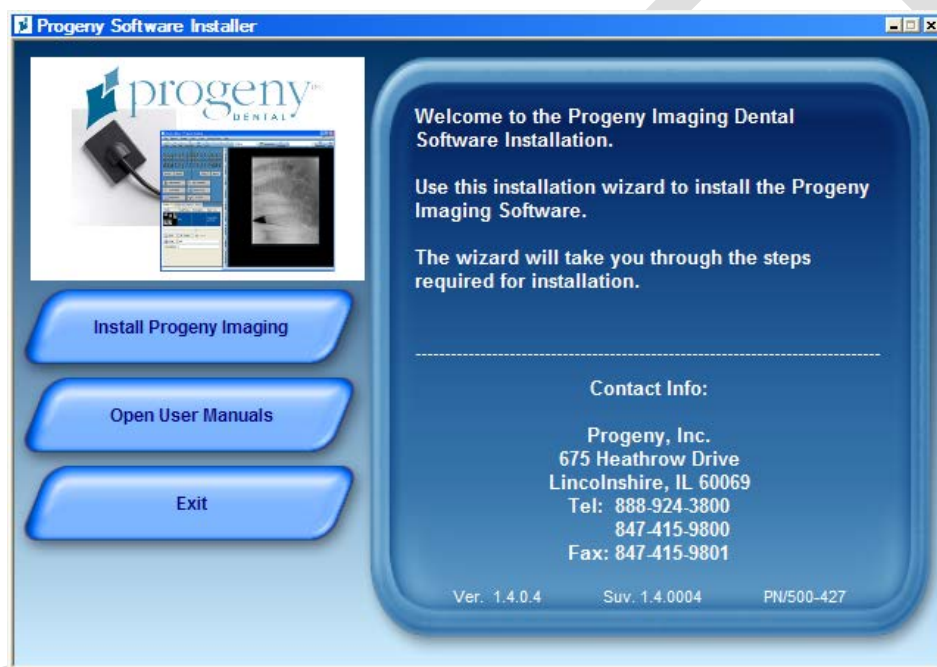


Progeny Imaging



User Guide

V. 1.6.0.x and Higher

EU Representative
CE Partner 4U
Esdoornlaan 13
3851 DB Maarn
The Netherlands

Part Number: 00-02-1598
ECN: P2325
REV.G

Contents

1 About This Manual	5
How to Use this Guide	5
Text Conventions.....	5
Getting Assistance.....	6
2 Overview.....	7
Progeny Imaging Features and Functions	7
Progeny Imaging Screen Layout	8
3 Launching Progeny Imaging.....	9
About Login Modes.....	9
Logging in for the First Time.....	10
Launching Progeny Imaging in Open User Mode	10
Launching Progeny Imaging in Secure Mode	12
4 Setting up Progeny Imaging.....	15
About Application Settings.....	15
Entering Clinic Information	15
Selecting the Language.....	16
Selecting the Tooth Numbering Scheme.....	17
Setting Image Resolution	18
Using an Acquisition Sound.....	19
About Device Settings	19
Setting the Sensor Timeout Period.....	20
Configuring Default Filters	21
5 Working with Patient Records	22
About Patient Records.....	22
Creating a Patient Record	22

Accessing Patient Records.....	23
Modifying a Patient Record	24
Deleting Patient Records	25
Reassigning Patient Records	26
Adding Files to a Patient Record	26
6 Acquiring Images	28
About X-ray Image Acquisition	28
Acquiring X-ray Image Sequences	30
Canceling and Pausing Image Acquisition	33
Reacquiring Images.....	34
Using Templates to Acquire Images.....	35
Creating and Modifying Image Acquisition Templates	37
Acquiring Video Images.....	39
7 Displaying Existing Images.....	41
About Displaying Images.....	41
Opening and Closing Images	42
Arranging Images on the Work Surface	44
Displaying an Image's DICOM Information	46
Deleting Images.....	47
Controlling the Image View.....	48
Adding a Note to an Image.....	51
8 Manipulating Existing Images.....	53
About Image Manipulation	53
Annotating Images.....	54
Applying Image Filters	59
Creating Custom Filters	61
Creating Image Studies	62
Moving Images to Another Patient Record.....	64
Correcting Tooth Numbering on Images	65

9 Exporting, Importing and Printing Images.....	67
About Communicating Images	67
Exporting DICOM Images.....	67
Exporting JPEG Images	68
Exporting Other Image Formats	69
Importing Images	69
Publishing Images to a PACS Server.....	71
Printing Images.....	72
Emailing Images	73
10 Backing up and Restoring Patient Data	74
About Backing up and Restoring Patient Data	74
Backing up a Patient Database	75
Restoring a Patient Database.....	77
11 Frequently Asked Questions.....	79
12 Keyboard Shortcuts	82
Keyboard Command Sequences.....	82
Index	84
DICOM Conformance Statement.....	91

1 About This Manual

In this Section

- How to Use this Guide
- Text Conventions
- Getting Assistance

How to Use this Guide

This guide is designed to help you acquire and work with images using Progeny Imaging. From logging in through data backup, this guide contains all the information and procedures you need to use the software.

For information on installing Progeny Imaging, refer to the *Progeny Imaging Installation Guide*.

Text Conventions

The following typographic conventions are used in this manual.

Type of Information	Convention	Example
Menu selection	Bold font, menus in path connected by '>'	Select Tools > User Management
User interface objects and controls	Bold font	Click Next
Program information and information typed by the user	Fixed-width font	Change directories to C: / pr ogr am_f i l es/ Pr og enyDent al
User-specific information typed by the user	Fixed-width font with italics and '< >'	Type C: / pr ogr am_f i l es/ <user _database>, substituting the name of your database for <user _dat abase>

Getting Assistance

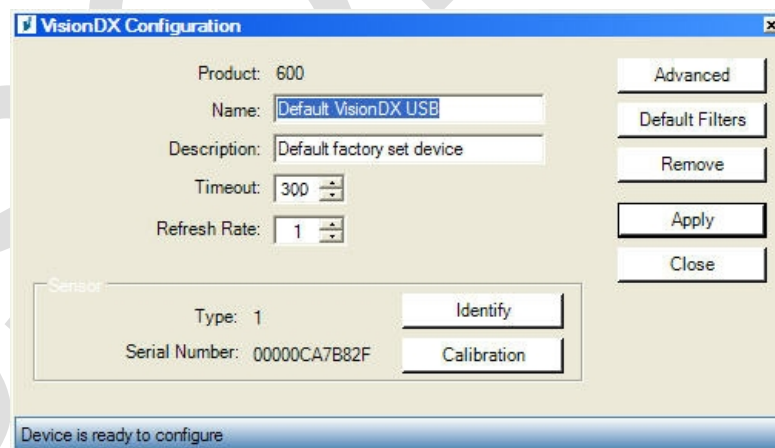
In the event that you require additional assistance, please contact your local dealer representative from whom you purchased your Progeny products. You may also contact Progeny Technical Support:

- Phone 888-924-3800 (Press 2) (U.S. and Canada)
- +1 847-415-9800 (Press 2) (International)
- Fax 847-415-9810
- techsupport@progenydenal.com
- Hours: 8:00 a.m.-5:00 p.m. CT

To facilitate your service call, the following information should be ready and available:

- Your computer operating system (Vista, XP, Mac OS)
- Version of Progeny Imaging software--To determine the version, in Progeny Imaging, select **Help > About Progeny Imaging**.
- Serial number of your VisionDX system and sensor--You can find the serial number of your VisionDX sensor on the VisionDX Configuration screen. To open the VisionDX Configuration screen, be sure the sensor is connected and selected in the Device drop-down menu. Then select **Tools > Devices > Device Configuration**.

Figure 1-1: VisionDX Configuration Screen



- Type of Progeny Imaging installation (standalone, peer-to-peer network, client-server network)

When you call, please make sure that your Progeny Imaging software is open and running and your VisionDX sensor is connected.

2 Overview

In this Section

- Progeny Imaging Features and Functions
- Progeny Imaging Screen Layout

Progeny Imaging Features and Functions

Progeny Imaging is an imaging software intended to acquire, display, manipulate, store and distribute dental X-ray images and intraoral video feeds. Progeny Imaging stores digital sensor images in DICOM format (Digital Imaging and Communications in Medicine).

You can use Progeny Imaging to:

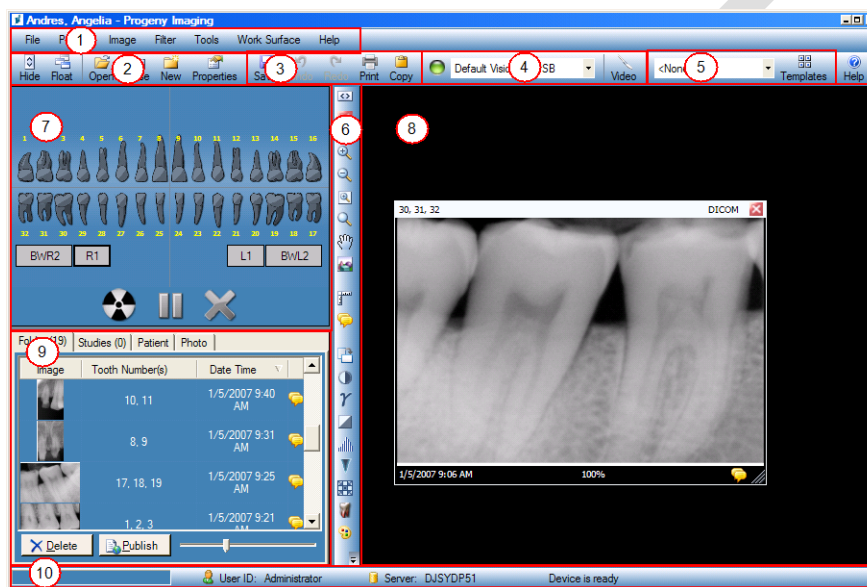
- Acquire, manipulate, and communicate images
- Manage patient records
- Create login IDs for users of Progeny Imaging

Our software is specifically designed to provide easy access to digital image acquisition, simplified storage and image recall, as well as many tools useful for image evaluation.

Progeny Imaging Screen Layout

Progeny Imaging's screen layout is divided into intuitive sections.

Figure 2-1: Areas of the Progeny Imaging Screen



The table below describes each area of the Progeny Imaging screen.

Areas of the Progeny Imaging Screen

Area	Description
(1) Main Menu Bar	Commands for all Progeny Imaging functions.
(2) Patient Controls Toolbar	Open, create, or modify patient records.
(3) Image Operations Toolbar	Save, undo, and print images.
(4) Device Controls Toolbar	Select image acquisition modules.
(5) Template Controls Toolbar	Select a template or open the Template Manager.
(6) Filter Toolbar	Manipulate the way an image is displayed.
(7) Tooth Panel	Select sequences of teeth and acquire images.
(8) Work Surface	Display, filter, and annotate images.
(9) Image Container	Store images and files in a patient record.
(10) Progress and Status Bar	Image acquisition progress, sensor readiness, and current user and server.

3 Launching Progeny Imaging

In this Section

- About Login Modes
- Logging in for the First Time
- Launching Progeny Imaging in Open User Mode
- Launching Progeny Imaging in Secure Mode

About Login Modes

Login mode determines how Progeny Imaging starts when you launch it from the desktop or Windows Start menu. The login mode also determines the level of security for patient records. Progeny Imaging has two login modes: Open User Mode and Secure Mode.

Open User Mode

Open user mode allows users to start Progeny Imaging without having to log in. In open user mode, Progeny Imaging opens immediately whenever anyone clicks the Progeny Imaging icon. In open user mode, all users have access to all patient records.

Secure Mode

In secure mode, each user has his or her own user ID and password, and all users must log in to use Progeny Imaging. In secure mode, an Administrator creates user IDs for users. In secure mode, users have access only to the patient records assigned to them. Administrators have access to all patient records.

Choosing your Login Mode

The first time that you start Progeny Imaging after installation, you log in as Administrator. Then, you can select the login mode that best suits the needs of your practice. If you wish to use open user mode, you enable it by creating a new desktop shortcut for starting Progeny Imaging. If you wish to use secure mode, you use the User Manager screen to set up user IDs and passwords for users.

Logging in for the First Time

When you first launch Progeny Imaging after installation, the Login window appears. To use Progeny Imaging initially you must login as Administrator.

Before logging in, ensure that your Windows account has Windows computer Administrator privileges.

To Log in for the First Time

1. On your computer's desktop, double-click the Progeny Imaging icon, or select Progeny Imaging from your Windows Start menu.

Figure 3-1: Login Screen



2. In the Login screen User ID field, type **Administrator**.
3. Leave the Password field blank.
4. Click **Login**.

Launching Progeny Imaging in Open User Mode

About Open User Mode

By default, every time you launch Progeny Imaging, the Login window appears. Open user mode allows users to start Progeny Imaging without having to log in. You must enable open user mode in order to start Progeny Imaging without requiring users to log in.

Open user mode treats all users as Administrator. In open user mode, all users have access to all patient records, and there is no need to create users.

Enabling Open User Mode

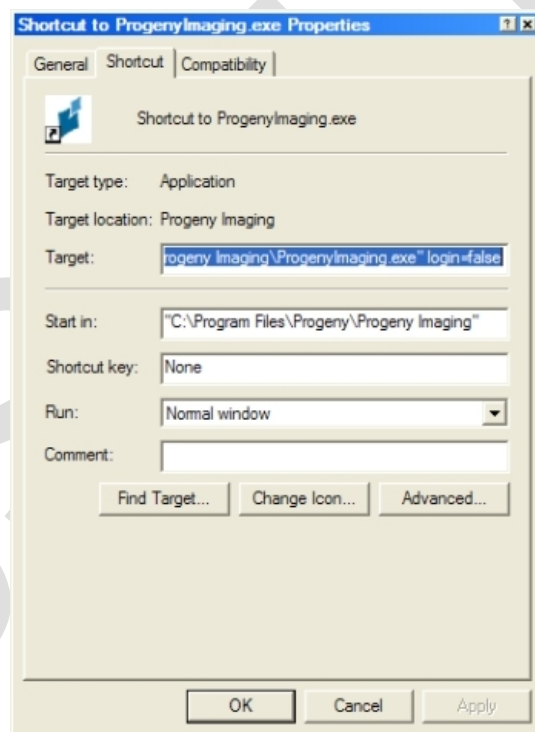
To enable open user mode, you create a new Progeny Imaging icon on the computer's desktop.

Note

Do not delete the original Progeny Imaging icon from the desktop. You will need it in the event that you later want to launch Progeny Imaging in secure mode.

1. In the Windows file system, navigate to the Progeny Imaging executable file. By default, the file is located in:
C:\Program Files\Progeny\Progeny Imaging\ProgenyImaging.exe
2. Select ProgenyImaging.exe. Then click the right mouse button and select **Copy** from the menu.
3. On your computer's desktop, right click to display the option menu and select **Paste Shortcut**.
4. With the shortcut (icon) selected, right click and select **Properties**.
5. In the Properties dialog box, select the **Shortcut** tab.

Figure 3-2: Progeny Imaging Shortcut Properties



6. In the Target text field, place your cursor to the right of the last character.
7. Type a space, and then type l o g i n = f a l s e .
8. Click **Apply**.
9. Click **OK**.

Starting Progeny Imaging in Open User Mode

Ensure that your Windows account has Windows computer Administrator privileges. On your computer's desktop, double-click the new Progeny Imaging icon.

Launching Progeny Imaging in Secure Mode

About Secure Mode

When Progeny Imaging is installed, only one user, the Administrator, can log in. Secure mode allows you to extend login and patient access privileges to other users. In secure mode, each user has his or her own user ID and password, and all users must log in to use Progeny Imaging.

Progeny Imaging permits two types of users:

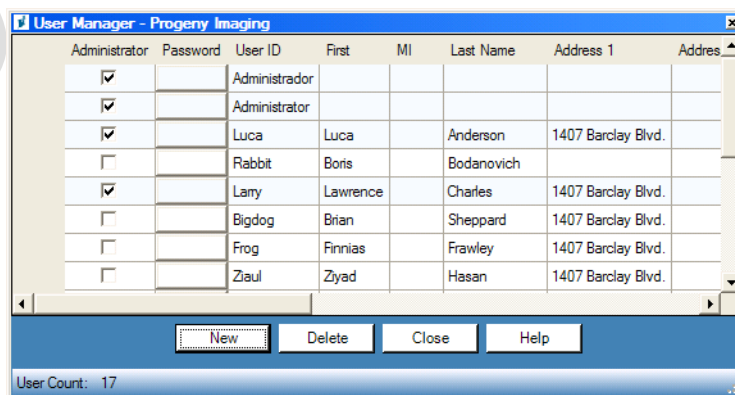
- **Administrator** -- Administrator is the default user that comes with Progeny Imaging. The Administrator can create and manage other users and access all patient records. Progeny Technical Support uses the Administrator user in the event that you require Technical Support. Any user can also act as Administrator when the Administrator box is checked in the User Manager screen.
- **Users** -- Users create and manage only their own patients' records. You can create any number of users.

In order to implement secure mode, you use the User Manager screen to create users.

To Create a User

1. Log into Progeny Imaging as Administrator.
2. Select **File > User Manager**, or **CTRL + U**.

Figure 3-3: User Manager Screen



3. In the User Manager screen, click **New**. A blank row is added to the User Manager screen.
4. To allow the user to act as an Administrator, with access to all patient records, click the **Administrator** box. Leaving the Administrator box unchecked means that the user will only have access to the patient records he or she creates.
5. Setting a password is optional. If you want to set a password, in the new row, click the **Password** box. In the User Password screen, enter and re-enter the password. Passwords are case-sensitive and must be at least 5 characters long.

Figure 3-4: Password Screen

A screenshot of a Windows-style dialog box titled "User Password - Progeny Imaging". It contains two text input fields: "Password:" and "Re-Enter Password:". Below the fields are two buttons: "OK" and "Cancel".

6. Type a **User ID**.
7. In the remaining fields, enter the user's first and last names and other information.
8. Click **Close** to save the information and close the User Manager screen.

To Log In

If you are running Progeny Imaging in secure mode, every time Progeny Imaging is launched, the Login screen appears. You must log in to use Progeny Imaging. Before logging in, obtain your user ID from the Administrator. Also, ensure that your Windows account has Windows computer Administrator privileges.

1. On your computer's desktop, double-click the Progeny Imaging icon, or select Progeny Imaging from your Windows Start menu. You will see the Login screen.

Figure 3-5: Login Screen

A screenshot of the "Login - Progeny Imaging" screen. It features the Progeny Dental logo at the top. Below the logo are two text input fields: "User ID:" and "Password:". At the bottom left is a small icon of a folder with a key. At the bottom right are two buttons: "Login" and "Exit".

2. In the Login screen, enter your user ID and password, if you have one. Remember that passwords are case sensitive.
3. Click **Login**.

To Modify User Information

1. Log in to Progeny Imaging as an Administrator.
2. Select **File > User Manager**, or **CTRL + U**.
3. In the User Manager screen, select the user whose information you want to change.
4. Change the user's information.
5. Click **Close** to save the user information and close the User Manager screen.

To Delete Users

If the user to be deleted has patients assigned to him or her, you have to assign the patients to another user. *For more information, see Reassigning Patient Records on page 26.*

1. Log in to Progeny Imaging as an Administrator.
2. Select **File > User Manager**, or **CTRL + U**.
3. In the User Manager screen, select the user to delete.
4. Click **Delete**.
5. Click **OK** to delete the user.

4 Setting up Progeny Imaging

In this Section

- About Application Settings
- Entering Clinic Information
- Selecting the Language
- Selecting the Tooth Numbering Scheme
- Setting Image Resolution
- Using an Acquisition Sound
- About Device Settings
- Setting Sensor Timeout
- Configuring Default Filters

About Application Settings

When installed, Progeny Imaging is ready to use. You may, however, want to customize the following software settings.

- Clinic Information
- Language
- Tooth Numbering Scheme
- Image Resolution
- Image Acquisition Sound

Entering Clinic Information

You must set up clinic information in order for it to appear in the DICOM image information and printouts.

To Enter Clinic Information

Use the Options screen Clinic Information tab to enter the name and other clinic information.

1. Select **Tools > Options** to open the Options screen.
2. Select the **Clinic Information** tab.

Figure 4-1: Options Screen Clinic Information Tab

The screenshot shows the 'Options - Progeny Imaging' window with the 'Clinic Information' tab selected. The 'General' sub-tab is highlighted. The form contains the following fields:

- ID: []
- Name: [Smiles Galore]
- Street: [123 Madison Street]
- City: [West Sidney] State/Province: [IL]
- Zip: [60231] Country: []
- Contact section:
 - Name: [Dr. James Mooney] Phone: [555-555-5155]
 - Fax: [555-505-5155] Email: [Smile@aol.com]

Buttons at the bottom: OK, Cancel, Apply, Help.

3. Enter information for your clinic.
4. Click **OK**.

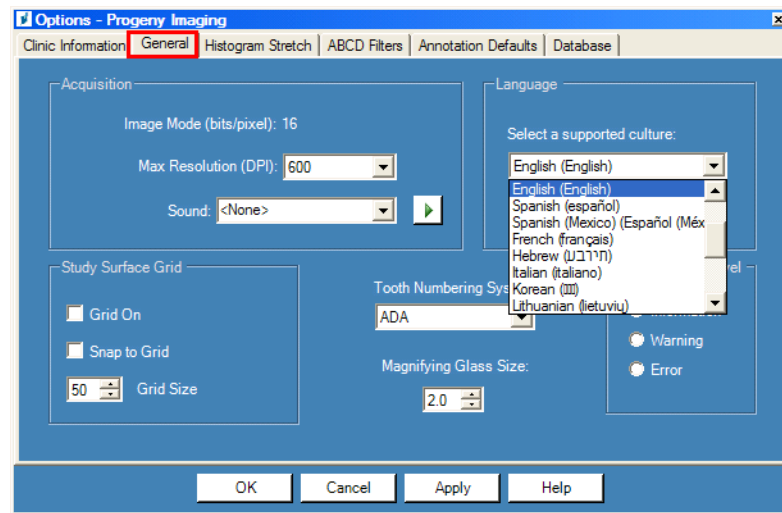
Selecting the Language

Progeny Imaging is localized so that you can select the language for the application. If the version of Windows that you are running is also localized, you will be able to add image notes and annotations in your chosen language.

To Select the Language

By default, Progeny Imaging is configured for English. You can use the Options screen General tab to change the language.

1. Select **Tools > Options** to open the Options screen.
2. Click the **General** tab.

Figure 4-2: Options Screen General Tab - Language

3. In the **Language** area, select a supported culture from the list.
4. Click **OK**. You will be prompted to restart Progeny Imaging
5. Click **Yes**.

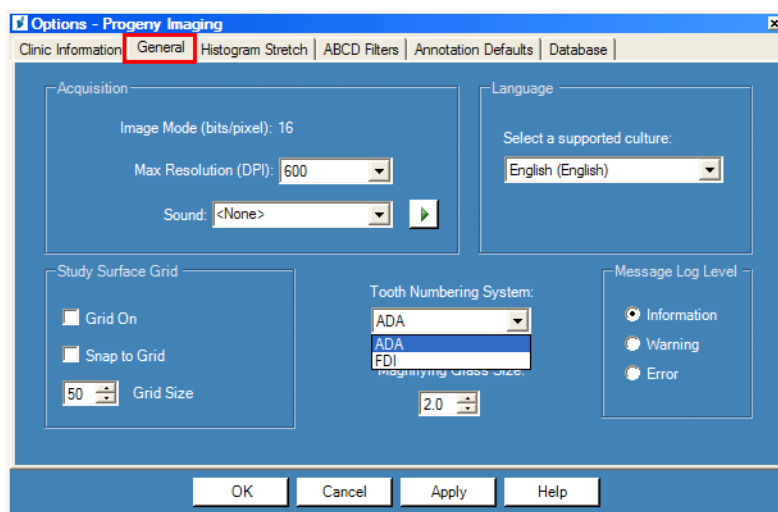
Selecting the Tooth Numbering Scheme

Progeny Imaging allows you to use either the American Dental Association (ADA) or FDI World Dental Federation Two-Digit Notation (FDI) for identifying the patient's teeth in the Tooth Panel and in image information.

To Select the Tooth Numbering Scheme

You use the Options screen General tab to select the tooth numbering scheme.

1. Select **Tools > Options** to open the Options screen.
2. Click the **General** tab.

Figure 4-3: Options Screen General Tab

3. Under **Tooth Numbering System**, select a numbering scheme from the list.
4. Click **OK**.

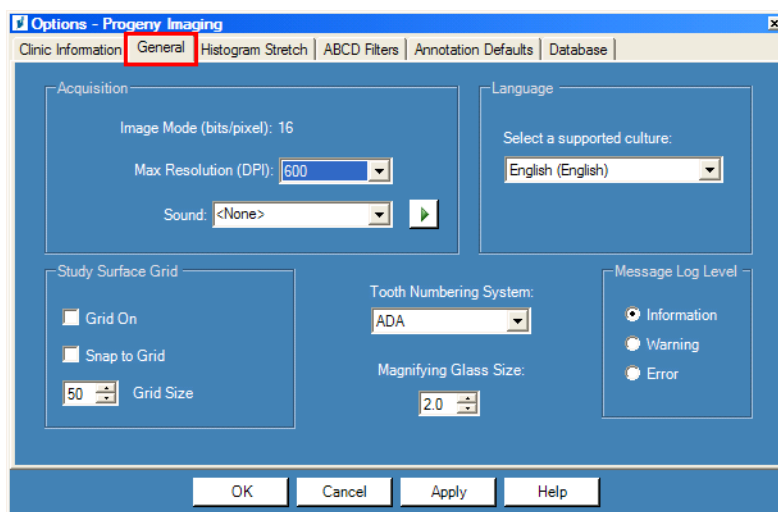
Setting Image Resolution

Image resolution, measured in dots per inch, or DPI, is an indication of the quality of an image. Progeny Imaging supports raw, 300, or 600 DPI. Raw files represent the closest image format to the original sensor data, and, therefore, the most "pure" way to retain your image data. However, raw images take longer to acquire and result in large files (4 MB). 300 DPI images are faster to acquire, result in smaller files (2 MB), but at the expense of lower image quality. The default image resolution, 600 DPI, offers good diagnostic quality images that are fast to acquire and reasonable to store (2.5 MB).

To Set Image Resolution

You use the Options screen General tab to set image resolution.

1. Select **Tools > Options** to open the Options screen.
2. Click the **General** tab.

Figure 4-4: Options Screen General Tab

3. In the Acquisition area, select a **Max Resolution (DPI)** from the list.
4. Click **OK**.

Using an Acquisition Sound

If your computer has a sound card and speakers, Progeny Imaging can play a sound during image acquisition. By default, no sound will play. You can select a sound from Progeny Imaging's library of more than a dozen sounds.

To Set Image Resolution

You use the Options screen General tab to set an image acquisition sound.

1. Select **Tools > Options** to open the Options screen.
2. Click the **General** tab.
3. Select a **Sound** from the list of sounds.
4. To test the sound, click the arrow button beside the sound.
5. When you are satisfied with the sound, click **OK**.

About Device Settings

When installed, your VisionDX sensor is ready to acquire images. You may, however, use Progeny Imaging to configure the following device settings:

- Sensor Timeout Period
- Default Filters

Setting the Sensor Timeout Period

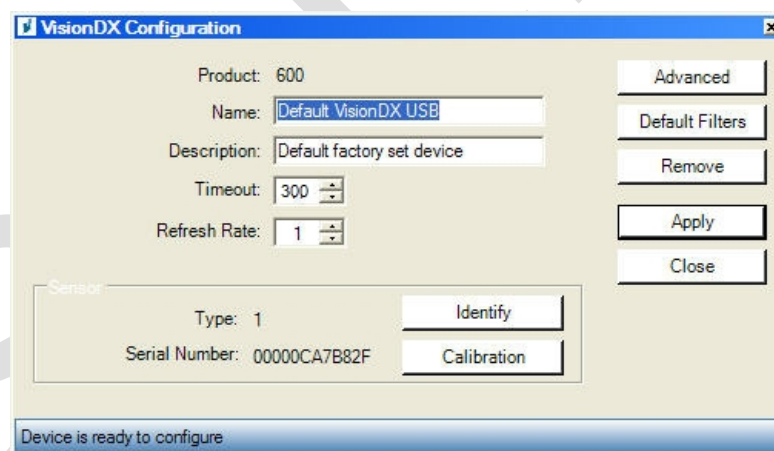
The sensor timeout period is the length of time that the sensor remains ready to acquire an image. The timeout period begins when the Acquisition button is clicked in Progeny Imaging. At the end of the timeout period, if no X-ray exposure has been made, the digital sensor generates a gray-scale image. By default, the timeout is 90 seconds, with a maximum of 300 seconds. You can increase the timeout to allow sufficient time after clicking the Acquisition button to take the X-ray.

To Set the Sensor Timeout Period

A sensor must be installed and active before you can configure its timeout. The timeout that you set will be used for all images acquired with the sensor. You use the VisionDX Configuration screen for the sensor to set its timeout.

1. Select a sensor in the **Device** drop-down list on the Device toolbar. Wait for the indicator to turn green, showing that the sensor is active.
2. Select **Tools > Devices > Device Configuration** to open the VisionDX Configuration screen.

Figure 4-5: VisionDX Configuration Screen (VisionDX USB Sensor)



3. Configure the **Timeout** using the up and down arrows.
4. Click **Apply**.
5. Click **Close**.

Configuring Default Filters

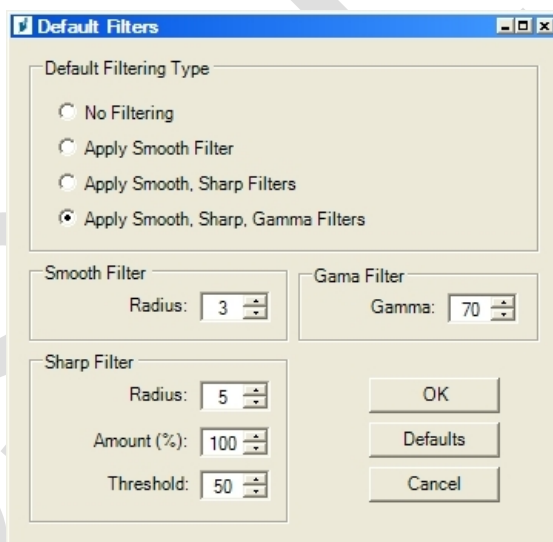
A default filter is an image transformation that is applied automatically to an image as soon as it is acquired. A default filter cannot be removed from the image as can filters that you apply manually to the image. By default, no default filters are configured. You can configure your sensor to use a smooth filter, smooth and sharp filters, or a combination of smooth, sharp, and gamma filters.

To Configure a Default Filter

A sensor must be installed and active before you can configure its default filter. The default filter that you configure will be used for all images acquired with the sensor. You use the Default Filters screen to configure the default filters.

1. Select a sensor in the **Device** drop-down list on the Device toolbar. Wait for the indicator to turn green, showing that the sensor is active.
2. Select **Tools > Devices > Device Configuration** to open the VisionDX Configuration screen.
3. Click **Default Filters** to open the Default Filters screen.

Figure 4-6: Default Filters Screen



4. Select the **Default Filtering Type**.
5. Use Progeny Imaging's default settings for the filter or configure your own. Click Default to reset filter settings to Progeny Imaging default settings.
6. Click **OK**.

5 Working with Patient Records

In this Section

- About Patient Records
- Creating a Patient Record
- Accessing Patient Records
- Modifying a Patient Record
- Deleting Patient Records
- Reassigning Patient Records
- Adding Files to a Patient Record

About Patient Records

Progeny Imaging associates X-Ray images and other patient files with a patient record. You need a record for each patient for whom you want to acquire images. When a patient record is open, the Progeny Imaging title bar displays the patient's name, and the image container shows images and other files in the patient's record.

Tip

If the Image Container is not displayed, select **Patient > Show Patient Panel**, or **ALT + 2**.

Creating a Patient Record

You use the Patient Properties screen to create a patient record. When you create a patient record, you must assign the patient a primary dentist. The person who will be the primary dentist must already be set up as a user of Progeny Imaging.

To Create a Patient Record

1. Select **Patient > New**, click the **New** icon or press **ALT + N** to open the Patient Properties screen.

Figure 5-1: Patient Properties Screen

2. In the Patient Properties screen, enter patient information. Fields marked with an asterisk '*' are required.
3. (Optional) Click **Browse** to locate and include a picture of the patient. Pictures must be JPEG image files.
4. Click **Apply** to save your changes and continue working in the Patient Properties screen. Click **OK** to save your changes and close the screen.

Accessing Patient Records

A patient record must be open in order to acquire or display images. You use the Select Patient screen to open a patient record.

Note

If you are logged in to Progeny Imaging as a user, you will see only your own patients in the Select Patient screen. If you are logged in as an Administrator, you will see all patients. In open user mode, all users see all patients.

To Open a Patient Record

1. Open the Select Patient screen by selecting **Patient > Open**, pressing **ALT + O**, or by clicking the **Open** icon.

Figure 5-2: Select Patient Screen

Med Alert	Last	First	Folder	Gender	Birth Date	Last XRay	Start Date	Last Changed
<input type="checkbox"/>	Andres	Angelia		F	5/10/1962			4/10/2007 1:32 PM
<input type="checkbox"/>	Bravo	Vera		F	2/28/1989			4/8/2007 1:09 PM
<input type="checkbox"/>	Campos	David		M	4/12/1975			4/5/2007 4:34 PM
<input type="checkbox"/>	Chapman	Landon		M	5/7/1981			4/10/2007 1:54 PM
<input type="checkbox"/>	Chauhan	Aisha		F	1/31/1977			4/7/2007 1:19 PM
<input type="checkbox"/>	Cortes	Valentin		M	3/20/1961			4/7/2007 1:20 PM
<input type="checkbox"/>	Dhawan	Lynette		F	5/26/1960			4/7/2007 1:20 PM
<input type="checkbox"/>	Foster	Helena		F	6/11/1972			1/18/2007 3:33 PM
<input type="checkbox"/>	Guerrero	Martin		M	9/8/1976			1/18/2007 3:33 PM
<input type="checkbox"/>	Harris	Alyssa		F	6/20/1984			1/18/2007 3:34 PM
<input type="checkbox"/>	Hill	Julie		F	3/21/1980			1/18/2007 3:34 PM
<input type="checkbox"/>	Holmes	Megan		F	8/11/1989			1/18/2007 4:34 PM
<input type="checkbox"/>	Kapoor	Russel		M	9/2/1977			1/18/2007 3:35 PM
<input type="checkbox"/>	Kumar	Marc		M	7/3/1986			1/18/2007 3:36 PM
<input type="checkbox"/>	Lloyd	Lindsay		F	9/23/1984			1/18/2007 3:36 PM

2. In the Select Patient screen, click a row select a patient. To search for a patient by last name, enter all or part of the patient's last name in the Last Name Filter field.
3. Click **Open**, or double-click to the left of the patient's information.

To Close a Patient Record

When a patient record is open, select **Patient > Close** or click the **Close** icon to close it. Opening another patient record, logging off, or exiting Progeny Imaging automatically closes any patient record that is open.

Modifying a Patient Record

You open the patient record, then use the Patient Properties screen to modify it.

If you are logged in to Progeny Imaging as a user, you will see only your own patients in the Select Patient screen. If you are logged in as an Administrator, you will see all patients. In open user mode, all users see all patients.

To Modify a Patient Record

1. Open the Select Patient screen by selecting **Patient > Open**, pressing **ALT + O** or clicking the **Open** icon.
2. In the Select Patient screen, click a row to select the patient record.
3. Click **Properties** to open the Patient Properties screen. You can also open the patient's record, then select **Patient > Properties**, click the **Properties** icon or press **CTRL + ALT + P**. You can also modify the patient record using the Patient tab in the Image Container.

Figure 5-3: Patient Properties Screen

4. In the Patient Properties screen, modify the patient's information.
5. Click **Apply** to save your changes and continue working in the Patient Properties screen. Click **OK** to save your changes and close the screen.

Deleting Patient Records

Patient records contain patient images and any additional files that may have been added for the patient. Deleting a patient's record removes all images and files associated with the patient. The patient record must be open in order to delete it.

CAUTION!

To preserve patient data, be sure to backup the patient database before deleting patients. For more information, see Backing up a Patient Database on page 75.

To Delete a Patient Record

1. Open the Select Patient screen by selecting **Patient > Open**, pressing **ALT + O** or clicking the **Open** icon.

Note

If you are logged in to Progeny Imaging as a user, you will see only your own patients in the Select Patient screen. If you are logged in as an Administrator, you will see all patients. In open user mode, all users see all patients.

2. In the Select Patient screen, click in a row to select a patient. To search for a patient, in the Last Name field, enter one or more characters of the patient's last name.
3. Click **Open**, or double-click to the left of the patient's information.

4. Select **Patient > Delete Patient**. Progeny Imaging will ask you to confirm your decision to delete the patient record, including all images and other files.
5. Click **OK**.

Reassigning Patient Records

If you are running Progeny Imaging in secure mode, all patients are assigned to a primary dentist. From time to time, you may need to assign patient records to a different dentist. For example, if a new dentist joins the practice, you may assign some patients from another dentist to the new dentist.

To Reassign Patients to a Different Dentist

1. Log in as the dentist whose patients you are reassigning.
2. Click **Open**. The Select Patient screen contains the dentist's patients.
3. Write down the names of the patients in the Select Patient screen.
4. Select **File > Log Out**.
5. Log into Progeny Imaging as an Administrator.
6. Select **Patient > Open**, or click the **Open** icon. The Select Patient screen contains all patients.
7. In the Select Patient screen, select the first patient from the list to be assigned to the new dentist.
8. Click **Properties**.
9. In the Patient Properties screen, change the patient's original dentist to the new dentist.
10. Click **Apply** to save your changes and continue working in the Patient Properties screen.
11. When you have reassigned all the original dentist's patients, click **OK**.

Adding Files to a Patient Record

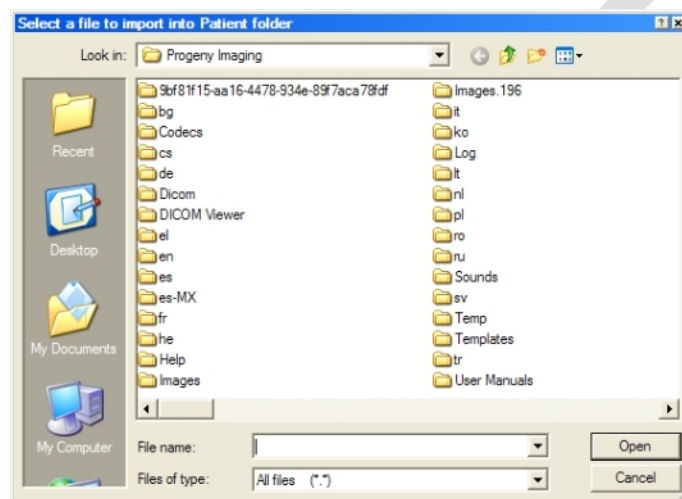
While most images in your patients' records will be X-rays, you can also add files created in other applications to patients' records. Adding files allows you to keep all information pertaining to the patient in one location. For example, if you have an intraoral video of the patient or find a Web page or PDF file that contains information related to a patient, you can conveniently store this information in the patient's record along with their X-ray images.

Storing files in a patient's record creates a copy of the file. When you open these files from the Image Container, the application associated with the file opens so that you can edit the copy of the file that Progeny Imaging stored in the patient's record. In order to open and edit files from the Image Container, the application associated with the file must be located on your computer. For example, if the patient record contains an Acrobat (.pdf) file, your computer must have Adobe Reader installed in order for you to open the file.

To Add Files to a Patient Record

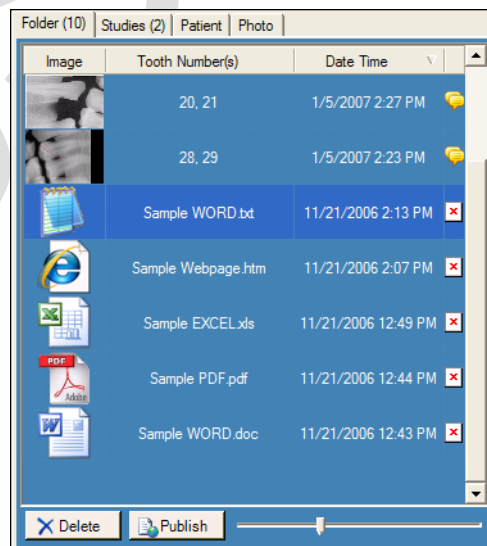
1. Open the Select Patient screen by selecting **Patient > Open**, or **ALT + O**, or by clicking the **Open** icon.
2. Click in a row to select a patient. To search for a patient, in the Last Name field, enter one or more characters of the patient's last name.
3. Click **Open**.
4. Select **Image > Import** to open a file selection box.

Figure 5-4: File Selection Box



5. In the file selection box, locate the file to add to the patient's record.
6. Select the file.
7. Click **Open**. The file is added to the patient's record and an icon representing the file type and the name of the file appear in the Folder tab of the Image Container.

Figure 5-5: Image Container Folder Tab with Imported Files



6 Acquiring Images

In this Section

- About Image Acquisition
- Acquiring X-Ray Image Sequences
- Canceling and Pausing Image Acquisition
- Reacquiring Images
- Using Templates to Acquire Images
- Creating or Modifying Image Acquisition Templates
- Acquiring Video Images

About X-ray Image Acquisition

When you acquire X-ray images, you work with Progeny Imaging and with the patient, X-ray source and digital sensor. The process begins in Progeny Imaging where you select the patient, teeth to image and the imaging sensor. Outside of Progeny Imaging, you select the technique factors for the X-ray exposure, prepare the patient and position the sensor, and position and activate the X-ray source. This section describes concepts of image acquisition in Progeny Imaging--sensor timeout, sequences of teeth and the Tooth Panel.

Sensor Timeout Period

Each VisionDX sensor has a set number of seconds during which it is receptive to an X-ray exposure from the X-ray source. This period, known as the sensor timeout, begins when you click the exposure button in Progeny Imaging. When the sensor timeout period is over, the sensor can no longer record an X-ray, even if you activate the X-ray source. To minimize patient exposure to X-ray radiation, it is important to ensure that the sensor timeout period is long enough for you to complete all the steps of image acquisition. The factory-set default for the sensor timeout is 90 seconds. Progeny Dental recommends that you increase the sensor timeout to its maximum of 300 seconds. Sensor timeout is set in the VisionDX Configuration screen.

Sequences of Teeth

The sequence of teeth defines the tooth or teeth that will be imaged and the order in which the images will be acquired. All teeth included in a sequence appear in a single image. You can define more than one sequence for a patient, for example, if the teeth that you are imaging require that you move the sensor. When you acquire multiple sequences, Progeny Imaging allows time between acquiring each sequence so that you can reposition the sensor and X-ray source. If you need more time, you can pause acquisition of the next sequence.

You may also decide to include the same tooth in more than one sequence, for example, if you want to acquire images of the stages of a procedure. During the first stage of the procedure, you would acquire the image of the first sequence. You could then pause image acquisition until you reach the next stage of the procedure that you want to image, when you would acquire the image of the next sequence.

The Tooth Panel

The Tooth Panel is Progeny Imaging's interface for acquiring images. You use the Tooth Panel to select preset sequences or create sequences by selecting individual teeth. You also use the Tooth Panel to control image acquisition.

When teeth are included in a sequence, the number of the sequence appears on the teeth. As shown in the figure of the Tooth Panel below, the teeth with a number 1 will be imaged in the first sequence. When teeth are included in a sequence, they are highlighted in orange. The color of the teeth in the sequence changes during image acquisition. Green indicates that image acquisition for the sequence is complete; purple indicates that you have paused acquisition for the sequence.

If the Tooth Panel is not displayed, click the **Hide** icon, select **File > Toggle Tooth Panel**, or **ALT + 1**. Clicking **Float** in the Patient Controls toolbar, displays the Tooth Panel as a self-standing window. If the Tooth Panel is displayed as a separate window, clicking the **Float** button or double-clicking its window borders will dock it.

Tip






To use the Tooth Panel, a patient record must be open and an image acquisition module must be selected and active.

Figure 6-1: Tooth Panel



The table below describes the controls in the Tooth Panel.

Tooth Panel

Item	Description
Teeth	Select teeth to add to an image sequence. Selected teeth are highlighted.
BWR2, BWR1, BWL1, BWL2	Selects predefined bitewing and incisor sequences. Teeth that are included in the sequence are highlighted. The number of the sequence appears on the teeth.
	Starts acquisition of the selected sequence(s) of teeth. During acquisition, this button changes to a cancel acquisition button.
	Cancels the acquisition that is in progress. This button is displayed during an acquisition.
	Pauses image acquisition between sequences. When acquisition is paused, this button changes to a resume button.
	Resume acquisition with the next sequence. This button is displayed after pausing acquisition.
	Removes all sequences of teeth that are highlighted for acquisition.

Acquiring X-ray Image Sequences

The procedures below guide you through the steps for acquiring images for a single sequence and for multiple sequences.

To Image a Single Sequence of Teeth

1. In Progeny Imaging, open a patient record.
2. Verify that Progeny Imaging indicates that the image acquisition module you want to use is installed and ready. The device indicator should be green, and a "Device Ready" message should appear in the Progeny Imaging status bar. If the module is not ready, select it from the Device Control drop-down list.
3. In the Tooth Panel, click on a tooth to image, or click **BWR2**, **R1**, **BWL2**, or **L1** to select a predefined sequence to image. To include contiguous teeth in a single sequence, click and hold the mouse button down on the first tooth. Move the mouse cursor over the teeth in the sequence before releasing. To remove the sequence, click the **Remove All Sequences** button.

The teeth that are included in the sequence will turn orange to indicate that they are now part of a sequence. A small number '1' will appear on the tooth or teeth to indicate the sequence that they are part of.

4. Insert the X-ray sensor into a protective sheath.
5. Select the technique factors on the X-ray source and prepare the X-ray source to produce the selected X-ray exposure.
6. Position the X-ray sensor in the patient's mouth.
7. Align the X-ray source with the X-ray sensor as appropriate for the desired radiographic technique.
8. Check again that Progeny Imaging, the X-ray sensor and the X-ray source are ready for an X-ray exposure.
9. Click the **Acquire** button. For the duration of the sensor timeout period, the teeth in the sequence will flash to indicate that Progeny Imaging is ready to accept an image from the X-ray sensor. The Acquire button changes to a Cancel button.

CAUTION!

During acquisition, the X-ray sensor is active and waiting for X-Ray exposure for the number of seconds set in the sensor timeout in the VisionDX Configuration screen. At the end of the timeout period, the sensor times out, requiring you to start the procedure again. If you activate the X-ray source after the sensor times out, you will unnecessarily expose the patient to X-ray radiation. To avoid this situation, Progeny recommends that you set the sensor timeout in the VisionDX Configuration screen to its maximum (300 seconds).

10. Activate the X-ray source to expose the sensor.
When the acquisition is complete, the teeth change shade to green and the image is automatically saved. The image appears on the Work Surface and in the Folder tab of the Image Container.
11. In the Tooth panel, click the **Remove All Sequences** button.

To Image Multiple Sequences of Teeth

1. In Progeny Imaging, open a patient record.
2. Verify that Progeny Imaging indicates that the image acquisition module you want to use is installed and ready. The device indicator should be green, and a "Device Ready" message should appear in the Progeny Imaging status bar. If the module is not ready, select it from the Device Control drop-down list.
3. In the Tooth Panel, select a tooth or teeth for the first sequence by clicking on a tooth to image, or click **BWR2**, **R1**, **BWL2**, or **L1** to select a predefined sequence to image. To include contiguous teeth in the sequence, click and hold the mouse button down on the first tooth. Move the mouse cursor over the teeth in the sequence before releasing. To remove the sequence, right-click on the sequence and select Remove Sequence from the context menu. To remove the sequence, place your cursor over the sequence and click the right mouse button. From the context menu, select Remove Sequence.

4. In the Tooth Panel, select a tooth or teeth for the second and additional sequences by repeating step 3. To remove all sequences, click the **Remove All Sequences** button.

The teeth that are included in the sequences will turn orange to indicate that they are now part of a sequence. Small numbers will appear on the tooth or teeth to indicate the sequence that they are part of.
5. Insert the X-ray sensor into a protective sheath.
6. Select the technique factors on the X-ray source and prepare the X-ray source to produce the X-ray exposure for the first sequence.
7. Position the X-ray sensor in the patient's mouth for the first sequence.
8. Align the X-ray source with the X-ray sensor as appropriate for the radiographic technique for the first sequence.
9. Check again that Progeny Imaging, the X-ray sensor and the X-ray source are ready for an X-ray exposure.
10. Click the **Acquire** button. For the duration of the timeout period, the teeth in the sequence will flash to indicate that Progeny Imaging is ready to accept an image from the X-ray sensor. The Acquire button changes to a Cancel button.

CAUTION!

During acquisition, the X-ray sensor is active and waiting for X-Ray exposure for the number of seconds set in the sensor timeout in the VisionDX Configuration screen. At the end of the time period, the sensor times out, requiring you to start the procedure again. If you activate the X-ray source after the sensor times out, you will unnecessarily expose the patient to X-ray radiation. To avoid this situation, Progeny recommends that you set the sensor timeout in the VisionDX Configuration screen to its maximum (300 seconds).

11. Activate the X-ray source to expose the sensor for the first sequence.

When the acquisition is complete, the teeth change shade to green and the image is automatically saved. The image appears on the Work Surface and in the Folder tab of the Image Container. When acquisition is complete for the first sequence, Progeny Imaging will reset the timeout period and automatically begin to acquire the next sequence.
12. If you need more time between sequences, for example, to reposition the sensor, click the Pause button during acquisition of the previous sequence. Repeat steps 5 to 9, if necessary, for the next sequence. When you click the Resume button, Progeny Imaging resets the timeout interval and begins acquisition of the next sequence.
13. Activate the X-ray source to expose the sensor for the next sequence.
14. When all sequences are complete, in the Tooth panel, click the **Remove All Sequences** button.

Canceling and Pausing Image Acquisition

When Progeny Imaging is acquiring an image, you can stop the acquisition. If you are imaging multiple sequences, you can pause the acquisition between sequences.

To Cancel Image Acquisition

After you click the Acquire button in Progeny Imaging, the button changes to a stop sign--the Cancel button. Clicking Cancel stops the acquisition of the current sequence. When you are ready to resume acquisition, simply click the Acquire button. The timeout period begins, and you can acquire the image as before.

If you click the Cancel button after you have already activated the X-ray source, but before the end of the sensor timeout period, the X-ray image of the sequence will still appear in Progeny Imaging.

CAUTION!

If you activate the X-ray source after canceling acquisition, you will unnecessarily expose the patient to X-ray radiation. After clicking Cancel to stop the acquisition, discontinue the image acquisition procedure to ensure that the patient will not be unnecessarily exposed to X-ray radiation.

To Pause Image Acquisition between Sequences

The Pause button is only active if you are acquiring multiple sequences of teeth and can only be used to pause acquisition between sequences. To pause acquisition between two sequences, click the **Pause** button during acquisition of the first sequence, before acquisition of the second sequence begins. The teeth in the next sequence flash purple to indicate that acquisition has been paused. To resume acquisition, click the **Resume** button. When you click Resume, Progeny Imaging resets the timeout interval and begins acquisition of the next sequence.

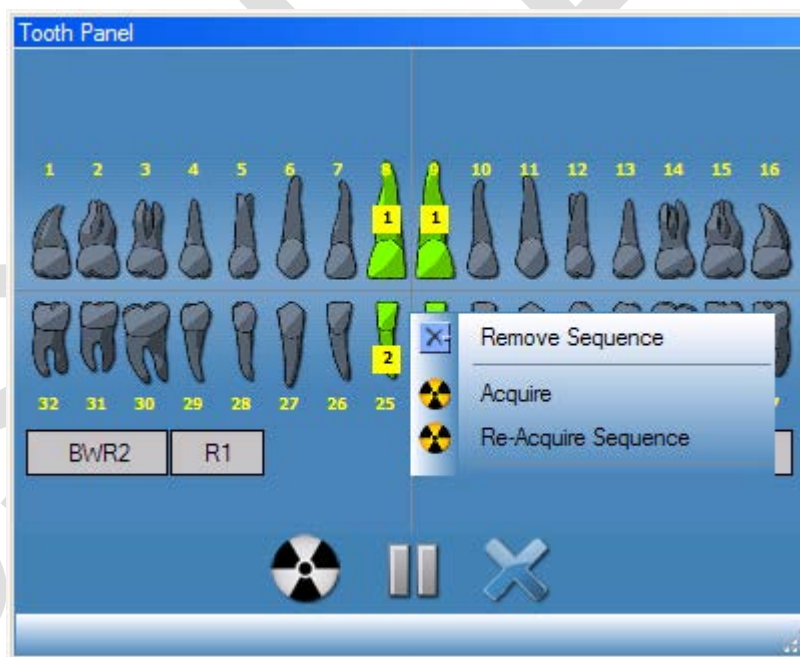
Reacquiring Images

Immediately after acquiring an image, before removing the sequence (while the teeth are still highlighted green in the Tooth Panel), you can reacquire the image.

To Reacquire Images

1. Insert the X-ray sensor into a protective sheath.
2. Select the technique factors on the X-ray source and prepare the X-ray source to produce the selected X-ray exposure.
3. Position the X-ray sensor in the patient's mouth.
4. Align the X-ray source with the X-ray sensor as appropriate for the desired radiographic technique.
5. Check again that Progeny Imaging, the X-ray sensor and the X-ray source are ready for an X-ray exposure.
6. Place your cursor over the sequence that you want to reacquire.
7. Click the right mouse button to display the context menu.

Figure 6-2: Tooth Panel with Context Menu



8. Select **Re-Acquire Sequence**.
The teeth in the sequence again turn orange as Progeny Imaging begins to reacquire the image. When reacquisition is complete, the reacquired image replaces the original image.
9. Activate the X-ray source to expose the sensor.
10. If necessary, repeat the steps to reacquire another sequence.
11. When you are finished, click the **Remove All Sequences** button.

Using Templates to Acquire Images

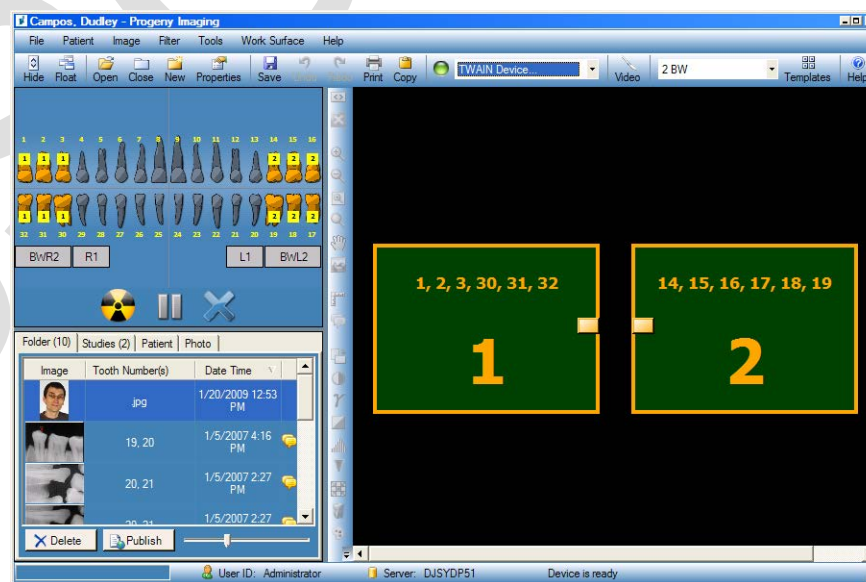
Templates are pre-defined groupings of image acquisition sequences that you can use to streamline image acquisition. Progeny Imaging is delivered with several templates. In addition, you can create and modify templates. Templates can also be imported and exported for use in Progeny Imaging on other computers.

When you select a template, the template is displayed on the Work Surface and the sequences are added in the Tooth Panel. When you acquire images using the template, Progeny Imaging acquires the sequences in the order defined in the template. The images appear in the template on the Work Surface and are saved as a study.

To Acquire Images Using a Template

1. In Progeny Imaging, open a patient record.
2. Verify that Progeny Imaging indicates that the image acquisition module you want to use is installed and ready. The device indicator should be green, and a "Device Ready" message should appear in the Progeny Imaging status bar. If the module is not ready, select it from the Device Control drop-down list.
3. In the Template toolbar, select the template from the template drop-down list. As shown below, the sequences in the template appear on the Work Surface. In the Tooth Panel, the teeth in the template sequences change to orange. A small number will appear on the tooth showing the sequence that it is part of.

Figure 6-3: Using a Template to Acquire Images



4. Insert the X-ray sensor into a protective sheath.
5. Select the technique factors on the X-ray source and prepare the X-ray source to produce the X-ray exposure for the first sequence.

6. Position the X-ray sensor in the patient's mouth for the first sequence.
7. Align the X-ray source with the X-ray sensor as appropriate for the radiographic technique for the first sequence.
8. Check again that Progeny Imaging, the X-ray sensor and the X-ray source are ready for an X-ray exposure.
9. Click the **Acquire** button. During acquisition, the template and teeth in the first sequence will flash to indicate that Progeny Imaging is ready to accept an image from the X-ray sensor. The Acquire button changes to a Cancel button.

CAUTION!

During acquisition, the X-ray sensor is active and waiting for X-Ray exposure for the number of seconds set in the sensor timeout in the VisionDX Configuration screen. At the end of the time period, the sensor times out, requiring you to start the procedure again. If you activate the X-ray source after the sensor times out, you will unnecessarily expose the patient to X-ray radiation. To avoid this situation, Progeny recommends that you set the sensor timeout in the VisionDX Configuration screen to its maximum (300 seconds).

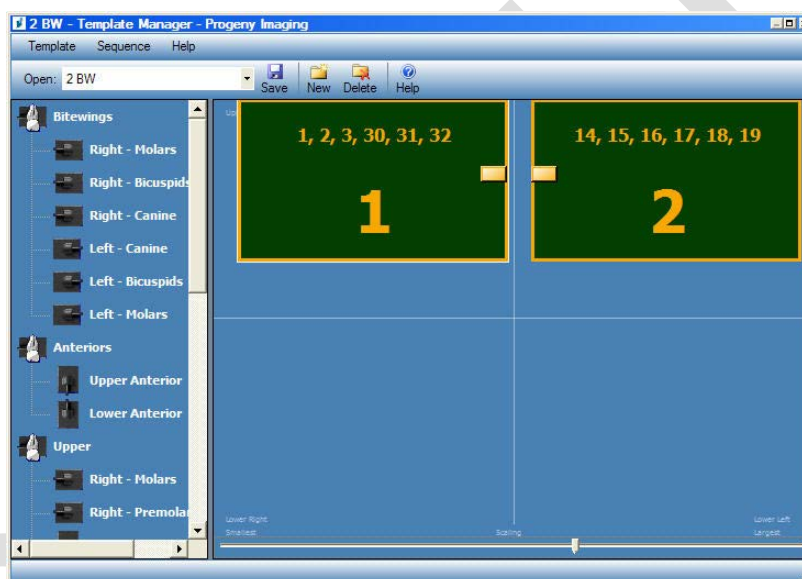
10. Activate the X-ray source to expose the sensor for the first sequence.
When the acquisition is complete, the template sequence and the teeth change shade to green. The image replaces the sequence in the template and appears in the Folder tab of the Image Container. When acquisition is complete for the first sequence, Progeny Imaging will reset the timeout interval and automatically begin to acquire the next sequence.
11. If you need more time between sequences, for example, to reposition the sensor, click the Pause button during acquisition of the previous sequence. Repeat steps 5 to 8, if necessary, for the next sequence. When you click the Resume button, Progeny Imaging resets the timeout interval and begins acquisition of the next sequence.
12. Activate the X-ray source to expose the sensor for the next sequence.
13. When all images for the template have been acquired, Progeny Imaging will ask you if you wish to close the template. Closing the template removes the sequences from the Tooth Panel. Click **Yes** to close the template or **No** to leave the sequences selected.

When you close the template, a study, which includes all the images specified by the template, is saved in the Image Container Studies tab. The study is named for the template used and the date and time of acquisition.

Creating and Modifying Image Acquisition Templates

You use the Template Manager to create, modify, and delete custom image acquisition templates. On the left side of the Template Manager are sequences of teeth to include in the template. On the right side of the Template Manager is the design surface where you assemble sequences for the template. The design surface is oriented from the patient's point of view.

Figure 6-4: Template Manager



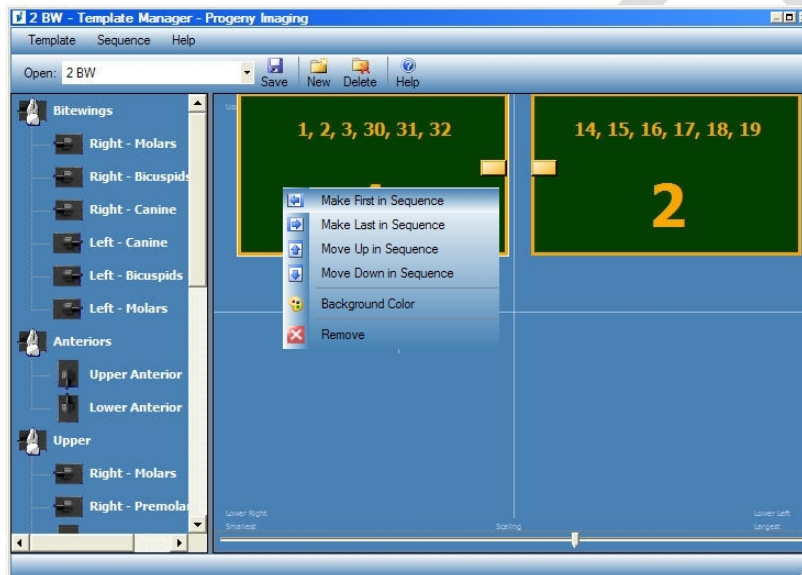
To Create a Template

1. Select **Tools > Templates**, or click the **Template** icon in the Template toolbar.
2. In the Template Manager, select **Template > New**, or click **New**.
3. In the New Template screen, enter a name for the template and click **OK**. The template name appears as the open template.
4. Drag sequences of teeth to the design surface, positioning the sequences in the order in which they will be acquired.
 - To remove a sequence from the design surface, select the sequence, then select **Sequence > Remove**. To remove all sequences, select **Template > Remove All Sequences**.
5. Select **Template > Save**, or click **Save**.
6. To close the Template Manager, select **Template > Exit**.

To Modify a Template

1. Select **Tools > Templates**, or click the **Template** icon.
2. In the Template Manager, use the drop-down list to select the template to modify.
3. In the design surface, select a sequence. Then click the right mouse button to display a menu of actions that you can perform on the sequence.

Figure 6-5: Template Manager Context Menu



4. Select an action to perform on the sequence. You can perform the following actions on sequences in a template:
 - **Make First in Sequence:** Reorders the sequences in the template so that the selected sequence will be acquired first
 - **Make Last in Sequence:** Reorders the sequences in the template so that the selected sequence will be acquired last
 - **Move Up in Sequence:** Reorders the sequences in the template so that the selected sequence will be acquired before the immediately preceding sequence
 - **Move Down in Sequence:** Reorders the sequences in the template so that the selected sequence will be acquired after the immediately following sequence
 - **Background Color:** Displays a color palette from which you select the color of the background for the template
 - **Remove:** Removes the selected sequence from the template
5. Select **Template > Save**, or click **Save**.
6. To close the Template Manager, select **Template > Exit**.

To Delete a Template

1. Select **Tools > Templates**, or click the **Template** icon.
2. In the Template Manager, use the drop-down list to select the template to delete.
3. Select **Template > Delete**, or click the **Delete** icon.
4. Progeny Imaging asks you to confirm your decision to delete the template. Click **OK** to delete the template or **Cancel** to abort your decision to delete the template.

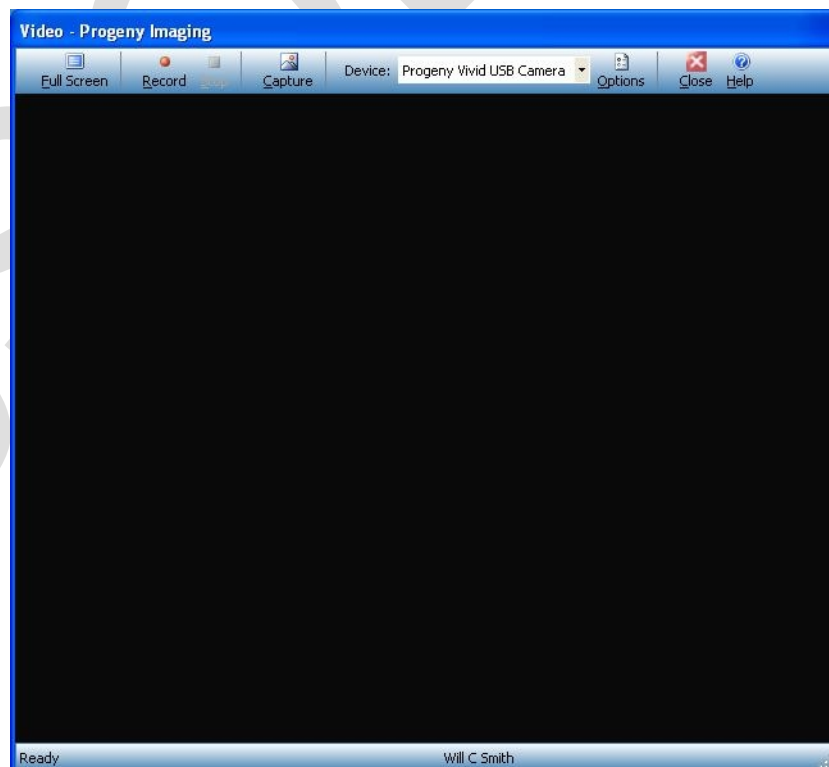
Acquiring Video Images

If you have a USB video camera installed on your computer, you can acquire video images. The procedure below guides you through the steps for acquiring video images.

To Acquire Video Images

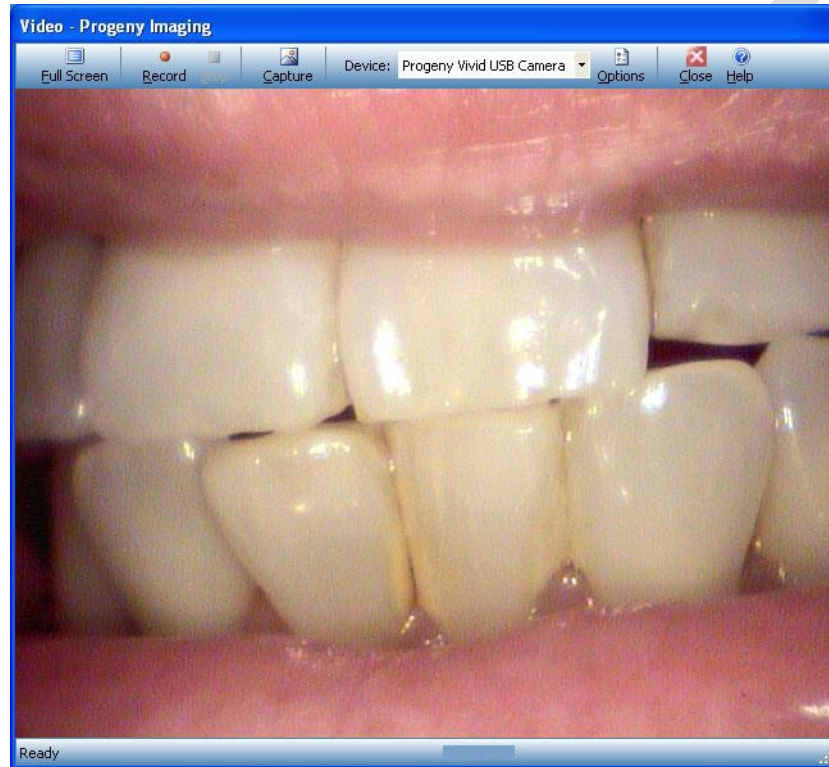
1. In Progeny Imaging, open a patient record.
2. From the Device Control drop-down menu, select the video camera. Verify that the camera is ready to begin acquiring video.
3. In the Device Control toolbar, click **Video**. The Video screen will open.

Figure 6-6: Video Screen Before Capture



4. Insert the video camera wand into a protective sheath.
5. Position the video camera in the patient's mouth so that the region to image appears in the Video window, as shown below.

Figure 6-7: Video Screen with Image



6. To capture the image, press then release the button on the video camera, or click the **Capture** button in the Video window. The image will appear in the image area of the patient folder.

7 Displaying Existing Images

In this Section

- About Displaying Images
- Opening and Closing Images
- Arranging Images on the Work Surface
- Displaying an Image's DICOM Information
- Deleting Images
- Controlling the Image View
- Adding a Note to an Image

About Displaying Images

The X-ray images that you acquire for a patient are saved with the patient record. When you want to review or manipulate these images, you display them on the Work Surface, as shown below. By default, images display with top and bottom borders. Numbers in the top border are the numbers of the teeth in the image. The bottom border shows the date and time of acquisition and the zoom level. A star symbol in the bottom border indicates that a filter has been applied to the image. The notes symbol indicates the presence of image notes.

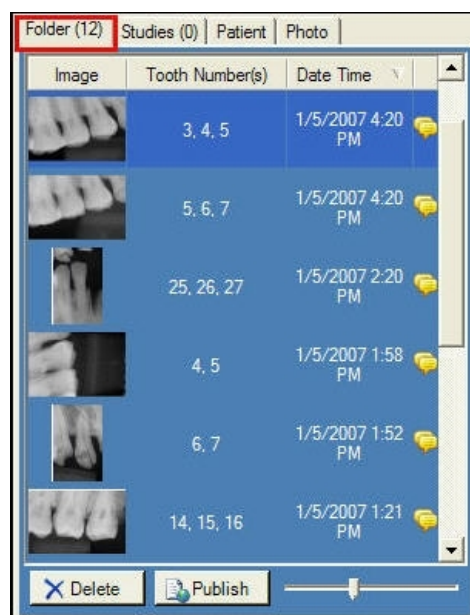
Figure 7-1: Image Displayed on the Work Surface

Opening and Closing Images

You open and close images from the Image Container Folder tab in the current patient record.

To Display Previously Saved Images

1. Open the patient record with image(s) you want to view.
2. In the Image Container Folder tab, locate the images to display. Use the horizontal slider to adjust the view of the Image Container to help you find the image.

Figure 7-2: Image Container Folder Tab

3. Double-click the image that you want to display, or select and drag the image to the Work Surface. To select and display multiple images, hold down the Shift or Ctrl key while selecting and dragging the images.

To Close Images

When you close an image, Progeny Imaging automatically resaves the image. You can re-display the image later.

1. Display one or more images on the Work Surface.
2. Select the image to close.
3. Click the small red 'x' in the upper right corner of the image or on the Filter toolbar. You can also select **Image > Close**, or **ALT+C**. To close all images on the Work Surface, select **Work Surface > Remove All**.

To Open Multiple Copies of an Image

In certain instances, you may need to open multiple copies of an image. For example, you may want to compare the same image with different filters applied. You can clone the image to create multiple copies.

1. Display an image on the Work Surface.
2. Select **Image > Clone**. The copy of the image appears on the Work Surface and in the Image Container Folder tab. The copy shows the date and time when you cloned the image.

Arranging Images on the Work Surface

Progeny Imaging gives you several ways to arrange images on the Work Surface. You can maximize an image to fill the Work Surface or allow the image to fill your entire computer screen. You can also arrange multiple images in rows (tiling). You may also want to hide the image borders.

To Maximize the Image on the Work Surface

1. Display an image on the Work Surface. Select the image.
2. Select **Image > Maximize**. The image will fill the Work Surface.

Figure 7-3: Maximized Image



3. To return the image to its default display size, select **Image > Restore Down**.

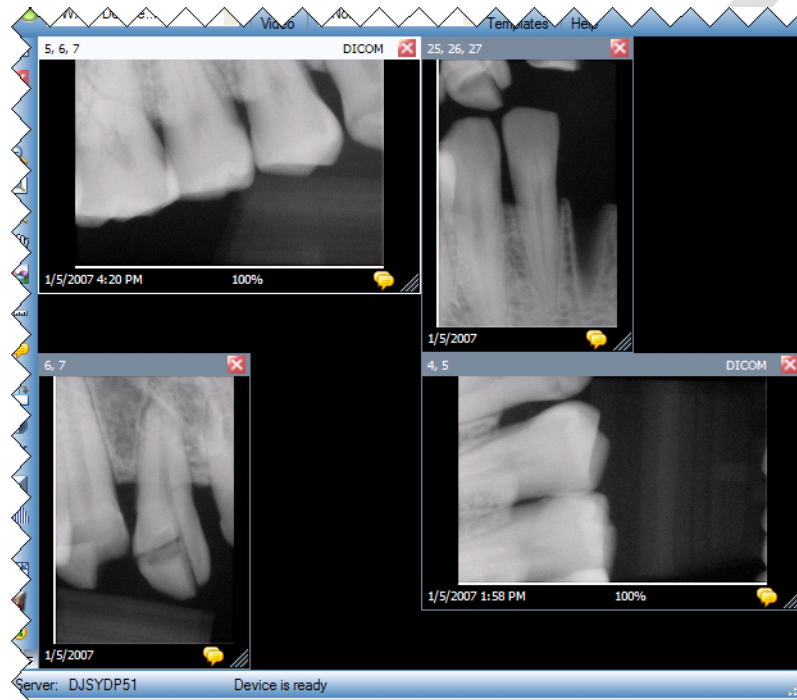
To Display a Full-screen Image

1. Display an image on the Work Surface. Select the image.
2. Select **Image > Full Screen**, click **ALT+F**, or double-click on the image.
3. To close the full-screen view of the image, double-click again on the image.

To Tile Images on the Work Surface

1. Display multiple images on the Work Surface.
2. Select **Work Surface > Tile**, or **ALT+T**. Images will be arranged in rows.

Figure 7-4: Tiled Images



To Hide Image Borders

When you display an image in the Work Surface, the image has top and bottom borders. Hiding the borders slightly enlarges the image.

1. Select **Work Surface > Expanded View** or **CTRL+ALT+E**. The borders will disappear on all images on the Work Surface, as shown in the image below. To hide the borders on a single image, select the image. Then select **Image > Expanded View**, or press **ALT+E**.

Figure 7-5: Hidden Image Borders

2. To redisplay borders on all images, select **Work Surface > Expanded View** or **CTRL+ALT+E** again. To redisplay the border on a single image, select the image. Then select **Image > Expanded View**, or press **ALT+E**.

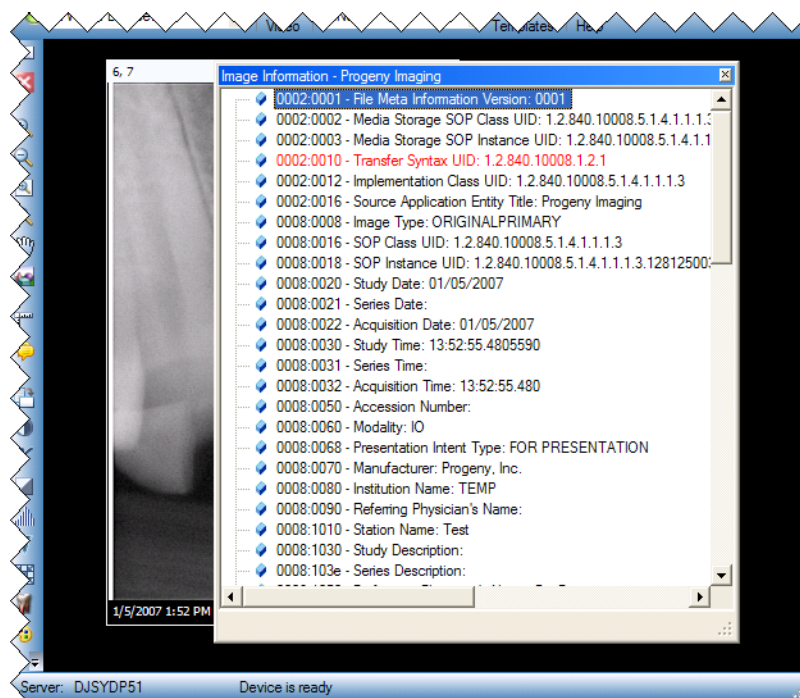
Displaying an Image's DICOM Information

X-ray images acquired with Progeny Imaging are stored in DICOM format. You can view an image's DICOM information.

To Display Image Information

1. Display an image on the Work Surface.
2. With the image selected, select **Image > Show Image Information**. A box opens with the image information.

Figure 7-6: Displaying DICOM Image Information



3. When you are finished viewing the image information, close the Image Information box by clicking the small 'x' in the upper right corner of the box.

Deleting Images

You delete images from the Image Container. You do not have to display the image on the Work Surface in order to delete it. Deleting images permanently removes the image.

CAUTION!

Do not delete the image if regulations for your jurisdiction require you to save all X-ray exposures.

To Delete Images

1. Select the image either on the Work Surface or in the Image Container Folder tab.
2. In the Image Container Folder tab, click **Delete**.
3. Click **OK** to confirm that you want to delete the image.








Controlling the Image View

Once you display an image on the Work Surface, you can control your view of the image using image view controls on the Filter toolbar or the Image menu.

About Image View Controls

Image view controls on the Filter toolbar are shown below.

Filter Toolbar Image View Controls

Item	Icon	Description
Zoom In		Enlarges the view of the image.
Zoom Out		Reduces the view of the image.
Zoom To		Enlarges a user selected area of the image.
Magnifying Glass		Displays a virtual magnifying glass. Set the level of magnification for the Magnifying Glass tool by selecting Tools > Options , then clicking the General tab.
Pan		On an image that is zoomed in, moves the image so that you can view different parts.
UnZoom All		Restores all enlarged areas to their original view.
Rotate 90°		Changes the orientation of an image 90° in the clockwise direction.

To Zoom In

1. Display an image on the Work Surface.
2. On the Filter Toolbar, click the **Zoom In** icon.
3. Click on the area that you want to enlarge. Progeny Imaging enlarges the image, centering it where you clicked. The zoom percentage appears in the information area at the bottom of the image.
4. Click again on the image to continue enlarging it.
5. To again view the image at 100%, click the **Zoom Out** or **UnZoom All** icons.

To Zoom Out

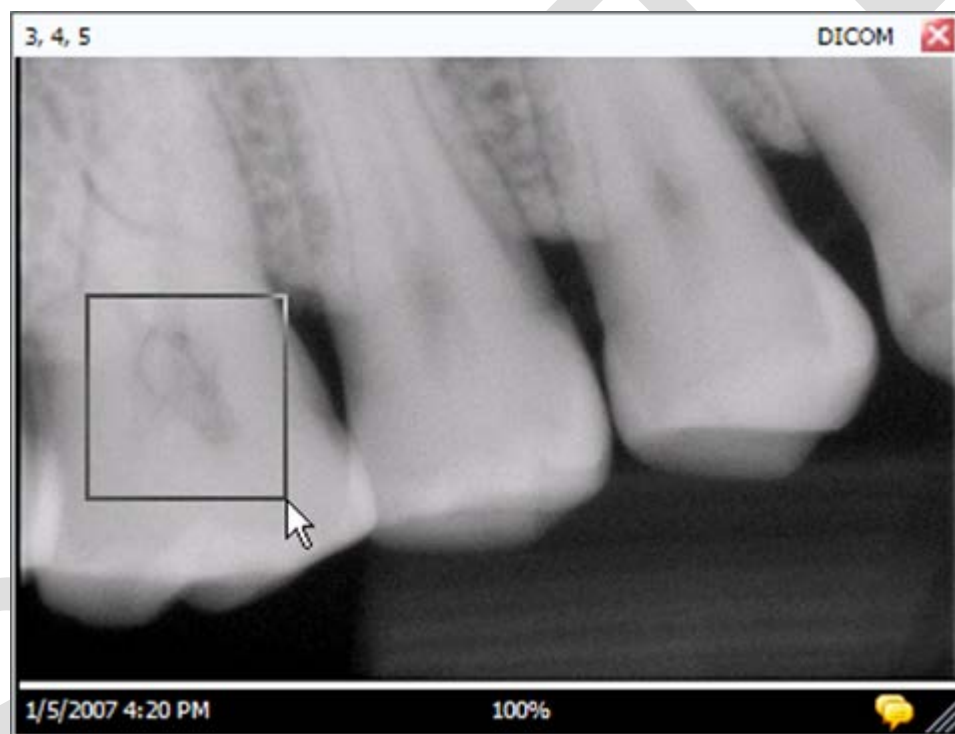
1. Display an image on the Work Surface.
2. On the Filter Toolbar, click the **Zoom Out** icon.
3. Click anywhere in the image. Progeny Imaging reduces the image. The zoom percentage appears in the information area at the bottom of the image.
4. Click again on the image to continue reducing it.

5. To again view the image at 100%, click the **Zoom In** or **UnZoom All** icons.

To Enlarge a Specific Area of an Image

1. Display an image on the Work Surface.
2. On the Filter Toolbar, click the **Zoom To** icon.
3. On the image, hold the left mouse button down and drag to outline the area of the image to enlarge. When you release the mouse button, Progeny Imaging enlarges and centers the selected area. The zoom percentage appears in the information area at the bottom of the image.

Figure 7-7: Zooming in on an Image Area

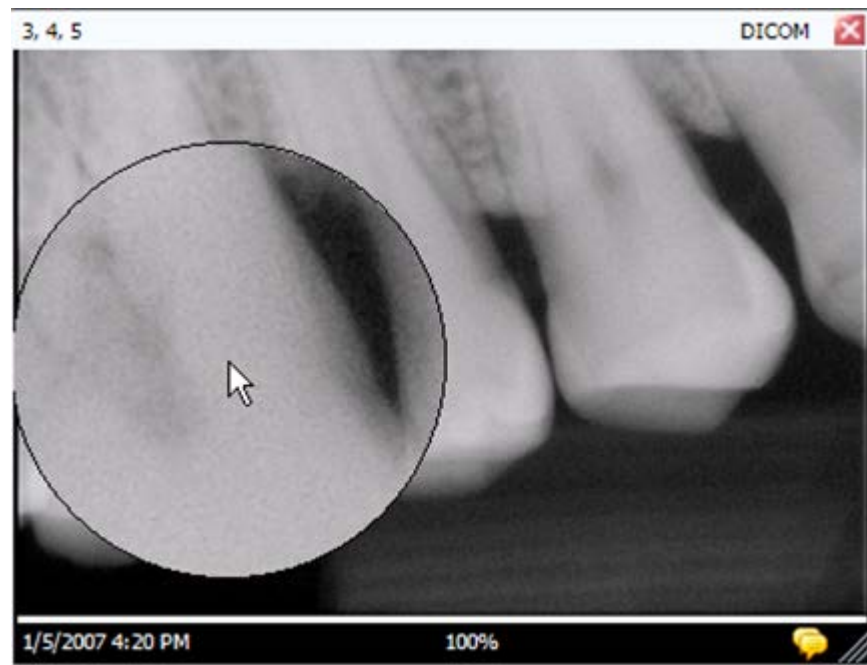


4. To again view the image at 100%, click the **UnZoom All** icon.

To Magnify an Area of the Image

The Magnifying Glass tool allows you to view any part of the image at the level of magnification set in the Options screen General tab.

1. Display an image on the Work Surface.
2. On the Filter Toolbar, click the **Magnifying Glass** icon.
3. On the image, hold the left mouse button down and drag the magnifying glass to the areas of the image to examine.

Figure 7-8: Using the Magnifying Glass

4. When you are finished using the Magnifying Glass tool, release the mouse button.

To Pan the Image View

After you have zoomed in or enlarged an area of an image, you can use the Pan tool to view another area of the enlarged image.

1. Display an image on the Work Surface.
2. Zoom in on the image or enlarge a specific area of the image.
3. On the Filter Toolbar, click the **Pan** icon.
4. On the image, hold the left mouse button and drag to move the image.
5. Release the mouse button when you are satisfied with the view of the image.

To Rotate an Image

Rotating an image changes its orientation on the Work Surface in the direction and by the number of degrees you specify.

1. Display an image on the Work Surface.
2. On the Filter Toolbar, click the **Rotate** icon, or select **Image > Rotate > Right** or **Image > Rotate > Left**.

To Flip an Image

Flipping an image displays its mirror image on the Work Surface. You can flip an image along the vertical or horizontal axis.

1. Display an image on the Work Surface.
2. Select **Image > Flip Horizontal** to mirror the image along the vertical axis, or **Image > Flip Vertical** to mirror the image along the horizontal axis.

Adding a Note to an Image

All images acquired with Progeny Imaging contain an area for image notes. By default, Progeny Imaging records information about the sensor in the note. You can edit and add your own information to the image note. For example, you can record the X-ray exposure parameters or other information related to the acquired image. When you close the image, the notes are saved with the image.

Figure 7-9: Image with Image Note



To Add or Edit a Note

1. Display an image on the Work Surface.
2. Select the image. Then click the yellow note icon in the bottom right corner of the image, click the **Note** icon on the Filter toolbar, or select **Image > Notes**.

Tip

If the image is displayed in Expanded View, the note icon on the image will not be visible. You can still display the note area by clicking the Note icon on the Filter toolbar or selecting **Image > Notes**.

3. Enter text for the note, or edit existing text.
4. To close the note area, again click the yellow note icon in the bottom right corner of the image, click the **Note** icon on the Filter toolbar, or select **Image > Notes**.

8 Manipulating Existing Images

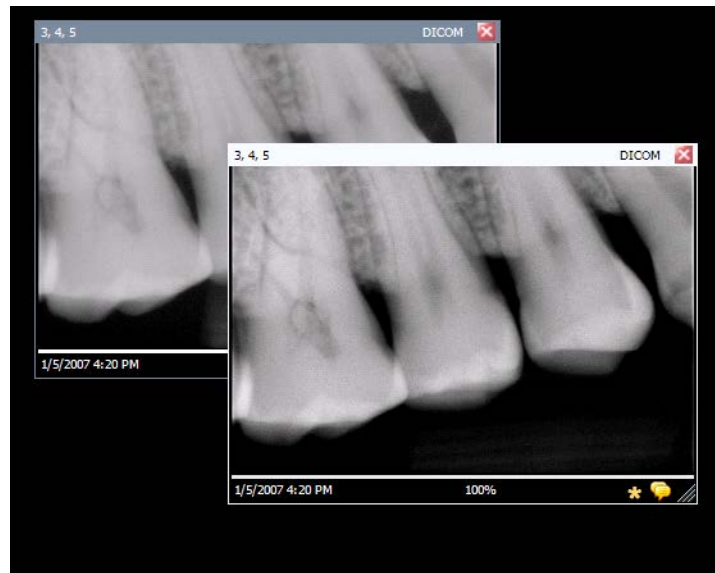
In this Section

- About Image Manipulation
- Annotating Images
- Applying Image Filters
- Creating Custom Filters
- Creating Image Studies
- Moving Images to Another Patient Record
- Correcting Tooth Numbering on Images

About Image Manipulation

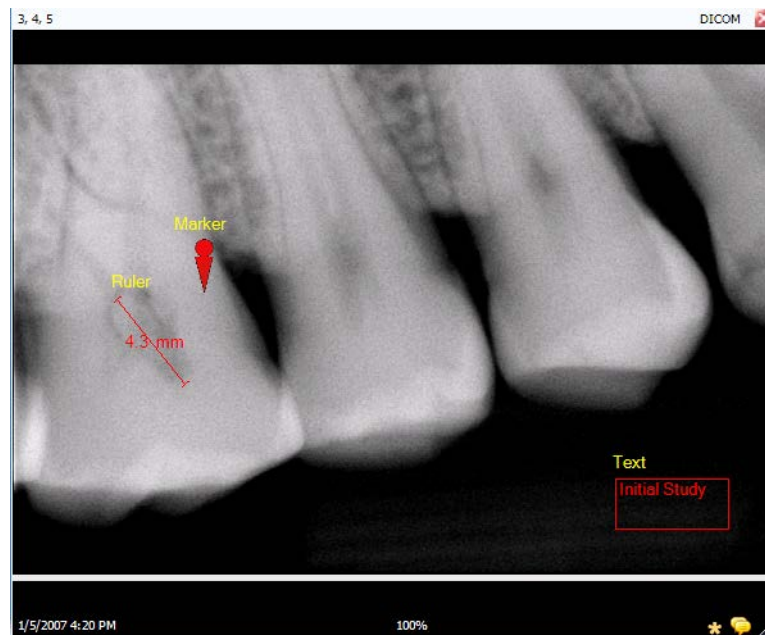
Filtering and annotating images assists you in analyzing image information and communicating your findings. For example, the image on the left below has been cloned, and the sharp filter has been applied to the copy (right hand) image. Progeny Imaging offers a number of filters and annotation tools to manipulate existing images.

When you add a filter to an image, a star symbol appears in the bottom right of the image border so that you know immediately that you are looking at a filtered image. You can remove the filter at any time simply by clicking on the star.

Figure 8-1: Image with Filter Applied

Annotating Images

Annotations are lines, measurements, and text that you add to images to enhance the image for studies and presentations. For example, before performing a root canal, you may want to measure the length of the root canal in an image using the ruler measurement tool. The image below illustrates several of the annotations that are available in Progeny Imaging.

Figure 8-2: Image with Annotations

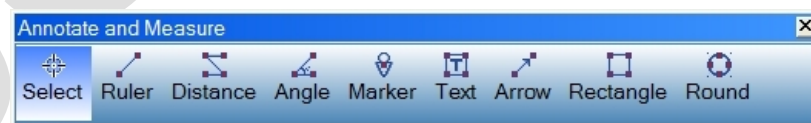
When you annotate an image, Progeny Imaging stores the annotations in separate files accompanying the image so that the original image remains intact.

CAUTION!

The accuracy of measurements made with Progeny Imaging virtual measurement tools is not guaranteed and depends upon accurate calibration of the tool object. You must calibrate the tool object for use in each image.

Annotation Tools

Progeny Imaging's annotation tools are located on the Annotate and Measure toolbar, shown below.

Figure 8-3: Annotate and Measure Toolbar

The table below describes each tool in the Annotate and Measure toolbar.

Annotate and Measure Toolbar

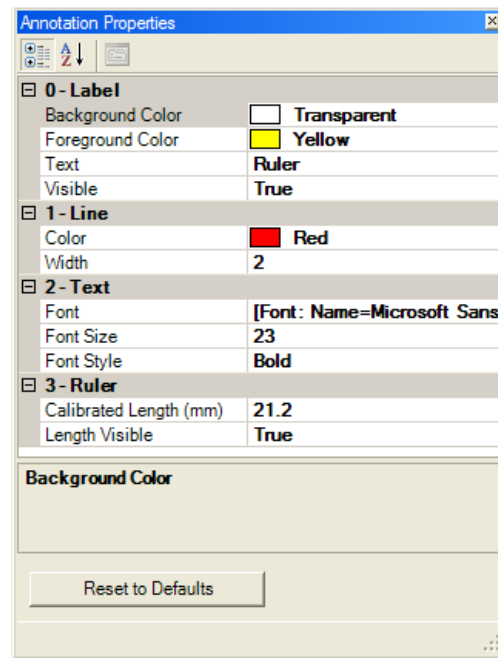
Item	Description
Select	Allows for easy selection of any annotation applied to an image.
Ruler	Adds a virtual ruler to the image.
Distance	Adds a virtual tool that sums the total distance of all line segments within the annotation.
Angle	Allows you to use a virtual protractor to measure angles on your image.
Marker	Marks a point on an image.
Text	Adds an editable text box to an image allowing you to make a note on the image.
Arrow	Adds a line with an arrowhead to an image.
Rectangle	Adds a rectangular shape to an image.
Round	Adds a circular shape to an image.

To Calibrate Ruler and Distance Tools

The ruler tool must be calibrated for each image in which measurement tools are used in order for their measurements to be accurate. Calibrating the ruler in the image recalibrates all distance and angle annotations for that image. Follow the steps below to calibrate the ruler tool.

1. When you acquire the X-ray image to which you are adding a measurement, include an object of known length.
2. Display the image on the Work Surface. Select the image.
3. In the Filter toolbar, click the **Annotate** icon, or **ALT + A**, or select **Image > Annotate**.
4. On the Annotate and Measure toolbar, click the **Ruler** tool.
5. Click in the image at one end of the object of known length and hold the left mouse button down. Drag then release the mouse button at the end of the length of the object to complete its measurement.
6. In the image, use the left mouse button to double-click on the ruler annotation that you just added. The Annotation Properties box, shown below, will open.

Figure 8-4: Enter Calibrated Length



7. In the **Calibrated Length** field, enter the length of the known object.
8. Click the small 'x' at the top of the Annotation Properties box to close it.

To Annotate an Image

1. Display an image or study on the Work Surface. Select the image.
2. In the Filter toolbar, click the **Annotate** icon, or **ALT + A**, or select **Image > Annotate**.
3. Click a tool on the Annotate and Measure toolbar to annotate the image. Each tool behaves slightly differently.
 - For the Ruler, click the image where you want to begin the measurement and hold the left mouse button down. Drag then release the mouse button to complete the measurement.
 - For the Distance tool, click the image where you want to begin the measurement. Then continue clicking to add line segments. You can add a curved measurement to the image by adding smaller line segments. When you have added the last line segment, double-click the left mouse button to complete the measurement.
 - For the Angle tool, click where you want the vertex to appear and hold the left mouse button down. Drag then release the mouse button to complete the first segment. Then click where you want the second segment to end.
 - To add a marker, select the Marker tool. Then click the image where you want to place the marker.
 - To add text, select the Text tool. Then, holding down the left mouse button, draw a text box on the image. Enter text in the text box. Text will be formatted according to settings in the Options screen Annotation Defaults tab.

- To add an arrow, click the Arrow tool. Then click the image where you want the arrowhead to appear and hold the left mouse button down. Drag the line to the desired length.
- To add an object, such as a rectangle or circle, select the Rectangle or Circle tool. Then click the image where you want the shape to begin. Hold the left mouse button down and drag the shape to the desired size.

CAUTION!

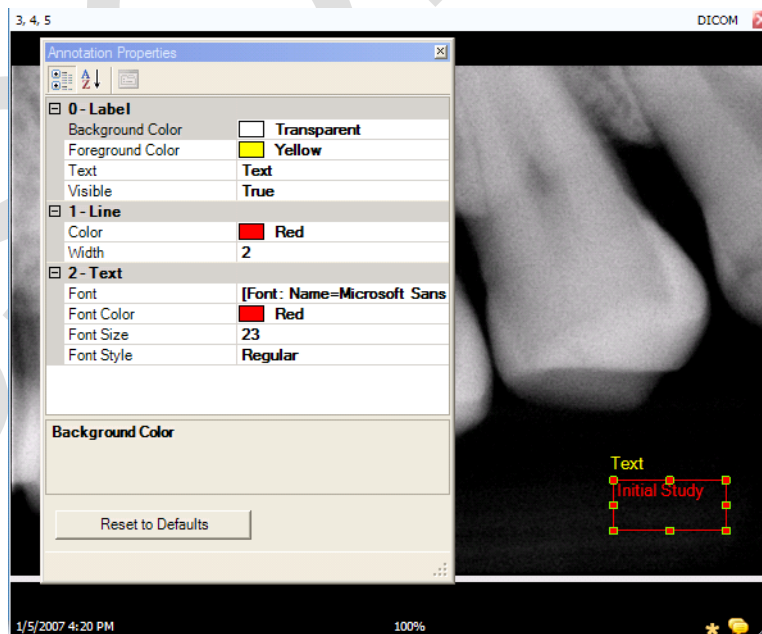
The accuracy of measurements made with Progeny Imaging virtual measurement tools is not guaranteed and depends upon accurate calibration of the tool object. You must calibrate the tool object for use in each image.

To Modify Annotations in an Image

Annotations are created using default settings in the Options screen Annotation Defaults tab. To change how new annotations appear, change settings in the Options screen. Follow the steps below to modify the properties of annotations that you have already added to an image.

1. Display an image containing at least one annotation on the Work Surface.
2. In the Annotate and Measure toolbar, click the **Select** tool.
3. In the image, use the left mouse button to double-click on the annotation to modify. Progeny Imaging displays the Annotation Properties box for the annotation.

Figure 8-5: Modifying Annotation Properties



4. In the Annotation Properties box, modify properties for the annotation.
5. Click the small 'x' at the top of the Annotation Properties box to close it.

To Remove Annotations from an Image

1. Display an image containing annotations on the Work Surface.
2. Open the Annotate and Measure Toolbar by selecting **Image > Annotate**, or by clicking the **Annotate and Measure** icon on the Filter Toolbar.
3. In the Annotate and Measure Toolbar, click the **Select** tool.
4. In the image, click the annotation that you want to delete.
5. With the annotation selected, press the **Delete** key on your computer.

Applying Image Filters

Filters allow you to modify an image in order to improve image quality or highlight information. When you use filters, the original image remains intact, and you can remove the filters at any time. You can apply several filters simultaneously to an image or you can clone an image and apply filters individually to each copy of the image.





Note






Applying filters alters your view of the original image. For diagnosis of questionable areas, for example, a suspected demineralization, always use the raw image.

Available Filters

Progeny Imaging's filters are shown below. These filters are located on the Filter toolbar and the Filter menu.

Filter Toolbar

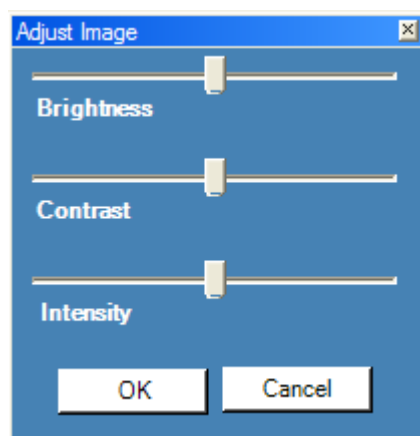
Item	Icon	Description
Adjust Brightness, Contrast, Intensity		Displays a filter with controls to adjust the brightness, contrast, or intensity of an image. You can use the Adjust Brightness, Contrast and Intensity filter to improve image quality when the exposure is not optimal for diagnostic purposes. For example, adjusting this filter may be helpful to distinguish hard and soft tissues during endodontic or periodontic evaluations.
Gamma		Displays a filter to make changes to the overall brightness and intensity of an image. You can use the Gamma filter to lighten an image that is too dark.
Invert		Reverses the color (white/black), saturation, and brightness values of the pixels in the image. This filter may be useful to diagnose demineralization (cavities).
Image Leveling		Displays the image's histogram with controls that allow you to limit the histogram to a useful range. When you remove extraneous information from the image, image quality improves. If you are using this filter in

Item	Icon	Description
		conjunction with the Adjust Brightness, Contrast and Intensity filter, apply this filter first.
Sharpen		The Sharpen Filter enhances the edges of anatomical structures such as dentine boundaries or bones. Clicking the Sharpen icon displays the Sharpen Filter dialog with settings to configure the Sharpen Filter. The Amount slider increases and decreases the strength of the filter. The Radius slider determines the surface area that will be analyzed by the edge detection algorithm. Increasing the Amount and Radius sliders sharpens the image.
Smooth		Displays a filter to soften the anatomical boundaries visible in the image. Removes noise in a granulated image.
Emboss		Displays a filter to create a pseudo three-dimensional image. Useful in cavity diagnosis. Can select the light source location to determine the direction of shadows in the image.
IsoDensity Colorization		Uses histogram information to change the saturation and hue. Select colors and the portion of the histogram to colorize. Useful for diagnosis in situations where gray scale distinctions are not easily visible.
Custom Filters		Apply user-configurable filters, A, B, C, and D. You configure these filters by selecting Tools > Options and clicking the ABCD Filters tab.

To Apply Filters

This is the general procedure to apply filters for an existing image.

1. Display an image or study on the Work Surface. Select the image.
2. In the Filter toolbar, click on one of the filter icons, or select the filter from the Filter menu. Depending on the filter, a box displays with filter controls.

Figure 8-6: Configuring Filter Settings

4. Adjust the filter controls. The filter's effect appears in the image.
5. If you are satisfied, click **OK** to apply the filter and close the filter controls. Click **Cancel** to close the filter without applying it. The bottom border of the image includes a small star to indicate that the image has a filter applied.

To Remove Filters

To remove all filters from an image, click the star at the bottom of the image. Progeny Imaging will ask you to confirm that you want to remove all filters.

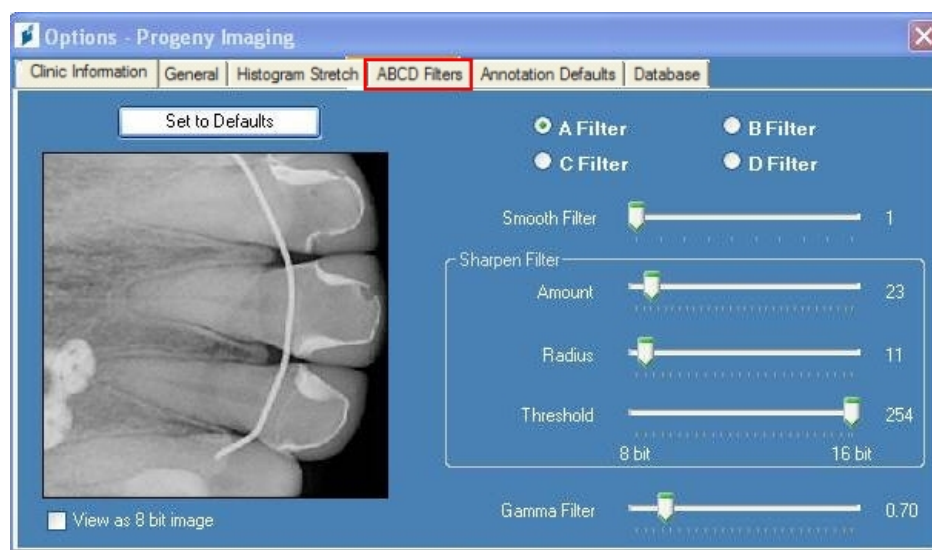
Creating Custom Filters

Custom filters allow you to combine smooth, sharpen, and gamma filter settings so that you can easily reuse them for a particular application. For example, if you prefer to diagnose endodontic cases with sharper images, you can set the A filter up with a specific sharpen setting. You can then apply the A filter when viewing endodontic images.

To Create a Custom Filter

1. Open the Options screen by selecting **Tools > Options**.
2. In the Options screen, click the **ABCD Filters** tab.
3. In the ABCD Filters tab select the filter that you are defining, for example, the A Filter. If the filter was previously set, the sliders will not be in the default position. You can click Set to Defaults to return the sliders to the default position.

Figure 8-7: Creating Custom Filters



4. Adjust the Smooth, Sharpen, and Gamma filter controls to the desired settings. The sample image to the left shows the effects of the filter settings.
5. Click **OK** to save the custom filter and close the Options dialog box. Click **Apply** to save the custom filter and continue working in the Options dialog box. Click **Set to Defaults** to cancel and redefine the custom filter.

To Apply a Custom Filter

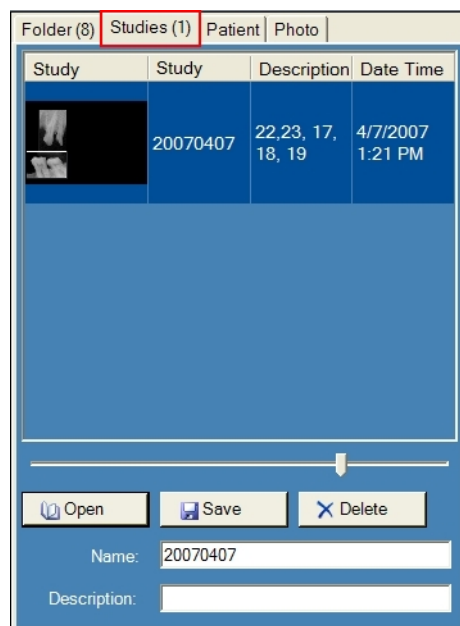
1. Display an image or study on the Work Surface. Select the image.
2. In the Filter toolbar, click on the A, B, C, or D filter icon.

Creating Image Studies

Studies are collections of images that you name and save. Images acquired using a template automatically appear as a study named for the template used and date and time of acquisition. In addition, you can save any image(s) that are displayed on the Work Surface as a study. For example, you might create a study to track the development of a particular pathology over several encounters with the patient.

Image Container Studies Tab

Studies are saved to the Studies tab located in the Image Container in a patient record. The number in the Studies tab is the number of studies in the patient's record. The Studies tab shows a thumbnail image of the study and provides the name or number of the study, a description of the study, and the date on which the study was created. If not all studies are visible in the Studies tab, a scroll bar displays so that you can view all items. The slider at the bottom of the Studies tab adjusts the view so that you can more easily find studies.

Figure 8-8: Image Container Studies Tab

To Save a Study

1. Open the patient record where you would like to create the study.
2. On the Work Surface, display the image or images to be included in the study.
3. (Optional) Use filters or annotations to modify the image(s).
4. In the Image Container, select the **Studies** tab.
5. In the Studies tab, enter a name and description for the study in the text fields and click **Save**, or select **Work Surface > Save as Study**, or **ALT + S**.

To Load a Previously Saved Study

1. Open the patient record.
2. In the Image Container, select the **Studies** tab.
3. Select the study to open. Use the horizontal slider to adjust the view of the Image Container to help you find the study.
4. Click **Open**. The study images will appear on the Work Surface.

To Remove a Previously Saved Study

1. Open the patient record.
2. In the Image Container, select the **Studies** tab.
3. Select the study to delete. Use the horizontal slider to adjust the view of the Image Container to help you find the study.
4. Click **Delete**.

Moving Images to Another Patient Record

Progeny Imaging stores X-ray images in the patient record that is open during acquisition. You can use the Move File to Patient screen in the event that you need to move an image or images to another patient record. When you move an image, the image is deleted from the open patient record and added to the selected patient record. Any filters, annotations, or notes associated with the image are also moved.

To Move an Image

1. Open the record of the patient that contains the image(s) to be moved.
2. Select **Image > Move to Patient**, or **ALT + M** to open the Move File to Patient screen.
3. In the Move File to Patient screen select the patient whose record will contain the image.

Figure 8-9: Select Patient in Move File to Patient Screen

Med Alert	Folder	Last	First	Gender	Birth Date	Last XRay	Start Date
<input type="checkbox"/>		Andres	Angelia	F	5/10/1962		
<input type="checkbox"/>		Bravo	Vera	F	2/28/1989		
<input type="checkbox"/>		Campos	David	M	4/12/1975		
<input checked="" type="checkbox"/>		Chapman	Landon	M	5/7/1981		
<input type="checkbox"/>		Chauhan	Aisha	F	1/31/1977		
<input type="checkbox"/>		Cortes	Valentin	M	3/20/1961		
<input type="checkbox"/>		Dhawan	Lynette	F	5/26/1960		
<input type="checkbox"/>		Foster	Helena	F	6/11/1972		
<input type="checkbox"/>		Guerrero	Martin	M	9/8/1976		
<input type="checkbox"/>		Harris	Alyssa	F	6/20/1984		
<input type="checkbox"/>		Hill	Julie	F	3/21/1980		

Filter by Last Name:

Close Help

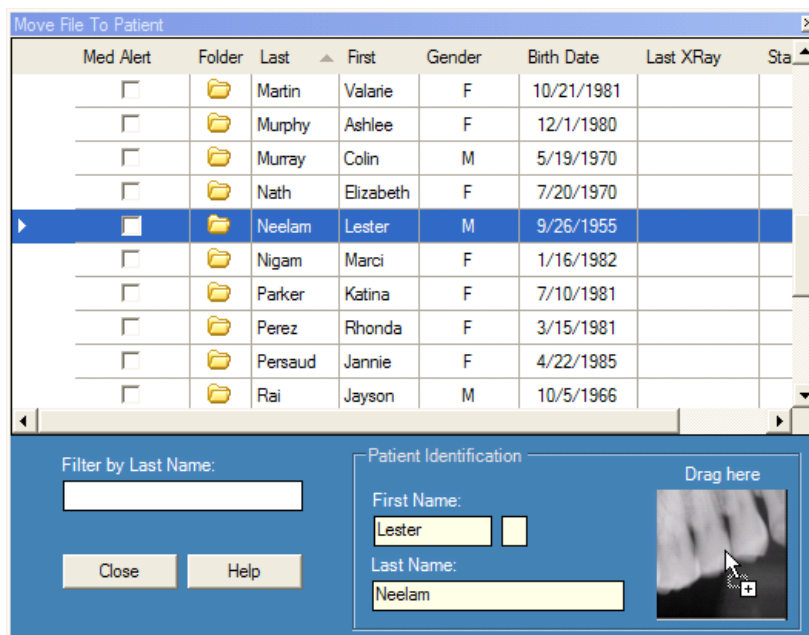
Patient Identification

First Name:

Last Name:

Drag here

4. In the Image Container Folder tab, select the image to move. Hold down the Shift or Ctrl keys to select multiple images.
5. Drag the image(s) from the Image Container Folder tab to the Drag here icon in the Move File to Patient screen. You will see the image in the Move File to Patient screen.

Figure 8-10: Drag Image to Patient Identification Area

- When you drop the image on the Drag here icon, Progeny Imaging asks you to confirm that you want to move the image to the selected patient's record. Click **Yes**. If you dragged multiple images, Progeny Imaging will ask you to confirm that you want to move each image.

Correcting Tooth Numbering on Images

Progeny Imaging records the number of the tooth or teeth that were selected in the Tooth Panel in the DICOM information associated with each X-ray image. In the event that tooth or teeth selected in the Tooth Panel were not the tooth or teeth that were imaged, you can use the Correct Tooth Numbers screen to assign the correct tooth number to the image's DICOM information.

To Correct Tooth Numbering

- Display the image with the incorrect tooth number(s) on the Work Surface.
- Select **Image > Correct Tooth Numbers**. The Correct Tooth Numbers screen, shown below, will display with a check mark beside the tooth number(s) that was selected when the image was acquired. Click column header for ADA or FDI to sort the order of the teeth.

Figure 8-11: Correct Tooth Numbers Screen

	ADA	FDI	DICOM
<input type="checkbox"/>	01	18	T-54210
<input type="checkbox"/>	02	17	T-54220
<input type="checkbox"/>	03	16	T-54230
<input type="checkbox"/>	04	15	T-54240
<input type="checkbox"/>	05	14	T-54250
<input type="checkbox"/>	06	13	T-54260
<input checked="" type="checkbox"/>	07	12	T-54270
<input checked="" type="checkbox"/>	08	11	T-54280
<input checked="" type="checkbox"/>	09	21	T-54290
<input checked="" type="checkbox"/>	10	22	T-54300
<input type="checkbox"/>	11	23	T-54310
<input type="checkbox"/>	12	24	T-54320
<input type="checkbox"/>	13	25	T-54330
<input type="checkbox"/>	14	26	T-54340

4 Teeth

Select All Select None

OK Cancel

3. Uncheck the incorrect tooth number(s).
4. Check the correct tooth number(s).
5. Click **OK**. The correct tooth number(s) will appear on the image in the Image Container Folder tab and in the image's DICOM information.

9 Exporting, Importing and Printing Images

In this Section

- About Communicating Images
- Exporting DICOM Images
- Exporting JPEG Images
- Exporting Other Image Formats
- Importing Images
- Publishing Images to a PACS Server
- Printing Images
- Emailing Images

About Communicating Images

Progeny Imaging gives you a number of ways to make patient images available outside the application. You can export image files, print images, send images to a PACS server and email images. You can also import images into Progeny Imaging.

About Exporting Patient Images

Progeny Imaging allows you to select the image type when you export the image. You can export images in DICOM or JPEG format, or you can select another format such as BMP.

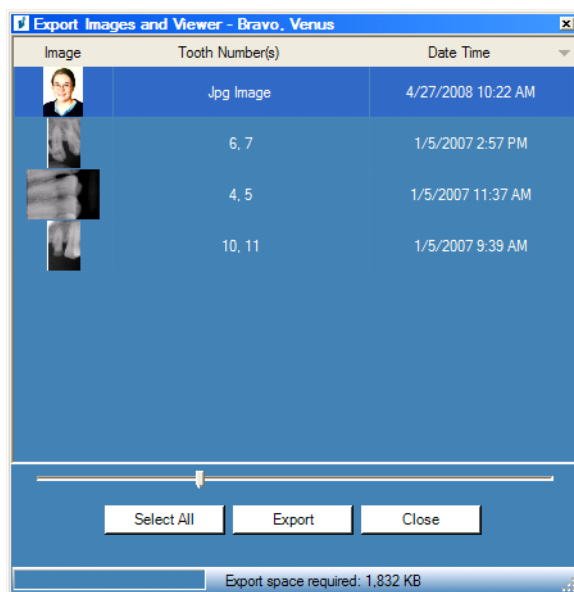
Exporting DICOM Images

You can export DICOM images from a patient record to a folder on your computer or to an external hard drive or network location. When you export patient images, Progeny Imaging creates a Progeny Imaging Export folder in the location you designate. The folder contains copies of the image files that you exported. Progeny Imaging names the DICOM image files with the name of the patient and a number indicating the order in which the images were exported. The folder also contains the ImageJ Viewer, a DICOM-compliant image viewer. Using ImageJ, the recipient of images from Progeny Imaging can view the DICOM image information.

To Export DICOM Images

1. In Progeny Imaging, open a patient record.
2. Select **Patient > Export Patient Images** to open the Export Images and Viewer screen. The screen shows all the images in the patient's record.

Figure 9-1: Export Images and Viewer Screen



3. In the Export Images and Viewer screen, select the images that you want to export.
The slider at the bottom of the screen adjusts the size of the thumbnail images so that you can more easily find images. To select several images, hold down the CTRL key while selecting the images. To select all images, click **Select All**. When you select images, the status bar of the Export Images and Image Viewer screen shows the amount of space that will be required in the target location for the selected images.
4. Click **Export**.
5. In the Browse for Folder window, select the location for the exported images.
6. Click **OK**. The status bar of the **Export Images and Viewer** screen shows the progress of the export operation and indicates when the export is complete.
7. When the export is complete, click **Close**.

Exporting JPEG Images

You can export all images displayed on the Work Surface in one export operation. When you export the images, Progeny Imaging copies the images as JPEG files to the location you specify on your computer, on a removable media, or on the office network. Progeny Imaging names the DICOM image files with the name of the patient and a number indicating the order in which the images were exported.

To Export JPEG Images

1. In Progeny Imaging, display images on the Work Surface.
2. From the Work Surface menu, select **Export All**. The Browse for Folder screen appears.
3. In the Browse for Folder screen, select the location to copy the files.
4. Click **OK**. The images will be copied to the location that you specified.

Exporting Other Image Formats

You can export images in other image formats, such as BMP, to a location on your computer, on a removable media, or on the office network. When you export an image, Progeny Imaging copies the image to the location you specify. With this export option, you can assign the file name and select the image format.

To Export an Image from a Patient Record

1. In Progeny Imaging, display an image on the Work Surface.
2. From the Images menu, select **Export > Other Format**. The Save As screen will appear.
3. In the Save As screen, select the location to copy the image.
4. In the **Filename** field, enter the name to use when saving the image.
5. In the **Save as** type drop-down list, select the image format.
6. Click **OK**. The image will be saved in the location and with the name that you specified.

Importing Images

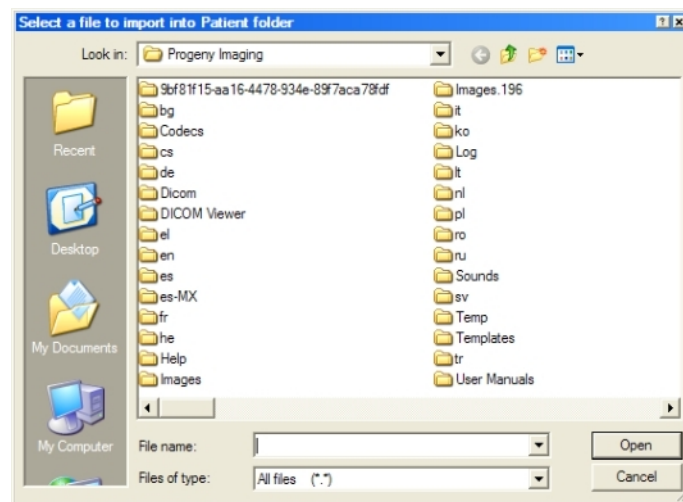
You can import images of various types, for example, DICOM, JPEG or BMP, into the Image Container Folder tab in a patient's record.

Tip

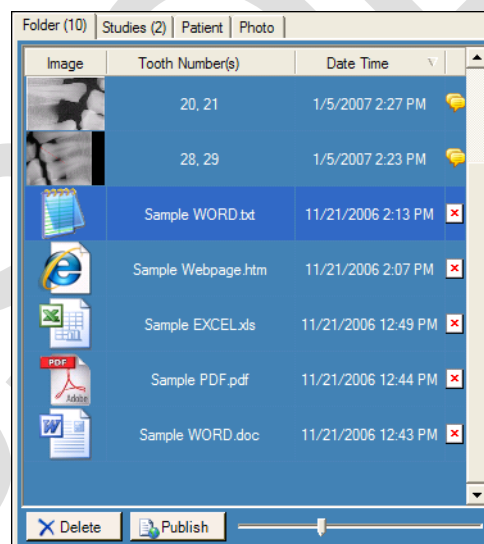
To add a picture of a patient to the patient's record, select **Patient > Add Patient Photo**.

To Import Images

1. Open the Select Patient screen by selecting **Patient > Open**, or **ALT + O**, or by clicking the **Open** icon.
2. Click in a row to select a patient. To search for a patient, in the Last Name field, enter one or more characters of the patient's last name.
3. Click **Open**.
4. Select **Image > Import** to open a file selection box.

Figure 9-2: File Selection Box

5. In the file selection box, locate the file to add to the patient's record.
6. Select the file.
7. Click **Open**. The file is added to the patient's record and an icon representing the file type and the name of the file appear in the Folder tab of the Image Container.

Figure 9-3: Image Container Folder Tab with Imported Files

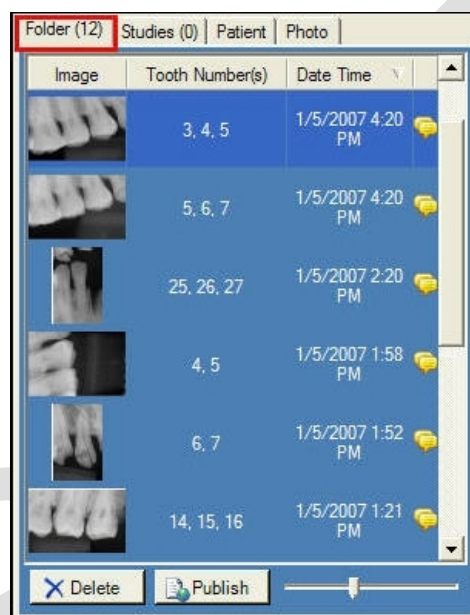
Publishing Images to a PACS Server

If your Progeny Imaging system is configured to publish to a PACS server, you send the images easily to the PACS server directly from the Image Container Folder tab in a patient's record. For information about configuring Progeny Imaging with a PACS server, See "Configuring Progeny Imaging to Publish to a PACS Server" in the *Progeny Imaging Installation Guide*.

To Publish Images to a PACS Server

1. In Progeny Imaging, open a patient record.
2. In the Image Container Folder tab, select an image.

Figure 9-4: Image Container Folder Tab



3. Click **Publish**. When you click Publish, Progeny Imaging uploads a copy of the image to the server. The status bar will display messages as the publishing progresses.

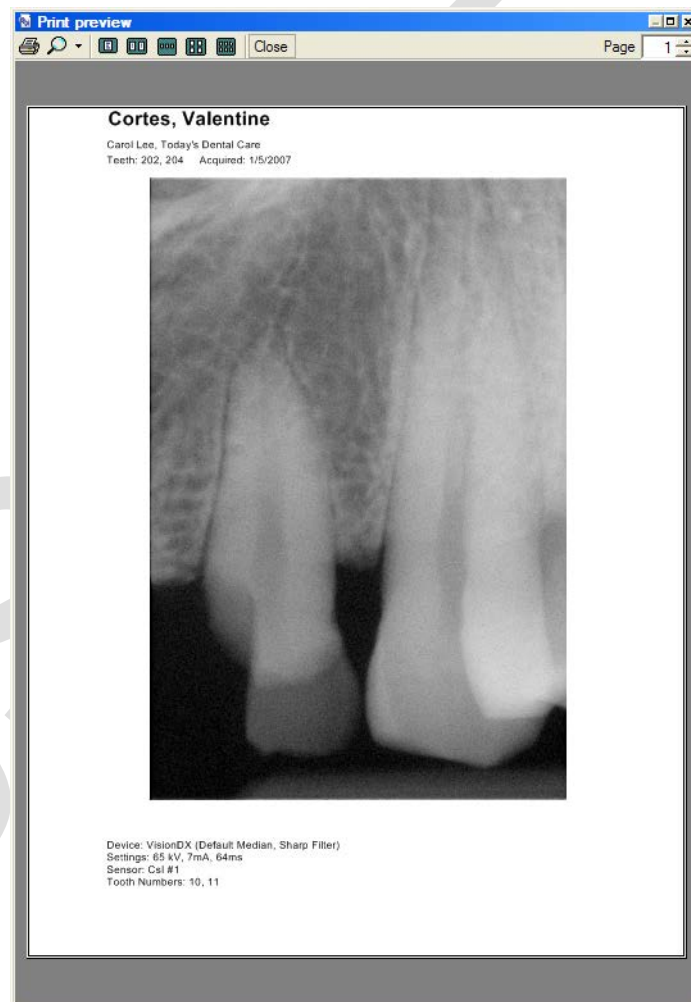
Printing Images

You can print images displayed in the Work Surface to your computer's default printer using Progeny Imaging's Print Preview screen. Printed images are labeled with patient, clinic and tooth information. If the image contains notes, they will appear below the image.

About the Print Preview Screen

You use the Print Preview screen to preview and print the image. The Print Preview screen also allows you to zoom in on the image.

Figure 9-5: Print Preview Screen



The table below describes the controls in the Print Preview screen.

Print Preview Screen

Item	Description
Print	Sends the image to the printer.
Zoom	Magnifies the image by the percentage you select in the drop-down menu.
Page icons	Selects the number of pages to display in the Print Preview screen.
Close	Closes the Print Preview screen.
Page field	Selects the page to display in the Print Preview Screen. Note <i>Progeny Imaging currently supports printing only a single image per page.</i>

To Print Images

1. In Progeny Imaging, display and select an image on the Work Surface.
2. Select **Image > Print**, or **ALT + P**, or click the **Print** icon. The Print Preview screen opens.
3. (Optional) In the Print Preview screen, click the **Zoom** button to magnify or reduce the image.
4. Click the **Print** button to send the image to the printer.
5. Click **Close** to close the Print Preview screen.

Emailing Images

To email images from a patient's record in Progeny Imaging, first export the image in the format you desire. You can then attach the image file to any email message.

About Exporting Images

Progeny Imaging allows you to select the image type when you export the image. You can export images in DICOM or JPEG format, or you can select another format such as BMP.

- For more information, see *Exporting DICOM Images on page 67*.
- For more information, see *Exporting JPEG Images on page 68*.
- For more information, see *Exporting Other Image Formats on page 69*.

10 Backing up and Restoring Patient Data

In this Section

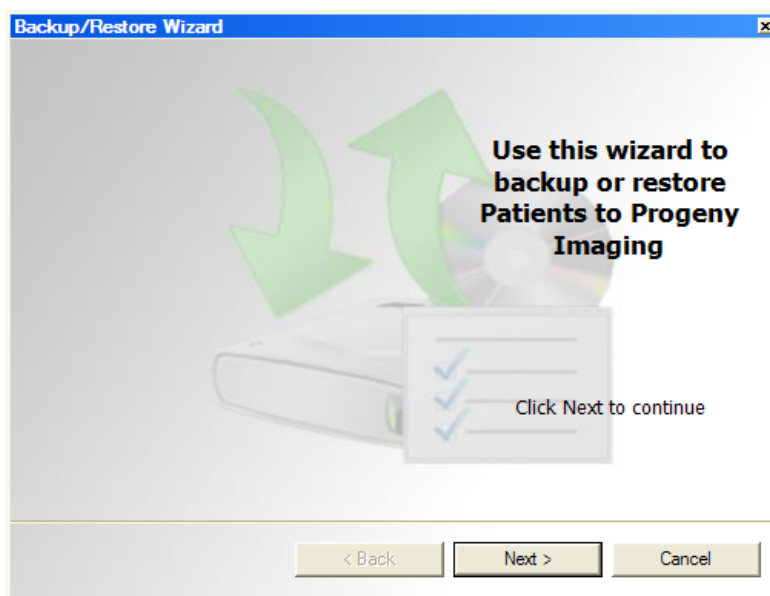
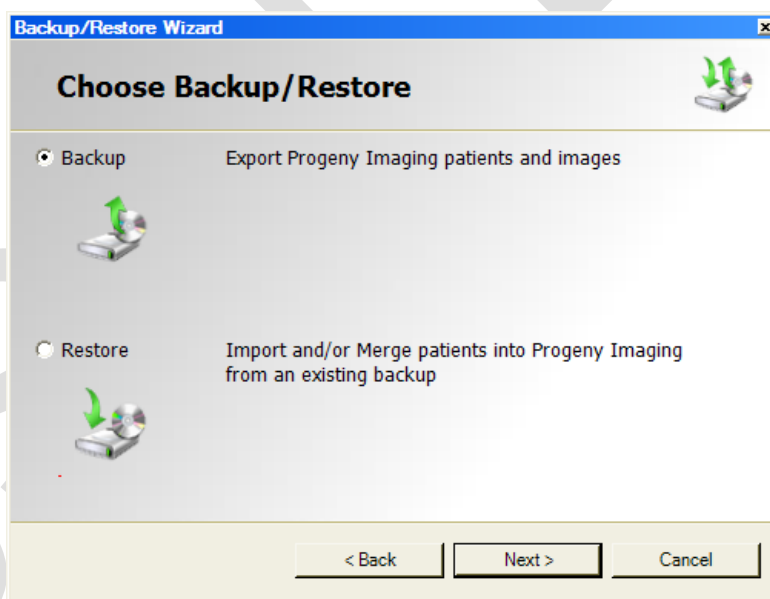
- About Backing up and Restoring Patient Data
- Backing up a Patient Database
- Restoring a Patient Database

About Backing up and Restoring Patient Data

Progeny Imaging stores patient data in a Microsoft SQL Server database on the computer where Progeny Imaging is installed or on another computer on the same network. You can back up the database to safeguard the data. In the event of data loss, you can then restore the data. Backup and restore functions are also useful if you want to archive patient records or if you have more than one office and want to move patient records among the offices.

About the Backup/Restore Wizard

The Backup/Restore Wizard is the series of screens that walks you through Progeny Imaging's backup and restore functions. You use the Backup/Restore Wizard to choose backup or restore, select the backup media, and start the backup or restore operation. The Backup/Restore Wizard allows you to back up to and restore from CD-ROM, DVD, or to a hard drive or network location.

Figure 10-1: Backup/Restore Wizard Welcome Screen**Figure 10-2: Backup/Restore Wizard--Choosing Backup or Restore**

Backing up a Patient Database

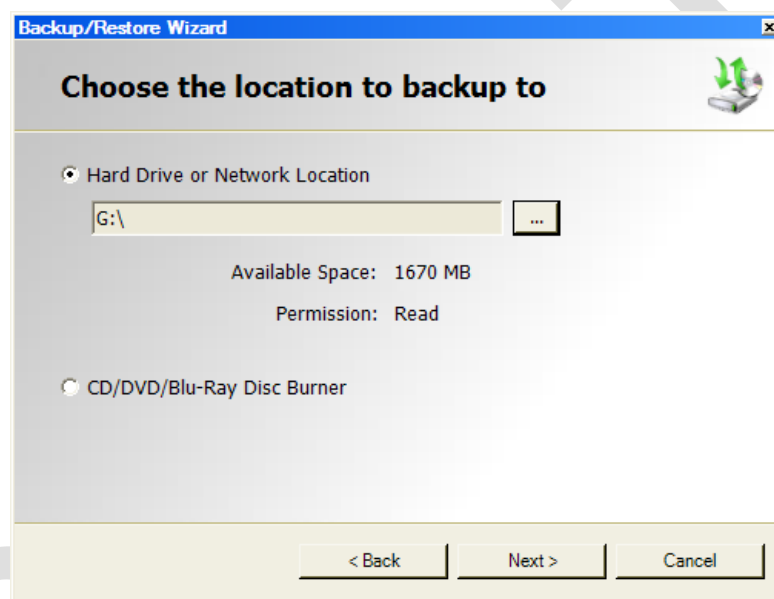
Backing up the patient database regularly is important to ensure that patient data is not lost in case of computer failure. You can also back up and restore patient data if you have more than one location where you see patients and you want to keep the Progeny Imaging database at all locations up-to-date for all patients. Simply back up the patient database in one office and restore it in another office.

You use the Backup/Restore Wizard to back up patient data. When backing up patient data, the Backup/Restore Wizard creates a Progeny Backup folder in the location you designate. The folder contains a sub-folder for each patient in the database. The patient folders contain the images and other files that are part of the patients' records.

To Back up the Patient Database to a Hard Drive or Network Location

1. Select **File > Backup and Restore** to open the Backup/Restore Wizard.
2. In the Backup/Restore Wizard Welcome screen, click **Next**.
3. When asked to choose Backup or Restore, select **Backup**. Then click **Next**.

Figure 10-3: Backup Wizard Location Selection



4. When asked to choose the location for the backup, select **Hard Drive or Network Location**.
 5. Click the browse (...) button.
 6. In the Browse for Folder dialog box, select the location for the backup.
The Backup/Restore Wizard displays the space available for the backup. If the location does not have sufficient space to backup the entire patient database, the Backup/Restore Wizard will not allow you to begin the backup operation.
- Note**
If you select a location that already has a Progeny Backup folder, the Backup/Restore Wizard asks you if you want to overwrite the existing backup. Click Yes to overwrite, or click No and select another location for the backup.
7. Click **Next**. The Backup/Restore Wizard displays a summary of the backup operation.
 8. Click **Next** to begin the backup.
 9. When the backup is completed, click **Finish**.

To Backup the Patient Database to a CD/DVD/Blu-Ray Disc Burner

1. Select **File > Backup and Restore** to open the Backup/Restore Wizard.
2. In the Backup/Restore Wizard, click **Next**.
3. When asked to choose Backup or Restore, select **Backup**. Then click **Next**.
4. When asked to choose the location for the backup, select **CD/DVD/Blu-Ray Disc Burner**.
5. Be sure that blank backup media is in the drive, then select the drive where the backup media is located. The Backup/Restore Wizard displays the selected media and calculates how many discs will be needed to back up the entire patient database.
6. Click **Start Burning** to initiate the backup operation. If additional discs are needed, the Backup/Restore Wizard will prompt you to insert them.
7. When the backup is completed, click **Finish**.

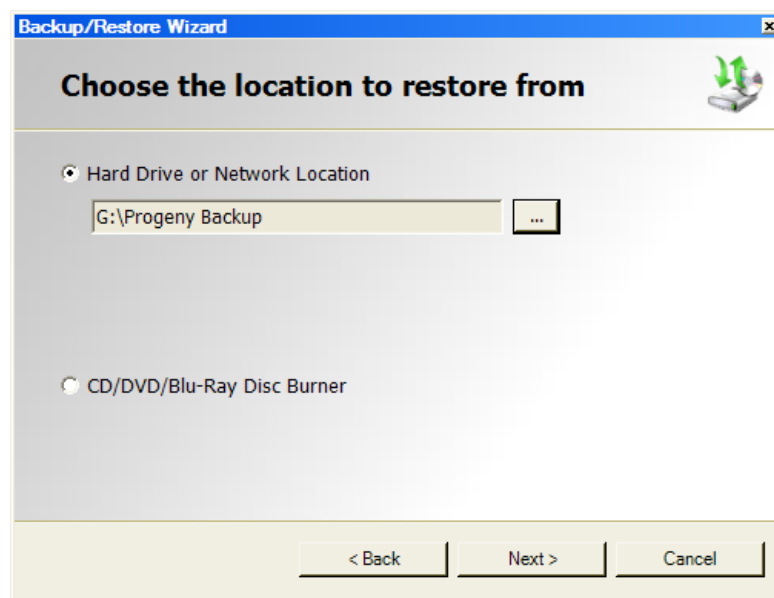
Restoring a Patient Database

You can restore a patient database from a backup file that was created by Progeny Imaging. The backup file must exist on the computer with Progeny Imaging, on another computer on the same network, or on media, such as a CD-ROM or DVD.

When you restore the patient database, the Backup/Restore Wizard checks to see if any patient records in the backup are duplicates of records in the patient database. If the patient record in the backup differs from the record in the database, the Backup/Restore Wizard automatically updates the record with the new information. This is useful if you see some patients in one office and wish to keep their records up-to-date in the Progeny Imaging patient database in another office.

To Restore a Patient Database from a Hard Drive or Network Location

1. Select **File > Backup and Restore**.
2. In the Backup/Restore Wizard, click **Next**.
3. When asked to choose Backup or Restore, select **Restore**. Then click **Next**.

Figure 10-4: Restore Wizard Location Selection

1. When asked to choose the location to restore from, select **Hard Drive or Network Location**.
2. Click the browse (...) button.
3. In the Browse for Folder dialog box, find and select the Progeny Backup folder.
4. Click **Next**. The Backup/Restore Wizard displays a summary of the Restore operation.
5. Click **Next** to begin the restore.
6. When the restore is completed, click **Finish**.

To Restore the Patient Database from a CD/DVD/Blu-Ray Disc Burner

1. Select **File > Backup and Restore**.
2. In the Backup/Restore Wizard, click **Next**.
3. When asked to choose Backup or Restore, select **Restore**. Then click **Next**.
4. When asked to choose the location to restore from, select **CD/DVD/Blu-Ray Disc Burner**.
5. Be sure that the media with the backup of the patient database is in the media drive. Click **Next**. The restore operations begins automatically. If additional discs were used to backup the patient database, the Backup/Restore Wizard will prompt you to insert them.
6. When the restore is completed, click **Finish**.

11 Frequently Asked Questions

The Tooth Panel is not visible. How do I display it?

The Patient Panel must be displayed in order to view the Tooth Panel. If the Patient Panel is visible but the Tooth Panel is hidden, click **Hide** on the tool bar. The Tooth Panel will open. If the Patient Panel is not displayed, select **Patient > Show Panel**, then click **Hide** to open the Tooth Panel.

The Tooth Panel is not responding when I try to select a tooth to image. What should I do?

A patient file must be open. Also, a sensor must be selected and ready, as shown by the green ready indicator.

I got a gray scale image instead of an X-ray image. What happened?

Each digital sensor device is configured to allow a certain number of seconds between the time you click **Acquire** in Progeny Imaging and the time you activate the X-ray source. At the end of the timeout period, if no X-ray exposure has been made, the digital sensor generates a gray-scale image. Check your time out settings by selecting **Tools > Devices > Device Configuration**. *For more information, see Setting the Sensor Timeout Period on page 20.*

The wrong tooth was selected when the image was acquired and now the tooth number is wrong in the image information. How do I correct it?

First, display the image with the incorrect tooth information in the workspace. Then select **Image > Correct Tooth Numbers**. The Correct Tooth Numbers screen will have a check mark beside the tooth number that was selected when the image was acquired. Remove the check mark and check the correct tooth number. Then click **OK**. *For more information, see Correcting Tooth Numbering on Images on page 65.*

I can rotate an image from the Filter tool bar, but how do I flip the image?

Use **Image > Flip Horizontal** and **Image > Flip Vertical** commands.

I want to delete the annotation measurements from the image. How do I select them so I can delete them?

With the image in the workspace, select **Image > Annotate** to open the Annotate and Measure toolbar. Click the left mouse button on the annotation to select it. Then click the **Delete** key on your computer. *For more information, see Annotating Images on page 54.*

How do I reacquire an image?

Right click on the sequence number of the tooth you would like to re-acquire and select **Re-Acquire Sequence** from the drop down menu. *For more information, see Reacquiring Images on page 34.*

Can I export images in DICOM format?

Yes, with the patient record open, select **Patient > Export Patient Images....** You can then select all of the patient's images or individual images. After selecting the images, they can be exported to any location on your computer. All images will be exported in a DICOM format. *For more information, see Exporting DICOM Images on page 67.*

Can I export images in any other format?

Yes. Images can be exported in jpg, png, gif, tif, and bmp formats. With an image on the Work Surface, select **Image > Export > Other Format**. You will then have to name the file and select the format for saving. *For more information, see Exporting Other Image Formats on page 69.*

Can I back up my data? How and how often?

Yes. Select **File > Backup and Restore**. This will launch a wizard which will step you through the backup and restore process. Backing up your data should be performed whenever new images have been added. Your back up data should be stored on a server or an external drive. Storing the back up file in multiple locations will ensure that you can restore all patient images and data if you have to replace your computer or you have a hard drive failure. *For more information, see About Backing up and Restoring Patient Data on page 74.*

How do I delete an image?

Images are automatically saved after the acquisition is complete. In order to delete the image, you must select the image within the Image Container and then press the **Delete** button. An image can be identified as being selected when the image and image information in the Image Container is highlighted in dark blue. *For more information, see Deleting Images on page 47.*

Can I have Progeny Imaging launch without having to enter a user name and password?

Yes. You can run Progeny Imaging in Open User mode. You will need to enable Open User mode by following the steps below.

1. Navigate to C: \ P r o g r a m F i l e s \ P r o g e n y \ P r o g e n y I m a g i n g \ and locate the Progeny Imaging.exe file.
2. Right click on the file and select **Copy**.
3. On your computer's Desktop, right click and select **Paste Shortcut**.
4. With the shortcut selected, right click and select **Properties**.
5. In the Properties dialog box, select the **Shortcut** tab.
6. In the Target field, place your cursor to the right of the last character.
7. Type a space, and then type l o g i n = f a l s e .
8. Click **Apply** and then **OK**.

You can then delete the original shortcut and use the newly created one. *For more information, see Launching in Open User Mode on page 10.*

How can I obtain manuals for Progeny Imaging and VisionDX?

User Manuals are installed during the installation of Progeny Imaging. They can be accessed by selecting **Start > All Programs > Progeny Imaging > Users Manuals** or by loading the Progeny Imaging CD-ROM and selecting **Open Users Manuals** in the Progeny Software Installer Window.

What other resources are available for obtaining technical information on Progeny Imaging user functions?

Online help in Progeny Imaging provides Progeny Imaging user functions and technical information, including installation and networking information. You can access online help by selecting **Help > Contents** or **Help > Index**.

12 Keyboard Shortcuts

Keyboard Command Sequences

Use the commands below for efficient access to Progeny Imaging functions.

Keyboard Shortcuts

Shortcut Key	Command
File Menu	
ALT + 1	Show or Hide the Tooth Panel
CTRL + U	Open the User Manager
ALT + L	Logout of Progeny Imaging and redisplay the Login screen
ALT + X	Exit Progeny Imaging
Patient Menu	
ALT + 2	Show or Hide the Patient Panel
ALT + O	Open the Select Patient screen
ALT + N	Open the Patient Properties screen to create a new patient record
CTRL + ALT + P	Open the Patient Properties screen for a patient whose record is open
ALT + D	Delete the selected image in the Image Container Folder tab
Image Menu	
ALT + U	Undo filter
ALT + R	Redo filter

Shortcut Key	Command
ALT + A	Open the Annotate and Measure toolbar
ALT + P	Open the Print Preview screen
ALT + F	Full-screen display of an image on the Work Surface
ALT + M	Open the Move to Patient screen
ALT + E	Hide and display an Expanded View of the image on the Work Surface
ALT + C	Close an image on the Work Surface
Tools Menu	
ALT + V	Display the Video screen if a video capture device is available
Work Surface Menu	
ALT + T	Tiles (repositions) images on the Work Surface
CTRL + ALT + E	Hides and displays an Expanded View of all images on the Work Surface
ALT + D	Delete Study that is selected in the Image Container Study tab
ALT + S	Save images on the Work Surface as a study
Help Menu	
ALT + H	Displays Progeny Imaging Help

Index

OBSOLETE

A

- Acquiring Video Images, 39
- Acquiring X-Ray Image Sequences, 30
 - Canceling Acquisition, 33
 - Pausing Acquisition, 33
 - Using Templates, 35
- Acquiring X-Ray Images, 34
- ADA Numbering, 17
- Adding
 - Files to Patient Records, 26
 - Notes to Images, 51
 - Patient Records, 22
 - Text to Images, 54
 - Users, 12
- Administrator Log In, 10
- Annotate and Measure Toolbar, 54
- Annotating Images, 54
- Aquisition Sound, 19

B

- Backing up Patient Data, 75
- Backup and Restore, 74
- Backup/Restore Wizard, 74, 75, 77

C

- Calibrating Annotation Tools, 54
- Canceling Image Acquisition, 33

- Clinic Information, 15

- Closing

- Images, 42
 - Patient Records, 23

- Correcting Tooth Numbering on Images, 65

- Creating

- Custom Filters, 61
 - Image Sequences, 30
 - Passwords, 12
 - Patient Records, 22
 - Studies, 62
 - Templates, 37
 - Users, 12

- Custom Filters, 61

- Customer Service, 6

D

- Database

- Backup, 75
 - Restore, 77

- Default Filters

- Configuring, 21

- Default Filters Screen, 21

- Deleting

- Annotations on Images, 54
 - Patient Records, 25
 - Studies, 62

Users, 12	Default, 21
X-Ray Images, 47	Frequently Asked Questions, 79
Design Surface, 37	
DICOM Conformance Statement, 91	G
DICOM Image Information	Getting Help, 6
Displaying, 46	
DICOM Images, 7	I
Exporting, 67	Image Acquisition Templates, 35, 37
Displaying	Image Container, 42, 62
DICOM Image Information, 46	Image Information Screen, 46
Image Notes, 51	Image Notes, 51
Images, 41, 42, 44, 48	Image Resolution, 18
Studies, 62	Image Sequences, 30
	Images
E	About Acquiring, 28
E-mailing	About Filtering and Annotating, 53
Images, 73	Acquiring, 30
Export Images and Viewer Screen, 67	Annotating, 54
Exporting Images, 67	Canceling Image Acquisition, 33
DICOM Images, 67	Closing, 42
JPEG Images, 68	Correcting Tooth Numbering, 65
Other Image Formats, 69	Displaying, 42, 44
	Exporting, 67, 68, 69
F	Filtering, 59, 61
FAQ, 79	Hiding Borders, 44
FDI Numbering, 17	Importing, 69
Filter Toolbar, 59	Magnifying, 48
Filtering Images, 59	Maximizing, 44
Filters	Measuring, 54
Custom, 61	Moving to Another Patient Record, 64

Opening, 42	M
Pausing Image Acquisition, 33	Magnifying Images, 48
Printing, 72	Maximizing Images, 44
Publishing to PACS Server, 71	Measuring Images, 54
Resolution, 18	Modifying
Roating, 48	Patient Records, 24
Tiling, 44	User Information, 12
Zooming, 48	Move File to Patient Screen, 64
Importing	Moving Images to Another Patient Record, 64
Files to Patient Records, 26	N
Images, 69	Notes on Images, 51
J	O
JPEG Images	Open User Mode
Exporting, 68	About, 9
K	Enabling, 10
Keyboard Shortcuts, 82	Opening
L	Images, 42
Language, 16	Patient Records, 23
Loading	Studies, 62
Images, 42	Options Screen
Studies, 62	ABCD Filters Tab, 61
Logging in	Clinic Information Tab, 15
About, 9	Image Resolution, 18
For the First Time, 10	Language Selection, 16
Secure Mode, 12	Tooth Numbering, 17
Login Screen, 10	Overview of Progeny Imaging, 7
Removing, 10	P
	PACS Server, 71

Passwords

- Creating, 12

Patient Database

- Backup, 75

- Restore, 77

Patient Information, 22

Patient Photo, 22

Patient Properties Screen, 22, 24

Patient Records

- About, 22

- About Backup and Restore, 74

- Adding Files, 26

- Backing Up, 75

- Closing, 23

- Creating, 22

- Deleting, 25

- Importing Images, 69

- Modifying, 24

- Moving Images Between, 64

- Opening, 23

- Reassigning, 26

- Restoring, 77

Pausing Image Acquisition, 33

Print Preview Screen, 72

Printing Images, 72

R

Reacquiring Images, 34

Removing

- Annotations on Images, 54

- Filters from Images, 59

- Patient Records, 25

- Users, 12

- X-Ray Images, 47

- Resolution, 18

- Restoring Patient Data, 77

- Rotating Images, 48

S

Secure Mode

- About, 9

- Enabling, 12

- Logging in, 12

- Select Correct Tooth Numbers Screen, 65

- Select Patient Screen, 23

Sensor

- Timeout Period, 20

Setting up

- Acquisition Sound, 19

- Clinic Information, 15

- Default Filters, 21

- Language, 16

- Tooth Numbering, 17

Shortcuts, 82

Sound

- Selecting an Acquisition Sound, 19

Starting Progeny Imaging

- For the First Time, 10

- Open User Mode, 10

- Secure Mode, 12

Studies

Annotating, 54

Creating, 62

T

Taking X-Ray Images, 30

Technical Support, 6

Teeth

Selecting, 30

Template Manager Screen, 37

Templates for Image Acquisition, 35

Tiling Images, 44

Timeout, 20

Tooth Numbering

Correcting on Images, 65

Selecting the Tooth Numbering System, 17

Tooth Panel

Using, 29

Troubleshooting, 79

U

Updating Patient Records, 24

User Manager Screen, 12

Users

Assigning Passwords, 12

Creating, 12

Deleting, 12

Modifying, 12

V

Video

Acquiring, 39

Video Screen, 39

W

Work Surface, 41

X

X-Ray Images

Acquiring, 30

Annotating, 54

Canceling Image Acquisition, 33

Deleting, 47

Displaying, 42, 44

Exporting, 67, 68, 69

Filtering, 59, 61

Hiding Borders, 44

Importing, 69

Magnifying, 48

Maximizing, 44

Measuring, 54

Moving to Another Patient Record, 64

Pausing Image Acquisition, 33

Printing, 72

Publishing to PACS Server, 71

Re-Acquiring, 34

Resolution, 18

Rotating, 48

Tiling, 44

Zooming, 48

Z

Zoom In and Out on Images, 48

OBSOLETE

DICOM Conformance Statement

OBSOLETE