MDR Video Touch

User Help

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What is the MDR Video Touch?

The MDR Video Touch is a hardware device that captures and sends high resolution images and video from a wide range of modalities to PACS/VNA. It provides image and video capture and transfer at the point of care without the need of a workstation.

The MDR Video Touch connects to PACSGEAR Core Server which handles security, configuration, and the flow of data between the modalities and destination DICOM systems. You can access PACSGEAR Core Server through PACSGEAR Core Server Console (PCS Console), a browser-based interface that administrators can use to configure settings. You can launch PCS Console from a PC or within the MDR Video Touch.

Indications for use

The MDR Video Touch is intended to be used by authorized staff to perform various operations on imaging studies before they are made available to other locations in the network. These operations include capturing images, capturing video, and confirming or editing patient demographics. The MDR Video Touch is not labeled for diagnostic use.

Work with the MDR Video Touch

Find a patient record

To find an existing patient record on a configured source, complete the following steps.

1. Optional. To find the last-opened patient record, tap **Last**.
2. Type all or part of the last name or the complete MRN or to use as a search criterion. For example, in the **Last name** box, type c to query patients whose last names begin with the letter c.

   > **Note:** You can enter additional information to narrow your search results.

3. Tap **Look Up**.
4. In the results list, tap a patient record to view studies, tap a study, and then tap **Select**.

Result Information from the patient record appears in the fields on the patient information screen.

Create a patient record

If there is no record for your patient in a configured source, you can create one. To create a patient record, complete the following steps.

1. In the **MRN** box, type the patient's medical record number.

   > **Note:** When creating a patient, the MRN is the only required field.

2. Optional. Enter additional information in the fields provided.
3. Click **Start Exam**.

Result The MDR Video Touch creates the record on the destination device after you complete the exam.

Capture and send an image

With the MDR Video Touch you can capture an image and send it to a destination. To capture and send an image, complete the following steps.

1. Find or create a patient, and then tap **Start Exam**.
2. In the image preview screen, tap **Capture Frame**.

    Note: You can capture multiple images by tapping **Capture Frame** again.

3. Tap **End Capture and Send**.
4. In the confirmation screen, tap **Yes**.

Capture and send a video

The MDR Video Touch can capture video from a variety of modalities. To capture and send a video, complete the following steps.

1. Find or create a patient, and then tap **Start Exam**.
2. In the image preview screen, tap **Record**.
3. When you are finished recording, tap **Stop**.

    Note: You can record more than one video without leaving the current screen.

4. When you are done capturing videos, tap **End Capture and Send**.

Add a marker to an image and send

After capturing an image you can perform basic edits before sending. To add a marker to an image, complete the following steps.

1. Capture an image, and then tap **End Capture and Edit**.
2. In the edit screen, tap **Edit Image**.
3. Tap **Mark**.
4. In the right pane, tap a marker, and then tap the image where you want to place the marker.
5. Tap **Done**.

    Note: You can undo all unsaved edits by tapping the **Undo All** button.

6. Tap **Save and Close**, and then tap **Yes**.
7. To send the image, tap **Send**.

    Note: To return to the capture screen, tap **Resume Exam**.

Crop and send an image

After capturing an image you can perform basic edits before sending. To crop and send an image, complete the following steps.

1. Capture an image, and then tap **End Capture and Edit**.
2. In the edit screen, tap **Edit Image**, and then tap **Crop**.

> **Note:** You can undo all unsaved edits by tapping the **Undo All** button.

3. Tap **Save and Close**, and then tap **Yes**.
4. To send the image, tap **Send**.

> **Note:** To return to the capture screen, tap **Resume Exam**.

Rotate, flip, and send an image

After capturing an image you can perform basic edits before sending. To rotate, flip, and send an image, complete the following steps.

1. Capture an image, and then tap **End Capture and Edit**.
2. In the edit screen, tap **Edit Image**.
3. Tap **Rotate**.
4. In the right pane, tap a button to rotate the image 90 or -90 degrees, or to flip the image vertically or horizontally.
5. Tap **Done**.

> **Note:** You can undo all unsaved edits by tapping the **Undo All** button.

6. Tap **Save and Close**, and then tap **Yes**.
7. To send the image, tap **Send**.

> **Note:** To return to the capture screen, tap **Resume Exam**.

Add a label to an image and send

After capturing an image you can perform basic edits before sending. To add a label to an image and send, complete the following steps.

1. Capture an image, and then tap **End Capture and Edit**.
2. In the edit screen, tap **Edit Image**.
3. To create a label, tap **Label**, type the label, and then tap **OK**.
4. Drag the label from the top of the screen onto the image where you want the label to appear, and then tap **Done**.

> **Note:** You can undo all unsaved edits by tapping the **Undo All** button.

5. Tap **Save and Close**, and then tap **Yes**.

6. To send the image, tap **Send**.

> **Note:** To return to the capture screen, tap **Resume Exam**.

Manage hardware settings

Configure a trigger event

You can configure which event occurs when you engage a trigger. To configure a trigger event, complete the following steps.

1. In the patient information screen, tap **Settings**.

2. In the settings screen, under **Hardware**, tap **Trigger Events**.

3. In the **Trigger Settings** screen, select a trigger event in the list corresponding to the trigger that you want to configure.

4. Tap **Save**, and then **Yes**.

Configure video and audio settings

You can configure video and audio settings for your connected modalities. To configure video and audio settings, complete the following steps.

1. In the patient information screen, tap **Settings**.

2. In the settings screen, under **Hardware**, tap **Video / Audio**.

3. To configure video settings, under **Video Settings**, complete the following substeps.

    1. In the **Video input** list, select your video input device.

    2. In the **Frame rate** list, select the frame rate of your video input device.

    3. To automatically configure video settings, select the **Auto video settings** check box.

4. To configure audio settings, under **Audio Settings**, complete the following substeps.

    1. To enable recording of audio, select the **Record audio** check box.

    2. Tap **Advanced**.

    3. In the **Audio Settings** dialog box, in the **Input** list, select your audio input device.

    4. To record in stereo, select the **Stereo** check box.

    5. If gain is available for your input device, adjust the gain.

    6. Adjust the recording level, and then Tap **Save**.

5. Tap **Save**, and then tap **Yes**.

Adjust the system volume

You can adjust the volume of audio that is output to the speakers. To adjust the system volume, complete the following steps.

1. In the patient information screen, tap **Settings**.

2. In the settings screen, under **Hardware**, tap **Volume**.

3. To adjust the volume, tap the Up and Down arrow keys.

4. Optional. To mute audio, tap the speaker button.

5. Tap **OK**.

Manage connection settings

Change the current department

An administrator pre-configures query, destination, and other settings for deployed MDR Video Touch units by department. To change the current department and optionally edit the default department settings for your MDR Video Touch, complete the following steps.

1. In the patient information screen, tap **Settings**.

2. In the settings screen, under **Connections**, tap **Departments**.

3. In the **Departments** list, select a department.

   Settings for the department appear in the screen.

4. Optional. To edit the department settings for your MDR Video Touch, complete the following substeps.

   1. In the **Lookup** list, select a source to use for patient queries.

   2. In the **Destination** list, select a PACS, VNA, or other device to which to send data.

   3. In the **Modality** list, select a default modality.

      Note: You can change the modality if necessary in the patient information screen during the exam.

   4. In the **Station name** box, type a unique name for your MDR Video Touch.

   5. Click **Save**.

Open PCS Console

PCS Console is the web interface with which you can modify settings on MDR Video Touch. To open PCS Console from the MDR Video Touch, complete the following steps.

1. In the main screen, click **Settings**.

2. In the settings screen, under **Connections**, click **Server Config**.

Change connection settings

The MDR Video Touch connects to PACSGEAR Core Server. To change settings related to this connection, complete the following steps.

1. In the patient information screen, tap **Settings**.

2. In the settings screen, under **Connections**, tap **General**.

3. In the **General Settings** screen, under **PACSGear Core Server**, type the address of your server.

4. To test the connection to the server, click **Test Connection**.

   Note: If the test is unsuccessful, contact your network administrator.

5. Optional. To edit other server related options, complete the following substeps.

    1. To apply study descriptions from a worklist to patient records that you find, select the **Use study descriptions from worklist** check box, and then click **Refresh Worklist**.

    2. If you want the MDR Video Touch to remember your login credentials the next time you log in, select the **Remember me** check box.

Manage jobs in the MDR Video Touch

What is a job?

A "job" is a collection of information about a send operation that the client MDR Video Touch creates when you send data to a destination. This information includes such things as who sent the data, when, and from where. It also includes the job status, which is the result of the send operation. You can view job history or details, resend a failed job, and cancel a send job while in progress.

View a job

You can view details about a completed or failed job. To view a job, complete the following steps.

1. In the patient information screen, tap **Settings**.
2. In the settings screen, under **MDR**, tap **Job Status**.
3. In the jobs screen, tap a job and then tap **Details**.

Cancel a job

You can cancel a failed job or a job in progress. To cancel a job, complete the following steps.

1. In the patient information screen, tap **Settings**.
2. In the settings screen, under **MDR**, tap **Job Status**.
3. In the jobs screen, tap a job and then tap **Delete**.

Resend a job

You can attempt to resend a failed job. To resend a job, complete the following steps.

1. In the patient information screen, tap **Settings**.
2. In the settings screen, under **MDR**, tap **Job Status**.
3. In the jobs screen, tap a job and then tap **Resend**.

Administer the MDR Video Touch in CS Console

Manage connection settings

About managing connection settings

Because the MDR Video Touch works in conjunction with other DICOM devices over a network, it is necessary to configure connection settings for those devices. You can manage the following four categories of connection settings.

- Destinations. A "destination" is a user-specified group of DICOM device configurations. By creating a destination, you can send studies to multiple devices at once. Destinations are optional.

- Query sources. A "query source" is a DICOM worklist server, archive, or other source that can respond to patient queries. To query patient studies on the MDR Video Touch, you must configure at least one query source. For information on the query sources available at your institution, contact your PACS administrator.

- Devices. A "device" is a server, archive, or other device to which you can send patient studies for storage. To use your MDR Video Touch to send captured images or videos, you must configure at least one DICOM device. For information on the devices available at your institution, contact your PACS administrator.

- DICOM Trace. "DICOM Trace" is a function that captures raw event data flowing between DICOM devices and the server. This data is useful for server diagnostics. For DICOM trace data to be available for viewing, you must enable the function prior to any server activity.

Edit the AE title

An AE title is assigned to DICOM devices to identify them to other DICOM devices on the same network. The MDR Video Touch uses PACSSCANMOBILE as the default AE title. The AE title must be between 1 and 16 characters in length, and must not include spaces or special characters. To change the application entity (AE) title, complete the following steps.

1. In PCS Console, on the **Settings** menu, click **Connections**.
2. In the **Connection Settings** page, in the **AE title** box, type an AE title.
3. Click **Save**.

Add a destination

To add a destination, complete the following steps.

1. In PCS Console, on the **Settings** menu, click **Connections**.
2. In the **Connection Settings** page, select the **Destinations** tab, and then click **Add**.
3. In the **Add/Edit Destination** dialog box, complete the following substeps.
    1. In the **Name** box, type a name for the destination.
    2. Optional. In the **Description** box, type a description of up to 65 characters to appear at the bottom of the image. A description can help you remember the purpose of each destination, especially if there are a large number of destinations.

3.   In the list of devices, select one or more check boxes corresponding to the devices that you want to include in the destination, and then click **Save**.

Edit a destination

To edit an existing destination, complete the following steps.

1.   In PCS Console, on the **Settings** menu, click **Connections**.
2.   In the **Connection Settings** page, select the **Destinations** tab.

> **Note:** If the destination that you want to edit does not appear on the first page of the list, click the navigation buttons at the bottom of the list or type all or a portion of the destination information in the **Search** box, and then click **ENTER**.

3.   In the list of destinations, click the name of the destination.
4.   In the **Add/Edit Destination** dialog box, edit the information as needed and then click **Save**.

Add a query source

To add a query source, complete the following steps.

1.   In PCS Console, on the **Settings** menu, click **Connections**.
2.   In the **Connection Settings** page, select the **Query Sources** tab, and then click **Add**.
3.   In the **Add/Edit Query Source** dialog box, complete the following substeps.
    1.   In the **Protocol** list, select the protocol of the query source.
    2.   In the **Name** box, type a name for the query source.
    3.   In the **AE title** box, type the AE title configured on the query source.
    4.   In the **IP address** box, type the IP address of the query source.
    5.   In the **Port** box, type the port that the query source uses for the protocol selected earlier.
    6.   To limit the number of query results that the source returns, select an option in the **Date range** list.
    7.   In the **Study UID** list, select how you want client devices to handle the study UID.
    8.   To enable querying of post-dated studies, select the **Include future dates** check box.
    9.   To test whether the console can connect to your query source, click **Test**.

    > **Note:** If the test fails, confirm that you entered the correct settings, or contact your PACS administrator.

4.   Click **Save**.

Edit a query source

To edit a query source, complete the following steps.

1.   In PCS Console, on the **Settings** menu, click **Connections**.
2.   In the **Connection Settings** page, select the **Query Sources** tab.

> **Note:** If the query source that you want to edit does not appear on the first page of the list, click the navigation buttons at the bottom of the list or type all or a portion of the query source information in the **Search** box, and then click ENTER.

3. In the list of query sources, click the name of the query source.
4. In the **Add/Edit Query Source** dialog box, edit the information as needed, and then click **Save**.

Add a device

To add a device, complete the following steps.

1. In PCS Console, on the **Settings** menu, click **Connections**.
2. In the **Connection Settings** page, select the **Devices** tab, and then click **Add**.
3. In the **Add/Edit Device** dialog box, in the **Device Type** list, select the type of device, and then enter device-specific settings.
4. To test whether the console can connect to your device, click **Test**. If the test fails, confirm that you entered the correct settings, or contact your PACS administrator.
5. Click **Save**.

Edit a device

To edit an existing device, complete the following steps.

1. In PCS Console, on the **Settings** menu, click **Connections**.
2. In the **Connection Settings** page, select the **Devices** tab.

> **Note:** If the device that you want to edit does not appear on the first page of the list, click the navigation buttons at the bottom of the list or type all or a portion of the device information in the **Search** box, and then click ENTER.

3. In the list of devices, click the name of the device.
4. In the **Add/Edit Device** dialog box, edit the information as needed, and then click **Save**.

Manage a department

What is a department?

A department is a saved group of settings that makes it easy to configure client devices for use in specific departments at a healthcare institution. You must configure any destinations and query sources that you want to use in DICOM Settings before configuring departments. PCS Console includes a default department called "General." All client devices use the default department unless users specify otherwise. You must add at least one department in PCS Console before you can change the default department on the client device.

Add a department

To add a new department, complete the following steps.

Prerequisite
Add at least one device, query source, and destination.

1. In PCS Console, on the **Settings** menu, click **Departments**.
2. In the **Departments** page, click **Add**, and then complete the following substeps.

   > **Note:** To make this department the default department, in the **Add/Edit Department** dialog box, select the **Default** check box.

   1. In the **Name** box, type a name for the department.
   2. In the **AE title** box, type an AE title to use when the department is selected on the MDR Video Touch.

      > **Note:** If this box is empty, the MDR Video Touch uses the AE title set in Connections.

   3. In the **Modality** list, select the modality to use when the department is selected on the MDR Video Touch.

      > **Note:** If you select None, the MDR Video Touch uses the modality set in Connections.

3. Select the **Destinations** tab, and then select the check boxes corresponding to the destinations that you want your department to use.
4. Select the **Query Sources** tab, and then select the check boxes corresponding to the query sources that you want your department to use.
5. Select the **Client** tab, and then select the check boxes corresponding to the client devices that you want your department to use.
6. In the **Persistent Login** list, select YES if you want the MDR Video Touch to remain logged in indefinitely.
7. Select the **Series** tab, click **Add**, type a description, and then click **Save**. Repeat this step to add additional descriptions.

   > **Note:** The descriptions that you enter here are available to add to studies on the MDR Video Touch.

8. Click **Save** to close the **Add/Edit Department** dialog box.

Edit a department

To edit an existing department, complete the following steps.

1. In PCS Console, on the **Settings** menu, click **Departments**.
2. In the **Departments** page, click the name of the department.
3. In the **Add/Edit Department** dialog box, change the settings as needed.
4. Click **Save**.

Change the default department

To change the default department, complete the following steps.

1. In PCS Console, on the **Settings** menu, click **Departments**.
2. In the **Departments** page, in the list of departments, select the check box in the **Default** column corresponding to the department that you want to be the default.

Manage user access

About managing user access

To manage access to the MDR Video Touch and PCS Console, you can add users and assign administrator rights to authorized users.

You can configure the MDR Video Touch to restrict access to users who are verified through local settings, or to users who are verified by an LDAP/Active Directory server. MDR Video Touch verifies local users based on the settings you specify in this section. Your LDAP/Active directory server verifies LDAP users.

Configure an LDAP/Active Directory server

To configure an LDAP/Active Directory server, complete the following steps.

1. In PCS Console, on the **Settings** menu, click **Users**.
2. Under **Restrict access permissions to**, click **LDAP Users**.
3. In the **Server** box, type the address of the LDAP/Active Directory Server.
4. In the **Domain** box, type the domain of the LDAP/Active Directory Server.
5. Click **Test**. If the test fails, confirm that your settings are correct, or contact your network administrator.

> **Note:** You cannot save the LDAP settings until the test succeeds, and at least one LDAP user is added to the list.

6. Click **Save**.

Assign access permissions

To assign access permissions by verification type, complete the following steps.

1. In PCS Console, on the **Settings** menu, click **Users**.

2. Under **Restrict access permissions to**, click **Local Users** or **LDAP Users**.

3. Click **Save**.

Add a local user

To add a local user, complete the following steps.

1. In PCS Console, on the **Settings** menu, click **Users**.

2. Under **Restrict access permissions to**, click **Local Users**.

3. At the bottom of the **Users** page, click **Add**.

4. In the **Add/Edit User** dialog box, complete the following substeps.

   1. In the **User name** box, type a user name.

   2. In the **Password** and **Confirm password** boxes, type a password.

   3. To assign administrative rights to the user, select the **Administrator** check box. Administrators can edit many PCS Console settings that normal users cannot. When you log in to PCS Console as a non-administrator, only a limited number of options are available in the left pane.

5. Click **Save**.

Add an LDAP user

When you enable LDAP, any user on the LDAP server can log in to MDR Video Touch with limited rights. However if you want a user to have administrator rights, you must "add" them as an LDAP user in PCS Console. To add an LDAP user, complete the following steps.

1. In PCS Console, on the **Settings** menu, click **Users**.

2. Under **Restrict access permissions to**, click **LDAP Users**.

3. At the bottom of the **Users** page, click **Add**.

4. In the **Add/Edit User** dialog box, in the **User name** box, type a user name that already exists on your LDAP/Active Directory server.

5. Click **Save**.

Edit a user

To edit an existing user, complete the following steps.

1. In PCS Console, on the **Settings** menu, click **Users**.

2. Under **Restrict access permissions to**, click the button corresponding to the type of user that you want to edit (**Local Users** or **LDAP Users**) and then click a user name.

> **Note:** If the user that you want to edit does not appear on the first page of the list, click the navigation buttons at the bottom of the list or type all or a portion of the user information in the **Search** box, and then press **ENTER**.

3. Edit the user information as needed, and then click **Save**.

Manage jobs

View a job

To view a job in PCS Console, complete the following step.

1.   In PCS Console, on the **Logs** menu, click **Jobs**.

> **Note:** If the job that you want does not appear on the first page of the list, click the navigation buttons at the bottom of the list or type all or a portion of the job information in the **Search** box, and then click **ENTER**.

Cancel a job

To cancel a job in PCS Console, complete the following steps.

1.   In PCS Console, on the **Logs** menu, click **Jobs**.

> **Note:** If the job that you want does not appear on the first page of the list, click the navigation buttons at the bottom of the list or type all or a portion of the job information in the **Search** box, and then click **ENTER**.

2.   Select the job and then click **Cancel**.

Restart a job

To restart a job in PCS Console, complete the following steps.

1.   In PCS Console, on the **Logs** menu, click **Jobs**.

> **Note:** If the job that you want does not appear on the first page of the list, click the navigation buttons at the bottom of the list or type all or a portion of the job information in the **Search** box, and then click **ENTER**.

2.   Select the job and then click **Retry**.

Manage other server settings

Edit a server setting

To edit a server related setting, complete the following steps.

1.   In PCS Console, on the **Settings** menu, click **Server**.
2.   In the **Server Settings** page, click **Edit**.
3.   Complete one or more of the following steps.
     - To turn off recording of server logs, clear the **Enable debug** check box.
     - In the **Session timeout** box, type the number of minutes that a mobile device must remain inactive for its connection to the server to time out.

- In the **Max. retries** box, type the maximum number of times the server should attempt to reconnect after a lost connection.
- In the **Retry intervals** box, type the number of seconds between attempts to reconnect.

4. Click **Save**.

View an audit log

To view an audit log, complete the following steps.

When auditing is enabled, you can view audit logs showing user and device access to the server.

1. In PCS Console, on the **Logs** menu, click **Audit**.

   Note: If the log entry that you want is not on the first page of the list, click the navigation buttons at the bottom of the list or type all or a portion of the log entry in the **Search** box, and then click **ENTER**.

2. To display study details, click the log entry that you want to view.

   Note: It can take a few seconds for results to appear.

View server log

To view a server log, complete the following step.

If you selected the Enable debug check box in the server settings, you can view server logs containing server-specific events such as errors and changes in connection statuses. For information on the Enable debug check box, refer to Edit a server setting.

1. In PCS Console, on the **Logs** menu, click **Server**.

   Note: If the log entry that you want is not on the first page of the list, click the navigation buttons at the bottom of the list or type all or a portion of the log entry in the **Search** box, and then click **ENTER**.

Enable DICOM Trace

To enable DICOM Trace, complete the following steps.

1. In PCS Console, on the **Settings** menu, click **Connections**.
2. In the **AE Title** area, select the **Enable trace** check box.
3. Click **Save**.

View DICOM Trace

To view DICOM trace data, complete the following step.

1. In PCS Console, on the **Tools** menu, click **DICOM Trace**.

Edit a default setting

Defaults are optional site information and settings that the server automatically includes with studies as DICOM metadata. To edit a default setting, complete the following steps.

1. In PCS Console, on the **Settings** menu, click **Defaults**.

2. In the **Defaults** page, click **Edit**.

3. Perform one or more of the following actions, and then click **Save**.

   - In the **Manufacture** box, type the manufacturer of the sending device. The default value is `LEXMARK`.

   - In the **Institution** box, type the name of your institution.

   - In the **Model** box, type the model of the sending device.

   - In the **Serial** number box, type the serial number of the sending device.

   - In the **Software version** box, type the version number of the model that you typed in the Model box.

   - In the **Modality** list, select a default modality according to how you want the image to be processed by systems that open the image.

4. Click **Save**.