



SupplyPoint™ User's Guide

(v4.1)

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Styling Conventions

This manual uses different text format and styling to indicate different things:

Text you enter is shown in **boldface**. If you need to press the **ENTER** key, you will see **enter this text**.↵.

Keys on the computer keyboard are shown in **BOLDFACE CAPITALS**. A plus (+) sign is used to indicate that multiple keys must be pressed for an action. In these cases, the first key is pressed and held while the second (and later) keys are pressed (e.g. **CTRL + ALT + DELETE** means that the **CTRL**, **ALT** and **DELETE** buttons must be pressed and then released.)

The names of menu commands, dialog boxes and other options are shown in *Italics*, for example: select *Exit* from the *File* menu.

Buttons within the User Interface and SupplyPoint Utilities will be BOXED SMALL CAPS

Pathnames are shown in SMALL CAPS (e.g. C:\PROGRAM FILES\SUPPLYPOINT\DATABASE).

n.b. If you are running on a 64-bit operating system the *Program Files* directory will need to be changed to *Program Files (x86)*.

References to other sections of the manual will be underlined.

Common Terms

The following terms are used to indicate an action with a mouse or other pointing device:

Click	Press and release the left mouse button.
Right-click	Press and release the right mouse button.
Double-click	Click the left mouse button twice in rapid succession.
Check	Select an option shown as a small square box. These options are known as check boxes and can be checked (on) or cleared (off). When a check box is on a check will be displayed in the box and a "yes" or "1" displayed in the corresponding data location. An unchecked box will show a "no" or "0" in the corresponding data location. A box that is shaded grey cannot be used currently.
Clear	Turn off a check box.

Machine Hardware

Introduction

This section of the manual is intended to provide an overview of the SupplyPoint™ machine and its physical installation. Before beginning, though, a word about the different types of machines that this manual covers. There are two types of machines, called “flapper-style” and “ratchet-style” after the mechanisms used to control the drawers. All new machines as of this printing are flapper style, and the information in this section is geared primarily toward these. Most information in this manual applies equally to both types. However, for ratchet-style-specific information, please refer to the Appendix at the rear of the manual.

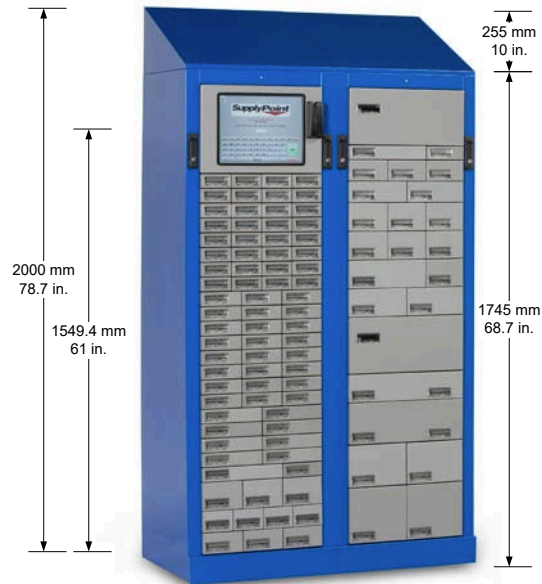
Tour of the Machine

There are numerous possible configurations for the SupplyPoint™, but all machines share certain traits regardless of whether they are single-frame units servicing a small workshop or a ten-frame unit supplying the tooling needs of a large company. These are the basic components: the frame, the panelling, the drawer trays and/or cupboards, and the electronics.

The Frame

The frame functions as the skeletal structure of the machine. A unit consists of between one and ten frames, and machines are usually referred to by this bit of information. Frames are generally numbered from left to right, though additions subsequent to installation can change this as additional frames are often configured so as to keep the monitor centred. The SupplyPoint™ software is able to handle this effortlessly, as the number of a given frame is determined not by its position, but by the controller board within it (see PICs below).

Frames are constructed in Supply Point Systems' plant in Rugby, Warwickshire of high gage steel uprights riveted to a top and a base. Each frame provides space for up to 28 drawer trays (26 in the frame with the touch screen or computer), which are held in place by the *locking bar*. Two such bars run the vertical length of each frame, one on each side. When the locking bar is in the up position, the drawer trays can be freely moved. When it is in the down position, the teeth on the locking bar slide into slots on each drawer tray, holding them in place. The locking bars are moved by rotating the black swing handle locks mounted on the outside of the panels. They can also be locked into the down position using these locks.



Base Unit Width 1092 mm/43 in. (shown above)
Single Bay Width 546 mm/21.5 in.

Depth 510 mm/20 in.

In a unit of more than one frame; the two frames containing the computer and the monitor are called a *base unit*. A base unit may start with only the two frames, but, as mentioned earlier, more frames can be added later, linking up to a total of ten frames together. The computer and touch screen are secured through the locking bar and swing handle locks. Additional top cupboards are available on add-on units; they will fill the empty space at the top of the frame.

Panelling

The panelling is the outer covering of the SupplyPoint™. There is a removable panel on the back of each frame attached with Torx (T25) security screws. A thin strip of panelling joins two rear panels together and must be removed if the rear panels are to be removed. Removing these panels provides access to the wiring of the frames, though this is seldom necessary, except in flapper-style machines.

Drawer Trays and Cupboards

With the exception of the frame that holds the touch screen or computer, any frame can hold up to 28 drawer trays (26 for the touch screen/PC frames), each having between one and four drawers attached. Since the maximum size of a machine is ten frames this provides a maximum of 1112 drawers on any given machine. This number will, of course, vary depending on the configuration of a given machine. In

addition to the number of drawers on a tray, the height of the drawers may vary as well; drawers may occupy from one to four drawer tray slots, which will affect the number of trays that can be placed in a frame. Each drawer has a single connection for communication with the controlling electronics. A complete list of drawer dimensions can be found in [Drawer Specifications](#) below.

Individual drawers are supported on roller bearings with a maximum capacity of 20kg. (44lbs.) per drawer. They can be divided by means of reinforced plastic liners or plastic and metal dividers, based on drawer type, into twelve, six, four, three, two, or one compartments. See [Drawer Specifications](#) for the depth information of each compartment size. The SupplyPoint™ software and electronics control access to each compartment, allowing for complete control of stored inventory. Trays are locked into frames using the locking bar.

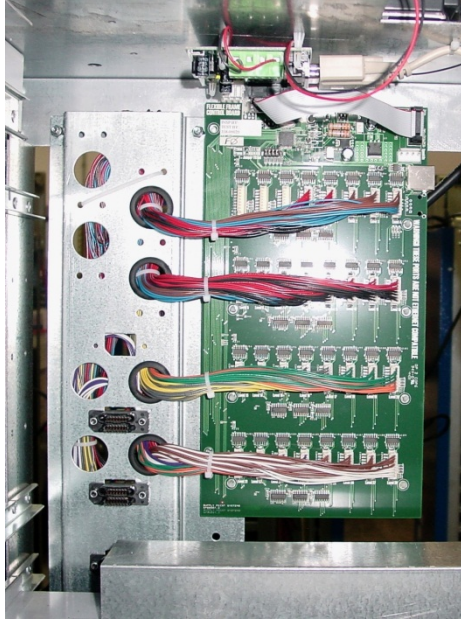
Another option for storage is the use of lockable cupboards, which can be used in place of drawer trays. These are configured and operate in exactly the same manner as drawers do. They are useful for storage of larger items or mass storage of low security items. Add-on frames can also have a top cupboard added in the space normally taken up by the monitor and computer. For a list of cupboard types and their specifications, see [Cupboard Specifications](#) below.

The Electronics

PICs

The PIC boards provide an interface between the computer and the drawer trays. In each machine there is a Serial Interface board that will connect to a slave board, one for each frame in the system up to a maximum of 10. Older 20-level “flapper style” systems will differ slightly and include at least one master PIC- distinguished by the presence of a 9-pin connector and power block- and a variable number of slave PICs (not more than nine in a flapper-style machine) depending on how many frames are in the machine.

Each PIC controls an entire frame and is mounted vertically in the rear of the frame. All connections on the board will be configured when the machine ships; there is no configuration required during installation. The bus bar has twenty-nine plugs on it, which connect with a similar plug at the rear of each drawer tray. The topmost plug is for the optional top cupboard. Each controller board has a set of five jumper switches, also pre-configured, that identify the frame within the machine. For reporting purposes, a 20 level frame is divided into two half frames or PICs (i.e. Frame 1 is divided into half frames or PICS 1&2, Frame 2 into 3&4, etc.). A 28 level machine is simply frame 1 with PIC 1, frame 2 with PIC 3, etc.



Jumper Settings

Please refer to the table below to ensure the jumper settings are correct for each frame. Below are examples of jumper settings for a 20 and 28 level PIC.

PIC (Logical PICs - 28 Level)	PIC (Logical PICs - 20 Level)	FRAME (Physical PIC)	20 LEVEL SETTING	28 LEVEL SETTING
1	1 and 2	1	0111	11110
3	3 and 4	2	1011	11101
5	5 and 6	3	0011	11100
7	7 and 8	4	1101	11011
9	9 and 10	5	0101	11010
11	11 and 12	6	1001	11001
13	13 and 14	7	0001	11000
15	15 and 16	8	1110	10111
17	17 and 18	9	0110	10110
19	19 and 20	10	1010	10101

Card Reader

The SupplyPoint™ can be supplied with an optional magnetic strip card reader. A User ID can be stored on the magnetic strip and used to access the SupplyPoint™, freeing the User from the need to remember his User ID. Users can be forced to use

this as the sole means of entry to the SupplyPoint™ (see [Users](#) below). Security can be enhanced through the use of a password or Personal Identification Number (PIN). In addition to the standard card reader, other readers can be attached, based on the needs of the customer, though some may incur additional cost. Bar codes, proximity cards and fingerprint readers have been attached to machines.

The Computer

The SupplyPoint™ is equipped with PC powered by an Intel Celeron, Pentium or AMD Sempron processor running the XP Professional or Windows 7 operating system. This PC in turn controls a series of processor boards (PICs), one per frame, that are linked to a drawer board mounted on each tray within the frame. It comes equipped with an Ethernet connection and magnetic stripe or bar code reader. A printer can be attached, but this is not a standard option. An Uninterruptable Power Supply (UPS) with surge suppression provides 4-6 minutes of power in the event of an outage. In the event that power is not restored within a few minutes the UPS will shut down the PC with no data loss. Once power is restored the PC will restart automatically and load the User Interface.

Monitor

The SupplyPoint™ comes equipped with a 15-inch Liquid Crystal Display (LCD) touch screen monitor. This will require periodic cleaning to ensure proper functioning. Keep the following in mind when caring for and using your monitor:

- The monitor is designed to be pressed by fingers; DO NOT use any other kind of stylus or object as a pointer.
- Protect the screen from exposure to liquids.
- Clean the touch screen periodically. The best cleaner is a 50/50 solution of water and isopropyl alcohol

Printers

Printers can be connected to the SupplyPoint™ for any number of reasons: for printing reports when the SupplyPoint™ is not part of a network, for printing orders to be faxed, or for the specialized purpose of printing receipts, known as tickets, for items withdrawn, returned or restocked. Instructions on the use of a printer for tickets can be found in [Advanced Configuration](#), under the section heading [Ticket Printing](#). When using printers for other purposes, simply power down the computer, attach the printer, and let Plug and Play handle the installation process.

Scales

A scale can also be attached to the SupplyPoint™ for weighing small items that are dispensed in large quantities. The scale will use either a serial or USB port. Generally

no configuration will be required, as the scales will take the resources of the port to which they are attached. More information on the practical aspect of scales can be found in the section on the User Interface and the [Items](#) and [Parameters](#) sections of Software Utilities.

UPS

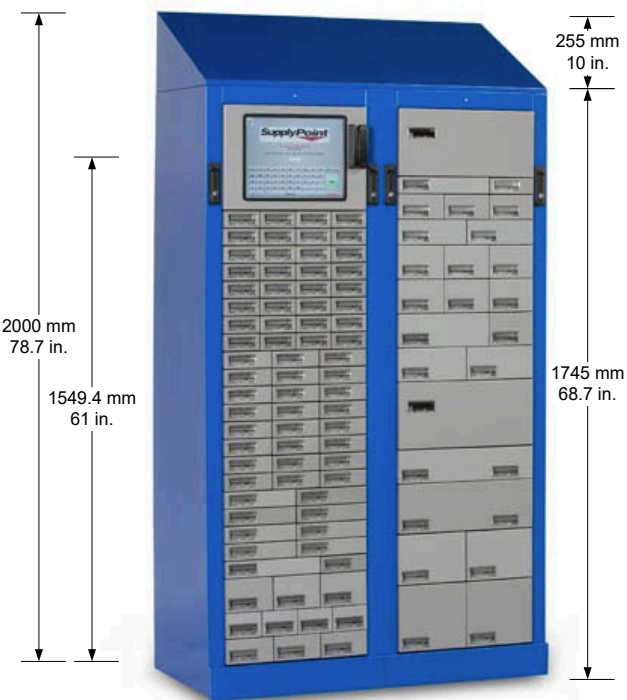
The SupplyPoint™ is equipped with UPS monitoring software. It is important to remember that the UPS is NOT designed to allow the SupplyPoint™ to run when the power is down. The purpose of the UPS is to allow the machine to shut down in a manner that ensures no data is lost. The UPS is not an integral part of the SupplyPoint™ and so covered only by the manufacturer's warranty.

Fingerprint Reader

The SupplyPoint™ may be equipped with an optional fingerprint reader, allowing you to use biometric verification. This reader will be located next to the monitor on any machine. It is a delicate piece of equipment, so take the following precautions when you have one:

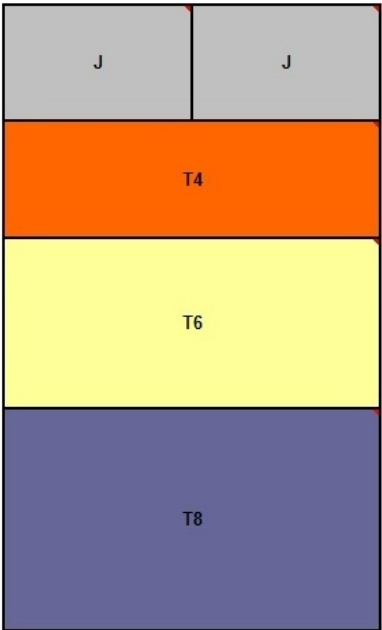
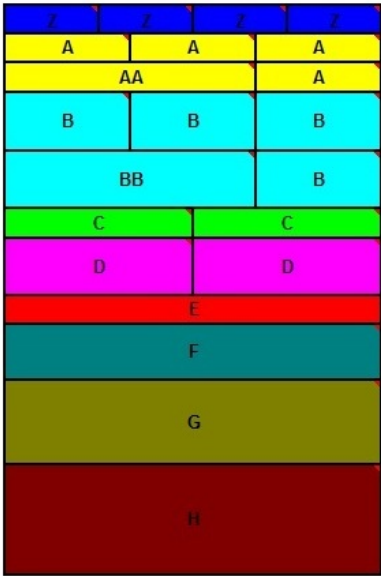
- Do not immerse the reader in water or any other liquid.
- Do not spray liquid on the reader.
- Protect it from dripping liquids.
- Do not use it if it has sustained damage, such as from a damaged cord or plug.
- Do not clean it with the reader connected.
- The easiest method for cleaning the reader is to use transparent tape. Simply press a small piece of tape onto the glass reading surface to lift any residual oils.

Physical Specifications



Base Unit Width 1092 mm/43 in. (shown above)
Single Bay Width 546 mm/21.5 in.

Depth 510 mm/20 in.



Cupboard Type	Drawer Tray Slots	Internal Width		Internal Height		Internal Depth	
		Mm	In.	Mm.	In.	Mm.	In.
T4	4	440	17.32	200	7.87	450	14.71
T6 (Top Cupboard)	6	440	17.32	300	11.81	450	14.71
T8	8	440	17.32	400	15.74	450	14.71

Drawer Specifications

Z Z Z Z Z-Tray

4 Drawers, 1 Drawer Tray Slot

		Divider Material	Depth		Diagonal		Maximum Height		Usable Height		Maximum Width		Usable Width	
			mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.
Number of Compartments	12	Metal	27	1.06	74	2.91	24	.94	24	.94	65	2.56	59	2.32
		Plastic	25	.98	73	2.87	24	.94	24	.94	65	2.56	59	2.32
		Liner	24	.94	63	2.48	23	.9	23	.9	55	2.16	55	2.16
		Scooped	19	.74	62	2.44	23	.9	23	.9	55	2.16	55	2.16
	6	Metal	55	2.16	88	3.46	24	.94	24	.94	65	2.56	59	2.32
		Plastic	54	2.12	88	3.46	24	.94	24	.94	65	2.56	59	2.32
		Liner	52	2.04	78	3.07	23	.9	23	.9	55	2.16	55	2.16
	4	Metal	84	3.3	109	4.29	24	.94	24	.94	65	2.56	59	2.32
		Plastic	82	3.22	108	4.25	24	.94	24	.94	65	2.56	59	2.32
	3	Metal	113	4.44	132	5.19	24	.94	24	.94	65	2.56	59	2.32
		Plastic	111	4.37	131	5.15	24	.94	24	.94	65	2.56	59	2.32
	2	Metal	170	6.69	184	7.24	24	.94	24	.94	65	2.56	59	2.32
		Plastic	168	6.61	182	7.16	24	.94	24	.94	65	2.56	59	2.32
	1	Metal	342	13.46	349	13.74	24	.94	24	.94	65	2.56	59	2.32
		Plastic	340	13.38	347	13.66	24	.94	24	.94	65	2.56	59	2.32

ZT ZT ZT ZT Z-Twin Module **4A x 75**

4 Drawers, 1.5 Drawer Tray Slots Must be paired with Z, A or C twin module

		Divider Material	Depth		Diagonal		Maximum Height		Usable Height		Maximum Width		Usable Width	
			mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.
Number of Compartments	12	Metal	27	1.06	81	3.18	49	1.92	49	1.92	65	2.56	59	2.32
	6	Metal	55	2.16	94	3.70	49	1.92	49	1.92	65	2.56	59	2.32
	4	Metal	84	3.3	114	4.48	49	1.92	49	1.92	65	2.56	59	2.32
	3	Metal	113	4.44	137	5.39	49	1.92	49	1.92	65	2.56	59	2.32
	2	Metal	170	6.69	186	7.32	49	1.92	49	1.92	65	2.56	59	2.32
	1	Metal	342	13.46	351	13.81	49	1.92	49	1.92	65	2.56	59	2.32

A	A	A
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A-Tray

3 Drawers, 1 Drawer Tray Slot

		Divider Material	Depth		Diagonal		Maximum Height		Usable Height		Maximum Width		Usable Width	
			mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.
Number of Compartments	12	Metal	27	1.06	108	4.25	24	.94	24	.94	102	4.01	96	3.77
		Plastic	25	.98	107	4.21	24	.94	24	.94	102	4.01	96	3.77
		Liner	24	.94	100	3.93	23	.9	23	.9	95	3.74	95	3.74
	6	Metal	55	2.16	118	4.64	24	.94	24	.94	102	4.01	96	3.77
		Plastic	54	2.12	118	4.64	24	.94	24	.94	102	4.01	96	3.77
		Liner	52	2.04	110	4.33	23	.9	23	.9	95	3.74	95	3.74
Number of Compartments	4	Metal	84	3.3	134	5.27	24	.94	24	.94	102	4.01	96	3.77
		Plastic	82	3.22	133	5.23	24	.94	24	.94	102	4.01	96	3.77
	4	Liner	80	3.14	126	4.96	23	.9	23	.9	95	3.74	95	3.74
	3	Metal	113	4.44	154	6.06	24	.94	24	.94	102	4.01	96	3.77
		Plastic	111	4.37	153	6.02	24	.94	24	.94	102	4.01	96	3.77
	2	Metal	170	6.69	200	7.87	24	.94	24	.94	102	4.01	96	3.77
		Plastic	168	6.61	198	7.79	24	.94	24	.94	102	4.01	96	3.77
	1	Metal	342	13.46	358	14.09	24	.94	24	.94	102	4.01	96	3.77
		Plastic	340	13.38	356	14.01	24	.94	24	.94	102	4.01	96	3.77

AT	AT	AT
AT	AT	AT

A-Twin Module 3A x 75

3 Drawers, 1.5 Drawer Tray Slots Must be paired with Z, A or C twin module

		Divider Material	Depth		Diagonal		Maximum Height		Usable Height		Maximum Width		Usable Width	
			mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.
Number of Compartments	12	Metal	27	1.06	111	4.37	49	1.92	49	1.92	102	4.01	96	3.77
	6	Metal	55	2.16	121	4.76	49	1.92	49	1.92	102	4.01	96	3.77
	4	Metal	84	3.3	137	5.39	49	1.92	49	1.92	102	4.01	96	3.77
	3	Metal	113	4.44	156	6.14	49	1.92	49	1.92	102	4.01	96	3.77
	2	Metal	170	6.69	201	7.91	49	1.92	49	1.92	102	4.01	96	3.77
	1	Metal	342	13.46	359	14.13	49	1.92	49	1.92	102	4.01	96	3.77

AA	A
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AA-Tray

2 Drawers (1AA, 1A), 1 Drawer Tray Slot

		Divider Material	Depth		Diagonal		Maximum Height		Usable Height		Maximum Width		Usable Width	
			mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.
Number of Compartment	12	Metal	27	1.06	252	9.92	24	.94	21	.82	250	9.84	244	9.6
	6	Metal	55	2.16	257	10.11	24	.94	21	.82	250	9.84	244	9.6
	4	Metal	84	3.30	264	10.39	24	.94	21	.82	250	9.84	244	9.6
	3	Metal	113	4.44	275	10.86	24	.94	21	.82	250	9.84	244	9.6
	2	Metal	170	6.69	303	11.92	24	.94	21	.82	250	9.84	244	9.6
	1	Metal	342	13.46	424	16.69	24	.94	21	.82	250	9.84	244	9.6

B	B	B
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B-Tray

3 Drawers, 2 Drawer Tray Slots

		Divider Material	Depth		Diagonal		Maximum Height		Usable Height		Maximum Width		Usable Width	
			mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.
Number of Compartments	12	Metal	25	.98	128	5.03	74	2.91	74	2.91	102	4.01	96	3.77
	6	Metal	54	2.12	137	5.39	74	2.91	74	2.91	102	4.01	96	3.77
	4	Metal	82	3.22	150	5.90	74	2.91	74	2.91	102	4.01	96	3.77
	3	Metal	111	4.37	168	6.61	74	2.91	74	2.91	102	4.01	96	3.77
	2	Metal	168	6.61	210	8.26	74	2.91	74	2.91	102	4.01	96	3.77
	1	Metal	340	13.38	363	14.29	74	2.91	74	2.91	102	4.01	96	3.77

BB	BB
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BB-Tray

2 Drawers (1BB, 1B), 2 Drawer Tray Slots

		Divider Material	Depth		Diagonal		Maximum Height		Usable Height		Maximum Width		Usable Width	
			mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.
Number of Compartments	12	Metal	25	.98	261	10.27	74	2.91	71	2.79	249	9.8	243	9.56
	6	Metal	54	2.12	265	10.43	74	2.91	71	2.79	249	9.8	243	9.56
	4	Metal	82	3.22	273	10.74	74	2.91	71	2.79	249	9.8	243	9.56
	3	Metal	111	4.37	283	11.14	74	2.91	71	2.79	249	9.8	243	9.56
	2	Metal	168	6.61	310	12.2	74	2.91	71	2.79	249	9.8	243	9.56
	1	Metal	340	13.38	428	16.85	74	2.91	71	2.79	249	9.8	243	9.56

C	C
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C-Tray

2 Drawers, 1 Drawer Tray Slot

		Divider Material	Depth		Diagonal		Maximum Height		Usable Height		Maximum Width		Usable Width	
			mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.
Number of Compartments	12	Metal	27	1.06	179	7.04	24	.94	24	.82	176	6.92	170	6.69
		Plastic	25	.98	179	7.04	24	.94	24	.82	176	6.92	170	6.69
		Liner	24	.94	167	6.57	23	.9	23	.9	164	6.45	164	6.45
	6	Metal	55	2.16	186	7.32	24	.94	24	.82	176	6.92	170	6.69
		Plastic	54	2.12	185	7.28	24	.94	24	.82	176	6.92	170	6.69
		Liner	52	2.04	173	6.81	23	.9	23	.9	164	6.45	164	6.45
	4	Metal	84	3.3	196	7.71	24	.94	24	.82	176	6.92	170	6.69
		Plastic	82	3.22	196	7.71	24	.94	24	.82	176	6.92	170	6.69
		Liner	80	3.14	183	7.20	23	.9	23	.9	164	6.45	164	6.45
	3	Metal	113	4.44	210	8.26	24	.94	24	.82	176	6.92	170	6.69
		Plastic	111	4.37	209	8.22	24	.94	24	.82	176	6.92	170	6.69
	2	Metal	170	6.69	246	9.68	24	.94	24	.82	176	6.92	170	6.69
		Plastic	168	6.61	245	9.64	24	.94	24	.82	176	6.92	170	6.69
	1	Metal	342	13.46	385	15.15	24	.94	24	.82	176	6.92	170	6.69
		Plastic	340	13.38	384	15.11	24	.94	24	.82	176	6.92	170	6.69

CT	CT
CT	CT

C-Twin Module 2A x 75

3 Drawers, 1.5 Drawer Tray Slots Must be paired with Z, A or C twin module

		Divider Material	Depth		Diagonal		Maximum Height		Usable Height		Maximum Width		Usable Width	
			mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.
Number of Compartments	12	Metal	27	1.06	179	7.04	49	1.92	49	1.92	176	6.92	170	6.69
	6	Metal	55	2.16	185	7.28	49	1.92	49	1.92	176	6.92	170	6.69
	4	Metal	84	3.3	196	7.71	49	1.92	49	1.92	176	6.92	170	6.69
	3	Metal	113	4.44	210	8.26	49	1.92	49	1.92	176	6.92	170	6.69
	2	Metal	170	6.69	245	9.64	49	1.92	49	1.92	176	6.92	170	6.69
	1	Metal	342	13.46	385	15.15	49	1.92	49	1.92	176	6.92	170	6.69

D	D
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D-Tray

2 Drawers, 2 Drawer Tray Slots

		Divider Material	Depth		Diagonal		Maximum Height		Usable Height		Maximum Width		Usable Width	
			mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.
Number of Compartments	12	Metal	25	.98	192	7.55	74	2.91	74	2.91	176	6.92	170	6.69
	6	Metal	54	2.12	198	7.79	74	2.91	74	2.91	176	6.92	170	6.69
	4	Metal	82	3.22	208	8.18	74	2.91	74	2.91	176	6.92	170	6.69
	3	Metal	111	4.37	221	8.7	74	2.91	74	2.91	176	6.92	170	6.69
	2	Metal	168	6.61	254	10	74	2.91	74	2.91	176	6.92	170	6.69
	1	Metal	340	13.38	390	15.35	74	2.91	74	2.91	176	6.92	170	6.69

E**E-Tray****1 Drawer, 1 Drawer Tray Slot**

		Divider Material	Depth		Diagonal		Maximum Height		Usable Height		Maximum Width		Usable Width	
			mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.
Number of Compartments	12	Metal	25	.98	399	15.7	24	.94	21	.82	398	15.66	392	15.43
	6	Metal	54	2.12	402	15.82	24	.94	21	.82	398	15.66	392	15.43
	4	Metal	82	3.22	407	16.02	24	.94	21	.82	398	15.66	392	15.43
	3	Metal	111	4.37	414	16.29	24	.94	21	.82	398	15.66	392	15.43
	2	Metal	168	6.61	433	17.04	24	.94	21	.82	398	15.66	392	15.43
	1	Metal	340	13.38	524	20.62	24	.94	21	.82	398	15.66	392	15.43

F**F-Tray****1 Drawer, 2 Drawer Tray Slots**

		Divider Material	Depth		Diagonal		Maximum Height		Usable Height		Maximum Width		Usable Width	
			mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.
Number of Compartments	12	Metal	25	.98	402	15.82	74	2.91	71	2.79	394	15.51	388	15.27
	6	Metal	54	2.12	405	15.94	74	2.91	71	2.79	394	15.51	388	15.27
	4	Metal	82	3.22	409	16.10	74	2.91	71	2.79	394	15.51	388	15.27
	3	Metal	111	4.37	416	16.37	74	2.91	71	2.79	394	15.51	388	15.27
	2	Metal	168	6.61	435	17.12	74	2.91	71	2.79	394	15.51	388	15.27
	1	Metal	340	13.38	526	20.7	74	2.91	71	2.79	394	15.51	388	15.27

G**G-Tray****1 Drawer, 3 Drawer Tray Slots**

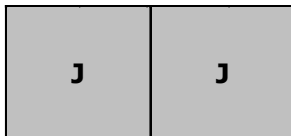
		Divider Material	Depth		Diagonal		Maximum Height		Usable Height		Maximum Width		Usable Width	
			mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.
Number of Compartments	12	Metal	25	.98	414	16.29	123	4.84	120	4.72	394	15.51	388	15.27
	6	Metal	54	2.12	417	16.41	123	4.84	120	4.72	394	15.51	388	15.27
	4	Metal	82	3.22	421	16.57	123	4.84	120	4.72	394	15.51	388	15.27
	3	Metal	111	4.37	428	16.85	123	4.84	120	4.72	394	15.51	388	15.27
	2	Metal	168	6.61	446	17.55	123	4.84	120	4.72	394	15.51	388	15.27
	1	Metal	340	13.38	535	21.06	123	4.84	120	4.72	394	15.51	388	15.27



H-Tray

1 Drawer, 4 Drawer Tray Slots

		Divider Material	Depth		Diagonal		Maximum Height		Usable Height		Maximum Width		Usable Width	
			mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.
Number of Compartments	12	Metal	25	.98	431	16.96	173	6.81	170	6.69	394	15.51	388	15.27
	6	Metal	54	2.12	434	17.08	173	6.81	170	6.69	394	15.51	388	15.27
	4	Metal	82	3.22	438	17.24	173	6.81	170	6.69	394	15.51	388	15.27
	3	Metal	111	4.37	445	17.51	173	6.81	170	6.69	394	15.51	388	15.27
	2	Metal	168	6.61	462	18.18	173	6.81	170	6.69	394	15.51	388	15.27
	1	Metal	340	13.38	549	21.61	173	6.81	170	6.69	394	15.51	388	15.27



J-Tray

2 Drawers, 4 Drawer Tray Slots

		Divider Material	Depth		Diagonal		Maximum Height		Usable Height		Maximum Width		Usable Width	
			mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.	mm.	In.
Number of Compartments	12	Metal	25	.98	246	9.68	173	6.81	170	6.69	170	6.69	167	6.57
	6	Metal	54	2.12	250	9.84	173	6.81	170	6.69	170	6.69	167	6.57
	4	Metal	82	3.22	258	10.15	173	6.81	170	6.69	170	6.69	167	6.57
	3	Metal	111	4.37	268	10.55	173	6.81	170	6.69	170	6.69	167	6.57
	2	Metal	168	6.61	297	11.69	173	6.81	170	6.69	170	6.69	167	6.57
	1	Metal	340	13.38	419	16.49	173	6.81	170	6.69	170	6.69	167	6.57

Definition of Compartment Dimensions

Usable width

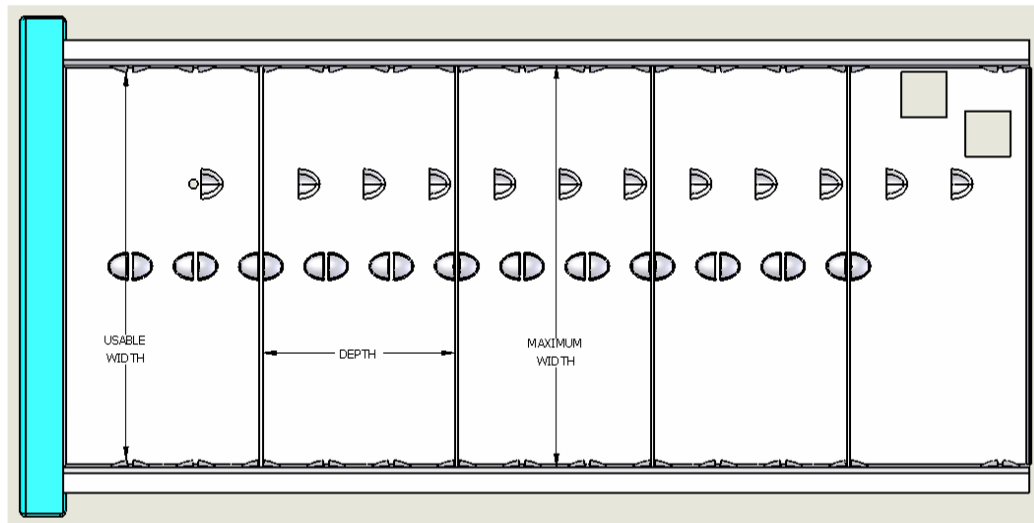
The minimum left-to-right distance between the slotted dimples in the sides of the drawer, or the interior width of a drawer liner. Use this dimension when determining the compartment size for storing regularly shaped items such as packets.

Maximum width

The actual left-to-right distance between the sides of the drawer. Use this dimension when determining the compartment size to be used for storing irregularly shaped or cylindrical items.

Depth

The interior distance between two dividers, or the front to-back interior measurement of one compartment of a drawer liner.



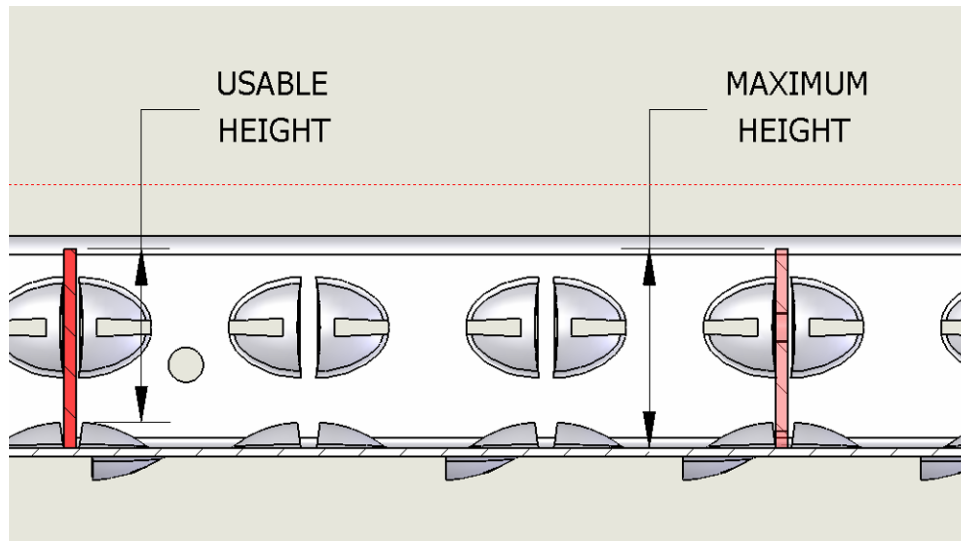
Usable height

The distance between the top of the slotted dimple and the top of the divider, or the distance between the bottom of a drawer liner and the top of the divider. Use this distance when determining the compartment size for storing boxes or packets. Drawer types Z, A and B do not have a slotted dimple on the bottom of the drawer. For these drawers use the maximum height.

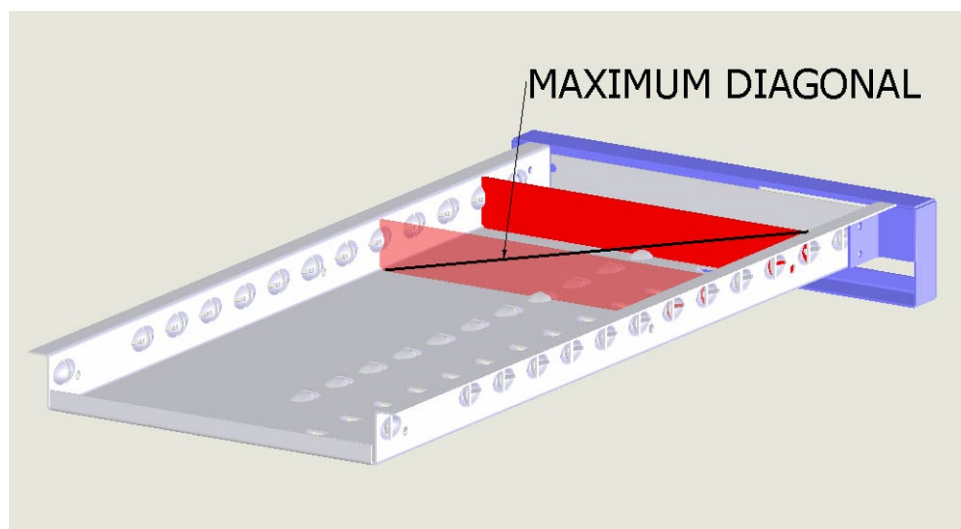
Maximum height

The distance between the bottom of the drawer and the top of the divider. Use this dimension when determining the

compartment size for irregularly shaped items. Also used for drawer types Z, A and B.



Maximum Diagonal The distance from opposite interior corners (i.e. from bottom front left to top rear right). Use this dimension as the maximum storage dimension for a zero-diameter cylindrical object. It can also be used to estimate the maximum storage length of items such as drills.



Lockers

The addition of locker units to the SupplyPoint™ provides a greater degree of flexibility than might otherwise be possible with drawers or cupboards. Like cupboards, lockers have doors that are electronically controlled, securing storage for bulkier items. Unlike cupboards, which take the place of traditional drawer trays, locker units take the place of *frames*. You can connect up to 14 locker units to a SupplyPoint™ machine.

Since these are pre-fabricated units, you cannot change the configuration once in place. The lost modularity is more than made up for by the reduced cost, relative to a similar-sized SupplyPoint™ unit. And, of course, you gain the added advantage of bringing accountability to items that might otherwise be left on a shelf and dispensed using external stock. Also, since more of these units can be added than can conventional frames, you can use the more valuable real estate in conventional frames for small, high-value items instead of occupying large amounts of space with cupboards.

Lockers are shipped in self-contained units that connect to the SupplyPoint™. They are configured in stacks, each stack being a vertical column of lockers. Each locker unit consists of three such stacks. There are four different stacks available and they can be combined into five different locker units. The footprint for each of these units is 1090mm (42.9in) wide by 510mm (20.1in) deep. Each locker is capable of holding up to 75kg (165lbs).



Locker Units

Unit Number	Small Lockers	Medium Lockers	Large Lockers
S1 (3-3-3)	0	0	9
S2 (6-6-6)	0	18	0
S3 (9-9-9)	27	0	0
S4 (M-M-M)	9	6	3
S5 (9-6-M)	12	8	1

Locker Stacks

Stack Type	Small Lockers	Medium Lockers	Large Lockers
Small	9	0	0
Medium	0	6	0
Large	0	0	3
Mixed	3	2	1

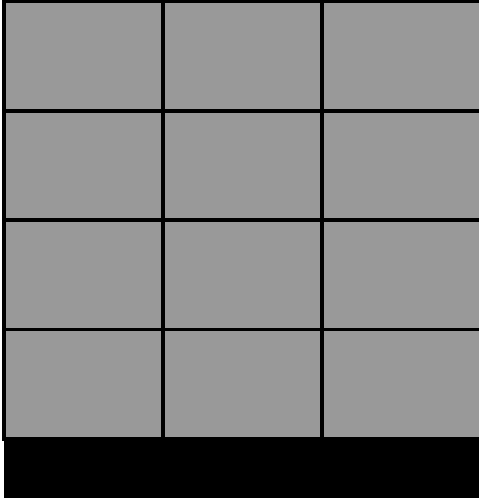
Locker Sizes

	Height		Width		Depth	
	mm.	In.	mm.	In.	mm.	In.
Small	154	6.1	320	12.6	500	19.7
Medium	254	9.6	320	12.6	500	19.7
Large	515	20.3	320	12.6	500	19.7

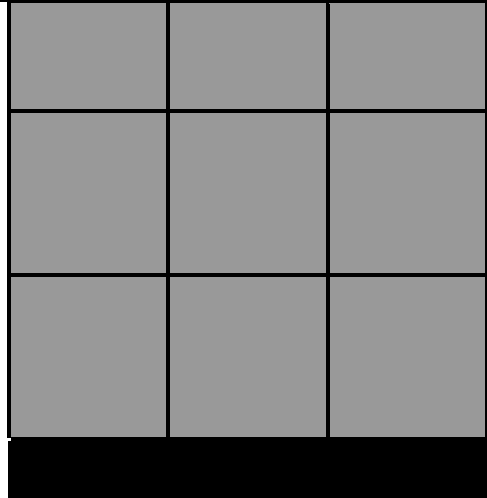
Locker Layouts

Small Stack Small Stack Small Stack

Medium Stack Medium Stack Medium Stack

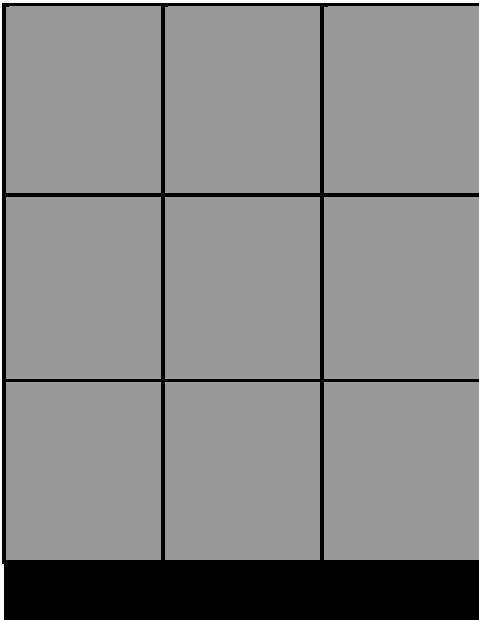


S3 - Locker type S3 consists of three stacks of small lockers for a total of 27 lockers.



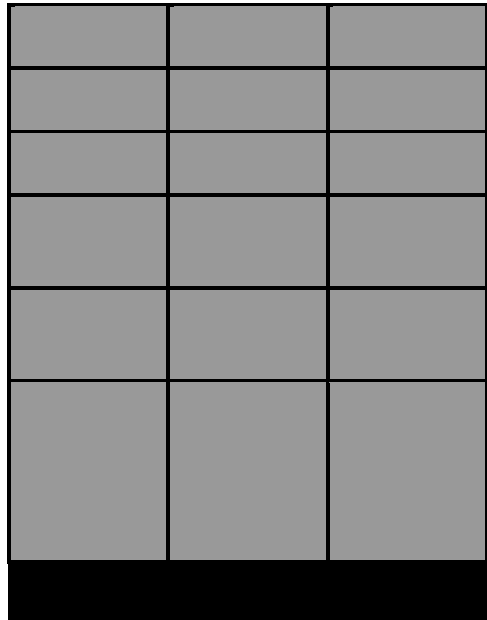
S2- Locker type S2 consists of three stacks of medium lockers for a total of 18 lockers.

Large Stack Large Stack Large Stack



S1- Locker type S3 consists of three stacks of large lockers for a total of nine lockers (not available in North and South America).

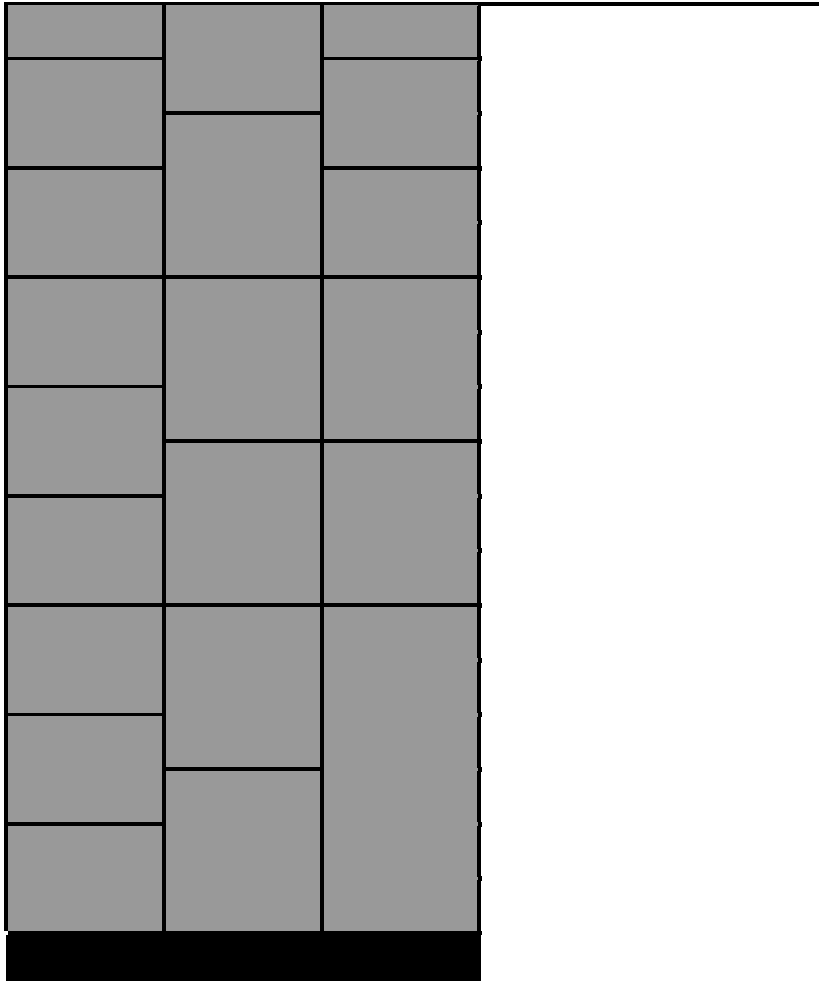
Mixed Stack Mixed Stack Mixed Stack



S4 - Locker type S4 consists of three mixed stacks (three small, two medium, one large) for a total of 18 lockers.

Small Stack Medium Stack Mixed Stack





S5- Locker type S5 consists of one small stack, one medium stack and one mixed stack, for a total of 21 lockers.



RotoPoint

The RotoPoint is an ideal solution where space is limited but the need for managing a large number of different items is essential, for example, the management of a wide variety of gloves, goggles and hand tools.

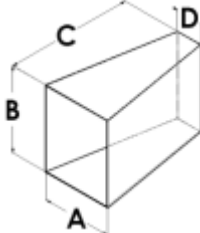


Physical Specifications

Dimensions: 1030mm x 1030mm x 2010mm (incl. lid)

Power: 240v

Weight Capacity: 250Kg Uniform Distributed Load (UDL)

Number of Doors	Locations Per Level	Total Number of Locations					Overall Weight (Kg)
			Compartment size/mm				
			A	B	C	D	
7	18	126	160	175	290	60	390
7	36	252	80	175	290	30	400

13	18	234	160	80	290	60	450
13	36	468	80	80	290	30	470

Cabinet Solutions



Overview

These cabinets are based on standard large format industrial roller drawer cabinets and are available as add-on or base units. The cabinets are available in three different levels of functionality.

1. **Electronically Controlled Tool Cabinet (ECTC / Journeyman):**

A cabinet where the opening of each individual drawer is controlled by the SupplyPoint™ software.

The cabinet has a manual override system in case of power or electronic failure. Cabinets are available in a full range of sizes, with drawer depths of between 50mm and 300mm available. These cabinets can support up to a 250Kg (550Lbs) uniformly distributed load (UDL) in each drawer.

2. **Lids In Drawers (LID):**

A cabinet where some or all drawers are segmented into separate sections each of which has an electronically locked LID controlled by the SupplyPoint™ software, this can also be combined with the ECTC locking mechanism to give combined locking drawers and individually secured LID compartments.

These cabinets incorporate a complete manual override mechanism to each

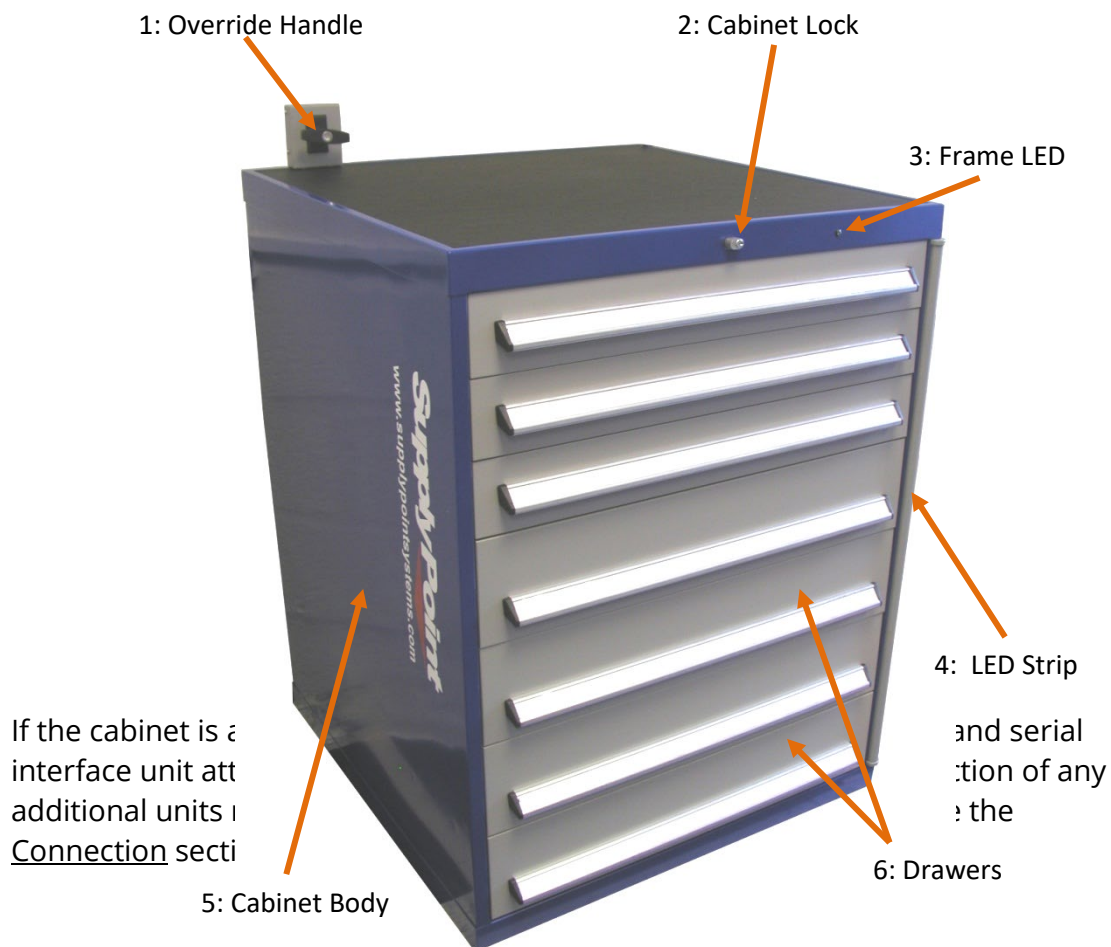
LID compartment in case of power or electronic failure.

3. **Low Cost LIDS (LCL):**

The same as the LID option, except for the omission of the override mechanism at the LID compartment level. Controlled via the SupplyPoint™ software and capable of being combined with the ECTC locking mechanism, these cabinets require some disassembly to access the LID compartment contents in the event of a power or electronic failure.

Main Components of the Cabinet

1. Override Handle – this is used to override the electronic locking mechanism, either for system maintenance or in the event of a power failure; to allow access to the drawer contents.
The Override Handle only appears on cabinets where the ECTC locking mechanism has been selected as an option.
2. Cabinet Lock – when locked this prevents *any* access to the drawers, it may be secured in the locked or open position.
3. Frame LED – illuminates to show which cabinet is currently being accessed by the SupplyPoint™ software.
4. LED Strip – illuminates alongside the drawer which is to be opened via the SupplyPoint™ software.
5. Cabinet Body – a steel frame to which all the other components are connected.
6. Drawer – lockable location in which the cabinets inventory is securely stored.



Computer Enclosures

A range of computer enclosures are available, all of which securely contain all the necessary electronics to control the cabinet as a base unit. Add-on units can connect to any SupplyPoint™ base unit (28 level frame, Rotopoint etc.) to provide system capacity expansion as required.

Worktop Mounted Enclosure

This unit encompasses a substantial metal housing designed to accommodate the touchscreen, keyboard, mouse, UPS and a standard desktop PC, without increasing the footprint required for the cabinet. This unit also incorporates a fully integrated power supply and cooling equipment, and is supplied with the same 15" capacitive touchscreen as used in the traditional SupplyPoint™ frames. The unit can be fitted with all the usual peripheral interface options including fingerprint, swipe card, proximity and barcode readers.

The enclosures are manufactured to order and can be painted in any of the standard SupplyPoint™ colours.



Low Cost All-In-One Enclosure

Recommended for use in less harsh or abrasive environments, the 15.6" resistive touchscreen is similar to that used by many of our competitors but is not as rugged as the standard capacitive SupplyPoint™ touchscreen. As a result of this difference, this screen can be used whilst wearing gloves, or with a stylus or pointer. The PC is fitted with a lockable port and control cover to discourage tampering of the connections. No provision is made for the storage of the keyboard or mouse. The PC can be positioned on the top of the cabinet, or fixed to an optional adjustable arm. The PC comes complete with wireless network capability and RJ45 network ports as well as additional spare USB ports. There may be slight variations in the all-in-one computer from region to region.



Compact Laptop Enclosure (Europe Only)

This is a low profile, low-cost interface unit utilizing a 10" resistive touchscreen laptop, housed in a secure metal enclosure to prevent theft or interference with the connections, the enclosure can be mounted directly onto the top of all current ECTC/LID/LCL cabinets. The enclosure can be fitted with an optional fingerprint or swipe reader and is available in grey or white. With this unit there is no need to store either a keyboard or mouse; once the enclosure is unlocked, the laptop can be easily removed from the enclosure allowing any required maintenance to be performed.



Deluxe Computer Enclosure

The Deluxe enclosure is designed to provide an aesthetically appealing, adaptable, secure and functional solution for the operation of ECTC/LID/LCL cabinets, whilst maintaining the visual style of the SupplyPoint™ range.

The computer housing is available in 1000mm or 800mm heights and comes complete with fully integrated power supply, serial interface, UPS and cooling equipment. Internally there is ample storage space to house any standard desktop or mini-tower PC, together with keyboard, mouse, manuals and other peripheral items. The computer housings are manufactured to order and can be supplied in any of the standard SupplyPoint™ colours.

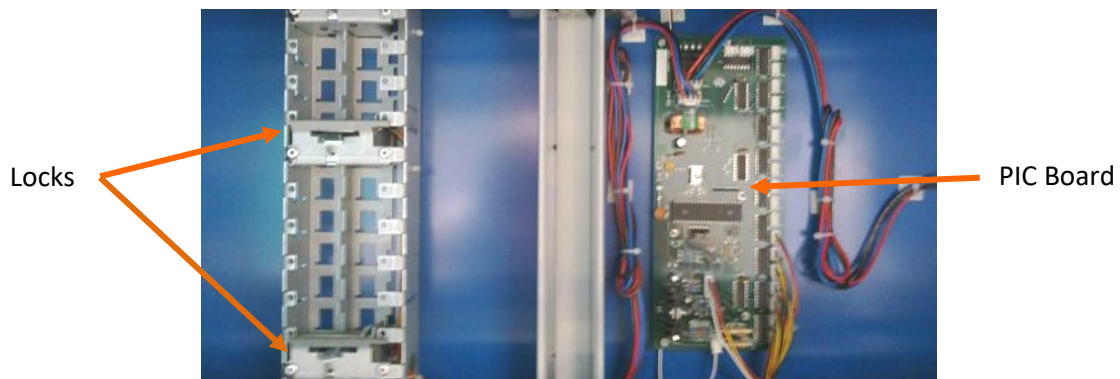
The secure steel monitor enclosure houses the same, tough, same 15" capacitive touchscreen as used in the standard SupplyPoint™ frames; mounted on an adjustable arm allowing for easy operation, the touchscreen housing is available in either a grey or white. The monitor enclosure can be fitted with an optional fully integrated fingerprint reader, as well as a swipe or omnidirectional barcode reader, an externally accessible USB port is also included for convenient, temporary connection of a keyboard, mouse, or similar peripheral.



The Electronics

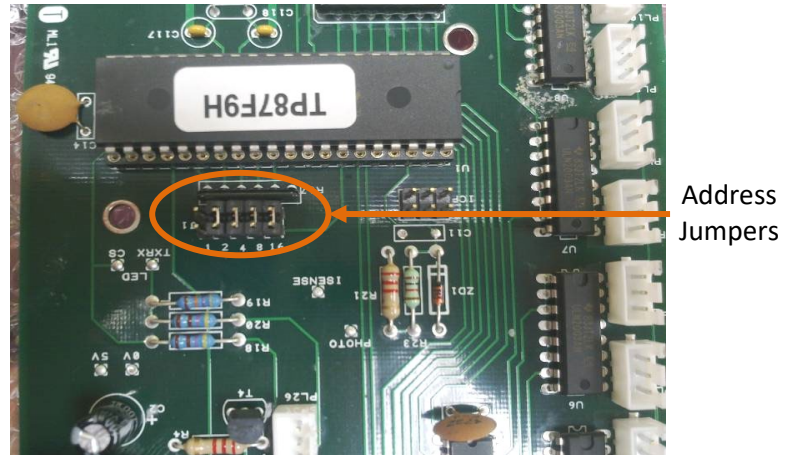
ECTC/Journeyman Cabinets

Internally attached to the rear of the cabinet there is a cabinet PIC board and a vertical steel structure which contains the locks for each drawer, as shown below.



The address should be set by your SupplyPoint™ approved installer or come pre-set from the factory. Should you need it to be re-configured, simply disconnect the power from the cabinet, alter the jumper settings* and re-apply the power.

Should it be necessary to change the address of the cabinet board for installation, the address jumpers can be adjusted, as shown opposite.



Settings are binary and are effected by the removal of jumpers

So

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

1 2 4 8 16 would represent cabinet 5, and

<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

1 2 4 8 16 would represent cabinet 8.

* If you are in any doubt of the correct settings, contact your local agent for technical support.

LID and Low Cost Lid (LCL) Cabinets

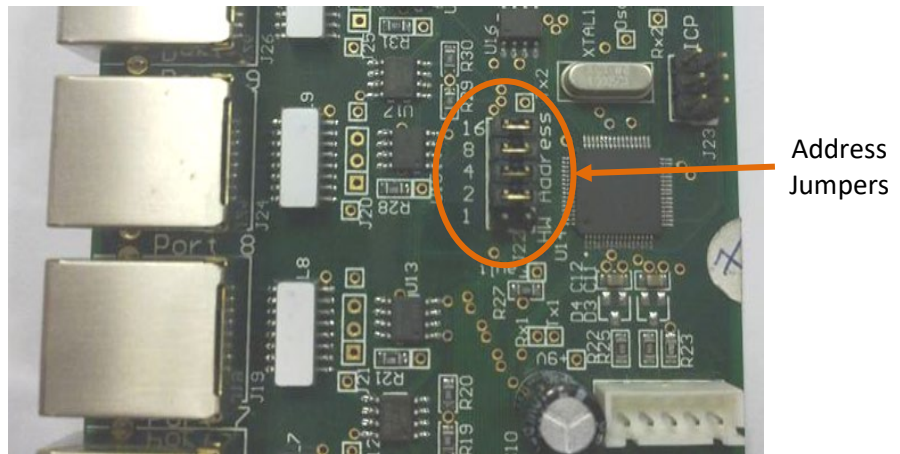
Although the physical cabinet enclosure for LID and LCL is the same as ECTC/Journeyman cabinets, the internal cabinet electronics differ significantly.

It is important to note that any cabinet containing a mix of ECTC/Journeyman and either LID or LCL drawers will operate using the LID/LCL cabinet board described below and not the cabinet board mentioned in the ECTC/Journeyman Cabinets section.

The LID/LCL compatible cabinet board, shown below, is found within a metal 'top-hat' enclosure at the base of the cabinet, beneath the bottom drawer.

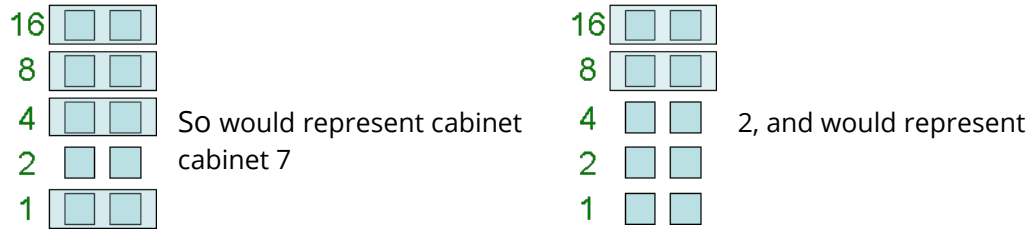


Should there be a need to change the cabinet number of the board, the address jumpers can be adjusted, shown opposite.



The address should be set by your SupplyPoint™ approved installer or come pre-set from the factory. However should it need to be re-configured, simply disconnect the power from the cabinet, alter the jumper settings* and re-apply the power.

Settings are binary and effected by the removal of jumpers

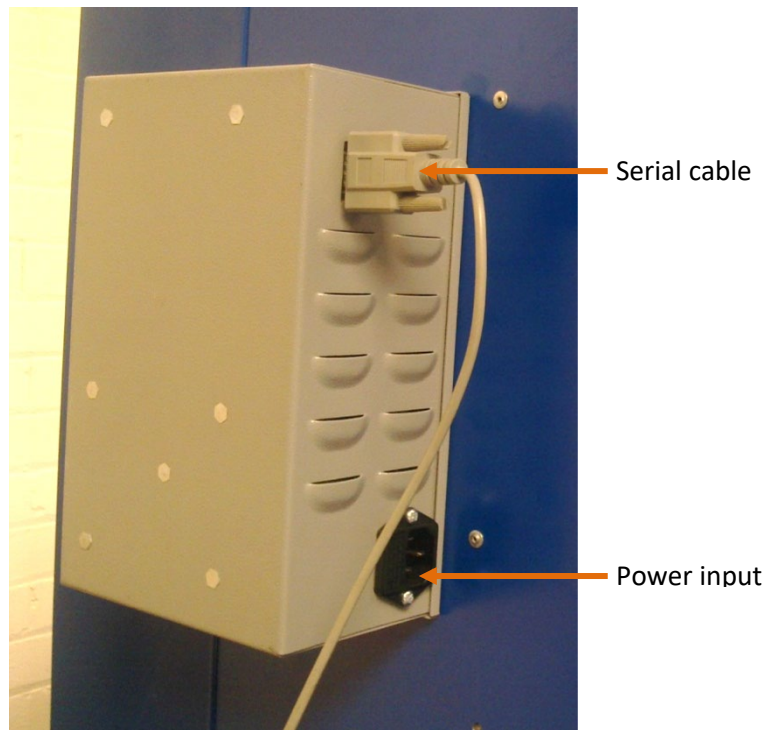


*If you are in any doubt of the correct settings, contact your local agent for technical support.

Base Units

For cabinets using either the Low Cost All-In-One Enclosure or the Compact Laptop Enclosure there will be a power/serial interface unit on the back of the cabinet, shown below.

The serial cable is connected to COM1 on the PC and the power provided runs not only this cabinet, but will power further cabinets via the 'SPEAKON' connectors mentioned previously.



Should there be a power problem; two fuses are located within the mains power input.



Ease the carrier forward, as shown previously, and check the two fuses, also shown. Both fuses are 20mm long, 5mm diameter and are rated at 240v, 160mA. Replace the fuses with the same type and rating in the carrier and re-insert them into the unit.

Physical connections (add-on units only)

Connection of the cabinet(s) into your SupplyPoint™ solution will normally be performed by your SupplyPoint™ approved installer. The cabinet connects to other SupplyPoint™ hardware either internally by way of a grey PICBus ribbon cable or, more usually, externally by use of a 'SPEAKON' connector, shown below.



The 'SPEAKON' connector is inserted into one of the sockets on the rear of the cabinet, then rotated approx. 45° clockwise into the locked position.

To unlock, pull back the silver lock button on the top of the connector, rotate approx. 45° anti-clockwise and withdraw.

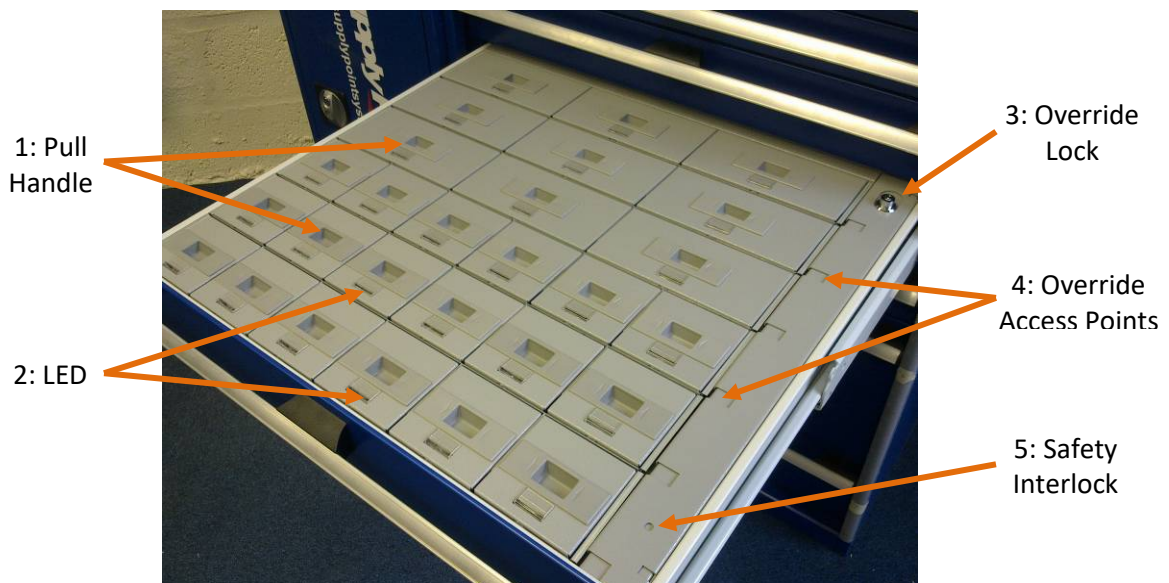
There are two connectors on the back of each cabinet to enable connection to further cabinets by 'daisy-chaining' them together, as shown below.



LID & Low Cost LID (LCL)

For both LID and LCL, the cabinet enclosure is the same as in the ECTC/Journeyman cabinets, regardless of whether or not the cabinet has the ECTC/Journeyman locking mechanism on any drawers.

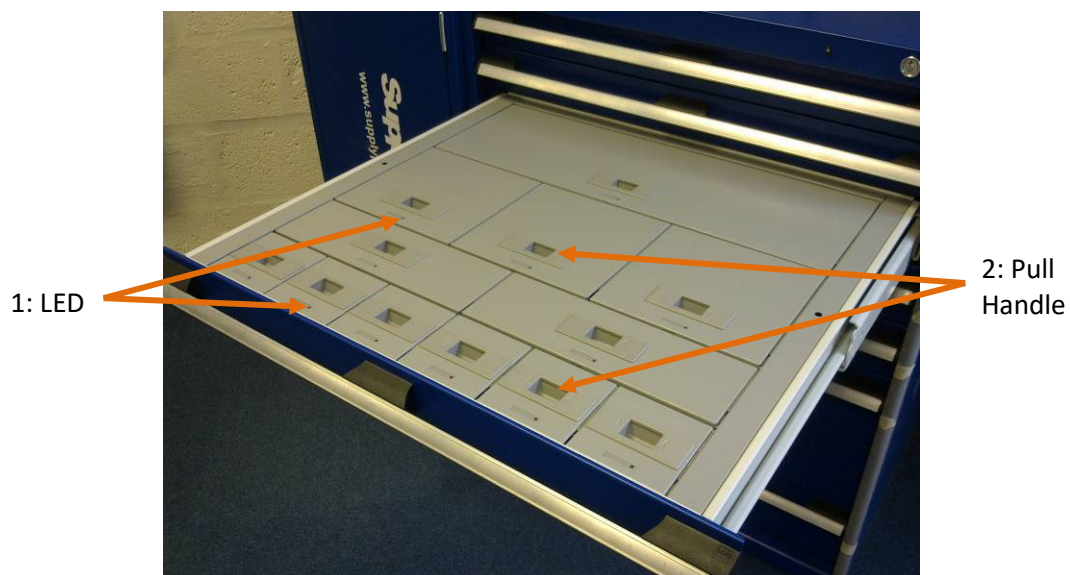
Main components of an LID drawer



The image above shows the main components of an LID drawer.

1. Pull Handle – used to open the individual LID compartment.
2. LED – shows which LID compartment is to be opened.
3. Override Lock – used to unlock or lock the override access points.
4. Override Access Points - should the LID overrides need to be employed, they are accessed through these apertures.
5. Safety Interlock – in order to close the override access points, both the safety interlock *and* the override lock must be used simultaneously, thus avoiding any chance of accidental crush injuries.

Main Components of a LCL Drawer



1. LED – shows which LID compartment is to be opened.
2. Pull Handle – used to open the individual LID compartment.

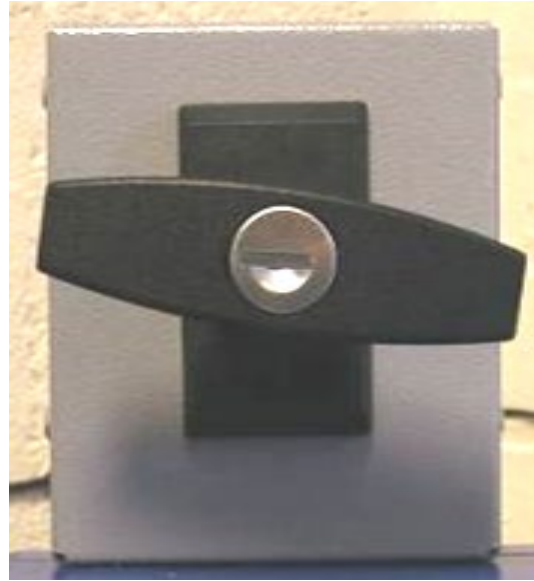
Overriding the Cabinet

If the cabinet has the ECTC/Journeyman locking mechanism, follow the instructions in the ECTC/Journeyman Override section below, if not move to the following section, LID Override.

ECTC/Journeyman Override

The ECTC/Journeyman enabled cabinet has been engineered to assure reliable and trouble-free automated operation, there are however occasions where it may be necessary to manually override the cabinet to gain access to the contents. Overriding the cabinet and returning it back to automatic operation is a simple and quick operation.

To put the cabinet into override mode, unlock the override handle at the back of the cabinet using the key. Rotate the T-handle 90° in a clockwise direction, from vertical to horizontal (both positions are shown below).

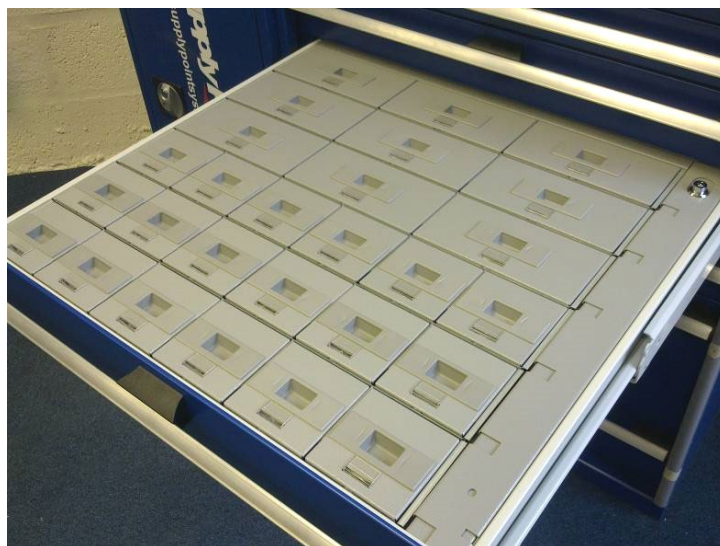


In the overridden state it is possible to freely open any drawer within the cabinet. It should be noted that due to a mechanical 'anti-tilt' mechanism, it is only possible to open a maximum of one drawer at any time.

To return the cabinet to automatic mode, simply ensure all drawers are closed, rotate the T-handle 90° in an anti-clockwise direction, back to the vertical position and then secure by relocking the central key lock.

LID Override

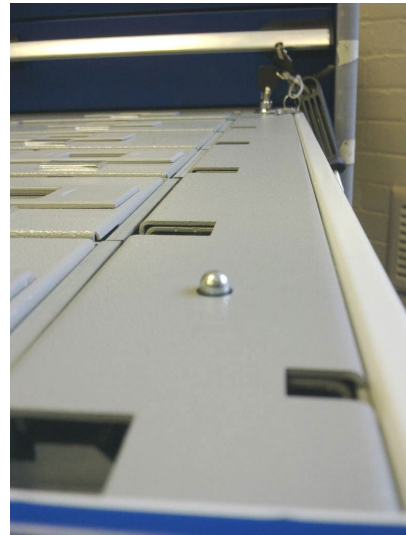
Each drawer has its own individual override controlled by a push-to-close lock, circled below.



1. To open the override cover, insert the key into the lock and turn until the centre of the lock pops up, shown opposite.



2. Push the lock body towards the rear of the cabinet until the safety interlock clicks into position, thus exposing the overrides, shown opposite.



The lock body, in its unlocked position, prevents the drawer from being closed and the safety interlock prevents the overrides being closed inadvertently.

1. Using the override tool provided; insert the steel end into the hole in the shifter bar and then pull towards the outer edge of the drawer.



2. The bar will slide across and all the Lids in the appropriate channel will be released. All LID compartments will rise up slightly due to the spring plunger in the locking mechanism. Shown opposite; you will see an overridden channel and a secure channel in the same drawer, a marked difference in height can be observed.



3. All the LID compartments in the overridden channel are then free to open.

Each channel can be overridden individually whilst maintaining the security of the adjacent channels around it by sliding the override cover back to its closed position and relocking the lock with the key. This allows certain items to be available, uncontrolled, during a power outage and



the more valuable items to remain secure.

To re-secure an overridden channel

Firstly ensure all LID compartments are open fully then insert the steel tipped tool into the hole in the shifter bar and push towards the left-hand side of the drawer to re-engage the locks. Then close the Lids, pushing them down firmly, until they click into the locked position.

Once all overridden channels in a drawer have been re-locked, the override cover needs to be put back in place.

In order to do this, both hands will be required. If necessary, insert the key into the override lock such that it is in the 'popped up' position. Push down the safety interlock (the small silver button at the front of the override bar) with one hand and with the other pull the lock body forward; then push the lock body down to lock and allow the drawer to be closed.

If the ECTC mechanism is also present, that too must be relocked as described earlier in the [ECTC/Journeyman Override](#) section.

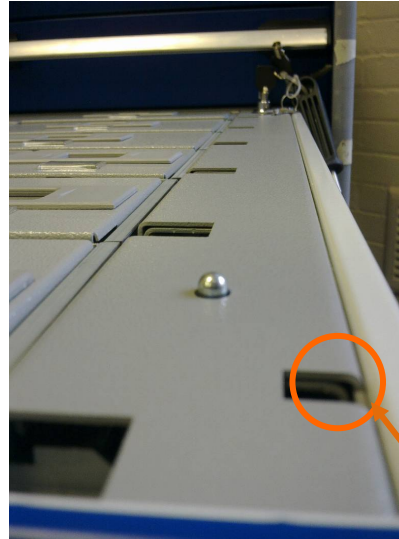
Removing and replacing LID Channels

With LID compartments being held in individual channels, it is possible to reconfigure a LID/LCL drawer just as it is to reconfigure a SupplyPoint™ frame and the types of drawers stored in it.

With LID and LCL channels secured in the system in two different ways it is important to understand how to remove and replace channels in both drawer types. In both cases, if the channels reside in an ECTC/Journeyman controlled drawer refer to the [ECTC/Journeyman Override](#) section in order to gain access to the drawer outside of the SupplyPoint™ software.

To gain access to the LID Override mechanism unlock the override access as refer to the first 2 steps in the previous [LID Override](#) section.

1. With the override lock open, small square holes will have been revealed close to the right-hand edge of the drawer. Two Set Screws hold the override cover in place.



Set Screw

2. Remove the screws and lift out the cover.



3. With the locking plate removed, the right-hand side of the channel, including its control board, will be visible. To remove the channel gently pull the ribbon cable from the plug located on the control board, circled opposite.



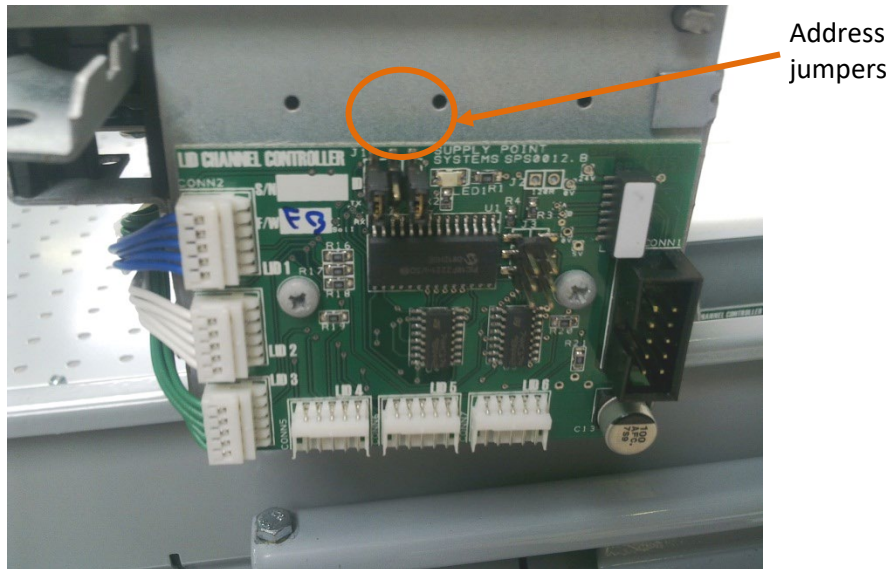
4. Slide the channel to the right, it only moves a few millimetres as shown opposite, then lift the channel vertically up to remove it.



5. Shown opposite, a LID drawer with a channel removed and the ribbon cable, circled, disconnected.



Having removed a channel it may be necessary to change the address of the replacement channel by its jumper settings*. It may, for example, have a default address of Channel 1, or have been used in a different position in an alternate drawer. The Channel control board resides at the right hand end of a channel and is shown with the address jumpers circled below.



Settings are binary and are effected by the removal of jumpers

4	2	1

 So represents Channel

4	2	1

 2, while represents Channel 5.

*If there is any doubt call your local agent for support.

Channels must be numbered from front to back. Each channel, irrespective of size, is considered as one addressable item.

A drawer with 3 single depth channels and one triple depth channel would be addressed 1-4, two triple depth channels would be addressed as 1 and 2

To replace the channel, place it gently into the slot available, slightly to the right taking care not to damage any of the cables or circuit boards, then to reengage the catches underneath, slide the channel to the left to secure the channel into place.

Then carefully re-attach the ribbon cable, ensuring the plug is firmly seated in the holder on the channel board.

At this time test the channels within the drawer using the **SPSOpendrawer.exe** program to ensure all cables have been reconnected and the addressing is correct.

Once testing has been satisfactorily completed replace the override cover and secure back into place with the two screws.

Using Drawers and LIDs

Regardless of the cabinet type the first stage is the same, there will be one LED at the top of the cabinet to show which cabinet is in use and the drawer to be opened will have 1, 3 or 6 flashing LEDs illuminated to the right hand side.

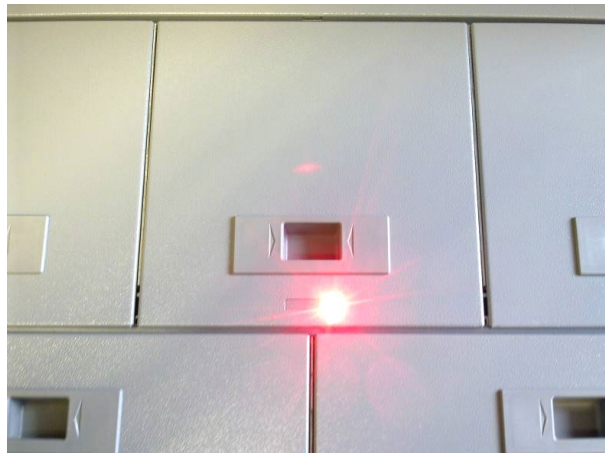


When the drawer is opened, the LEDs will go out and if this is just an ECTC drawer the items can be addressed as required and the drawer simply pushed closed.

LCL

After the drawer is opened the relevant LID compartment will be lit by an LED.

At this point simply lift the LID compartment, remove the item, allow the LID to close and shut the drawer, thus completing the transaction.



LID

Once the drawer is opened, the required LID compartment will be indicated by a lit LED.



Press down on the front of the LID and a click will be heard as the solenoid lock releases and unlocks the LID.



Now the LID is unlocked and pulling the LID compartment open allows the contents to be accessed and the contents taken.

The red LED will extinguish approximately 0.5 seconds after the LID has been lifted.



To close the LID compartment, push the LID until it locks into place with a click and then close the drawer, completing the transaction.

Physical Specifications

BASE UNIT CONSTRUCTION

- Robust steel construction
- Four sided top tray with anti-roll function

DRAWER BODY CONSTRUCTION

- Folded pan construction, stiff and distortion free, no sharp edges and no dirt traps
- Telescopic drawer runners allow 100% opening of drawers, maximizing available space
- Ergonomic handles that can be gripped from above or below

WEIGHTS Max drawer load capacity

- Standard drawer (Uniform Distributed Load): 90kg
- LID drawer (Uniform Distributed Load): 120kg

CABINET HOUSING				
Depth	Width	Height	N° of LID channels /drawer	Usable area D x W mm (N° LIDs)
525	800	800	4	400x 675
525	800	1000	4	400x 675
750	800	800	6	625x 675
750	800	1000	6	625x 675
750	800	1200	6	625x 675
750	800	1600	6	625x 675

DRAWER SPECIFICATION	
Drawer height/mm	Usable height/mm
75	55
100	80
150	130
200	180
300	280

LID MODULE OPTIONS

LID size W x D	Max N° locations per drawer	Internal Dimensions (W x D)		Available Internal Height 100mm/150mm drawer size	
		mm	in	mm	in
1 x 1	36	99 x 66	3.9 x 2.6	55 / 105	2.2/ 4.1
2 x 1	18	198 x 66	7.8 x 2.6	55 / 105	2.2/ 4.1
3 x 1	12	299 x 68	11.8 x 2.6	55 / 105	2.2/ 4.1
2 x 2	9	198 x 163	11.8 x 6.4	55 / 105	2.2/ 4.1
3 x 2	6	299 x 163	11.8 x 6.4	55 / 105	2.2/ 4.1
3 x 3	4	299 x 260	11.8 x 10.2	55 / 105	2.2/ 4.1
6 x 3	2	599 x 260	23.6 x 10.2	55 / 105	2.2/ 4.1
6 x 2	3	599 x 163	23.6 x 6.4	55 / 105	2.2/ 4.1

ECTC / Journeyman

These cabinets do not have specific sizes as almost any size of cabinet can be converted. See your SupplyPoint™ agent for more details.

Installation (Drawer Unit)

Supply Point personnel are usually responsible for installing the SupplyPoint™, but there are cases when a customer feels it best to install it himself. The purpose of this section is to provide a comprehensive guide to installing the SupplyPoint™ unit and for dealing with some issues that may arise during installation. The following is the minimum set of tools required to install the machine:

- A drill or power screwdriver with a Phillips bit;
- A screwdriver with Phillips and Torx (T25) security bit;
- A ¾" open end wrench;
- A level;
- A ½" masonry drill bit (if the machine is being attached to the floor);
- Two concrete anchors (included in the shipment);
- 3/8" and 5/16" wrenches (if there are add-ons);
- Joining kits (provided for add-ons);

- A riveting tool that can handle 3/16" rivets (for add-ons).

Pre-Installation

1. Determine the location of the SupplyPoint™. The space should have 12-24 inches clearance on the back and 20-24 inches on the side.
 - Is the SupplyPoint™ going to be anchored to the floor? If so, can a hammer drill be made available for this task?
2. The SupplyPoint™ requires 120 VAC and has a 10-foot power cord. If power is farther from the site appropriate preparations should be made. Alternatively, AC power can be supplied through conduit by connecting the conduit to the conduit box (½" knockouts) located underneath one of the SupplyPoint™'s lids.
3. If the SupplyPoint™ will reside on the network a connection will be required. The SupplyPoint™ has a network interface card and the network drop should be CAT5 cable with an RJ-45 connector. The following points should be considered:
 - Is the network structured as a workgroup or as a domain? If the network is a domain, the SupplyPoint™ may require an account on the domain and a member of the IT department will be needed to log it on.
 - What protocol is in use (e.g. TCP/IP, IPX/SPX and NetBEUI)?
 - Will the SupplyPoint™ have a fixed IP address or will it use DHCP to obtain an address (TCP/IP only)?
4. Determine which users need to have access to the SupplyPoint™ administrative functions. These users will have the SupplyPoint™ client software installed on their PCs which needs to be coordinated with the internal IT department.
5. Complete the SupplyPoint™ Item Plan Spreadsheet to configure the drawer layout.

Physical Setup

The SupplyPoint™ is designed to stay in place once installed. Ideally the machine should be anchored to the floor to ensure its stability and to enhance the safety of workers. For this purpose there are two holes at the base of each frame that can accept ½" concrete anchors or other anchoring devices. One anchor at each end of a machine is generally sufficient to provide stability. Where protection from vehicular traffic is a concern, installation of a guardrail is recommended.

1. Unload the SupplyPoint™ from its crate.
 - a. Remove all of the drawer trays from the frame. Do not attempt to remove the machine from the crate fully loaded as the stress on the frame could cause serious damage.

- b. Lift the crate and frame to a standing position.
 - c. Remove the SupplyPoint™ frames from the crate and set in place.
2. Remove the side panels if the SupplyPoint™ is to be attached to the floor. If there are add-ons, remove the screws from the edges of the rear panels where they will be joined.
3. Remove the lids to aid in levelling. They are secured by one or two screws, which can be loosened from below.
4. Put the frames in place and level them. If there are add-ons, level the base unit to use as a guide for the rest. The frames are made level by adjusting the four feet at the base of each frame with a ¾" open wrench.
5. Level any add-ons and attach them with the materials provided.
 - a. In the back of the frames to be joined, place the bolts provided through the joining hole of one frame, the spacer in between the frames and into the second. Tighten the locknut so that it holds in place.
 - b. Repeat for the second set of holes in the back.
 - c. Tighten the locknuts. The bolt requires a 5/16" wrench and the nut uses a 3/8" wrench.
 - d. On the front of the machine attach the top set of joining plates. This is done by placing one set of plates over the four holes at the top of the frame. The larger plate should always be the outermost. Secure with 3/16" rivets.
 - e. Repeat for the bottom and middle.
 - f. Slide the coloured panel over the joining plates. They should fit nicely into the channel created by the joining plates. It may be necessary to loosen the kick plate at the bottom of the frame to get the panel all the way down.
 - g. Attach the rear centre strip with Torx (T25) screws.
 - h. Repeat for additional frames if necessary.
6. Attach the machine to the ground if necessary.
 - a. Using the holes at the ends of the machine as a guide, drill two holes using a ½" masonry bit.
 - b. Hammer the provided concrete anchors into place.
 - c. Tighten the nuts using the ¾" open wrench.
7. Replace any side panels.
8. Replace the drawer trays in their proper configuration.

Electrical Setup

Electrical Connection (U.S.)

The SupplyPoint™ must be connected to a 120 VAC power supply as specified on the rating label. The connection must conform to NEC article 300, with supply current limited to no more than 15 Amps. A readily accessible disconnect device is to be incorporated into the building installation wiring.

Connection is made under the lid of the frame holding the monitor. A connector block is provided in a wire enclosure with a square metal cover at the rear of the frame top. The colour convention used is as follows:

Black= Hot

White= Neutral

Green= Ground

An Uninterruptable Power Supply is located under the lid of the frame containing the computer. The UPS is plugged into the outlet on the frame over the monitor and in turn provides power to the computer, monitor and 24V power supply that controls the machine's electronics. Total output from the UPS is to be limited to 3 Amps.

Electrical Connection (Europe)

The SupplyPoint™ must be connected to a Mains supply (230VAC) as specified on the rating label. The connection must conform to local wiring safety standards, with supply current limited to no more than 15 Amps. A readily accessible disconnect device is to be incorporated into the building installation wiring.

Connection is made under the lid of the frame holding the monitor. A connector block is provided in a wire enclosure with a square metal cover at the rear of the frame top. The colour convention used is as follows:

Brown= Live

Blue= Neutral

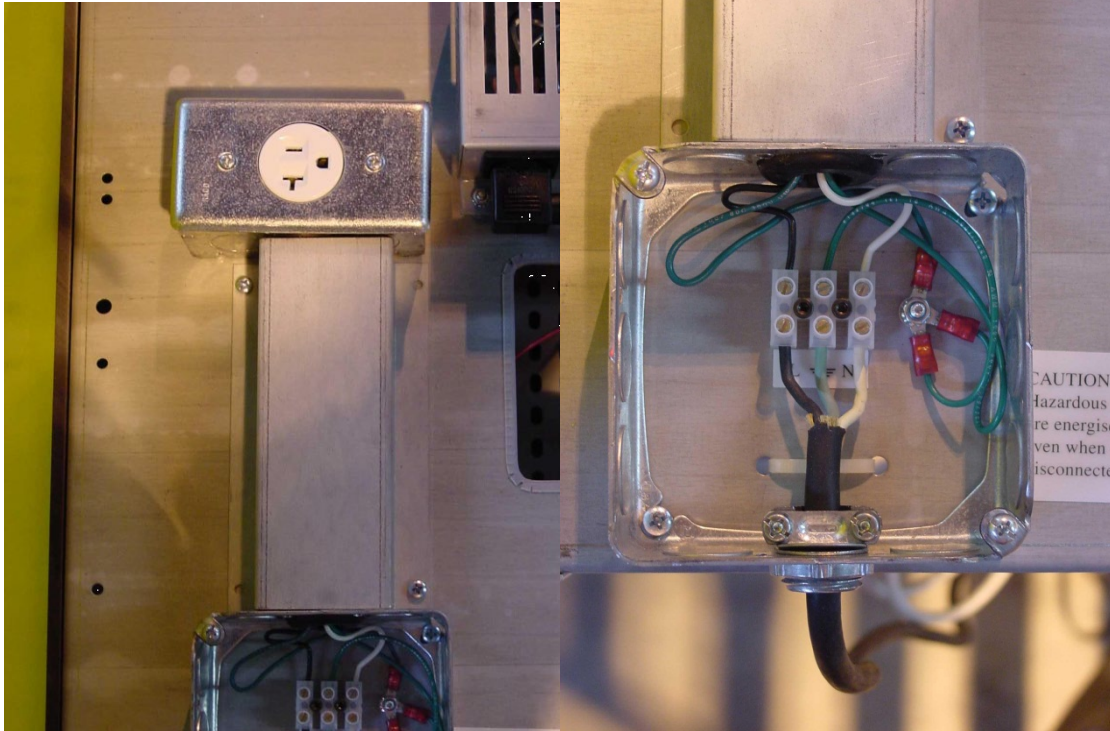
Green/Yellow= Earth

An Uninterruptable Power Supply is located under the lid of the frame containing the computer. The UPS is plugged into the outlet on the frame over the monitor and in turn provides power to the computer, monitor and 24V power supply that controls the machine's electronics. Total output from the UPS is to be limited to 3 Amps.

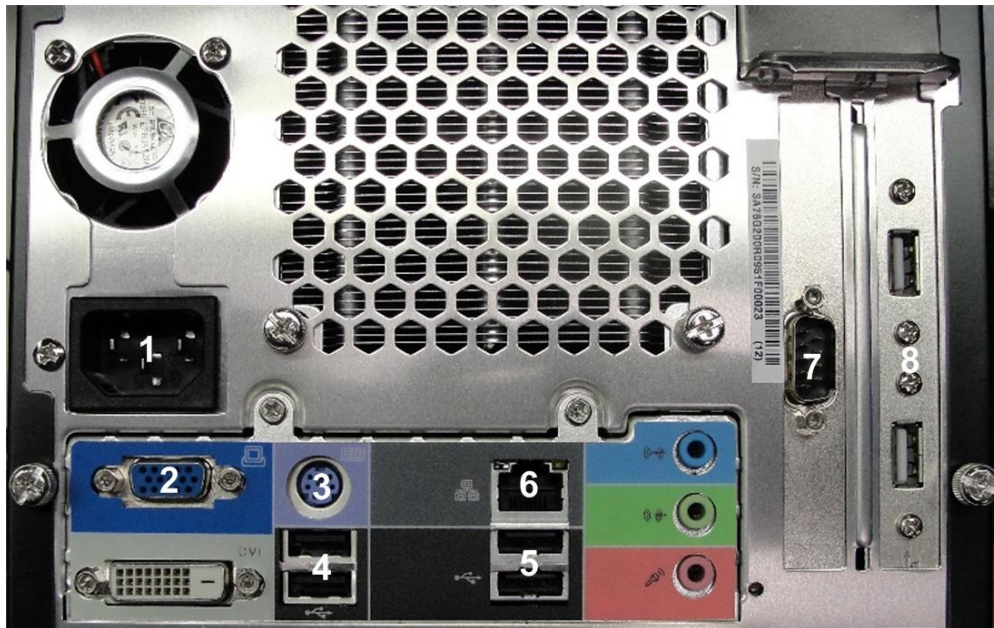
Caution!

There is a risk of electric shock even when the main AC power is disconnected, as some components are still receiving current from the UPS battery. Take care when replacing any UPS as the sockets can maintain residual power for a time after disconnection.

1. There is a bus cable that is used to connect all of the PIC boards, so that they can communicate with the computer. Plug the cable in to any add-on units.
2. The SupplyPoint™ electrical apparatus is designed to conform to CE® standards. Located on top of the frame holding the monitor is the equipment that makes this possible. The SupplyPoint™ CE apparatus is pictured below.
NOTE: The included power cable is intended for temporary use only. Use of this cable is not consistent with the CE® standard. In order to be CE® compliant, power conduit will need to be attached to the machine.
The power cord will need to be attached to this.
 - a. Remove the cover from the junction box at the rear of the machine.
 - b. Run the power cord through the cable clamp at the rear of the junction box.
 - c. Attach the leads from the power cord to the terminal block inside the junction box and tighten them in place. Pay close attention to the colour scheme.
 - d. Tighten the cable clamp at the rear of the junction box.
 - e. Replace the cover of the junction box.
3. Place the Uninterruptable Power Supply (UPS) on the frame over the computer. Run the UPS power cord through the opening in the top of the frame, into the frame containing the monitor, up through the opening above the monitor, and plug into the outlet on the frame containing the monitor. Make sure the UPS is off.
4. There are three plugs in the frame with the computer. Plug them into the battery/surge side of the UPS.
5. Plug the machine into the wall



Computer Setup



1. Connect the AC power cable at location 1.
2. Connect the touch screen video cable to location 2.
3. Location 3 is a PS/2 port for a keyboard if required. All machines currently ship with USB keyboards however, so this connection is not used by default.
4. Location 4 is 2 USB ports for keyboard, mouse, card reader, scan gun, receipt printer, fingerprint reader, etc.
5. Location 5 is 2 USB ports for keyboard, mouse, card reader, scan gun, receipt printer, fingerprint reader, etc.
6. Plug the RJ-45 connector on the network cable to location 6.
7. Plug the serial cable from the communications board on a 28 level



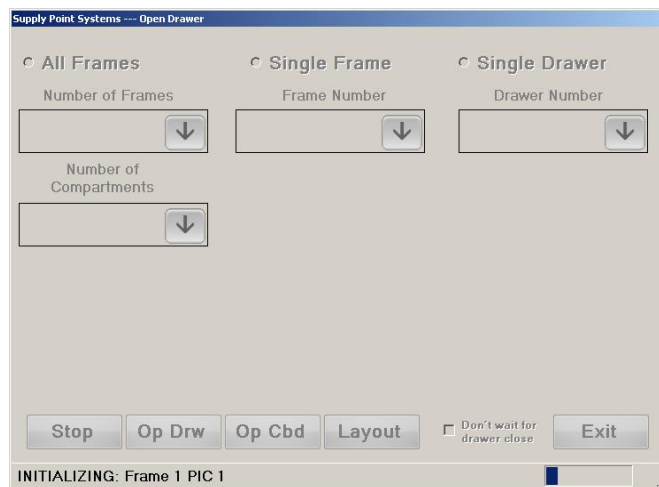
frame or the Master PIC board on a 20 level frame into location 7.

8. Location 8 is 2 USB ports for keyboard, mouse, card reader, scan gun, receipt printer, fingerprint reader, etc.

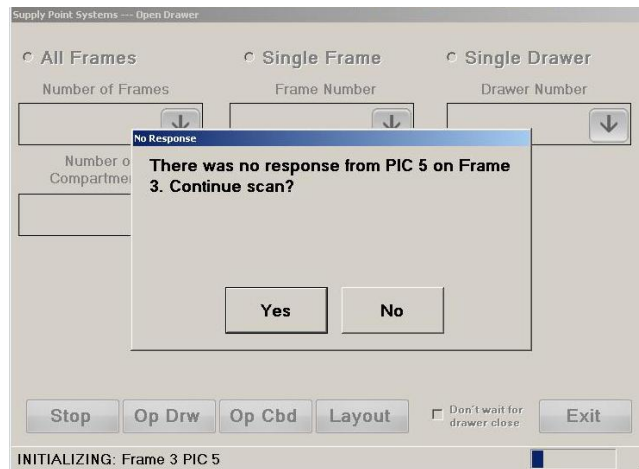
There is a serial number tag on each of these PCs, to be used when calling technical support. It is located toward the front of the case on the right-hand side.

Startup and Drawer Test

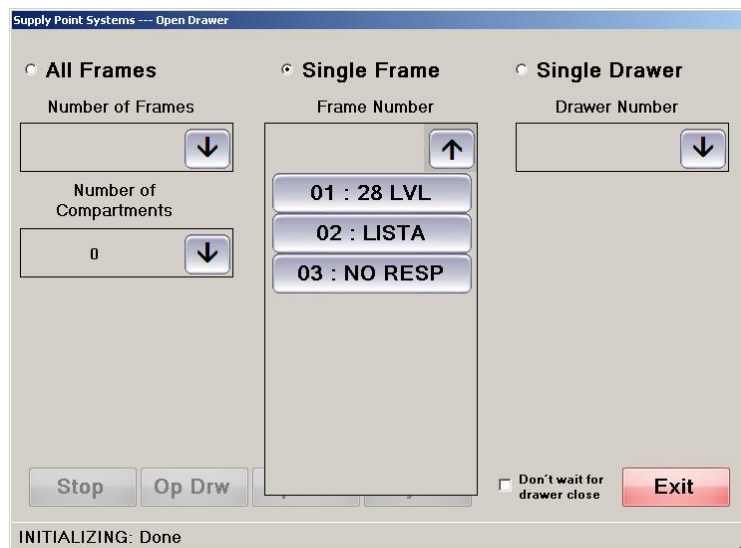
1. Plug the AC cable into the wall.
2. Press the power button on the UPS. The PC should start its boot process. When the Windows login screen appears enter **Administrator** for the user. The password is **sps**.
3. Start the *SPSOpenDrawer* program to test the drawers. When it starts up it will scan each frame to determine the type (20 level, 28 level or ECTC/Listia). You will see the screen below.



4. The program will start at frame 1 and scan until it gets no response. At this point you will see the screen below. This is ok. It just means there is nothing detected on Frame 3. In this example there are only 2 frames in the machine. Click **NO** to finish scanning. It is possible to click **YES** and look for additional frames. This may be necessary if you suspect the frames are incorrectly numbered (setup with the incorrect addresses -(see the Jumper Settings section above).



5. You can now select *All Frames* and choose the number of frames in your machine in the drop-down list below it.
6. Select the *Number of Compartments to Open*. Bear in mind that this number has nothing to do with the actual number of compartments your machine is configured for. This simply tells the software how far to open the drawer (i.e. 12= all the way, 6=halfway). Select six and press **GO**.
7. Open and close the drawers in sequence, paying attention to ensure they open to the distance of 6 compartments. If there are any problems refer to [Drawer Issues](#) in the FAQs and Troubleshooting section towards the end of the manual.
8. You can also select a single frame to test as shown below. The drop down will show the types of frames it detected on startup.




Generating a Layout

You can generate a layout for the frame by selecting the desired frame and clicking the **LAYOUT** button.

For 28 Level frames the machine will quickly scan all the drawer trays and generate a layout as shown below. You can now click any drawer and open to the number of compartments specified in the box at the top of the form. For 20 level frames the scanning process is significantly slower. You will have to wait for it to click through each drawer in the frame. If the layout shown here does not match the drawers in the machine, there may be a problem. In a 28 level frame if there are any drawers coloured red then the drawer board may need to be replaced. See the hardware and maintenance section for more information on troubleshooting and replacing drawer boards.

01:28 LVL

Rescan ☐ Repeat 12 

Exit

9 (Z)	10 (Z)	11 (Z)	12 (Z)
13 (Z)	14 (Z)	15 (Z)	16 (Z)
17 (Z)	18 (Z)	19 (Z)	20 (Z)
21 (Z)	22 (Z)	23 (Z)	24 (Z)
25 (Z)	26 (Z)	27 (Z)	28 (Z)
29 (Z)	30 (Z)	31 (Z)	32 (Z)
33 (Z)	34 (Z)	35 (Z)	36 (Z)
37 (Z)	38 (Z)	39 (Z)	40 (Z)
41 (Z)	42 (Z)	43 (Z)	44 (Z)
45 (Z)	46 (Z)	47 (Z)	48 (Z)
49 (Z)	50 (Z)	51 (Z)	52 (Z)
53 (Z)	54 (Z)	55 (Z)	56 (Z)
57 (Z)	58 (Z)	59 (Z)	60 (Z)
61 (Z)	62 (Z)	63 (Z)	64 (Z)
65 (Z)	66 (Z)	67 (Z)	68 (Z)
69 (Z)	70 (Z)	71 (Z)	72 (Z)
73 (Z)	74 (Z)	75 (Z)	76 (Z)
77 (C)		78 (C)	
81 (A)	82 (A)	83 (A)	
85 (A)	86 (A)	87 (A)	
89 (A)	90 (A)	91 (A)	
93 (A)	94 (A)	95 (A)	
97 (C)		98 (C)	
101 (C)		102 (C)	
105 (C)		106 (C)	
109 (C)		110 (C)	

Installation (RotoPoint)

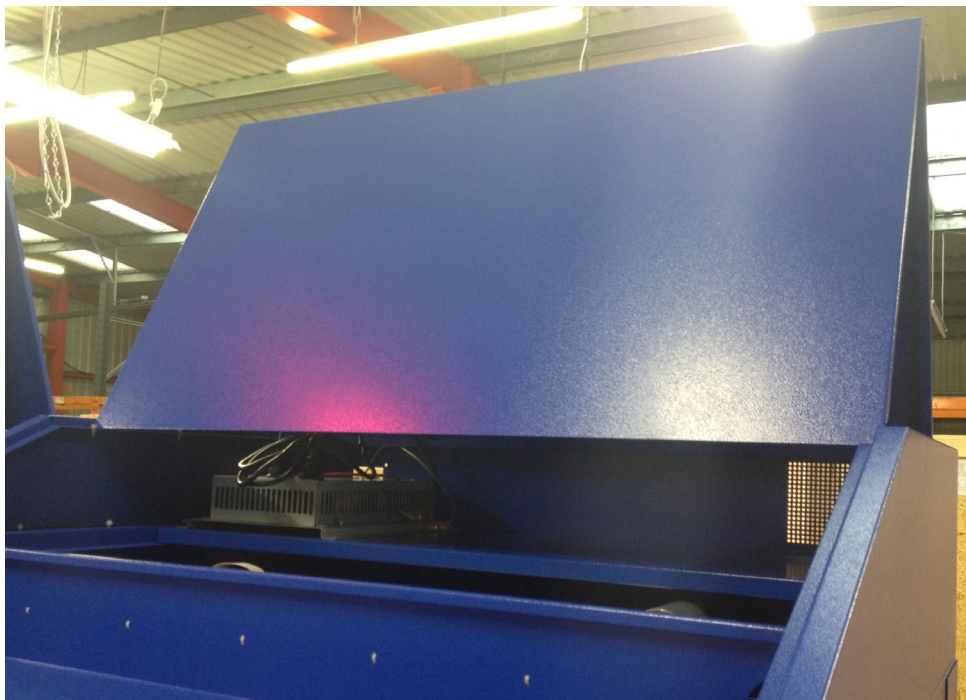
A RotoPoint installation consists of the following steps. This is the same for an add-on connecting to a drawer unit or as stand-alone. In the case of a stand-alone the computer and battery backup are installed in the top of the RotoPoint. In the case of an add-on the RotoPoint is connected via the external SPEAKON receptacles at the back. This is the same connector used to connect ECTC and LID cabinets together or to a drawer unit.

- Remove the unit from the crate
- Open Lid and thread power cable through back
- Open front doors, inspect inside of the unit and check the safety switch
- Plug power cable in and connect SPEAKON cable from main system (if it is an add-on unit) and make sure that both lights on the Motor Control board are on and that the light on the FFC PIC flashing (see pages 10-11)
- Verify safety switch screw is installed (page 12)
- Use Auto/Manual switch to ensure that drum rotates smoothly (see page 14) (you will have to close the main door for this to rotate the drum)
- Rotate drum at least one full rotation
- Use the Drawer Setup Open Drawer button in Machine Configuration to select column 1, Level 1 and check for proper alignment.



The unit can be removed from the crate in the same way the previous generation was. Use a forklift to lift at the bottom just enough to raise it off the crate floor and then pull the unit from the crate. Then place the unit in the desired location and make sure all of the adjustable feet are touching the floor. Use a level on the inside of the lid to make sure the unit is level left to right and front to back. See the following pages for instructions on opening the lid. To open the lid unlock the lock on the lid and slowly pull the lid back as shown below.

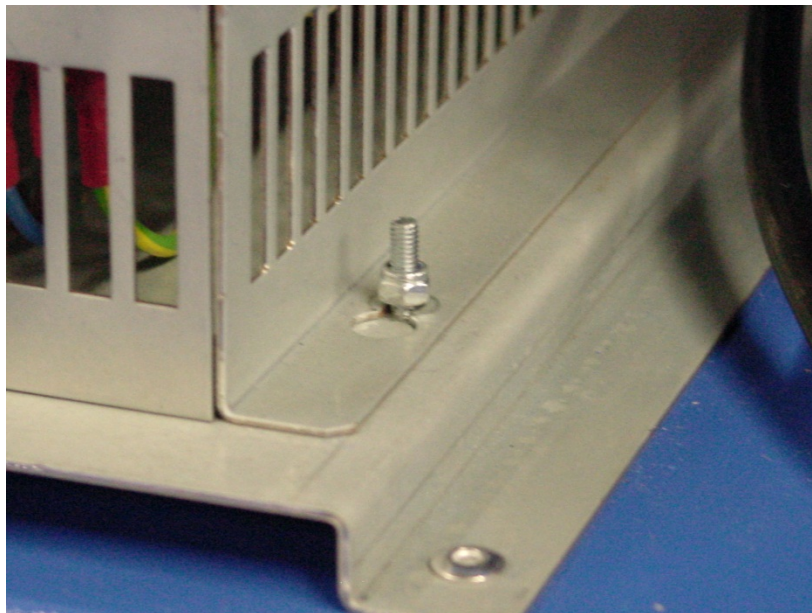
Continue to pull the lid back as shown until it is in the position shown. It can rest against the bolt heads to keep from sliding forward. Be careful to not pull the lid too far back as it could swing backwards and fall down behind the machine.



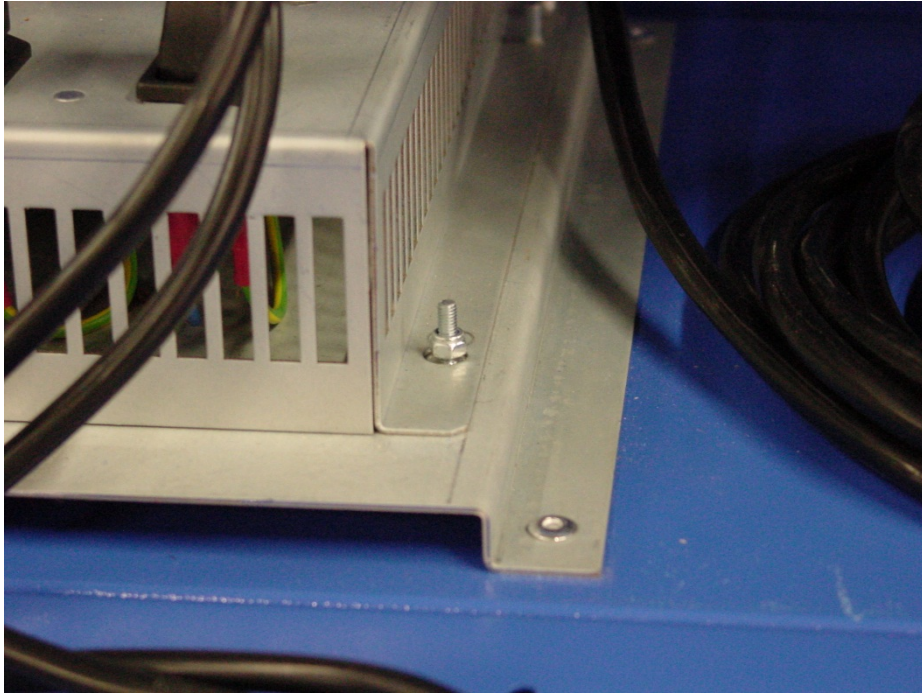
The above shows the final position of the lid when open. Once the lid is open you will see the main power conversion unit at the left with the power cord (add-on configuration). The power cord must be inserted through the opening at the back and then plugged into a power outlet. To do so; the power cover, shown on the next page, must be lifted up and out of the way slightly. Follow the instructions to do this.



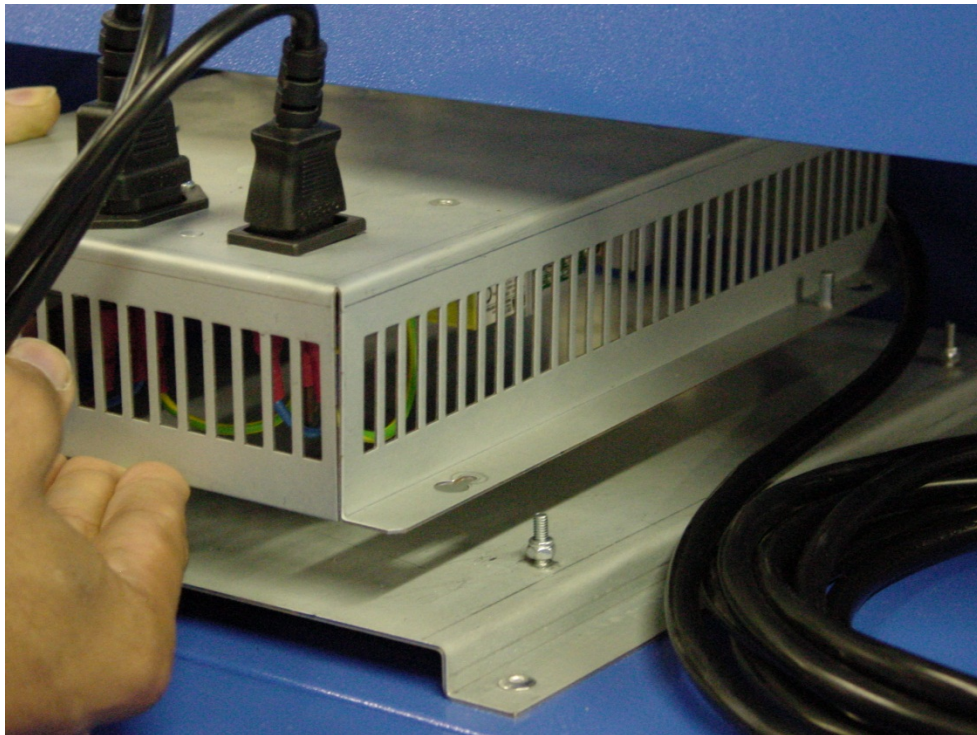
There are four nuts that hold the cover for the power unit in place. Shown below is a close up of one and how it will look when the unit arrives. These nuts must be loosened slightly so the cover can be slid towards the back. This will allow the nuts to clear the larger hole (See next picture).



Below shows the cover pushed to the back. You can now lift the cover up and over the nuts (see next picture).



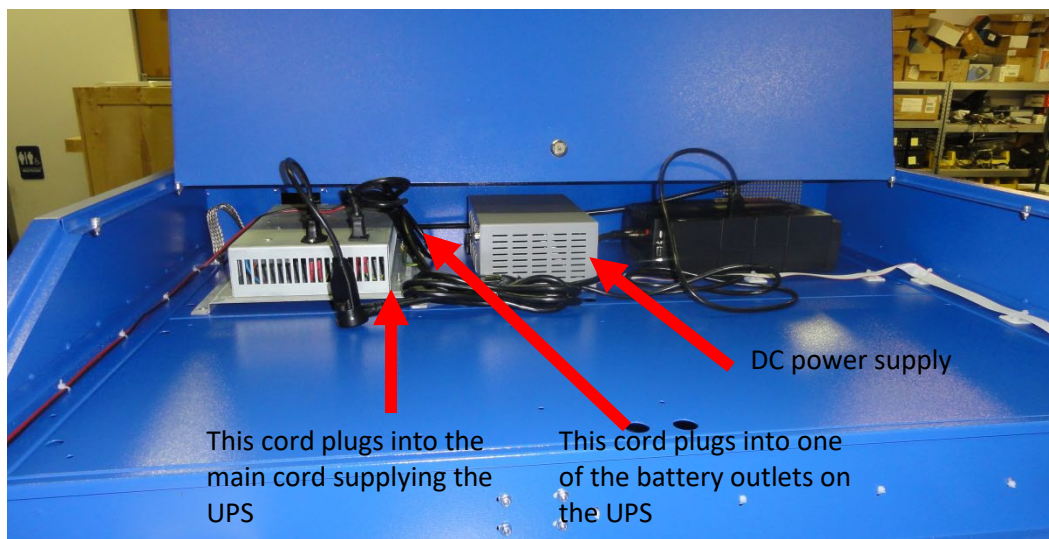
Now the cover has been lifted the cord can be inserted through the hole at the back. Note that all of the power components are attached to the underside of the cover.



The picture below shows feeding the plug through the hole at the back of the unit. The RotoPoint may be shipped with the plug already fed through the back as shown below. If so then the previous steps will not be necessary.



The previous pictures depicted an add-on setup. If the RotoPoint is a standalone unit, the top will look like below. The grey box in the middle is the DC power supply for the PIC board and communications interface for the PC. The battery backup is on the right. The PC will be a standalone unit mounted on the side or if internal it will sit in front of the incoming power box on the left.

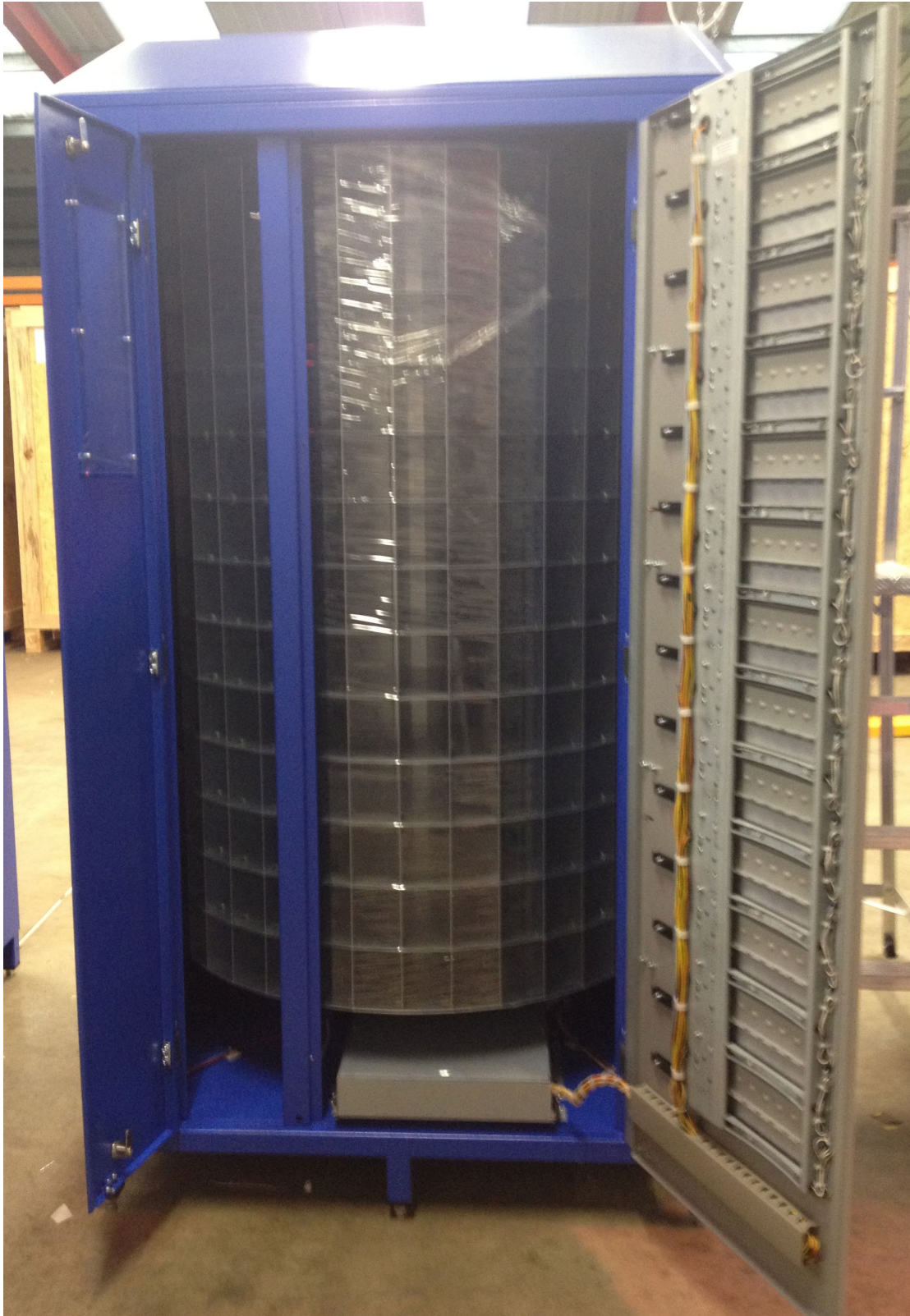




The above is a close up of the DC power supply. Plug the serial cable from the PC into the DB9 connection on the top right. Plug the power cord from the UPS (battery backup) into the black power inlet of the lower left. Now open the doors to unit to inspect the inside and test the drum rotation.



There are two doors that open at the middle. First unlock the left door (lock at top and bottom) and open the door. This will allow the door on the right to be opened.



View of the inside of the unit upon with both doors open.



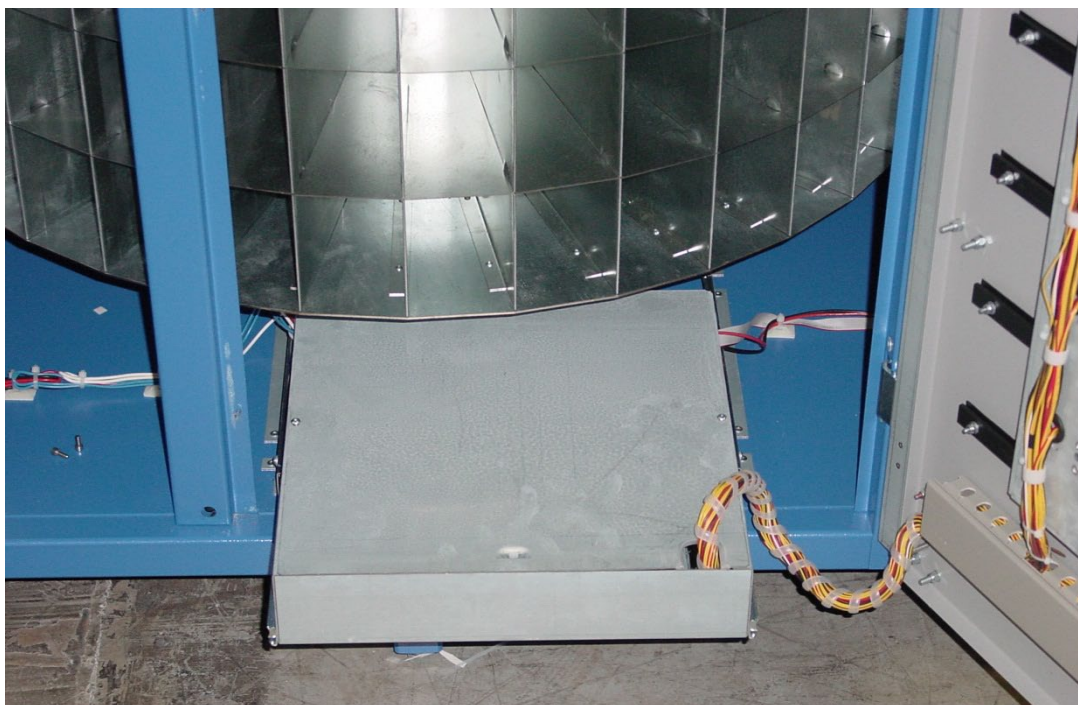
View of wiring on back of right front door and individual access doors.

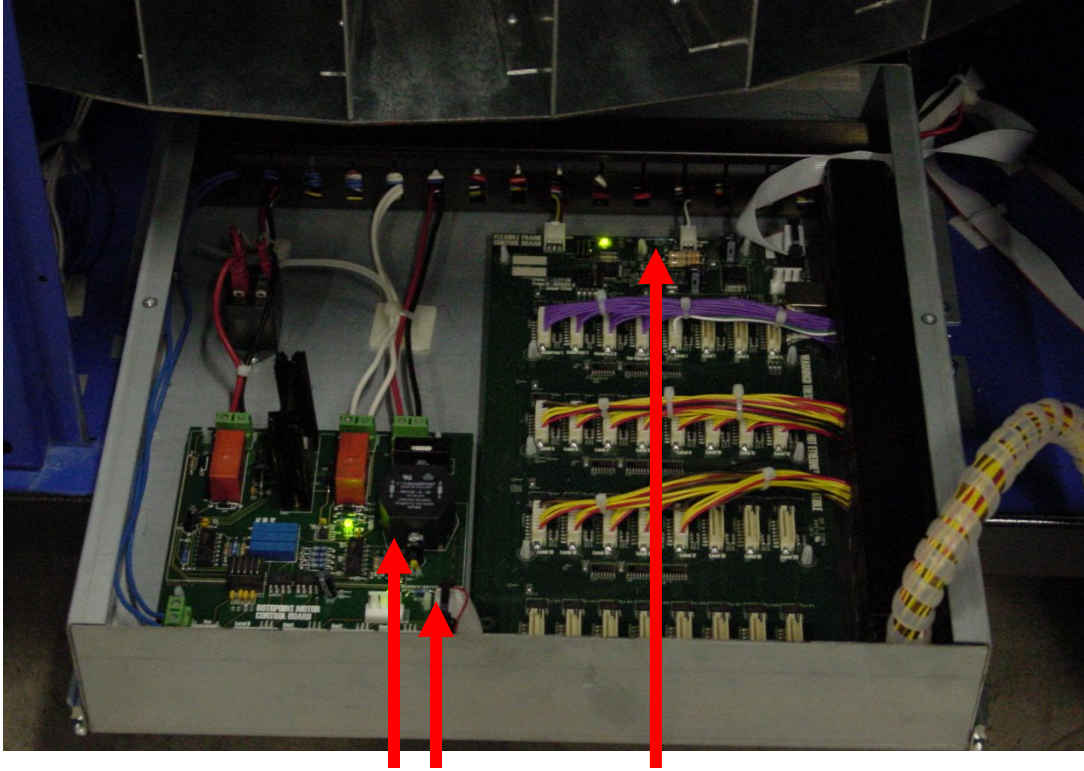
Once the unit is set in position and powered, it is important to verify if the FFC PIC board and motor control board are powered. This will also be useful for troubleshooting. The PIC board and motor control board are located under the

drum on the right side. You must open the right door to access them. They are located in a box as shown below.

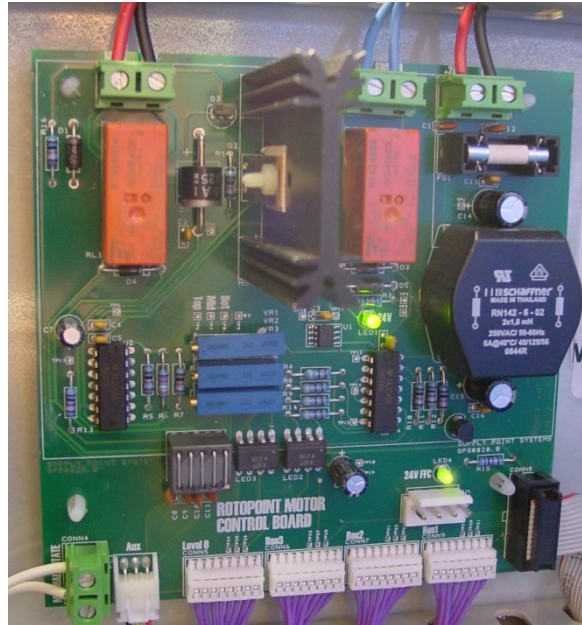


To access the box simply slide it out as shown below. There are two screws on the left and right securing the lid in place. Remove the screws to access the inside of the box (see next picture).





No connections are required to be made here but is useful to understand the boards. The motor control board is on the left and the FFC PIC board is on the right. Note the lights on Motor Control and FFC PIC boards. If everything is connected correctly, power is applied and the ribbon or Speakon connection is active, the two Motor Control board lights will be on and the FFC PIC board light will be flashing. **NOTE:** The FFC PIC board is the same physical board as used in the standard 28 level frame but has different firmware. Therefore **DO NOT REPLACE** with a standard 28 level frame PIC board.

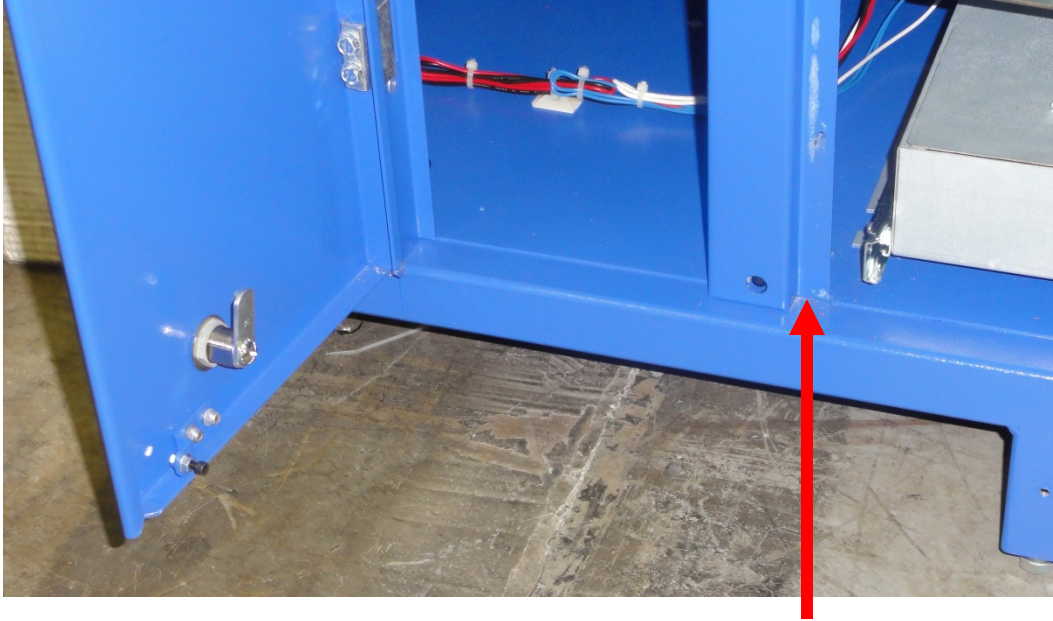


Close-up of **Motor Control board** and connections

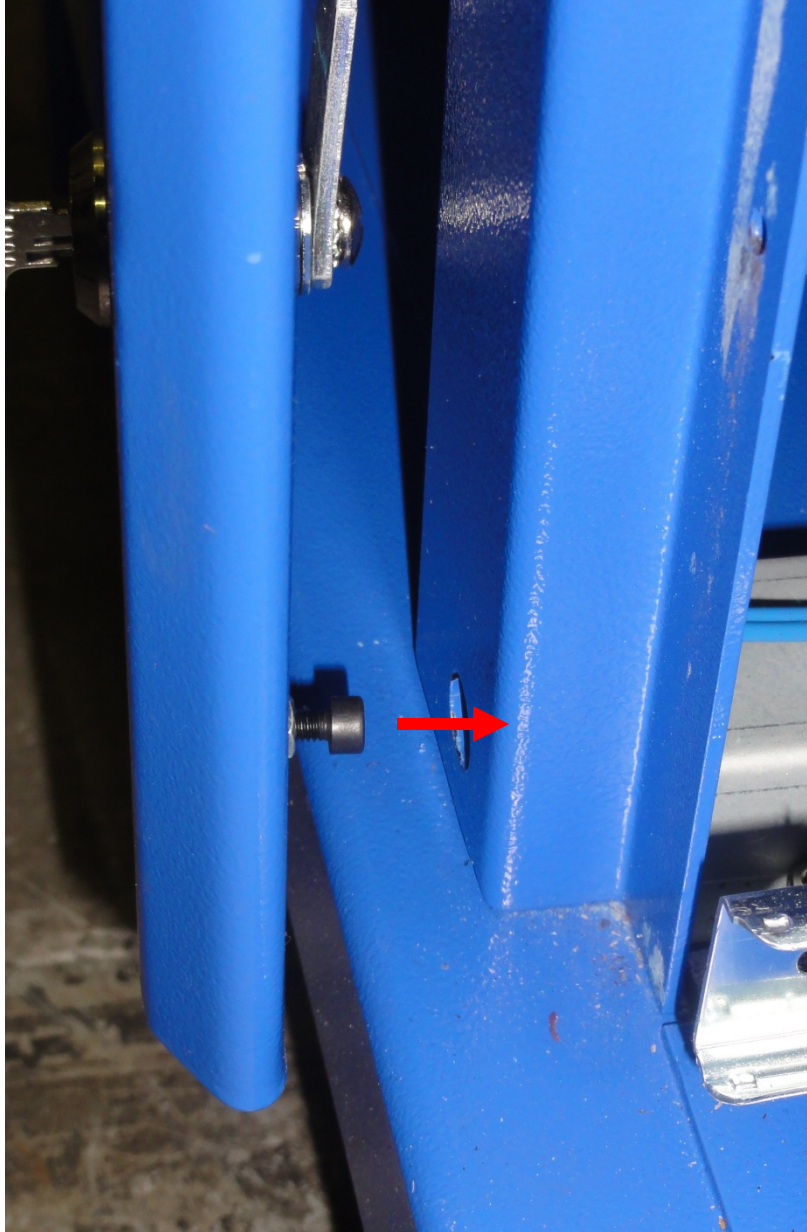
Now check the safety switch screw in preparation for a test rotation of the drum.



Location of safety switch screw on bottom inside of left door.



When the door is closed the safety switch screw will go inside the hole in the middle strut shown above. Once inside it will depress the safety switch allowing the drum to turn. If the door is not fully closed and locked at the bottom the switch may not become fully depressed. If so, the unit would report a main door fault when trying to rotate the drum. The next picture shows a close up view of the left door being closed with the safety switch screw being inserted in the hole.



View of the left door being closed with safety switch screw

Now that you've verified that the safety switch screw is installed, verify that the drum rotates. On the left inside towards the top will be the manual rotation switch (shown below). For normal operation the switch should be in the up position. To turn the drum manually; change the switch to the down position and close the left hand door for the rotation to begin. This may be necessary during troubleshooting to determine if the motor and drum are functional. Let the drum rotate one full rotation. Stop the drum rotation by moving the switch back to the up position.

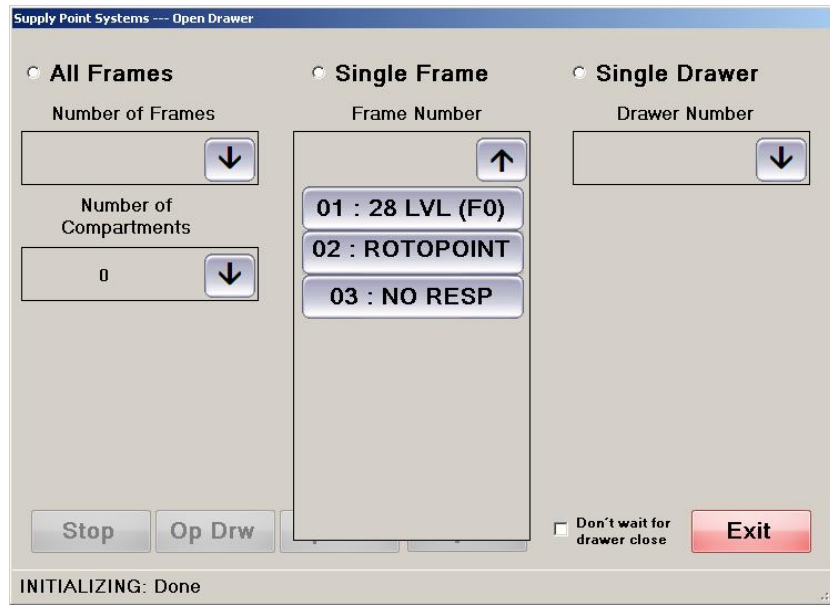


Manual/Automatic Rotate Switch

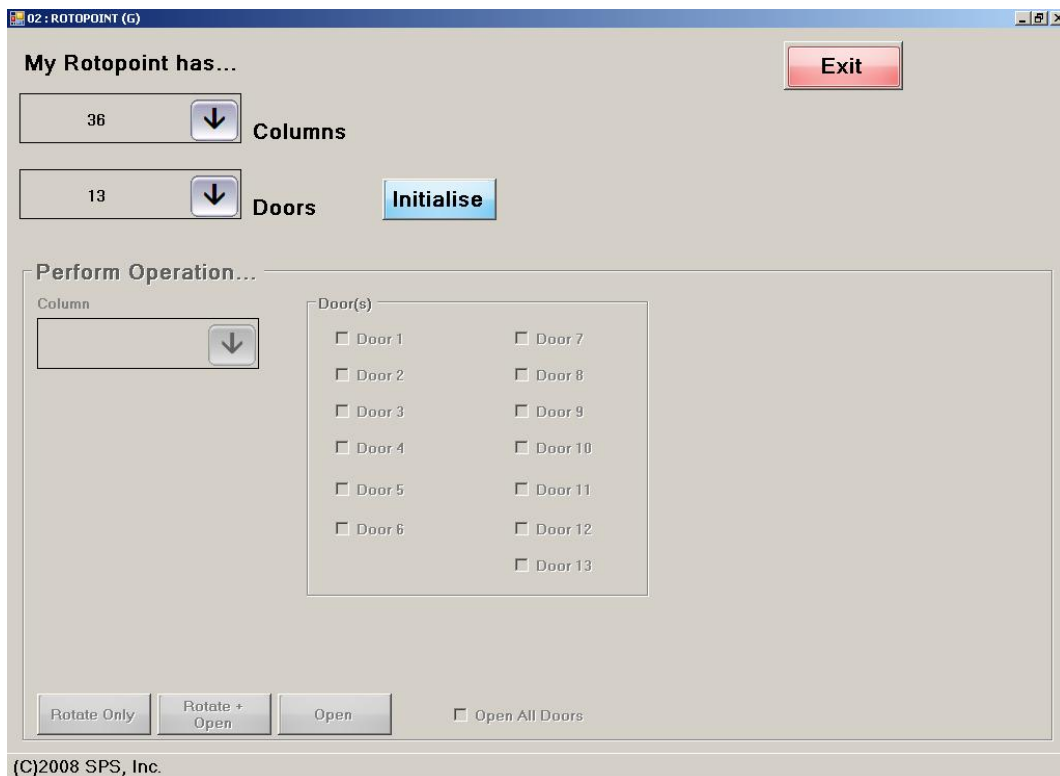
Finally, close the doors and use the open drawer program to test the opening of each of the doors.

Important: Don't forget to move the switch to the up position before closing the doors. It would be easy to simply forget to move the switch to the up position but once the doors were closed, the drum would start rotating again.

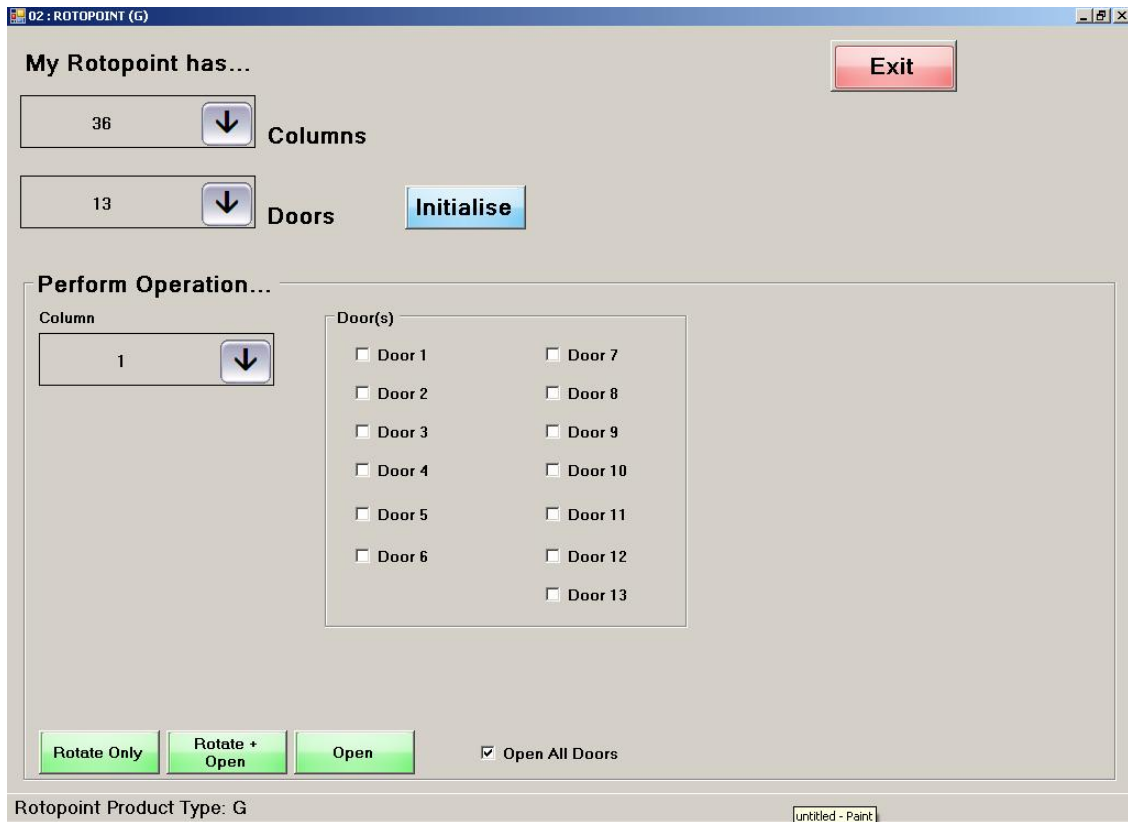
To run the Open Drawer program double click the icon on the desktop. This is the same program used to test the drawers on the standard frame. If the RotoPoint is powered up correctly, the open drawer program will detect it during its startup scan process. Select the "Single Frame" dropdown, as shown, and select the RotoPoint frame. If the RotoPoint frame is not in the frame list then make sure the lights on the PIC Board and motor control board are lit.



Once you selected the frame, then click the “Layout” button. The screen below will then come up. Choose 36 columns and 13 doors and then click the “Initialise” button.



Next choose a column and then check the “Open All Doors” check box. Then click the “Rotate + Open” button. Make sure the unit moves to the correct column and then open all the doors.



The Database

The SupplyPoint™ is delivered with the ability to use a SQL Server database preconfigured. The database is the repository of the machine's important (and valuable) information including the items stored, the users, the configuration of the machine and the transactions that have taken place. Loss of this information can be catastrophic, causing the loss of important costing information and potentially hampering production. In order to minimize this risk, please observe the following precautions concerning the database.

- Back up the database regularly, either by including it in a regular network back up or by using the auto backup utility included and detailed in the [SQL Database Functions](#) section. Be sure that backups run to a remote location or attached storage device, as merely backing up to another part of the hard drive will not help in the event of a hard drive crash.
- Never open the database with Microsoft SQL Server Management Studio unless instructed to do so by SupplyPoint™ personnel. Supply Point Systems, Ltd. assumes no liability for damage incurred when the database is directly opened by personnel other than those authorized by Supply Point Systems, Ltd.

For more information on the SupplyPoint™ SQL Server tools please see the [SQL Database Functions](#) section.

Emergency Override- Customer Duty of Care

The SupplyPoint™ has been designed and manufactured to the highest standards in order to ensure your company receives the most reliable control of your inventory. There is always, however, the possibility that events, whether natural or man-made, may cause the unit to malfunction or cease to operate. In these circumstances you should follow these procedures to guarantee continued access to inventory stored in any SupplyPoint™ units until they can be repaired.

Preparation

When installing and configuring the SupplyPoint™ the customer must implement procedures to ensure that:

1. Properly-trained personnel, competent to administer the vending machine, are on-site whenever the SupplyPoint™ is in use.
2. The following keys are accessible to this person, so that he can provide emergency access to the SupplyPoint™:
 - The key to the computer cupboard;
 - Keys to the bottom cupboard of each frame;
 - Keys to the swing handle locks that actuate the locking bars (28 level frames only)
 - Keys to the locking bars of each frame (20 level frames only);
 - The unlock bar to actuate the locking bar on 20 level frames
3. Make available to this person an up-to-date Item Location by Drawer or Item Location By Compartment report, so that in the event of a total systems failure items can be more easily located.

Implementation

Emergency overrides should be implemented only as a last resort to access your inventory. Furthermore, such procedures should be implemented only in the necessary areas of larger machines. For instance, if you have a five-frame unit and only one frame is non-responsive, implement the override procedure only on that one frame. The vending machine should be restored to regular operation as soon as is practicable.

Determine exactly which frames of the machine need to be accessed in this manner (i.e. those frames which are non-responsive). Remember that when you are operating in this fashion, the normal inventory tracking capabilities of the SupplyPoint™ are not functioning. You should perform the override ONLY on those frames you need access to.

Take the following steps to implement the emergency override procedure:

1. Release the locking bars in the frame(s) you are going to override.
2. Slide the bottom tray in these frames slightly forward to prevent the locking bars from falling back into place.
3. When you need an item, slide the entire drawer tray forward, remove the item and push the drawer tray firmly back into place.
 - To gain access to items contained within cupboards, pull the cupboard approximately 100mm out of the frame. Insert a small flat bladed screw driver into the recess on the left-hand-side of the cupboard, and push the solenoid flap down. The cupboard door can then be freely opened.
4. Record each item withdrawn in this way, so that once the machine is back in operation, these transactions can be recorded.

Restoring Normal Service

Once the underlying issue has been resolved, take the following steps to return the machine to normal service.

1. Push all the trays in the affected frame back into place.
2. Restore the locking bar to its normal position. If it will not close easily DO NOT FORCE IT. Make sure that the trays are properly aligned and try again.
3. Correct the inventory- this can be accomplished in two ways:
 - Run “dummy” transactions in the User Interface. Perform the required Withdraw, Restock, or Return transactions, for example, to get your inventory to the right levels. If you have multiple instances of the same item, be sure that the transactions are performed on the correct location. You can also use the adjustment procedure defined below to fine-tune the inventory in cases where there are multiple locations for items.
 - Use the Inventory Adjust function. This has the advantage of allowing you to choose the locations for the transactions, but it has the disadvantage of not providing you with information such as what was withdrawn, who took it, and for what purpose.

NOTE: Keep in mind that while this procedure will bring your inventory levels to where they need to be, the dates and times recorded will be those of the actual transaction performed on the SupplyPoint™. You will need to take this into account when running reports.

Networking

Introduction

With the advanced consolidation and data replication features available in the SupplyPoint™ software; your SupplyPoint™ machine is best utilized when integrated to your existing network infrastructure. This allows for administrative tasks, such as using the SupplyPoint™ Utilities, to be performed behind the scenes from a remote location without interrupting regular operations. The SupplyPoint™ PC comes equipped with a 10/100 Mbps (later models have a 10/100/1000 NIC) Ethernet card that accepts an RJ-45 connector. It is capable of operating on Windows, NetWare or UNIX networks, using protocols standard to Windows XP and 7. Material in this section focuses on Windows 7; for Windows XP networking information, refer to the appendix.

Server-based vs. Peer-to-Peer Networking

Server-based and peer-to-peer networks are the most frequently used network models. Although there is a third- the hybrid model- for purposes of installing the SupplyPoint™ only knowledge of the first two is required, as it will usually be joined to a network segment that is either server-based or peer-to-peer. Also, having an understanding of the two generally provides sufficient knowledge for grasping the third.

A server-based network- in a Windows-based network a server-based network is also called a **domain**, and the two are sometimes used interchangeably- is a hierarchical structure consisting of a computer that runs the network and provides security for the network and subordinate computers, called **clients**, that use the resources of that server and of other client computers. For this reason a server-based network is also referred to as a client-server network. The advantages of a server-based network lie in the centralization of control and the ability to pool resources more easily. All users must be authenticated by the server (in Windows, a **domain controller**) and the server contains information about user privileges to network resources.

A peer-to-peer network (in Windows, a **workgroup**) is a structure consisting of a group of computer joined together and sharing resources. The primary difference between a server-based and a peer-to-peer network is the lack of centralized control. Each user controls access to the resources on his computer. The advantage of this type of networking is primarily in expense: no servers are required, there is less need for network administrators, and there is no loss of function due to the failure of a server.

Required Network Information

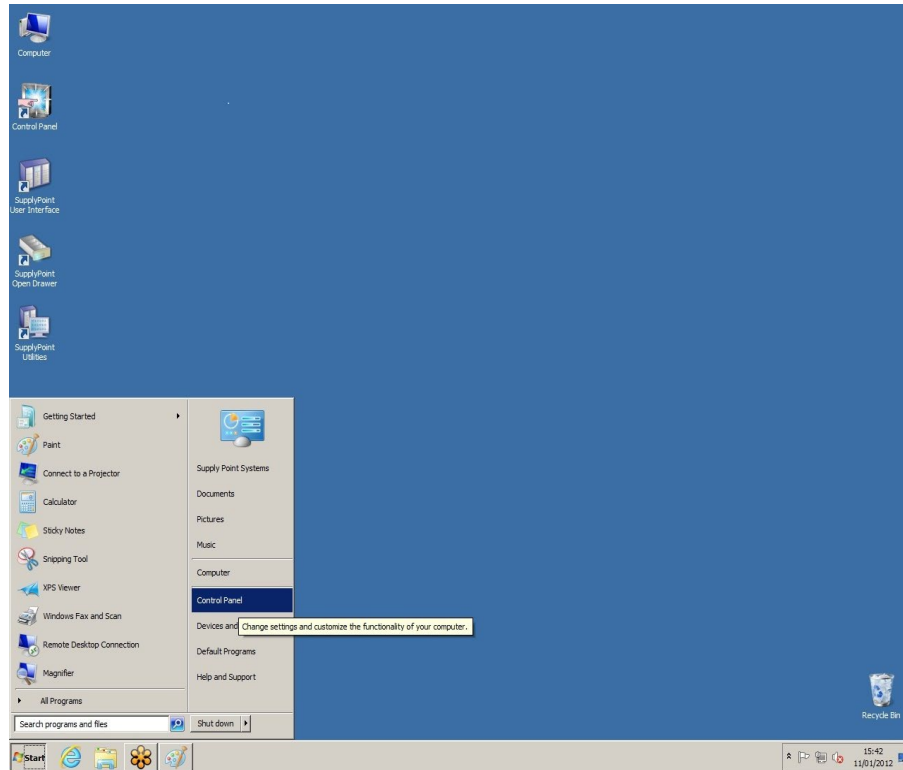
Before attempting to join the SupplyPoint™ to network, the following questions must be answered:

- Is the network a workgroup or a domain? If the network is a domain, the SupplyPoint™ will require an account on the domain and a member of the IT department will be required to log it in.
- What protocol is in use? Most networks use TCP/IP, but there are other protocols, each of which presents its own unique challenges.
- If the networking protocol is TCP/IP, will the SupplyPoint™ have a fixed IP address or will it use Dynamic Host Configuration Protocol (DHCP)? If the SupplyPoint™ will have a fixed IP address, the IT department will need to provide the IP address, the Subnet Mask and, possibly, the Default Gateway.
- Who is going to be connecting to the SupplyPoint™ using the SupplyPoint™ Utilities? If possible, add these people to a SupplyPoint User group on the server (domains only). This will make configuring access to the computer easier and avoid any connectivity problems with SQL Server.

Entering IP Address Information

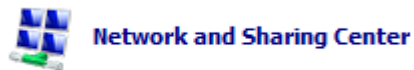
Most networks use the Dynamic Host Configuration Protocol (DHCP) to obtain IP address information. In situations where this is the case, the SupplyPoint™ will likely receive an address as soon as the network cable is connected. Proceed to the next section, either Joining a Workgroup or Joining a Domain, to continue.

1. To enter IP address information manually, begin by looking at the PC's network connections. Do this by pressing the START button, selecting *Control Panel* from the Start Menu.

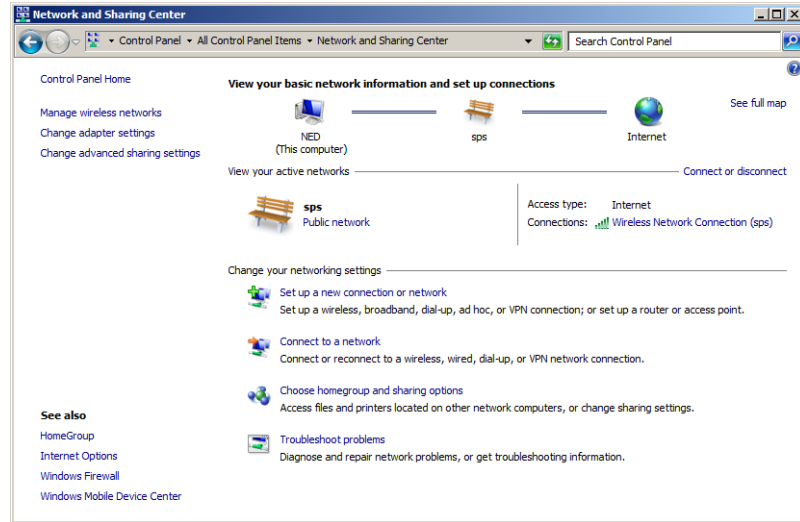


To follow the rest of the steps correctly ensure the *View by:* section of the *Control Panel* window has the *Large Icons* option selected in the top right-hand corner of the window.

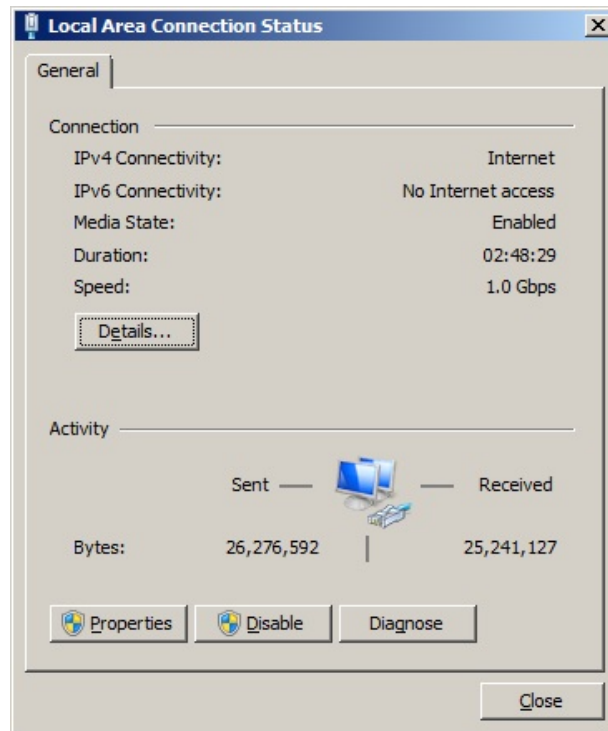
2. Select the *Network and Sharing Center* icon.



3. From the resulting *Network and Connection Sharing Center* window; select the *Change Adapter Settings* option located on the left-hand side of the window.



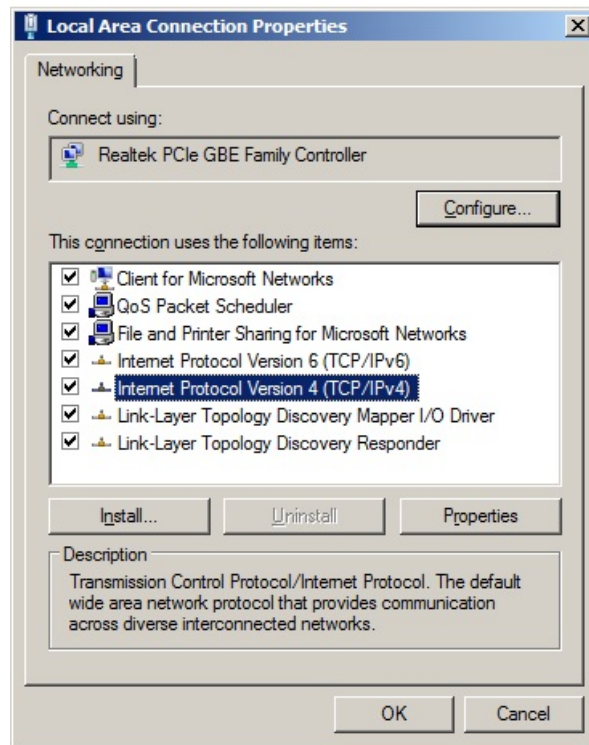
4. There will usually be only one connection, labelled *Local Area Connection*. Double-click on it to open the Local Area Connection Status.
5. The example to the right shows an active network connection. Note especially the *Activity* area of the display; on a system where IP address information is needed, you will frequently see packets being sent but not received. Selecting the *Details* button will open a window showing the current IP address information. It also provides access to more information about the network configuration. To access a basic repair tool click the *Diagnose* button. Press **PROPERTIES** to open the



Local Area Connection Properties dialog box.

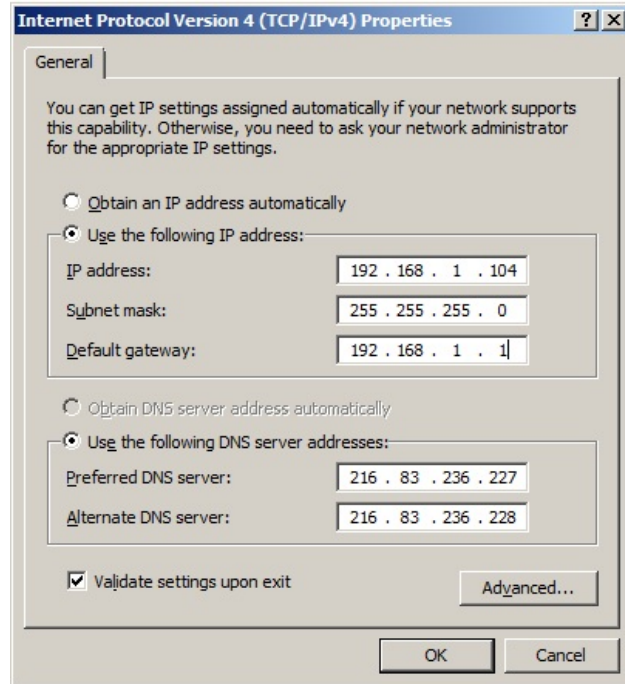
- This box shows the protocols and services that are running on the PC. You will usually see the ones listed in the display
- If you are joining a network that uses another protocol (such as the IPX/SPX protocol used on most Novell networks), you would install it here. Since most networks use TCP/IP, we'll confine ourselves to it.
- If there is a protocol running that is not needed, click on it and press uninstall to REMOVE it.

Click on *Internet Protocol (TCP/IP)* and press **PROPERTIES** to continue.



6. By default, the SupplyPoint™ is configured to obtain addresses via the Dynamic Host Configuration Protocol (DHCP). That is why the bubble next to *Obtain an IP address automatically* is selected by default.

- Click on the bubble below it to enter the fixed IP address for the machine. Notice that when you do, the corresponding setting for the DNS address will be selected as well.
- It is possible to have manually entered DNS addresses and automatically assigned IP addresses. The reverse is never true.



7. Enter the necessary information.

- **IP Address**, an identifier for the computer, which must be unique on the network.
- **Subnet Mask**, a series of numbers that determines what segment of the IP address identifies the computer and which segment identifies the network. If you move the cursor to this field after entering the IP address, a default value will appear. Most of the time this is the correct number, but always check.
- **Default Gateway**, the address of the computer or router on the network that provides access to other networks or the Internet.
- **DNS Servers**, the address of the servers that provide name to IP address resolution on the network. This is especially important if you are going to use email, as without it the system has no idea what you mean when you enter the name of the customer's mail server.

8. Once you have entered this information, press **OK** to continue.

9. Press **OK** to close the *Local Area Connection Properties* dialog box.
10. Press **CLOSE** to close the *Local Area Connection Status* dialog box.

Joining the Network

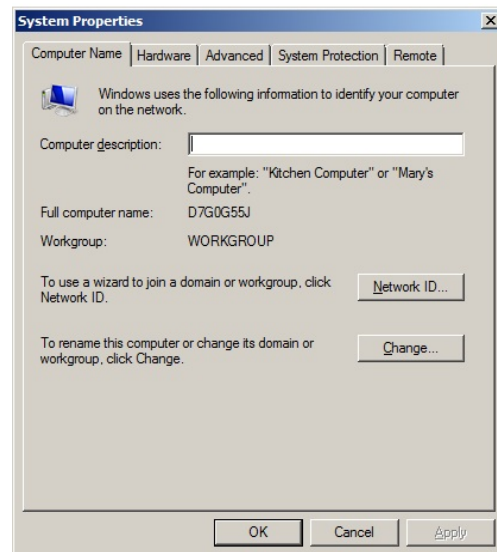
When joining a network, regardless of whether the network is a domain or a workgroup, the process is going to be essentially the same, and you'll be looking at the same screens. Below are the dialog boxes you'll become familiar with when joining a network:

The System Properties Dialog Box

To access these properties from your desktop; right-click on the *Computer* icon and select *Properties*; from the window that appears click *Change Settings* from the *Computer name, domain, and workgroup settings* section.

There is a great deal of information that can be acquired here, for example:

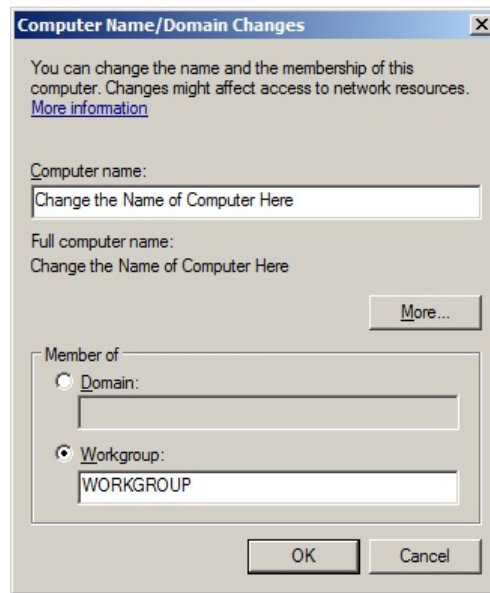
- Device Manager and other hardware information can be found on the *Hardware* tab.
- Most importantly for this discussion, the name of the computer and the network affiliation can be found on the *Computer Name* tab.



Computer Name Changes Dialog Box

This is where changes to the computer name and domain/workgroup affiliation are made. It is accessed by clicking the *Change* button on the *Computer Name* tab.

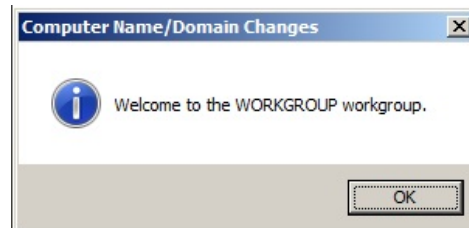
- Change the name of the computer by typing it in the *Computer Name* slot.
- Change the PC's domain or workgroup membership by changing either the *Domain* or *Workgroup* information. Shown at the bottom of the screen.
- All changes made here will require a reboot



Joining a Workgroup

Of the two most common network types, domains and workgroups, workgroups are the easiest to join. They require no administrative help. Take the following steps to join the SupplyPoint™ to a workgroup.

1. Right-click on the *Computer* icon and select *Properties* from the menu that appears. This will open the *System* window.
2. Select *Change Settings* from the *Computer name, domain, and workgroup settings* section. You can alter the description of the computer here, as well as view the current computer name and domain affiliation. In order to change the name, press **CHANGE**.
3. This will open the Computer Name Changes dialog box. Enter the new workgroup name into the *Workgroup* field and press **OK** to continue.
4. Clear the welcome message that appears by pressing **OK**.
5. You will be prompted to reboot. Your changes will not be

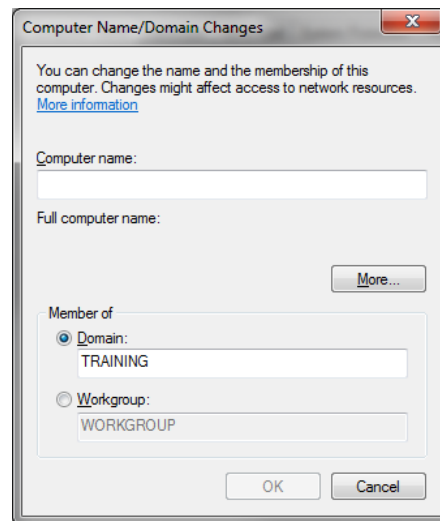


effective until you have rebooted the system.

Joining a Domain

Of the two most common network structures- the domain and the workgroup- the domain is prevalent. To join a domain, you will need the assistance of the domain administrator or of a member of the customer's IT staff who has the right to join computers to the domain. Although you are not likely to be the one performing this operation, it is a good idea for you to have a basic familiarity with the process.

1. Begin by right clicking on the *Computer* icon and selecting *Properties* from the menu to open the System Properties Window. Then click the *Change Settings*.
2. Select the *Computer Name* tab to view the current name and affiliation of the PC.
3. Press the **CHANGE** button to open the Computer Name/Domain Changes dialog box.
4. Enter the name of the new domain into the *Domain* box and press **OK** to continue.
5. Enter the user name and password of a domain user who has the ability to join computers to the domain. This will generally be a domain administrator. It is usually best to make sure this person knows in advance that the vending machine is being installed, so that he can create an account for it on the domain if that is required. Press **OK** to continue.
6. If the process has been performed correctly, a welcome message will appear. Press **OK** to clear it.
7. You will be prompted for a reboot. The domain change will not be effective until you reboot the PC.



The User Interface

Introduction

The User Interface is the program that controls the operation of the SupplyPoint™; it is the face of the SupplyPoint™ that users see from day to day and the environment in which they interact with the machine. In designing the User Interface the goal was to make the SupplyPoint™ as simple for the end user as using an Automated Teller Machine, which facilitates ease of training and rapidity of transactions. This chapter provides an introduction to the User Interface along with instruction in its use.

User Interface Screens

The following displays show common elements of the User Interface, along with explanations of how these various elements can be configured.

The Login Screen



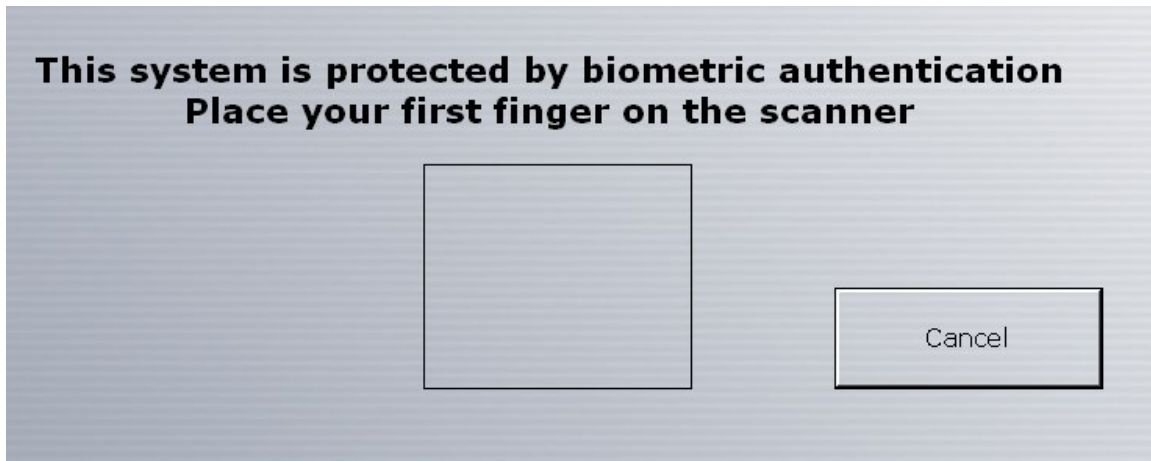
- A. **Language Flags:** When the multiple language function is in use, this icon will appear. Click on it to display a list of available languages. To activate multiple languages do the following
- Enable the function by checking the Parameter setting *Language- Multiple languages*.
 - Enter the numbers corresponding to the languages in the Parameter setting *Languages*.
 - Switch between US and UK English by changing the Parameter setting *Language- Is US English*.

- B. **Catalog Button:** This button can be used to access local or Internet catalogs. Take the following steps to set it up:
- Enable the catalog by checking the Parameter setting *Catalog- Enable*.
 - Choose an icon file (.ICO) and enter the path and file name in *Catalog- Icon File*.
 - Establish the location (or the name of the file that executes them) of the catalog files by filling in the *Catalog- URL*.
- C. **Company Logo:** configured by entering the path and name of the logo file in *Parameters*. The specific setting is *GUI: Image file containing company logo*.
- D. **Customizable messages:**
- **Welcome Message 1:** configured by changing the input in *Location Definition (VM/Cribs)* for *Welcome Message 1*.
 - **Welcome message 2:** configured by changing the input in *Location Definition (VM/Cribs)* for *Welcome Message 2*.
- E. **Sign-on Instruction:** configured by changing the input in *Terminology* for *Signon Instruction*.
- F. **Software version information:** this is the version and build number of the software in use. You will need this information if calling for technical support.
- G. **Sign in entry box**
- Receives the characters typed or swiped by the User as their Username for logging in to the system.
- H. **On-screen Keyboard:**
- Displayed when keyboard login is permitted. It can be removed- and users forced to use other login methods- by clearing the *Parameter* setting *GUI: Disallow keyboard for user login*.
 - When biometric identification is used as the primary login method, press the FINGERPRINT ONLY LOGIN button to begin the process.



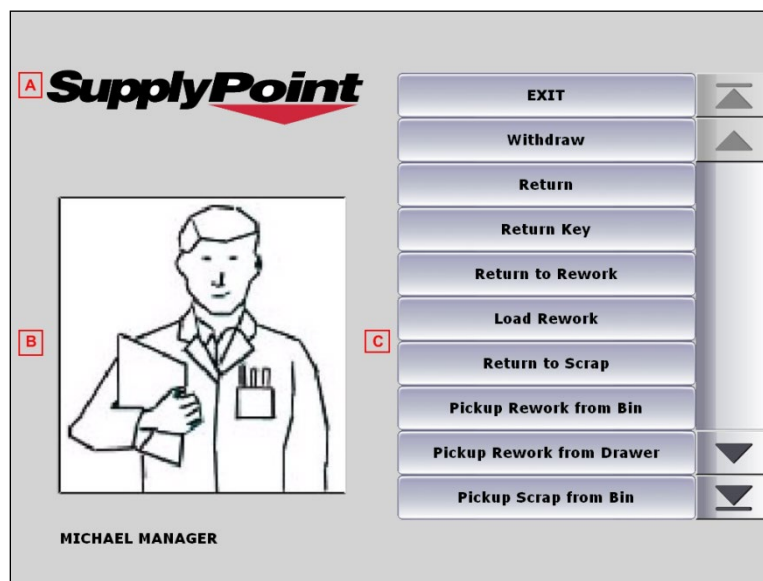
Fingerprint Verification

The SupplyPoint™ software offers the ability to use biometric verification in order to enhance security. It can be used as a replacement for regular login, or it can act as a kind of password. Fingerprint verification will occur if the parameter setting *Biometric Identification: Enabled on Login* is activated. To use fingerprints as the primary login, you must also check the parameter setting *Biometric Identification: Fingerprints only*. For information on setting up users' fingerprints see [Capture Fingerprints](#) below. When a user's fingerprints are in the system, the following screen will appear.



If a user's fingerprints have not been captured, and if he lacks the transaction privilege to capture them, he will be notified that he needs to have the fingerprints taken before he can continue.

The Transaction Screen



- A. **Company Logo**
- B. **User Image:** the name of the file is entered in the *Image File* field of *Users* setup. The images themselves are stored in a directory specified in the parameter setting *Directory containing User pictures*, which is set by default as C:\PROGRAM FILES\SUPPLYPOINT\GRAPHICS\USERS OR D:\GRAPHICS\ITEMS.
- C. **Transaction Buttons:** this is a list of the transactions available to the user, which can be configured in *Users* setup.

The Item Selection Screen

Specify Item

Item

A B C D E F G H I

J	Item	Description	Qty	Alias	Group	Si
X	1/4-284FPH3	1/4 INCH 4 FLUT...	0		TAPS FOR TESTING	
✓	16ER16UNJKC730	INSRT,CRB,EXT J...	44		INSERTS	
✓	16ER28UNJKC730	INSRT,CRB,EXT J...	11		INSERTS	
✓	3/8-162FPH3SP	3/8 X 16 SPIRAL...	6		TAPS FOR TESTING	
✓	4FL BALL STUB DBL ENDMILL	4 FLUTE BALL ST...	2		ENDMILLS	
X	B261A15600KC7040	SOLID CARBIDE ...	0		CARBIDE DRILLS	
✓	CCMT21505LFC730	INSERT,CARB,80...	1		INSERTS	
✓	CNGP432 KC730	1/2" IC 80 DEG ...	28	IN432-ABC	INSERTS	
✓	CNMG432-48 TN8025	CNMG432-48 TN...	260		INSERTS	
✓	CNMG432KC850	INSERT,CARB,80...	12		INSERTS	
X	DNMG432KC850	INSERT,CARB,55...	0		INSERTS	
X	DNMG432LFC9025	INSERT,CARB,55...	0		INSERTS	

M

Cancel GO

Note: Other selection screens (for Jobs and Machines) are similar. They will not have buttons D or E; they will have a keyboard that can be used for input displayed by default.

- A. **Clear filter:** this clears any information that has been entered in the text box at the top of the screen.
- B. **Filter by:** use this button to open the search screen.
- C. **Fast filter:** provides a more efficient alternative to the regular filter. By setting the parameter *Item- Fast Filter Column Number* you can allow users to search automatically by the specified column. For instance, if you have selected Supplier Part Number as your Fast Filter column, Users can enter information, press the Fast Filter button and the system will automatically search for conforming information in the Supplier Part Number column. Columns can also be established for Jobs and Machines using their respective parameter settings.
- D. **Item group search:** This button brings up a list of Item Groups, so users can narrow their searches. After an Item Group has been selected, you can press this button again to enter the Item Sub-group list.
- E. **Recent History:** Pressing this button will bring up a list of items recently withdrawn by the user. It is activated by the Parameter setting *Recent History: Enabled*. Other Parameter settings will determine the time period constituting "recent" and filters (Job, Machine, User) employed in generating the list. If pressed when carrying out a Restock transaction, with the *Restock - Show Items Below Min* parameter checked; this button will show all items that are currently below their minimum stock level.


- F. **Browse other machines/ cribs:** This allows the user to search the contents of other vending machines or the crib locations. To enable this function, the parameter setting *GUI- View inventory in other Vending Machines/ crib* must be checked.
- G. **Exit:** Use this button to log completely out of the User Interface.
- H. **Main Menu:** This button can be used to backtrack all the way to the transaction menu.
- I. **Graphical search:** This button allows users to search for items using graphics. The parameter setting *GUI- Graphical Selection Allowed* must be enabled.
- J. **Locking spot:** Users who have the *Can Size Grid* box checked can click here to lock or unlock the grid.
- K. **Column Header:** Click at the top of any column to sort the information in ascending or descending order.
- L. **Item list:** This is a list of items that are controlled through the SupplyPoint™. The alternate colouring for the grid is configured by the Parameter setting *GUI: Grid Alternate Row Colour*. Font size is set by the parameter *GUI: Font size in selection grids*. Larger font sizes allow for easier use of touch screens
- M. **Keyboard Display Button:** Press this button to either minimize or maximize the keyboard, depending on its current state; used to enter text for searching.

Re-sizing Grids

When a user has the *Can Size Grid* function enabled, he or she is able to alter the width of the columns displayed in the User Interface and make the change permanent, at least until the next person with the ability comes along.

To accommodate Shopping Baskets having different columns in them, when the User resizes the columns it only applies to the Transactions' basket they are currently viewing.

In order to do this, the user changes the grid size by pressing the light pen to the line dividing columns and adjusting them. He then presses the box in the upper left corner of the grid until the lock emblem appears. The grid will now be locked into place and displayed that way for each User of the system, until somebody changes the display and locks it again.

	Job
	JOB01
	JOB02
	JOB03
	JOB04
	JOB05

Graphical Selection

When Item and Item Group pictures are available, you can use them to help users pick the right tool every time by using the Graphical Selection function. Users will be able to press on a picture of the Item or Item Group they need instead of selecting it by name. This feature is activated by the *GUI- Graphical Selection Allowed* parameter setting. There are two basic ways to implement this feature.

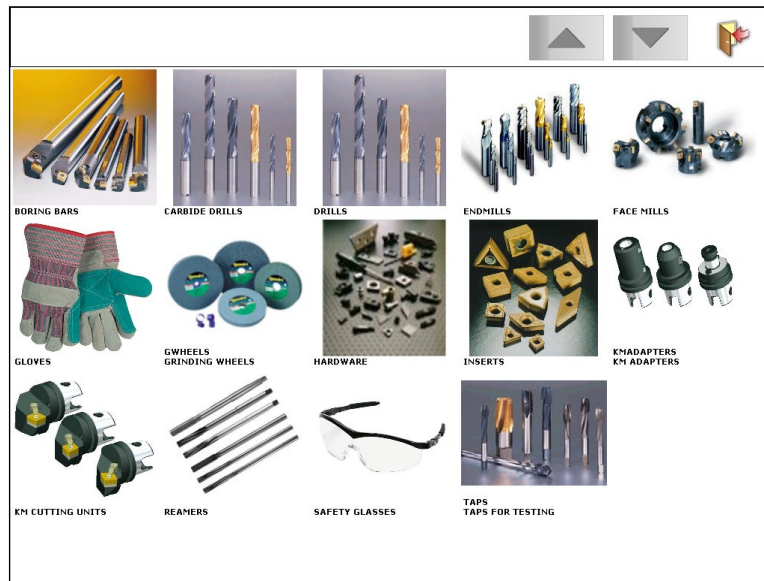
- Simply activating the feature makes graphical selection available for all users. It is purely optional, accessed by pressing a button on the Item Selection Screen.
- Activating the *GUI- Graphical Selection Automatic for Item Groups* parameter will cause graphics to display whenever Item Groups are called for. This can be coupled with the *GUI- Before selecting an Item, pop up group filter automatically* parameter to cause Item Group photos to appear

immediately after the transaction is selected. This works with Item Sub-Group filters as well.

When in the Item Group or Item Sub Group filter, selecting the back arrow will take you back one step. For example whilst in the Item Sub Group graphical selection screen, selecting the back arrow will return the user to the Item Group graphical selection screen.

The Up and Down arrows will display more Items, Item Groups or Item Sub groups.

The exit button will log the user out of the User Interface.



Quantity Selection

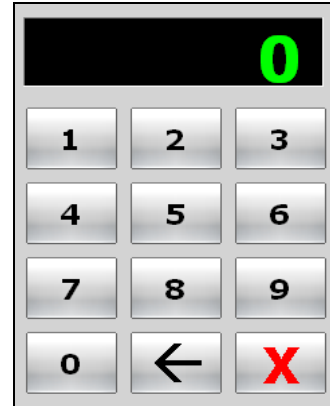
After selecting an item, you will need to select the quantity of the item that you need. Most often, you will see a screen like the one below:

The screenshot shows a 'Withdraw - Qty' interface. On the left is a vertical stack of 10 buttons numbered 1 to 10. A red box 'C' is next to button 7. To the right of the buttons is a table with the following data:

Withdraw - Qty	
User	100103
Job	VALVE#1290
Machine	GRINDER#0045
Item	CNGP432 KC730
Alias	IN432-ABC
Description	1/2" IC 80 DEG DIAMOND 0.0312 RADIUS
Type	New
Issue Qty	1
Available	10

A red box 'A' is next to the 'Alias' field. To the right of the table is a red box 'B' next to the word 'Supplier'. Below the table is a photograph of a square metal part with a circular hole in the center, labeled with a red box 'D'. At the bottom are three buttons: a numeric keypad, a red 'Cancel' button, and a green 'GO' button.

- A. **Transaction and Availability Information:** This provides a final opportunity to verify that you have selected the correct Job, Machine and Item. Availability entries show how many of the item are available and what the issue quantity is.
- B. **Supplier Image:** The name of this file must be entered in the *Image* File field in *Suppliers* setup. The picture should be in the folder shown in the parameter setting *Directory containing item supplier pictures*, which by default is C:\PROGRAM FILES\SUPPLYPOINT\GRAPHICS\SUPPLIERS OR D:\GRAPHICS\SUPPLIERS.
- C. **Quantity selection:** These buttons show the quantities available for withdraw.
- When you see buttons as in the upper display, each represents the contents of one compartment of the drawer. This will be expressed as multiples of the Issue Quantity.
 - When the number of buttons is greater than ten and fewer than twenty-one, there will be up and down arrows to access the button as in the lower left display.
 - If there are more than twenty selections, you will see a numeric keypad, as in the lower right display, simply key in the number of pieces you want and click Go to continue.

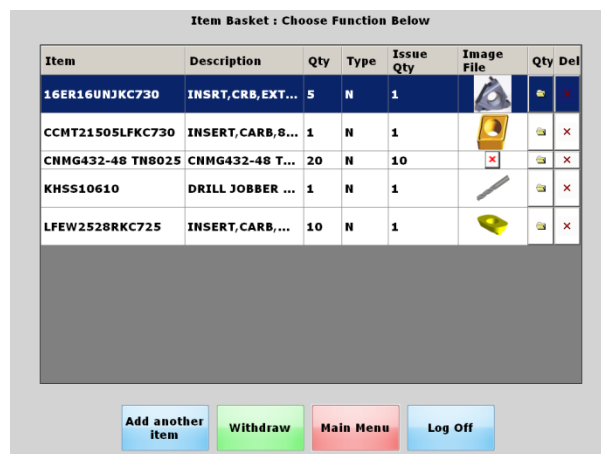


- D. **Item picture:** A picture of the item, the name of which must be entered as the *Image File* under *Items* setup. Pictures should be stored in the folder designated in the Parameter setting *Directory containing item pictures*, which by default is located at C:\PROGRAM FILES\SUPPLYPOINT\GRAPHICS\ITEMS OR D:\GRAPHICS\ITEMS.

Shopping Basket

It is often the case that users require more than one item in a transaction. With the Shopping Basket enabled; once an item has been selected, the user will be presented with a screen like the one below, which allows the user to add items to their basket. This can be used in most transactions to decrease the time needed to remove or replace large quantities. It can be disabled for withdrawals by the Parameter setting *GUI- Disable Shopping Basket on Withdraw*.

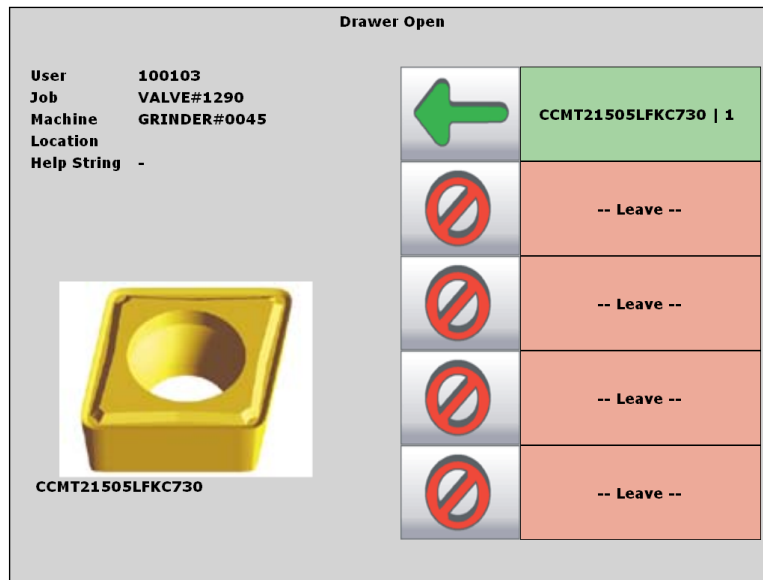
- Press **ADD ANOTHER ITEM** to continue adding to the basket.
- Press **WITHDRAW** to carry out the chosen transaction(s).
- Press **MAIN MENU** to abandon the basket and return to the Transaction Screen.
- Press **LOG OFF** to abandon the basket and exit the User Interface and return to the Login Screen.



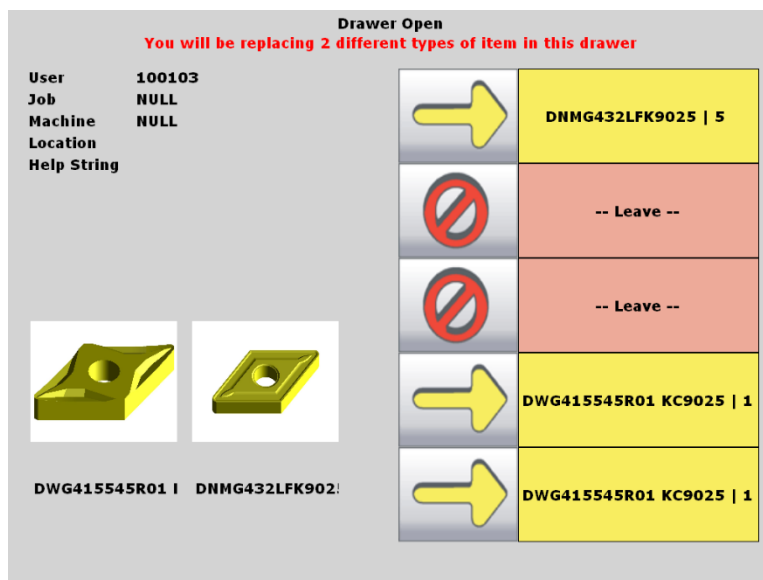
If you attempt to select the same item twice from the list, the system will warn you of it, in order to prevent duplicate withdrawals.

The Drawer Display Screen

Once a drawer is opened, the screen will provide instructions for what to do. For a typical Withdraw transaction, the screen will look something like this:



The graphic on the right-hand side of the screen tells you all you need to know. In this case, the drawer has opened to the fifth compartment. The first four compartments- the ones with the "Leave" message- are either empty or do not contain the item you need. The fifth compartment has the item number and the issue quantity on it. The arrow pointing left means the item is being removed from the machine. A more interesting example is this one:



Note the message at the top of the screen: "You will be replacing 2 different types of items in this drawer." This message is your cue to pay close attention. The drawer is open to the fifth compartment. Following the instructions, you will know

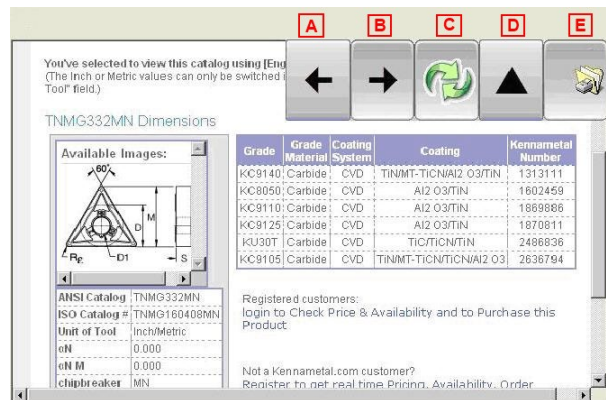
to place one piece of item **DWG414445R01 KC9025** in each of the first and second compartments, skip the third and fourth compartments, and place five pieces of **DNMG432LFG9025** in the fifth. You know that you are putting items in the drawer from two cues: the message at the top of the screen and the arrows pointing right in the display.

Item Image Display

In addition to displaying normal photos, the SupplyPoint™ User Interface also allows the display of HTML images/pages, Microsoft Word documents or PDF's, to name a few. When using an HTML document, the user can use any links on the page to view World Wide Web content, assuming there is an Internet connection. If this view is enabled, but there is no HTML document assigned to an image, ordinary images can be displayed in a window that allows them to be viewed in greater detail.

Configure the HTML display by changing the *Directory containing Item pictures* Parameter setting. Enter **file://pathname**, where the pathname is the location of HTML documents to be used. Any hyperlinks in the document will be active, assuming there is connectivity to the Internet. Regular pictures will be displayed in the larger window.

- A. **Back:** Use this button to go back one page.
- B. **Forward:** Use this button to go forward one page.
- C. **Refresh:** Use this button to refresh the current page.
- D. **Resize:** Use this button to increase the size of the HTML display.
- E. **Print:** Use this button to print the current page.



Alternate Image File

The User Interface can also display an alternate image file for an item. If an alternate image is assigned to an item (via the *Alt Image File* field), an icon will appear just to the bottom right of the standard image; if clicked it will display the alternate image. Click it again to bring back the standard image.

Withdraw - Qty

1	▲	User	SHOP USER
2	▲	Job	HEAD#6020
3		Machine	LATH#3344
4		Item	CNGP#32 KCF30
5		Alias	IN432-ABC
6		Supplier Part Number	CNGP-990034
7		(Current)	
8	▼	Description	1/2" IC 80 DEG DIAMOND 0.0312 RADIUS
9	▼	Unit Cost	-
		Type	New
		Issue Qty	1
		Available	14



Accessing Multiple Drawers

When Items are stored in more than one drawer, the SupplyPoint™ can be configured to allow access to multiple drawers within a single transaction. The transaction process is the same as before. Users can access multiple drawers as long as the following conditions apply:

- The Parameter setting *Drawers- Enable multiple drawers per transaction* must be enabled;
- The item involved must be stored in the same quantity and content type in both locations;
- The number withdrawn must not violate any rations in place (Withdraw transactions only).

Life Tracked Tools

The SupplyPoint™ provides limited functionality for tracking the tool life. This is done by calculating the number of pieces that a tool can make over its life against the number of pieces the tool has made. By doing this, you will be able to follow the use of tooling, and ensure that you are getting what you paid for. There are many elements involved in this process.

NOTE: It is very important to note that the information involved **does not** attach to any individual piece of tooling. It will allow you to track average tool life across multiple pieces.

Tool Life in Machine Setup

Items

When creating items that will be tracked using tool life functions you will need the following:

- Items will need to be designated as being tracked in this manner by being selecting *the Life Tracked* attribute in the *Location Attributes* section of *Items* setup;

- The default number of pieces in the life of the tool must be entered;
- The minimum number of pieces that is allowable for the tool to be used must be entered.
- Since the use of these functions requires users to know the tool life of an item when it was Withdrawn, it is recommended that you use a ticket printer and that these items be marked as *Ticketable*.
- Items must also be marked as *Can Be Returned*, *Can Be Reworked* and *Can Be Scraped* with the appropriate Rework/Scrap User/Group configured.

Users

Since the entire process encompasses a number of transaction privileges will need to be assigned to users who will have access to the items:

- *Withdraw New* and *Withdraw Used* for taking new and used items;
- *Return to Used* for returning items that have not reached the end of their useful life;
- *Return to Rework* for returning items that have reached the end of their useful life;
- *Return to Scrap* for returning items that have failed for some reason or that can no longer be reworked.
- The life tracking functions will work best if users are forced to take used items first.

Drawers

Drawers will have to be configured for the items:

- A *New* drawer for items at their full life count;
- A *Used* drawer for items at less than their full life count, but more than their minimum life count;
- A *Rework* drawer (not a bin) for items below the minimum life count that can be reworked;
- A *Scrap* drawer (optional) for items that can no longer be reworked or that have failed for some reason.

Tool Failure Reasons

Tool Failure Reasons will have to be created for those items that fail to meet their specified lives. Users will be able to select from these reasons when they return for scrap an item that has not worked to specification. These reasons are created under *Tool Fail Reasons* in Machine Setup.

Ticket Printing

You will need to remember the usual considerations when using a ticket printer with these functions:

- Be sure the items are designated as *Ticketable* in the *Location Attributes* section of *Items* setup;
- Designate the port with the printer in the setting *Tickets: Port with ticket printer attached* in *Parameters*;
- Also, make sure that the *Parameters* setting *Tickets: Print a ticket when withdrawing Items* is turned on;
- Ensure that the TICKET.INI file contains somewhere in the *TicketText* line the entry TOOLLIFE.

Withdraw

The Withdraw transaction is the most commonly-used transaction privilege. Most, if not all, users will have this privilege available to them. Take the following steps to withdraw items from the SupplyPoint™.

1. Log in to the User Interface.
2. Press the **WITHDRAW** button on the Transaction screen.

3. A list of Jobs will appear. Select one to continue to the next step or use the search functions to find the Job you need. If one of the following conditions applies the list will not be displayed:

- If the Parameter setting *Jobs- In Use* is not checked, this step will be skipped;
- If the Parameter setting *Job-Defer showing full Job list* is checked, no jobs will be displayed until the search button is used;
- If the Parameter setting *Job- Do not display Job list* is checked the list will not be displayed and Users will be forced to enter a Job number.

Job	Description	Alias
3457	3457	
HEAD#6020	HEAD#6020	
VALVE#1290	VALVE#1290	
VALVE#4462	VALVE#4462	

4. Select the Machine on which the Item will be used. If the Parameter setting *Machines- In Use* is not checked, this step will be skipped.
 - If the Parameter Setting *GUI: Before selecting an Item, pop up group filter automatically* is selected, you will see a list of Item Groups as in the accompanying display.
 - If the Parameter Setting *GUI: Before selecting an Item, pop up sub group filter automatically* is selected, this will be followed by Sub Groups of the selected Item Group.
 - If you are forcing graphical selection, this will be a display of pictures.
 - If the Parameter settings are not in use you will see the standard Item Selection screen. Items with a green check mark are in stock. Items with a red "x" are currently unavailable. The size of this list may vary from user to user depending on whether Restrictions are in place. All configuration for Items is taken into account; ensuring that when the user selects via the filter options the resulting selection grid is populated.
5. Once you have selected an Item, you will then be asked to select the quantity you wish to Withdraw. The amount you can take will be subject to certain conditions:
 - If the *Restrict to Single Compartments* box in Users setup is checked, the User will have access to the contents of only one compartment for each item per transaction.
 - If the item is life tracked, the User will only have access to the contents of one compartment.
 - If Rationing is in use it may set limitations on how many pieces a user has access to.
 - When the drawer is a maximum security drawer, that is, when the *Uniform Content* and *Enforce Full/Empty* rules are in effect, you have to withdraw based on a specified issue quantity.
 - When the drawer is a reduced security location (either the *Uniform Content* or *Enforce Full/Empty* rule is off) you will see a keypad with which you can select the appropriate quantity. You will also have the keypad in situations where you can access more than twelve compartments (e.g. accessing multiple drawers).



- If the User has the *Offer Drawer Choice* attribute they will be allowed to choose between maximum or reduced security drawers should they exist for the same item.
6. Once you have selected the quantity; if the shopping basket is enabled you will be able to add Items to your basket should you require, followed by clicking **WITHDRAW** to proceed. If the shopping basket isn't in use you will proceed with the transaction having selected your quantity.
 7. Once you have closed the drawer what happens next may vary:
 - If the *Log Out After a Transaction* box is checked in *Users* setup, the system will return to the Login Screen.
 - If it is not, you will be given a selection of options, including exiting the User Interface; you can proceed on your own from there.

Withdraw Variations

There are numerous options for withdrawal other than those mentioned above; they are simply the most common. For all of these processes, the same initial steps are required- login, transaction selection, job and/or machine selection and item selection. It is after the item is selected that the variations appear. The following are some of the other possibilities:

Withdrawing New and Used Items

Another potential variation is the withdrawal of new and used items. Obviously, this can only occur when there are New and Used versions of the same Item stored in the vending machine. If the User is allowed a choice, he will see a screen like the one to the right, where he is offered buttons representing the New and Used items. The withdrawal proceeds normally from there. This choice can be eliminated by checking the *Dispense Used First* box in *Users* setup or by not allowing the user the Withdraw New or Withdraw Used transaction privilege respectively.

The screenshot shows a software interface titled "Withdraw - Type". On the left, there are two buttons: "New (11)" and "Used (5)". To the right, a list of fields displays transaction details: User (100103), Job (VALVE#4462), Machine (GRINDER#0045), Item (52DEG SP FL TAP), Description (52 DEG SPIRAL FLUTE TAP), Type (Not Specified Yet), Issue Qty (Not Specified Yet), and Available (Not Specified Yet). Below this list is a small image of a spiral flute tap. At the bottom of the screen are three buttons: a keyboard icon, a red "Cancel" button, and a green "GO" button.

Withdrawing With Multiple Issue Quantities

It is also conceivable that Items might be stored in more than one location with different issue quantities (e.g. in a maximum security drawer and in a cupboard). If Users are not being denied access somehow to the alternate locations, they will see a screen like the one to the right, asking them to select the issue quantity they want. After this, the transaction will proceed normally. If it is a matter of maximum and reduced security locations, it can be controlled by use of the *Offer drawer choice (M/R)* option in *Users* setup, as mentioned previously.

Restock - Issue Qty	
User	100103
Item	CNGP432 KC730
Alias	IN432-ABC
Description	1/2" IC 80 DEG DIAMOND 0.0312 RADIUS
Type	New
Issue Qty	Not Specified Yet
Space For	

Withdrawing With Dispense Quantities

Items stored in large quantities in low-security locations can be given issue quantities. This forces Users to withdraw set quantities of the Item. The display will be similar to the one on the left. Select the quantity needed and continue.

0		300			
10	20	30	40	50	60
70	80	90	100	110	120
130	140	150	160	170	180
190	200	210	220	230	240
250	260	270	280	290	300

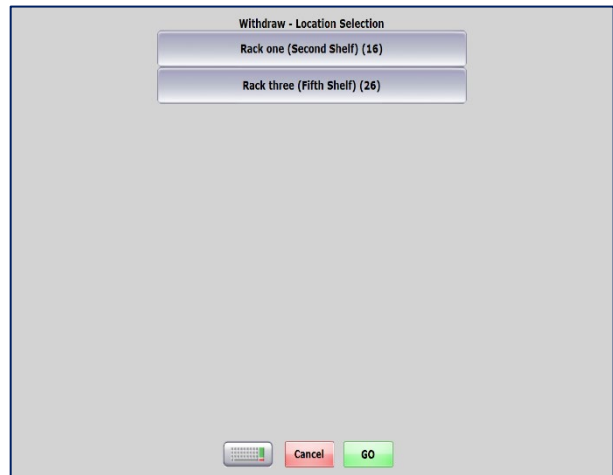
Withdrawing Life Tracked Items

1. Follow the normal *Withdraw* process. For life tracked tools you will only be able to take the contents of one compartment at a time.
2. Follow the normal process to complete the transaction.

Withdrawing External Stock

1. Follow the normal withdraw procedure, selecting Job, Machine, and Item.
2. Where the same item is available in multiple External Stock Locations the user is presented with a Location Selection screen, which details the current inventory quantity for the respective location; this enables the user to choose the most appropriate location to Withdraw the inventory from.
3. Enter the quantity of the item needed. A screen similar to the one to the right will appear. A message at the top of the display tells you that you are accessing External Stock. Use the location information to find the item.

The check box *Can access Crib/External Stock* must be checked in *Users* setup for users to have access to items stored externally.



Withdrawing Items by Weight

For smaller, low-cost items such as screws, nuts or washers, large quantities may need to be withdrawn. This process can be simplified by using scales.

In order for this to work the following conditions must apply to the item:

- The *Is Weighable* box in the *Location Attributes* section of *Items* setup must be checked.
- The *Average Weight of 1 Piece* must be entered in *Items* setup or calculated using the Weigh Item function in the User Interface.

1. Follow the normal withdraw process.
2. When a weighable item is selected, you will see a screen like the one at the right, allowing you to withdraw up to the number of pieces currently stored.
3. When the drawer opens, you can begin placing items on the scale. There will be a running total of the number of pieces on the scale on the screen. You can zero the scales before you begin to cancel out the weight of any containers being used.
4. Once you have finished counting out the items, close the drawer to complete the transaction.

Withdraw - Quantity

Qty

User Michael Machinist
Job HEAD#6020
Machine LATHE#3344
Item AD42

AD42 BS ALY/STEEL RIVET

Type New Issue Qty 1 (R)
Available 87

Up To 87

Cancel

Withdraw - Open Drawer and Take Your Item(s)

User Michael Machinist
Job HEAD#6020
Machine LATHE#3344
Item AD42

AD42 BS ALY/STEEL RIVET

Take Up To 87

Quantity on Scales
36

Use Scales Qty
Zero Scales

Accept quantity on scales to continue

Withdrawing for a Third Party

Items can be withdrawn and assigned to other users when the user setting *Is Handheld Administrator* and the parameter *GUI - Capture User on Withdraw* are

enabled. This can be useful when a storeman withdraws items from the physical machine for other users.

Dispense Sequence

Parameters can be configured so that the order in which items are dispensed from the frame better suit the end user.

Shopping basket sequence

The parameter *Location/Shopping Basket Sequence* (0 = *Classic Location Based Sorting*, 1 = *User Selected Sequence*) changes the way items are dispensed. When the parameter is set to:

- 0 – Classic Location Based Sorting: Items are dispensed from top to bottom and left to right. For example; if there are two frames items will be dispensed from the top left of frame one to the bottom right of frame two.
- 1 – User Selected Sequence: Items are dispensed in the order they are placed into the shopping basket, dispensing from the top to the bottom of the list. The physical location of the item is not taken into account.

Dispense by expiration date

When an item is marked as *can expire* and *First In First Out* the expiration date of the item is taken into account dispensing the item with the shortest life. If the item is located within two drawers drawer one has an expiration date of 01SEPT and drawer two has an expiration of 01AUG the item will be dispensed from drawer two first.

LIDs

The LID system allows for compartment-level access in an industrial roller drawer/ECTC cabinet. The drawers of the cabinet are retrofitted with individually actuated compartments, allowing for high-security storage. Take the following steps to withdraw items from LID compartments.

1. Follow the normal withdraw process, selecting Job, Machine, Item and quantity.



2. Follow the instructions on the shopping basket screen to create your pick list and press **WITHDRAW**.
3. Begin withdrawing items.
4. When you reach the LID drawer, a display like this one will appear. Each drawer can have up to 36 locations (six channels of six compartments). The location indicated by the green arrow will be lit in the actual LID drawer.
5. Press down in the front edge of the compartment to release it and remove your item.
6. Close the compartment and drawer to continue.



Confirming Items

In some circumstances it may be necessary to store more than one item in a single location, a locker or ECTC/Journeyman drawer for example. In these types of situations the SupplyPoint™ software offers the ability to force users to confirm they have picked up the correct item before the transaction can be completed, thus greatly reducing the chance of picking errors from locations holding multiple items. This feature is controlled by the parameter *GUI – Confirm Items on Withdraw from non uniform content locations* and will not function in the User Interface unless it is turned on.

Once a user opens the location for the item, they will be shown the screen opposite, indicating that they cannot commit the transaction until they have confirmed the item.

Withdraw : Drawer Open

Item	484
Alias	DLY9622540D
Supplier Part Number (Current)	DLY9622540D
Description	BLUE PAPER BOILER SUIT (XLARGE)
Batch Number	NONE
User	ANDREW GILLESPIE

Confirm Item

484 | Take 1

Unconfirmed

Cancel GO

Users should click the **CONFIRM ITEM** button to display the screen shown opposite. At this point the user can either enter the *Item Number* or *Supplier Part Number* for the item via the keyboard or, if one exists, by scanning the barcode attached to the item.

Enter/Scan Item to confirm transaction

1 2 3 4 5 6 7 8 9 0 + ← X

Q W E R T Y U I O P #

A S D F G H J K L - ;

Z X C V B N M , . / :

Space GO Cancel

If the user tries to continue without confirming their item(s) they will receive a message asking them to confirm the items without letting them proceed. Users are afforded the benefit of the doubt and allowed to continue without confirming their items, only if the parameter *GUI – Confirm Items on Withdraw – max failure count* is set to a number greater than 0 and the user fails to enter/scan the correct items the specified number of times. Using this parameter enforces good practice on the user while ensuring they are not stuck in an endless loop of failing to confirm the item(s) correctly.

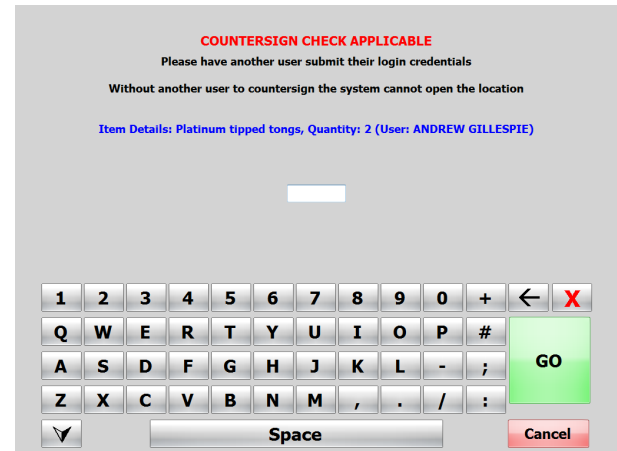
Withdrawing Countersign Items

If items have been marked with the *Countersign* attribute in *Items* setup, and the transaction quantity selected by the user qualifies for the countersign check to be applied; the transaction process will be slightly different from usual operation. Aside from marking items as applicable for the countersign check, the parameter *Countersign – In Use* needs to be turned on before the function can be used in the

User Interface. A brief explanation of some of the countersign features is shown below.

Having selected the quantity and chosen to proceed from the shopping basket, if it is in use, users will be unable to open a location until somebody else verifies their presence at the system.

A second user will have to be present and enter their login credentials, in the screen shown opposite, before the location will open. Instructions on what to do are shown to the user at the top of the screen.



COUNTERSIGN CHECK APPLICABLE

Please have another user submit their login credentials

Without another user to countersign the system cannot open the location

Item Details: Platinum tipped tongs, Quantity: 2 (User: ANDREW GILLESPIE)

[Empty input field]

1 2 3 4 5 6 7 8 9 0 + ← X

Q W E R T Y U I O P #

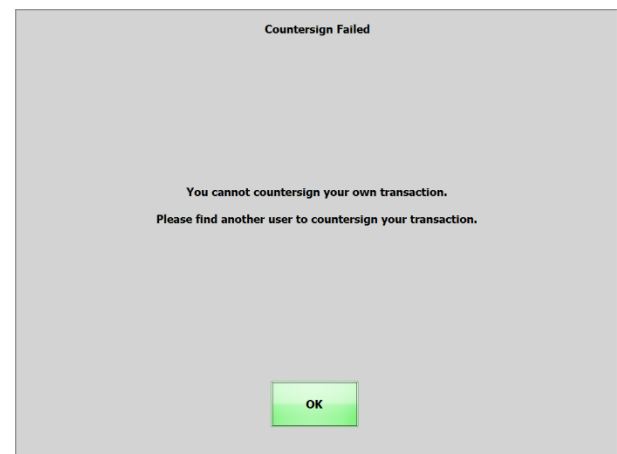
A S D F G H J K L - ;

Z X C V B N M , . / :

GO

Space Cancel

If a user tries to countersign their own transaction they will see the screen shown opposite and will remain unable to open the location until another user is present.



Countersign Failed

You cannot countersign your own transaction.

Please find another user to countersign your transaction.

OK

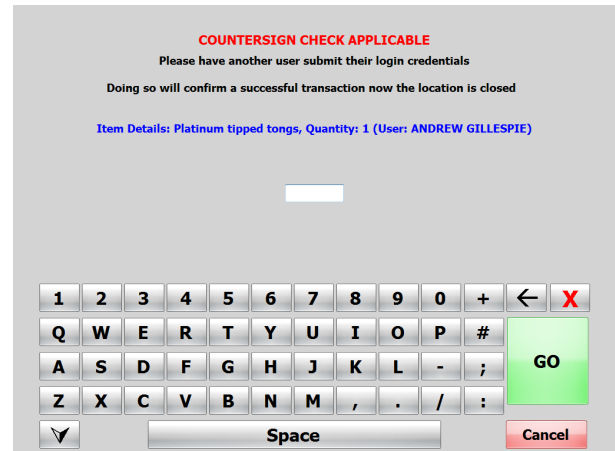
If another user is unavailable to countersign the transaction; the user should click CANCEL to skip this transaction and proceed with any others they may wish to carry out. This will log a failed transaction in the system so that any users routinely appearing to try and bypass the system can be identified via the reporting functionality.

Users can also be forced have somebody else present to countersign the items once a location has been closed. This is useful for confirming users have taken the amount of stock they asked for and not any more.

If the parameter *Countersign – Check On Close* is turned on the screen shown opposite will appear when the user closes the location.

You will notice the instructions at the top of the screen differ slightly from the same screen shown earlier in this section.

After a transaction has been completed that used the countersign check, both the user who countersigned the transaction prior to the location being opened, and after it was closed are logged and available in the reporting software.



It is important to note that the countersign check is applied to the following transactions;

- Withdraw
- Restock
- Return
- Inventory Adjustment
- Cycle Count
- Pickup from Bin

The countersign check should be used for high value or mission critical items or in circumstances where administrators wish to impose tighter controls on the flow on inventory in and out of the system.

Specific users can be forced to always countersign items marked with the *Countersign* attribute, regardless of the quantity they selected by setting the *Force Countersign* attribute in *Users* setup.

Withdraw where the User is forced to confirm the remaining quantity.

In some situations, following a Withdraw transaction, it might be useful to force the User to confirm the remaining quantity of the item in the specific location. When used in conjunction with the parameter *GUI – Perform Inventory Adjustment when User counts Item*, this function facilitates dynamic stock taking and the reconciliation of any discrepancies between the physical inventory and the book stock figures required to be undertaken. Customers adopting this method of stock reconciliation are advised that an *Inventory Transaction* will be recorded and the current quantity

for the Item adjusted accordingly, irrespective of whether the User has been assigned access to the *Inventory Adjustment* transaction.

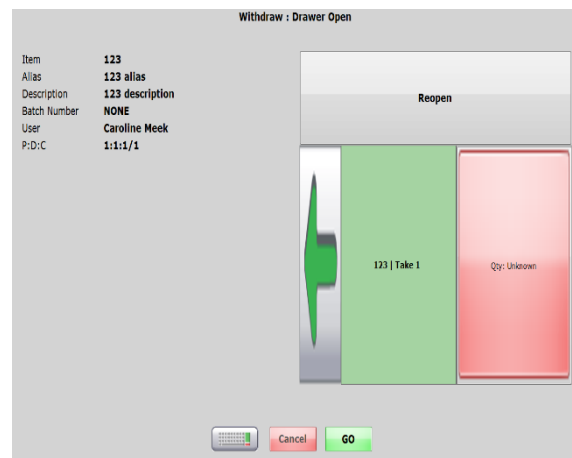
To enable the software to instruct the User to count and confirm the remaining inventory, for the item in the compartment, the following configuration settings are required: *Item per Location Attributes* requires the Item to have the *Is Countable* attribute checked. The item must also be assigned to a location where the drawer configuration rules are not *Enforce Full/Empty*; it would be a senseless exercise to ask the operative to enter zero where it is presumed that, on a withdraw transaction, the user has taken everything in the compartment.

Aside from marking items as applicable for counting, the parameters *GUI – Force User to confirm remaining quantity* and *GUI – Perform Inventory Adjustment when User counts Item* must be enabled before the function can be used in the User Interface.

A brief explanation of the function is detailed below.

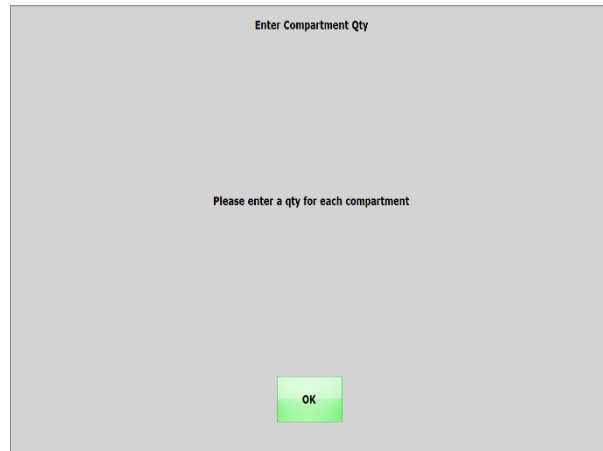
Having selected the quantity and chosen to proceed from the shopping basket, the screen shown opposite will be displayed indicating that the user is required to confirm the remaining quantity in the location.

The User should open the drawer and remove the required quantity as instructed on the screen. Before closing the drawer it is desirable for the User to note the remaining quantity of the specified item; enabling them to record the inventory level when prompted.



After closing the drawer the User selects the Go button and the screen shown opposite will be displayed indicating that the user is required to enter a quantity for each compartment.

Press the OK button to reveal the quantity input screen.

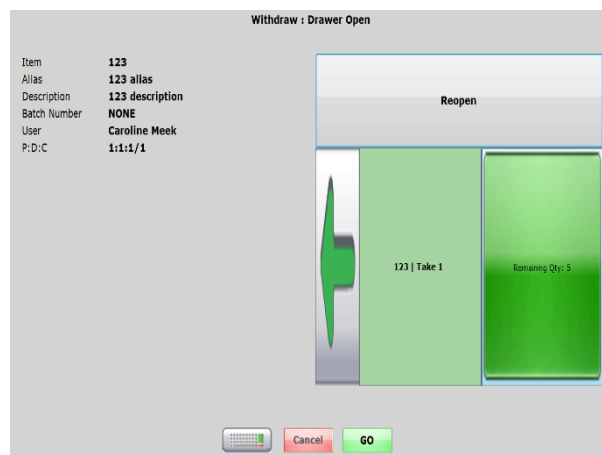


Using the key pad the User should confirm the remaining quantity of the specified item within the compartment.

Pressing Enter will enable the User to review the figure keyed and trigger the reopening of the drawer to facilitate a recount if required.



The refreshed *Withdraw: Drawer Open* screen enables the User to review the confirmed quantity and provides an opportunity for the User to reopen the drawer, if required, by pressing the Reopen button; to facilitate a second count.



FIFO On Withdraw

The premise behind this feature is that the system will select the location for the item that throughout the entire system, all VMID's within the database, has been in stock the longest. This functionality is primarily used for items where a charging socket is

installed for example to charge tablets or walkie-talkies etc. thus enabling the user to be issued with the device that has been on charge longer than any other and therefore, in theory, have an item that gives them the maximum usage possible at the point it is withdrawn from the cabinet.

The FIFO On Withdraw feature requires the items to be assigned to individually secure, single compartment locations for example a cupboard, single compartment drawer, a RotoPoint hatch or a LID cabinet where the location must be configured as enforce full/empty or only have a maximum quantity of one in order to be considered for this check. The location Content Type for a FIFO by location item must be New.

The Withdraw process, in the User Interface, is exactly the same as the Standard Withdraw transaction.

Priority Withdraw

The Priority Withdraw transaction is designed to allow the user who has it to withdraw items on an emergency basis, bypassing User Cost Centers, Jobs, Machines, Aux1, Aux2 and Aux3 tracking selection; ignoring any Restrictions or Rationing on the item. For items to appear on this list, they must have the *Priority Status* attributed check in the *Location Attributes* section of *Items* setup.

Withdraw Kit

In some situations it might be useful to group common items into a kit and shorten the Withdraw process for the user; organizing items into Kits can do this. For information on configuring Kits please refer to the [Kits](#) section within [SupplyPoint™ Utilities](#).

When working with Kits all configuration for Item and Kit Restrictions are taken into account; ensuring that when the user selects, via the filter options, in the Withdraw or Withdraw Kits transaction, the resulting selection grid is always populated.

When the parameter *Restrictions - Apply regular item restrictions to Kit issue* is enabled where allowed Items for kit issue are not defined it is possible that the user could select the menu option withdraw by kit, select the job and kit and then have no access to items required that make-up the kit. Where the parameter *Restrictions - Apply regular item restrictions to Kit issue* is enabled and items are defined, in the restriction configuration, the user is not restricted to taking the items which make up the kit only as part of a kit issue; the job and items, which have been specified for kit assembly, also become accessible via the menu option *Withdraw*.

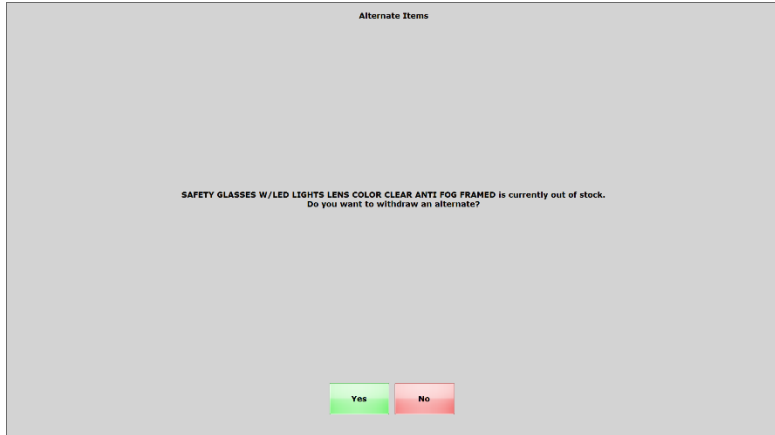
1. Log in and select **WITHDRAW KIT**.
2. If selection screens such as those for Jobs and Machines are turned on users will have to select the required information.
3. A list of configured Kits will appear similar to that shown opposite.
4. Having selected a Kit; the user will be shown a summary of the items comprising the Kit.
5. To withdraw the Kit the user can click **CONTINUE**. For information on how to handle quantity shortages when withdrawing a Kit, refer to the Kit attributes detailed in User Settings within the Kits section of SupplyPoint™ Utilities.

Item	Description	Defined Qty	Available Qty	Selected Qty	Alias
HS0001	High Visibility Jacket (XL)	1	7	1	
HS0002	Workwear Gloves	1	7	1	
HS0003	Safety Goggles	1	7	1	
HS0004	Safety Briefing Guidelines	1	7	1	

In some cases, where users will routinely withdraw more than one of a kit at the same time, the process can be further expedited by using the parameter *Kits: Multiple to withdraw (0 = classic mode)*. If this parameter is set to 5, for example, users will be able to select up to 5 of the same kit in a single go, without the need to either repeat the same transaction 5 times, or to manually modify or 'nudge up' the *Selected Qty* of each item shown in the previous example.

Withdraw Alternate Item

Alternate items allows other items to be withdrawn if the original item is out of stock. This could save time spent at the machine searching for another item that would be suitable for the desired situation. If an item was going to be superseded, the new item could be configured as an alternate item, making the transition between the old and new item seamless.



When selecting an out of stock item that has alternate items configured the user will be asked if they would like to see the alternate items list. Selecting yes will display the list of available alternate items, if an alternate item is out of stock, it will not be displayed. If the user does not want to see the list of alternate items selecting no will continue to the alternate locations screen as normal.

Tips for Withdrawing

- Never attempt to 'jerk' the drawer open. The SupplyPoint™ interprets this as an attempted theft. When it senses that a drawer is being opened too quickly it will lock in place. A message reading "TOO FAST OPEN + RETRY" will appear. The user will then be required to close the drawer and reopen it at a more measured pace. This applies for all transactions.
- On machines of more than two frames use the light at the top of each frame to narrow the search for the right drawer. This will light up when a drawer within that frame has been selected. This applies for all transactions
- Use photographs of items to reduce the chances of a user taking the wrong item. A withdrawal can be cancelled at any point before the quantity has been selected or, if in use, the shopping basket has been confirmed.
- Never simply replace an item if, when the drawer is opened, you discover you have the wrong tool. This has the double effect of erroneously charging an item to the selected Job and Machine and of throwing off the inventory. Immediately follow the procedure in place for handling this situation (Return, User Undo, or Supervisory Undo).
- Always close the drawer and log out when the transaction is complete. Though the machine will time out eventually, there is a window of opportunity for another user to come along and perform transactions under the wrong User Number.

Return

The Return function can be used in a number of ways. Users can return items that are not consumed by use, or to replace them in the machine after the incorrect item has been withdrawn, though use of the Undo functions is highly recommended for this (see the instructions for those transactions below). There are also variants for the returning of items to locations designated for rework and for scrap. To return an item, take the following steps:

1. Log in and select **RETURN**. You will see a screen similar to the one on the right. The Item grid sequences the records by Last Modified (description), Item Description and User Description; with the most recent transactions at the top.
2. You can select and Item, User, Job or Machine to narrow your search. If an item does not appear on the list, the *Returnable* box in Items setup is probably not checked.
3. Select the item(s) and the red x will change to a green check mark.
4. You can select additional items or just click **GO**. You will now see the shopping basket, as when items are being withdrawn. If you would like to go back to the previous screen to select additional items, press the button marked **ADD ANOTHER ITEM** and continue building a list.
5. If prompted, choose whether the item is being returned to new or used. You may also have to select the issue quantity of the location
6. Enter the quantity of the item being returned.
7. Follow the instructions on the drawer to replace the items. The transactions Return to Rework and Return to Scrap work essentially in the same manner, except when life tracking is involved (see below).

The screenshot shows the 'Return' interface. At the top, there are filters for Item, User, Job, and Machine. The 'User Filter' is set to 'C.N.C. COLLINS'. Below the filters is a table titled 'Active Inventory' with columns: Item, Descripti..., User Name, Job Num..., Machine ..., Qty, and Alias. The table contains several rows of items, some with a red 'x' in the first column and others with a green checkmark. At the bottom, there are buttons for 'Cancel' and 'GO'.

Item	Descripti...	User Name	Job Num...	Machine ...	Qty	Alias
B261A15...	SOLID C...	C.N.C. C...	NULL	NULL	12	
CNGP432...	1/2" IC ...	C.N.C. C...	NULL	NULL	4	IN
GWXX5678	24" OD X...	C.N.C. C...	NULL	NULL	1	Y
K222	K222 DY...	C.N.C. C...	NULL	NULL	2	
B261A15...	SOLID C...	C.N.C. C...	VALVE#1...	LATHE#3...	3	
B261A15...	SOLID C...	C.N.C. C...	VALVE#4...	LATHE#3...	5	
B261A15...	SOLID C...	C.N.C. C...	VALVE#4...	MILL#66...	15	

Simple Return

A "Simple Return" just asks for each field one at a time (Job→Machine→Item) rather than presenting them on the screen all at once. One way to think about it is just as a reverse Withdraw. When selecting Return you will be presented with a list of only the

Jobs that are linked to a returnable item that has been checked out. Next will be the Machine screen and you will only see the machines that have an item checked out against the previously selected Job. Finally at the Item selection screen, you will only see items checked out against the previously selected Job and Machine.

Returning Life Tracked Items

Returning life tracked items bears a great deal of resemblance to returning non-life tracked items. Take the following steps:

1. Log in and select **RETURN** from the transaction list.
2. Select the item to be returned, being sure to match the User, Job and Machine information.
3. If the item is life tracked, a screen like the one at the right will appear. Enter the initial tool life for the piece (this is where a ticket comes in handy) and enter the number of pieces made with the tool.
4. Press **GO** to continue.
5. One of two things will occur based on this input:
 - a. If the Remaining Life is below the Minimum Life in Items setup, the item will be returned to a Rework location.
 - b. If the Remaining Life is above the Minimum Life in Items setup, the item will be returned to a Used location.
6. Follow the instructions on the screen to replace the item in its drawer.
7. After you have closed the drawer, you may then decide what to do next.

Enter Tool Life Information

Enter Original Tool Life Remaining When Last: 10000

Enter Number of Lives Used: 6500

Remaining Life = 3500

Buttons: Cancel, GO

Returning Life Tracked Items to Scrap

1. Log in and select **RETURN TO SCRAP** from the transaction list.
2. Select the item to be returned, being sure to match the User, Job and Machine information.
3. Enter the original tool life and number of pieces made information.
4. A screen like the one on the right will appear, from which

Enter Scrapped Tool Information

Enter Reason for Scrap or Pick from List

- Broken
- Crashed
- Dropped
- Misaligned
- Tool Defective

Buttons: GO, Cancel

you can select a reason why
the tool is being scrapped.

5. Follow the normal procedure to return the item to its proper location.
6. Continue when finished with the transaction.

Swapping

Swap functions are intended to increase user accountability by requiring that previously-withdrawn items be returned before new ones can be taken. They are established on an item-by-item basis with the following attributes:

- *Is Swappable*: This allows swap rules, requiring the return of previously withdrawn units of the item before new ones can be taken.
- *Swap Qty*: This is the quantity that must be returned in a swap transaction. Your issue quantity should be at least this number.
- *Swap by User*: This enforces swap rules on a user basis. If not enabled then a user will not be able to withdraw a swappable item if any other user already has the swap quantity checked out.
- *Swap by Job*: This allows the user a little leeway by enforcing the swap rules on a job-by-job basis.
- *Swap by Machine*: This allows the user a little leeway by enforcing the swap rules on a machine-by-machine basis.

When only the *Is Swappable* box is checked, the swap function is most broadly applied. Users can be exempted by having the *Can Ignore Swap Rules* box checked in Users setup. Here's how the process works:

1. Perform a normal return of the item. This can be to a Used, Rework or Scrap location.
2. Once the drawer has been closed, you will be prompted that you have returned a swappable item and asked if you want to withdraw more of the item. You may be given a choice of Job and Machine, depending on how the item's attributes are configured. Select the option that allows you to withdraw the item.
3. Choose the Job and/or Machine for which the item will be withdrawn if necessary.
4. Take the item from the drawer, close the drawer and continue with any other tasks.

Tips for Returning

- All of the variations (return by weight, return to External Stock, etc.) that were available for Withdraw are available for Return.
- By default, any user can return items that have been taken by any other user. Users can be limited to returning only items they have withdrawn by checking the *Return- Restrict to original User* Parameter setting. If you don't want the majority of Users to return items taken by another user, but you do want one or two supervisors to be able to return items withdrawn by others; check the *Can Ignore Strict Return Rule* for those users in *Users* setup.

- Always be sure to choose the correct Job and Machine that the item is returned against. This is important if the SupplyPoint™ is being used to track job costing information. The selected Job and Machine information is posted at each step of the way and the transaction can be cancelled at any point before the quantity is chosen.
- When replacing items in the SupplyPoint™ always return them from the rear unless otherwise indicated on the drawer display.
- When returning to rework or scrap, pay close attention to the drawer display, as certain configurations allow for more than one item in a drawer or even within a compartment.
- Return can be used to replace items that were wrongly withdrawn, and will remove the item from any cost tracking accordingly. The main drawback to this approach is that in order for it to work all items must be designated as returnable. Doing this will lead to longer Active Inventory lists, which will never be cleared except by using the *Clear Active Inventory* function in *Machine Setup* (see [Clear Active Inventory](#)). Try to limit return only to those items that actually need to be returned; use the User Undo and Supervisory Undo for the rest.
- As always, be sure to close the drawer and log out after replacing the item(s).

Restock

As the name indicates Restock is the function used to place items in the SupplyPoint™. It is the second most frequently used transaction after Withdraw. Restock has been used to replace items that were mistakenly withdrawn and it will work for this purpose, but the preferred method is through the use of the User Undo and Supervisory Undo functions. To restock items take the following steps:

1. Log in and select **RESTOCK**.
2. A screen similar to the one to the right will appear, listing the items that can be restocked and showing the quantity for which there is space in the machine. As in other transactions the list can be searched using the buttons in the upper

Item	Description	Qty	Alias	Gr
1/4-284FPH3	1/4 INCH 4 F...	4		
AD42BS	AD42BS Aly/...	10..		
B261A15600KC7040	SOLID CARB...	23		
CCMT21505LFKC730	INSERT,CAR...	5		
CNGP432 KC730	1/2" IC 80 D...	65	IN432-ABC	
CTEST	CTEST	1		
DFT030304GD720	INSRT,CARB,...	13..		
DNMG432LFK9025	INSERT,CAR...	10		
DWG415545R01 KC9025	INSERT,CAR...	2		
EXTNEW	EXTNEW	30		
KHSS10610	DRILL JOBB...	12		
KM MCLNR	KM MCLNR ...	1		







right corner of the screen.

3. Select the item to be restocked.
4. Make appropriate selections of content type, issue quantity, etc. as prompted.
5. Follow the instructions on the drawer to restock the items. Remember that, in general, you will restock from the back of the machine.
6. After you have closed the drawer, follow the instructions on the screen to continue.

Restock Variations

First In First Out

Items can also be set up to be rotated within the drawer. The items are designated *First In First Out* in *Items* setup. When you Restock these items you will be reminded to shuffle the old product forward by the arrows along the side of the drawer display.

	KHSST09121 1
	KHSST09121 1
	Move From Back
	Move From Back
	Move From Back
	-- Leave --





















Expiration Dates

Items stored in the SupplyPoint™ can be given expiration dates. These dates serve as a guide to users concerning the useful life of tooling. This function is activated in *Items* setup by checking the box that says *Can Expire*. When restocking items that can expire, you will need to enter an expiration date for each separate compartment. The default date will be based on the parameter setting *Expiration Date Restock: Default Future Days* parameter and cannot exceed the *Expiration Date Restock: Maximum Future Days* parameter.

Restocking an item with an expiration date will bring up a display similar to the one shown on the right.

In order to select a single expiration date for all items, select it using the drop-down boxes and press the **SET ALL** button.

In order to assign dates to items in compartments individually, select the date using the drop-down boxes and select the field that reads *Not Set*.

Reopen		Set All	
11	▼	June	▼
		2008	▼
	GAGE001 1		Not Set
	GAGE001 1		Not Set
	GAGE001 1		Not Set
	GAGE001 1		Not Set
	GAGE001 1		Not Set
	GAGE001 1		Not Set
	GAGE001 1		Not Set
	GAGE001 1		Not Set
	-- Leave --		
	-- Leave --		
	-- Leave --		
	-- Leave --		

Restocking External Stock

1. Follow the normal Restock procedure, selecting the Item and pack size where applicable.
2. Where the same item is assigned to multiple External Stock Locations the user is presented with a Restock - Location Selection screen, which details the current inventory quantity for the respective location; enabling the user to choose the most appropriate location to Restock; for the item.
3. The location for the item appears above the item image. After you have confirmed your restock, press GO to finish the transaction.



Restocking LIDs

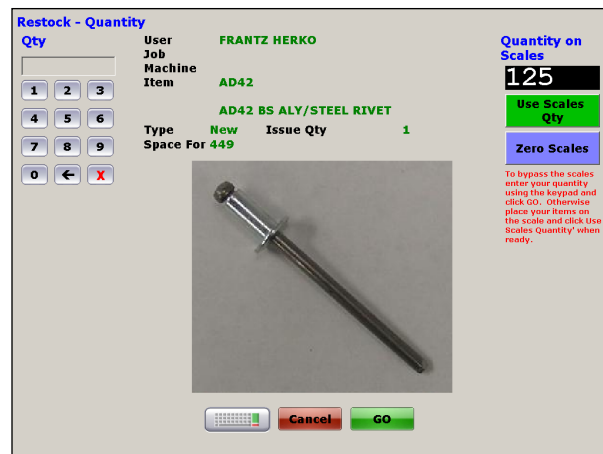
1. Follow the normal restocking process.
2. When you reach the LID drawer, a display like this one will appear. Each drawer can have up to 36 locations (six channels of six compartments). The location indicated by the yellow arrow will be lit in the actual LID drawer.
3. Close the LID compartment and the drawer to continue.



Restocking Items by Weight

Items that can be dispensed using scales can also be restocked using scales. Take the following steps for this to restock items with scales:

1. Follow the normal restocking process.
2. When a weighable item is selected, you will see a screen like the one at the right, allowing you to place items on the scales. You can clear any weight on the scales by pressing **ZERO SCALES**.
3. Enter the quantity on the keypad and press **GO** or weigh items and press **USE SCALES QTY**.
4. Follow instructions on the drawer display to complete the process.



Receive and Restock

This function allows you to simultaneously Receive and Restock an EDI order, eliminating the necessity of first receiving inventory at one computer and then restocking items at the vending machine.

Where a User has only the *Receive and Restock* transaction privilege, and no Restock General or Restock Used transaction privileges, they will only be able to Receive and Restock into locations designated for New items.

Where a User has been assigned the Receive and Restock transaction privilege and either the Restock General or Restock Used transaction privileges where there is insufficient available space in locations designated for New items the User can take advantage of any available space in locations designated for the same item of Content Type General or Used depending upon which transaction privileges have been assigned to them.

Take the following steps to use this function:

1. Log in and select **RECEIVE AND RESTOCK** from the list of transactions.
2. A screen like the one to the right will appear, showing the information about currently open purchase order and release numbers. Select one from the list to continue.

To search for orders with a specific item, enter the *item number* or *Supplier Part Number* into the search field and press *enter*. The subsequent list will display the open orders the item is associated with.

3. Enter a packing slip number as prompted and press **GO**.

Enter packing slip number

Receive and Restock			
Purchase Orders			
Purchase Order	Release Number	Supplier Number	Order Date
123456	6008	KMTL	12/28/2007

4. A list of items will appear, similar to the one on the right. These are the items on the purchase order you have selected. Select an item.

5. You may now choose:

- Press **RECEIVE AND RESTOCK** to receive the item and place it in the machine.
- Press **RECEIVE WITHOUT RESTOCK** to receive the item only.
- Press **CLOSE LINE ITEM** if you do not expect to receive this item.

6. What you do next will depend on the selection you have made.

- If you have opted to close the line item, you may then move on to another item;
- If you have opted to receive without restocking, you will be asked how many of the item to receive;
- If you have opted to receive and restock, you will be asked how many of the item to restock; the system will then receive the items and allow you to place them in the machine.

Receive and Restock
Purchase Orders 123456 (6008 KMTL 12/28/2007)

Select Item From Purchase Order

Item CCMT21505LFC730

Item	Description	Qty Alias	Supplier Part...
1/4-284...	1/4 INCH 4 F...	2	
B261A15...	SOLID CARB...	12	
CCMT215...	INSERT,CAR...	5	
CNGP432...	1/2" IC 80 D...	65	IN432-ABC
DFT0303...	INSRT,CARB...	13..	
DNMG43...	INSERT,CAR...	10	
DWG415...	INSERT,CAR...	2	
KHSS106...	DRILL JOBB...	7	
KHSS109...	TAP SP PT P...	12	
NGD4125...	INSERT.CAR...	5	

Receive and Restock Receive without Restock Close Line Item Select New Purchase Order Close Purchase Order Exit

Receive without Restock

Enter Quantity #6/AS109/A7-AG
Max 20

0

1	2	3
4	5	6
7	8	9
0	←	×

OK Cancel

Receive Without Restock

Receive and Restock - Qty

User 100103
Item CCMT21505LFC730
Description INSERT,CARB,80DIAMD,SO,1/4IC,.00
Type New
Issue Qty 1
Space For 5

1
2
3
4
5



Cancel GO

Receive and Restock

7. When you have received an item, you may then proceed to receive and/or restock others as well.

8. Once you have finished, you can either press **SELECT NEW PURCHASE ORDER** or **EXIT**.

Tips for Restocking

- Unless the item is designated First In First Out, always restock from back to front.
- Pay close attention to the drawer display, as there may be cases where several different items are stored within the same drawer.
- Though restock can be used to replace wrongly removed items this is not recommended. Instead, consider use of the User Undo or Supervisory Undo functions.
- Always close the drawer and log out when finished restocking.

Rework and Scrap Functions

One of the advantages of the SupplyPoint™ is its ability to track items through the rework and/or scrap process. There are several transactions tied to these functions: RETURN TO REWORK, LOAD REWORK, RETURN TO SCRAP, PICKUP REWORK FROM BIN, PICKUP REWORK FROM DRAWER, PICKUP SCRAP FROM BIN, PICKUP SCRAP FROM DRAWER, RETURN FROM REWORK, RETURN FROM REWORK TO SCRAP. Since these are tied together, it seems appropriate to consider them as parts of a whole process.

There are two modes of storage for rework and scrap items; choosing which to use is generally a matter of convenience. The two modes are bins and drawers. This section deals only with the use of these, for configuration refer to Drawers in the System Configuration section of this manual.

- A rework or scrap **bin** is a location (drawer or external) assigned to a specific user (this might be an external vendor) and can contain any items for which that user/group is the assigned rework or scrap user/group (see Items) and which are reworkable or scrappable. It may also be a crib location. The advantage of bins is that they allow storage of many different items without the need to actually assign the individual items to the drawer. Simply give the items a rework or scrap user/group, make that them the owner of the drawer, and all of the preparation is done. The disadvantage comes when it is time to pick up the items; the system assumes that the bin is emptied at that time. The best situation to use a bin is when all of the rework or scrap pickup is by a single user or by members of a user group.
- A rework or scrap **drawer** is a drawer like most other drawers. It has assigned compartments and items assigned within those compartments. The only difference between it and any other drawer is that is configured for rework and scrap. The chief advantage of the rework or scrap drawer is that it allows for individual control over pickup of items. The chief disadvantage is that it requires more detailed planning than a bin. Since,

theoretically, items assigned to several different users can be placed in the drawer the best use of the rework or scrap drawers is when there are multiple people withdrawing rework or scrap and the number of drawers used in the operation needs to be kept to a minimum.

The rework or scrap process generally works as follows:

1. A user withdraws an item that can be reworked or can be scrapped and uses it.
2. He then returns the item for rework or scrap.
3. A designated user picks up the items for rework and performs whatever services are needed. Or, if he picks it up for scrap, he scraps it.
4. Items that have been reworked are returned as either New or Used, depending on the customer's policy. Users may now use the items and the process starts again. If they are worn beyond repair, they can be returned for scrap.
5. A designated user removes the scrap items from the machine.

Rework and Scrap Pickup

Since there are two modes of rework and scrap storage in the Vending Machine, there are also two modes of removing these items from the machine.

Pickup by Drawer

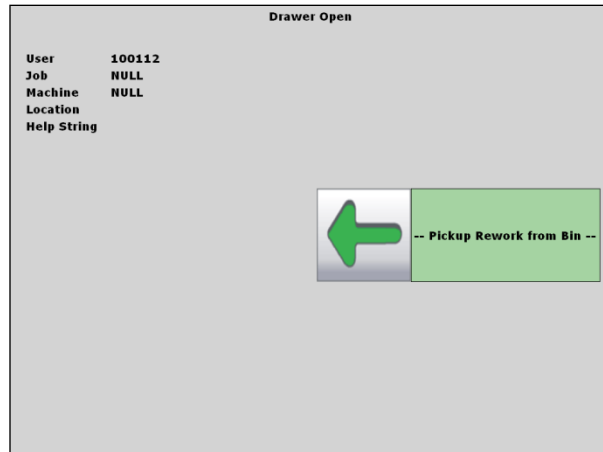
1. Log in and select either or from the transaction list. A screen will appear with items available for pickup.
2. Select the item from the list.
3. Select the quantity of the item to be picked up.
4. Remove the items from the drawer and close it.
5. Continue normally, either by picking up other items or by exiting the interface.

Pickup by Bin

NOTE: This mode of pickup only works when the user picking up meets these criteria:

- He is the designated Rework or Scrap User for the item **or**
- He is a member of the designated Rework or Scrap User Group for the Item **and**
- He or his User Group is the designated owner of the Rework or Scrap bin.

1. Select `PICKUP_REWORK_FROM_BIN` or `PICKUP_SCRAP_FROM_BIN` from the transaction list.
2. A screen like the one to the right will appear. Remove all of the items in the bin, as the system will now assume that it is empty.
3. Close the drawer and continue normally.



Return from Rework

Once taken for Rework; items can be returned from it as well. Items that are usable can be returned to a location that fits their status (e.g. New, Used and General). They can also be returned to Scrap if they are unusable or beyond economical repair. Take the following steps to return an item from Rework.

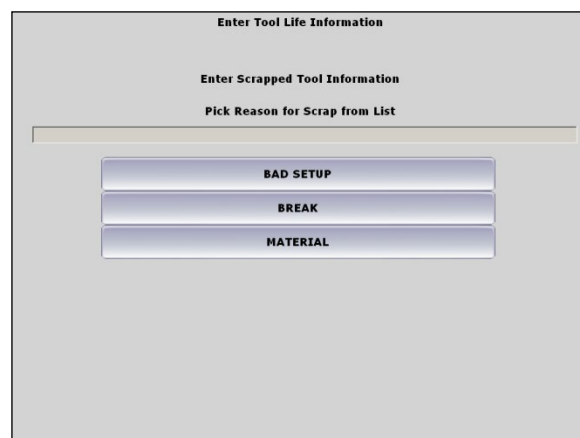
1. Log in and select either `RETURN_FROM_REWORK` or `RETURN_FROM_REWORK_TO_SCRAP`. A screen will appear, showing the items out for Rework.
2. Select the item to be returned from the list.
3. If the item is being returned to circulation, you will be asked whether you want it returned to a New or Used location, based on space availability.
4. Follow the instructions on the drawer display screen to return the item.
5. Continue normally after the transaction is complete.

Tool Fail Reasons

When life-tracked items are returned to scrap, a tool fail reason will be required. These reasons are entered in the *Tool Fail Reasons* of Machine Setup.

You can require users to enter a reason any time an item is scrapped by activating the *GUI- Tool Fail- Force Reason Entry on Scrap* Parameter setting.

You can allow users to enter new reasons at the User Interface by



activating the *GUI- Tool Fail- Allow manual entry of reason at machine* Parameter setting.

Keys

The SupplyPoint™ software provides the capability of storing items at other locations, securing access to those items by keeping a key in the unit. This is a complex function, as it requires the use of multiple transactions to perform. It is important to note that keys used in this manner will not be withdrawn, returned and restocked as keys; users will Withdraw, Return and Restock the items that the keys control access to.

Restocking Items Using Stored Keys

1. The first time an item under a stored key is restocked the key will need to be placed in the machine. Do this by using the **RETURN KEY** function and selecting the appropriate key. Place the key in the drawer as indicated by the drawer display.
2. To Restock these items select **RESTOCK** and proceed as normal.
3. When the drawer is opened, take the key as shown in the drawer display. Close the drawer to continue.
4. Restock items in the location secured by the key.
5. Use the **RETURN KEY** function to place the key back in the machine.

Key ID	Description
1	KEY01

Withdrawing Items Using Stored Keys

1. Follow the normal withdrawal procedure, selecting Job, Machine and Item.
2. Open the indicated drawer and remove the key as indicated by the drawer graphic.
3. Close the drawer and retrieve the item from its locked location.
4. At this point the user who withdrew the key can still withdraw other items stored under it. However, if other users need access to items stored under it,

the key must be returned. Log in and select the **RETURN KEY** function. A display similar to the one shown below will appear. Simply select the key to be returned and follow the instructions on the screen. Other users will now be able to access items stored under the key.

Returning Items Using Stored Keys

1. Follow the normal return procedure using either return screen to select the User, Job and Machine that the item was checked out to.
2. Select the quantity of the item to be returned.
3. Remove the key from the drawer as shown on the drawer display. If the key is unavailable, the drawer will not open and a message will appear at the bottom of the screen showing the name of the last person to remove the key. The key will need to be returned using the **RETURN KEY** function before the process can continue.
4. Once the key has been removed replace the item in its locked location.
5. Use the **RETURN KEY** function to replace the key in the machine. It will now be available for other users who need access to it.

Serial Numbers

Once you've established that an item is *Serializable*, it needs to be restocked into the machine. It is at this point that the serial number for the item will be entered and stored with it in the specific compartment. To force serial numbers on an item; check the *Is Serializable* attribute in *Items* setup and enable the parameter *Serial Numbers – In Use*.

Restocking Serial Number Items

For example, if you need to store 3 of item "A" in the machine, each instance has to be stored in a separate compartment and the maximum quantity for each compartment will be 1. To start restocking the item, log in and select *Restock* and then select the item from the item selection screen. Normally at this point, you would be prompted for a quantity, but since the item is serializable, you will immediately be prompted for a serial number. Enter the correct serial number and click **GO** to continue.

Enter Serial Number

123456

1	2	3	4	5	6	7	8	9	0	+	←	X
Q	W	E	R	T	Y	U	I	O	P	#	GO	
A	S	D	F	G	H	J	K	L	-	;		
Z	X	C	V	B	N	M	,	.	/	:		
											Space	Cancel

When the drawer or cupboard is opened you will see the following screen. The serial number will be displayed on the drawer/compartment map. This screen will also instruct which compartment to put the item in if it is a drawer.

Restock : Drawer Open

Item EP7 PTX-55 Description EP7 PTX-55 Batch Number 123456 User JIM ROSE	<table border="1" style="width: 100%; border-collapse: collapse;"> <tr style="background-color: #FFFF00;"> <td style="width: 40px; text-align: center;">→</td> <td>EP7 PTX-55 Put 1 (123456)</td> </tr> <tr><td style="text-align: center;">⊘</td><td>-- Leave --</td></tr> <tr><td style="text-align: center;">⊘</td><td>-- Leave --</td></tr> <tr><td style="text-align: center;">⊘</td><td>-- Leave --</td></tr> <tr><td style="text-align: center;">⊘</td><td>-- Leave --</td></tr> <tr><td style="text-align: center;">⊘</td><td>-- Leave --</td></tr> <tr><td style="text-align: center;">⊘</td><td>-- Leave --</td></tr> <tr><td style="text-align: center;">⊘</td><td>-- Leave --</td></tr> <tr><td style="text-align: center;">⊘</td><td>-- Leave --</td></tr> <tr><td style="text-align: center;">⊘</td><td>-- Leave --</td></tr> <tr><td style="text-align: center;">⊘</td><td>-- Leave --</td></tr> <tr><td style="text-align: center;">⊘</td><td>-- Leave --</td></tr> </table>	→	EP7 PTX-55 Put 1 (123456)	⊘	-- Leave --	⊘	-- Leave --	⊘	-- Leave --	⊘	-- Leave --	⊘	-- Leave --	⊘	-- Leave --	⊘	-- Leave --	⊘	-- Leave --	⊘	-- Leave --	⊘	-- Leave --	⊘	-- Leave --
→	EP7 PTX-55 Put 1 (123456)																								
⊘	-- Leave --																								
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Inventory Adjustment for Serial Number Items

The system also supports Inventory Adjustment for serial number items. Start the Inventory Adjustment transaction and select the correct item. If it is in more than one drawer/location pick the correct location. Next you will see the screen below. The current serial number for the item stored in each compartment is shown on the far right and you can change the serial number by clicking the numeric keypad button to the left of it.

Inventory Adjust
Enter Correct Quantities And Serial Numbers

Item	EP7 PTX-55
Description	EP7 PTX-55
Batch Number	NONE
User	JIM ROSE

<input type="button" value="CLEAR"/>	<input type="button" value="+1"/>	<input type="button" value="1"/>	<input type="button" value="-1"/>	EP7 PTX-55	<input type="button" value="CLEAR"/>	123456
<input type="button" value="CLEAR"/>	<input type="button" value="+1"/>	<input type="button" value="1"/>	<input type="button" value="-1"/>	EP7 PTX-55	<input type="button" value="CLEAR"/>	987654
<input type="button" value="CLEAR"/>	<input type="button" value="+1"/>	<input type="button" value="0"/>	<input type="button" value="-1"/>	EP7 PTX-55	<input type="button" value="CLEAR"/>	
<input type="button" value="CLEAR"/>	<input type="button" value="+1"/>	<input type="button" value="0"/>	<input type="button" value="-1"/>	EP7 PTX-55	<input type="button" value="CLEAR"/>	
<input type="button" value="CLEAR"/>	<input type="button" value="+1"/>	<input type="button" value="0"/>	<input type="button" value="-1"/>	EP7 PTX-55	<input type="button" value="CLEAR"/>	
<input type="button" value="CLEAR"/>	<input type="button" value="+1"/>	<input type="button" value="0"/>	<input type="button" value="-1"/>	EP7 PTX-55	<input type="button" value="CLEAR"/>	
<input type="button" value="CLEAR"/>	<input type="button" value="+1"/>	<input type="button" value="0"/>	<input type="button" value="-1"/>	EP7 PTX-55	<input type="button" value="CLEAR"/>	
<input type="button" value="CLEAR"/>	<input type="button" value="+1"/>	<input type="button" value="0"/>	<input type="button" value="-1"/>	EP7 PTX-55	<input type="button" value="CLEAR"/>	
<input type="button" value="CLEAR"/>	<input type="button" value="+1"/>	<input type="button" value="0"/>	<input type="button" value="-1"/>	EP7 PTX-55	<input type="button" value="CLEAR"/>	
<input type="button" value="CLEAR"/>	<input type="button" value="+1"/>	<input type="button" value="0"/>	<input type="button" value="-1"/>	EP7 PTX-55	<input type="button" value="CLEAR"/>	
<input type="button" value="CLEAR"/>	<input type="button" value="+1"/>	<input type="button" value="0"/>	<input type="button" value="-1"/>	EP7 PTX-55	<input type="button" value="CLEAR"/>	
<input type="button" value="CLEAR"/>	<input type="button" value="+1"/>	<input type="button" value="0"/>	<input type="button" value="-1"/>	EP7 PTX-55	<input type="button" value="CLEAR"/>	
<input type="button" value="CLEAR"/>	<input type="button" value="+1"/>	<input type="button" value="0"/>	<input type="button" value="-1"/>	EP7 PTX-55	<input type="button" value="CLEAR"/>	

EP7 PTX-55












Withdrawing Serial Number Items

Withdrawing serial number items is done in nearly the same manner as with non-serial number items. After the item is selected the following is a portion of the screen that will be displayed. The available serial numbers for the item will be displayed.

Withdraw - Serial Number	
<input type="button" value="Cancel"/>	User SHOP USER
<input type="button" value="987654"/>	Job TEST JOB
<input type="button" value="123456"/>	Machine TEST MACHINE
	Item EP7 PTX-55
	Alias
	Supplier Part Number (Current)
	Description EP7 PTX-55
	Type Not Specified Yet
	Issue Qty Not Specified Yet
	Available
	Serial Number

Now click the button with the desired serial number to continue. If the parameter *Serial Numbers- Only offer first available serial number for item selected* is enabled then the user interface will only display one serial number to choose from. In this example it would be 987654. Once the drawer is opened the following screen will be

displayed. The serial number is shown next to the item number in the drawer/compartments map.

Withdraw : Drawer Open		
Item	EP7 PTX-55	
Description	EP7 PTX-55	
Batch Number	987654	
User	SHOP USER	
Job	TEST JOB	
Machine	TEST MACHINE	
		-- --
		EP7 PTX-55 Take 1 (987654)
		-- Leave --
		-- Leave --
		-- Leave --
		-- Leave --
		-- Leave --
		-- Leave --
		-- Leave --
		-- Leave --
		-- Leave --
		-- Leave --

When the drawer opens to provide access to the respective item the User is presented with a field to allow them to confirm the Serial number of the item that has been taken from the drawer. The input field is prepopulated with the value of the expected serial number.

Confirm Serial Number

5201536

1

2

3

4

5

6

7

8

9

0

+

←

X

Q

W

E

R

T

Y

U

I

O

P

#

GO

A

S

D

F

G

H

J

K

L

-

;

Z

X

C

V

B

N

M

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/

:

▽

↑

Space

Cancel

When Withdrawing the Item, the Items Serial Number Cycle Count value is increment by 1 so that we can see how many times the item has cycled through the machine since it was last reworked.

Using the *Maximum Uses before Inspection/Maximum Units Produced before Inspection* setting under the item, once the maximum uses or units produced has been reached the item will then automatically be routed to the rework drawer on return to the cabinet. The current number of uses or units produced is reset to zero when the item is *Returned from Rework*.

Returning Serialized Numbered Items

'Return Serialised Item' facilitates a swifter selection process for accessing the respective Serial Number of the item to be returned by giving the User the ability to scan/type the Serial Number and have it automatically lookup the correct Active Inventory record for the Serial Number/Item and VMID to allow the user to proceed as normal.

Batch Numbers

Batch number items are handled the same way as with serial numbers, where it is only possible to Restock one batch at a time. The batch number is still linked to the compartment so it is not possible to have a quantity of the same item in a single compartment with more than one batch number.

Change Password

Passwords are a great aid to security for companies that have a SupplyPoint™, and for users of the machine. They provide an extra layer of security on top of the User ID. In many companies the User ID is widely distributed and may be available on publicly posted items, thus it is available to other persons. Often, they are on time cards that are left in plain view. Use of a password allows the user or management to assign a signifier known only to management and its possessor, reducing the likelihood of persons using the SupplyPoint™ while claiming to be someone else. The CHANGE PASSWORD function allows individual users to change or, in a special case, to create their own passwords. Take the following steps:

1. Log in and select **CHANGE PASSWORD**.
2. Key in the old password in the field labelled *Old Password*. If there is no previous password leave this field blank.

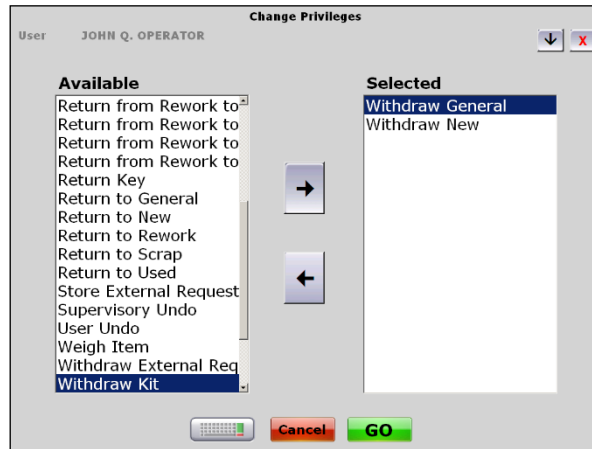
Current Password	****
New Password	****
New Password (Retype)	****

3. Press **GO** to continue when finished.

Change Privileges

This function allows those who have it to perform the administrative task of assigning privileges to users through the SupplyPoint™ User Interface. This can be especially useful in environments where client machines accessing the SupplyPoint™ are located a great distance from the machine itself. To perform this function, take the following steps:

1. Log in and select **CHANGE PRIVILEGES**.
2. On the screen that follows use the drop-down list labelled *Set up transactions for user* to select the user whose privileges are being updated.
3. Use the arrows pointing left and right to move transactions between the *Available* and those *Selected* for a user. Once the changes have been made, press **GO** to return to the transaction screen.



Inventory Adjustment

Inventory adjustment is a method of altering inventory levels without performing withdrawal and restock transactions. It may be used in cases where users have opened a drawer, but have left the item inside or in cases where a user has withdrawn the wrong item but has exceeded the time period allows for the User Undo or Supervisory Undo transactions, among other possibilities. Take the following steps to perform inventory adjustments:

1. Log in and select **INVENTORY ADJUSTMENT**.
2. A list showing all of the items assigned to the vending machine will appear. Select the item to be adjusted.
3. Select (when applicable) the item type and/or drawer, as shown on the right. If the item is housed in more than one drawer, multiple locations will

Drawer ID	PIC Number	Drawer
1022	1	22
1023	1	23

appear on the list. The *Drawer ID* field details where the item is located.

A four or five digit ID where the first digits are 01-20 denotes a location that is a drawer. If the last digits of the ID are 99, this indicates a top cupboard. One or two digit Drawer IDs denote an external stock locations.

If you wish to adjust all locations for the item, press the **ALL** button at the bottom of the screen.

4. The selected drawer(s) will now open completely, allowing the contents to be counted. After counting the items close the drawer.
5. Once the drawer is open, you can adjust the inventory of the item.

- a. In maximum security drawers, press the **GO** button if the quantity shown in message at the top of the screen is correct. Otherwise, press the button that corresponds to the correct number, as shown in the display to the right. The numbers on the buttons will be determined by the issue quantity of the item.

- b. In reduced security drawers where *Uniform Content* is in force you will use a keypad to enter the total quantity for the drawer. Alternatively you can still press the **GO** button if the quantity shown in message at the top of the screen is correct.

- c. In reduced security drawers, you will adjust the quantity for each individual compartment. You can either use the **+** or **-** buttons or you can click on the keypad button for more detailed changes.

	+1	20	-1	16ER16UNJKC730
	+1	20	-1	16ER16UNJKC730
	+1	4	-1	16ER16UNJKC730
	+1	0	-1	16ER16UNJKC730

- d. Pressing the keypad button will allow you to key in your changes. This is especially useful for locations where large quantities are stored.

Inventory Adjust
Enter Correct Quantities

Item: 16ER16UNJJC730
Description: INSR, CRB, EXT J THRD, L/D, 3/8IC, 1
User: MICHAEL MANAGER

Specify a value from 0 to 20
And click Enter

0

1 2 3
4 5 6
7 8 9
0 ← X

Enter

16ER16UNJJC730

Cancel GO

- e. For locations such as an ECTC/Journey cabinet, or Crib location, there is another option. If you are storing the item with an issue quantity, you may see a display like the one on the right. In this case, there is a large number stored with an issue quantity of ten. Use the tabs at the top and the buttons to select the right quantity.

0 300

10	20	30	40	50	60
70	80	90	100	110	120
130	140	150	160	170	180
190	200	210	220	230	240
250	260	270	280	290	300

6. Press **GO** and close the drawer to finish your adjustments.

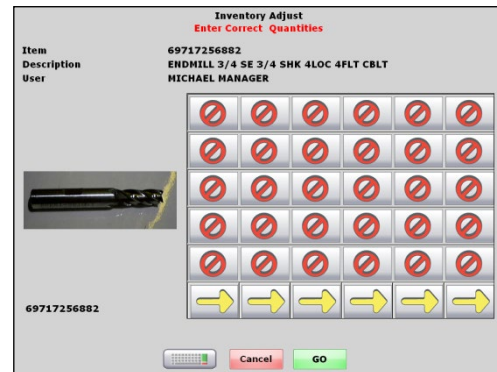
Expiration Dates

When performing an inventory adjustment on items with expiration dates, you can also adjust these dates. The process works like a normal adjustment, but when the new inventory has been entered a display like the one to the right will appear. You can set all the expiration dates or adjust the compartments one at a time, just as you did when restocking.

Reopen		Set All	
11	June	2008	
GAGE001		6/11/2008	
GAGE001		6/11/2008	
GAGE001		6/11/2008	
GAGE001		6/11/2008	
GAGE001		6/11/2008	
GAGE001		6/11/2008	
GAGE001		6/11/2008	
-- Leave --			
-- Leave --			
-- Leave --			
-- Leave --			
-- Leave --			

LIDs

1. Follow the normal Inventory Adjust process until you reach the drawer display.
2. You will see a LIDs display like the one to the right. Yellow arrows mark the LID compartments containing the item you wish to adjust. Select one.
3. Open the drawer and press down on the lighted compartment to open it.
4. Enter the new quantity on the keypad and press the **ENTER** button.
5. Close the LID. You will return to a screen like the previous one, but the LID compartment you have adjusted will have a check mark on it.
6. You can now adjust other compartments.



Cycle Count

Based on the logic of the Inventory Adjustment transaction, Cycle Count offers the ability to perform audits of inventory that has not been counted within a given time period. Allowing the user to select how they would like to select the items they count, either by Item Group or Frame for example, Cycle Count offers the user a more structured form of stock take on the system, not to mention much easier. Selecting the period over which you wish to exclude items from this check – by saying “count everything that hasn’t been counted in the last week”, for example – also ensures you do not spend time needlessly stock taking locations that have recently been checked by another user.

To perform a selection of Cycle Counts transaction; follow the steps outlined below.

1. Log in and select **CYCLE COUNT** from the transaction list.
2. Select an option from the list shown opposite. You may wish, for example, to periodically count the stock in different Item Groups to ensure all of your stock gets counted over a given period.
3. Having selected *By Item Group*, in this example, the user needs to select the time period which qualifies items for the transaction.

In this example we want to count everything that hasn't been counted in the *Last Week*.

4. If the user clicks the *Custom Date* option they need to select their date and press **CONFIRM CYCLE COUNT DATE PERIOD** to continue.

Clicking the *Ignore Filter* option will include all items within the Item Group, in our example.

Cycle Count
How would you like to Cycle Count?

- By Item
- By Item Group
- By Item Sub Group
- By Supplier
- By Frame

Buttons: [Grid Icon] [Cancel] [GO]

Cycle Count
Count everything that has not been counted for

- Last Week
- Last Month
- Last 3 Months
- Last 6 Months
- Last 12 Months
- Custom
- Ignore Filter

Buttons: [Grid Icon] [Cancel] [GO]

Cycle Count
Count everything that has not been counted for

Confirm Cycle Count date period

13 January 2012

Buttons: [Grid Icon] [Cancel] [GO]

- Having selected the time period; users will then be shown a list of all of the objects, *Item Groups* in our example, which qualify for the transaction.

If the user had selected *By Item* in step 2, detailed above, they would see a list of Items instead of Item Groups

Item Group	Description
✓ ABRASIVES	ABRASIVES
✗ AEROSOLS	AEROSOLS
✗ BATTERIES	BATTERIES
✗ CATERING	CANTEEN DISPOS...
✓ DRILLS	DRILLS
✗ DRILLSET	DRILL SETS
✓ HAND TOOLS	HAND TOOLS
✗ INSERTS	INSERTS
✗ JANITORIAL	JANITORIAL
✗ MILLING	MILLING
✗ MISC	MISC
✗ QA	QUALITY ASSURANCE

- To continue with the transaction(s) users should select the entries/items they wish to count by clicking on the row, this puts a green tick next to the item, clicking **GO** to continue.
- Alternatively users can click the **ALL** button to count all of the entries/items that appear in the list.

Move Stock

When stock is stored in more than one location within the SupplyPoint™, such as a top cupboard, multiple drawers or an external location, the Move Stock function provides an easy way to place stored items where they are needed. In order to move stock, take the following steps:

- Log in and select **MOVE STOCK**.
- A display will appear, showing the items that are stored in more than one location. It is important to note that the item quantities shown here encompass all tool types (new, used, general, scrap and rework) that are currently in the machine. If the Parameter setting *Move Stock: Strict matching of content type* is checked, you will not be able to move between different content types (e.g. Used to New). The list can be searched using the search buttons in the upper right corner of the screen or by scrolling through the list. Select the item being moved to continue.
- Once you have selected the item, the next screen will show locations that currently have inventory. Remember that drawer IDs ending with 99 are top

Drawer ID	PIC Number	Drawer
1022	1	22
1023	1	23

cupboards and PIC
Numbers that are 0 are
external stock locations.

4. Select the location you want to move the items *from*.
5. The next screen will show a list of locations you can move the items *to*. Select a location.
6. You can now open the first drawer as far as necessary to accommodate your request. Take the pieces you need, paying close attention to the drawer display and close the drawer. If the location was an external location, it will be a good idea to have the pieces already on hand.
7. The receiving drawer will light up. Open it and place the items in the new location according to the drawer display.
8. Close the drawer and continue normally.

Weigh Item

The Weigh Items function allows a user, at the vending machine, to enter the average weight of an item that will be distributed and restocked using a scale. In order to weigh an item, take the following steps:

1. Count out a sufficient quantity of the item to establish a baseline weight for one piece. In general, the smaller the item is, the greater the quantity should be. For pieces that weigh less than one unit (ounces or grams, determined by your selection on the Parameter setting *Scales: 0=grams, 1=ounces*) at least 50 pieces should be considered, if not 100.
2. Log in and select WEIGH ITEM.
3. A screen will appear, showing the items that can be weighed. Checking the *Weighable* box in Items setup for an item makes it appear on this list.
4. Once the item has been selected, a screen like the one shown below will appear. The field *Average weight of 1 piece* will take the weight information entered in *Items* setup.

5. Begin placing items on the scale. If any container is being used, be sure to tare the scale with the empty container on it- to eliminate it from the total weight- by using the **ZERO SCALES** button. The SupplyPoint™ will calculate the quantity on the scale by dividing the total weight by the weight of one piece. If there is an error in the original weight setting, the user can change the average weight by entering the quantity present on the keypad and pressing **UPDATE AVERAGE PIECE WEIGHT**. If the weight is correct, simply press **CANCEL** to continue.

The screenshot shows a 'Weigh Item' interface. At the top, 'Item Number' is 'AD42'. Below it, 'Weight' is '86.800' and 'Average weight of 1 piece' is '1.736'. The 'Qty' field shows '50'. A numeric keypad is on the right with buttons for digits 0-9, a decimal point, and a backspace. Action buttons include 'Update average piece weight' (green), 'Cancel' (red), and 'Zero Scales' (blue). A 'Enter quantity on scales' prompt is also visible.

6. Once you have chosen either to update the average piece weight or to cancel the transaction, you will be returned to the item list. You can then choose to weigh another item or press **CANCEL** to return to the transaction list and exit the User Interface.

Undo Functions

The undo functions are the ideal way to correct mistakes. Simply put, the undo functions reverse the previous transaction(s) for the given user. So it will allow users to return an item mistakenly withdrawn without resorting to a return, restock or inventory adjustment transaction, any of which may cause problems in cost tracking. There are some caveats to using these functions.

- Only the immediately previous transaction can be undone with a User Undo. If a user were to withdraw the wrong item, realize it, and then take out the right one before undoing his mistake, his mistake cannot be corrected by using the undo functions.
- There is a time limit on undoing transactions, which is determined by parameter settings to be explained in [Parameters](#) below.

Undo comes in two flavours: User Undo and Supervisory Undo. As the name suggests, User Undo allows each user to undo his most recent transaction. Supervisory Undo allows the supervisor to undo anyone's transactions within a defined time period.

User Undo

1. Log in and select **USER UNDO**.
2. A screen similar to the one below will appear, showing the most recent transaction information. To qualify for this screen the transaction has to have been carried out within the tolerance set by the Parameter *Undo - User: Last transaction UNDOable time period (minutes)*.
3. Select the transaction and press **GO** to continue.
4. The next display to appear instructs the user on how to reverse his previous transaction.
5. Close the drawer and continue once the undo is complete.

ID	Date Time	Transa...	Item	Qty	Description
750	2007-12-28....	Withdr...	16ER28...	3	INSRT,CRB,EXT J THR..

Supervisory Undo

1. Log in and select **SUPERVISORY UNDO**.
2. A screen will appear, showing all users who have performed transactions within the appropriate time frame. This is determined by the Parameter setting *Undo-Supervisory: Last Transaction UNDOable time period (minutes)*.
3. Select a user and press **GO** to continue.

User
Description
MICHAEL MANAGER
C.N.C. COLLINS

4. You will now see a list of the transactions performed by the user within the established time frame. Inventory adjustments and other Undo transactions will not be available. Select the transaction to be reversed and press **GO**.
5. Follow the instructions on the drawer display to undo the transaction.
6. Close the drawer and continue.

The screen is titled "Supervisory Undo" and shows the user "MICHAEL MANAGER". It prompts the user to "Pick a transaction to undo". Below this is a table with the following data:

ID	Date Time	Transac...	Item	Qty	Description
733	2007-12-28.10...	Restock...	1/4-28...	2	1/4 INCH 4 FLU...
729	2007-12-28.10...	Restock...	GAGE001	6	Gage

At the bottom are buttons for a keypad, "Cancel", and "GO".

Capture Fingerprints

Before users can log in with biometric authentication, their fingerprints must be captured. Take the following steps to capture fingerprints.

1. Log in to the User Interface
2. Select **CAPTURE FINGERPRINTS** from the list of transactions
3. Press the down arrow button to display a list of users.
4. Select the user whose fingerprints you wish to verify. The number should now appear at the top of the display, in the spot labelled *Capture Fingerprints for user:*
5. Press the **REGISTER USER** button to begin the registration process.
6. The user will then be asked for four scans of one finger.
7. Once the four scans are accepted, the user will be asked to scan a second finger.

The screen is titled "Capture Fingerprints" and shows the user "JOHN Q. OPERATOR". In the center is a green button labeled "Register User". At the bottom are buttons for a keypad, "Cancel", and "GO".

The screen displays the message "This system is protected by biometric authentication" and "Place your first finger on the scanner". It shows three fingerprint scan images. Below them is a red dot and a "Cancel" button. At the bottom, it says "Waiting for scan 4 of 4".

8. When all scans are accepted, you may continue registering users or press to finish.

External Requests

The SupplyPoint™ has the capability to handle input of information from other sources. It can receive requests for inventory to be checked out or for inventory to be stored in the vending machine. Requests for inventory to be checked out from the vending machine are handled by the *Withdraw External Request* function; requests for items to be stored are handled by the *Store External Request* function. Before using either function, though, there are two things to be kept in mind:

- Items involved in the process must be entered in the SupplyPoint™ database, and the Item numbers need to correspond in both the system making the request and the SupplyPoint™.
- Items involved need to have locations assigned in the SupplyPoint™ database.

Withdraw External Request

The SupplyPoint™ can receive requests for inventory from external sources such as a machine controller (like the Okuma THINC controller) or another software package (such as a corporate Material Resources Planning program) and make these requests available to be filled by users of the vending machine. In this way, operations can run more efficiently as decisions are not left up to end users regarding when an item is needed. Rather, the machine that needs the tool or the person in charge of planning alerts the SupplyPoint™ concerning what items are needed and for which purpose. Here's how the process works:

1. The system making a request sends information about it to the SupplyPoint™. This will include the Job, Machine, Item and Quantity of the Item. If the interface is with a machine controller, information will have to be entered there that will allow it to trigger the request.
2. The User who is responsible for the machine in question will then go to the SupplyPoint™ to fill the request. He will need to have the *Withdraw External Request* transaction privilege assigned to him.
3. Once he logs in, he will immediately be presented with the list of items that have been requested. The user will not be required to enter Job and Machine information as this is already provided in the external request, as shown in the display below.

Withdraw External Request

Machine	Job	Item	Description	Qty	Qty...	Life	St
✗ OKUMA ES	178432-12	CNMG432UFKC730	INSERT,CARB,80DI...	3	1	0	
✓ OKUMA ES	178432-12	CNMG432KC850	INSERT,CARB,80DI...	4	1	0	
✗ 12345-1	159624-32	CNMG432UFKC730	INSERT,CARB,80DI...	3	1	0	
✗ 12345-1	159624-32	DNMG432KC850	INSERT,CARB,55DI...	4	1	0	
✓ OKUMA ES	178432-12	CNGP432 KC730	1/2" IC 80 DEG DIA...	5	1	0	

- The user will then select the item or items he needs by selecting them with the light pen or touch screen and press **GO**. If the parameter setting *GUI- Allow deletion of external requests* is checked, the **DELETE** button will appear as in the display above. This will allow users to select and delete external requests.
- The SupplyPoint™ will then allow access to the items one drawer at a time. As with a regular *Withdraw* transaction, the User should follow all instructions on the screen.

Store External Request

It is also possible for other systems to let the SupplyPoint™ know that items need to be stored in the vending machine. For instance, if an assembly is built in one department, they can send a request to the SupplyPoint™ in another department, informing it that the item needs to be stored.

Here's how the process works:

- The system making a request sends information about it to the SupplyPoint™. This will include the Item(s) to be stored and the quantity.
- The User then takes the Item(s) to the SupplyPoint™ to store them. He will need to have the *Store External Request* transaction privilege assigned to him.
- The User will log in and select **STORE EXTERNAL REQUEST** from the menu of transactions.
- From this point forward, the process looks and operates like the *Withdraw External Request* function. The user selects the Item or Items to be stored from the list and presses **GO**.
- The User then follows the sequence of drawers opening and should follow all instructions on the screen to place the Item(s) in the vending machine.

Reservations

Either when clicking on an item that is out of stock in the current Vending Machine/Crib but which is stocked in an alternate location, or through clicking the designated transaction, *Reserve Item*, it is now possible to reserve stock in one system while at another. Where tracking of the withdraw transaction is configured to enable the user to assign the transaction to a *User Cost Center, Job, Machine, Aux1, Aux2* and / or *Aux3*, the user must select the respective value from the list offered when executing a *Reserve Item* and / or *Withdraw Reserved Item* transaction.

The use of User Cost Centers is now no longer a mandatory requirement when reserving items; the functionality which enables a reservation to be made by one user and withdrawn by another is preserved through enabling the new *Item Reservations – Ignore Reservation Ownership* parameter.

The *Reserve Item* transaction adheres to *Restrictions* and *Rationing* rules in place; designed to manage the consumption of available inventory.

The monitoring of Reservations which time has expired before a physical withdraw takes place can be achieved via the *Reservation History Report*; providing a valuable insight into any artificial out-of-stock instances that have occurred.

When attempting to reserve an item, where the inventory has an Expiry date and the parameter *Expiration Dates – Deny Expired Items* is enabled the validation check will be applied.

Items withdrawn using the Withdraw Reserved Item transaction, like items withdrawn via the standard withdraw function may be returned if the item attribute has been set.

In order for a user to take advantage of this functionality they must have the *Reserve Item* and *Withdraw Reserved Item* transactions. Users without these transactions will be unable to reserve or collect items.

Reserving Out of Stock Items

With multiple machines/cribs on site, it might be possible that one system may have run out of stock of an item but another location still has stock. To reserve stock in an alternative system when the item is out of stock in your current location; follow the steps outlined below.

1. Having searched for your item and found it to be out of stock, as shown opposite, click on the out of stock item.

2. An alternative way of identifying stock in another machine is by



clicking the button. This button is controlled by the *GUI - View Inventory in other vending machines/crib* parameter.

3. The user will be shown a list of alternative locations for the item. Having clicked on the location where they wish to reserve the item; the user will be prompted to enter the quantity they wish to reserve. Click **YES** to continue with the reservation.

4. When shown the quantity selection screen the user should enter their required quantity and click **GO** to confirm the reservation.

Specify Item

Item

Item	Description	Qty	Alias
✓ 30MTC3M7447PAD	SCOTCHBRITE 7447 (RED)	20	SCOTCHBRITE 7447
✗ 30MTC3M7496PAD	SCOTCHBRITE 7496 (GREEN)	0	SCOTCHBRITE 7496

Item Description Contains 'SCOTCHBRITE'.

#1 (NEW PRODUCTION)

Do you wish to reserve from the available quantity of 8

Withdraw - Qty

User nathan

Item 30MTC3M7496PAD

Alias SCOTCHBRITE 7496 (GREEN)

Supplier Part Number (Current) 30MTC3M7496PAD

Description SCOTCHBRITE 7496 (GREEN)

Type New

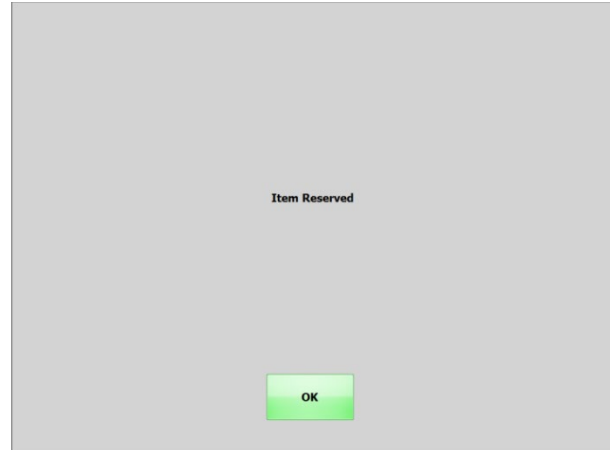
Issue Qty 1

Available 8

Specify a value from 1 to 8

5. Once the reservation has been placed; click to return to the Main Menu.

The stock will be withheld from other users in the alternate location for the duration specified by the *Item Reservations – Amount of Time to Reserve Items (Minutes)* parameter. After this time expires the item will become available to other users.



Reserving Items

For users who know an item is not stocked in their “local” location, but is held in an alternate system; items can be reserved using the dedicated *Reserve Item* transaction.

Where tracking of the withdraw transaction is configured to allow the user to assign the transaction to a *User Cost Center, Job, Machine, Aux1, Aux2* and / or *Aux3*, the user must select the respective value from the list offered.

The use of User Cost Centers is now no longer a mandatory requirement when reserving items; the functionality which enables a reservation to be made by one user and withdrawn by another is preserved through enabling the *Item Reservations – Ignore Reservation Ownership* parameter.

The *Reserve Item* transaction adheres to *Restrictions* and *Rationing* rules in place; designed to manage the consumption of available inventory.

The monitoring of *Reservations* which time expire before a physical withdraw takes place can be achieved via the *Reservation History Report*; providing a valuable insight into any artificial out-of-stock instances that have occurred.

To reserve an item using this transaction; follow the steps outlined below.

1. Log in and select RESERVE ITEM from the transaction list.
2. If User Cost Centers and / or the tracking of the Withdraw against Jobs, Machines, Aux1, Aux2 and Aux3 is required the user will need to choose which one to assign the transaction to.

N.B. Where the user only has one User Cost Center assignment it will automatically be assigned without having to select it from the list shown opposite.

3. Users will be presented with a list of the items stored in other system that are available for Withdraw, shown opposite.
4. Select the required item from the list, and when shown the quantity selection screen the user should enter their required quantity and click **GO** to confirm the reservation.

Specify User Cost Center

User Cost Center

User Cost Center	Description	Alias
UCC1	Main Production Cell	
UCC2	Auxiliary Production	
UCC3	Emergency Repairs and Servicing	

1 2 3 4 5 6 7 8 9 0 + ← X

Q W E R T Y U I O P #

A S D F G H J K L - ;

Z X C V B N M , . / :

GO

Space Cancel

Pick a vending machine and item to reserve

Item	Description	VMID	Qty
3020010AUBU	1" WIDE MASKING TAPE	NEW PRODUCTION	2
3020010AUBU	1" WIDE MASKING TAPE	Repair & Overhaul 2	3
3032TPIBLADEPL...	32 TPI HACKSAW BLADE	NEW PRODUCTION	10
30B272	SAFETY SPEC	NEW PRODUCTION	5
30GL8902	GLOVES 15503.17 POWDERFREE MED	NEW PRODUCTION	2
30GL8902	GLOVES 15503.17 POWDERFREE MED	Repair & Overhaul 2	2
30GL8902G	GLOVES GREEN MED	NEW PRODUCTION	2
30GL8903	GL8903 POWDERFREE LARGE GLOVES	NEW PRODUCTION	2
30GL8903	GL8903 POWDERFREE LARGE GLOVES	Repair & Overhaul 2	2
30GL8905	GL8905 POWDERFREE XL GLOVES	NEW PRODUCTION	1
30GL8905	GL8905 POWDERFREE XL GLOVES	Repair & Overhaul 2	6
30HIGHLIGHTERO	HIGHLIGHTER PEN ORANGE	NEW PRODUCTION	10
30MISBATAA	AA BATTERY	NEW PRODUCTION	8

Cancel GO

5. Once the reservation has been placed; click **OK** to return to the Main Menu.

Withdrawing Reserved Items

Having used either of the previously documented methods for reserving an item; the user must collect the item from the alternate system before the time window specified by the *Item Reservations – Amount of Time to Reserve Items (Minutes)* parameter expires. To withdraw a reserved item; follow the steps outlined below.

1. Log in to the alternate system and if any reservations exist a screen will be shown, as opposite, detailing the list of reserved items to be withdrawn.
2. If User Cost Centers, and / or the tracking of the Reservation against Jobs, Machines, Aux1, Aux2 and Aux3, were used when the Reservation was placed, the user will need to select the relevant filter options prior to seeing the list shown opposite.

Item	Description	User Name	Available Qty	Selected Qty	Status	Warning	Del
30MTC3M7496PAD	SCOTCHBRI...	nat...	8	2	0		X

N.B. Where the user only has one User Cost Center assignment it will automatically be assigned without having to select it

3. Any reserved items which the user does not wish to withdraw can be removed, either temporarily or permanently deleted, from the item reservation Shopping Basket by clicking the delete button at the right-hand side of the row in the Item Reservation screen.
4. Having reviewed the list of reserved items; click **WITHDRAW** to continue with the transaction(s); following the on screen instructions to carry out the withdraw(s).

Stock Transfer

Stock Transfer can be initiated through either the User Interface or Utilities whereas receiving the stock transfer can only be complete using the User Interface.

Initiate Stock Transfer

1. Login to the User Interface and select the **INITIATE STOCK TRANSFER** transaction from the main menu.
2. Select a Supplier, then a source and target location from the drop-down lists.
3. In the Item Rules section, choose from either *a* or *b* and *c* or *d*;

- a. Below Maximum
- b. Below Minimum
- c. Max = Capacity
- d. Max = Item Max

4. Select *GO* to continue.

A List of all the items current available for stock transfer will be shown. Using the selected column located on the left of the table, when this box is checked the item will be included in the stock transfer. Uncheck this box to leave the item in the current location.

To modify the quantity each item has a quantity button, when selected the user can change the quantity of the selected item. Modifying the quantity like this is the same as with the standard shopping basket built on the fly during a standard withdraw or restock.

Select the delete button to remove the item from the stock transfer list all together.

Receive Stock Transfer

Login to the user interface and select the RECEIVE STOCK TRANSFER transaction from the main menu.



You will immediately see a pre-built shopping basket with all of the items waiting to be received. Looking at the *Selected* column on the far left each item has a check box, if this box is checked the item will be received on selection of the RECEIVE button. If you do not want to transfer an item as part of this transaction deselecting this box will leave the item in its current state.

When deleting the item from the receive Stock list the user will be given two options;

1. Put the quantity back into the crib location – The item will be removed from the stock transfer and the quantity will be added back to the source location.

2. Remove the item from the current transaction – The item will be removed from the current transaction but still wait to be receive from the stock transfer.

On completion of the transaction if there are any outstanding stock to be transferred selecting the **RECEIVE STOCK TRANSFER** transaction again will show the previously removed items.

The quantity can also be modified when receiving a stock transfer by selecting the quantity button for the relevant item the same as the initiate stock transfer transaction, although the quantity can only be decreased. If quantity is changed the source location will update accordingly.

Receive Stock Transfer : Item Basket : Choose Function Below


Item	Description	Qty	Max Qty	Type	Issue Qty
00427286	3/16DIA X 9/16LOC X 2OAL X 3/...	6	6	N	1
07760655	3/8DIA X 1-1/8LOC X 3OAL X 3/...	6	6	N	1
07765555	1/8DIA X 1LOC X 3OAL X 1/8SH ...	4	4	N	1
07766009	3/8DIA X 1-1/8LOC X 3OAL X 3/...	1	1	N	1
71115513	5/16DIA X .130LOC X 3OAL X 5/...	4	4	N	1
74547332	1/2DIA X 5/8LOC X 6OAL X 1/2S...	1	1	N	1
76491323	1/4DIA X 1-1/8LOC X 3OAL X 1/...	4	4	N	1
88170972	1/16X2" 1FL CARBIDE DOVETAIL ...	5	5	N	1
TF4V0013...	1/2DIA X 1-1/4LOC X 1/2SH X 3...	1	1	N	1
XJ071110-1	.055DIA X 1-1/2OAL X 1/8SH 2F...	3	3	N	1

SupplyPoint™ Utilities

Introduction

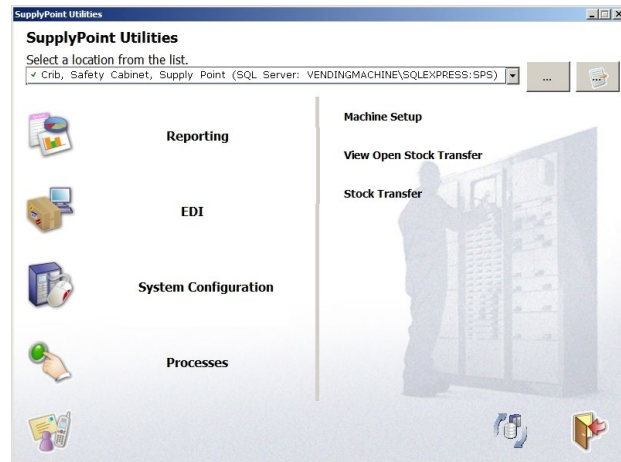
The SupplyPoint™ Utilities allow for configuration of the system, reporting and ordering functions to be centralized. They are installed on the vending machine itself and on any client machines that will be performing administrative functions remotely. Access to multiple vending machines is possible from this screen as well. If you are setting up a client computer for the first time, take the following steps:

Registering a Database (SQL Server)

1. Start the SupplyPoint™ Utilities.
2. Press the  button to establish a connection to the SQL Server.

The database button next to the Exit button, shown opposite, provides a mechanism to *Backup, Restore, Copy* or add a new database from a backup.

3. A box will appear labelled Database Login. Click the add button and enter the SQL server and database. An example could be *PCNAME\SQLEXPRESS*.
4. The SQL server can be a vending machine. If there are multiple vending machines only **ONE** can be the SQL server.



5. The database field should be the name of the desired connection database. Do not check *Use Trusted Connection*. The *Username* will be "sa" and the *Password* is for that account. (See IT department). *Timeout* should be set to 30.
6. Press **LOGIN** to commit the changes. The database will now appear on the main SupplyPoint™ Utilities screen.

The additional button to the right allows the user to assign a licence to the existing database entries as well as delete them.

1. Select a database then *Load Licence File*.
2. Select a VMID from the database.
3. Navigate to the licence file *sps.lic* usually located within the *Database* folder within the *SupplyPoint* directory. *C:\Program Files (x86)\SupplyPoint\Database*, or *Program Files* for 32bit PCs.

SPSConfig.XML

The SPSConfig.XML file is contained in the folder where SupplyPoint™ executables are saved on the vending machine's PC. This file, in Extensible Markup Language, or XML, contains all the configuration settings for the system. This file replaces the system of registry keys and the SPSUtils.CFG file that was used in previous versions of the software. This is where the database appears in the location list in SupplyPoint™ Utilities is stored.

An additional setting within the SPSConfig.XML has been included to facilitate the disabling of all existing active records in the database, where implemented, for Jobs, Machines, Aux1, Aux2 and Aux3 objects, prior to importing new data. This configuration offers a more dynamic process for handling the deactivation of records no longer required by utilizing the frequent import of active objects.

The flag setting,

'<DisableObjectThenEnableOnImport>0</DisableObjectThenEnableOnImport>', is found within the SPSImport section of the SPSConfig.XML. To enable this functionality the value needs to be set to '1'.

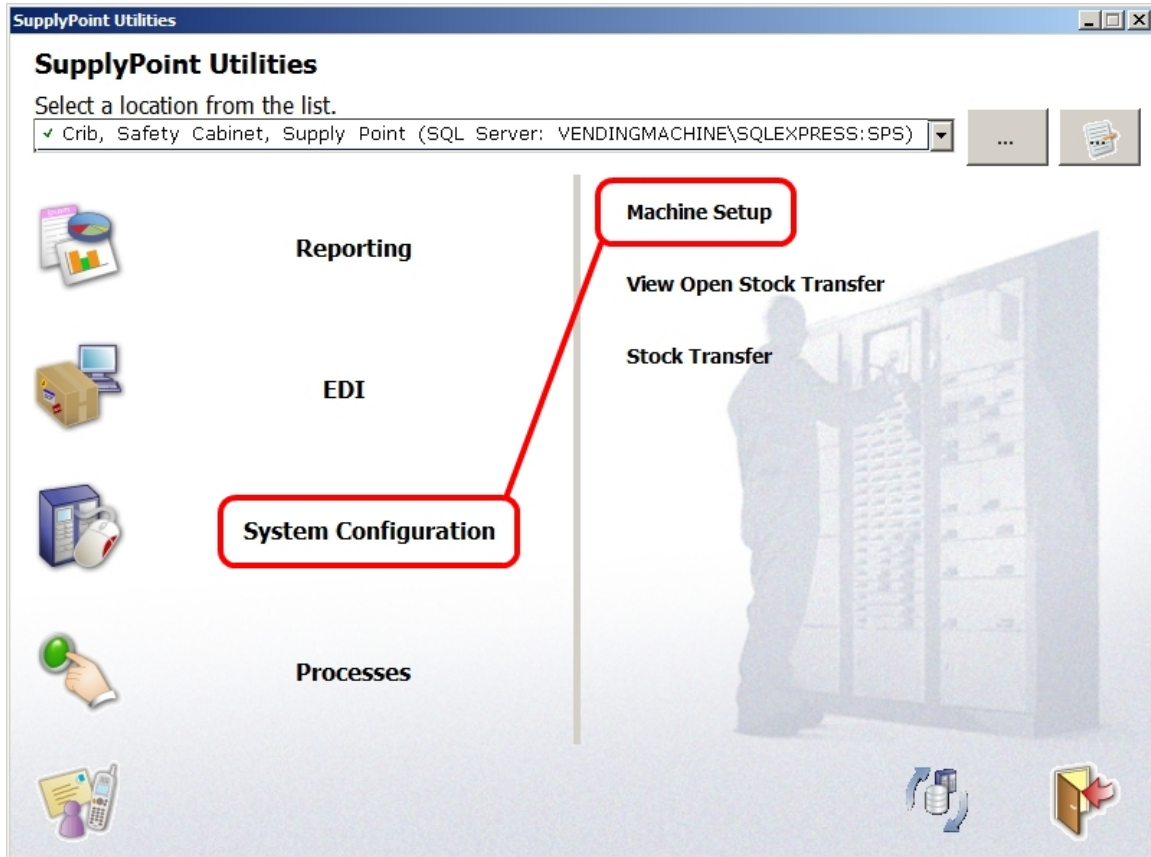
Where the values is set as '0' existing functionality is preserved.

```
<SPSImport>  
  <MoveToTempFolder>0</MoveToTempFolder>  
  <IncludeAllVMIDs>0</IncludeAllVMIDs>  
  <DisableobjectThenEnableonImport>0</DisableobjectThenEnableonImport>  
</SPSImport>
```

Machine Setup

Machine Setup deals with three varieties of functions: Data, Utilities and Configuration. In Data functions, the primary information that SupplyPoint™ (s) needs to function is entered and manipulated. Utilities allow mainly for the cleanup of the information entered in Data. Configuration allows you to actually use the data in setting up SupplyPoint™ (s).

Logging in to Machine Setup




1. Click on *System Configuration* and then *Machine Setup*.
2. The following display will appear, asking the user for his credentials.

Supply Point Configuration

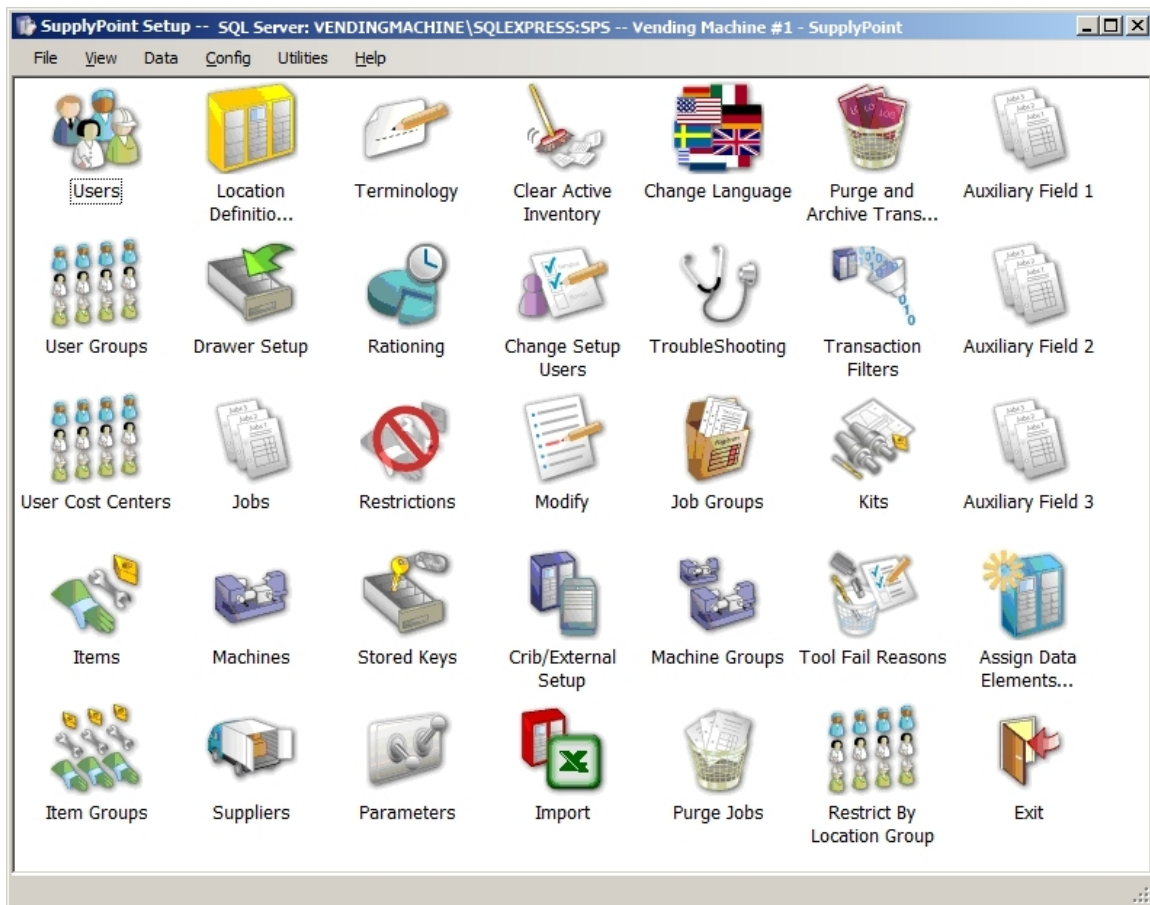
Please enter your credentials to access Machine Setup

User Name

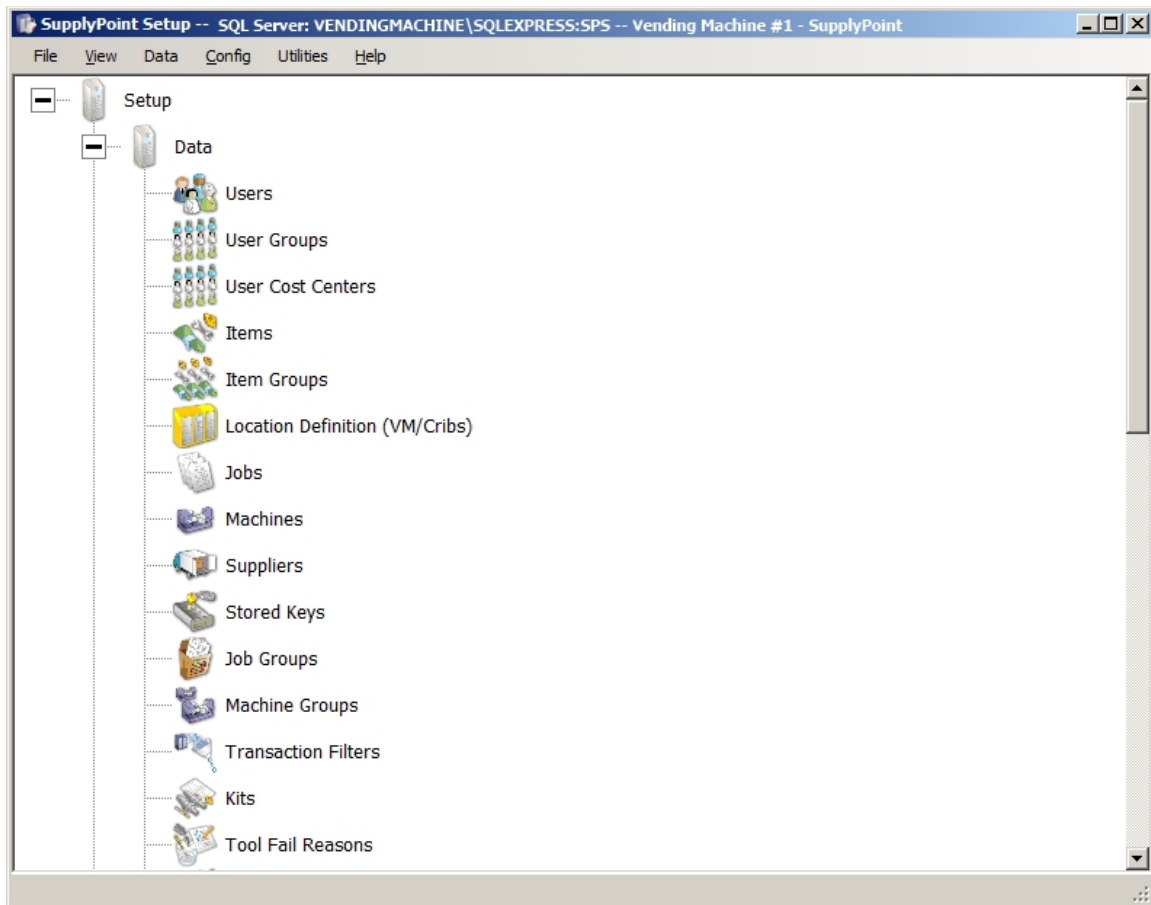
Password



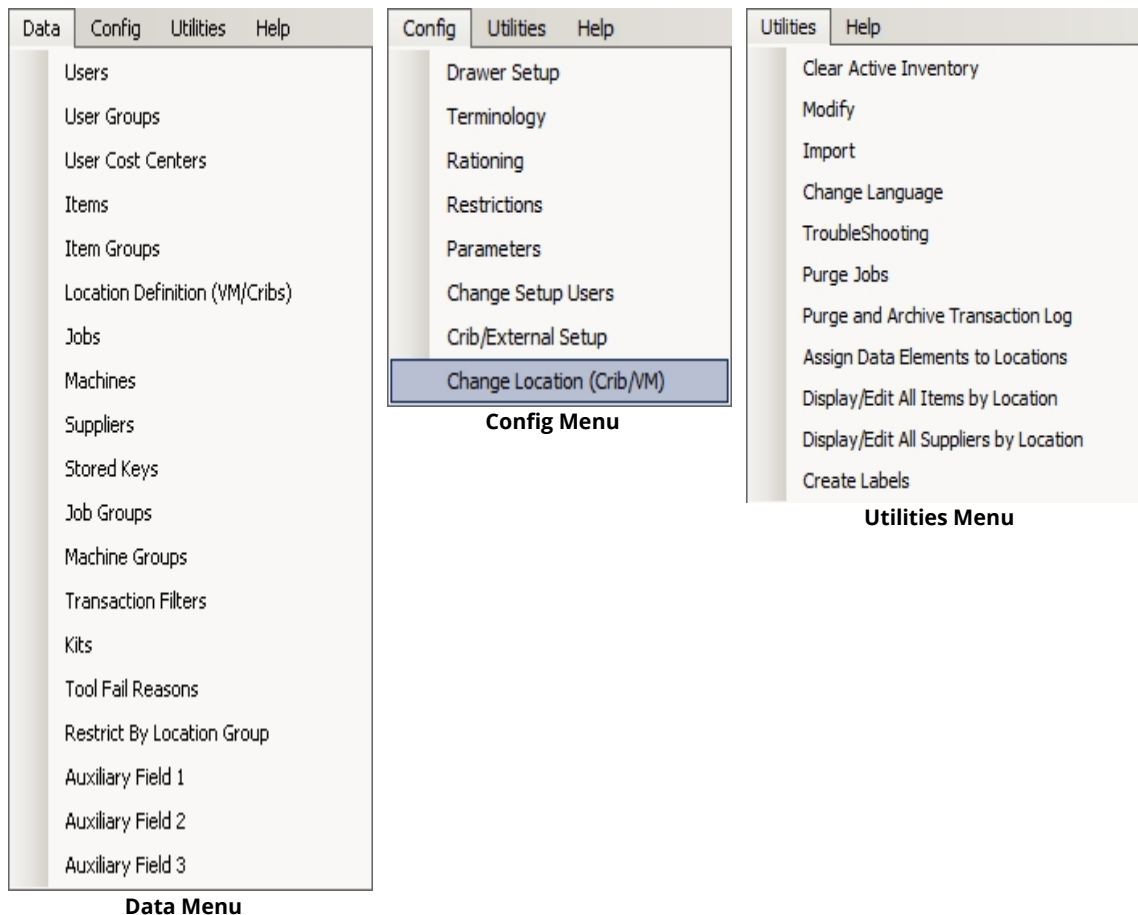
- If a User Name does not appear, enter one. Enter the proper password and press **OK**. A screen like the one below will appear, showing the setup options available to the particular user.



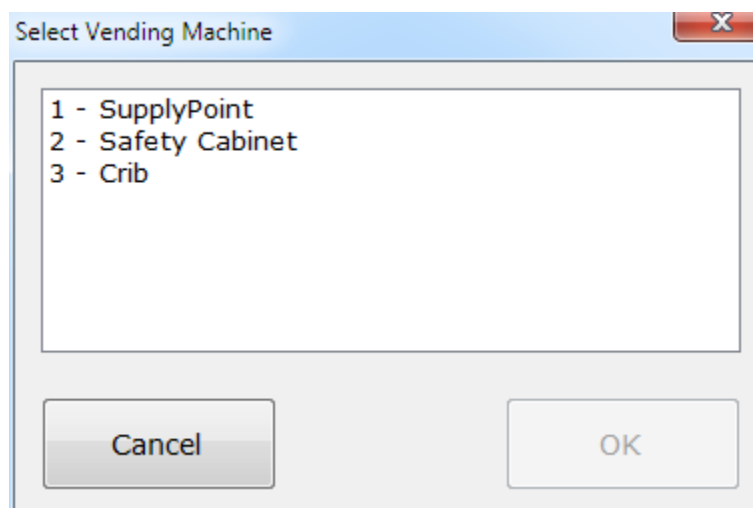
4. There is also an alternate view, called the Hierarchical view, which separates icons according to their function. This can be established via *View* menu.



5. The functions in this area can also be accessed via the menus at the top of the screen.



Be sure to establish which location you wish to make edits. This can be done via the *Config* menu above and selecting *Change Location(Crib/VM)*. You will then be prompted to select your location as shown below.

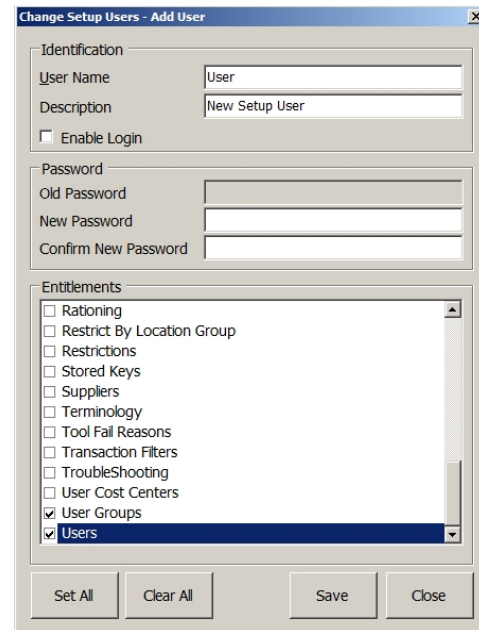


Change Setup Users

This is the function where Setup Users, those who have access to the *Machine Setup*, are configured. To create or a setup user follow the steps below.

1. Click on the *Change Setup Users* icon to display a box containing the current list of setup users.
2. Select **ADD USER** to create a new user or **REMOVE USER** to remove the highlighted user. Choosing **ADD USER** will open a display that allows you to create a new user.

3. In order to create a new setup user, enter the following under *Identification*:
 - *User Name* is the identity the user will use to log into the Utilities.
 - *Description* contains other identifying information.
 - Check the *Enable Login* box for the account to be active.



1. Enter and confirm the setup user's password.
2. Check the boxes under *Entitlements* to indicate which setup functions the setup user can access. Use **SET ALL** to check all of the boxes or **CLEAR ALL** to remove the check from any boxes.
3. Press the **SAVE** button to save and activate the new setup user.
4. Press **CLOSE** to finish.










In order to change the password for an existing user, take the following steps:










1. Select *Change Setup Users* from the Machine Setup control panel.
2. Select the user whose password is to be changed from the list of users and press **EDIT**.
3. In the *Password* fields, enter the following:
 - The old password in the spot labelled *Old*.
 - The new password in the spot labelled *New*.
 - Confirm the change in the *Confirm New* spot.
4. Press **SAVE** to commit the changes.
5. Press **CLOSE** to finish.










Please note that if you change the password for the Admin user, you are also changing that password used to exit the SupplyPoint™ User Interface. The Parameter *User*








Interface Exit Password: Enabled, when set to “yes”; allows for an alternate User Interface exit password to be specified in the *User Interface Exit Password* parameter; this remains unaffected by changes made to the Admin account password.

Machine Setup Icons

	Users- These are the individuals who are using the SupplyPoint™. This is the place to create and edit them.
	User Groups- User Groups provide an easy way to operate on many Users at once by providing them with transaction privileges, setting up Restrictions, etc. They can be created and edited here.
	User Cost Centers- Providing an additional level of organization and tracking; the User Cost Center feature allows users who belong to more than 1 logical Department or Cost Center to attribute their Withdraw transaction to the relevant area. This is the place to create and edit them.
	Items- This is where entries are created and edited for the Items that will be stored in and tracked by the SupplyPoint™.
	Item Groups- This is where Item Groups and Subgroups are created and edited. Item Groups and Subgroups are a good way to make searching easier in the SupplyPoint™ User Interface. They are also handy when establishing Restrictions and Rationing rules.
	Location Definition (VM/Cribs)- This is where new location entries are created. The nature of a location, Vending Machine or Crib, along with its visibility of other systems is established here.
	Drawer Setup- This function is used for configuring the drawers and drawer trays of the SupplyPoint™. It is also used to add frames to existing machines.
	Jobs- This is where Jobs are created and edited. This is also where Job date ranges are established.
	Job Groups- This is where Job Groups are created and edited. Job Groups provide a convenient way of uniting common Jobs, so that effective Restrictions and Rationing rules can be established for them.

	Machines- This is where Machines are created and edited. This is also where Machine date ranges are established.
	Machine Groups- This is where Machine Groups are created and edited. Machine Groups provide a convenient way of linking Machines in the SupplyPoint™ database (e.g. to form a cell), so that effective Restrictions and Rationing rules can be established for them.
	Kits- This is where you can define Kits to be issued from the SupplyPoint™. Use of this feature requires a license.
	Suppliers- These are the entities that provide Items to be stored in the SupplyPoint™. Enter their contact information here. This is the list of places to which EDI orders can be placed and can also be used to provide secure multi-vendor access to the SupplyPoint™.
	Tool Fail Reasons- When you are using the tool life functions and you have to return a tool to Scrap, the systems will ask for a reason why the tool has failed. Users can enter reasons on the fly, or they can select from a list of reasons that is entered here.
	Terminology- The entries in this area determine just exactly what things will be called. Among the items that can be changed here are the terms for Jobs, Machines, Users, New, Used, etc.
	Rationing- Rationing is a powerful tool for controlling inventory. Use of this function allows the SupplyPoint™ administrator to control the number of tools issued to a User, User Group, Job, Job Group, Machine or Machine Group over a given amount of time.
	Restrictions- Restrictions provide another powerful tool for controlling inventory. Use of this function allows the SupplyPoint™ administrator to control what Jobs, Machines and Items SupplyPoint™ Users have access to.
	Restrict By Location Group- Adding to the already powerful Restrictions capability; this Location control allows administrators to assign individual Users, or User Groups, to specific locations, restricting access of non-authorized Users or User Groups; maximizing availability and control over inventory where it is needed most.

	Stored Keys- The use of Stored Keys provides a higher-security method of tracking Items stored outside of the SupplyPoint™. This function is used to create the Keys that will provide access to these External Locations.
	Parameters- There are many little settings that allow users to configure the SupplyPoint™ so that it does what they need it to. Many of those, such as enabling Restrictions and/or rationing can be done here.
	Clear Active Inventory- Active inventory is inventory that has been withdrawn and that the system expects will be returned at some point (i.e. returnable, reworkable and scrappable items). Use of this function allows this inventory to be cleared up to a given date.
	Change Setup Users- Setup Users are those Users who have access to Machine Setup. This function allows the SupplyPoint™ administrator to add and alter the areas of Machine Setup that these Users will have access to. It also allows him to change the password needed to enter Machine Setup and to exit the User Interface.
	Modify- There are several database keys (e.g. User Numbers, Item Numbers, etc.) that cannot be altered where they were created. This is because they appear in numerous tables of the SupplyPoint™ database. When these key items need to be changed, Modify is the place to change them.
	Crib/External Setup- This function allows the SupplyPoint™ to track items that are stored in a Crib and/or External Locations. When the User comes to Withdraw, Restock, etc., he will be directed to the designated External Location.
	Change Language- The SupplyPoint™ is capable of operating in any language, provided translations for the terms have been entered into the system. Use of the Change Language function resets the default language setting for the system.
	Assign Data Elements to Locations- With ability to quickly assign and view the location assignments of all aspects of the system; this features provides complete management capability of data at a central point.
	Troubleshooting- The tools here can be used to deal with some errors that may arise during the use of the SupplyPoint™. One of the most useful features here is the Fatal Error Log, which can be

	used by Technical Support Personnel to troubleshoot many problems.
	Import- The import function is used to automatically enter large amounts of data into the SupplyPoint™ database. It can also be used to quickly configure new frames or even to create the database for a new Vending Machine/Crib. When using this function, be sure to use the proper Item Plan Spreadsheet and pay attention to whether you are appending, overwriting or updating.
	Purge Jobs- It may, at some point, be desirable to remove Jobs from the database once they have expired. By using the Purge Jobs function, you can remove jobs that have expired before a given date.
	Purge/ Export Transaction Log- Use this function to remove entries from the Transaction Log. All entries before the selected date will be deleted and will no longer appear on reports, so be sure to back up your database if you think you might ever need this information in the future.
	Transaction Filters- Use this function to create custom files that will be output whenever certain transactions occur. These are files that can then be imported into a customer's enterprise system. Use of this feature requires a license.
 Auxiliary Field 1  Auxiliary Field 2  Auxiliary Field 3	Auxiliary Fields- This is where additional tracking fields can be created and edited. There are 3 separate auxiliary tracking fields.

Data Functions

The areas of Machine Setup that fall under the category of Data are the following:

Users • User Groups • User Cost Centers • Items • Item Groups • Location Definitions

Jobs • Job Groups • Machines • Machine Groups • Suppliers • Stored Keys

Transaction Filters • Kits • Tool Fail Reasons • Restrict By Location Group
Auxiliary Field (1, 2 and 3)

Database Elements

Each of the above areas has a corresponding table in the SupplyPoint™ database, so they are known as database elements. The first field in each of these tables is known as a database key, and must be unique.

When dealing with database keys it is important to be careful, especially when changing or deleting them. Each key has other information associated with it (e.g. Item Description, Alias, etc.) that is not recorded in the Transaction Log. When a database key is deleted, all that remains of it is the information in the Transaction Log, this other information is lost. So, too, when a key is changed, all associated information is tied to the new key value, while the old values remain in the Transaction Log.

All elements have audit fields, allowing setup users to see who last altered database entries. This is only really helpful if there are multiple setup users. If everyone logs in under the **ADMIN** account, you'll never know for sure who changed the information. The audit fields are as follows:

- *Date Created*
- *Created By*
- *Date Last Modified*
- *Last Modified By*

Changing Database Elements (Modify Function)

You may notice, when editing database elements, that you cannot change the key field (User ID, Item ID, etc.). This is because when you are editing a database element, you are changing only the contents of one table of the SupplyPoint™ database. But a database element may appear in multiple tables of the SupplyPoint™ database. So, in order to make sure that changes apply across the board, there is the *Modify* function. Here's how it works:

1. Select *Modify*. The Modify window will open.

Modify

Select Entity To: User ID

☒ Modify Single Instance

☐ Modify Multiple Instances from Excel Spreadsheet or Text File

Location of File containing Old and New Values

Filename: ..

Old and New Values

Old Value: .. X

New Value:

Cancel OK

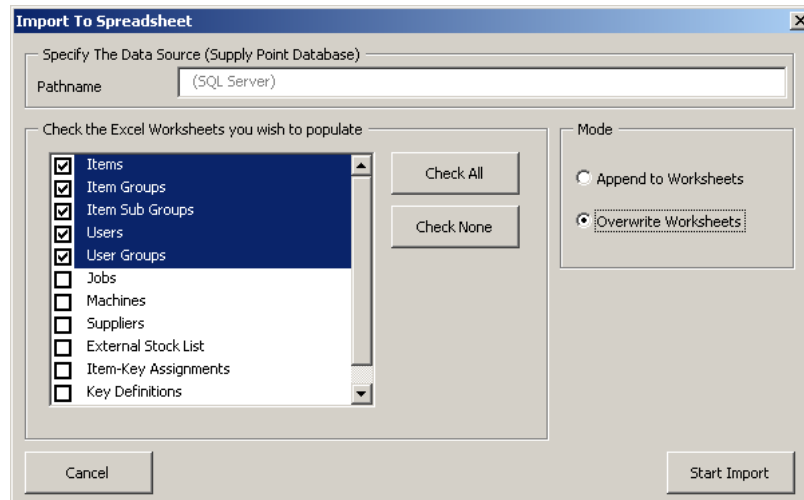
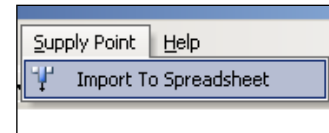
2. Select the key value you wish to modify from the drop-down box at the top of the window.
3. Decide whether you want to modify a single instance or multiple instances by selecting the appropriate radio button.
4. If you wish to change multiple values for item numbers only, enter the filename or browse for the file in the field labelled *Location of File containing Old and New Values*. Press **OK** to continue.
5. To change single values:
 - a. Enter or browse for the existing value in the *Old Value* spot.
 - b. Enter the new value in the *New Value* field.
 - c. Press **OK** to finish.

It is important to note that values changed using this function will only be changed going forward. For audit purposes, the entries in the Transaction Log will retain the old values, though any other information (Item Description, etc.) will now attach to the *New Value*.

It is possible using the Item Plan Spreadsheet to do mass updates of item numbers. Take the following steps. It is important to note that you need to be performing this exercise on a system that has the SupplyPoint™ Client software and Microsoft Excel installed.

1. In the Item Plan Spreadsheet, select *Import to Spreadsheet* from the *Supply Point* menu.

2. Enter the database path from which the old numbers are to come.
3. Check the *Items* field.
4. Choose either to overwrite or append the current spreadsheet.



5. Press **START IMPORT**. The items will be imported.
6. Copy the items into the *Item Renumbering* sheet.
7. Enter the new item numbers.
8. Save the changes to the spreadsheet.
9. Run *Modify* and select *Item Number*.
10. Press the Excel button in the lower right-hand corner of the box.
11. Browse to the location of the item plan spreadsheet and press open.
12. Once the change is complete, you can continue modifying other values.

Anatomy of Data Entry Screens

Items

File View Record Audit Locations Item

A **B** **C** **D** **E** **F** **G** **H**

	Item Number	Description	Alias	Item G
+	.1892 STEP DRILL	.1892 STEP DRILL	.1892 STEP DRILL	DRILL
+	.200 X .050 S/C KEY CUT OD	.200 X .050 S/C KEY CUTTER OD 032707	.200 X .050 S/C KEY CUT...	CUTTER
+	ADEH 431 Z9	ADEH 431 Z9	ADEH 431 Z9	INSERT
+	BB140500 JM6000	BB140500 JM6000	BB140500 JM6000	BORING
+	BB-230400 CBN JM6000	BB-230400 CBN	BB-230400 CBN JM6000	BORING
+	CORNER ROUNDER	1/4 x .225 x .125 RADIUS CUTTER	CORNER ROUNDER	RADIUS
+	CPGW32.51 JM6000 W/ .002	CPGW32.51 JM6000 W/ .002	CPGW32.51 JM6000 W/ ...	INSERT
+	CPGW32.51 REGRIND	CPGW32.51 REGRIND	CPGW32.51 REGRIND	INSERT
+	CXS-04T098-15-4210R GRADE 1...	.005 SANDVIK BORING BAR (SMALL SHANK)	26728	BORING
+	CXS-04TE98-15-4220R GRADE...	.007 RADIUS SANDVIK BORING BAR	CXS-04TE98-15-4220R...	BORING
+	CXS06.0130.0379 GRADE 1025	.005 RADIUS SANDVIK BORING BAR (LARGE SHANK)	CXS06.0130.0379 GRAD...	BORING
+	CXS06.1830.0381 GRADE 1025	.003 RADIUS SANDVIK BORING BAR	CXS06.1830.0381 GRAD...	BORING
+	CXS-06G150-6210R GRADE 1025	.059 WIDE GROOVING BAR	26615	BORING
+	DNGG 431-SGF GRADE 1105	DNGG 431-SGF GRADE 1105	52974	INSERT

Edit Item .1892 STEP DRILL(Modified)

File Record

J **K** **H**

Item Number	.1892 STEP DRILL
Description	.1892 STEP DRILL
Alias	.1892 STEP DRILL
Item Group	DRILL (DRILL)
Item Sub Group	-----
Supplier	[None]
Supplier Part Number	
Unit Cost	0.0000
Used Unit Cost	0.0000
Packet Size	1
Order in Package Qty	<input type="checkbox"/>
Package Price	0.0000
Lead Time	1
Brand	
Image File	

A. New Entry Button: Use this button to create a new entry.

B. Copy Current Record: Use this button to duplicate selected entries.

- C. Edit Entry Button:** Use this to edit selected entries. You can select multiple entries using the **CTRL** and **SHIFT** keys.
- D. Location Assignments:** This button will allow to view all location assignment details. For example if an item is assigned to two different machines then there will be two records for the location specific information (i.e. min and max).
- E. Auto-complete/ Text Search:** The cursor will automatically be in this window. You can start typing the unique key you need and the system will complete it and locate the item. If the relevant Fast Filter Column parameter has been set; this can use be used to search by information such as Description and Alias as well.
- F. Search:** Use this to open the search functions.
- G. Delete Current Record:** Use this button to delete selected entries.
- H. Exit:** This button will exit the current screen.
- I. Data Fields:** This area shows currently entered information. Click on any column header to sort the information within in either descending or ascending order.
- J. Save Entry:** Use this button to save your work.
- K. Roll Back Changes:** This button will reverse any changes you have made in the current editing session.
- L. Data Entry Fields:** Make changes to the Reference Data in these fields.

Advanced Search

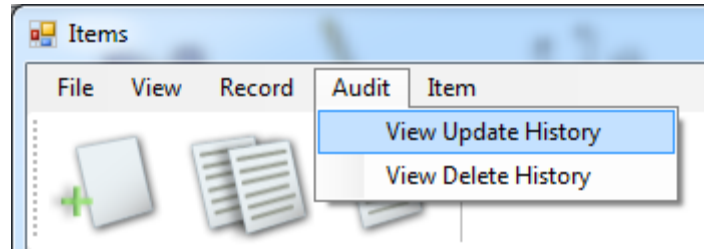


Advanced search allows one to search for specific *Items* when making edits to an existing list.

The screenshot shows a dialog box titled "Advanced Search" with a close button (X) in the top right corner. Inside the dialog, there is a "Search For" text input field. Below it, there are several search criteria sections separated by horizontal lines. The first section has a checkbox for "All Fields" which is unchecked. The second section has checkboxes for "Item Number", "Description", and "Alias", all of which are checked. Below these are checkboxes for "Supplier Part Number" and "Brand", which are unchecked. The third section has a checkbox for "Item Group" which is unchecked, followed by a dropdown menu currently showing "ARBORS". The fourth section has a checkbox for "Item Sub Group" which is unchecked, followed by an empty dropdown menu. The fifth section has a checkbox for "Supplier" which is unchecked, followed by a dropdown menu currently showing "MSC". At the bottom of the dialog, there are three buttons: "Cancel", "Reset", and "Search".

Audit History

The SupplyPoint™ software can track changes on the core data fields (Items, Item Groups, Users, User Groups, Jobs, Job Groups, Machines, Machine Groups, Suppliers and Auxiliary Fields). For example, if an Item Description is changed, it can be determined when and who made the change. Further, if an Item is deleted it can be determined who deleted it and when. To access this information, select the Audit menu from the desired data setup screen as shown below.



Select *View Update History* to view changes to the selected record. The screen shown below will be displayed. The first row in the grid, highlighted green, represents the record in its current state. The rows below that represent the previous versions of this record and when they were edited and by which user. The second row in the grid will always represent the state of record prior to the most recent edit. The fields highlighted red are the fields that were actually changed. In the example below, the Description was the field that was changed.

Update History - Item B261A15600KC7040						
Edit...	Edit User:	EditDate	EditVersion	Item Number	Description	Alias
		4/10/2009 4:03 PM	CURRENT	B261A15600KC7040	2FL SOLID CARBIDE DRILL	B78964
HAL2...	ADMIN	4/10/2009 4:03 PM	3	B261A15600KC7040	SOLID CARBIDE DRILL	B78964
HAL2...	ADMIN	4/10/2009 4:03 PM	2	B261A15600KC7040	SOLID CARBIDE DRILL	B78964
HAL2...	ADMIN	4/10/2009 4:02 PM	1	B261A15600KC7040	SOLID CARBIDE DRILL	

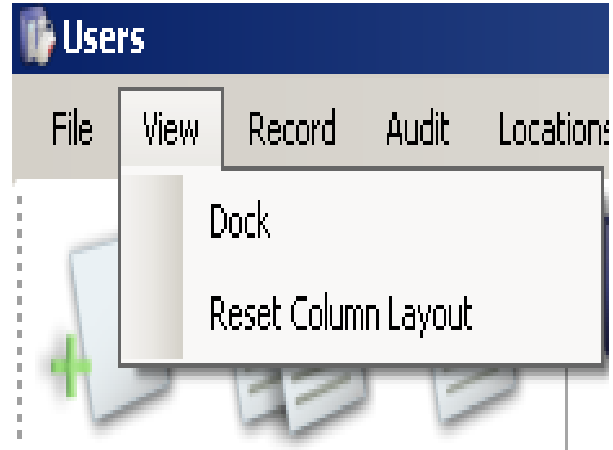
Select *View Delete History* to see which records have been deleted. The screen shown below will be displayed. The grid will show every record that has been deleted, that state of the record at the time of deletion, who deleted it and when.

Delete History - Item						
Edit...	Edit User:	EditDate	EditVersion	Item Number	Description	Alias
HAL2...	ADMIN	4/10/2009 4:01 PM	1	NG3062RKKC935	TOP NOTCH INSERT; GRADE KC935	
HAL2...	ADMIN	4/10/2009 4:01 PM	1	NGD4125LKKC850	INSERT,CARB,GROOVING,TOPNOTCH,,1	

View Menu

Users preferring the classic view of setup screens, where the data fields grid appears in the top and the data entry fields appear in the bottom, can use the *View* menu to change the view.

Select the *View* menu in any of the data screens and either check the box next to *Dock* to change the display back to the traditional view or leave it unchecked to display as many records on screen as possible. This will be applied across all data entry displays. Column widths can be resized and *Reset Column Layout* will reset the view to factory defaults.



Data Field Grid Layout

The columns in the generic data grids can be reordered to suit the client PC user. To move a column simply click on the header, hold, and drag it to an alternative position on the grid. The layout of columns will be preserved until somebody click the *Reset Column Layout* detailed in the [View Menu](#) section above.

Personalizing the screens in this way enables the user to see their key data from the moment a screen loads.

Location Specific Details

Some of the most powerful improvements to the software concentrate around the handling of Items and Suppliers. Both of these data elements have seen their data divided into two categories;

- Base Data
- Location Specific Details

Global uniformed information such as an Item Description or Unit Cost fall into the Base Data category. Base data is that which regardless of the system the item is stored in, the information remains the same in one system as the other(s). Information such as Item Minimum or Maximum stock levels fall into a *Locations Specific Details* category. The *Location Specific Details* category is information that you may wish to tailor for the same item on different machines. The Minimum and Maximum stock levels are a good example of this as one system may stock more of an item than another due to capacity or throughput and therefore the reorder points will vary from one system to another. Likewise you may have the capacity, or

require the flexibility, to make an item *Returnable* on one system, but not on another. The functionality offered by *Location Specific Details* allows for this type of configuration, amongst others.

Editing Location Specific Details

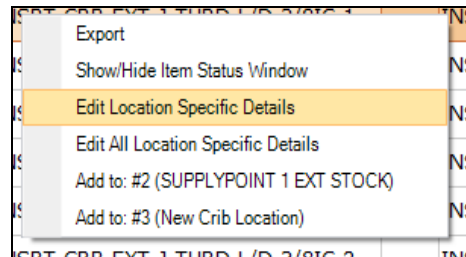
The process for editing Location Specific Details for Items and Suppliers is the same. While the following examples focus on editing Items details, the same steps should be followed when working with Suppliers.

Take the following steps:

Select the item that you wish to edit from the list.

Either select *Edit Location Specific Details* from the location menu (icon D described previously) or right-click on the item and select that option.

The list of locations for that item will appear. It is important to note that just because there is a location specific record for an *Item*, it doesn't necessarily mean that the item is actually assigned to that location. In the case of a vending machine you still have to go to drawers and assign the item to a specific drawer.



Item Per Location Attributes										
Item Number	Description	Location	Location Type	Item Group	Item Sub Gro...	Total On Hand Qty	New On Hand Qty	General On Hand Qty	Used On Hand Q	
1035	3/8-16 GR 5 PLAIN FINISHED H...	SUPPLYPOINT	VM	HARDWARE		0	0	0	0	
1035	3/8-16 GR 5 PLAIN FINISHED H...	EXTERNAL STOCK	Ext	HARDWARE		2	2	0	0	

On this screen, there will be several columns displaying information about the item for this location such as on hand quantity (by content type), capacity, in use quantity, on order quantity and more. Double-click on the item location specific record you need to update.

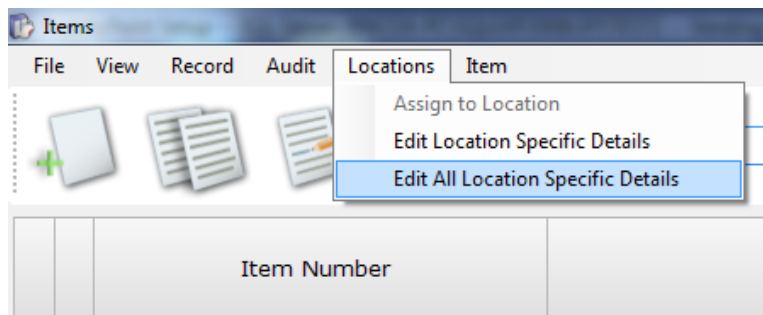
The 'Edit Item 1035' window displays the following fields and values:

Item Number	1035
Location	SUPPLYPOINT (1)
Min Qty	101
Max Qty	200
Critical Level	0
Used Min Qty	0
Rework Pickup Level	0
Is Swappable	<input type="checkbox"/>
Swap Qty	
Swap by User	<input type="checkbox"/>
Swap by Job	<input type="checkbox"/>
Swap by Machine	<input type="checkbox"/>
Is Ticketable	<input type="checkbox"/>
Is Returnable	<input type="checkbox"/>
Is Reworkable	<input type="checkbox"/>

A window will open with the location specific details for the item. Press the Save button to retain your changes.

Editing Multiple Location Specific Details

There may be situations when you wish to edit location specific details for more than one item at a time. For example you may want to edit the *Is Returnable* flag for all items that belong to a specific item group (i.e. *Drills*). To do this, go into Items and select the *Locations* → *Edit All Location Specific Details* menu.



Now you will see all location specific details and can click the *Item Groups* column header to sort by *Item Group*. Find and select all of the records for the *Drills* item group. In the example below you can see that the *Item 1051* is listed twice. This is because it has details for two different locations.

Items Per Location Attributes							
File View Record Audit							
Item Number	Description	Location	Location Type	Item Gr...	Ite...	Total On Hand Qty	New On Hand
1085	9V ALKALINE 1PCS RAYOVAC INDUSTR...	SUPPLYPOINT	VM	BATTERIES	0	0	0
1001	#25 2FL 145 DEG HP SGS TI-NAMITE-C...	SUPPLYPOINT	VM	DRILLS	0	0	0
1002	7/32 2FL 145 DEG HP SGS TI-NAMITE-...	SUPPLYPOINT	VM	DRILLS	0	0	0
1003	NO.5 118D HERTEL BLK HSS JOBBER DR	SUPPLYPOINT	VM	DRILLS	0	0	0
1004	NO.56 118D HERTEL BLK HSS JOBBER...	SUPPLYPOINT	VM	DRILLS	0	0	0
1005	NO.69 118D HERTEL HSS BRITE JBBER...	SUPPLYPOINT	VM	DRILLS	0	0	0
1006	NO.71 118D HERTEL HSS BRITE JBBER...	SUPPLYPOINT	VM	DRILLS	0	0	0
1007	NO.75 118D HERTEL HSS BRITE JBBER...	SUPPLYPOINT	VM	DRILLS	0	0	0
1008	NO.77 118D HERTEL HSS BRITE JBBER...	SUPPLYPOINT	VM	DRILLS	0	0	0
1011	B225A 5.2M KC7315 CLNT DYNAPOINT...	SUPPLYPOINT	VM	DRILLS	0	0	0
1012	B225A 5.5M KC7315 CLNT DYNAPOINT...	SUPPLYPOINT	VM	DRILLS	0	0	0
1013	B225A 6M KC7315 W/CLNT DYNAPOINT...	SUPPLYPOINT	VM	DRILLS	0	0	0
1022	NO.60 118D HERTEL BLK HSS JOBBER...	SUPPLYPOINT	VM	DRILLS	0	0	0
1051	1/64" 118D HSS BRIGHT JOBBER DRILL	SUPPLYPOINT	VM	DRILLS	0	0	0
1051	1/64" 118D HSS BRIGHT JOBBER DRILL	EXTERNAL STOCK	Ext	DRILLS	0	0	0
1009	AL48-8 1-1/2X1-1/4X4 WELDON HSS 6...	SUPPLYPOINT	VM	ENDMILLS	0	0	0
1015	3120 5.8MMX6MMX13MM OSG EXOCAR...	SUPPLYPOINT	VM	ENDMILLS	0	0	0

Next click the Edit button to edit the records and set the Is Returnable flag as shown below.







Edit Multiple Items (1001 1002 1003 1004 1005 1006 1007 1008 1011 1012 1013 1022 1051 1051) (Modified)	
Item Number	(Multiple)
Location	
Min Qty	
Max Qty	
Critical Level	0
Used Min Qty	0
Rework Pickup Level	0
Is Swappable	<input type="checkbox"/>
Swap Qty	
Swap by User	<input type="checkbox"/>
Swap by Job	<input type="checkbox"/>
Swap by Machine	<input type="checkbox"/>
Is Ticketable	<input type="checkbox"/>
Is Returnable	<input checked="" type="checkbox"/>
Is Reworkable	<input type="checkbox"/>
Is Scrannable	<input type="checkbox"/>

Item and Supplier Expanding

Individual Items and Suppliers can be expanded by clicking on the + sign to the left of each record. Below is a screenshot demonstrating an expanded Item. Once expanded the Locations in which the item is assigned are listed.

Items

FileViewRecordAuditLocationsItem



	Item Number	Description	Alias	
▶ -	.1892 STEP...	.1892 STEP DRILL	.1892 STEP...	D

	Location	Location Type	Total On Hand Qty	New On Hand Qty	General On Hand Qty
	Location '1...	Ext	0	0	0
	TOOLBOSS	VM	0	0	0
	Location '1...	Ext	0	0	0

+	.200 X .050...	.200 X .050 S/C KEY CUTTER OD 032707	.200 X .05...	C
---	----------------	--------------------------------------	---------------	---

You can also edit fields such as Minimum and Maximum stock levels of an item by just clicking in the sub-grid and changing the relevant field.

- 1035	3/8-16 GR 5 PLAIN FINISHED HEX NUT				52593365	HARDWARE		MSC
	Location	Location Type	Total On Hand Qty	New On Hand Qty	General On Hand Qty	Used On Hand Qty	On Order Qty	In Use Qty
	SUPPLYPOINT	VM	0	0	0	0	0	0
	EXTERNAL STOCK	Ext	2	2	0	0	0	0

Location Assignments

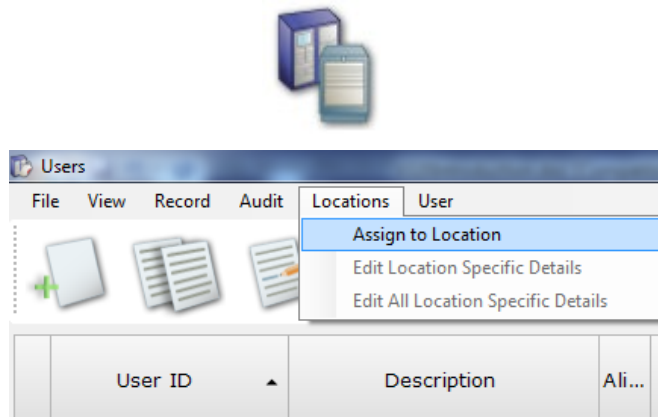
While Items and Suppliers have seen their information divided into categories, information for the remaining detail elements remains intact. The major difference for most of the remaining data elements is that they now rely on Location Assignments being created before they can be used on a vending machine/crib location.

The following data elements require Location Assignments to be created before they can be used on an installation;

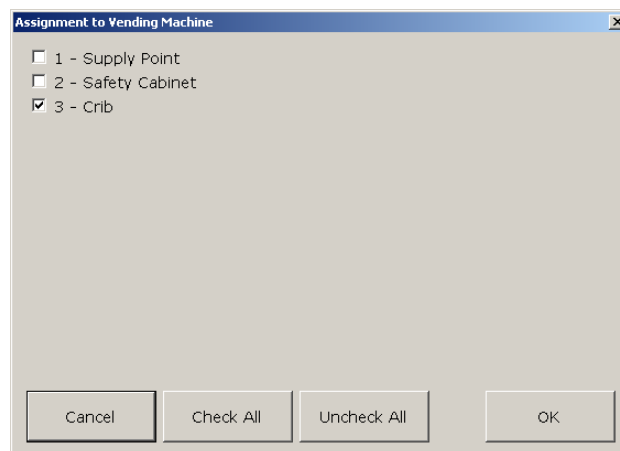
Users • User Groups • Jobs • Machines
Auxiliary Field (1, 2 and 3)

The process for creating/modifying Location Assignments for any of these data elements is the same. While the following examples focus on assigning Users to locations, the same steps should be followed when working with the other specified data elements.

There are two ways to assign data elements, such as Users to different locations. The first is to perform it in the setup screen for that data element. Select the desired user and select the *Locations* → *Assign to Location* menu option, shown below, or click the Location Assignments button.



Focusing on User; regardless of the transaction rights that user may have, if the desired location is not checked as shown below, that user will not be able to login to that machine or location from the user interface.



The same could be said of Jobs and Machines; if their *Enabled* attribute is turned on, but they have no Location Assignments, they will not appear on the User Interface.

Software release v3.2 did not initially incorporate the ability to import Suppliers and set details such as rounding rules and max definitions via SPSTImport. The software has been enhanced to incorporate this functionality together with creating *Supplier Vending Machine Assignment* details; in the same way that importing Items does.

Static Data Elements

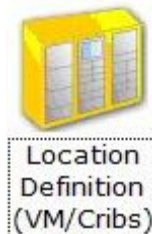
The remaining data elements shown below will exist and be available either on the User Interface, or Reporting for example, as soon as they have been created. There are no Location Specific Details of Location Assignments necessary for these elements.

User Cost Centers • Job Groups • Machine Groups • Stored Keys

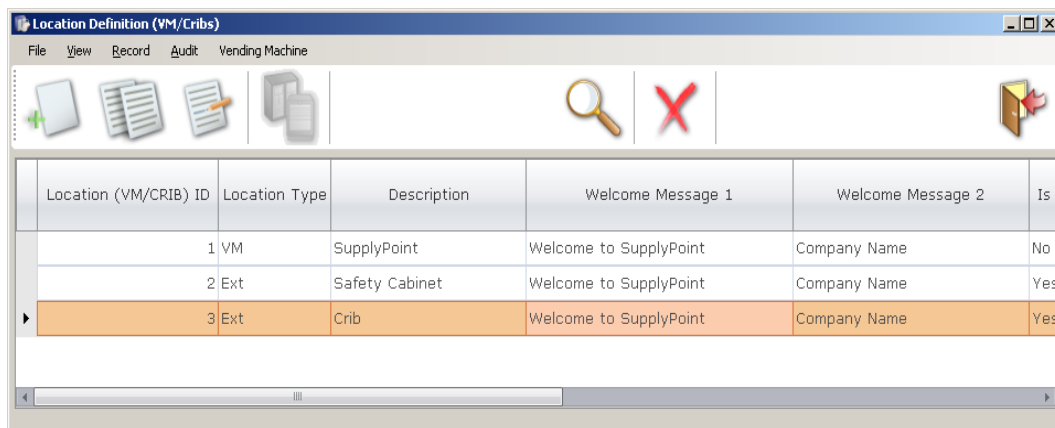
Transaction Filters • Kits • Tool Fail Reasons • Restrict By Location Group

Location Definitions (VMs/Cribs)

Location Definitions allows you to determine the locations where you will keep your items and provides basic information about them. This was formerly known as *Vending Machines* and incorporates the functions that were part of *Vending Machines* and builds on them in important ways. You will need to have an entry for each location you want to manage whether it is a vending machine, crib or just an external stock location. Take the following steps to create a location. Select *Location Definition (VM/Cribs)* from the *Machine Setup* Desktop.



The screen below will show all of your locations. Either select *New* from the *Record* menu or press the button to create a new record.



The screenshot shows a software window titled "Location Definition (VM/Cribs)". It has a menu bar with "File", "View", "Record", "Audit", and "Vending Machine". Below the menu bar is a toolbar with icons for adding, editing, deleting, and searching. The main area contains a table with the following data:

Location (VM/CRIB) ID	Location Type	Description	Welcome Message 1	Welcome Message 2	Is
1	VM	SupplyPoint	Welcome to SupplyPoint	Company Name	No
2	Ext	Safety Cabinet	Welcome to SupplyPoint	Company Name	Yes
3	Ext	Crib	Welcome to SupplyPoint	Company Name	Yes

A screen like the one below will appear.



The screenshot shows a software window titled "Edit Vending Machine 3". It has a menu bar with "File" and "Record". Below the menu bar is a toolbar with icons for saving and undoing. The main area contains a form with the following fields:

Location (VM/CRIB) ID	3
Description	Crib
Welcome Message 1	Welcome to SupplyPoint
Welcome Message 2	Company Name
Is Crib/External Location	<input checked="" type="checkbox"/>
Include with location for order req	TOOLBOSS

Enter the following information:

Location (VM/CRIB) ID: This is the identifier used by all of the software to differentiate the new location from others. Just pick the next number in the sequence.

Description: Use this field to give the location a description.

Welcome Message 1 and 2: This determines what messages will be displayed on the User Interface Screen.

Is Crib External Location: Checking this box tells the software several useful things. The most important of these is not to try opening a drawer. Be sure to check this box for all crib/external locations.

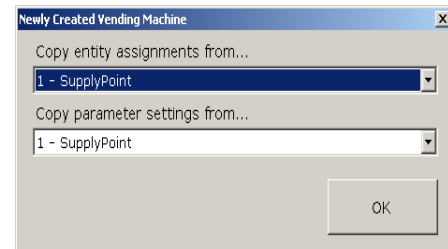
Include with location for order req.: If this location is going to be tied to a vending machine for ordering purposes, select the desired vending machine location from the drop-down box. This is only if you want to treat an external

location as it was in previous versions of the software. In other words, the system will add quantities from the external location to those in the vending machine when determining the on hand quantity for an item (i.e. an overflow location).

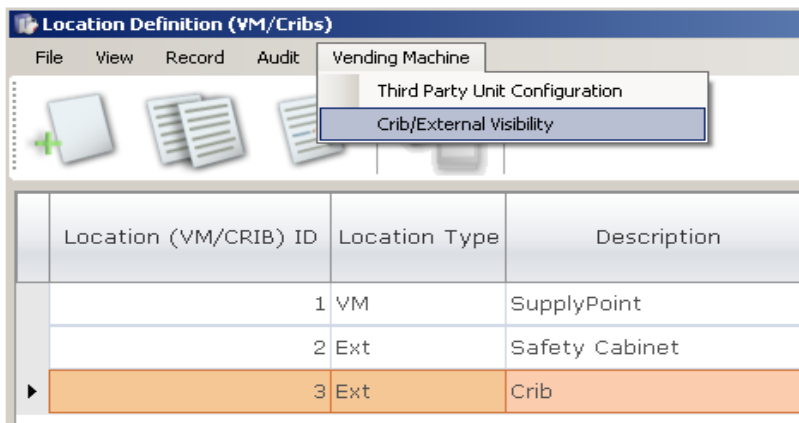
Press the **SAVE** button.

Select a location from which you would like to copy entities (Items, Users, etc.). Entity assignments will be explained in more detail later.

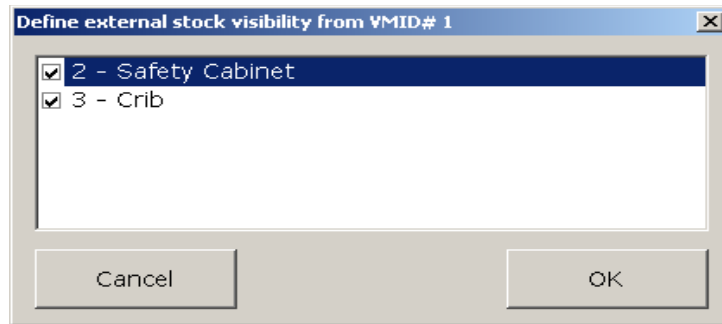
Press **OK** to complete the process.



Another important feature of this version is the ability to make an external or crib location visible to one or more vending machines. In past versions, external stock could essentially only be attached to a single vending machine. Now any number of vending machines can view stock in the same crib or external location and even conduct transactions on that location. To setup this up, select the vending machine that needs to be able to see a crib or external location and select the *Vending Machine → Crib/External Visibility* menu.



You will now be able to select the external location that this vending machine can see. Repeat this for the other vending machines where necessary.



Creating and Copying Database Elements

Take the following steps to create any database element:

1. Double-click on the appropriate icon from the Machine Setup control panel.
2. Press the New Entry button.
3. Enter the appropriate information
4. Save the new database entry.

There may be other steps to take after creating the new element and these will be discussed below within their respective elements.

You can also copy a database element by selecting it (clicking on it once) and pressing the Copy Record button. You will then be able to enter a new ID (remember, this is the database key and must be unique) and change information as appropriate. Copying a record is a good way to avoid the pitfalls associated with deleting or changing elements listed above. Again, see tips within each database element for ideas on how to use this.

Users

These are the operators of the SupplyPoint™. Creating new users is a three step process: first, enter the basic user settings; secondly, assign the user to the *Locations* that they are allowed to login to; thirdly, assign transactions, group memberships, cost centers or supplier assignments to the users. What does each of the fields in Users mean?

- *User ID*: This is the unique alphanumeric identifier for each User. It is recorded in the Transaction Log. **Required**
- *Description*: Usually, this is the User's name. **Required**
- *Alias*: Use this field to enter any other useful information on the User.
- *Password*: Enter a password here if you intend to use password protection for this User. Leaving this blank means there is no password needed for the account.
- *Cost Center*: Use this as a way to track Users as departments. **n.b.** This is not related to the User Cost Center screen shown in Machine Setup's control panel.
- *Image File*: This is the name of the file containing a user photo.
- *Allow to Login*: Check this box if you want the User to be able to log into the SupplyPoint™. **Required**
- *Date Range Enable*: Check this box if the User will only need to access the Vending Machine/crib for a limited time. This is a good solution for holiday/ temporary employees.

- *Date Range Start:* Enter the beginning of the date range. As of this date, the User will be able to access the Vending Machine/Crib.
- *Date Range End:* Enter the end of the date range. After this date the user will be unable to access the Vending Machine/Crib.
- *Dispense Used Items First:* When there is a choice between new and used items, a User with this box checked will be required to take used items.
- *Log Out After a Transaction:* When this box is checked, the User will be returned to the login screen whenever a transaction is completed.
- *User Is a Demo User:* This function allows the User to function in a sort of training mode, where he can perform transactions, but they do not count or affect inventory levels.
- *Ignore Fingerprint Check:* Checking this box will allow the User to avoid any biometric authentication rules that are in effect.
- *Restrict to Single Compartments:* Checking this box allows the User access to the contents of only one compartment of a drawer at a time.
- *Can Access Crib/External Stock:* This box either allows or disallows access to External Stock/Crib locations.
- *Can Size Grid:* This allows Users to size the selection grids and Shopping Basket column widths in the User Interface.
- *Offer Drawer Choice (M/R):* Checking this box allows Users to choose between locations when there is a maximum and a reduced security location.
- *Can Ignore Swap Rules:* This attribute allows the User to return and Withdraw items without regard to any item swapping rules that are in effect.
- *Can Ignore Strict Return Rule:* This attribute means the User can return items for other Users even if the strict return parameter is on that says Users can only return items they have withdrawn.
- *Rationing Policy:* This regulates how the User interacts with Rationing.
 - *1- This User Ignores Rationing:* The User is allowed complete freedom from any rations
 - *2- Only Log When Ration Exceeded:* The User may exceed rations, but it is noted in the Transaction Log
 - *3- Prevent Ration Being Exceeded:* The User is prevented from exceeding rationed amounts (default).
- *Can Change Kit Issue:* This allows the User to change the number of pieces issued as part of a kit.
- *Can Exceed Kit Qty:* This allows the User to Withdraw more than the specified number of pieces for a kit.
- *Can Ignore Kite Item Shortage:* This allows the User to Withdraw a kit even though one or more items may be lacking.
- *Allow Disabled Items:* Allows a User access to items that have been marked as disabled in the User Interface by the *Disable on Withdraw* attribute in the *Location Attributes* section of *Items* setup.
- *Is Handheld Administrator:* Is selected for Users who operate the handheld unit.

- *Force Countersign:* Forces the User to always have somebody present to Countersign any item marked as being subject to the countersign check in Item Setup; regardless of the quantity the User has chosen.

Location Assignments

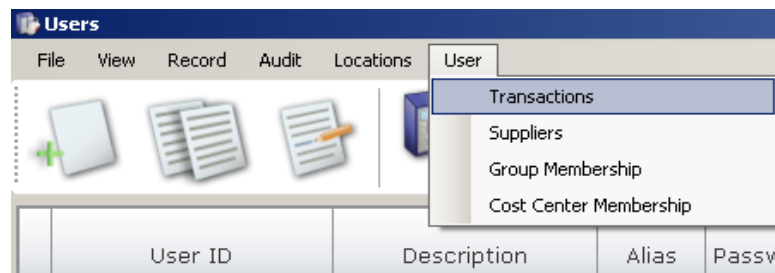
Before a User can login to the User Interface, regardless of the value of the *Allow To Login* attribute; users should be given their Location Assignments.

For details on how to create/modify Location Assignments please refer to the [Location Assignments](#) section detailed previously.

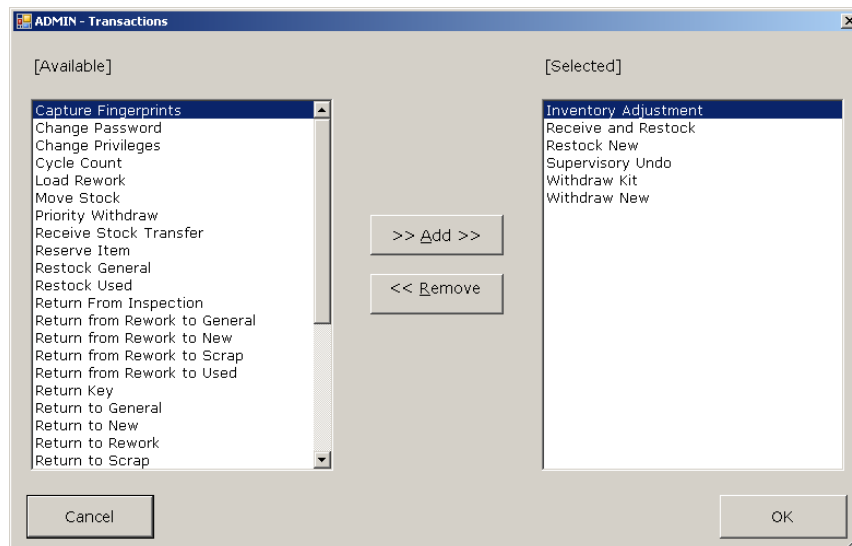
Assigning Transactions

To assign transactions to a user, take the following steps:

1. Select the user or users to be assigned transactions. You can select multiple users using the **CTRL** or **Shift** keys.
2. Click on the *User* menu at the top of the screen.
3. Select *Transactions* from the menu.



4. Highlight the transactions the user needs in the left-hand column of the next screen and press **ADD**.



5. Press to close.

Available Transaction Privileges

Below is a list of available transaction privileges with a brief explanation.

Transaction	Code	Description
Capture Fingerprints	FPR	Capture fingerprints of a user for login purposes
Change Password	CPW	Change a user's password without having to enter <i>Machine Setup</i>
Change Privileges	CPV	Change transaction privileges without having to enter <i>Machine Setup</i>
Cycle Count	CC	A process for ensuring all stock quantities are audited on a cyclical basis by analysing the date they were last counted and putting them into easy to manage categories.
Drawer Deletion	DD	Occurs when an item is unassigned from a drawer
Free Issue Withdraw	FIW	Withdraw an item marked Free Issue
Initiate Stock Transfer	IST	Initiate Stock Transfer
Inventory Adjust	IA	Stock check individual locations, logging the relative quantity, +/-, of any adjustment made.
Load Rework	LR	Load Rework
Move Stock	MOV	Records the relocation of an item from one assigned location in a Vending Machine to another location in the same machine
Priority Withdraw	WP	A withdraw that bypasses all steps(Job, Machine, etc.) prior to item listing
Receive and Restock	R_R	An extension on the Restock transaction by allowing for the management and organization of Purchase Orders, using specific PO and Release Numbers
Receive Stock Transfer	STD	Receive stock from another externally defined location
Reserve Item	RS1	While at one Vending Machine, reserve an item for collection in another.
Restock General	REG	Restock of an item of General content type
Restock New	REN	Restock of an item of New content type
Restock Used	REU	Restock of an item of Used content type

Return from Rework to General	RRG	Return from Rework to a drawer with General content Type
Return from Rework to New	RRN	Return from Rework to a drawer with New content Type
Return from Rework to Scrap	RRS	Return from Rework to a drawer with Scrap content type
Return from Rework to Used	RRU	Return from Rework to a drawer with Used content Type
Return Key	RK	Return Key after use
Return Serialized Item	RSI	Return an item marked serializable
Return to General	RG	Return of an item to a drawer with a content type of General - Should be used only for returning non-consumables
Return to New	RN	Return of an item to a drawer with a content type of New - Should be used only for returning non-consumables
Return to Rework	RR	Return of an item to a location with a content type of Rework
Return to Scrap	RS	Return of an item to a location with a content type of Scrap
Return to Used	RU	Return of an item to a drawer with a content type of Used - Should be used only for returning non-consumables
RFID – Static Cabinet Scan	SCS	Scan a cabinet for items (RFID only)
RFID Insta-track	DBS	Track items (RFID only)
Store External Request	REX	Restock items following notification from a third party system or software application, i.e. Okuma or Zoller controllers
Supervisory Undo	SU	Given to Administrators to reverse transactions mistakenly/incorrectly carried out by other users
User Undo	UU	Allows a user to reverse a transaction mistakenly/incorrectly carried out
Weigh Item	SCL	Calculate the weight of Weighable items by using the connected scales unit

Withdraw External Request	WEX	Withdraw items following reservation(s) from a third party system or software application, i.e. Okuma or Zoller controllers
Withdraw General	WG	Withdraw of an item with a content type of General
Withdraw KIT	WKT	Withdraw of a Kit of items
Withdraw New	WN	Withdraw of an item with a content type of New
Withdraw Reserved Item	RS2	Withdraw item(s) reserved from another Vending Machine or the Web Portal
Withdraw Rework from Bin	WR	Withdraw items with a content type of Rework from a bin location – referred to as Pickup Rework from Bin in the User Interface
Withdraw Rework from Drawer	WRD	Withdraw items with a content type of Rework from a drawer location – referred to as Pickup Rework from Drawer in the User Interface
Withdraw Scrap from Bin	WS	Withdraw items with a content type of Scrap from a bin location – referred to as Pickup Scrap from Bin in the User Interface
Withdraw Scrap from Drawer	WSD	Withdraw items with a content type of Scrap from a drawer location – referred to as Pickup Scrap from Drawer in the User Interface
Withdraw Used	WU	Withdraw of an item with a content type of Used

Group Membership, Cost Center and Supplier Affiliation

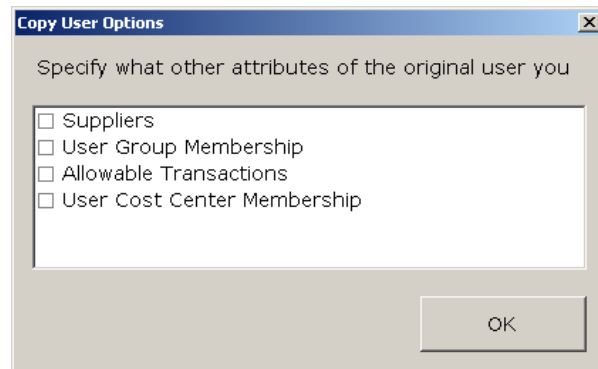
To assign Group membership, User Cost Centers or Supplier affiliation, take the following steps:

1. Create a user, or select the users to be assigned.
2. Assign transaction privileges
3. Select *Group Membership* (or *appropriate option*) from the *User* menu.
4. Select the value to be assigned to the user from the left-hand column.
5. Press .
6. Press to close the dialog.

Copying Users

1. Begin by entering *Users* in *Machine Setup*.
2. Select the user you wish to copy and press the *Copy Current Record* button.

3. Enter the new information for the user. All you will need to change is the User Number and the Description.
4. Press the *Save* button.
5. You will be asked what other information you want to copy from the old user. For most users, you will want to select *User Group Memberships* and *Allowable Transactions*.
6. Press **OK** to finish.



Use of User Photos

The SupplyPoint™ can display photos of users when they log in. The purpose of this is twofold. First, by using photos, you can add a little bit of security to the process. When a user's photo is displayed, other users can see it. They can also see if the user standing in front of the machine is the same one logged into the machine. Secondly, the use of photos often helps speed acceptance of the SupplyPoint™. Having one's photo in the system often makes the user feel like he's a part of the whole process. Take the following steps to add user photos to the system:

1. Copy the photos to the SupplyPoint™. A default directory has been set aside for them; it is located in either C:\PROGRAM FILES\SUPPLYPOINT\GRAPHICS\USERS or D:\GRAPHICS\USERS. You can, however, use any directory you wish. Simply change the setting in Parameters that is called *Directory containing User pictures*. If choosing another directory, bear in mind that a local directory is generally better than a network directory. There are two reasons for this. Firstly, when pictures are on the network the machine must access the network each time a user logs in, which can slow the SupplyPoint™. Secondly, if the network goes down, pictures will be unavailable.
2. Start SupplyPoint™ Utilities and enter Machine Setup if you have not already done so.
3. Enter *Users* setup.
4. Select the user to be configured and press the edit button or double-click on the user.
5. Either enter the name of the photo file in the slot labelled *Image file* or browse to it.
6. Be aware when assigning graphics from a client PC that the graphics are by default stored on the SupplyPoint™ in one of the above directories. When

browsing in this scenario you will be browsing over the network to a path similar to \\PCNAME\\SupplyPoint\\Graphics\\Users.

7. Save the changes to the user.

Configuring Cards

Assuming that the card reader hardware is working correctly, you will need to configure the SupplyPoint™ software so that it knows how to deal with information from the cards.

1. Exit the User Interface using the exit password.
2. Open *Notepad* by pressing START, selecting *Programs*, then *Accessories*, and then *Notepad*.
3. Swipe or scan the card. It will output a string of characters. The following is a typical card output: **;9876542?**
4. Identify the string of characters that is the user ID. For the purpose of this example, we'll use **7654** as the user ID.
5. Count the total number of characters in the string including any punctuation or spaces.

; 9 8 7 6 5 4 2 ?
1 2 3 4 5 6 7 8 9

6. Determine which characters correspond to the user ID.

;**9876542?**
1 2 3 4 5 6 7 8 9

7. Use these two pieces of information to determine what the edit is for this card. The edit is notated as follows: **Total Number of characters: First digit (in sequence) of ID- Last Digit of ID**. Or, using the above example: **9: 4-7**. If the ID were a discontinuous sequence of numbers, for instance **8764**, you would use a comma (e.g. **9:3-5,7**).

;
1 2 3 4 5 6 7 8 9

8. Enter the edit in *Parameters* under the setting *Users- Semi colon separated list of edits*. Multiple edits can be entered, but there can be only one entry for each initial number (i.e. the SupplyPoint™ will not be able to look at 9-digit numbers with two different edits).

User Groups

User Groups are, as the name suggests, groups of users. There are many reasons why you might want to group users together and many ways to group them. Most commonly, they are grouped together by some common trait- perhaps they work on the same line or are members of the same shift. Some may need only to take items from the SupplyPoint™ while others may need access to functions like Supervisory Undo or Inventory Adjustment. This points out the most common use of User Groups: giving sets of people the same transaction privileges. In a shop with a dozen or so employees, this might not be convenient, but where there might be hundreds involved it becomes easy to see why assigning privileges to a group of users instead of to each individual user could be handy.

Another use of the User Group is for restricting access to items; it is often more convenient to apply Restrictions or Rations across a group of users rather than to each individual user. You can single out individual users for greater access simply by giving it to the individual user; his permissions and/or access will be combined with that he receives as a member of a group. Users can also be members of multiple groups, with permissions and access combining here as well.

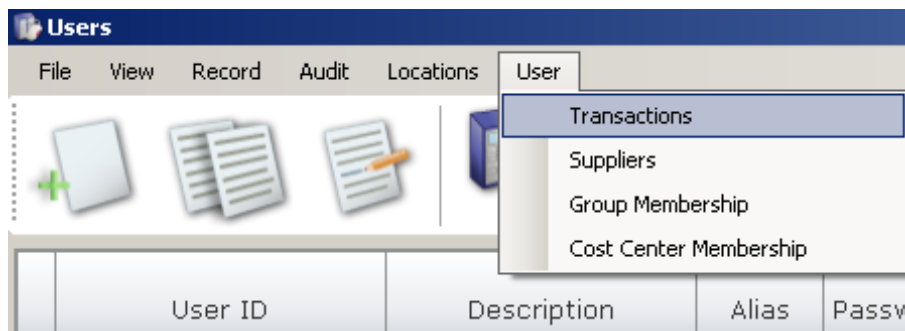
Creating and Copying User Groups

In order to create a User Group, follow the general instructions on creating new database elements. Fill out all fields. For copying, follow the instructions on copying a User above.

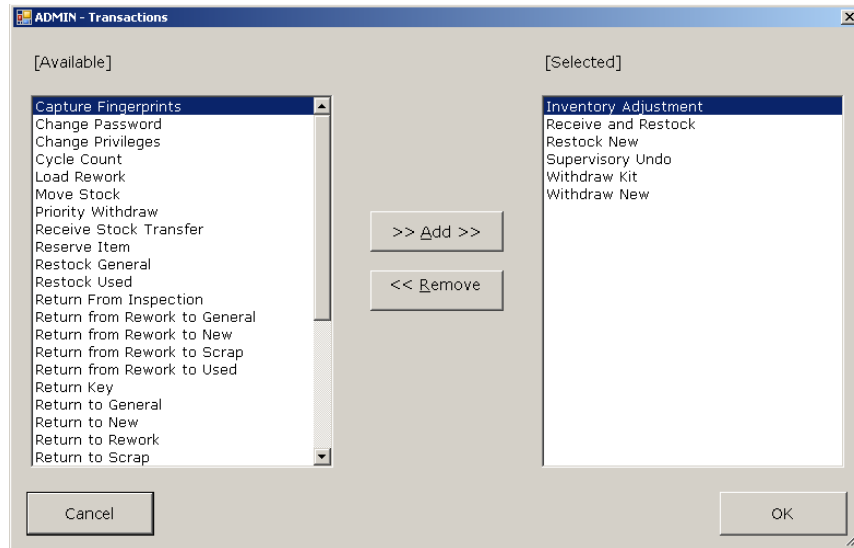
Assigning Transactions to User Groups

To assign transactions to a user, take the following steps:

1. Select the user group to be assigned transactions. You can select multiple users using the **CTRL** or **Shift** keys.
2. Click on the *User* menu at the top of the screen.
3. Select *Transactions* from the menu.



4. Highlight the transactions the users need in the left-hand column of the next screen and press **>>ADD>>**.



5. Press **OK** to close.

Location Assignments

Before a User Group is effective to the User Interface, their Location Assignments have to be created.

For details on how to create/modify Location Assignments please refer to the [Location Assignments](#) section detailed previously.

User Cost Centers

Helping to provide another level or organization within the system; the User Cost Center functionality allows administrators to assign Users to either individual or multiple Cost Centers, or Departments, within the organization.

When a User logs in to the User Interface, with more than one Cost Center assigned to them; they will be prompted to assign their Withdraw to the relevant Cost Center. If the User only has a single Cost Center assigned to them; it is implied that this is the chosen Cost Center for the Withdraw and is recorded in the Transaction Log as such.

Another use of this function is to enable installations that utilize the Web Portal to make reservations against User Cost Centers for items that they require but haven't managed to get to the Vending Machine/Crib to Withdraw. The User logs in to the Web Portal using their User Interface User ID and Password, selects the appropriate Cost Center and proceeds to reserve the required stock.

Creating and Copying User Cost Centers

In order to create a User Cost Center, follow the general instructions on creating new database elements. For copying, follow the instructions on copying a User above.

Items

All data regarding items within the SupplyPoint™ system falls into one of two categories, as described in the Location Specific Details section covered previously. Global uniformed information such as an Item Description or Unit Cost fall into the Base Data category. Base data is that which regardless of the system the item is stored in, the information remains the same in one system as the other(s). Information such as Item Minimum or Maximum stock levels fall into a *Locations Specific Details* category. The *Location Specific Details* category is information that you may wish to tailor for the same item on different machines.

Creating and Copying Items

Follow the general instructions on creating and copying database elements to create a new item. On the Item Details element screen the base data for an item is displayed. What does each of Base Data fields mean?

- *Item Number:* This has to be a unique alphanumeric identifier for the item. **Required**
- *Description:* A description of the item. **Required**
- *Alias:* This can be used for useful information about the item. Some uses have included manufacturer's part number and location of the item in locked cabinets.
- *Item Group:* Putting the item in an Item Group will allow you to search for the item more easily. **Recommended**
- *Item Sub-Group:* It is sometimes useful to divide large item groups into smaller groups to help with searches. Select the appropriate Item Sub-group here.
- *Supplier:* This is the provider of the item; having this info will help with ordering. **Recommended**
- *Supplier Part Number:* This is generally used to keep track of the item number as it is ordered from the supplier.
- *Unit Cost:* Enter the cost of one new unit of this item.
- *Used Unit Cost:* Enter the price of a used unit here. This might be a purchase price, or it may be the price of reworking the item.
- *Packet Size:* The number of the item that comes in a packet; this will help with ordering. **Recommended**

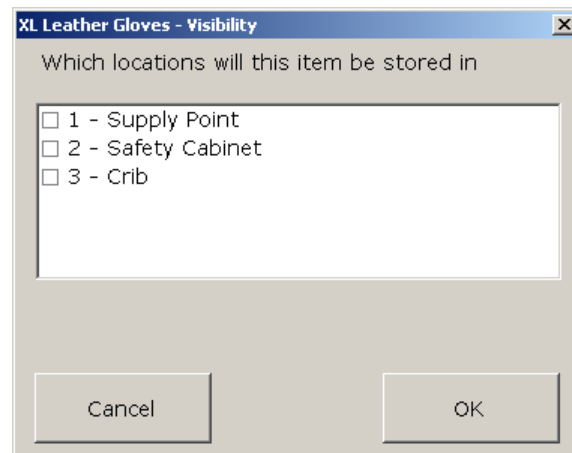
- *Order In Package Qty:* Items can be ordered based on a package quantity.
- *Package Price:* Price of item package.
- *Lead Time:* This is the average time for the item to be delivered from the supplier when ordered.
- *Brand:* This field is for internal use; use it when you need to differentiate the brand of an item from the supplier.
- *Image File:* Enter the name of the item's image file here. If you are using the improved graphic setup functions, place the name of the sub-directory before the file name, using the format **subfolder/filename.ext**
- *Alt Image File:* The same as the *Image File* attribute above; files entered here will be available via the alternate image "book" button displayed on the Quantity Selection screen of the User Interface.
- *In Use Percentage (ordering calc):* The value defined here is used in the ordering process. When an order is being calculated, this percentage of the number of the item in use will be added to the on-hand quantity in the calculation of the minimum.
- *In Rework Percentage (ordering calc):* This is similar to the *In Use Percentage* field, except that the calculation is based on the number of items out for Rework.
- *Average Weight of 1 Piece:* Enter the weight of this item here if you are using scales.
- *New/ Used Sensitive:* Check this box if the item will be stored as new and used in the SupplyPoint™.
- *First In First Out:* Check this box if you want to rotate stock, making sure that old stock does not stay in the back of the drawer.
- *FIFO On Withdraw:* The premise behind this feature is that the system will select the location for the item that throughout the entire system, all VMID's within the database, has been in stock the longest. Primarily used for items where a charging socket is installed for tablets or walkie-talkies etc. to enable the user to be issued with the device that has been on charge longer than any other and therefore, in theory, have an item that gives them the maximum usage possible at the point it is withdrawn from the cabinet. This feature requires the items to be assigned to individually secure, single compartment locations for example a cupboard, single compartment drawer, a RotoPoint hatch or a LID cabinet. The location has to be configured as enforce full/empty or only have a maximum quantity of one in order to be considered for this check. FIFO by location items must be restricted to locations which are Content type New.
- *Can Expire:* Check this box if the item will be stored with an expiration date.
- *Can Expire:* Use this option to make an item have the capability to expire. When the item is restocked an expiry date will be entered. (See parameters for additional functionality).
- *Expiry Date Reset Value:* This feature is used in conjunction with the returnable feature. When a returnable item is withdrawn, the expiry date is reset to the

configured date and time whilst in use. (See parameters for additional functionality).

- *ATMS ToolType ID:* Use this to tie items into the ATMS tool management system.
- *Batch Traceable:* Use of this function will require users to enter a batch number when withdrawing the item.
- *Is Serializable:* Use this option to make an item capable of having unique serial numbers. i.e. When the item is restocked a serial number can be recorded with the location/compartments it is stored in. As a result, only single quantities of serializable items can be restocked or withdrawn at any one time.
- *Max Number of Minutes In Use Before Inspection:* The SPS application will maintain a running total of the number of minutes that have elapsed between the Item/Serial number combination being Withdrawn from and Returned to the Cabinet. Define here the maximum number of minutes that can elapse whilst the item is in use, after which the specific Item/Serial number combination will be automatically routed to the Rework drawer on return to the Cabinet. The current running total value for the Maximum Number of Minutes in Use Before Inspection for an Item/Serial Number combination is reset to zero when the Item/Serial number combination is 'Returned from Rework'.
- *Max Number Uses Before Inspection:* The SPS application will maintain a running total of the number of times the item/Serial Number combination can be withdrawn from the Cabinet before an inspection of the item is required. Define here the maximum number of occurrences that the item can be withdrawn for use, after which the Item/Serial number combination will be automatically routed to the Rework drawer on return to the Cabinet. The current running total value for the Maximum Number of Uses Before Inspection for an Item/Serial Number combination is reset to zero when the Item/Serial number combination is 'Returned from Rework'.
- *Max Units Produced Before Inspection:* The SPS application will maintain a running total of the number of Units produced using the Item/Serial Number combination. Define here the maximum number of Units that can be produced using any given Item/Serial Number combination, after which the item/Serial Number combination will be automatically routed to the Rework drawer on return to the Cabinet. The current running total value for the number of units produced by an Item/Serial Number combination is reset to zero when the Item/Serial number combination is 'Returned from Rework'.
- *Audio File On Quantity Selection:* Audio file notifies the operator of their numerical selection; providing them with audible advice or warnings that the administrator has recorded in a Waveform Audio File Format Audio File (.wav).
- *Audio File On Drawer Open:* Audio file notifies the operator that a drawer is ready to be opened; providing them with audible advice or warnings that the administrator has recorded in a Waveform Audio File Format Audio File (.wav).

- *Minutes Since Last Withdraw:* The duration during which a warning will be displayed to a User if they select to Withdraw an item that has recently been withdrawn by another User who belongs to the same User Cost Center selected for the current transaction.
- *Extended Information Field (1-5):* Allowing for additional information required on an item; these fields are available for reporting purposes only and do not appear in the User Interface. These fields would commonly be used for additional information required on Usage or Purchasing reports as well as with reports used for system integration.

You will be prompted to establish the location(s) where the item will exist upon saving. Select the location(s) you wish to store the item in and click **OK**.



Location Specific Details

As stated previously; items can be assigned to multiple Vending Machine/Crib locations; with each location or point of issue possessing the ability to have properties (e.g.) Minimum and Maximum stock levels, Returnable, Ticketable, etc.).

- *Location:* Shows the current location for which you are editing the attributes.
- *New Minimum Qty:* The minimum number of the item that you want to have on hand; this will help with ordering. **Recommended**
- *Maximum Qty:* You can use the drawer capacity as the item maximum if you wish. Otherwise, fill in this field so that the system can correctly calculate an order quantity. **Recommended**
- *Critical Level:* This is a number you can use to have the system inform you that stock levels are critically low for this item.
- *Used Minimum Qty:* Enter the minimum number of used pieces of the item you want on hand. This can be used to see if items are being returned properly or to help track your rework processes.
- *Rework Pickup Level:* Enter the maximum number of this item that should be in the machine for rework at any given time.

- *Do Not Order*: Items will not be ordered. This can be used if the item is seasonal or order occasionally.
- *Is Swappable*: This allows swap rules, requiring the return of previously withdrawn units of the item before new ones can be taken.
- *Swap Qty*: This is the quantity that must be returned in a swap transaction. Your issue quantity should be at least this number.
- *Swap by User*: This enforces swap rules on a user basis. If not enabled then a user will not be able to withdraw a swappable item if any other user already has the swap quantity checked out.
- *Swap by Job*: This allows the user a little leeway by enforcing the swap rules on a job-by-job basis.
- *Swap by Machine*: This allows the user a little leeway by enforcing the swap rules on a machine-by-machine basis.
- *Ticketable*: Check this box if you intend to issue receipts for this item.
- *Can Be Returned, Rework or Scrap*: Check these boxes if you want users to be able to return, rework or scrap the item.
- *Weighable*: Check this box if you intend to allow use of scales to measure quantities of the item.
- *Priority Status*: Check this box to make the item available using the Priority Withdraw transaction privilege.
- *Rework User/ Rework User Group*: Enter the name of the User or User Group responsible for reworking the item.
- *Scrap User/ Scrap User Group*: Enter the name of the User or User Group responsible for scrapping the item.
- *Life Tracked*: Check this box if you are going to track the tool life of this item.
- *Initial Life*: Enter the expected life of the item here.
- *Minimum Life*: Enter the minimum number of remaining lives that the tool can have and still be withdrawn for use.
- *Is Free Issue*: For items that don't require the control of actual quantities; making the Item *Free Issue* allows users to Withdraw items without selecting a quantity. Items reach a reorder point when Users notify the User Interface the current location no longer has stock. This is recommended for controlling items stored in their thousands such as rivets and screws where usage information of individual quantities is not required, but avoiding stock-outs is a requirement.
- *Owned Qty*: This is for situations when a company switches from buying outright to consignment. If any of the items are owned from previous purchases enter the quantity here.
- *Quickfill Restock Qty*: For reporting purposes; the Quickfill Restock Qty. implies an issue quantity that can then be used by the integrated ERP/MRP system to deliver a quantity that is a multiple of the quantities stored per location in the Vending Machine/Crib.

- *Disable on Withdraw*: Items checked will appear in the Item list of the User Interface for Withdraw; but when selected will display a message telling the User stating the item is unavailable and to contact the System Administrator.
- *Needs Verification Code*: Forces Users to submit a formatted Verification Code upon selecting an item. The format of the Verification Code is determined by the *Item Verification Code* parameter. Limited use – please contact Supply Point Systems with any enquiries.
- *Countersign*: Before the location for an item can be unlocked a second User must verify their presence at the system by submitting their login credentials. Both the primary and secondary Users are recorded against the transaction to provide enhanced accountability for sensitive or expensive items.
- *Countersign Qty*: The point at which the Countersign check is applied. If the transaction quantity is less than the Countersign Quantity the check will not be applied; unless the User has the *Force Countersign* attribute checked. A quantity of 0 means the countersign check is applied on every transaction for the item.
- *Is Countable*: This setting allows the user to count the remaining quantity of an item during a withdraw transaction, where the compartment quantity is greater than 1.

Editing Location Specific Details

For an explanation on how to edit Location Specific Details for Items; refer to the [Editing Location Specific](#) details section within the previously covered [Location Specific](#) Details section.

Use of Item Photos

Item photos can be of immense use. The key purpose is to ensure that the user does not withdraw the wrong item. Assuming that the user has a basic familiarity with the item he seeks, having a picture of the item allows him to cancel his transaction before withdrawing the wrong item. The process of adding item photos is identical to adding user photos, as described above. Take the following steps:

1. Copy the photos to the SupplyPoint™; the default directory is C:\PROGRAM FILES\SUPPLYPOINT\GRAPHICS\ITEMS or D:\GRAPHICS\ITEMS. You can, however, use any directory you wish. Simply change the setting in Parameters that is called *Directory containing Item pictures*. If choosing another directory, bear in mind that a local directory is generally better than a network directory. There are two reasons for this. Firstly, when pictures are on the network the machine must access the network each time a user logs in, which can slow the SupplyPoint™. Secondly, if the network goes down, pictures will be unavailable.

2. Start the SupplyPoint™ Utilities and enter Machine Setup if you have not already done so.
3. Enter Items setup.
4. Select the item to be configured and press the edit button or double-click on the item.
5. Either enter the name of the photo file in the slot labelled *Image file* or browse to it.
6. Be aware when assigning graphics from a client PC that the graphics are by default stored on the SupplyPoint™ in one of the above directories. When browsing in this scenario you will be browsing over the network to a path similar to \\PCNAME\\SupplyPoint\\Graphics\\Items.
7. Save the changes to the item.

Expiry Date Reset Value

The expiration date reset value is used in conjunction with the item settings *can expire* and *can be returned*. A value entered in the expiry date reset value will reset the expiration date of an item on withdrawal. This can be useful when an item has a different life expectancy after it has been used.

At a basic level, when a numerical value (which equate to days), is entered into the *Expiry Date Reset Value* field, the expiration date will be reset taking the date of withdrawal plus the value entered. For example; current expiration date is 01AUG and the expiry date reset value is 5, on withdrawal the new expiration date for the item would be 06AUG.

If the customer wants a greater level of control over what the Expiry Date is set to then they can specify an End Of X value.

- EOY = End of Year
- EOM = End of Month
- EOW = End of Week
- EOD = End of Day

The customer may also configure the number of Years, Months, Weeks, Days, Hours and Minutes that gets added to the End of X value, using the pipe character '|' to separate the fields. If the required date and time was; 13:30 on the second day of the third week of next month the value would be as follows;

EOM|0|0|2|1|13|30

If a customer puts the correct numbers of pipes in place but doesn't submit a number then the value is assumed to be 0. For example:

EOD| |0|1|12|00 would be assumed as EOD|0|0|0|1|12|00

If the correct pattern is not entered correctly the expiration date will not be reset and the current expiration date will continue to be in use.

n.b. The start and end of week will always be;

- Start of week is Monday.
- End of week is Sunday.

Returning Items

The Return function is intended to allow users to Return non-consumable items to the SupplyPoint™. It is not intended as a method for users to correct mistakes in Withdraw transactions. While it can easily be used for this function, this type of use presents special hazards. To use the Return function to the fullest you will need to do the following:

- The box labelled *Can be Returned* in the *Location Specific Details* section in *Items* setup must be checked;
- If items are being returned as a content type other than the type of the drawer from which they were issued (i.e. New Items being returned as Used) you will need a location able to receive the item;
- Users will need appropriate transaction privileges (Return to New, Used, and/or General).

New and Used Items

You can use the SupplyPoint™ to track New and Used items separately. Used items can be items that have been withdrawn and slightly used or items that have been re-sharpened in some fashion. In order to use this ability to the fullest, you will need to do the following:

- The box labelled *New/Used Sensitive* must be checked for each item that will have New and Used versions;
- You will need to assign New and Used locations to each item in *Drawer Configuration*;
- You may want to enter a *Used Unit Cost* in *Items* setup if you are going to track the different prices;
- In order to force users to take Used items, you need to check the box that says *Dispense Used First* in *Users* setup;
- Users will need the transaction privilege to Withdraw Used.

Rework and Scrap Items

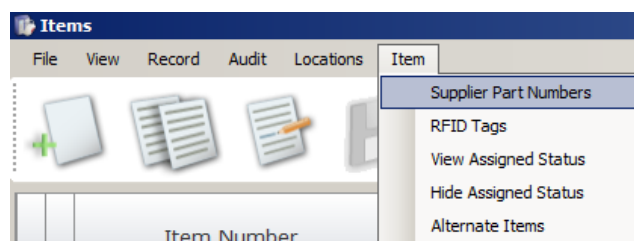
The SupplyPoint™ is also capable of tracking items through the process of reworking and scrapping items. Setup requires the following:

- The box that says *Can be Rework* (or *Can be Scrap*) in the *Location Specific Details* section in *Items* setup must be checked for each item that will be tracked this way;
- If you are using a Rework (or Scrap) bin, you will need to assign each item to be tracked a Rework (or Scrap) User or User Group;
- You will need a location in the Vending Machine/Crib to take the items awaiting Rework (or Scrap)
 - If it is a **bin**, it's owner will need to be the Rework (or Scrap) User or User Group for the items to be stored there;
 - If it is a **drawer**, the items will need to be assigned just like any other drawer.
- If the item is to be returned from Rework and considered Used, you will need a Used location for the Item;
- Users will need the transaction privileges to Return to Rework (or Scrap);
- Users handling the Rework (or Scrap) will some combination of the following: Pickup Rework (or Scrap) from Bin; Pickup Rework (or Scrap) from Drawer; Return from Rework to New, Used and/or General; Return from Rework to Scrap.

Item Menu

Supplier Part Numbers

It is sometimes the case that there multiple Suppliers for the same Item. While SupplyPoint™ ordering does not allow for this, it is possible to Restock items and indicate that they came from different Suppliers. This information is entered in the *Supplier Part Numbers* function on the *Items* menu.



1. Select the item in the data grid of Items setup.
2. Select *Supplier Part Numbers* from the *Item* menu.
3. Enter the additional Supplier Part Number in the appropriate place.
4. Select the Supplier from the *Supplier Number* drop-down box.
5. Press **ADD** to insert the new Supplier Part Number.
6. Add any other numbers needed and press **CLOSE** to exit the function.

Description	Supplier Number	Supplier Part Number
MSC	MSC	12345

Remove

Supplier Part Number: 12345

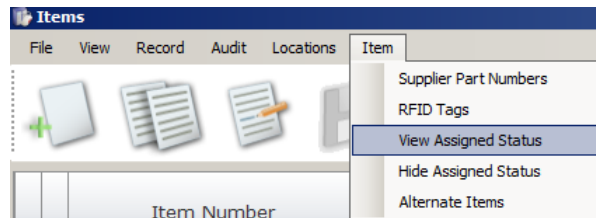
Supplier Number: MSC (MSC)

Add Close

View Assigned Status

This function is also accessed from the *Item* pull-down menu. Selecting it will cause the item entries to change colour according to their assigned status.

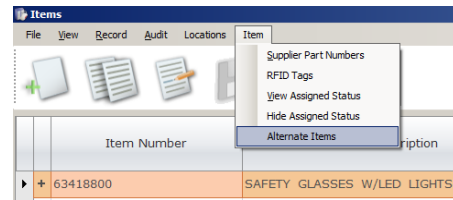
- Items assigned to locations within the SupplyPoint™ range will remain white.
- Items not assigned to the SupplyPoint™ appear in red.
- Key controlled items will appear highlighted yellow.
- Items located in an External Location/Crib will be highlighted blue.
- Those items assigned to a location within the SupplyPoint™ range and also assigned to an External Location/Crib will appear highlighted green.



Alternate Items

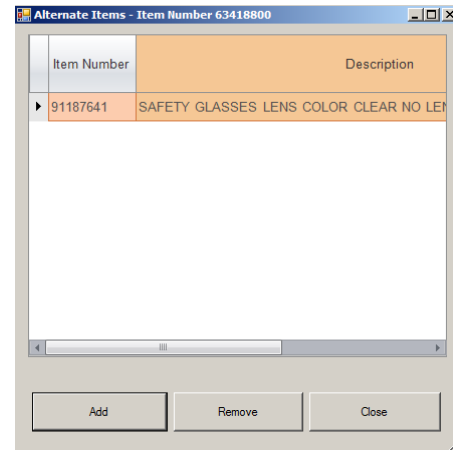
As previously stated, alternate items can be assigned to other items. When an item is out of stock users can view the list of available alternate items. To configure alternative items:

1. Select an item then select *Alternate Items* located within the *Items* tab.
2. A Pop-up window will appear showing the current items that are assigned as alternate.



Select the *Add* button to search the item grid.

3. Select an item, then *save* to assign the item as an alternate. Once the item appears in the *Alternate Item* window, the item is fully configured as an alternate.



Item Groups

Item groups promote efficient use of the SupplyPoint™ by allowing users to locate items faster. In the User Interface, a user can select an item group and see only the items that are part of that group. For large item groups, you can also set up sub-groups, further narrowing the search in the User Interface. In order for Item Groups to work properly, you need to do two things:

- Create the Item Group (or sub-group- see below), following the general procedure for creating database elements;
- Add items to the group (or sub-group) in Items setup.

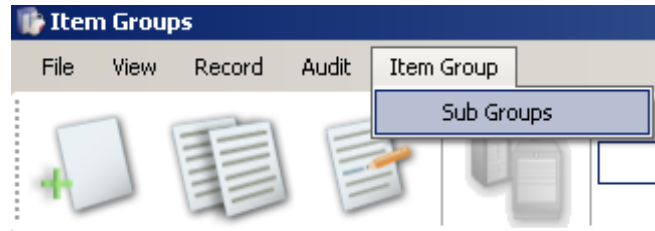
Item Groups only work if set up in a logical and consistent manner. Consider the following:

- If you have several different kinds of items in the machine (e.g. inserts, taps, endmills), make these your item groups. You may not gain much by breaking your inserts, for instance, into milling, turning, lathing etc. at this level. The idea is to reduce the number of items a user sees at each step.
- Use sub-groups to subdivide large groups of items.
- Be logical in determining your sub-groups. Make sure that the divisions make sense for the end user.
- Have as few of each as possible; remember the more entries you have, the more selections an end user has to go through.

Item Sub groups

To create an item sub-group, take the following steps:

1. On the Item Groups screen select *Sub-group* from the *Item Group* menu.
2. In the screen that follows, use the general procedure for creating database elements.



Suppliers

These are the organizations that provide the items stored in the SupplyPoint™. Items can then be assigned to a supplier and users can be set up for secure multi-vendor access. Like *Items* setup; Supplier information is divided into 2 categories, Base Data and Location Specific Details. The information in the Location Specific Details section allows you to configure different ordering rules for a Supplier, dependent on the vending machine/crib items are located in. Offering this flexibility enables tailored ordering calculations to suit the individual nature of distinct locations.

Supplier Data Fields

There are a few base fields and several fields that determined the purchasing behaviour for items supplied by the specific supplier.

- **Base Fields**
 - *Supplier Number*: This is the unique alphanumeric identifier for each Supplier. It is recorded in the Transaction Log. **Required**
 - *Description*: Usually, this is the Supplier's full company name. **Required**
 - *Address Line 1*: Used to store address information for the supplier.
 - *Address Line 2*: Used to store address information for the supplier.
 - *Address Line 3*: Used to store address information for the supplier.
 - *Address Line 4*: Used to store address information for the supplier.
 - *Image File*: This can be used to insert a logo or other graphic in any instance that items from the supplier are withdrawn, restocked, etc. The folder for these graphics is by default C:\PROGRAM FILES\SUPPLYPOINT\GRAPHICS\SUPPLIER IMAGES
- **Location Specific Details and Purchasing Fields (These fields are used to determine the parameters of an order for each Supplier)**

- *Location*; Shows the current location for which you are editing/viewing the attributes.
- *Rounding Rule*: Determines whether the order quantity should be rounded up, down or not at all
- *FTP Upload*: By default this is set to "Order File" which means the order file will be sent during an FTP transmission. This is the only option for this field but is listed because in past versions the database could be uploaded to the same location as the order file. This can now be handled with the Automatic File Transfer feature.
- *Order Below Req*: This field can be "Order Below Minimum" or "Order Below Maximum".
- *Max Def*: Determines what the maximum is defined as. Choices are "Capacity" or "Item Maximum". This is important because this is used to determine the order quantity. The system will try to fill to the maximum level. See the section on ordering for a fuller explanation.
- *Allow Round to Zero*: If the Rounding Rule is set to "Round Down", this determines if order quantity should be allowed to be rounded down to zero.
- *Factor Used*: Check this option if you wish for the on hand "Used" quantity to be added to the "New" on hand quantity when determining the total on hand quantity.
- *Include Used Qty in Total On Hand Qty*: Used inventory can be used in order calculations
- *Customer Number*: This is usually an account number that identifies the customer (user of the vending machine) to the supplier.
- *Order File Format 1*: The primary file format that the order file will be sent as. The following types are:
 - **General** - A basic man-readable text file with the following fields: Item Number, Item Description, Order Quantity, Unit Cost and Line Cost
 - **General2** - The same as the General format but with the Alias field added to the order file
 - **General New** - Same as the General2 format but with the Supplier Part Number field added.
 - **Generic PDF and Generic CSV** - Same fields as the General New Format
 - **Traditional PDF**
 - **General XML** - basically the same format with some modifications.
 - **KMTL** - Specific to KMTL
 - **KMTL CSV** - Specific to KMTL

- **MSC** - Specific to MSC (formerly referred to as the J&L format)
 - **MSCXML** – Specific to MSC
 - **MSCXML2** – Specific to MSC
 - **JobBOSS** - Used for interfacing with the JobBOSS. Usually used as the secondary file format so that purchase orders sent to a specific supplier can also be automatically duplicated in the JobBOSS system. Contact technical support for more information on the JobBOSS interface.
- *Template 1:* The primary electronic transmission template that is used to send the order file. See section on Electronic Transmission of Reports and Orders for more explanation.
 - *Order File Format 2:* A secondary file format that the order file will be sent as.
 - *Template 2:* The secondary electronic transmission template that is used to send the order file.
 - *Current/Default PO:* The default and current Purchase Order. When an order is next transmitted (automatically or manually) this will be the purchase order used. If transmitting manually you will have an option to change it.
 - *Current/Default Release:* The default and current Release Number. When an order is next transmitted (automatically or manually) this will be the purchase order used. If transmitting manually you will have an option to change it. After an order is placed, this number will be incremented automatically (manual or automatic transmission).
 - *Order Report Title:* Set a report title you wish to see on the order file for this supplier.
 - *Header Notes Print:* Notes that will appear in the header of the printed copy of the order file.
 - *Header Notes No Print:* Notes that will only appear in the header of the transmitted order file. These do not show up on the printed copy.
 - *Detail Notes Print:* Notes that will appear on every line of the printed copy of the order file. These can be changed when the order is being generated.
 - *Detail Notes No Print:* Notes that will appear on every line of the transmitted copy of the order file. These can be changed when the order is being generated.
 - *KMTL Order Type:* For Kennametal orders only. See your Kennametal rep for more information.

Editing Location Specific Details

For an explanation on how to edit Location Specific Details for Items; refer to the [Editing Location Specific details](#) section within the previously covered [Location Specific Details](#) section.

Jobs

Jobs is the name given to one of the first selection objects that a User is presented with after pressing **WITHDRAW**. It can be renamed in *Terminology* to reflect local needs. Jobs can either be entered via SupplyPoint™ Utilities (or an Excel import) or they can be created “on the fly” by vending machine users. Allowing users to create jobs is not without risk; if unchecked, users will be able to enter anything they want in the job field. A contract date can also be established to help track the timing of jobs. Jobs can also be set to expire, for jobs that are operational for a finite period. The following are some notes on the use of Jobs that you may want to consider. Not using Jobs? Make sure that the Parameter setting *Jobs- In use* is set to “0”.

Location Assignments

Before a User can login to the User Interface, regardless of the value of the *Allow To Login* attribute; users should be given their Location Assignments.

For details on how to create/modify Location Assignments please refer to the [Location Assignments](#) section detailed previously.

User-created Jobs

The following Parameter settings are related to user-created jobs and their locations:

1. *Jobs-Must already exist when entered, else they are creatable by VM users.* If this entry is set to “1”, the only way to enter a new Job into the database is through the SupplyPoint™ Utilities or by an Excel import. If the value is set to “0”, users can create jobs at the vending machine.
2. *Jobs-User created must be this length.* This is your first defence against incorrect entries. If all job numbers are of a certain length, enter that number in this field; only jobs of that length will be accepted.
3. *Jobs- User created must start with this text.* This is a second defence against incorrect entries. If the jobs will begin with a character or string of characters, enter that information here; only entries that begin with that text will be accepted.
4. *Jobs- Semi colon separated list of edits.* This is for use when a barcode scanner is employed to scan job numbers. When combined with numbers 2 and 3 above, the chances of a bad job number being entered are very small. That chance can effectively be cut to zero by disabling the User Interface keyboard

using the *GUI- Disallow Keyboard throughout application* setting. For information on configuring this parameter setting, see [Configuring Cards](#) above.

Date Ranges

As was mentioned above, Jobs can be set up to run for certain date ranges. This would ensure that users could not select a Job that is no longer being run. Jobs that are expired can be purged using the Purge Jobs function. Furthermore, the date range allows you the flexibility to create Jobs ahead of time and have them appear on the list at the prearranged date. Take the following steps to establish a date range:

1. Enable date ranges by changing the Parameter setting *Jobs- Enable Validity Date Range Check* to "1".
2. Create the Job in Jobs setup.
3. Check the box that says *Date Range Enabled*.
4. Enter the Start Date and the End Date.
5. Save the new Job entry.

Machines

Machines is the name given to the selection object following Jobs in the Withdraw process. Like Jobs, Machines can be renamed in Terminology, entered by users or ignored. A purchase date can be established. Machines can also be set to expire, for jobs that are operational for a finite period. Parameter settings work in the same manner as those for Jobs.

Location Assignments

Before a User can login to the User Interface, regardless of the value of the *Allow To Login* attribute; users should be given their Location Assignments.

For details on how to create/modify Location Assignments please refer to the [Location Assignments](#) section detailed previously.

User-Created Machines

The following Parameter settings are related to user-created jobs

1. *Machines-Must already exist when entered, else they are creatable by VM users.* If this entry is set to "1", the only way to enter a new Machine into the database is through the SupplyPoint™ Utilities or by an Excel import. If the value is set to "0", users can create machines at the vending machine.
2. *Machines-User created must be this length.* This is your first defence against incorrect entries. If all machine numbers are of a certain length, enter that number in this field; only machines of that length will be accepted.
3. *Machines- User created must start with this text.* This is a second defence against incorrect entries. If the machines will begin with a character or string of characters, enter that information here; only entries that begin with that text will be accepted.
4. *Machines- Semi colon separated list of edits.* This is for use when a barcode scanner is employed to scan machine numbers. When combined with numbers 2 and 3 above, the chances of a bad machine number being entered are very small. That chance can effectively be cut to zero by disabling the User Interface keyboard using the *GUI- Disallow Keyboard throughout application* setting. For information on configuring this parameter setting, see [Configuring Cards](#) above.

Date Ranges

As was mentioned above, Machines can be set up to run for certain date ranges. This would ensure that users could not select a Job that is no longer being run. Furthermore, the date range allows you the flexibility to create Machines ahead of time and have them appear on the list at the prearranged date. Take the following steps to establish a date range:

1. Enable date ranges by changing the Parameter setting *Machines- Enable Validity Date Range Check* to "1".
2. Create the Machine in Machines setup.
3. Check the box that says *Date Range Enabled*.
4. Enter the Start Date and the End Date.
5. Save the new Machine entry.

Job and Machine Groups

Job Groups and Machine Groups exist more for administrative reasons; they are largely invisible to the user. But they are no less effective for this. You can use Job and Machine Groups in Restrictions and Rationing, for instance, allowing you to restrict users to a particular set of Jobs and/or Machines in one stroke. For instance, a set of Machines can be grouped together as a cell, with users restricted in the tooling they use accordingly. They are also powerful accounting tools. Reports can then be created, detailing costs for the entire operation, instead of the individual machines within the operation.

Auxiliary Fields

The SupplyPoint™ software has three additional tracking fields that can be used to capture information about Withdraw and Return transactions. By default the fields are labelled *Auxiliary Field 1*, *2* and *3* but can be renamed just as with jobs and machines. For example, *Auxiliary Field 1* could be renamed to *Operation*. Each of the Auxiliary fields also has a description and alias field as a part of its definition that can also be renamed. Each of the Auxiliary Fields can be individually enabled or disabled just as with jobs and machines. If enabled, the selection screen for these fields will appear in the user interface after the machine selection screen. The data for these fields can be created and edited by logging into *Machine Setup* and clicking the appropriate icon as shown to the right. It is also possible to configure various parameters for the Auxiliary fields such as the *Must exist* and *Defer Showing Full List* parameters. The parameters for these fields can be found under the *User - Job - Machine* tab in *Parameters*. The fields are also available in all the transaction reports. At this time, *Restrictions* and *Rationing* cannot be applied to these fields.

Location Assignments

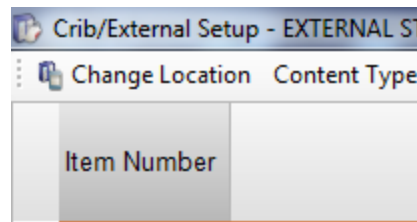
Before a User can login to the User Interface, regardless of the value of the *Allow To Login* attribute; users should be given their Location Assignments.

For details on how to create/modify Location Assignments please refer to the [Location Assignments](#) section detailed previously.

Crib/External Setup

This function allows you to control the tool cribs and external locations you want to maintain. You can assign items and edit inventory levels. Double-clicking on the icon will show you items assigned to whichever crib or external location you last viewed. Here's how you manage your external inventory in this screen.

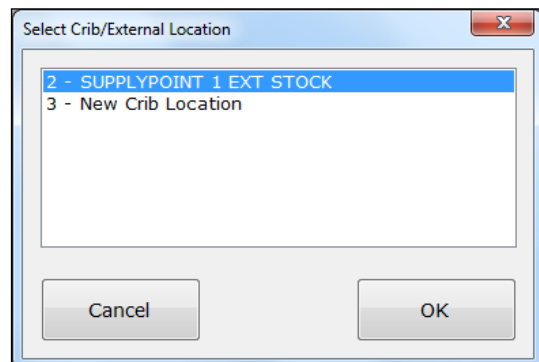
Press *Change Location* in the top left corner if you need to select another external location. A list of the available locations will appear.



Select the location you want to edit.

Press **OK** to switch to that location.

The main Crib/ External setup screen will show the items currently assigned to that location. You can edit by double-clicking, or press *Add Item* if you want to place something new there.



A list of the items available to be stored in that location will appear. Double-click on the item you want to store in this location.

Item Number	Description	Alias	Item Group	Item Sub Group	Supplier Pa
1/4-284FPH3	1/4 INCH 4 FLUTE TAP		TAPS		
16ER12UNJKC5010	INSRT,CRB,EXT J THRD,L/D,3/8IC,1		INSERTS		
16ER12UNJKC730	INSRT,CRB,EXT J THRD,L/D,3/8IC,1		INSERTS		
16ER16UNJKC5010	INSRT,CRB,EXT J THRD,L/D,3/8IC,1		INSERTS		
16ER16UNJKC730	INSRT,CRB,EXT J THRD,L/D,3/8IC,1		INSERTS		
16ER18UNJKC5010	INSRT,CRB,EXT J THRD,L/D,3/8IC,1		INSERTS		
16ER18UNJKC730	INSRT,CRB,EXT J THRD,L/D,3/8IC,1		INSERTS		

You will then be asked to specify the content type for each item. Select *New*, *Used* or *General* based on your preferences or needs. Press **OK** to continue.

Specify Type

☒ New ☐ Used ☐ General

OK Cancel

External Stock Item Data

Item Number : 1/4-284FPH3

Max Qty: 1 Current Qty: 0

Disp Qty: 1

Location: [Empty dropdown menu]

Cancel OK

You will then be asked for the Item Data for the location. Enter the following:

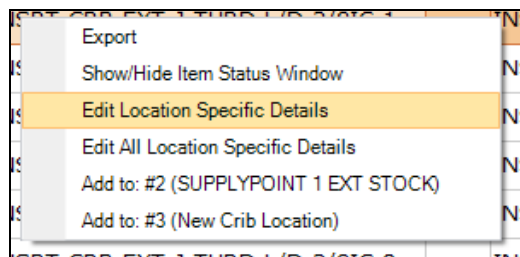
- *Max Qty*: The maximum number of pieces that will be stored there.
- *Current Qty*: The number of the item currently stored in the location.
- *Disp Qty*: The number of the item that will be dispensed in each transaction.

- **Location:** This is a way to let users know where to find the item in the external location.

Press **OK** to save the changes. The new item will now appear on the screen. It is also possible to assign an item to more than one location in the same crib/external stock area. If items are stored in multiple locations, or bins, within a store room; each bin location can be recorded independently and have its own individual values configured. The example below shows numerous items appearing in multiple locations, all with the same content type – New.

Crib/External Setup - 9 DOCK(VFS)							
Change Location Content Type New Add Item Remove Item Edit Withdraw Return < > Close							
Item Number	Description	Content Type	Item Group	Current Qty	Max Qty	Disp Qty	Location Text
990751017	OILER PUMP HAND 150ML CAPACITY	New	HAND TOOLS	3	3	1	VFS3 CAROUSEL
990751017	OILER PUMP HAND 150ML CAPACITY	New	HAND TOOLS	4	4	1	VFS2 CAROUSEL
991018571	CAP PROTECTIVE PLASTIC RED 3/4" BSP	New	PLUG/CAP	2	2	1	VFS3 CAROUSEL
991018571	CAP PROTECTIVE PLASTIC RED 3/4" BSP	New	PLUG/CAP	19	19	1	VFS2 CAROUSEL
991026989	CAP PROTECTIVE DUST 1" BSP POLYTHENE	New	PLUG/CAP	7	7	1	VFS2 CAROUSEL
991026989	CAP PROTECTIVE DUST 1" BSP POLYTHENE	New	PLUG/CAP	5	5	1	VFS3 CAROUSEL
991202537	BRUSH WIRE 6" 12" STEEL WIRE WOOD	New	ABRASIVE	14	14	1	VFS3 CAROUSEL
991202537	BRUSH WIRE 6" 12" STEEL WIRE WOOD	New	ABRASIVE	48	48	1	VFS2 CAROUSEL
991202714	DRILL BIT 1/2" 2 FLUTE 1/2" 2 FLUTE 1/2" 2 FLUTE	New	DRILL BIT	10	10	1	VFS2 CAROUSEL

Another way to assign items to a crib or external location is through a shortcut menu within Items. Go into items and right-click the desired item to get a pop-up menu as shown below.



Select one of the options that starts with “Add to:” menus. There will be one for every external/crib location in the system. You will then be prompted for the type and location data exactly as if added from the Crib/External Setup window (see above).

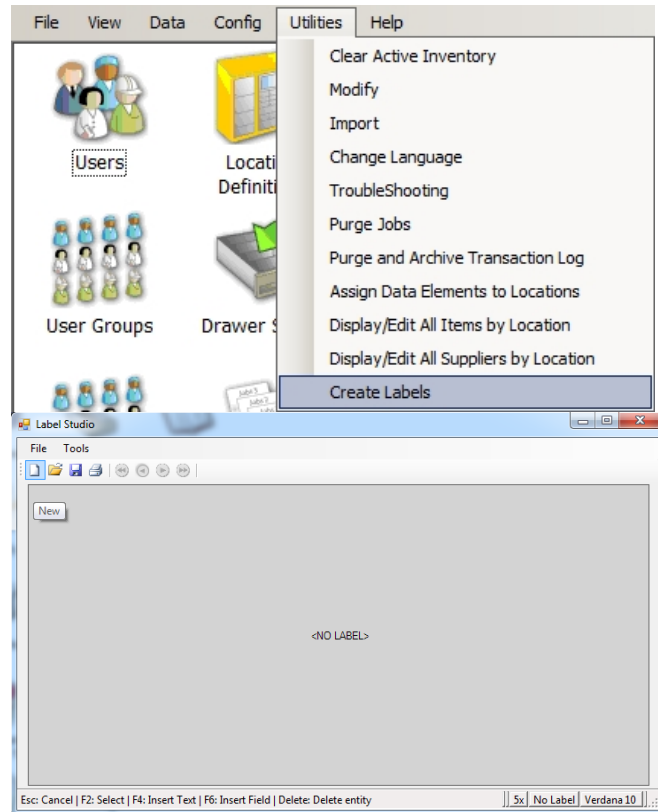
Ticket Printers and Crib/External Stock

Use has shown that External stock is one of the best uses for a receipt printer. This is especially true when the location being controlled is not right next to the SupplyPoint™. By using the **LTEXT** key in the *TicketText* of the TICKET.INI file, the information entered as the item location will be displayed on the ticket. This can be

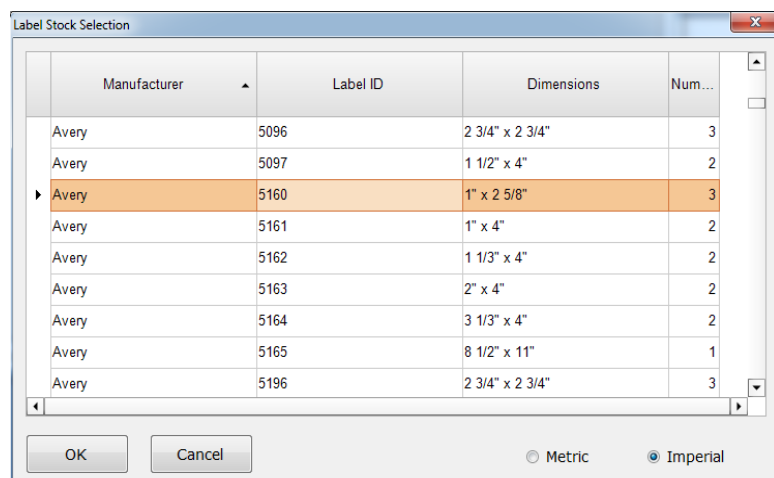
referenced by the user in his search for the item, or can be given to a tool crib attendant for items that are stored in tool cribs. Alternatively, the receipt can print to a printer in the tool crib, allowing the attendant to retrieve the item in a more timely fashion.

Creating Barcode Labels

Machine Setup now has the ability to generate labels for use in labelling storage locations in a crib. This can be done for a variety of data sources in the system such as raw item data, item-location data, job data machine data and user data. To access this feature login to *Machine Setup* and select the *Utilities* → *Create Labels* menu option. This will bring up a Label Studio window where you can design your own label. When it first starts up it will be blank. You first need to select a label stock to use (i.e. Avery label template) or enter the dimensions of a customer label. Click the New button at the top left or choose the *File* → *New* menu.

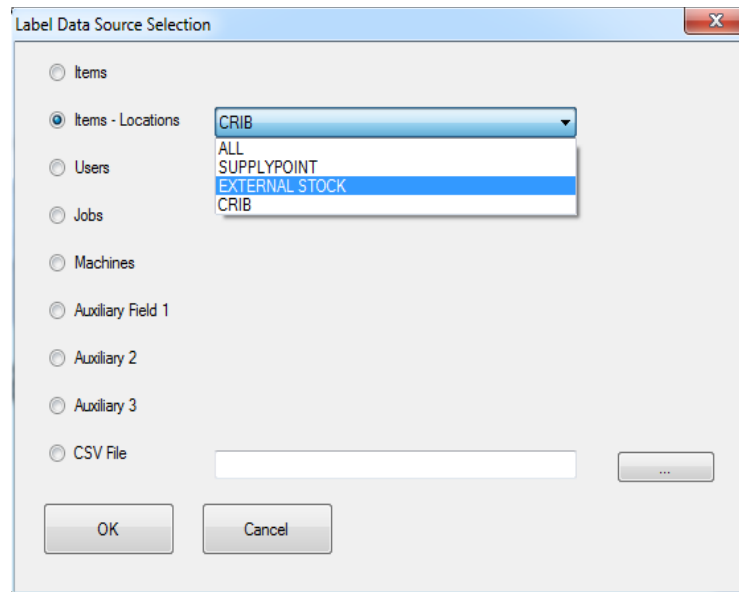


Now select from one of the available label types. We've built a database of several industry standard label templates to choose from. You will be able to see the manufacturer label id, the dimensions of the label and the number of labels on each page. In this example, we've chosen and Avery label with 30 labels per page.

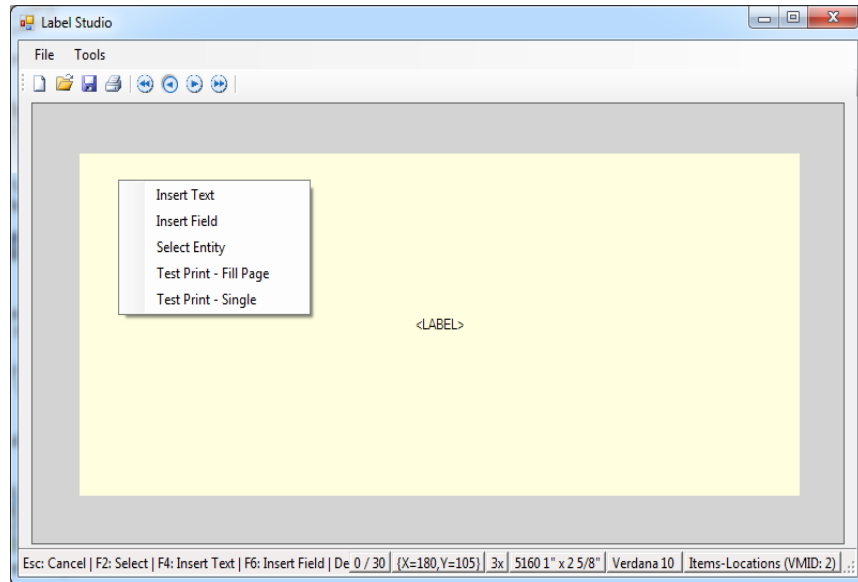


Click OK and you will be able to choose the data source to generate labels from.

In this example, we will choose item with location data just for the “CRIB” location.



In the bottom right of the label studio, it will display the type of data source being used as well as for which specific location or all locations. To start designing the label right-click anywhere in the blank space of the label and a pop-up menu with several choices will appear.



The choices are defined as follows:

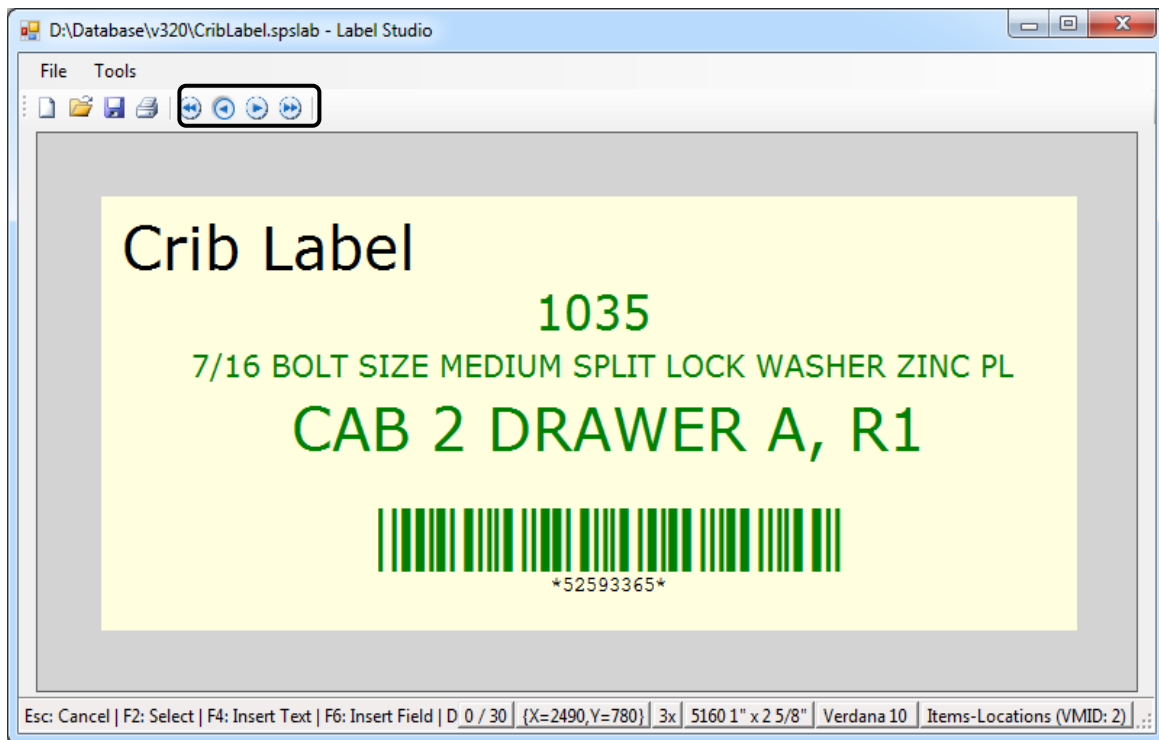
- *Insert Text*: This will allow you to insert fixed text on the label. An example might be a title for the label. This text will be the same for every label. The text will be inserted on the label where ever you right click your mouse.
- *Insert Field*: This will allow you to insert a field based on the data set selected. For example, item number, description, alias, location text etc. The field will be inserted on the label where ever you right click your mouse.
- *Select Entity*: This will allow you to select on the entities (field or text) already on the label for moving or modification.
- *Test Print - Fill Page*: This will print a single test page laying out all the labels as dictated by the label template used. In this example there will be 30 labels printed on the test page. This will allow you to see how the labels are going to look on the page as well as make sure they do fit properly on your actual label paper.
- *Test Print - Single*: This will print a single label on the centre of the page. This option is useful in making sure your label is readable and looks satisfactory without wasting paper or ink.

Once you insert some text and data on the label it should look something like the label below. If you right-click any of the fields or text on the label a pop-up menu will appear with several choices.

- *Delete*: Deletes the selected text or field.
- *Move*: Allows you to move the text or field. Click the left mouse button when you are satisfied with the position of the entity on the label.
- *Barcode*: Converts the data in the field or text to a barcode (Code 39).
- *Font*: Allows you to modify the font of the data in the field or text.

- *Grow*: Click to increase the size of the text.
- *Shrink*: Click to decrease the size of the text.

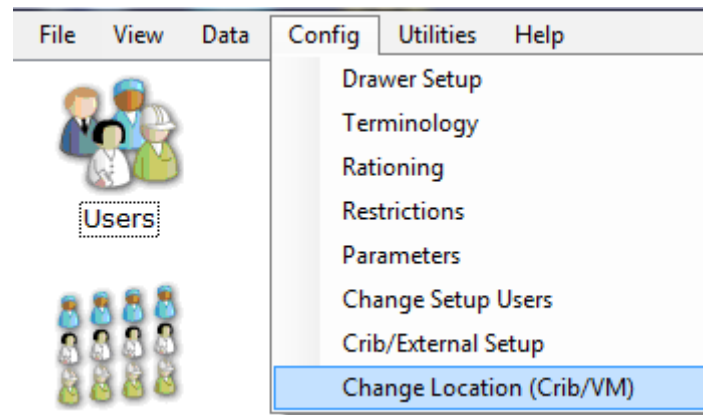
In the above example we will convert the selected field to a barcode. At this point it is important to note that for each data field used, the label editor is picking the longest piece of data it can find for that field. So for example, the item description displayed may not be the description for the item number displayed. This is to ensure that your fields are sized properly and will never overrun the boundaries of the label. Once you have the label designed, you can click the record buttons (circled below) to navigate through the data.



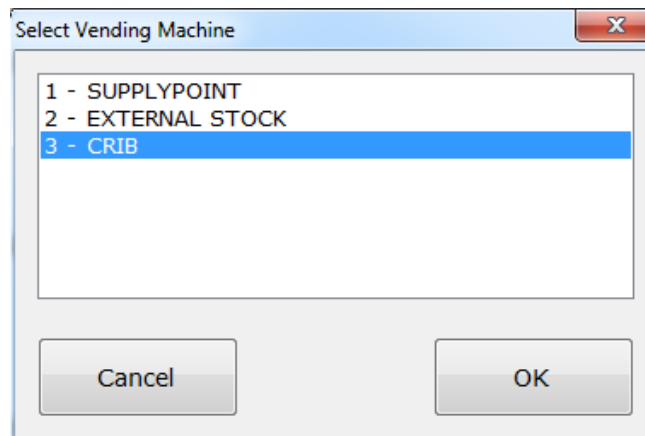
Crib Transactions

In prior versions the user interface was only designed to run on an actual vending machine pc. Now you can set up the user interface to run a basic PC for conducting transactions at a manned or unmanned crib. This can be done in either full screen mode (as it does on a vending machine) or in a windowed mode.

Probably the most common example will be an unmanned crib with a station where users can come and search for their desired items and have the system identify a location within the crib with stock. Once you have setup your external/crib location as discussed earlier, you must make sure the user interface is configured to operate against this location. To do this login to *Machine Setup* and select the Config→Change Location (Crib/VM) menu.



When prompted select the correct location to operate against. Now when the user interface runs it will only make available items in the selected location. Now all transactions will be conducted just as they are on a vending machine. The only difference is the user will have to a "GO" button at the end of each transaction. This is exactly like withdrawing an item from external stock on a vending machine in versions 3.1 and prior.



The second most common example of a crib setup will be a crib with a crib attendant that conducts transactions for the users. In this case the crib attendant will want to capture the user so he doesn't have to know each user's id and password. To configure this scenario, log in to *Machine Setup* and then enter the *Parameters* section. Next go to the *User Interface - Appearance* tab and select the *GUI - Capture User on Withdraw* parameter and enable it.

Parameters	
Vending Machine	SUPPLYPOINT
Authentication	Hardware
Maintenance	Miscellaneous
Multi Language	Rationing and Restriction
System Paths	User - Job - Machine
User Interface - Appearance	
Description	Value
Flush input events while system is busy (Win98/2000/XP only)	0
GUI - Allow selection by supplier part number	0
GUI - Auto minimize keyboard on item select screens	1
GUI - Before selecting an Item, pop up group filter automatically	1
GUI - Before selecting an Item, pop up sub-group filter automatically	1
GUI - Cancel on login screen exits	0
GUI - Capture User on Withdraw	0
GUI - Disable Shopping Basket on Restock	0
GUI - Disable Shopping Basket on Return	0
GUI - Disable Shopping Basket on Withdraw	0
GUI - Disallow Keyboard on User login	0
GUI - Disallow Keyboard throughout application	0
GUI - Do not use Red	0

When the crib attendant logs in, they will now have an opportunity to select a User before the job, machine and item selection screens. Only Users who have the *Allow To Login* attribute checked will appear on the list for selection. When the *GUI - Capture User on Withdraw* parameter is enabled, the selected Users details will be logged against the transaction, and not those of the Logged in User; permitting the analysis of withdraws by actual user.

When the parameter *Users – Semi colon separated lists of edits* is enabled, users can be searched against using their personal ID cards. This speeds up the process of capturing a user during the withdraw transaction.

Below is the screen that will be displayed when the withdraw function is selected.

User	Description
100	SHOP USER
1000	CRIB ATTENDANT 01
200	JOHN SMITH
300	MIKE SMITH
400	DAVE SMITH
500	STEVE SUPERVISOR
600	ROGER REWORK
700	MIKE MANAGER
800	ABC SUPPLIER
900	JEFF JOHNSON

In this particular example where the crib attendant is running the user interface to conduct transactions, he may want the ability to run the user interface in a windowed mode so he can minimize it and then come back to it later. Simply create a shortcut to the SPSUi.exe executable and then right-click the shortcut and select *Properties*. In the Target box make sure “-win” is entered at the end of the line. For example: [“C:\Program Files\SupplyPoint\SPSUi.exe” -win]. When started from this shortcut the user interface will look as follows.

SupplyPoint

Welcome To The SupplyPoint

Please swipe I.D. card to login.

[Input Field]

1 2 3 4 5 6 7 8 9 0 + ← X

Q W E R T Y U I O P #

A S D F G H J K L - ;

Z X C V B N M , . / :

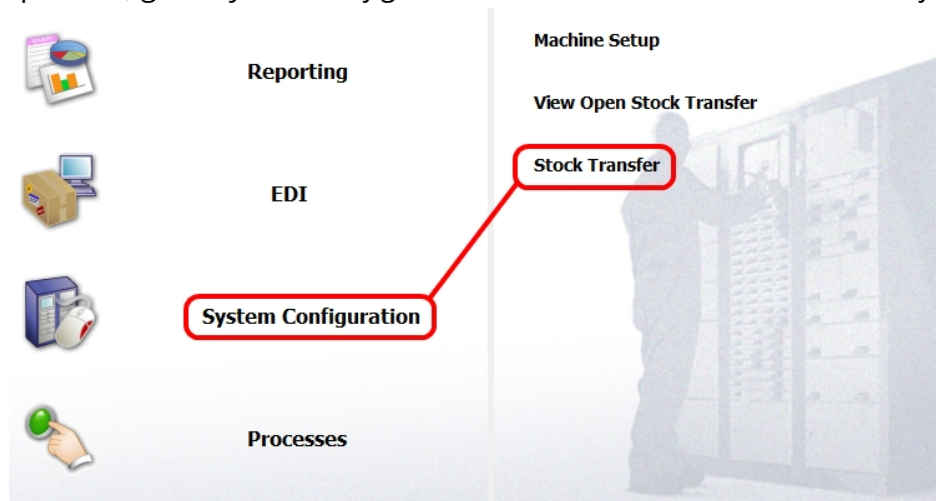
Space

GO

Cancel

Stock Transfer between Locations

One of the most important new features in this new version is the ability to streamline a stock transfer from an external or crib location to a vending machine. This is important because in a scenario with a crib and one or more vending machines, a main crib may carry significant overflow of items normally dispensed through the vending machines. Therefore users will want to distribute as much as possible from the crib to the available vending machines before placing a replenishment order for the crib or any of the vending machines. To start the stock transfer process, go to *System Configuration* in Utilities and then *Stock Transfer*.



Next you will be presented with some options that will define how the list of items to be transferred is generated. Transfers can only originate from crib or external locations. The options are outlined below.

- **Supplier** - You can transfer items for a specific supplier or transfer items regardless of their supplier.
- **From: Source Crib** - Select the location to take the items from. In this example we will use the external stock location
- **To: Target Vending Machine** - Select the vending machine or crib/external location that will receive the items.
- **Item Selection Rules** - These rules work in a similar manner to the rules that define how an order requirement is determined.
 - **Below Maximum** - Try to refill any item in the target location that is below the maximum value (capacity or item max).
 - **Below Minimum** - Try to refill any item in the target location that is below the set minimum for that location.
 - **Max = Capacity** - Indicates that the maximum in the target location is defined as the physically capacity for each item.

- **Max = Item Max** - Indicates that the maximum in the target location is defined as the item maximum for each item.

In this example, we wish to move all items from the “Mill External Stock” Location to the “Milling” vending machine, where the items in the “Milling” vending machine are below minimum. We will also refill to the physical capacity of each item in the “Milling” vending machine. Other factors that the transfer process considers are:

- **On Order Qty** - The transfer process will compensate for any quantity of an item currently on order for the target location.
- **Availability in the Source Location** - Even if an item in the target location is below minimum, it will not show up on the transfer list if there is no availability in the source location.

Click **OK** to start the transfer. A list similar to the following will appear. Just as with an order, you can modify the list by checking or un-checking an item on the list.

Transfer Stock From Crib

Close

Transfer Mill External Stock (2) ==> Milling (1)

Uncheck any items that you do not wish to transfer

Double-click a line to edit the quantity.

Total Cost : \$1,450.96

S...	Item Number	Description	Content...	Qty	Unit ...	Ext Cost	Alias	Supplier P
<input checked="" type="checkbox"/>	00427286	3/16DIA X 9/16LOC X 2OAL X 3/16SH X	N	6	\$18.83	\$112.98	004...	12118751
<input checked="" type="checkbox"/>	07760655	3/8DIA X 1-1/8LOC X 3OAL X 3/8SH X 2...	N	6	\$40.50	\$243.00	077...	6/623370
<input checked="" type="checkbox"/>	07765555	1/8DIA X 1LOC X 3OAL X 1/8SH X 4FL ...	N	4	\$13.77	\$55.08	077...	6/444120
<input checked="" type="checkbox"/>	07766009	3/8DIA X 1-1/8LOC X 3OAL X 3/8SH X 4...	N	1	\$24.09	\$24.09	077...	6/443370
<input checked="" type="checkbox"/>	71115513	5/16DIA X .130LOC X 3OAL X 5/16SH X	N	4	\$84.90	\$339.60	711...	40700411
<input checked="" type="checkbox"/>	74547332	1/2DIA X 5/8LOC X 6OAL X 1/2SH X 3FL...	N	1	\$125.79	\$125.79	745...	113-0327
<input checked="" type="checkbox"/>	76491323	1/4DIA X 1-1/8LOC X 3OAL X 1/4SH X .0...	N	4	\$25.11	\$100.44	764...	6/443250/
<input checked="" type="checkbox"/>	88170972	1/16X2" 1FL CARBIDE DOVETAIL CUTTER	N	5	\$62.64	\$313.20	881...	DT1/16
<input checked="" type="checkbox"/>	TE4V0012015	1/2DIA X 1-1/4LOC X 1/2SH X 2OAL 4FL	N	1	\$50.82	\$50.82	TE4...	TE4V0012

Clear All Select All

Transfer Print

Vending Machine/Location: 1 (Milling) Items to Transfer: 10 Order Type: Below Min

When you are ready to commit the removal of the items from the source location, click the Transfer button. You can also click the Print button to print this list before starting the transfer. It is highly recommended to print the list as it will be used to gather the items from the source location.

Once the system commits this part of the transfer, the stock in the source location will be deducted by the quantities specified. Now gather the items from the source location and proceed to the vending machine or crib to be replenished.

Transaction Filters

The Transaction Filters function allows SupplyPoint™ administrators to create special output files that can be imported into enterprise business systems. **NOTE:** Use of this utility requires a license. These files will be created each time a specified transaction occurs. To create transaction filters, take the following steps:

1. Select *Transaction Filters*.
2. Press the *New Record* button.
3. Fill in the following information.
 - *Filter ID:* Enter the name of the filter;
 - *Description:* Enter the description of the filter;
 - *Filter Enabled:* Check the box to enable the filter;

- *Filter Type*: Choose the type of filter to be created (XML or delimited text);
- *Output Directory*: Enter the directory to which the file should be written. If this is a network location, be sure that the SupplyPoint™ has appropriate permissions to the location;
- *Filename Mask*: Create the file name (*filename#*, where # will be the number- in sequence- of the file);
- *Line Terminators*: Select what will happen at the end of each line of the file:
 - **CR**: Carriage Return
 - **CR+LF**: Carriage Return and Line Feed
 - **LF**: Line feed.
- *Delimiter string*: Select the character that will divide fields shown in the file.
- *Group Output*: When this box is checked, individual transactions that can be grouped will be output as a single file. For instance, when a user withdraws a kit, each item is recorded as having been withdrawn separately in the Transaction Log. With this selected, those transactions will be grouped together as a single output file instead of multiple individual files.

4. Save the filter.

5. Under the *Filter* menu, select *Field List*.

6. Select the fields you wish to save by moving them from the left column to the right column. Adjust the order in which they will be saved by moving them up and down on the right column.



7. Press to continue.

8. Select *Transaction List* from the *Filter* menu.

9. Select the transactions for which this file will be written by moving them from the left column to the right column.

Use of Transaction Filters

This function was added to allow easier interaction between SupplyPoint™ and other enterprise management systems. While this function will output the data according to the customer's needs, it will be up to them to get the data the rest of the way. They will be responsible for writing any import agents necessary to bring the data into their system.

Kits

The SupplyPoint™ kitting function provides a powerful tool that can be used to make gathering the parts needed for a job easier. Creating an association between groups of items in *Kits* setup. Users with the Withdraw Kit privilege can then choose the kit. They will then be directed to each item in the kit by following the lighted drawers.

When working with Kits all configuration for Item and Kit Restrictions are taken into account; ensuring that when the user selects, via the filter options, in the Withdraw or Withdraw Kits transaction, the resulting selection grid is always populated.

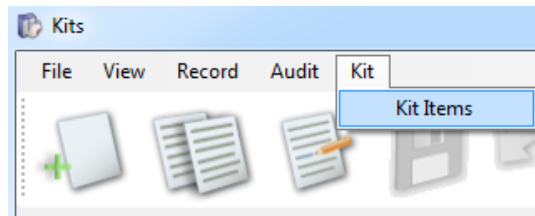
Things to keep in mind with kits:

- The users need the Withdraw Kit transaction privilege;
- The users need the ability to withdraw for whatever content type the drawers containing the items are configured as (e.g. New, Used, and General).
- When the parameter *Restrictions - Apply regular item restrictions to Kit issue* is enabled where allowed Items for kit issue are not defined it is possible that the user could select the menu option withdraw by kit, select the job and kit and then have no access to items required that make-up the kit.
- Where the parameter *Restrictions - Apply regular item restrictions to Kit issue* is enabled and items are defined, in the restriction configuration, the user is not restricted to taking the items which make up the kit only as part of a kit issue; the job and items, which have been specified for kit assembly, also become accessible via the menu option *Withdraw*.

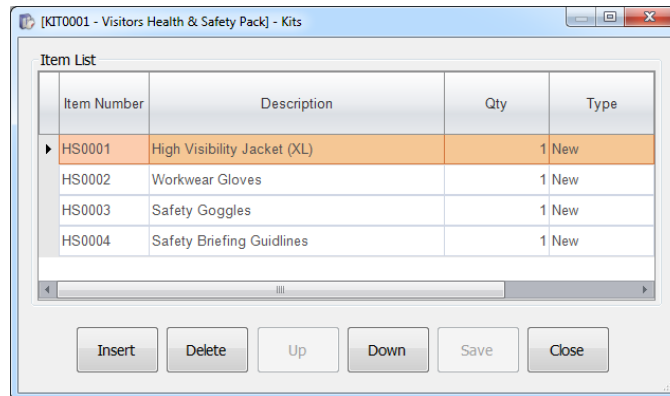
Take the following steps to set up a kit:

1. Select *Kits* from machine setup.
2. Follow the general instructions for creating database elements to create the kit.
 - *Kit Number*: This is the unique alphanumeric identifier for the kit.
 - *Description*: This is a description of the kit in plain English.
 - *Extended Description*: This can contain details that were not included in the kit description.
 - *Part Number*: This is commonly used to tell what the kit makes, or what process it is part of.
 - *Graphic File*: A graphic file that shows the kit.

3. Save the new kit.
4. Select *Kit Items* from the *Kit* menu.
5. Press **INSERT** to begin selecting items for the kit.



6. Select items from the list. You can use **CTRL** and **Shift** to add multiple items.



7. Press the save button to add them to the list.
8. Clicking on the *Qty* or *Type* columns will allow you to edit that information.
9. Use the **UP** and **DOWN** buttons to change the issue orders for items in the kit.

10. Click on an individual item and edit the *Qty* as necessary. You can also choose whether the item needs to be New, Used or Either. This can be used to override the User settings that require users to withdraw used items first.
11. Add comments in the comment field as necessary.

12. Use the **DELETE** button to remove items from the list.
13. Press **SAVE** when you have constructed the kit you need.
14. Press **CLOSE** to close the window.

User Settings

There are three settings in Users setup that can be used to configure how users interact with kits. These are in addition to the Withdraw Kit and appropriate Withdraw privileges.

Can Change Kit Issue	<input type="checkbox"/>
Can Exceed Kit Qty	<input type="checkbox"/>
Can Ignore Kit Item	<input type="checkbox"/>

- *Can Change Kit Issue:* This allows the user to change the number of any item issued with the kit. The change lasts only for the duration of the transaction. An example of this might be if the user needs only one item from the kit because it broke, wore out prematurely or was defective.
- *Can Exceed Kit Qty:* This allows the user in question to exceed the listed quantity for any item in the kit.
- *Can Ignore Kit Item Shortage:* This allows the user to withdraw the kit even if there is not enough of one or more items available to make the kit.

Other Database Elements

Stored Keys

This is where you create keys that will be stored in the SupplyPoint™ and that will provide access to items stored elsewhere. This will be explained in more detail later in the Drawer Setup section. In short, the concept is that the user comes to request a given item that is not physically located in the SupplyPoint™. He is given a key to that location. After he retrieves the item, he must then return the key so others have access to the location.

Tool Fail Reasons

This feature compliments, and helps deal with, the Tool Life tracking functions on the SupplyPoint™. In this field, you enter the reasons why a tool might fail. All that needs to be entered is a code and a description. Alternatively these can be created on the fly if the parameter *GUI – Tool Fail – Allow manual entry of reason at machine* is enabled.

Tool Fail reasons can be assigned to the following transaction;

- Inventory Adjustment (IA)
- Return from Rework to New (RRN)
- Return from Rework to Used (RRU)
- Return from Rework to General (RRG)
- Return to Rework (RR)
- Return from Rework to Scrap (RRS)
- Return to Scrap (RS)

To assign the transaction to a Tool Fail reason:

1. Double-click on the *Tool Fail Reasons* icon.
2. Select the *New* icon located in the top left corner of the window.
3. Enter a suitable *Tool Fail Reason* and *Description* then press *Save*.
4. Select the *Tool Fail Reason* tab then *Transaction*.
5. Select the relevant transaction and select *Add*. Once the transaction has moved to the right pane, the transaction has been assigned to the tool fail reason.

This function can also be extended to all items being returned for scrap. Simply check the Parameter setting *GUI- Force Tool Fail Reason Entry on Scrap* to extend the requirement.

Machine Setup Utilities

Introduction

The *Utilities* section of Machine Setup has, as its general purpose, the clean-up and management of the data from the previous section. Functionality involved with this are the following:

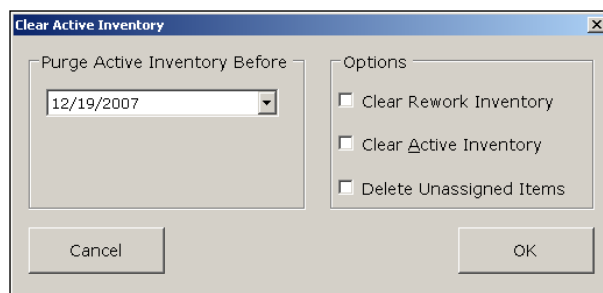
Clear Active Inventory • Modify • Import • Change Language • Troubleshooting
View Backup Log • Purge Jobs • Purge and Archive Transaction Log
Assign Data Elements to Locations

Modify was explained above in the Data functions section, since it pertains more directly to the material discussed there, and will not be repeated here.

Clear Active Inventory

Active inventory consists of two types of inventory: items that have been withdrawn and that can be returned (i.e. items marked returnable in *Items* setup) and items that can be returned for rework (i.e. items marked reworkable). Regardless of the type, it is a good idea to periodically clear this inventory. The primary reason is that until these items are returned they will continue to appear on the list of items that can be returned when users attempt this function. This can contribute to the gradual slowing of certain operations in the User Interface and can also contribute to user confusion. Take the following steps to clear the active inventory.

1. Select *Clear Active Inventory* from the Machine Setup control panel. A display similar to the one below will appear.
2. Use the calendar to select a beginning date.
3. If you only want to clear the active **or** rework inventory, select the appropriate check box. If you want to clear both, select neither and press **OK** to continue.
4. The system will ask you to verify that it is your intent to clear the active inventory. Press **YES** or **NO** as appropriate.
5. The active inventory will now be purged up to the selected date.



Import

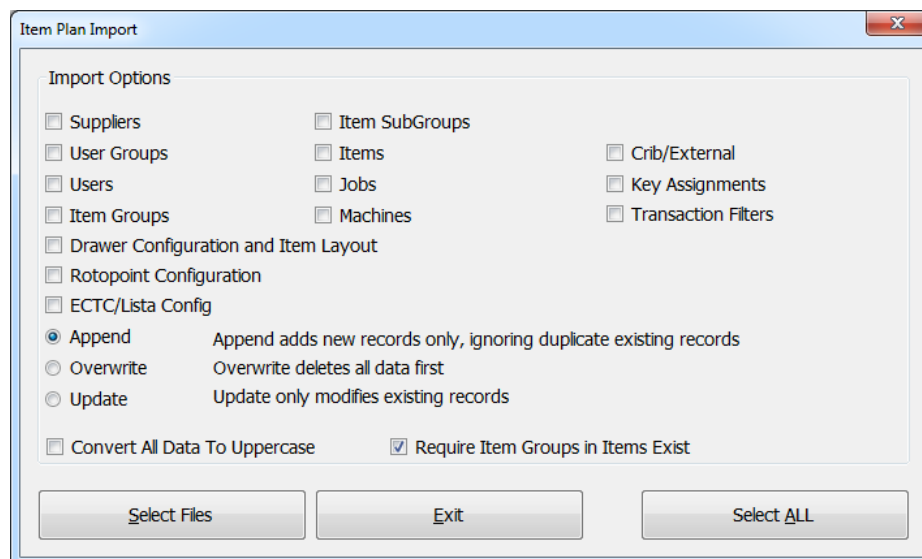
The *Import* function is used either to create or make major modifications to the SupplyPoint™ database. It is used in conjunction with the *SPS Item Plan Spreadsheet*. Before using this function you need to do two things:

- Make sure you are using the appropriate version of the spreadsheet. If there's any doubt, contact technical support to find out.
- Always, ALWAYS, make a backup of your database. Misuse of this function has the potential to overwrite the existing database, potentially destroying hours, days, or years of hard work.

Importing to a New Database

In order to import an Item Plan to a new database, take the following steps:

1. Start SupplyPoint™ Utilities and point at the database you wish to import information to.
2. Enter *Machine Setup*.
3. Select *Import* from the Machine Setup control panel.
4. From the box that opens, select the information you wish to import. Check the box that reads *Convert All Data to Uppercase* if you wish. If you want to import everything on the spreadsheet, press **SELECT ALL**.
5. For a new database, select the *Overwrite* option.



6. Press **SELECT FILES** to continue.
7. Locate and select the Item Plan Spreadsheet that is being imported. It must be version 12_6 or later to work with the current software.
8. Press **OPEN** to continue.

9. A warning will appear. Press to continue.
10. The utility will now attempt to import the data. If no error messages appear and the utility finishes, restart Machine Setup to see the changes. If there are error messages, follow the instructions given to correct the errors.

Appending Information

The import function can also be used to append information (Users, Items, new frames, etc.). Take the following steps to append information to your database:

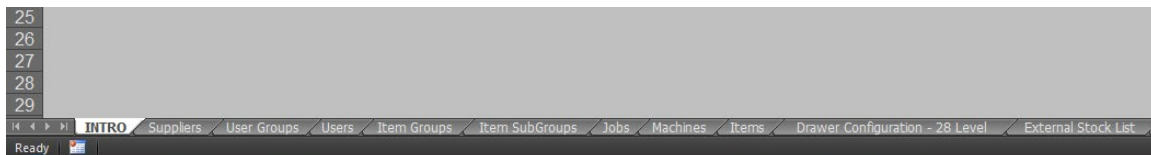
1. Follow steps 1 through 3 above.
2. Choose the field or fields you wish to import. It is important to note that you should fill out the Item Plan Spreadsheet as though it were for a new machine (e.g. place your new frame in the slot for Frame 1, even though it may be Frame 10). The utility will simply add any information it finds to the database. Select *Append*.
3. Follow steps 6-10 above.

Updating Information

The import function can also be used to update existing database entries. In this case, it will scan the spreadsheet for entries that are already in the SupplyPoint™ database and change the things that are different about them. Follow the same instructions as you would when appending, only select *Update* as your option.

Import Workbook

The import workbook used is relatively self-explanatory. Each sheet represents that a data element (i.e. users, jobs, items) or a configuration option such as drawer configuration, RotoPoint, ECTC, Key Assignments or External Stock. Below is a screen shot of some of the worksheets in an item planning workbook. The workbook will always be installed in the application folder of the machine or client pc with installed client software. It will be named SPSITEMPLAN_V13_6-EMPTY.XLS. The number part of the file name indicates the version. Currently 13_6 is the latest version.



The first sheet is an introduction sheet with some basic instructions. Please read this before getting started. Below is an example of one of the sheet (*Users*). Do not delete rows 1 through 4 and always start entering data at row 5. The yellow row is a description of each field, the gray row is the actual field name and the blue row is an

example row. Also do not modify any of the text in these rows. Finally do not delete any columns or re-order them. If it becomes necessary to add columns for special calculations use the columns after the fixed ones to the right. This applies to all of the data element sheets.

USER ID	DESCRIPTION	USER GROUP	GRAPHIC FILE	ALLOW LOGIN	PASSWORD
1	JOHN SMITH	MILLING	JSMITH.BMP	YES	ABCD

Creating and Assigning Items for the Standard Frame

With the import process you can not only import item data elements such as user, job and machine data, but you can also import drawer configuration. On the items worksheet, fill out the following columns to specify a drawer in a drawer frame.

- **Tray Type:** Enter the desired drawer code (i.e. Z, A, C etc.).
- **Number of Drawers:** Enter the number of drawers the item will be located in.
- **Issue Qty:** Enter the issue quantity for the item or the maximum quantity stored in each compartment
- **Number of Compartments:** Specify the total number of compartments in each drawer for the item
- **Internal:** Do not fill in this column. This will be used to indicate if the item could not be loaded into the available drawer frame or frames specified.

For this process all drawers will be configured as uniform content. In other words, each item will occupy a single drawer and no other items will be assigned to that drawer.

T	U	V	W	X	Y
Unit Cost; not required	Either Z,A,B,C,D,E,F, G,H,J,AA,BB,4 A (Twin),3A (Twin),2A (Twin); R5 (252 cmts) or R6 (468 cmts) for the Rotopoint	Number of drawers in ToolBoss or the number of locations (single compartments) in a RotoPoint	Quantity per compartment (or single RotoPoint location)	Either 1,2,3,4,6 or 12 compartments	INTERNAL USE ONLY; DO NOT DELETE THIS COLUMN
UNIT COST	TRAY TYPE	NUMBER OF DRAWERS	ISSUE QTY	NUMBER OF COMPARTMENTS	INTERNAL
12	A	1	1	12	
	Z		1	1	12
	Z		1	1	12
	Z		1	1	12
	A		1	1	12
	A		1	5	6
	A		1	5	6

Once the items have been loaded into the items worksheet, go to the *Drawer Configuration – 28 Level* worksheet. Below is a partial screen shot of this worksheet. Click the *Load Items* button to attempt to load the items into the frame.

Available Drawer Trays		DO NOT ALTER!	
Z	2	2	2
A	A	A	A
B	B	B	B
C	C	C	C
D	D	D	D
E	E	E	E
F	F	F	F
G	G	G	G
H	H	H	H

If a drawer is available it will populate the frame as shown below. If enough drawers are not available for all of the items specified the Load Items routine will put an "X" in the *Internal* column on *Items* worksheet. Once the item load is satisfactory click the *Compile Configuration* button to save the frame (or frames) configuration to a readable format for the import utility. To complete the import, be sure to choose the *Drawer Configuration and Item Layout* check box on import utility dialog.

PC/TOUCH SCREEN FRAME					PC/TOUCH SCF				
FRAME 1					FRAME 2				
T/Cpbd	PC/Touch Screen (locked)				T/Cpbd				
R1	Z12	Z12	Z12	Z12	R1				
R2	Z12	Z12	Z12	Z12	R2				
R3	Z12	Z12	Z12	Z12	R3				
R4	Z12	Z12	Z12	Z12	R4				
R5	Z12	Z12	Z12	Z12	R5				
R6	Z12	Z12	Z12	Z12	R6				
R7	Z12	Z12	Z12	Z12	R7				
R8	Z12	Z12	Z12	Z12	R8				
R9	Z12	Z12	Z12	Z12	R9				
R10	Z12	Z12	Z12	Z12	R10				
R11	Z12	Z12	Z12	Z12	R11				
R12	Z12	Z12	Z12	Z12	R12				
R13	Z12	Z12	Z	Z	R13				
R14	Z	Z	Z	Z	R14				
R15	Z	Z	Z	Z	R15				
R16	Z	Z	Z	Z	R16				
R17	Z	Z	Z	Z	R17				
R18	Z	Z	Z	Z	R18				
R19	A12	A12	A12		R19				
R20	A12	A12	A12		R20				
R21	A12	A12	A12		R21				
R22	A12	A6	A6		R22				
R23	A6	A6	A6		R23				
R24	A6	A6	A6		R24				
R25	A6	A6	A6		R25				
R26	A6	A6	A6		R26				
R27	A6	A6	A6		R27				
R28	A6	A6	A6		R28				

Available Drawer Trays					DO NOT ALTER!
Z	Z	Z	Z	Z	Load Items
A	A	A	A		
B	B	B	B		

Creating and Assigning Items for the RotoPoint

There is very little departure from the current procedure when adding items to the spreadsheet. Simply fill in the item details on the Items sheet. The standard item attributes such as description, item group, alias, unit cost, etc. are still applicable and can be entered in the usual manner. The main difference will be in specifying the tray type. Since the RotoPoint is not the standard drawer tray system, simply enter "R5" or "R6" into the tray type column as shown below. The list and screen shot below describe the fields necessary to assign an item to the RotoPoint via the item plan. In addition, the yellow row has been updated to include instructions for the RotoPoint.

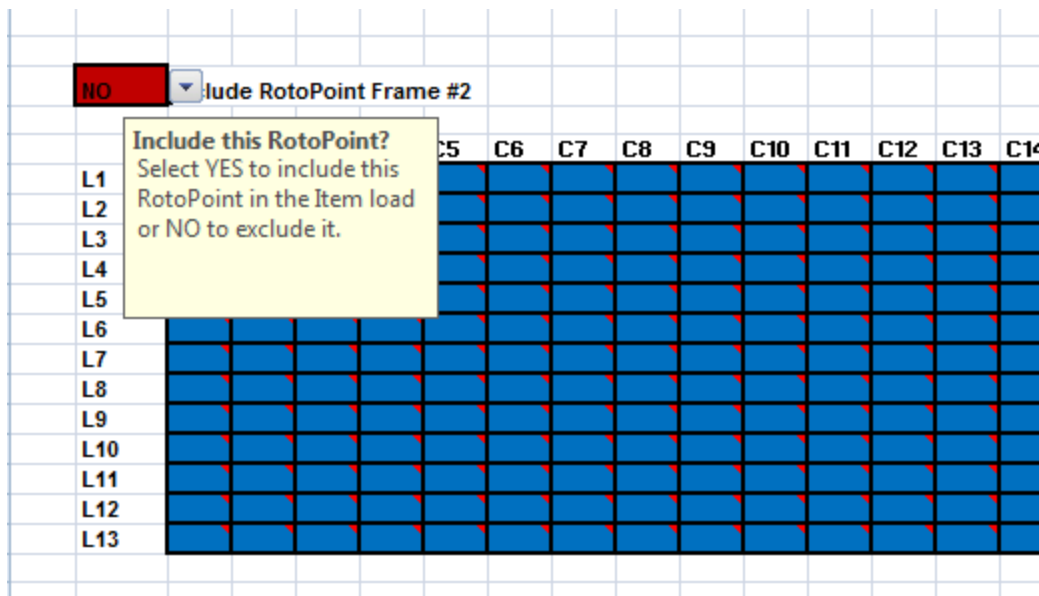
- **Tray Type:** Enter an "R5" or "R6" depending on the type of RotoPoint. "R6" is the most dense type.
- **Number of Drawers:** Enter the number of locations within the RotoPoint that you would like the item to occupy. If the number is greater than 1, then the spreadsheet will attempt assign the items vertically in the same column.

- **Issue Qty:** Enter the maximum quantity to be stored in the RotoPoint location. If more than one location is specified in the “Number of Drawers” column then this will be the same for each location
- **Number of Compartments:** Do not fill in this column for the RotoPoint
- **Internal:** Do not fill in this column. This will be used to indicate if the item could not be loaded into the available RotoPoint frames specified.

T	U	V	W	X	Y
Unit Cost; not required	Either Z,A,B,C,D,E,F, G,H,J,AA,BB,4 A (Twin),3A (Twin),2A (Twin), R (Rotopoint)	Number of drawers in ToolBoss or the number of locations (single compartments) in a RotoPoint	Quantity per compartment (for single RotoPoint location)	Either 1,2,3,4,6 or 12 compartments	INTERNAL USE ONLY; DO NOT DELETE THIS COLUMN
UNIT COST	TRAY TYPE	NUMBER OF DRAWERS	ISSUE QTY	NUMBER OF COMPARTMENTS	INTERNAL
12	A	1	1	12	
	R6	5	1		
	R6	13	1		
	R6	1	5		
	R6	1	5		
	R6	1	10		
	R6	1	1		
	R6	1	1		
	R6	1	1		
	R6	1	1		
	R5	1	1		
	R5	1	1		
	R5	1	1		
	R5	1	1		
	R5	1	1		
	R5	1	1		
	R5	1	1		

Loading Items into the RotoPoint

In an effort to represent the RotoPoint, we’ve taken the drum and flattened it out on a new sheet named “RotoPoint” as shown below. Once the data on the Items sheet has been filled out, first determine how many RotoPoint units will need to be in the system by typing YES or NO in the cell next to the text that says “Include RotoPoint Frame #X” where “X” is the RotoPoint frame number. You can load up to four RotoPoint frames. You can also select the type of RotoPoint by selecting from the drop down box on the right above each RotoPoint. If there are drawer tray frames in the system then the RotoPoint frames will be added to the end. To load the items click the “Load Items” button and an “X” will be assigned to every location that has an item assigned. If the cell does not have an “X” then nothing was assigned to it. In the example below, the first RotoPoint frame is completely filled while only the first 2 columns of the second RotoPoint are filled.



Change Language

The SupplyPoint™ is capable of operating in many languages, either simultaneously (users choose the language) or in one language only. This function is for changing the default language of the SupplyPoint™. If you need multiple language capability, select the Parameter setting that says *Language- Multiple Languages*. The availability of languages is contingent upon translations being available. French, German and Spanish are just some of those languages that are readily available. Other languages can be commissioned at customer's expense. In order to change the default language, take the following steps:

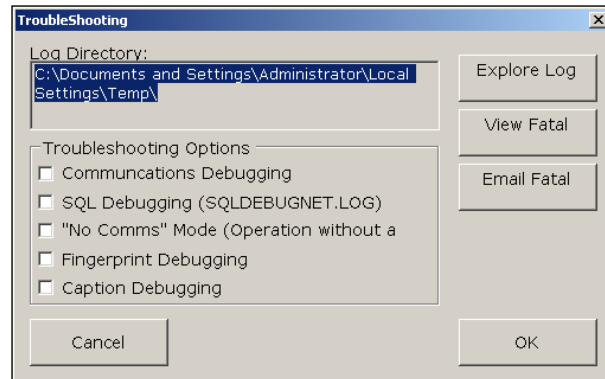
1. Select *Change Language* from the Machine Setup Control Panel. A screen like the following will appear.
2. Select the desired language from the list available.
3. Press to continue.

Troubleshooting

The *Troubleshooting* function is intended to provide technical support with information needed to solve issues that may arise from using the SupplyPoint™. Selecting *Troubleshooting* will bring up the following display.

Log Directory: This is the directory that any of the logs used in *Troubleshooting* are written to. It is always the Temp directory of the local user.

Communications Debugging: The SupplyPoint™ uses COM ports to communicate with the PICs, scales and- sometimes- printers. If there is a problem with one of these devices, enabling this log may provide the information needed to solve the problem.



"NO COMMS" Mode: This is a testing mode that is used primarily by Supply Point personnel. This function bypasses communications with COM1, allowing the User Interface software to operate without being attached to a machine.

SQL Debugging, Fingerprint Debugging, Caption Debugging: These are logging options that you will use only in conjunction with technical support to address specific problems.

Fatal Error Log

Any error that causes a component of the SupplyPoint™ software to shut down is considered a fatal error and is cause for concern. The SupplyPoint™ is programmed to record such errors automatically so that they can be diagnosed. Press the **VIEW FATAL ERROR LOG** button to look at these errors. You may be asked to email this file to technical support; it is located in the same directory as the other logs mentioned above.

Purge Jobs

Expired jobs can now be completely eliminated from the database, by using the *Purge Jobs* function. Expired jobs are those that have, in accordance with the validity date range check, passed out of use. If you no longer need them in the database, take the following steps to remove them.

1. Select *Purge Jobs*.

2. The system will now confirm that you wish to delete the expired job(s). Press to continue or to cancel.
3. The system will then confirm that the purge has occurred.

Purge and Archive the Transaction Log

Sometimes it has proven useful to purge the Transaction Log, especially for machines where there is several years' worth of data. Once again, when working with the database in an irrevocable function, make a backup! In order to purge the Transaction Log, take the following steps:

Purging and Archiving the Transaction Log

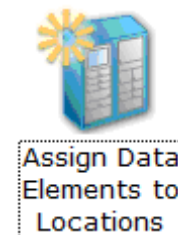
This function purges transactions and creates an archive that can be queried using certain reports.

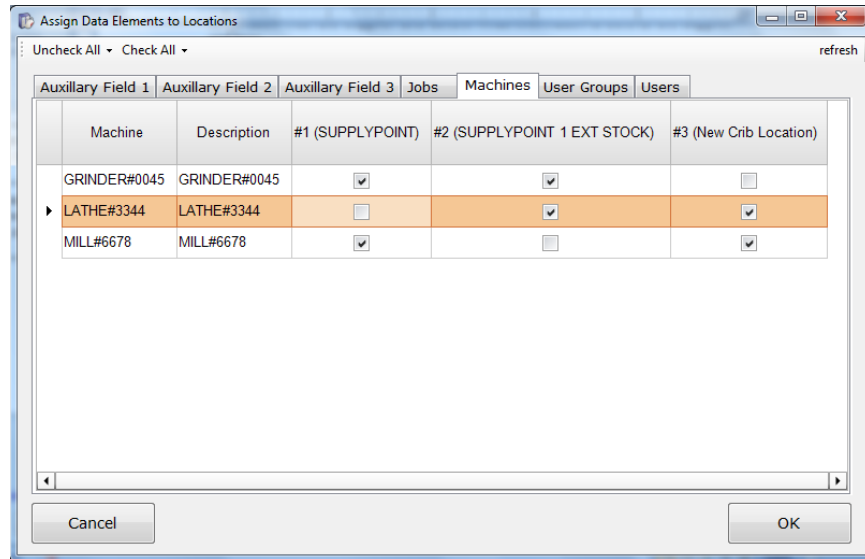
1. Double-click on *Purge and Archive the Transaction Log*.
2. Select *Purge and Archive the Transaction Log* radio button and press .
3. Select the date beyond which you want to keep transaction information. Enter the admin user's password.
4. Confirm the purge.
5. Confirm the purge again. **NOTE: This is the point of no return! All transactions before the chosen date will be eliminated from the database.**
6. The system will now complete the purge. Press to clear the confirmation.

Assign Data Elements to Locations

Apart from using the Location Assignments button/menu on the generic data screens; the other way to assign elements is to use the *Assign Data Elements to Locations* function. This function is easier to use if you are making large changes. Take the following steps to use this function.

Double-click on the Assign Data Elements to Locations icon. A window will open showing the data elements that can be assigned from here. Select the tab that corresponds to the data element you want to assign. Each tab shows the locations that are available for the data element. Simply mark or clear the corresponding box to make a change. You can make changes to other database elements as well by selecting the appropriate tab. Press when you are finished in order to save your changes.





Machine Setup- Configuration

Introduction

The *Configuration* section of Machine Setup includes the functions that are used to formalize the physical architecture on the machine, the physical hardware, while also being the point of call for all major system settings. Functionality involved with this are the following:

Drawer Setup • Terminology • Rationing • Restrictions • Restrict By Location •
Parameters
Change Setup Users • Crib/External Setup

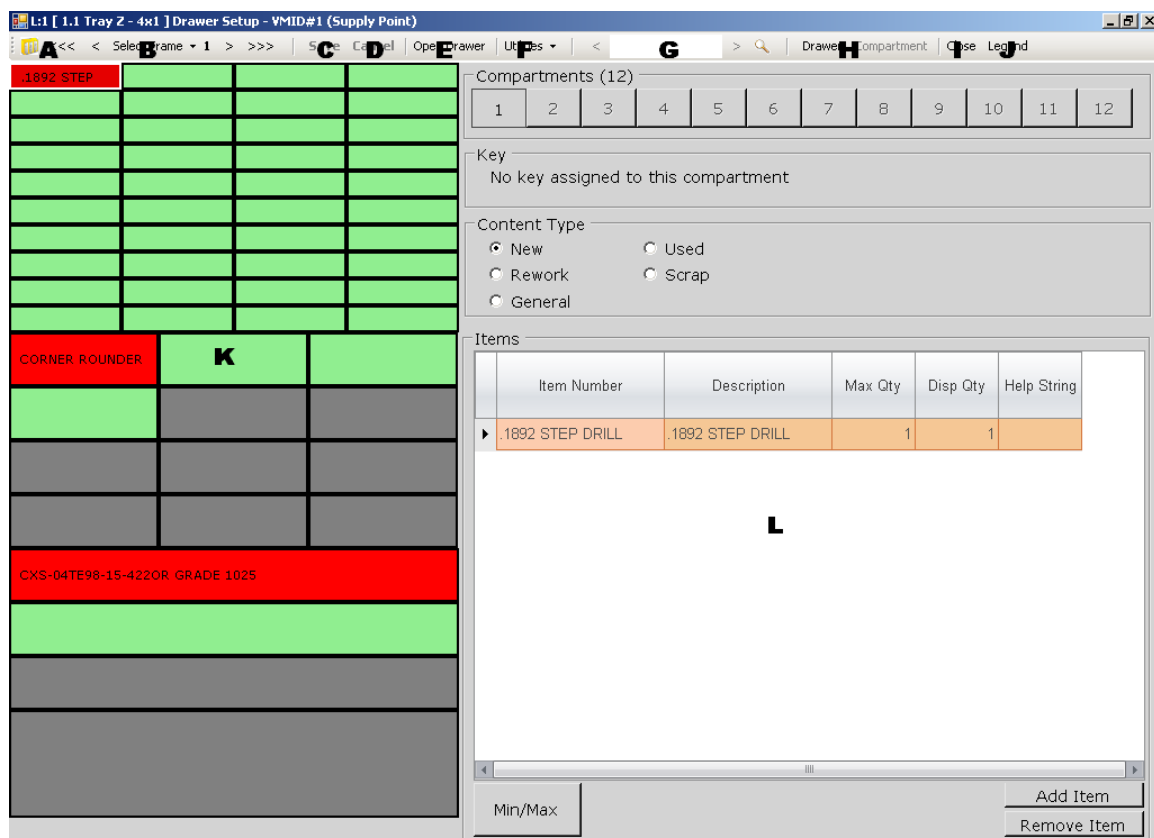
Drawer Setup

Drawer Setup is one of those areas where there is a lot you can do. Here are some tips and tricks that you may want to keep in mind.

- Be sure to select the point of issue you wish to configure via the Config menu and Change Location in Machine Setup. You can also select a Vending Machine via the Vending Machine button within Drawer Setup, as detailed in the [Anatomy of Frame Setup](#) section below.
- The ability to delete a frame is deactivated by default; leave it that way. When you delete a frame, there is no way to recover that information unless you have a backup. That's why you get two warnings. Of course, when you restore from a backup, you're going to lose any transaction information generated since. All of this underscores the importance of two things: reading warnings and backing up the database.

- Searches begin on whichever storage location is selected when the search starts.
- The **OPEN DRAWER** button on the *Utilities* menu will only work when you are working at the SupplyPoint™, and only if the User Interface and SPSEOpenDrawer applications are not running or the Windows on screen keyboard is not in use. The button will be disabled if the communication port specified in the SPSEConfig.xml is set to zero.
- Rework (or scrap) bins need to have a rework (or scrap) user/group assigned to them as the owner. This user must also be assigned as the rework (or scrap) user/group for the items to be returned there.
- If you have an item stored in more than one location, don't spend any time trying to make sure they are located next to each other. Remember, when the item runs out in the first location, SupplyPoint™ is going to send users to the next location. And since the location is indicated by the light on the drawer, the fact that the item is located in different areas is not a consideration to the average operator.

Anatomy of Frame Setup



- A. **Vending Machine Selection:** Select the vending machine which you want to modify. By default you will be looking at the “current” vending

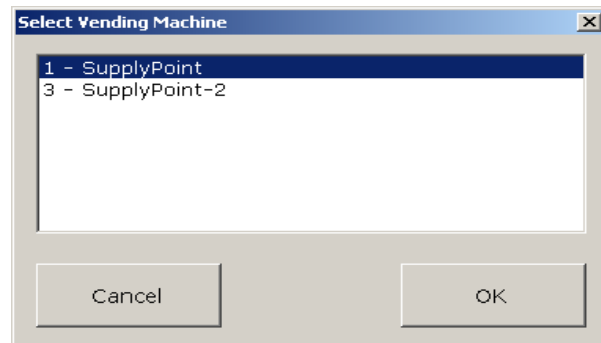
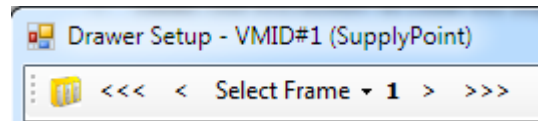
machine but you are able to view or modify any of the machines within the system.

- B. **Frame Selection:** Use this area to navigate from frame to frame in the vending machine. Buttons with a single arrow move back or forth one frame while those with multiple arrows move to the last frame in the chosen direction.
- C. **Save:** Use this button to save changes when editing the layout.
- D. **Cancel:** Use this button to exit edit mode.
- E. **Open Drawer:** Use this button to open the selected location.
- F. **Utilities Menu:** Use this to access the Utilities Menu. See below for a more detailed explanation of the functions on this menu.
- G. **Search:** Enter text-based search terms here. The system will locate the selected item. If you want to search from a list, press the magnifying glass to bring up a window containing a list of the items controlled by the SupplyPoint™.
- H. **Drawer/ Compartment Selection:** See below for more information on these items.
- I. **Close:** Use this button to close the display.
- J. **Legend:** The legend provides a key to understanding the different colours that appear on the drawer display.
- K. **Layout:** This is a graphical representation of one frame of the machine.
- L. **Drawer/ Content Display:** See below for more information.

Vending Machine Selection

Be sure to select the Vending Machine in which you wish to make edits.

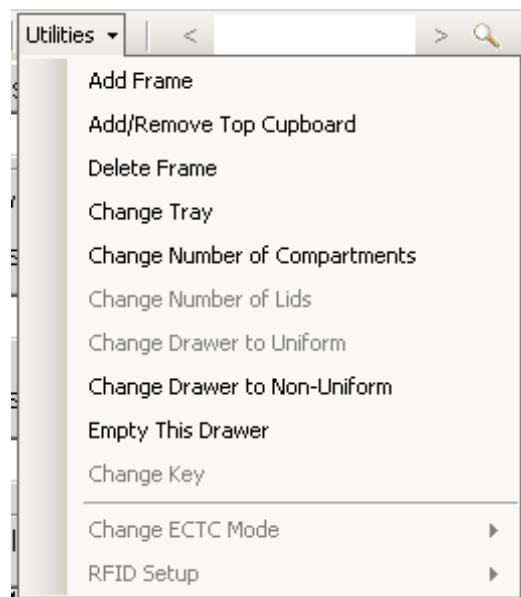
All physical Vending Machines will be listed. Once selected, click OK and you will now be configuring that Vending Machine's Drawer layout.



Utilities Menu

The *Utilities* menu provides access to some higher-level administrative functions in Drawer Setup. From here you can:

- Add or remove a frame. Removing a frame requires that the Parameter setting *Setup- Enable frame deletion* be activated.
- Add or remove a top cupboard. On a 28-level system with smaller 4 level (T4) cupboard this option should be used. If the frame has a larger 6 level high cupboard at the top of the frame do not use this function – add a T2 cupboard at level 2 of the frame instead.
- Change the tray type or the number of compartments in a drawer or a Lids unit.
- Empty a drawer of its contents.
- Toggle the Uniform Content status of the drawer (see [The Rules](#) below for the consequences of such changes).
- Empty a drawer or its current contents with the appropriate

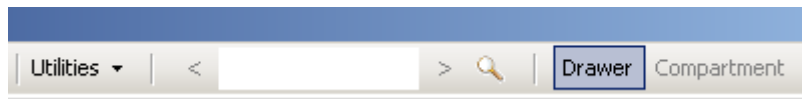


transactions recorded for the locations stock.

- Change the key being stored in the drawer.
- Change the mode of an ECTC/Journeyman cabinet and configure the different locking and RFID options.

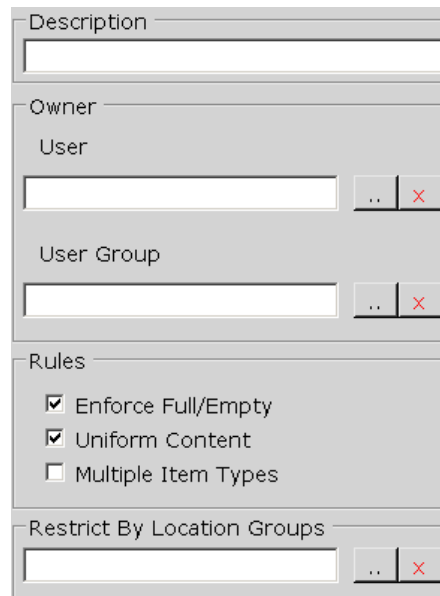
Drawer

Depending on your screen resolution you may need to select the *Drawer* menu option to make the functions listed below visible. If the screen resolution is high enough then all of the options will be displayed on the screen the *Drawer* and *Compartment* buttons will be disabled.



Pressing the *Drawer* button on the top menu allows you to set the conditions for the entire drawer, as opposed to the compartments within. There are a few things that bear explanation here:

- The *Description* is information that is available only to admin users and appears on the User Interface if a User is performing a Pickup From Bin transaction where there are multiple Bins configured in the system.
- The *Owner* is the user or user group who has exclusive rights to withdraw from the drawer. This is only used when configuring a rework or scrap bin.

A screenshot of a 'Drawer' configuration dialog box. It has a light gray background and several sections. The 'Description' section has a text input field. The 'Owner' section contains 'User' and 'User Group' labels, each followed by a text input field and a button with '..' and a red 'X'. The 'Rules' section contains three checkboxes: 'Enforce Full/Empty' (checked), 'Uniform Content' (checked), and 'Multiple Item Types' (unchecked). The 'Restrict By Location Groups' section has a text input field and a button with '..' and a red 'X'.

- The *Rules* determine how items can be stored in the drawer and are described in detail below.
- Below are the rules for setting up *Restrict by Location*. This is linked to the *Restriction By Location Group* feature and controls which users can gain access to the location. This is explained in greater detail later on in this section.

The Rules

On the *Configuration* tab there are three rules that are the key to how the setup of drawers works:

- *Enforce Full/ Empty*: This means that whenever a user is given access to a compartment he is expected to take everything in that compartment.
- *Uniform Content*: This means that whatever is assigned to the first compartment if a drawer is assigned to all of the other compartments of the drawer.
- *Multiple Item Types*: This means that you can store more than one type of item in a given compartment.

That's what the rules mean, but what do they *mean*? Take the drawer used above for the *Content* example. Let's look at the characteristics of the drawer:

- It has 12 compartments.
- There is a single item stored in it.
- There is a maximum of 5 pieces of the item stored in each compartment.

Is there anything else we can determine based on the display? There is, in fact, at least one more thing. We know that *Uniform Content* is not in force. How? If this rule were in force, only the first compartment would be available (black) for configuration. Why? Because, as the rule explains above, whatever is assigned to the first compartment is assigned to the rest. In fact, *Uniform Content* and *Enforce Full/Empty* are by far the most common configuration; in fact they are the default configuration.

The rules also affect the issue quantity of the item. Again, given the above example, we know that five pieces of the item are stored in each compartment. But how many are the users required to take? It depends:

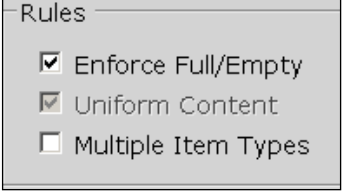
- If the *Enforce/ Full Empty* rule is in force, the user is required to take five and, in fact, his choices will be multiples of five. With *Enforce Full/Empty* in place, the *Max Compartment Qty* is also the issue quantity.
- If the rule is not in effect, he will be able to withdraw individual pieces, which presents obvious security problems.

This brings us to the issue of maximum versus reduced security drawers. It causes a lot of confusion, but it's really very simple:

- If both the *Uniform Content* and *Enforce Full/ Empty* rules are in forced the drawer is a **maximum security** drawer.
- If one or both of those rules is removed the drawer is a **reduced security** drawer.

Which rules you use depends on how you want to use the drawer. *Enforce Full/Empty* and *Multiple Item Types* can be toggled with the check boxes. In order to toggle *Uniform Content* you will need to visit the *Utilities* menu. Below are some of the most common rules combinations.

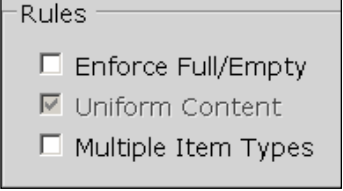
- If you want to store the same item in the same quantity in each compartment and force users to withdraw the entire contents of the compartment, keep *Enforce Full/Empty* and *Uniform Content* checked. This is a maximum security drawer.



Rules

- ☒ Enforce Full/Empty
- ☒ Uniform Content
- ☐ Multiple Item Types

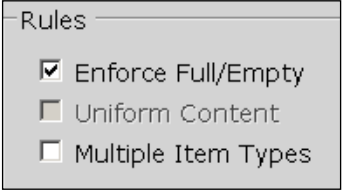
- If you want to store the same item in the same quantity in each compartment, but allow the users to decide how many pieces they want (i.e. to break packets), turn off the *Enforce Full/Empty* rule.



Rules

- ☐ Enforce Full/Empty
- ☒ Uniform Content
- ☐ Multiple Item Types

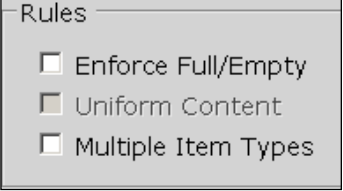
- If you want to store a different item in each compartment, but want to force users to withdraw all the items in a compartment when they access it, leave *Enforce Full/Empty* checked, but clear the check from *Uniform Content*.



Rules

- ☒ Enforce Full/Empty
- ☐ Uniform Content
- ☐ Multiple Item Types

- If you want to store a different item in each compartment (or various items in various numbers of compartments) and have no control over how many the user is required to withdraw, clear all the rules.

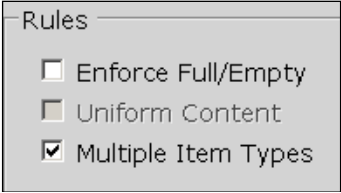


Rules

- ☐ Enforce Full/Empty
- ☐ Uniform Content
- ☐ Multiple Item Types

- If you would like to use a key to access a location containing many different items,

and track these items through the SupplyPoint™, check *Multiple Item Types*.



A dialog box titled "Rules" with three checkboxes. The first checkbox is "Enforce Full/Empty", the second is "Uniform Content", and the third is "Multiple Item Types", which is checked.

Rules
<input type="checkbox"/> Enforce Full/Empty
<input type="checkbox"/> Uniform Content
<input checked="" type="checkbox"/> Multiple Item Types

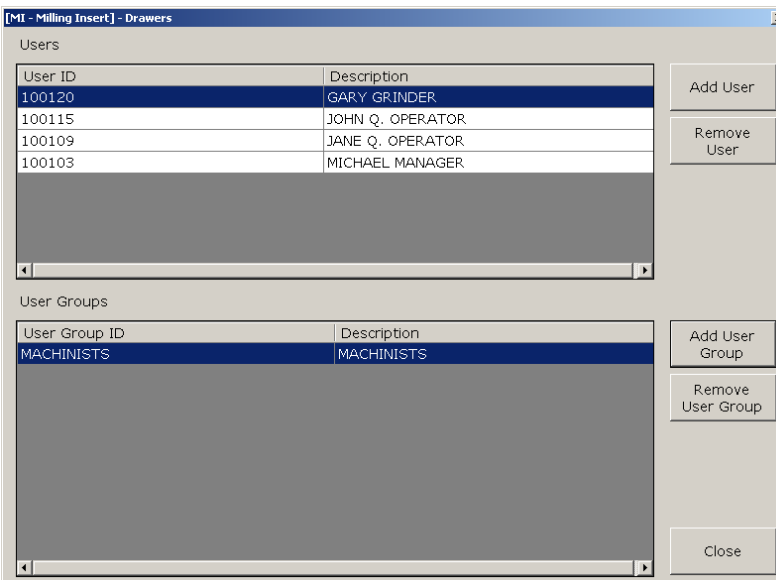
Restrict By Location Groups

Beneath are the *Rules* for the function(s) mentioned previously; the ability to restrict access on a drawer exists, allowing you greater control over access to drawer contents without setting up wide-ranging restrictions over all inventory. Through this function, you can give specific users and/or groups of users' access to the content of individual drawers, including restricting who has access to which *Rework* and *Scrap* Bins

1. The function must first be enabled. Activate the setting *Restrictions by Location-Enabled* on the *Restrictions* tab of Parameters.
2. Create or edit a group as you would a User or User Group using the *Restrict By Location Group* icon in the Machine Setup control panel. You will need to enter a name and description.
3. Select *Group Membership* from the *Restrict by Location Group* to add or remove members of the group.




4. A screen like the one below will appear, allowing you to add Users or User Groups to the new restrictions group. Press **ADD USER** and/ or **ADD USER GROUP** to configure the restrictions group.

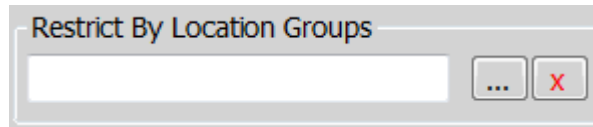


A dialog box titled "[MI - Milling Insert] - Drawers" with two sections: "Users" and "User Groups". Each section has a table with "ID" and "Description" columns, and buttons for "Add" and "Remove".

Users	
User ID	Description
100120	GARY GRINDER
100115	JOHN Q. OPERATOR
100109	JANE Q. OPERATOR
100103	MICHAEL MANAGER

User Groups	
User Group ID	Description
MACHINISTS	MACHINISTS

5. Press **CLOSE** when you are finished and exit the Restriction by Location group setup screen. You can now select the Restriction by Location group in *Drawers* setup. Don't forget to save your changes!
6. Go to Drawers setup and select the location you need to restrict.
7. In the area labelled *Restrict by Location Group* click the  button, shown below, and select the group to who you wish to assign access to the location.



Compartment

Depending on your screen resolution you may need to select the *Compartment* menu option to make the functions listed below visible. If the screen resolution is high enough then all of the options will be displayed on the screen the *Drawer* and *Compartment* buttons will be disabled.



The *Compartment* button, as mentioned previously, deals with what's inside the drawer.

- The number of compartments is shown toward the top of the display. This number can be changed on the *Utilities Menu*.
- The numbered buttons each represent a compartment in the drawer. In various circumstances they will be black or grey.
- The *Content Type* determines whether the item stored will be New, Used, General, Rework or Scrap. This can be determined on a compartment-by-compartment basis.
- The *Items* area shows the item(s) stored in the compartment and information about them.

Item Number	Description	Max Qty	Disp Qty	Curr Qty	Help Strin
CNGP432 KC730	1/2" IC ...	5	5	0	

- The *Max Qty* is the number of items that can be stored in the compartment.
- The *Dispense Qty* is the number of the item that is dispensed per transaction.
- The *Curr Qty* is the current quantity of the item in the compartment.
- The *Help String* is information that appears on the User Interface when a user works with the selected item in the compartment.
- The **ADD ITEM** and **REMOVE ITEM** buttons are used for those purposes and are explained in greater detail below.

Compartment Level Content Type

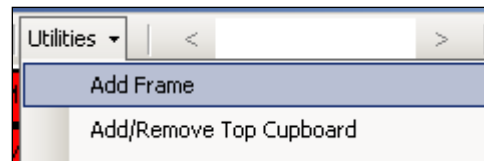
The content type (New, Used, General, Rework, and Scrap) can now be specified on a per-compartment basis. Previously it had to be specified on a per-drawer basis. This results in increased security, capacity and flexibility. Many possible uses, but an especially valuable one is that an item of “New” content type can be assigned to the back of a drawer while the same item of “Used” content type can be assigned to the front of the drawer. When the “New” items are requested only the “Used” items and the exact requested quantity of the “New” item is exposed.

You can configure the content type on a per-compartment basis for any drawer that is non-uniform (see the Rules above).

Configuring a New Frame

This process can be used for configuring a new machine or adding a new frame to an existing machine.

1. Select *Add Frame* from the *Utilities* menu.
2. A window like the one below will open. Choose the frame type you wish to add. For this example we will add a 28 Level Flapper Drawer frame.



Specify Frame Type

Frame Type: 28 Level Flapper Drawer (DCS)

Frame Number: 20 Level Ratchet Drawer (PICBus/Ribbon cable)

Number of Drawers: Rotopoint

Default Compartments: 12

Third Party Com Port:

Cancel PIC Number: 7 Create Frame

3. Upon selecting a 28-Level system; the number of compartments created by default for each drawer is twelve. If you wish to change it then click an alternative option from the *Drawer Compartments* drop-down shown below.

Specify Frame Type

Frame Type: 28 Level Flapper Drawer (DCS)

Frame Number: 4

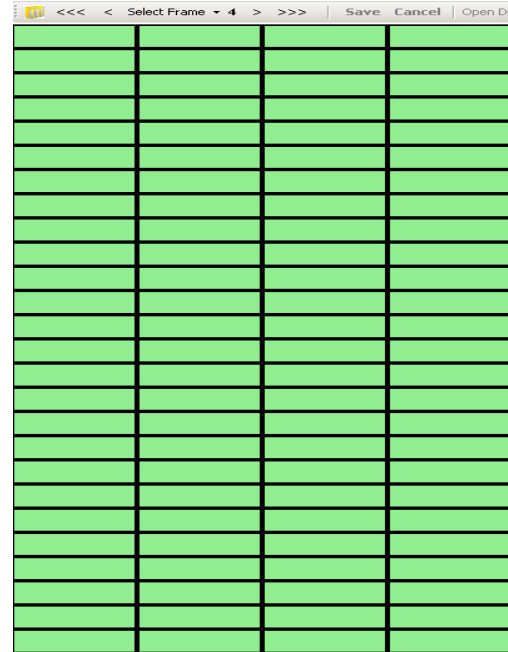
Number of Drawers:

Default Compartments: 12

Third Party Com Port:

Cancel PIC Number: 7 Create Frame

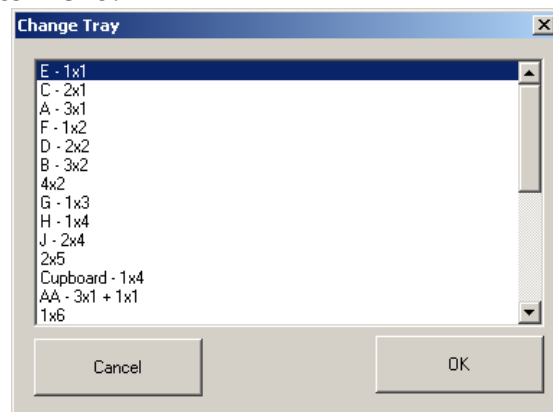
4. The new frame will appear, populated by 28 "Z" trays. Each drawer will have a default of 12 compartments based on the above configuration.
5. If there is a top cupboard for this frame, select *Add/ Remove Top Cupboard* from the *Utilities* menu.
6. If you need drawers other than "Z" type, you will have to change them. See *Changing Trays and Cupboards Below*.



Changing Drawer Trays and Cupboards

Take the following steps to change a drawer tray or cupboard:

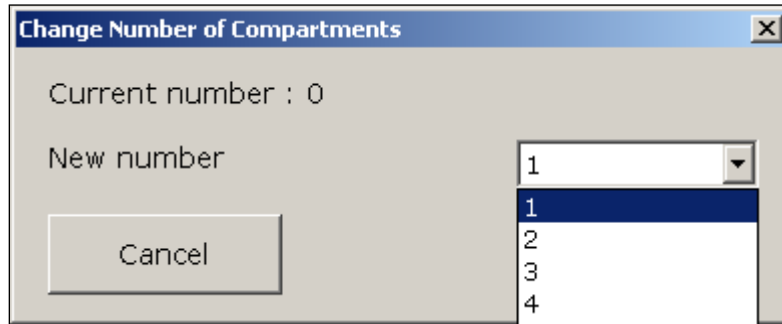
1. Open *Drawers* and browse to the appropriate frame.
2. Select a drawer on the tray that is being changed. If multiple single-height trays are being replaced with a tray that occupies more than one drawer tray slot select the topmost tray that is being replaced.
3. Select *Change Tray* from the *Utilities* menu.
4. Select the tray type in the window that appears and press .
5. Confirm the tray change by pressing in the next window.



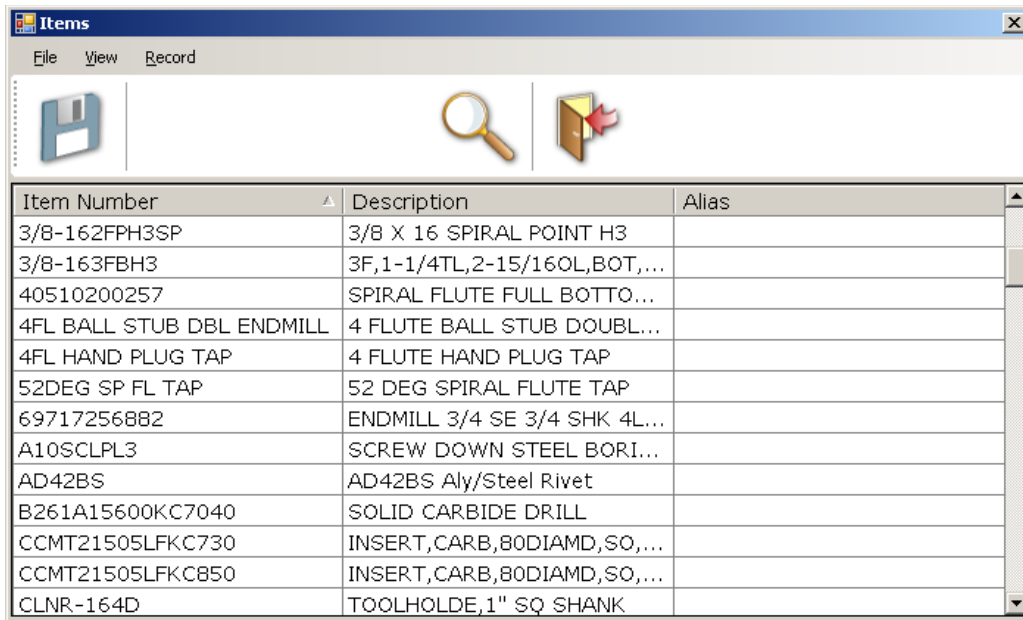
Assigning Items to Drawers

1. Click on an empty drawer in the frame setup screen. Current information about the drawer will appear on the right-hand side of the screen.
2. Make the appropriate changes to the *Drawer* display if necessary and save them.

3. Select *Compartment* from the top menu bar to enter content setup.
4. A drawer will have either zero, one, two, three, four, six or twelve compartments. If the number needs to be changed, select *Change Number of Compartments* from the *Utilities* menu. A display will appear, asking how many compartments the drawer should have.



5. Use the drop-down box to select the correct number of compartments. and press . It is important to note that when the number of compartments of a configured drawer is changed, the items in the drawer will be cleared. The system will always verify that the change should be made.
6. When the number of compartments has been selected one or more of the numbered buttons on the compartment display will be available. The number depends on the rules selected in the *Configuration* tab. Only one will appear if *Uniform Content* and *Enforce Full/Empty* are selected; in this case the configuration of one compartment suffices for all. If *Multiple Item Types* is selected or *Uniform Content* is not selected each compartment is configured individually. Select a compartment to continue.
7. Select the *Content Type* by clicking the appropriate radio button.
In a *Uniform Content* drawer, this will be applied for the whole drawer.
Other configurations allow you to assign content type on a per compartment basis.
8. In the compartment display, press . A list like the one below will appear.



Item Number	Description	Alias
3/8-162FPH3SP	3/8 X 16 SPIRAL POINT H3	
3/8-163FBH3	3F,1-1/4TL,2-15/16QL,BOT,...	
40510200257	SPIRAL FLUTE FULL BOTTO...	
4FL BALL STUB DBL ENDMILL	4 FLUTE BALL STUB DOUBL...	
4FL HAND PLUG TAP	4 FLUTE HAND PLUG TAP	
52DEG SP FL TAP	52 DEG SPIRAL FLUTE TAP	
69717256882	ENDMILL 3/4 SE 3/4 SHK 4L...	
A10SCLPL3	SCREW DOWN STEEL BORI...	
AD42BS	AD42BS Aly/Steel Rivet	
B261A15600KC7040	SOLID CARBIDE DRILL	
CCMT21505LFKC730	INSERT,CARB,80DIAMD,SO,...	
CCMT21505LFKC850	INSERT,CARB,80DIAMD,SO,...	
CLNR-164D	TOOLHOLDE,1" SQ SHANK	

9. Select the item and double-click on it or press the *Save* button. If multiple item types are allowed, you can use the **CTRL** and **Shift** keys to select more than one. It should now appear in the list under *Items*.
10. Click on the *Max Qty* field and enter the quantity to be stored in the compartment. When *Enforce Full/Empty* is selected this will be the *Disp Qty* of the item in that drawer. If the drawer does not meet this requirement, you will need to manually edit the dispense quantity as well.
11. If necessary, assign items to other compartments or, if *Multiple Item Types* is active, add other items to the compartment and assign their maximum quantities.
12. Save the changes from the top menu.

Configuring Rework and Scrap Storage

There are two models for storing items awaiting rework or scrap: the bin and the drawer.

- A rework or scrap **bin** is a catch-all for items returned for rework and scrap. The common factor of these items is that they have the same rework or scrap user or user group assigned in *Items* setup. Only the assigned user or user group can remove the items.
- A rework or scrap **drawer** is a location that is configured like a regular drawer to which items can be returned for rework or scrap.

Rework and Scrap Bins

1. Select the frame and drawer to be configured.

2. Under the *Drawer* configuration, select the item type to be stored (i.e. rework or scrap).
3. Select the owner for the drawer. An owner can be either a User or a User Group. This person (or group) must be the *Rework User* (or *Rework User Group*) or the *Scrap User* (or the *Scrap User Group*) for the items stored within.
4. Clear the *Uniform Content* rule from the *Utilities* menu and un-check *Enforce Full/Empty*. Check *Multiple Item Types*.
5. It is recommended that you give the *Bin* a description at this point. Entering something meaningful into the *Description* box will allow you to identify the location should you configure multiple Bins in the system.
6. Save the changes from the top menu. The bin is now ready to receive rework or scrap items.

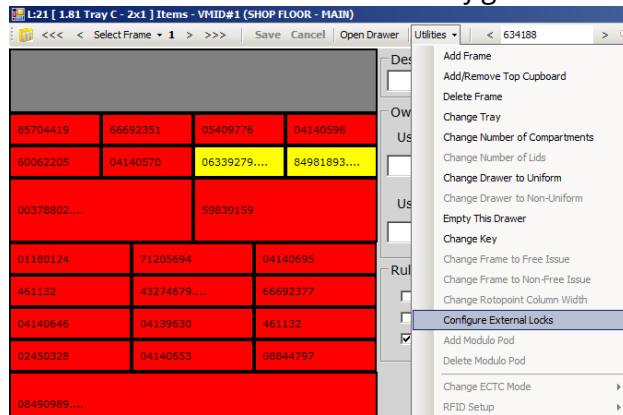
Configuring Rework and Scrap Drawers

1. Select the frame and drawer to be configured.
2. Under the *Drawer* configuration, select the item type to be stored (i.e. rework or scrap).
3. Clear the *Uniform Content* rule from the *Utilities* menu if more than one item is to be stored in the drawer. Uncheck the *Enforce Full/Empty* rule. If more than one item will be stored in a compartment select the *Multiple Item Types* rule.
4. Save the changes from the top menu.
5. Select the *Compartment* configuration.
6. Set the number of compartments for the drawer.
7. Add the appropriate item(s) to each compartment, determining the maximum quantity to be stored in each compartment using the *Max Qty*. These items must be set as reworkable or scrappable.
8. Save the changes from the top menu.

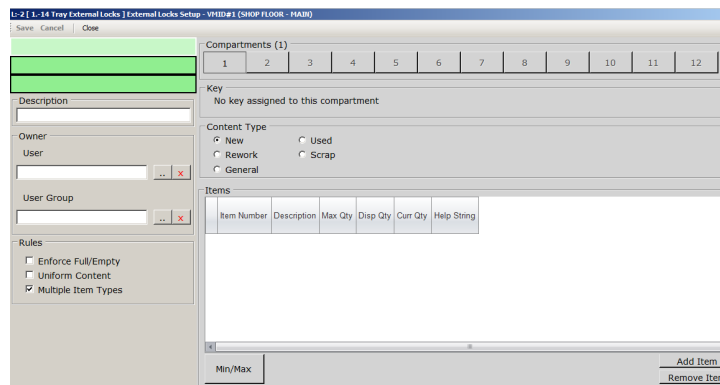
Configuring External Locks

External locks are installed onto locations such as a fridge. This can be useful when multiple items need to be stored at a controlled temperature. External locks can be configured alongside a 28 Level frame, a maximum of 3 locks can be installed per 28 Level frame.

1. Select a location then select *Configure External Locks* under the *Utilities* tab.



2. A pop-up window will appear with three locations, each location being an individual external lock.

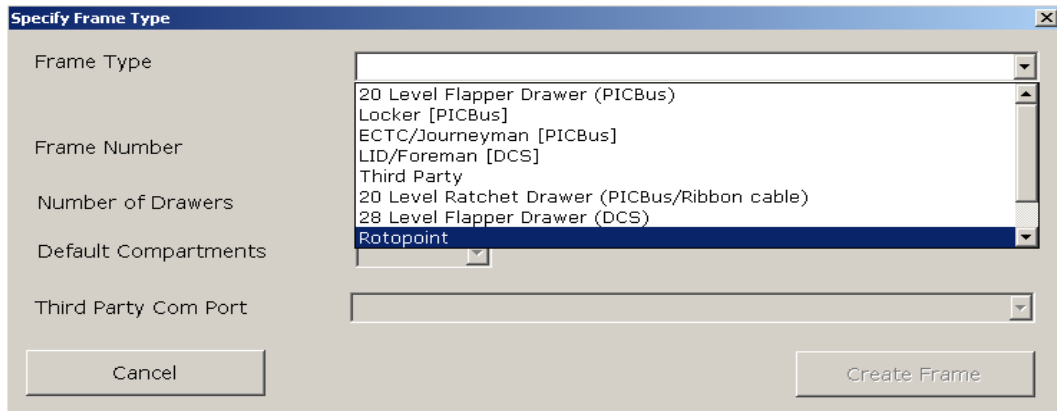


3. Select a location, making sure the location matches the physical location of the lock then select *Add Item*.
4. Select the relevant items that are required for the selected location. Select *Save* on the items screen then *save* within the external lock pop-up window.

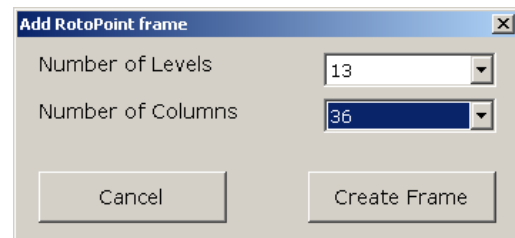
Configuring a Rotopoint

This is a carousel based point of issue. A *Rotopoint* can contain up to 468 compartments; comprising of 36 columns spanning 13 levels. Take the following steps to configure a *Rotopoint*.

1. Select *Add Frame* from the *Utilities* menu.
2. A window like the one below will open. Choose the Rotopoint frame type and then click the **CREATE FRAME** button.



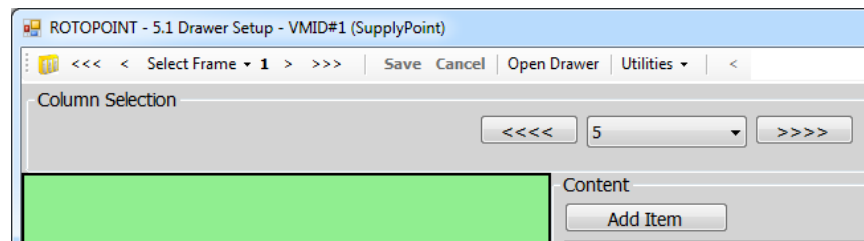
- When prompted select the number of levels and columns that make up the Rotopoint.



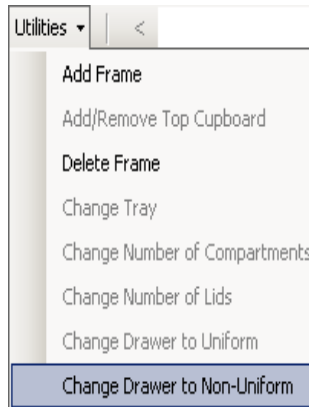
- Click the **CREATE FRAME** button to finish.

Assigning Items to a Rotopoint

- Select the column you wish to configure using the <<<< and >>>> buttons, or by selecting the drop-down shown in the *Column Selection* section below.

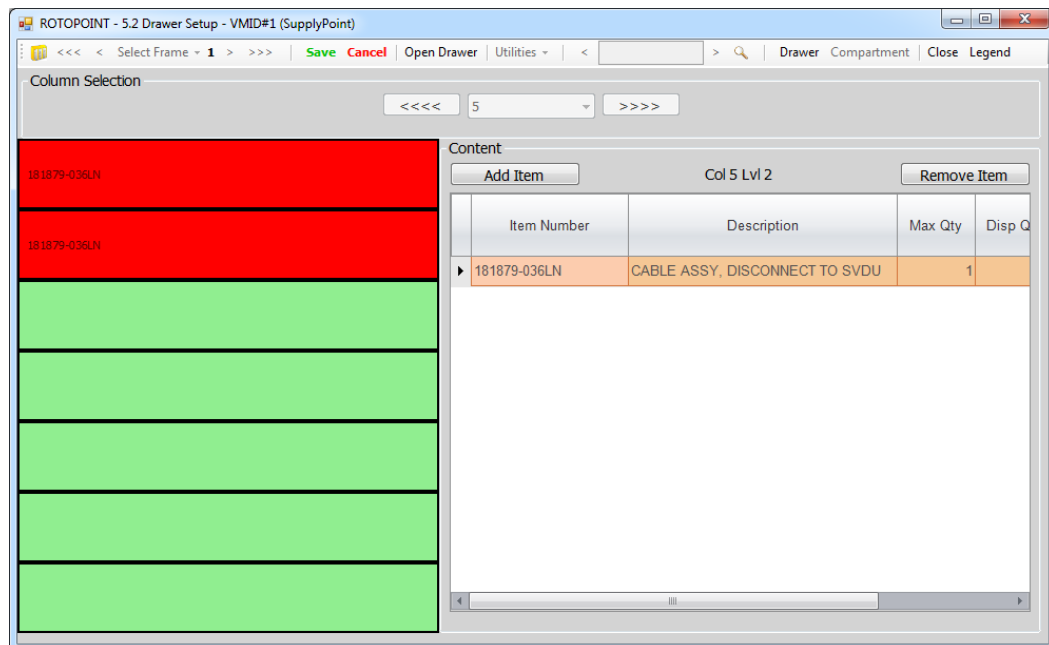


- By default a column will be fully assigned because Rotopoint columns are deemed *Uniform Content* by default.
- If you wish to have a *Non-Uniform Content* column, one that can store multiple different items; click the *Utilities* menu and select *Change Drawer to Non-Uniform*. Alternatively you can select the *Drawer* menu option and uncheck the *Uniform Content* option.



4. Select a level/compartment; establish the necessary *Rules*, and the *Content Type* as described above in *The Rules* and *Content Type* sections

5. Select *Add Item* and choose the item you wish to assign. Remember; if you wish to store more than one of the item in a given compartment be sure to increase the *Max Qty*.

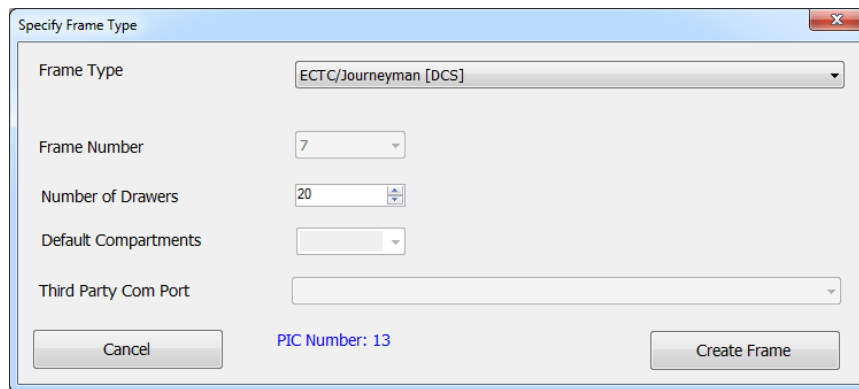


6. Once all edits are complete click **SAVE**

Configuring ECTC Cabinets (Journeyman)

Standard industrial roller drawer cabinets (Lista/Bott) can be converted with a special locking mechanism that connects to the SupplyPoint™. These cabinets are also known by the name Journeyman. This is a kit that can be installed in our manufacturing facility or on-site. Take the following steps to configure a cabinet in the software:

1. Select *Add Frame* from the *Utilities* menu.
2. A window like the one below will open. Depending on the type/age of cabinet; the frame type will either be *ECTC/Journeyman[PICBus]* or *ECTC/Journeyman[DCS]*.

A screenshot of a software dialog box titled "Specify Frame Type". It contains several input fields: "Frame Type" is a dropdown menu set to "ECTC/Journeyman [DCS]"; "Frame Number" is a dropdown menu set to "7"; "Number of Drawers" is a numeric spinner set to "20"; "Default Compartments" is a dropdown menu; and "Third Party Com Port" is a text input field. At the bottom, there are "Cancel" and "Create Frame" buttons. A status label "PIC Number: 13" is displayed in blue text between the buttons.

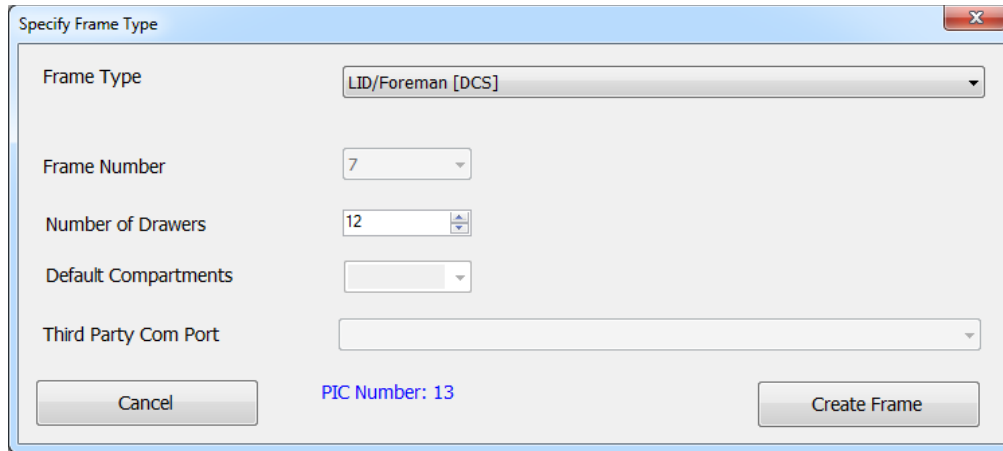
The *[DCS]* type cabinets contain newer firmware so if you select the wrong cabinet type it may not work from the User Interface. If you are in any doubt please contact a SupplyPoint™ representative.

3. Click the **CREATE FRAME** button to and continue by configuring the drawers as you would for a regular SupplyPoint™ frame.

Configuring LIDs Drawers

The LIDS system allows for compartment-level access in an ECTC cabinet. The drawers of the cabinet are retrofitted with individually actuated compartments, allowing for high-security storage. Take the following steps to configure LIDs drawers.

1. Select *Add Frame* from the *Utilities* menu. A window like the one below will appear.



Specify Frame Type

Frame Type: LID/Foreman [DCS]

Frame Number: 7

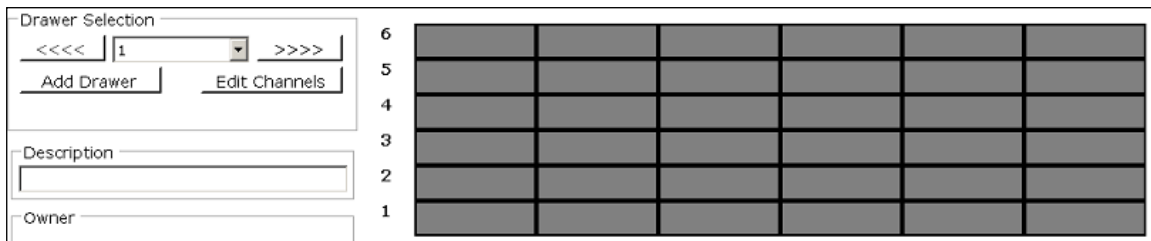
Number of Drawers: 12

Default Compartments:

Third Party Com Port:

Cancel PIC Number: 13 Create Frame

2. Select *LID/Foreman [DCS]* from the list of available frame types.
3. Select the number of drawers in the cabinet.
4. Press **CREATE FRAME** to add the frame to the vending machine.
5. The new frame will be added to the vending machine and the drawers can now be configured. The display below shows the areas of this screen relating to drawer configuration. The default configuration is shown on the right. The drawer begins with a configuration of six channels (rows running left to right) with six compartments in each channel.



Drawer Selection

<<<< 1 >>>>

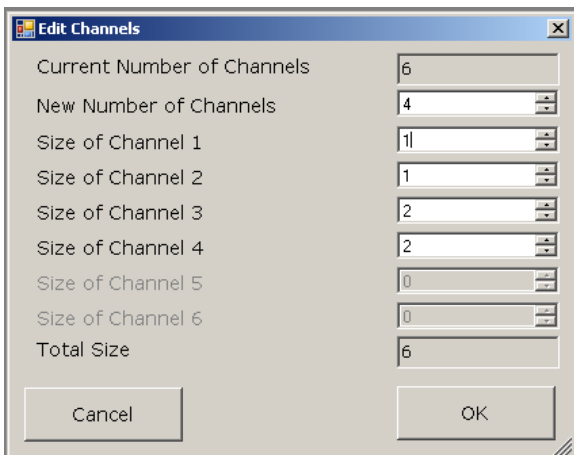
Add Drawer Edit Channels

Description

Owner

1 2 3 4 5 6

6. Select the drawer you want to configure by picking it from the drop-down box under *Drawer Selection*. If you have entered an incorrect number of drawers you can use to **ADD DRAWER** button to place an additional drawer in the frame.
7. If the number of channels needs to be altered, you need to press the **EDIT CHANNELS** button. You can now change the number of channels and the size of each individual channel. The *Total Size* will always be six.
8. Once you have made your configuration changes, press ok. The changes will be reflected in the display.



Edit Channels

Current Number of Channels: 6

New Number of Channels: 4

Size of Channel 1: 1

Size of Channel 2: 1

Size of Channel 3: 2

Size of Channel 4: 2

Size of Channel 5: 0

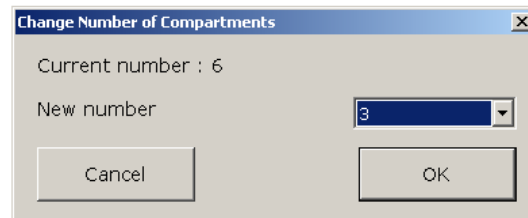
Size of Channel 6: 0

Total Size: 6

Cancel OK

4						
3						
2						
1						

9. You can now change the number of LIDs in a given channel. Select any LID in the channel you want to change.
10. Select *Change Number of LIDs* from the *Utilities* menu.
11. A window like the one at the right will appear. Select the new number of LIDs for the given channel from the drop-down box.
12. Press **OK** to continue.
13. Repeat for any other LIDS you need to configure,
14. Once you have configured the LIDs hardware, you can add items to them. Follow the same steps you would use when adding items to a drawer to complete the configuration process.



Stored Keys

Stored Keys were briefly introduced earlier in the section on Database Elements. To review the concept is that the user comes to request a given item that is not physically located in the SupplyPoint™. He is given a key to that location. After he retrieves the item, he must then return the key so others have access to the location. The following describes how to set up a *Stored Key* and assign items to it to achieve just that.

Creating the Stored Key

The first thing you have to do is create a Stored Key. This does not mean entering *Item* setup and creating an *Item* called "Stored Key". Find the *Stored Key* icon in machine setup and double click it. A *Stored Key* is a data element that can be created, edited and deleted just like the other data elements (Jobs, Machines, Users, Items, etc.). Now just create a new record and enter an ID and Description for the Stored Key as demonstrated below.



New Stored Key (Modified)

File Record

Stored Key ID: 3

Description: STORED KEY - CAB12

Date Created: 3/30/2010

Created By:

Date Last Modified: 3/30/2010

Last Modified By:

Assigning the Items to the Correct Location for Use with the Stored Key

In this example we have 5 items that are too large to store in the vending machine but it is important that they be secured. Therefore we are going to store them in a locked cabinet and dispense the key to users. For this example the items are:

- GW001 (Grinding Wheel 01)
- GW002 (Grinding Wheel 02)
- GW003 (Grinding Wheel 03)
- GW004 (Grinding Wheel 04)
- GW005 (Grinding Wheel 05)

Assuming the items have been created properly, open Drawer Setup and select the location where the key will be stored. Make sure the desired location has the correct number of compartments and then select the desired compartment. The below screen shot shows how the drawer should be setup as far as the Rules before assigning the key. *Multiple Item Types* must be on and *Enforce Full/Empty* and *Uniform Content* must be off. In this example, the Stored Key will be located in compartment 12.

The screenshot shows a configuration form with several sections:

- Description:** A text input field.
- Owner:** Includes fields for 'User' and 'User Group', each with a selection button (..) and a close button (X).
- Rules:** A list of checkboxes: 'Enforce Full/Empty', 'Uniform Content', and 'Multiple Item Types' (which is checked).
- Restrict By Location Groups:** A text input field with selection and close buttons.
- Compartments (12):** A row of 12 buttons numbered 1 to 12. Button 12 is highlighted with a blue border.
- Key:** A text area showing 'No key assigned to this compartment'.
- Content Type:** Radio buttons for 'New' (selected), 'Used', 'Rework', 'Scrap', and 'General'.
- Items:** A table with columns: Item Number, Description, Max Qty, Disp Qty, Curr Qty, and Help String. The table is currently empty.

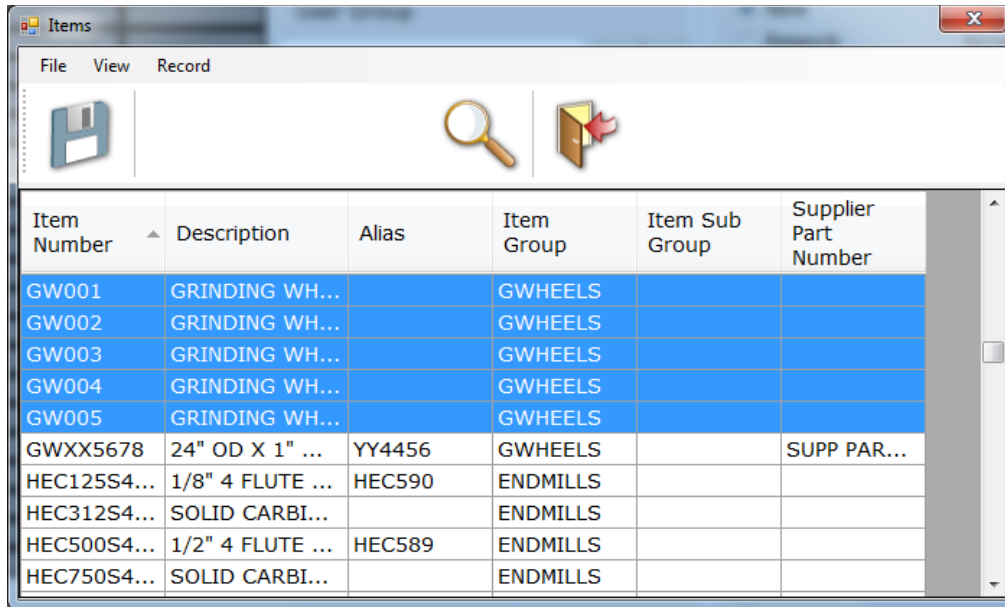
Now click the compartment 12 button as shown above. You must now assign the items accessed by the key to the actual compartment where the key will be stored. Click the **ADD ITEM** button at the bottom of the drawer configuration form.

This screenshot shows the same configuration form, but with the following changes:

- Compartment button 12 is now selected (highlighted with a blue border).
- The 'Items' table is visible and contains a single header row:

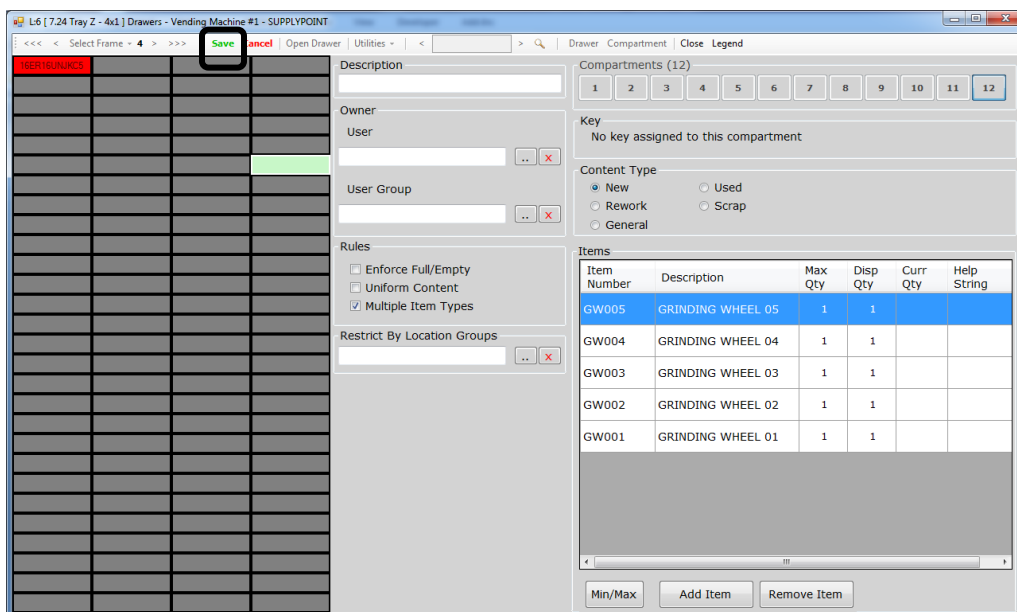
Item Number	Description	Max Qty	Disp Qty	Curr Qty	Help String
- At the bottom of the form, there are three buttons: 'Min/Max', 'Add Item', and 'Remove Item'.

Next select the five items from the resulting item selection list. It is possible to select all the items at once by selecting the first item and then the last item while holding the **SHIFT** key down. Once the items are selected, press the **SAVE** button at the top left.



Item Number	Description	Alias	Item Group	Item Sub Group	Supplier Part Number
GW001	GRINDING WH...		GWHEELS		
GW002	GRINDING WH...		GWHEELS		
GW003	GRINDING WH...		GWHEELS		
GW004	GRINDING WH...		GWHEELS		
GW005	GRINDING WH...		GWHEELS		
GWXX5678	24" OD X 1" ...	YY4456	GWHEELS		SUPP PAR...
HEC125S4...	1/8" 4 FLUTE ...	HEC590	ENDMILLS		
HEC312S4...	SOLID CARBI...		ENDMILLS		
HEC500S4...	1/2" 4 FLUTE ...	HEC589	ENDMILLS		
HEC750S4...	SOLID CARBI...		ENDMILLS		

Next you will see the items assigned to the compartment as seen below. Click the Save button at the top of the form to commit the assignments. Now set the Max Qty field to be the capacity for the item in the external storage cabinet. You can also the Help String to provide the user additional information or instructions about the item when withdrawing.



Drawer - Vending Machine #1 - SUPPLYPOINT

Save Cancel Open Drawer Utilities

Description: [Text Field]

Owner: [Text Field]

User: [Text Field]

User Group: [Text Field]

Rules:

- ☐ Enforce Full/Empty
- ☐ Uniform Content
- ☒ Multiple Item Types

Restrict By Location Groups: [Text Field]

Compartments (12): [Grid of 12 compartments]

Key: No key assigned to this compartment

Content Type:

- ☒ New
- ☐ Used
- ☐ Rework
- ☐ Scrap
- ☐ General

Items:

Item Number	Description	Max Qty	Disp Qty	Curr Qty	Help String
GW005	GRINDING WHEEL 05	1	1		
GW004	GRINDING WHEEL 04	1	1		
GW003	GRINDING WHEEL 03	1	1		
GW002	GRINDING WHEEL 02	1	1		
GW001	GRINDING WHEEL 01	1	1		

Min/Max Add Item Remove Item

Attaching the Stored Key to the Compartment

Now it appears as if the items are going to be actually located in this compartment. That is clearly not the case. This compartment represents a virtual location for the

items. To complete the setup, the Stored Key must be attached the compartment. Click the *Utilities* Menu at the top of the form and choose *Change Key*.

The screenshot shows a software interface with a 'Utilities' menu open. The menu options are: Add Frame, Add/Remove Top Cupboard, Delete Frame, Change Tray, Change Number of Compartments, Change Number of Lids, Change Drawer to Uniform, Change Drawer to Non-Uniform, Empty This Drawer, **Change Key**, and Change ECTC Mode. The background window is titled 'Compartment' and contains the following sections:

- Compartments (12):** A row of 12 buttons numbered 1 to 12. Button 12 is selected.
- Key:** A text field containing 'No key assigned to this compartment'.
- Content Type:** Radio buttons for New (selected), Used, Rework, Scrap, and General.
- Items:** A table with the following data:

Item Number	Description	Max Qty	Disp Qty	Curr Qty	Help String
GW001	GRINDING WHEEL 01	1	1	0	
GW002	GRINDING WHEEL 02	1	1	0	
GW003	GRINDING WHEEL 03	1	1	0	
GW004	GRINDING WHEEL 04	1	1	0	
GW005	GRINDING WHEEL 05	1	1	0	

Next select the Stored Key you created in the first step of this process and then click **OK**.

The screenshot shows a 'Change Key' dialog box. It has a 'Stored Key ID' label and a dropdown menu. The dropdown menu is open, showing the following options: [None], KEY01 (1), KEY02 (2), and **STORED KEY - CAB12 (3)**. A 'Cancel' button is located at the bottom left of the dialog box.

Now the drawer configuration form will display the Stored Key that is attached to the compartment. The Stored Key is now configured. The final step is to log into the User Interface and put the key in the compartment so users can access it through a withdraw. Do this by selecting the Return Key transaction privilege. This is covered in the User Interface section of this manual under the “Returning Items using Stored Keys” section.

Compartment (12)

1
2
3
4
5
6
7
8
9
10
11
12

Key
STORED KEY - CAB12

Content Type

☒ New
☐ Used
☐ Rework
☐ Scrap
☐ General

Items

Item Number	Description	Max Qty	Disp Qty	Curr Qty	Help String
GW001	GRINDING WHEEL 01	1	1	0	
GW002	GRINDING WHEEL 02	1	1	0	
GW003	GRINDING WHEEL 03	1	1	0	
GW004	GRINDING WHEEL 04	1	1	0	
GW005	GRINDING WHEEL 05	1	1	0	

Terminology

The use of terms such as Job, Machine or even Item should not be interpreted as locking you into using those terms. They are terms of convenience only. Want to call a Job a Task or a Machine a Gizmo? Go right ahead! Using the *Terminology* function in Machine Setup allows you to configure the user environment so that things are called by the names your users recognize. Job, Machine and Item are simply the most popular choices. The best part is that changes are made throughout, meaning you'll see them reflected in Machine Setup, the User Interface and Reporting.

Other functions you can perform here:

- Determining the names of item types (New, Used, General, etc.);
- Configuring foreign language settings.
- Defining the *Signon Instruction*.

NOTE: Previous versions of the software allowed you to configure the two Welcome Messages for the User Interface here. These are now configured under *Location Definition (VM/Cribs)* which can be found on the Machine Setup control panel.

Rationing and Restrictions

Both Rationing and Restrictions provide powerful tools for controlling inventory. They are grouped together here because they are so often confused, and by talking about them both at the same time, the uses of each may become clearer. By properly using one or both of these functions, you can reduce the risk that users will take more material than they need, or that they will take the wrong part for the task at hand. Some general points on Restrictions and Rationing:

- **Restrictions** provides a method of limiting the Jobs, Machines or Items that a User (or group of users) sees on the screen. It is important to note that, by default, when using Restrictions you are restricting users to the selected Jobs, Machines, Auxiliary Fields (1-3) and Items/Kits. When certain Jobs, Machines, Auxiliary Fields (1-3) and Items/Kits are shown for a user they represent the *only* Jobs, Machines, Auxiliary Fields (1-3) and Items/Kits that User will be able to choose from. If a User has been left out of restrictions, he will have access to nothing.
- **Rationing** is the control of Items over time. Items can be apportioned to Jobs, Job Groups, Machines, Machine Groups, Users and User Groups.
- Use **Restrictions** if you want to restrict something (a User, Job, Machine, etc.) to a certain list of items.
- Use **Rationing** if you want to ration the number of a given Item (or Item Group) that can be issued over a given time.
- Use **Restrictions** as a hedge against operator error. By restricting users in their selections, you can reduce the chance that they will select the wrong tool for the operation.
- Use **Rationing** to enforce the discipline of having to return an item before more can be issued. This is accomplished by setting a long rationing time for the item. A user who has exceeded his ration can remove this burden by returning the item (for rework, scrap, etc.)
- Use **Rationing** to determine if an item is giving you the service it should. Items that are continually in need of reissue before their ration period ends might need looking at.

Rationing

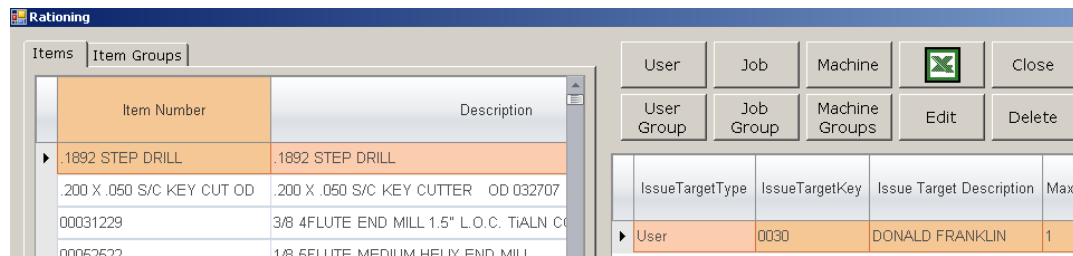
Click the *Rationing* icon on the control panel to display the rationing setup form. Unlike the restrictions form, rationing is setup by items or by item groups. This form allows items to be rationed by user, job or machine or a combination of the three. To set up rationing on an item or items follow these steps.

1. After clicking *Rationing* from the control panel; a screen will appear showing a list of items in the SupplyPoint™. There is also a tab labelled *Item Groups*, from

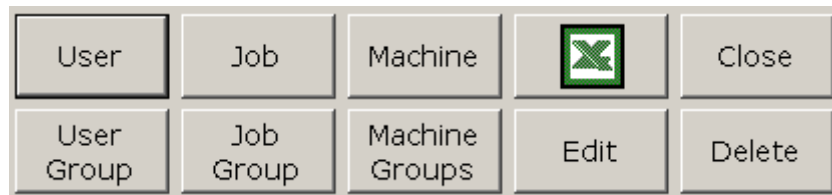
which you can ration item groups. If you do not see the list of items, you may see a message that looks like this:



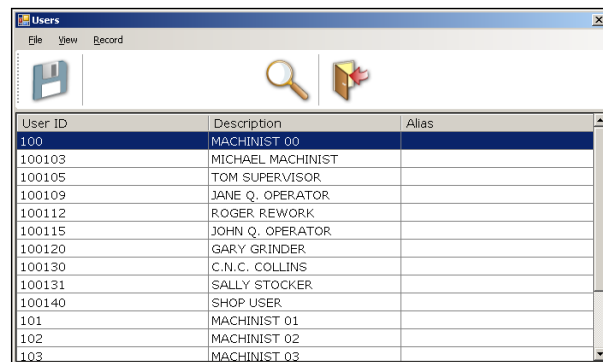
2. This means that you need to go to *Parameters* and check the setting that says *Rationing- Enabled*. With Rationing enabled, a window like the one below will be displayed.



3. Select the item (or item group) to be rationed and decide where ratios will be applied by pressing the appropriate button in the rationing display. For this exercise rationing will be set up by User.

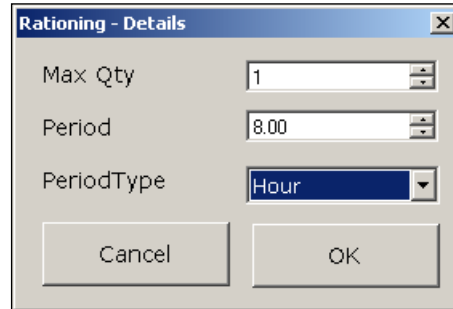


4. Press **USER** to select the User or Users you wish to ration. Use the **CTRL** and **Shift** keys to select multiple users. Press the save button to continue.
5. You will return to the main rationing screen and the User or Users selected will



appear on the right side of the main display.

6. Next you will need to determine the number of pieces and the time period you want to ration. If you are rationing only to one user, you can double-click on him. For multiple users, use the **CTRL** and **SHIFT** keys to select them and press the *Edit* button. The following display will appear.

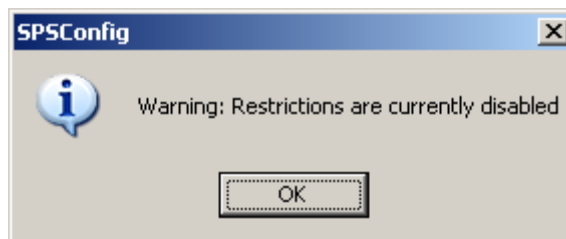
A dialog box titled "Rationing - Details" with a close button (X) in the top right corner. It contains three input fields: "Max Qty" with a value of "1", "Period" with a value of "8.00", and "PeriodType" with a dropdown menu showing "Hour". At the bottom are two buttons: "Cancel" and "OK".

7. Enter the quantity of the item and the amount of time over which that quantity is to be rationed and click **OK**.
8. To delete rations, select the item or item group that is mistakenly rationed, select the entry relating to it and click **DELETE**.

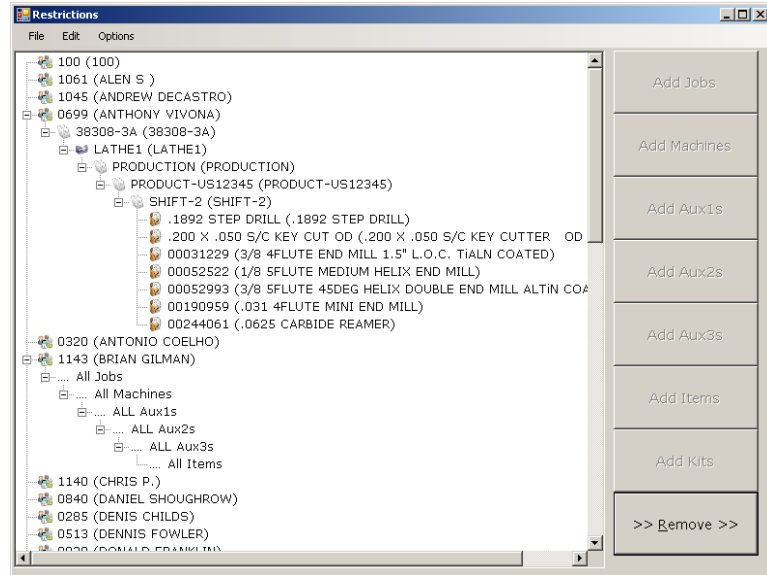
Restrictions

Click the *Restrictions* icon on the control panel to display the *Restrictions* setup window. To set up restrictions for an object follow these steps.


1. After clicking *Restrictions* from the control panel; a screen will appear showing all users and User Groups in the SupplyPoint™. If you do not see the Users and User groups, you may see a message that looks like this;

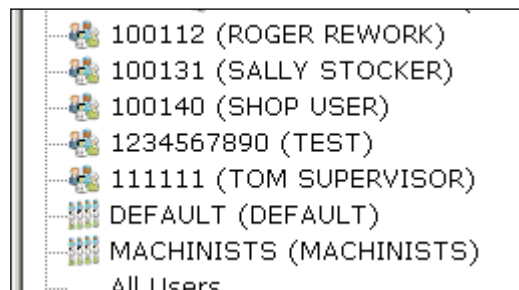


2. This means that you need to go to *Parameters* and check the setting *Restrictions Enabled*. With *Restrictions* enabled, a window like the one below will be displayed

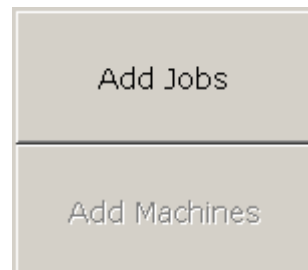


The tree shows a list of Users, User Groups and All Users. Clicking on one of these opens the next level of the tree (i.e. Jobs, Machines, Aux 1-3, Items and Kits).

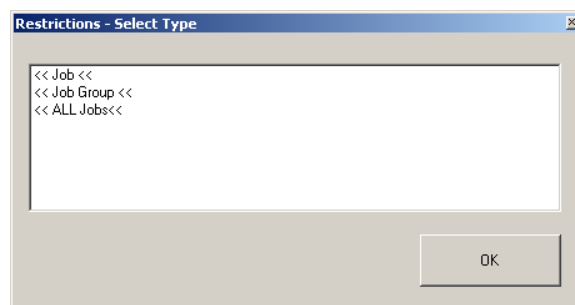
3. Begin by selecting the User or User Group you wish to restrict. If you are giving the same restrictions to all users, select All Users. Users or User Groups with a  beside them already have information entered



4. When you select a User the first button on the right-hand side of the display will become available, allowing you to assign Jobs



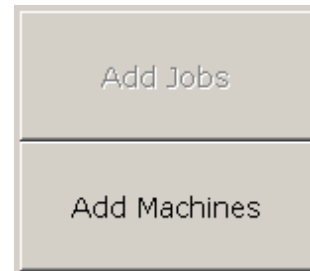
5. You will have to select Job, Job Group or All Jobs and press **OK**



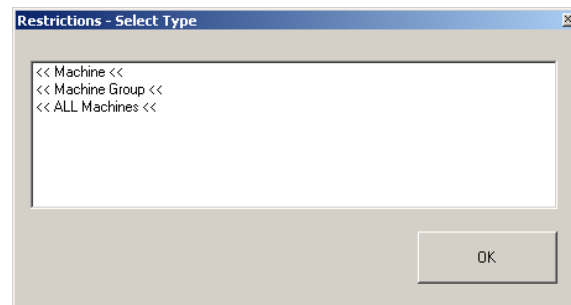
6. When you select either a Job or a Job Group, a selection screen will appear. Select the Job(s) or Job Group(s) you need to assign and press the save button. You can use **Shift** and **CTRL** to select multiple items. The selected Job information will appear below the User
7. When the Job appears in the tree, focus will automatically shift to it. You will now be able to select the Machine information



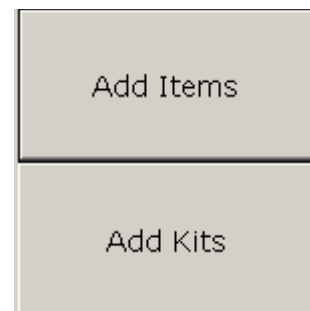
Job	Description
JOB_02	CELL02
JOB01	CELL01
JOB02	CELL02
JOB03	CELL03



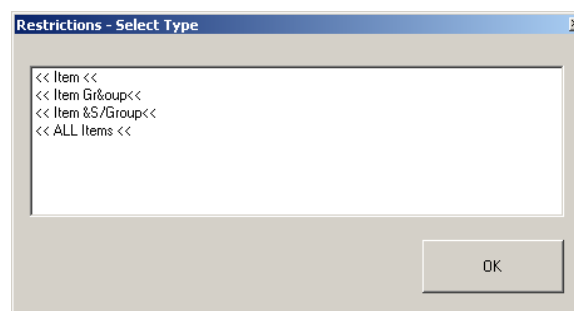
8. Select Machines. Machine Groups, or All Machines in the same manner as you selected Job information. This (minus groups) also applies to Aux fields if enabled



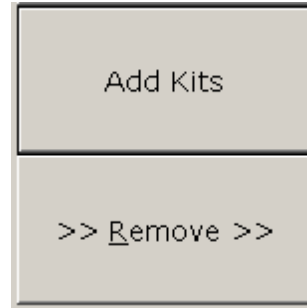
9. Once Machine information is entered, you can proceed to Items. Note that with Items the same process is required similar to Jobs and Machines.



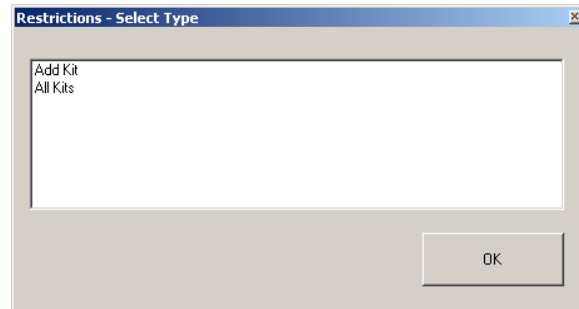
10. You can select individual Items, Item Groups or Item Sub-groups if use of those would be easier. The selected Item information will appear on the tree and Restrictions setup is complete for the selected User or Group



11. You can also select a Kit under the machine/machine group instead of an item. This will restrict which kits are available



12. Either select All Kits or specify a specific Kit



Parameter Settings

There are several settings in *Parameters* (see below) that refer to restrictions. These determine everything from the basic operation of restrictions to how individual restrictions work with group restrictions. Remember that any change in *Parameters* requires a restart of the User Interface. To change a setting, either double click on it or highlight it and press **SETUP**. Check, uncheck, or enter the new value and press **OK**. The pertinent *Parameters* settings are the following:

- *Restrictions Enabled*: This function activates the restrictions. The default value is 0, or off.
- *Restrictions - Apply regular item restrictions to Kit Issue*: When this parameter is turned on and restrictions effecting items taken during a Kit Issue will apply. Kits can be applied to restrictions, but there could also be restrictions set up for individual items. For example, a user may choose to withdraw a specific kit, but may be restricted from one of the items in the kit based on the restrictions setup. If this option is on, then that user will not be able to withdraw all the items in the Kit.
- *Restrictions Additive- ALL Users*: This function combines restrictions established for individual users with those established under *All Users*.
- *Restrictions Additive- User Group*: This function combines restrictions established for individual users with those of any restrictions for User Groups of which he is a member.

- *Restrictions Enabled – Simple Return*: forces the Restriction rules to be applied to Return transactions when the *Return: Use Simple Return Method* Parameter is in use.
- *Restrictions show restricted items as disabled (grayed)*: Typically when restrictions are in place, restricted items will not appear in the User Interface. Use of this parameter will cause them to appear in the User Interface, but they will be grayed out.
- *Restrictions show what is DENIED not ALLOWED*: This function allows the use of restrictions to deny access to items. The default setting is 0, or off, which means by default Restrictions allows access to the listed items. It is important to remember that when this is the case a user will have access to no items unless he is explicitly given access to them.

Using Restrictions to Deny Access

As was mentioned above, the default use of restrictions is to *give* users access to certain items. This logic can be switched by using the *Restrictions show what is DENIED not ALLOWED* parameter setting. It would be incorrect, however, to think this is a direct reversal. Though you need to complete the restriction setup through the Item level, the denial will occur wherever you specify an entry. Examples follow. For simplification, it should be noted here that what works for Users, Jobs, Machines or Items works equally well when using User Groups, Job Groups, Machine Groups, Item Groups (or sub groups) and all three Aux's:

- **User → All Jobs → All Machines → Item A** = No access to Item A for the User
- **User → Job A → All Machines → Any or All Items** = No access to Job A for the User;
- **User → All Jobs → Machine A → Any or All Items** = No access to Machine A for the User.

Parameters

Parameters is the place where a lot of the miscellaneous settings that make the SupplyPoint™ work are set. Need to enable or disable something? Chances are *Parameters* is the place to be. Need to configure something? Again, think *Parameters*. When dealing with these settings there are two rules to keep in mind:

Rule No. 1: Don't change it unless you have to. These settings are a major determinant of what happens to Users at the User Interface. Changes to settings like these can have unintended consequences. Wait until you need to change the setting to change the setting.

Rule No. 2: Whenever you make a change, restart the User Interface. The User Interface reads the parameters each time it starts and holds those settings

until it starts again. If you make a change from client machine you will need to go to the vending machine, shut down the User Interface and re-start it.

Working with Parameters

Once you are in Parameters, you will see a display like the one below. It shows the entire list of Parameters, most of which you'll not be using.

The screenshot shows the 'Parameters' window with 'SupplyPoint 1' selected in the 'Vending Machine' dropdown. The window has tabs for 'Authentication', 'Hardware', 'Maintenance', 'Miscellaneous', 'Multi Language', 'Rationing and Restriction', 'System Paths', 'User - Job - Machine', 'User Interface - Appearance', and 'User Interface - Functionality'. The 'User Interface - Functionality' tab is active, displaying a list of parameters with their descriptions and values.

Description	
Alternate Location - Fast Filter Column (0 = Location, 1 = Item, 2 = Description, 3 = Qty, 4 = Item Group, 5 = Alias, 6 = Supplier Part Number)	1
GUI - Allow selection by Alias	0
GUI - Allow selection by supplier part number	0
GUI - Auto minimize keyboard on item select screens	1
GUI - Before selecting an Item, pop up group filter automatically	0
GUI - Before selecting an Item, pop up sub-group filter automatically	0
GUI - Cancel on login screen exits	0
GUI - Capture User on Withdraw	0
GUI - Check alternate locations for items not in this location	0
GUI - Confirm Items on Withdraw - max failure count	0
GUI - Confirm Items on Withdraw from non uniform content locations	0
GUI - Disable Shopping Basket on Restock	0
GUI - Disable Shopping Basket on Return	0
GUI - Disable Shopping Basket on Withdraw	0
GUI - Disallow Keyboard on User login	0
GUI - Disallow Keyboard throughout application	0
GUI - Enable User Cost Center On Screen Warnings (0 = Off, 1 = UI Only, 2 = Portal Only, 3 = Both)	0

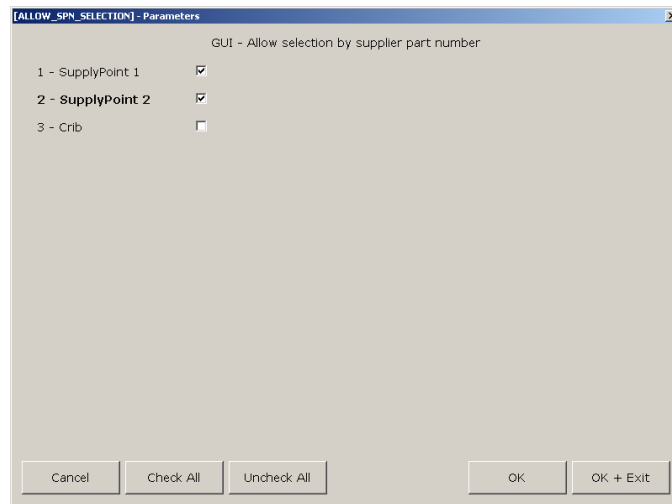
At the bottom of the window are 'Edit' and 'Close' buttons.

1. Use *Vending Machine* dropdown, shown below, to select the Vending Machine of which you wish to load its parameters.

The screenshot shows the 'Parameters' window with the 'Vending Machine' dropdown menu open. The menu lists 'SupplyPoint 1', 'SupplyPoint 2', and 'Crib'. The 'SupplyPoint 1' option is highlighted.

2. Parameters are grouped according to their function. Select the tab that correlates to the function you are controlling to pull up the appropriate list. In order to edit a parameter setting you can take the same steps you would follow when editing anything else: you can both highlight it and press the **EDIT** button or you can double-click on it. There are also two possibilities for editing: you may be asked to enter data, or you may be presented with a check box. In cases where a check box is used, this is reflected in the data field as either a **1** (box checked, yes, function on) or a **0** (box not checked, no, function off). Be sure to check the box for each machine the parameter

is to apply. You can also press **CHECK ALL** or **UNCHECK ALL** to save time, as shown below.



3. When you are finished, you can press **OK** to save the change and return to Parameters or **OK + EXIT** to save your change and exit parameters. Lastly press **CANCEL** to cancel your change. Below is a description of important Parameter settings according to their function:

The Parameters and Their Meanings

- **Authentication Parameters**
 - *Biometric Authentication- Enabled on Login:* This setting allows the use of fingerprint readers as verification on login.
 - *Biometric Authentication- Use Fingerprints Only:* Enabling this setting will make fingerprints the only acceptable login method.
- **Hardware Parameters**
 - *Drawers- Auto Continue on Drawer Closed:* This function causes the system to move on when a user closes the drawer. When this is not in use, users will be required to press a **GO** button when the drawer is closed.
 - *Drawers- Enable multiple drawers per transaction:* When this parameter is checked, the systems will allow the user access to multiple drawers during a transaction. For instance, when an item is stored in multiple drawers and the user requests a greater quantity than can be dispensed from one drawer, the systems will allow access to one drawer and then to the other.
 - *Drawers- Number of retries to open drawer:* This determines how many attempts a user may make to open a drawer when a timeout occurs.
 - *Drawers- Time (sec) to wait for user to close drawer:* This is the amount of time the system will wait for a drawer to be closed before reverting back to the login screen.

- *Flashing Lights- Enabled:* This activates or deactivates the flashing lights that can be seen while the User Interface is running and the machine is idle. The default setting is 1, or on. It is recommended that this setting not be changed as the flashing lights serve an important diagnostic purpose.
- *Flashing Lights – Ignore top two rows in each frame during check:* in 28-level systems this option is required to be on to ensure errors are not reported when the Flashing Lights checks can't find a drawers on levels 1 and 2. This is usually the case when you have a frame containing the monitor or with a Top Cupboard (T6) located at the top of the frame.
- *Flashing Lights- Interval:* This determines how often the machine will flash. The default time period is once every five seconds.
- *Manual Override Check (DCS only) – Enabled:* A special sensor is available that will monitor the status of the locking bar and warn if it has been raised to the unlock position. If this sensor is installed, check this option. This is only available with 28 level frames (DCS). If the locking bar is detected in the unlock position then a message will be displayed on the login screen of the user interface. It will also be recorded in a special log table in the database.
- *Manual Override Check (DCS only) – Interval (Minutes):* This is the polling frequency at which the system will check the manual override sensor (locking bar position) and report its condition to the user interface.
- *Scales: 0=grams 1=ounces:* This allows the choice of units to be used when weighing items.
- *Scales: Communications port:* Enter the name of the COM port to which the scale is attached.
- *Scales: Log Output to C:\Scales.txt:* Setting used for debugging the scales functionality.
- *Tickets - Port with ticket printer attached:* If the ticket printer is a USB printer then enter the name of the ticket printer. It can be found under *Printers* in Windows. If you have a parallel port print then enter LPT1.
- *Tickets - Print a ticket when adding items:* This forces the system to print a ticket whenever a ticketable item is returned or restocked.
- *Tickets - Print a ticket when withdrawing items:* This forces the system to print a ticket when a ticketable item is removed from the machine.
- *Tickets - Print for alternate/ crib stock:* This allows the creation of tickets for stock that is not directly controlled by the vending machines. Such tickets are often used as pick tickets with tool cribs.
- *Tickets – Print ticket when location is open:* When turned on this option forces the ticket to print once the User has opened the location. The printed ticket can then be fixed to the Item being withdraw to help identify it should it have been removed from a pack and contain no distinguishing information.

- **Maintenance Parameters**

- *Setup: Enable Frame Deletion:* Use of this setting will allow the Delete Frame button described in Drawers above to be enabled or disabled.

- **Miscellaneous Parameters**

- *Barcode reader present:* Where there is a barcode attached to the VMID the correct location needs to be selected with this parameter.
- *Catalog: Enable:* Use of this function allows users to access a catalog or other site on the World Wide Web from the User Interface.
- *Catalog: Icon File:* This is the image that denotes the catalog on the User Interface.
- *Catalog: URL:* Enter the URL (Uniform Resource Locator) that corresponds to the catalog. This can be a document on the local computer or a web site.
- *External Request- Allow Reserving:* This gives priority to externally requested items by preventing users from removing externally requested items (as part of a normal withdrawal) before the request can be filled.
- *External Request- Amount of time to reserve request (hours):* Enter the number of hours that requested items are to be reserved in this space.
- *External Request: Disable Automatic Popup of List:* When a user who has current Requests to be withdraw from the system logs in, they will automatically be taken to the External Request transaction unless this parameter is turned on.
- *Item – Maximum length (no greater than 32):* Sets the maximum length that can be used when creating a new Item Number in the system.
- *PAC Reader: Number of characters to extract from decimal:*
- *Quickfill- Allow Barcode Separator:* When using a barcode scanner, this will allow you to include both the item number and quantity on the barcode.
- *Quickfill- Barcode Separator:* This is the separator character in the barcode.
- *Quickfill- Will log out when this string is scanned:* This setting allows you to establish a character string for logging out of the User Interface when you are done restocking.
- *Suppliers – Default Supplier:*
- *Suppliers – GeneralXML Order From Domain:*
- *Suppliers – GeneralXML Order To:*
- *Suppliers – GeneralXML Order To Domain:*
- *Suppliers – Show KMTL Order Type:*

- **Multi-Language Parameters**

- *Language- Is US English:* This setting can be used to toggle between US and UK English. 1= US English; 0= UK English.

- *Language - Multiple Languages:* Use this setting to activate the multiple language operations of the vending machine. 1 means that the languages listed in the following parameter setting will be available for selection.
- *Languages [1=English, etc]:* dictates which languages are available within the software.
- **Rationing and Restrictions Parameters**
 - *Rationing Consolidation Enabled:* when turned on the Rationing rules are applied across all Vending Machines/Cribs in the database and not applied on a per machine basis. Using this feature allows Administrators to ensure staff are not trying to bypass the Rationing rules by taking their allocation from each system, but enforcing they can only get it once; no matter which system they take it from.
 - *Rationing Enabled:* Activates the rationing functions. The default value is 0, or off.
 - *Rationing Item Group Members Separately:* This function together with the *Rationing User Group Members Separately* replaces the earlier parameter *Rationing Group Members Separately*; this enables the software to be configured to ration User Groups and Item Groups separately. For example, a user may choose to set up a rationing rule of 5 pairs of gloves per week, for a group of items composed of gloves of different sizes, for a group of users. By enabling both parameters each user will be restricted to withdrawing 5 pairs of gloves regardless of size.
 - *Rationing User Group Members Separately:* This function together with the *Rationing Item Group Members Separately* replaces the earlier parameter *Rationing Group Members Separately*; this enables the software to be configured to ration User Groups and Item Groups separately. For example, a user may choose to set up a rationing rule of 5 pairs of gloves per week, for a group of items composed of gloves of different sizes, for a group of users. By enabling both parameters each user will be restricted to withdrawing 5 pairs of gloves regardless of size. Where this parameter is not enabled the ration rule will apply across the users in the group.
 - *Restrictions – Apply regular item restrictions to Kit Issue:* When this parameter is turned on and restrictions effecting items taken during a Kit Issue will apply. Kits can be applied to restrictions, but there could also be restrictions set up for individual items. For example, a user may choose to withdraw a specific kit, but may be restricted from one of the items in the kit based on the restrictions setup. If this option is enabled, then that user will not be able to withdraw all the items in the Kit.
 - *Restrictions Additive- ALL Users:* This function combines restrictions established for individual users with those established under *All Users*.

- *Restrictions Additive- User Group:* This function combines restrictions established for individual users with those of any restrictions for User Groups of which he is a member.
 - *Restrictions by Location- Enabled:* This allows you to use the Restriction by Location function, which provides drawer-level restriction of access.
 - *Restrictions Enabled:* This function activates the restrictions. The default value is 0, or off.
 - *Restrictions Enabled – Simple Return:* forces the Restriction rules to be applied to Return transactions when the *Return: Use Simple Return Method* is in use.
 - *Restrictions show restricted items as disabled (grayed):* Typically when restrictions are in place, restricted items will not appear in the User Interface. Use of this parameter will cause them to appear in the User Interface, but they will be grayed out.
 - *Restrictions show what is DENIED not ALLOWED:* This function allows the use of restrictions to deny access to items. The default setting is 0, or off, which means by default Restrictions allows access to the listed items. It is important to remember that when this is the case a user will have access to no items unless he is explicitly given access to them.
- **System Path Parameters**
 - *Audio Files – Directory containing Item audio files:* This is the directory where all Item audio files are stored.
 - *Audio Files – Item Audio Files Enabled:* Turning this feature on/off will determine if the User Interface will play any Item audio files on the Quantity Selection or Drawer Open screens in the User Interface; should the item have an audio file associated with it.
 - *Directory containing Item pictures:* This is the directory where all item graphics are stored. The default setting is to C:\PROGRAM FILES\SUPPLYPOINT\GRAPHICS\ITEMS or to D:\GRAPHICS\ITEMS but this can be changed. HTML documents can be displayed by entering [file://pathname](#) where the pathname is the location of the HTML document. This function can also be used to display ordinary images in greater detail.
 - *Directory containing item supplier pictures:* Images placed in this folder can be attached to suppliers. Any time a transaction involving an item from the supplier is performed the image will appear.
 - *Directory containing User pictures:* This is the directory where photos of the users can be placed. The default setting is C:\PROGRAM FILES\SUPPLYPOINT\GRAPHICS\USERS or D:\GRAPHICS\USERS.
 - *External application access password:* Entering a password here will allow SupplyPoint™ functions to access some third-party business systems.
 - *External application parameters:* This allows the user to enter any commands or switches required for external applications.

- *External application pathname:* The pathname entered here is the location of the external application being used.
 - *Launch Program on Transaction: Command Line:* This setting contains the path and name of the program that is to be launched after each transaction.
 - *Launch Program on Transaction: Enabled:* Activation of this parameter forces the computer to launch a program (e.g. TMS Transfer Agent) each time a transaction is finished.
 - *Launch Program on Transaction: Timeout (seconds 0=no timeout):* This setting indicates how long the process should attempt to complete its task before giving up.
 - *Launch Program on Transaction: Windows Mode (1=Normal, 2=Minimized, 3=Hidden):* This setting indicates whether the process will be visible to vending machine users.
 - *OEM App Icon Path:* When an OEM application is able to be launched from the User Interface, this is the path to the icon that will be displayed in the Interface.
 - *OEM App Parameters:* This field is for command line switches used in an OEM application.
 - *OEM App Path:* This is the location of the program that will be launched when the OEM icon is selected in the User Interface.
 - *Transaction Files- Directory Scanned by Transfer Agent:* This is the directory to which transaction files will be written for pickup by the ATMS Transfer agent.
 - *Transaction Files- Directory they are put in while they are being written prior to being moved to the Live:\ directory:* This serves as a holding area for the transaction files and prevents other process from disrupting their transfer to the final location.
 - *Transaction Files- Should be written for the Transfer Agent:* This setting is to indicate that the TMS Transfer agent is in use and that transaction files should be created for it.
- **User-Job-Machine Parameters**
 - *Aux Track Field 1-3: Defer Showing Full List:* In situations where there are large numbers of aux entries being used, this function will stop the User Interface from automatically listing all aux entries. The user then must use the search functions to find and select their aux entry.
 - *Aux Track Field 1-3: Disable Keyboard:* Disables the on-screen keyboard within the User Interface whenever the User is on the Aux Selection screen.
 - *Aux Track Field 1-3: Do not display list:* Use of this function will require users to enter an aux number - either by using the light pen or an attached par code scanner- instead of allowing them to select it from the list.

- *Aux Track Field 1-3: Enable:* This determines whether users will have to select an aux entry when withdrawing an item. When the value is set to 0, aux numbers will not be used.
- *Aux Track Field 1-3: Fast Filter Column Number (0 = Aux Track Field 1-3, 1 = Description, 2 = Alias):* This parameter determines which field or column will be searched when the fast filter button is clicked.
- *Aux Track Field 1-3: Maximum Length (no greater than 32):* Sets the maximum length that can be used when creating a new aux Number in the system.
- *Aux Track Field 1-3: Must exist (If not user can create):* When this function is activated, users must choose from a pre-existing list of aux entries. Where the pre-existing list is not suitable and entry can be created.
- *Aux Track Field 1-3: Order By Column Number (0 = Aux Track Field 1-3, 1 = Description, 2 = Alias):* This parameter determines which column the data is being ordered by for each transaction.
- *Aux Track Field 1-3: Semi colon separated list of edits:* The string entered here tells the machine how to read information entered by a card swipe or barcode reader. For detailed information see *Users - Semicolon separated list of edits* below.
- *Aux Track Field 1-3: User created must be this length:* When the setting *Aux Track Field 1-3: Must exist (If not user can create)* is in force, this function determines the length that those aux numbers must have. This can be used as a hedge, especially in cases where barcode scanners are being used, against scanning or keying an incorrect number into the system.
- *Aux Track Field 1-3: User created must start with this text:* A further hedge against creating the wrong aux number, this setting determines what the starting character or characters of a job number.
- *Jobs- Defer showing full Job List:* In situations where there are large numbers of jobs being used, this function will stop the User Interface from automatically listing all jobs. The user then must use the search functions to find and select his job.
- *Jobs - Disable Keyboard on job selection:* Disables the on-screen keyboard within the User Interface whenever the User is on the Job Selection screen.
- *Jobs- Do not display Job List:* Use of this function will require users to enter a job number- either by using the light pen or an attached par code scanner- instead of allowing them to select it from the list.
- *Jobs- Enable Validity Date Range Check:* This parameter setting allows the system to check the date range of Jobs.
- *Jobs- Fast Filter Column Number (0-Job, 1-Descr, 2-Alias):* This parameter determines which field or column will be searched when the fast filter button is clicked.
- *Jobs- In use:* This determines whether users will have to enter a job number when withdrawing an item. When the value is set to 0 job numbers will not be used.

- *Jobs – Maximum Length (no greater than 32):* Sets the maximum length that can be used when creating a new Job Number in the system.
- *Jobs- must already exist when entered; else they are creatable by VM users:* When this function is activated, users must choose from a pre-existing list of jobs. In shops where job numbers are frequently created or changed it can be convenient to allow users to enter job numbers. Deactivating this function will allow that to happen.
- *Jobs- Semicolon separated list of edits:* The string entered here tells the machine how to read information entered by a card swipe or barcode reader. For detailed information see *Users - -Semicolon separated list of edits* below.
- *Jobs- User created must be this length:* When the setting *Job Numbers- must already exist, else they are creatable by VM users* is in force this function determines the length that those job numbers must have. This can be used as a hedge, especially in cases where barcode scanners are being used, against scanning or keying an incorrect number into the system.
- *Jobs- User created must start with this text:* A further hedge against creating the wrong job number, this setting determines what the starting character or characters of a job number
- *Jobs - Order By Column Number (0 = Aux Track Field 1, 1 = Description, 2 = Alias):* This parameter determines which column the data is being ordered by for each transaction.
- *Machines- Defer showing full Machine List:* In situations where there are large numbers of machines being used, this function will stop the User Interface from automatically listing all machines. The user then must use the search functions to find and select his job.
- *Machines- Do not display Machine List:* Use of this function will require users to enter a machine number- either by using the touch screen or an attached barcode scanner- instead of allowing them to select it from the list.
- *Machines- Fast Filter Column Number (0-Machine, 1-Descr, 2-Alias):* This parameter determines which field or column will be searched when the fast filter button is clicked.
- *Machines – Disable Keyboard on machine selection:* disables the on-screen keyboard within the User Interface whenever the User is on the Machine Selection screen
- *Machines- Enable Validity Date Range Check:* This parameter setting allows the system to check the date range of Machines.
- *Machines- In use:* This parameter tells the system whether to ask users for machine numbers when they withdraw or return items to the vending machine.
- *Machines – Maximum Length (no greater than 32):* Sets the maximum length that can be used when creating a new Machine Number in the system.

- *Machines- must already exist when entered; else they are creatable by VM users:* As with the jobs function, this one allows users either to select from a pre-existing list of machines or create them as needed.
 - *Machines- Semicolon separated list of edits:* The string entered here tells the machine how to read information entered by a card swipe or barcode reader. For detailed information see *Users - Semicolon separated list of edits* below.
 - *Machines- User created must be this length:* When the setting *Machine Numbers- must already exist, else they are creatable by VM users* is in force this function determines the length that those Machine numbers must have. This can be used as a hedge, especially in cases where barcode scanners are being used, against scanning or keying an incorrect number into the system.
 - *Machines- User created must start with this text:* A further hedge against creating the wrong Machine number, this setting determines what the starting character or characters of a Machine number.
 - *Machines - Order By Column Number (0 = Aux Track Field 1, 1 = Description, 2 = Alias):* This parameter determines which column the data is being ordered by for each transaction.
 - *Users – Allow selection by user alias:* This parameter allows users to log into the User Interface using their alias.
 - *Users - Enable Validity Date Range Check:* This setting allows you to establish date ranges for users of the vending machine.
 - *Users – Maximum Length (no greater than 32):* Sets the maximum length that can be used when creating a new User Number in the system.
 - *Users- Semicolon separated list of edits for user Ids:* This parameter refers to the user ID string that is used to log in to the User Interface. Often, users will have ID badges with a bar code or magnetic stripe, encoded with more characters than the actual user ID. This parameter provides a mask for obtaining the necessary characters from the input string. For example, the string "10:1-3,5,9" indicates that if the input string is 10 characters long the user ID can be obtained from the first, second, third, fifth and ninth characters. If the input string is not 10 characters, it will be used as is. As well as supporting fixed position within the string, you can also configure the edits to work on strings that begin with a certain pattern or characters. For example, the string "/per\4-7" would extract characters 4-7 from any value swiped/scanned in that began with "per". Additional masks can be added by separating them with semicolons.
- **User Interface- Appearance Parameters**
 - *Alternate Location – Fast Filter Column (0 = Location, 1 = Item, 2 = Descr, 3 = Qty, 4 = Item Group, 5 = Alias, 6 = Supplier Part Number):* The column on which

searches should be performed when somebody select the Fast Filter search button on the Alternative location screen in the User Interface.

- *Alternate Location - Order By Column Number* (0 = Location, 1 = Item, 2 = Descr, 3 = Qty, 4 = Item Group, 5 = Alias, 6 = Supplier Part Number This parameter determines which column the data is being ordered by for each transaction.
- *GUI - Allow selection by Alias*: When this function is activated, users can enter the Item Alias in the User Interface as a means of selecting the Item.
- *GUI- Allow selection by supplier part number*: When this function is activated, users can enter supplier part numbers in the User Interface as a means of selecting the item.
- *GUI- Auto-minimize keyboard on item select screens*: When this parameter is enabled, the on-screen keyboard will disappear in Item selection, to be replaced by the keyboard button.
- *GUI- Before selecting an item, pop up group filter automatically*: Use of this setting will require users to choose an item group before selecting an item. This can be extended to item sub-groups by using the parameter *GUI- Before selecting an item, pop up sub-group filter automatically*.
- *GUI- Cancel on login screen exits*: This setting eliminates the need to enter an exit password by allowing the button to close the User Interface.
This is a security risk and is not recommended.
- *GUI - Capture User on Withdraw*: when turned on this feature allows any User who has the *Is Handheld Administrator* attribute checked to be able to book a Withdraw transaction against any User account that has access to that Vending Machine/Location and has the Users attribute *Allow To Login* checked . Especially useful when operated by a Storeman in managing an External Location/Crib.
- *GUI Check alternate locations for items not in this location*: If a User searches for something that isn't available in the current Vending Machine/Crib location this option will allow the User Interface to search all of the other Vending Machines/Cribs locations that the User has access to and let them know if it is in stock.
- *GUI - Confirm Items on Withdraw- max failure count*: The numbers of times a User can scan/enter the Item Number or Supplier Part Number for an Item taken from a non-uniform content location before the User Interface logs their failure and continues on with the transaction(s).
- *GUI - Confirm Item on Withdraw from non-uniform content locations*: When an item is taken from a non-uniform location, such as an ECTC drawer, this feature will force the User to scan/enter the Item Number or Supplier Part Number for the item, confirming that they have Withdrawn the correct item and not picked another by mistake.
- *GUI- Disable shopping basket on Withdraw*: Checking this box will force users to take items one at a time by removing the Shopping Basket from the

Withdraw process. The function will still be standard on other transactions. This parameter also exists for Restock and Return transactions.

- *GUI- Disallow keyboard on user login:* This setting forces users to log in by using the swipe card reader mounted on the machine.
- *GUI- Disallow keyboard throughout application:* This setting eliminates the keyboard entirely from the user interface, forcing users to interact with the machine using some combination of swiped cards and bar codes.
- *GUI - Enable User Cost Center On Screen Warnings (0 = Off, 1 = UI Only, 2 = Portal Only, 3 = Both):* Applicable to either the User Interface or Web Portal; when turned on this feature will show a warning to a User if they have selected an Item that has recently been withdrawn another User from the same User Cost Center. Designed to minimize unnecessary wastage the time period for which warnings are applied are set in Item Setup via the *Minutes Since Last Withdraw* attribute.
- *GUI- Font size in selection grid:* This determines the size of the font used in screens of the User Interface. The default setting, zero, equates to a 22 point font. Increase the size to facilitate the use of touch screens.
- *GUI - Force User to confirm remaining quantity:* When performing a Withdraw transaction Users will not be able to continue until they have recorded the quantity remaining in the compartment for the specific item. The current stock level is hidden from the User and replaced with the words Qty: Unknown until the user has confirmed the remaining amount.
- *GUI - Force User to supply quantity on Inventory Adjustment:* When performing an adjustment Users will not be able to continue until they have entered a confirmed quantity in the User Interface, and are not allowed to press Go to continue. The current stock levels are hidden from the User and replaced with a question mark until they have submitted the quantity.
- *GUI- Graphical Selection Allowed:* This parameter activates the graphical selection functions of the vending machine.
- *GUI- Graphical Selection Automatic for Item Groups:* When this is selected, choosing the Item Group filter will automatically lead to graphical selection.
- *GUI- Graphical Selection Automatic for Items:* When this is selected, the item list will automatically be displayed as graphics rather than a list.
- *GUI- Graphical Selection Border Enabled:* This will cause the system to place the graphical selection images in a grid.
- *GUI- Graphical Selection Font Size:* Determines the font size to be used to display the item number below the image thumbnail during graphical selection mode.
- *GUI- Graphical Selection Image Size (MIN=100 MAX=800):* This is the size, in pixels, of the images used for Graphical selection.

- *GUI- Graphical Selection Image Spacing (MIN=25 MAX=150):* This is the space, in pixels, between graphics used for selection.
- *GUI- Grid alternate row color (0=white, etc...):* This function allows you to change the colors of alternating rows in selection grids, making the act of reading through them easier. Simply enter the number that corresponds to the color you want to use.
- *GUI- grid cell height:* Use this setting to change the size of the grid without changing the size of the text. The default setting, zero, is to fit the text.
- *GUI- Help String Font Size:* The help string is entered in drawer setup. This setting determines how prominent the help string will be in the User Interface.
- *GUI- Image file containing company logo:* This setting can be used to personalize the User Interface by the addition of a company logo. Enter the location and name of the logo file here and it will display on the login screen of the User Interface.
- *GUI- Images stretched by default:* This setting will increase or decrease the size of item or user graphics to fill the space available for their display in the User Interface.
- *GUI- Location Display Field (1=Item Number; 2=Description; 3=Alias; 4=Supplier Part Number):* This parameter determines which field will be shown on the open drawer screen (compartment map) in the user interface when an item is being withdrawn or put away.
- *GUI – On 'Go' Perform Fast Filter Search:* On the User Interface selection screens that feature the Fast Filter Search; this parameter causes the 'Go' button to work the same as the Fast Filter Search button, performing a search unless the value entered is the Unique Key for an entry on that screen.
- *GUI – Perform Inventory Adjustment when User counts Item:* When this parameter is enabled, an Inventory Adjustment transaction will be recorded if the quantity of actual physical inventory recorded as remaining in a compartment, following a withdraw transaction, does not correspond to the calculated book stock quantity. When this occurs the current calculated book stock quantity for the Item will be adjusted accordingly to match the confirmed quantity. The Inventory Adjustment transaction will occur irrespective of whether the User has been assigned the Inventory Transaction.
- *GUI – Reapply search filter when adding item to shopping basket:* This setting reapplies any filters that have been previously applied when adding another item through the shopping basket.
- *GUI- Scroll Bar Size (0, 2 or 3):* This setting allows you to increase or decrease the size of the scroll bar for easier use with light pen styli or touch screens.

- *GUI – Show Item Unit Cost:* Once the User has selected an Item and are taken to the Quantity Selection screen; the Unit Cost (New or Used) will be shown for the Item amongst the other details on-screen.
- *GUI- Show PIC/ Drawer/ Compartment:* This will cause location information for the selected item to appear on the drawer display screen.
- *GUI – Show previous selection details:* While moving forward through their transaction in the User Interface; the generic selection screens (Jobs, Machine etc.) will show the entry selected from the previous screen at the top of the current screen. Showing the previous selection gives Users affirmation they made the correct selection on the previous screen and they don't book a transaction against the wrong entry.
- *GUI- Show QWERTY keyboard:* This will cause the vending machine to display the standard keyboard configuration. Otherwise, the User Interface will display a keyboard in alphabetical order.
- *GUI – Special keyboard keys enable:* Enable this parameter to allow support for various languages when using the onscreen keyboard.
- *GUI – Special keyboard keys values:* Using the additional button displayed when the parameter *GUI – Special keyboard keys enable* is activated, the values entered will be displayed.
- *GUI- Tool Fail- Allow manual entry of reason at machine:* Enabling this will allow users to create and enter their own tool fail reasons in situations where they are required.
- *GUI- Tool Fail- Force Reason Entry on Scrap:* When this setting is enabled, users will be required to enter a tool fail reason whenever an item is scrapped.
- *GUI- View inventory in other machines/crib:* This allows activation of a feature in the User Interface which allows users to browse the contents of other Vending Machines or Cribs. This feature requires a consolidated database to be in use.
- *Item- Fast Filter Column Number (0-Item, 2-Descr, 2-Qty, 3-Alias, 4-Group, 5-Sub Group, 6-Supplier Part Number):* On the item selections screens in the user interface, this determines which field/column is searched when the fast filter button is clicked.
- *Items – Semi colon separated list of edits:* The string entered here tells the machine how to read information entered by a barcode reader, or other such device. For detailed information see *Users - Semicolon separated list of edits*, above.
- *Return- Use Simple Return Method:* If enabled, the user interface just asks for each field one at a time (Job→Machine→Item) rather than presenting them on the screen all at once. One way to think about it is just as a reverse withdraw. See the section on Simple Return in the User Interface section for more details.

- **User Interface- Functionality Parameters**
 - *Batch numbers- in use:* This is to indicate that batch numbers will be used with items that are designated as having batch numbers.
 - *Batch Numbers: Strict matching on Orders:* This parameter will force users to enter a batch number that has been imported via SPSTImport when completing a receive and restock transaction.
 - *Countersign – Check on Bin Locations:* With Bin locations not having any items assigned to them; this feature enables the Countersign check to be applied when picking up stock from Bin locations. Two people must be present at the system before the location will open.
 - *Countersign – Check on Close:* With the check applied prior to opening a location; turning this option on will force a secondary User to confirm their presence once the location has been closed. The purpose of which is to reaffirm that the primary User not only picked the right item, but they only took the quantity specified in the transaction.
 - *Countersign – In Use:* A check applied prior to a location being opened; items that fall under the Countersign feature require that a secondary User submits their login credentials confirming their presence before the primary User is granted access to the requested item. Items are marked as countersign-able within Item Setup and Users can be forced to always require their transactions to be Countersigned via the *Force Countersign* attribute within User Setup.
 - *Direct Keyboard Input:* For systems that experience problems with the login box on the initial screen of the User Interface (caused by Windows component issues); this feature simplifies the underlying logic used on that screen to eliminate the problem allowing the User Interface to operate successfully.
 - *Drawer\Item Priority Option (0=Minimize Operations (Classic), 1=Empty Locations):* If set to 0, the system will always try to minimize operations when withdrawing an item. For example, if the requested quantity for an item is 2 and there is one drawer with 2 and two drawers with 1 each then it will open the drawer with a quantity of 2 so the transaction can be done in one step rather than two. This is the classic or default mode. If set to 1 then the system will always try to empty drawer first and the reverse of the above example will be done.
 - *Drawers – Allow early exit from shopping basket/cycle count transactions:* Understanding that administrative tasks such as Restocks and Inventory Adjustments are an important part of inventory control; this feature allows the logged in User to finish their session within the User Interface once they have completed the current transaction. This is especially important if somebody is performing consecutive Restock, Inventory

Adjustment or Cycle Count operations, during which time a User arrives at the system needing to urgently Withdraw an Item. The logged in User clicks the *Early Exit* button and is logged upon closing the opened location.

- *Drawers- Enable Free Issue:* Determines if the Free Issue option should be allowed.
- *Expiration Date Restock: Default Future Days:* This is the default number of days in which items that can expire will expire.
- *Expiration Date Restock: Maximum Future Days:* This is the longest time an item that can expire is able to go without expiring.
- *Expiration Date Restock: Minimum Future Days:* This is the shortest expiration time for items that can expire.
- *Expiration Date Restock: Number of Month Ends to Display when Setting Future Expiration Dates:* Using this will cause all items that can expire to expire on the last day of a month. The number entered here is the maximum number of months the item will last.
- *Expiration Dates: Auto Populate on Return Transaction:* When a returnable item that can expire is withdrawn, it will store the expiration date in the active inventory table. If this option is turned on then when the user comes to return this item it will automatically fill in the expiration date with what was recorded when it was withdrawn originally. The user still has the option to modify the expiration date before committing the transaction.
- *Expiration Dates: Deny Expired Items:* This will cause the vending machine to prevent users from withdrawing items that have passed their expiration date.
- *External Request- Allow deletion of external requests:* When the vending machine is interfaced with certain machine controllers or computer systems, it can receive requests to withdraw or store items, which are taken using the Withdraw External Request or stored with the Store External Request transaction. Activating this Parameter allows users to delete the requests.
- *Idle timeout in seconds:* If a user logs into the User Interface and no activity is detected for this period, the User Interface will log out automatically.
- *Item Reservations – Allow Collection Code:* Allows the User to submit a unique Collection Code when placing a reservation via the Web Portal. The Collection Code is then used as a temporary login to allow staff members who may not have a login account for a machine to Withdraw the reserved Item(s). The Collection Code is only valid for a single session in the User Interface and once the Item(s) has been withdrawn the code is no longer valid.
- *Item Reservations – Allow Reservations:* If turned on this allows for Items to be reserved remotely via functionality in the Web Portal.

- *Item Reservations – Amount of Time to Reserve Items (minutes)*: The time period that Items reserved via the User Interface or Web Portal will be withheld from other Users. Once this period expires the Items will no longer be reserved and will become available to other Users.
- *Item Reservations – Disable Automatic Popup*: When a User who has current Reservations to be withdrawn from the system logs in, they will automatically be taken to the Collect Reservation transaction unless this parameter is turned on.
- *Item Reservations – Ignore Reservation Ownership*: Turning on this feature will allow Users who are assigned to the same *User Group* to withdraw inventory which has been reserved by another User who is assigned to the same *User Group*. This parameter setting preserves existing functionality whilst negating the previous mandatory requirement for the use of *User Cost Centers* for the Reserve Item transaction.
- *Item Verification Codes – Default Value*: This parameter is fail safe when the acceptable code does not meet the parameter *Item Verification Codes – Version (0 = English...)*
- *Item Verification Codes – In Use (Return Transactions)*: Turning on this feature will force any Item marked with *Needs Verification Code* in Item Setup to require a certain type of code to be submitted before the User is able to Return it.
- *Item Verification Codes – In Use (Withdraw Transactions)*: Turning on this feature will force any Item marked with *Needs Verification Code* in Item Setup to require a certain type of code to be submitted before the User is able to Withdraw it. *Item Verification Codes – Mode (0 = Individual Items, 1 = Shopping Basket)*: This parameter allows one verification code to be entered for each individual item or all items within a shopping basket.
- *Item Verification Codes – Version (0 = English, 1 = Swedish CheckSum, 2= Swedish Date Check, 3 = Custom)*: This parameter defines the structure for acceptable codes. An existing template can be used or one can be customised via the use of regular expressions. Anybody wishing to use this feature should contact Supply Point Systems for further consultation and advice.
- *Kits: Multiple to withdraw (0=classic mode)*: If set to 0, then the user will only be able to withdraw a single kit. If set to a number higher than 1 then the user can choose to select a specific quantity of the kit up to this number. For example, if this parameter is set to 10, then the user can select a quantity from 1 to 10 of any kit they have access to. Then the quantities of the items in the Kit will be multiplied by the number entered.
- *Location/Shopping Basket Sequence (0 = Classic Location Based Sorting, 1 = User Selected Sequence)*: Setting this parameter to 1 will withdraw the items depending on the order selected within the shopping basket, otherwise items

will be dispensed from the left frame to right working from top to bottom of each frame.

- *Move Stock: Strict matching of content type:* When this is enabled (1) stock can only be moved between locations with the same content type (New, Used, etc.). When disabled, you can move stock freely between locations with different content types.
- *Owned Stock- Deduct General issues from owned:* This function is used in conjunction with the *Owned Qty.* setting in *Items* setup. Use of this function will deduct issues from drawers where the content type is General from the owned quantity. Use of this function allows owned and consigned quantities to be tracked separately in reporting.
- *Owned Stock- Deduct new issues from owned and Owned Stock deduct used issues from owned* perform the same function for New and Used content types.
- *Quantity Selection- Always prompt on last remaining quantity:* By default, if there is only 1 (or a single issue quantity) of the item selected, to save time the user interface will automatically select the quantity and start the transaction. If this parameter is set to 1 then it will not do that.
- *Receive and Restock- Force Entry of Packing Slip Number:* If enabled the user cannot leave the packing slip number blank on a Receive and Restock function at the User Interface.
- *Receive and Restock- Packing Slip Number in Use:* Allows the user to enter a packing slip when receiving an order through the Receive and Restock function in the User Interface. This can be left blank unless the next option is enabled.
- *Recent History: Display by Default:* Activating this function will instruct the User Interface to automatically search for recent history when a user selects an item.
- *Recent History: Enabled:* This switch activates the Recent History function
- *Recent History: Lookup Period (Days):* This allows you to define what is meant by "recent." Enter the number of days you want the system to look back in order to generate the recent history.
- *Recent History: Search by Job, Machine, User:* You can use these fields individually or in concert to narrow the number of items that will show up in recent history. With no filters, the user's entire history for the given number of days will appear.
- *Restock – Show Items Below Min:* With this option turned on; clicking the *Favorites* (or *Recent History*) button on the Item Selection screen the User will be shown only the Items that have fallen below their Minimum stock level.
- *Restock – Show Items Below Min by Default:* By default when on the Item Selection screen for Restock transactions; the only Items that will be shown are those that have fallen below their Minimum stock level.

- *Return- Restrict to original user:* When this function is enabled Users will only be able to return items that they have checked out.
- *Return – Restrict to original user group:* When this function is enabled Users will only be able to return items that either they, or another member of a group they belong to, have withdrawn.
- *Return- Disable Job Selection on Returns:* If enabled, the user will not be able to select a job from the list of available jobs in active inventory. The user interface will automatically attempt to select the appropriate job. This is to prevent a user from just randomly selecting any job when returning.
- *Return- Disable Machine Selection on Returns:* If enabled, the user will not be able to select a machine from the list of available machines in active inventory. The user interface will automatically attempt to select the appropriate machine. This is to prevent a user from just randomly selecting any machine when returning.
- *Return- Force Auxiliary Input on Item Selection:* This is to force the user to scan the item when returning. The user will not be able to select it from the list or type it. This is to prevent a User incorrectly selecting the item and returning it to the wrong drawer/location.
- *Return – Never Display Blank Returns List (where possible):* Ensures that if the logged in User doesn't have anything to Return; the User Interface shows the list of Items available for Return from other Users, providing the *Return - Restrict to Original...* parameters are not turned on.
- *Serial Numbers- In Use:* Determines if the serial number mode should be used. The *Is Serializable* option for an item must also be enabled.
- *Serial Numbers- Only offer first available serial number for item selected:* If enabled, when withdrawing serializable items, only the first available serial number in the drawer will be offered. In the case of a locker or ECTC drawer, multiple serial numbers for a specific item may be available. This forces the use to select the one put away most recently or in the case of a FIFO item, the oldest one.
- *Swap – Immediately begin Withdraw after Return:* This is used to immediately start the withdraw process of a swappable item after the return has been completed. This will streamline the swap process.
- *Undo- Supervisory: Last Transaction UNDOable time period (minutes):* This setting determines the period that will elapse before a supervisor can no longer undo users' transactions. Supervisors will be unable to undo any transactions within the given time period.
- *Undo- User: Last Transaction UNDOable time period (minutes):* This setting determines the period that will elapse before a user can no longer undo his previous transaction.
- *User Interface Exit Password:* This is the new password used to exit the User Interface.

- *User Interface Exit Password: Enabled:* Setting this parameter to “yes” allows you to create an exit password for the User Interface that is different from the one used with the ADMIN account in Machine Setup.
- *Video Capture - Archive Directory:* When video capture is being used, this is the directory where the files will be saved.
- *Video Capture - Enable:* This parameter enables the use of video capture for the vending machine
- *Video Capture - Max Number files allowed in archive directory:* This is the maximum number of archive files to be kept.
- *Video Capture - Time Limit (sec):* This is the maximum time limit for any individual video capture event.
-

Reporting and Ordering

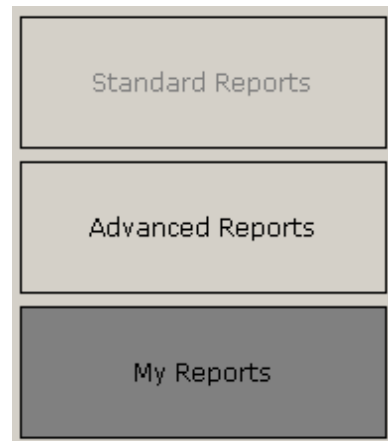
Reporting

Reporting goes right to the heart of the SupplyPoint™ operation. Through its reporting functions, the SupplyPoint™ provides administrators and suppliers with powerful tools for data analysis. The suites of reports provided with the software allow users a great deal of flexibility in determining what information they want and how they wanted it presented. In order to start reporting, select *Start Reporting* from the *Reports* menu of the SupplyPoint™ Utilities.

When you select reports you will be shown the following display, offering you a selection of suites of reports:

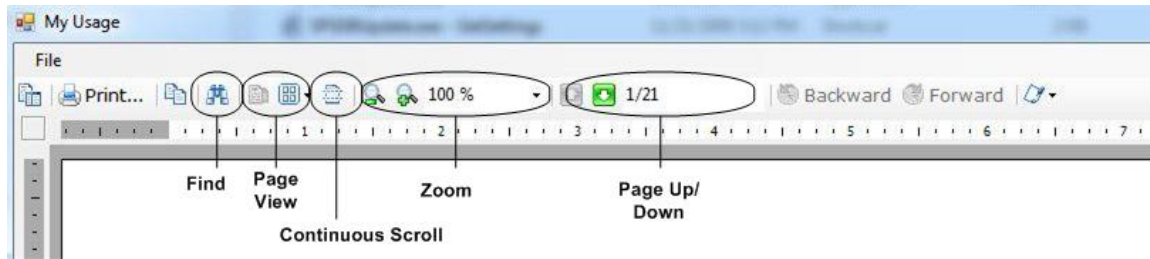
Advanced Reports is a suite of reports that provide users with the greatest number of choices in fields, totaling and sorting.

My Reports are Advanced Reports that have been saved. They are saved to the SupplyPoint™ database and so are available to all users of the reporting software. These reports can also be emailed on a schedule or whenever a user chooses, so long as the transmission settings are correct.



Reports Toolbar

The reports toolbar is at the very top of any report using the SupplyPoint™ software:



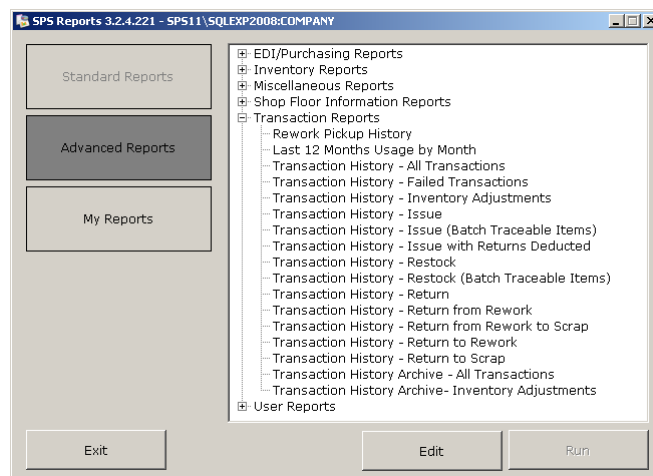
- You can seek out certain text within the report by using the **Search** button;
- With **Page View**, you can vary the number of report pages viewed on screen;
- Use the **Zoom** buttons or the **View Size** drop down to zoom in and out on the display.
- Switch pages with the **Page Up/ Page Down** buttons or the **Current Page** box.
- The continuous scroll button will let you scroll through the pages without have to click the page up/page down buttons

Advanced and My Reports

The *Advanced Reports* suite is designed for greater flexibility than is available with *Standard Reports*. With these reports you have the ability to choose exactly what you want to show, establish criteria for the fields you want to see, and arrange the layout of the report to match your needs. When you build a report that you think you'll want to run again and again, you have the ability to save it in *My Reports*.

Most of the reports listed are fairly self-explanatory and are grouped into categories. Click the plus sign next to the category to expand it and see the available templates. The uses of the following reports, though, may not be so evident:

- **Active Inventory** allows you to trace items that are checked out of the vending machine and that can be either returned or reworked.
- **Order Requirement Base** allows you to create a report that will mirror the EDI ordering in the system. This report is often used to

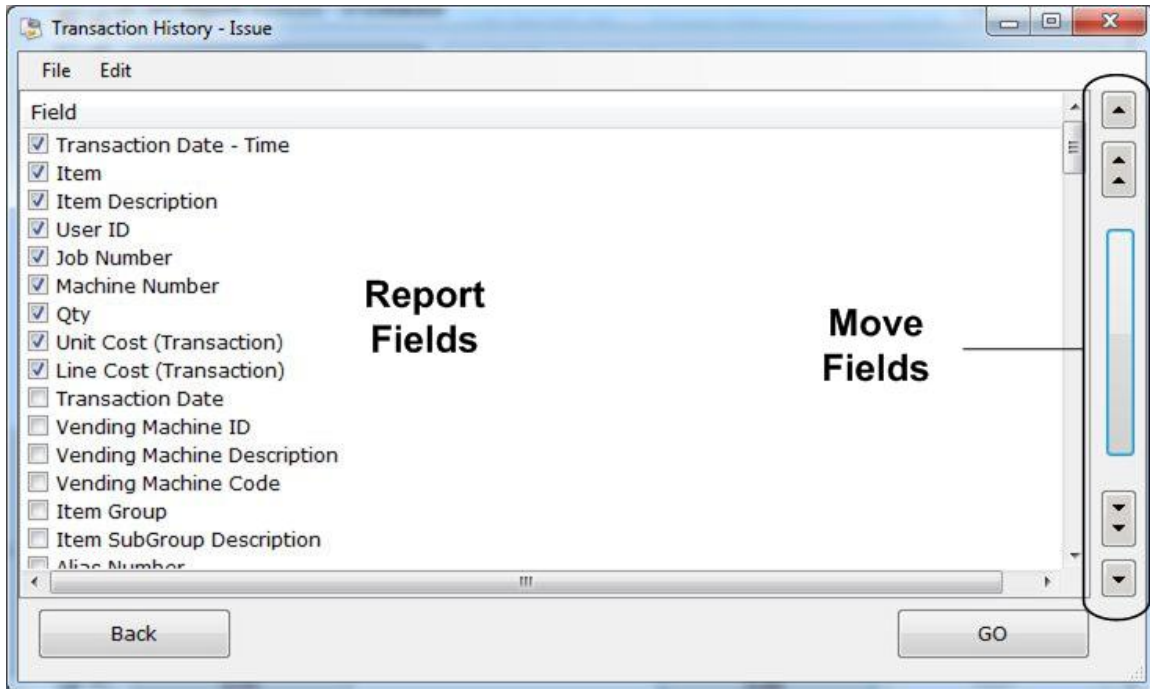


preview an order before it is placed.

- **Transaction History**
Archive reports are used to query transactions that have been archived using the *Purge/Export Transaction Log* function in Machine Setup.

Using Advanced Reports

In its simplest form, the *Advanced Reports* are very easy to use. Check the fields you want on the report and run it (see the figure labelled Report Display 1). But the thing that makes *Advanced Reports* advanced is the flexibility you have in tailoring your reports until they are exactly what you want. These instructions should provide you with the information you need to go beyond checking the fields to crafting the report you want.



Transaction History							
Transacti	Item	User Name	Job Number	Machine Number	Unit Cost	Qty	Line Cost C
11/29/20	14-16 WIRE NUT	TOM SUPERVISOR	JOB_02	CIN01	\$0.08	5	\$0.40 N
11/29/20	16ER12UNJKC5010	TOM SUPERVISOR	JOB_02	CIN01	\$20.75	5	\$103.75 N
11/29/20	16ER12UNJKC5010	TOM SUPERVISOR	JOB_02	CIN01	\$20.75	5	\$103.75 N

Report Display 1

1. **Placing your fields in order-** This is the simplest level of customization for your report. There are four buttons along the right-hand side of the Advanced Report Field

Selection screen that allow you to put the report fields in the order you want. Highlight the field to be moved and press the appropriate button. The large button in between the up and down buttons just moves all of the selected fields together to the top of the list. This makes it easier to see all the fields you've selected.



Move the selected item up one spot.



Move the selected item to the top of the list.



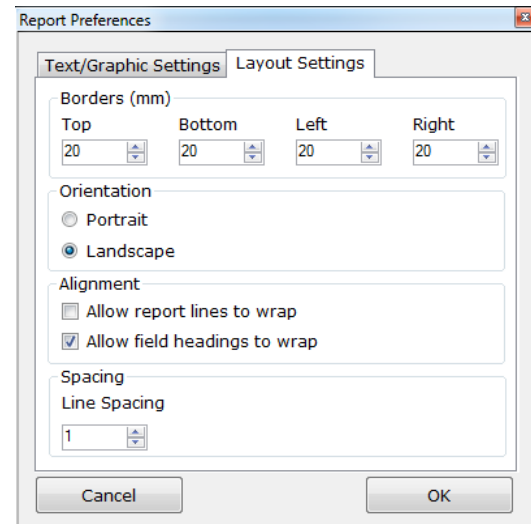
Move the selected item to the bottom of the list.



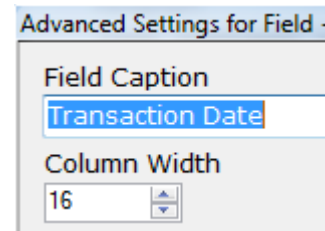
Move the selected item down one spot.

2. **Changing the size of the fields-** When running reports you may have noticed that some fields have a huge amount of space while others don't have enough for their field headings. There are two solutions to this.

- a. Set field headings and report lines to wrap by selecting *Edit* and *Report Options*. In this area you can also make other adjustments. For instance, you can set borders and alter the page orientation of the report. On the *Text/Graphic Settings* tab you can make determinations about the font and other appearance elements.



- b. Change the column width of the fields by double-clicking on the field you want to change and entering a new column width (look at Report Display 2 to see what happens when we change a few column widths and allow field headings to wrap).



Machine Number	Unit Cost (Current)	Qty	Line Cost (Current)	Content Type
CIN01	\$0.08	5	\$0.40	New
CIN01	\$20.75	5	\$103.75	New
CIN01	\$20.75	5	\$103.75	New
CIN01	\$20.75	5	\$103.75	New

Report Display 2

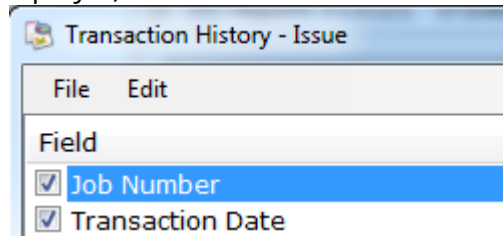
3. **Rename the field-** While you are adjusting the column width you can also rename the field if you like, by changing the *Field Caption*. In Report Display 3, the *Unit Cost (Current)* field has been renamed *Unit Cost*.

Unit Cost	Qty	Extended Cost	Content Type
\$0.08	5	\$0.40	New
\$20.75	5	\$103.75	New
\$20.75	5	\$103.75	New
\$20.75	5	\$103.75	New

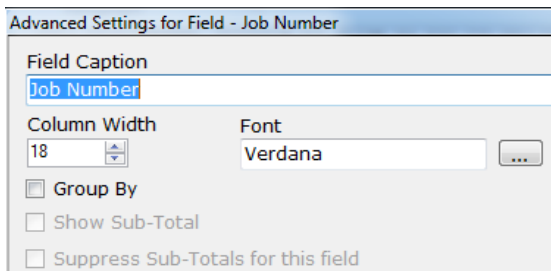
Report Display 3

4. **Sort information-** Checking the *Group By* box will sort the report by the selected field. Taking the report we're building as an example, let's say we want to sort by Job (see also Report Display 4).

- a. Begin by moving Job Number to the top of the list of fields for the report. Remember, this is done with the up and down arrows on the right side of the window. Click the double-up arrow to send the field straight to the top.



- b. Double click on the Job number field and check the *Group By* box. This will cause the report to separate and group all of the results generated by Job Number. Remember, when making your own reports, that *any* field can be used in this way by following these instructions! Report Display 4 shows the results of grouping by Job Number.



Job Number	JOB 02		
Transaction Date	Item	User Name	Machine Number
11/29/2005	14-16 WIRE NUT	TOM SUPERVISOR	CIN01
11/29/2005	16ER12UNJKC5010	TOM SUPERVISOR	CIN01
11/29/2005	16ER12UNJKC5010	TOM SUPERVISOR	CIN01
11/29/2005	16ER12UNJKC5010	TOM SUPERVISOR	CIN01
11/29/2005	B261A15600KC7040	TOM SUPERVISOR	CIN01
11/29/2005	B261A15600KC7040	TOM SUPERVISOR	CIN01

Report Display 4

- c. Set secondary (and tertiary and quaternary) sort fields by moving them into place under the primary sort field. Any field that is directly under a field that is being sorted can be sorted (see Report Display 5, which is sorted by Job Number and Machine Number).

Job Number JOB_02		
Machine Number CIN01		
Transaction Date	Item	User Name
11/29/2005	14-16 WIRE NUT	TOM SUPERVISOR
11/29/2005	16ER12UNJKC5010	TOM SUPERVISOR
11/29/2005	16ER12UNJKC5010	TOM SUPERVISOR
11/29/2005	16ER12UNJKC5010	TOM SUPERVISOR

Report Display 5

5. **Total the fields that need totaling-**

Since we've sorted this report by Job Number and Machine Number let's assume we're interested in the cost and number of items used for each Job Number. Any numeric field can be totaled by double-clicking on it and checking *Show Sub-Total*. Be careful, though, not all numeric fields need to be totaled. For instance, totaling the Unit Costs will not yield any useful information (see Report Display 6).

Advanced Settings for Field - Line Cost (Transaction)

Field Caption	
Line Cost (Transaction)	
Column Width	Font
14	Verdana
<input type="checkbox"/> Group By <input checked="" type="checkbox"/> Show Sub-Total <input type="checkbox"/> Suppress Sub-Totals for this field	

12/1/2005	16ER12UNJKC5010	TOM SUPERVISOR	\$20.75	10	\$207.50	New
12/1/2005	16ER12UNJKC5010	TOM SUPERVISOR	\$20.75	10	\$207.50	New
Sub Totals for Machine CIN01				46	\$1,121.59	
Sub Totals for Job JOB_02				46	\$1,121.59	

Report Display 6

6. **Don't total the fields that don't need totaling-**

The report in Display 6 may give you more information than you need. Not only does it total pieces use and total cost by Job Number, it also does so for each Machine Number within the Job. If we were grouping by other fields it would do that as well. For the sake of argument, let's say we're not interested in the cost per Machine Number. Double-click on the Machine

Advanced Settings for Field - Unit Cost (Transaction)

Field Caption	
Unit Cost (Transaction)	
Column Width	Font
14	Verdana
<input type="checkbox"/> Group By <input checked="" type="checkbox"/> Show Sub-Total <input type="checkbox"/> Suppress Sub-Totals for this field	

Number field and check the box that says *Suppress Totals for this Field* (see Display 7).

7. **Narrow your focus-** Reports can give you a lot of information when sometimes all you're looking for is a little bit. For instance, say you wanted to find out the usage of a single item, using the report we've been working on. You can do this by setting conditions. Double-click on the field to enter the advanced settings. In the centre of this display is the *Conditions* area. If you place the cursor in the blank space below the conditions and press **ENTER**, a list will appear. In this case, it is a list of items that have been issued. Select an item from the list. You can use the various conditions to include or exclude data as needed.

☐ CNMG322UFKC730
☐ CNMG432-48 TN8025
☐ CNMG432-5 TN7010
☐ CNMG432KC850
☐ CNMG432MPKC9225
☐ CNMG432MS KC5510
☒ CNMG432UFKC730
☐ CNMG432UFKC990
☐ CNMG432UFKT125
☐ CNMG543-5 TN7010
☐ CNMG643-5 TN7025
☒ CPMT3251MF9025
☐ CPMT3251UFK990
☐ DFT030304GD720
☐ DFT030304LD720
☐ DFT030304MD720
☐ DNMG432KC850
☐ DNMG432LFK9025
☐ DNMG432LFKC935
☐ DWG415545R01 KC9025
☐ E3/44FCB
☐ E5/164D
☐ EC1804F
☒ 1/4-284FPH3

☒ Range

From: To:

You can also enter multiple items, but the process is a little more complicated. Enter the item numbers (for example) separated by a bar (**ITEM1|ITEM2|etc...**). For dates and/or times, use the *Range* fields.

8. **Use date switches-** Date switches are useful for reports that are to be run regularly, or on a set schedule. These can be entered in the *Condition* or *Range* fields of either the *Transaction Date* or the *Transaction Date/Time* fields. Be wary of the *Transaction Date/Time* field; when you use it, it is going to take into account the time the report is run. Use *Transaction Date* whenever you can. Examples follow:

- *Less Than* [TODAY] will show everything that happened before the day the report was run.
- *Equals* [YESTERDAY] is tricky. When you use it in the *Transaction Date* field, it will show everything that happened on the day before the report was run and is a good one to use for a daily report. When you use it under *Transaction Date/Time* it will seek out a transaction performed precisely 24 hours previous.

Conditions

☒ Single Condition

☒ Equals
☐ Greater Than
☐ Greater Than or Equal To
☐ Less Than
☐ Less Than or Equal To
☐ Does Not Equal

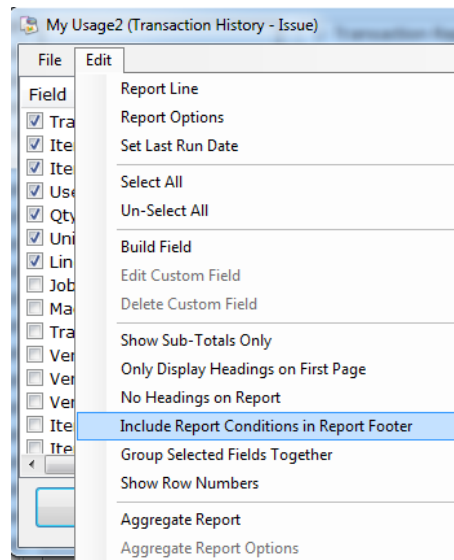
- *From* [WEEK AGO TODAY] *To* [YESTERDAY] will show activity from the previous seven days.
- *From* [START OF MONTH xx] *To* [END OF MONTH xx] will display all data from month xx, where xx represents the two digit code for the month (01=January, 02=February, etc.).
- The report switch [LAST RUN] can be used to eliminate any guesswork from your scheduling. For instance, a report scheduled to run *From* [LAST RUN] *To* [TODAY] would show data beginning immediately after the report was last generated. This is designed so that if a report is run between scheduled transmissions, no duplicate data is sent.
- Present Date Switches: [TODAY], [LAST RUN], [DAY BEFORE LAST RUN]
- Past Date Switches: [YESTERDAY], [WEEK AGO TODAY], [WEEK AGO YESTERDAY], [4 WEEKS AGO TODAY], [4 WEEKS AGO YESTERDAY], [MONTH AGO THIS DAY], [MONTH AGO TODAY], [START OF WEEK], [START OF THIS WEEK], [START OF LAST WEEK], [END OF WEEK], [START OF MONTH], [START OF THIS MONTH], [START OF LAST WEEK], [END OF WEEK], [START OF MONTH], [START OF THIS MONTH], [START OF LAST MONTH], [END OF MONTH], [END OF LAST MONTH]
- Future Date Switches: [TOMORROW], [WEEK FROM TODAY], [WEEK FROM TOMORROW], [WEEK FROM YESTERDAY], [4 WEEKS FROM TODAY], [4 WEEKS FROM TOMORROW], [4 WEEKS FROM YESTERDAY]
 - Future date switches will generally be used for future events, such as item expiration dates.
- Target Date Switches: [START OF WEEK xx], [END OF WEEK xx], [START OF MONTH xx], [END OF MONTH xx], [END OF MONTH+xx], [x DAYS AGO], [x DAYS AGO YESTERDAY], [x WEEKS AGO], [x WEEKS AGO YESTERDAY], [x MONTHS AGO], [x MONTHS AGO END OF LAST MONTH]
 - Week entries range from 01-52. Month entries run from 01 to 12
 - The + symbol can be used for future events like item expiration dates. Whatever number is entered will be added to the end of the current month. For instance, the entry [END OF MONTH +03] in a report of item expiration dates will generate a list of items that will expire within the next three months.
- Target Date/Time Switches: [WEEK AGO TODAY @ xx:xx], [WEEK AGO TOMORROW @ xx:xx], [WEEK AGO YESTERDAY @ xx:xx], [WEEK FROM TOMORROW @ xx:xx], [WEEK FROM YESTERDAY @ xx:xx], [TODAY @ xx:xx], [YESTERDAY @ xx:xx], [TOMORROW @ xx:xx]

- These switches use 24-hour time. Eight o'clock A.M. would be rendered as 08:00. For the afternoon hours, add twelve to the time, so eight o'clock P.M. would be rendered as 20:00.
9. **Have the report prompt for information-** If you are setting up a report to be run at any time and from which you may want various information, you can tell the report to ask you what you want. For instance, assume you want to run your report at any time and input a custom date range. Simply place a percent sign (%) in the *From* and *To* fields of the report. Each time the report runs, you will be asked to enter a value. If you need to be reminded of what the entry is, simply type it after the percent sign.

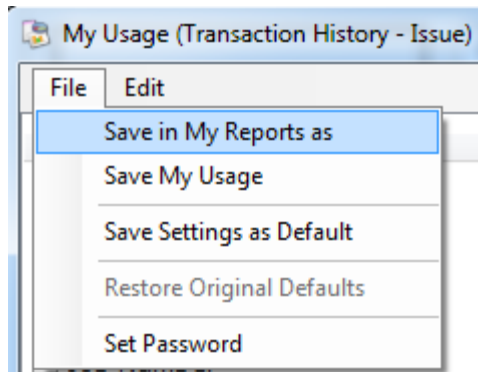
When you run the report, a query box like the following will appear:

10. **Set General Report Properties-** You can set several different report properties such as *Include Report Conditions in Report Footer* or *Show Row Numbers*.

11. **Save your report-** If you think you might want to use this report again, don't let your efforts go to waste! Save the report by clicking on the *File* menu and selecting *Save in My Reports as...* and entering a name when prompted. The report will now be available whenever the *My Reports* button is pressed. In fact, there's not need to



wait until you're done to save the report. You should save throughout just to be on the safe side.

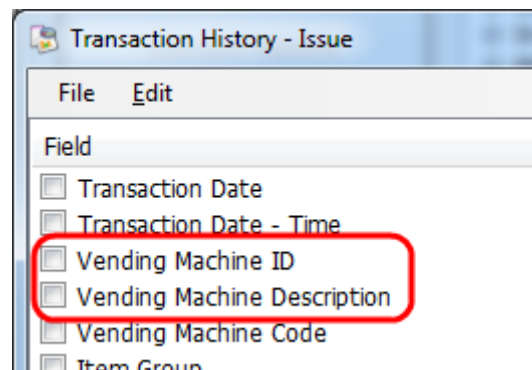


Location Specific or Consolidated Reporting

It is worth remembering that one of the most powerful features of the *Advanced Reports* suite is its ability to report on numbers Vending Machines or External/Crib locations within the same report.

On reports, where applicable, you will find the useful *Vending Machine ID* and *Vending Machine Description* fields, see opposite.

Grouping by the Vending Machine ID/Description fields gives you added flexibility on your reports and allows you to view Transaction and Inventory data against all installations on a single report.

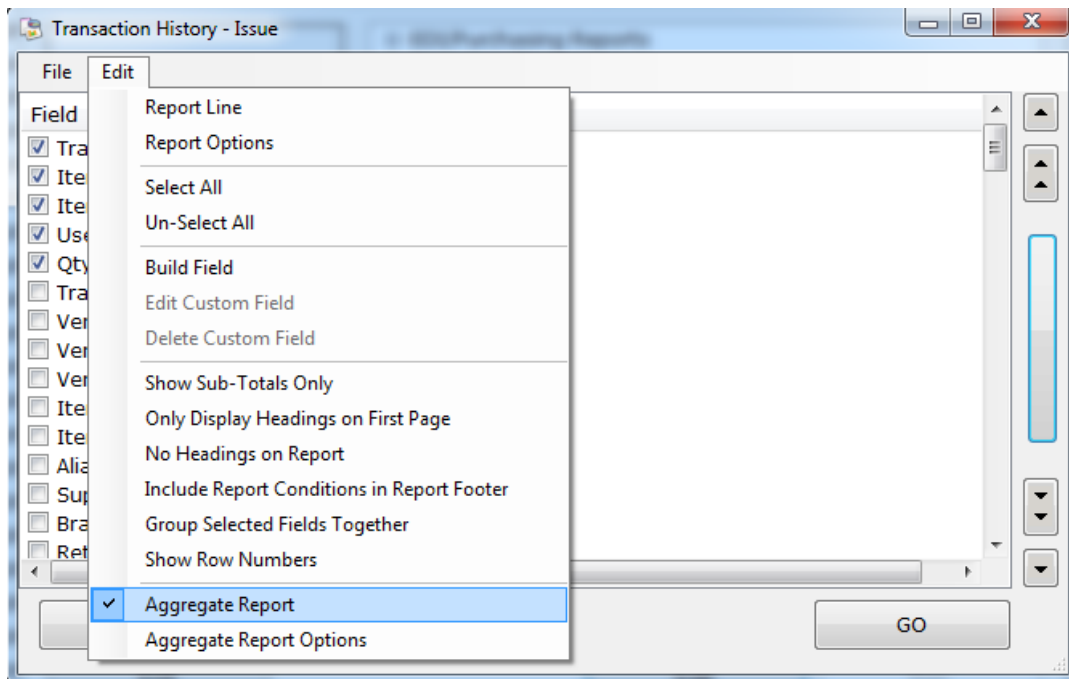


Alternatively if you choose to filter reports to show individual or specific Vending Machine ID's; reports can still be tailored to show key data for the required installation.

Aggregate Reports

Aggregate reports are useful for compiling large amounts of data. They can be used, for instance, when you are interested in seeing the total number of pieces issued over a certain time, without looking at the individual transactions that have occurred. Take the following steps to create an aggregate report:

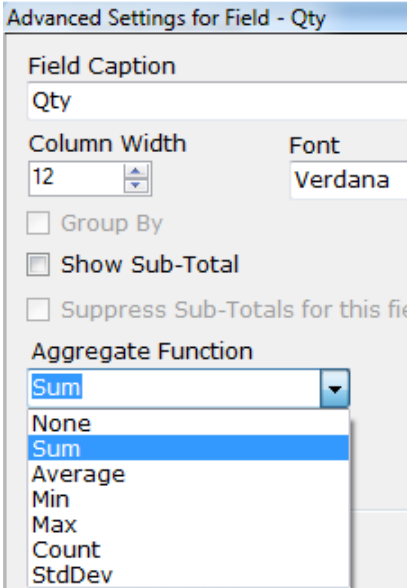
1. Select the Advanced Report for which you wish to gather aggregate data.
2. Select *Aggregate Report* from the *Edit Menu* to turn on the aggregate functions.



3. Select the fields you wish to display on the report. Remember that the more fields you choose, the less aggregated the data is going to be. The data will be aggregated in the order that the fields appear in the report builder. For instance if you select Item and Machine, with the information aggregated by quantity, the report will show the quantity of each item issued to each machine. If you remove the machine, you will simply see the quantity of each item issued overall, making for a much shorter report.

4. Select the field you wish to aggregate and double-click on it. In the advanced settings there is a new selection called *Aggregate Function* and a drop-down box.

- **Sum:** In the illustration to the left, this would give the total number of each item issued.
- **Average:** Again, sticking with the supplied example, this is the average number of pieces taken in a transaction. (SUM/COUNT)
- **Min** and **Max:** The minimum and maximum quantity taken.
- **Count:** The number of transactions performed.
- **StdDev:** This would provide an effective measure of the variation in quantities taken in each transaction. In a normal distribution, 75 percent of all transactions take place within one standard deviation on either side of the mean (in this case, the average).



Advanced Settings for Field - Qty

Field Caption
Qty

Column Width
12

Font
Verdana

☐ Group By

☒ Show Sub-Total

☐ Suppress Sub-Totals for this field

Aggregate Function
Sum

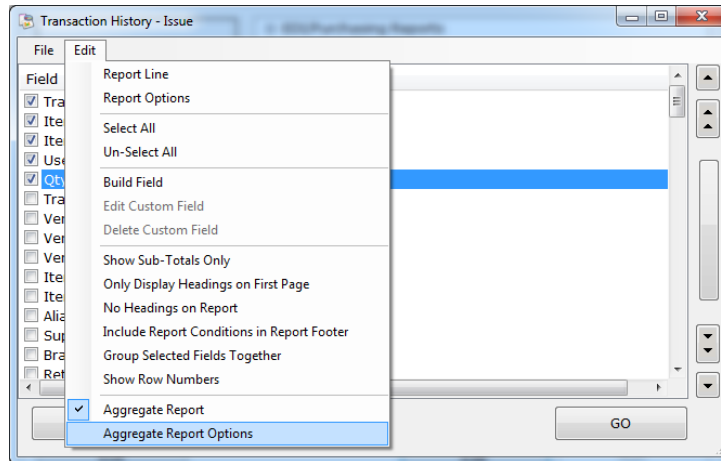
None
Sum
Average
Min
Max
Count
StdDev

5. Run the report. Don't forget to save in My Reports if this is something you'll want to view over and over again. You can use any of the date range or selection tricks that are useful with advanced reports to narrow the data selected.

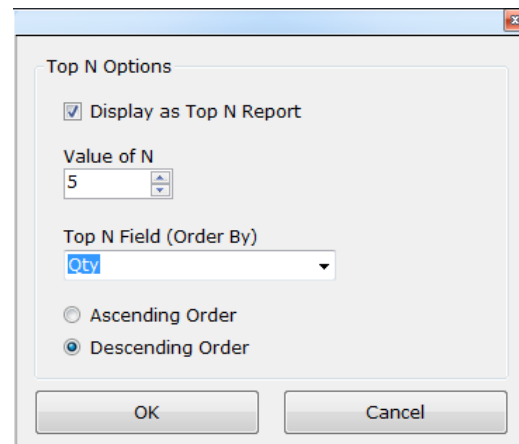
Aggregate Report Options

We have seen that with aggregate reports you can combine large amounts of information into single lines to create compact reports. *Aggregate Report Options* allows you to cull even more information by creating "Top-N" reports. You can use them to create, say, a list of the top ten items issued by usage or cost. Here is how the process works.

1. Create an aggregate report using the steps detailed above. At least one of the fields selected will need to be using an aggregate function.
2. Select *Aggregate Report Options* from the *Edit* menu.



3. Check the box that says *Display as a Top N Report*.
4. Enter a number in the *Value of N* spot. This is the number of entries that will appear on the report.
5. Decide which field you want the information to be based on by making a selection from the drop-down box under *Top N Field (Order By)*.
6. Select *Ascending Order* or *Descending Order*. Ascending will give you a list of *N* items starting at the lowest value. Descending will start from the top.
7. Press **OK** to continue working with the report builder.

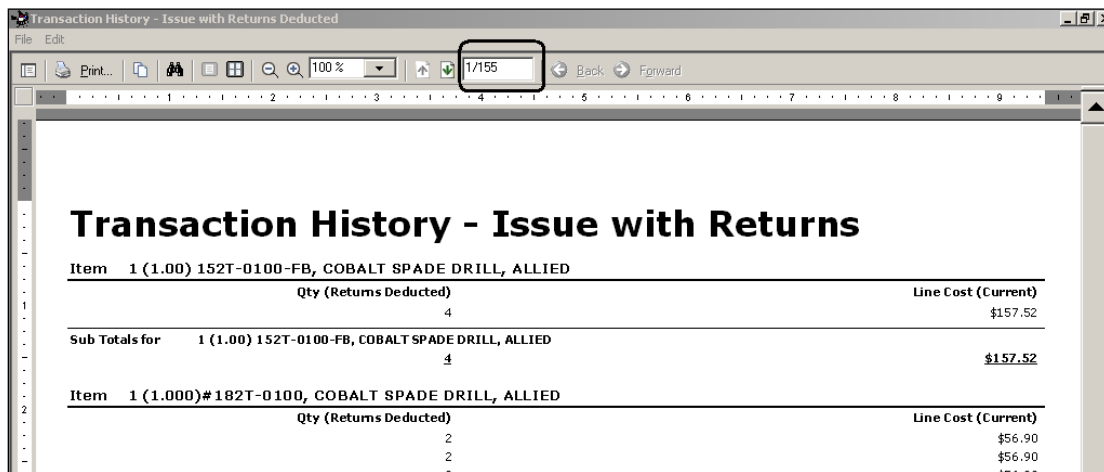


Aggregate Reporting Example

The simplest example of an aggregate function is calculating a sum. A non-aggregate report showing the total quantity and line cost would be constructed in the following manner:

1. Select *Transaction History- Issue* or *Transaction History- Issue with Returns Deducted* from the *Advanced Reports* menu.
2. In the report builder, select *Item* and move it to the top.
3. Double-click on *Item* and check the *Group By* box.
4. Check *Qty* or *Qty (Returns Deducted)*.

5. Double-click on the *Qty* field you have selected and check the box that says *Show Sub-total*.
6. Repeat steps four and five for the *Line Cost* field you have selected.
7. Run the report.

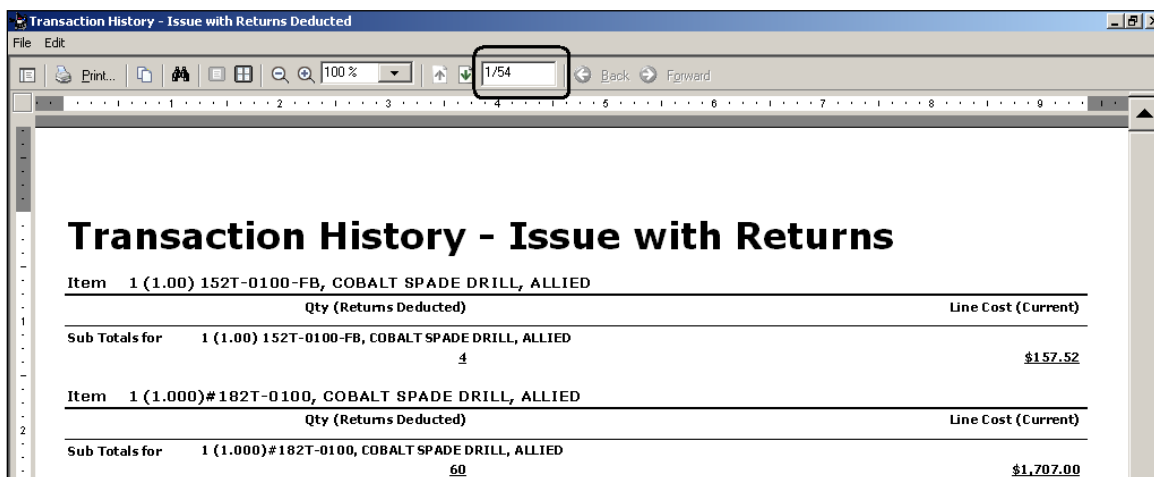


Transaction History - Issue with Returns Deducted

Item	Qty (Returns Deducted)	Line Cost (Current)
1 (1.00) 152T-0100-FB, COBALT SPADE DRILL, ALLIED	4	\$157.52
Sub Totals for 1 (1.00) 152T-0100-FB, COBALT SPADE DRILL, ALLIED	4	\$157.52
Item 1 (1.000)# 182T-0100, COBALT SPADE DRILL, ALLIED	2	\$56.90
	2	\$56.90
	2	\$56.90

This report was generated from an actual database. Note that it does exactly what we have asked of it, showing the total quantity and value of the items withdrawn and returned from the vending machine. It also sub-totals each of the items. However, the report is 155 pages long, because it shows each transaction of each item.

You can reduce the page count by selecting *Show Subtotals Only* from the *Edit* menu in the report builder. This will suppress the individual transactions and generate a report that looks like this:



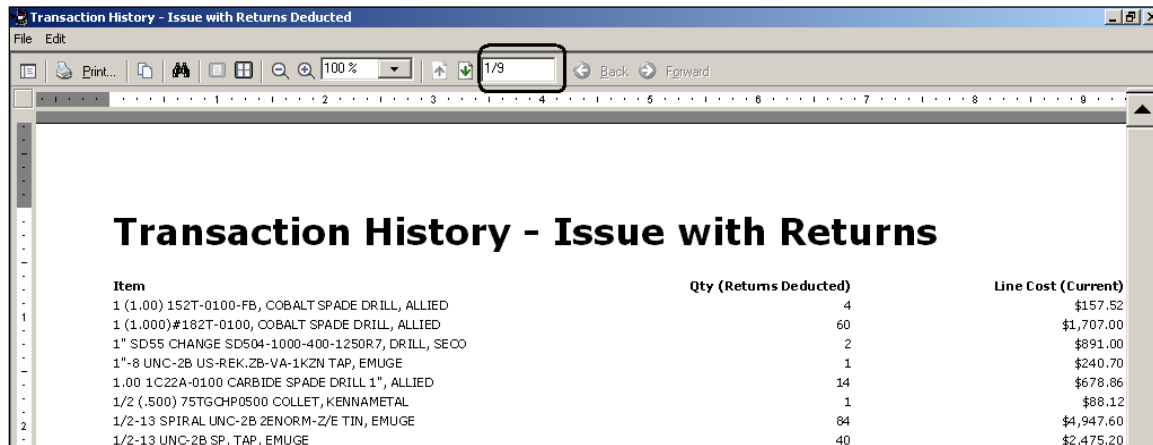
Transaction History - Issue with Returns Deducted

Item	Qty (Returns Deducted)	Line Cost (Current)
1 (1.00) 152T-0100-FB, COBALT SPADE DRILL, ALLIED	4	\$157.52
Sub Totals for 1 (1.00) 152T-0100-FB, COBALT SPADE DRILL, ALLIED	4	\$157.52
Item 1 (1.000)# 182T-0100, COBALT SPADE DRILL, ALLIED	60	\$1,707.00
Sub Totals for 1 (1.000)# 182T-0100, COBALT SPADE DRILL, ALLIED	60	\$1,707.00

The report is shorter, since the individual transactions are suppressed. Still, the report is 54 pages long and slightly busy. An aggregate report will clean this up. Take the following steps to create an aggregate report for the same information:

1. Select the *Transaction History- Issue with Returns Deducted* from the *Advanced Reports* menu.

2. Select *Aggregate Report* from the *Edit* menu.
3. Select the *Qty* field and the *Line Cost* field.
4. Double-click on *Qty* and select *Sum* from the Aggregate Function drop-down.
5. Repeat for *Line Cost*.
6. Run the report.



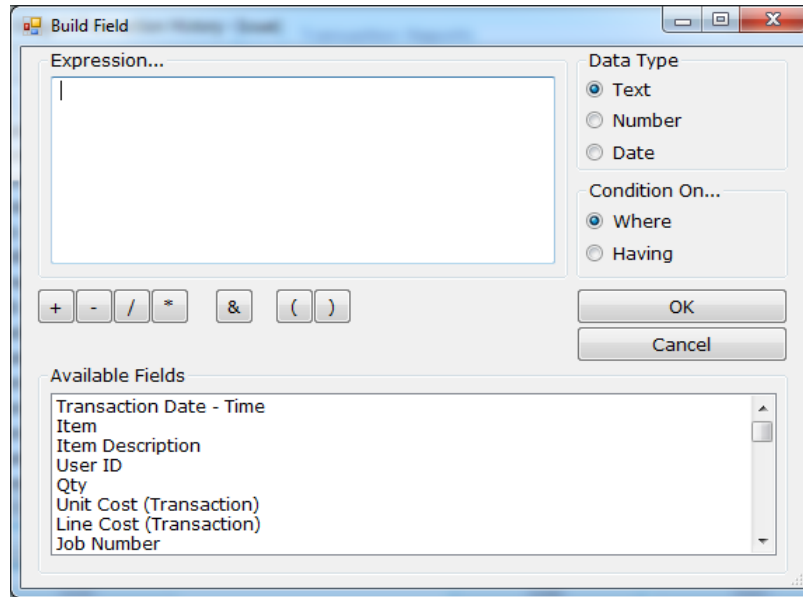
Item	Qty (Returns Deducted)	Line Cost (Current)
1 (1.00) 152T-0100-FB, COBALT SPADE DRILL, ALLIED	4	\$157.52
1 (1.000)#182T-0100, COBALT SPADE DRILL, ALLIED	60	\$1,707.00
1" SD55 CHANGE SD504-1000-400-1250R7, DRILL, SECO	2	\$891.00
1"-8 UNC-2B US-REK.ZB-VA-1KZN TAP, EMUGE	1	\$240.70
1.00 1C22A-0100 CARBIDE SPADE DRILL 1", ALLIED	14	\$678.86
1/2 (.500) 75TGCHP0500 COLLET, KENNAMETAL	1	\$88.12
1/2-13 SPIRAL UNC-2B 2ENORM-Z/E TIN, EMUGE	84	\$4,947.60
1/2-13 UNC-2B SP. TAP, EMUGE	40	\$2,475.20

This report contains all of the information from the first and second examples. However, the length of the report has been cut from 155 to nine pages, or close to 95 percent.

Building Report Fields

As previously mentioned, it is possible to create custom fields for display on reports. These are useful in cases where a desired bit of information can be formed from two other pieces that are already there. These fields may be created to meet the needs of a third-party ordering system or simply for ease of use. To build a new field, take the following steps:

1. Select *Build Field* from the *Edit* menu. The screen below will appear.

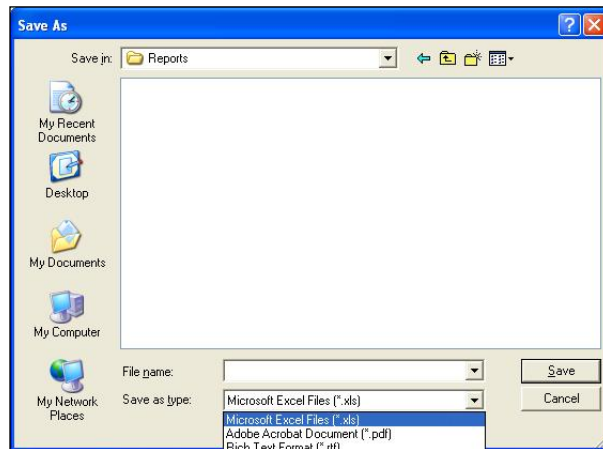


2. Select the *Data Type* that the field will hold (text, number or date).
3. Select the first field from which information will be drawn. It will appear in the box labelled *Expression*.
4. Use the keyboard and the symbols below the *Expression* box to indicate the relationship the first bit of data will have with the next.
 - Use the mathematical operands (+,-,*,/) to indicate a mathematical relationship.
 - Use the ampersand (&) to concatenate two fields.
 - Use the parentheses to nest mathematical operations.
 - In order to insert text place that text in quotes. In order to insert spaces between concatenated columns place spaces between quotes (e.g. " ").
5. Once the expression is complete press **OK** to continue.
6. In the dialog box that appears, name the expression and press **OK** to add the new field to the list. It can now be manipulated along with all of the other fields. If the report is exited before the field has been saved in some way it will be lost.

Exporting Reports

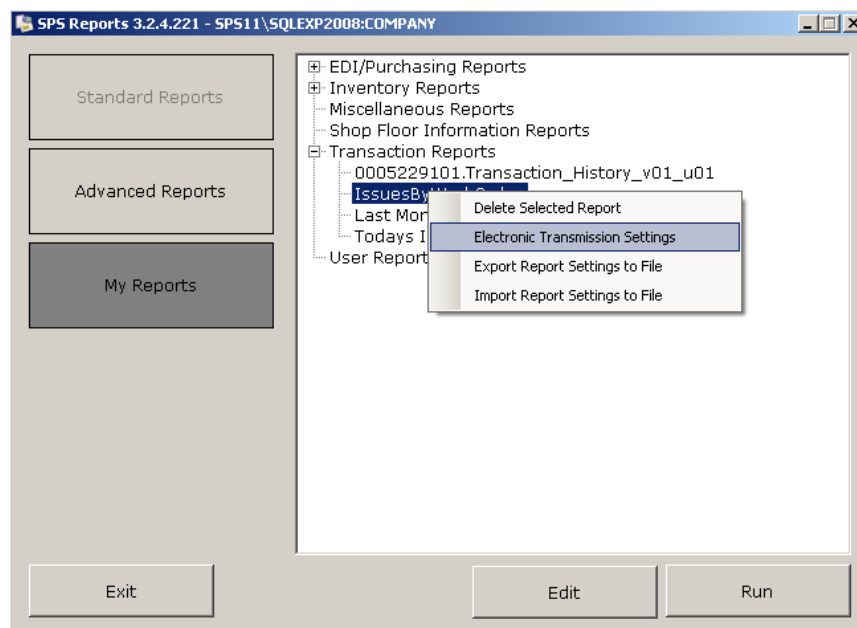
Some find it convenient to export SupplyPoint™ reports to other software packages. This can be done by choosing the *Export* option from the *File* menu on the report itself. Selecting that will bring up a display like the one below.

Using the drop down labelled *Save as Type* it is possible to choose from a variety of file formats including Microsoft® Excel, and Adobe Acrobat. These files will then be ready to be opened and manipulated within these programs.



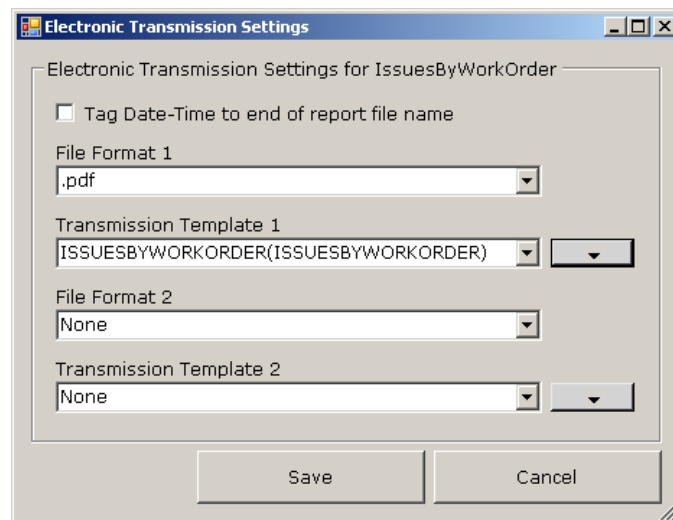
My Report Settings

Once a report has been saved it will be added to the My Reports list. Now it can be setup to be automatically transmitted based on a schedule. To do this certain settings have to be established. First is the file format (.xls, .pdf, etc.) the report will be transmitted in and second is the details of how it should be transmitted (E-mail, FTP, etc.). To do this, go to My Reports and right-click the desired report. A pop-up menu will appear with four options. Choose *Electronic Transmission Settings*.

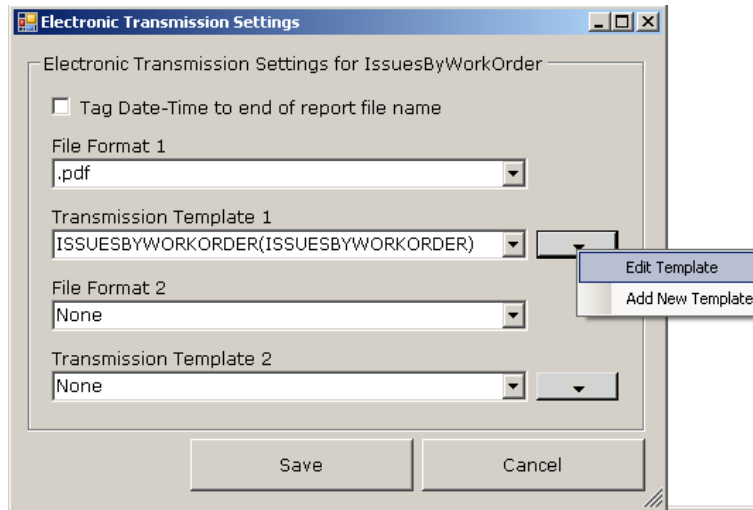


You will now have the option to setup two potential destinations for the report. You must specify the file format first. The available file formats are as follows:

- pdf
- rtf
- txt
- txt (tab delimited)
- xls
- csv
- raw (pipe delimited)
- xml

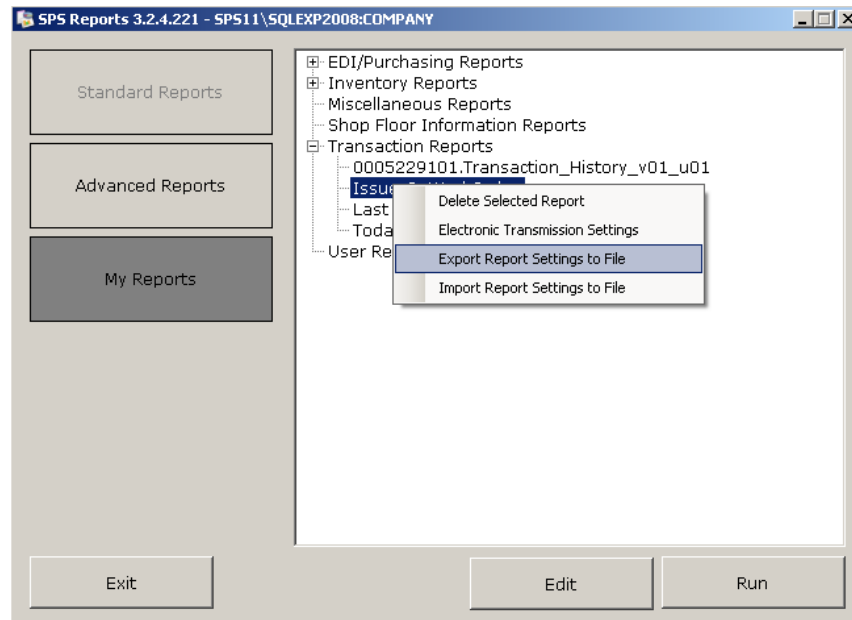


Next you must specify how the file should be transmitted. The available options are e-mail, ftp, or file copy. These settings are established by defining a transmission template. Instructions on how to define and edit these templates are discussed in a later section. Select an available template from the drop down list or click the button next to the drop down to define a new template. If a second destination for the report is not required, then make sure to leave the File Format 2 and Transmission Template 2 options set as *None*.

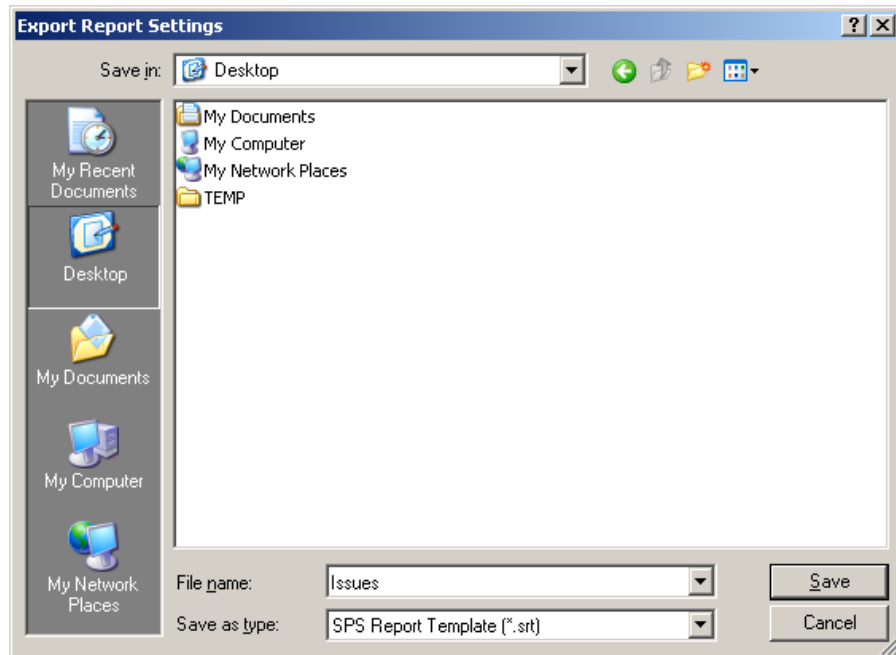


Importing and Exporting My Report Templates

Once a report has been saved in My Reports, the settings or design of the report can be exported and then imported into another machine or database. Right-click the report and select the *Export Report Settings to File* or *Import Reports Settings from File* menu option.



Now specify a location to save the file. These report template files are always saved with a .srt extension. To import a report template file from another database simply select the import option and specify the location of the .srt file when asked.



Finally to delete an existing My Report, simply right-click the report and select *Delete*.

EDI Ordering

Reports vs. EDI Ordering

The two methods the SupplyPoint™ provides for ordering stock: Reports and EDI Ordering/Purchasing. Reports were covered in the previous section; this section will deal with use of the ordering/purchasing software on the SupplyPoint™. First, though, it will be useful to look at the comparative advantages and disadvantages of each.

- Reports only provide a snapshot of the current state of affairs. For instance, if a *Reorder (Items below Minimum)* report is sent on Monday and another is sent on Friday, any items from the Monday report that have not been restocked will appear on the Friday report, setting up a situation where the same item could conceivably be ordered twice. Some of this uncertainty can be eliminated by using *Transaction History* reports and employing the Date/Time switches described above.
- Ordering, on the other hand, is cumulative. It takes into account what has been ordered previously when counting minimum stock levels, so the same item would not appear on the Friday and Monday orders unless enough of the item has been withdrawn to bring the total of items in stock plus the quantity on order below the minimum level. If the total of the quantity in stock and the quantity on order is greater than or equal to the item minimum an order will be placed. If the total is less than the item minimum no order will be placed.
- EDI orders must be received through the ordering software. If they are not received, the software will assume that the items are still on order and this will

affect the order quantities, regardless of how many times the item has been restocked. In effect, the machine will always order too few items until the older order has been received.

- Reports do not have this limitation. As described above, reports merely provide a snapshot of the machine at the time the report is run. However, they do not provide the tracking that the ordering does, that is, the ability to track past receipts. They do obviate the need to receive items and for some this has proved a bonus.
- Reporting allows for greater flexibility in choosing what information is sent. Ordering/Purchasing formats have pre-set fields of information that are sent.

EDI Ordering/Purchasing

Ordering/Purchasing, as has been explained earlier, is used to order items for the SupplyPoint™ electronically. These orders are usually sent via email to each supplier, but can also be sent through the use of FTP (File Transfer Protocol) and file copy.

Ordering Calculations

When calculating an order, the system considers the following criteria:

- The quantity on hand;
- The reorder point (minimum, assigned maximum, machine capacity);
- The quantity on order;
- The amount in use and in rework

Ordering in Package Quantities

Often it is only possible to order certain items in a package quantity while you still wish to dispense them as individuals or in smaller packages. Two new fields have been added to the base item record. They are:

Package Price – This is the cost for a whole package or packet. The number of items in a package is determined by the *Packet Size* field. When you enter a value for this field the system will re-calculate the *Unit Cost* based on the *Packet Size* field.

Order in Package Qty - when this field is checked, the system knows to transmit a quantity to the supplier that is the number of packages rather than individuals. It will round the calculated refill quantity up or down to the nearest packet size and then divide by packet size to determine the number of packages or packets to order. It will also use the *Package Price* when determining the line cost for each item on the order.

Edit Item 00031229

File Record

Item Number: 00031229

Description: 3/8 4FLUTE END MILL 1.5" L.O.C. TiALN COATED

Alias: 00031229

Item Group: ENDMILL (ENDMILL)

Item Sub Group: HANITA (ENDMILL_HANITA)

Supplier: MSC (MSC)

Supplier Part Number: TF4V1510004S

Unit Cost: 32.7200

Used Unit Cost: 0.0000

Packet Size: 1

Order in Package Qty: ☐

Package Price: 0.0000

Lead Time: 1

Brand: HANITA

Image File:

Now when the order requirement is displayed on the screen, it will indicate whether each item is being ordered as a package or an individual (each).

Transmit Order

PO Number: 48953 Release Number: 2

Uncheck any items that you do not wish to order

Double-click a line to edit the quantity.

Total Cost: \$15,706.24

Item Number	Description	Qty on Hand (N.G)	Used Qty on Hand	Order Qty	Unit	Unit Cost	Ex Cc
<input checked="" type="checkbox"/> 01783273	CPGM3251 KC5010	6	0	10	each	\$10.85	\$
<input checked="" type="checkbox"/> 08031585	3/32 HP 4FLUTE END MILL	5	0	7	each	\$9.18	\$
<input checked="" type="checkbox"/> 08443038	CPGM 32505 KC730	3	0	10	each	\$8.83	\$
<input checked="" type="checkbox"/> 08443145	CPGM 32505 K313	1	0	15	each	\$7.82	\$
<input checked="" type="checkbox"/> 08443152	CPGM3251 K313	4	0	10	each	\$7.81	\$
<input checked="" type="checkbox"/> 52743739	WNMG 431-TF IC20	0	0	20	each	\$5.06	\$
<input checked="" type="checkbox"/> 55128482	3/32x90 DEG 4FLUTE STUB DRILL/MILL	0	0	100	each	\$13.68	\$1
<input checked="" type="checkbox"/> 60796612	GFN2 IC20	9	0	10	each	\$5.91	\$
<input checked="" type="checkbox"/> 60797271	GFN 3 IC354	6	0	10	each	\$8.84	\$
<input checked="" type="checkbox"/> 62289012	DNGP432K KC730	3	0	15	each	\$12.50	\$
<input checked="" type="checkbox"/> 67278978	GRJP3003Y IC908	8	0	10	each	\$16.26	\$
<input checked="" type="checkbox"/> 68888957	3/16 SPHERICAL BALL END MILL	0	0	25	each	\$18.98	\$

Clear All Select All Transmit Order Save without transmitting Print

Vending Machine/Location: 1 (SupplyPoint 1) Items to Order: 24 Supplier: MSC (MSC) Order Type: Below Min

EDI uses these numbers to determine whether an order should be placed according to the following criteria:

- **Quantity on Hand + Quantity on Order + (In Use Percentage*Qty in Use) + (In Rework Percentage*Qty in Rework) = Total Quantity**
- If **Total Quantity ≥ Reorder Point** then **NO ORDER**
- If **Total Quantity < Reorder Point** then **ORDER TO MAXIMUM** (assigned maximum or drawer capacity)

Proper EDI Settings are the key to successful use of the EDI Software. Correct settings can be the difference between receiving exactly as many pieces as you need, receiving nothing at all or receiving too many items. Here are a few things to keep in mind:

- **Packet Sizes-** As you are probably aware, it is not always possible to order single pieces of items such as inserts; they must be ordered in package quantities. However, these same items are often dispensed individually from the vending machine. When using EDI, there can be problems getting these systems to overlap.
- **Minimum Quantities-** Most of the time, EDI is configured so that orders are placed when the quantity of the item slips **below** a set minimum. Keep this in mind when setting your minimums; the order will be placed when the quantity is one **less** than the minimum. This means that if you set your minimum to 1, the item will be ordered when the quantity slips to zero. If you set the minimum to zero, it will never be ordered, since it is impossible for you to have a negative quantity.
- **Drawer Capacity vs. Item Max-** Regardless of when an order is placed, it is going to order up to one of these numbers. Bear this in mind when establishing your minimums, especially if you are rounding to packet sizes. The Item Max is the number you entered in Items setup, and is often the same as the drawer capacity.
- **In Use and In Rework Percentages-** These properties are defined in the item master record. If they are set to zero then they will have no effect on the ordering calculation. If the In Use Percentage is set to .50 and there are 6 of an item in use, the system will add 3 to the amount of the item it considers to be the total quantity on hand.

Rounding

Rounding is one of the ways used to overcome the package quantity issue. You can set the system not to round, to round up to a packet size or round down to a packet size. Below are examples of the effects of rounding on order quantities. The following assumptions are made:

- Orders are placed below minimum;
- All items have the same supplier;
- None of these items is currently on order.

Item Number	Quantity on Hand	Minimum	Maximum	Packet Size	Refill	Do Not Round	Round Up	Round Down
ITEM 1	8	9	12	5	4	4	5	5
ITEM 2	7	8	12	5	5	5	5	5
ITEM 3	6	8	12	5	6	6	10	5
ITEM 4	5	7	12	1	7	7	7	7

- In each case, when there is no rounding in effect, the exact quantity needed to achieve the item maximum is ordered.

- Rounding up, however, does make a difference. In the case of Items 1 and 2, a single packet of five is ordered; in the case of Item 1, this will leave you with one more piece than is needed (8 on hand + 5 ordered= 13 total pieces). In the case of Item 3 you will have four extra pieces (6 on hand + 10 ordered = 16 total pieces) because the order for 6 is rounded up to the next packet size. Rounding does not affect Item 4, since it has a packet size of 1.
- Rounding down also makes a difference. A packet of Item 1 is ordered; this is because the SupplyPoint™ will place a minimum order for one packet when rounding down is used. The idea is to make sure that there is something available. So you will have 1 more piece of Item 1 than was needed (8 on hand + 5 ordered= 13 total pieces). Item 2 ordered exactly what was needed. Item 3 ordered a packet of 5, leaving room in the SupplyPoint™ for one extra piece (6 on hand + 5 ordered= 11 total pieces). Again, Item 4 was unaffected.

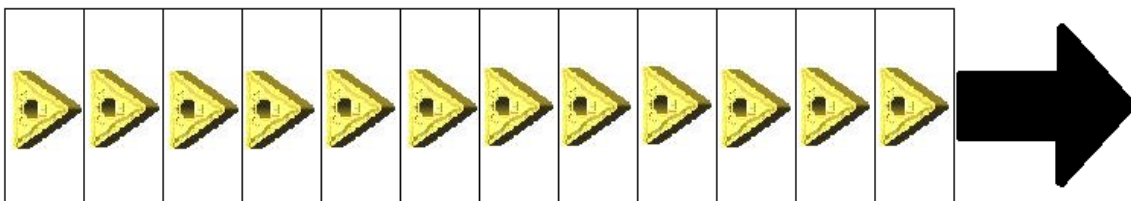
Given the above scenarios, consider the following if you're going to use rounding:

- **Issue items in packet sizes wherever possible-** This precludes the possibility of ordering excess quantities.
- **Set your minimums properly-** It is possible to set minimums so that a packet size is always ordered. Consider a drawer with 12 compartments, each issuing a single piece of an item with a packet size of 5. By setting the minimum to 8, you ensure that the order will be placed only when the quantity equals 7, triggering an order for 5. If more pieces are used in the interim, they will not trigger an order unless the on hand quantity is reduced to 2 (2 on hand + 5 on order= 7 total pieces; 7 pieces < min quantity of 8 = order for 5 pieces) and it will order a packet.
- **Avoid ordering packet sizes when possible-** This allows you to dodge the above.

EDI Ordering Example

The following is an order example, showing the progress from a full drawer, through withdraws and ordering. The following assumptions are made:

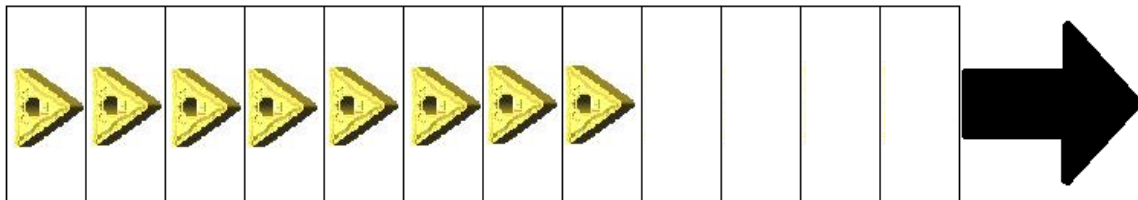
- The Item Maximum is 12, as is the drawer capacity;
- The Item Minimum is 8;
- The Packet Size is 5;
- Orders are placed below minimum.



EDI Sample- Day One

On day one the drawer is full to capacity. In no circumstances will any order be placed for this item given the above assumptions.

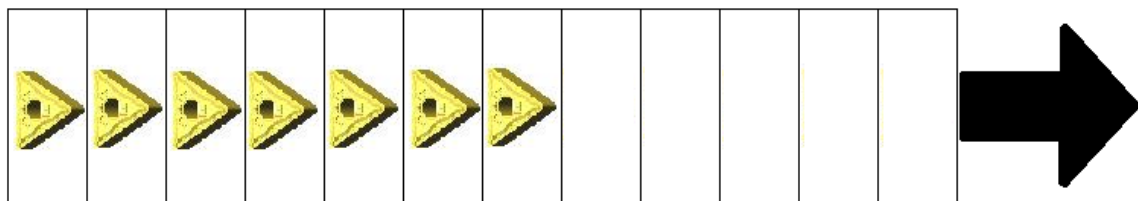
Quantity on Hand	+	Quantity on Order	Total Quantity	Compare to Min	Order not rounding	Order Rounding Up	Order Rounding Down
12	+	0	12	$12 \geq 8$	0	0	0



EDI Sample- Day Two

By the end of Day two, four pieces have been removed, leaving a total of eight. Eight is the item minimum. However, no order will be placed, because the order is placed when the item goes **below** the item minimum. It is important to bear this in mind when setting minimum values. If you set your minimum as one, your order will be placed when the total hits zero. If you place it to zero, you will never order the item.

Quantity on Hand	+	Quantity on Order	Total Quantity	Compare to Min	Order not rounding	Order Rounding Up	Order Rounding Down
8	+	0	8	$8 \geq 8$	0	0	0



EDI Sample- Day Three

Only one more item has been taken on day three, but it is a significant one. The item has now slipped below the minimum and will be reordered. This is where you really need to consider packet sizes when considering your minimums. The user in this case has followed the following formula for determining the item minimum:

Item Minimum = Maximum - Packet Size + 1

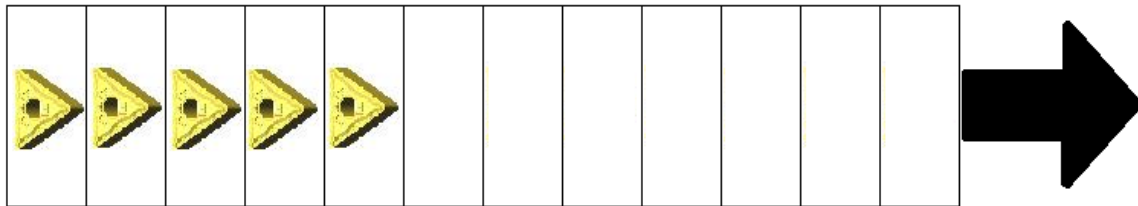
In this case the maximum will be either the Item Defined Maximum or the Drawer Capacity. Remember that for each supplier you can only choose one, so you'll need to be consistent. If you are dealing with multiple locations where the numbers involved are much larger than a single packet quantity, simply use multiples of the packet size.

Quantity on Hand	+	Quantity on Order	Total Quantity	Compare to Min	Order not rounding	Order Rounding Up	Order Rounding Down
7	+	0	7	$7 < 8$	5	5	5

This is also a good opportunity to consider the issue of rounding up vs. rounding down. Each has its use. In the above example, as you can see, rounding makes no difference at all. But what if the quantity had been drawn down to six?

Quantity on Hand	+	Quantity on Order	Total Quantity	Compare to Min	Order not rounding	Order Rounding Up	Order Rounding Down
6	+	0	6	$6 < 8$	6	10	5

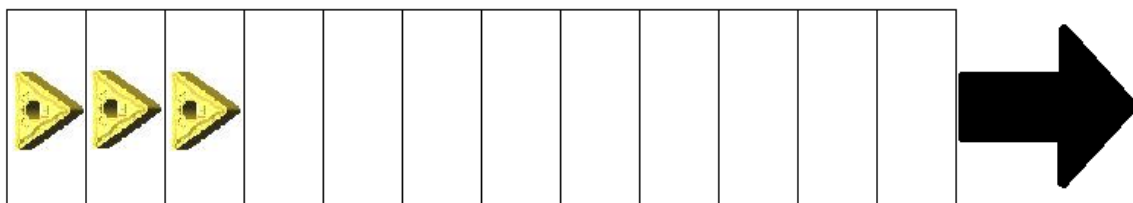
See the difference? If you're not rounding, you get exactly what you need, but there's always the issue of broken packets to be raised with a supplier. If you're rounding down, you order a packet, which would still leave you one short if you were to receive the order before other items are taken, but you would still be above the item minimum. Rounding up would leave you with four extra pieces of the item, which you would then need to do something with.



EDI Sample- Day Four

The order placed yesterday has not been received and two more pieces have been removed from the drawer. Still, the item will not be ordered, because the total quantity remains above the minimum.

Quantity on Hand	+	Quantity on Order	Total Quantity	Compare to Min	Order not rounding	Order Rounding Up	Order Rounding Down
5	+	5	10	$10 \geq 8$	0	0	0



EDI Sample- Day Five

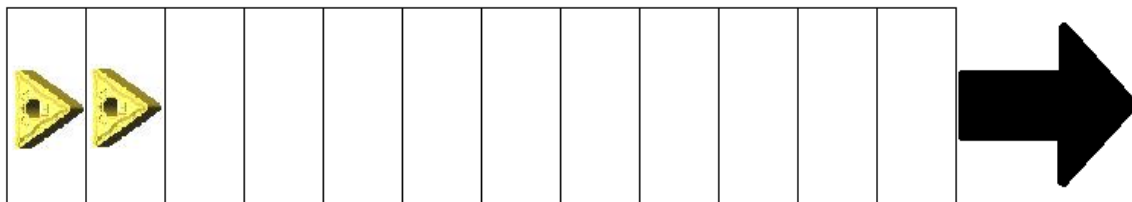
The order you placed two days ago has yet to be received, yet two more pieces have been removed from the drawer. However, since the total quantity still equals the minimum, no order will be placed.

Quantity on Hand	+	Quantity on Order	Total Quantity	Compare to Min	Order not rounding	Order Rounding Up	Order Rounding Down
3	+	5	8	$8 \geq 8$	0	0	0

This is actually a good time to discuss receiving and restocking, the main point being that you should do both as quickly as possible. What do you think would happen in this example if you had received your previous order into inventory, but you had not restocked them? The result would be that the system has none on order, but only three in the drawer:

Quantity on Hand	+	Quantity on Order	Total Quantity	Compare to Min	Order not rounding	Order Rounding Up	Order Rounding Down
3	+	0	3	$3 < 8$	9	10	5

Remember, all that receiving the item does is tell the system that the order is in; it is not considered on hand until it is restocked. The best way to avoid this problem is to use the receive and restock function at the SupplyPoint™.



EDI Sample- Day 6

By now, you would probably be worried about running out of the item. You are down to two, you have five on order, but none have been received yet. At this point you need to reconsider your item maximums and minimums. You may want to add another location of this item. Of course, if you get this far down, another order will be placed:

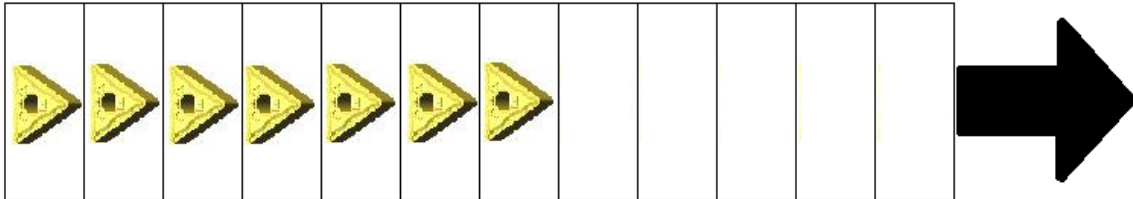
Quantity on Hand	+	Quantity on Order	Total Quantity	Compare to Min	Order not rounding	Order Rounding Up	Order Rounding Down
2	+	5	7	$7 < 8$	5	5	5

This is also a good moment to consider the reverse of the receive/ restock situation we discussed above. What would happen if the order were to be delivered, you restocked it, but did not receive it.

Quantity on Hand	+	Quantity on Order	Total Quantity	Compare to Min	Order not rounding	Order Rounding Up	Order Rounding Down
	+						

7	+	5	12	$12 \geq 8$	0	0	0
---	---	---	----	-------------	---	---	---

See the problem? You would never order the five you need and, if you're lucky, you would always be five short. If you're unlucky, you're going to run out and that's not what you want. This is one of the top reasons items fail to show up on EDI orders: the system thinks it's ordered them already. Again, the point to be driven home is that you should receive and restock as quickly as possible.



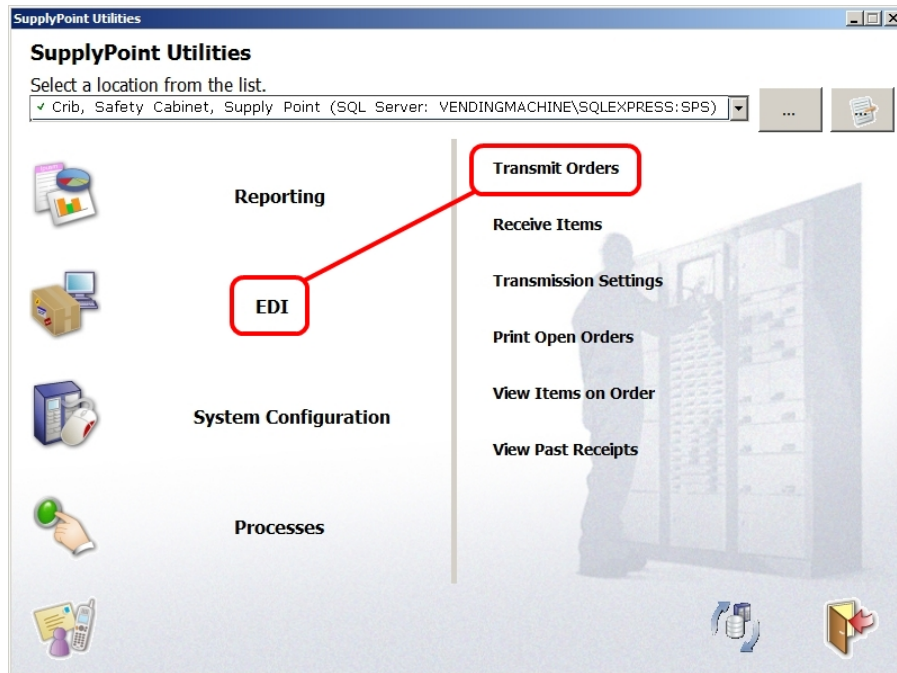
EDI Sample- Day Seven

On day seven, you have finally received the first order and all is right with the world. Even though you came close to running out yesterday, you managed to squeak by. You still might want to reconsider checking maximums and minimums for this item, as you might not be so lucky next time.

Quantity on Hand	+	Quantity on Order	Total Quantity	Compare to Min	Order not rounding	Order Rounding Up	Order Roundin g Down
7	+	5	12	$12 \geq 8$	0	0	0

1. to exit.

Manually Transmitting an Order



1. Select *Transmit Orders* from the *EDI* menu in SupplyPoint™ Utilities as shown above
2. A display like the one to the right will appear, showing the default purchase order information for the default supplier. The default supplier can be set when defining or editing the supplier record. You can also set it by clicking the **SET AS DEFAULT SUPPLIER** button. The release number shown here takes into account the most recent automated orders that were placed. Take this opportunity to select another supplier or change information as needed. You can also add header notes. This form will

Supplier	MSC
Location/VM	SupplyPoint 1
PO Number	48953
Release Number	2
Order File Format 1	MSC
Order File Format 2	NONE
Order Items	<input type="radio"/> Order Below Maximum <input checked="" type="radio"/> Order Below Minimum
Header Notes (Printed)	
Header Notes (Hidden)	
<input type="button" value="Cancel"/> <input type="button" value="Set as Default Supplier"/> <input type="button" value="OK"/>	

also indicated what order file format is being used as well as which transmission template. All of these properties are determined when defining or editing the supplier record as well. The transmission template is the same template referred to in the report section. How to define a template will be discussed in the next section, but the transmission template defines how the order will be sent electronically and to whom (i.e. E-mail). When you have completed making changes press .

3. A display like the one below will appear, showing the list of items that meet the specified order criteria. Items already on order, but which have yet to be received, will not appear.

Transmit Order

PO Number: 123333 Release Number: 0005

Uncheck any items that you do not wish to order

Double-click a line to edit the quantity.

Total Cost : \$0.00

Selected	Item Number	Description	Qty	Unit Cost	Ext Cost	St
<input checked="" type="checkbox"/>	B261A15600KC7040	SOLID CARBIDE DRILL	12	\$0.00	\$0.00	
<input checked="" type="checkbox"/>	CNGP432 KC730	1/2" IC 80 DEG DIAMOND ...	74	\$0.00	\$0.00	CN
<input checked="" type="checkbox"/>	CNMG432KC850	INSERT,CARB,80DIAMD,K...	12	\$0.00	\$0.00	XX
<input checked="" type="checkbox"/>	DNMG432KC850	INSERT,CARB,55DIAMD,K...	12	\$0.00	\$0.00	
<input checked="" type="checkbox"/>	TNMG332MN	INSERT,CARB,TRIANGLE	12	\$0.00	\$0.00	
<input checked="" type="checkbox"/>	VNMG331KC850	INSERT,CARB,35DIAMD,K...	12	\$0.00	\$0.00	
<input checked="" type="checkbox"/>	WNMG432MG KC9025	INSRT,CARB, TRIGON	1	\$0.00	\$0.00	
<input checked="" type="checkbox"/>	WNMG432MG KC935	INSRT, CARB,TRIGON	12	\$0.00	\$0.00	
<input checked="" type="checkbox"/>	XCGT030304GD72	INSRT,CARB,TRIGON, DRL...	4	\$0.00	\$0.00	
<input checked="" type="checkbox"/>	XCGT030304MD72	INSRT,CARB,TRIGON, DRL...	4	\$0.00	\$0.00	

Clear All

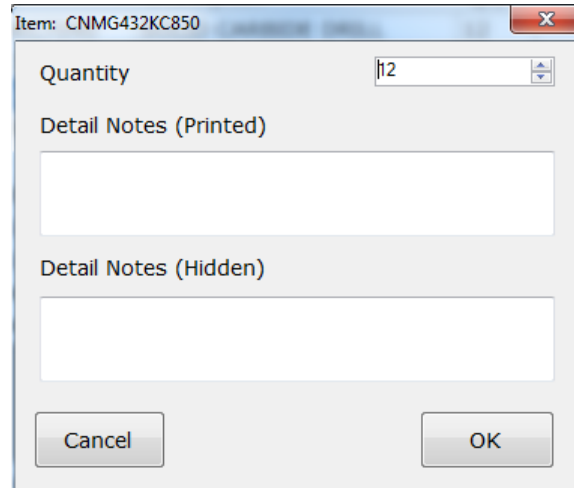
Select All

Transmit Order

Print

Vending Machine/Location: 1 (SUPPLYPOINT) Items to Order: 10 Supplier: ABC Co. (ABC Co.)

4. By default all items that can be ordered will be ordered. Remove items from the order by clearing the check box.
5. Double-click on an item to make adjustments to the order quantity or to add notes. Simply change the Qty field to alter the number ordered. Once you have decided on the appropriate quantity or added required notes, press **OK**.
6. When you have finished adjusting the order press **TRANSMIT ORDER** to send it. You should receive a message saying that the order has been sent or, if not, why it hasn't.
7. You will be asked if you want to print a report showing this order. If you chose not to, the process is complete. If you choose to view the report, you can then print it and the process is complete.
8. Once you are done with the report, close the window and press **CLOSE** to exit the ordering program.



The screenshot shows a dialog box for item CNMG432KC850. It has a 'Quantity' field set to 12. There are two text input areas for 'Detail Notes (Printed)' and 'Detail Notes (Hidden)'. At the bottom are 'Cancel' and 'OK' buttons.

Receiving an Order

When EDI is used to order items, it is of paramount importance that items are received into inventory as well as restocked. This is because, when calculating EDI orders, the software takes into account items currently on order. The dangers of improperly receiving items are twofold:

- Restocking but not receiving items can lead to item shortages. This is because, when calculating the order requirement, EDI will factor the items not received into its calculation. Since restocking does nothing to clear a pending order, pending items are considered when EDI makes its determination of whether to order an item. This is the most common reason for item shortages when EDI orders are being used.
- Receiving but not restocking items can lead to item overages. This is because when the item is received, the quantity on order is removed from further calculations. So, if the item is received but not restocked, calculations will be made based on the wrong on-hand inventory levels.

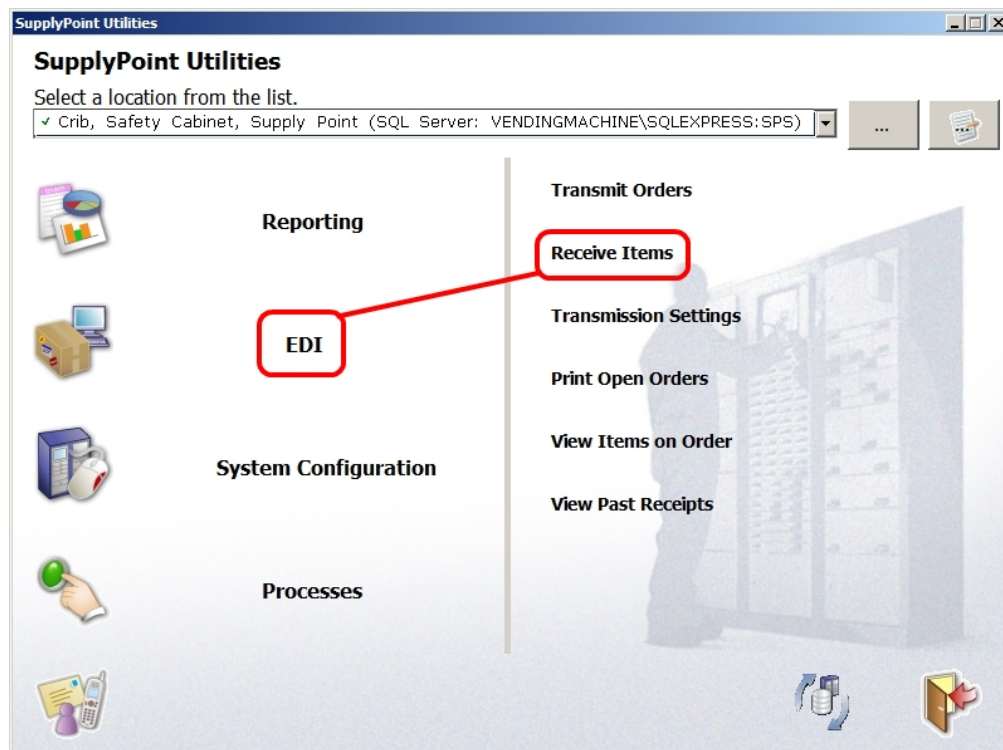
Items can be received in two ways: through the EDI functions of SupplyPoint™ Utilities and by the Receive and Restock transaction in the SupplyPoint™ User Interface.

Receive and Restock

This function is described in greater detail in the User Interface section of the manual. Here, presented for convenience, is a brief description of the process.

1. Log in to the User Interface and select **RECEIVE AND RESTOCK** from the available options.
2. From the drop-down list at the top of the screen select the Purchase Order / Release Number of the item(s) to be received.
3. Select the specific item to be received from the list and use the keypad on the right of the screen to enter the quantity to be received.
4. Select the quantity of the item to be restocked.
5. Follow the instructions on the screen to restock the item.
6. Repeat the process as necessary to complete the order.

Receiving Through EDI



1. Select *Receive Items* under EDI from SupplyPoint™ Utilities. A window like the one to the right will open.

2. Select the purchase order and release number you are receiving here.

- Choose directly from the drop-down boxes at the bottom of the display;
- Chose to list the PO and Release numbers for a specific date by pressing the radio button labelled *List ONLY PO and Release Numbers on* and then selecting a date from the drop-down;
- Select a date range by pressing the radio button labelled *List ONLY PO and Release numbers between These Dates* and selecting appropriate dates

Receive Items

Order Date Criteria

☒ List ALL PO and Release Numbers

☐ List ONLY PO and Release Numbers On This Date

3/27/2010

☐ List ONLY PO and Release Numbers Between These Dates

3/27/2010 And 3/27/2010

Select a PO and Release Number

PO Number 123333

Release Number 0005

Cancel OK

3. Press **OK** to continue.

4. A display similar to the one seen when ordering items will appear, showing the list of items that have been ordered. Items that are not being received can be so designated by removing the check from the check box.

Receive Items

PO Number: 123333 Release Number: 0005

Uncheck any item that you are not receiving at this time

Double-click a line to edit the quantity. Lines colored gray will be closed

Order Date: 3/27/2010

Selected	Item Number	Description	Receive Qty	Suppli
<input checked="" type="checkbox"/>	B261A15600KC7040	SOLID CARBIDE DRILL	12	
<input checked="" type="checkbox"/>	CNGP432 KC730	1/2" IC 80 DEG DIAMOND 0.0312 RADIUS	74	CNGP-
<input checked="" type="checkbox"/>	CNMG432KC850	INSERT,CARB,80DIAMD,KL,1/2" IC,1/3	12	XXXXY
<input checked="" type="checkbox"/>	DNMG432KC850	INSERT,CARB,55DIAMD,KL,1/2IC,1/3	12	
<input checked="" type="checkbox"/>	TNMG332MN	INSERT,CARB,TRIANGLE	12	
<input checked="" type="checkbox"/>	VNMG331KC850	INSERT,CARB,35DIAMD,KL,3/8IC,1/6	12	
<input checked="" type="checkbox"/>	WNMG432MG KC9025	INSRT,CARB, TRIGON	1	
<input checked="" type="checkbox"/>	WNMG432MG KC935	INSRT, CARB,TRIGON	12	
<input checked="" type="checkbox"/>	XCGT030304GD72	INSRT,CARB,TRIGON, DRL,.236IC,.1	4	
<input checked="" type="checkbox"/>	XCGT030304MD72	INSRT,CARB,TRIGON, DRL,.236IC,.1	4	

Clear All Select All Receive Items Print

Vending Machine/Location: 1 (SUPPLYPOINT) Items to be Received: 10 Supplier: ABC Co. (ABC Co.)

5. Any individual item can be edited by double-clicking on it. You can change the quantity being received if the full amount is not being received at this time. If you are not expecting the item, you can check the box labelled *Close this line*. Press **OK** to continue.

6. Once you have finished adjusting any information, press **RECEIVE ORDER** to complete the process.

Item: CNMG432KC850

Quantity: 12

☐ Close This Line

Cancel OK

7. The system will offer to print a report detailing the received items. Press **YES** to display the report.

8. Press **CLOSE** to leave the current order.

9. If there are further orders to be received the next display that appears will be like the one above where the PO and release numbers were selected. If there are no further items to receive a message will appear reading, "There are no items to receive at this time."

Viewing Order Information

Open orders can be displayed by using the *Print Open Orders* or *View Items on Order* options. When the print option is used the user will be prompted to select the purchase order and release number as in transmitting and receiving orders. A report

will be generated that can be printed or exported as needed. *View Items on Order* will generate a list of all items currently on order with PO and release numbers.

Orders that have been received can be viewed with the *View Past Receipts* option. It functions in the same manner as *Print Open Orders*, allowing for selection by PO and release number. It will generate a report that can be exported and printed.

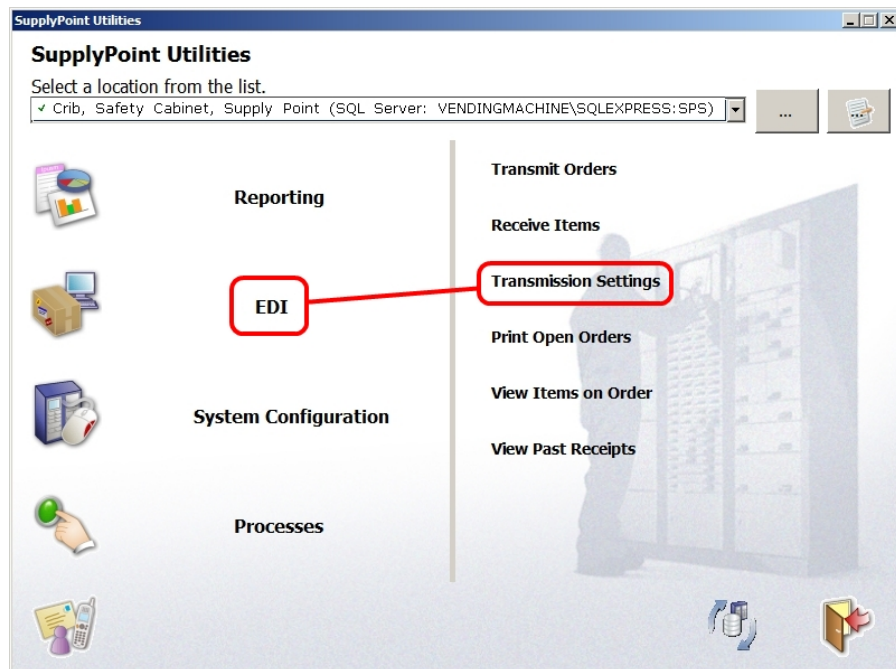
Electronic Transmission of Reports and Orders

The electronic transmissions of reports and orders can be handled in two ways: manually or automatically. Regardless of whether they are manually or automatically transmitted or if it is a report or an order, the setup of the electronic transmission settings are the same. In this section, we will look at the settings required for electronic transmission, scheduling automatic transmission of reports and orders and how to troubleshoot transmission problems.

Accessing Transmission Settings

The electronic transmission settings for reports and orders are achieved through a transmission template. In earlier sections on Supplier and Report setup we discussed how to assign a template to a supplier or a report. Now we will discuss how to create and edit this transmission template.

The editor for electronic transmission templates can be accessed in 3 different locations. The first is through SupplyPoint™ Utilities by selecting the *EDI → Transmissions Settings* option.



The second is through Supplier Setup. Each Supplier can have up to two transmission templates assigned to it.

Customer Number	12345678
Order File Format 1	Generic PDF
Template 1 (for Order File Format 1)	ABC (ABC)
Order File Format 2	
Template 2 (for Order File Format 2)	

Add Settings
Edit Settings 'ABC (ABC)'

The third is through the My Report settings form.

Electronic Transmission Settings

Electronic Transmission Settings My Usage

☐ Tag Date-Time to end of report file name

File Format 1
.pdf

Transmission Template 1
MY USAGE

File Format 2
None

Transmission Template 2
None

Edit Template

Add New Template

Save

Cancel

Transmission Template Editor

When the editor is started the existing templates will be displayed in the list on the left side of the form. As you select a template, the details will be displayed on the tabs on the right side of the form. To edit an existing template, simply select the template on the left and change the desired fields. Once complete, click the **SAVE** button at the bottom of the form.

SPS Electronic Transmission Settings

Templates

- ABC
- ITEMDETAILS
- KMTL
- LOWUSAGE
- MY USAGE
- STOCK RPT

Template Details

Template Name: ABC

Template Description: ABC

E-Mail Settings | Ftp Settings | File Copy Settings | Proxy Settings | Default Settings

To: recipient@supplier.com

To Description: Supplier

From: machine@customer.com

From Description: Vending Machine

CC: copy@customer.com

Notification E-Mail: purchasing@customer.com

Subject: Vending Machine Order

SMTP Server: mail.customer.com

Server Requires Login: ☐ Server Requires SSL: ☐ Use Proxy: ☐

SMTP User:

SMTP Password:

Transmission Type

☒ E-Mail ☐ FTP ☐ File Copy

Add Delete Save Close Test

To make a copy of an existing template, simply select the desired template, change the template name to the name of the new template, fill in the necessary details and click **SAVE**. To add a new template from scratch, click the **ADD** button, fill in the necessary details and then save it. Don't forget to enter a Template Name and Description.

Default and Proxy Settings

The tabs below the Template Name and Description are where the specific details of a template get filled in. However, before discussing template specific details, there are default settings that can be setup once and applied over and over again as new templates are added. These settings are filled in on the *Proxy Settings* tab and *Default Settings* tab. In the case of e-mail there are certain settings such as the e-mail server and the *From* address that will not change from template to template. There is usually only one e-mail (SMTP) server on a site and usually the outgoing messages from a machine will always be from the same e-mail address. Therefore you can fill in the details shown on the form below and click the **SAVE DEFAULT SETTINGS** button. Now, whenever a new template is created, these settings will be applied. Now for a specific template these still can be changed if desired.

E-Mail Settings	Ftp Settings	File Copy Settings	Proxy Settings	Default Settings
SMTP Server: <input type="text" value="mail.customer.com"/>				
Server Requires Login: <input type="checkbox"/> Server Requires SSL: <input type="checkbox"/>				
SMTP User: <input type="text"/>				
SMTP Password: <input type="text"/>				
From: <input type="text" value="machine@customer.com"/>				
From Description: <input type="text" value="Vending Machine"/>				
<input type="button" value="Save Default Settings"/>				

Some customers will have a proxy server that controls outgoing e-mail and/or ftp transmissions. There will be a specific proxy server and the proxy settings will not need to be changed from template to template. Fill in the required proxy settings and then check the *Use Proxy* check box on the E-Mail or FTP Settings tab.

E-Mail Settings	Ftp Settings	File Copy Settings	Proxy Settings	Default Settings
Use Default Proxy Settings: <input checked="" type="checkbox"/>				
Proxy Server: <input type="text"/>				
Proxy Port: <input type="text" value="1"/>				
Use Default Credentials: <input type="checkbox"/>				
User Name: <input type="text"/>				
Password: <input type="text"/>				
<input type="button" value="Save Proxy Settings"/>				

Next it is necessary to choose the type of transmission to use. The three choices are *E-Mail*, *FTP* or *File Copy*. At the bottom of the editor form, there are three radio buttons with these choices. Choose the desired one and then fill in the details on the appropriate tab.

SPS Electronic Transmission Settings

Templates

- ABC
- ITEMDETAILS
- KMTL
- LOWUSAGE
- MY USAGE
- STOCK RPT

Template Details

Template Name: ABC

Template Description: ABC

E-Mail Settings | Ftp Settings | File Copy Settings | Proxy Settings | Default

To: recipient@supplier.com

To Description: Supplier

From: machine@customer.com

From Description: Vending Machine

CC: copy@customer.com

Notification E-Mail: purchasing@customer.com

Subject: Vending Machine Order

SMTP Server: mail.customer.com

Server Requires Login: ☐ Server Requires SSL: ☐ Use Proxy: ☐

SMTP User:

SMTP Password:

Transmission Type

☒ E-Mail ☐ FTP ☐ File Copy

Add Delete Save Close Test

E-Mail Settings

- **To:** enter the name of the primary recipient of the email. There can be only one entry in this space.
- **To Description:** Usually the name of the recipient.
- **From:** This is the address of the vending machine (or other entity) sending the report or order. When notifications are used with EDI Ordering, this is the address they will come from. This field has to be filled in for an e-mail transmission to work.
- **From Description:** Again, usually the name of the sender.
- **CC:** The names of people selected to receive copies of the report or order. There is no limit to the number of CC recipients, but there is a total limit of 255 characters in the field. Separate names with a comma.
- **Notification E-Mail:** This is a person(s) who needs to receive notice that an order or report has been sent. This will be filled out in the case of an FTP transmission with an e-mail notification.
- **Subject:** This will be the subject line of the email. Enter the title of the report, where it's from, anything you feel might be useful. In the case of a report transmission, the Report Name will always start the subject. Any text entered here will be displayed after that.

- **SMTP Server:** This is the name or the IP address of the outgoing mail server. It can also be the name or IP address of a Microsoft Exchange server.
- **Server Requires Login:** Some E-Mail servers required a user name and password to be entered before sending an e-mail. Check this box if this is the case and enter the proper user name and Password in the SMTP User and Password boxes.
- **SMTP User:** This is the username needed to log into the email server if required.
- **SMTP Password:** The password needed to log into the mail server if required.
- **Server Requires SSL:** Some E-Mail servers use Secure Sockets Layer (SSL). SSL is a protocol designed to allow applications such as E-Mail programs and web browsers to send and receive information securely. If your e-mail server supports this simply check the box.
- **Use Proxy:** Check this box if outgoing transmissions are to be routed through the proxy server specified on the *Proxy Settings* tab.

FTP Settings

The screenshot shows the 'SPS Electronic Transmission Settings' dialog box. On the left, a list of templates includes 'ABC', 'ITEMDETAILS', 'KMTL', 'LOWUSAGE', 'MY USAGE', and 'STOCK RPT'. The 'ABC' template is selected. The 'Template Details' section on the right shows 'Template Name' as 'ABC' and 'Template Description' as 'ABC'. Below this, the 'Ftp Settings' tab is active, displaying fields for 'User Name' (customer1), 'Password' (masked with asterisks), 'FTP Server' (ftp.supplier.com), and 'Directory' (/Orders/Customer1). There are checkboxes for 'Enable E-Mail Notification of Upload' (checked) and 'Use Proxy' (unchecked). At the bottom, the 'Transmission Type' section has three radio buttons: 'E-Mail', 'FTP' (selected), and 'File Copy'. At the very bottom are buttons for 'Add', 'Delete', 'Save', 'Close', and 'Test'.

- **User Name:** The username needed for the FTP site.
- **Password:** The password for that user.
- **FTP Server:** The address of the FTP server.

- **Directory:** This is the directory or folder on the FTP site where the report is sent. You can also specify a folder on the local computer and orders (or reports) will be placed there.
- **Enable E-Mail Notification of Upload:** If checked this will send an E-Mail notification to the E-Mail address entered in the Notification *E-Mail* box on the E-Mail settings tab. To do this however, the necessary E-Mail settings have to be filled in (SMTP server, From address).
- **Use Proxy:** Check this box if outgoing transmissions are to be routed through the proxy server specified on the *Proxy Settings* tab.

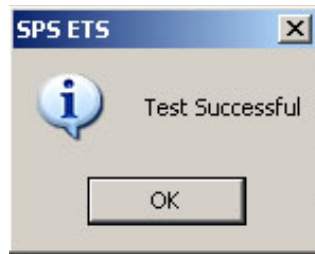
File Copy Settings

The screenshot shows the 'SPS Electronic Transmission Settings' dialog box with the 'File Copy Settings' tab selected. On the left, a list of templates includes 'ABC', 'ITEMDETAILS', 'KMTL', 'LOWUSAGE', 'MY USAGE', and 'STOCK RPT'. The 'Template Details' section on the right shows 'Template Name' as 'ABC' and 'Template Description' as 'ABC'. The 'File Copy Settings' tab contains a 'Directory' field with the value '\\Server1\\Reports' and a checked checkbox for 'Enable E-Mail Notification of File Copy'. At the bottom, the 'Transmission Type' section has three radio buttons: 'E-Mail', 'FTP', and 'File Copy', with 'File Copy' being selected. Buttons for 'Add', 'Delete', 'Save', 'Close', and 'Test' are located at the bottom of the dialog.

- **Directory:** This is the directory where the report or order file will be copied. This can be a local directory or a directory on the location network
- **Enable E-Mail Notification of File Copy:** If checked this will send an E-Mail notification to the E-Mail address entered in the Notification *E-Mail* box on the E-Mail settings tab. To do this however, the necessary E-Mail settings have to be filled in (SMTP server, From address).

Testing Settings

Remember to always test your settings before finishing. To do this, simply click the **TEST** button at the bottom right of the form. If successfully, you will see the following message. The test function will E-Mail, FTP or copy the file *SPSTransmissionTest.txt* file.



Using MS Exchange

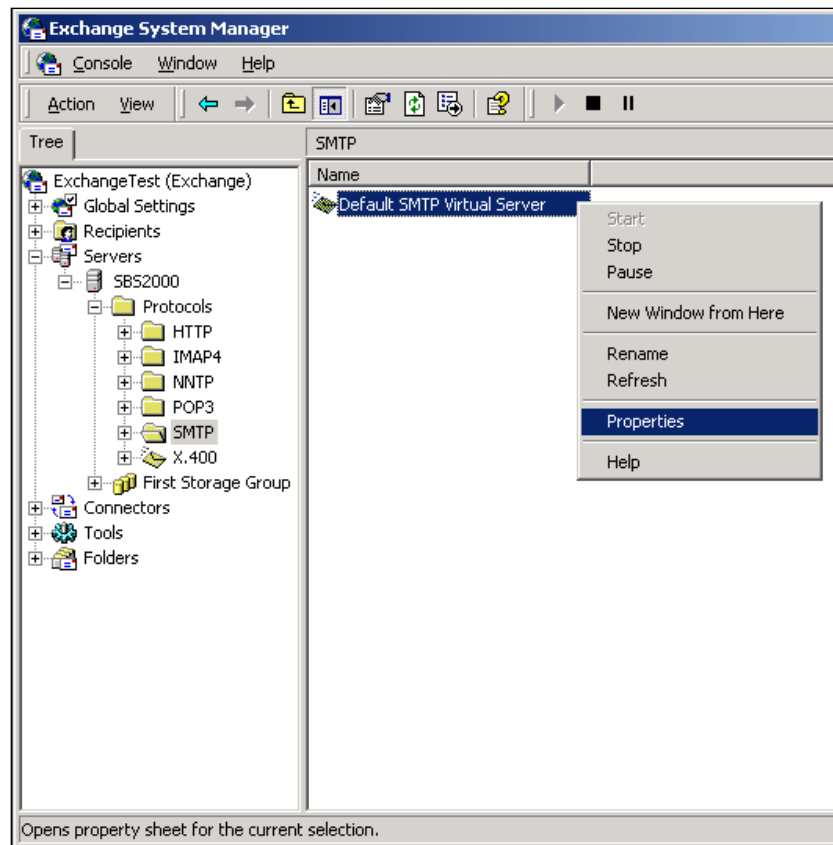
NOTE: This section is intended as reference only. Please consult the proper IT/IS administrator before modifying any network or server settings.

In locations using Microsoft Exchange for messaging, the SupplyPoint™ may have difficulty sending email to recipients outside of the local network. This will usually generate an error code 8 as described above. There are two ways around this problem:

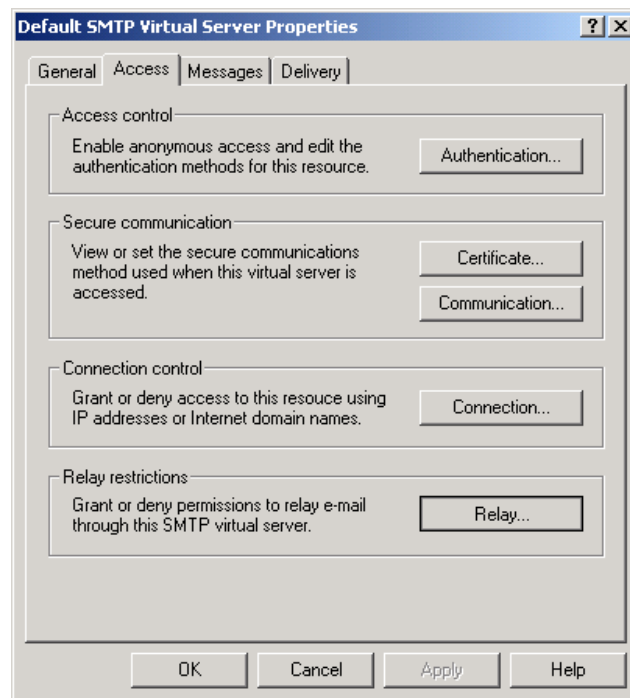
- Set up a mail forward on an existing Exchange user account to pass email to the external recipients.
- Configure the Exchange server to allow relaying from the SupplyPoint™'s IP address. This will require either the assignment of a static IP address to the machine or the reservation of an IP address on the DHCP server if the server has MAC reservation capabilities.

Setting Up a Mail Relay

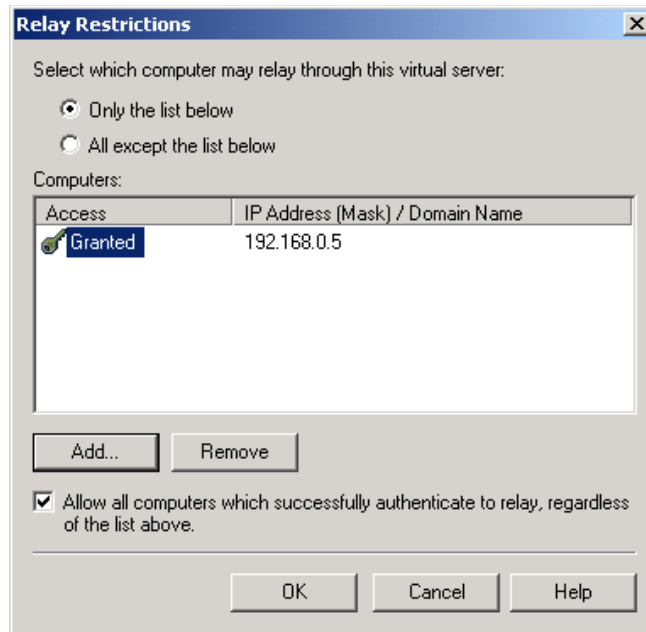
1. Open the Exchange System Manager from the Windows desktop by pressing *Start> Programs> Microsoft Exchange> System Manager*.
2. Next, look at the properties of the Default Virtual SMTP server by opening *Servers> Mail Server Name> Protocols> SMTP*. Right-click on the *Default Virtual SMTP Server* and select *Properties* from the list that appears.



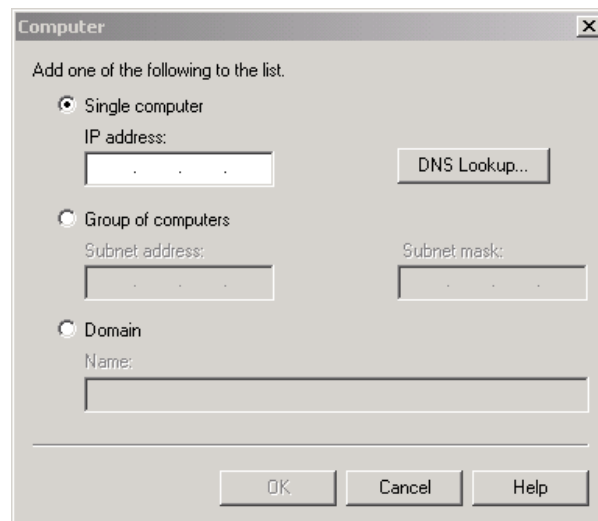
3. Select the Access tab.



4. Press the *Relay* button to display the relay restrictions.



5. Press *Add* to enter the IP address of the SupplyPoint™ in the *IP address* text box on the *Computer* form. Click the *OK* button on the on the *Computer* form and the *Relay Restrictions* form.



6. Click the *Apply* button and then press *OK* on the *Default SMTP Virtual Server* form to apply the changes.

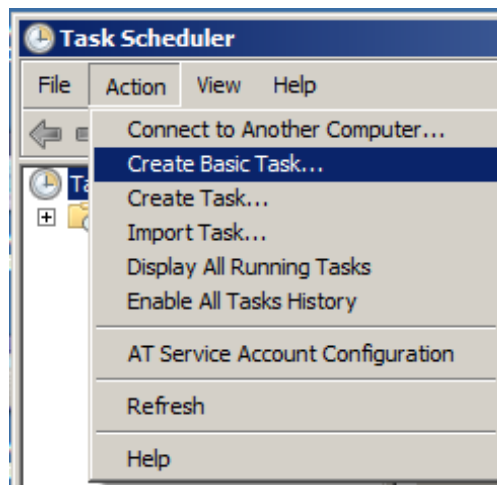
Scheduling

Reports and orders are scheduled to run automatically using the Windows 7 Task Scheduler. The process is only slightly different depending on whether you are scheduling a report or an order. It's simple enough to understand why orders might be transmitted, but why reports? The reasons are as many and varied as the reports created with the software, but include:

- Sending *Refill* reports to the person responsible for restocking the SupplyPoint.
- Sending *Transaction History* reports on a daily, weekly or monthly basis to accounting to track usage.
- Sending *Reorder* reports to suppliers, letting them know when the SupplyPoint is low on stock.

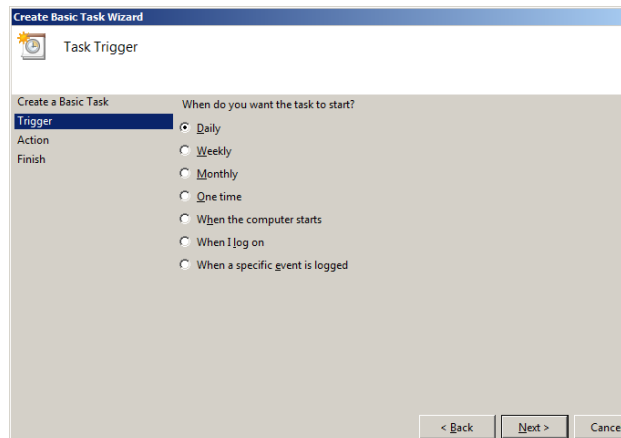
Basic Task Scheduling

1. Begin by opening the Windows 7 Scheduled Tasks. This is found by clicking *Start Menu > All Programs > Accessories > System Tools > Task Scheduler*
2. From the *Task Scheduler* window select *Actions* and *Create Basic Task*.



3. Enter a name and description for the task. Press **NEXT** to continue.

4. Select the frequency with which you wish to run the task. Press **NEXT** to continue.

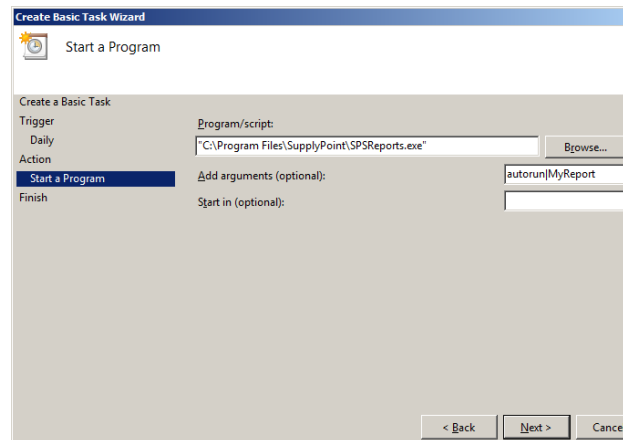


5. If prompted, enter start information as shown in the display on the right. Press **NEXT** to continue.



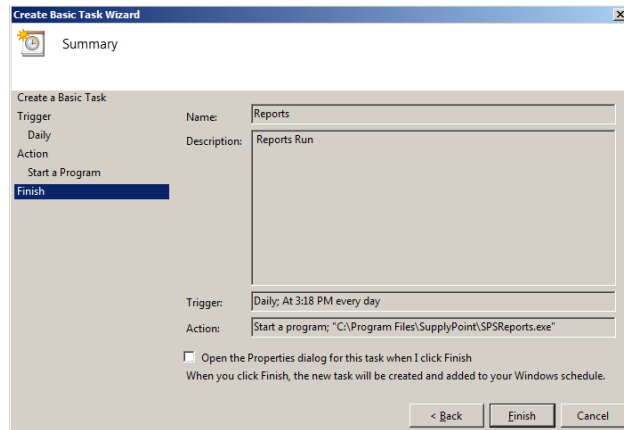
6. When prompted to select an *Action*, be sure to select *Start a Program*. Press **NEXT** to continue.

7. From the *Start a Program* window shown opposite, select the *SPSReports.exe* program if you are running reports, select *SPSEDI.exe* if you are running orders. Neither program will appear on the list. Press **BROWSE...** and find the program (generally it is located in the folder C:\PROGRAMFILES(X86)\SUPPLYPOINT). Once you locate the program, select it and press **OPEN**.



8. Proceed to Report Scheduled Task Settings if you are scheduling a report. Proceed to EDI Scheduled Task Settings if you are scheduling an order. The command lines and arguments specified in these sections should be entered into the *Add arguments (optional)* box shown opposite.
9. Once the arguments have been entered, Press **NEXT** to continue.

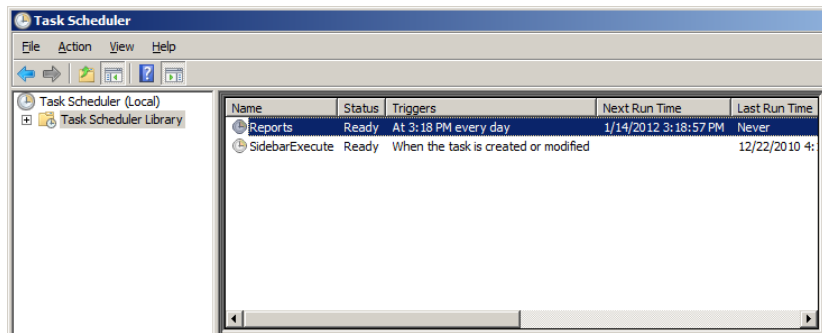
10. Check the details of the task and click **FINISH** when done



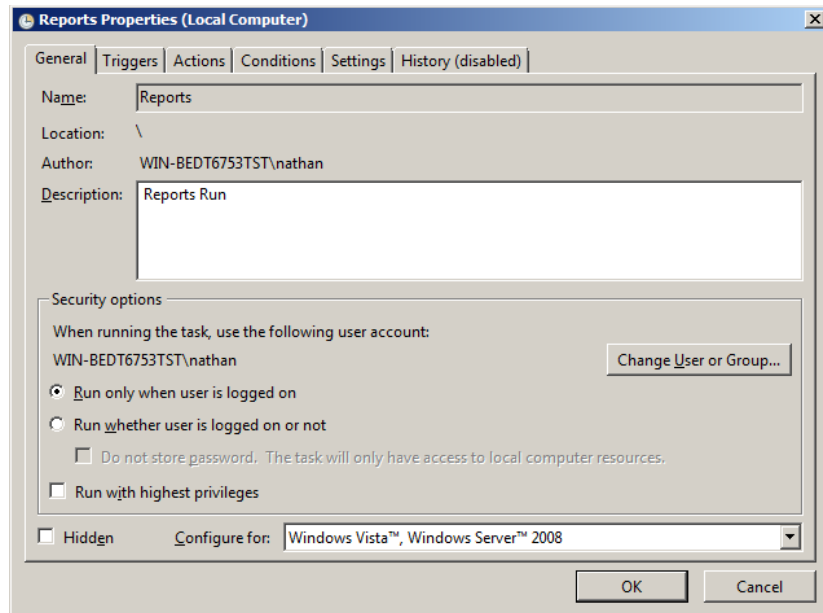
Editing Scheduled Task

From time to time you may wish to alter saved task settings. Follow the steps outlined below to open and edit saved task settings.

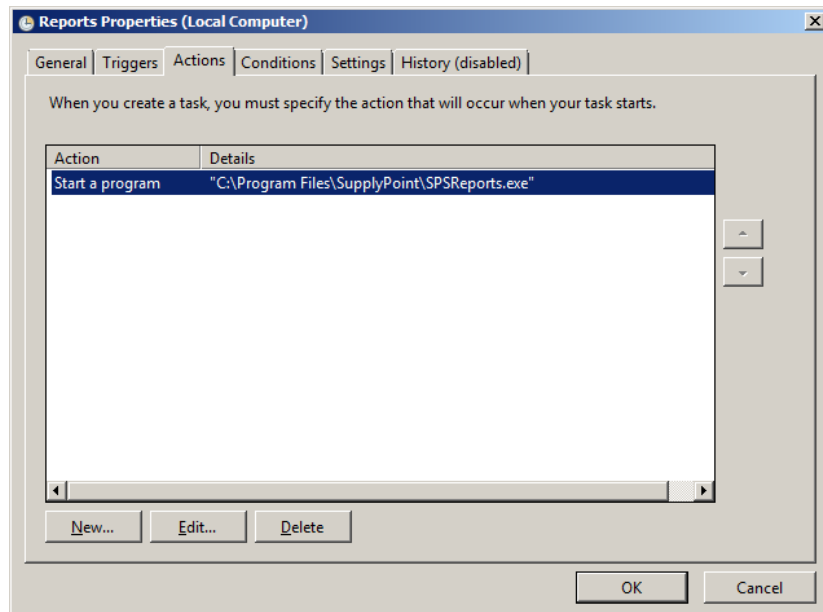
1. Open *Task Scheduler* and find the task by clicking the task as



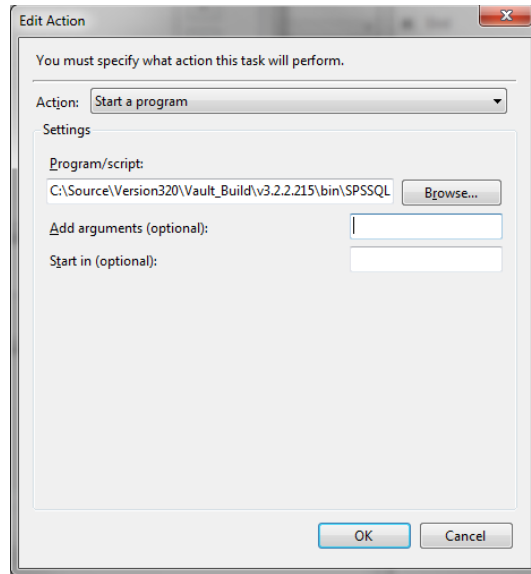
Once this is highlighted right click and select *Properties*, this will bring up the screen below. With details of the task you have already set up.



Click the *Actions* tab, then highlight the selected action and click **EDIT**.

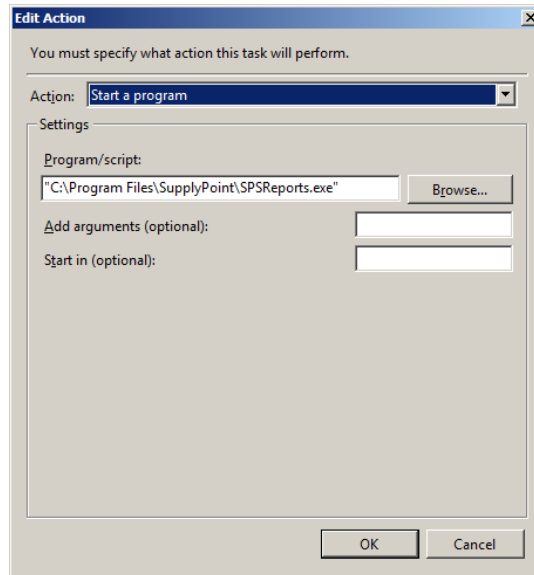


From the resulting window you can enter the following commands in the Add arguments (optional), depending on the function that you require. See Report Scheduled Task Settings for reports options and see EDI Scheduled Task Settings for EDI options



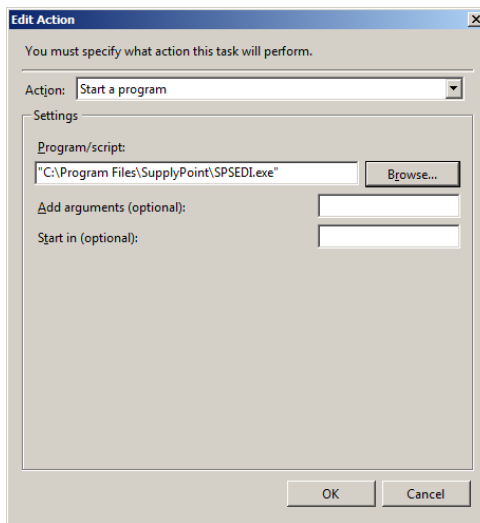
Report Scheduled Task Settings

- **-autorun | Name of Report:**
This switch causes the report named report to run automatically. Be sure to preserve all capitalization and spacing in the name of the report.
- **| Field Name:** Entering a field name after the name of the report allows you to run queries. In Advanced Reporting you saw that you could get the software to ask for input by putting a percent sign (%) in a condition field. With automated reporting, you can do the same thing, but instead of manually entering the response, you enter it here in the scheduled task.
- **| Field Name 1 | Field Name 2:** You can set up multiple queries with the percent sign. Make sure though, that the data for different fields is in the same order as the fields are shown on the report.
- By using these functions you can create several different reports from the same template. All you need to do is have SPSReports ask the questions (by using the percent sign in your condition fields) and set the scheduled task to answer them.



EDI Scheduled Task Settings

- The EDI settings in scheduled tasks are used to ensure that the proper information is sent each time the order is run. They are a series of switches that are used to instruct the software each time EDI is run. Each switch is to be appended after the closing quotation mark on the *Run* line. - **autosend**: This will send an order to the default supplier. The default supplier is whichever one was selected the last time someone closed EDI Settings.
- **-supp=Supplier Number**: When this string is added after the - **autosend**, the order will go only to the specified supplier.
- **-vmid=#**: The last string to be added is the vmid for each machine in which an order will be placed with the *Supplier*. Multiple machines would require for example: -vmid=1 -vmid=2 etc.



Troubleshooting Email Problems

When an automated report or order transmission fails there are two possible root causes: either Windows Task Scheduler has failed or the email process failed. Remember, though, that failures generally do not occur spontaneously. If the process has run previously there are two possibilities:

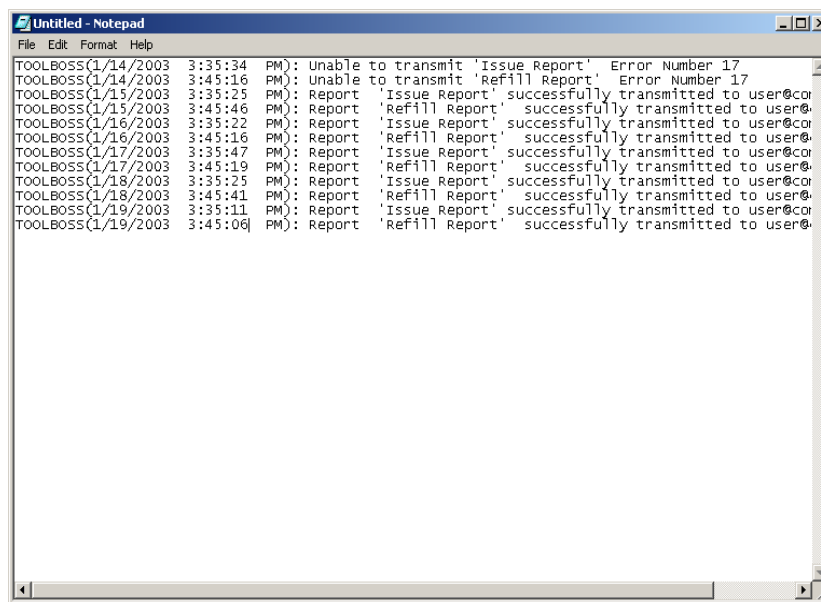
- This is a one-time event that is the result of specific conditions.
- Something has changed- either in the supplier transmission settings or in the overall network setup.

When a previously successful transmission fails the first thing to do is to try running it again. Scheduled tasks can be run manually by right-clicking on the task and selecting *Run*. Reports can be manually transmitted by running the report and

selecting *Transmit* from the file menu. If both of these fail, that means something has changed. Double-check the supplier transmission settings; verify the SMTP server and from address with IT.

To troubleshoot a scheduled report or EDI transmission, take the following steps:

1. The first place to check is in the logs generated by the SupplyPoint™. Both are located in the **C:\Program Files\SupplyPoint** directory are text files that can be opened by Windows Notepad. There are two files, which one you look at depends on whether the transmission is being performed by EDI or Reports. For EDI look at the file **AutoSend.log**; for Reports, **ReportsAutoSend.log**. Newer systems will have shortcuts to these logs on the Windows desktop. Below is a sample of **ReportsAutoSend.log**.



```
File Edit Format Help
TOOLBOSS(1/14/2003 3:35:34 PM): Unable to transmit 'Issue Report' Error Number 17
TOOLBOSS(1/14/2003 3:45:16 PM): Unable to transmit 'Refill Report' Error Number 17
TOOLBOSS(1/15/2003 3:35:25 PM): Report 'Issue Report' successfully transmitted to user@cor
TOOLBOSS(1/15/2003 3:45:46 PM): Report 'Refill Report' successfully transmitted to user@cor
TOOLBOSS(1/16/2003 3:35:22 PM): Report 'Issue Report' successfully transmitted to user@cor
TOOLBOSS(1/16/2003 3:45:16 PM): Report 'Refill Report' successfully transmitted to user@cor
TOOLBOSS(1/17/2003 3:35:47 PM): Report 'Issue Report' successfully transmitted to user@cor
TOOLBOSS(1/17/2003 3:45:19 PM): Report 'Refill Report' successfully transmitted to user@cor
TOOLBOSS(1/18/2003 3:35:25 PM): Report 'Issue Report' successfully transmitted to user@cor
TOOLBOSS(1/18/2003 3:45:41 PM): Report 'Refill Report' successfully transmitted to user@cor
TOOLBOSS(1/19/2003 3:35:11 PM): Report 'Issue Report' successfully transmitted to user@cor
TOOLBOSS(1/19/2003 3:45:06 PM): Report 'Refill Report' successfully transmitted to user@cor
```

2. The log shows a chronological listing of transmissions and transmission attempts. Successful transmissions will be detailed as such. Unsuccessful transmissions will be listed as *Unable to transmit* and will include an error code.
3. If there is an entry showing an error, use the error code to troubleshoot the problem; if there is not an entry for the expected date and time, chances are that the report or order never ran and the problem is with Task Scheduler.
4. Open the Scheduled Task Log. Scheduled Tasks can be found on the Windows Control Panel. Select the *Advanced* Menu and choose *View Log* from the choices there.

```

SchedLgU - Notepad
File Edit Format Help
Started at 7/2/2003 7:50:59 AM
"SPSEDI.job" (SPSEDI.exe)
Started 7/2/2003 8:38:00 AM
"SPSEDI.job" (SPSEDI.exe)
Finished 7/2/2003 8:38:03 AM
Result: The task completed with an exit code of (0).
"Task Scheduler Service"
Exited at 7/2/2003 4:30:16 PM
"Task Scheduler Service"
Started at 7/3/2003 7:33:37 AM
"SPSEDI.job" (SPSEDI.exe)
Started 7/3/2003 8:38:00 AM
"SPSEDI.job" (SPSEDI.exe)
Finished 7/3/2003 8:38:05 AM
Result: The task completed with an exit code of (0).
"Task Scheduler Service"
Exited at 7/3/2003 4:09:20 PM
"Task Scheduler Service"
Started at 7/6/2003 7:57:55 PM
"Task Scheduler Service"
Exited at 7/6/2003 8:46:02 PM
"Task Scheduler Service"
Started at 7/7/2003 7:41:01 AM
"SPSEDI.job" (SPSEDI.exe)
Started 7/7/2003 8:38:00 AM
"SPSEDI.job" (SPSEDI.exe)
Finished 7/7/2003 8:38:04 AM
Result: The task completed with an exit code of (0).
"Task Scheduler Service"
Exited at 7/7/2003 4:20:22 PM
"Task Scheduler Service"
Started at 7/8/2003 7:32:42 AM
"SPSEDI.job" (SPSEDI.exe)
Started 7/8/2003 8:38:00 AM

```

5. Look for the most recent entry. Since the entries in this log are not always in strictly alphabetical order, look for the following marker:

[*** MOST RECENT ENTRY IS ABOVE THIS LINE *****]**

If the task has run successfully a message like the one below will be displayed.

```

"SPSReports.job" (SPSReports.exe)
Finished 7/9/2003 11:03:11 AM
Result: The task completed with an exit code of (0).

```

6. The most common error will resemble the one shown below. In this case the remedy is to check the Windows user name and password of the person running the task. This will generally be the same as the Windows logon for the computer; it is totally separate from any user name and password in the SupplyPoint™ Utilities. It is possible that either the user name and/or the password are not valid for this machine or that there is a typo in one or the other. In this case re-type the password and try the task again. Once this has been done attempt the task again.

```

"SPSReports.job" (SPSReports.exe) 7/9/2003 11:01:55 AM ** ERROR **
The attempt to log on to the account associated with the task failed, therefore, the task did not run.
The specific error is:
0x8007052e: Logon failure: unknown user name or bad password.
verify that the task's Run-as name and password are valid and try again.

```

Transmission Error Codes

Error Description or Code	Possible Cause/ Remedy
E-Mail Errors	

Mailbox unavailable. The server response was: <user@customer.com> No such user here	This can be due to invalid user name and or password. Also can occur if the server does not allow relaying.
Error in processing. The server response was: Greylisted, please try again in 900 seconds	For those messages that are returned to valid email servers, the messages will be retried at least four times. If the first retry is beyond the Block period (default 15 minutes) and within the Pass Period (default 6 hours) The message is passed to the Spool and it goes through its normal processing. A record is also created that says This is a valid email address and keeps it for 36 days (default). If another email from the same email address is received within the 36 day, record clock is reset for an additional 36 days and delivered directly to the Spool
The operation has timed out	This could be due to an invalid smtp user or password
Server does not support secure connections	Either the server port needs to be specified or SSL needs to be unchecked.
No connection could be made because the target machine actively refused it	The server was not accepting connection at the address/port specified.
The SMTP server requires a secure connection or the client was not authenticated. The server response was: 5.7.0 Must issue a STARTTLS command first	Check SSL or change the port number
Failure sending mail. The remote name could not be resolved: 'xxxxx'	The network connection could not be established
The parameter 'address' cannot be an empty string. Parameter name: address; Server was unable to process request. --> The parameter 'address' cannot be an empty string.	Either the To or From email addresses was blank
Server was unable to process request. ---> The specified string is not in the form required for an e-mail address	E-Mail addresses need to be in the proper format sss@sss.sss
Invalid URI: The hostname could not be parsed.	Invalid proxy server name/address

The proxy name could not be resolved: 'xxxxxxxxxx'	Network or DNS problems
FTP Errors	
The remote server returned an error: (530) Not logged in	An invalid user name or password was provided for the FTP server
The remote server returned an error: (550) File unavailable (e.g., file not found, no access)	The directory name is invalid or the user does not have permission to write to the location.
Unable to connect to the remote server	The server name is invalid or there are network problems preventing a connection.
File Copy Errors	
Logon Failure	Unknown user name or bad password; The program is unable to authenticate.
The network name could not be found	Check the file path
Could not find a part of the path '\\server\\shared\\qqqqqqqqqq\\SPSTra nsmissionTestFile.txt'.	This could be either an invalid path or a permissions issue

MiScan

Introduction

MiScan is a hardware and software platform for conducting inventory transactions on External Stock or Crib items. It is comprised of a handheld computer and software that integrates with SupplyPoint™ Inventory Control System. It allows a user to maintain stock in remote areas of their facilities and conduct transactions at the stock location. MiScan then allows a user to synchronize transactions either wired or wirelessly back to the SupplyPoint™ database.

Initial Setup

Before using the device for the first time, it will need to be configured to communicate with the SQL Server database and the local database will need to be populated with data. To login for the first time, use **spsmobilesetup** for the user name and **sps** for the password.



SPS Mobile

SupplyPoint

v.1.06.02

Welcome to SPS Mobile. Please Login.

User Name

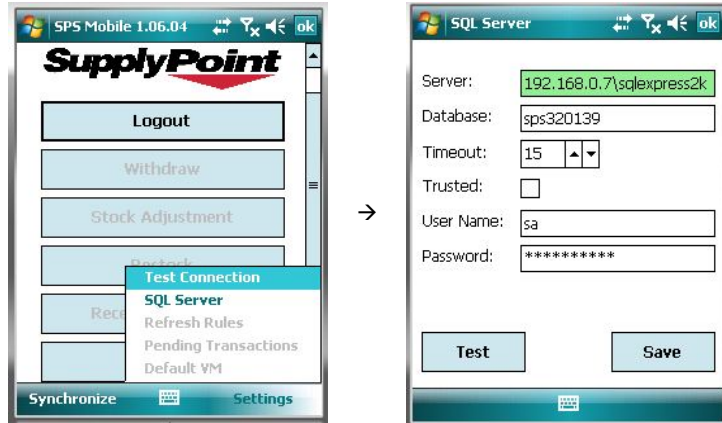
Password

Login

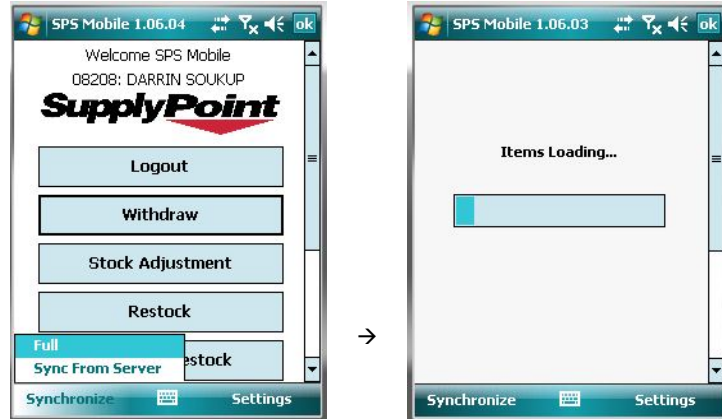
Exit

Clear  Login

When logging in with the setup account, most of the software functionality will be disabled. To setup the device for use, click on the "Settings" menu, and then click "SQL Server".



After entering the details for the SQL Server database, click on the "Synchronize" menu, and then click "Sync From Server".



The "Sync" menu has two options; Full and Sync From Server.

Full will synchronize all pending transactions and then refresh the device's local database.

Sync From Server will only refresh the local database.

User Interface

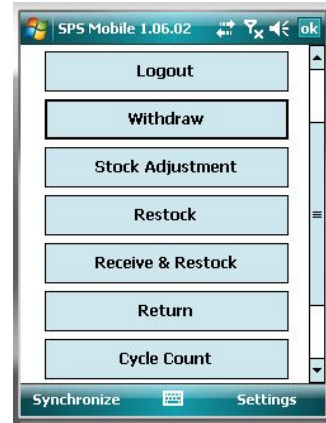
Login Window

The login window utilizes the same user names and passwords that are used in the SupplyPoint™ User Interface.



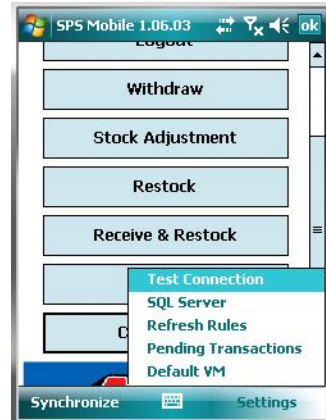
Main Window

The main window will present the user with a list of transactions that they are permitted to perform. The user's permissions will carry over from the SupplyPoint™ User Interface.



Settings

The “Settings” menu will allow a user to configure and test a connection to a SQL Server, view and edit the data refresh rules, view and edit pending transactions, and view and edit the default VM.



SQL Server

This window will allow the user to setup a connection to the SQL Server database.

The screenshot shows the "SQL Server" configuration window. It contains the following fields: "Server:" with the value "192.168.0.7\sqlexpress2k", "Database:" with the value "sps320139", "Timeout:" with a value of "15" and a dropdown arrow, "Trusted:" with an unchecked checkbox, "User Name:" with the value "sa", and "Password:" with a masked field "*****". At the bottom, there are "Test" and "Save" buttons.

Refresh Rules

The refresh rules determine how data is transferred to the MiScan device. The default rules established in the device provide the best synchronization performance. Changing these options may cause slower synchronizations or incomplete data availability on the MiScan device.

The screenshot shows the "Refresh Rules" configuration window. It contains a text box with the following text: "Table Names that are checked will be refreshed every time a synchronization occurs. Unchecked tables will only be refreshed if data on the server has been changed since the last synchronization." Below this is a table with two columns: "Table" and "Last Refresh". The table has three rows: "ActInv" with a last refresh time of "4/22/10 3:18:37 PM", "DrawerC..." with a last refresh time of "4/22/10 3:14:31 PM", and "DrawerC..." with a last refresh time of "4/22/10 3:14:41 PM". The first two rows have checkboxes next to them, and the second and third rows are checked. At the bottom, there is a "Save" button.

Pending Transactions

This window will allow a user to view the transactions that are waiting to be synchronized with the server. If a user deletes a transaction from the list, it will not be synchronized with the server database.

PTID	Trans...	UserN...	JobNu..
<input type="checkbox"/> 1	WU	08208	
<input type="checkbox"/> 2	IAG	08208	
<input type="checkbox"/> 3	WU	08208	
<input type="checkbox"/> 4	WU	08208	12-067

Default VM

This window is used to set the active VMID for future transactions. MiScan can conduct transactions on numerous points of issue.

Current VM: 2

Available VMs:

- 2 - Location '1' external stock
- 3 - Fake Ext Location For Testing

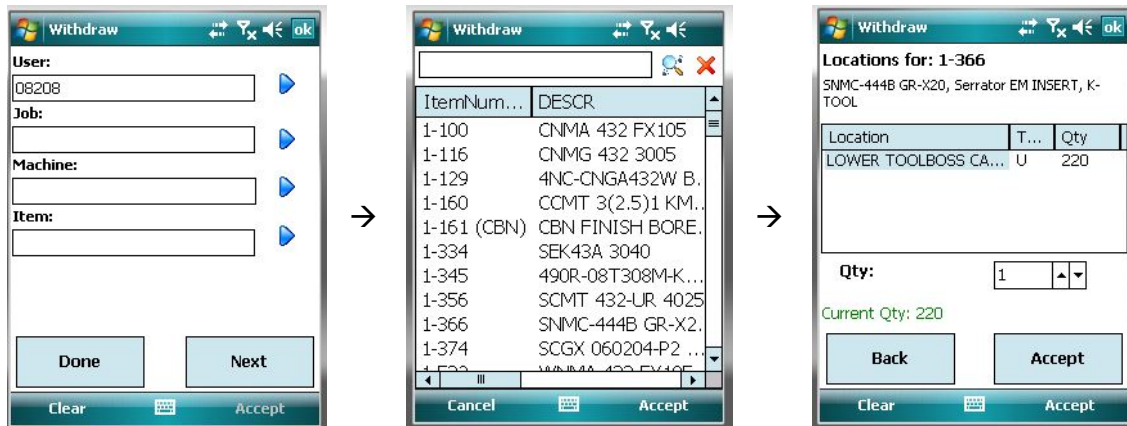
Set VM

Withdraw

Withdraw will allow the user to specify which User, Job, and Machine that an item will be withdrawn against. Values for the fields can be entered manually or scanned via the bar code reader on the handheld computer.

Clicking on the blue arrows next to the fields will display a selection form that shows the available options for that field. The selection form also has a search box to reduce the need to scroll through an entire list of objects.

The location window is the last step in the withdraw process. Here a user can choose which location from where the stock will be taken.



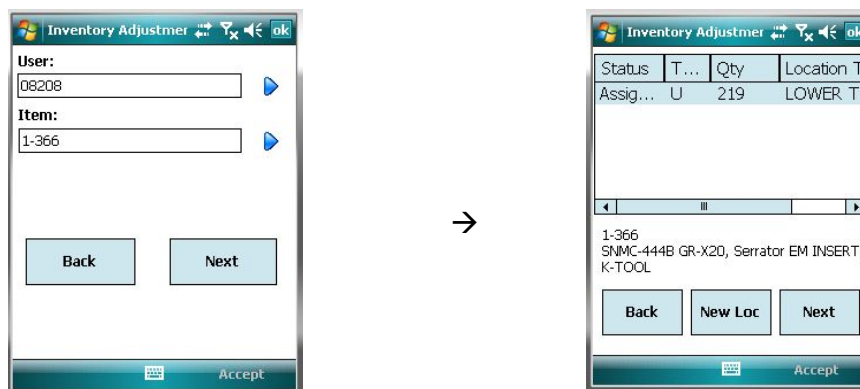
Stock Adjustment

Stock Adjustment will allow the user to specify the User and the Item Number to adjust.

The locations window will allow a user to select a currently assigned location or specify a new location which will be added to the system.

If a user clicks the "New Loc" button, they will then have to choose a content type for the location.

After selecting a content type, the user will be able to define the location text, max quantity, current quantity, and the dispensing quantity. Clicking "Next" instead of "New Loc" will bring the user to this window as well.

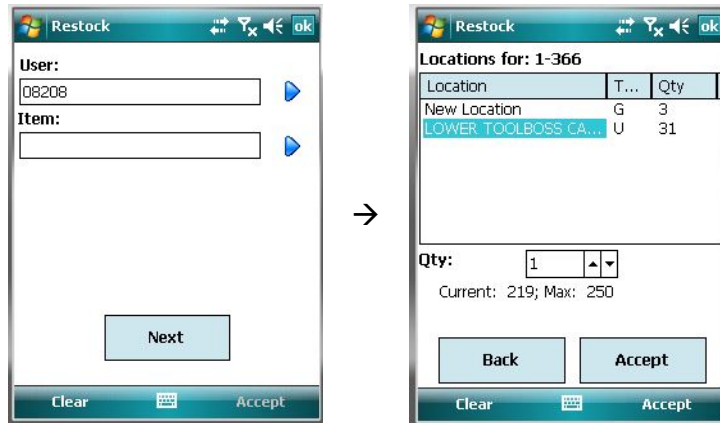




Restock

Restock will allow the user to specify the User and the Item Number.

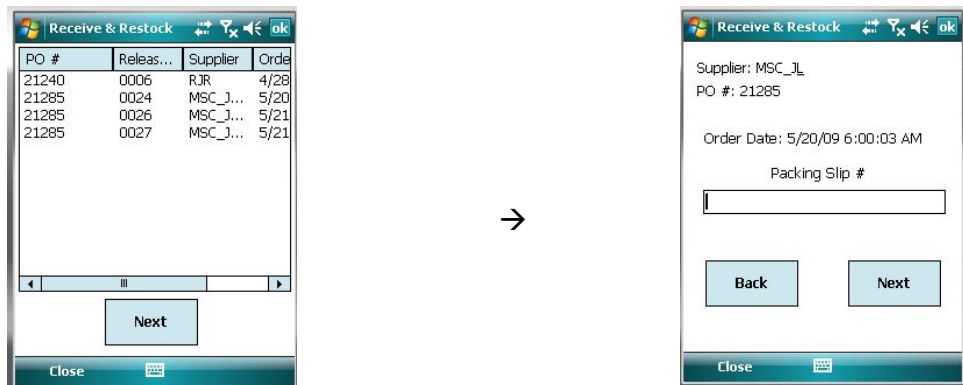
The user will choose a location and then specify the quantity to restock in that location.



Receive & Restock

Receive & Restock first presents the user with a list of currently open purchase orders. The user will now have an opportunity to enter the packing slip number for this transaction.

The next window will allow the user to receive a line item from the order and restock it to a location that has space available. A user may edit the quantity received by clicking the "Edit Qty" button.





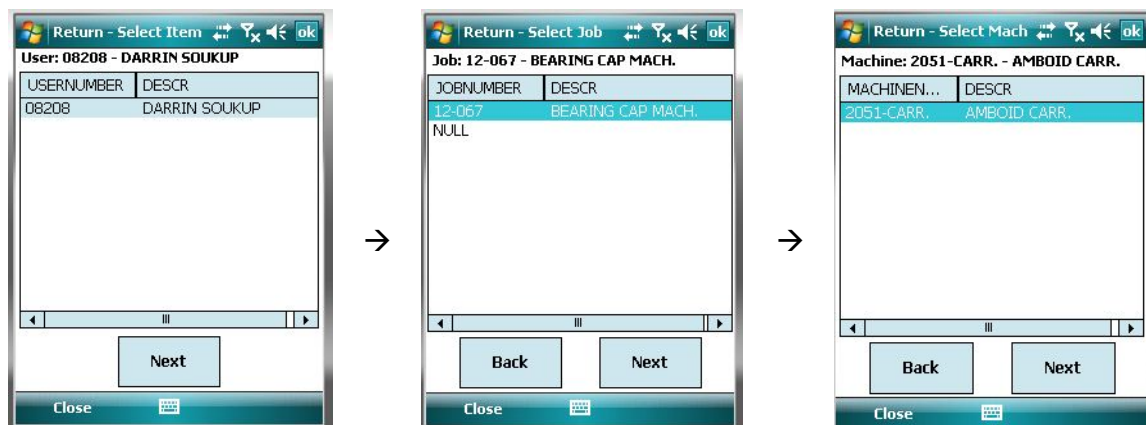
Return

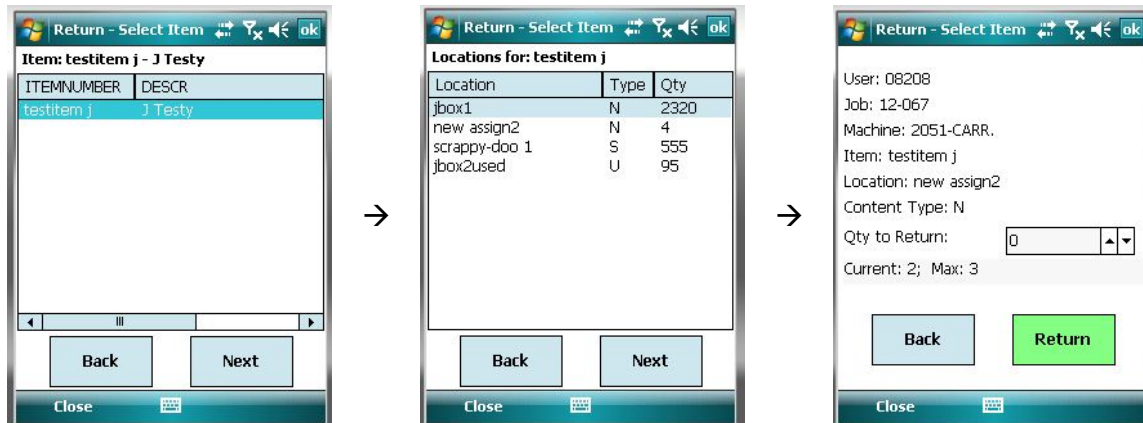
If the user has permission to return items for other users, they will be presented with a list of users that have returnable items. Otherwise, the user will be taken to the job selection window. Jobs and machines may be skipped if they are disabled in the main User Interface.

Based on the previous selections of user, job, and machine, a list of returnable items will be displayed.

After selecting an item, a location to return the item must be chosen.

The final step in the return allows the user to review the details about the return and specify the quantity.





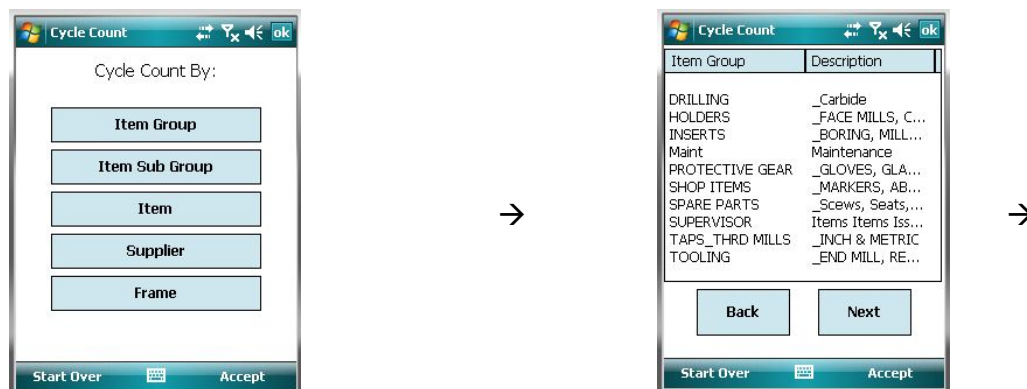
Cycle Count

Cycle Count will allow inventory adjustments to be done on an entire category of items.

After choosing a category, the user will need to select a time since the last cycle count.

The last step in the cycle count is to go through the list of items presented and count or verify the quantities.

The "Accept" button will only process the rows that have their check boxes checked. This will happen automatically if the quantities are adjusted or they can manually be checked to confirm the existing quantity.





Advanced Configuration

Ticket Printing

The ticket printing functions of the SupplyPoint™ provide a method of instantly documenting withdrawals, returns and restocks made by users. This might be useful in several instances: ensuring that proper batch numbers are taken, ensuring that users have only tools they are permitted, and providing additional assurance that users return items correctly, against the proper job and machine.

Ticket printing crosses a number of the functions detailed above in the *Machine Setup* sections. In order to ensure tickets will print the following conditions must be met:

1. The ticket printer must be installed on one of the serial or printer ports.
2. All items to be ticketed must have the attribute *Is Ticketable* checked.
3. The *Parameters* setting *Tickets- Port with ticket printer attached* must be filled in. If the printer is attached to a COM port, only the number of the port needs to be entered here. For printing to a printer port or file, enter the port name (e.g. LPT1) or filename.
 - Alternatively, you can use the Windows name for a printer. The Windows user logged into the SupplyPoint™ PC will need to have access to the printer, or it will need to be attached to the PC. Network printers need to be added to the local list of printers using the Windows *Add Printer* function.
 - To find a printer name, open the command line and enter: SPSDBUPDATE -PLIST
4. Also in *Parameters* the options to *Tickets- Print a ticket when adding items* and/or *Tickets-Print a ticket when withdrawing items* need to be checked depending on which transactions will generate a ticket.
5. A control file, called TICKET.INI, must be in the same directory as the SPSUI.exe file (generally **C:\Program Files\SupplyPoint**). See below for an example of TICKET.INI and an explanation of the different fields.

TICKET.INI

```
[Ticket]
Settings= 9600,n,8,1
Handshaking=0
Font1=Arial,8,N
Font2=3of9,8,N

TicketText=TB TICKET{CRLF}*****{fundesc}*****{crlf}{crlf}Date: {date}{CRLF}Time: {time}{crlf}{CRLF}Username:
{username}{CRLF}Job Descr: {JOBDESCR}{CRLF}Machine Descr: {MACHINEDESCR}{CRLF}{CRLF}Item: {itemnumber}{crlf}
Description: {itemdescr}{CRLF}{CRLF}Qty: {QTY}{CRLF}{CRLF}{CRLF}{CRLF}{CRLF}{CRLF}

OOSTicketText=** CRIB REQUEST TICKET**{CRLF}{crlf}Date: {date}{CRLF}Time: {time}{crlf}{CRLF}Username: {username}
{CRLF}JOB: {JOBNUMBER}{CRLF}Item: {_ITEM}{crlf}Item Description: {_DESCRIPTION}{CRLF}Qty Requested: {_QTYINPUT}
{CRLF}Crib: {_VENDING MACHINE}{CRLF}Location in Crib: {_LOCNAME}{CRLF}{CRLF}{CRLF}{CRLF}{CRLF}{CRLF}{CRLF}{FF}

LeftIndent=0
spacing=0
Autoprint=0
DefaultPrint=0
DefaultToNo=0
```

Settings: This function is not used.

Handshaking: This function is not used.

TicketText: This provides the template for the ticket contents. See below for an example of a ticket printed to file.

```

** withdraw **
Date: 07Jan2003 Time: 10:44
User: TOM SUPERVISOR
Job: JOB_01
Machine: H5001
Item: #10 3/4 MACHINE SCREW
Description: #10 3/4 MACHINE SCREW
Qty: 3

```

Left Indent: Sets the left margin of the ticket. Counted in spaces.

Autoprint: This function is not used.

Disable Print: This function is not used.

DefaultToNo: This function is not used.

Font1= fontname,size,bold: Font 1 is the default font for the ticket. Enter the name of the font, the size of the text, and Y or N to determine whether the font will be bold.

Font2= fontname,size,bold: Font 2 is an optional second font that can be used to set information apart. If you want something in Font 2, place the relevant information in the *TicketText* line in back single quotes (e.g. `{ItemNumber}`). This is typically used to print a barcode on the ticket.

TicketText

Settings in the *TicketText* line can be used to customize the receipt. All of the information for the *TicketText* is to be entered in one line. Control codes (e.g. codes to make certain text bold or to send a command to the printer) and transaction codes are inserted by use of tokens in braces {}. Control codes may also be inserted by entering its number preceded by a backslash (\). A list of tokens follows:

BATCHNO	Adds the Batch Number information to the ticket.
CR	ASCII Carriage return
CRLF	New line
DATE	The date of the transaction
DRAWER	Drawer containing the item being withdrawn/added
ESC	ASCII Escape
FF	Form feed
FUNDESC	The type of transaction occurring (i.e. Withdraw, Return, Restock, etc.)
IG	Item Group Number
IGD	Item Description
ISGD	Item Subgroup Description
ITEMALIAS	Information from the <i>Alias</i> field in <i>Items</i> setup
ITEMDESCR	The item description as entered in <i>Items</i> setup
ITEMNUMBER	The number of the item involved in the transaction

JOBALIAS	Any information contained in the <i>Alias</i> field in <i>Jobs</i> setup
JOBDESCR	The job description as entered in <i>Jobs</i> setup
JOBNUMBER	The Job number for which the item was removed
LF	ASCII Line Feed
LTEXT	Location Text (esp. for items in external stock)
LOCATIONTEXT	Location Text
MACHINEALIAS	Any information contained in the <i>Alias</i> field in <i>Machines</i> setup
MACHINEDESC	The machine description as entered in <i>Machines</i> setup
MACHINENUMBER	The Machine number on which the item will be used
OB or CB	Open or close brace
PHYCMPT	The physical compartment of the drawer containing the item
PIC	PIC number where the transaction occurred
VMID	Vending Machine ID
QTY	The quantity involved in the transaction
TIME	The time of the transaction
TRANSCODE	The code for the transaction as it appears in the transaction log
TRANSDISC	The type of transaction and the content type of the drawer (i.e. New, Used, etc.)
USERCOSTCEN	The Cost Center associated with the transaction. From the <i>Cost Center</i> field in <i>Users</i> setup
USERNAME	The User's name or other information from the <i>Description</i> field in <i>Users</i> setup
USERNUMBER	The User Number of the person performing the transaction
USERALIAS	Name by which the User is identified. From the <i>Alias</i> field in <i>Users</i> setup
AUX1ALIAS	Any information contained in the <i>Auxiliary 1 Alias</i> field in <i>Aux1</i> setup
AUX1DESCR	The characters entered within the <i>Auxiliary 1</i> field in <i>Aux1</i> setup
AUX1	The Aux1 number on which the item will be used
AUX2ALIAS	Any information contained in the <i>Auxiliary 2 Alias</i> field in <i>Aux2</i> setup
AUX2DESCR	The characters entered within the <i>Auxiliary 2</i> field in <i>Aux2</i> setup
AUX2	The Aux2 number on which the item will be used
AUX3ALIAS	Any information contained in the <i>Auxiliary 3 Alias</i> field in <i>Aux3</i> setup
AUX3DESCR	The characters entered within the <i>Auxiliary 3</i> field in <i>Aux3</i> setup
AUX3	The Aux3 number on which the item will be used
ITEMAUX1	Item Extended Information field # 1
ITEMAUX2	Item Extended Information field # 2
ITEMAUX3	Item Extended Information field # 3
ITEMAUX4	Item Extended Information field # 4

ITEMAUX5	Item Extended Information field # 5
KITNUMBER	The Kit number on which kit will be used
KITCOMMENT	Kit Comment
LOGCMPT	The compartment number for the transaction
FUNCODE	The function code from the transaction log
ITEMVERCODE	Item verification code from the transaction log
TFR	Tool Fail Reason
TOOLLIFE	Tool Life – Piece Count
EXPDATE	Expiration Date

Alternate Stock

The other printer setting in *Parameters* is called *Tickets: Print for alternative/crib stock*. The function of this setting is to allow users of the External Inventory Monitor to print a request ticket for items stored in other vending machines or the crib. This is configured by adding a line to the TICKET.INI file, after the *TicketText* line, called *OOSTicketText*. An example is shown below in **bold**.

```
[ticket]
Settings=9600,n,8,1
Handshaking=0
TicketText=** {FUNDESC} **{CRLF}Date: {DATE} Time: {TIME}{CRLF}User: {USERNAME}{CRLF}Job:
{JOBNUMBER}{CRLF}Machine: {MACHINENUMBER}{CRLF}Item: {ITEMNUMBER}{CRLF}Description:
{ITEMDESCR}{CRLF}Qty: {QTY}{CRLF}{CRLF}{CRLF}{CRLF}{CRLF}{CRLF}{CRLF}{CRLF}
OOSTicketText=** Item: { _ITEM}{CRLF}Quantity: { _QTYINPUT}{CRLF}Vending Machine: { _VENDING MACHINE}
LeftIndent=0
Spacing=0
AutoPrint=0
DisablePrint=0
DefaultToNo=0
```

A list of fields valid in the *OOSTicketText* is the following:

CR	ASCII Carriage return
CRLF	New line
CB or OB	Insert a closing brace or an open brace.
DATE	The date of the transaction
ESC	ASCII Escape
FF	Form feed
LF	ASCII Line Feed
TIME	The time of the transaction.
VMID	The Vending Machine ID where the request is made.
_DESCRIPTION	Item Description
_GROUP	The Item Group

_ITEM	The Item Number
_QTY	The quantity of the item available.
_QTYINPUT	The quantity of the item requested.
_SUBGROUP	The item subgroup.
_VENDINGMACHINE	The vending machine that has stock.

Scales

Scales can be used to count out large quantities of low-value items with high accuracy. The scale connects to a COM port on the SupplyPoint™ PC and is managed through the User Interface. Scales setup is simple. Connect the scale to a COM port, turn it on, and check the following *Parameter* settings.

Scales: 0=grams 1=ounces: This allows the choice of units to be used when weighing items.

Scales: Allow skipping when scales non-responsive: Allows the user to restock or withdraw the item manually in the event that the scales fail to respond.

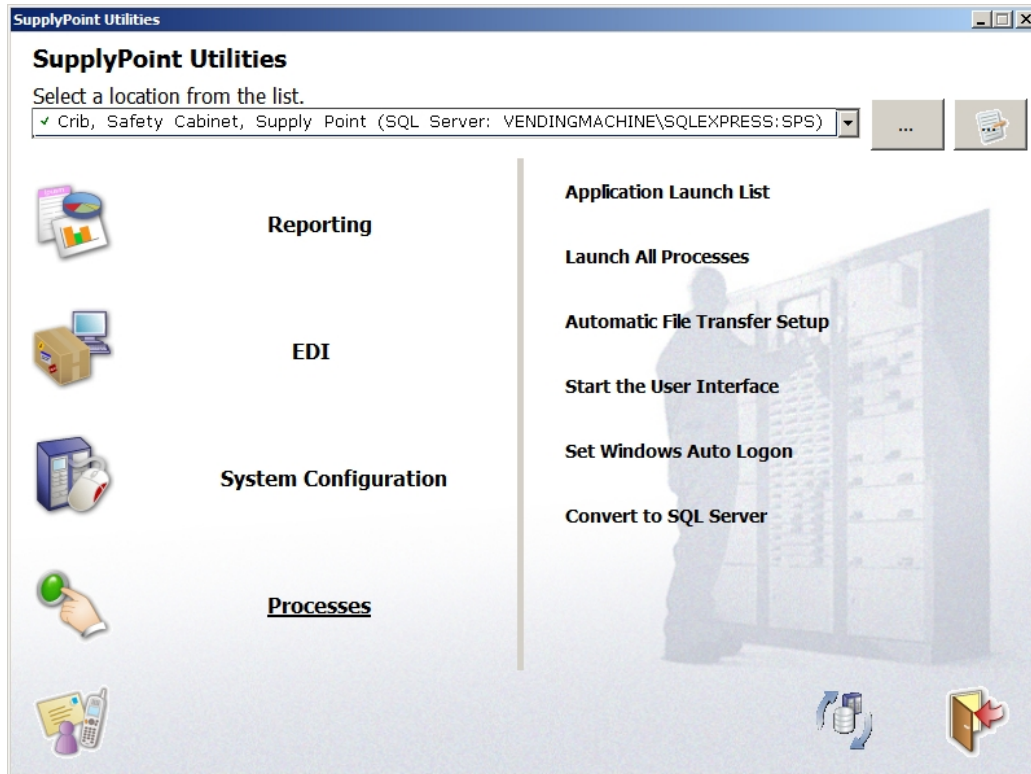
Scales: Communications port: Enter the name of the COM port to which the scale is attached.

Scales: Global quantity below which scales are ignored: Allows the weighing process to be skipped for smaller quantities of weighable items, e.g. it may be useful to weigh 100 small screws, whereas the user can generally be trusted to count out 10.

Scales: Warn user to clear drawer when restocking batch traceable items: In cases where items are batch traceable, this prevents the mixing of different batches.

Processes

The functions under *Processes* provide various useful tools for maintaining and operating the SupplyPoint™.

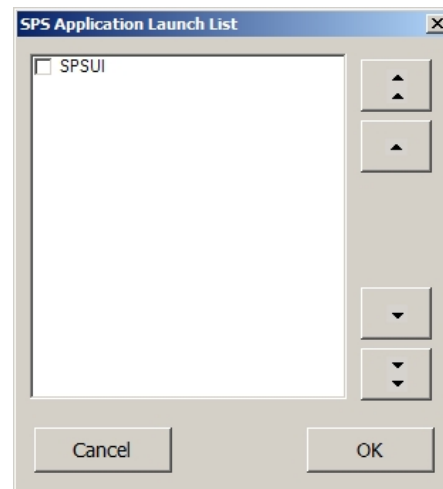


Application Launch List: This allows you to determine what applications will launch when the *Launch All Processes* function is used or when SPSUtilities.exe is started with the **-Logon** switch is used. Simply check the boxes next to the applications you want to start and press ☐. You can determine the order in which they launch by using the arrows along the side of the window.

Launch All Processes: This will start the SupplyPoint™ User Interface during the boot process.

Automatic File Transfer Setup: Use this to establish settings for automatic file transfer. See [Automatic File Transfer Settings](#) below for more details.

Start the User Interface: This is a quick and easy way to go to the User Interface from the Main Interface screen.



Set Windows Auto Logon: This provides an easy way to set the computer to log on automatically, eliminating the need to enter a user name and password. Using the screen shown below, enter the username, password and domain (or name) of the computer. The program will make necessary changes to the Windows registry, allowing for fully automated startup.

This now works on 32 and 64 bit window systems.



Convert to SQL Server: This allows one to convert an Access database to SQL Server. This process is described in greater detail below in "SQL Database Functions."

Automatic File Transfer Settings

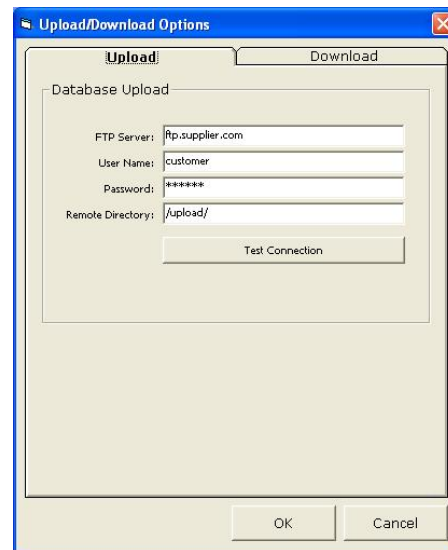
The SupplyPoint™ has the ability to perform certain functions using the File Transfer Protocol (FTP) such as uploading the database at set intervals or downloading database information or instructions for the SupplyPoint™ from remote servers. Some applications of this function might include:

- Uploading the database to a distributor so they can run reports without having to be on site;
- Sending the database to a remote server for backup;
- Downloading price or item changes from a supplier;

In order for this to work, the Automatic File Transfer Settings have to be entered. There are two sets of settings to be entered: one for uploading, the other for downloading. To enter settings, select *Automatic File Transfer Settings* from the *Processes* menu of the SupplyPoint™ Utilities.

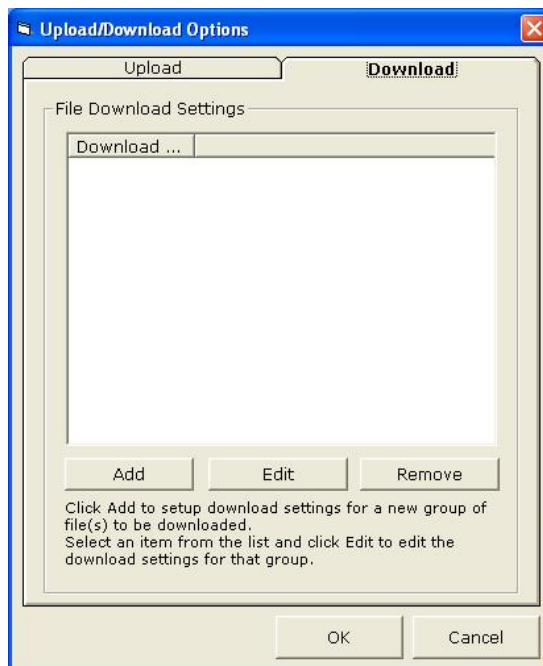
Upload

1. Select the *Upload* tab if it is not already selected (it should be by default).
2. Enter the FTP server name, the user name, password and directory to which the upload is going.
3. Press the **TEST CONNECTION** button.
4. If the test is successful, clear the success message by pressing **OK**.
5. Press **OK** to finish.



Download

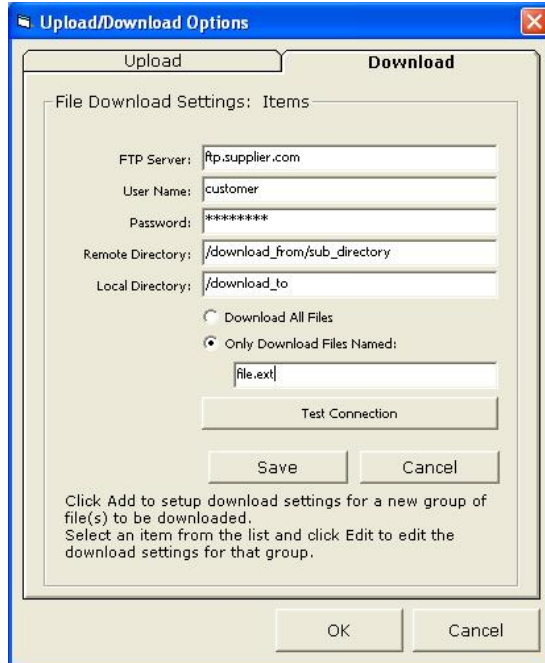
1. Select the *Download* tab. A list of download options will appear.
2. Press **ADD** to enter new download settings. These download settings are the parameters the SupplyPoint™ will use when performing the FTP download function. For instance, below we have entered Items, which would be used to download information about items stored in the SupplyPoint™ (price changes, or other information changes). You could do this for other database tables as well, such as Users, Jobs or Machines.



3. Enter the name of the new download settings and press **OK**.



4. Enter the settings for the FTP download. Note that in these settings, a source (the *Remote Directory*) and the destination (the *Local Directory*) need to be entered. If you are downloading multiple files, enter the exact name of the file in each set of settings and download them to a different directory.
5. Press the **TEST CONNECTION** button.
6. If the test is successful, clear the success message by pressing **OK**.
7. Press **SAVE** to retain the settings. The new download settings should be on the list.
8. Press **OK** to close.

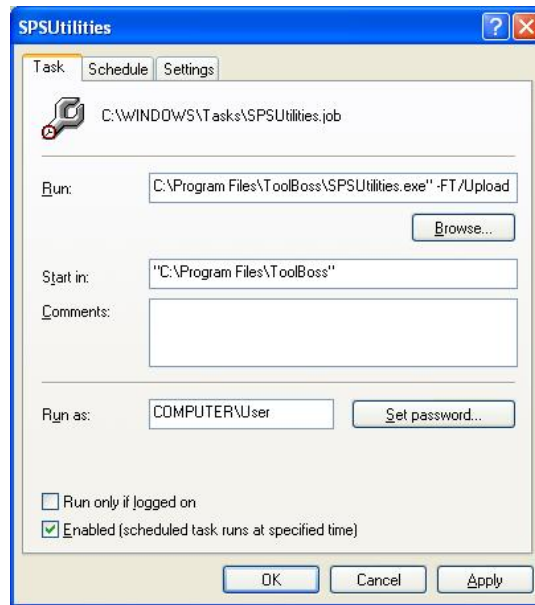


Scheduling an Upload

Take the following steps to schedule a regular database upload via FTP:

1. Go to *Scheduled Tasks* and select *Add a Scheduled Task*.
2. Press **NEXT**.
3. Press **BROWSE**.
4. Locate *SPSUtilities.exe*. It can be found in C:\PROGRAM FILES\SUPPLYPOINT. Select it and press **OPEN**.
5. Give the task a name and press **NEXT**. If prompted, select the days the report should run and press **NEXT**.

6. Select the time for the task to run and the start date of the task. Press **NEXT** to continue.
7. Enter the User Name and Password of a Windows user who can run the task. Press **NEXT**.
8. Check the box that says *Open advanced properties for this task when I click Finish*. Press **FINISH**.
9. In the advanced properties for the task, append the statement **-FT /DBUpload** to the *Run* line.
10. Press **APPLY** and re-enter your password if prompted.



Scheduling a Download

Follow the steps above to schedule a download of information. The only change you need to make is to the *Run* line. Append **-FT /Settings** where settings is the name of your download settings. You can activate multiple groups of settings by adding them to the line: **-FT /Settings1/Settings2/etc.**

FTP Logging

Scheduled uploads and downloads are logged in the file **AutoFT.log**, which is located in the folder containing SupplyPoint™ applications, generally C:\PROGRAM FILES\SUPPLYPOINT. This log can be used to troubleshoot failed file transfers.

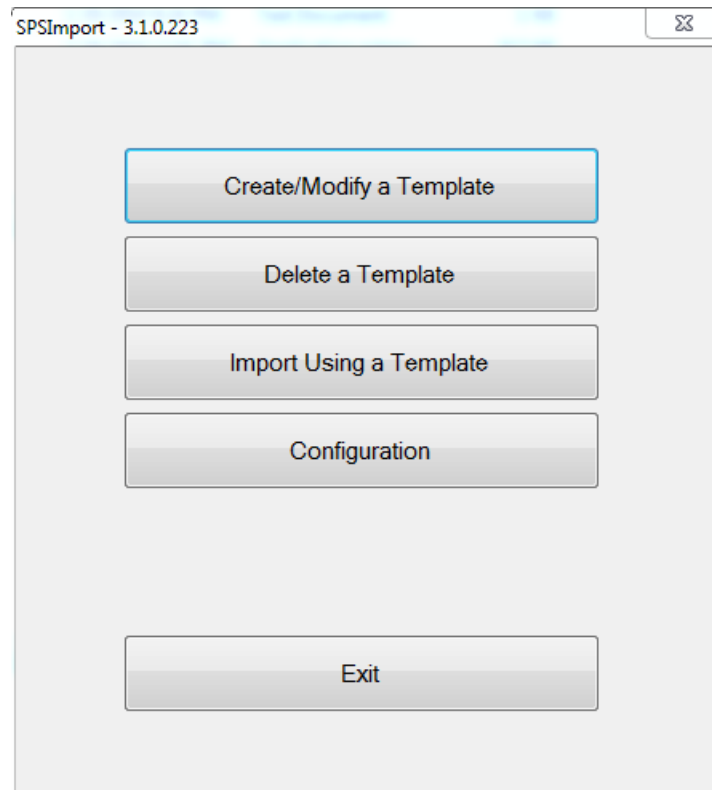
Import Utility

The Import utility allows you to import the information that you have downloaded. Proper use of this function requires some preparation. If you are going to import information into the database it will need to be formatted correctly. For that you will need to create a template that shows what is going to be imported and in what order you are expecting the information. The Import Utility can be used with files from all manner of sources, such as SupplyPoint™ reports. One possible scenario for using the import utility with the FTP functions is described above:

1. The SupplyPoint™ database backup is uploaded to the distributor's FTP site (as described in the procedures above).
2. Distributor personnel restore the database with SupplyPoint™ Utilities and change pricing and/or descriptive information about the items.

3. This information is output to a file conforming to the parameters of the import template (see below).
4. This file is placed on an FTP site for download.
5. The SupplyPoint™ performs a scheduled download of the information (as described in the procedures above).
6. The information is imported into the SupplyPoint™ database using the Import Utility.

Using this process will allow for the automated and simplified updating of large amounts of information in the SupplyPoint™ database, which can be performed at times when it is unlikely to disrupt normal SupplyPoint™ operation.



Creating a Template

1. Press **CREATE/MODIFY A TEMPLATE**. A screen like the one on the right will appear.
2. You will need to determine the following:
 - The name of the template.
 - A source directory- if you are using this in conjunction with automatic file transfer, this will be the folder where the download is stored.
 - The file type- text (.TXT), Excel (.XLS), comma separated values (.CSV) or raw (.RAW).
 - If you are using a delimiter, you will need to decide what the delimiter is- this may be determined by the software used to output the data.
 - Whether your fields will be divided by a delimiter or whether they will have a fixed width- if you are using fixed width the number you enter on the right needs to match the width of the fields from the output source (e.g. SupplyPoint™ reports).
 - What table are you importing this data to? You can only do one per template. For this example the data would be imported into the Items

SPSImport - 3.1.0.223

Please provide a name for the template
ItemDetails

Please select a source directory
D:\ImportFiles

File
.RAW

Header Row
☒ Yes ☐ No

Field Option
☒ Delimiter ☐ Fixed Width

Field Width
0

Delimiter
☐ Comma(,) ☐ Semicolon(;) ☒ Other |

Table
Item

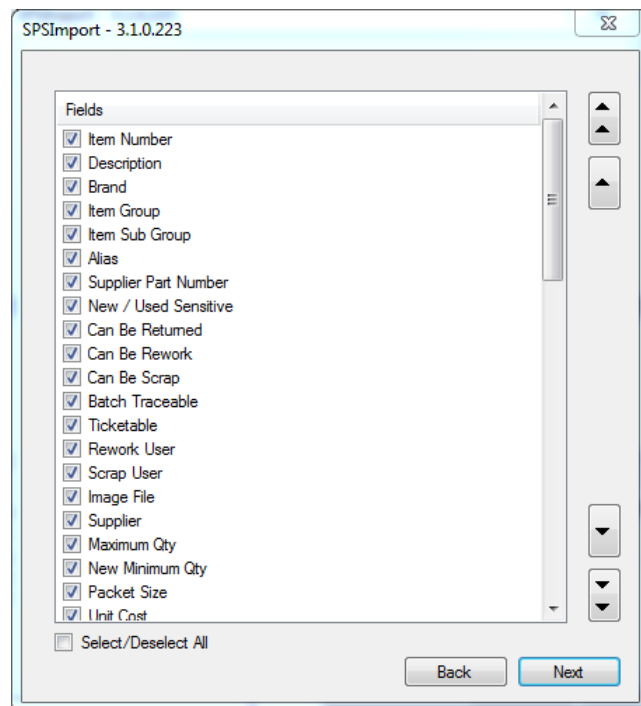
☒ Append New Records and Update Existing Records
☐ Append New Records Only
☐ Update Existing Records Only
☐ Clear table before importing data?
☐ Clear User Group Memberships?

Back Next

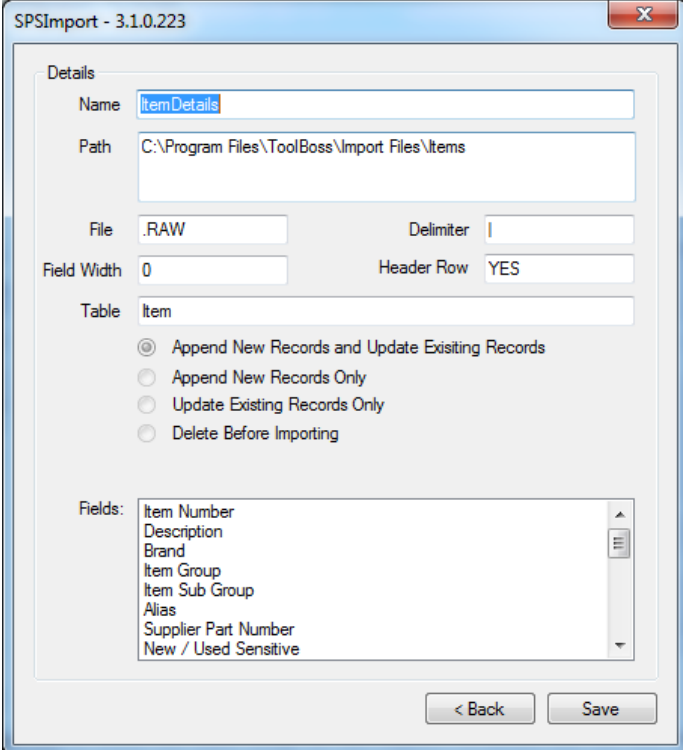
Table
Item
Job
Job Group
Machine
Machine Group
User
UserGroups
Suppliers
Restrictions
EDI Ordering
Rationing
External Stock
Active Inventory
*Supplier Part Number

table. The list on the right shows the other possible options. Simply pick one of the tables.

- Choose if you would like to Append New Records as well as Update Existing Records, Append New Records Only or Update Existing Records Only
 - Do you want to clear the table before importing the data? Selecting yes means that you have to be sure that everything is filled out in your source material.
 - If you are choosing to import to the Users table you can choose to clear existing User Group Membership before importing.
3. Press **NEXT** to continue. You will then be asked to choose what fields you want to import.
 4. Check the fields you want to import. You can move the fields up and down using the arrows on the right. The order of the fields here must match the order of the fields in your source. Press **NEXT** to continue. You will now see a recap of the choices you have made.



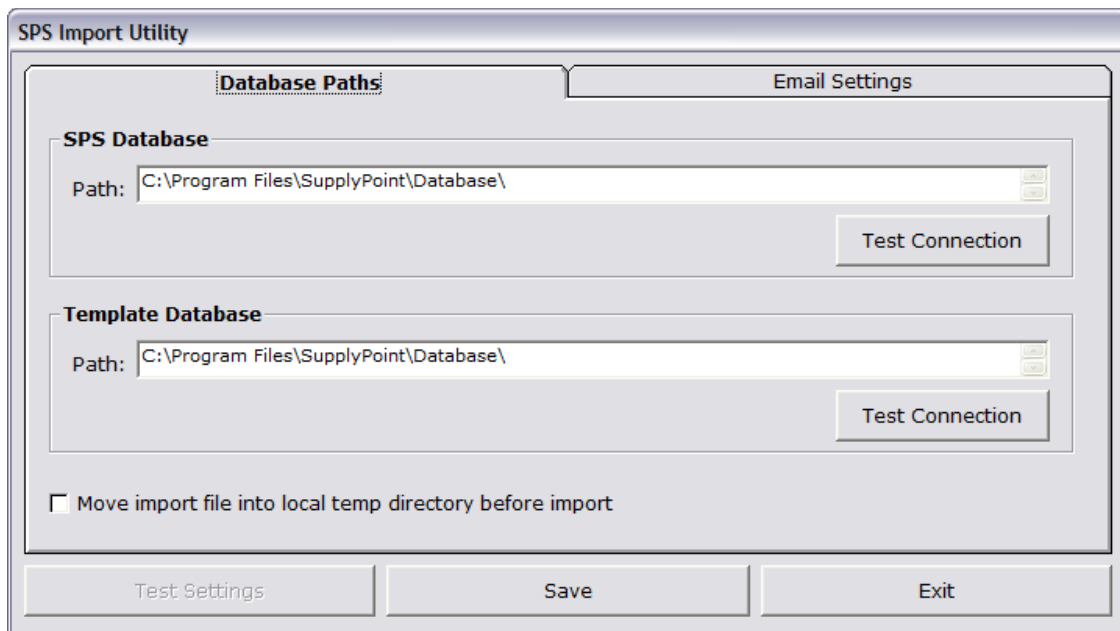
5. Press **SAVE** to retain these settings.



The SPSImport - 3.1.0.223 dialog box is shown. It has a 'Details' tab. The 'Name' field is 'ItemDetails'. The 'Path' field is 'C:\Program Files\ToolBoss\Import Files\Items'. The 'File' field is '.RAW'. The 'Delimiter' field is '|'. The 'Field Width' field is '0'. The 'Header Row' field is 'YES'. The 'Table' field is 'Item'. There are four radio buttons for import options: 'Append New Records and Update Existing Records' (selected), 'Append New Records Only', 'Update Existing Records Only', and 'Delete Before Importing'. The 'Fields' list contains: Item Number, Description, Brand, Item Group, Item Sub Group, Alias, Supplier Part Number, and New / Used Sensitive. At the bottom are '< Back' and 'Save' buttons.

Import Configuration

Press **CONFIGURATION** to check the basic setup for the import. A screen like the one below will appear.



The SPS Import Utility dialog box is shown. It has two tabs: 'Database Paths' (selected) and 'Email Settings'. Under 'Database Paths', there are two sections: 'SPS Database' and 'Template Database'. Both have a 'Path' field set to 'C:\Program Files\SupplyPoint\Database\'. Each has a 'Test Connection' button. At the bottom, there is a checkbox 'Move import file into local temp directory before import' which is unchecked. At the very bottom are 'Test Settings', 'Save', and 'Exit' buttons.

This shows the path to the database and to the templates you have created. You can use the **TEST CONNECTION** button to make sure you are connected to the folders. Press **SAVE** when you are finished.

The import utility is also able to send a log file detailing the process, for off-site personnel who need to know that the process has completed successfully or who will need to troubleshoot failures. Select the *Email Settings* tab and fill in the fields as needed. Press **SAVE** when finished.

The image shows the 'SPS Import Utility' dialog box. It has two tabs: 'Database Paths' and 'Email Settings'. The 'Email Settings' tab is active. Inside this tab, there is an 'E-Mail Settings' section with the following fields: 'To:' (recipient@supplier.com), 'Subject:' (Import Log), 'To Description:' (Receipient), 'SMTP Server:' (mail.customer.com), 'From:' (toolboss@customer.com), 'ESMTP Auth Mode:' (0), 'From Description:' (ToolBoss), 'ESMTP Account:' (empty), 'CC:' (copies@wherever.com), and 'ESMTP Password:' (empty). Below this is a 'Dial-Up' section with a checkbox 'Establish Dial-up Connection' (unchecked) and a dropdown menu 'Use this Dial-up connection' (empty). At the bottom are 'Save' and 'Exit' buttons.

Importing- Manual

1. Press import using a template to begin the process of importing. A screen like the one below will appear, showing the available templates.
2. Select a template and press **RUN**. You will receive a message detailing the results of the process.
3. Press **OK** to clear. You will then receive a message indicating whether email notification was successful.

The image shows the 'SPSImport (2.4.1 (2006-05-04))' dialog box. It has a title bar with the text 'SPSImport (2.4.1 (2006-05-04))'. Inside, it says 'Select a template to Run:'. Below this is a list box containing 'Template 1' with a checkmark next to it. At the bottom are '< Back' and 'Run' buttons.

Importing- Automated

Importing can also be set up to run as a scheduled task. The steps are the same as they are for setting up an FTP upload or download. The major difference is that instead of selecting *SPSUtilities.exe* you must select *SPSImport.exe*, so that the *Run* line reads **"C:\Program Files\SupplyPoint\SPSImport.exe"** **Template Name**, where "template name" is the name of a template you have created.

Consolidating Downloads and Imports

If you are going to be downloading and importing information on a regular basis and you want to automate the process, you might want to consider using a batch file. A batch file is a program that can be used to execute other programs and is simple to create. For instance, assume you want to do the following:

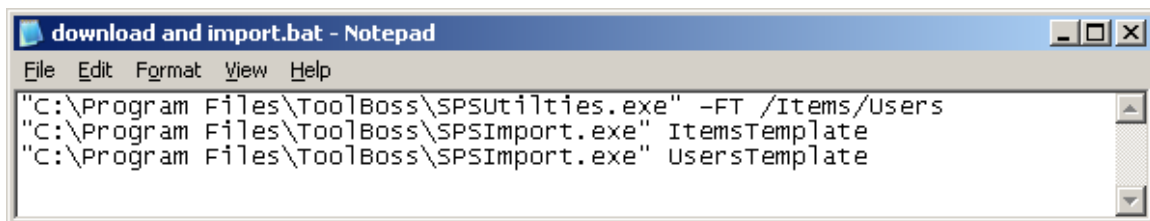
- Download updated item information from an FTP site;
- Download updated user information from an FTP site;
- Import both sets of information

You could set up scheduled tasks for each of these, which would require you to concern yourself with timing three (or conceivably many more) tasks, and which would provide more opportunities for something to go wrong. Or you can combine the operations into a single task and schedule it. Here's what you'll need to do to make a batch file work:

1. Create the FTP download settings for each file you're going to import.
2. Create the import templates.
3. Create the batch file (see below).
4. Schedule the batch file.

Creating the Batch File

Creating the batch file is very simple. Begin by opening up a simple text editor like notepad (press *Start*, select *Programs*, then *Accessories* and *Notepad*). Enter the names of the programs you want to run (in quotes) into the batch file and save it as **Name of file.bat**. For instance, in the example below we will download information using download groups called **Items** and **Users** and will import them into the database using **ItemsTemplate** and **UsersTemplate**.



Once created and saved, you would have to schedule this file using Task Scheduler, following the same procedure as you would for any other scheduled task.

Import Logging

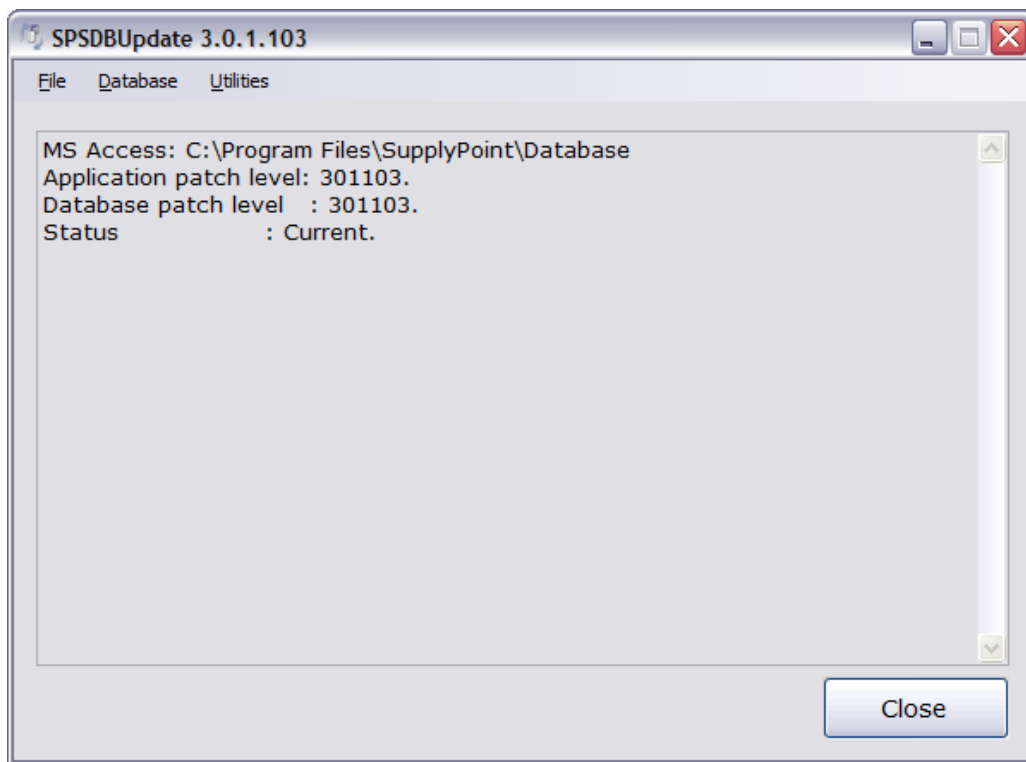
Attempts at importing are tracked by **Import.log**, which is located in the database folder, generally C:\PROGRAM FILES\SUPPLYPOINT\DATABASE. This log can be used to troubleshoot problems with the import process.

SQL Database Functions

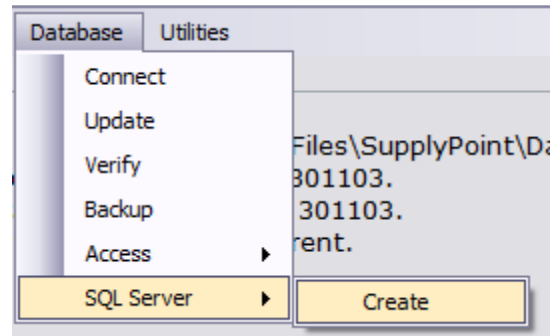
Creating the SQL Database

The new database will need to be created by taking the following steps:

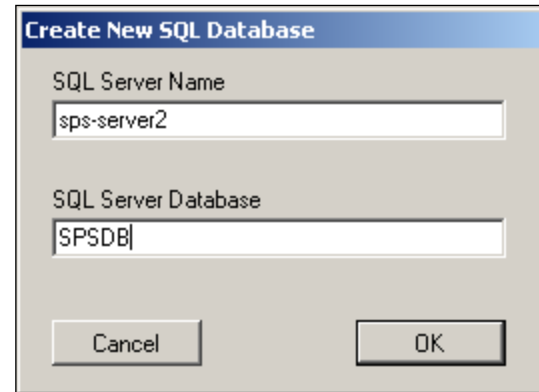
1. Run the **SPSDBUpdate.exe** program that is located in the C:\PROGRAM FILES\SUPPLYPOINT directory. A window like the one below will open, showing the current status of the SupplyPoint™ database.



2. Select *SQL Server* from the *Database* menu.
3. Select *Create* to begin the process of creating the SQL database.



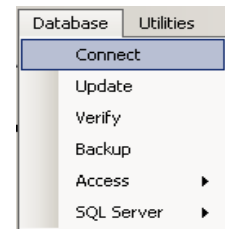
4. Enter the SQL server name and the name of the database. You will need to be logged in as a user who has the appropriate permissions on the SQL server to accomplish this.
5. Press to create the database and answer on the next window to confirm that you wish to continue. Do not close **SPSDBUpdate.exe** yet. Proceed to *Connecting to an SQL Database* to continue.



Connecting to an SQL Database

Once the database has been created, you will need to connect the vending machine to it. Take the following steps:

1. Run **SPSDBUpdate.exe** if you are not already in the program.
2. Select *Connect* from the *Database* menu.
3. In the next window, select the *SQL Server* tab.

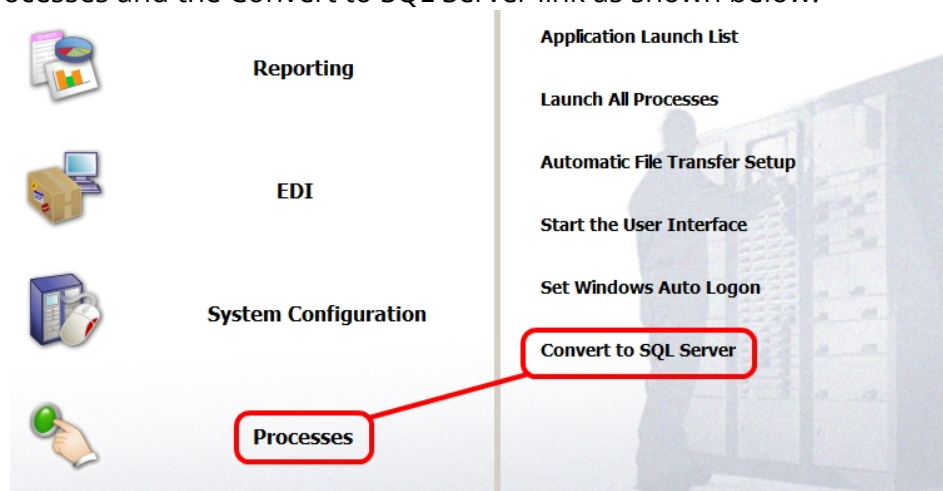


4. Select the SQL server from the list that is displayed. If the right one does not appear, you can seek it by pressing **SEARCH**. Alternatively, you can enter it manually by pressing **ADD**.
5. Enter the name of the database.
6. If you are not using a trusted connection, enter the Username and Password required by the server.
7. Enter a timeout in seconds. The recommended period is 300 seconds.
8. Press **LOGIN** to continue.

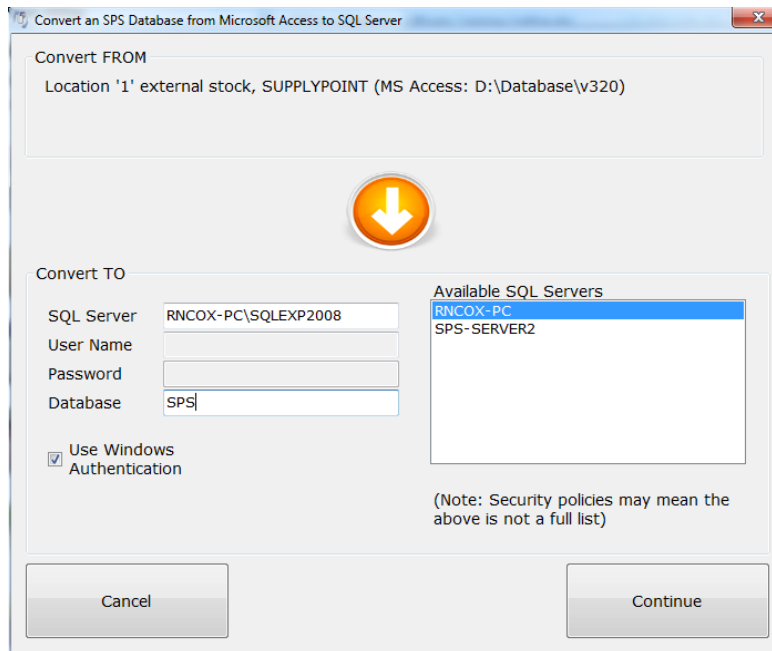
Converting to SQL Server

Version 3.2 can run against and MS Access database but is really designed to run against a SQL Server database. SQL Server is a database service that runs constantly on the PC where it is installed making it much more robust, faster and less prone to corruptions and problems.

As a result it will be necessary to convert your database from MS Access to SQL Server. This is a fairly simple process. First you will need to upgrade your MS Access database to version 3.2. Do this the normal way. Once this is complete, make sure you MS Access database is selected in the location list of Utilities. Then click Processes and the Convert to SQL Server link as shown below.

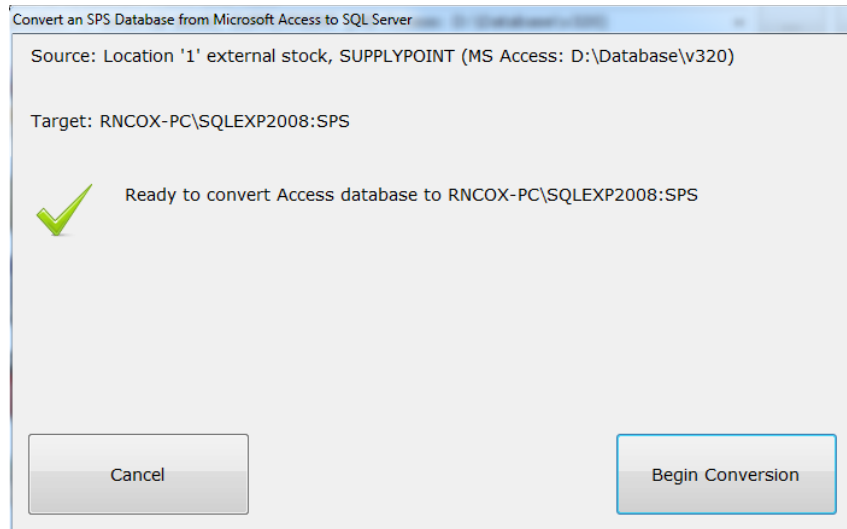


The wizard below will be shown to help make the conversion. Fill in the necessary fields as described below.

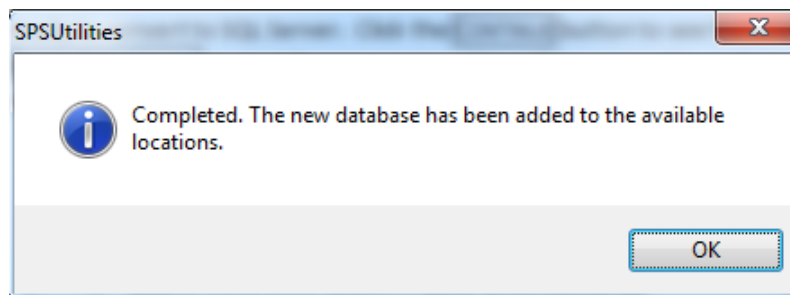


- **SQL Server:** This is the name of the server. The first part before the back slash is the name of the PC and the second part is usually "SQLEXP2008".
- **User Name:** This is left blank if using Windows Authentication. If not use "sa".
- **Password:** This is blank is using Windows Authentication. If not use "sps12345".
- **Database:** Typically use "SPS", but if you have many customer databases on you systems, type in something that relates to the customer such as "ABCIND" if the customer is "ABC Industries".
- **Windows Authentication:** This means that the system will use windows security to authenticate to the database. This is usually the case especially on the vending machine pc.

Now you are ready to convert to SQL Server. Click the **CONTINUE** button to see the confirmation screen. Click **BEGIN CONVERSION** to start the conversion. You will be warned to make sure no one else is using the system. Make sure this is the case and click **OK**.

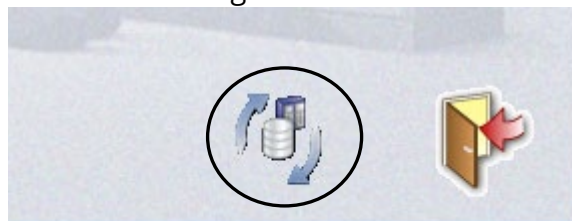


Once the conversion is complete a message will appear confirming that. Now there will be a brand new entry in the Location list in Utilities.

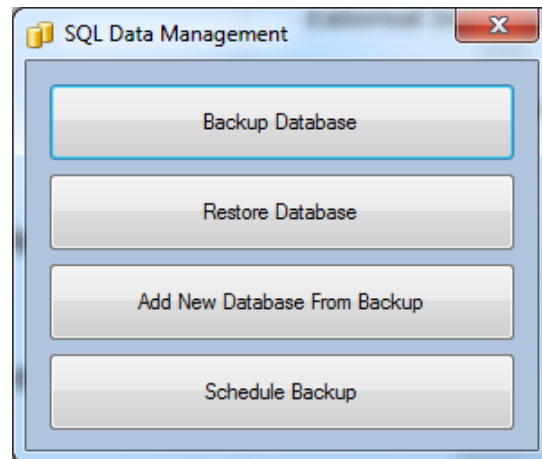


Backing Up the SQL Server Database

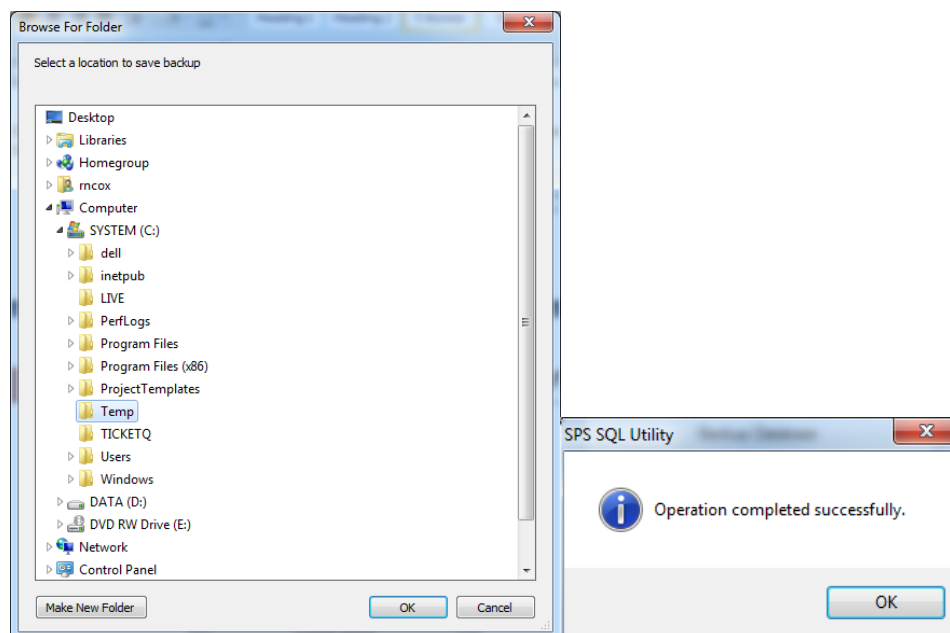
In previous versions that used MS Access as the database, to make a backup you could simply make a copy of the file. With SQL Server that is not possible. However it is actually much easier and can be done right from Utilities. Start Utilities and you will see a new button in the bottom right.



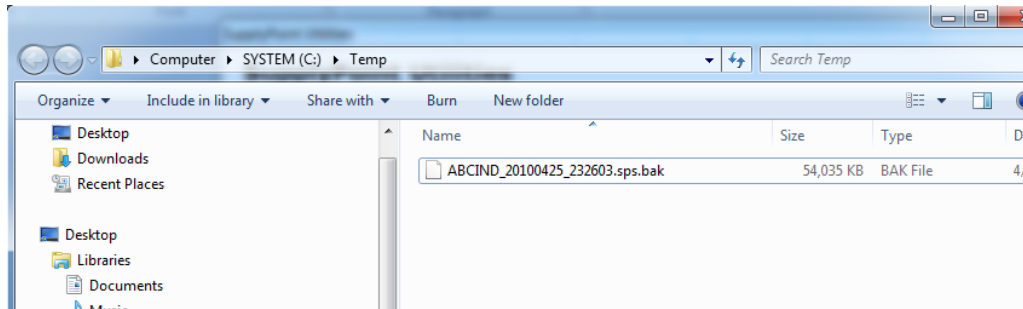
Click this button and you will be presented with a SQL Data Management menu. The first choice will be *Backup Database*. Click this button to make the backup file.



You will now be presented with an option to select a folder in which to store the backup file. Select the desired folder and click OK. When the backup operation is complete you will receive a confirmation message indicating so.



To view or copy the backup file, go to the folder specified in the steps above. It will be a file with an extension of .bak. This is a SQL Server backup file. The file name will also have the database name as part of it. In this example the database was named "ABCIND". It will also have the date and time stamp as part of the file name. The screen shot below shows the backup file view with Windows Explorer. This backup file can be restored over an existing database or as a new database. These methods will be discussed next.



Restoring from a SQL Server Backup File

Now that you know how to make a backup file it may be necessary to restore the database if the working database has become corrupted for some reason or if you simply want to start over. As with backing up a file this is also easier than with MS Access. Follow the steps below. Do NOT use these steps if you are restoring the database to a new PC after a PC replacement.

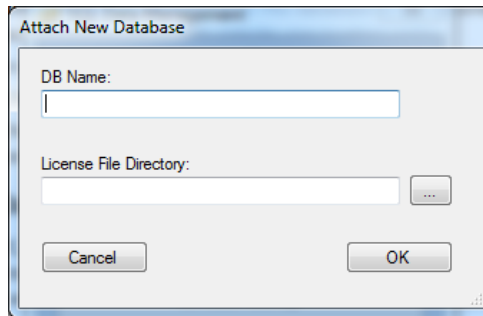
- Make sure you have the most recent backup file (preferably on your portable flash memory stick).
- Start Utilities and make sure it is pointing to the database to be restored over. Remember at the vending machine there will usually only be one location entry.
- Click the button at the bottom right to bring up the SQL Data Management menu.
- Select *Restore Database* and then browse to the location with the backup file.
- Click OK once the backup file has been selected and if successful, the system will prompt indicating success.

Adding a New Database from a SQL Server Backup File

If you are replacing a PC, it will be necessary to add a new database to Utilities using a backup file. You can also use this process if someone sends you a backup file for analysis or troubleshooting purposes. Again this is easy and basically involves selecting a single file. Follow these steps.

- Make sure you have the most recent backup file (preferably on your portable flash memory stick).
- Start Utilities and make sure it is pointing to the database to be restored over. Remember at the vending machine there will usually only be one location entry.
- Click the button at the bottom right to bring up the SQL Data Management menu.
- Select *Add New Database from Backup* and then browse to the location with the backup file.

- You will be presented with a form to enter a new database name and License File Directory.
- Enter in the name you wish the new database to be named. This is usually "SPS" on a machine, but as mentioned earlier you may want to include a part of the customer's name in it if you keep multiple databases on your system.
- Enter the License File Directory. The system will always try to fill in the current value if available.



Automated Database Backup

Using the **SPSSQLUtility.exe** program it is possible to backup the SQL database using a scheduler such as Task Scheduler in Windows.

To automate the backup routine; a command line is required, similar to that shown below.

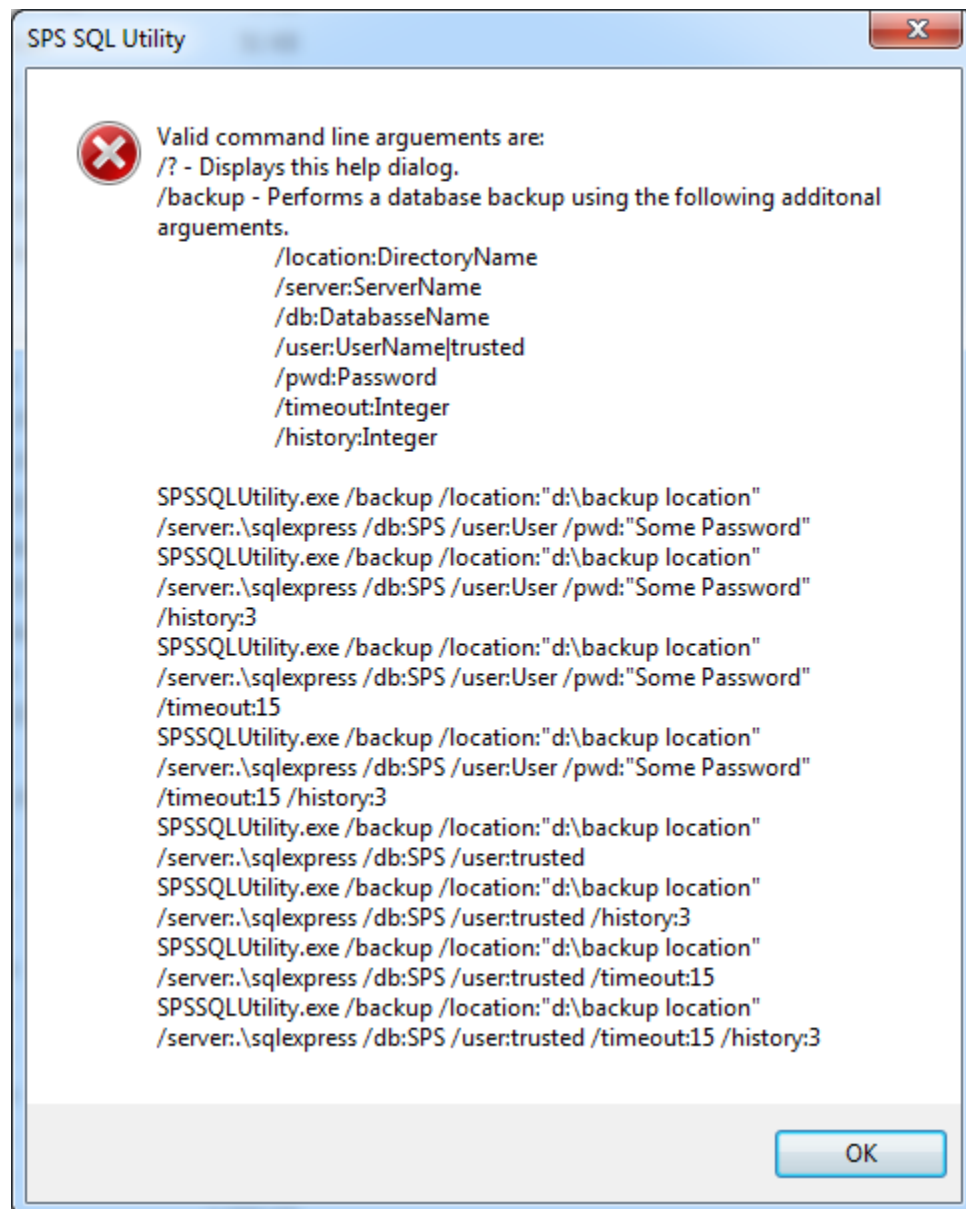
```
C:\Program Files\SupplyPoint\SPSSQLUtility.exe /backup /location:"C:\SQLBackups"
/server:VENDINGMACHINE\Exp_2008 /DB:Vend1 /user:trusted
```

In this example the database backup would be placed in the folder *C:\SQLBackups*, although we recommend an external drive as the location. The database, *Vend1*, would be backed up from the server called *VENDINGMACHINE* and its instance of SQL Server called *EXP_2008*

If the SQL Server is using SQL Authentication; a username and password should be specified after the database name, removing the word *trusted* from the above example.

```
/user:sa /pwd:sps
```

For the full list of command line options available; run the **SQLUtility.exe** with a command line of **/?**. Running with this command line you will be shown the command line arguments pictured below.



The '/history' option shown above allows you to limit the number of backups that are retained. Using this feature allows you to manage backups to a local pen drive should you be using SQL Server on a Vending Machine/Crib control PC.

Additional Information

For further information on guidelines and recommendations for SQL Server please refer to the [Appendix](#).

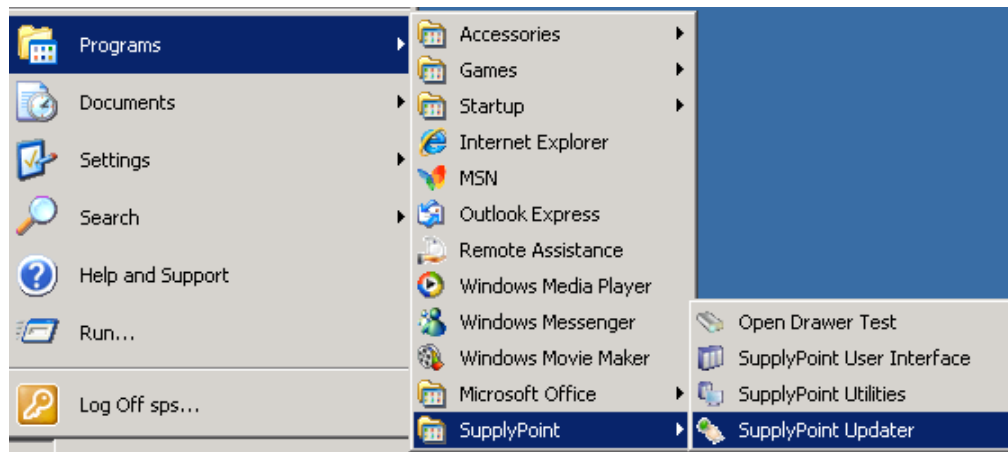
SupplyPoint™ Updater Process

The SPS Pre-Installer allows you to use the Web-based licensing feature to upgrade your SupplyPoint™ machine. It will automatically check to see what features you are licensed for, what your hardware specifications are, and what version of the software you are using in order to ensure that the right upgrades are run. This system can be run in on-line and off-line modes, so that even SupplyPoint™ units without direct Internet access can take advantage of it.

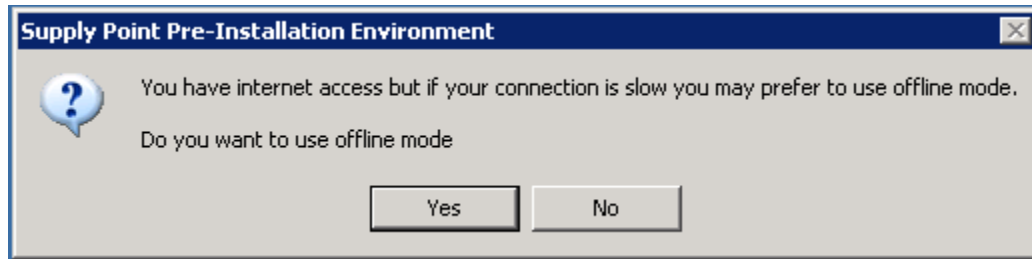
On-line Updates

On-line updates can be performed on SupplyPoint™ units that are connected to the Internet. Take the following steps to perform an on-line update:

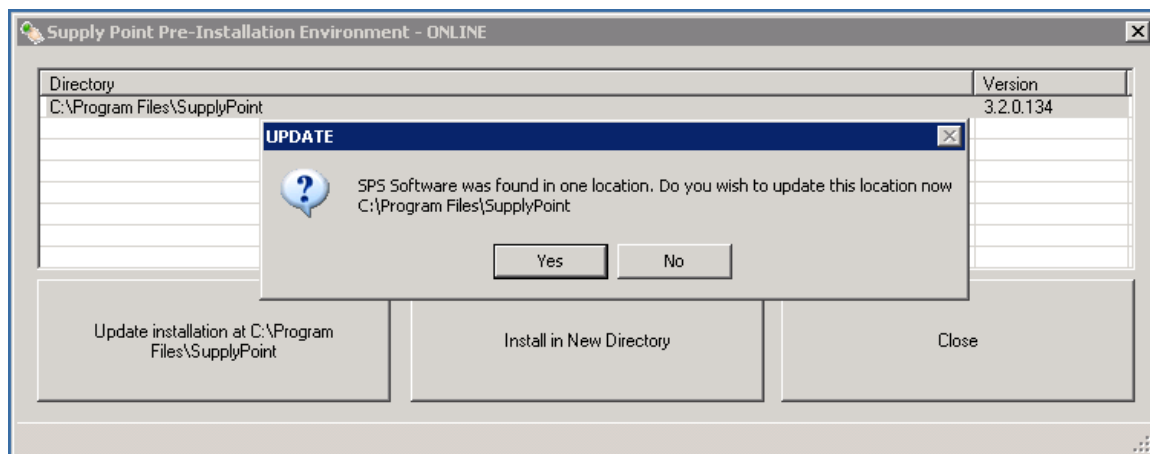
1. Run the SupplyPoint™ Updater. There will be a link in the start menu under the SupplyPoint™ program group.



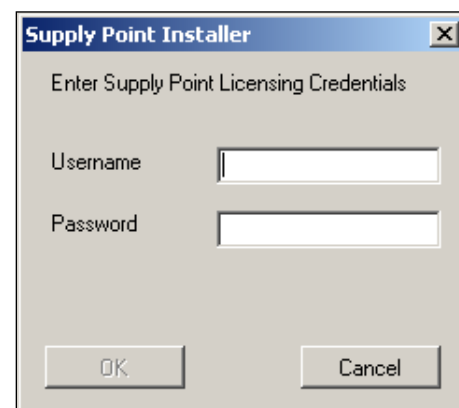
2. You will be first asked if you want to use off-line mode in the case of a slow internet connection. Unless you know of a problem with the connection go ahead and click ☐ No here.



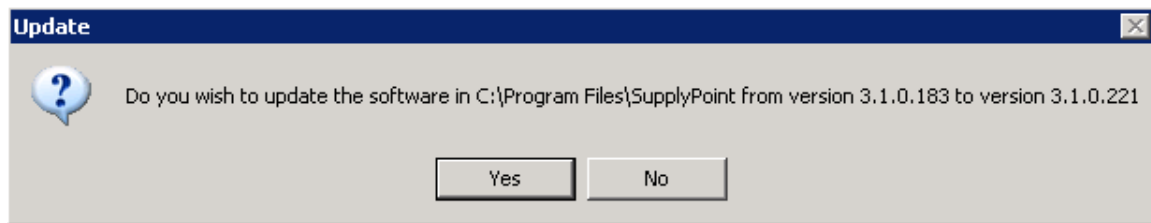
3. A window will open showing the available SupplyPoint™ installations. In most cases, there will be only one entry available. If there is only one entry then it will automatically ask you if you want to go ahead and update the location. Click **YES** now.



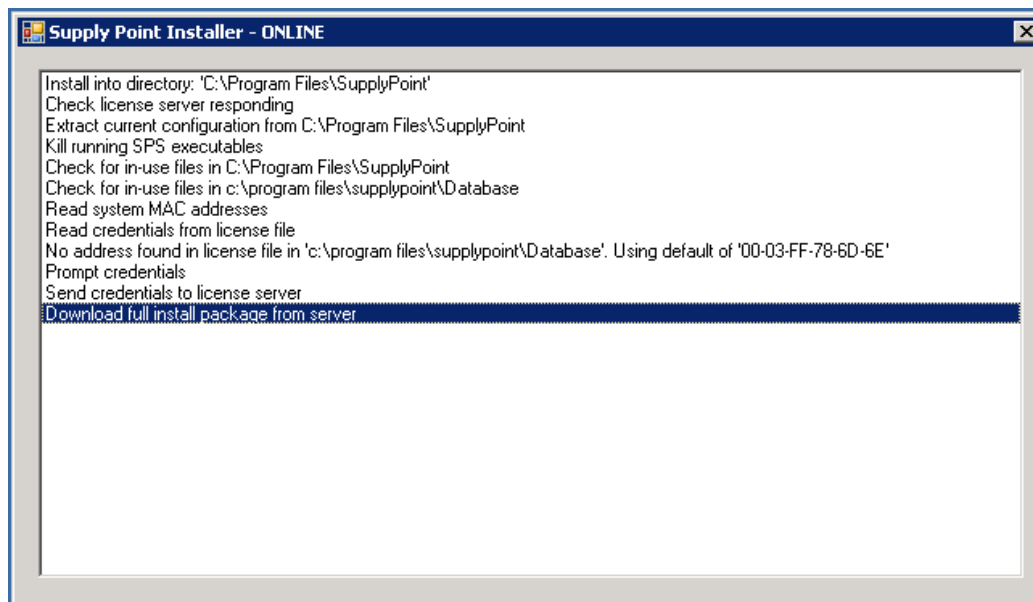
4. You will then be asked for logon credentials. Enter the user name and password that you have been supplied either by your distributor or by Supply Point Systems.
5. Once you have entered the information, press **OK** to continue.



6. You will next be asked if you wish to update from the current version to a newer version. Click ☐ Yes to continue.



7. The automatic downloader will begin. A window will appear on the screen detailing the progress.

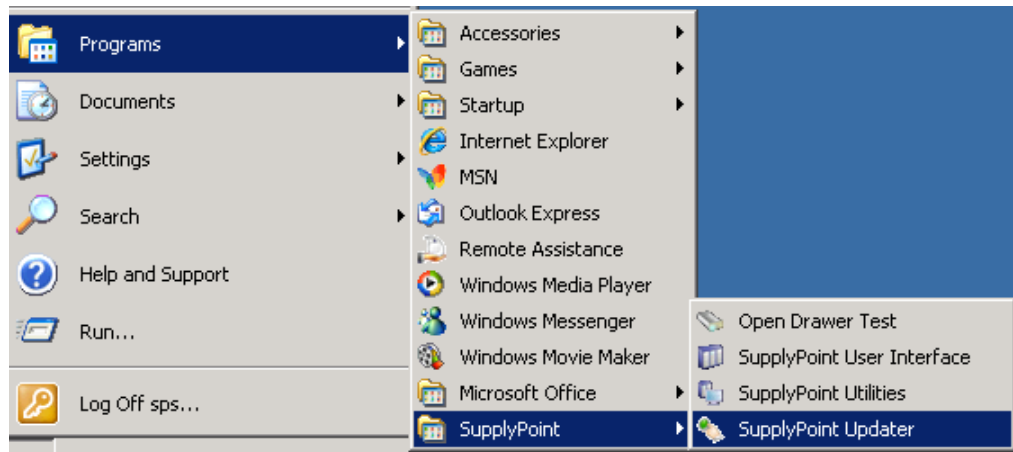


8. Once the process is complete, close the window and resume normal operations.

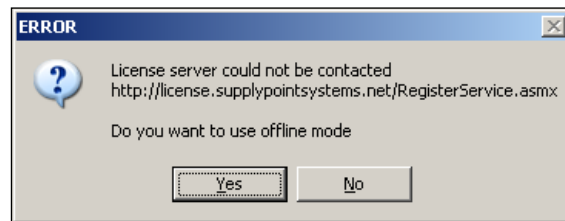
Off-Line Updates

Off-line updates are complicated by the fact that the SupplyPoint™ is not connected to the Internet. Take the following steps to complete an offline SupplyPoint™ update.

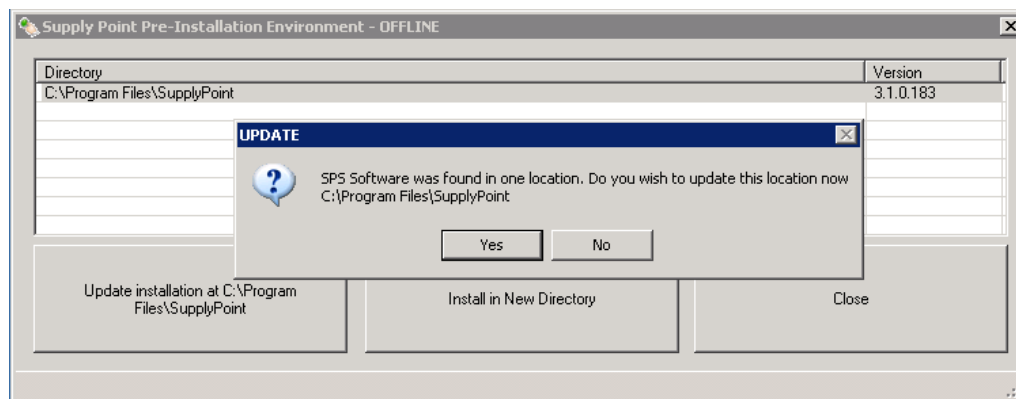
1. Run the SupplyPoint™ Updater. There will be a link in the start menu under the SupplyPoint™ program group.



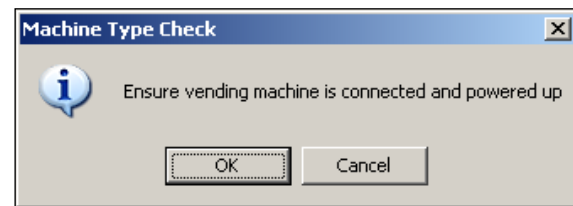
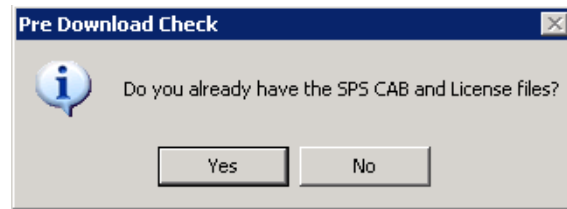
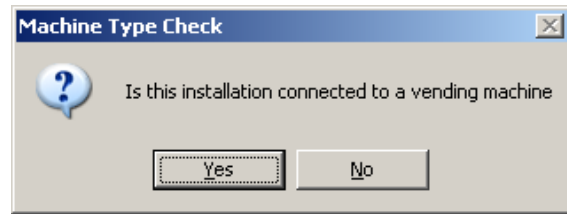
2. The system will attempt to contact the license server to begin the download. When this attempt fails, you will see a display like this one, asking if you want to use offline mode. Click **YES**.



3. Next, as with the on-line mode, a window will open showing the available SupplyPoint™ installations. In most cases, there will be only one entry available. If there is only one entry then it will automatically ask you if you want to go ahead and update the location. Click **YES** now.



4. You will then be asked whether the computer you have running SupplyPoint™ Updater on is connected to a vending machine. It will use this to collect information about the hardware in order to make sure you receive the appropriate upgrade package. Click ☐ YES or ☐ NO.
5. If you are presented with the next message, click ☐ NO. This is for and advanced off-line mode to be discussed later.
6. You will then be asked to ensure that all of the connections on the vending machine are in place and that it is fully powered up. Press ☐ OK to continue.



7. A screen like the one below will appear. The user and password fields will be blank if you upgrading from a version prior to 3.0. You will have to call Supply Point Systems or your distributor to receive your user and password information. Make a note of that information, as well as the security key, and go to a computer with Internet access.

Credentials

User: **AG8MD5**

Password: **ADWWC4**

Security Key: **1K3E154AO-2HYUA4I3UO**

Please enter the credentials above on the Supply Point web site

Then download the install package provided, and select it using the button below

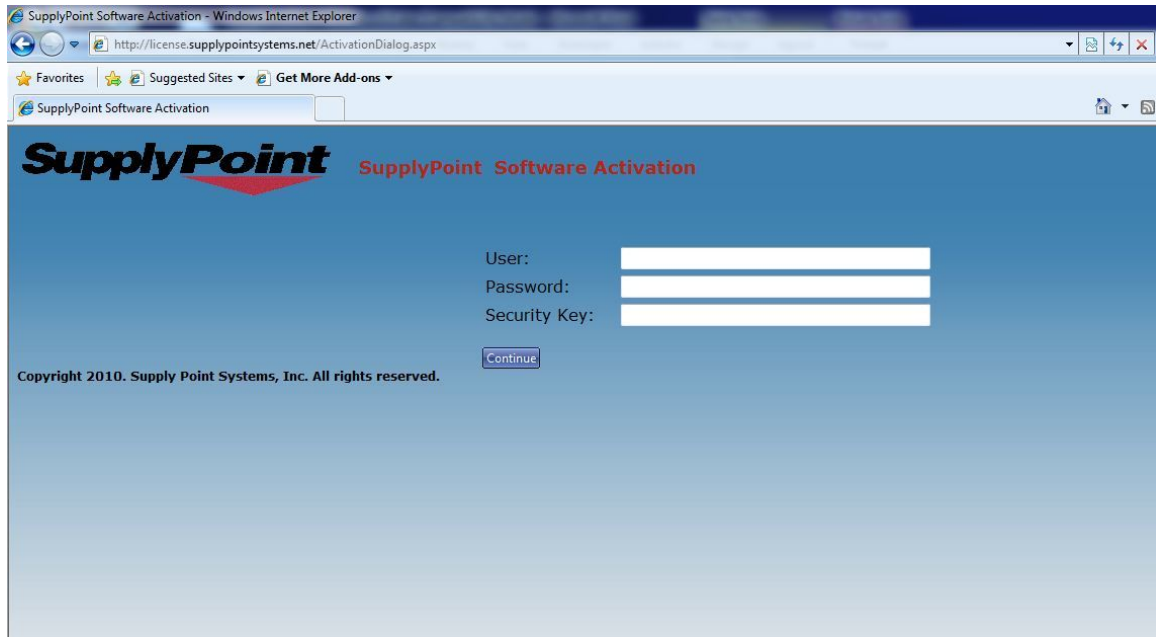
 Selected Folder

Install Package **Cancel**

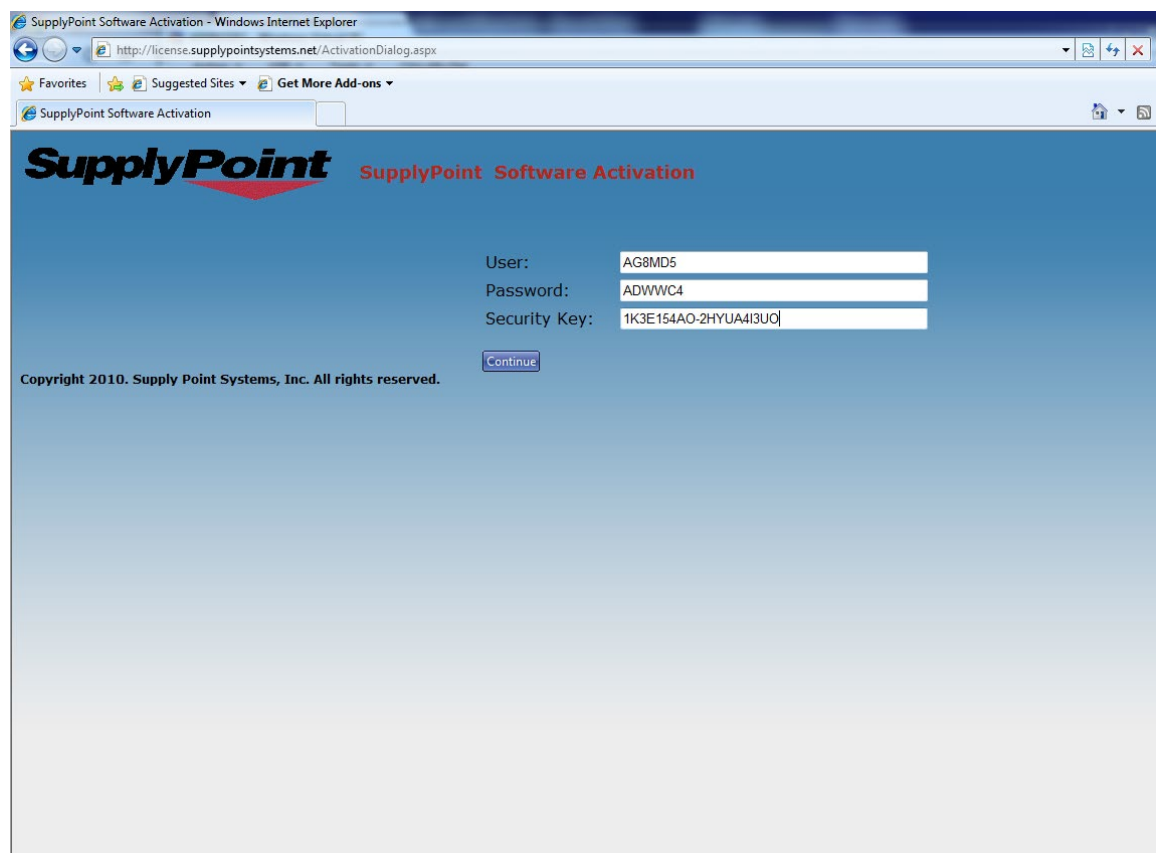
- Open the Internet browser on the computer and go to **<http://uklicense.supplypointsystems.net>**.



- Press the button that says **GET INSTALL PACKAGE**. A page like the one below will open.



10. Enter the User and Password information along with the Security Key that was generated by the SPS Pre-Installer. Press **CONTINUE**.

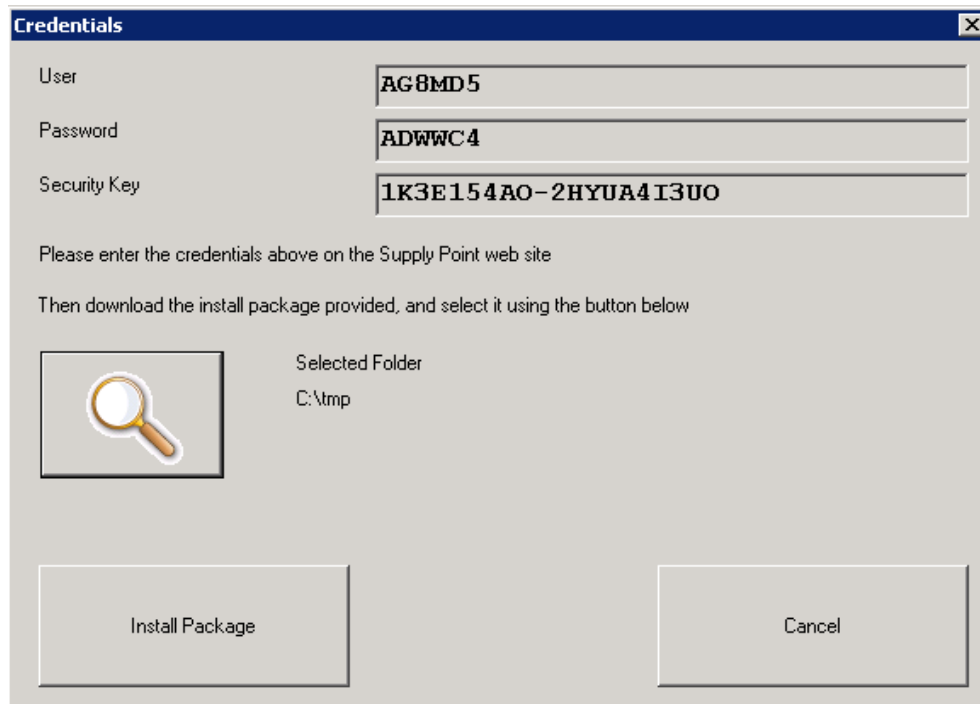
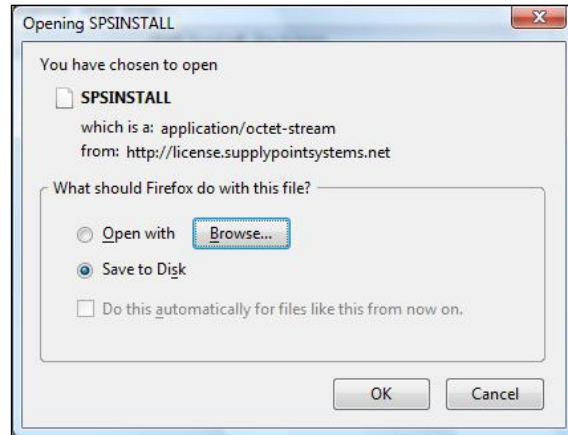


11. If the login is successful, you will see a page with one but that says **GET INSTALL PACKAGE**. Click it to continue.

12. Specify a location to save the download package. You will want to use some sort of removable media such as a flash drive so you can take it to the vending machine.

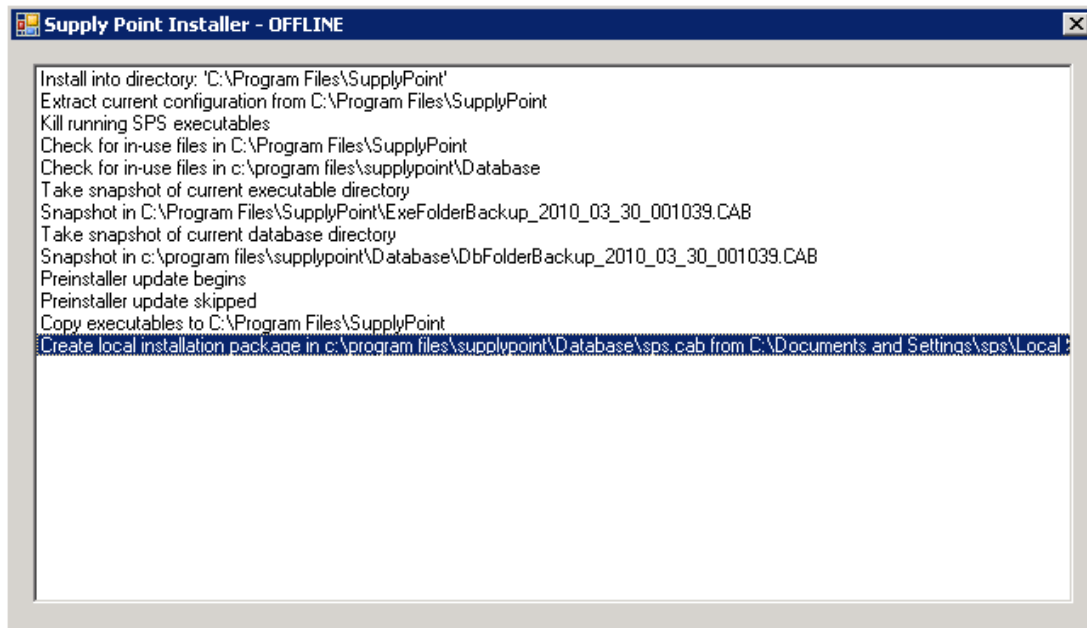
13. Press **OK**.

14. Once the download is complete, take the media with the download package to the vending machine. A window like the one below should still be showing on the vending machine.



15. Press the button with a magnifying glass and browse to the location containing the update package. Press **OK** once you have reached that folder and you will return to this window. The path will show to the right of the magnifying glass.

16. Press **INSTALL PACKAGE**. The installer will begin, and you will be able to watch its progress.



17. A window will appear, telling you that the upgrade is complete. Press **OK** to end the process.

FAQs and Troubleshooting

Drawer Issues

Symptom	Cause	Action
Drawer opens farther than it should.	There is a bad drawer board.	Use procedures to isolate the bad drawer board, bearing in mind that the problem is not always the drawer showing trouble. Replace the faulty board.
Drawer opens farther than it should; there are no diagnosed bad drawer boards.	Inventory levels in the drawer are incorrect. If a user performs a withdraw but does not take the item, the next user will find that the drawer opens to reveal more compartments than he needs.	Perform an inventory adjustment on the item.
Drawer does not open far enough; may be coupled with "Too Fast" messages even when the drawer is being opened slowly.	There is a bad drawer board.	Use procedures to isolate the bad drawer board, bearing in mind that the problem is not always the drawer showing trouble. Replace the faulty board.
There is a message on the login screen that says "A Drawer has been left open- please close it" even though no drawers are open.	There is a bad drawer board.	Use procedures to isolate the bad drawer board, bearing in mind that the problem is not always the drawer showing trouble. Replace the faulty board.
The selected drawer opens and closes freely until the system times out. The transaction fails.	There is a bad drawer board.	Use procedures to isolate the bad drawer board, bearing in mind that the problem is not always the drawer showing trouble. Replace the faulty board.
When I select a drawer the light flashes and the solenoid clicks repeatedly; I am unable to access the drawer.	The selected drawer has a bad drawer board.	Replace the faulty board.
There is a drawer on the vending machine that opens and closes freely without being selected.	The solenoid spring has popped off.	Confirm that the solenoid spring has popped off. Replace the solenoid.
When attempting to open a single drawer, all of the other drawers on the tray open as well. The light on the selected drawer goes off as this happens.	The drawer trays are unlocked.	Lock drawer trays into place using the locking bar.
When selecting a drawer the solenoid triggers, the light comes on, but I am unable to open the drawer.	The drawer has been physically jammed.	If the drawer has simply been closed too far, it may be possible to pry the handle loose from the tray. More severe damage will require the tray to be replaced.

Isolating a Problem Drawer (28 level frames only)

A potential drawer problem will initially become apparent when a message like the one shown below appears on the user interface login screen. The mechanism that detects this is the flashing lights. If the flashing lights are not turned on then it will not be able to detect a problem here.



The image shows a login screen for a system called "SupplyPoint". At the top left is a small icon of a card and a hand. The main title "SupplyPoint" is in a large, bold, black font with a red swoosh underneath. Below it, in red text, is "Welcome To SupplyPoint" and "ABC Company" in black. A message says "Please swipe I.D. card or type your access code to login." followed by a small white input box. Below that is a yellow banner with the text "Possible Drawer Open (PIC: 1)". Under the banner is a numeric keypad (0-9, +, ←, X), a QWERTY keyboard, a "GO" button, a "Space" button, and a "Cancel" button.

SupplyPoint

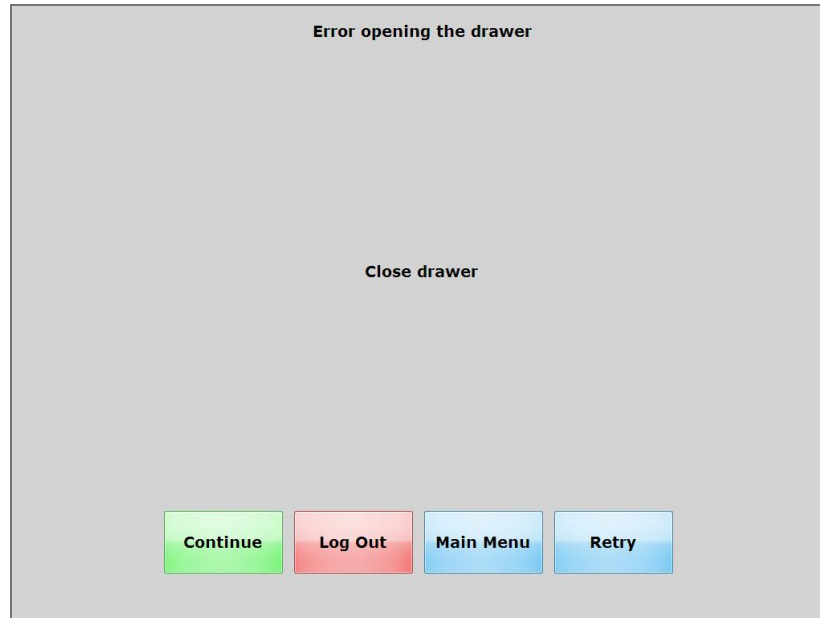
Welcome To SupplyPoint
ABC Company

Please swipe I.D. card or type your access code to login.

Possible Drawer Open (PIC: 1)

1	2	3	4	5	6	7	8	9	0	+	←	X	
Q	W	E	R	T	Y	U	I	O	P	#	GO		
A	S	D	F	G	H	J	K	L	-	;			
Z	X	C	V	B	N	M	,	.	/	:			
▼												Space	Cancel

The drawer problem may also be first noticed if there is an error trying to open a drawer as in the example below. In this case the system thinks there may be an open drawer due the presence of a faulty photocell. If you know that all drawers are closed then it is time to troubleshoot the system using the OpenDrawer program.



In the case of a 28 level frame it is simply a manner of running the layout function on the frame with the drawer in question. In the first example where a message is displayed on the user interface, the message will indicate which frame by indicating the PIC Number (this is for backwards compatibility with the 20 level frames). PIC 1 will correspond to frame 1 in this example and only odd number PICs are used. So PIC 3 is frame 2, PIC 5 is frame 3 and so on. Once the suspect frame is determined, click the layout button and you should see the following.

01:20 LVL

Rescan ☐ Repeat 12 ↓ Exit

9 (Z)	10 (Z)	11 (Z)	12 (Z)
13 (Z)	14 (Z)	15 (Z)	16 (Z)
17 (Z)	18 (Z)	19 (Z)	20 (Z)
21 (Z)	22 (Z)	23 (Z)	24 (Z)
25 (Z)	26 (Z)	27 (Z)	28 (Z)
29 (Z)	30 (Z)	31 (Z)	32 (Z)
33 (Z)	34 (Z)	35 (Z)	36 (Z)
37 (Z)	38 (Z)	39 (Z)	40 (Z)
41 (Z)	42 (Z)	43 (Z)	44 (Z)
45 (Z)	46 (Z)	47 (Z)	48 (Z)
49 (Z)	50 (Z)	51 (Z)	52 (Z)
53 (Z)	54 (Z)	55 (Z)	56 (Z)
57 (Z)	58 (Z)	59 (Z)	60 (Z)
61 (Z)	62 (Z)	63 (Z)	64 (Z)
65 (Z)	66 (Z)	67 (Z)	68 (Z)
69 (Z)	70 (Z)	71 (Z)	72 (Z)
73 (Z)	74 (Z)	75 (Z)	76 (Z)
77 (C)		78 (C)	
81 (A)	82 (A)	83 (A)	
85 (A)	86 (A)	87 (A)	
89 (A)	90 (A)	91 (A)	
93 (A)	94 (A)	95 (A)	
97 (C)		98 (C)	
101 (C)		102 (C)	
105 (C)		106 (C)	
109 (C)		110 (C)	

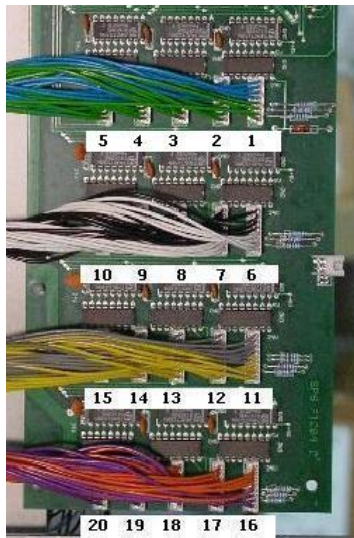
Done

The drawer colored red should be the offending drawer. At this point it is just a matter of replacing the drawer board (see section on Replacing Drawer Boards

below). If every drawer in the row is colored red then it will be necessary to isolate the specific drawer board on the tray that is causing the problem (see section on Isolating the Problem Drawer Board below).

Isolating a Problem Drawer (20 level frames only)

A faulty drawer in a 20 level frame will generate the same types of error message as shown above with a 28 level frame. The most important thing to remember, however, is that **the drawer that is showing the problem is not always the source of the problem**. This is due to the fact that within groups of five drawer trays (see the display below) there is shared circuitry that allows- in some cases- a problem originating in one location to manifest itself in another.



This makes troubleshooting a problem drawer an exercise in determining which drawer board has failed.

It is not generally useful, then, to think in terms of an entire frame when troubleshooting a problem drawer. It is more useful- especially when you are told that a specific drawer has failed- to think of the frame as four blocks of five drawer tray slots. If you have no specific information- or if you are troubleshooting a ratchet-style machine- think of the frame as two half frames (also known as PICs, especially as they relate to older machines). Problems tend to manifest upward from the trouble spot (and, of course, at the trouble spot itself). The following displays illustrate the breakdown of half-frames and blocks of five. Please note that the space taken by the computer on a single-frame machine with a CRT has to be counted, so the first drawer tray in a single-frame unit is in row five (5-1, 5-2 etc). In the case of a single bay with a touch screen the first drawer is at row 1 (1-1, 1-2 etc).

Half frame (PIC)1	Z	Z	Z	Z	Trays 1-5		
	A	A	A				
	B	B	B				
	AA	A					
	BB	B					
Half frame (PIC) 2	G				Trays 6-10		
	F					Trays 11-15	
	H						Trays 16-20
	J	J					
Standard Frame							
Half frame (PIC)1	Computer takes slots 1-4				Trays 1-5		
	Z	Z	Z	Z		Trays 6-10	
	Z	Z	Z	Z			
	Z	Z	Z	Z			
	Z	Z	Z	Z			
Half frame (PIC) 2	A	A	A		Trays 11-15		
	A	A	A				
	A	A	A				
	C	C	C			Trays 16-20	
	C	C	C				
B	B	B					
D	D						
F				Trays 1-5			
Single-Frame Machine							

Drawer problems generally manifest in the following ways:

- A drawer opens beyond the compartment to which it should open
- A User is unable to open a drawer, due to repeated warnings that he is opening the drawer too fast, even though he may be opening it in a reasonable manner;
- When items are taken from the last compartment, the drawer does not lock properly and a failed transaction occurs;
- There is a warning message on the login screen of the User Interface warning the user that a drawer has been left open, even though all of the drawers are closed;
- The drawer containing the selected item lights up and clicks repeatedly, not allowing the user to open it.

The remedy for all but the last is the same: you need to isolate the drawer board that is causing the problem. The process, though it is slightly different for different symptoms, boils down to one simple rule: **remove trays (or boards) until the machine works; then replace them until it stops working.**

Problems Opening Drawers

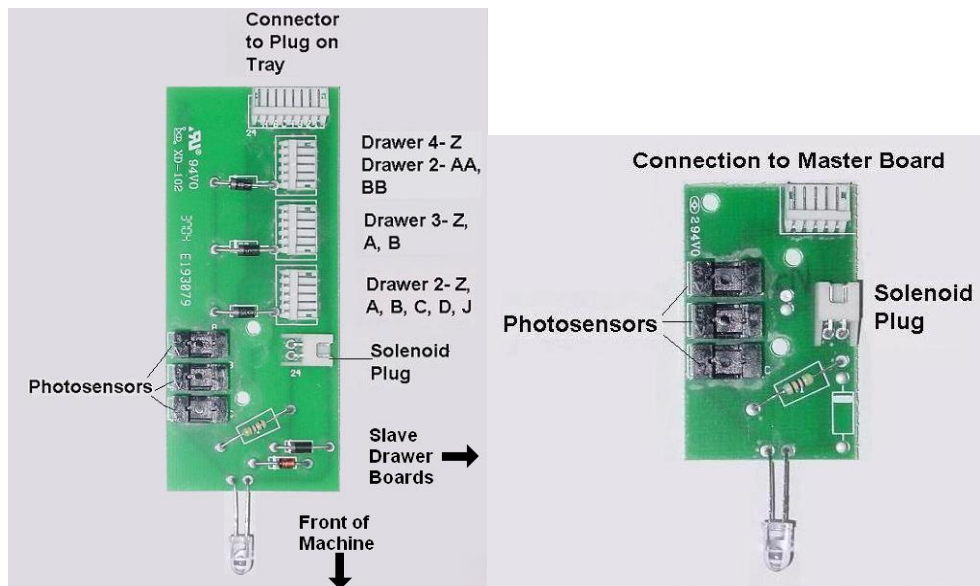
When there is a problem opening a drawer, regardless of whether it opens too far or not far enough, take the following steps to determine which tray is causing the problem.

1. Shut down the User Interface
2. Start OpenDrawer.
3. Run a test on the half-frame containing the suspect drawer.
 - a. Open drawers 6 compartments if the problem is one where the drawer opens too far or not far enough.

- b. Open drawers 12 compartments if the problem is one where the drawer opens all the way, but does not properly lock when the drawer is closed.
4. When the test fails, which will not always be on the drawer that showed the original failure, identify the other trays in its group of five.
5. Unlock the drawer trays and unplug all but the bottom member of the group of five (e.g. if the problem shows in tray 12, remove trays 11-14).
6. Run the test again, focusing only on the half-frame where the problem is identified (in the above example, focus on the bottom half of the frame).
7. If the test succeeds, plug in the next tray and try again. Repeat this process until the test fails.
8. When the test fails, remove the now suspect tray and set it aside. Replace it with a known good tray from another part of the machine, with all the other trays in place. If the test still fails, you should begin to suspect something deeper is going on and contact technical support. If the test succeeds, you can be reasonably sure that the suspect tray is the problem. See the instructions below for isolating a problem drawer board.

Isolating the Problem Drawer Board

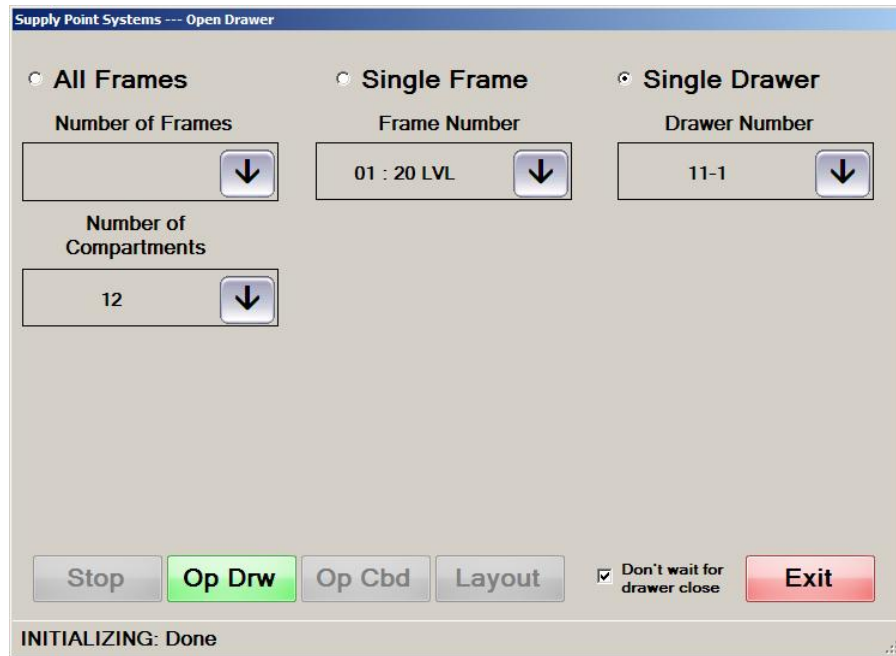
Remember that there are one or more drawer boards on each drawer tray. Each tray has one master drawer board and most will have one or more slave drawer boards. Use the following display to determine what will be plugged in according to tray type.



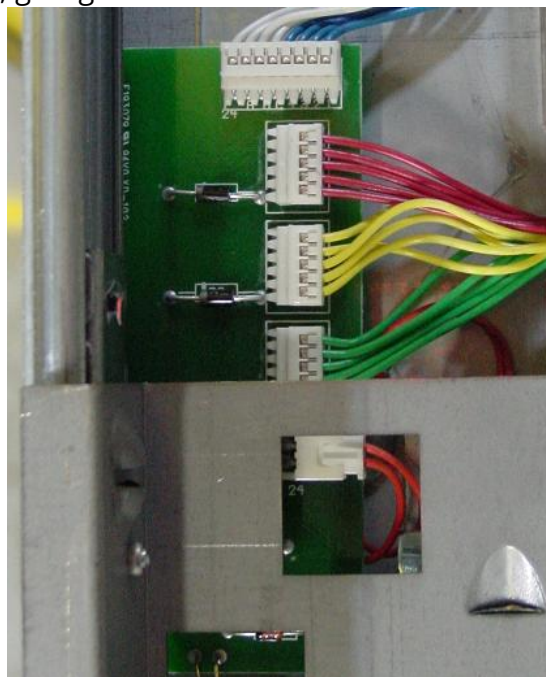
Follow these steps to isolate the problem drawer board once the tray has been identified.

1. Place the fault tray back into the machine.

2. Start OpenDrawer.
3. Select the first drawer on the tray from the *Single Drawer* drop-down.
4. Select 12 from the drop-down under *Number of Compartments to Open*.
5. Check the box that says *Don't Wait for Closed*. In the following example, the problem tray is tray 11 in frame one.



6. Press **GO**. The system should ignore most faults and allow the drawer to open all the way, giving access to the master drawer board.



7. The wires running to the right in the above display are connected to the slave drawer boards. If there are no such connections (that is, if this is a type E, F, G or H drawer tray), this is the board you need to replace. Otherwise, disconnect the slave drawer boards and close the drawer.
8. Re-connect the tray.
9. Clear the check from the *Don't Wait for Closed* box and try whatever test was used to isolate the drawer tray.
10. If the test fails, replace the master drawer board and re-try. If it succeeds, open the drawer again, as detailed in steps 5 and 6 above.
11. Re-connect one slave drawer board at a time and try the test.
12. When you connect a board that causes the test to fail, you can open the drawer using the *Don't Wait for Closed* box and replace the drawer board.

UPS Issues

Symptom	Cause	Action
Warning that the system has lost AC power.	Unit is unplugged.	Plug unit back into wall.
System is switching to battery power in the absence of power failure.	May be caused by voltage fluctuations or electrical noise.	Check Sensitivity and Voltage Configuration in Power Chute software.
System is switching to battery power in the absence of power failure after Power Chute has been adjusted.	Voltage from the wall outlet has wider fluctuations than the software can handle.	Check the wall outlet and make the necessary adjustments.
System shuts down immediately after a power failure; the alarm sounds.	Components are not plugged into the battery outlets.	Remove plugs from surge outlets and replace them in the battery/ surge outlets.
System shuts down immediately after a power failure; the alarm does not sound and the UPS is plugged in.	UPS battery is dead.	Replace UPS.

Troubleshooting the UPS

The SupplyPoint™ is equipped with an Uninterruptable Power Supply, which will allow the machine to shut down safely in the event of a power failure. It will provide approximately 4-6 minutes of life after loss of power. If power is restored quickly the machine will resume normal operation; otherwise the UPS will signal the computer to initiate shutdown, ensuring against data loss. In the event that the UPS causes the SupplyPoint™ to shut down, the unit should completely power up again after power is restored.

Monitor Issues

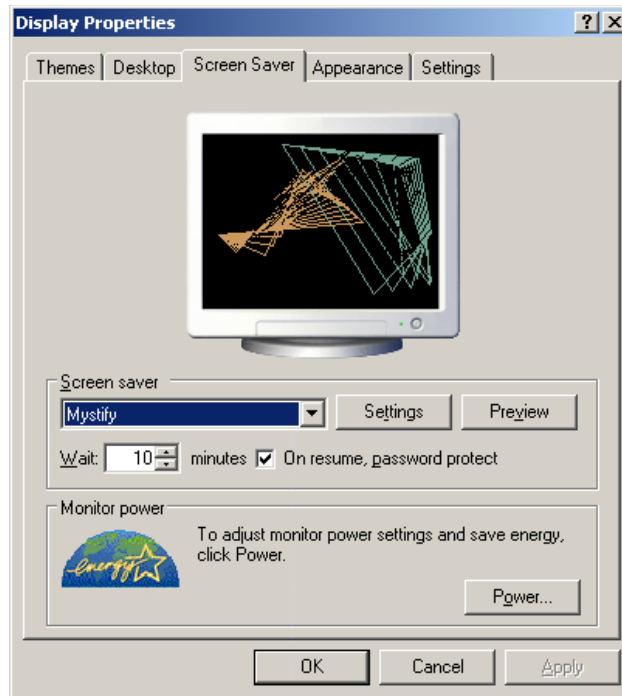
Symptom	Cause	Action
Monitor is black; power light on PC is solid green. Drawer LEDs are	Power settings have been altered.	Move the mouse to wake the monitor. Change power settings so

flashing. Tapping the screen with the light pen produces no result.		that the monitor stays on and set up the screen saver if necessary.
Monitor is black; power light on PC is solid green. Drawer LEDs are flashing. Tapping the screen with the light pen produces no result; the monitor does not wake when the mouse is moved.	The monitor is not plugged into the back of the PC.	Plug the monitor into the back of the PC.
Monitor is black; power light on PC is solid green. Drawer LEDs are flashing. Tapping the screen with the light pen produces no result; the monitor does not wake when the mouse is moved. It is properly connected to the PC.	The monitor is not plugged into the UPS, and so is not receiving power.	Make sure that the monitor is plugged into the UPS.
Monitor is black; none of the above solutions will bring it back.	Either the monitor or the video adapter on the PC is damaged.	Test the PC video adapter by removing the PC and attaching it to a known good monitor. If the PC adapter is working, plug the monitor into a known good computer.

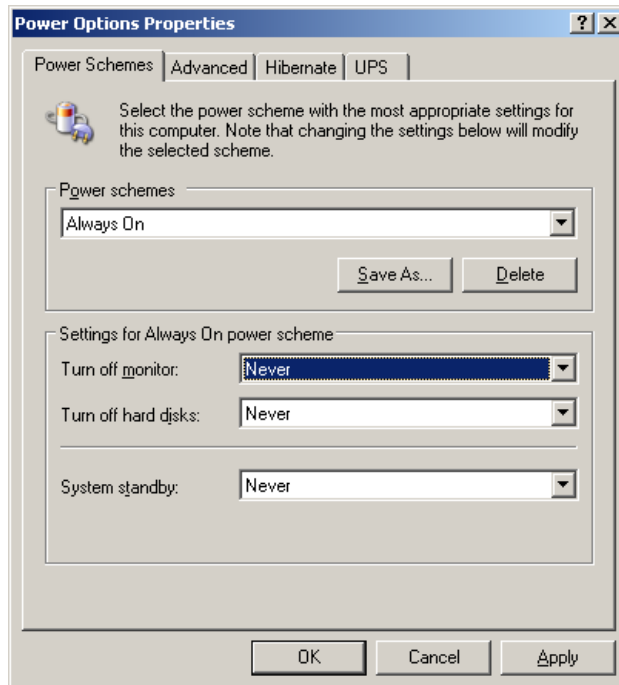
Changing Power Settings for the Monitor

A change in power settings is the most common cause of a blank screen. It happens most frequently when the SupplyPoint™ is logged into a new domain or when a new domain user logs into it. When the SupplyPoint™ is originally shipped, every attempt has been made to reduce the possibility of this happening, but some network security can override the settings. Take the following steps to restore the original power settings.

1. To change the power settings, begin by right-clicking anywhere on the Windows desktop and selecting *Properties* from the menu that appears.
2. Select the *Screen Saver* tab from the Display Properties dialog box.



3. Press the **POWER** button to access the power settings.



4. Make sure that the power settings look like the ones above.
5. Press **APPLY** to save changes.

PC Issues

Symptom	Cause	Action
The PC has shut down for no reason. When the system re-boots there is a message reading, "Previous fan failure."	The CPU fan has stopped working.	Replace the CPU fan and heat sink.
The PC will not boot. A blue screen appears reading "Inaccessible boot device."	Either the IDE controller on the PC motherboard or the hard drive has failed.	Run IDE diagnostics to determine whether the HD has failed.
The PC will not boot. A blue screen appears reading "Inaccessible boot device." The IDE controller and hard drive are ok.	Something has corrupted the hard drive boot sector.	Run CHKDSK on the affected drive.
The PC will not boot. A blue screen appears reading "Inaccessible boot device." The IDE controller and hard drive are ok. CHKDSK is ineffective.	The computer has a boot sector virus.	Run anti-virus software on the affected drive.
The PC will not boot or shuts down for no reason. The power light is blinking yellow.	The power supply has most likely failed.	Replace the PC power supply.

Light Pen Issues

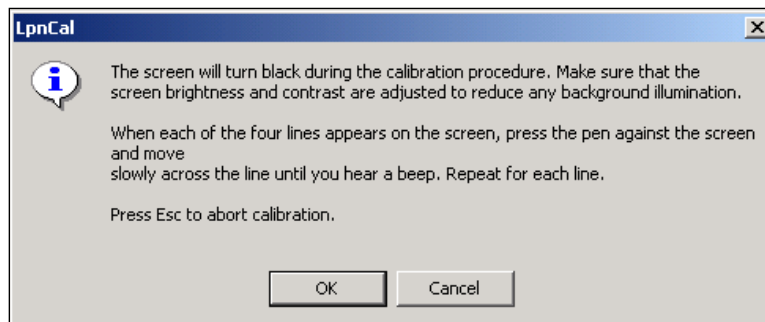
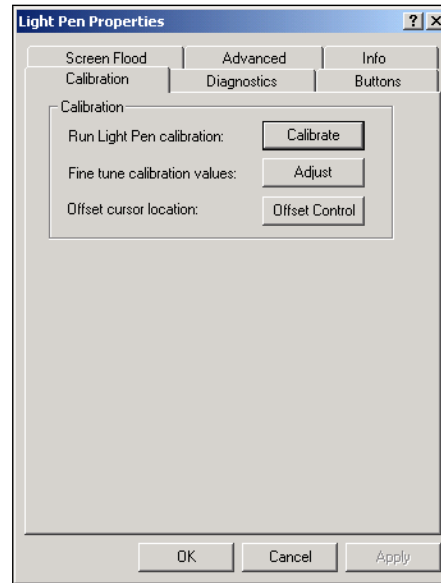
Symptom	Cause	Action
Cursor will not track	Connections between computer and light pen interface are loose	Check and tighten all connections.
Cursor will not track; all connections are secure.	Light pen out of calibration	Calibrate light pen
Cursor jumps, difficulty pressing buttons on screen.	Connections between computer and light pen interface are loose.	Check and tighten all connections
Cursor jumps, difficulty pressing buttons on screen; all connections are secure.	Light pen interface is non-functional.	Replace light pen interface.
Screen is flooded blue	Light pen interface plug is loose	Check plug at the interface;
Screen is flooded blue; all connections are secure.	Light pen interface is non-functional	Replace light pen interface
Screen is flooded blue	Light pen cable is damaged	Replace light pen
Screen is flooded blue; button will not depress	Light pen button is stuck, perhaps by debris	Clean light pen button with isopropyl alcohol
Button will not depress; no blue flood on screen.	Light pen button is damaged	Replace light pen

Calibrating the Light Pen

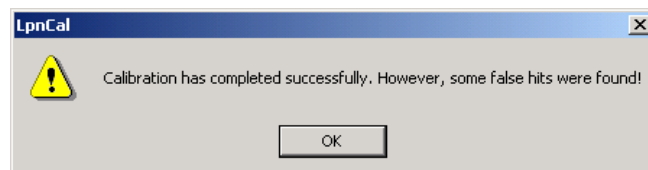
The light pen is the most-used piece of equipment associated with the SupplyPoint™ so, as one might expect, it is the most common source of problems. Fortunately it is also the easiest piece to replace, with the exception of a drawer tray. Below are described some of the remedies for light pen issues.



1. Using the mouse, click on *Start, Settings, Control Panel*. Once in the Control Panel, double-click on light pen. Alternately, you can select the light pen icon from the system tray and skip to step 3.
2. Double-click on the *Light Pen* icon to open the *Light Pen Properties*.
3. Select calibrate. Instructions for the calibration process will follow.



4. Move across each of the lines as they appear. When all four lines have disappeared, a message similar to that below will display. False hits are nothing to be concerned about.



If the light pen continues to malfunction after calibration, contact technical support.

User Issues

Symptom	Cause	Action
A new user attempts to log into the User Interface and receives a message reading "Unrecognized User ID." He is using the correct ID.	User is not allowed to log in.	Edit the user's entry in Machine Setup and check the box that says "Allow to Login."
A new user logs into the User Interface, and instead of having a list of transactions, has only a button labelled "Exit."	No transaction privileges have been assigned to the user.	Give the User the appropriate transaction privileges, either by assigning them to him personally, or by assigning him to a user group with the appropriate privileges.
A new user logs into the User Interface and selects his transaction. When he reaches the Job selection screen, nothing is shown.	The use of restrictions is preventing the user from seeing the Job list.	Either add restrictions for the user or place him in a user group that already has restrictions assigned.
A user attempts to check out an item. When he selects the item, he sees a message reading "No drawers found containing appropriate stock." Other messages of this type may state "You do not have a required transaction privilege"	The user does not have the appropriate transaction privilege to withdraw the item.	Enter Machine Setup. Check the content type of the drawer in Drawers. Make sure the user has the appropriate privilege (withdraw, return, restock, etc.) for that content type.
A user attempts to check in using his ID card. When he does so, he receives the "Unrecognized User ID" message. He is able to log in with the light pen.	The card reader is configured incorrectly.	Change the Parameters setting "Users-Semicolon separated list of edits" so that it takes the correct information from the card.
Rationing is in effect, but when a user withdraws a rationed item, he is able to take more than his allotment.	The incorrect rationing policy is in effect.	Edit the user and change his rationing policy to "Prevent ration being exceeded"
I want my users to take Used items before New items. However, when they go to withdraw an item, they are given a choice of new and used.	The Users are not configured so that they must take Used items first.	Check the box that says Dispense Used first in Users setup.
I have created a Used location for an item, so that it can be returned there after use/ rework. However, my Users are unable to place items there.	Users do not have the appropriate transaction privileges.	Give Users one or both of Return to Used and Return from Rework to Used.

Items Issues

Symptom	Cause	Action
A new item has been created in the SupplyPoint™ database, but it does not show up as available for restock.	The item has not been added to a drawer or external stock location.	Add the item to a drawer or external stock location. Be sure that users have the appropriate transaction privileges for the content type.

A new item has been added to the SupplyPoint™ database and has been restocked, but users are unable to withdraw the item.	The item has not been added in restrictions.	Make sure that the appropriate users have the new item added to their restrictions list.
I want to return an item for rework / scrap. However, when I select the Return to Rework/ Scrap function, my item is not on the list.	The item has not been made reworkable or scrappable.	Check the appropriate box (Can be Rework or Can be Scrap) in Items setup.
I have created a Used location for an item, so that it can be returned there after use/ rework. However, my Users are unable to place items there.	The item is not New/ Used sensitive.	Check the New/ Used sensitive box for the item in Items setup.

Jobs and Machines Issues

Symptom	Cause	Action
Users are not given the opportunity to select a job and/or machine. When they select withdraw, they are sent straight to the item list.	Jobs and/or Machines are not in use.	To enable the use of jobs and/or machines, go to parameters and make sure the settings <i>Jobs- In use</i> and/or <i>Machines-In use</i> are set to 1. Re-start the User Interface.
When users select withdraw and are taken to the jobs selection screen they see nothing but a blank grid. Restrictions are not being used.	The parameter setting <i>Jobs-Defer showing full job list</i> is enabled.	Either change the <i>Jobs- defer showing full job list</i> parameter setting or instruct users to hit the search button to see the job list. Re-start the User Interface.
When users select withdraw and are taken to the jobs selection they see nothing but a blank grid. <i>Jobs- Defer showing full job list</i> is set to "0".	The parameter setting <i>Jobs- Do not display list</i> is enabled.	Disable the parameter setting or instruct users to manually enter information.
There are new entries in the Jobs and/or Machine list. They do not conform to the standard and no one else should be adding to the list(s).	Users are being permitted to create Jobs and/or Machines at the vending machine.	Make sure that the parameter setting(s) <i>Job Numbers (or Machine Numbers)- Must already exist, else they are creatable by VM users</i> is set to 0.

Parameters Issues

Symptom	Cause	Action
Restrictions have been set up. However, when users come to the SupplyPoint™, they have access to everything.	Restrictions have not been enabled in parameters.	Make user that the parameter setting <i>Restrictions- enabled</i> is set to 1. Re-start the User Interface.
Restrictions have been set up and enabled in Parameters. However when users log in they have access to everything.	The User Interface has not been reset since rations were enabled. Any change to Parameters requires the UI to be reset.	Log off and restart the User Interface. Changes to Parameters will take effect.
Rations have been set up. However, they do not have any effect.	Rations have not been enabled in parameters.	Make user that the parameter setting <i>Rations- enabled</i> is set to 1. Re-start the User Interface.

Rations have been set up and enabled in Parameters. However when users log in they have access to everything.	The User Interface has not been reset since rations were enabled. Any change to Parameters requires the UI to be reset.	Log off and restart the User Interface. Changes to Parameters will take effect.
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EDI Issues

Symptom	Cause	Action
An item that is stored in the SupplyPoint™ is below minimum, yet it does not appear on the EDI order.	The item may not be assigned to the appropriate supplier.	Verify that the item is assigned to the correct supplier in Machine Setup.
The item mentioned above is assigned to the right supplier, yet it is not on the order.	The item may be already on order.	Use the <i>View Items on Order</i> function of EDI to verify that the item is on order. If it is, either receive or close the line for that item. It will appear on the next order.
An item is out of stock. It is assigned to a supplier and it is not already on order, but it does not appear on the current EDI order.	There may be no minimum assigned. If the order is set to go when the item is below minimum and there is no minimum, the item will never be ordered.	Verify that the correct minimum is set in Machine Setup. Remember that the order will be placed when the item quantity is below minimum, so setting a minimum of 1 means the order will go when the quantity on hand is 0.

User Interface Messages

Symptom	Cause	Action
When I start the User Interface I receive an error stating that the COM port is already open.	Another program, most likely OpenDrawer or the Windows on-screen keyboard, has the COM port open.	Close the User Interface, then shut down whichever program has the COM port open.
When I choose an item, I receive a message stating that the solenoid is not responding.	Another program, most likely OpenDrawer or the Windows on-screen keyboard, has the COM port open.	Clear the error. Close the User Interface, then shut down whichever program has the COM port open.
When I choose an item, I receive a message stating that the solenoid is not responding. No other programs that can open the Com port are running.	The item has been assigned to a drawer that does not exist.	Verify in Drawers setup that the physical layout of the machine matches the layout on the screen. Make appropriate changes.
When I choose an item, I receive a message stating that the solenoid is not responding. No other programs that can open the Com port are running. The layout of the machine is correct.	The solenoid is either unplugged or has failed.	Make sure that the solenoid is plugged into the drawer board. If it is, replace the solenoid.
I am performing a transaction. When I close the drawer, an ADO run time error appears stating that the operation must use an updateable query.	The User logged into the SupplyPoint™ does not have appropriate permissions to the folder containing the SupplyPoint™ database.	Configure the permissions on the Security tab of the folder with the SupplyPoint™ database.
I am performing a transaction. When I close the drawer, an ADO run time error appears stating that	Another user is running SupplyPoint™ Utilities and this user	Have the user close the SupplyPoint™ Utilities. Then,

the operation must use an updateable query. The user logged in has full control over the SupplyPoint™ folder.	has only Read access to the SupplyPoint™ share.	change his permissions to the SupplyPoint™ share.
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SupplyPoint™ Utilities Errors

Symptom	Cause	Action
When I attempt to log in to Machine Setup I receive a run time error that says "Object variable or with block variable not set"	You do not have Proper access to the SupplyPoint™ share.	Adjust your permissions on the Security tab of the SupplyPoint™ share.
I have just installed SupplyPoint™ Utilities on a new computer at a pre-existing installation. I used the software that originally came with the SupplyPoint™. All the permissions are set, but when I attempt to log in to Machine Setup I receive a run time error that say "Object variable or with block variable not set."	The SupplyPoint™ Utilities installation on the desktop is an older version than the software running on the desktop.	Find out what version of the software is running on the SupplyPoint™ and update the client machine to that version.
When I enter Machine Setup, I am shown a backup log that shows errors backing up the database.	The Windows user logged into the SupplyPoint™ does not have proper permission for the backup location.	Adjust the permissions of this user to the backup location.
When I enter Machine Setup, I am shown a backup log that shows errors backing up the database. The Windows user has proper permissions for the backup location.	Another application (such as the SupplyPoint™ Utilities) had the database open when the backup was attempted.	Make sure that no one is running the SupplyPoint™ Utilities. Exit and then re-enter the User Interface.
When I attempt to change/create an entry in Machine Setup, I receive an ADO runtime error that says "Object must use and updateable query."	You have Read permission, but neither Write nor Modify permission on the SupplyPoint™ share.	Adjust your permissions on the Security tab of the SupplyPoint™ share.

Rework/ Scrap Issues

Symptom	Cause	Action
I am attempting to return an item for rework/scrap. When I select the item to be returned, I get a message saying that there are no drawers with space available for stock.	The incorrect rework/ scrap user has been assigned to the item.	Assign the correct rework/ scrap user to the item. This is for use when rework or scrap bins are in operation.
I am attempting to return an item for rework/scrap. When I select the item to be returned, I get a message saying that there are no drawers with space available for stock. The item has a rework/ scrap user.	The rework/ scrap user is not established as the owner of a rework/ scrap bin.	Assign the rework/ scrap user as the owner of the rework/ scrap bin.
I am attempting to return an item for rework/scrap. When I select the item to be returned, I get a	The item has not been assigned to a rework/ scrap drawer.	Assign the item to a rework/ scrap drawer.

message saying that there are no drawers with space available for stock.		
I am attempting to return an item for rework/scrap. When I select the item to be returned, I get a message saying that there are no drawers with space available for stock.	The Max Compartment Qty is insufficient to handle more stock. If you do not specify a Max Compartment Qty, it will be set to one.	Set a new Max Compartment Qty if there is space available. If there is not space in the compartment, assign the item to another compartment.

Reports Issues

Symptom	Cause	Action
I am running a daily report to see the previous day's issues. When the report runs, there are issues showing from the current day as well as the previous day. I am using the [YESTERDAY] switch.	You are using the Transaction Date-Time field. Use of this field with, for instance, the [YESTERDAY] switch will cause the report to seek out activities for the previous 24 hours.	Change to Transaction Date. Using [YESTERDAY] with this field will seek out information based on the previous calendar day.
I run a refill report daily to see what items are needed for the SupplyPoint™. When I look at the Max Qty field, I notice that it is different from the capacity of the machine, so I never have the machine full.	You are using the wrong Max Qty. There are TWO potential maximums: the Item Defined Maximum and the Drawer Capacity.	Switch to the Drawer Capacity. This can be done from the Report menu on Standard Reports. For advance reports, select the appropriate field.
I have just created a daily issues report to see what operators are using. It uses the [YESTERDAY] switch to pull the previous day's information. When I run it, I get a message reading "No results to display" even though there was definitely activity the day before.	You are using the Transaction Date-Time field. Use of this field with, for instance, the [YESTERDAY] switch will cause the report to seek out activities for the previous 24 hours. If your single condition equals [YESTERDAY], the report will look only at what happened exactly 24 hours ago.	Change to Transaction Date. Using [YESTERDAY] with this field will seek out information based on the previous calendar day.

External Inventory Monitor Issues

Symptom	Cause	Action
I have multiple SupplyPoint™ units and want them to communicate. I have configured and started the External Inventory monitor, but nothing happens when I press the view button/ select an item that is out of stock.	The External Inventory Monitor (SPSTalk.exe) is not running on the other machine(s).	Launch SPSTalk on all machines that are supposed to be part of the system.
When I view inventory database, remove that as well.in other machines or select an item that is out of stock, I receive incorrect stock information about the other machine(s).	The External Inventory Monitor (SPSTalk.exe) has been stopped on one of the other machines. When this happens, the SupplyPoint™ uses information gained the last time it received information from other machine(s).	Launch SPSTalk on all machines that are supposed to be part of the system.
The External Inventory Monitor is running on all SupplyPoint™	You do not have appropriate permissions to the SPS share on the other machines.	Adjust permissions on the SPS share so that the Windows user

machines, but I am unable to see the inventory in other machines.		logged into other SupplyPoint™ machines can view the contents.
I have configured External Inventory Monitor by entering the UNC pathname (\\COMPUTER) to the other SupplyPoint™ units. But when I attempt to use it I see nothing.	The name of the computer is incorrectly formatted.	Remove the back slashes (\\) from the computer name.

Common Email Errors

Message	Cause	Action
No electronic transmission settings defined for report 'Name of Report'	Electronic transmission settings have not been entered.	Follow instructions in User's Guide to enter Electronic Transmission Settings.
Unable to transmit 'Name of Report'. Error Number 7	There is a problem with the <i>From</i> address.	<ol style="list-style-type: none"> 1. Check the spelling of the <i>From</i> address, especially the domain name. 2. Make sure that the email address is set up on the SMTP server. 3. Make sure the proper ESMTP mode is selected if required.
Unable to transmit 'Name of Report'. Error Number 8	The address listed in the <i>From</i> field cannot send.	<ol style="list-style-type: none"> 1. Make sure that the <i>From</i> address has relay rights on the SMTP server. 2. Make sure that the proper ESMTP mode is selected if required.
Unable to transmit 'Name of Report'. Error Number 16	There is most likely no SMTP server entered in the Electronic Transmission Settings.	Verify that the SMTP server name or IP address has been entered in SMTP settings.
Unable to transmit 'Name of Report'. Error Number 17	The name of the SMTP server is wrong or DNS is not set up properly.	<ol style="list-style-type: none"> 1. Make sure that the SMTP server name or IP address is entered properly. 2. If the name is correct, try the IP address of the SMTP server. 3. If the IP address works and the name does not, check DNS settings.
Unable to transmit 'Name of Report'. Error Number 25	The <i>ESMTP Auth Mode</i> is set to "1", but the server does not support ESMTP.	Change the <i>ESMTP Auth Mode</i> to "0".

Common FTP Errors

Message	Cause	Action
'Unable to transmit [Unable to change remote directory: 550 directory/: no such file or directory (1003)] Name of Report'. [ftp site]	The directory indicated in FTP settings either does not exist or is entered incorrectly.	<ol style="list-style-type: none"> 1. Verify the spelling of the directory and correct as needed. 2. Verify the existence of the specified directory and if it does not exist, create it.
'Unable to transmit [Unable to connect to FTP server: 220 FTP Server ready. 331 Password required for "account name". 530 Login incorrect. (1014) Name of Report'	The account specified in FTP settings is unable to log in to the FTP server.	Verify that the user name and password entered in FTP settings are correct. Re-enter the password.
'Unable to transmit [Unable to change remote directory (1000) Name of Report'	The account specified does not have permission to change the contents of the specified directory.	Verify with the site administrator that the account being used has all appropriate permissions.

Appendix

Ratchet-style Machines

Older SupplyPoint™ units are referred to as “ratchet-style” machines, after the mechanism used to control the drawers. With respect to most of the material covered in the manual, they are exactly the same as the flapper-style machines currently manufactured. What follows is information that is specific to the ratchet-style machines.

Installing, Moving and Securing the Machine

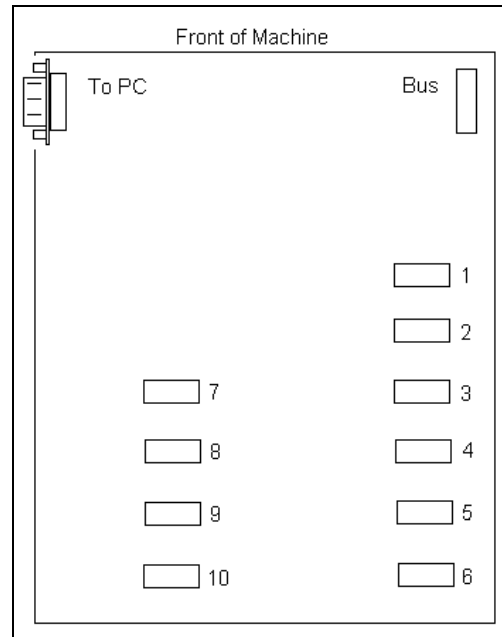
Qualified installation personnel will always perform the initial installation of the SupplyPoint™. It is, however, important to understand the installation process in the event that future circumstances require relocation of the unit. Installation of the SupplyPoint™ occurs as follows:

1. Establish a location for the SupplyPoint™. Ideally, there should be at least 18 inches between the rear of the SupplyPoint™ and the wall or other machinery and 20-24 inches clear on either side.
2. Unload the SupplyPoint™ from its crate by removing first the drawers and then the frame. DO NOT attempt to remove the SupplyPoint™ from the crate fully loaded as the stress on the frame could cause substantial damage to the unit.
3. Remove the back panels; remove the side panels if the SupplyPoint™ is to be attached to the floor.
4. Put the frame in position and level it. This is accomplished by manipulating the four feet at the bottom of each frame using a $\frac{3}{4}$ " crescent wrench. For add-on units, level one unit and then level the others against it.
5. Attach any add-on units using the joining kit provided.
6. Using the holes in the base at either end of the frame as a guide, drill two $\frac{1}{2}$ " holes into the concrete. Use a hammer to place the provided concrete anchors into the floor and tighten the nuts with a $\frac{3}{4}$ " crescent wrench.
7. Lock all of the trays and the monitor into place with the locking bar.
8. Connect the cables to the drawer trays (see below, *Cable Connections*).
9. Power up the machine.
10. Run the OpenDrawer test program (see above, *Drawer Test*) to verify proper connection.
11. Reattach the rear panels and replace the side panels.

Cable Connections

Connecting the PICs to the drawer trays and to each other is an easy and straightforward process. Each PIC has connections for up to ten drawer trays and a connector for communicating with other PICs. In addition, one PIC is designated the master PIC and has a port for serial communication with the PC (see Figure below).

Each frame has two PICs, allowing for control of up to 20 drawer tray slots per frame. The numbering of the boards goes from right to left, so that in each frame the right board controlled the first ten drawer tray slots, while the second board controls the bottom ten. It is for this reason that a PIC is sometimes referred to as a half-frame. On the diagram to the right there are two rows of connections at the rear (bottom) of the tray. Like the boards, connections are counted from right to left, with the first column controlling drawer tray slots one through six (front to back); the second controls slots seven through ten. Drawer tray slots number 11 through 20 in a frame are connected to the left-hand PIC. Double height drawer trays are plugged into the lower slot of the range they occupy.



In addition, each frame has a connection in the front left corner to connect it, via bus cable, with the other PICs. A bus connects the PICs to each other and, through the master PIC, to the PC. Once power is on, a red LED on each PIC indicates connectivity. In the upper left-hand corner of the PIC that is designated the master is a connector labelled *To PC*. A standard serial cable is used to connect this to the PC's serial port, COM1.

			Slot	Tray	Board Connection
			1	A	Pic1, #1
			2	A	Pic1, #2
			3	A	Pic1, #3
			4	A	Pic1, #4
			5	A	Pic1, #5
			6	A	Pic1, #6
			7	A	Pic1, #7
			8	A	Pic1, #8
			9	C	Pic1, #9
			10	C	Pic1, #10
			11	C	Pic2, #1
			12	C	Pic2, #2
			13	C	Pic2, #3
			14	C	Pic2, #4
			15		Pic2, #5 - no connection
			16	B	Pic2, #6
			17		Pic2, #7 - no connection
			18	B	Pic2, #8
			19		Pic2, #9 - no connection
			20	B	Pic2, #10

The above diagram shows the layout of a typical frame, half of a standard machine, as it might be configured in the machine. There are 14 single height trays in the frame, followed by three double height trays. The first double height tray occupies slots 15 and 16 in the frame, the second occupies 17 and 18, and the bottom occupies 19 and 20. The diagram below shows the PIC connections for that frame. Note that there are some connectors with no connections. These spaces are empty because double height trays occupy the slots below them.

Reconfiguring Drawer Layout

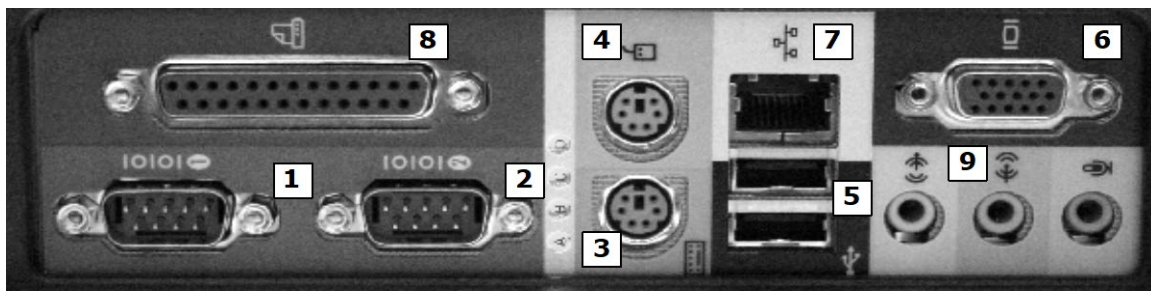
Follow these steps if it becomes necessary to rearrange the drawers within the machine:

1. Exit the User Interface and power down the PC.
2. Remove the rear panel(s) from the frame(s) to be reconfigured.
3. Disconnect the drawer cables from the drawers to be moved. Be sure that all cables are hanging down the back of the machine and are not caught in the drawer trays.
4. Open the cupboard at the base of the frame and unlock the locking bars for the frame(s)
5. Remove the appropriate drawer trays.
6. Replace the trays in their new locations.
7. Use the locking bar to lock the drawer trays into place.
8. Reconnect the cables (see **Cable Connections** for instructions on proper arrangement of the cables on the PIC board.
9. Once the connections have been verified, replace the rear panels.
10. Press the power button on the UPS to restart the PC and User Interface. Replace the lid on that frame.
11. Use *Open Drawer* to verify the connections.
12. Lock the cupboards at the base of the frame(s)
13. Use the software drawer configuration utility under Machine Setup to reconfigure the software to the new layout and add tools to the new drawers.

Legacy Computer Connections

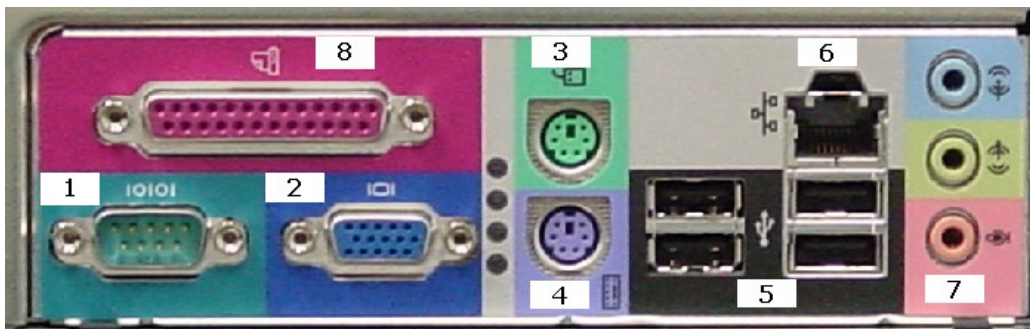
There are several items that must be connected to the computer for the SupplyPoint™ to become operational. Most of these are standard items that the user may have installed on his PC at home, but all are worth reviewing.

GX-50



Dell Optiplex GX-50

1. The 9-pin plug from the controller board should be plugged in to serial port 1 (1).
2. The communications cable from the UPS should be plugged in to serial port 2 (2).
3. The keyboard should be connected to the blue mini-DIN plug (3). However, when a card reader or scanner is required, one cable from the reader/scanner should be connected to the blue mini-DIN plug. The keyboard should then be plugged into the other cable.
4. The mouse should be connected to the green mini-DIN plug (4).
5. The PXL-2000 light pen interface should be plugged in the lower of the USB ports (5).
6. The light pen cable should be plugged into the 15-pin VGA connection (6). The monitor should then be plugged into the 15-pin VGA connection on the light pen cable (marked Vid. to Computer) while the 9-pin plug (marked External Interface) should be plugged into the back of the light pen hub.
7. The RJ-45 connector on the network cable should be plugged in to the Ethernet card (7).
8. The printer port (8) is seldom used but is available.
9. The sound card's speaker and microphone ports (9) are generally unused.

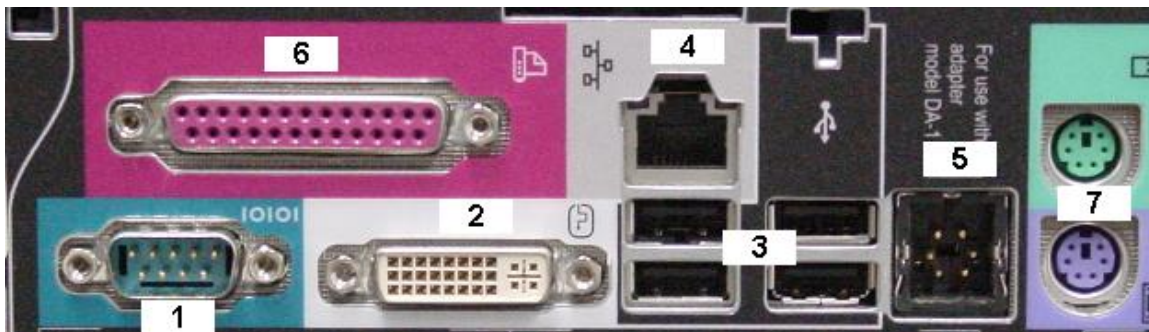


GX- 60 and 270

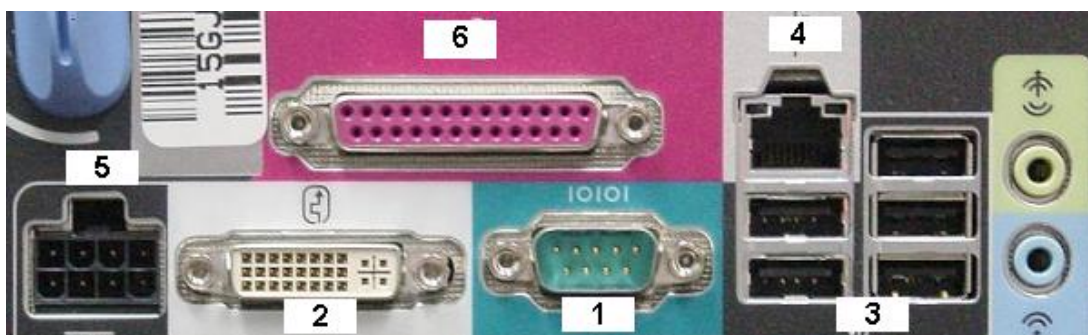
1. The 9-pin plug from the PIC board should be plugged into serial port 1 (1).
2. The light pen cable should be plugged into the VGA connection (2). The monitor should be connected to the 15-pin VGA connection on the light pen cable (marked Vid. To Computer) while the 9-pin plug (marked External Interface) should be plugged into the back of the light pen interface.
3. The mouse should be plugged into either the green mini-DIN plug (3) or one of the USB plugs (5). **NOTE: The actual number of USB ports may vary with the model of the computer.**

4. The keyboard should be connected to the blue mini-DIN plug (4). However, when a card reader or scanner is required, the cable from the scanner/reader should be connected to the blue mini-DIN plug. The keyboard should be plugged into the cable coming from the scanner/reader.
5. The communications cable from the UPS should be plugged into one of the USB ports (5).
6. The cable from the PXL-2000 Light Pen Interface should be plugged into another of the USB ports (5).
7. The RJ-45 connector from the network cable should be plugged into the network card (6).
8. The sound card (7) is generally unused.
9. Optional printers can be plugged into either the printer port (8) or one of the USB ports (5) depending upon the equipment.
10. Optional scale can be plugged into the USB port (5).
11. Be sure to tighten all connections!

SX-Model Computers



Dell SX-270



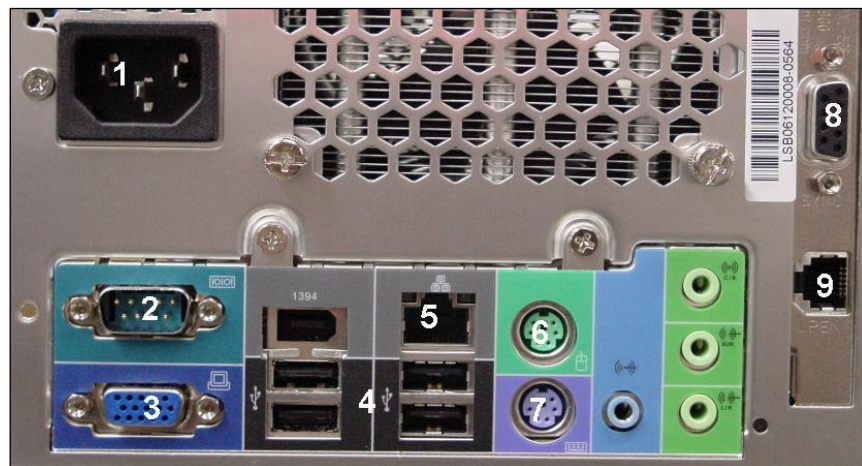
Dell SX-280

1. The 9-pin connector from the PIC should be plugged into the serial port (1).
2. Plug the VGA to DVI connector into the DVI port (2). Attached to this connector will be a cable running to the light pen interface and to the monitor. If the 9-

pin connector from the light pen is not attached to the rear of the light pen interface, please connect it.

3. Attach the following to the USB ports (3).
 - The USB cable from the light pen interface;
 - The data cable from the UPS;
 - The mouse;
 - The keyboard should be connected to a USB port. However, when a card reader or scanner is required, one cable from the reader/scanner should be connected to the USB port. There may be a special adapter on the card reader to allow it to connect to the USB port. The keyboard should then be plugged into the other cable. **(SX-280 only)**
4. The RJ-45 connector on the network cable should be plugged in to the Ethernet card (4).
5. The connector from the external power supply should be plugged in (5).
6. An optional printer can be plugged in to the parallel port (6).
7. The keyboard should be connected to the blue mini-DIN plug (7). However, when a card reader or scanner is required, one cable from the reader/scanner should be connected to the blue mini-DIN plug. The keyboard should then be plugged into the other cable. **(SX-270 only).**

SPS Shuttle PC with Light Pen



SPS Shuttle PC

- Connect the AC power cable at location 1.
- The serial cable from the master PIC should be attached to location 2.
- Attach the 15-pin portion of the "Y" connector from the light pen into the VGA port at location 3. Machines with touch screen monitors will plug them in at this location.

- Connect the UPS data cable, touch screen monitor, optional fingerprint reader and the USB card reader (along with any other USB devices) to location 4.
- Plug the RJ-45 connector on the network cable to location 5.
- Attach the mouse to position 6.
- Plug the keyboard into position 7.
- Plug the 9-pin portion of the “Y” connector from the light pen into location 8.
- The light pen stylus snaps into position 9.

Windows XP Networking

The SupplyPoint™ is best used on a network. This allows for administrative tasks, such as using the SupplyPoint™ Utilities, to be performed behind the scenes from a remote location without interrupting regular operations. The SupplyPoint™ PC comes equipped with a 10/100 Mbps (later models have a 10/100/1000 NIC) Ethernet card that accepts an RJ-45 connector. It is capable of operating on Windows, NetWare or UNIX networks, using protocols standard to Windows XP and Windows 7. Material in this section focuses on Windows XP; for Windows 2000 networking information, refer to the appendix.

Server-based vs. Peer-to-Peer Networking

Server-based and peer-to-peer networks are the most frequently used network models. Although there is a third- the hybrid model- for purposes of installing the SupplyPoint™ only knowledge of the first two is required, as it will usually be joined to a network segment that is either server-based or peer-to-peer. Also, having an understanding of the two generally provides sufficient knowledge for grasping the third.

A server-based network- a Windows-based, or server-based network, is also called a **domain**, and the two are sometimes used interchangeably. This is a hierarchical structure consisting of a computer that runs the network and provides security for the network and subordinate computers, called **clients**, that use the resources of that server and of other client computers. For this reason a server-based network is also referred to as a client-server network. The advantages of a server-based network lie in the centralization of control, and the ability to pool resources more easily. All users must be authenticated by the server (in Windows, a **domain controller**) and the server contains information about user privileges to network resources.

A peer-to-peer network (in Windows, a **workgroup**) is a structure consisting of a group of computer joined together and sharing resources. The primary difference between a server-based and a peer-to-peer network is the lack of centralized control. Each user controls access to the resources on his computer. The advantage of this type of networking is primarily in expense: no servers are required, there is less need

for network administrators, and there is no loss of function due to the failure of a server.


Required Network Information

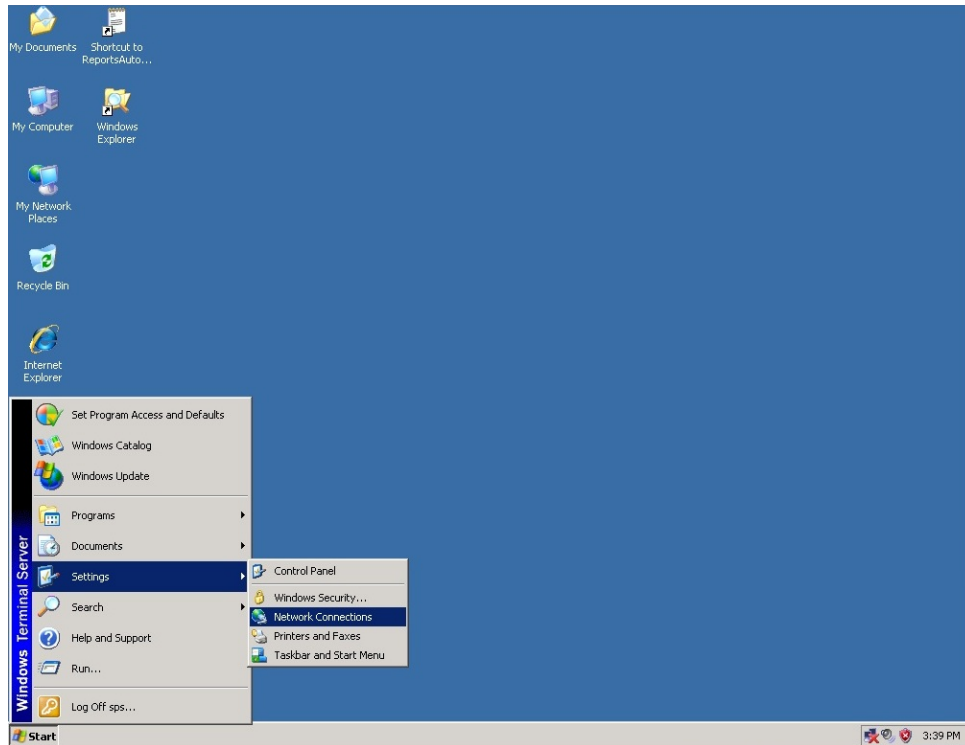
Before attempting to join the SupplyPoint™ to a network, the following questions must be answered:

- Is the network a workgroup or a domain? If the network is a domain, the SupplyPoint™ will require an account on the domain and a member of the IT department will be required to log it in.
- What protocol is in use? Most networks use TCP/IP, but there are other protocols, each of which presents its own unique challenges.
- If the networking protocol is TCP/IP, will the SupplyPoint™ have a fixed IP address or will it use Dynamic Host Configuration Protocol (DHCP)? If the SupplyPoint™ will have a fixed IP address, the IT department will need to provide the IP address, the Subnet Mask and, possibly, the Default Gateway.
- Who is going to be connecting to the SupplyPoint™ using the SupplyPoint™ Utilities? If possible, add these people to a SupplyPoint™ User group on the server (domains only). This will make configuring access to the computer easier.

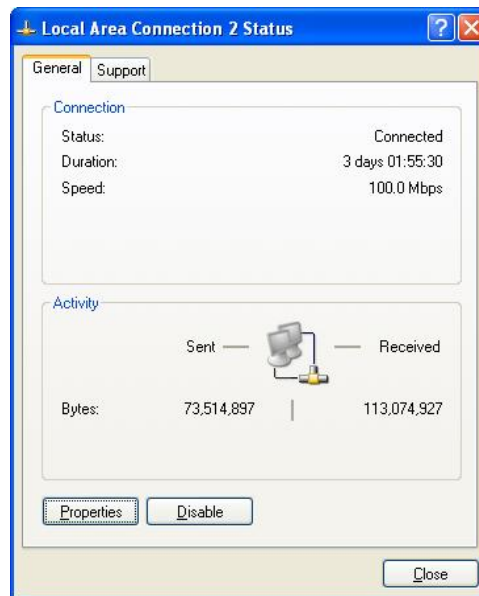
Entering IP Address Information

Most networks use the Dynamic Host Configuration Protocol (DHCP) to obtain IP address information. In situations where this is the case, the SupplyPoint™ will likely receive an address as soon as the network cable is connected. Proceed to the next section, either [Joining a Workgroup](#) or [Joining a Domain](#), to continue.

1. To enter IP address information manually, begin by looking at the PC's network connections. Do this by pressing the  button, selecting *Settings* from the Start Menu and *Network Connections* from the Settings Menu.



2. This will open the *Network Connections* applet, which provides access to all of the network and dialup connections that are available on the PC and allows you to configure them.
3. There will usually be only one connection, labelled *Local Area Connection*. Double-click on it to open the Local Area Connection Status.
4. The example to the right shows an active network connection. Note especially the *Activity* area of the display; on a system where IP address information is needed, you will frequently see packets being sent but not received. Selecting the *Support* tab will open a dialog showing the current IP address information. It also provides access to more information about the network configuration and a basic repair tool. Press



PROPERTIES to open the *Local Area Connection Properties* dialog box.

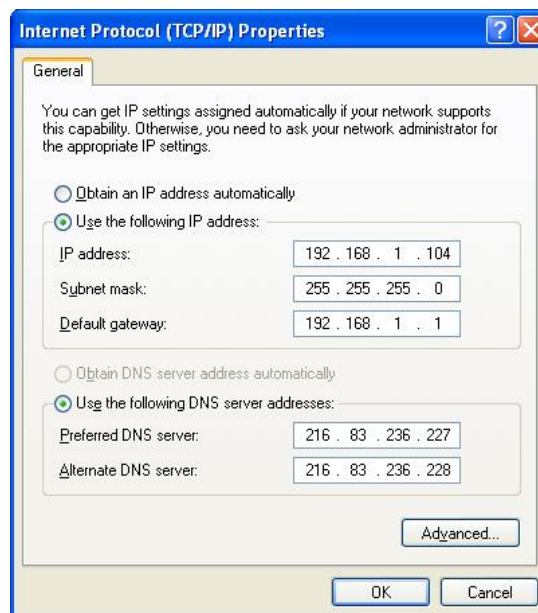
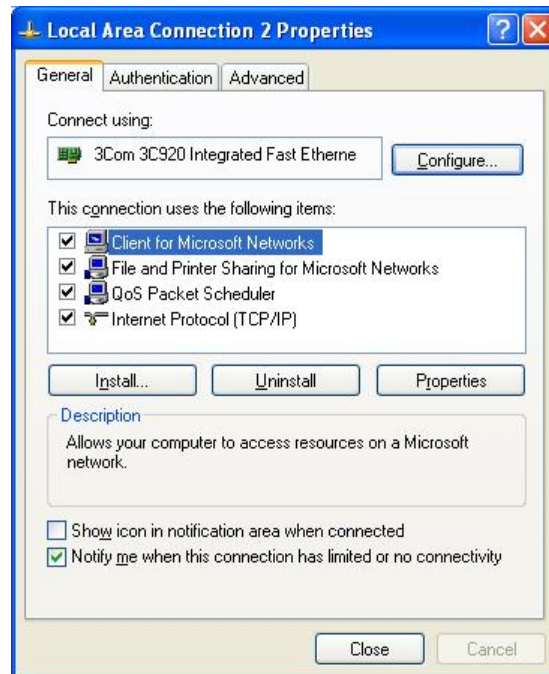
5. This box shows the protocols and services that are running on the PC. You will usually see the ones listed in the display. Click on the *Advanced* tab if for any reason you need to check the Windows Firewall settings (it should be off).

- If you are joining a network that uses another protocol (such as the IPX/SPX protocol used on most Novell networks), you would install it here. Since most networks use TCP/IP, we'll confine ourselves to it.
- If there is a protocol running that is not needed, click on it and press uninstall to **REMOVE** it.

Click on *Internet Protocol (TCP/IP)* and press **PROPERTIES** to continue.

6. By default, the SupplyPoint™ is configured to obtain addresses via the Dynamic Host Configuration Protocol (DHCP). That is why the bubble next to *Obtain an IP address automatically* is selected by default.

- Click on the bubble below it to enter the fixed IP address for the machine. Notice that when you do, the corresponding setting for the DNS address will be selected as well.



- It is possible to have manually entered DNS addresses and automatically assigned IP addresses. The reverse is never true.
7. Enter the necessary information.
 - **IP Address**, an identifier for the computer, which must be unique on the network.
 - **Subnet Mask**, a series of numbers that determines what segment of the IP address identifies the computer and which segment identifies the network. If you move the cursor to this field after entering the IP address, a default value will appear. Most of the time this is the correct number, but always check.
 - **Default Gateway**, the address of the computer or router on the network that provides access to other networks or the Internet.
 - **DNS Servers**, the address of the servers that provide name to IP address resolution on the network. This is especially important if you are going to use email, as without it the system has no idea what you mean when you enter the name of the customer's mail server.
 8. Once you have entered this information, press to continue.
 9. Press to close the *Local Area Connection Properties* dialog box.
 10. Press to close the *Local Area Connection Status* dialog box.

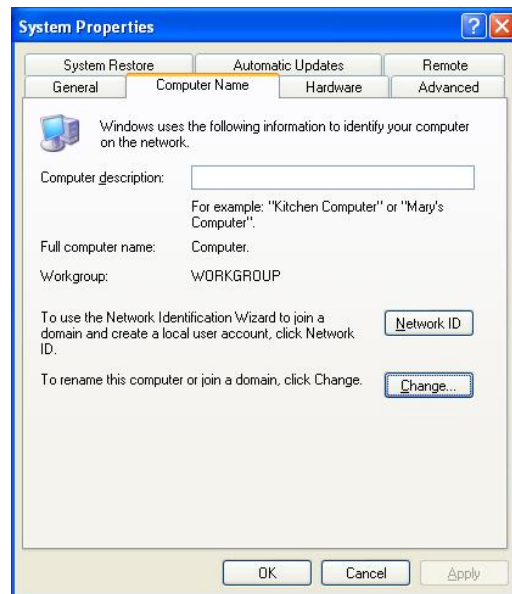
Joining the Network

When joining a network, regardless of whether the network is a domain or a workgroup, the process is going to be essentially the same, and you'll be looking at the same screens. Below are the dialog boxes you'll become familiar with when joining a network:

The System Properties Dialog Box

This is accessed by right-clicking on *My Computer* and selecting *Properties*. There is a great deal of information that can be acquired here, for example:

- General information about the PC can be found on the *General* tab.
- Device Manager and other hardware information can be found on the *Hardware* tab.
- Most importantly for this discussion, the name of the computer and the network affiliation can be found on the *Computer Name* tab.



Computer Name Changes Dialog Box

This is where changes to the computer name and domain/workgroup affiliation are made. It is accessed by pressing the change button on the *Computer Name* tab of the System properties dialog box.

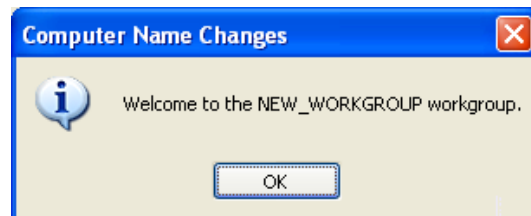
- Change the name of the computer by typing it in the *Computer Name* slot.
- Change the PC's domain or workgroup membership by changing either the *Domain* or *Workgroup* information under *Member of*.
- All changes made here will require a reboot



Joining a Workgroup

Of the two most common network types, domains and workgroups, workgroups are the easiest to join. They require no administrative help. Take the following steps to join the SupplyPoint™ to a workgroup.

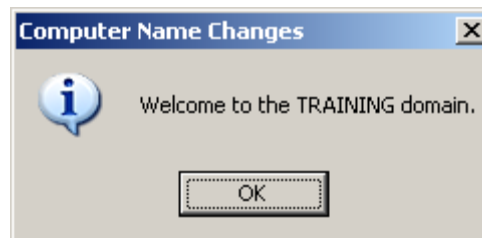
6. Right-click on the *My Computer* icon and select *Properties* from the menu that appears. This will open the System Properties dialog box.
7. Select the tab labelled *Computer Name*. You can alter the description of the computer here, as well as view the current computer name and domain affiliation. In order to change the name, press **CHANGE**.
8. This will open the Computer Name Changes dialog box. Enter the new workgroup name into the *Workgroup* field and press **OK** to continue.
9. Clear the welcome message that appears by pressing **OK**.
10. You will be prompted to reboot. Your changes will not be effective until you have rebooted the system.



Joining a Domain

Of the two most common network structures- the domain and the workgroup- the domain is prevalent. To join a domain, you will need the assistance of the domain administrator or of a member of the customer's IT staff who has the right to join computers to the domain. Although you are not likely to be the one performing this operation, it is a good idea for you to have a basic familiarity with the process.

8. Begin by right clicking on the *My Computer* icon and selecting *Properties* from the menu to open the System Properties dialog box.
9. Select the *Computer Name* tab to view the current name and affiliation of the PC.
10. Press the **CHANGE** button to open the Computer Name Changes dialog box.
11. Enter the name of the new domain into the *Domain* box and press **OK** to continue.
12. Enter the user name and password of a domain user who has the ability to join computers to the domain. This will generally be a domain administrator. It is usually best to make sure this person knows in advance that the vending machine is being installed, so that he can create an account for it on the domain if that is required. Press **OK** to continue.
13. If the process has been performed correctly, a welcome message will appear. Press **OK** to clear it.
14. You will be prompted for a reboot. The domain change will not be effective until you reboot the PC.



Users

Every computer requires users to operate it and the SupplyPoint™ is no exception. The users covered here are distinct from the SupplyPoint™ operators; those are covered in the System Configuration section below. There are two types of users

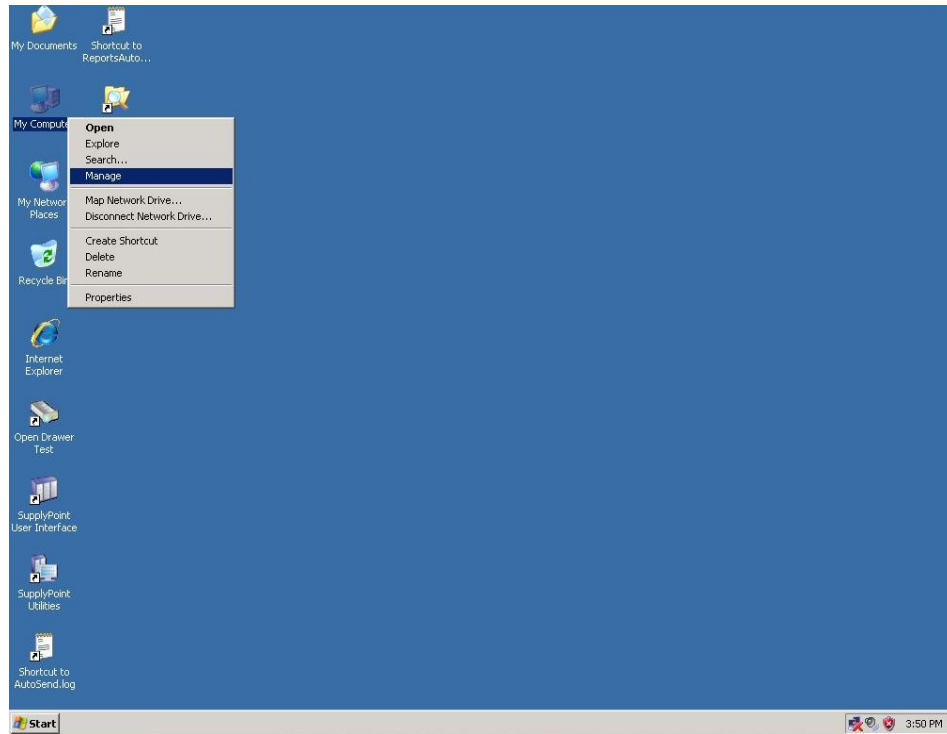
covered here- the user who logs into the SupplyPoint™ computer and the users who will have access to the SupplyPoint™ share when using a Microsoft Access database (i.e. people using the SupplyPoint™ Utilities).


Each machine has some users built in by default. There will always be at least an administrative account and a guest account (typically disabled). Additional users may be necessary if the SupplyPoint™ Utilities are being used remotely or if network security policies require a domain user to log in to the machine. This section describes the process of adding users in different network environments.

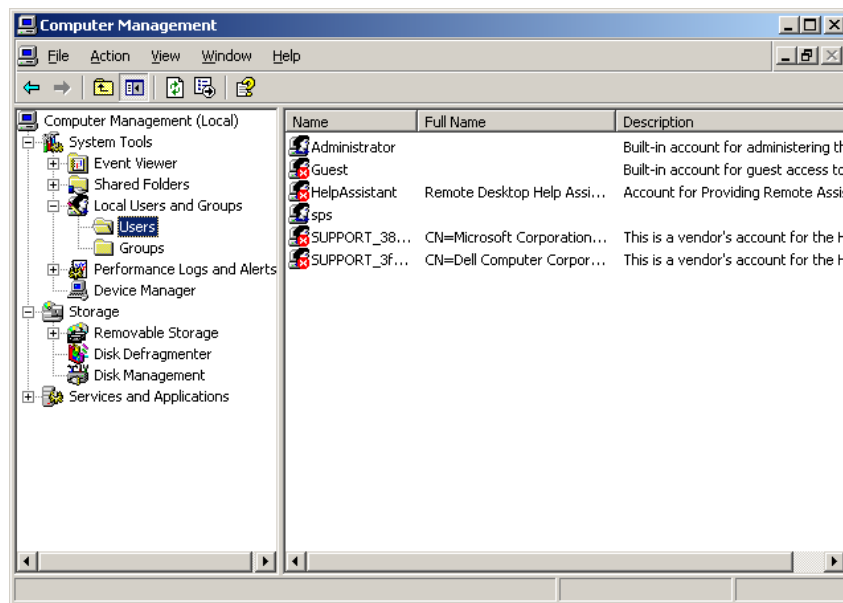
Adding Workgroup Users

The main drawback to the workgroup structure is in adding users to the system. In domains, as we will see later, you only need to give users access to shares. In workgroups, you need to create on the SupplyPoint™ the same users they use to log into their other company computers. To create workgroup users take the following steps.

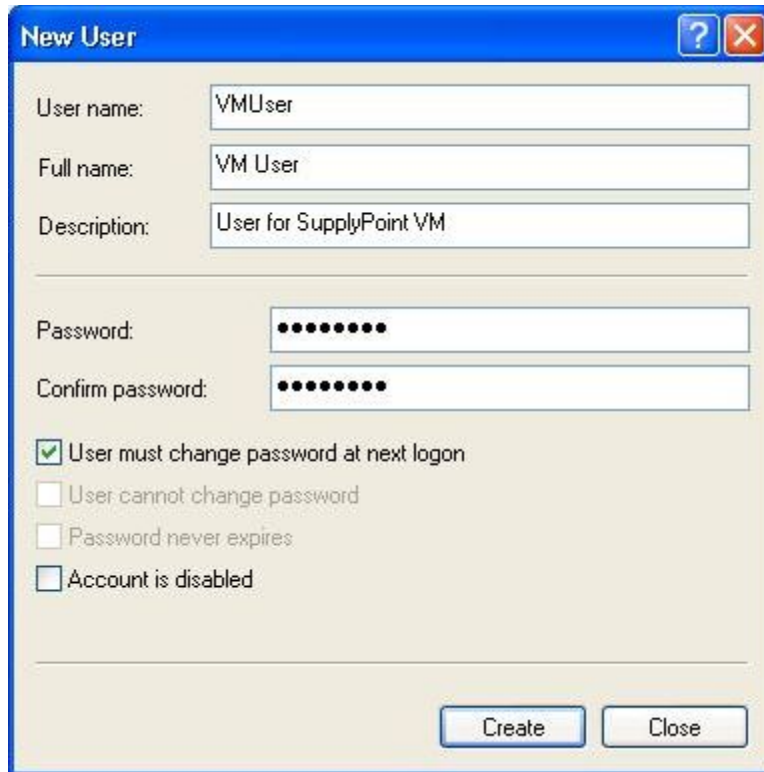
1. Right-click on the *My Computer* icon and select *Manage* to open the Microsoft Management Console.



2. Locate the folder called *Local Users and Groups*. Clicking on the  beside it will display two folders: *Users* and *Groups*.

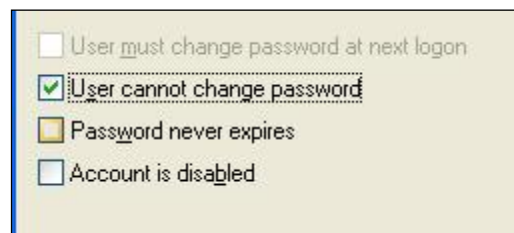


3. Click on the *Users* folder to display a list of users on the right-hand side of the screen.
4. Right-click on the empty space on the right side of the screen and select *New User* from the menu that appears.
5. In the New User dialog box enter at least the user name and password.



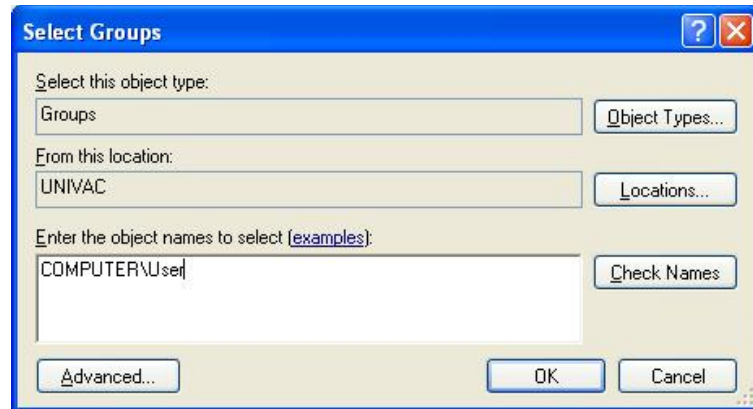
The 'New User' dialog box has a blue title bar with a question mark and a close button. It contains three text input fields: 'User name:' with 'VMUser', 'Full name:' with 'VM User', and 'Description:' with 'User for SupplyPoint VM'. Below these are two password fields, both filled with dots. At the bottom, there are four checkboxes: 'User must change password at next logon' (checked), 'User cannot change password' (unchecked), 'Password never expires' (unchecked), and 'Account is disabled' (unchecked). 'Create' and 'Close' buttons are at the bottom right.

6. Clear the check from the box labelled *User must change password at next logon*. Check the box that says *Password never expires*.



A close-up of the checkboxes from the previous dialog. The 'User must change password at next logon' checkbox is now unchecked. The 'User cannot change password' checkbox is now checked. The 'Password never expires' checkbox is still unchecked. The 'Account is disabled' checkbox is still unchecked.

7. Press **CREATE** to continue. The new user should now appear on the list.
8. Double-click on the new user to look at his properties. In the dialog box that appears, select the tab labelled *Member of*.
9. This display has a list of the user's group memberships. He is currently in the *Users* group, which confers only limited privileges to him. We want to add him to the Administrators group. Press **ADD** to continue.



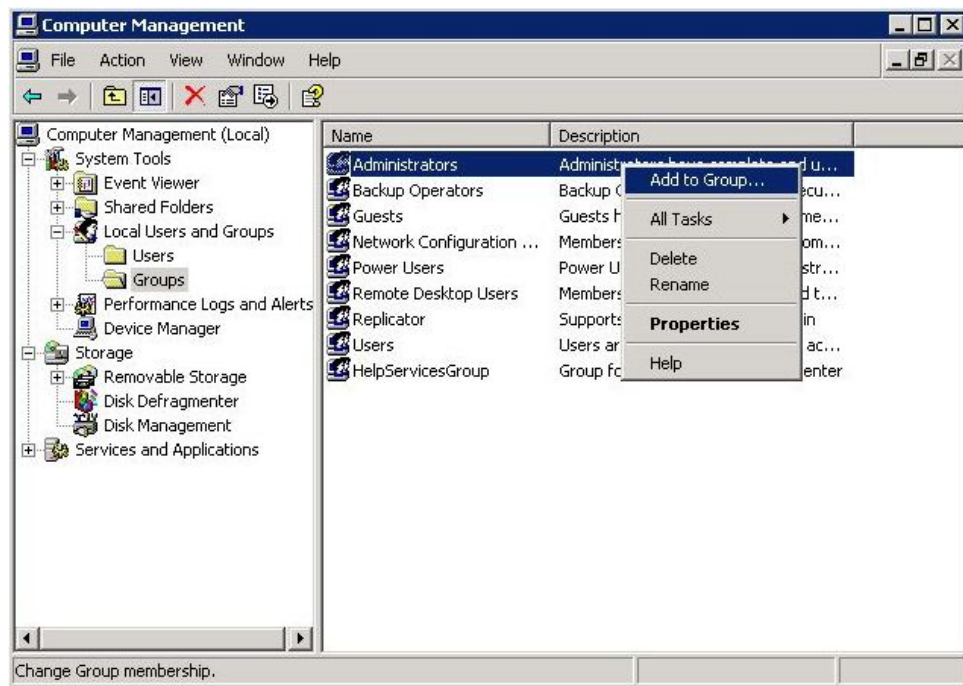
10. You can enter the name of the group here, using the format shown above. For instance, with the computer name of SPS01, you could enter SPS01\Administrators to add the new user to the administrators group. You can search for an appropriate group by pressing **ADVANCED**.
11. When the next display opens, the bottom section is generally empty. Press the **FIND NOW** button to display a list of groups in the selected location (in this case, the local computer).
12. Select a group and press **OK** to continue.
13. You will return to the first *Select Groups* screen. The name of the computer and the group will now appear in the window. Verify that they are correct and press **OK**.
14. The new group will now appear in the User properties. Press **APPLY** to commit your changes and **OK** to close the User properties.

Adding Domain Users

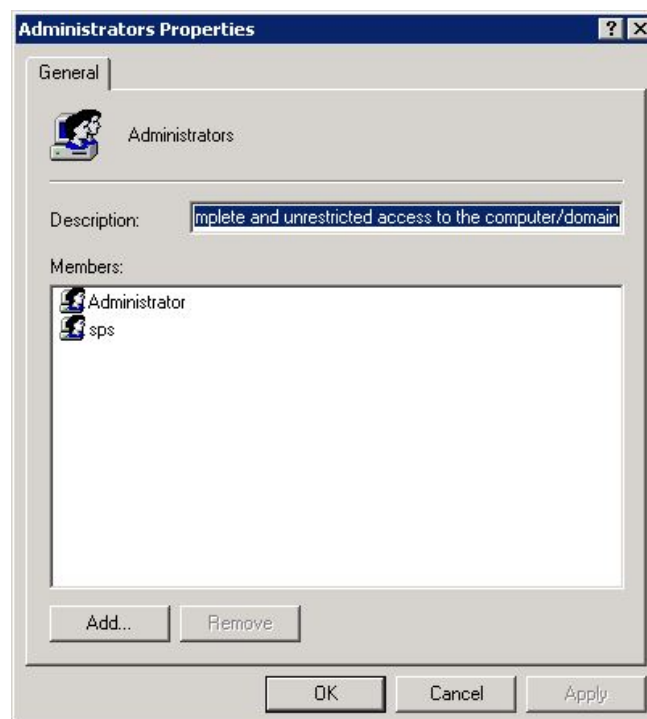
After joining the domain, there are two choices for the user logging into the SupplyPoint™. You can either continue using the local Administrator account to log in or you can use a domain user. The advantage of having the local administrator log in is that it will give you more control over the configuration of the PC. The advantage of having a domain user log in is that you have better access to network resources. The domain user account will have to be created on the domain server and then added to the user list on the SupplyPoint™. IT personnel will have to be responsible for creating the user. Here's how you add him to the computer:


1. Right-click on the *My Computer* icon and select *Manage* to open the Microsoft Management Console.
2. Select *Groups* under *Local Users and Groups*.

3. Right-click the *Administrators* group and then select *Add to Group* as shown below.

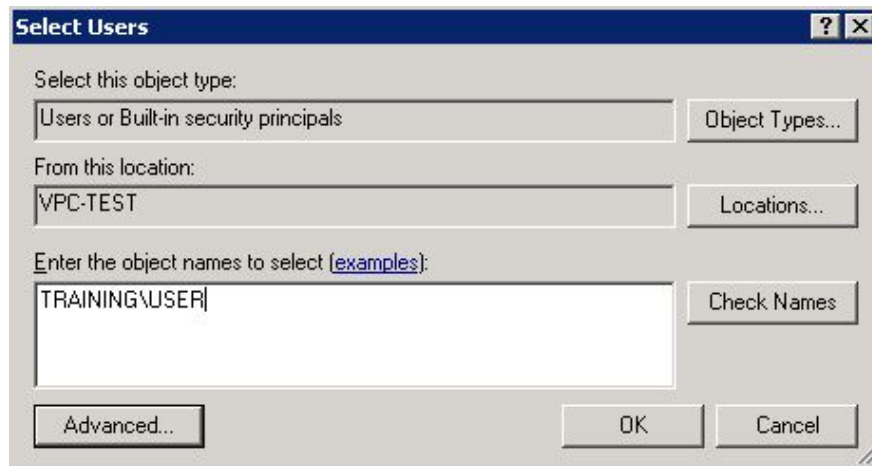


4. The users that are a member of the local administrators group will now be listed.



Next click the  button to select a domain user to add to the local administrators group.

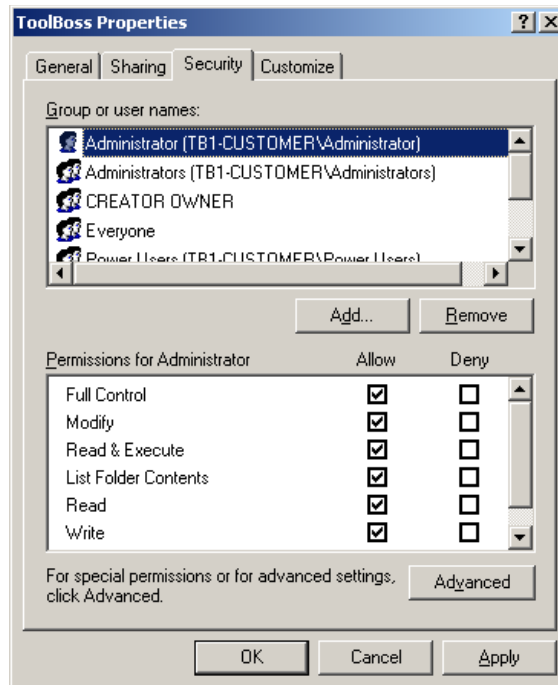
Next simply type the domain user in the box as shown below. In this example *TRAINING* is the domain and *USER* is the domain user name.



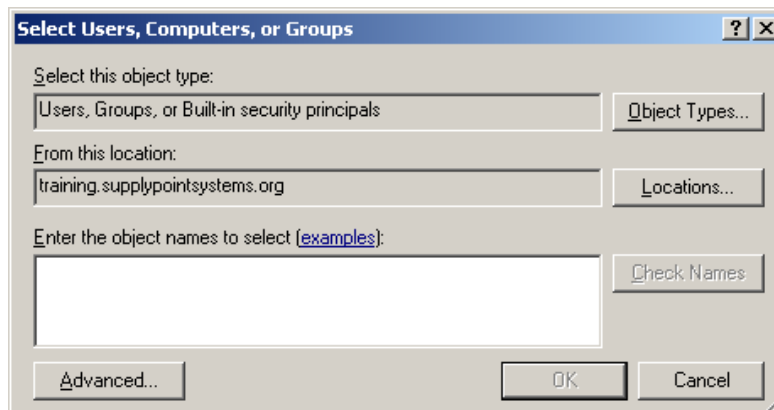
NTFS File Permissions

Adding users to the SupplyPoint™ as described above allows them to log into the computer at the machine. It is also one possible route towards giving remote users access to the SupplyPoint™; by adding them as described above, they will be allowed access to SupplyPoint™ data from wherever they are logged in. In many cases, however, it is not desirable to grant remote users access in this manner. In such cases you want only to give user's access to the SupplyPoint™-specific areas of the PC. You do this by applying NTFS file permissions. The importance of this is difficult to overstate. Most errors from the SupplyPoint™ Utilities are a result of permissions not being applied correctly. To set the NTFS File Permissions for the SupplyPoint™ share, take the following steps.

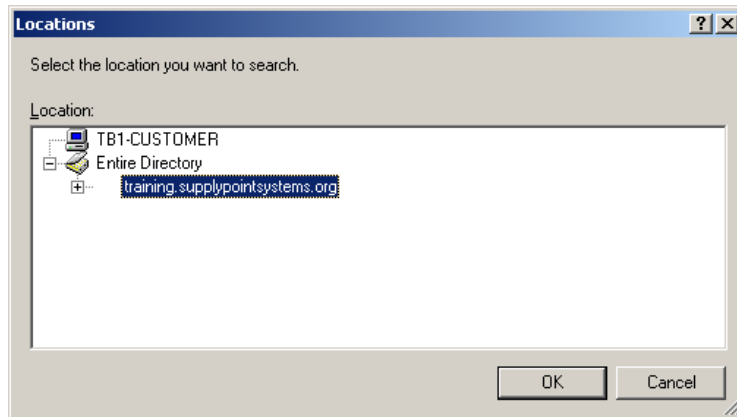
1. Open Windows Explorer by right clicking on *My Computer* and select *Explore*.
2. Browse to the shared SupplyPoint™ folder by opening *Local Disk (C:)*, then *Program Files*.
3. Right-click on the SupplyPoint™ folder and select *Sharing and Security...*
4. Select the *Security* tab.



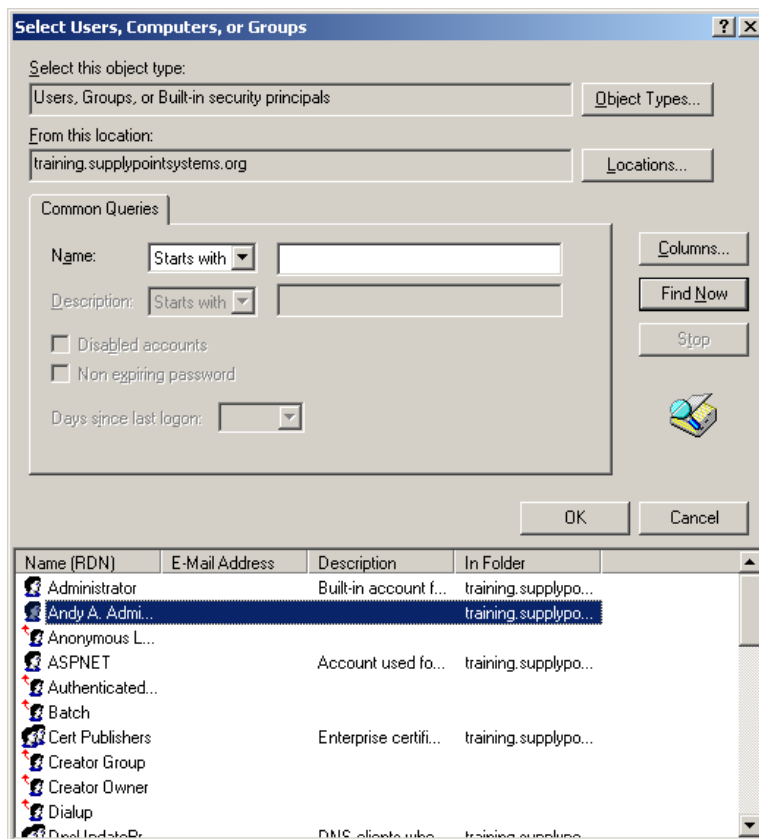
5. You will now see the list of users who have file permissions for the SupplyPoint™ folder. These will usually be local users only, which means you will need to add any network users. Press **ADD** to give specific network users access to the share.



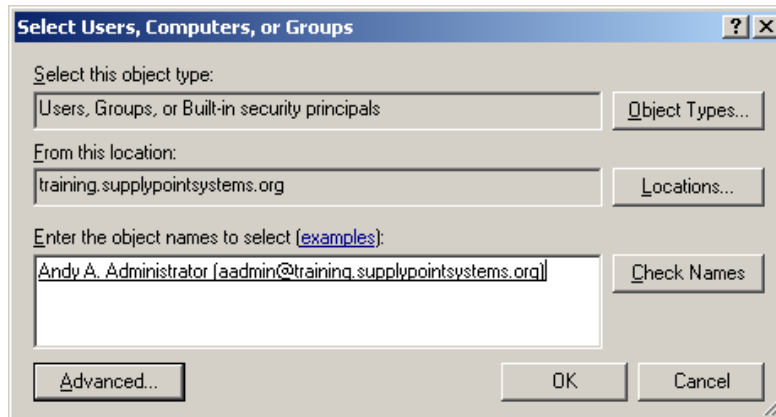
6. If you know the domain and name of the user, you can enter it here in the format **DOMAIN\user**. If you want to look for his location, press the **LOCATIONS** button.



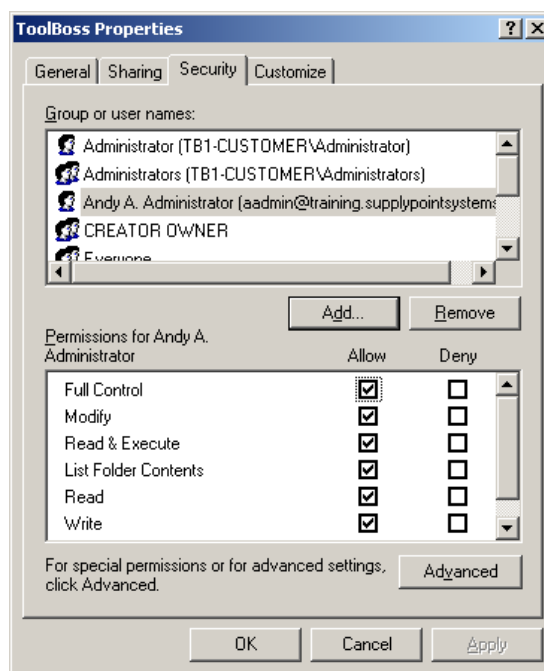
7. The Locations dialog box will show you the places you can look for your user. Select the appropriate location and press ok to return to the previous dialog box.
8. Verify that the correct location is in the *From this location* box and press **ADVANCED** to continue.



9. The bottom section of this display will be empty when it opens. Press **FIND NOW** to display a list of users and groups in the selected location.
10. Select the user and press **OK** to continue.



11. The user should now appear on the display. Press **OK** to continue.



12. Check the box that says *Full Control* and press **APPLY** to confirm the changes.

13. Press **OK** to close the SupplyPoint™ Properties dialog box.

Windows 2000 Networking

1. Once the SupplyPoint™ is installed and running, it will be necessary to configure the network settings. If the network is a TCP/IP-based network and is using the DHCP protocol for IP addressing, proceed to step 6. Otherwise, right-click on the *My Network Places* icon and select *Properties* from the options presented.
2. Right-click on the icon labeled *Local Area Connection*. Select *Properties* from the available options. This will display the network components currently in use by the computer.

3. If the necessary network protocol is not installed, select *Install* and follow the steps necessary to install it. If the protocol in use is TCP/IP, highlight it and click the *Properties* button. This will open the Internet Protocol (TCP/IP) Properties screen.
4. Enter the IP address, subnet mask and default gateway, all of which were obtained in step 1. If necessary, enter the address of a DNS (Domain Naming Service) server. Press *OK* when finished. Reboot if prompted.
5. Once the SupplyPoint™ has rebooted, right-click on the *My Computer* icon on the desktop and select *Properties* from the list that appears. Select the *Network Identification* tab.
6. To add the computer to a workgroup or a domain, press the *Properties* button.
7. Select either the *Domain* box or the *Workgroup* box and enter the appropriate name. Joining a workgroup requires nothing further. The computer will seek out the workgroup and be joined to it. Joining a domain will require the User Name and the Password of a domain member (usually an Administrator) who is authorized to add computers to the domain. Success in joining either a workgroup or a domain will be indicated by a welcome message issued by the network. Completion will require a reboot.

Adding a Domain User

Some network administrators will require a domain user to log into the SupplyPoint™. This is generally not a problem as long as the domain user has sufficient rights to the SupplyPoint™; it is recommended that the domain user be given local administrative rights to the system. The user that logs into the system by default has these rights. Take the following steps to add a domain user:

1. From the Windows desktop right-click on *My Computer*.
2. Select *Manage* from the list of available options. This will open the Computer Management console.
3. Expand the *Local Users and Groups* tree and select the *Groups* tree item.
4. On the right side of the display will be a list of available groups. Right-click on *Administrators*.
5. Select *Add to Group* from the list of options. A display similar to the one below will appear.
6. Press *Add* to display a list of users as shown below. Using the drop-down box labeled *Look in* will allow a search of the domain the computer is attached to or other domains with which it has a trust relationship.
7. Find the user to be added and press *Add*. His name should appear in the lower half of the screen. Press *OK* to continue.

8. The display shown in Step Five above will reappear. The new user should appear on the list. Press *Ok* to finish. The selected domain user now has local administrative rights to the SupplyPoint™.

Adding a Workgroup User

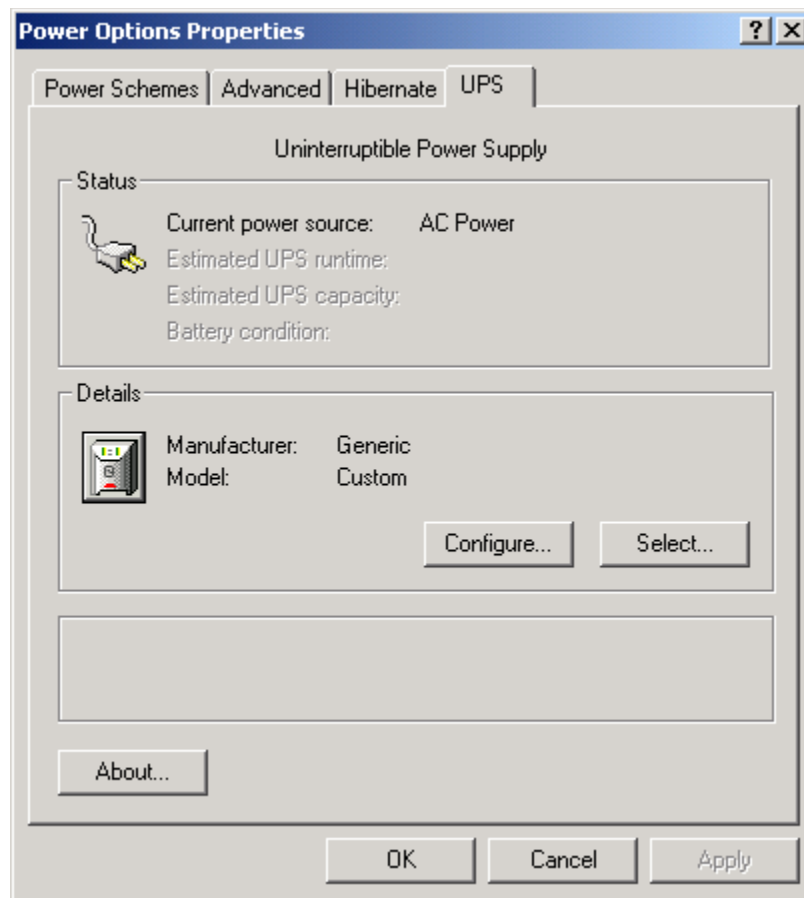
As described above a workgroup is a peer-to-peer environment, with no centralized security. Because of this, there must be an account for each user on each computer that the user accesses. Further, passwords for that user have to be the same, meaning that when the user changes his password on his usual computer he must change it on each additional computer he accesses. Take the following steps to add users in a workgroup environment:

1. From the Windows desktop, right-click on *My Computer*.
2. Select *Manage* from the list of available options. This will open the Computer Management console.
3. Expand the *Local Users and Groups* tree and select the *Users* tree item.
4. On the right side of the display will be a list of the users. Right-click anywhere in the white space and select *New User* from the list that appears.
5. Fill in the New User form with the User and Password information. If this user will be accessing the SupplyPoint™ from a remote computer, be sure that the information matches the login information from his regular computer.
6. Clear the check from the box that says *User must change password at next logon*.
7. Check the box reading *Password never expires*.
8. Click the *Create* button.
9. Click the *Close* button.
10. In the management console view double-click on the new user to open the user's properties.
11. Select the *Member of* tab.
12. Press *Add*.
13. Select the *Administrators* group and press *Add*.
14. Press *OK* to continue.
15. Press *Apply* and *OK* to save the changes.

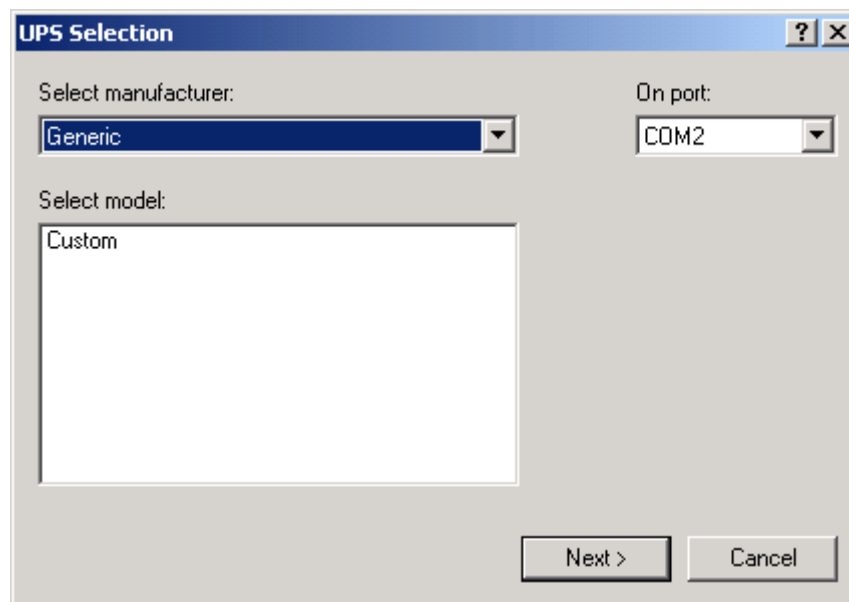
Legacy Serial UPS (Uninterruptible Power Supply)

The following describes how to configure Legacy Serial UPS through the Windows Control Panel (Windows 2000).

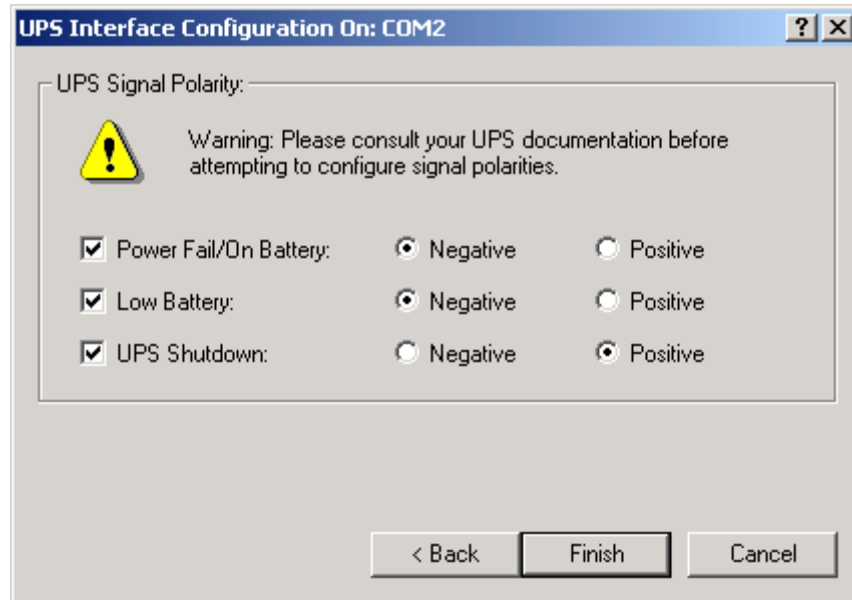
1. The UPS is configured through the *Power Options* icon on the Windows Control Panel. Select the UPS tab to display the screen below.



2. From the *Details* section, choose *Select*. The screen below will be displayed.



3. On this screen the manufacturer selected should be *Generic* as shown above. The port selected should be COM2. Choosing COM1 will cause a conflict with the PICs and neither the UPS nor the PICs will function correctly, rendering the SupplyPoint™ useless until the problem is corrected. Highlight the *Custom* selection under the *Select Model* heading and press *Next*. The screen in below will display.



4. On this screen the polarities are set that allow the computer to register signals from the UPS. They should be set as displayed above if the UPS is the one provided with the SupplyPoint™. For UPS units added later, consult the manufacturer's manual or web site for the correct settings.

UPS (MGE Pulsar Ellipse 300)

Vending machines installed outside of North America come equipped with the MGE Pulsar Ellipse 300 UPS. Once the MGE Pulsar has been connected to the computer via USB, it is immediately ready for use. Details regarding the power schemes used while running on UPS and the charge remaining can be viewed and configured through the *Power Options* icon on the Windows Control Panel. The MGE UPS provides 5 – 15 minutes of life after loss of power. In event of main power failure it will sound an alarm every 10 seconds, then every 3 seconds when its battery is almost exhausted. During this time, it is not possible to complete transactions. If main power is restored, the machine will resume normal operation, otherwise the UPS will signal the computer to shut down, ensuring no data loss due to power failure. In the event of a shut down, the unit should power up again when main power is restored. If the shut down is brief, turn the UPS off for approximately one minute and then reactivate it using the power button on the UPS. When turning the SupplyPoint™ off for an extended period (e.g. a holiday shutdown), it is best to power down the SupplyPoint™ computer and then turn off the UPS by pressing its power button. When operation

resumes, simply press the power button on the UPS and the SupplyPoint™ will start again.

E-Mail Error Codes (Versions 3.0.x and earlier)

Below are E-Mail error codes from versions 3.0.x, 2.4.x and 2.3.x.

Error Code No.	Description	Possible Cause/ Remedy
1	Failure opening file	Check permissions for the current user to the SupplyPoint™ directory on the vending machine and make sure he has read/write access to that folder.
2	Failure reading file	Check permissions for the current user to the SupplyPoint™ directory on the vending machine and make sure he has read/write access to that folder.
3	The process has run out of memory	This may indicate an errant process running on the SupplyPoint™ such as a virus, worm or Trojan horse. It may also be a symptom of physical memory failure. Contact Supply Point Systems technical support.
4	An error has occurred due to a problem with the message body or attachments.	The SMTP server may be set to reject certain kinds of attachments. Contact the IT department to see if there are any policies that may be blocking certain kinds of attachments.
5	There was a problem initiating conversation with the mail server. Ensure the setting of the Domain property is correct.	Re-try the transmission. If the process continues to fail contact technical support.
6	There was an error terminating the conversation with the mail server.	Re-try the transmission. If the process continues to fail contact technical support.
7	The from address was not properly formatted or was rejected by the SMTP mail server.	Many SMTP servers will refuse to forward mail when they cannot authenticate the sender. Make sure that the from address is entered correctly and is a legitimate address on the proper SMTP server.

8	An error was reported in response to a recipient address. The SMTP server may refuse to handle mail for unknown recipients.	This usually indicates that the message was successfully handed off to the SMTP server but the server refused to send it. The most common cause of this problem is that the from address has no relay rights on the SMTP server.
9	There was an error connecting to the SMTP server.	Re-try the transmission. If the process continues to fail contact technical support.
10	There was an error opening a file. If you have specified file attachments, ensure that they exist and that you have access to them.	This could be indicative of a rights issue in either the C:\PROGRAM FILES or C:\PROGRAM FILES\SUPPLYPOINT directory. Be sure that the user running the report has write access to those folders.
11	There was an error reading a file. If you have specified file attachments, ensure that they exist and that you have access to them.	Check permissions for the current user to the SupplyPoint™ directory on the vending machine and make sure he has read/write access to that folder.
15	No mail server specified.	Specify an SMTP server in the <i>Electronic Transmission Settings</i> .
16	There was a problem with the connection and a socket error occurred.	This may indicate a failure to open TCP port 25 (SMTP). Make sure the port is not being blocked by the network administrator.
17	Could not resolve host.	The name of the SMTP server is unrecognized. Check the name of the SMTP server. Try using the IP address of the SMTP server if the name is right.
18	Connected but server sent back bad response.	Re-try the transmission. If the process continues to fail contact technical support.
19	Could not execute thread.	Re-try the transmission. If the process continues to fail contact technical support.
20	Cancelled as a result of calling the Cancel () method.	Re-try the transmission. If the process continues to fail contact technical support.
21	The operation timed out while the host was being resolved.	The operation is taking too long. Increase the <i>Email timeout in seconds (Global)</i> in <i>EDI Settings</i> .
22	The operation timed out while connecting.	Connection to the SMTP server is taking too long. Increase the <i>Email timeout in seconds (Global)</i> in <i>EDI Settings</i> .
24	ESMTP authorization failed.	The server does not recognize the user name or password used in Extended SMTP. Check and re-enter these pieces of information.

25	The selected ESMTP authentication mode is not supported by the server.	Change the <i>ESMTP Auth Mode</i> to 0 (off).
26	ESMTP authentication protocol error	Make sure that ESMTP settings are correct. If the problem continues contact technical support.
27	Socket timeout error.	Something in the process is taking too long. Increase the <i>Email timeout in seconds (Global)</i> in <i>EDI Settings</i> . This error most commonly occurs when dialup connections are used.

SQL Server – Technical Information

Platform

The SupplyPoint™ Application Suite can support the following versions of SQL Server, including Express editions:

- SQL Server 2005
- SQL Server 2008
- SQL Server 2008 R2
- SQL Server 2012

While all 4 versions are supported the use of SQL Server 2012 is recommended. If SQL Server 2008 R2 edition is used, the database will be unable to take advantage of the SupplyPoint™ Enterprise Hosted Solution at a later date.

The SupplyPoint™ Enterprise Hosted Solution, which is in the final stages of development and testing, will allow access to system data and configuration from any internet connection via the secure, 256-bit encrypted, SupplyPoint™ Websync Portal. For further details of the SupplyPoint™ Enterprise Hosted Solution please contact your local agent who can provide you with more details.

Storage Allowance

While it is difficult to pinpoint exact storage requirement for individual databases, SupplyPoint™ make the following observations;

- The maximum space requirement for your SupplyPoint™ database should be no more than 500Mb – 1Gb.

- The “typical” size of a SupplyPoint™ database is unlikely to exceed between 300-400Mb.
- Using the recommended configuration and regular maintenance of your SupplyPoint™ database will keep the database size to a manageable level with the data file only likely to exceed 500Mb under extreme heavy usage. For more details on the recommended configuration and maintenance options please refer to the Recovery Mode and Maintenance sections contained further in this document.
- Scheduled archiving of the SupplyPoint™ User Interface’s Transaction Log will ensure historic data is still available should it be required for future audit purposes. With usage history often sent to external systems the requirement to retain all historic data within the active SupplyPoint™ database is greatly reduced and subsequent scheduled archiving of historic data is a recommend maintenance task which will help to manage the overall size of the SupplyPoint™ database, keeping it to a minimum.

Recovery Mode

One of the main areas of concern for anybody managing a SQL database will be the increase in size over time. The SQL Server Transaction Log File ([databasename].ldf) holds the entire history of changes made within the database and can therefore contribute greatly to the total size of the SupplyPoint™ database files.

When running a SQL Server database in Full Recovery Mode the log file will grow significantly as the system is used. While this provides increased protection for data it isn’t necessary when a formal Backup procedure is in use for the SupplyPoint™ database.

SupplyPoint™ recommend using Simple Recovery Mode which will mean the log file size will not increase to the same kind of levels as it will when running in Full Recovery Mode. Providing a structured Backup routine is in place; the Simple recovery mode will eliminate some of the tasks associated with the management of the SQL Server Transaction Log and will aid in keeping the disk space required for the SupplyPoint™ database to a minimum.

We recommend that if people are not aware of the difference between Full and Simple Recovery Mode(s) they should operate in Simple Recovery Mode. Anybody who wishes to run in Full Recovery mode is advised to routinely Truncate the log file following a database backup. Doing so will significantly reduce the size of the

working log file while still enabling you to revert back to the database and its state at any point in time that you choose.

To identify which Recovery Mode a database is using take the following steps within SQL Server Management Studio:

1. After connecting to the appropriate instance of the Microsoft SQL Server Database Engine, in Object Explorer, click the server name to expand the server tree.
2. Expand Databases, and, depending on the database, either select a user database or expand System Databases and select a system database.
3. Right-click the database, and then click Properties, which opens the Database Properties dialog box.
4. In the Select a Page pane, click Options.
5. The current recovery model is displayed in the Recovery model list box.
6. Optionally, to change the recovery model select a different model list. The choices are Full, Bulk-logged, or Simple.

Database Maintenance

The SupplyPoint™ Application Suite comes complete with tools that aid the scheduled maintenance of a SQL Server database.

The Automated Backup Tool available, SPSSQLUtility.exe, provides a backup routine that encompasses the Shrink function of SQL Server along with the Verification of a database backup when it is created.

It is recommended that anybody not using the Automated Backup Tool for SQL Server backups ensures that the database is routinely 'shrunk' to reclaim any redundant space within the database and log files.

Scheduled defragmentation processes are also recommended on your SupplyPoint™ database. With databases subject to suffering from some of the same problems as HDD's; if data is not organized in an optimal fashion, response and processing times can increase significantly. Having a regular 'defrag' performed on a database is a step to ensure it is in the best possible state for continued operation at acceptable levels.

Authentication

Both Windows Integrated and SQL Server Authentication can be used when connecting the SupplyPoint™ Application Suite to SQL Server. Whichever method is used, the authentication method should grant full ownership of the SupplyPoint™ database to all SupplyPoint™ applications.

SupplyPoint™ recommend the use of SQL Server Authentication to avoid possible network permission issues encountered when running Windows Integrated Authentication.

Tables

Applications such as the Database Update Tool, SPSTDBUpdate.exe, and the User Interface, SPSTUI.exe, require the ability to affect the SupplyPoint™ database schema on a dynamic basis.

The SupplyPoint™ User Interface in particular alters the database schema at various stages when a User is undertaking transactions. Temporary tables are created and deleted as part of the transaction process.

If the applications are restricted in their ability to manipulate the database schema they will cease to function correctly and prohibit the use of machines at an end-user level.

Stored Procedures

Although not used in all versions and applications, parts of the SupplyPoint™ Application Suite utilize Stored Procedures during their operation.

The Database Update Tool, SPSTDBUpdate.exe, will be required to create the Stored Procedures as part of an update routine. Failure to allow the update tool to Create and Alter the Stored Procedures and inhibit their use will cause the SupplyPoint™ Application Suite to cease to function correctly.

Triggers

Versions of the SupplyPoint™ software that utilize functionality such as the SupplyPoint™ Data Replication application(s) will require the use of database triggers on the SQL Server database.

The database update tool, SPSTDBUpdate.exe, will be required to create the Triggers as part of an update routine. Failure to allow the update tool to Create or Drop the Triggers and inhibit their use will cause the SupplyPoint™ Application Suite to cease to function correctly.

Instances

With IT departments building/maintaining their enterprise solutions using SQL Server technologies it may be necessary to “hide” the instance installed on a Vending Machine PC, so that it doesn’t appear in the IT departments list of servers. Please note; this is only necessary in situations where SQL Server is installed on the Vending Machine PC and is not managed by the internal IT department. For details on how to hide, and connect to a hidden instance of SQL Server, please contact Supply Point Systems Ltd.

In some circumstances it may be necessary to hide an instance of SQL Server so that it doesn’t appear on an internal IT departments list of servers.

With large numbers of companies using SQL Server enterprise solutions the IT department may take exception to finding “miscellaneous” installations of SQL server throughout their organization, even though it might not cause a “technical” problem in being there.

To hide an instance is straight forward;

1. Firstly; open the *SQL Server Configuration Manager*, this is typically found in Start > Programs > Microsoft SQL Server 2012 > Configuration Tools > SQL Server Configuration Manager.
2. In the left-hand window pane; expand *SQL Server Network Configuration* and you will see a branch called *Protocols for EXP_2012*, where EXP_2012 is the name of the installed SQL Server instance.
3. Right-click *Protocols for EXP_2012* and select *Properties*.
4. On the *Flags* tab; change the setting for *Hide Instance* from *No* to *Yes*.
5. To save the change click *Apply* followed by *OK*.

With the instance of SQL Server (EXP_2012 in this example) now hidden; you need to assign it a *TCP Port* so that connections to our chosen instance can be inferred by specifying a port number within the SupplyPoint™ software.

If you fail to assign a port number to a hidden instance you will not be able to connect to it from another system.

Assigning a *TCP Port* to an instance is straight forward;

1. Firstly; open the *SQL Server Configuration Manager*, this is typically found in Start > Programs > Microsoft SQL Server 2012 > Configuration Tools > SQL Server Configuration Manager.
2. In the left-hand window pane; expand *SQL Server Network Configuration* and you will see a branch called *Protocols for EXP_2012*, where EXP_2012 is the name of the SQL Server instance.
3. Having selected the EXP_2012 instance in the left-hand window pane; right-click the *TCP/IP* entry in the list on the main window and select *Properties*.
4. On the *IP Addresses* tab; scroll down to the bottom of the list and under the *IP All* section, specify a value for the *TCP Port* setting, 12345 for example.
5. To save the change click *Apply* followed by *OK*.

Having hidden the instance and assigned a port number to that instance; you can now connect to it using the SupplyPoint™ software, without having to specify the instance name in the database setting windows.

In the example shown below we have omitted the instance name of EXP_2008 and have just specified the port number after the server name, which in this case is DELL_OPTI.

The screenshot shows a 'Database Login' dialog box with the following fields and controls:

- Access** tab selected.
- SQL Server** section:
 - Text box: DELL_OPTI
 - Text box: DELL_OPTI,12345 (highlighted)
 - Buttons: Search, Add
- Database** section:
 - Text box: MY_SPS
- Username** section:
 - Text box: sa
- Password** section:
 - Text box: masked with dots
- Timeout** section:
 - Text box: 15
- License Directory** section:
 - Text box: C:\Program Files (x86)\SupplyPoint\Database
 - Button: Search...
- Buttons**: Cancel, Login

Configuring the installed instance of SQL server this way, on a Vending Machine PC, will enable you to ensure the internal IT department is not shown instances that they do not have to manage, thus removing something which otherwise would have provided a constant irritation the IT departments Database Administrator.

Contact Information

If you call technical support, please have the following information available:

The correct version of the User Interface (shown on the login screen).

The exact error message reported (if any).

Support hours are from 7:30 a.m. to 5:30 p.m., Greenwich Mean Time, Monday through Friday, holidays excluded.

Technical support can be reached at:

Supply Point Systems, Ltd.

Unit B Swift Park

Swift Valley Industrial Estate

Old Leicester Road

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CV21 1DXZ

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Fax: +44 (0)84 4576 1248

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Certificate of Compliance

Certificate Number: E207079 - E220679
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