

10 Working With Setup Tools

Setup Tools Overview

The **Setup** window allows you to set defaults and control various functions of the Terason software. The Setup window tabs display sets of controls for defaults and other settings.

The controls are described in these sections:

- [Using General Setup Controls](#), see page 151
- [Setting Export Defaults](#), see page 154
- [Setting Display Defaults](#), see page 157
- [Setting Measurement Defaults](#), see page 159
- [Using Annotation Setup Controls](#) on page 159
- [Setting Print Defaults](#) on page 160
- [Setting Storage and Acquisition Defaults](#) on page 161
- [Setting DICOM Defaults](#) on page 163

Using General Setup Controls

When you press the Setup key, then click the **General** tab, the Setup window offers several controls for different actions and defaults.

The screenshot shows the 'Setup General Window' with the following controls:

- Buttons: **About...**, **License...**, **Monitor Setup...**
- User Settings** section:
 - Buttons: **Back Up...**, **Restore...**
 - Checkboxes: **Run Ultrasound at Windows Startup.**, **Create Default Patient Name/ID.**
 - Checkboxes: **Enable Auto Freeze.**, **Wait Time...** (button)
 - Checkboxes: **Auto Delete Exported Studies after** **weeks**
- View Options** section:
 - Checkboxes: **Depth Ruler**, **Patient Info**
 - Checkboxes: **ECG**, **Measurement Value**
 - Checkboxes: **Reference Bar**
 - Checkboxes: **Zoom in 2D image by** **percent when enter Spectral Doppler.**
 - Checkboxes: **Correction Angle +/-**, **Auto Steer Correction Angle**
- TGC Display** section:
 - Radio buttons: **Show**, **Hide**, **Time Out**
- Bottom buttons: **OK**, **Cancel**, **Apply**

Setup General Window

About

The About button opens a message box that includes the version number of the Terason Ultrasound software.

License

The License button opens the Ultrasound License Registration window, where you can enable optional features you have purchased.

Monitor Setup

The Monitor Setup button opens a window where you can change the default monitor profile (useful if you're using a separate monitor), and run different tests on the selected monitor.

Startup

The Run Ultrasound at Windows Startup box is checked by default. This makes the ultrasound system start automatically when the computer is started. Unchecking the box means you have to manually start the Terason Ultrasound software.

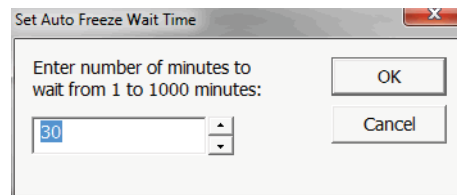
Auto Freeze

The Terason software lets you set a time value that shuts off power to the probe and freezes the scan if the system has been inactive for the specified period. This feature is especially useful when you run an ultrasound system on battery power.

To set the Auto Freeze time, complete these steps:

1. Press the **Setup key**.
2. On the Setup/General window, make sure the **On** box under Auto Freeze is checked.
3. Click the **Wait Time...** button.

The Set Auto Freeze Wait Time window appears.



Setting the Auto Freeze Time

4. Either type the **number of minutes** you want to specify as the time-out value, or click the up and down arrows to select a different value.
5. Click **OK**.

When the specified number of minutes elapses, the computer shuts off power to the probe and displays the following message:

Program has automatically suspended. Hit any key or move mouse to resume.

The Terason title bar changes to Terason - Suspended, to indicate that probe power is shut down. When you move the mouse or press any key on the keyboard, the Terason software sends power to the probe and removes the message box.

Auto Delete Exported Studies

When you check this box, exported studies are automatically deleted from the ultrasound system when the selected number of weeks have passed since the study was created. If a study was created at a time that is further in the past than the number of weeks selected, it is immediately deleted when it is exported. You can select any number of weeks from 0 to 99.

Studies that have not been exported are not automatically deleted.

View Options

Several checkboxes that toggle different features of the Imaging window on and off are offered in the View Options area. Click the check boxes to enable or disable the feature. When the box has a checkmark, the feature is enabled.

Depth Ruler sets whether or not to show the depth ruler.

ECG sets whether output from ECG leads is displayed.

Reference Bar sets whether the color doppler reference bar displays.

Patient Info sets whether the patient information is shown at the top of the Imaging window.

Measurement Value sets whether the values of measurements on the Imaging window are displayed.

TGC Display

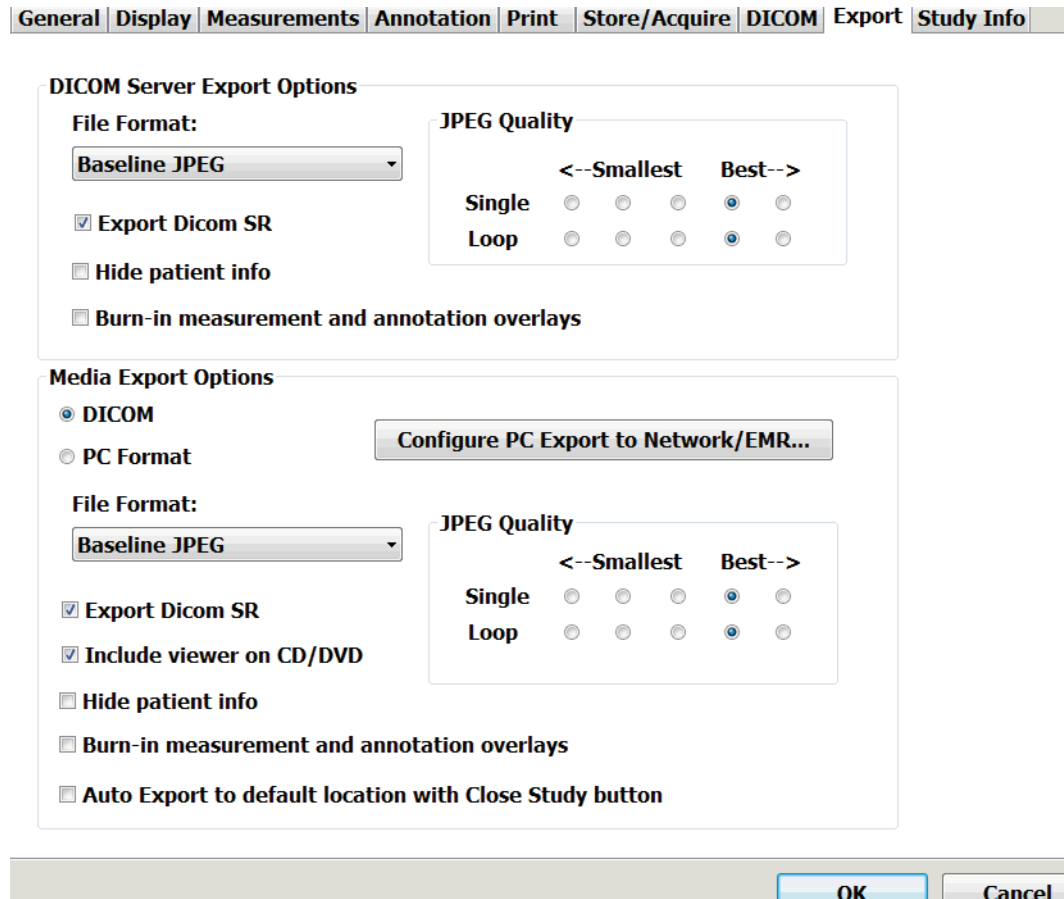
You can choose whether and for how long the Time Gain Compensation display appears on the Imaging window.

- **Show** sets the TGC display to always show.
- **Hide** sets the TGC display to never show.
- **Time Out** sets the TGC display to show for a few seconds after an adjustment is made to the TGC sliders or the Gain knob.

Setting Export Defaults

When you press the Setup key, then click the **Export** tab, the Setup window offers several controls for different actions and defaults.

By default, the Terason software uses the DICOM file format when saving image files and loops. You can choose a different format for exporting images or loops to a CD, DVD, USB, DICOM server, or other network location.



Setup Export Window

Media Export Options

Choices in this section affect the format of files exported to a CD, DVD, or USB drive.

Selecting the **DICOM** radio button exports files in the standard DICOM format.

Selecting the **PC Format** radio button lets you choose a different format for export. You can choose any of the following formats:

- Palette Color (8-bit color)
- RGB (24-bit color)
- Palette Color RLE (Palette Color with run-length encoding applied)
- RGB, RLE (RGB with run-length encoding applied)
- Baseline JPEG

Selecting the **Include viewer on CD/DVD** checkbox includes a DICOM image viewer on CDs and DVDs burned with the Terason Ultrasound software. This lets DICOM loops play on systems that do not have the Terason software installed. See [Using the DICOM Image Viewer on a CD or DVD](#) on page 140.

DICOM Server Export Options

You can choose the color format used for sending a DICOM image. You can choose any of the following formats:

- Palette Color (8-bit color)
- RGB (24-bit color)
- Palette Color RLE (Palette Color with run-length encoding applied)
- RGB, RLE (RGB with run-length encoding applied)
- Baseline JPEG

This setting only affects files sent to a DICOM server. DICOM files saved in the Terason Image or Patient folders always use the Palette color format.

Baseline JPEG enables the JPEG Quality controls. Selecting a radio button toward the **Best-->** end of the table produces a higher-quality image with fewer artifacts, and a larger file. Selecting a radio button toward the **<--Smallest** end of the table produces a lower-quality image and a smaller file.

By default, DICOM files are compressed using the DICOM RLE syntax, and then uncompressed and converted to the chosen Send format when exported or sent to a DICOM server.

PC Export Options

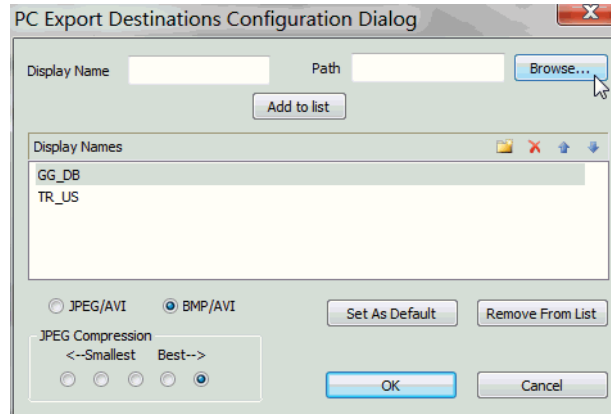
The PC Export button on the Setup/Export window opens a dialog box that lets you set defaults for exporting to other locations on a network. PC Export does not work with DICOM.

Locations added as export destinations appear in a drop-down menu on the Export Selection window. If more than one destination is added to the menu, you can select one as a default. If only one destination is added, or if a destination is designated the default, the Export button on the Export Selection window immediately sends the image to that destination. If more than one destination is added, and no destination is designated the default, clicking the Export button on the Export Selection window opens a notification box with a message saying you must choose a destination EMR.

To add a destination EMR:

1. Press the **Setup key**.
2. In the Setup window, click the **Export tab**.
3. On the Setup/Export window, click the **Configure PC Export to Network/EMR** button.

The PC Export Destinations Configuration Dialog box opens.



PC Export Destinations Configuration Dialog Box

4. Click **Browse... .**

The system searches the network, and displays a list of possible destinations in a Select Path window.

5. Select the **export destination from the Current Path list on the Select Path window.**

6. Click **OK.**

7. On the PC Export Destinations Configuration Dialog box, click in the **Display Name field, and enter a name for the destination.**

8. Click Add to list.

The destination is added to the Display Names list, and will appear in the drop-down menu on the Export Selection window.

To set defaults for PC Export:

1. To set a destination as the default, select it in the Display Names list, then click **Set As Default.**

2. Select either **JPEG/AVI or **BMP/AVI**.**

3. Select the **JPEG Compression level.**

4. Click **OK.**

The selected defaults are set.

Burning Measurements and Annotations for Export

Some servers do not allow overlays on images. If the images you export are stripped of measurements and annotations, you must burn those into the images when exporting.

To configure export to burn measurements and annotations into images:

1. Press the **Setup key.**

The Setup window opens.

2. Click the **Export tab.**

The Setup/Export window opens. (See [Setup Export Window](#) on page 154.)

3. Click the **Burn-in measurement and annotation overlays checkboxes.**

Setting Display Defaults

When you press the Setup key, then click the **Display** tab, the Setup window offers several controls for different actions and defaults.

The Display tab on the Setup window controls how certain features of the Imaging window are displayed.

The screenshot shows the 'Setup Display Window' with the following settings:

- Center ROI at Spectral Gate.
- Scale linear images for maximum width
- Update Mode:
 - Non-Simultaneous
 - Simultaneous
- Needle Guide:
 - Show Target Indicator when turn on Needle Guide
 - Calibration...
- M-Mode Format:
 - S/L
 - Equal
 - L/S
 - 2D/MMode
 - MMode/2D
- Spectral Format:
 - S/L
 - Equal
 - L/S
 - 2D/Spectral
 - Spectral/2D
- TI Selection:
 - TIS
 - TIB
 - TIC
- Date Format:
 - MM/dd/yyyy
- Split Screen:
 - Combine image
 - Crop image
 - Return to live on toggle screen
- Patient Info Units:
 - English
 - Metric
 - Show both on Patient screen

Setup Display Window

Return to live imaging on toggle active screen

The checkbox controls whether toggling between split screens makes the active screen live or not.

When the box is **unchecked**, toggling between the screens leaves them both frozen. Pressing the Freeze key makes the active window live. Toggling to the other screen and back freezes both screens again.

When the box is **checked**, toggling between windows makes the active window live, even if it was previously frozen using the Freeze key.

Center ROI at Spectral Gate

When this box is checked, the feature centers the region of interest around the spectral gate.

Scale linear images for maximum width

when this box is checked, the feature widens the display for shallow scans.

Patient Info Units

You can choose to have the height and weight values in patient information sets display as either Metric or English units. When you change from one to the other, the software automatically calculates the equivalent value in the new units. For example, if the patient's height was entered as 2 meters, when you change to English units, that value is changed to 6 feet 7 inches.

Update Mode

When they are selected, Spectral Doppler modes normally open updating both the Time Series display and the 2D display simultaneously. This is the default, and is the Simultaneous selection on the Setup Display window. Selecting Non-Simultaneous causes Spectral Doppler modes to open with the 2D display frozen.

Whichever radio button is selected, pressing the Update key toggles the 2D display between live and frozen.

Needle Guide

This section includes a checkbox that shows or hides the Target Indicator and a button that opens the Needle Guide Calibration window.

Needle guide calibration is used exclusively with the biopsy/medical procedures options. See [Calibrating Needle Guide Positioning for Biopsies](#) on page 134 for information on correcting the needle guide position.

M-Mode Format and Spectral Format

These radio buttons set the relative sizes of the 2D display and the Time-Series display on the Imaging window.

- **S/L** makes the 2D display half the height of the Time-Series display
- **Equal** makes the 2D display the same height as the Time-Series display
- **L/S** makes the 2D display twice the height of the Time-Series display

See [Resizing the 2D and Time-series Displays](#) on page 52.

TI Selection

This chooses the thermal index that is displayed on the scanning window. Refer to “General Description of Indices” in Volume 2 of the *User Guide* for more information about thermal indices.

- TIS is the Soft Tissue index.
- TIB is the Bone index.
- TIC is the Cranial index.

Combine Image

Allows measurement across both images in split-screen mode.

Crop Image

When checked, this cuts the edges of trapezoidal or sector images in split-screen mode to increase the image size.

Return to live on toggle screen

When this box is checked, toggling from one split-screen view to the other makes the selected view live.

When the box is not checked, both views remain frozen when toggling from one to the other, until the Freeze key is pressed.

Setting Measurement Defaults

When you press the Setup key, then click the **Measurement** tab, the Setup window lets you choose which measurements appear on the menu accessed by the Calcs key on frozen images. See [Measurement Sets](#) on page 89 for instructions on how to do that.

The Setup Measurement window also includes controls for choosing the size of the measurement cursor, the tables used in calculating obstetric measurements, and the port used to send measurements to another location.

The Volume Calculation Coefficient selection chooses either the standard $\pi/6$ ellipsoid coefficient, or a custom value. The default for the Custom selection is 0.479, another commonly used value, but you can enter any value.

Setup Measurements Window

Caliper Size

To change the size of the measurement cursor, click the Small or Large radio button.

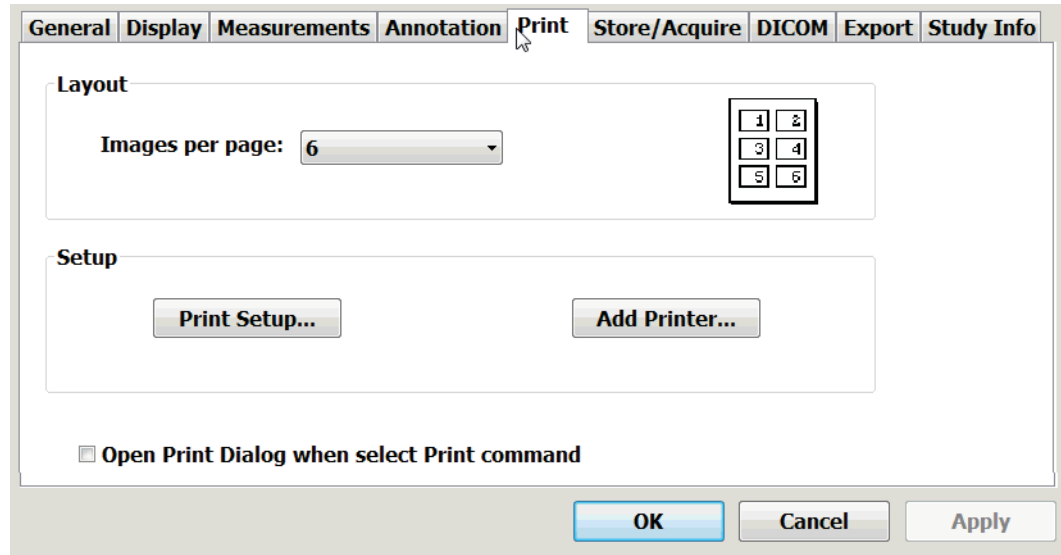
Using Annotation Setup Controls

When you press the Setup key, then click the **Annotation** tab, the Setup window offers several controls for different actions and defaults. The Setup Annotation window lets you control which anatomy labels are available when you press the Text key. This is explained in detail in [Predefined Text](#) on page 56 and [Custom Predefined Text](#) on page 56.

The Setup Annotation window also lets you control which body markers are available when you press the Body Marker softkey. This is explained in detail in [Using Body Markers](#) on page 61.

Setting Print Defaults

When you press the Setup key, then click the **Print** tab, the Setup window lets you add and configure printers and choose how many images will print on a page.



Setup Print window

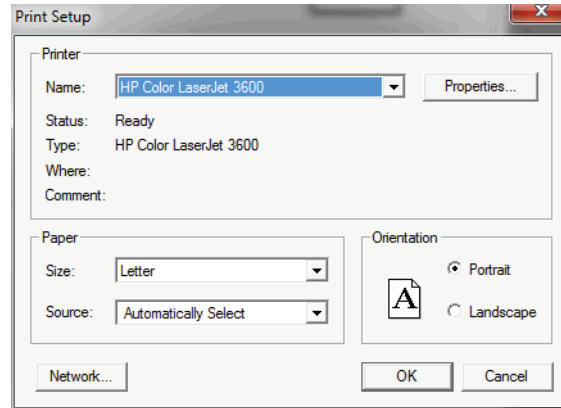
To set the number of images that print on a page, click the triangle next to the Images per page: field, then select a number from the menu.

To add a printer:

1. Click the **Add Printer...** button.
The Windows Add printer window opens.
2. Select the printer you want to use, then click **Add**.

To Set the printing defaults:

1. Click the **Print Setup...** button.
The Print Setup window opens.



Print Setup Window

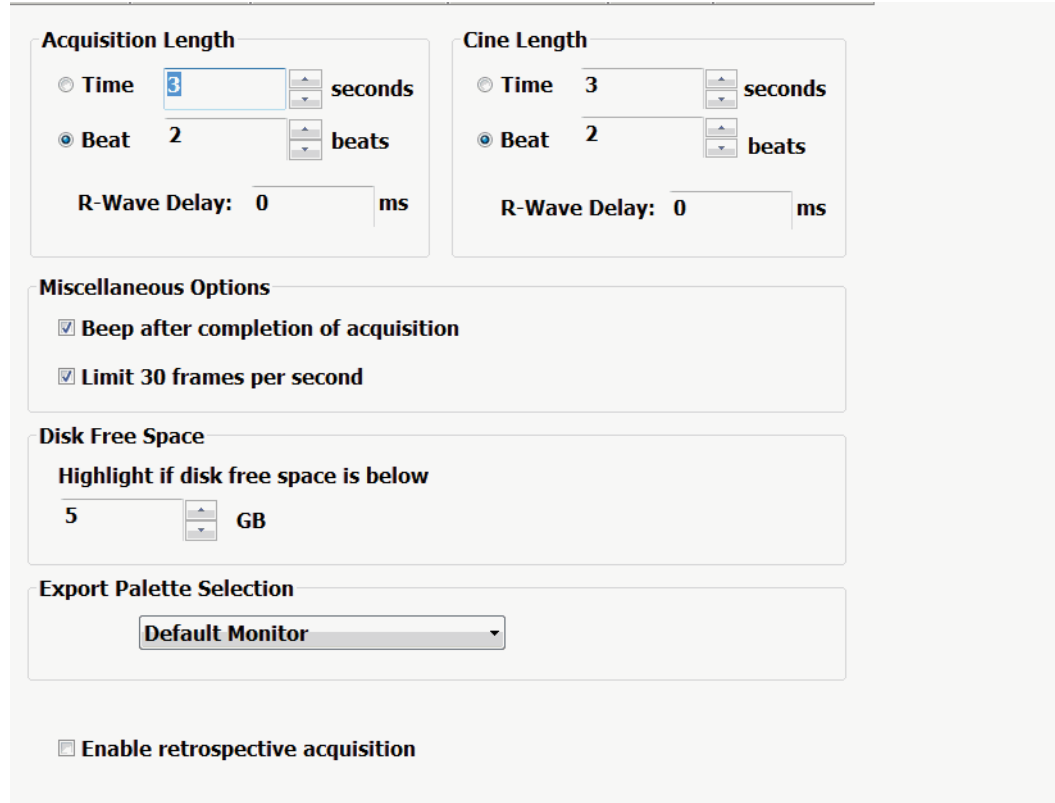
(This illustration is an example; the details of the window depend on the printer you have selected.)

2. Select the **paper size**, orientation, etc.

For detailed instructions, refer to the printer manufacturer's documentation.

Setting Storage and Acquisition Defaults

When you press the Setup key, then click the **Store/Acquire** tab, the Setup window offers several controls for different actions and defaults.



Setup Store/Acquire Window

Acquisition Length

This lets you set the length for prospective loops. See [Saving Prospective Loops](#) on page 50.

Cine Length

This lets you set the length for retrospective loops. See [Saving Retrospective Loops](#) on page 51

Disk Free Space Warning

When the unused space on the computer hard disk becomes less than the value set with this control, the Disk free space indicator on the Imaging window turns yellow. You should delete unneeded files to make more room on the disk for new studies.

To set the disk free space warning threshold, click the up or down arrow next to the GB field until the desired value displays, then click OK or Apply.

Export Palette

You can choose the export palette to match the computer, but this is seldom necessary. The correct palette is set at the factory.

Miscellaneous Options

Acquisition Beep

You can enable and disable a beep sound triggered by the completion of an image or loop acquisition.

To enable or disable the acquisition-complete beep, click the Beep after completion of acquisition checkbox.

Frame-Rate Limit

This control toggles a 30 frames per second limit on the frame rate. Enabling the limit results in smaller study files.

Setting DICOM Defaults

When you press the Setup key, then click the **DICOM** tab, the Setup window offers controls for connecting to and using DICOM networks.

Connecting and configuring DICOM networks requires the involvement of your System Administrator.

Setup DICOM Window

Server Edit

This set of controls lets you define DICOM server identities. Click **New** and enter the name, AE title, and IP address of any DICOM servers you want to export to.

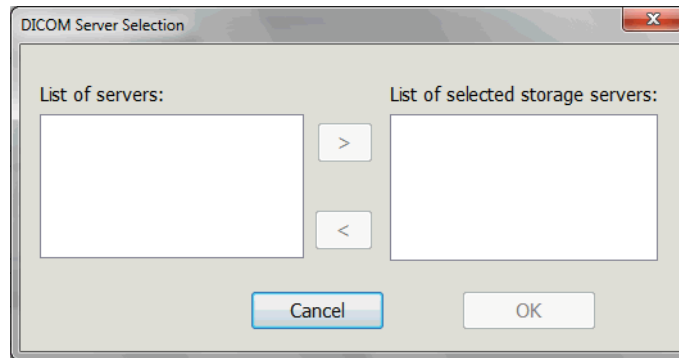
Server Role Selections

This section is where you define SCPs and set up Worklist Query defaults.

To configure storage SCPs:

1. Click **Select** next to the Storage SCPs: field.

The DICOM Server Selection window opens.



DICOM Server Selection Window

2. Click a desired target SCP from the **List of Servers** to select it, then click the right arrow to add it to the List of selected storage servers.
3. Click **OK**.

To configure SR SCPs:

1. Click **Select** next to the SR SCPs: field
The DICOM Server Selection window opens.
2. Click a desired target SCP from the **List of Servers** to select it, then click the right arrow to add it to the List of selected SR servers.
3. Click **OK**.

Local Host Setup

This button opens a dialog box where you can enter data required for communication with a DICOM server.

Manage Jobs

This button opens a window where you can monitor the status of items sent to the DICOM network.

