



# IDEXX



# Diagnostic Imaging

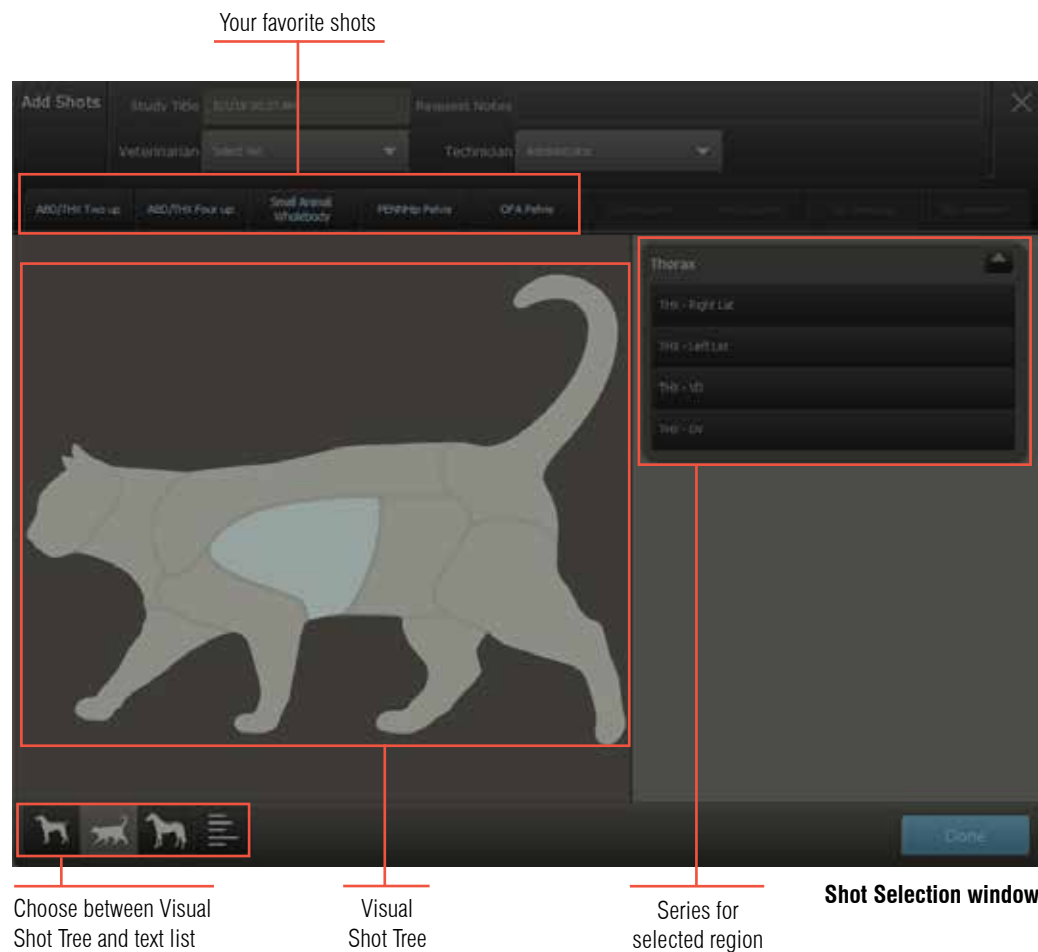
# Capturing images

## Before you begin:


- Adjust collimation properly.
- Make sure the body part you are imaging matches the selected shot type.
- Use the technique chart provided by IDEXX to set exposure time and kVp.



## To prepare to capture an image:

1. In the Home window, start the capture process any of these ways:
  - Select from the **Pending** or the **Census** list (if your software is integrated with your practice management system) or click **New Patient** and enter the requested information.
  - Find an existing patient record, and click  in the patient card.
  - Click . You can assign the image to a patient later.
2. At the top of the Shot Selection window update the study title and the veterinarian and technician names as needed.
3. In the Visual Shot Tree, click the region you want. (If a text list of shots is displayed, select the species.)
4. On the right, click a series name to select all shots in the series, or select individual shots in the order you want to take them.
5. Click **Done**. In the Capture window, the first shot is surrounded by a light border, ready for capture.
6. **IMPORTANT:** For ImageVue\* DR50 Systems, some shots display a **>10 cm** or a **>15 cm** check box. Be sure to select this check box if the anatomy being imaged meets the size criteria.
7. (Optional) Click **Add Options** to enter special options for the selected shot if needed.
8. Prepare the animal; measure the thickest part of the anatomy to be radiographed; and then set generator technique.
8. Set physical markers, and then continue with the steps to the right.






## For IDEXX I-Vision CR\* Systems:

1. Take the radiograph.
2. Click **Capture** and then insert the cassette into the scanner.
3. Repeat to capture the remaining radiographs.
4. When finished, click .

**Tip:** To pause a study, click . To restart the study, select the paused request from the **Pending** list or click  on the patient card.


## For IDEXX DR systems:

1. Prep the x-ray switch. The system beeps when ready. **Note:** For ImageVue DR50 systems, prep the x-ray switch after the ready button turns green.
2. Press the switch all the way to capture the radiograph.
3. Repeat to capture the remaining radiographs.
4. When finished, click .

**Tip:** To pause a study, click . To restart the study, select the paused request from the **Pending** list or click  on the patient card.

# Finding a patient and viewing a saved image

## To find a patient record and view an image:

1. In the Home window, enter search criteria and then click . You can enter a patient name, a patient ID, a client name, or a client ID.

### OR

Select a time period, and then select a filter, such as a species.

Search results are displayed as patient cards.

2. Click a thumbnail in the patient card to open the study in the Image Viewer.

**Tip:** If there are no thumbnails, you can click the empty thumbnail area to view the patient record.

3. In the Image Viewer click a thumbnail to open the image.

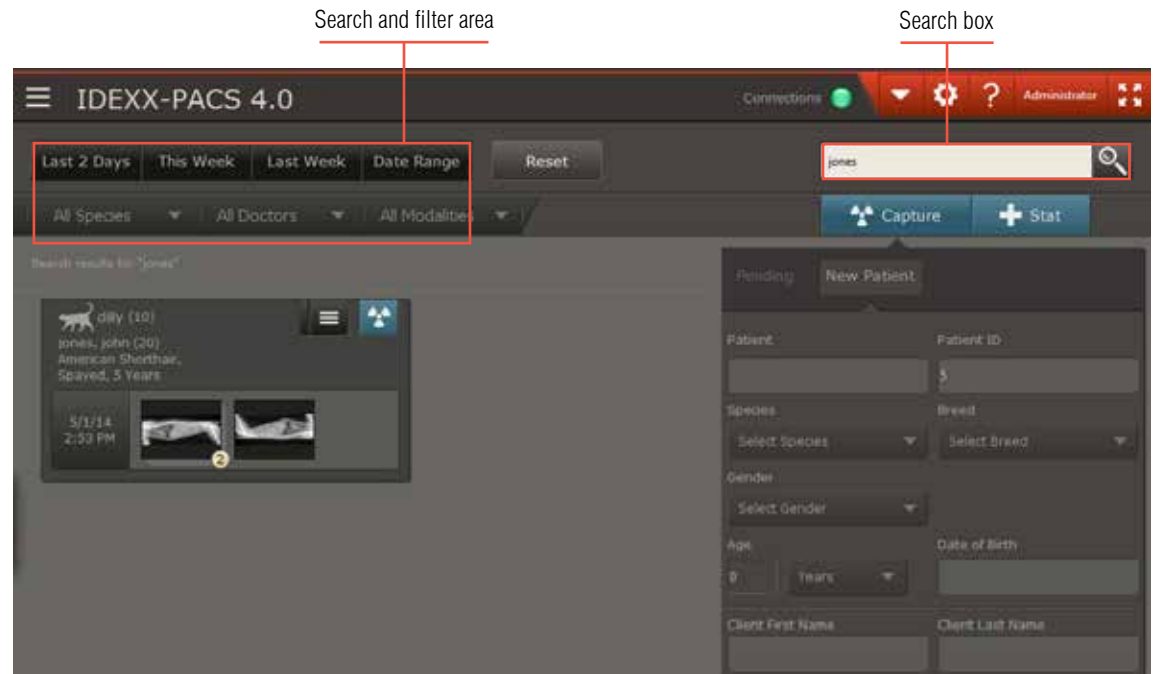
## The IDEXX Web PACS option

One of the best ways to view radiographs is through IDEXX Web PACS—the subscription service that stores your radiographs in the cloud.

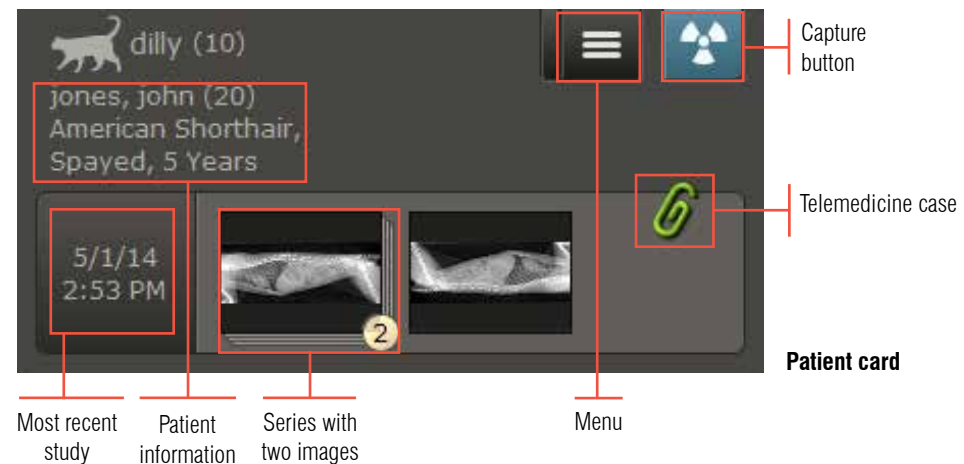
With IDEXX Web PACS you can:

- View radiographs anywhere, anytime, and use a complete suite of advanced viewing and enhancement tools.
- Compare radiographs to a library of reference images.
- Submit radiographs directly to the Orthopedic Foundation for Animals (OFA).
- Enjoy unlimited, safe, secure storage in the cloud.

For more information, contact IDEXX Diagnostic Imaging.




Home window

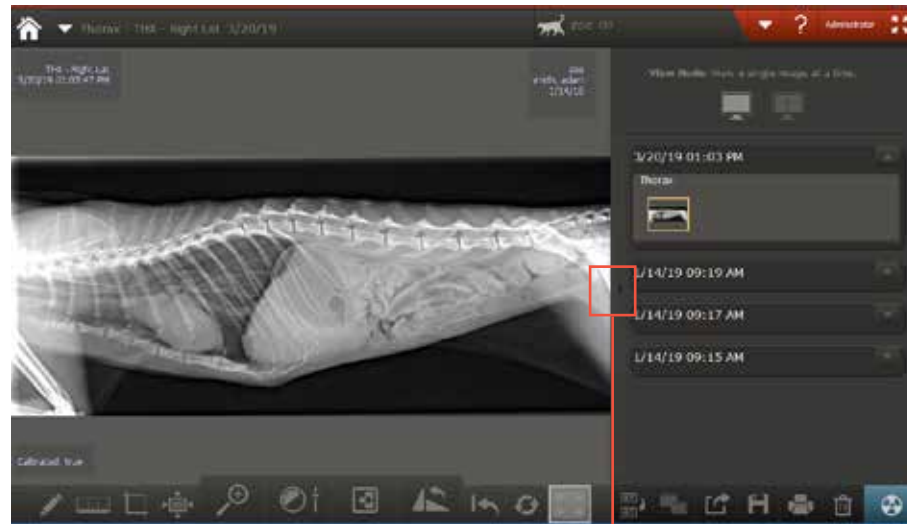


Patient card

# Working with images

## To enhance and manage images:

1. Find the patient record and open the image in the Image Viewer.
2. To view the image full screen, click the small arrow on the right edge of the window.
3. Use the tools below the image to annotate, enhance, restore, or reprocess the image.
4. Use the tools below the image history pane on the right to reassign, clone, share, save, print, or delete the image.
5. To view other images:
  - a. Look for studies in the image history pane on the right.
  - b. Click the down-arrow to open a study; click a thumbnail to view the image.
6. To return to the Home window, click .



Previous studies; click down-arrows to open

Full screen arrow

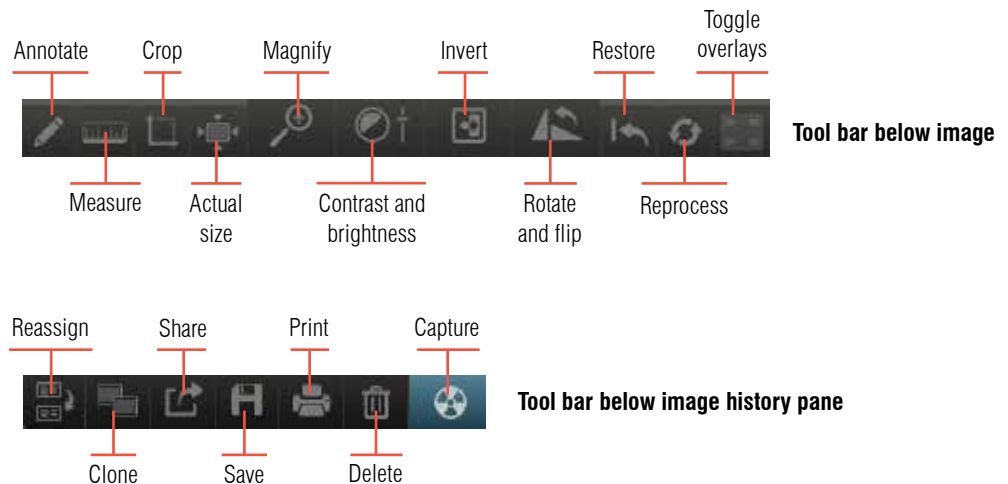
Image Viewer with open study

## To compare images:

1. Click **Compare** above the image history pane on the right.




2. Select up to 3 thumbnails for the images you want to compare with the current image.
3. To return to single view, click the **X** in the upper right corner of each image you want to close, and then click the single view button:



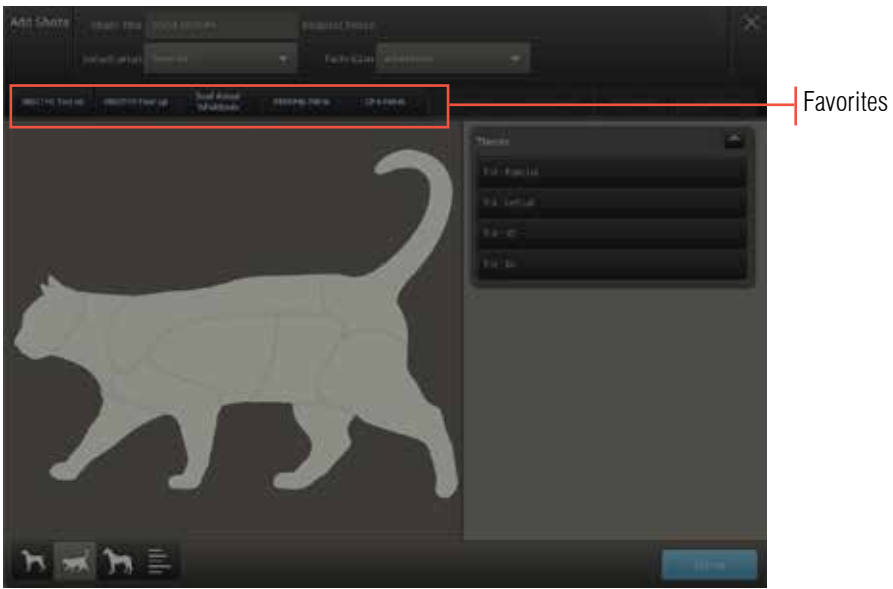
# Using the favorite shots list

## To create a favorite shots list:

- 1. Start an image capture for any patient.
- 2. In the Shot Selection window, choose the shots you want to save in a favorite shots list, and then click **Done**.
- 3. In the Image Viewer click  above the image history pane.
- 4. Enter a name for the favorite shots list and click **Save**.

## To select a favorite shots list:


- 1. Start the image capture.
- 2. In the Shot Selection window, select the tab for the favorite shots list you want, located above the visual shot tree.



Shot Selection window

# Keyboard and mouse shortcuts

## To enable shortcuts:


- 1. In the Home window, click **Settings** .
- 2. On the left side of the System Settings window, click **User Settings**.
- 3. Select **Enable Imaging Shortcuts**, and then click **Save**.

## To use shortcuts when viewing images:

| Task   | Shortcut   |
|--|--|
| Rotate image 90° counterclockwise              | Press the <b>A</b> key.  |
| Rotate image 90° clockwise                     | Press the <b>S</b> key.  |
| Change the window (contrast)                   | Hold down the left mouse button and move the mouse left and right. |
| Change the level (brightness)                  | Hold down the left mouse button and move the mouse up and down.    |
| Return to original window/level settings       | Double-left-click.   |
| Zoom   | Hold down the right mouse button and move the mouse.               |
| Return to original zoom (image fits in window) | Double-right-click.  |
| Move a magnified area around the image         | Hold down the SHIFT key, and click the right mouse button.         |

# Importing images from a remote DICOM server



## To import an image from a remote DICOM\* server:

1. In the Home window, click **Tools**  and then **Query Retrieve**.
2. Enter search criteria and then select the remote server from the **Location** box. **Tip:** Servers are listed only if they have been defined in DICOM settings. Contact IDEXX for information.
3. Click **Search**, and then select the study (or studies) you want to import and click **Retrieve**.
4. Click **OK**.


## To check the status of the import request:

1. In the Home window, click **Connections** in the tool bar, and on the DICOM row, click **Queue**.
2. Select the **Inbound** tab, find the request in the table, and note the status. A "Complete" status means the study has been imported to the associated patient's record.

# Sharing images by email, patient CD, telemedicine, or DICOM

1. In the patient card in the Home window, click **Menu** , and then click **Share** .

### OR

At the bottom right side of the Image Viewer, click **Share** .

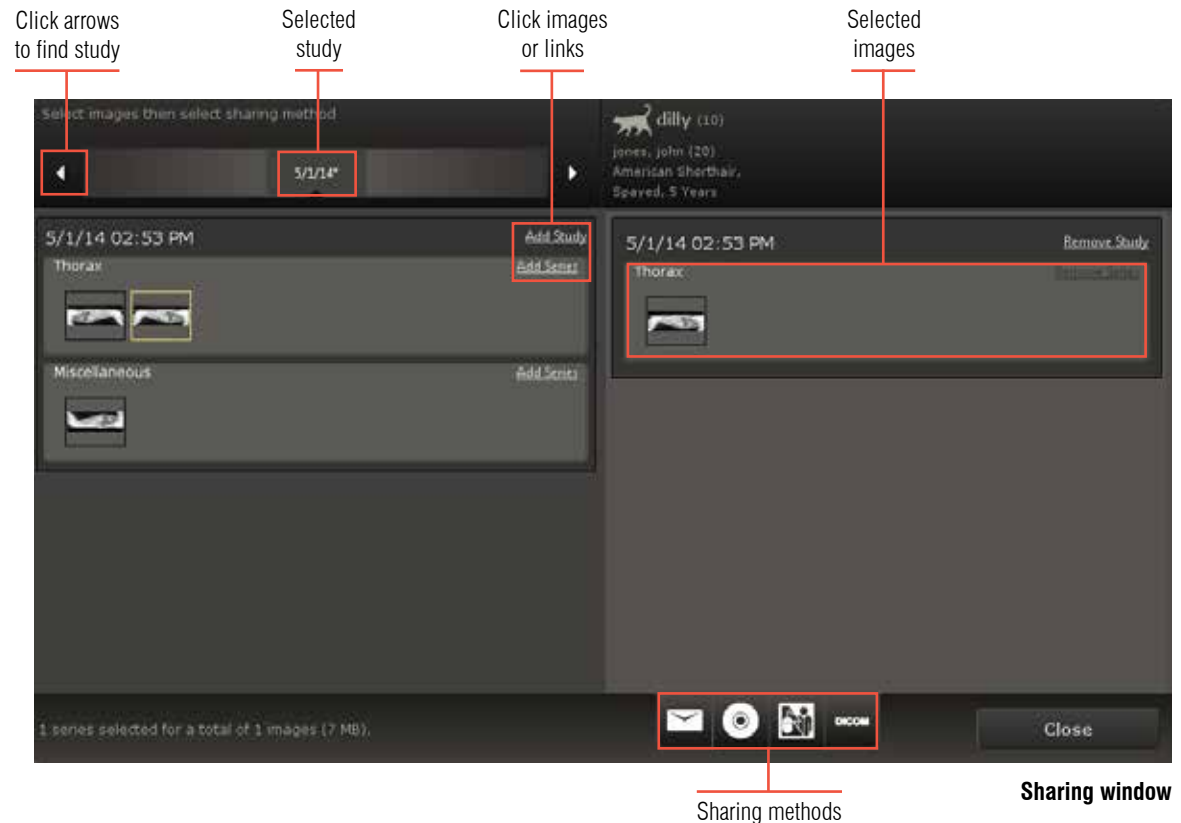
The sharing window opens.

2. If the image you want is not displayed on the left, use the arrows at the top of the window to scroll through the patient's studies until you find the one you want.
3. To select images, click the thumbnails or click **Add Study** or **Add Series**. The images move to the right side of the window.
4. At the bottom of the window, click the button for the sharing method: email, patient CD, telemedicine, or DICOM.



5. Provide any additional information needed by the sharing method.

**Tip:** With IDEXX Web PACS, the subscription cloud version of IDEXX-PACS, you can also submit radiographs directly to the OFA. For more information, contact IDEXX Diagnostic Imaging.



# Adding or updating client/patient records; reassigning a study

## To add a new client/patient record:

1. In the Capture panel in the Home window, click **New Patient**.
2. Enter the client and patient information, and then click **Save and Continue**. The Shot Selection window opens.
3. If you don't want to capture images yet, click **Done** in the Shot Selection window, and then click **Done** in the Capture window.

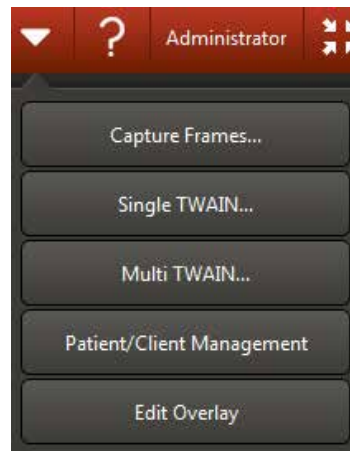
The new patient record is saved, even if you do not capture images.



New patient window

## To update a client/patient record:

1. Find the patient record, and then click the thumbnail area of the patient card.
2. In the Image Viewer, click **Tools**, and then click **Patient/Client Management**.
3. Edit the information as needed, and then click **Save**.



Tools menu on Image Viewer

## To reassign a study to a different patient:

1. With the image open in the Image Viewer, click **Reassign** (below the image history pane).
2. At the top of the window, select whether to reassign this study to an existing patient or to a new patient.
3. Enter the required information to find and select an existing patient or to create a new patient record, and then click **Reassign**.

**All images** for the current study are reassigned.

**IMPORTANT:** If your IDEXX-PACS software is integrated with the Cornerstone\* software, the reassigned study is removed from the current Cornerstone Patient Clipboard\* and is now available in the Patient Clipboard for the patient you assigned the study to.

**Tip:** When an image is captured for a STAT request, reassign the study to a patient as soon as possible. The patient card in the Home window is labeled +STAT Patient.



Reassign button



# Tips for taking high-quality radiographs

- **Follow these radiation safety guidelines** and adhere to the ALARA principle (keep radiation dose As Low As Reasonably Achievable):
  - Minimize exposure time.
  - Keep a safe distance.
  - Wear protective clothing.
- **Use a caliper** to measure the thickest part of the anatomy of interest; then **use your technique chart** to select the appropriate generator settings.
- **Position the animal correctly** for the anatomy being radiographed. For help, see the IDEXX Diagnostic Imaging positioning poster or contact IDEXX Diagnostic Imaging.
- **Collimate the generator** to target the x-ray beam to the area of interest.
- **Choose the correct shot type** for the anatomy. Different shot types apply different image processing parameters.



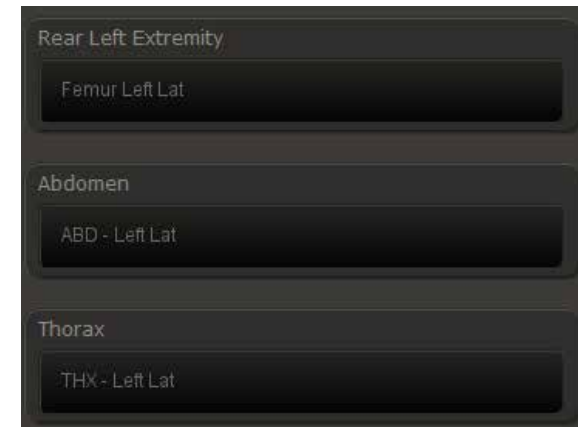
**Wear protective clothing**



**Measure anatomy and set technique accordingly.**



**Position correctly and collimate to the area of interest.**



**Choose the correct shot type.**



# Maintaining your system for optimal performance

## Backing up your images and data

Make sure that both image files and patient data are backed up on a regular basis.

We recommend an automatic cloud-based option like **IDEXX Web PACS**. IDEXX Web PACS combines secure, unlimited image and data storage with advanced image-viewing tools, a Reference Image Library, online OFA submission, and more. To learn more about subscription options, contact an IDEXX Digital Systems Consultant at **1-855-627-6573**.

If you don't use IDEXX Web PACS but do capture large numbers of radiographs, it is best to store images on a computer that is not your capture station—for instance, on an IDEXX-PACS software server.

## Maintaining your image-capture computer

- Restart your computer **once a day**. (You may also turn off your digital imaging system overnight.)
- As a safeguard against viruses and other malware, use your IDEXX imaging computer **only** to capture and view images. Avoid using it for nonimaging-related internet activity.

## Troubleshooting

### If images will not open:

If you cannot access images and the software has been running but inactive for a long period of time, the software may no longer be connected to the database. Try exiting and restarting the software. You should always restart the computer and software once a day.








### If you have problems capturing images:

For ImageVue\* DR40, I-Vision\* DR, and IDEXX-DR\* 1417 systems:

- Turn off power to the computer and control boxes and then check all cables that connect the system components to make sure they are connected securely. Look for damage such as nicks, cuts, and crimps.

For ImageVue DR50 systems:

- If LEDs are not illuminated or you have problems connecting cables, please contact customer support. See the number at the bottom of the page.
- Make sure the generator is turned on and the footswitch/handswitch is working correctly. If the generator still does not fire, contact your local generator technician.
- Check ImageVue DR50 connections and refer to these battery status and connection icons:

| Icon  | Status   |
|---|--|
|       | <i>Wired mode:</i><br>Cable is connected   disconnected        |
|       | <i>Wireless mode:</i><br>Connection is active   inactive/error |
|        | <i>Battery status:</i><br>Full   Empty   Charging              |

Connection and battery information  
for ImageVue DR50 system


# Cleaning scanners, cassettes, and rollers

To help ensure optimal performance and high-quality images, follow these cleaning guidelines.

## IDEXX I-Vision CR imaging systems

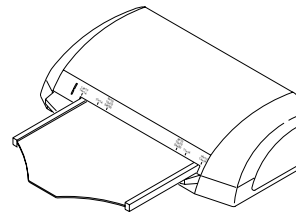
Clean the rollers monthly to remove dust and small particles.

### Prepare:

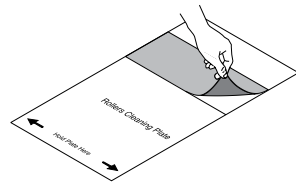
1. Remove any cassettes and screens from the scanner.
2. In the Home window, click **Settings** , click **Imaging** on the left, and then click **Scanner Configuration Settings**.
3. If prompted to log in, type *user* in the **User** name text box and *Idexx123* in the **Password** text box, and then click **Login**. After a few seconds, the User window appears.

**Note:** The password and username are case-sensitive.

4. Insert the cleaning tray by pushing gently until it locks into place. (See illustration.)
5. Remove the protective paper from the cleaning plate to expose the adhesive. Save the paper.
6. Place the cleaning plate on the tray, orienting the cleaning plate in the direction specified on the plate.
7. In the Maintenance area of the software, if the **Dismiss** button is active (blue), click it, and then click **OK** to reset the cleaning reminder.



Notched end of tray goes into scanner smooth side up.



Removing the protective paper

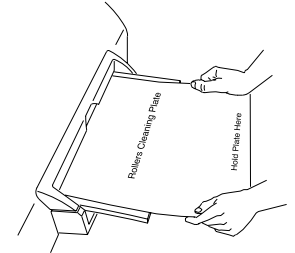
### Clean:

1. Depending on your software version, click either **Prepare** or **Activate Rollers Cleaning**, and then click **OK** to clear any messages that appear.

2. Push the cleaning plate very slightly into the scanner and let go.

The rollers pull the plate in almost entirely and then feed the plate back out. When the plate is ejected, the cleaning tray unlocks.

3. Repeat **Steps 1–2** two more times. Be sure the cleaning tray is locked in place before you start each cleaning cycle.
4. Remove the plate and tray; cover the adhesive area on the cleaning plate with the protective paper (wax side down), and store the plate in the protective envelope.
5. Click **OK**.





Cleaning plate on tray

## ImageVue CR20 imaging systems

Perform these steps monthly.

### Scanner:

- Vacuum the air vents on each side of the scanner to remove dust and pet hair.
- Run the cleaning cycle as follows: Remove the cassette, and then simultaneously press the **Standby**  switch and the **Eraser** button . Cleaning takes about 5 seconds.

### Cassette:

Wipe the exterior of the cassette as needed with a clean, dry cloth. Do not use a solvent.

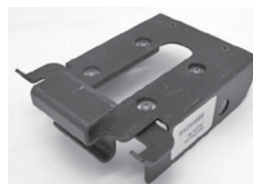
# Cleaning imaging screens/plates

## IDEXX I-Vision CR imaging systems

### Which way is up?

Be sure to observe which side of the screen faces the top of the cassette (toward the x-ray tube). This is the side to be cleaned.

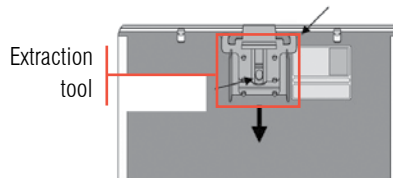
Be sure to return the screen to the cassette with the proper side facing up. All-white screens should have the side marked "back side" facing the back (black) side of the cassette. For Kodak\* screens, the black side of the screen should face the back of the cassette.



Extraction tool

### Remove the screen:


1. Slide the edge of the extraction tool over the back edge of the cassette. Pull the tool down until it enters the square slots in the back of the cassette. (Your tool may vary from picture.)
2. Hold the cassette horizontally, and locate the cassette slider in the extraction tool's central opening; push the slider toward the edge of the cassette until the screen edge is visible.
3. Carefully pull the screen out and place it on a clean, dust-free surface.



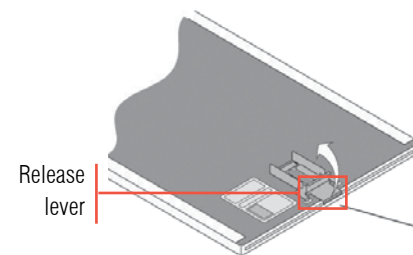
Installing the extraction tool on back of cassette

### Clean and return the screen:

1. Fold a nonabrasive, lint-free cloth, and dampen with a small amount of screen-cleaning solution. Do not pour the solution directly onto the screen! Excessive amounts of solution may damage the screen.

**Note:** See your Hardware Guide (available on the Help  menu) for the screen cleaner to use.


2. Wipe the screen gently and thoroughly, one section at a time. Fold the cloth to expose a fresh area for each section. If necessary apply pressure while cleaning.
3. Allow screen to dry completely. Never insert a wet screen.
4. Position the dry screen so that 2–3 inches hang off the edge of a clean, dust-free surface, such as a tabletop, and then slide the open end of the cassette over the first inch of the screen; slide the screen into the cassette, tipping the cassette up so that gravity pulls the screen inside.
5. Pull up on the release lever to remove the extraction tool.



Removing the extraction tool

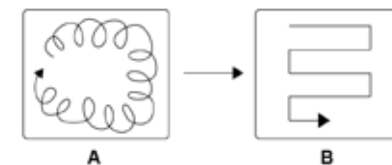
## ImageVue CR20 imaging systems

### Erase each plate before you use it the first time each day:

1. Before inserting a cassette, press the **Eraser**  button on the scanner. The status light turns orange.
2. Insert the cassette; erasure begins automatically.
3. Remove the cassette when the **Cassette Removal** lamp blinks.

### If images are streaked, clean the plate:

1. Press down the latches at the top of the cassette, tilt open the top, and then remove the plate.
2. Using the towelettes provided with your system, wipe the plate surface lightly, in the order shown (A, then B).
3. Return the plate to the cassette, with barcode visible in the window.



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Westbrook, Maine 04092 USA  
[idexx.com](http://idexx.com)

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IDEXX Diagnostic Imaging Customer Support: **1-877-433-9948**

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