3

Basic Operations

⚠️ **CAUTION** Users should read and understand all safety warnings and operating instructions prior to using the system.

Making a User Badge

At the Login prompt, you can choose to make and print a user badge for yourself. You can then log in to any SLS PCS by scanning the barcode on the badge. If you have already made a badge and just need to reprint it, refer to "Printing a User Badge" on page 3-23.
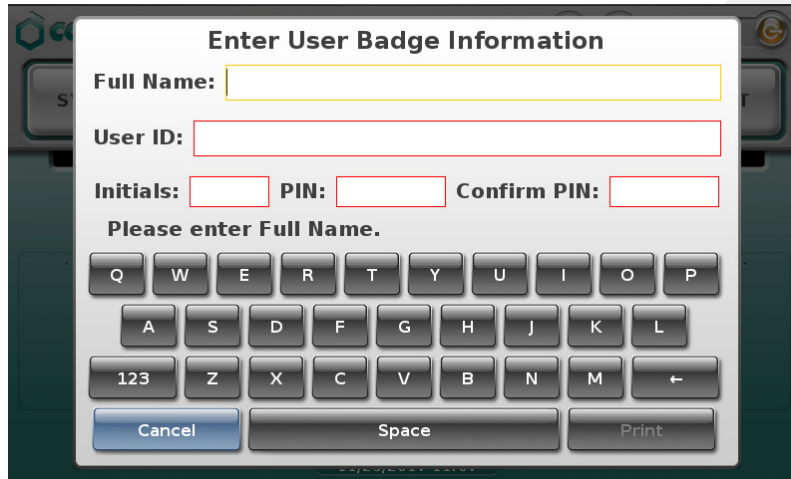
To make a user badge

1. At the Login prompt, press the **Make User Badge** button.

Scan User Badge to Log In

Manual Log In
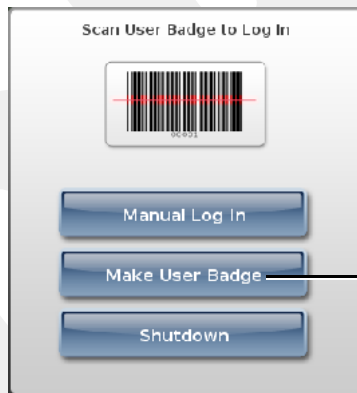
Make User Badge ——Press **Make User Badge**

Shutdown

You are prompted to enter your user information.

NOTE: *If instead of the Enter User Badge Information screen a message displays saying this function is disabled, contact your SLS administrator about how to obtain a user badge.*

2. Enter user information by pressing each field and using the on-screen keyboard.

   • The Full Name can be up to 38 characters long.

   • The User ID can be up to 16 characters long.

   • The Initials can be up to 3 characters long.

   • The PIN can be up to 10 digits long. If the system is not configured to require a PIN, then PIN fields will not be shown.

3. When you have entered your user information, press the **Print** button.

   The badge is printed and placed in the output tray. The Login prompt is displayed.

Your user information is stored in the system. You can now use this badge to log in to any SLS PCS by scanning its barcode.

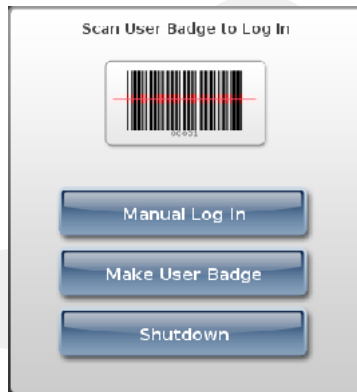*NOTE: The SLS system administrator needs to ensure that unique user IDs are assigned to each user.*

Logging In

You log in by entering your user ID or by scanning the barcode on your user badge. For information about making a user badge, refer to "Making a User Badge" on page 3-1.

To log in

1. With the Login prompt displayed, enter your user ID using one of the following methods:


- Method 1: Press the **Manual Log In** button. Then go to step 2.

- Method 2: Scan the barcode on your user badge.

Scanning a user badge

If SLS PCS has been configured to require a PIN and one has not yet been created for your user ID, you are prompted to enter your PIN, which can be up to ten digits long. Go to step 4. Otherwise, a test label is printed and you are prompted to confirm that it printed correctly (the prompt is shown in step 5). Go to step 6.

Basic Operations

2. Use the keypad to enter your user ID.
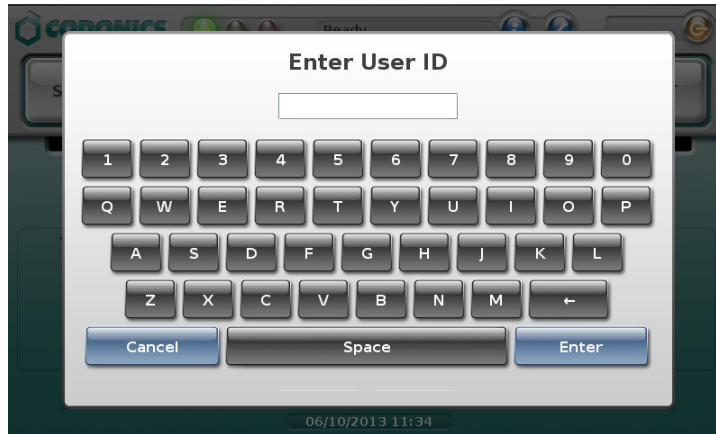
3. Press the **Enter** button

   If SLS PCS has been configured to require a PIN and one has not yet been created for your user ID, you are prompted to enter your PIN. Otherwise, a test label is printed and you are prompted to confirm that it printed correctly (the prompt is shown in step 5). Go to step 6.
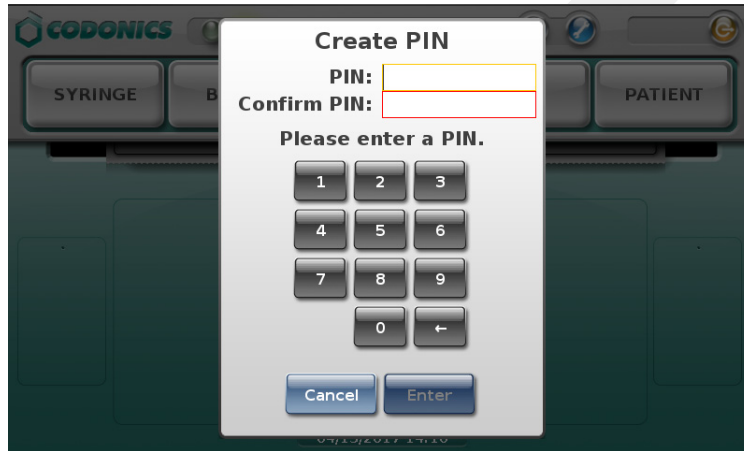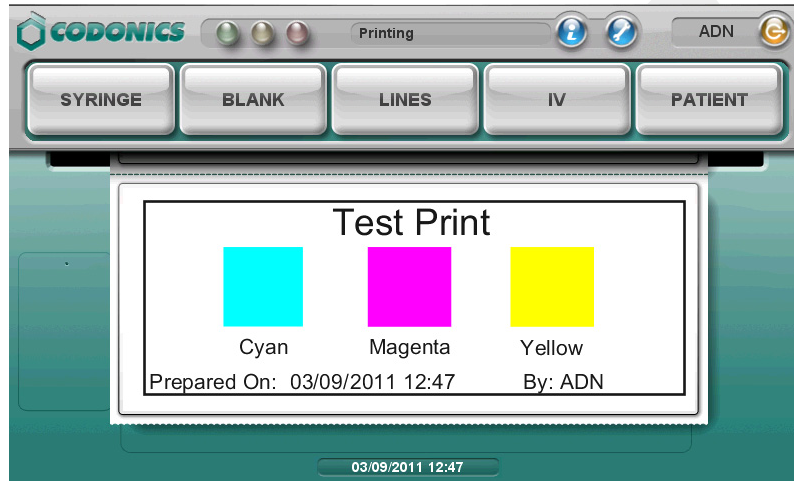

4. Enter your PIN.

   The PIN can be up to 10 digits long.

5. Press the **Enter** button.

   To ensure that labels print properly, the test print screen displays and a test label is printed.

NOTE: *If the 24-hour test print setting is enabled, the system will ensure that a test print is performed at least once a day.*

You are then prompted to confirm the test label printed correctly.
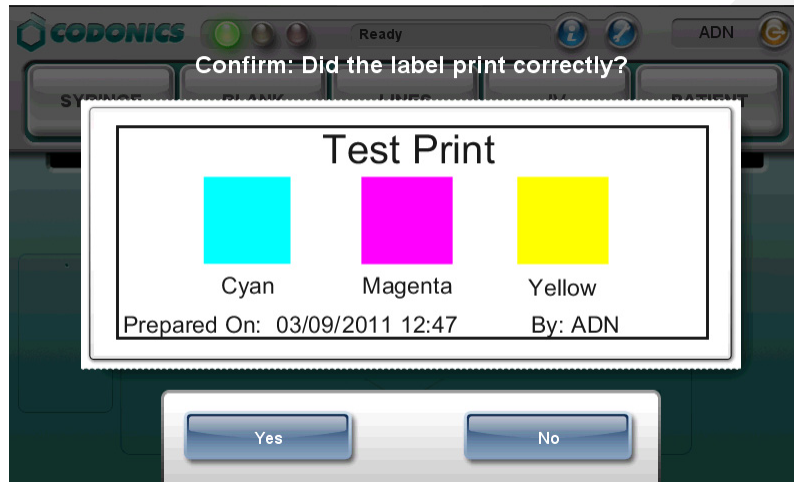
6. Review the following to ensure that the test label printed correctly:

- The colors are correct

- The label content is correctly centered

- The print is not faded

- There is no horizontal banding

- The date and time are correct

- The user's initials are correct

7. If the test label has printed correctly, press the **Yes** button.

The main screen displays and the system is ready for use.

If the test label prints incorrectly, press the **No** button.

A Test Print Failed Verification message displays.

ERROR CODE 2

Test print failed verification.

The system cannot print labels.

The following actions may resolve the problem:

Print the test label again.
Clean the ink cartridge nozzles using the Utilities screen.
Replace the ink cartridge or labels.
Cycle power on the system.

If problems persist, contact your system administrator.
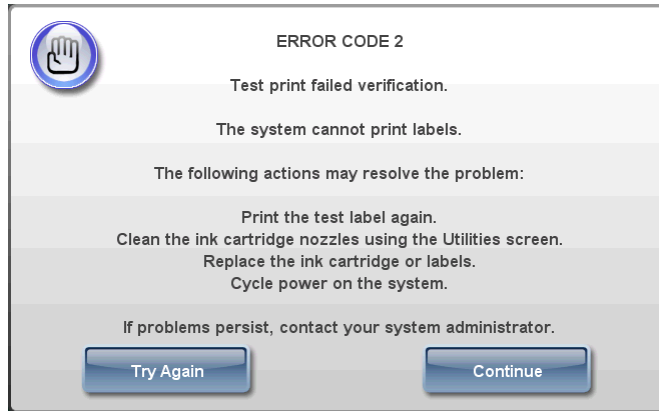
Try Again   Continue

8. **To print another test label,** press the **Try Again** button.

Another test label prints and you are prompted again to confirm the test label.

To attempt to resolve the printing problem, press the **Continue** button.

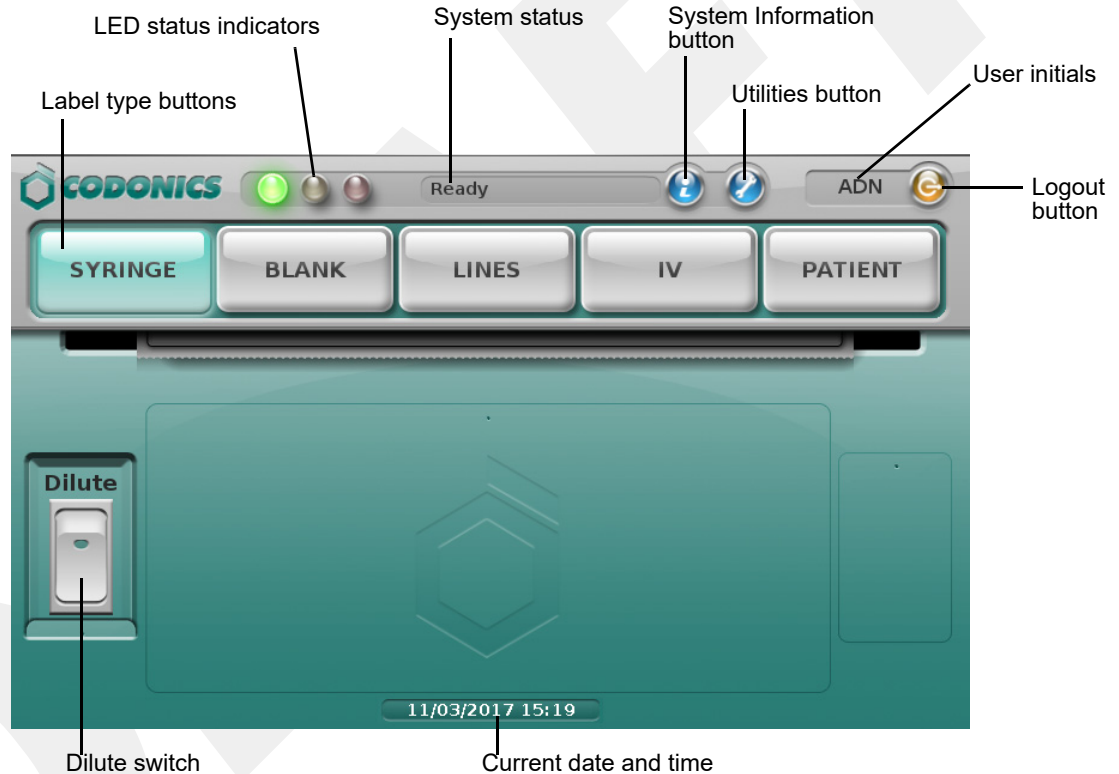The Utilities screen displays and SLS PCS is put into an out-of-service state.

9. To troubleshoot the printing problem and perform the recommended solution, refer to Table 10-2 on page 10-10.

The system cannot leave the out-of-service state until you press the **Yes** button in response to the prompt to confirm that the test label printed correctly. So, after each solution you try, print another test label. If the test label does not print automatically, you can log out and log in again to have the system print a test label.

10. If the test label still does not print correctly after trying the suggested solutions, contact your SLS system administrator.

Touch Screen User Interface

The elements of the main screen are identified in the following figure.

LED status indicators

System status

System Information button

Label type buttons

Utilities button

User initials

Logout button

Dilute switch

Current date and time

If the SLS600i supports Batch or Copy mode, a **Batch** or **Copy** button is included on the main screen. Refer to "Printing Labels in Batch Mode" on page 5-47 and "Printing Labels in Copy Mode" on page 5-56.

SLS Utilities

You can perform certain operations from the Utilities screen.

These operations include:

- Adjusting the audio volume. Refer to "Adjusting the Audio Volume" on page 3-37.

- Adjusting the touch screen brightness. Refer to "Adjusting the Touch Screen Brightness" on page 3-37.

- Setting Fast Print mode. Refer to "Setting Fast Print Mode" on page 3-22.

- Printing another copy of your user badge. Refer to "Printing a User Badge" on page 3-23.

- Setting the date and time. Refer to "Setting the Date and Time" on page 3-35.

There are other utilities functions that are used to maintain SLS PCS. These include:

- Cleaning the ink cartridge nozzles. Refer to "Cleaning the Ink Cartridge Nozzles" on page 3-15.

- Adjusting the label media path. Refer to "Adjusting the Media Path" on page 3-18.

- Setting the black levels of a printed label. Refer to "Adjusting the Label Black Levels" on page 3-20.

- Copying system log files to a USB flash drive. Refer to "Backing Up Log Files" on page 3-27.

- Clearing system errors. Refer to "Clearing Errors" on page 3-30.

- Adding SLS features. Refer to "Adding a Feature" on page 3-32.

- If SLS PCS is being run on a network, configuring its network settings. Refer to Chapter 3.

NOTE: *The SLS 600i touch screen does not require calibration. If you press the* **Calibrate Screen** *button, the message "Calibration is not required for this touchscreen" displays.*
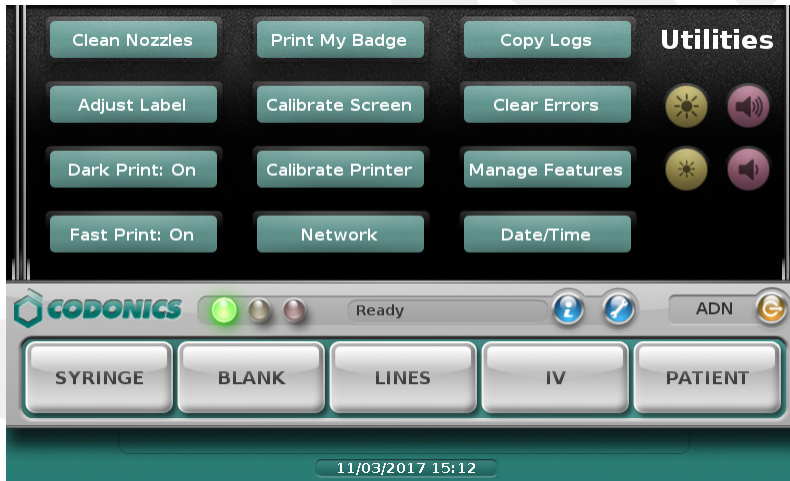
Displaying the Utilities Screen

**To display the
Utilities screen**

Press the **Utilities** button.

Utilities button

The Utilities screen displays.

Basic Operations

Cleaning the Ink Cartridge Nozzles

If label print quality is poor, you might need to clean the ink cartridge nozzles.

To clean the ink cartridge nozzles

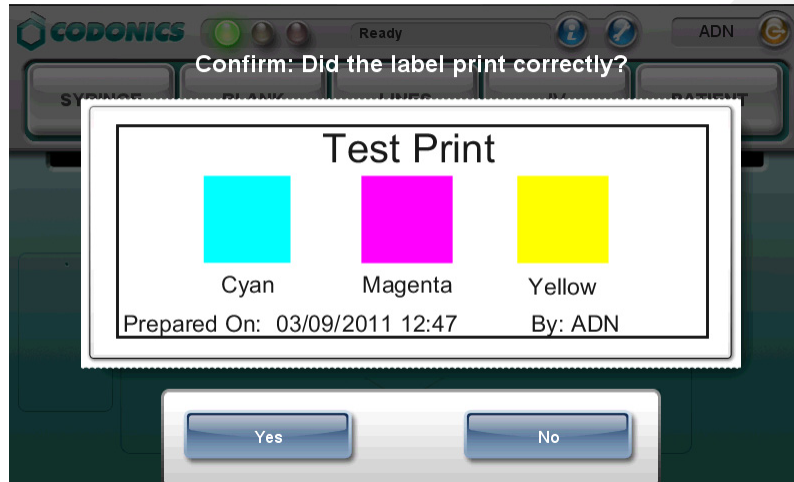1. Press the **Utilities** button at the top of the user interface.

Utilities button

The Utilities screen displays.

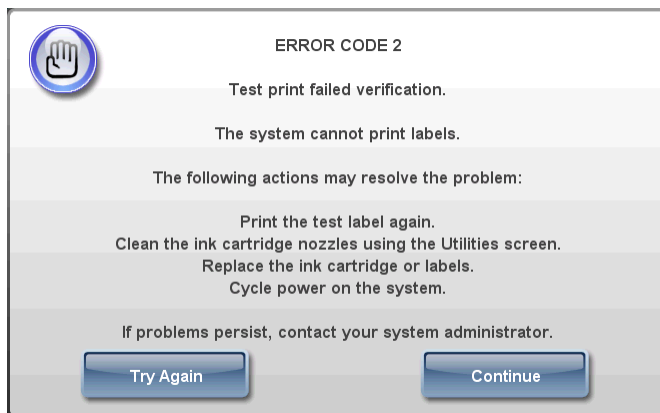2. Press the **Clean Nozzles** button.

Press **Clean Nozzles**

The system cleans the ink cartridge nozzles, and then prints a test label.

You are then prompted to confirm that the test label printed correctly.

3. Review the following to ensure that the test label printed correctly:

- The colors are correct

- The label content is correctly centered

- The print is not faded

- There is no horizontal banding

- The date and time are correct

- The user's initials are correct

4. If the test label has printed correctly, press the **Yes** button.

The main screen displays.

If the test label prints incorrectly, press the **No** button.

A Test Print Failed Verification message displays.

ERROR CODE 2

Test print failed verification.

The system cannot print labels.

The following actions may resolve the problem:

Print the test label again.
Clean the ink cartridge nozzles using the Utilities screen.
Replace the ink cartridge or labels.
Cycle power on the system.

If problems persist, contact your system administrator.

Try Again   Continue

5. To print another test label, press the **Try Again** button.

    Another test label prints and you are prompted again to confirm the test label.

    To attempt to resolve the printing problem, press the **Continue** button.

    The Utilities screen displays and SLS PCS is put into an out-of-service state.

6. To troubleshoot the printing problem and perform the recommended solution, refer to Table 10-2 on page 10-10.

    The system cannot leave the out-of-service state until you press the **Yes** button in response to the prompt to confirm that the test label printed correctly. So, after each solution you try, print another test label. If the utility you use does not do this automatically, you can log out and log in again to have the system print a test label.

7. If the test label still does not print correctly after trying the suggested solutions, contact your SLS system administrator.

Adjusting the Media Path

If the label is not properly centered on the printed labels or the labels are not being cut at the proper location on the media, you might need to adjust the media path.
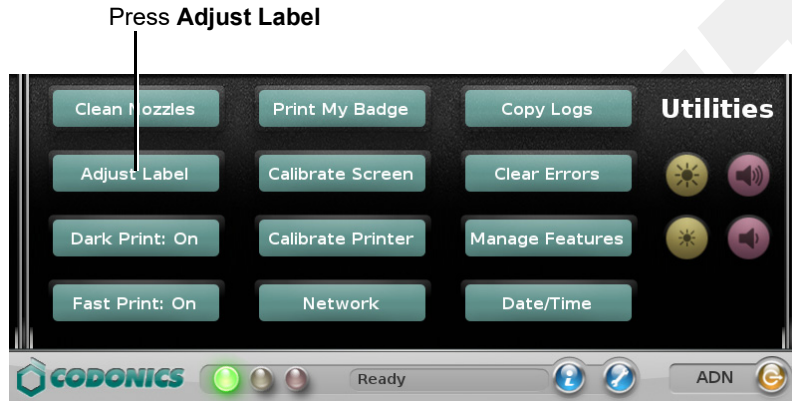
To adjust the media path

1. Unload the label media, as described in "Clearing a Label Media Jam" on page 10-24.

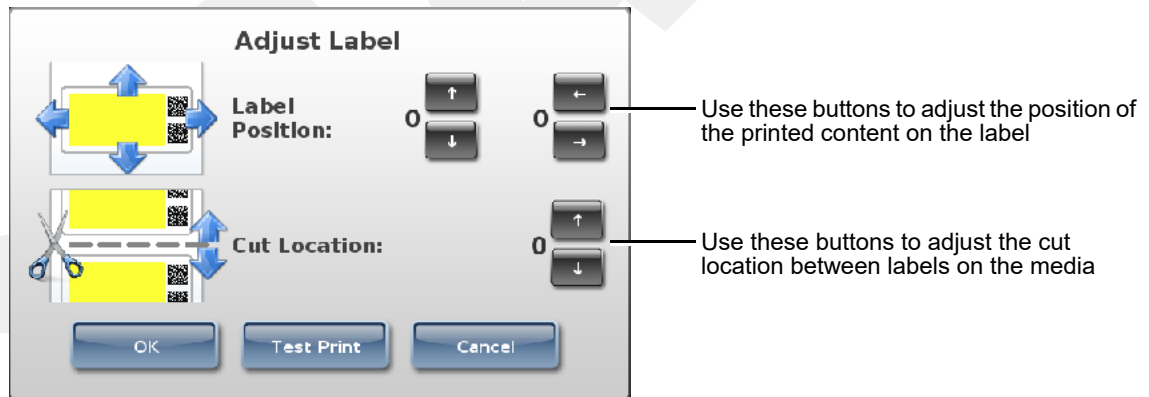2. Press the **Utilities** button at the top of the user interface.

Utilities button

The Utilities screen displays.

3. Press the **Adjust Label** button.

Press **Adjust Label**

The **Adjust Label** dialog box displays.

4. Use the adjustment buttons as described in the following figure.

Use these buttons to adjust the position of the printed content on the label

Use these buttons to adjust the cut location between labels on the media

For example, if the label content is correctly centered horizontally but is too low on the label vertically, use the up arrow button to move the print area up on the label.

5. Optionally, press the **Test Print** button to print a label and check your adjustments.

6. After making the appropriate adjustments, press the **OK** button.

7. Close the Utilities screen.

8. Reload the label media, as described in "Loading or Replacing the Label Media" on page 2-26.

9. Print a custom label to see if the label prints correctly and use the Adjust Label utility again to make additional adjustments if needed.

Adjusting the Label Black Levels

You can adjust the black levels of printed labels to improve their print contrast. If ink bleeding or barcode printing issues occur, the black levels adjustment should be turned off.

To adjust the label black levels

1. Press the **Utilities** button at the top of the user interface.

The Utilities screen displays.

2. Press the **Dark Print: On** button (the button is in the **Dark Print: On** state by default).

Press **Dark Print: On**

The button label changes to **Dark Print: On**, which indicates that the black levels adjustment has been turned on and the black levels for labels decreased.

3. To turn off the black levels adjustment, press the **Dark Print: Off** button.

Setting Fast Print Mode

SLS PCS supports Fast Print mode, which uses fewer ink passes to print labels faster than in normal print mode. By default, Fast Print mode is on.

☞ Press the **Fast Print** button to toggle it on or off.

To set Fast Print mode

Clean Nozzles	Print My Badge	Copy Logs	**Utilities**
Adjust Label	Calibrate Screen	Clear Errors	
Dark Print: On	Calibrate Printer	Manage Features	
Fast Print: On	Network	Date/Time	

CODONICS   Ready   ADN

Press **Fast Print**

🖋 *NOTE: While in Fast Print mode, streaks or white lines might occur on the printed label if a nozzle is clogged. If the quality deteriorates to an unacceptable level, you can try purging the ink cartridge by selecting Clean Nozzles on the Utilities screen, replacing the ink cartridge, or turning off Fast Print mode.*

Printing a User Badge

To print a user
badge

Press the **Print My Badge** button.

Press **Print My Badge**

Clean Nozzles	Print My Badge	Copy Logs	**Utilities**
Adjust Label	Calibrate Screen	Clear Errors	
Dark Print: On	Calibrate Printer	Manage Features	
Fast Print: On	Network	Date/Time	

The user badge is displayed and then printed. The user badge will include your login barcode and name. Depending on how the user badges are configured, it can also include your user ID. If your user name is too long to fit on the badge, an ellipse indicates that the name has been truncated.

Basic Operations
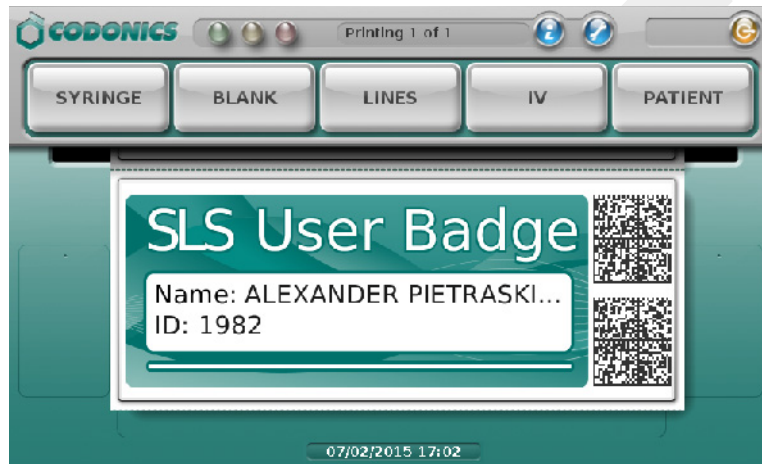
Calibrating the Printer

The Calibrate Printer utility calibrates the media loading path and the paper out sensor.

Run the Calibrate Printer utility if you notice that labels are not loading properly or if the printer is not detecting that media is out.

To calibrate the printer

1. Press the **Utilities** button at the top of the user interface.

Utilities button

The Utilities screen displays.

2. Press the **Calibrate Printer** button.

Press **Calibrate Printer**

The system displays a message with instructions about how to perform the calibration.
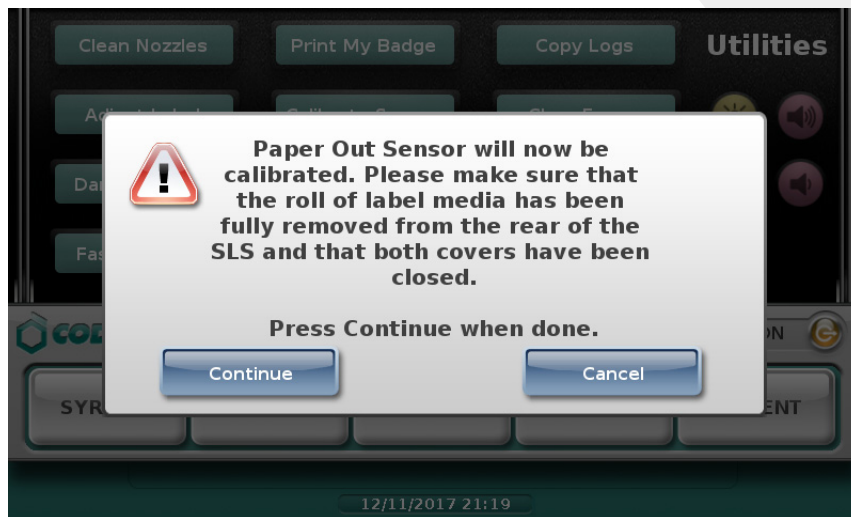
3. Remove the media roll and close the SLS PCS covers.

4. Press the **Continue** button to begin the calibration.

Configuring the Network

The **Network** button opens the Network utility. For information about how to use this utility, refer to Chapter 4, "Configuring the Network Connection".

Backing Up Log Files

To prevent loss of the system logs stored on SLS PCS, it is strongly recommended that this data be backed up to another storage device on a regular basis. Also, if SLS PCS is experiencing problems, Codonics Technical Support might ask you to copy the system files to a USB flash drive and send them the drive.

Use the following procedure to copy the system files to a USB flash drive. You can then copy these files to another storage device for backup purposes.

⚠ **CAUTION** The system files copied to the USB flash drive are not encrypted.

To copy logs and other system files to a USB flash drive

1. Log in to SLS PCS, as described in "Logging In" on page 3-3.

2. Insert the USB flash drive into the USB port on the left side of the touch screen.
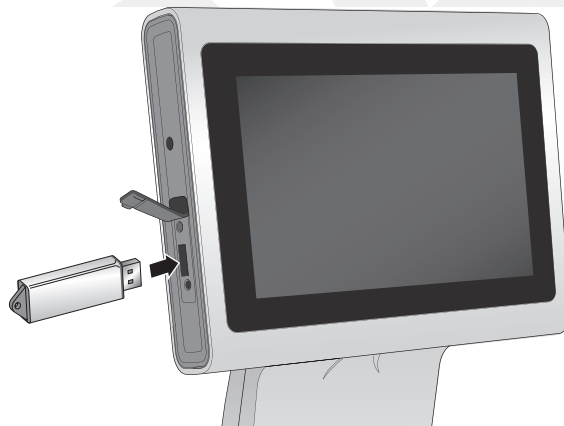
Inserting the USB flash drive into the touch screen USB port

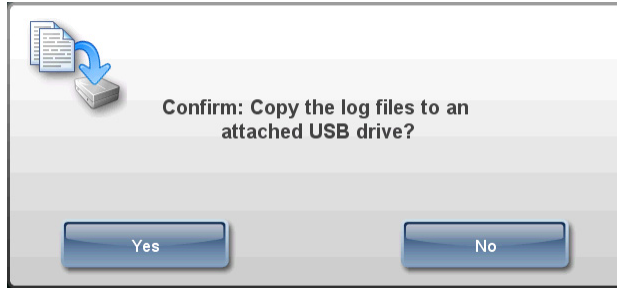3. Press the **Utilities** button at the top of the user interface.

Utilities button

The Utilities screen displays.

4. Press the **Copy Logs** button.

Press **Copy Logs** to start the copy operation

The system prompts you to confirm the copy operation.

Confirm: Copy the log files to an
attached USB drive?

Yes   No

5. Press the **Yes** button to continue.

    The system displays the progress of the copy operation.

6. When the copy operation is complete, press the **Utilities** button to close the Utilities screen.

7. Remove the USB flash drive.

Clearing Errors

Sometimes a permanent error state needs to be cleared in the SLS software.

NOTE: This function should only be performed by a qualified and trained SLS system administrator or in coordination with Codonics Technical Support.

To clear errors

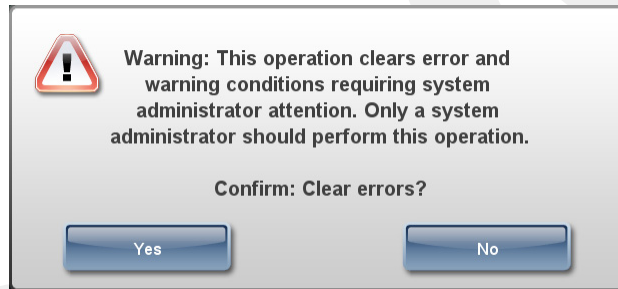1. Press the **Utilities** button at the top of the user interface.
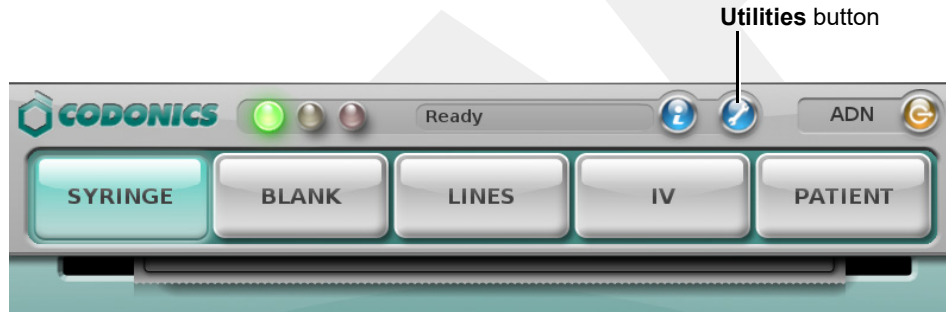
Utilities button

The Utilities screen displays.

2. Press the **Clear Errors** button.

Press **Clear Errors**

A confirmation dialog box displays.

Warning: This operation clears error and warning conditions requiring system administrator attention. Only a system administrator should perform this operation.

Confirm: Clear errors?

Yes   No

3. To continue with clearing the errors and restarting the system, press the **Yes** button.
    SLS PCS shuts down, restarts, and returns to the Login prompt.

Adding a Feature

Feature keys enable specific features of SLS PCS. Each feature key is associated with an integer value that identifies the name of the feature.

If you have purchased a new feature for SLS PCS, Codonics will provide you with the feature key.

The procedure for adding feature keys is provided below. Feature keys can also be installed remotely over the network from the SLS Administration Tool.

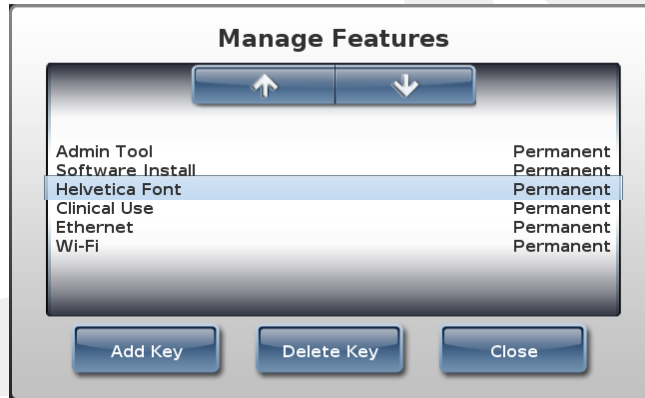**To add a feature**

1. Press the **Utilities** button at the top of the user interface.

Utilities button

The Utilities screen displays.

2. Press the **Manage Features** button.

Press **Manage Features**

The **Manage Features** dialog box displays.

3. Press the **Add Key** button.

The **Add Feature Key** dialog box displays.
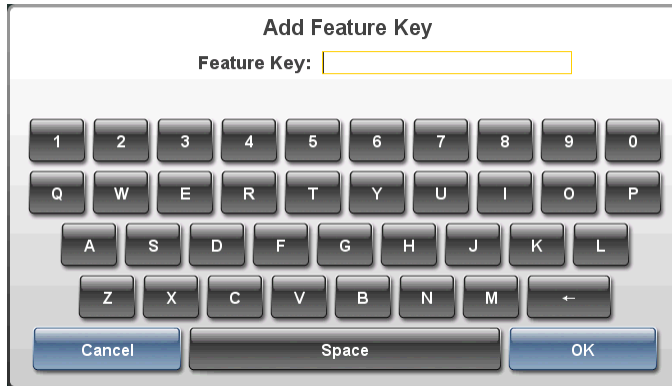
4. Enter the feature key, and then press the **OK** button to install the feature.

   You are prompted to confirm the feature installation.
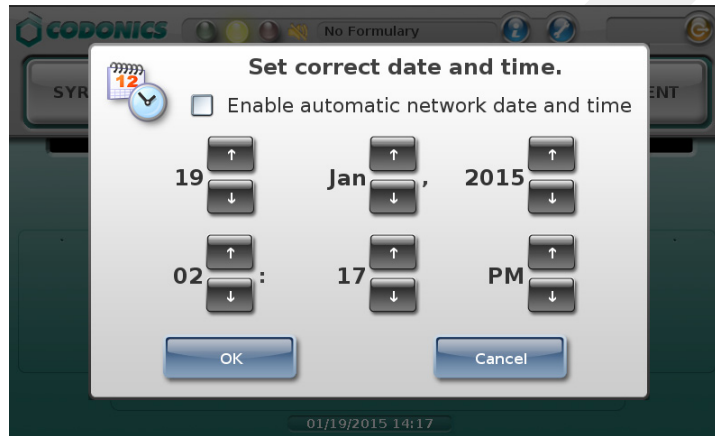
Setting the Date and Time

To set the date and time

1. Press the **Date/Time** button.

Press **Date/Time**

The Set correct date and time screen displays. The **Enable automatic network date and time** setting will be selected or not, depending on how SLS PCS has been configured. If this setting check box is selected, SLS PCS will use the time server to automatically set the date and time and the Date/Time buttons will become unavailable.

2. If the **Enable automatic network date and time** setting is selected, clear the check box to make the Date/Time buttons available again.

   For example, you might have to make the Date/Time buttons available if the time server goes down and the date and time need to be corrected.

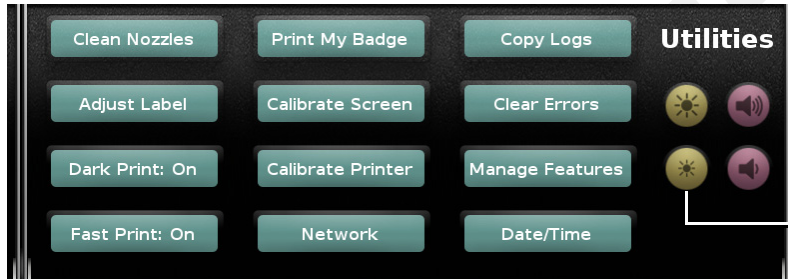3. Use the Date/Time buttons to set the date and time, then press **OK**.

NOTE: When Daylight Savings Time occurs, SLS PCS time will be automatically updated. There will not be a notice of the time change occurring.

Adjusting the Touch Screen Brightness

To adjust the brightness

Press the **Brightness Up** or **Brightness Down** button.

Clean Nozzles	Print My Badge	Copy Logs	**Utilities**
Adjust Label	Calibrate Screen	Clear Errors	☀ 🔊
Dark Print: On	Calibrate Printer	Manage Features	☀ 🔈
Fast Print: On	Network	Date/Time	

Press **Brightness Up** or **Brightness Down**

The current brightness level is indicated by the brightness level display.

Adjusting the Audio Volume

To adjust the audio volume

Press the **Volume Up** or **Volume Down** button.

Clean Nozzles	Print My Badge	Copy Logs	**Utilities**
Adjust Label	Calibrate Screen	Clear Errors	☀ 🔊
Dark Print: On	Calibrate Printer	Manage Features	☀ 🔈
Fast Print: On	Network	Date/Time	

Press **Volume Up** or **Volume Down**

The current volume level is indicated by an audible beep and in the volume level display.

If a minimum volume has not been configured for SLS PCS, you can turn the volume down until it is muted. A Muted icon will display in the Dashboard.
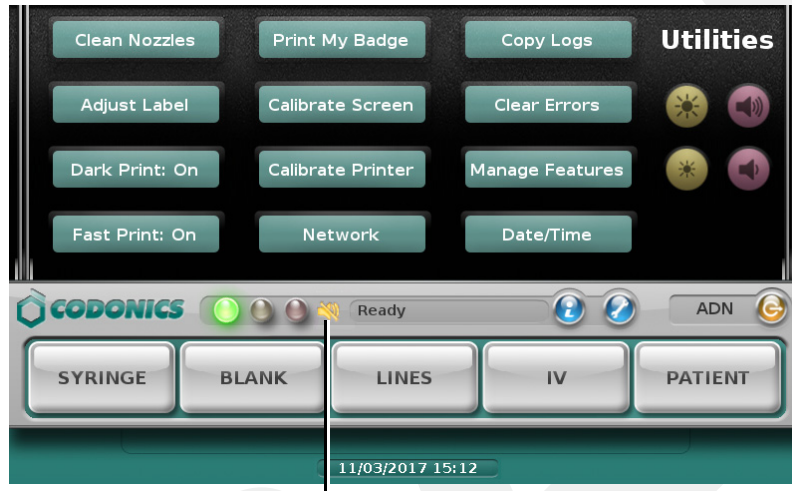
Muted icon

Basic Operations

Closing the Utilities screen

Press the **Utilities** button or any area of the dashboard, highlighted in red in the figure below.

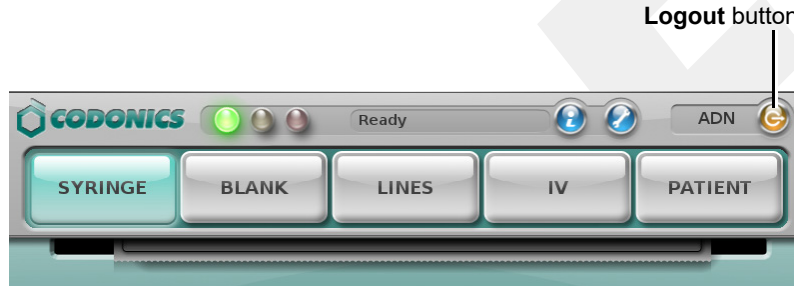Press the **Utilities** button or anywhere in the highlighted area

Clean Nozzles	Print My Badge	Copy Logs	**Utilities**
Adjust Label	Calibrate Screen	Clear Errors	
Dark Print: On	Calibrate Printer	Manage Features	
Fast Print: On	Network	Date/Time	

CODONICS   Ready   ADN

| SYRINGE | BLANK | LINES | IV | PATIENT |

11/03/2017 15:12

The Utilities screen closes.

Logging Out

To log out

1. Press the **Logout** button.

The **Log Out or Shut Down** dialog box displays.

2. Press the **Log Out** button.

Log Out button
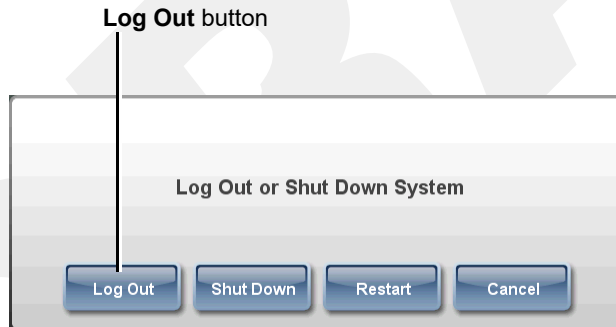
The Login prompt displays.

Being Logged Out Automatically Due to Inactivity

The system includes a preconfigured timeout period (by default, 15 minutes) to help ensure the security of system operations. The timeout period can be up to 18 hours.

If a user is logged in but the user session is idle for the timeout period, a notification message displays and a countdown begins.

To cancel the automatic logout and continue with your session, press the **Continue** button. The system resets the inactivity timer.

Screen Saver On Due to Inactivity

If no users have been logged in for a preconfigured timeout period (60 minutes), the touch screen shows the image below. If you scan a barcode while the screen saver is being shown, the screen saver will be cleared.
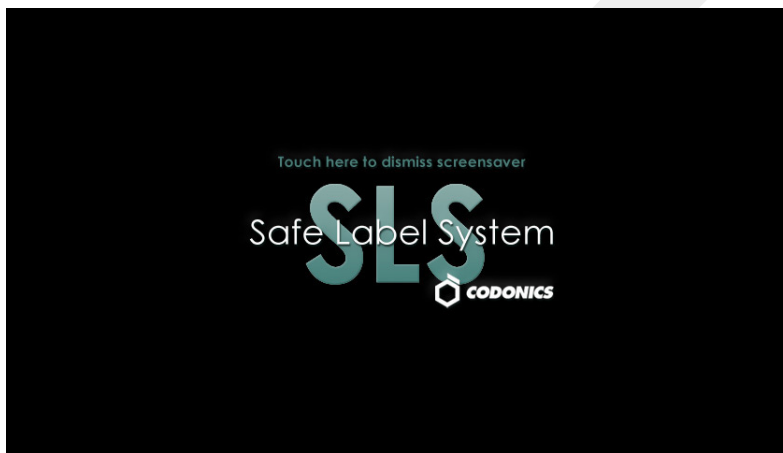
To turn on the display again, press anywhere on the touch screen.

Auto-Logout and Screen Saver in Batch or Copy Mode

When a Batch or Copy Mode job is printing, you will not be automatically logged out nor will the screen saver activate during the following conditions, even if the system is waiting with the OK to Cut message displayed:

- While cutting a strip of labels

- If the end of the media has been reached before the job could be completed

Shutting Down or Restarting the System

You should always shut down the system software before powering down the system.

⚠️ **CAUTION** Always make sure that all print jobs have completed before shutting down or restarting the system software:

- Check the Dashboard to ensure that SLS PCS is in Ready mode.
- At the back cover; ensure that the media label roll is not moving.
- At the front cover; ensure that no shaking is occurring.
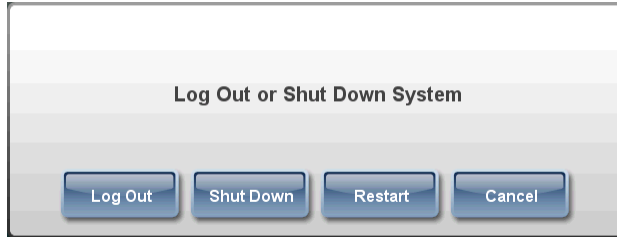
Shutting Down or Restarting from the Main Screen

To shut down or restart the system software

1. Make sure all print jobs have completed.

2. Press the **Logout** button.

Logout button

The **Log Out or Shut Down** dialog box displays.

> Log Out or Shut Down System
>
> [Log Out] [Shut Down] [Restart] [Cancel]

3. Press the **Shut Down** or **Restart** button.

    The system shuts down or restarts.

Shutting Down from the Login Prompt

To shut down the system software

1. Make sure all print jobs have completed.

2. Press the **Shutdown** button.

> Scan User Badge to Log In
>
> [Manual Log In]
>
> [Make User Badge]
>
> [Shutdown]
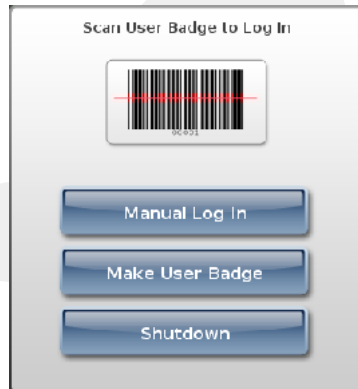
The system shuts down.

Powering Off the System

👉

1. Make sure all print jobs have completed.

2. Shut down the system as described in "Shutting Down or Restarting the System" on page 3-43.

   The system shuts down and displays a message indicating that it is now safe to power off the system.

3. Set the Power switch on the rear panel to off.
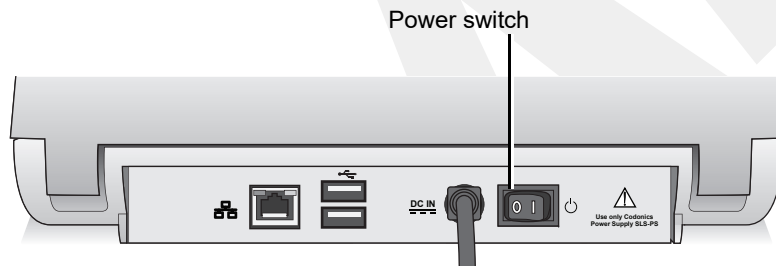
Power switch

Power switch on the rear panel

⚠️ **CAUTION** Always make sure that the user is logged out of the session and all print jobs have completed before shutting down or restarting the system software. Also, always shut down through the user interface so that the ink cartridge is properly capped, the SmartDrive is properly backed up, and the remainder of the system is properly shut down. If SLS PCS is not powered down from the user interface, the following message displays: *Warning Code 86, SLS PCS has recovered from an unexpected shutdown. Use the power icon on the touchscreen for proper shutdown*.

4

Configuring the Network Connection

If SLS PCS is to be connected to a network, then its network settings must be configured. When SLS PCS is properly configured to operate on the network, your SLS administrator can update its formulary and configuration packages remotely, and also monitor its operation.

SLS PCS can connect to the network in one the following ways:

- **Ethernet cable.** For instructions, refer to "Configuring an Ethernet Network Connection" on page 4-3.

- **Enterprise Wi-Fi.** For instructions, refer to "Configuring an Enterprise Wi-Fi Network Connection" on page 4-9.

- **Non-Enterprise Wi-Fi.** For instructions, refer to "Configuring a Non-Enterprise Wi-Fi Network Connection" on page 4-21.

Static SLS PCS Device Names

SLS supports static names for SLS PCSs, which means that a unique fixed IP host name is assigned to SLS PCS via the SmartDrive. This allows SLS PCS to be accessible to the SLS Administration Tool and Email Server if its dynamically assigned IP address changes over time. Having the device name on the SmartDrive allows it to remain the same if SLS PCS is being swapped out.

The device name can be viewed on the **Network** tab of the **System Information** screen in parentheses following the Ethernet IP entry (refer to "Displaying System Information" on page 10-2).
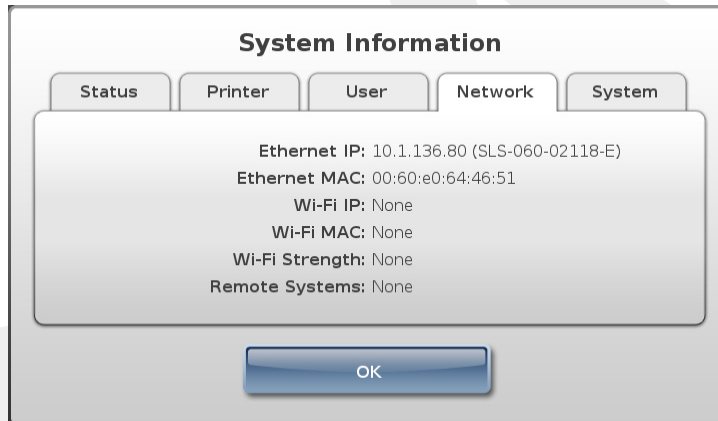
The -E or -W suffixes to the Ethernet IP entry indicate an Ethernet or Wi-Fi connection.

The use of static device names can be disabled in the SLS PCS configuration settings, when its configuration is defined using the SLS Administration Tool.

Setting Up Network Hardware

Prior to configuring the network settings, SLS PCS network hardware must be set up.

For more information, refer to "Connecting the Ethernet Cable (Optional)" on page 2-13 or "Connecting the Wi-Fi Adapter (Optional)" on page 2-15.

Configuring an Ethernet Network Connection

By default, SLS PCS Ethernet network connection settings are set to use the DHCP IP address acquisition method. So if the Ethernet cable is connected to a network with a DHCP server, SLS PCS network settings will be automatically populated by the DHCP service and the Ethernet connection will be enabled. No other configuration is required.

However, if you want to use the Static IP address acquisition method, perform the procedure that follows.

Prior to attempting to configure the Ethernet network settings for the Static acquisition method, you should have the IP addresses for the following:

- SLS PCS
- Network mask
- Gateway
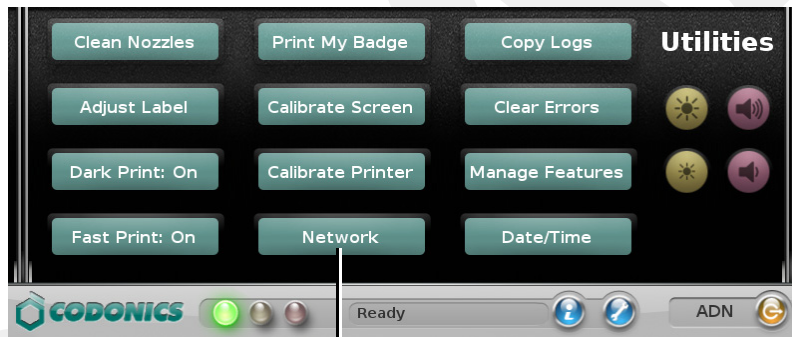- Primary and secondary DNS (optional)

1. Press the **Utilities** button at the top of the user interface.

Utilities button

The **Utilities** screen displays.

2. Press the **Network** button.

Press **Network**

The **Network Settings** dialog box displays.
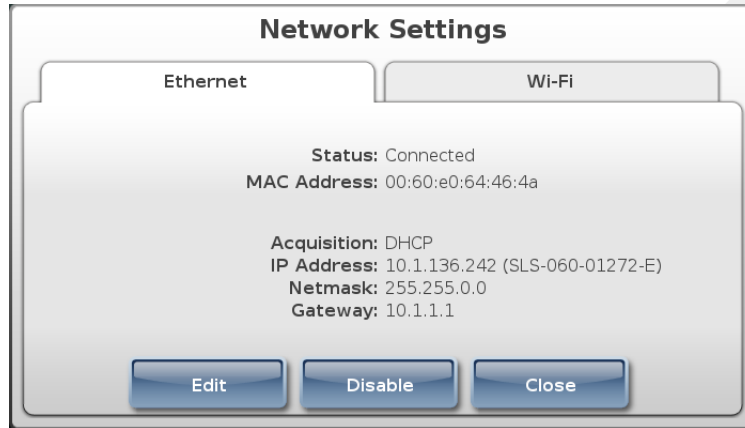
> **NOTE:** *For information about the possible network status messages that can be displayed here, refer to "Network Connection Status" on page 4-35.*

3. On the **Ethernet** tab, press the **Edit** button.

   The **Enter Ethernet Settings** dialog box displays.

   Enter Ethernet Settings

   Acquisition: DHCP

   IP Address: 10 . 1 . 130 . 85   Primary DNS: [ ] . [ ] . [ ] . [ ]

   Netmask: 255 . 255 . 0 . 0   Secondary DNS: [ ] . [ ] . [ ] . [ ]

   Gateway: 10 . 1 . 1 . 1

   | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 0 |

   | ! | @ | # | $ | % | ^ | & | (|) |

   | abc | ` | ~ | - | _ | = | + | * | ← |

   | Cancel | Alt | , | . | ? | Save |

4. To change the IP acquisition method, press the **Acquisition** button.

   The **Select Acquisition Type** dialog box displays.

   Select Acquisition Type

   ↑   ↓

   DHCP
   Static

   Cancel   Select

5. Select the IP acquisition method to be used, then press the **Select** button.

   - If you selected **DHCP**, go to step 7.

   - If you selected **Static**, then you have to enter the network settings on the **Enter Ethernet Settings** dialog box. Go to step 6.

6. Enter the static network settings.

7. When you are finished entering the network settings, press the **Save** button.

The **Ethernet** tab of the **Network Settings** dialog box displays again. If SLS PCS is able to connect to the network with these settings, the status changes to Connected. SLS PCS is now connected to the network.

Network Settings

Ethernet	Wi-Fi

Status: Connected
MAC Address: 00:60:e0:49:e7:d6

Acquisition: Static
IP Address: 10.1.130.91
Netmask: 255.255.0.0
Gateway: 10.1.1.1

[Edit]   [Disable]   [Close]

NOTE: If the status is not Connected, refer to "Network Connection Status" on page 4-35 for an explanation of the status, or refer to Table 10-2. Troubleshooting on page 10-10.

NOTE: Once you have saved the network connection settings, wait until SLS PCS has actually connected or failed before editing the settings again. For additional information, refer to "When Network Connection Settings Are Saved" on page 4-37.

NOTE: Record the SLS PCS IP address for the SLS administrator, so that it can be included in the Master Device List for the SLS Administration Tool.

8. Press the **Close** button to close the **Network Settings** dialog box.

9. Press the **Utilities** button to close the **Utilities** screen.

Configuring an Enterprise Wi-Fi Network Connection

NOTE: *Wi-Fi support requires a feature key on SLS PCS. Contact your Codonics Sales Representative to obtain the proper key.*

If your Enterprise network requires certificates, you must include them in the configuration package installed on SLS PCS must include the SLS PCS Enterprise Wi-Fi certificate files. For instructions on how to include Wi-Fi certificate files in a configuration package and deploy the package to SLS PCSs, refer to Chapter 6 of the *SLS Administration Tool User's Manual*.

If there is a DHCP server on the network, then you perform the following procedure to simply enable the Enterprise Wi-Fi network connection, which is initially disabled by default.

If you want to change the default Enterprise Wi-Fi network connection settings — typically, to change the IP address acquisition method to Static — then you should have the following information ready prior to performing the configuration procedure:

- If using the Static IP address acquisition method, IP addresses for:

    - SLS PCS
    - Network mask
    - Gateway
    - Primary and Secondary DNS (optional)

- SSID (that is, the public name) of the Wi-Fi network that SLS PCS will use

- Wi-Fi security method being used

NOTE: If the network connection is ever switched from an Enterprise to a non-Enterprise Wi-Fi connection and then switched back to an Enterprise Wi-Fi connection, the settings in the Enterprise Wi-Fi certificate files are used again.
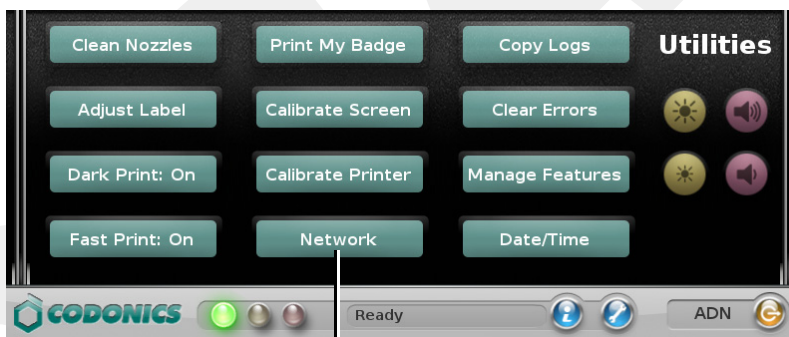
1. Press the **Utilities** button at the top of the user interface.

To configure an Enterprise Wi-Fi network connection

Utilities button

The **Utilities** screen displays.

2. Press the **Network** button.

Press **Network**

The **Ethernet** tab of the **Network Settings** dialog box displays.

3. If the **Ethernet** tab shows a **Disable** button, press it to make sure that the Ethernet connection is disabled.

Network Settings

Ethernet	Wi-Fi

Status: Connected
MAC Address: 00:60:e0:49:e7:d6

Acquisition: Static
IP Address: 10.1.130.91
Netmask: 255.255.0.0
Gateway: 10.1.1.1

[Edit] [Disable] [Close]

4. Go to the **Wi-Fi** tab.

By default, the Wi-Fi network connection is initially disabled.

Network Settings

Ethernet	Wi-Fi

Status: Disabled

SSID:
Acquisition:
IP Address:
Netmask:
Gateway:

[Edit] [Enable] [Close]

NOTE: *For information about the possible network status messages that can be displayed here, refer to "Network Connection Status" on page 4-35.*

4-11
Codonics SLS 600i User's Manual   4-11
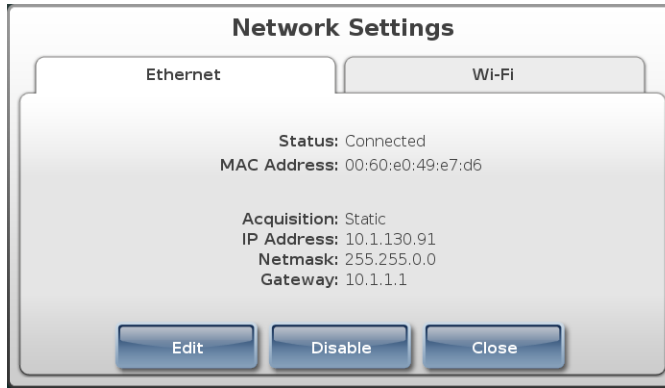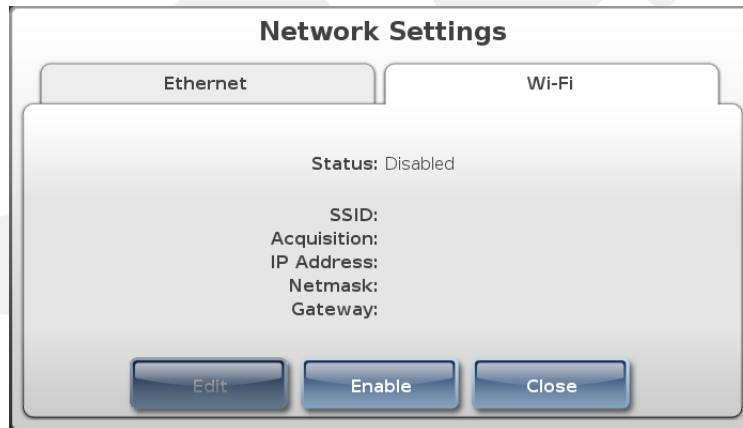
5. Press the **Enable** button.

    If there is a DHCP server on the network and a connection was established, then
    the status will change to Connected.

    ## Network Settings

Ethernet	Wi-Fi

    Status: Connected
    MAC Address: 74:da:38:0e:2f:da

    SSID: CodTemp
    Acquisition: DHCP
    IP Address: 10.1.131.224 (SLS-060-01272-W)
    Netmask: 255.255.0.0
    Gateway: 10.1.1.1

    Edit   Disable   Close
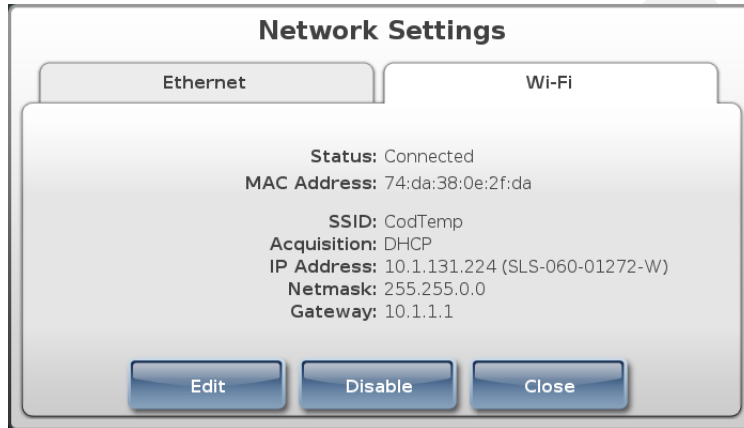
    No further configuration is required. Go to step 16.

    If you need to change the network configuration settings, go to the next step.

6. Press the **Edit** button.

The **Enter Wi-Fi Settings** dialog box displays.

7. To change the IP acquisition method (the default selection is **DHCP**), press the **Acquisition** button.

    The **Select Acquisition Type** dialog box displays.

8. Select the IP acquisition method to be used, then press the **Select** button.

   The **Enter Wi-Fi Settings** dialog box displays again, showing the IP acquisition method you selected.

9. If using the Static acquisition method, enter the static IP addresses.

10. To enter the Enterprise Wi-Fi network to which to connect SLS PCS:

- Manually enter it in the **SSID** field. Then go to step 12.

  or

- Press the **Scan for SSIDs** button. The **Select a Network** dialog box displays.

11. Select an Enterprise Wi-Fi network for SLS PCS to join, then press the **Select** button.

The **Enter Wi-Fi Settings** dialog box displays again, with the SSID entered.

12. Press the **Continue** button.

If you entered the SSID by scanning for it, the **Wi-Fi** tab of the **Network Settings** dialog box displays. Go to step 16.

If you manually entered the SSID, the **Wi-Fi Password Settings** dialog box displays. Go to the next step.

13. Press the **Select** button.

The **Select Security Type** dialog box displays.

Select Security Type

↑ ↓

WPA2 PSK
WPA/WPA2 PSK
WPA Enterprise
WPA2 Enterprise
WPA/WPA2 Enterprise

Cancel   Select

14. Select the appropriate Enterprise Wi-Fi security type setting, and then press the **Select** button.

The **Wi-Fi Password Settings** dialog box displays again. The **Network Password** field is disabled, as the network password in the SLS PCS certificate files is used to access the Enterprise Wi-Fi network.
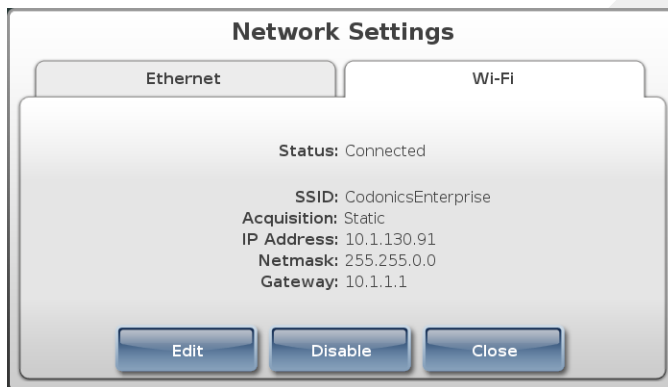

NOTE: If you press the Cancel button on the Wi-Fi Password Settings dialog box, all of your previous network setting entries are cleared. They must be entered again to complete the network configuration.

15. Press the **Save** button.

The **Wi-Fi** tab of the **Network Settings** dialog box displays again. If SLS PCS is able to connect to the network with these settings, the status changes to Connected. SLS PCS is now connected to the network.

Network Settings

Ethernet	Wi-Fi

Status: Connected

SSID: CodonicsEnterprise
Acquisition: Static
IP Address: 10.1.130.91
Netmask: 255.255.0.0
Gateway: 10.1.1.1

Edit   Disable   Close

NOTE: If the status is not Connected, refer to "Network Connection Status" on page 4-35 for an explanation of the status, or refer to Table 10-2. Troubleshooting on page 10-10.

NOTE: Once you have saved the network connection settings, wait until SLS PCS has actually connected or failed before editing the settings again. For additional information, refer to "When Network Connection Settings Are Saved" on page 4-37.

NOTE: Record the SLS PCS IP address for the SLS administrator, so that it can be included in the Master Device List for the SLS Administration Tool.

16. Press the **Close** button to close the **Network Settings** dialog box.

17. Press the **Utilities** button to close the **Utilities** screen.

Configuring a Non-Enterprise Wi-Fi Network Connection

NOTE: *Wi-Fi support requires a feature key on SLS PCS. Contact your Codonics Sales Representative to obtain the proper key.*

Prior to attempting to configure the non-Enterprise Wi-Fi network settings, you should have the following information:

- The IP address acquisition method to be used: DHCP or Static

- If using the Static IP address acquisition method, IP addresses for:
    - SLS PCS
    - Network mask
    - Gateway
    - Primary and Secondary DNS (optional)

- SSID (that is, the public name) of the Wi-Fi network that SLS PCS will use

- Wi-Fi security method being used
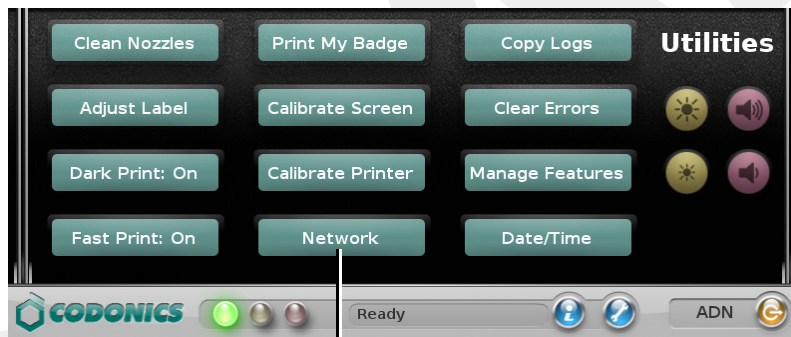
- Wi-Fi network access password

1. Press the **Utilities** button at the top of the user interface.
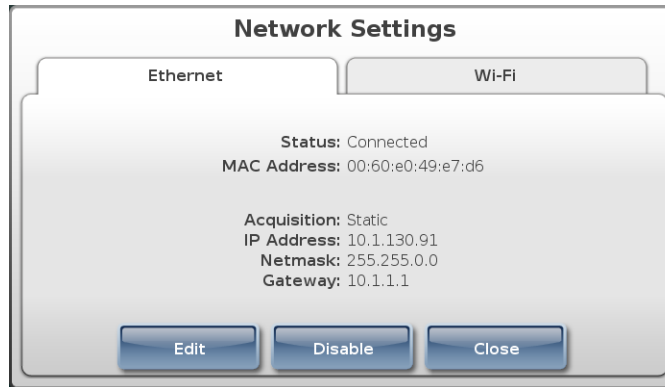
Utilities button

The **Utilities** screen displays.

2. Press the **Network** button.

Press **Network**

The **Ethernet** tab of the **Network Settings** dialog box displays.

Network Settings

| Ethernet | Wi-Fi |

Status: Connected
MAC Address: 00:60:e0:49:e7:d6

Acquisition: Static
IP Address: 10.1.130.91
Netmask: 255.255.0.0
Gateway: 10.1.1.1

| Edit | Disable | Close |

3. If the **Ethernet** tab shows a **Disable** button, press it to make sure that the Ethernet connection is disabled.

4. Go to the **Wi-Fi** tab.
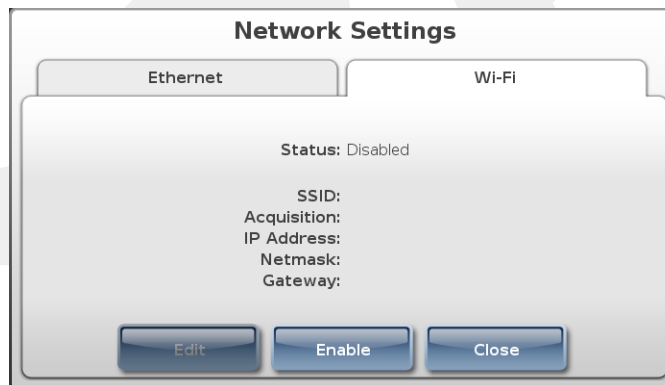
By default, the Wi-Fi network connection is initially disabled.

Network Settings

| Ethernet | Wi-Fi |

Status: Disabled

SSID:
Acquisition:
IP Address:
Netmask:
Gateway:

| Edit | Enable | Close |

NOTE: For information about the possible network status messages that can be displayed here, refer to "Network Connection Status" on page 4-35.

5. Press the **Enable** button.

6. Press the **Edit** button.

   The **Enter Wi-Fi Settings** dialog box displays.

7. To change the IP acquisition method (the default selection is **DHCP**), press the **Acquisition** button.

The **Select Acquisition Type** dialog box displays.

Select Acquisition Type

↑ ↓

DHCP
Static

Cancel   Select

8. Select the IP acquisition method to be used, then press the **Select** button.

The **Enter Wi-Fi Settings** dialog box displays again, showing the IP acquisition method you selected.

Enter Wi-Fi Settings

Acquisition: Static   Scan for SSIDs

IP Address: [ ].[ ].[ ].[ ]   SSID: [   ]

Netmask: [ ].[ ].[ ].[ ]   Primary DNS: [ ].[ ].[ ].[ ]
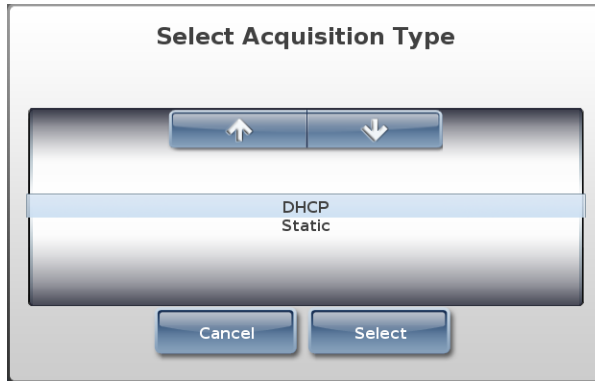
Gateway: [ ].[ ].[ ].[ ]   Secondary DNS: [ ].[ ].[ ].[ ]

q w e r t y u i o p

a s d f g h j k l

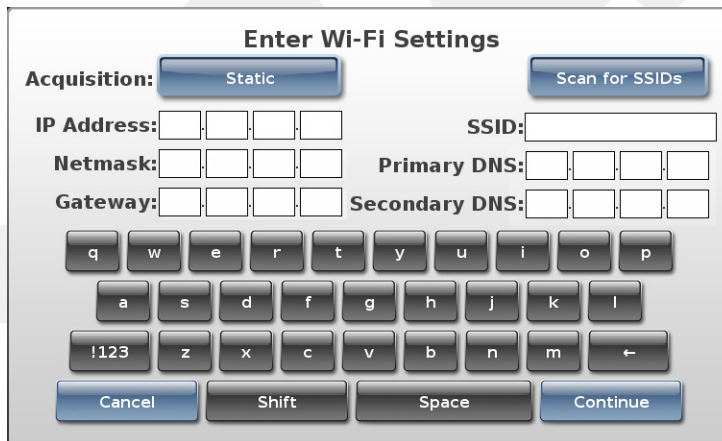!123 z x c v b n m ←

Cancel   Shift   Space   Continue

9. If using the Static acquisition method, enter the static IP addresses.

Enter Wi-Fi Settings

Acquisition:	Static				Scan for SSIDs

IP Address: 10 . 1 . 130 . 91   SSID:

Netmask: 255 . 255 . 0 . 0   Primary DNS:

Gateway: 10 . 1 . 1 . 1   Secondary DNS:

q w e r t y u i o p

a s d f g h j k l

!123 z x c v b n m ←

Cancel   Shift   Space   Continue

10. To enter the Wi-Fi network to which to connect SLS PCS:

- Manually enter it in the **SSID** field. Then go to step 12.

or

- Press the **Scan for SSIDs** button. The **Select a Network** dialog box displays.

Select A Network

Scan Again

↑   ↓

CodEnterprise   WPA PSK

CodRf   WEP

Cancel   Select

11. Select a non-Enterprise Wi-Fi network for SLS PCS to join, then press the **Select** button.

The **Enter Wi-Fi Settings** dialog box displays again, with the SSID entered.

12. Press the **Continue** button.

If you entered the SSID by scanning for it, the **Wi-Fi** tab of the **Network Settings** dialog box displays. Go to step 17.

If you manually entered the SSID, the **Wi-Fi Password Settings** dialog box displays. Go to the next step.

13. Press the **Select** button.

The **Select Security Type** dialog box displays.

Configuring the Network Connection
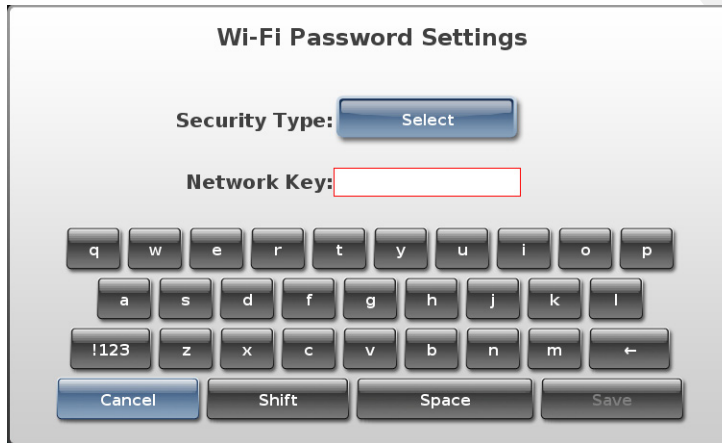
14. Select the appropriate non-Enterprise Wi-Fi security type setting, and then press the **Select** button.

NOTE: *If you selected a non-secure network (for example, None or a WEP network), a message displays to notify you of this. WPA or WPA2 is recommended for wireless security because both provide data encryption. WEP is not recommended because security can be breached. Press the **OK** button to dismiss the message.*

Warning: This network security type
is not recommended. For more
secure operation, use WPA or WPA2.

OK

The **Wi-Fi Password Settings** dialog box displays again.

If you selected None for the network security type, go to step 17.

If you selected a network security type that requires a password to access it, go to the next step.

15. In the **Network Key** field, enter the network password.

Wi-Fi Password Settings

Security Type: [WEP]

Network Key: [password01]

| q | w | e | r | t | y | u | i | o | p |

| a | s | d | f | g | h | j | k | l |

| !123 | z | x | c | v | b | n | m | ← |

| Cancel | Shift | Space | Save |

*NOTE: If you press the **Cancel** button on the **Wi-Fi Password Settings** dialog box, all of your previous network setting entries are cleared. They must be entered again to complete the network configuration.*

16. Press the **Save** button.

The **Wi-Fi** tab of the **Network Settings** dialog box displays again. If SLS PCS is able to connect to the network with these settings, the status changes to Connected. SLS PCS is now connected to the network.

Network Settings

Ethernet	Wi-Fi

Status: Connected
MAC Address: f4:6d:04:b1:8e:d7

SSID: CodRf
Acquisition: Static
IP Address: 10.1.130.91
Netmask: 255.255.0.0
Gateway: 10.1.1.1

[Edit] [Disable] [Close]

NOTE: If the status is not Connected, refer to "Network Connection Status" on page 4-35 for an explanation of the status, or refer to Table 10-2. Troubleshooting on page 10-10.

NOTE: Once you have saved the network connection settings, wait until SLS PCS has actually connected or failed before editing the settings again. For additional information, refer to "When Network Connection Settings Are Saved" on page 4-37.

NOTE: Record the SLS PCS IP address for the SLS administrator, so that it can be included in the Master Device List for the SLS Administration Tool.

17. Press the **Close** button to close the **Network Settings** dialog box.

18. Press the **Utilities** button to close the **Utilities** screen.

Disabling the Network Connection

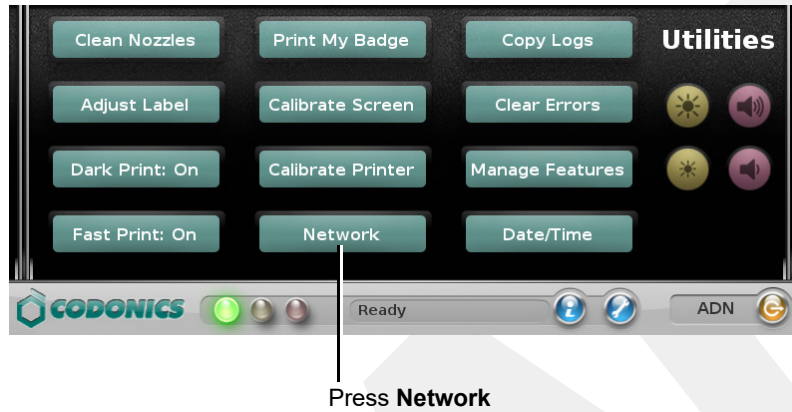You can disable the SLS PCS network connection to take SLS PCS offline from the network.

To disable the SLS PCS network connection

1. Press the **Utilities** button at the top of the user interface.

Utilities button

The Utilities screen displays.

2. Press the **Network** button.

Press **Network**

The **Network Settings** dialog box displays.

3. Go to the appropriate tab.

4. Press the **Disable** button.

   SLS PCS is taken offline from the network and the status changes to Disabled.

   Network Settings

Ethernet	Wi-Fi

   Status: Disabled

   Acquisition:
   IP Address:
   Netmask:
   Gateway:

   Edit   Enable   Close
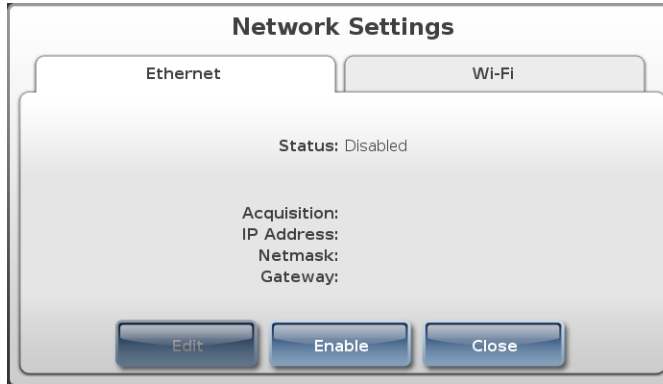
5. To reconnect SLS PCS to the network, reopen the **Network Settings** dialog box and press the **Enable** button.

Network Connection Status

The network connection status of SLS PCS is displayed on the **Ethernet** or **Wi-Fi** tab of the **Network Settings** dialog box.

Network Settings

| Ethernet | Wi-Fi |

Status: Connected
MAC Address: 00:60:e0:64:46:4a

Acquisition: DHCP
IP Address: 10.1.136.242 (SLS-060-01272-E)
Netmask: 255.255.0.0
Gateway: 10.1.1.1

[Edit] [Disable] [Close]

Table 4-1 describes the network connection status messages that can be displayed here.

CAUTION If the status indicates that the network connection process has not completed (for example, Connecting or Debugging), do not attempt to modify the network connection settings. Wait until the attempted network connection process completes.

Table 4-1. Network Connection Status Messages

Status Message	Description
Associated	SLS PCS is associated the Wi-Fi network for which it is configured.
Associating	SLS PCS is attempting to associate with the Wi-Fi network.

Table 4-1. Network Connection Status Messages (Continued)

Status Message	Description
Connected	SLS PCS is connected to the network for which it is configured. This status indicates completion of a connection attempt.
Connecting	SLS PCS is attempting to connect to the network.
Debugging	SLS PCS is performing Wi-Fi network connection debugging. SLS PCS is writing a log file that might contain helpful information as to why the connection did not occur successfully.
Disabled	SLS PCS network connection has been disabled by an SLS PCS user.
Disabled — Feature Key Missing	The feature key for the network whose tab is being displayed — **Ethernet** or **Wi-Fi** — has not been added to SLS PCS.
Disconnected	SLS PCS is not connected to the network, either because the related network settings are not configured or they are not configured correctly. This status indicates that a network connection is not currently being attempted.
Failed	The network connection attempt failed. Either the network password or a network connection setting is incorrect. This status indicates completion of a connection attempt.
Handshaking	Initial communication between SLS PCS and the network is being performed.
Wi-Fi not installed	The Wi-Fi adapter is not installed in the SLS PCS Wi-Fi adapter USB port, or the Wi-Fi adapter is not operating properly.

When Network Connection Settings Are Saved

Ethernet and Wi-Fi network connection settings are only saved when a successful connection occurs.

Once there is a successful connection, selecting the **Edit** button on one of the tabs of the Network utility's **Network Settings** dialog box creates a new network profile that can be edited and that will replace the existing profile on a successful connection.

If you are using Enterprise Wi-Fi certificates, settings from the certificate files are not affected by the network settings configured using the SLS Network utility.