SelfCheck™ System
C-Series

User Guide

3M Library Systems

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3M™ SelfCheck™ System C-Series User Guide

78-8129-2093-8 Rev. B2

Software Version 1.5

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Contents

Safety information

Read, understand, and follow all safety information contained in these instructions prior to installation and use of the 3M™ SelfCheck™ System C-Series C1 Model 877. Retain these instructions for future reference.

Intended use

The 3M SelfCheck System C-Series C1 Model 877 is intended for use by library patrons in checking RFID-tagged books back into a library with minimal assistance by library staff. The system is offered in versions suitable for installation into fire-rated or non-fire-rated partition walls.

The system must be installed as specified in the SelfCheck System C-Series C1 Model 877 *Contractor's Package*. It is intended for use in a library environment, and has not been evaluated for other uses or locations.

EXPLANATION OF SIGNAL WORD CONSEQUENCES	
⚠ **DANGER:**	Indicates a potentially hazardous situation, which, if not avoided, will result in death or serious injury and/or property damage.
⚠ **WARNING:**	Indicates a potentially hazardous situation, which, if not avoided, could result in death or serious injury and/or property damage.
⚠ **CAUTION:**	Indicates a potentially hazardous situation, which, if not avoided, may result in minor or moderate injury and/or property damage.
CAUTION:	Indicates a potentially hazardous situation, which, if not avoided, may result in property damage.

EXPLANATION OF PRODUCT SAFETY LABEL SYMBOLS	
	**Attention: Read accompanying documentation**
	**Risk of electric shock**
BACKLIGHT CONTAINS MERCURY, DISPOSE ACCORDING TO LOCAL, STATE, AND FEDERAL LAWS	**Display Unit: Mercury disposal hazard**

⚠ WARNING

To reduce the risk associated with fire due to incorrect installation or modification of 3M-supplied system components or the use of non-approved replacement components:

- Do not attempt to modify or repair—no user serviceable parts—contact 3M Service for repair.
- Use approved system components installed by 3M service personnel only.

⚠ WARNING

To reduce the risk associated with fire due to insertion of non-authorized items into chute:

- Install security procedures and equipment appropriate to conditions; comply with applicable building codes and insurance concerns.

To reduce the risk associated with hazardous voltage due to a user attempting to service a component, incorrect installation of system components, or use of the system when damage has occurred:

- Do not attempt to modify or repair—no user serviceable parts—contact 3M Service for repair.
- Use approved system components installed by 3M Service personnel only.
- Do not use the SelfCheck system if enclosures or power cords are damaged—contact 3M Service for repair.

⚠ CAUTION

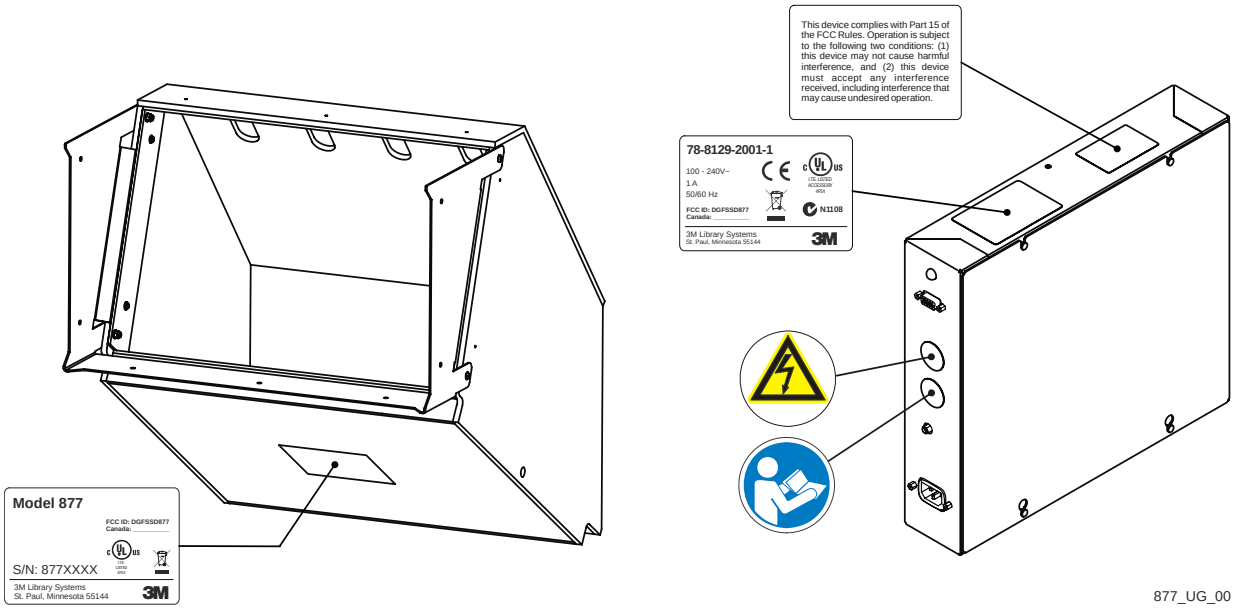
To reduce the risk associated with environmental contamination due to the incorrect disposal of the lithium battery in the computer, mercury in the monitor/display, or any circuitry that contains lead in the solder:

- At the end of service life, dispose of the computer, display, and other components in accordance with federal, state, and local requirements.

To reduce the risk associated with repetitive strain injury from repeated lifting of library materials:

- Operation of this product may involve repeated body movements. To minimize possibility of repetitive stress injury, avoid prolonged repetitive movements, rest when becoming fatigued, and, when possible, alternate job functions with other people. Avoid awkward reaching for items.

Label locations



877_UG_00

Regulatory compliance

EMC compliance USA and Canada

FCC Radio Frequency Rules and Regulations

This equipment has been tested and found to comply with the limits for a Class A device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can emit radiated radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at their own expense.

NO MODIFICATIONS. Modifications to this device shall not be made without the written consent of the 3M Company. Unauthorized modifications may void the authority granted under Federal Communications Commission Rules permitting the operation of this device.

FCC intentional radiator certification

FCC ID: DGFSSD877

This equipment contains an intentional radiator approved by the FCC under the FCC ID number shown above. This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

NO MODIFICATIONS. Modifications to this device shall not be made without the written consent of the 3M Company. Unauthorized modifications may void the authority granted under Federal Communications Commission Rules permitting the operation of this device.

Industry Canada radio frequency rules and regulations

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

CANADA: Pending

Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference received, including interference that may cause undesired operation of the device.

EMC compliance Europe

This equipment complies with the requirements of the RTTE and EMC directives.

Overview

Welcome to the 3M™ SelfCheck™ System C-Series.

The SelfCheck System C-Series is a “smart chute” system. It automates check-ins by reading RFID tags as books and other library items slide down the return chute. Then it checks them in, generates item and exceptions reports, and prints hold slips for the exceptions.

Please take the time to read this guide. It will help you understand how your SelfCheck system works. Keep it accessible when the system is in use. It will serve as a reference guide when questions arise.

Components

Computer (optional)

The SelfCheck system requires the use of a dedicated personal computer. Minimum requirements include Microsoft Windows XP with SP2, application of the 3M Windows XP Systems Configuration CD, a 2-GHz Intel Pentium 4 CPU, 512 MB RAM, 20 GB or greater hard disk, keyboard, mouse, and a CD-ROM drive.

Chute with RFID antenna

A 3M-provided RFID antenna is mounted to the chute. The RFID antenna detects the RFID tags as they pass over the chute. The RFID tag information is then passed to the computer.

Color touch-screen monitor (optional)

The color touch-screen monitor can be used by staff to monitor the system status and perform other operations. The monitor is connected to the PC that is connected to the RFID reader. Other monitors with a minimum screen resolution of 1024 by 768 can be used.

Hold slip printer

The 3M-provided staff printer is a thermal printer. It does not require toner or ribbons. (Its use is not required; the library may supply its own printer.) Hold slip printing can be turned on or off. The hold slip text and font can be edited in the 3M™ SelfCheck™ System Manager.

Interconnect box

The interconnect box contains the RFID reader and the power supplies for the RFID reader, touch-screen monitor, and 3M-provided printer.

Communications

The SelfCheck system communicates with the library’s circulation system over the library’s local area network. It uses the Standard Interface Protocol Version 2.0 (SIP 2.0).

Software installation

If the SelfCheck system computer is supplied by 3M, the SelfCheck system software should already be installed. If you should need to install or reinstall the SelfCheck system software yourself, please follow these instructions.

Step 1 – Install the Windows XP System Configuration Update

The system configuration update makes the following changes to the SelfCheck system's computer:

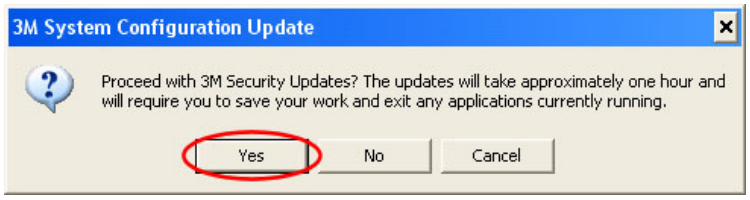
- Turns off services that are not being used.
- Installs additional drivers.
- Installs a standard password for use by service technicians.
- Installs Windows XP Service Pack 2 if required.
- Adds the ability to download and install future security updates from a 3M server.

To install the configuration update

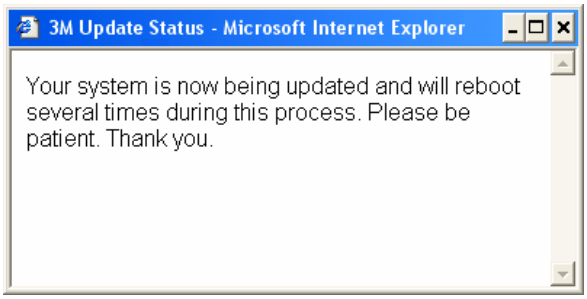
1. Verify that the mouse and keyboard are connected to the computer and ready to use.
2. Turn on the computer and wait for all programs and services to finish loading.
3. Disable the Windows screen saver.
4. Insert the 3M Windows XP System Configuration CD into the CD drive.
5. Wait for a message asking if you want to proceed.
6. Click **Yes**.

   A **3M Update Status** message appears, after which the computer restarts.

   During the upgrade, the computer reboots a total of eight times. The message appears after each restart.

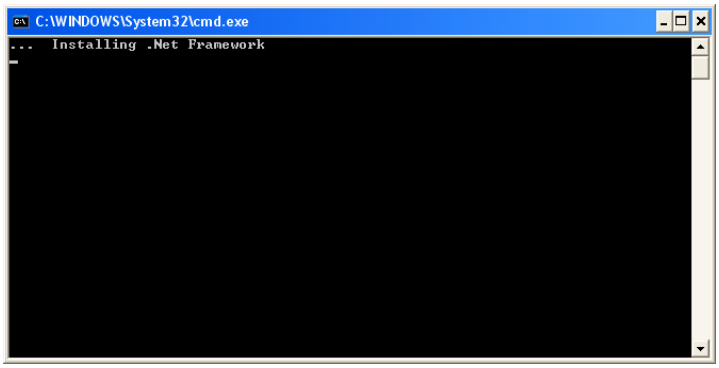


Click Yes to proceed



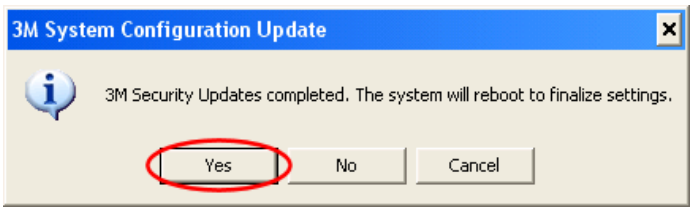
3M Update Status message

Several command windows appear while the update process is running.



Command window

When the update is finished, a completion message appears.



Completion message

7 Remove the CD from the CD drive and place it back into its case.

8 Click **Yes** to restart the computer.

9 Go to “Step 2 – Install the 3M™ SelfCheck™ System software.”

Step 2 – Install the 3M™ SelfCheck™ System software

1 Start the computer if it is not running.

2 Insert the SelfCheck System C-Series CD. It should start automatically.

3 Follow the instructions that appear on the screen until you are notified in the command window that the installation is complete.

4 Go to “Step 3 – Install the printer drivers.”

Step 3 – Install the printer drivers

Before you can use the Ithaca® iTherm™ Series 280 printer that is supplied with the SelfCheck system, you must install and configure the Ithaca USB port and printer drivers.

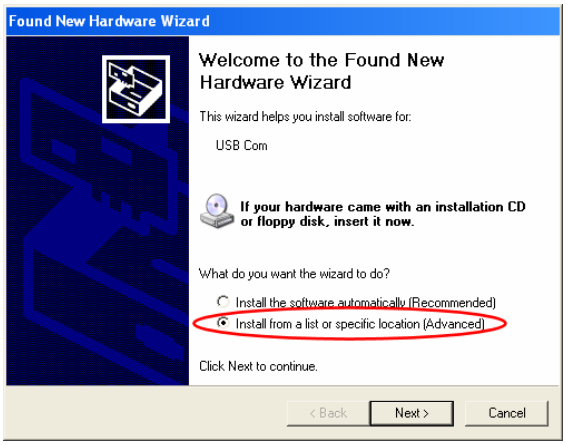
Install the USB port and driver

1 Make sure the printer’s USB cable is not connected to the computer.

2 Plug the Ithaca iTherm Series 280 printer into a power source, and then turn on the printer.

3 Connect the USB cable between the printer and your computer.

4 When the **Found New Hardware Wizard** appears, click **Install from a list or specific location**, and then click **Next**.

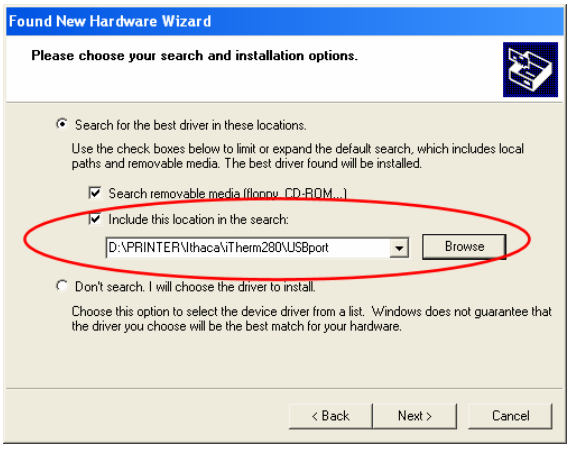


5 Click **Include this location in the search**, browse to the PRINTER\Ithaca\iTherm280\USBport folder on the CD, and then click **Next**.

6 Click **Finish**.

This only causes a USB port to be installed on your machine. *The printer is not installed yet!*

4 Click Install from a list or specific location



5 Browse to PRINTER\Ithaca\iTherm280\USBport

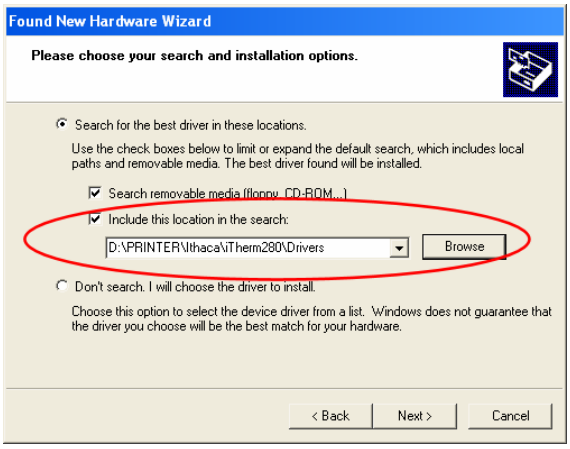
7 When the **Found New Hardware Wizard** reappears, again click **Install from a list or specific location**, and then click **Next**.

8 Click **Include this location in the search**, browse to the PRINTER\ Ithaca\iTherm280\Drivers folder on the CD, and then click **Next**.

9 Click **Finish**.

10 Restart the computer when prompted.

11 When the computer restarts, cancel the installation program, but leave the CD in the CD drive.



8 Browse to PRINTER\Ithaca\iTherm280\Drivers

Install the printer driver

1 Click **Start**, click **Settings**, click **Printers and Faxes**, and then double-click **Add Printer**.

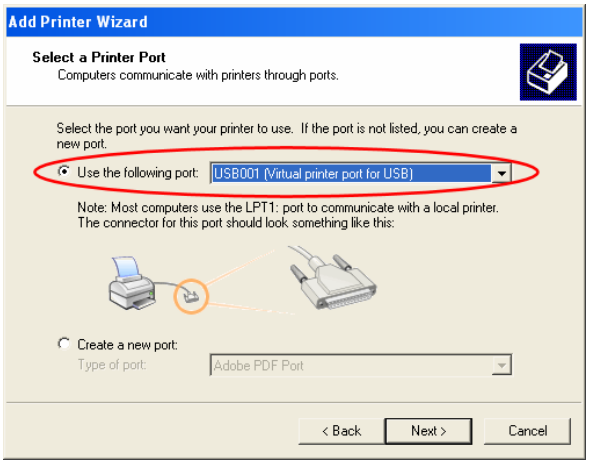
2 Click **Next**.

3 Select **Local Printer attached to this computer**, and then clear the check box for **Automatically detect and install my Plug and Play printer**.

4 Click **Next**.

5 In the **Use the following port** box, select **USB*xxx* (Virtual printer port for USB)**, and then click **Next**.

6 In the **Install Printer Software** dialog box, click **Have Disk**.



5 Select the USB port

7 In the **Install from Disk** dialog box, browse to the PRINTER\Ithaca\iTherm280\Drivers folder on the CD, and then click **OK**.

8 Select **Ithaca** from the **Manufacturers** list and **Series 280** from the **Printers** list, and then click **Next**.

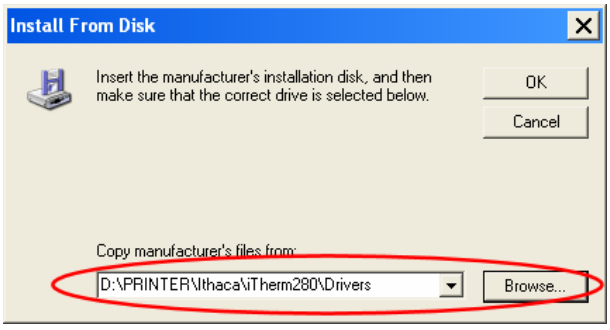
9 In the **Name Your Printer** dialog box, name the printer **Series 280** and select it as the default printer.

The printer must be named **Series 280** for the SelfCheck system diagnostics to work properly.

10 Click **Next**, and then click **Next** again.

11 If you want to print a test page, click **Yes**, and then click **Next**.

12 Click **Finish**. If a message appears that says the software has not passed Windows Logo testing, click **Continue Anyway**.



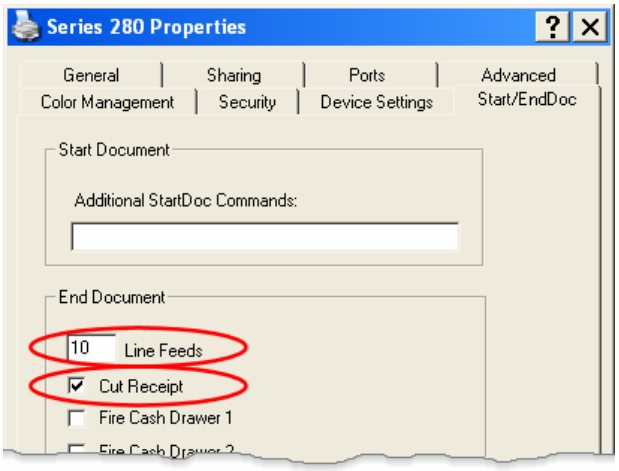
7 Browse to PRINTER\Ithaca\iTherm280\Drivers

Configure the printer driver

1 In the **Printers and Faxes** window, right-click **Series 280**, and then click **Properties**.

2 On the **Start/EndDoc** tab, set **Line Feeds** to **10** and select **Cut Receipt**.

3 On the **Advanced** tab, click **Printing Defaults**.

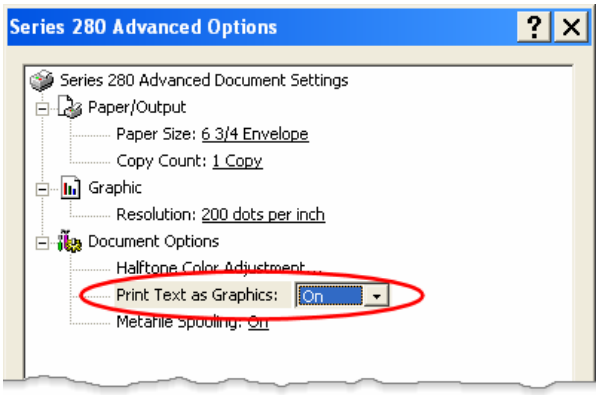


2 Set Line Feeds to 10 and select Cut Receipt

4 On the **Paper/Quality** tab, click **Advanced,** and then set **Print Text as Graphics** to **On**.

5 Close the **Series 280 Properties** dialog boxes by clicking **OK** in each.

6 On the Windows Taskbar, click **Start**, and then click **Stop 3M SelfCheckCSeries**.



4 Turn on Print Text as Graphics

7 To determine which COM port has been assigned to this printer, click **Start**, click **Run**, type **usbman**, and then click **OK**. Note the COM port number, and then close the **Ithaca USB Manager**.

8 Click **Start**, and then click **Run**.

9 In the **Open** box, type ***d*:\printer\setup com*x***, where *d* is the drive letter of the CD drive and *x* is the COM port assigned to the printer, and then press ENTER. For example, if the CD drive is drive E and the printer is assigned to COM3, type **e:\printer\setup com3**.

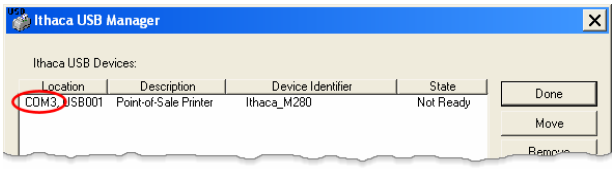
10 When you see a dialog box with the message "Exiting Printer Configuration," click **OK**.

11 Cycle the printer power by unplugging the printer power cord, and then plugging it back in. (Do not use the power switch—it is disabled.)

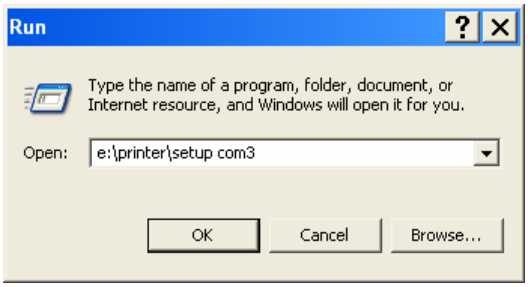
12 Click **Start**, and then click **Start 3M SelfCheckCSeries**.

13 Open SelfCheck System Manager, and then enable the printer on the **Devices** tab.

14 Remove the CD from the CD drive, place it back into its case, and then put it in a safe place.



7 Note the COM port the printer is assigned to



9 Run the printer configuration utility

Typical workflows

Without DLA

Use the following procedure if you do not use a 3M Digital Library Assistant (DLA).

1. Let the returns accumulate until the chute is full or a set time is reached.
2. Remove the returns, and then immediately click **Items Removed** on the **Current Items** tab of the local interface.
3. Place any item that arrives between the time you remove the returns and click **Items Removed** with the items you just removed.
4. View or print the exception report for the items, and use it to find the items that need further processing.
5. Remove the exception slips from the printer and place them in the items you sorted out.
6. Repeat.

With DLA

Use the following procedure if you use a DLA.

1. Let the returns accumulate until the chute is full or a set time is reached.
2. Remove the returns, and then immediately click **Items Removed** on the **Current Items** tab of the local interface.
3. Place any item that arrives between the time you remove the returns and click **Items Removed** with the items you just removed.
4. Remove the CompactFlash (CF) card from the reader attached to the SelfCheck system computer, and then insert the other CF card supplied with the system.
5. Use the DLA to find the items that need further processing.
6. Remove the exception slips from the printer and place them in the items you sorted out.
7. Remove the CF card from the DLA for reuse.
8. Repeat.

Startup and shutdown

Use the following procedures to start the SelfCheck system, to restart it, or to shut it down.

Starting the 3M™ SelfCheck™ System

To start the SelfCheck system

- Ensure power is applied to all components, and then start the computer. The SelfCheck system software and local user interface starts automatically after Windows loads. This may take a minute or two.

To start the SelfCheck system software when the computer is already running

1. On the keyboard, press the Windows key. The Windows **Start** menu appears.
2. Click **Start 3M SelfCheckCSeries**.

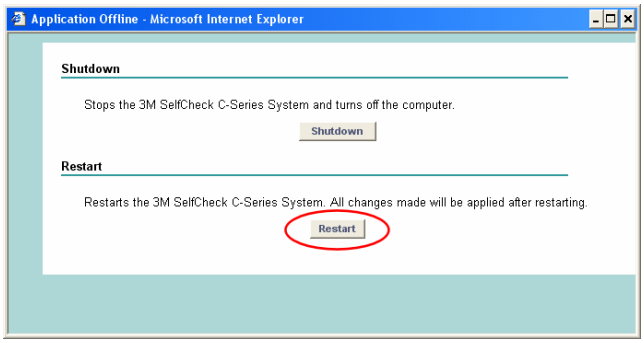
Starting when the computer is running

Restarting the 3M™ SelfCheck™ System

Use **Restart** if you need to restart the SelfCheck system service after changes to the operating system. This command restarts the SelfCheck system software and service. It does not restart the SelfCheck system computer.

To restart using SelfCheck System Manager

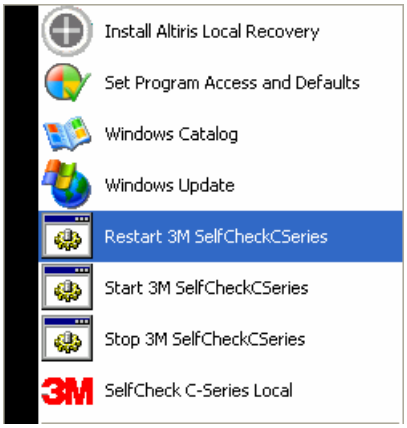
1. Open SelfCheck System Manager. (See “3M™ SelfCheck™ System Manager” on page 20.)
2. On the **Home** page, type your password in the **Password** box, and then click **Login**.
3. At the bottom of the screen, click **Shutdown**.
4. In the shutdown dialog box, click **Restart**.



Restarting from the Shutdown dialog box

To restart using the Start menu

1. On the SelfCheck system keyboard, press the Windows key. The Windows **Start** menu appears.
2. Click **Restart 3M SelfCheckCSeries**.

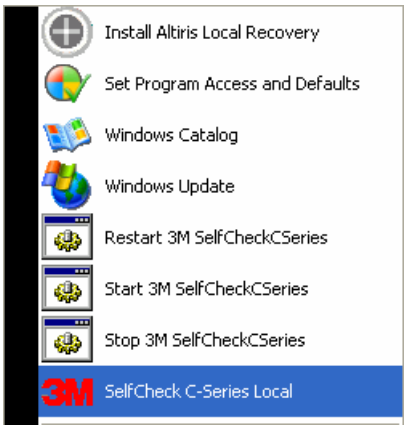


Restarting from the Start menu

To restart the local user interface

1. On the SelfCheck system keyboard, press the Windows key. The Windows **Start** menu appears.
2. Click **SelfCheck C-Series Local**. The local interface starts and automatically reconnects to the SelfCheck system service.

The local user interface does not have to be running for the SelfCheck system to function properly. This interface provides real-time updates of items being processed and current status, and allows staff to unload the chute. You may close it at any time.



Restarting the local user interface

Shutting down the computer

3M recommends that you leave the SelfCheck system on overnight.

If you should find it necessary to shut down the SelfCheck system completely, shut down the computer in the normal way, using the Windows **Start** menu, and then turn off the peripherals.

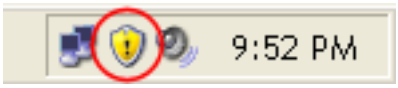
Do not use the **Shutdown** command in SelfCheck System Manager, which only shuts down the controller.

Installing system security updates

From time to time new security updates become available for your SelfCheck system. Windows notifies you of the availability of these updates as they are released. To protect the SelfCheck system from hazards such as hackers and computer viruses, you should download and install updates as soon as possible.

To learn when a security update is available

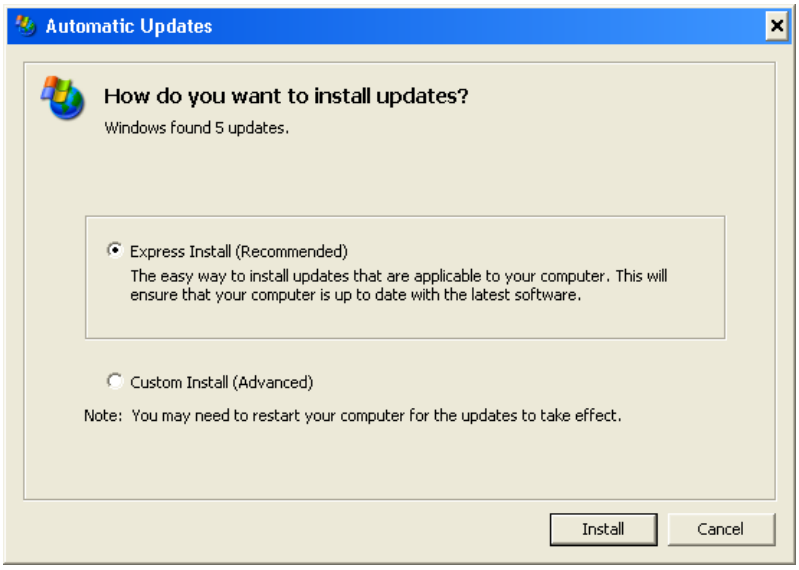
- Look for the Automatic Updates icon to appear in the notification area of the Windows taskbar. This icon appears only when an update is available.



Automatic Updates icon

To download and install a security update

1. In the notification area, click the Automatic Updates icon.
2. In the **Automatic Updates** dialog box, click **Install**.
3. After the updates are installed, restart the computer if you are requested to do so.



Automatic Updates dialog box

Managing the 3M™ SelfCheck™ System

The SelfCheck system is managed through two user interfaces. The local user interface is for daily management at the chute where the SelfCheck system is installed. The remote user interface, called the 3M SelfCheck System Manager, is a browser-based interface for management and configuration over the Internet or your intranet.

Security

The local interface has no security aside from that provided by Microsoft Windows. SelfCheck System Manager has three levels of security: no password, basic password, and advanced password. Any action that changes the operation of the SelfCheck system requires a password.

No password

No password is required to access the SelfCheck system's **Home** page. The **Home** page provides basic information and usage statistics about the system. The lack of password protection makes it easy for all staff to access and review this information.

Basic password

Staff with a basic level password can change a limited number of settings and view system and support information. The default basic password is *basic*. You should change this password as soon as possible.

Advanced password

An administrator with an advanced level password has full access to all system settings and information. The default advanced password is *advanced*. You should change this password as soon as possible.

Initial configuration

During installation, a 3M technician configures your SelfCheck system to operate in your library's existing environment. The technician normally performs the following operations:

- Sets up host communications
- Sets up mail server communications and notifications
- Enables the optional staff printer and configures the exceptions and hold slips based on your library's check-in environment.
- Ensures that the RFID reader configuration is correct
- Saves the current configuration
- Restarts the SelfCheck system to enable diagnostics on the newly configured devices.

Should changes at your library make it necessary to change the SelfCheck system configuration settings, please follow the procedures in this guide.

Local interface

The local interface is available only on the SelfCheck system computer. You can use it to monitor the operation of the SelfCheck system, reset the chute counter, and view reports.

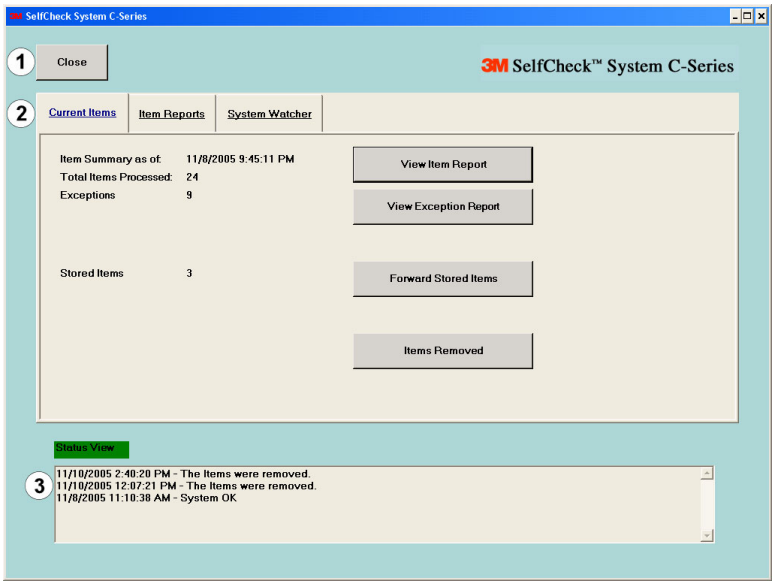
Common elements

The local interface has the following common elements:

(1) **Close button.** Closes the SelfCheck system window only. The SelfCheck system software continues to run in the background.

(2) **Tabs.** Click to select different interface pages.

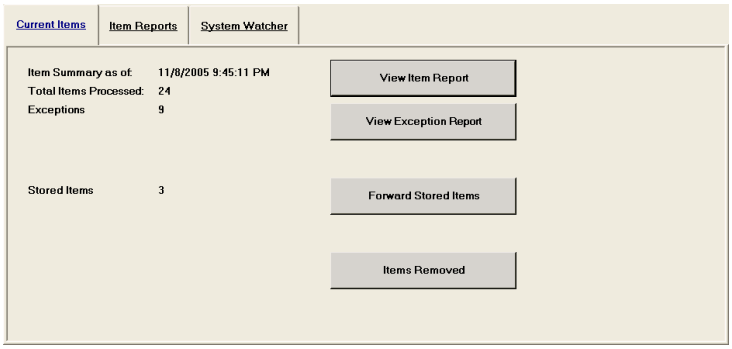
(3) **Status view.** Displays messages about the operation of the SelfCheck system.



Local interface

Current Items tab

Use the **Current Items** tab to view current item statistics, to reset the current statistics, and to forward stored items to the circulation system.



Current Items tab

View Item Report

Displays the current item statistics. (See “Item reports” on page 17.)

View Exception Report

Displays the current exception statistics. (See “Exception reports” on page 18.)

Forward Stored Items

Forwards stored item transactions to the circulation system. You can also forward stored transactions from SelfCheck System Manager. (See “Forwarding stored items” on page 51.) The local interface only forwards items that have been stored since the last time the items were removed. It is best to use it only when the circulation system loses connectivity for a brief time.

Items Removed

Archives the current item statistics and resets the count to zero. You should click this button each time you empty the chute.

System Watcher tab

Use the **System Watcher** tab to monitor current and recent activities of the SelfCheck system.

Item View
Displays information about RFID tags detected by the SelfCheck system as they are detected.

Check In Results
Displays the results of attempts to check in the detected tags.

System Watcher tab

Item Reports tab

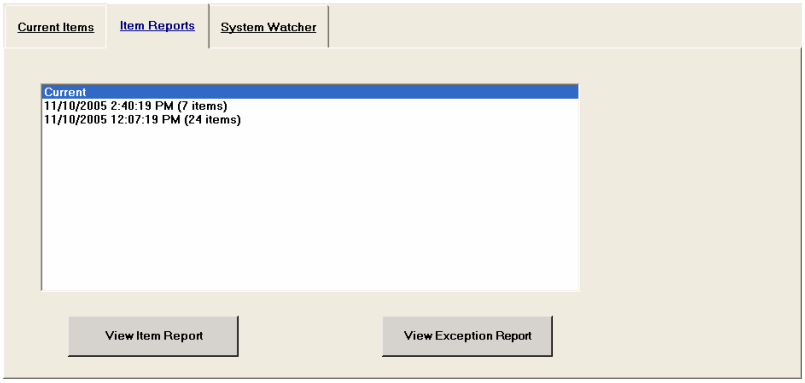
Use the **Item Reports** tab to view current and archived reports.

To view an item report

1. Click the archive you want to review.
2. Click **View Item Report**.

To view an exception report

1. Click the archive you want to review.
2. Click **View Exception Report**.



Item Reports tab

Item reports

An item report lists all items detected in the chute and summarizes and sorts them by category.

To view the current item report

- In the **Current Items** tab, click **View Item Report**.
- In the **Item Reports** tab, click **Current**, and then click **View Item Report**.

To view an archived item report

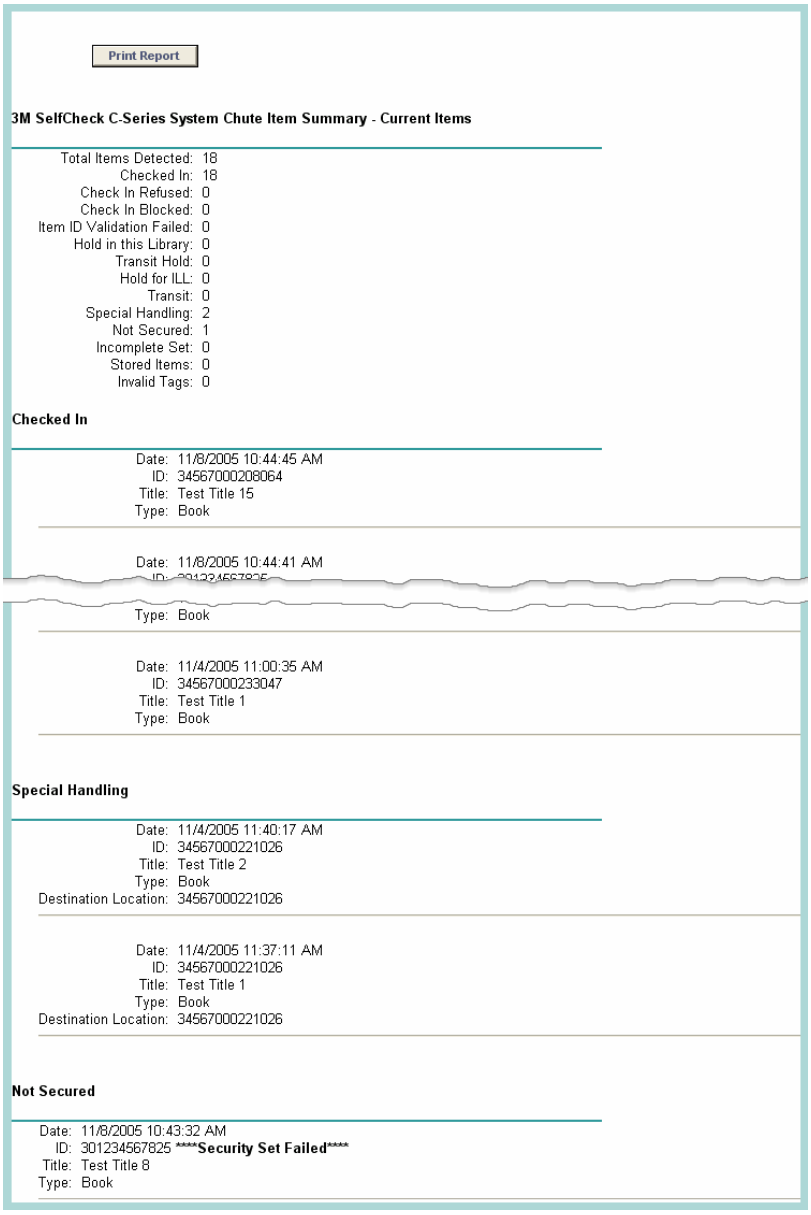
- In the **Item Reports** tab, click the archive you want to view, and then click **View Item Report**.

Item reports can also be viewed in SelfCheck System Manager. For more information, see “Home page” on page 23, “Statistics” on page 26, and “Statistics and report management” on page 32.

To print a report

1. Click **Print Report**.
2. In the **Print** dialog box, select the printer you want, and then click **Print**.

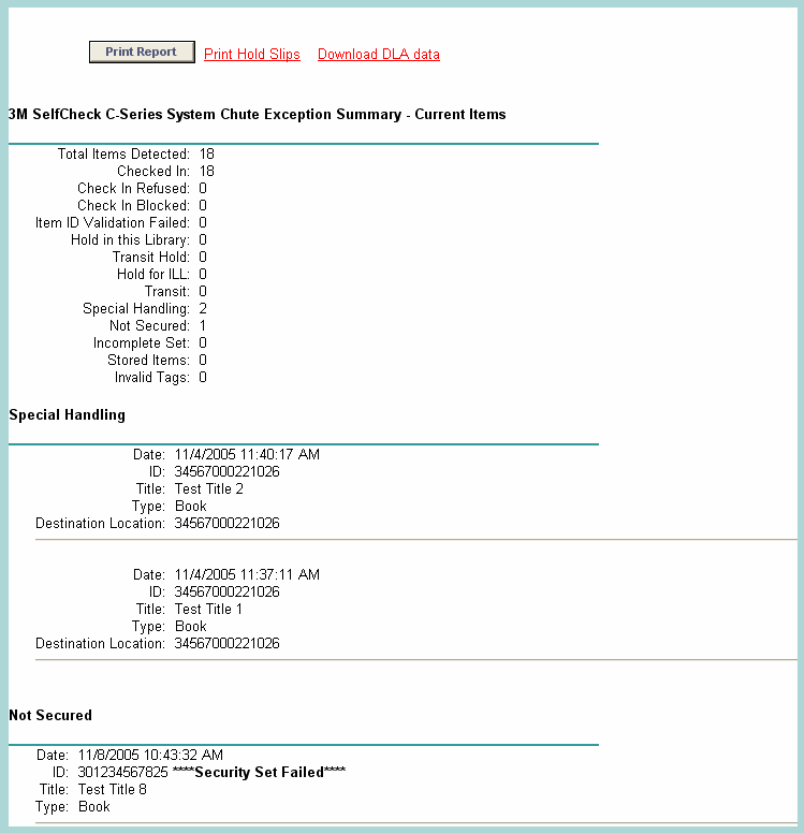
You can only print to printers that are installed in Windows.



Item report

Exception reports

An exception report lists all items that were not checked in or that require special handling. It summarizes and sorts them by category. Essentially, the exception report is a subset of the item report, omitting only the items that were successfully checked in.



Exception report

To view the current exception report

- In the **Current Items** tab, click **View Exception Report**.
- In the **Item Reports** tab, click **Current**, and then click **View Exception Report**.

To view an archived exception report

- In the **Item Reports** tab, click the archive you want to view, and then click **View Exception Report**.

Exception reports can also be viewed in SelfCheck System Manager. For more information, see “Home page” on page 23, “Statistics” on page 26, and “Statistics and report management” on page 32.

To print a report

1. Click Print Report.
2. In the **Print** dialog box, select the printer you want, and then click **Print**.

You can only print on printers that are installed in Windows.

Printing hold slips

You can manually print hold slips from any exception report, though typically you would print them only from the most recent report. To automatically print hold slips, see “Printing hold slips” on page 34.

To manually print hold slips

1. Open the exception report you want to print from.
2. Click **Print Hold Slips**.
3. On the **Print Hold Slips** page, click **Print Hold Slips**.

Downloading DLA data

Items on the exception report arrive in no particular order. To locate them quickly, it helps to have a 3M™ Digital Library Assistant (DLA). If you have a DLA, you can download search lists to use with it. Each type of exception (except for Invalid Tags and Stored Items) will have a separate search list. The search lists are downloaded to the location specified in the **Process Items** tab of the SelfCheck System Manager. (See “Processing items” on page 27.)

Before using this feature, you should make sure the DLA software that came with your DLA is installed on the SelfCheck system computer. You should also have a CF card reader attached to the SelfCheck system computer with a card inserted into it.

Because the search list export overwrites the entire DLA database, you should use dedicated CF cards for DLA downloads.

To manually download DLA search lists

1. Open the exception report you want to download from.
2. Click **Download DLA data**.
3. On the **Download DLA Database** page, click **Download DLA Data**.

To automatically download DLA search lists

1. Open SelfCheck System Manager, and then log in using an advanced password.
2. Click the **Process Items** tab, and then select **Automatically download DLA Database when items are removed**.
3. In the **Download to** box, type the path for the location you want the search lists to be downloaded to. To download directly to the card reader, typically this would be **E:**.

3M™ SelfCheck™ System Manager

SelfCheck System Manager is the SelfCheck system's Web-based management and configuration utility. Access to its features is password-protected. Only administrators with advanced passwords have complete access to its configuration options.

Because SelfCheck System Manager is Web-based, you can open it from any computer equipped with a Web browser, including the SelfCheck system computer itself.

To open SelfCheck System Manager at the SelfCheck system

1. Start Internet Explorer, which opens at the SelfCheck system's **Home** page.
2. In the **Password** box, type your password, and then click **Login**.

To find the SelfCheck system's IP address

1. Open SelfCheck System Manager at the SelfCheck system. (See the preceding procedure.)
2. Note the address under **Machine host name or ip address** on the left side of the screen.

SelfCheck system address

To open SelfCheck System Manager remotely

1. Open your computer's Web browser.
2. In the browser's address box, type the address of the SelfCheck system you want to manage, in the format **http://*ipaddress*/admin/**, where *ipaddress* is the IP address or URL of the SelfCheck system.
3. Press ENTER.
4. On the SelfCheck system's **Home** page, type your password in the **Password** box, and then click **Login**.

For quick access, bookmark each SelfCheck system in your browser.

Common elements

Most SelfCheck System Manager pages have the following elements:

(1) Navigation bar

(2) Status block

(3) System name

(4) Host name or IP address

(5) Export Settings

(6) Import Settings

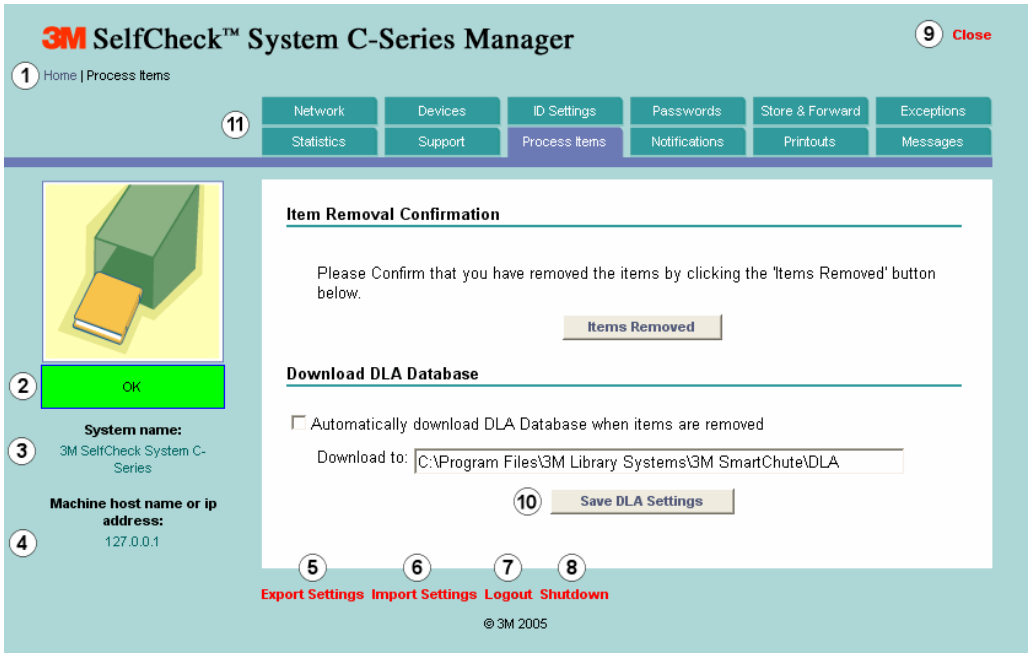
(7) Logout

(8) Shutdown

(9) Close

(10) Save button

(11) Tabs



Common elements

Navigation bar

The navigation bar displays the current page in black and higher-level pages in color. To return to a higher-level page, just click its name.

Status block

The status block displays messages about the condition of the SelfCheck system. The messages are color-coded:

- Green: OK (normal working mode).
- Yellow: Demo mode, Offline mode, Out of Service mode, printer out of paper.
- Red: Fail, circulation system unavailable, device failure.

System name

The system name is a descriptive name for the SelfCheck system used to distinguish one system from another. This can be changed in the advanced **Support** tab.

Host name or IP address

This element displays the DNS name or IP address of the SelfCheck system.

Export Settings

Click **Export Settings** to save the current configuration for future use on the current unit or another unit.

Import Settings

Click **Import Settings** to import a previously saved configuration. Use this command to configure several SelfCheck systems alike or to restore a previous configuration.

Manage

Click **Manage** to open the advanced setup pages. This command is available only on the **Home** page and then only if an advanced password has been entered.

Logout

Click **Logout** when you have finished making changes to the SelfCheck system. Once you have logged out, you must log in again if you want to make additional changes.

Shutdown

Click **Shutdown** to open a dialog box that enables you to shut down or restart the SelfCheck system.

Close

Click **Close** to log out of SelfCheck System Manager and close the browser. The **Close** command is in the upper right corner of the screen.

Save buttons

Pages that allow settings to be changed have one or more **Save** buttons. You must click the appropriate **Save** button to save any changes you make. *Otherwise, changes will not be implemented when you move to another page.* When there is more than one **Save** button on a page, each **Save** button typically is placed below the group of settings it saves.

Tabs

The primary configuration pages are tabbed for quick access. To select a primary configuration page, click its tab. Subordinate pages are not tabbed. To return to a primary page from a subordinate page, click the name of the primary page in the navigation bar.

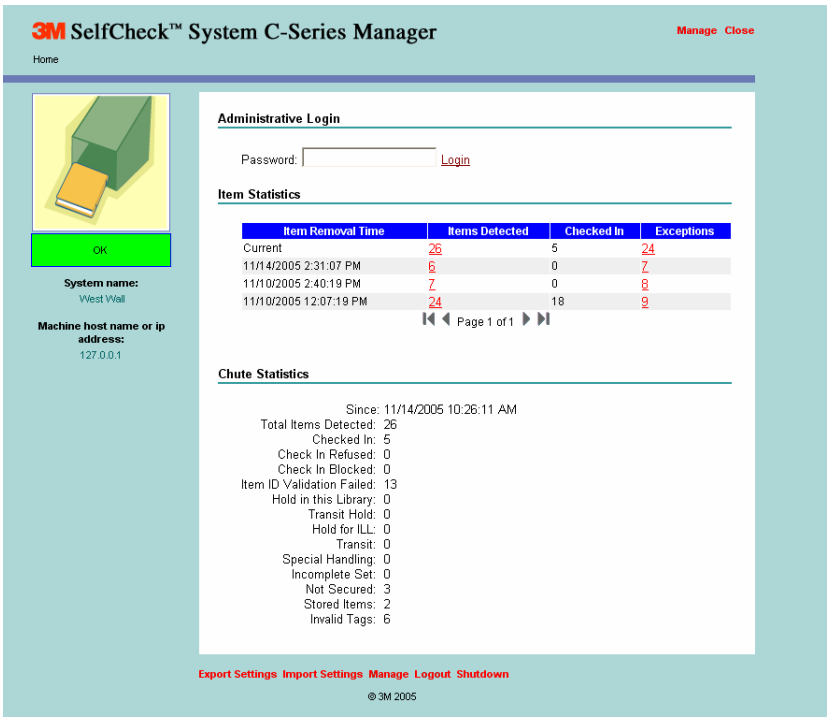
Home page

The **Home** page is the first page you see when you browse to the SelfCheck system. Because no password is required to view the **Home** page, any staff member can use it to check the operational status of the SelfCheck system and view the item and chute statistics.

The **Item Statistics** table contains current and archived statistics. The current item statistics is the number of items processed since the last time the chute was emptied and the previous item count was archived. (See “Items Removed” on page 15 and “Unloading the chute” on page 27.)

The **Chute Statistics** table is a further breakdown of the current statistics.

The **Home** page is also the login page for the SelfCheck System Manager.



Home page

To view a statistics report

- Click the appropriate link in the **Item Statistics** table for the report you wish to view.

  Reports in the **Items Detected** column show detailed information about all items in the archive. Reports in the **Exceptions** column show detailed information for items that may require special handling.

See also “Item reports” on page 17 and “Exception reports” on page 18.

To log in to the SelfCheck System Manager

- In the **Password** box, type the basic or the advanced password, and then click **Login**.

Basic administration

This section describes operations that can be performed after logging in with the basic password. With the basic password you can:

- View system and support information.
- Change the mode of operation to normal, offline, or out-of-service.
- View chute statistics and reports.
- Unload the current chute.
- Export settings.
- Shut down or restart the system.
- View system status information.

Basic administrators have access to these operations under the following tabs:

- Support
- Statistics
- Process Items

Support

You can use the basic **Support** tab to:

- Contact 3M technical support.
- View basic information about the SelfCheck system.
- View detailed system status.
- Set the operation mode.
- Send the current configuration and logs to 3M technical support.

Contact us

Use the **Contact Us** section to contact 3M technical support through the Web, by telephone, or by email.

To contact 3M support through the Web

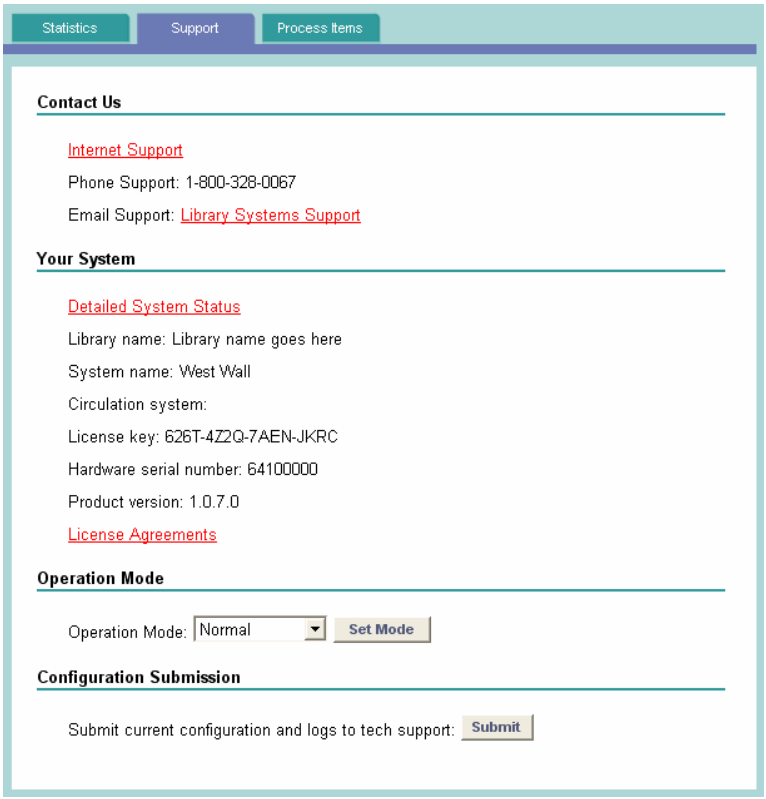
- Click **Internet Support**.

To contact 3M support by phone

- Call the **Phone Support** number.

To contact 3M support by email

- Click Library Systems Support.



Basic Support tab

Your system

This section contains basic information about the system. If you call technical support, the technician will ask you for information from this section.

Detailed system status
Click to view the current status of the SIP connection, mail server connection, RFID reader, and printer.

Library name
The name of the library where the SelfCheck system is located.

System name
A unique name that distinguishes the SelfCheck system from other SelfCheck systems in the library. For example: “West Wall Chute.”

Circulation system
The brand name of the circulation system.

License key
The license key for the SelfCheck system software.

Hardware serial number
The serial number of the SelfCheck system as printed on the identification label.

Product version
The version number of the SelfCheck system software.

License agreements
Click this link to view the software license agreement.

Operation mode

You can set the SelfCheck system to any of three modes of operation:

Normal
In Normal mode the system is communicating with the circulation system and checking in library items.

Offline
Offline mode enables the SelfCheck system to operate when the library's circulation system is not functioning. Offline transaction data are stored in the SelfCheck system for forwarding to the circulation system when the two systems are communicating again.

Out of Service
Select **Out of Service** to disable the system. In Out of Service mode *no* items are stored for forwarding at a later time.

To change the operation mode

- In the **Operation Mode** box, click the operation mode you want, and then click **Set Mode**.

Configuration submission

If you are having problems with the SelfCheck system, 3M technical support may ask you for the system’s current configuration and log files. To send them to 3M technical support, click **Submit**.

The **Statistics** tab contains the same statistics information as the **Home** page except for the **View Archive** link.

To view a statistics report

- Click the appropriate link in the **Item Statistics** table.

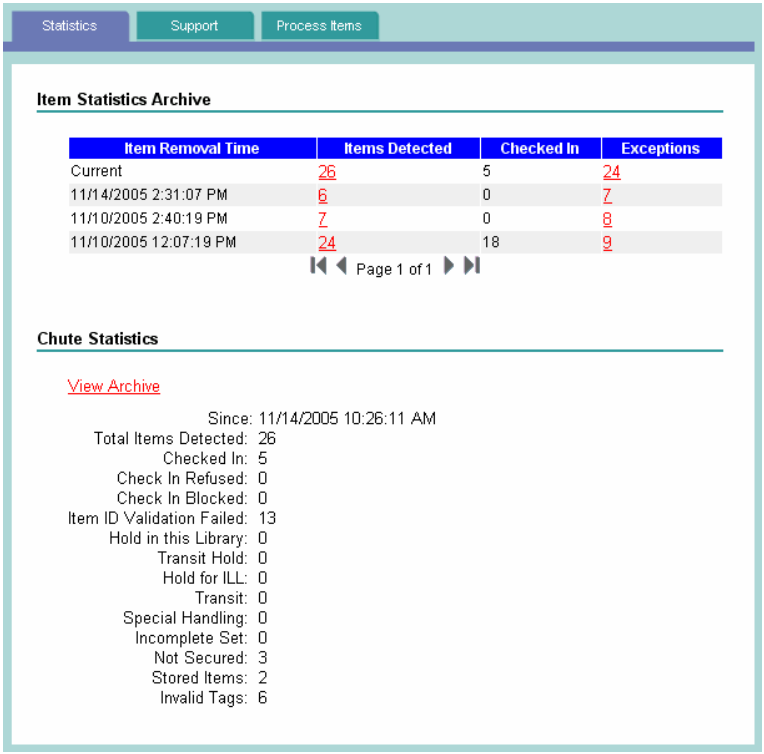
  Reports in the **Items Detected** column show detailed information about all items in the archive. Reports in the **Exceptions** column show detailed information about items that may require special handling.

See also “Home page” on page 23, “Item reports” on page 17, and “Exception reports” on page 18.

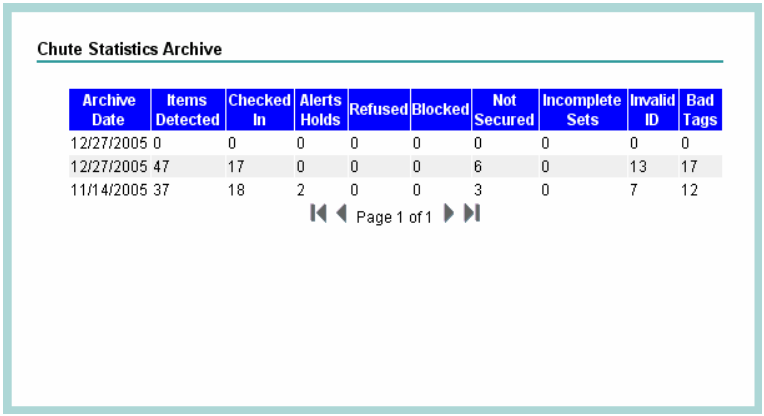
The **View Archive** link opens the **Chute Statistics Archive** page. This page displays a statistical summary for each archive.

To view the Chute Statistics Archive

- Click **View Archive**.



Basic Statistics tab



Chute Statistics Archive

Unloading the chute

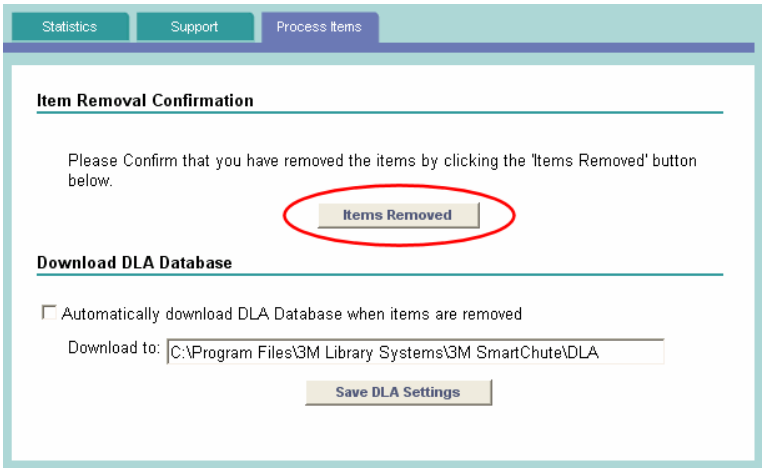
Staff can confirm item removal through either the local interface or the browser interface. When you confirm item removal, you archive the current statistics and reset the counters to zero.

To unload using the browser

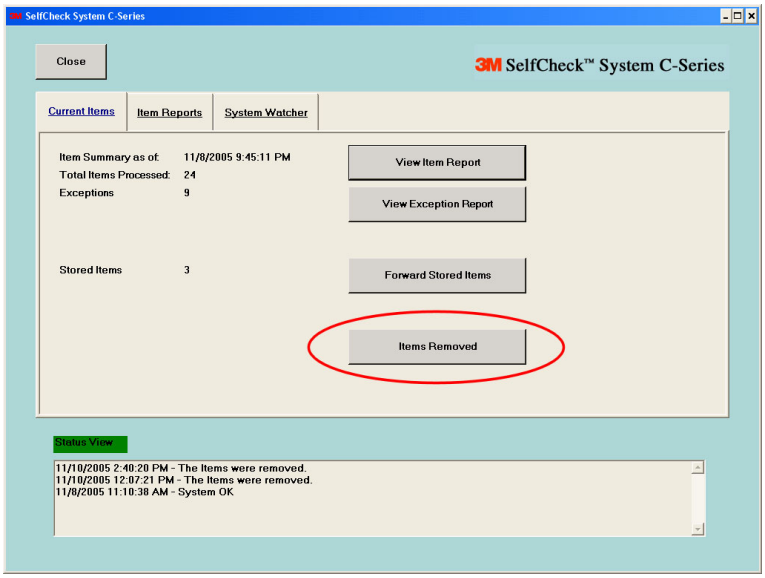
1. Open the browser and log in.
2. Click the **Process Items** tab, and then click **Items Removed.**

To unload using the local user interface

1. Under the **Current Items** tab, click **Items Removed**.
2. Confirm the action by clicking **OK** in the confirmation message.



Unloading the chute using the browser interface



Unloading the chute using the local user interface

Downloading DLA data

Items on the exception report arrive in no particular order. To locate them quickly, it helps to have a 3M Digital Library Assistant (DLA). If you have a DLA, you can download a search list to use with it. The search list is downloaded to the location specified in the **Process Items** tab.

Before using this feature, you should make sure the DLA software that came with your DLA is installed on the SelfCheck system computer. You should also have a CF card reader attached to the SelfCheck system computer with a card in it.

Because the search list export overwrites the DLA database, we strongly recommend that you use dedicated CF cards for DLA downloads.

To automatically download a DLA search list

- In the **Process Items** tab, select **Automatically download DLA Database when items are removed**.

To select the DLA download destination

- In the **Process Items** tab, type the path for the download destination. To download directly to the CF card reader, type the drive letter for the reader, typically **E:**.

To manually download a DLA search list

1. **Automatically download DLA Database when items are removed** should be cleared.
2. Open the exception report you want to download from.
3. Click **Download DLA data**.
4. On the **Download DLA Database** page, click **Download DLA Data**.

Advanced administration

The advanced administration pages can be opened only by typing the advanced password. With the advanced password you can:

- Edit contact, system and email notification information.
- Set the operation mode.
- Set the logging level.
- Forward stored transactions to the circulation system.
- Edit hold slips and email messages.
- Configure notification messages
- Set up network communications.
- Set up the hardware devices.
- Create ID filters and validators.
- Change passwords.

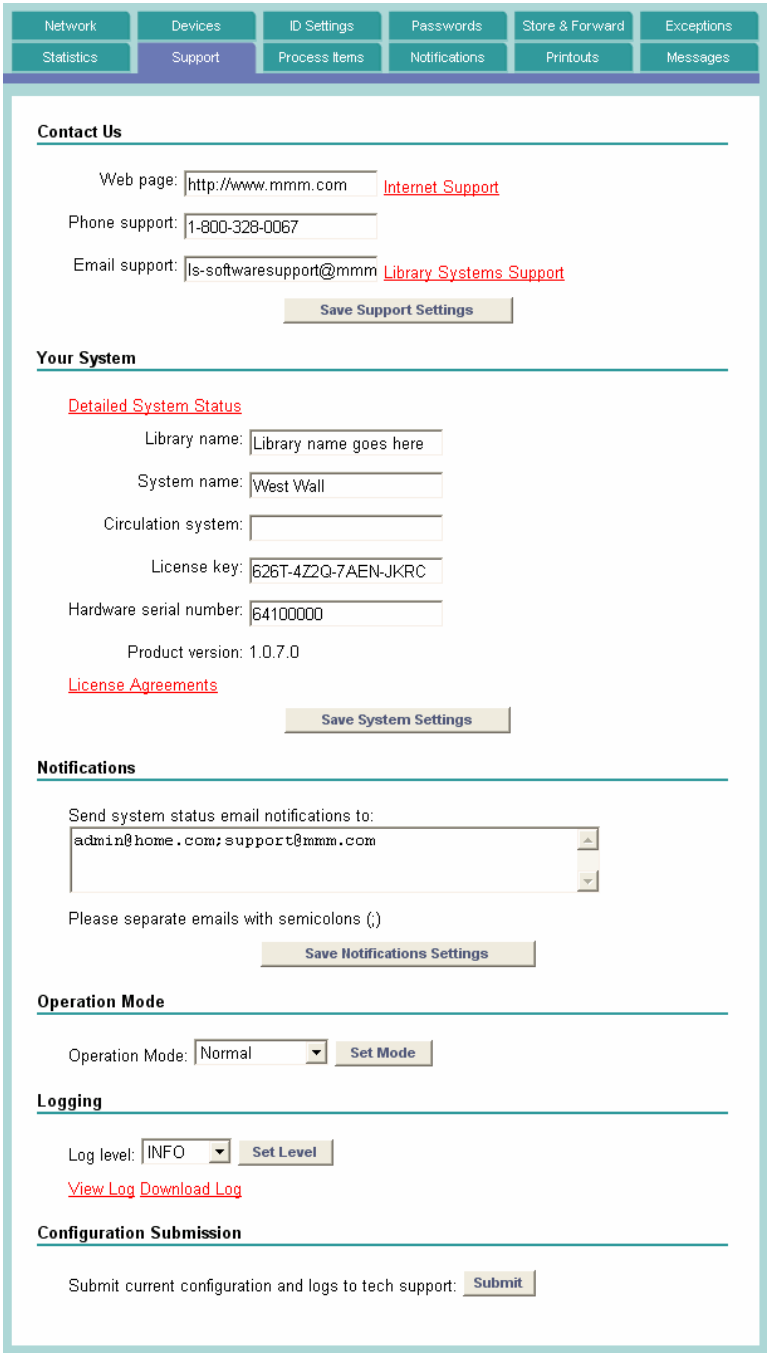
To open the advanced administration pages

- On the SelfCheck system's **Home** page, type the advanced password in the **Password** box, and then click **Login**.

Support

You can use the advanced **Support** tab to:

- Edit contact, system and email notification information.
- Set the operation mode.
- Set the logging level.
- View and save the log.
- Send the current configuration and logs to 3M technical support.



Advanced Support tab

Contact information

The **Contact Us** section is used to edit the contact information found on the basic **Support** page. Only a 3M technician should edit this section.

To change the contact information

1. Select the information you want to change.
2. Type the new information.
3. Click **Save Support Settings**.

System information

The **Your System** section is used to edit the information about the SelfCheck system found on the basic **Support** page.

Detailed system status
Click to view the current status of the SIP connection, mail server connection, RFID reader, and printer.

Library name
The name of the library where the SelfCheck system is located.

System name
A unique name that distinguishes the SelfCheck system from other SelfCheck systems in the library. For example: “West Wall Chute.”

Circulation system
The brand name of the circulation system.

License key
Each license key is unique and is required for the SelfCheck system to operate. The license key is configured at the factory. *Changing your license key can render your system unusable.* Do not change it without authorization from 3M.

Hardware serial number
The serial number of the SelfCheck system as defined by the license key. It cannot be changed.

Product version
The version number of the SelfCheck system software. It changes automatically when the software is updated.

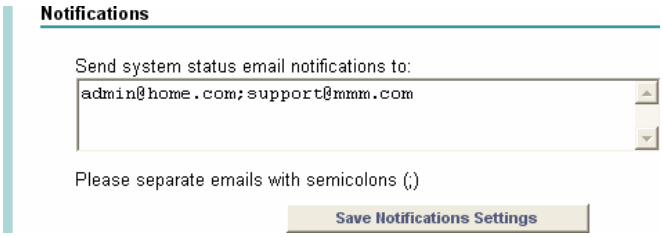
License agreements
Displays the software license agreement.

To change the system information

1. Select the information you want to change.
2. Type the new information.
3. Click **Save System Settings**.

Notifications

The SelfCheck system automatically sends email notifications of conditions that require attention to the email addresses listed in the **Notifications** box. Examples of such conditions are loss of connection with the circulation system and lack of paper in the receipt printer. See also “Mail server” on page 38.



Notifications

The email addresses set up in the **Notifications** box are independent of the email addresses set up on the **Notifications** tab. The **Notifications** box is intended for additional personnel and 3M technical support for troubleshooting or support purposes.

For a list of notification messages see “Appendix A: Email notification messages” on page 59. You can edit the text of the email notifications on the **Messages** tab (page 35).

To add email addresses to the notification list

1. In the **Notifications** box, type the email addresses of the persons who you want to receive alert messages. Separate the addresses with semicolons (;).
2. Click **Save Notifications Settings**.

To delete email addresses from the notification list

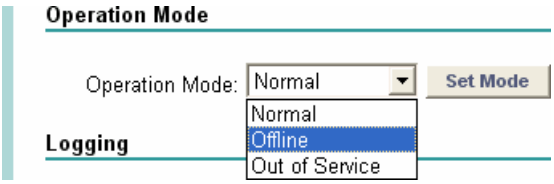
1. In the **Notifications** box, delete the addresses you do not want.
2. Click **Save Notifications Settings**.

Operation mode

You can set the SelfCheck system to three modes of operation:

Normal
In Normal mode the system is communicating with the circulation system and checking in library items.

Offline
Offline mode enables the SelfCheck system to operate when the library's circulation system is not functioning. Offline transaction data are stored in the SelfCheck system for forwarding to the circulation system when the two systems are communicating again.



Operation modes

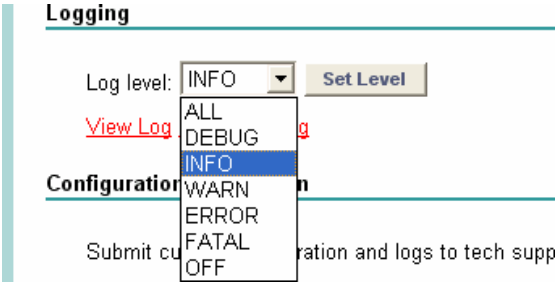
Out of Service
Select **Out of Service** to disable the system. In Out of Service mode *no* items are stored for forwarding at a later time.

To select an operation mode

- In the **Operation Mode** box, click the operation mode you want, and then click **Set Mode**.

Logging

The log is used for troubleshooting. In the **Logging** section you can turn logging on and off, select how much information is logged, view logs, and save logs on your computer. You should leave the log level set to **INFO** unless 3M support personnel request you to change it.



Log levels

To turn on logging

1. Click the **Log Level** box, and then click the logging level you want. Each level includes all levels below it except **OFF**.
2. Click **Set Level**.

To turn off logging

1. Click the **Log Level** box, and then click **OFF**.
2. Click **Set Level**.

To display the current log

- Click **View Log**. The log is displayed in your browser.

To save the current log

1. Click **Download Log**.
2. In the **File Download** dialog box, click **Save**.
3. In the **Save As** dialog box, rename the log file as needed, navigate to the folder where you want to save the file, and then click **Save**.

Configuration submission

See “Configuration submission” on page 25.

The SelfCheck system stores usage data in a database on the SelfCheck system computer. In the **Statistics** tab, you can view this data in the form of reports. You can also delete this data from the database.

Deleting data permanently removes it from the system. You should unload the current chute and archive the current chute statistics before you delete data.

To archive chute statistics

- To archive the current chute statistics and reset the chute statistics, click **Reset Chute Counters**.

To delete data

1. In the **Item Statistics Cleanup** section, click the calendar icon next to the **Start** box, and then click the beginning date in the **Date Picker**.
   - To change the calendar to the previous month, click **Mo-**; to change it to the next month, click **Mo+**.
2. Click **Remove Now**.
3. Confirm the deletion by clicking **OK** in the confirmation message that appears.

To view a statistics report

- Click the appropriate link in the **Item Statistics** table.

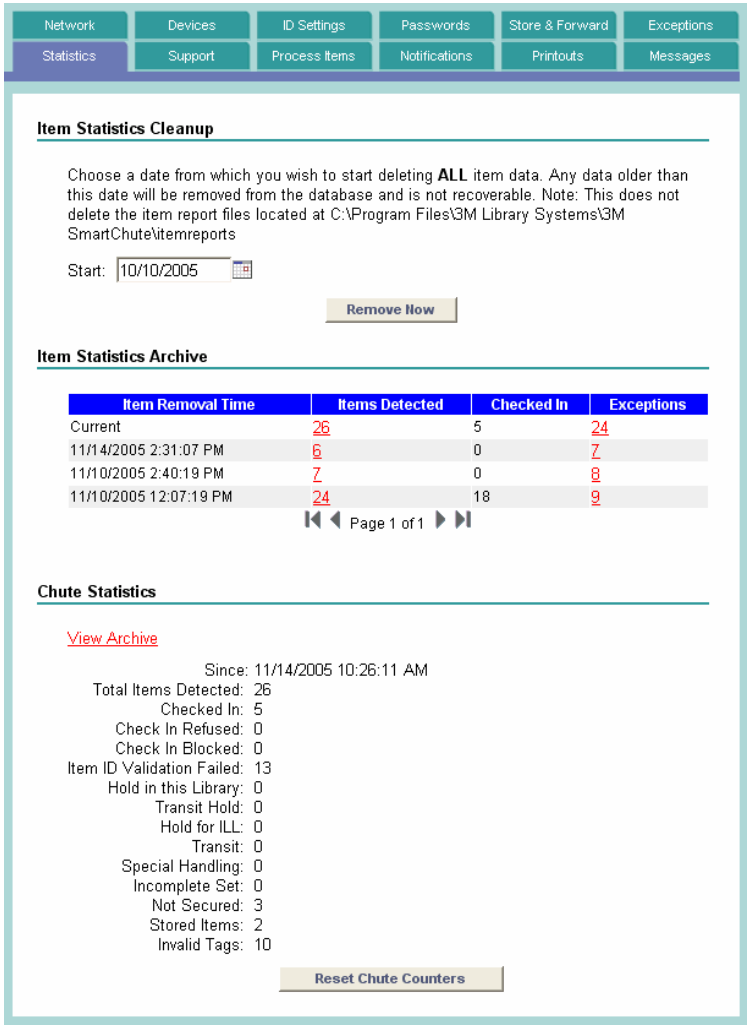
  Reports in the **Items Detected** column show detailed information about all items in the archive. Reports in the **Exceptions** column show detailed information for items that may require special handling.

See also “Item reports” on page 17 and “Exception reports” on page 18.

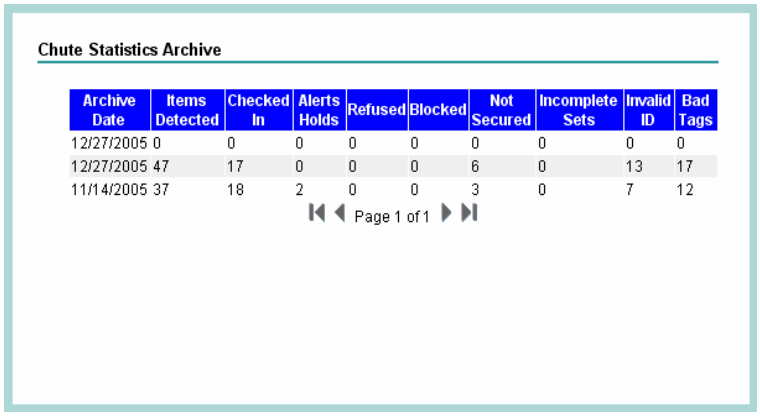
The **View Archive** link opens the **Chute Statistics Archive** page. This page displays a statistical summary for each archive.

To view the Chute Statistics Archive

- Click **View Archive**.



Advanced Statistics tab



Chute Statistics Archive

Processing items

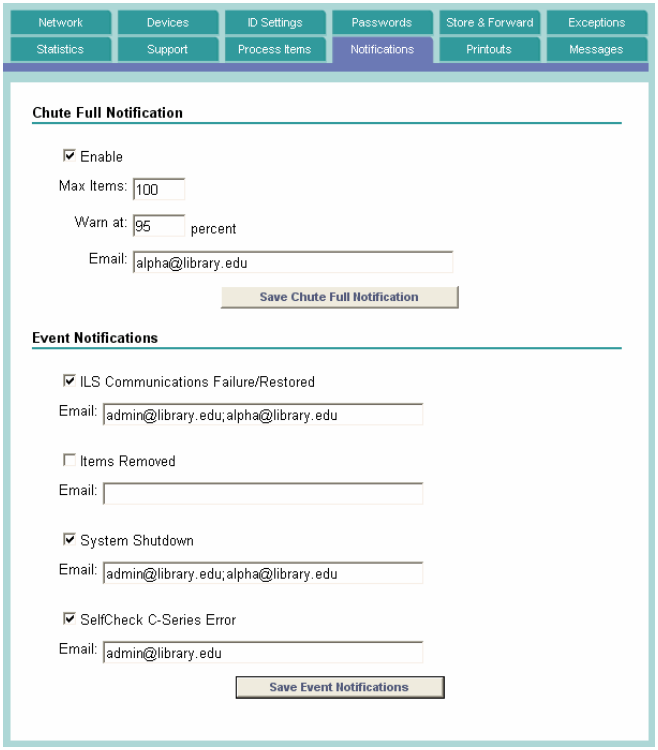
The **Process Items** tab is the same as in the basic administration interface.
See “Processing items” on page 27.

Notifications

The SelfCheck system can automatically send email notifications to the email addresses selected on the **Notifications** tab. There are five categories of notification. Each can be enabled or disabled individually.

The email addresses set up on this page are independent of the email addresses set up in the **Notifications** section of the **Support** tab. Disabling a notification here has no impact on sending notifications to the email addresses on the **Support** tab.

For a list of notification messages see “Appendix A: Email notification messages”. You can edit the text of the email notifications in the **Messages** tab (page 35).



Notifications

To select a notification category

1. In the **Email** box, type one or more email addresses separated by semicolons.
2. Select the check box in front of the category label.
3. Click **Save … Notification**.

Chute full notification

Sends an email warning when the chute is nearly full and another when it is full.

Max Items
The maximum number of items that can fit in your chute before they need to be removed.

Warn at
The percentage of the **Max Items** number at which a warning is sent.

Email
Type the email addresses where the warning and chute full emails should be sent.

Event notifications

ILS Communications Failure/Restored
Sends an email notification anytime the circulation system communication fails or is restored after a failure.

Items Removed
Sends an email notification any time the chute is unloaded.

System Shutdown
Sends an email notification any time the system is shut down or restarted

Self Check C-Series Error
Sends an email notification any time a critical error or failure condition occurs: for example, RFID reader failure, printer out of paper, etc. An additional notification is sent when the failure condition clears.

Printing hold slips

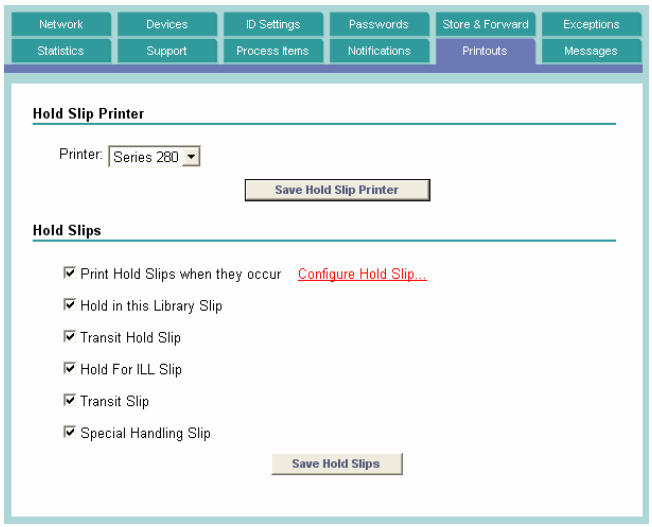
Selecting hold slips for printing

Each type of hold listed in the **Exceptions** tab can be selected for printing in the **Printouts** tab.

To enable printing of hold slips

1. In the **Printouts** tab, select the printer that you want the hold slips to be printed on, and then click **Save Hold Slip Printer**. The printer must also be enabled on the **Devices** tab.
2. Select the hold slips you want to be able to print.
3. Clear the check boxes of hold slips you do not want printed.
4. Click **Save Hold Slips**.

Select **Print Hold Slips when they occur** to print each hold slip at the time the item is processed. Alternatively, you can print hold slips for any chute at a later time by clicking **Print Hold Slips** in the chute exception report.



Printouts tab

Configuring hold slips

You can configure the format of the hold slips by clicking **Configure Hold Slip** in the **Hold Slips** area of the **Printouts** tab.

Selecting the information to print

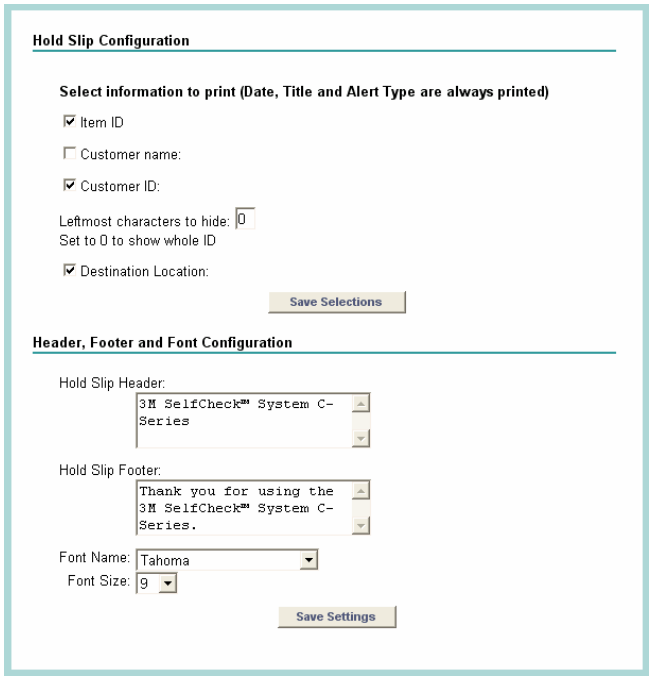
In the **Select information to print** area, select the information you want printed on the hold slip, and then click **Save Selections**. The date that the item was checked in and title of the item are always printed.

Item ID
The item's ID code.

Customer name
The name of the customer who the hold is for.

Customer ID
The customer's ID code after it is converted by the ID filter. To print only part of the code, in the **Leftmost characters to hide** box, type the number of characters you want to hide. Hidden characters print as asterisks.

Destination Location
The location code of the item's destination.



Hold slips configuration

Editing hold slip text

You can edit the header and footer text of a hold slip in the **Header, Footer and Font Configuration** area. To edit the text, simply type in the header and footer boxes. To change the font and font size of the slips, select them in the **Font Name** and **Font Size** boxes.

You can edit the hold slip header and footer through either the **Printouts** tab or the **Messages** tab.

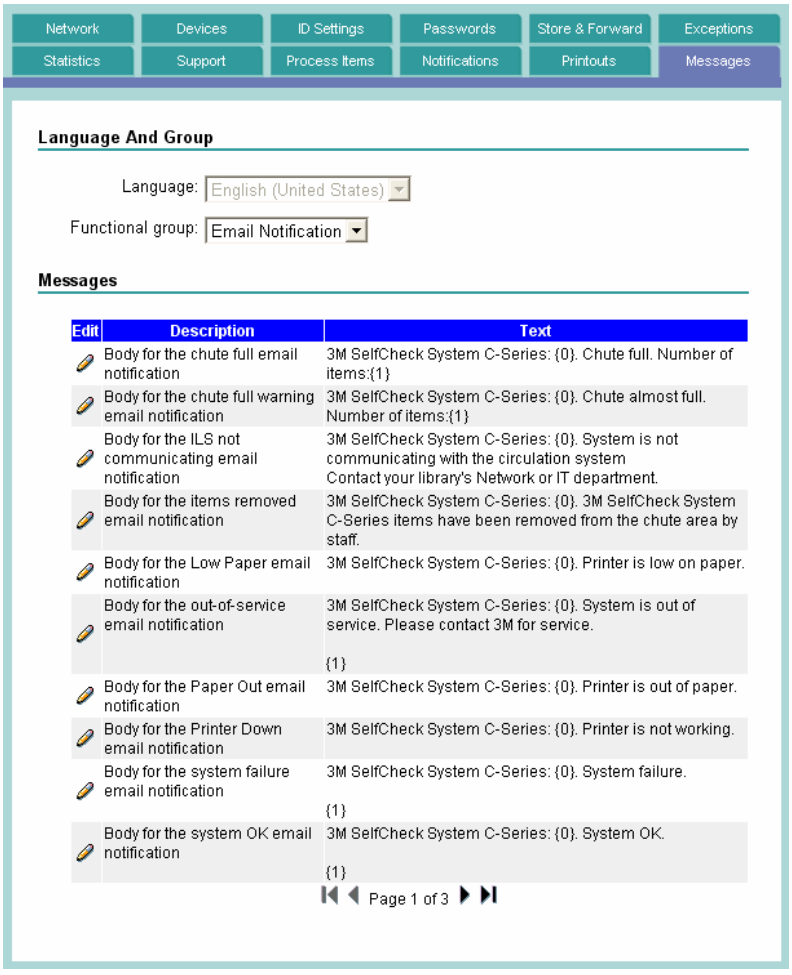
Messages

Use the **Messages** tab to edit the text of email notifications and hold slips.

To edit a message

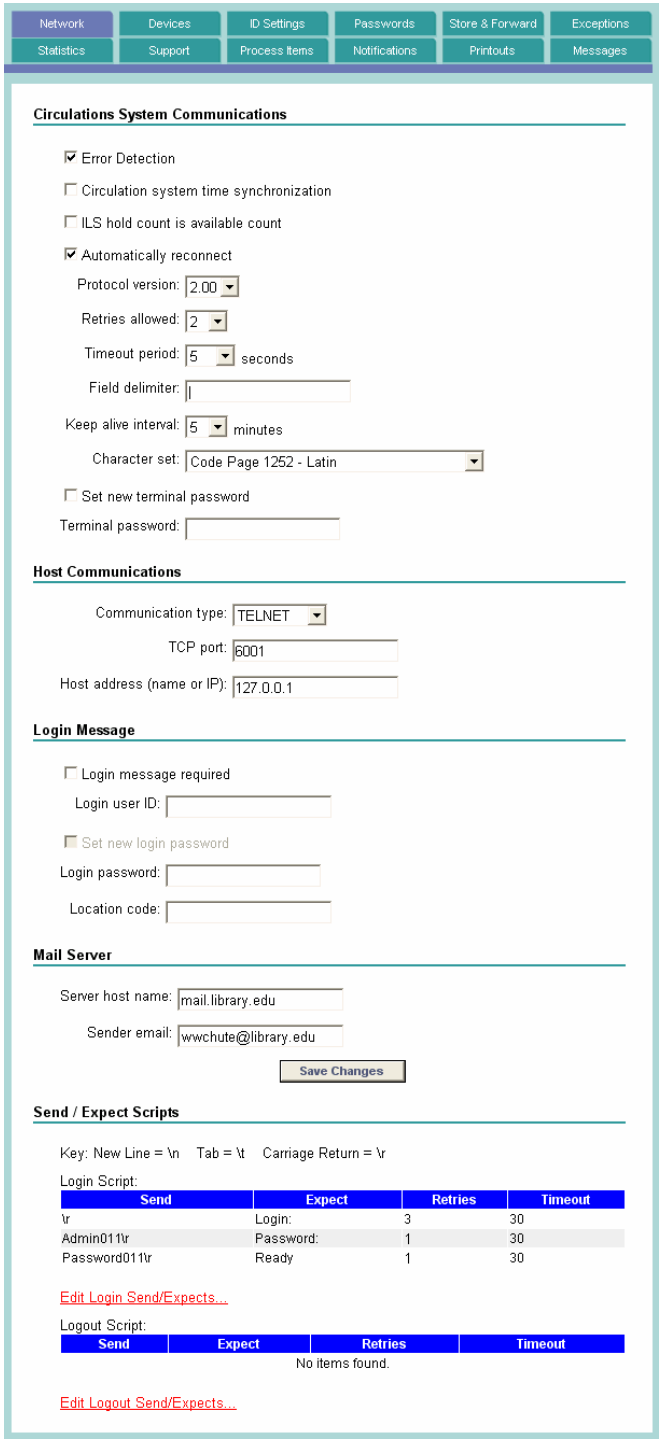
1. In the **Messages** tab, click the **Functional Group** box, and then click **Email Notification** or **Hold Slip**, depending on what you want to edit. The messages for the selected function appear in the **Messages** area.
2. Click the pencil icon next to the message text you want to change, and then type the new text.
3. When you are done, click **Save Text Message**.

You can edit the hold slip header and footer through either the **Printouts** tab or the **Messages** tab.



Messages tab

The settings in the **Network** tab enable the SelfCheck system to communicate properly with your library's circulation system. The settings should not be changed unless there is a change in the circulation system. Information about the circulation system should be available from the library's circulation system administrator.



Network tab

Circulation system communications

Error detection

Adds check digits to ensure that communications are correctly sent and received. This setting must match that of the circulation system.

Circulation system time synchronization

Synchronizes the SelfCheck system's clock with the circulation system's clock.

ILS hold count is available count

Determines how the SelfCheck System interprets the SIP hold items count field.

- Clear the check box if the circulation system uses the hold items field to report total hold requests, which includes both available and unavailable items.
- Select the check box if the circulation system uses the hold items field to report only available items.

Automatically reconnect

Automatically attempts to reconnect with the circulation system after a communications failure.

Protocol version

The version number of the Standard Interchange Protocol (SIP) used by the circulation system.

Retries allowed

The number of times a request can be resent by the SelfCheck system if a response is not received.

Timeout period

The maximum time in seconds that the SelfCheck system should wait for a response from the circulation system before a retry. Refer to your circulation system administrator for this setting.

Field delimiter

The SIP field delimiter that is appropriate for the language or circulation system you are using. You can enter the field delimiter as either a keyboard character or as hexadecimal notation (for example, **0x7C**).

The default field delimiter for SIP is the pipe character "**|**" (**0x7C**). Some character sets use the **0x7C** character in normal text. (For the Chinese, Japanese, and Korean character sets, use **0x80**.) If a circulation system reserves this character for other purposes, use a different character.

Keep alive interval
The time between messages periodically sent from the SelfCheck system to the circulation system to maintain communications.

Character set
The character set that the SIP communication parameters are coded in by the circulation system.

Set new terminal password
Enables a change in the terminal password. Select before typing a new terminal password.

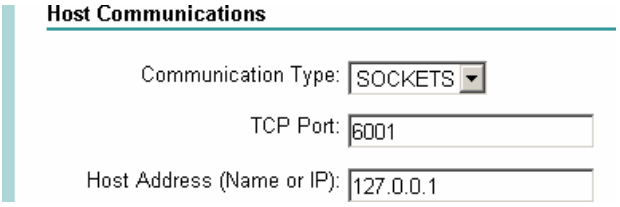
Terminal password
The appropriate ID for your socket connection. If you are using a login message instead of a login script, you might need to identify your terminal ID for the circulation system. The circulation system may use this to determine if the access is coming from the right place. The circulation administrator should have this information.

Host communications

Communication type
Choose the communication method for connecting to the host. If you choose **Telnet**, you must create a login script in the **Send/Expect Scripts** section.

TCP port
The port number used for communications.

Host address
The DNS name or IP address of the host.



Network Host Communications section

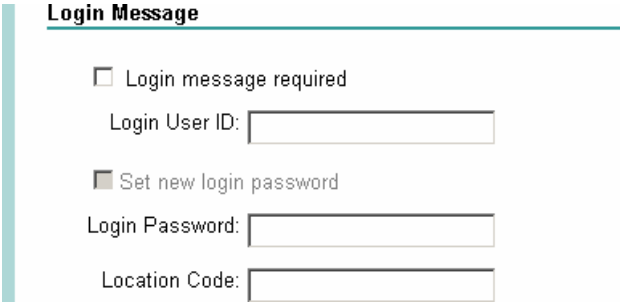
Login message

If your circulation system requires a SIP login, use this section to define the login message.

Login message required
Select if a login is required; clear the check box if it is not.

Login User ID
The user ID, obtained from the circulation system administrator.

Set new login password
Enables a change in the login password. Select before typing a new login password.



Network Login Message section

Login password
The user password, obtained from the circulation system administrator.

Location code
This box optionally allows the circulation system to identify the location of the SelfCheck system or to encode other types of information. The text or numbers you place in this box are sent to the circulation system only when the login command is used.

Mail server

The following information is required for email notifications. See also “Notifications” on page 30.

Server host name
The domain name or IP address of the library’s mail server.

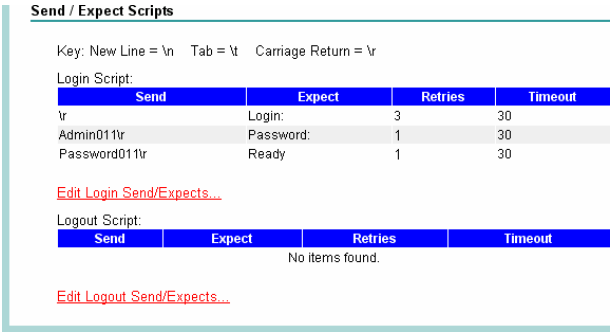
Sender email
The email address of the SelfCheck system. This will appear in the headers of email notifications.

Network Mail Server section

Send/expect scripts

If the SelfCheck system uses telnet communications, a send/expect login script is required to ensure security and limit access to the library’s host computer. If the SelfCheck system uses sockets communications, a login script is *not* required. The script is created in the **Send/Expect Scripts** section. The library’s network administrator should know what is required to log in to the host.

The script is created one row at a time. Except for the first send string, the send string in each row is typically a response to the expect string in the preceding row. All characters in the send/expects entries are case-sensitive and punctuation-sensitive and must have the correct number of spaces.

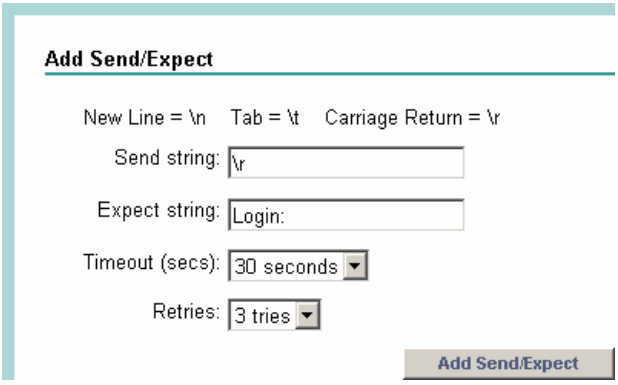


Network Send/Expect Scripts section

To create a send/expect script

1. In the **Send/Expect Scripts** section, click **Edit … Send/Expects**.
2. On the **Send/Expect Scripts** page, click the Add icon ( ).
3. In the **Send string** box of the **Add Send/Expect** page, type the characters required by the host.
4. In the **Expect string** box, type the characters expected from the host.
5. In the **Timeout** box, select the number of seconds the SelfCheck system should wait for a response.
6. In the **Retries** box, select the number of times you want the SelfCheck system to attempt to connect to the host if it does not succeed on the first attempt.

   Multiple retries are used only for the first exchange, which establishes the initial connection to the host computer.
7. Click **Add Send/Expect**. The send/expect line is added to the script on the **Send/Expect Scripts** page.
8. On the **Send/Expect Scripts** page, click **Save Changes**.
9. To add another line to the script, repeat steps 2 through 7.



Add Send/Expect page

To edit a line of script

- On the **Send/Expect Scripts** page, click the Edit icon ( ) for the line you want to edit, and then follow steps 2 through 8 in the preceding procedure.

To delete a line from the script

- On the **Send/Expect Scripts** page, click the Delete icon ( ) for the line you want to delete, and then click **Save Changes**.

Developing a script

All characters in the send/expects entries are case-sensitive and punctuation-sensitive and must have the correct number of spaces.

Expect strings

The characters in the expect string must *exactly* match the expected string of characters transmitted by the host to the SelfCheck system. Only when received character strings match expected character strings can the SelfCheck system send its responses.

For example, if the character string sent by the host computer is **`Host System Login:`**, you must enter this string in the **Expect string** box exactly as received.

You can also use partial expect strings, as long as the partial expect string exactly matches the last part of the received string and ends with the last character of the received string. For example, if the received string is **`Host System Login:`**, then **`System Login:`** and **`Login:`** might also work as expect strings. The SelfCheck system ignores characters in the received string that precede those in the expect string.

Send strings

The characters in the send string must *exactly* match what the host requires.

The first send string normally contains a carriage return or new line character. This is sent to let the host computer know the SelfCheck system is trying to connect to it.

You must manually enter this carriage return or new line that tells the host you are trying to log on. In addition, each send line needs either a carriage return or a new line at the end of it to tell the host that the line is complete. The following characters represent carriage returns and new lines in scripts:

`\r` carriage return

`\n` new line (typically used when communicating with a Unix system)

`\t` tab

Timeouts

A timeout in seconds should be added for each line. Timeouts define how long the SelfCheck system computer waits for a reply from the host computer before it returns an error message.

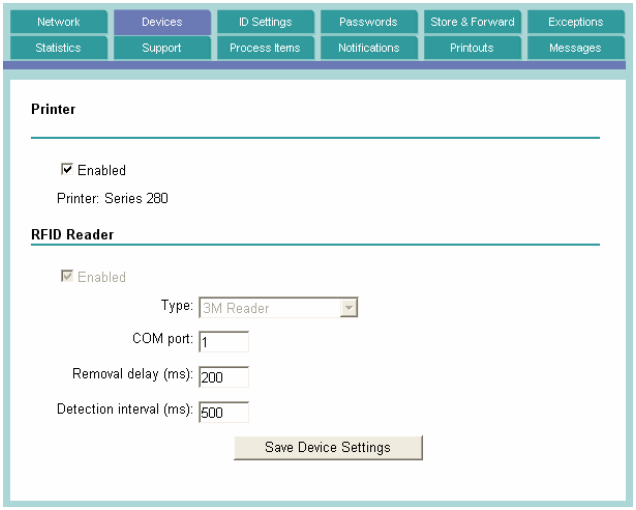
Retries

Retries are used only for the first exchange to establish the initial connection to the host computer. Enter the number of times you want the SelfCheck system to attempt to connect to the host if it does not succeed on the first attempt.

Devices

Use the **Devices** tab to set up the SelfCheck system's hardware devices, but only under the direction of 3M support personnel.

After making any changes, click **Save Device Settings**.



Devices tab

Printer

In SelfCheck System Manager, you can select only printers that are installed in the SelfCheck system's operating system. 3M currently supports only the Ithaca iTherm Series 280 printer. Though other printers can be used to print hold slips, printer-level diagnostics are not available for those printers.

To enable printing

- Under **Printer**, select **Enabled**.

To disable printing

- Under **Printer**, clear **Enabled**.

RFID reader

Because the 3M RFID reader is required, you cannot disable it or use a different type of RFID reader.

To configure the RFID Reader

- Type the number of the COM port that it is connected to (the default is COM 1).

To adjust the other RFID reader properties, please contact 3M Technical Support:

Removal delay
The default is 200 ms.

Detection interval
The default is 500 ms.

ID filters and validators

Filtering item IDs

Some item identification formats may not be compatible with those used by your circulation system, especially if the format has changed recently. For incompatible formats, the SelfCheck system can use *filters* to modify IDs before they are sent to the circulation system.

The filtering process works as follows:

1. The system reads the ID from the item tag.
2. The filter modifies the ID to meet the requirements of the circulation system.
3. The system sends the modified ID to the circulation system.

ID filters are managed in the **ID Settings** tab.

Using multiple filters

It is possible to create multiple filters to match different ID formats. The SelfCheck system applies filters in the order in which they are listed, but only the first filter whose constraint matches the ID is applied. All subsequent filters are ignored.

For example, suppose that the library has implemented a new 12-character ID and needs to convert older 8- and 10-character IDs to the new system. Suppose you create separate filters for the 8-character and the 10-character IDs based on their length. When the SelfCheck system subsequently scans an ID, it compares the ID length to that specified in the first, 8-character, filter. If they match, it applies the actions of that filter to the ID and ignores the second filter. If they do not match, it next compares the ID length to that specified in the second, 10-character, filter. If they match, it applies the actions of the second filter to the ID. If you have a third filter based on either length or the resulting 12-character length, but performing a different action, it is ignored.

To perform multiple actions on an ID, use several action commands in one filter rather than trying to apply multiple filters to the same ID.

Using filters with validators

Validators accept or reject IDs for further processing, including filtering. If you use both validators and filters, you should make sure that ID formats that you want to filter are accepted by your validators. See “Validating item IDs” on page 44.

Working with filters

Filters are created and managed on three page levels:

- The **ID Settings** page lists all filters and validators and contains a link to the **Item Filters** page.
- The **Item Filters** page lists all item filters and enables you to test the filters as a group. Here you can also delete filters and access the **Add** and **Edit Item Filter** pages.
- The **Add** and **Edit Item Filter** pages are where you create and edit filters and test them individually.

To return to a higher-level page, use the navigation bar in the top left corner of the page.

The filter commands are described in “ID filter language” beginning on page 46.

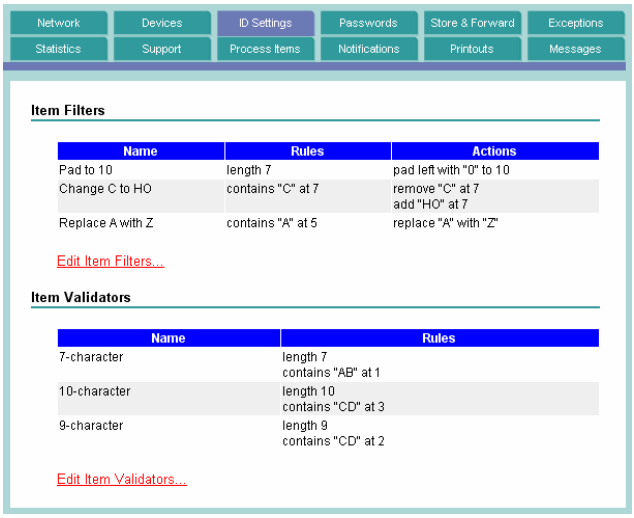
To create a filter

1. On the **ID Settings** page, click **Edit Item Filters**.
2. On the **Item Filters** page, click the Add icon ( ).
3. On the **Add Item Filter** page, type the name of the filter in the **Name** box.
4. In the **Constraints** box, type one or more commands that define the ID format to be acted on. Each command must be on a separate line.

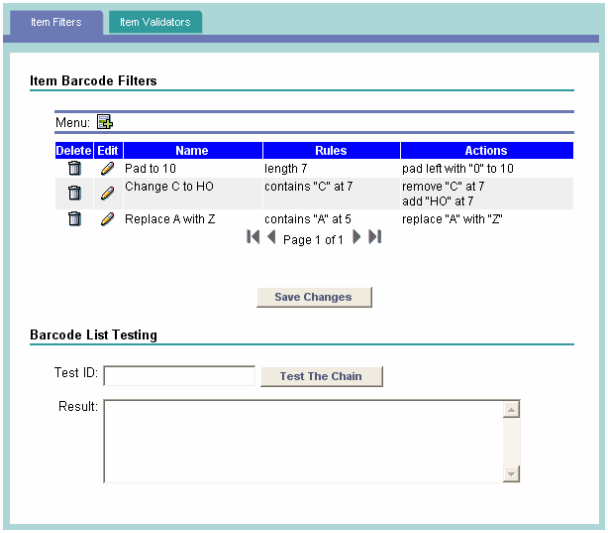
There are two constraint commands: **CONTAINS** and **LENGTH**.

5. In the **Actions** box, type commands that define the actions to be performed on the ID. Each command must be on a separate line.
6. Test the filter. (See next page.)
7. If the filter test shows the result you want, click **Add Item Filter**.
8. When you have added all the filters you want, on the **Item Filters** page, test the list of filters. (See next page.)
9. If the list test shows the results you want, click **Save Changes**. The filters are added to the **ID Settings** page.

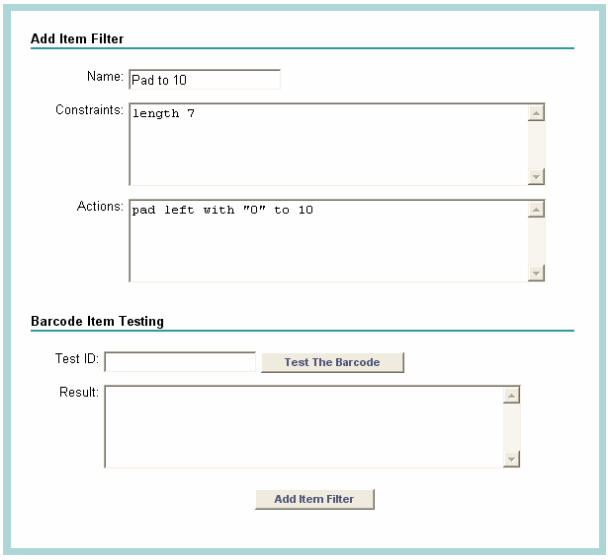
To return to the **ID Settings** page, click **ID Settings** in the navigation bar.



ID Settings page



Item Filters page

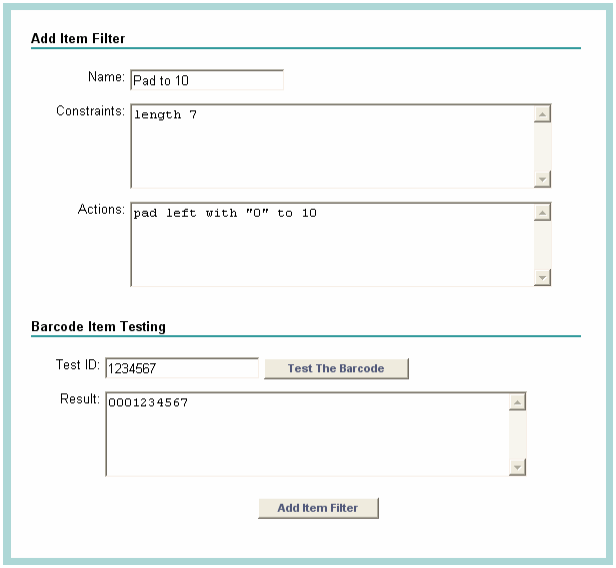


Add Item Filter page

To test a single filter

1. On the **Add Item Filter** or **Edit Item Filter** page, in the **Test ID** box, type an ID in the format you want to change.
2. Click **Test the Barcode**. The filtered ID appears in the **Result** box.
3. Compare the filtered format to the format you want.
4. To test the filter against other ID formats, repeat the preceding steps.

The filter in the illustration will add zeroes to any seven-character ID. To restrict the action to IDs used by the library, you should also use the **CONTAINS** command.

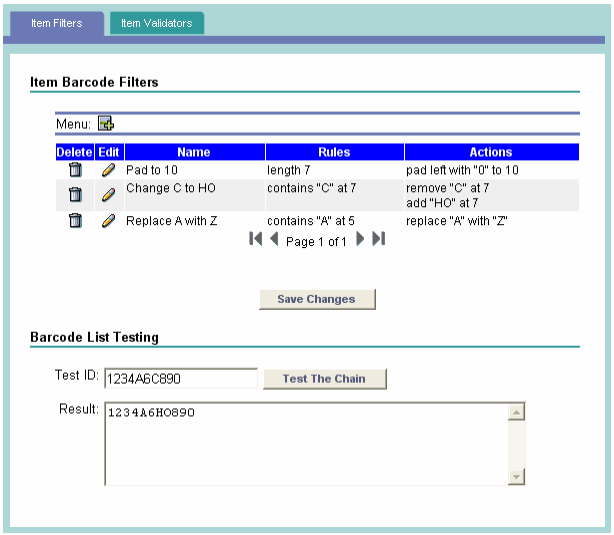


Testing a single filter

To test a list of filters

1. On the **Item Filters** page, in the **Test ID** box, type an ID in the format you want to filter.
2. Click **Test the Chain**. The filtered ID appears in the **Result** box.
3. Compare the filtered ID to the ID format you want.
4. Repeat for each ID format that you want to filter or to exclude from filtering.

This test compares each test ID to each filter in the list and applies the first filter that matches. If the result is unexpected, look for conflicts in the filter constraints. In the example on the right, the second and third filters work only with IDs that are other than 7 characters long, because the first filter is applied to all IDs of that length.



Testing a list of filters

To edit a filter

1. On the **Item Filters** page, click the Edit icon ( ) for the filter you want to edit. The **Edit Item Filter** page opens with the filter commands loaded.
2. Edit the filter commands, and then test and save the filter *twice*—first on the **Edit Item Filter** page and then on the **Item Filters** page.

To remove a filter

1. On the **Item Filters** page, click the Delete icon ( ) for the filter you want to remove. The filter is removed from the list.
2. Test the list of filters again, and then click **Save Changes**.

Validating item IDs

The purpose of a validator is to minimize network traffic by rejecting invalid ID formats before the ID is sent to the circulation system. It can also be useful for screening out invalid IDs when the SelfCheck system is in Offline mode. A validator is similar to a filter, except that it can only accept or reject an ID. Therefore, it does not include action commands. If the ID matches one of the validators in the validator list, it is accepted for further processing. If the ID does not match, the ID is rejected.

If no validator has been created, then all IDs are accepted for processing. If one or more validators have been created, then only IDs that match the validator constraints are accepted.

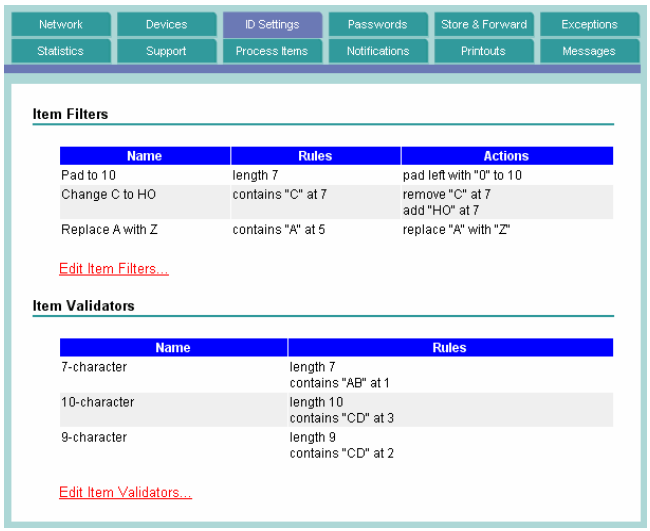
Working with validators

Like filters, validators are created and managed on three page levels:

- The **ID Settings** page lists all filters and validators and contains a link to the **Item Validators** page.
- The **Item Validators** page lists all item validators and enables you to test the validators as a group. Here you can also delete validators and access the **Add** and **Edit Item Validator** pages.
- The **Add** and **Edit Item Validator** pages are where you create and edit validators and test them individually.

To return to a higher-level page, use the navigation bar in the top left corner of the page.

The validator constraint commands are described in “ID filter language” on page 46.

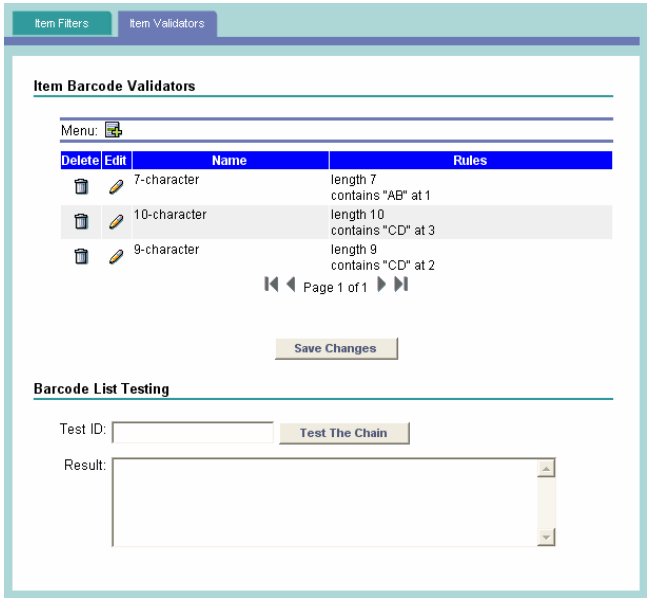


ID Settings page

To create a validator

1. On the **ID Settings** page, click **Edit Item Validators**.
2. On the **Item Validators** page, click  .
3. On the **Add Item Validator** page, type the name of the validator in the **Name** box.
4. In the **Constraints** box, type one or more commands that define the ID format to be accepted. Each command must be on a separate line.

   There are two constraint commands: **CONTAINS** and **LENGTH**.
5. Test the validator. (See next page.)
6. If the validator test shows the result you want, click **Add … Validator**.
7. When you have added all the validators you want, on the **Item Validators** page, test the list of validators. (See next page.)



Item Validators page

8 If the list test shows the results you want, click **Save Changes**. The validators are added to the **ID Settings** page.

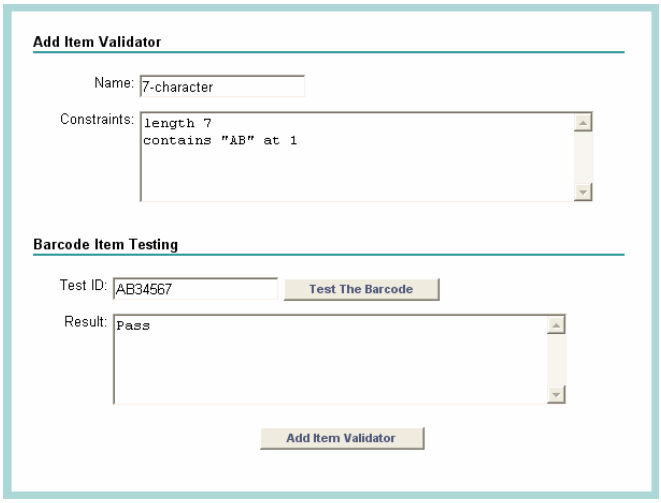
To return to the **ID Settings** page, click **ID Settings** in the navigation bar.

To test a single validator

1 On the **Add Validator** or **Edit Validator** page, in the **Test ID** box, type an ID in the format you want to pass.

2 Click **Test the Barcode**. The pass or fail result appears in the **Result** box.

3 To test the validator against other ID formats, repeat the preceding steps.



Add Validator page

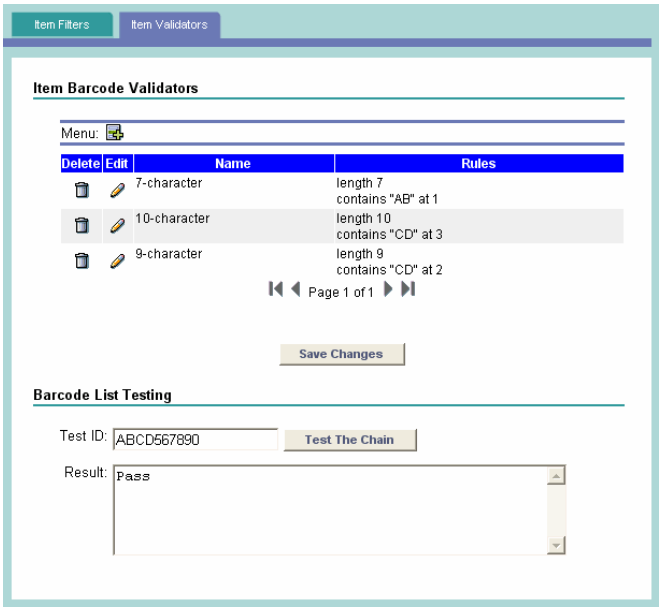
To test a list of validators

1 On the **Item Validators** page, in the **Test ID** box, type an ID in the format you want to test.

2 Click **Test the Chain**. The pass or fail result appears in the **Result** box.

3 Repeat for each ID format that you want to accept or reject.

This test compares the test ID to each validator in the list in the order listed and applies the first validator that matches. If the result is unexpected, usually it is because the constraints are not exclusive enough. In the example to the right, the only 10-character IDs that pass have the characters *CD* starting at position 3. All other 10-character IDs are excluded.



Testing a list of validators

To edit a validator

1 On the **Item Validators** page, click the edit icon ( ) for the validator you want to edit. The **Edit Item Validator** page opens with the validator commands loaded.

2 Edit the validator commands, and then test and save the validator *twice*—first on the **Edit Item Validator** page and then on the **Item Validators** page.

To remove a validator

1 On the **Item Validators** page, click the delete icon ( ) for the validator you want to remove. The validator is removed from the list.

2 Test the list of validators again, and then click **Save Changes**.

ID filter language

This section describes the commands used to create ID filters.

Command description conventions

KEYWORD	Words that are bold and all caps have special meanings, and should be typed literally. However, they may be typed in either upper or lower case.
< >	Angle brackets enclose a variable parameter. By *variable parameter,* we mean a value that you can select or invent. The brackets are not typed.
[ ]	Square brackets enclose an optional part of a command. The brackets are not typed.

ID filter command summary

Data types and parameters

<number>	Decimal number. Typically, this indicates an ID character position, with the first position being number 1.
<string>	“Literal text.” This can be any alphanumeric character or string of characters you want except double quotation marks. The text must be enclosed by double quotation marks, but they do not appear in the result.
<direction>	**LEFT** or **RIGHT**
CHECKDIGIT	

Constraint commands

CONTAINS <string> [**AT** <number>]

LENGTH <number>

Action commands

ADD <string> [**AT** <number>]

ADD CHECKDIGIT [**AT** <number>]

PAD <direction> **WITH** <string> **TO** <number>

REMOVE <string>

REMOVE <number> [**AT** <number>]

REPLACE <string> **WITH** <string>

ID filter command descriptions

CONTAINS command

Syntax: **CONTAINS** <string> [**AT** <number>]

The **CONTAINS** constraint searches the ID code for the specified string.

- If the string is not found, then the ID filter does not alter the ID code.
- If a string is specified without a number, then the string can appear anywhere in the ID code.
- If both a string and a number are specified, then the string must appear at the <number> character in the ID code. The first character in the ID code is number 1.

LENGTH command

Syntax: **LENGTH** <number>

The **LENGTH** constraint checks the length of the ID code.

- If it does not match the number specified, this line of the ID filter is not used. The SelfCheck system tries the next filter in the list.
- Note that because the **LENGTH** restriction may be anywhere in the script, the ID code may be partly processed before the length is checked.

ADD command

Syntax: **ADD** <string> [**AT** <number>] or
ADD CHECKDIGIT [**AT** <number>]

The **ADD** action adds a string to the ID code.

- If a number is not specified, the string or check digit is added to the end of the ID code.
- If a number is specified, the string or check digit is inserted at the <number> character in the ID code. The first character in the ID code is always number 1.

CHECKDIGIT parameter

If the **CHECKDIGIT** keyword is specified instead of a string, the SelfCheck system sums the digits in the ID code and adds a check digit.

PAD command

Syntax: **PAD** <direction> **WITH** <string> **TO** <number>

The **PAD** action adds a string to the beginning or end of the ID code.

- Use **LEFT** to add the text before the ID code, or **RIGHT** to add it after the ID code.
- Use **TO** <number> to specify the total number of characters in the string after padding.

Example: To convert 1234567 to 000001234567, use

```
pad left with "0" to 12
```

REMOVE command

Syntax: **REMOVE** <string> or **REMOVE** <number> [**AT** <number>]

The **REMOVE** action removes a string or a range of characters from the ID code.

- If a string is specified, the SelfCheck system searches the ID code and removes all occurrences of the string.
- If one number is specified, it is the number of characters to remove from the end of the ID code.
- If two numbers are specified, the first number is the number of characters to remove, and the second number is the first character position to remove. The first character in the ID code is number 1.

REPLACE command

Syntax: **REPLACE** <string> **WITH** <string>

The **REPLACE** action searches the ID code and replaces all occurrences of the first string with the second string.

Note that the search is not recursive, so the first (search) string may be a subset of the second (replacement) string. For example, “X may be replaced with “XYZ."

ID filter example 1

This example demonstrates the use of the **LENGTH** and **PAD** commands.

Problem

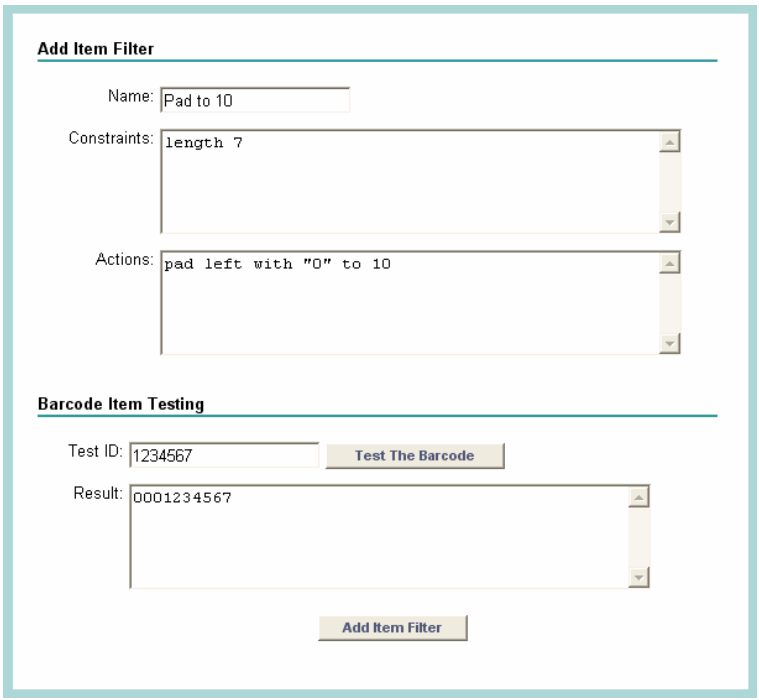
Items in the library system have two ID code formats.

- Older IDs are 7 characters long.
- Newer IDs are 10 characters long.

Solution

The older IDs must be padded with ‘000’ so that all IDs are 10 characters.

- The **LENGTH** command ignores all IDs that are not of the specified length.
- The **PAD** command inserts characters at the start or end until the ID is the specified length.



Example 1

ID filter example 2

This example demonstrates the use of the **CONTAINS** and **REPLACE** commands.

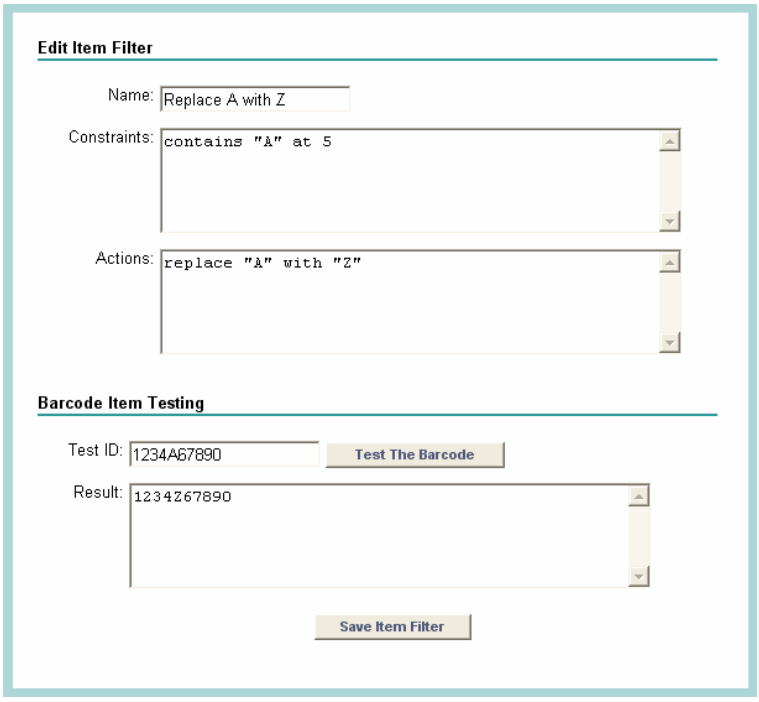
Problem

Item IDs in the library system have changed format. The meaning of character *A* has changed.

- If character *A* is found, it must be changed to a *Z*.

Solution

- The **CONTAINS** command selects only those ID codes with the *A* character in position 5.
- The **REPLACE** command changes *A* to *Z*.



Example 2

Passwords

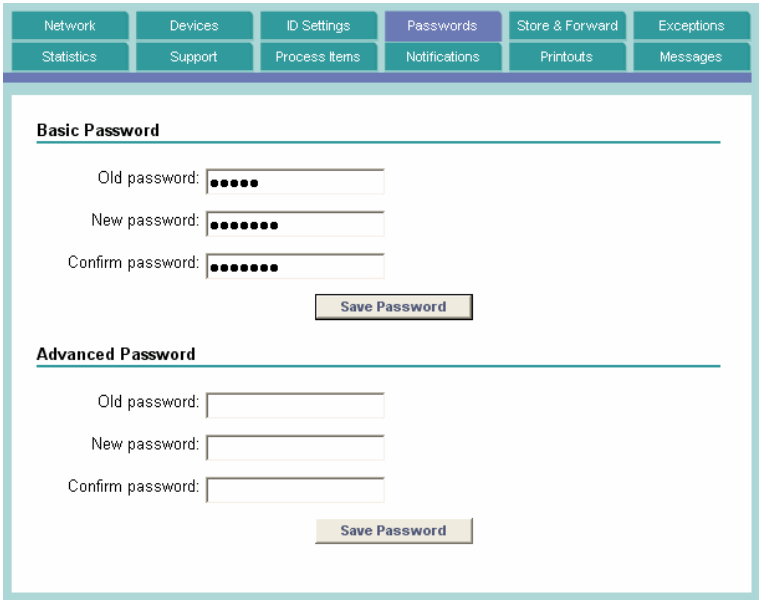
Use the **Passwords** tab to change the administrative passwords. The basic password is used to access the basic pages. The advanced password is used to access the advanced pages.

Because the default basic and advanced passwords (*basic* and *advanced*) are published in this guide, 3M strongly recommends that you change them as soon as possible.

If you lose or forget the password, you must call a 3M service technician to reset the passwords for you.

To change a password

1. In the **Old password** box, type the old password.
2. In the **New password** box, type the new password.
3. In the **Confirm password** box, type the new password again.
4. Click **Save Password**.



Password tab

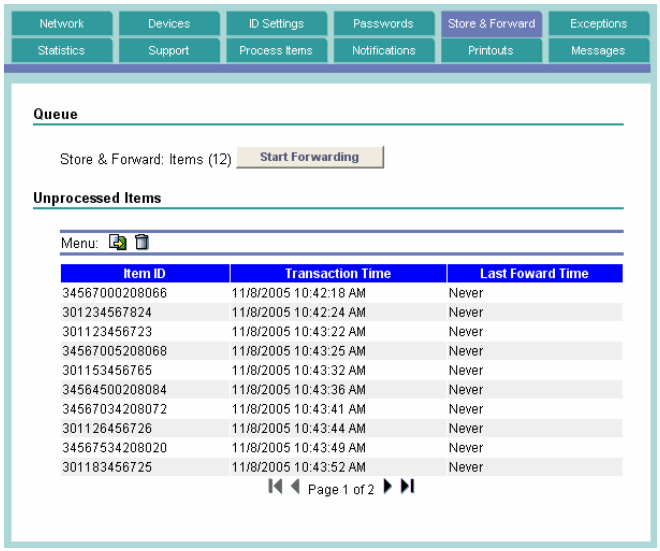
Forwarding stored items

Store and Forward

Use the **Store & Forward** tab to forward stored items to the circulation system after the SelfCheck system has been in Offline mode or disconnected from the circulation system.

Store and Forward enables the SelfCheck system to process library materials when the circulation system is unavailable. While operating offline, the SelfCheck system stores transactions for later forwarding to the circulation system. When it is back online, stored transactions are forwarded to the circulation system.

Most forwarded transactions should be automatically processed by the circulation system. Failed transactions are logged for the library staff to process manually if necessary.



Store & Forward

Using Store and Forward

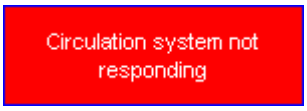
Store and Forward operations require intervention by library staff. When the circulation system becomes unavailable or the system is placed in Offline mode, the SelfCheck system automatically stores all items. When the circulation system becomes available again or the application is returned to Normal mode, library staff must initiate forwarding. This process is summarized in the following procedure and described in detail on the following pages.

1. Circulation system becomes unavailable or staff places unit in Offline mode.
2. SelfCheck system automatically begins storing items.
3. Circulation system becomes available again.
4. Staff places SelfCheck system in Normal mode.
5. Staff initiates forwarding. If the forwarding of an item fails then it stays in the queue and **Last Forward Time** is updated.
6. If some items were not forwarded, staff enters them manually into the circulation system.

When the circulation system is unavailable

When the SelfCheck system detects that the circulation system is unavailable, it displays the following messages:

- In SelfCheck System Manager the status block turns red and says: “Circulation system not responding.”
- The SelfCheck system sends the email message: ”System is not communicating with the circulation system. Contact your library's Network or IT department.” to all addresses in the **ILS Communications Failure/Restored** box of the **Notifications** page.



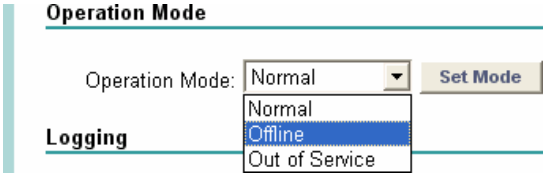
Status block message

Setting Offline mode

When you learn that the circulation system will be unavailable for an extended period of time, you should set the SelfCheck system to Offline mode.

To set the SelfCheck system to Offline mode

1. Open SelfCheck System Manager, log in, and then click the **Support** tab.
2. Click the **Operation Mode** box, click **Offline**, and then click **Set Mode**.



Setting Offline mode

Forwarding stored transactions

The SelfCheck system automatically detects when the circulation system is back online. As soon as it is back on line, you should forward the stored transactions to the circulation system.

To forward stored transactions

1. Make sure the SelfCheck system is in Normal mode.
2. On the **Store & Forward** tab, under **Queue**, verify that the number of stored items is greater than 0.
3. Click **Start Forwarding**. If there are no items to forward, **Start Forwarding** is unavailable.

When forwarding is complete, refresh the page to make sure that all unprocessed items have been successfully forwarded.

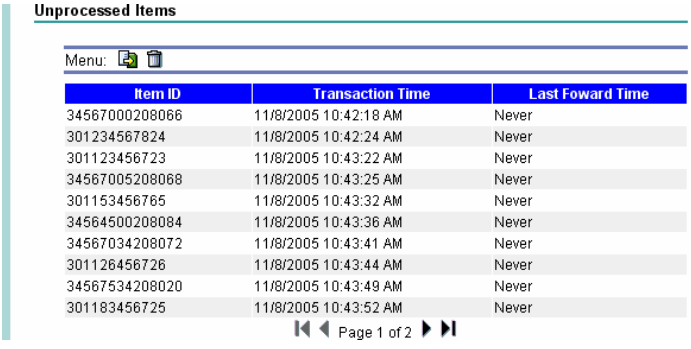
You can also forward stored transactions from the local interface. (See “Current Items tab” on page 15.) The local interface only forwards items that have been stored since the last time the items were removed. It is best to use it only when the circulation system loses connectivity for a brief time.

Unprocessed items

Stored transactions are listed in the **Unprocessed Items** table until they have been forwarded. You can export this list as an XML file. You can also delete the list.

To export the list of unprocessed items

1. In the **Unprocessed Items** menu, click the export icon ( ).
2. In the **File Download** dialog box, click **Save**.
3. In the **Save As** dialog box, type a name for the file, and then click **Save**.



Unprocessed items list

To delete the list of unprocessed items

1. In the **Unprocessed Items** menu, click the delete all icon ( ).
2. In the confirmation message, click **OK**.

Check-in exceptions

Use the **Exceptions** tab to enable holds that you want to see in exception reports and to enable the blocking of unsecured items or incomplete sets.

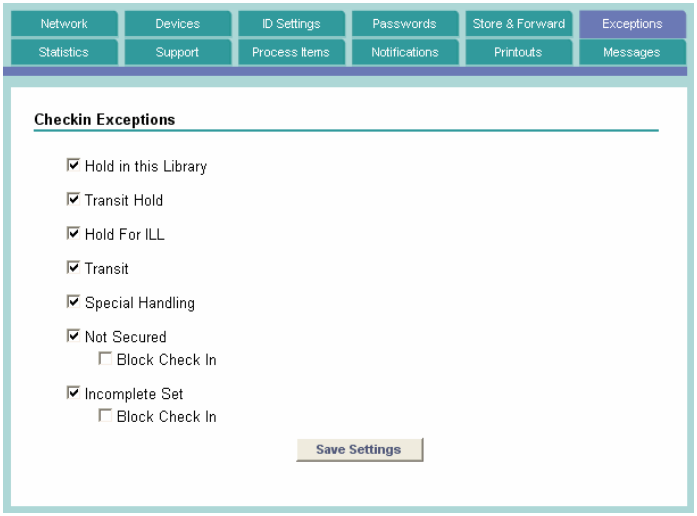
Alert types are defined in the 3M SIP 2.0 Extensions.

The following exceptions can be selected:

- **Hold in this Library** (Alert Type = 1)
- **Transit Hold** (Alert Type = 2)
- **Hold for ILL** (Alert Type = 3)
- **Transit** (Alert Type = 4)
- **Special Handling** (Alert Type = 99; also the default for all alerts that do not include an alert type as defined in the 3M SIP 2.0 Extensions.)
- **Not Secured**

  Select **Block Check In** to prevent these items from being checked in to the circulation system.
- **Incomplete Set**

  Select **Block Check In** to prevent these items from being checked in to the circulation system.



Exceptions tab

General maintenance

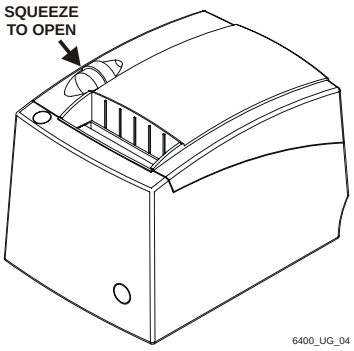
Replacing the printer paper

When the printer runs out of paper, use the following procedure to install a new roll of paper:

To replace the paper

1. Squeeze the open button and lift the printer cover.
2. Place the paper roll in the printer so the paper unwinds from the bottom.
3. Pull the front edge of the paper out until it is past the front edge of the printer.
4. Close the printer cover.

To order printer paper rolls, see "Obtaining service and supplies" on page 58.



Opening the printer

Cleaning the components

The SelfCheck system components can become dirty with normal use and may require cleaning. To clean the component exteriors, dampen a soft cloth with water or a mild cleaning solution and gently wipe away dirt from the affected areas.

Cleaning the monitor

- Shut down the SelfCheck system.
- Use care when cleaning the SelfCheck system monitor.
- Use pre-moistened towelettes that are sold specifically for monitor cleaning. If these are not available, you can use isopropyl alcohol or water to dampen a soft cloth, but use it very sparingly.
- Typically, an isopropyl alcohol and water solution ratio of 50:50 is the best cleaning agent for the touch screen. You can also use straight isopropyl alcohol. In addition, 3M™ Screen and Keyboard Cleaner CL680 has been tested and approved for this use.

Solving problems

Most problems with the SelfCheck system can be resolved by reading this guide. In the “FAQs” (frequently asked questions) section, we answer several of the most frequently asked questions. In the other sections we attempt to help you resolve problems that may be due to hardware, software, or configuration failures.

FAQs

Does the 3M™ SelfCheck™ System operate with SIP 1.0?

No. The SelfCheck System C-Series operates only with SIP (Standard Interchange Protocol) 2.0.

Does the 3M™ SelfCheck™ System recognize items on hold?

The SelfCheck system relies on the circulation system to determine how to process an item that has been placed on hold or reserved. Holds or Special handling is triggered when the Alert flag is set in the SIP Checkin Response. Other information available for holds such as alert type, hold patron ID and hold patron name are available if implemented by the circulation system according to the 3M SIP 2.0 extensions.

Will the 3M™ SelfCheck™ System C-Series sensitize a book if it is protected with a 3M™ Tattle-Tape™ Security Strip or non-ISO tags?

No. The system only processes and sets security on ISO tags.

Boot and login problems

Logon and communication problems

Problems you encounter during the logon process can be caused by changes to the host computer installation setup and circulation system changes. Contact your system administrator for assistance.

Unable to log on to the host computer

3M Software Support may ask you to monitor the logon process to determine if the SelfCheck system is attempting to log on to the host.

To set up Session logging

1. In the advanced **Support** tab, click the **Log Level** box, and then click the requested log level.
2. Click **Set Level**.

Additional things to check

- The data cable should be properly connected to the network connector on the SelfCheck system.
- The host should be properly operating and capable of accepting a connection from the SelfCheck system.
- Make sure the SIP program is running on the host.
- If a terminal server is used, make sure it is running and is capable of accepting a connection from the SelfCheck system.
- Have any network passwords changed?
- Has the path or other accesses to the network or the host changed?
- Was the SelfCheck system improperly turned off or otherwise disconnected from the host without properly logging off the system? This might leave the host connection active, which would prevent the SelfCheck system from logging on until the port is reset.
- Does the host port need to be reset to allow a connection from the SelfCheck system?
- Does the SelfCheck system get disconnected from the host without anyone initiating the logoff process? The host computer may be dropping the connection.
- Is there a firewall between the SelfCheck system and the host?

Printer problems

- Verify that the printer has paper.
- Verify that the paper is properly installed. The paper must be installed with the thermal side up and paper coming from the bottom of the roll.
- Verify that the printer is enabled in the **Devices** tab.
- Verify that the correct printer is selected in the **Printouts** tab.
- Verify that the printer cable and power plugs are connected.
- Try printing a test page from Windows via the **Printers** folder under the **Settings** option on the Windows Start menu.

Hold slip problems

Hold slip will not print

- See “Printer problems” on page 56.

Hold slip does not print the desired information

- Verify that the hold slip configuration area on the **Printouts** tab has the correct information.

Hold slip information does not fit properly

- Try changing the font or the font size in the hold slip configuration area on the **Printouts** tab. The font and font size selected in the **Header and Footer Text** area affect the *entire* receipt.
- If the problem is in the header or footer, create new line breaks to rearrange the text.

Power problems

Possible cause	Solutions
No AC power.	**1** Make sure the SelfCheck system is plugged in. **2** Make sure the monitor is turned on. **3** Make sure the outlet being used is not operated from a wall switch or other control device. **4** Check to see whether any other machine or appliance using the same outlet is working. **5** If the outlet is dead, have a qualified person check the circuit breaker or fuse box.
There is a computer problem with the SelfCheck system.	In the U.S., call 3M Technical Support at 1-800-328-0067, option 1. Outside the U.S., call your local 3M office.

Obtaining service and supplies

Printer paper and other supplies

To order printer paper and other supplies in the U.S., call 1-800-328-0067, option 2. Outside the U.S., call your local 3M office. The following printer paper is recommended:

Thermal Printer Paper

Part number	78-8126-7827-0 (Part number for one roll. You must order paper in quantities of 8 rolls.)
Width	3.15 inches [80 mm]
Length	410 feet [125 m]
Diameter	4.0 inches [100 mm]

Contacting Support

To contact 3M to request a service call, installation, software support, or to provide Service Agreement information, in the U.S. call 1-800-328-0067. Outside the U.S., contact your local 3M office.

3M Library Systems Web site

The 3M Library Systems Web site is at http://www.3M.com/library.

For additional information about SelfCheck systems, go to http://www.3M.com/us/library and select the information you want from the navigation bar.

Appendix A: Email notification messages

The SelfCheck system automatically sends email alerts to the email addresses on the **Notifications** tab (page 33) and in the **Notifications** box of the **Support** tab (page 30). The following table lists the standard email notification messages. You can edit the text of these messages on the **Messages** tab. (See “Messages” on page 35.)

Alert condition	Subject line	Message
Chute full	3M SelfCheck System C-Series: {0}. Chute full.	3M SelfCheck System C-Series: {0}. Chute full. Number of items:{1}
Chute full warning	3M SelfCheck System C-Series: {0}. Chute almost full.	3M SelfCheck System C-Series: {0}. Chute almost full. Number of items:{1}
Circulation system not communicating	3M SelfCheck System C-Series: {0}. Not communicating with circulation system.	3M SelfCheck System C-Series: {0}. System is not communicating with the circulation system Contact your library's Network or IT department.
Items removed	3M SelfCheck System C-Series: {0}. Items Removed.	3M SelfCheck System C-Series: {0}. 3M SelfCheck System C-Series items have been removed from the chute area by staff.
Low paper	3M SelfCheck System C-Series: {0}. Printer is low on paper.	3M SelfCheck System C-Series: {0}. Printer is low on paper.
Out of service	3M SelfCheck System C-Series: {0}. Out of service.	3M SelfCheck System C-Series: {0}. System is out of service. Please contact 3M for service. {1}
Paper out	3M SelfCheck System C-Series: {0}. Printer is out of paper.	3M SelfCheck System C-Series: {0}. Printer is out of paper.
Printer down	3M SelfCheck System C-Series: {0}. Printer is not working.	3M SelfCheck System C-Series: {0}. Printer is not working.
System failure	3M SelfCheck System C-Series: {0}. System failure.	3M SelfCheck System C-Series: {0}. System failure. {1}
System OK	3M SelfCheck System C-Series: {0}. System OK.	3M SelfCheck System C-Series: {0}. System OK. {1}
System shutdown	3M SelfCheck System C-Series: {0}. System shutdown.	3M SelfCheck System C-Series: {0}. System shutdown. {1}

Variables

{0} System name of the SelfCheck system.

{1}, {2}, … Other variables.

3M Library Systems
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St. Paul, Minnesota 55144-1000
www.3M.com/library