

Aperio eSlide Manager

User's Guide



Aperio eSlide Manager User's Guide

This document applies to Aperio eSlide Manager Release 12.5 and later.


Copyright Notice

- ▶ Copyright © 2022-2023 Leica Biosystems Imaging, Inc. All Rights Reserved. LEICA and the Leica logo are registered trademarks of Leica Microsystems IR GmbH. Aperio is a trademark of Leica Biosystems Imaging, Inc. Other logos, product and/or company names might be trademarks of their respective owners.
- ▶ This product is protected by registered patents. For a list of patents, contact Leica Biosystems.

Customer Resources

- ▶ For the latest information on Leica Biosystems Aperio products and services, please visit www.LeicaBiosystems.com/Aperio.

Contact Information – Leica Biosystems Imaging, Inc.

| Headquarters | Customer Support |
|---|--|
|  Leica Biosystems Imaging, Inc. 1360 Park Center Drive Vista, CA 92081 USA Tel: +1 (866) 478-4111 (toll free) Direct International Tel: +1 (760) 539-1100 | Contact your local support representative with any query and service request. https://www.leicabiosystems.com/contact-us/ |

REF 23ESMHUB, 23ESMCAP, 23ESMSPOKE, 23SPOKEHUB

UDI 00815477020402(8012) 12.5

Notices

Revision History

| Rev. | Issued | Sections Affected | Detail |
|------|--------------|-------------------|--|
| B | April 2023 | Copyright page | Replaced REF numbers |
| A | January 2022 | All | New manual for Aperio eSlide Manager 12.5. Based on existing <i>Aperio eSlide Manager User's Guide</i> , MAN-0469, Revision A. |

Cautions and Notes

- ▶ **Specifications and Performance** - For information on the requirements for client workstations and monitors, and Aperio eSlide Manager performance characteristics, refer to the document *Aperio eSlide Manager System Requirements*.
- ▶ **Installation** - Aperio eSlide Manager must be installed by a trained Leica Biosystems Technical Services representative.
- ▶ **Accessories** - For information on using Aperio eSlide Manager with third-party accessories such as a Laboratory Information System (LIS) or image analysis algorithms not provided by Leica Biosystems, contact your Leica Biosystems Technical Services representative.
- ▶ **Quality Control** - When viewing digital slides, the operator must confirm that the digital slide labels match the digital slide data for quality assurance.
- ▶ **Maintenance** - To ensure optimal viewing of digital slides, periodic maintenance is required for the monitors connected to viewing stations. For information on monitor calibration, contact your Leica Biosystems Technical Services representative. Some viewers include a test image that is used to verify the monitor display. For those viewers, refer to their user guides for information.
- ▶ **Cybersecurity** - Be aware that workstations are susceptible to malware, viruses, data corruption, and privacy breaches. Work with your IT administrators to protect workstations by following your institution's password and security policies. For Aperio recommendations on protecting your workstations and servers, see the *Aperio eSlide Manager Administrator's Guide*.
- ▶ **Training** - This manual is not a substitute for the detailed operator training provided by Leica Biosystems or for other advanced instruction. Leica Biosystems Technical Services should be contacted immediately for assistance in the event of any malfunction.



CAUTION: Use normal care in maintaining and using Aperio servers. Interrupting network connections or turning off servers while they are processing data (such as when they are analyzing digital slides or generating an audit report) can result in data loss.





Intended Use

Aperio eSlide Manager is a digital pathology image management software application that allows lab personnel to retrieve digital whole slide images derived from a compatible device, and with them assemble, store, and manage cases, projects, and/or courses, complete with rich slide metadata.

Aperio eSlide Manager is intended to be used by Pathologists, Histotechnicians, and Laboratory Managers.

Symbols

The following symbols appear in device labeling:

| | |
|---|--|
|  | Manufacturer |
|  | Catalog number |
|  | Unique Device Identifier |
|  | The exclamation point within an equilateral triangle is intended to alert you to the presence of important operating and maintenance (servicing) instructions. |

Customer Service Contacts

Please contact the office for your country for technical assistance.

Australia:

96 Ricketts Road
Mount Waverly, VIC 3149
AUSTRALIA
Tel: 1800 625 286 (toll free)
Between 8:30 AM-5 PM, Monday-Friday, AEST
Email: lbs-anz-service@leicabiosystems.com

Austria:

Leica Biosystems Nussloch GmbH
Technical Assistance Center
Heidelberger Strasse 17
Nussloch 69226
GERMANY
Tel: 0080052700527 (toll free)
In-country Tel: +43 1 486 80 50 50
Email: support.at@leicabiosystems.com

België/Belgique:

Tel: 0080052700527 (toll free)
In-country Tel: +32 2 790 98 50
Email: support.be@leicabiosystems.com

Canada:

Tel: +1 844 534 2262 (toll free)
Direct International Tel: +1 760 539 1150
Email: TechServices@leicabiosystems.com

China:

17F, SML Center No. 610 Xu Jia Hui Road, Huangpu District
Shanghai, PRC PC:200025
CHINA
Tel: +86 4008208932
Fax: +86 21 6384 1389
Email: service.cn@leica-microsystems.com
Remote Care email: tac.cn@leica-microsystems.com

Danmark:

Tel: 0080052700527 (toll free)
In-country Tel: +45 44 54 01 01
Email: support.dk@leicabiosystems.com

Deutschland:

Leica Biosystems Nussloch GmbH
Technical Assistance Center
Heidelberger Strasse 17
Nussloch 69226
GERMANY
Tel: 0080052700527 (toll free)
In-country Tel: +49 6441 29 4555
Email: support.de@leicabiosystems.com

Eire:

Tel: 0080052700527 (toll free)
In-country Tel: +44 1908 577 650
Email: support.ie@leicabiosystems.com

España:

Tel: 0080052700527 (toll free)
In-country Tel: +34 902 119 094
Email: support.spain@leicabiosystems.com

France:

Tel: 0080052700527 (toll free)
In-country Tel: +33 811 000 664
Email: support.fr@leicabiosystems.com

Italia:

Tel: 0080052700527 (toll free)
In-country Tel: +39 0257 486 509
Email: support.italy@leicabiosystems.com

Japan:

1-29-9 Takadanobaba, Shinjuku-ku
Tokyo 169-0075
JAPAN

Nederland:

Tel: 0080052700527 (toll free)
In-country Tel: +31 70 413 21 00
Email: support.nl@leicabiosystems.com

New Zealand:

96 Ricketts Road
Mount Waverly, VIC 3149
AUSTRALIA
Tel: 0800 400 589 (toll free)
Between 8:30 AM-5 PM, Monday-Friday, AEST
Email: lbs-anz-service@leicabiosystems.com

Portugal:

Tel: 0080052700527 (toll free)
In-country Tel: +35 1 21 388 9112
Email: support.pt@leicabiosystems.com

The Russian Federation.

BioLine LLC
Pinsky lane 3 letter A
Saint Petersburg 197101
THE RUSSIAN FEDERATION
Tel: 8-800-555-49-40 (toll free)
In-country Tel: +7 812 320 49 49
Email: main@bioline.ru

Sweden:

Tel: 0080052700527 (toll free)
In-country Tel: +46 8 625 45 45
Email: support.se@leicabiosystems.com

Switzerland:

Tel: 0080052700527 (toll free)
In-country Tel: +41 71 726 3434
Email: support.ch@leicabiosystems.com

United Kingdom:

Tel: 0080052700527 (toll free)
In-country Tel: +44 1908 577 650
Email: support.uk@leicabiosystems.com

USA:

Tel: +1 844 534 2262 (toll free)
Direct International Tel: +1 760 539 1150
Email: TechServices@leicabiosystems.com

Contents

- Notices 3**
 - Revision History 3
 - Cautions and Notes 3
 - Intended Use 4
 - Symbols 4
- 1 Aperio eSlide Manager Overview 12**
 - About This Guide 12
 - Case, Project, and Course Examples 12
 - Terms Used 12
 - For More Information 12
- 2 Getting Started 15**
 - Start Aperio eSlide Manager and Log In 15
 - Selecting Your User Role 15
 - Login and Preferences Tips 16
- 3 A Tour of Aperio eSlide Manager’s Main Page 17**
 - The Main Page 17
 - The Menu 18
 - General Aperio eSlide Manager Tips 18
 - Status and Error Messages 19
- 4 Working with Aperio eSlide Manager Data 20**
 - How Aperio eSlide Manager Organizes Data 20
 - Data Relationships 20
 - User Roles 21
 - Data Groups 21
 - Types of Aperio eSlide Manager Data Pages 21
 - Entering Data in Aperio eSlide Manager 22
 - Using Barcodes 22
 - LIS Data Interchange 22
 - Entering Comments 22
 - Entering a Reason for Change 23
 - Entering an Electronic Signature 23
 - Choosing from a Predefined List 23

| | |
|---|-----------|
| Using the TAG Column to Identify Specific Data | 23 |
| Working with List Pages | 23 |
| Viewing Data from List Pages | 24 |
| List View | 25 |
| Folder View | 26 |
| List Page Commands | 26 |
| Unassigning Digital Slides and Specimens from Parent Data | 28 |
| Multi-Level Sort on a List Page | 28 |
| Sorting Tips | 29 |
| Exporting Data | 29 |
| Working with Detail Pages | 30 |
| Adding Attachments to Details Pages | 31 |
| 5 Adding Data to Aperio eSlide Manager | 32 |
| Adding Cases | 32 |
| Working with Cases | 33 |
| Adding Specimens | 34 |
| Working with Specimens | 34 |
| Adding Digital Slides | 35 |
| Adding an Image to a Digital Slide | 35 |
| Third-Party Images | 36 |
| Creating Digital Slides from Images in a Server Folder or SubFolder | 36 |
| 6 Viewing Digital Slide Images | 37 |
| Digital Slide Viewers | 37 |
| Opening Digital Slide Images in Aperio WebViewer | 37 |
| Opening Digital Slides in Aperio ImageScope | 38 |
| Automatic Image Viewing | 39 |
| Disabling Automatic Image Viewing | 39 |
| 7 Conferencing | 40 |
| Before Starting the Conference | 40 |
| Starting a Conference | 40 |
| The Conference Window | 41 |
| Hosting a Conference | 42 |
| Participating in a Conference | 42 |
| 8 Moving, Copying, and Cloning Data | 43 |
| Synchronizing Changes to the Aperio eSlide Manager Image Database | 43 |
| Moving or Copying an Image File | 43 |
| Cloning Data | 44 |
| Using the Clone To Command | 44 |
| Preserving the Parent/Child Data Structure | 45 |

| | | |
|-----------|--|-----------|
| 9 | Searching Aperio eSlide Manager Data | 46 |
| | Using the Free-Text Search | 46 |
| | Free-Text Search Tips..... | 47 |
| | Advanced Search and Saved Searches | 48 |
| | Using a Saved Search..... | 48 |
| | Selecting Advanced Search Criteria | 49 |
| | Searching on User-Tagged Data..... | 49 |
| | Advanced Search Operators..... | 49 |
| | Advanced Search Results | 50 |
| | Working with Saved Searches | 51 |
| 10 | Analyzing Images | 52 |
| | Aperio Algorithms | 52 |
| | Analyzing Digital Slides in Aperio eSlide Manager | 52 |
| | Aperio eSlide Manager Analysis Batch Jobs | 53 |
| | Batch Analysis on Aperio eSlide Manager with Third-party Tools | 54 |
| | Organizing and Finding Algorithm Macros | 54 |
| | Sorting Macros | 54 |
| | Macro Versions | 54 |
| | Working with Algorithm Macros | 54 |
| | Viewing Digital Slide Analysis History | 55 |
| | Viewing the Analysis Job Queue | 56 |
| | Canceling Analysis Jobs | 56 |
| 11 | Network Case Workflows | 57 |
| | Overview | 57 |
| | Who Uses the Case Workflows?..... | 57 |
| | Getting Started | 58 |
| | Logging into the Case Workflows | 58 |
| | The Settings Toolbar..... | 59 |
| | The Network (Case Workflows) Page | 60 |
| | Navigating a List Summary Page | 60 |
| | Navigation and Editing Tools..... | 61 |
| | Showing and Hiding Case Data..... | 61 |
| | Change the Position of a Column..... | 62 |
| | Return to the Default Column Arrangement | 62 |
| | Your Profile Settings | 63 |
| | For More Information | 63 |
| | Case Assembly | 64 |
| | Creating a New Case..... | 64 |
| | Adding Patient Data | 65 |
| | Adding Case Data | 65 |
| | Adding Specimens and Digital Slides | 65 |
| | Tips on Creating Cases | 67 |

| | |
|---|-----------|
| Assigning a Case | 68 |
| Viewing Cases Outside of Your Worklist | 69 |
| Receiving a Case for Additional Work..... | 69 |
| Adding Attachments | 69 |
| Creating Reports | 69 |
| Tracking Case Status | 71 |
| Case Review | 71 |
| Reviewing Cases | 72 |
| Reviewing a Case | 72 |
| Completing the Case..... | 74 |
| Viewing Prior Cases..... | 74 |
| Collaborations | 75 |
| Outgoing Collaboration | 75 |
| Sending an Outgoing Collaboration | 76 |
| Incoming Collaboration | 77 |
| Reviewing Internal Collaboration Results | 77 |
| Administrative Settings | 78 |
| Aperio eSlide Manager Administrative Settings | 78 |
| Defining Network Users—User Groups | 78 |
| Setting the User Start Page..... | 79 |
| Search Settings..... | 79 |
| Email Settings..... | 79 |
| Network Administrative Settings | 80 |
| Administrative Settings | 80 |
| Case Review Administrative Settings | 80 |
| 12 Reporting | 82 |
| Overview | 82 |
| Aperio eSlide Manager Reporting Prerequisites..... | 82 |
| How Reporting Works | 83 |
| Getting Started | 83 |
| Updating Organizational Information in Report Files | 83 |
| Creating Comments..... | 83 |
| Adding Report Customers and Assigning Report Templates..... | 84 |
| Creating a Report | 85 |
| Report Contents | 85 |
| Selecting Digital Slides for the eIHC and Project Templates | 86 |
| Selecting Digital Slides for the Case Template | 86 |
| Specifying the Order of the Slides in the Case Report..... | 87 |
| Secure Reports | 88 |
| Opening a Case or Project | 88 |
| Selecting the Report Customer..... | 88 |
| Selecting Images to Display on the Report..... | 89 |
| Generating the Report | 89 |

| | |
|---|-----------|
| Signing and Revising a Report..... | 89 |
| Report States..... | 89 |
| Signing a Report..... | 90 |
| Amending or Correcting a Report..... | 90 |
| Viewing or Printing a Signed Report..... | 90 |
| Sample eHHC Report | 91 |
| A Creating a Workspace (Dashboard) | 92 |
| Creating a Workspace..... | 92 |
| Opening an Existing Workspace | 92 |
| Other Dashboard Features..... | 93 |
| B Managing Aperio Services..... | 94 |
| Accessing the Service Manager | 94 |
| Index..... | 96 |

1

Aperio eSlide Manager Overview

This chapter introduces Aperio eSlide Manager.

The heart of Aperio eSlide Manager is the digital image created by scanning a glass microscope slide.

Aperio eSlide Manager delivers an effective digital pathology information management system that treats high resolution digital slides—that can be viewed, managed, and analyzed—as an integrated element in the pathology workflow. Aperio eSlide Manager displays information in context, with gross (macro) images, digital slide images, reports, case histories, and other associated documents and images cross-linked and concurrently viewable.

Aperio eSlide Manager facilitates instant archival and intelligent retrieval of histopathological data in a searchable, context-sensitive manner. Pathologists and histotechnicians are able to work through an entire case without having to get up to track down case information or to wait for glass slides to be delivered. They can work remotely and collaboratively, initiating automated image analyses and viewing the results, all within Aperio eSlide Manager.

In addition to its basic digital slide management functions, Aperio eSlide Manager also includes the Network module, which provides case workflows that let you take a more workflow oriented approach. The Network case workflows give you the ability to assemble cases, review cases, and collaborate on cases. You can also view prior patient cases. For more information on Network case workflows, see “*Network Case Workflows*” on page 57.

About This Guide

This guide is intended for Aperio eSlide Manager users who need to know how to use Aperio eSlide Manager after it has been installed and set up. For information on how to set up Aperio eSlide Manager and perform administrative functions, refer to the *Aperio eSlide Manager Administrator's Guide*.

Case, Project, and Course Examples

In the examples in this guide, the term *cases* is used for consistency. However, when you are using Aperio eSlide Manager you may see other data hierarchies such as *projects* or *courses* instead of cases (due to factors such as your user role, etc.). For more information on data hierarchies, see “*How Aperio eSlide Manager Organizes Data*” on page 20.

Terms Used

In this guide, *eSlide* and *digital slide* in general mean the same thing; however, *eSlide* is used to discuss elements of the user interface, while *digital slide* is used in more generic contexts.

For More Information

For information on accomplishing specific tasks, see the following sections.

Session Options and Setup

| Task | See... |
|---|--|
| Logging into Aperio eSlide Manager | <i>"Start Aperio eSlide Manager and Log In" on page 15</i> |
| Changing your password | <i>"Login and Preferences Tips" on page 16</i> |
| Resetting your account | <i>"Login and Preferences Tips" on page 16</i> |
| Choosing which Aperio eSlide Manager page you see when you log in | <i>"Login and Preferences Tips" on page 16</i> |
| If you scan slides, choosing what data group the digital slides go into | <i>"Login and Preferences Tips" on page 16</i> |

Using Aperio eSlide Manager Data

| Task | See... |
|--|---|
| Viewing data in Aperio eSlide Manager | <i>"Chapter 4: Working with Aperio eSlide Manager Data" on page 20</i> <i>"Chapter 6: Viewing Digital Slide Images" on page 37</i> |
| Using data tables | <i>"Chapter 4: Working with Aperio eSlide Manager Data" on page 20</i> |
| Creating a new case | <i>"Adding Cases" on page 32</i> |
| Adding specimens to a case | <i>"Working with Cases" on page 33</i> |
| Adding digital slides to a specimen | <i>"Working with Specimens" on page 34</i> |
| Creating a specimen | <i>"Adding Specimens" on page 34</i> |
| Adding images to a gross specimen | <i>"Working with Specimens" on page 34</i> |
| Creating a digital slide | <i>"Adding Digital Slides" on page 35</i> <i>"Creating Digital Slides from Images in a Server Folder or SubFolder" on page 36</i> |
| Adding images to a digital slide | <i>"Adding an Image to a Digital Slide" on page 35</i> |
| Exporting data | <i>"Exporting Data" on page 29</i> |
| Managing image files | <i>"Chapter 8: Moving, Copying, and Cloning Data" on page 43</i> |
| Adding documents to a case or project | <i>"Adding Attachments to Details Pages" on page 31</i> |
| Searching for specific cases, specimens, or digital slides | <i>"Chapter 9: Searching Aperio eSlide Manager Data" on page 46</i> |

Using Network Case Workflows

| Task | See... |
|--|---|
| Assembling cases | <i>"Case Assembly" on page 64</i> |
| Reviewing cases | <i>"Case Review" on page 71</i> |
| Collaborating on cases | <i>"Collaborations" on page 75</i> |
| Configuring administrative settings for the Network case workflows | <i>"Administrative Settings" on page 78</i> |

Advanced

| Task | See... |
|--|--|
| Analyzing digital slides | <i>"Chapter 10: Analyzing Images" on page 52</i> |
| Setting up and saving a desktop view of Aperio eSlide Manager and other applications | <i>"Appendix A: Creating a Workspace (Dashboard)" on page 92</i> |
| Starting and stopping Aperio services | <i>"Appendix B: Managing Aperio Services" on page 94</i> |

2

Getting Started

Before you can use Aperio eSlide Manager, you must log in. You can then choose personal options to tailor the use of Aperio eSlide Manager to your preferences.

Start Aperio eSlide Manager and Log In

To log in to Aperio eSlide Manager, you need the URL of the Aperio eSlide Manager website and your user name and password. Your Aperio eSlide Manager administrator should provide this information.

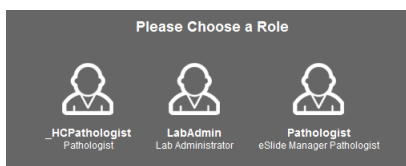
1. From your Internet browser, go to the URL of the Aperio eSlide Manager website.
2. When the Log In page appears, enter your user name and password. Remember that passwords are case sensitive.
3. Click **User Login**. Remember that passwords are case sensitive.

If you do not have a user name and a Guest Login button displays on this page, click **Guest Login** to log in as a guest user. (The guest user is not available in all configurations.)

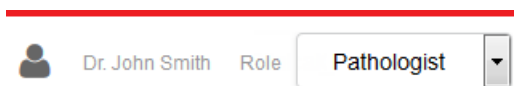
Selecting Your User Role

You might have multiple user role assignments. For example, when performing the duties of a pathologist (reviewing cases, annotating tumor regions, performing analyses, and so on), you might log in with the Pathologist user role. When performing administrative duties, you might log in with the Laboratory Admin user role.

If you have more than one user role, a set of user roles appears. For example:



Click the role to use for this session. Your current user role appears in upper left area of the Aperio eSlide Manager window.



When you have more than one user role, you can use the drop-down list under your name to switch to another user role.

Login and Preferences Tips

The following table gives tips on login options and setting personal options.

| If this happens | Do this |
|--|--|
| Your session times out | If you receive a message that Aperio eSlide Manager logged you off, your session has timed out and you need to log in again. If this happens frequently, ask your Aperio eSlide Manager administrator to increase the session timeout period. |
| Your account is locked | When you log in, if you see a message that your account is locked, request that your Aperio eSlide Manager administrator unlock your account. |
| You receive a license warning | If a warning message appears when you log in telling you that you are close to exceeding the image or analysis limits of the Aperio eSlide Manager license, notify the Aperio eSlide Manager administrator. |
| You receive a reminder to change your password | <p>If your password has expired or if the Aperio eSlide Manager administrator wants you to change your password, a message appears when you log in indicating you must change your password, and a New Password box appears.</p> <p>Type your new password in the New Password box and then retype it in the box below. Click Save.</p> <p>If your password must be a specific length or contain special characters, a reminder appears next to the New Password box.</p> |
| You want to change your password | <p>Go to the Administrative menu and select My Settings. If your password must be a specific length or contain special characters, a reminder appears next to the New Password box.</p> <p>Type your old password in the Old Password box.</p> <p>Type your new password in the New Password box and then retype it in the box below. Click Save.</p> |
| You want to select an Aperio eSlide Manager start page | <p>You can choose the Aperio eSlide Manager page that appears when you log in.</p> <p>Go to the Administrative menu and select My Settings.</p> <p>Click the arrow next to the eSlide Manager Start Page drop-down list and select the start page you want to use. Click Save.</p> |
| You want to set Aperio eSlide Manager Network case workflows options | <p>The following option for the Aperio eSlide Manager Network case workflows is available on your My Settings page. Go to the Administrative menu and select My Settings.</p> <ul style="list-style-type: none"> • Disable Workflow Email Notifications – Select this check box to disable email notifications when you have a case in your queue in one of the Network case workflows. <p>For information on the Network case workflows, see “<i>Chapter 11: Network Case Workflows</i>” on page 57</p> |
| You want to select a scan data group | <p>If your user role permits you to log into the scanner Console to scan slides, you can choose the data group to which the digital slides are added. Go to the Administrative menu and select My Settings.</p> <p>Use the Data Group for Scanning drop-down list to select a data group into which to scan slides.</p> |

3

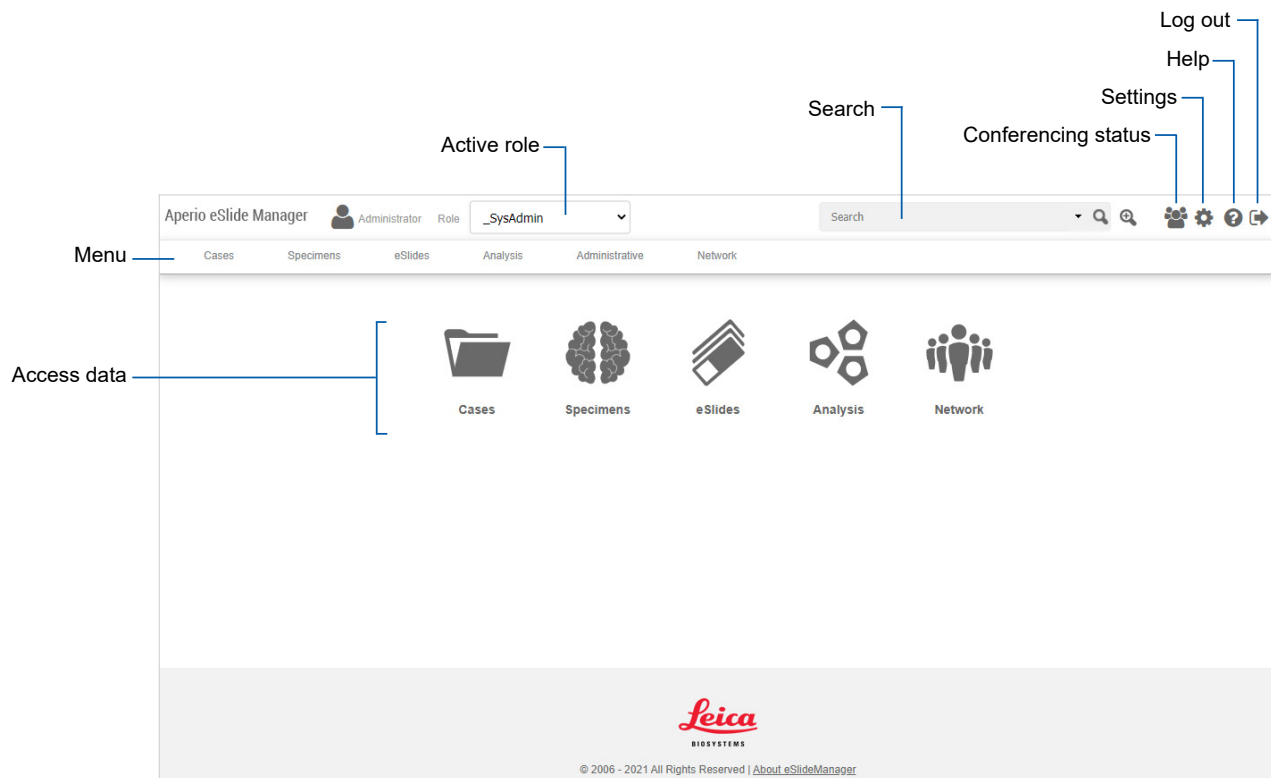
A Tour of Aperio eSlide Manager's Main Page

This chapter gives a brief tour of the Aperio eSlide Manager main page.

Because Aperio eSlide Manager is configurable by the Aperio eSlide Manager administrator, the data fields and data columns shown in this guide represent one typical configuration and may not reflect the appearance of your Aperio eSlide Manager location.

The Main Page

When you log into Aperio eSlide Manager, the main Aperio eSlide Manager page appears:



The appearance of this page depends on the data hierarchy of your current user role and any active optional modules. For example, if your user role uses the Research data hierarchy instead of Clinical, the top-level data category is Projects instead of Cases. For information on the Aperio eSlide Manager data hierarchies, see "Chapter 4: Working with Aperio eSlide Manager Data" on page 20.

The main features of this page include:

- ▶ **Data Icons** – You use the data icons displayed on the Aperio eSlide Manager main page to access the information and images stored in Aperio eSlide Manager. For example, to see a list of digital slides, click the eSlides icon.
- ▶ **Menu Bar** – The commands on the menu bar help you use special Aperio eSlide Manager features and access Aperio eSlide Manager data in different ways. See the next section for information.
- ▶ **Logo** – Click the Aperio eSlide Manager logo at the top of the page whenever you want to return to the main Aperio eSlide Manager page.
- ▶ **Searches** – The Search box at the top of every Aperio eSlide Manager page enables you to search for any Aperio eSlide Manager data. For information on conducting a search, and creating and using saved searches, see *“Chapter 9: Searching Aperio eSlide Manager Data” on page 46.*

The Menu

The Aperio eSlide Manager Menu contains navigation and access commands. (See the previous page for an example of the menu.)

The first commands on the menu provide access to your data (for example, Cases, Specimens, and eSlides). The specific data tables that appear depend on the data hierarchy assigned to your user role and which optional modules are available. (See *“How Aperio eSlide Manager Organizes Data” on page 20* for information on the different data hierarchies of Aperio eSlide Manager.)

The remaining menus provide the following functions:

- ▶ **Analysis** – Check the image analysis queue. See *“Chapter 10: Analyzing Images” on page 52.*
- ▶ **Administrative** – Use the My Settings command to change your password and set personal preferences. See *“Chapter 2: Getting Started” on page 15.*
- ▶ **Network** – Go to the Aperio eSlide Manager Network case workflows. See *“Chapter 11: Network Case Workflows” on page 57.*

General Aperio eSlide Manager Tips

Here are some tips about the general operation of Aperio eSlide Manager:

- ▶ Images created by the Aperio scanner are automatically associated to a digital slide created in the digital slide table. The barcode string populates the digital slide barcode field, and may also fill in other data fields for the digital slide. (This latter feature may require custom software from Leica Biosystems.) See *“Using Barcodes” on page 22* for more information.
- ▶ Gross specimen images captured in the Milestone Grossing Station are automatically associated with specimens in the Specimens data table.
- ▶ Documents can be added to most items in data tables. See *“Adding Attachments to Details Pages” on page 31.*

Status and Error Messages

Whenever you change data on an Aperio eSlide Manager page (for example, when adding information to a case, changing a data table, or adding digital slides to a case), a message highlighted in green lets you know that the update was successful. For example:



After making an update, Aperio eSlide Manager returns you to the appropriate page.

When an error occurs, a message appears in red on the page where the error occurred. If you want more information on the error (for example, to send the information to Leica Biosystems Technical Services), hover your mouse pointer over the error message to view a more detailed message.

4

Working with Aperio eSlide Manager Data

This chapter describes the features and functionality of Aperio eSlide Manager data tables.

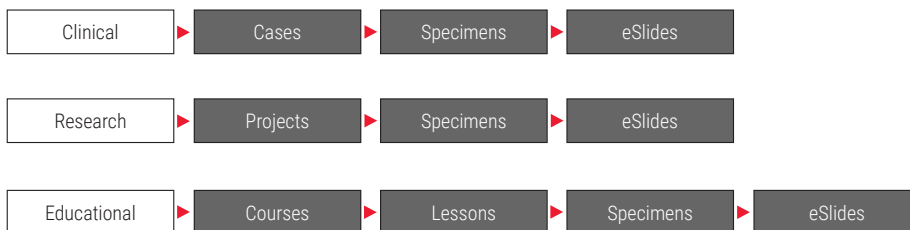
How Aperio eSlide Manager Organizes Data

Aperio eSlide Manager organizes and displays data in a hierarchy that is tailored to three types of users:

- ▶ **Clinical** – Data is displayed and organized with cases at the top, followed by specimens and digital slides.
- ▶ **Research** – Data is displayed and organized with projects at the top, followed by specimens and digital slides.
- ▶ **Educational** – Data is displayed and organized with courses at the top followed by lessons, specimens, and digital slides.

If your organization has purchased the optional Genie product, the Genie data hierarchy displays and organizes Genie projects at the top, followed by Genie training sets, specimens, and digital slides.

Your Aperio eSlide Manager administrator assigns your user role to one of these data hierarchies.



Data Relationships

Each item in the data hierarchy is a data table. The highest level in the data table hierarchy is the case/project/course. Other data can be associated with the case/project/lesson, such as digital slides, specimens, documents, and so on. The higher-level data is the parent data, and the items associated with it are child data. For example, a case is the parent, and the case's associated specimens and digital slides are child data.

To add child data to parent data (such as adding digital slides to specimens):

- ▶ Your active user role must have permission to use the child data and the parent data.
- ▶ You must have Full Control permission to the data groups that contain the parent and child data.

For example, if you add a new digital slide, you must have Full Control permission to the data group containing the image associated with that digital slide. If you receive an error message indicating you are not authorized to edit current parent data, contact your Aperio eSlide Manager administrator. You can add data to the tables in any order.

After a slide is scanned on an Aperio scanner, the resulting digital slide and associated image data are automatically added to the digital slide data table. If there is a barcode on the glass slide, it can populate the barcode field with the barcode

string; otherwise, the information fields in the digital slide data table are empty until you enter data. The digital slide can be associated with a specimen and case, project, or course.

You can also add slide images created by other scanners to Aperio eSlide Manager.

If you do not need to associate digital slides with specimens and cases or projects, you can work within just the digital slide table in Aperio eSlide Manager to organize your data.

User Roles

A user role defines a type of user based on the data table fields the user needs to access, and the Aperio eSlide Manager functions the user needs to use. Here are some sample user roles:

- ▶ **Lab Supervisor** – Works in the clinical data hierarchy and needs some administrative privileges to add or delete stains or body sites, and set up slide-specific processing. This user creates algorithm macros and analyzes digital slides.
- ▶ **Pathologist** – Works in the clinical data hierarchy and needs access to cases, needs to run image analysis and generate reports, but does not need to change patient data.
- ▶ **Researcher** – Works in the research data hierarchy and needs access to all projects, specimens, and digital slides, but does not scan slides or use administrative privileges.
- ▶ **Technician** – Works in the clinical data hierarchy and needs to scan slides and enter patient data, but does not create algorithm macros.

If you have questions about your user roles, or about which user role to use, contact your Aperio eSlide Manager administrator. The administrator creates the user roles that define what Aperio eSlide Manager commands and data users can access.

Data Groups

Data groups classify similar data into categories so that users can be given access to a particular category of data. A data group can categorize data by a specific pathologist, sample type, project, department, or whatever grouping makes sense for your workflow. When you create data, such as a new case, you can select the data group to which the new item belongs.

Data groups work with user roles to define the data a user can access. If a user doesn't have Full Control or Read Only access to a data group, the data in that group does not appear on that user's Aperio eSlide Manager page.

Two operators who log in with the same user role may not see and use the same data if they don't have access to the same data groups. If your Aperio eSlide Manager installation does not use data groups, all data is automatically assigned to the Default data group.

If you have questions about what data groups are available or which data groups you should use, contact your Aperio eSlide Manager administrator. The administrator creates the data groups and assigns access privileges.

Types of Aperio eSlide Manager Data Pages

There are two types of data pages in Aperio eSlide Manager:

- ▶ **List Page** – This page shows a summary of related data. For example, on the Case list page, you see the cases listed. To see more data about a specific case, you need to open the case to see its details page.

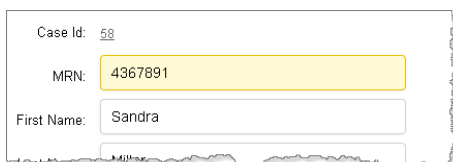
- ▶ **Details Page** – This page shows details about the selected item. For example, for a case, the details page might show the patient data, the specimens, reports, and digital slides associated with the case.

The following sections discuss how to use list and details pages.

Entering Data in Aperio eSlide Manager

Here are a few tips about using the list and details pages.

- ▶ All data fields accept alphanumeric input with the exception of date fields, which require a specific format of yyyy-mm-dd (year-month-day), for example: 2021-08-12.
- ▶ Once you have changed a field on an Aperio eSlide Manager details page, the background of the field turns yellow, indicating you have made a change but have not yet saved it:



Click the **Save** button that appears in the lower-right corner of the Aperio eSlide Manager page to save your change. If you attempt to leave a page before saving a change, Aperio eSlide Manager displays a message reminding you to save.

Using Barcodes

Aperio eSlide Manager includes support for automating data entry and building data hierarchies using barcodes that are interpreted when the glass slide containing a label with such a barcode is scanned by the Aperio scanner.

Aperio eSlide Manager can decode barcodes and:

- ▶ Place the barcode value into the Aperio eSlide Manager barcode field.
- ▶ Configure and parse the data from the barcode to the specified data table fields.
- ▶ Build the appropriate data hierarchy for that data.

For information on enabling this feature, contact Leica Biosystems Technical Services.

LIS Data Interchange

Aperio eSlide Manager includes support for automating data entry by getting data from an LIS (Laboratory Information System) or sending data to it. For more information, contact Leica Biosystems Technical Services.

Entering Comments

Many Aperio eSlide Manager pages contain Comments fields. If your Aperio eSlide Manager administrator set up predefined comments, then the Comments field includes a drop-down list from which you can select a comment. You can modify predefined comments or enter your own comments.

Entering a Reason for Change

If your Aperio eSlide Manager location uses the optional Aperio eSlide Manager Compliance module to audit data changes, you may be asked to enter a reason when you make a change on a details page. Select a reason for the change from the drop-down list (optionally including a comment), and click **Submit**.

For information on setting up and configuring the Compliance module, refer to the *Aperio eSlide Manager Administrator's Guide*.

Entering an Electronic Signature

If your Aperio eSlide Manager location uses the optional Aperio eSlide Manager Compliance module to audit data changes and electronic signatures are enabled, and you are not logged in as an administrator, you are asked to enter an electronic signature when you change the status of a case or project on a Case or Project Details page.

Type your Aperio eSlide Manager user name and password into the boxes and click **Sign**.

Choosing from a Predefined List

If a data field contains a drop-down list of choices, you must select one for that field. The Aperio eSlide Manager administrator decides whether a field will have a predefined list of choices. (The Aperio eSlide Manager administrator decides whether “blank” is one of the predefined choices.)

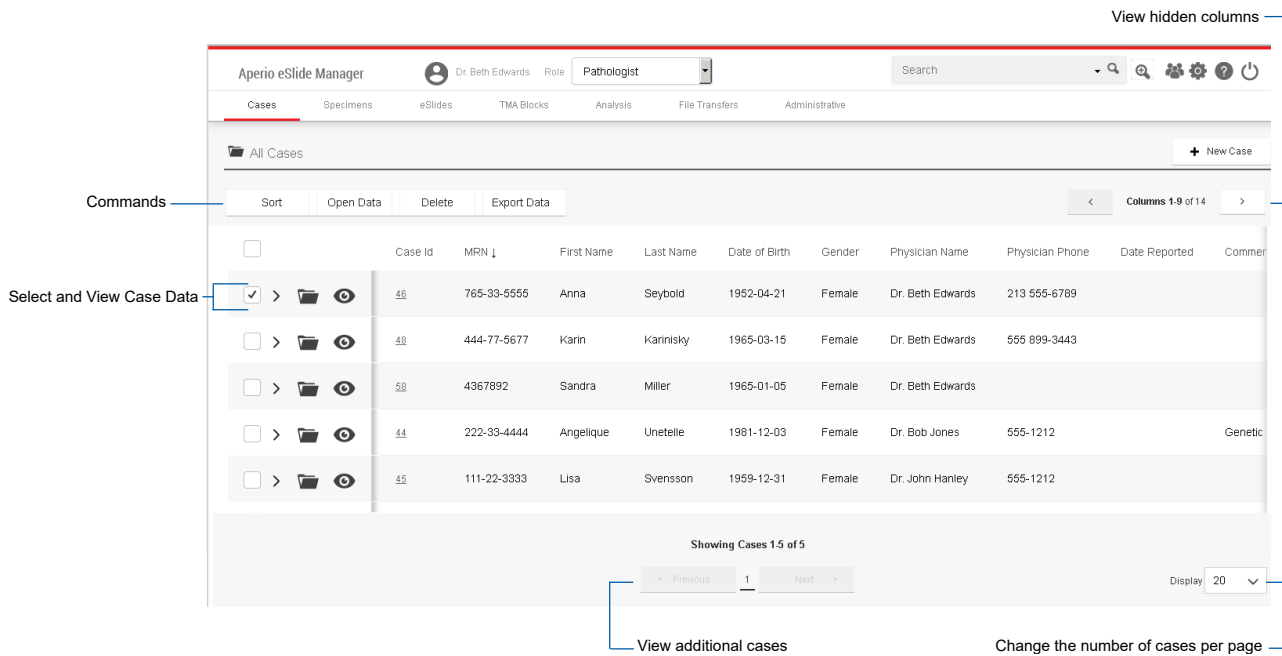
Using the TAG Column to Identify Specific Data

The TAG column on Aperio eSlide Manager list pages allows you to associate a text tag with items on the list page. You can then sort those items by the tag on the list page, or use Advanced Search to search for tagged items. By default, the TAG column is not visible. If you want to make the TAG column available, contact your Aperio eSlide Manager administrator.

Working with List Pages












List pages exist for Aperio eSlide Manager data tables, such as projects, specimens, cases, lessons, and digital slides. To get to a list page, click a data icon on the main Aperio eSlide Manager page or select a command from the menu bar at the top of the Aperio eSlide Manager page.

Here is a sample list page for Cases:



Viewing Data from List Pages

Use the following navigation tools to view data from Aperio eSlide Manager list pages.

| Use This Tool: | To Do This: |
|---|---|
|     | <p>These tools appear in the left pane of the list pages. The specific tools available in the left pane depend on the type of list page you are viewing.</p> |
|  | <p>Select one or more rows of data (cases, digital slides, etc.) to which you can apply a list page command.</p> |
|  | <p>Click to expand a set of preview fields specific to the type of data you are viewing. Click  to collapse the fields.</p> |
|  | <p>Click to open the detail page for the item, and to access lower-level detail items (for example, specimens and digital slides). For more information, see <i>“Working with Detail Pages” on page 30.</i></p> |
|  | <p>On Case, Project, or Course list pages, click to open all associated digital slide images in the Aperio WebViewer. For more information, see the <i>Aperio WebViewer User’s Guide.</i></p> |
|  Columns 1-10 of 21  | <p>When viewing columns in a list page, click the right and left arrows to page to the right or left.</p> |
| <p>List Page Commands (Sort, View Images, Open Data, etc.)</p> | <p>Commands at the top of the list apply to all items selected in that list. See <i>“List Page Commands” on page 26.</i></p> |

Here are some further tips on working with the Aperio eSlide Manager list page.

- ▶ You can search for specific data, such as cases or digital slides, by using the Search box at the top of the page. See *“Chapter 9: Searching Aperio eSlide Manager Data” on page 46* for details.
- ▶ You can access all data tables (Case, Specimen, eSlide, etc.) from the main menu bar or from the main page.
- ▶ When you use the Open Data command, you have the option of automatically opening any associated images in a separate viewer. To change this behavior, see *“Disabling Automatic Image Viewing” on page 39*.
- ▶ Clicking any header in a column in a data table sorts the list based upon that column title.
- ▶ When you open parent data, any associated child data is also available to view. For example, if you open a case that has a specimen and digital slides associated with it, you can view the associated specimens and digital slides.
- ▶ To bulk-edit information on multiple items, select the box to the left of each item and click **Open Data** at the top of the list. This displays a details page. Any data entered at this time applies to all of the items selected.
- ▶ You can export data from any table to an Excel file by clicking **Export Data** at the top of the table. The export file contains the data from that page for that data table level only. See *“Exporting Data” on page 29*.
- ▶ There are two ways of viewing Aperio eSlide Manager data—as *lists* or *folders*. The default view is list view. See the next sections for details.

List View

To use list view, click the data table (Cases, Specimens, eSlides, etc.) in the menu bar and then click the **(As List)** option or click the appropriate data icon on the main Aperio eSlide Manager page.

| | Label | Image | Barcode ID ↓ | Stain | Status | Comment |
|---------------------------------------|-------|-------|---|-------|-----------------|-----------------|
| <input checked="" type="checkbox"/> > | | | Lisa Svensson, 12/31/1959, S08-03005, A, HER... | HER2 | 100% 1+ | 10% |
| <input type="checkbox"/> > | | | Lisa Svensson, 12/31/1959, S08-03005, A, HER... | HER2 | 100% 1+ | 10% |
| <input type="checkbox"/> > | | | Lisa Svensson, 12/31/1959, S08-03005, A, H&E... | H&E | See Microscopic | See Microscopic |
| <input type="checkbox"/> > | | | Lisa Svensson, 12/31/1959, S08-03005, A, H&E... | H&E | See Microscopic | See Microscopic |
| <input type="checkbox"/> > | | | Lisa Svensson, 12/31/1959, S08-03005, A, ER... | ER | 100% 3+ | 1% |

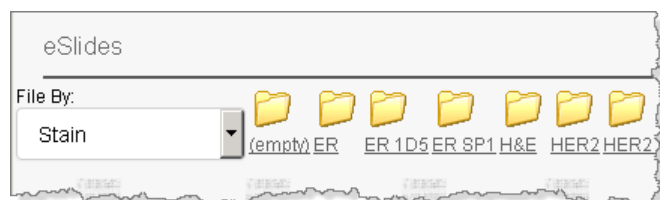
Folder View

To use folder view, go to a data table in the menu bar and click the **(As Folders)** option.



Folder view is a virtual grouping of your data. Using folder view does not create disk folders or move your data into folders.

The folder view displays, with data organized by data group.

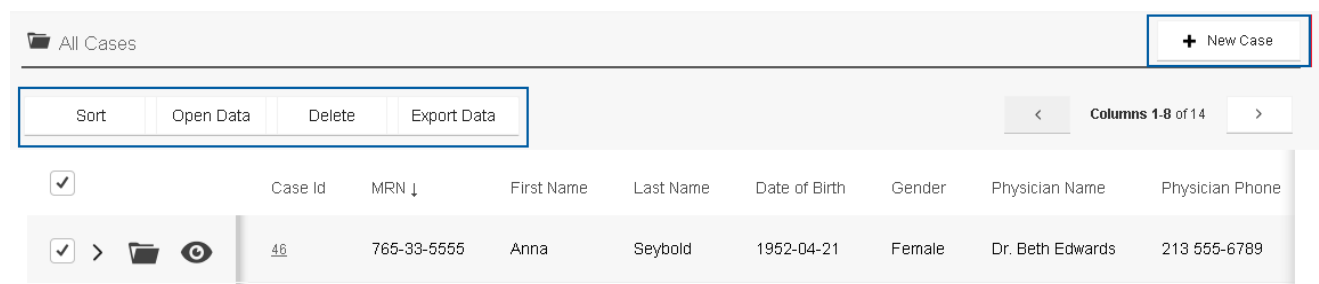


Click on a virtual folder to see the data it contains.

You can continue refining the folder view by selecting additional criteria.

List Page Commands

The commands at the top of the data list become active when one or more data items are selected. Selecting the check box in the upper left corner of the list selects all items in the list. There is also a New button in the upper right corner that is specific to the list page.



The commands you see at the top of the list page depend on the data table you are viewing and on the command permissions allowed by your user role. For example, if your active user role does not allow copying images, the Move or Copy commands do not appear at the top of the digital slide list. Contact your Aperio eSlide Manager administrator with any questions about your permissions.

To sort the page by a particular column entry, click the column title. To sort it in the opposite direction, click the column title again. (The arrow next to the column title changes direction depending on the order in which it is sorted.)

The commands available are:

- ▶ **New** (New Case, New Specimen, etc.) – Located in the upper right of the page, this command enables you to create one or more new items. You can enter the number of items to add, which allows you to bulk-create multiple

items that share information. Then each item can be opened individually to add the unique information. For more information on adding new items, see *“Chapter 5: Adding Data to Aperio eSlide Manager” on page 32.*

- ▶ **Sort** – Performs a multi-column sort. See *“Multi-Level Sort on a List Page” on page 28.*
- ▶ **Open Data** – Opens the details page that contains information about the item, including information on associated specimens and digital slides. For information on using the details page, see *“Working with Detail Pages” on page 30.*

To change the same details on multiple items, select those items and click **Open Data**. The details page that appears applies to all selected items. If you select only one item, the changes you make apply to that item only.

- ▶ **Delete** – Deletes the selected items. If used on the list page for parent data (for example, cases or projects), this also deletes related specimens and digital slides.



Notes about deleting data:

- ▶ *If you are trying to delete a large number of digital slides at one time and you receive an error, try selecting 50 or fewer digital slides to delete.*
 - ▶ *If you are deleting a case or project and you do not want to delete the associated digital slides and specimens, you must first disassociate them from the case or project. See *“Unassigning Digital Slides and Specimens from Parent Data” on page 28.**
-

- ▶ **Export Data** – See *“Exporting Data” on page 29* for information.
- ▶ **View Audits** – If your Aperio eSlide Manager location uses the optional Aperio eSlide Manager Compliance module, and if your user role permits viewing data audits, the View Audits command also displays on the list page. See the *Aperio eSlide Manager Administrator’s Guide* for information on data audit reports.

If you are using a list page for items that have images associated with them, you may also see additional commands:

- ▶ **View Images** – View all selected images in Aperio ImageScope. See *“Chapter 6: Viewing Digital Slide Images” on page 37* for details.
 - ▶ **Analyze** – You can analyze the selected digital slides using Leica Biosystems image analysis algorithms. For details, see *“Chapter 10: Analyzing Images” on page 52.*
 - ▶ **Move, Copy, Clone To** – See *“Chapter 8: Moving, Copying, and Cloning Data” on page 43.*
 - ▶ **Annotations** – Importing and deleting annotation layers are functions used with digital slides primarily when setting up validation studies, in which you want each digital slide to have the same annotations.
 - ▶ **Assign To** – You can assign an item to parent data, such as assigning a digital slide to a case or specimen. Click **Assign To** and choose the applicable parent data to add the item to.
-





When associating child and parent data groups, you must have Full Control permission to all data groups that belong to child data (such as Specimens or eSlides) that you are associating to parent data (such as Cases or Projects).

You then see a list page showing all parent data the item can be assigned to. Optionally use the Filter settings to fine-tune the list. Click **Select** next to the parent data you want to assign the item to.

Unassigning Digital Slides and Specimens from Parent Data

Deleting a case, project, or course deletes any digital slides and specimens associated with that item. If you want to retain those items, you must unassign them from the parent data before deleting the case, project, or course.

To unassign a digital slide or specimen:

1. From the case, project, or course list page, select the item that contains the digital slide or specimen that you want to unassign.
2. Click  to display the detail page for the case, project, or course.
3. In the Specimens Details section of the details page, click  to view specimens and digital slides.
4. Select the box next to the items you want to unassign, and click the **Unassign** command at the top of the list.

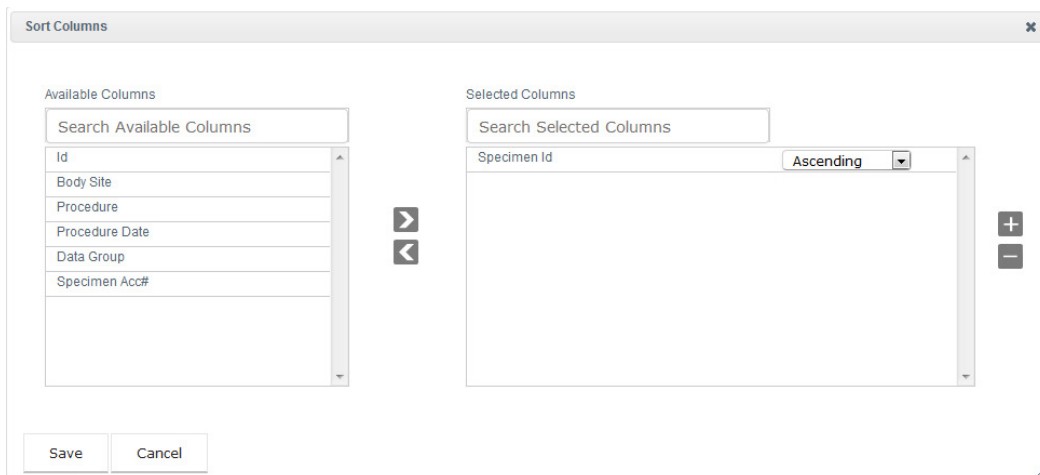
Now you can delete the case, project, or course without deleting the specimens or digital slides associated with it.

Multi-Level Sort on a List Page



The multi-level sort allows you to quickly arrange data on a list page. You can sort on multiple columns—for example, sort a list of specimens by body site, and then within the results of that sort, sort on specimen procedure.

To use the multi-level sort:

1. Go to an Aperio eSlide Manager list page (such as the Specimens page, the eSlides page, or so on).
2. Click the **Sort** command that displays at the top of the data list.
3. A Sort Columns window appears, as shown in the following example:



The column titles you see depend on the configuration of your Aperio eSlide Manager location and the current list page.

4. To sort the columns:
 - a. From the **Available Column** list, select one or more columns to add to your sort, and click  to move them to the **Selected Columns** list. (You can also drag the columns from one list to another.) To remove a column from the **Selected Columns** list, use the  button or drag it to the left-hand pane.

You can select only one of these columns: Body Site, Data Group, Customer Name, and Genie Project Name.

- b. For each column you add to the **Selected Columns** list, select **Ascending** or **Descending** to determine the sort order.
 - c. The columns are sorted in the order they appear in the Selected Columns list. To change the order, select a column and use the **+** and **-** to move it up or down the list.
 - d. To search for a specific column title, start typing in the **Search Available Columns** or **Search Selected Columns** boxes. As you type, the list of columns is filtered based on the characters you enter.
5. When you are finished sorting columns, click **Save** to save your settings.

Sorting Tips

- ▶ Sort settings are saved per user for a single list page.
- ▶ If you click on a single column title on the list page, the sort occurs only on that column's contents. A message appears letting you know that you are modifying saved multi-level sort selections to use only the selected column.
- ▶ Results from the Advanced Search appear using the sort settings for the applicable list pages.

Exporting Data

Aperio eSlide Manager enables you to export data into an Excel-compatible CSV (Comma Separated Value) or tab-delimited file.

If Microsoft Excel is installed on your workstation, you can open the exported data directly in Excel. If you don't have Excel on your workstation, you can save the file in a text editor, such as Notepad, or move it to another workstation that has Excel installed.

To export Aperio eSlide Manager data:

1. Select one or more items on an Aperio eSlide Manager list page, and click **Export Data**.

Slide Analysis Export Options

Do not include analysis data
 Include only the analysis data from the most recent annotation layer
 Include all analysis data

Include data by region
 Include plot data

Display Options

Orientation:
 Display Fields Horizontally
 Display Fields Vertically

Delimiter:
 Comma Delimiter
 Tab Delimiter

Fields:
 Display Empty Fields

Fields to be Exported

| | | |
|--|--|---|
| <input type="checkbox"/> Check All Case Fields | <input type="checkbox"/> Check All Specimen Fields | <input type="checkbox"/> Check All Slide Fields |
| <input type="checkbox"/> Case: Id | <input type="checkbox"/> Specimen: Id | <input type="checkbox"/> Slide: Id |
| <input type="checkbox"/> Case: MRN | <input type="checkbox"/> Specimen: Specimen Acc# | <input type="checkbox"/> Slide: Barcode ID |

The options available depend on the type of data you are exporting.

2. Choose the options you want to use:
 - ▶ **Slide Analysis Export Options** – If you are exporting digital slide data, these options determine whether image analysis results are included in the export. If the analysis algorithm you used supports result plots, you can select **Include plot data** to see that data in your export. If you want to export image analysis data by region as well as by layers, select **Include data by region**.
 - ▶ **Orientation** – These options determine the layout of the exported file. On Aperio eSlide Manager list pages, the columns identify the type of data (for example, Status or Image ID), while the rows contain the data fields for an item (for example, a digital slide). Use these options to arrange the exported data fields in rows (horizontally) or columns (vertically). (Note that Microsoft Excel has limits on the number of columns and rows it accepts.)
 - ▶ **Delimiter** – Determines whether the data in the export file is separated by commas or tabs. This depends on the application you are using to format the data.
 - ▶ **Fields** – Select whether you want empty fields to be exported.
 - ▶ **Fields to be Exported** – Select the data fields you want to export.
3. Click **Export**. Aperio eSlide Manager creates a comma-separated or tabs-separated file containing the exported data. You can open the file in Microsoft Excel or save it to your disk.


The first time you export a CSV file, your browser may ask you to select the program (such as Excel) used to open the CSV file.



Working with Detail Pages

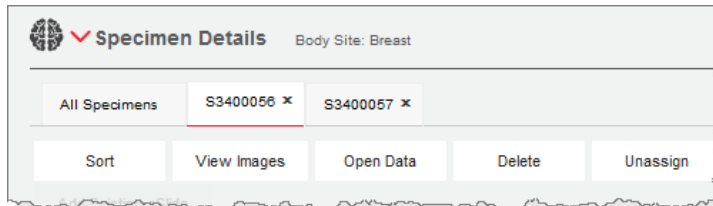
When you open an item on a list page, a details page appears that contains information on all data associated with that item. For example, the following Case Details page includes information on the case, and all associated specimens and digital slides:

The screenshot shows the 'Case Details' page for a specific case. At the top, there are navigation options: 'Show / hide details' and 'View other cases'. Below this is a header with 'Case Details' and 'Open Aperio WebViewer'. The main content area is divided into several sections:




- Case details:** Contains fields for Case ACQR, Last Name (Cheong), MRN (SC77001), First Name (Shin), Date of Birth (1971-10-23), Gender (Female), Hospital (General Hospital), and Physician Name (Dr. Cheon Kim). It also includes fields for Physician Phone, Clinical Impression, Final Diagnosis, Patient Summary, and Comment.
- Attachments and reports:** Shows 'Case Attachments (0)' and 'Case Reports (0)'. There is also a 'Last Change on 2014-02-07' and 'Reason for Change' field.
- Specimen Details:** Shows a list of specimens, with 'All Specimens' and '908-02014' visible.
- eSlide Details:** Shows a list of digital slides, with 'All eSlides' visible.

The details appear on the page in hierarchical order. In the previous example, after clicking  from the Cases list page, the case details appear, as shown above. You can view further details as follows:

- ▶ To view details for associated specimens and digital slides, scroll down the page. To view specimen details, click the corresponding icon .
- ▶ To view eSlide details, scroll down further and click the corresponding icon .
- ▶ If you open multiple items, they appear in tabs, as shown below.



From a details page, you can do the following. The examples and instructions below are using the Case Details page.

| To do this: | Do this: |
|--|---|
| Access or hide details for parent and child data | Click the icon corresponding to the detail information you want to view. In the previous example, you can show or hide details for the case  , specimen  , or digital slide  . |
| Add, sort, delete, or view attachments | Click Case Attachments to view the attachment options. See <i>“Adding Attachments to Details Pages” on page 31.</i> |
| View reports | Click Case Reports . For information on the Aperio eSlide Manager Reporting feature, see <i>“Chapter 12: Reporting” on page 82.</i> See the next chapter for examples of using details pages to create a complete set of related data. |

Adding Attachments to Details Pages

You can attach documents, such as study protocol spreadsheet and biopsy reports, to cases.

1. To add a document to a case (project, course or lesson), specimen, or digital slide, open the item of interest. List cases (projects, courses or lessons) or specimens, select the item of interest and click **Open Data** at the top of the list.
2. In the Details page, click Add Attachments section and click **Add Attachment**.
3. Click **Browse** to navigate to the document.
You can enter a document description.
4. Click **Upload** to add the attachment.

5

Adding Data to Aperio eSlide Manager

This chapter discusses several ways to add data to Aperio eSlide Manager.



If you are using the Network case workflows to add data to Aperio eSlide Manager, see “Case Assembly” on page 64 for more information.

The examples in this chapter use cases. Many of these procedures also apply to projects, courses, lessons, digital slides, or specimens.

One of the strengths of Aperio eSlide Manager is its flexibility. You can arrange your data in any way that suits your organization. Some researchers prefer not to set up projects and specimens, but only use the digital slide list. Other users wish to set up a case for each patient with all documents, digital slides, and specimens associated with that case.

Adding Cases

Be sure that permissions are set correctly. For more information, see “Data Relationships” on page 20.

1. From any Aperio eSlide Manager page, go to the **Cases** menu and click **Add Cases**.
2. On the **Add New Cases** page, enter the number of cases to be added in the **Case(s)** box.

The screenshot shows a form titled "Add New Cases". At the top left, there is a radio button labeled "Add" which is selected, followed by a text input field containing the number "1" and the label "Case(s):". Below this, there are three text input fields labeled "MRN:", "First Name:", and "Last Name:".



3. Enter the appropriate information in the text boxes.
If more than one case is added, the data entered in the fields below will apply to each case created.
4. Select the appropriate **Data Group** to assign the case to.
5. Click **Add** to add the case(s) or **Cancel** to exit.



If you are creating many new cases that have similar information (for example, they all have the same physician), you can create all the cases at one time. Enter the data the cases have in common, and then return to each case individually to enter the data that is different.

If your Aperio eSlide Manager location is set up to create cases automatically when a slide is scanned, and then to fill in the case with data from the slide barcode, you can skip this step.

Working with Cases

| If you want to.. | Do this... |
|---|--|
| Create a specimen and add it to a case. | <ol style="list-style-type: none"> 1. Under the Cases menu, click All Cases (As List) to go to the Cases list page. You can also search for a case by using the Search box at the top of the page and entering a unique identifier to locate the case (see “Chapter 9: Searching Aperio eSlide Manager Data” on page 46). 2. In the Cases list, click  or select the check box next to the case and click Open Data at the top of the case list. 3. At the top of the Case Details page, click Add New Specimen. 4. On the Add New Specimens page, enter the number of specimens to be added in the Add Specimen(s) box. Enter the appropriate specimen information. If more than one specimen is added, the data entered in the fields will apply to each specimen created. 5. Click Add to save the information and exit. |
| Add an existing specimen to a case. | <ol style="list-style-type: none"> 1. Under the Cases menu, click All Cases (As List) to go to the Cases list page. You can also search for a case by using the Search box at the top of the page and entering a unique identifier to locate the case (see “Chapter 9: Searching Aperio eSlide Manager Data” on page 46). 2. In the Cases list, click  or select the check box next to the case and click Open Data at the top of the case list. 3. At the top of the Case Details page, click Add Existing Specimen. Only unassigned specimens are listed. You can use the filter options to fine-tune the list of specimens shown to find the one you want. 4. Select the check box next to the appropriate specimen in the Unassigned Specimens list and click Assign. |

Adding Specimens



Be sure that permissions are set correctly. For more information, see *"Data Relationships"* on page 20.

1. From any Aperio eSlide Manager page, go to the **Specimens** menu and click **Add Specimens**.
2. On the **Add New Specimens** page, enter the number of specimens to be added in the **Add** box.
3. Enter the appropriate information in the text boxes that appear in the Add New Specimens window.

If more than one specimen is added, the data entered in the fields below will apply to each specimen created.

4. At the bottom of the page, type the name of the **Data Group** to which you want to assign the specimen.
5. Click **Add** to add the specimen(s) or **Cancel** to exit.

Working with Specimens

| If you want to.. | Do this... |
|--|--|
| Access the Specimen Details area. | <p>Do one of the following:</p> <ul style="list-style-type: none"> • Go to the Specimens menu, and view the specimens by list or folder. Click  or select the box to the left of the specimen and click Open Data. <p>Or:</p> <ul style="list-style-type: none"> • In the Specimens Details area of the Case Details page, click  or select the box to the left of the specimen and click Open Data. |
| Add an image to a gross specimen. | <ol style="list-style-type: none"> 1. From the Specimen Details section, click Add Gross Image. 2. Select Reference an Image or Upload Images to add an image to the specimen. (Your Aperio eSlide Manager configuration may not display Reference an image. Contact your Aperio eSlide Manager administrator for information.) <ul style="list-style-type: none"> • Reference an image – click Browse to select an image file from a location accessible to the Aperio eSlide Manager server, and click Add. The images can be any size. • Upload an image – click Select Images to browse to an image on your workstation, and click Open. The image cannot be larger than 2GB. |
| Create a digital slide and add it to a specimen. | <ol style="list-style-type: none"> 1. From the Specimen Details section, click Add New eSlide. 2. On the Add New eSlides page, enter the number of digital slides to be added. 3. Enter the appropriate digital slide information. If multiple digital slides are created, the information entered applies to all of them. 4. Click Add. <p>For information on adding scanned images to digital slides, see <i>"Adding an Image to a Digital Slide"</i> on page 35.</p> |

| If you want to.. | Do this... |
|--|--|
| Add an existing digital slide to a specimen. | <p>You can add a digital slide to a specimen, even if the specimen is not part of a case.</p> <ol style="list-style-type: none"> 1. From the Specimen Details section, click Add Existing eSlide. A list of unassigned digital slides appears. 2. Select the box to the left of each digital slide you want to add to the specimen and click Assign. |

Adding Digital Slides



Notes about digital slide images:

- **Scanned slides** – When you use an Aperio scanner to scan a glass slide, a digital slide is automatically created and sent to your Aperio eSlide Manager installation where it appears in the digital slide list page.
- **Composite digital slides** – Composite digital slides (images that consist of more than one file) such as ACI, or composite Mirax digital slides cannot be added directly to Aperio eSlide Manager through Aperio eSlide Manager commands. Instead, use the Universal Image Importer to add them to Aperio eSlide Manager. For assistance with the Universal Image Importer, contact [Technical Support](#).

Be sure that permissions are set correctly. For more information, see “Data Relationships” on page 20.

1. From any Aperio eSlide Manager page, go to the **eSlides** menu and click **Add eSlide**.
2. On the **Add New eSlides** page, enter the number of digital slides to be added in the **Add** box.
3. Enter the appropriate information in the text boxes. If more than one digital slide is added, the data entered in the fields below will apply to each digital slide created.
4. At the bottom of the page, type the name of the **Data Group** to which you want to assign the digital slide.
5. Click **Add** to add the digital slide(s) or **Cancel** to exit.

Adding an Image to a Digital Slide

You can add an image to a digital slide by going to the eSlide Details section of several different detail pages, such as a Case Details, eSlide Details, or Specimen Details page.

1. In the eSlide Details section of a details page, go to the eSlide Images section and click **Add Image**.
2. Select **Reference an Image** or **Upload an Image**. (Your Aperio eSlide Manager configuration may not display **Reference an image**. Contact your Aperio eSlide Manager administrator for information.)



Most virtual slide images are too large to upload. If the file is too large to upload, Aperio eSlide Manager times out before the image is loaded. We recommend using Reference an Image. When you reference an image, Aperio eSlide Manager points to and remembers the image location.

- ▶ Selecting **Reference an Image** allows you to browse to an image that is accessible to the server. Select the image file and click **Add** to reference this image. These images may be any size.
- ▶ Selecting **Upload an Image** allows you to browse to an image on your workstation that can be uploaded to the data table. Select the image file and click **Open** to upload the image. The size limit is 2GB.

Third-Party Images

Note the following when adding third-party images to digital slides:

- ▶ **Referencing and Uploading Images:** When adding an image to a digital slide, you can use Reference an Image to link to a Hamamatsu NanoZoomer or Zeiss Mirax image that is on the server, but Zeiss Mirax image files cannot be uploaded from your workstation or local network.
- ▶ **Maximum Dimensions:** Note that third-party image dimensions must be 8533 pixels wide by 6400 pixels high or less to ensure the image's associated thumbnail appears in your viewing software. If your third-party image exceeds this size, the primary image displays correctly; however, the thumbnail area contains "NA" instead of a scaled view of the primary image.

Creating Digital Slides from Images in a Server Folder or SubFolder

1. Go to the eSlides menu, and select **Add eSlides**.
2. In the Add New eSlides page, select **Add eSlides with images in server folder and subfolders**.
3. Click **Browse** to select a folder that contains the digital slide image files.
4. Click **Add** to create digital slides for all of the images in that folder or **Cancel** to exit.

If you select a folder that contains digital slide image files that are already assigned to other digital slides, a page appears letting you know which images are already used.

To use assigned images (that is, to unassign them from other digital slides and assign them to your new digital slides), select the check boxes for the images you want to use and click **Reassign Checked Boxes**. Or, click **Cancel** to continue without reassigning the images.

6

Viewing Digital Slide Images

This chapter provides instructions for opening digital slides and setting a default viewer.

Digital Slide Viewers



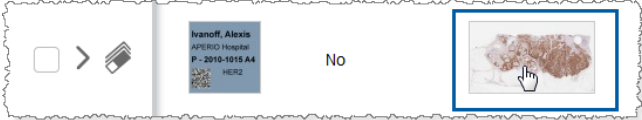
You can open digital slides from Aperio eSlide Manager using the following digital slide viewers:

- ▶ **Aperio WebViewer** – for more details, see the *Aperio WebViewer User's Guide*.
- ▶ **Aperio ImageScope** – for more details, see the *Aperio ImageScope User's Guide*. (To use Aperio ImageScope, it must be installed on your workstation.)

Your system administrator sets which digital slide viewer Aperio eSlide Manager uses by default to open digital slides.

Opening Digital Slide Images in Aperio WebViewer

You can open one or more specific digital slide images, or all of the digital slide images for a case or project.

| To open: | Do this: |
|--|--|
| All digital slides in a case, project, or lesson | <p>From a Case, Project, or Lesson list page – click the  that appears in the left column of the case or project to open all associated digital slide images.</p>  <p>From the Case, Project, or Lesson eSlide detail page – Click the thumbnail image of the digital slide. (Press and hold the W key if Aperio WebViewer is not set as the default viewer in Aperio eSlide Manager.)</p>  |

| To open: | Do this: |
|----------|----------|
|----------|----------|

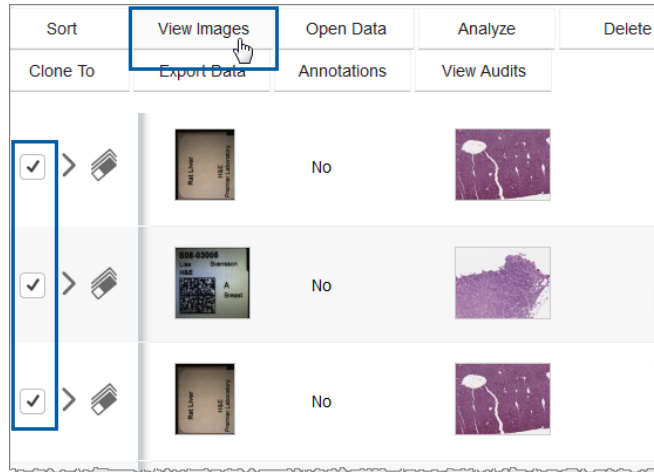
One or more digital slides from the eSlide List page

To open one digital slide:

- Press and hold the **W** key and click the thumbnail image of the digital slide (shown above).

To open multiple digital slides:

1. Select the check box next to each digital slide image you want to open.



2. Press and hold the **W** key and click **View Images**.

The Aperio WebViewer opens in a separate browser tab, with the selected digital slide images loaded in the slide tray. For details on using the Aperio WebViewer, see the *Aperio WebViewer User's Guide*.

Opening Digital Slides in Aperio ImageScope

If Aperio ImageScope is set as the default viewer, you do not need to press the **I** key in the instructions below.

| To open: | Do this: |
|-------------------------------|--|
| One digital slide image | From the digital slide list page, press and hold the I key and click the thumbnail image of the digital slide. |
| Multiple digital slide images | From the digital slide list page, select the check box next to each digital slide image you want to open. Press and hold the I key and click View Images . |

See the previous section for screen examples of opening slides from Aperio eSlide Manager.

For details on installing and using Aperio ImageScope, see the *Aperio ImageScope User's Guide* and the *Aperio Image Analysis User's Guide*.

Automatic Image Viewing

When you click on an thumbnail image or select an image and click **View Images** in Aperio eSlide Manager, your viewer opens and displays the image.

When you click on the item's icon or select the item and click **Open Data**, you see the details page for that item and the image associated with that item opens in your viewer.

This ensures that the proper Aperio eSlide Manager data entry screen is open for the correct corresponding image. In the case of digital slides, the operator must confirm that the digital slide labels match the digital slide data for further quality assurance. If you do not want to automatically open the image, see the next section.

Disabling Automatic Image Viewing

To disable a data item's image from opening in a viewer when you open the details page for the item:

1. Go to the **Administrative** menu on the menu bar at the top of the Aperio eSlide Manager page and click **My Settings**.
2. On the User Details page, clear the **Enable Auto-View Images** check box.

Clearing this check box prevents a viewer from opening and displaying the image when you open a details page for an item.


7

Conferencing

Conferencing enables colleagues working on the same Aperio eSlide Manager site to share a digital slide. This chapter describes how to host and participate in a conference. You use Aperio WebViewer to initiate the conference and navigate the digital slides. See the *Aperio WebViewer User's Guide* for details on using Aperio WebViewer.

Before Starting the Conference

Follow the steps below to prepare for the conference.

-
- | | |
|----------------------------------|---|
| If You are Hosting a Conference: | <ul style="list-style-type: none">▶ Use the Aperio WebViewer to open the digital slide or set of digital slides you want to share.▶ If you plan to use annotations to identify areas of interest on the digital slide, add the annotations before starting the conference. Annotations cannot be added to a digital slide during a conference. |
|----------------------------------|---|
-
- | | |
|------------------------------------|--|
| If You are Attending a Conference: | <p>You join a conference by accepting an invitation. To receive a conference invitation, you must:</p> <ul style="list-style-type: none">▶ Log into Aperio eSlide Manager.▶ Click  on the toolbar, and set your conference availability to Available. |
|------------------------------------|--|
-

Starting a Conference


The Aperio eSlide Manager conferencing feature allows you to host a conference and invite other Aperio eSlide Manager and Aperio eSlide Manager Network Application users. Your user role, as defined by your Aperio eSlide Manager administrator, determines whether you have access to host conferences.

This section describes how to host a conference. For information on participating in a conference, see “*Participating in a Conference*” on page 42.

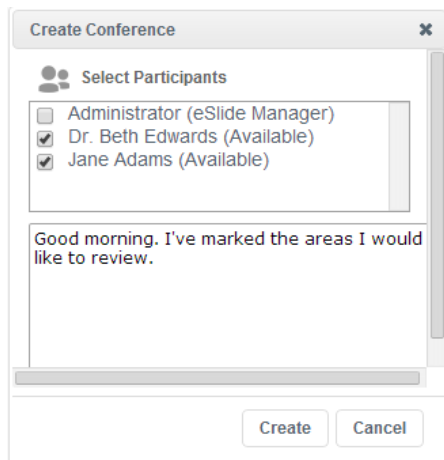
1. Make sure the digital slides you want to share are open in the Aperio WebViewer.




You can only have one image open in the Viewer window during a conference. If multiple images are open when you start a conference, Aperio WebViewer closes the pinned images.

2. Click the **Conference** icon  on the Aperio WebViewer tool bar.

- In the Create Conference window, select the people you want to invite to the conference, type a message to include, and click **Create**.



When you create the conference, the conference pointer appears  on the digital slide, and a Conference Manager window opens showing you as the host.




- Each person selected receives an invitation.

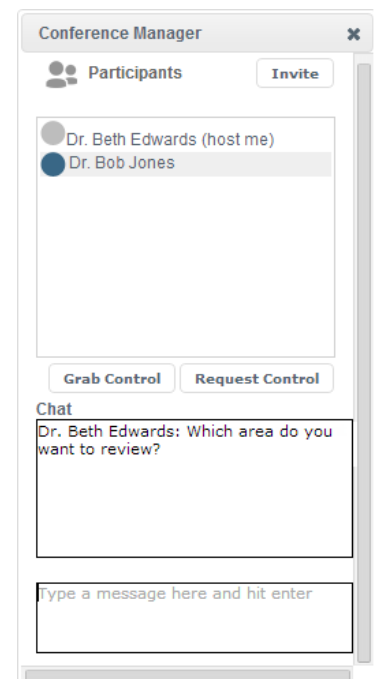
When they accept their invitations and join the conference, their names appear in the Conference Manager window. Attendees view the digital slide in a view-only format.

The Conference Window

The conference leader and participants communicate using the Conference Manager window. In the example to the right, the host has given control to another participant. The window for the participants is slightly different.

The status of participants is indicated by the color of the dot next to their names.

-  Active conference leader.
-  Participant or host.
-  The participant is requesting control of the conference.



Hosting a Conference

As the host, you are the initial conference leader. The following table describes tasks that hosts can do during a conference.

| To do this: | Do this: |
|---|--|
| Show participants areas of the digital slide image. | Use the Aperio WebViewer navigation tools to move around the digital slide image. Conference participants are presented with the same view. |
| Invite more participants. | From the Conference Manager window, click Invite to select from a list of available participants. |
| Give a conference participant control of the digital slide. | <p>When a participant requests control, the dot next to their name turns red. To give control to the participant, click the dot next to the participant's name.</p> <p>When a participant has control:</p> <ul style="list-style-type: none"> • Click Grab Control to regain control of the conference. • Click Request Control to display a "Give Control" link next to your name in the leader's Conference Manager window. The active leader clicks the link to give you control. |
| End the conference | <p>If you are the host and leader, close the Conference Manager window to end the conference.</p> <p>To allow the conference to continue without you, give control to another participant prior to leaving the conference.</p> |

Participating in a Conference

The following table describes what participants can do during a conference.

| To do this: | Do this: |
|--|--|
| Join a conference | <p>Make sure you are logged in to Aperio eSlide Manager.</p> <p>When you receive the conference invitation, click Accept to join the conference. You have the option of including a message to the conference host.</p> |
| Request control of the Aperio WebViewer navigation | From the Conference Manager window, click Request Control to alert the conference leader that you would like to take control of the Aperio WebViewer navigation. |
| Navigate the digital slide | Zoom in and out, and pan around the digital slide. |
| Chat to other participants | Type a message in the Chat box, and press Enter . |
| Leave the conference | Close the Conference Manager window. |

8

Moving, Copying, and Cloning Data

This chapter discusses how to move, copy, and clone Aperio eSlide Manager data.

For information on adding images, see “Chapter 5: Adding Data to Aperio eSlide Manager” on page 32.

Synchronizing Changes to the Aperio eSlide Manager Image Database

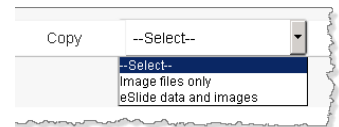
If you use the methods discussed in this chapter to move or copy image files, Aperio eSlide Manager automatically updates its database to reference the new locations. However, if you move image files outside of Aperio eSlide Manager, using standard Windows file operations, Aperio eSlide Manager will not know about the changes—if you do this, ask the Aperio eSlide Manager administrator to contact Leica Biosystems Technical Services for assistance in moving the files into Aperio eSlide Manager.

Moving or Copying an Image File

Moving an image file deletes it from its current location as defined in Aperio eSlide Manager, and moves it to a new location. Copying an image file creates a copy in the new location, and keeps the file in the original location.

To move or copy an image file:

1. Log into Aperio eSlide Manager with a user role that permits moving and copying images. (If your user role does not permit these actions, contact your Aperio eSlide Manager administrator.)
2. Go to an Aperio eSlide Manager page that lists images (for example, the digital slides list), and select the check box next to the images you want to move or copy. To select all images, select the check box at the top of the list.
3. Do one of the following:
 - ▶ Click **Move**. When the Move Images page appears, click **Browse** to select the destination folder for the file.
 - ▶ Click **Copy**. When the drop-down box appears, select whether you want to copy the image file only, or if you want to copy the digital slide (all the data associated with the image).



When the Copy eSlide or Copy Image page appears, click **Browse** to select the destination folder for the image file.

The initial folder displayed is the image root folder, which is read from the ImageServer.ini file. (This setting can be configured by using the Aperio System Information Utility.) If for some reason this setting cannot be found, the initial folder is C:\.

4. Navigate to the folder into which you want to move or copy the image file, and click **Select**. To create a new folder, click the **Create Folder Here** link.

5. When you have selected the folder, click **Copy** or **Move**, depending on whether you are copying or moving the file.

The status page tells you when the copy or move is finished.

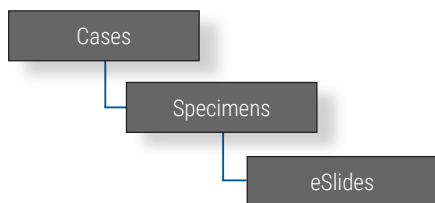


Do not close the Move or Copy Status page or move to another page until you see the completion message. Image files can be large, so the move or copy may take some time.

If you want to continue to use Aperio eSlide Manager during the move or copy, you can log in using another browser tab if multiple logins are permitted.

Cloning Data

It is important to understand how Aperio eSlide Manager structures data in parent/child relationships. Taking a case as an example:



The hierarchy above shows:

- ▶ The top-level data entity is the case.
- ▶ A case generally contains one or more specimens. Specimens are child data to the case, and the case is the parent to the specimen.
- ▶ Specimens generally contain one or more digital slides. The digital slide is the child data to the specimen and the grandchild to the top-level entity, the case.

The Clone To command acts like the Assign To command except that it makes a copy of the child data and assigns the copy to new or existing parent data.

The clone feature allows you to share child data between data hierarchies. For example, the same digital slide can be assigned to a case in the Clinical data hierarchy *and* a project in the Research hierarchy. Or, you can share child data between different data groups within the same data hierarchy.

The cloned child data is treated as a separate entity—for example, annotations made on a digital slide that is part of a project are not visible in the same image that is part of a case. (Some child data such as the actual image file itself, reports, and attachments, are not copied because they can be so large, but this is transparent to the Aperio eSlide Manager user.)

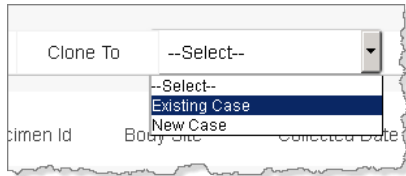
Using the Clone To Command

The Clone To command is available on all list pages that contain the Assign To command.

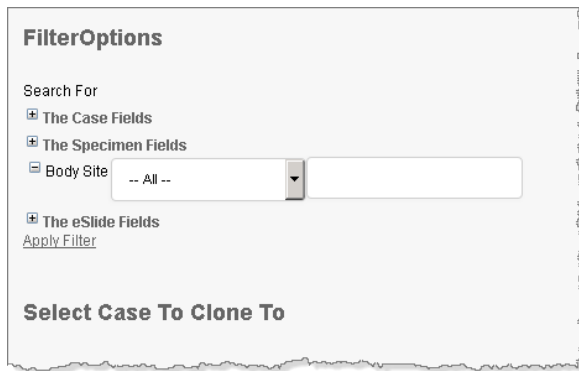
To use the Clone To command:

1. Select one or more items from the list page.
2. Click **Clone To**.
3. From the **Clone To** drop-down list, select what you want to clone the item or items to.

For example, on the Specimens page, you can select whether to clone the digital slide to an existing case or a new case. (If you are logged into another data hierarchy, you can select whether you want to clone the digital slide to a project or lesson.)



4. If you are cloning the digital slide to an existing parent such as a specimen or case, a Filter Options page appears where you can narrow the choices by selecting a data field on which to filter the data. (See the illustration below.)



- a. Click the **+** next to a type of field to display the fields from which you can choose.
- b. Click to select a field in that list, and use the appropriate operator from the operator drop-down list.
- c. Type the characters you want to filter by in the right-hand text box.
- d. After entering your filter data, click **Apply Filter** to see a new list of choices.
- e. Click **Select** next to the item you want to clone the data to.

A message appears letting you know that the data has been cloned to the selected parent.

Preserving the Parent/Child Data Structure

Cloning tries to preserve the child data/parent data structure. For example, a digital slide would typically be child data to a specimen. If you clone the digital slide to a parent higher than the specimen (such as directly to a case), then:

- ▶ If the cloned digital slide belongs to a direct parent, such as a specimen, then that specimen is also cloned to the higher parent.
- ▶ If the cloned digital slide does not belong to a specimen, a blank specimen is created and cloned to the higher parent.

9

Searching Aperio eSlide Manager Data


This chapter describes the features and functionality of searching within Aperio eSlide Manager.

Using the Aperio eSlide Manager search function, you can search the database on the majority of data fields defined within the data tables. Saved searches can assist you in refining your search in order to find or compare cases, specimens or digital slides of interest.

The search box is available at the top of every Aperio eSlide Manager page.




From the Search box, you can:










- ▶ Type the text for which you want to search.
- ▶ Click the drop-down arrow to use a saved search.
- ▶ Click  to use the advanced search or to save search criteria.

Using the Free-Text Search




The advantage of a free-text search is that you can enter any text without specifying the Aperio eSlide Manager data area (for example, Case or Specimen) from which to search. (The Aperio eSlide Manager administrator defines which fields are searchable.)

For example, to search on instances of “HER2,” enter “HER2” in the Search box, and click .

The search results appear in the appropriate context.

| Search Results | | |
|--|---|--|
| HER2 | | Search |
| Case | Specimen | Slide |
|  MRN: 222-33-4444 Case Acc#: 78810002 Last Name: Unetelle CaseID: 44 PatientGender: Female StateID: 2 |  Body Site: Breast SpecimenID: 62 |  Stain: HER2 HercepTest SlideID: 169 |
|  MRN: 111-22-3333 Case Acc#: 9877455 Last Name: Svensson CaseID: 45 PatientGender: Female StateID: 11 |  Body Site: Right Breast SpecimenID: 63 |  Stain: HER2 SlideID: 174 |
|  MRN: 111-22-1000 Case Acc#: 57800577 Last Name: Ivanoff CaseID: 47 PatientAge: 57 PatientGender: Female StateID: 3 |  Body Site: Breast SpecimenID: 25 |  Stain: HER2 SlideID: 200 |

From the Search Results page, you can:

- ▶ Click the corresponding icon to go to the case , specimen , or digital slide  where the search term appears.
- ▶ If you have more than one page of search results, use the **Previous** and **Next** buttons at the bottom of the page to view different pages.
- ▶ Use the **Display** drop-down list at the bottom of the page to set the number of results that appear on each page.
- ▶ Refine your search results by typing new search criteria in the **Search** box, and clicking **Search**.

Free-Text Search Tips

- ▶ Use the wildcard symbol * to find words that partially match the search characters. For example, Gar* matches patient names Garcia and Garman.
- ▶ The results that appear depend on the fields the Aperio eSlide Manager administrator made available for search. Results also depend on the fields you have permission to see based on the current data hierarchy, the permissions assigned to your user role, and any user groups to which you belong.

For additional information on saved searches, see the following sections.


Advanced Search and Saved Searches

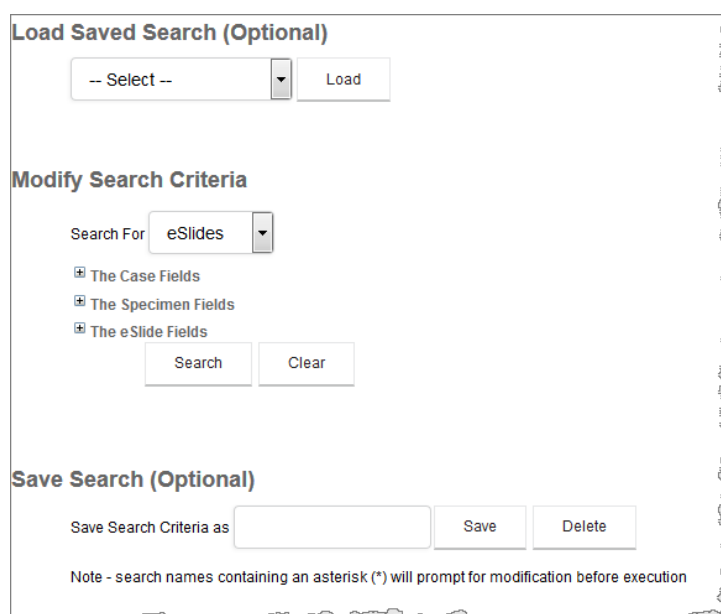
The Advanced Search page allows you to search on specific fields. You can also save your search criteria, or load a search you saved previously.



If you start your workflow at the Advanced Search page, you can set Advanced Search as your Aperio eSlide Manager start page. See the “You want to select an Aperio eSlide Manager start page” row in the table under “Login and Preferences Tips” on page 16.

To use the advanced search:

Click  next to the Search box. The Search page appears:



The screenshot shows the Search page interface with three main sections:

- Load Saved Search (Optional):** A dropdown menu with "-- Select --" and a "Load" button.
- Modify Search Criteria:** A "Search For" dropdown menu with "eSlides" selected, three checked checkboxes for "The Case Fields", "The Specimen Fields", and "The eSlide Fields", and "Search" and "Clear" buttons.
- Save Search (Optional):** A text input field for "Save Search Criteria as", "Save", and "Delete" buttons.

Note - search names containing an asterisk (*) will prompt for modification before execution

Using a Saved Search

To load and use a search you saved previously:

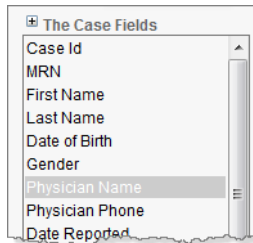
1. Click the drop-down arrow under the Load Saved Search (Optional) section, and select the search.
2. Click **Load** to load the search criteria.
3. Click **Search** under Modify Search Criteria.

To save a new search, see “Save a search” in the table under “Working with Saved Searches” on page 51

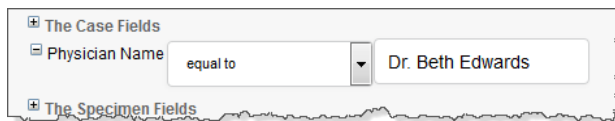
Selecting Advanced Search Criteria

To create advanced search criteria:

1. From the **Search For** box in the Modify Search Criteria section, select the type of data on which you are searching (for example, eSlides and Cases).
2. To search on specific fields, expand the list of fields by clicking the corresponding **+** button, as shown for the Case fields below:



3. Select the field on which to search. Only fields that are displayed in the data table are available.
4. When the field appears, select a search operator in the first field and type your criteria in the second field. The example below shows a search on the Physician Name field.



See “*Searching on User-Tagged Data*” next in this chapter for details about available search operators.

5. You can enter multiple search criteria by selecting one or more additional fields. You can select more than one field from the same list (Case, Specimen, etc.).
6. Click **Search**. The search results appear according to the type of data you selected in the Search For field, and the fields on which you searched.

Searching on User-Tagged Data

If you use the TAG column on Aperio eSlide Manager list pages to associate a text tag with items on the list page, you can search on the TAG field using advanced search. By default, the TAG column is not visible. If you want to make TAG column available, contact your Aperio eSlide Manager administrator.

Advanced Search Operators


The following search operators are available when using the advanced search.

| This search operator: | Finds this data for the selected field: |
|-----------------------|---|
| All | All data. |
| Equal to | Database field equals the exact data entered in the search field. |

| This search operator: | Finds this data for the selected field: |
|-----------------------|---|
| Not equal to | Database field does not equal the data entered in the search field. This could be useful for a status search, when status does not equal "complete." |
| Less than | <p>Data with a value less than the data entered in the search field. Data is searched in alphabetic or numeric order, starting at the beginning of the text or numeric string.</p> <p>For example, in the patient name search you ask for less than Doe:</p> <ul style="list-style-type: none"> The search returns any patient name that begins with D, C, B, A and any names that begin with Do, Dn, Dm etc., Dod, Doc etc. <p>For example, in a case number search, you ask for cases less than 30:</p> <ul style="list-style-type: none"> The search returns any cases numbers that begin with 2 or 1, including 29, 11, 100, 20000, 2324, 1120 etc. |
| Greater than | <p>Data that is greater than the data entered in the search field. Data is searched in alphabetic or numeric order, starting at the beginning of the text or numeric string.</p> <p>For example, in the patient name search you ask for greater than Mary:</p> <ul style="list-style-type: none"> The search returns any patient name that begins with M, N, O, P, etc., Mb, Mc, etc., Maq, Map etc., Marx, Marw etc. |
| Contains | Data that contains one or more characters entered in the search field. For example, type the letter "E" and the Aperio eSlide Manager database returns a list of physician names that contain that letter. |
| Between | <p>All fields that match the two search entries and all data that lies between them alphabetically.</p> <ul style="list-style-type: none"> For example, entering Dr. A and Dr. F as the entries to search between returns the result of Dr. A, Dr. B, Dr. C, Dr. D, Dr. E, and Dr. F. |
| Includes | <p>All items that satisfy any of a list of search parameters.</p> <ul style="list-style-type: none"> For example, suppose you are searching for all cases that have the status of Pending or Report Sent. Select the Status field under the Case Fields section, specify the includes operator, and in the Search field, type the search parameters separated by a comma (for example: Pending, Report Sent). The search returns all cases with the status of Pending and Report Sent. |

Advanced Search Results

Advanced search results appear on the appropriate list page with just the matching items. For example, if you search for all digital slides that are stained with the ER stain, a filtered list of digital slides that use that stain appears.

If you want to modify the search results, click  at the top of the page to return to your original Search criteria. Make any necessary changes, and conduct the search again.

Working with Saved Searches

| If you want to: | Do this: |
|------------------------------------|---|
| Save a search | <p>After selecting the search criteria, go to the Save Search section and type a name for the saved search in the Save Search Criteria box. Then click Save.</p> <p>Saved searches are associated with the user who created them for each data hierarchy. (For example, an operator who logs into the Clinical data hierarchy may have different saved searches than the same operator logged into the Research hierarchy.)</p> |
| Delete a saved search | <p>From the Search box drop-down list, select the saved search. Verify the name in the Save Search Criteria box in the Save Search section, and click Delete.</p> |
| Modify a saved search | <p>From the Search box drop-down list, select the saved search. Change the search criteria and click Save. To save the search under a new name, type a new name in the Save Search Criteria box and click Save.</p> |
| Create a search with a placeholder | <p>If you want to use the same <i>type</i> of search multiple times, include an * in the saved search name.</p> <p>For example, you might create a <i>HER2 Slides by Patient*</i> search that looks for all HER2-stained digital slides that belong to a specific patient. In this case, use a placeholder patient name, Jane Doe. When you load this saved search, the search criteria appears, where you can enter the patient name, and click Search.</p> |

10 Analyzing Images

This chapter describes the terminology, features and functions available to analyze images in Aperio eSlide Manager.



Adding image analysis macros is done by the Administrator. See the Aperio ImageScope User's Guide and Aperio Image Analysis User's Guide for details.

Aperio Algorithms

Analyzing digital slides helps you to examine slide staining to find patterns that tell you more about the digital slide. Using an algorithm to look for these patterns provides precise, quantitative data that is accurate and repeatable. The process of analyzing a digital slide is done by applying algorithms directly to the digital slide or selected regions of the digital slide.

The Positive Pixel Count algorithm is licensed without charge with other Aperio software. Other algorithms are available from Leica Biosystems Imaging for a license fee. Algorithms have also been developed by third parties and tools are available from Leica Biosystems Imaging for creating your own algorithms—contact Leica Biosystems Imaging for details.

These algorithms all have control parameters—for example, intensity and hue settings—that allow the algorithm to be tailored to your specific needs.

Analyzing Digital Slides in Aperio eSlide Manager

Aperio eSlide Manager provides a convenient tool for batch analysis of digital slides. Before you can batch analyze selected digital slide images in Aperio eSlide Manager, an Aperio eSlide Manager administrator must create a macro for each image analysis algorithm you want to use for analysis. You can then select one or more digital slides from the digital slide list to batch analyze with a specified macro.

You can display the status of all digital slides that have been submitted for analysis (see “*Viewing the Analysis Job Queue*” on page 56). As digital slide analyses are complete, they disappear from the queue.



CAUTION: Pixel values may vary for non SVS files due to compression when a file is opened in Aperio ImageScope directly compared to when it is opened in Aperio ImageScope via Aperio eSlide Manager. To obtain consistent viewing and analysis data please ensure you always maintain a consistent workflow (for example, always open images in Aperio eSlide Manager to view and analyze them).

Aperio eSlide Manager Analysis Batch Jobs

Analysis can occur while you continue to work within Aperio eSlide Manager, organizing data, and annotating images.

1. Display the desired list of digital slides.
 - ▶ Open a specific case or project to see the associated digital slides.
 - ▶ You can list all digital slides by clicking the eSlide icon on the main Aperio eSlide Manager page or by going to the **eSlides** menu and selecting **All eSlides (As List)**.
 - ▶ Or, you can search within the digital slides for a specific stain or status. (See “Chapter 9: Searching Aperio eSlide Manager Data” on page 46 for more information.)
2. Select the box to the left of each digital slide you want to analyze.
3. Click **Analyze** from the commands at the top of the data list.

The Analysis page displays:

The screenshot shows the 'Analyze 2 Images' interface. At the top, there's a search bar with 'IHC' and radio buttons for 'All Macros' (checked) and 'My Macros'. Below is a table with columns: Select, Id, Name, Version, Created By, Data Group, and Date Created. The table lists three slides: 74 (IHC PR), 75 (IHC HER2), and 76 (IHC ER), with the third one selected. Below the table is a pagination control showing 'Showing Macros 1-20 of 48'. At the bottom left, the 'Select Input Annotation Layer' section has three options: 'Most Recent' (checked), 'Whole Image', and 'Create markup image(s)' (checked). 'Analyze' and 'Cancel' buttons are at the bottom.



The list of annotation layers in the Select Input Annotation Layer section at the bottom-left area of the Analysis page depends on the digital slides you selected.

The number of annotation layers that all selected slides have in common are listed in this section. This is because Aperio eSlide Manager does not allow you to select an annotation layer that does not exist for all the selected digital slides.

If one of the digital slides selected has zero annotation layers, only the Most Recent or Whole Image appear.

4. Select the macro to use. See the section below for information on finding a particular macro.
5. To analyze only a portion of the image, select a specific annotation layer in the Select Input Annotation Layer section or click **Most Recent** to select the annotations in the most recently created annotation layer. To analyze the entire digital slide, select **Whole Image**.

(See the *Aperio ImageScope User's Guide* for information on drawing annotations to select areas to analyze.)

6. Select the **Create markup image(s)** check box if you want to see the results of the analysis in a visual way on the image.
7. Click **Analyze**. The digital slides chosen for analysis are added to the Analysis Job Queue.

You can always view the queue by going to the **Analysis** menu and selecting **Jobs**.

Batch Analysis on Aperio eSlide Manager with Third-party Tools

If a third-party analysis tool is installed on Aperio eSlide Manager, an additional drop-down list appears at the top of the Aperio eSlide Manager Analysis page from which you can select Aperio eSlide Manager Macros or the third-party tool. In this case, if you want to use an Aperio eSlide Manager macro, choose **eSlide Manager Macros** from the **Select Analysis Macro** drop-down list, and then select a macro in the macro list below.

Organizing and Finding Algorithm Macros

To search for specific algorithm macros:

1. Go to the Analysis page, and select the **All Macros** check box to see all of the macros available. You can also select the **My Macros** check box to see all of the macros you created.
2. Start typing the macro name in the **Search** box. Aperio eSlide Manager displays the list of macros that contain those characters in their name.

Sorting Macros

You can click on any underlined column title on the Analysis Macros page to sort the list of macros based on the contents of that column. Click once to sort in ascending alphabetical order; click again to sort in descending order.

For a more detailed sort, click the **Sort** command at the top of the macro list. For information on using this type of sort, see *"Multi-Level Sort on a List Page"* on page 28.

Macro Versions

If you save a macro from Aperio ImageScope that overwrites a macro that already exists, Aperio eSlide Manager increments the version number for the macro on the Analysis Macro page.

Note that you can only revise a macro if you have Full Control of the data group it is assigned to.

Working with Algorithm Macros

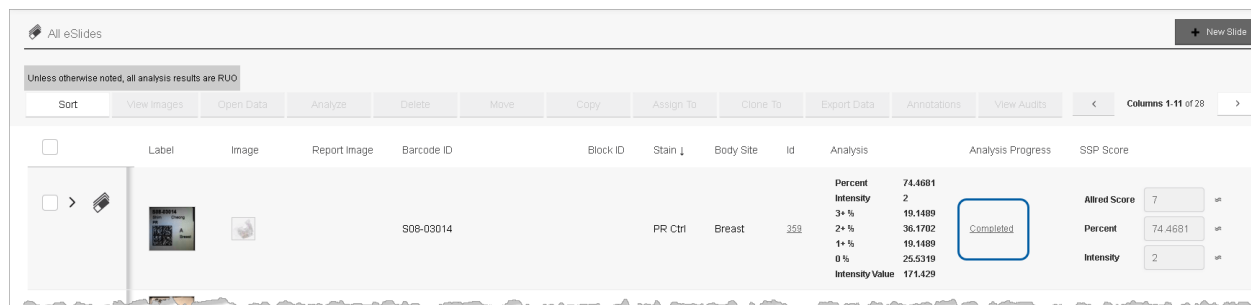
You perform all of the following tasks from the Analysis Macros page.

| If you want to... | Do this |
|--|---|
| Export macros from Aperio eSlide Manager | To export a macro from Aperio eSlide Manager (for example, to import the macro to another Aperio eSlide Manager location), click Export on the line for the macro, or select the check boxes for multiple macros and click the Export command at the top of the macro list. |

| If you want to... | Do this |
|--|--|
| Delete macros from Aperio eSlide Manager | Click Delete on the line for the macro, or select the check boxes for multiple macros and click the Delete command at the top of the macro list. |
| Add macros to Aperio eSlide Manager | <p>You can add a macro to Aperio eSlide Manager that was exported from another Aperio eSlide Manager location or that was saved from Aperio ImageScope. Click Add at the top of the macro list.</p> <p>(Note that saving a macro in Aperio ImageScope when you open a digital slide from Aperio eSlide Manager automatically saves the macro on Aperio eSlide Manager.)</p> <p>Navigate to the location of the macro file on your workstation and select the data group to which you want to add the macro.</p> |

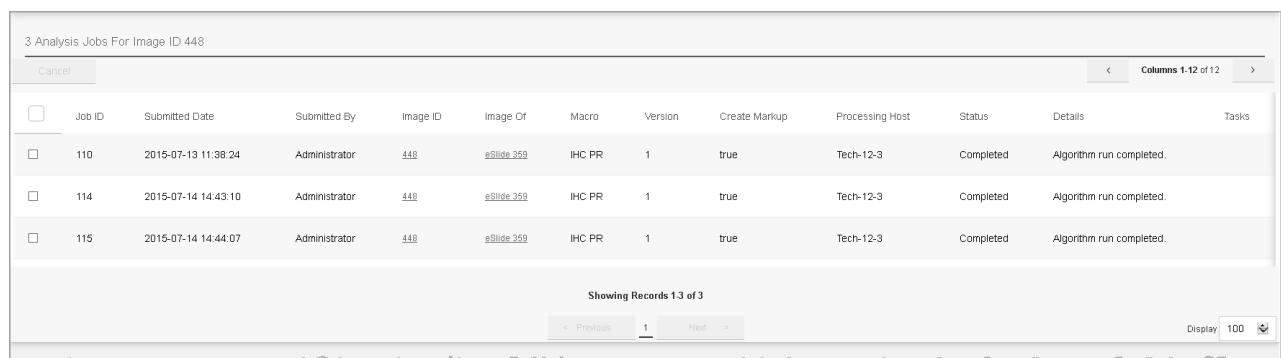
Viewing Digital Slide Analysis History

On any Aperio eSlide Manager page that contains a list of digital slides (for example, the main digital slide list page or a Specimen Details page), the Analysis Progress column lists status information on the analysis of that digital slide.



| Label | Image | Report Image | Barcode ID | Block ID | Stain | Body Site | Id | Analysis | Analysis Progress | SSP Score |
|-------|-------|--------------|------------|----------|---------|-----------|-----|--|-------------------|--|
| | | | S08-03014 | | PR Ctrl | Breast | 359 | Percent 74.4681 Intensity 2 3+ % 19.1489 2+ % 36.1702 1+ % 19.1489 0 % 25.5319 Intensity Value 171.429 | Completed | Altred Score 7 Percent 74.4681 Intensity 2 |

Click on the analysis status (for example, “Completed”) to go to a page that gives information on all analyses of that digital slide:



| Job ID | Submitted Date | Submitted By | Image ID | Image Of | Macro | Version | Create Markup | Processing Host | Status | Details | Tasks |
|--------|---------------------|---------------|----------|------------|--------|---------|---------------|-----------------|-----------|--------------------------|-------|
| 110 | 2015-07-13 11:38:24 | Administrator | 448 | eSlide 359 | IHC PR | 1 | true | Tech-12-3 | Completed | Algorithm run completed. | |
| 114 | 2015-07-14 14:43:10 | Administrator | 448 | eSlide 359 | IHC PR | 1 | true | Tech-12-3 | Completed | Algorithm run completed. | |
| 115 | 2015-07-14 14:44:07 | Administrator | 448 | eSlide 359 | IHC PR | 1 | true | Tech-12-3 | Completed | Algorithm run completed. | |

Showing Records 1 3 of 3

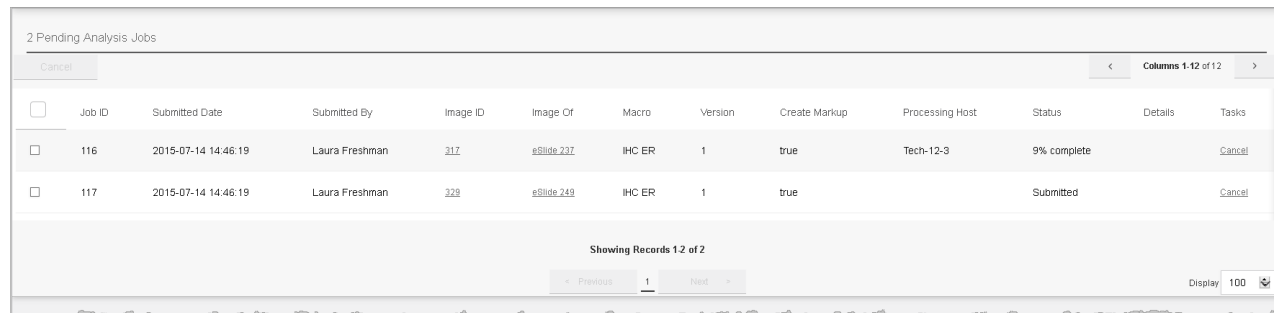
Previous 1 Next

Display 100

Viewing the Analysis Job Queue

To check the status of current analyses, go to the **Analysis** menu and select, **Jobs**.

The Analysis Job Queue page displays the status of the image analysis, which is *Submitted* or *In Progress*. For longer jobs, a percentage complete may appear.



| 2 Pending Analysis Jobs | | | | | | | | | | | | |
|---------------------------------|--------|---------------------|----------------|----------|------------|--------|---------|---------------|-----------------|-------------|--------------------|--------|
| <input type="checkbox"/> Cancel | | | | | | | | | | | Columns 1-12 of 12 | |
| <input type="checkbox"/> | Job ID | Submitted Date | Submitted By | Image ID | Image Of | Macro | Version | Create Markup | Processing Host | Status | Details | Tasks |
| <input type="checkbox"/> | 116 | 2015-07-14 14:46:19 | Laura Freshman | 317 | eSlide 237 | IHC ER | 1 | true | Tech-12-3 | 9% complete | | Cancel |
| <input type="checkbox"/> | 117 | 2015-07-14 14:46:19 | Laura Freshman | 329 | eSlide 249 | IHC ER | 1 | true | | Submitted | | Cancel |

Showing Records 1-2 of 2

Previous 1 Next

Display 100

When the analysis is complete, the digital slides disappear from the job queue.

Canceling Analysis Jobs

If you want to cancel one or more analysis jobs:

- ▶ To cancel a single job, click **Cancel** on the line for that job.
- ▶ To cancel multiple jobs, select the check box next to each job and then click **Cancel** at the top of the list.
- ▶ To cancel all jobs, click the check box at the top of the list to select all jobs, then click **Cancel** at the top of the list.

11

Network Case Workflows

Overview

The Aperio eSlide Manager Network case workflows fit seamlessly into the daily workflow of histotechnicians, pathology assistants, and pathologists. The case workflows provide the tools to fully manage patient cases.

The Aperio eSlide Manager case workflows consist of:

- ▶ **All Cases Workflow** – Shows a summary of all cases, specimens, and digital slides in read-only format. The cases list shows the status of each case, and the case assignment. Only cases that are not in Case Assembly (such as pending or completed cases) are shown in this list.
- ▶ **Case Assembly Workflow** – This is where cases are assembled with patient, case, specimen, and digital slide data. A priority is assigned, and then the case is assigned to a pathologist or user group.

The Case Assembly user can annotate digital slides, add attachments, and create a report. If a pathologist requires additional work on the case, he or she can return the case to Case Assembly. See “*Case Assembly*” on page 64 for more on this workflow.
- ▶ **Case Review Workflow** – Used by the pathologist to review cases, specimens, and digital slides, to save and complete results, and to see prior patient cases. Cases in Case Review are unique to the specified pathologist unless the case is assigned to the entire user group. See “*Case Review*” on page 71 for more on this workflow.
- ▶ **Collaborations Workflow** – Send a case out for internal review or review a case sent to you. Internal reviews go to pathologists who are on your Aperio eSlide Manager location. See “*Collaborations*” on page 75 for more on this workflow.

The workflows available on the Aperio eSlide Manager Network page depend on your user privileges and user group. For information on your user profile, contact your administrator.

Who Uses the Case Workflows?

Aperio eSlide Manager uses a sophisticated system of user roles and user groups to tailor the case workflows to specific types of users, and the Aperio eSlide Manager administrator assigns users roles accordingly.

For example, after logging in, histotechnicians view their worklist in the Case Assembly workflow, while pathologists view their worklist in the Case Review workflow.

Here are the types of users defined in the case workflows:

- ▶ **Histotechnicians** – Histotechnicians work in Case Assembly to prepare cases and route them for review. They enter patient and case data, define specimens and associate digital slides, enter specimen and digital slide data, add attachments to the case, annotate digital slides, and add reports. Histotechnicians can see cases in the All Cases workflow, but they cannot assign cases from that workflow.

- ▶ **Pathologists** – Pathologists work in Case Review to review cases. They can send a case back to Case Assembly for more work (such as requesting an IHC panel), or enter results and complete the case. Pathologists can see cases in the All Cases workflow and can assign a case from that workflow to themselves.
- ▶ **Pathology Assistants** – Pathology Assistants can create and edit cases in Case Assembly, and access cases in Case Review. Pathology assistants can view cases in All Cases, but cannot assign cases.
- ▶ **Lab Directors** – Lab Directors can access all of the Aperio eSlide Manager and Network administrative pages. Lab directors can use Case Assembly to edit cases or send them for review. They can also receive case assignments in Case Review. Lab directors can see cases in All Cases and can assign them to others from there.
- ▶ **Lab Assistant** – Lab assistants can see the cases in the All Cases workflow, but cannot edit or reroute them.

For more on user role assignments, see *“Outgoing Collaboration”* on page 75.

Getting Started

This section tells you how to begin using the Aperio eSlide Manager case workflows.

Logging into the Case Workflows

Go to your organization’s Aperio eSlide Manager website, and log into Aperio eSlide Manager using the username and password provided by your administrator. The workflows assigned to your user group appear in the left panel.

| Tasks | Priority | MRN | Case Acc# | Patient Name | Memo | Procedure | Procedure Date | Body Site | #Sp | #SI | #At |
|----------------|----------|-------------|-----------|---------------------|---|--------------------|---------------------|-----------|-----|-----|-----|
| 01-Rush | | 444-77-5677 | 78800411 | Karinisky, Karin | | Lumpectomy | 2014-01-08 00:00:00 | Breast | 1 | 0 | 0 |
| 02-Routine | | 765-33-5555 | 78890001 | Seybold, Anna | Additional specimens have been added to the case. | Lumpectomy | 2013-06-23 00:00:00 | various | 2 | 2 | 0 |
| 99-No Priority | | 222-33-4444 | 78810002 | Unetelle, Angelique | Please add more slides. | Fine Needle Biopsy | 2005-01-03 00:00:00 | Breast | 2 | 5 | 1 |
| 99-No Priority | | 111-22-1000 | 899923312 | Ivanoff, Alexis | | Lumpectomy | 2014-02-05 00:00:00 | Breast | 1 | 6 | 1 |
| 99-No Priority | | | | | | | | | 0 | 0 | 0 |

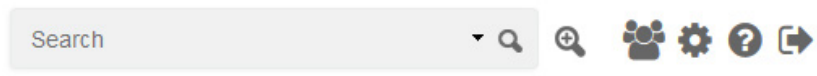
If you do not see a screen similar to the one above, you might not have a start page assigned. In this case, after logging into Aperio eSlide Manager, click the **Network** icon on the main Aperio eSlide Manager page to enter the Network page. See *“Select your start page”* in the table on page 63 to set your start page.



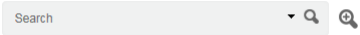





Network

The Settings Toolbar

The Settings Toolbar appears at the top of the page.



You use the toolbar to access the following features:

| Use This Tool: | To Do This: |
|---|--|
|  | <p>Search for a specific case, specimen, or digital slide. The results display in the Search page and provide links to the case.</p> <p>See <i>"Chapter 9: Searching Aperio eSlide Manager Data"</i> on page 46 for more information.</p> |
|  | <p>Access the advanced search page where you can save or change search criteria, or load a saved search. View your saved searches by clicking the down arrow in the search box. See <i>"Advanced Search and Saved Searches"</i> on page 48 for more information.</p> |
|  | <p>Update your availability status for conferences.</p> <p>For details on creating a conference, see <i>"Chapter 7: Conferencing"</i> on page 40.</p> |
|  | <p>Opens the case workflow help instructions.</p> |
|  | <p>Access the Configure My Settings window where you can set your Network preferences. See <i>"Your Profile Settings"</i> on page 63 for more information.</p> |
|  | <p>Log out of the current session.</p> |

The Network (Case Workflows) Page

The following example shows the Aperio eSlide Manager Network page, with the Case Review workflow open. The workflows available depend on your assigned user group. See *“Administrative Settings” on page 78* for more information on the user groups.

Available applications

Worklist

Indicates a case assignment







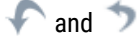

Navigating a List Summary Page

The Case Review page shown in the previous example is a list summary page. You can do the following from a list summary page:

| To do this: | Do this: |
|--|---|
| Open a different case workflow | The available case workflows appear in the left panel. Click the workflow you want to open. |
| Check if you have new case assignments | A blue numbered badge appears in the left panel indicating the number of cases in your queue. If email notifications are enabled, you also receive an email when cases are added to your queue. |
| Change the position of columns in the worklist | Select a column heading, and drag it to a new position in the list table. You can also show or hide columns. See <i>“Logging into the Case Workflows” on page 58</i> . |
| Show or hide details for the case, specimen, or digital slide | Click the + symbol in the worklist to show further detail on the case, specimen, or digital slide. Click the – symbol to hide the detail. |
| View the number of specimens, digital slides, or attachments associated with a case. | On the Case list page, view the #Sp (specimens), #Sl (digital slides), and #At (attachments) fields. |

Navigation and Editing Tools

Here are some of the tools you can use when working on a summary list and in a case.

| Use this tool: | To do this: |
|---|--|
|  | Display additional data, such as Specimen or digital slide. |
|  | Close additional data. |
|  | Open a case that is assigned to you. |
|  | Edit a case, specimen, or digital slide. |
|  | Delete a case, specimen, or digital slide. |
|  | Open a case that is assigned to a user group. Your Network administrative settings determine how cases are assigned to group members. For more information, see <i>"Case Assignments for User Groups"</i> on page 81. |
|  | Assign or unassign a digital slide or specimen to a case. |
|  | Click the arrow to sort the data in ascending or descending order based on the selected column. |

Showing and Hiding Case Data

You can show or hide case data by selecting which data columns appear in case summary lists and case detail tabs. If you hide a data column, the corresponding data is hidden in the case detail tab. For example, if you hide the Patient Name column, the patient's name is hidden in the case detail page.

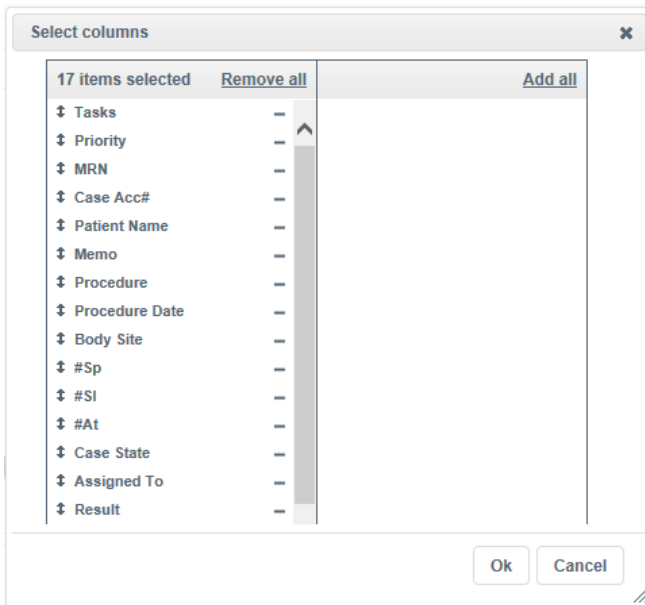
You can apply column selections in two ways:

- ▶ **Apply the column data selection to all cases in your list** – make your column selections from a case summary page. Any columns you hide are also hidden for all cases in the list.
- ▶ **Apply the column data selection to one case** – make your column selections from the applicable case detail tab, such as the Attachments tab or Results tab. Any columns you hide are hidden for that case only. (The ability to select column data is available on certain detail pages.)

Selecting Columns to Show or Hide

Follow these steps to select the columns to include in the list. You can return to the original default columns at any time.

1. Go to the bottom of a Case list summary page or an applicable case detail tab, and select **Select Columns**.
2. The Select Columns dialog box appears, as shown in the following example.



The left side of the box contains the columns that appear in the specified list. The right side of the box contains any columns you have removed.

3. Add or remove columns, as described below:

| | |
|---|--|
| Remove a column | In the left panel, click the corresponding - sign. |
| Remove all columns | Click the Remove all link. |
| Add a column that was previously removed | In the right panel, click the corresponding + sign. |
| Add all previously removed columns back into the summary list | Click the Add all link. |


Change the Position of a Column

You can change the position of a column on any summary list page or tab that contains a list. From the Select Columns dialog box (shown in step 2 in the previous procedure), select a column name and drag it to a new position in the list.

Return to the Default Column Arrangement

To return a case, specimen, or digital slide summary list back to its default column arrangement, go to the bottom of the list and select **Default Columns**. Click **Yes** to confirm.

Your Profile Settings

To change your Network profile settings, click the  button at the upper-right corner of the page. When the Configure My Settings page appears, you can make the following changes:

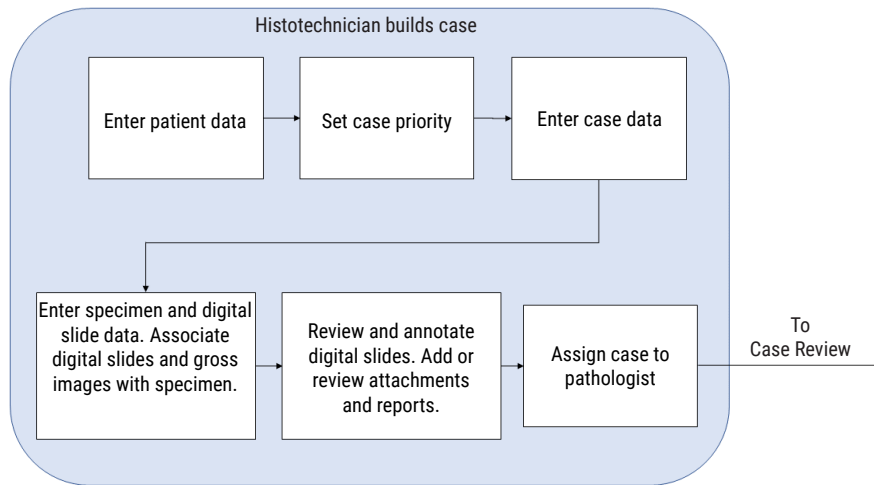
| To make this change: | Do this: |
|---|---|
| Change or add your contact information | Type your phone number and email address in the corresponding boxes. |
| Change your password | Type your current password in the Old Password box. Type your new password in the New Password box, and again in the Retype New Password box. |
| Select your start page | Click the drop-down arrow from the Spectrum Start Page box, and select your start page. |
| Specify a data group to which scanned digital slides are added. | If your user role permits you to log into the scanner Console to scan slides, click the drop-down arrow from the Data Group for Scanning box to select a data group. |
| Specify whether digital slide images open in a viewer when you click an information icon or use the Open Data command. | Select or clear the Enable Auto-View Images check box. |
| Specify whether an enlarged version of a digital slide appears when you hover over the digital slide in the slide tray. | Select or clear the Display Hover Popups for Images check box. |
| Specify whether you receive an email when there is a case in your queue. | Select or clear the Disable Workflow Email Notification check box. |

For More Information

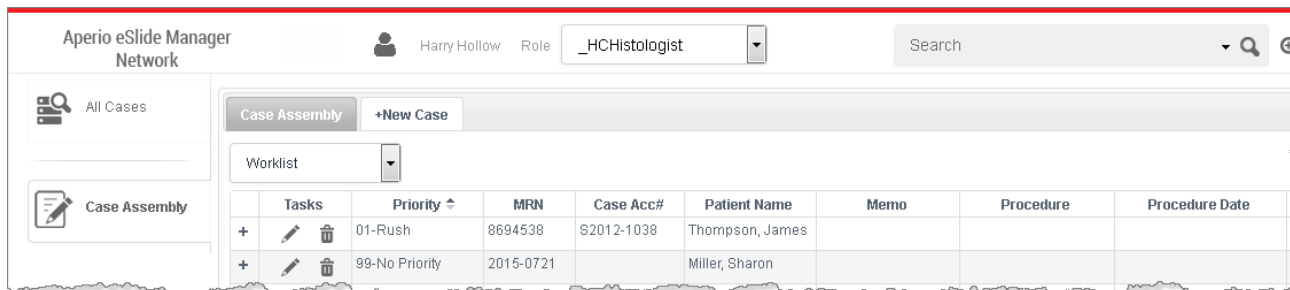
| For information on: | Go here: |
|--------------------------------|---|
| Creating and managing cases | <i>"Outgoing Collaboration" on page 75</i> |
| Reviewing and completing cases | <i>"Case Review" on page 71</i> |
| Using the digital slide Viewer | <i>"Chapter 6: Viewing Digital Slide Images" on page 37</i> |
| Using Conferencing | <i>"Chapter 7: Conferencing" on page 40</i> |
| Administrative settings | <i>"Administrative Settings" on page 78</i> |

Case Assembly

The Case Assembly workflow allows histotechnicians and pathology assistants to assemble cases with patient and case data, and then assign the case to a pathologist.



The following example shows the Case Assembly page.



You can rearrange the column order in the case list by selecting a column heading, and dragging it to a new location. You can also show or hide case columns. See “Showing and Hiding Case Data” on page 61.

Creating a New Case

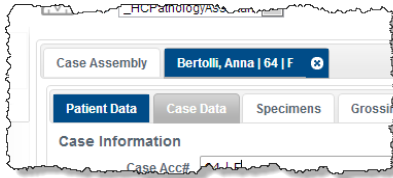
When you create a case, enter all the current patient and case data. You can access the case later to add further information, such as digital slides, more patient data, or attachments. After you assign the case to a user or user group, the case is moved from the Case Assembly worklist to the Case Review worklist for the assigned user or user group.

To create a new case:

1. Click the **+New Case** tab.
2. When the confirmation message appears, click **OK**.

A set of new tabs appears in which to enter different types of data for the case. (Remember that you can come back later to finish entering data, if necessary.)

As you enter data in the case, the tabs turn dark blue when there is unsaved data on that tab:



3. Click **Save** to save the data on the tab. The tab turns gray.

Adding Patient Data

The **Patient Data** tab contains information about the patient, including personal details and physician information.

Adding Case Data

The **Case Data** tab contains information about the case, including the priority level used to set its position in the assigned workflow.


Setting Case Priority

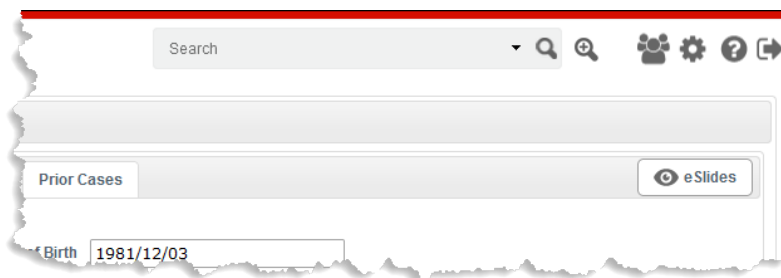
You can set the case priority to ensure this case appears in the proper order on the pathologists worklist. In the **Priority** field, type a number to set the priority. (Higher priority cases appear at the top of the worklist.) The lower the number, the higher the priority.

The default priority is **99 – No Priority**. Your system administrator defines the Priorities for your location.

Adding Specimens and Digital Slides

On the **Specimens** tab, you can add new or existing specimens and attach digital slides to them.

You can view the digital slides attached to the specimens by clicking the **eSlides** button . The slide tray groups the digital slides by their associated specimens.



Creating New Specimens

To create a new specimen:

1. From the Specimens tab, click **+New Specimen** to create one or more new specimens.
2. On the Add New Specimens window, type the number of specimens you want to create and click **OK**.

If you entered the case accession number in the Case Data tab, that number becomes the default specimen accession number base.

3. Enter a new specimen accession number or use the default number, and enter a specimen identifier (such as "A"):

4. Enter information in the remaining fields as appropriate. To add a gross image of the specimen, click **Add Image**.


Adding Existing Specimens to the Case

To find an existing unassigned specimen to add to the case:

1. Click **Find Specimens**. The list at the bottom of the page contains all unassigned specimens.
2. Click the **+** symbol next to **The Specimens Fields** or **The eSlide Fields** to search based on those parameters.

For example, to search for specimens made from breast tissue, click the **+** next to **The Specimen Fields** and select **Body Site**:

Then select **equal to** in the drop-down list and type **Breast** in the right text box:

3. Click **Search** to see all unassigned specimens that match this search.
4. Click  next to the specimen you want to assign to this case.

Adding a Digital Slide to a Specimen


To add a digital slide to a specimen:

1. Click the **Specimens** tab.
2. Click the tab for the specimen to which you want to add the digital slide.

The list at the bottom of the page contains the digital slides that are already assigned to this specimen.




3. To search for specific unassigned digital slides:
 - a. Click **Find eSlides** at the bottom of the page:



- b. Click the **+** symbol next to **The eSlide Fields** to search based on those parameters.
 - c. For example, to search for digital slides scanned from glass slides stained with the ER stain, click the **+** next to **The eSlide Fields** and select **Stain**.
 - d. Select **equal to** in the drop-down list and type **ER** in the right text box.
 - e. Click **Search** to see all unassigned digital slides that match this search.
4. Click  next to the digital slide you want to add to the specimen.

Tips on Creating Cases

Here are some additional tasks you can perform while creating or editing cases:

| To do this: | Do this: |
|--|---|
| Delete a case | Click  next to it in your worklist. |
| Edit a case | Click  next to it in your worklist. |
| Unassign a specimen in a case | Edit the case, go to the Specimens tab, select a specimen, and click Unassign . |
| Delete a specimen | Edit the case, go to the Specimens tab, select a specimen, and click Delete . Note that this removes the specimen permanently. |
| Unassign a digital slide in a specimen | Edit the case, go to the Specimens tab, select a specimen, and click  next to the digital slide in the Assigned eSlides list at the bottom of the Specimens page. |

| To do this: | Do this: |
|----------------------------------|---|
| View and annotate digital slides | Click the eSlides button to open the WebViewer in a new browser tab. For information on using the slide tray and Viewer, see the <i>Aperio WebViewer User's Guide</i> . |
| Create an online conference | Using the digital slide Viewer, you can conference with other Network users on your same location. For information on using conferencing, see "Chapter 7: Conferencing" on page 40. |

Assigning a Case

Follow these steps to assign a case to a pathologist or a user group for review.



Your Network administrative settings determine how cases are assigned to user group members. For more information, see "Case Assignments for User Groups" on page 81.

1. At the bottom of the page, select the appropriate action from the **Action** drop-down list.

The available choices depend on the status of the case. If the case was never assigned, then **Assign To** is the only option. If the case was returned to you from Case Review with a request for more work, the name of the requester appears as a choice. See "Creating a New Case" on page 64 for more on returning a case to a requesting pathologist.

2. Click **Assign To**.

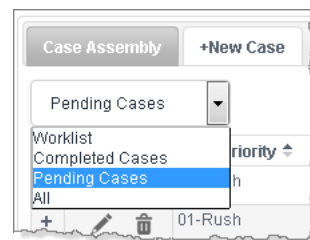
A list of people and user groups on your Network location appears.

3. Select a person or user group and click **Assign**. You can also include a memo, which will appear in the Memo field of the case.

The assigned case now appears in your pending cases list, and in the Case Review worklist of the person receiving the case assignment.

Viewing Cases Outside of Your Worklist

To view cases that are not in your worklist, use the drop-down list at the top of your case summary:



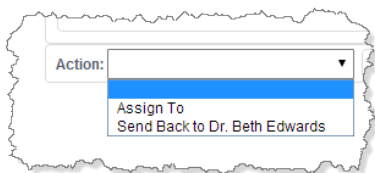
Receiving a Case for Additional Work

After you assign a case to a pathologist for review, it may come back to Case Assembly for additional work (for example, if the pathologist wants additional digital slides made). A blue numbered badge appears on the left of the page next to Case Assembly indicating that a case is waiting for you.

The Memo field of the case summary list may contain information entered by the requesting pathologist.

After performing the additional work, send the case back to the requesting pathologist.

1. From the **Action** drop-down list at the bottom of the page, select the option to return the case to the requesting pathologist:



2. On the Assign Case Back to User page, you can enter a memo to the requesting pathologist and then click **Assign**. The case is in your pending cases list and in the pathologist's Case Review.

Adding Attachments

Attachments are files, such as Word, Acrobat, or image files. To add an attachment to the case:

1. Click the **Attachments** tab.
There are different sections for Case Attachments, Specimen Attachments, and eSlide Attachments.
2. For the type of attachments you want to add (case, specimen, or digital slide), click the **Add** button in the appropriate area of the page.
3. On the attachments window, type a description of the document you want to add, click the **Browse** button to search for the document, and then click **Upload** to add the file.

Creating Reports

This section contains information on creating reports while using the case workflows. For information on using reports in Aperio eSlide Manager, see "Chapter 12: Reporting" on page 82.

To create a report:

1. Click the **Results** tab.
2. Click the **Add Report** button.
3. At the top of the Case Report Template window, select the report template you want to use.

The report appears:

The screenshot shows a window titled "Case Report Template" with a dropdown menu set to "Case Report". The main content area is divided into several sections:

- Header:** "Draft Report" | **CASE REPORT** | "January 16, 2014"
- Logo:** A colorful graphic of five stylized human figures holding hands.
- Address:** Capistrano Oncology Center, 1360 Park Center Dr., San Juan Capistrano, CA 92675, Phone: 555-555-1234, Fax: 555-555-5678
- Patient Information Table:**

| PATIENT | PATIENT ID | DOB | GENDER | AGE | PHYSICIAN | PHONE |
|-----------------|----------------|------------|--------|-----|------------------|--------------|
| Karinski, Karin | 2014-489996996 | 1970-04-23 | Female | 43 | Dr. Beth Edwards | 555 766-8989 |
- Case Comments:** A section titled "CASE COMMENTS" containing the text "Additional work needed on slides."
- Specimen Information Table:**

| SPECIMEN ID | COLLECTED DATE | RECEIVED DATE | BODY SITE | PROCEDURE |
|-------------|----------------|---------------|-----------|------------|
| A | | 2014-01-04 | Breast | Lumpectomy |

The type of case information included in the report depends on the template you use. Comments from the Case Data tab appear in the Comments section. (For information on customizing the report, see "Chapter 12: Reporting" on page 82.)

4. To finalize and save the report, click **Sign** at the bottom of the report; to cancel the report, click **Cancel**.
5. After you click **Sign**, enter your Aperio eSlide Manager password.

Updating a Report

Signed reports appear on the Results tab of the case. If you generate a report for which a prior version exists, select the type of update made to the report, and then click **Sign** to enter your password and save the new report.

All versions of the report display on the Results tab.

The screenshot shows the "Results" tab in the software interface. It features a table with columns for "Type", "Result", and "Pathologist". Below the table, there are navigation controls including "Page 1 of 0" and "30".

| Type | Result | Pathologist |
|-----------------|-----------------|--|
| FINAL | CaseReport.apmi | Seibold(1952-04-21) - Rev 0 (2014-01-16 21 55).pdf |
| FINAL - AMENDED | CaseReport.apmi | Seibold(1952-04-21) - Rev 1 (2014-01-16 21 59).pdf |

For more information on reports, see "Chapter 12: Reporting" on page 82.

Tips on Attachments and Reports

Here are some additional actions you can perform on attachments and reports.

| To do this: | Do this: |
|------------------------|---|
| View an attachment | On the Attachments tab, click the attachment. |
| View an attached image | On the Results page, click the attachment link. |
| Delete an attachment | On the Attachments tab, click the Delete button under the attachment. |
| View a report | On the Results tab, click the report. Acrobat reader must be installed on your workstation to view the report. |

Note: You cannot delete a report on the Results tab because it is a permanent record.

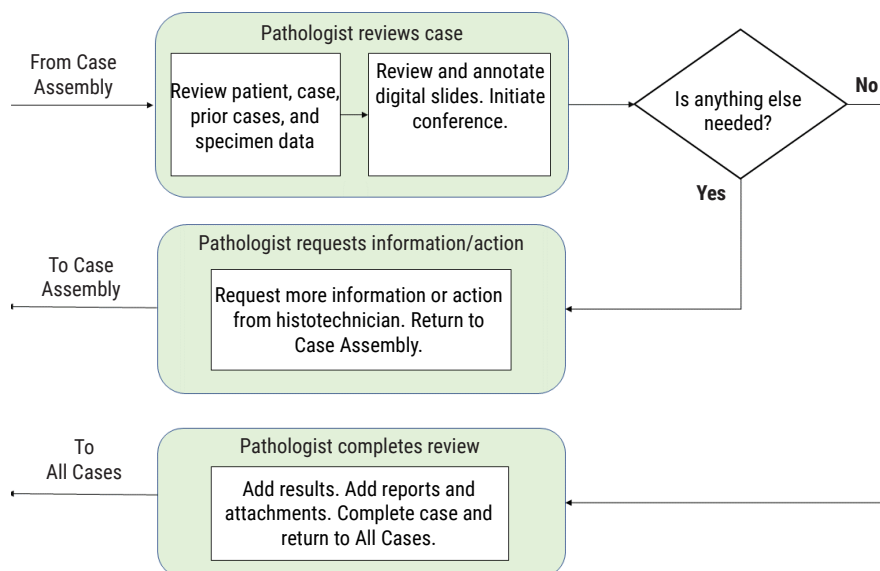
Tracking Case Status

You can go to the All Cases workflow to see a list of all cases with their statuses and assignments.

| All Cases | | | | | | | | | | | | | |
|-----------|----------------|----------|-------------|-----------|---------------------|---|--------------------|---------------------|-------------|-----|-----|------------------------|------------------|
| Case | Tasks | Priority | MRN | Case Acc# | Patient Name | Memo | Procedure | Procedure Date | Body Site | #Sp | #SI | Case State | Assigned To |
| + | 01-Rush | | 444-77-5677 | 78800411 | Karinisky, Karin | | Lumpectomy | 2014-01-08 00:00:00 | Breast | 1 | 0 | Ready for Review | Dr. Beth Edwards |
| + | 02-Routine | | 765-33-5555 | 78890001 | Seybold, Anna | Additional specimens have been added to the case. | Lumpectomy | 2013-06-23 00:00:00 | various | 2 | 2 | Ready for Review | Dr. Beth Edwards |
| + | 02-Routine | | 111-22-1000 | 57800577 | Ivanoff, Alexis | | Fine needle biopsy | 2007-01-03 00:00:00 | Breast | 2 | 22 | Additional Work Needed | Dr. Beth Edwards |
| + | 99-No Priority | | 222-33-4444 | 78810002 | Unetelle, Angelique | Please add more slides. | Fine Needle Biopsy | 2005-01-03 00:00:00 | Left Breast | 1 | 5 | Additional Work Needed | Dr. Beth Edwards |
| + | 99-No Priority | | 111-22-1000 | 899923312 | Ivanoff, Alexis | | various | 2014-02-05 00:00:00 | Breast | 2 | 8 | Ready for Review | Dr. Beth Edwards |

Case Review

The Case Review workflow allows pathologists to review cases (including prior cases), specimens, and digital slides, and then save and complete results.



When the Pathologist logs into Aperio eSlide Manager, he or she goes to the Case Review workflow. (If you do not go to the appropriate workflow for your user role, ask your administrator for help.)

If you do not have a start page defined, you need to log in through Aperio eSlide Manager. See *“Logging into the Case Workflows” on page 58.*

Reviewing Cases

Case assignments are unique to each pathologist unless a case is assigned to a user group.

If you are the first user to open a case assigned to a user group, one of the following occurs:

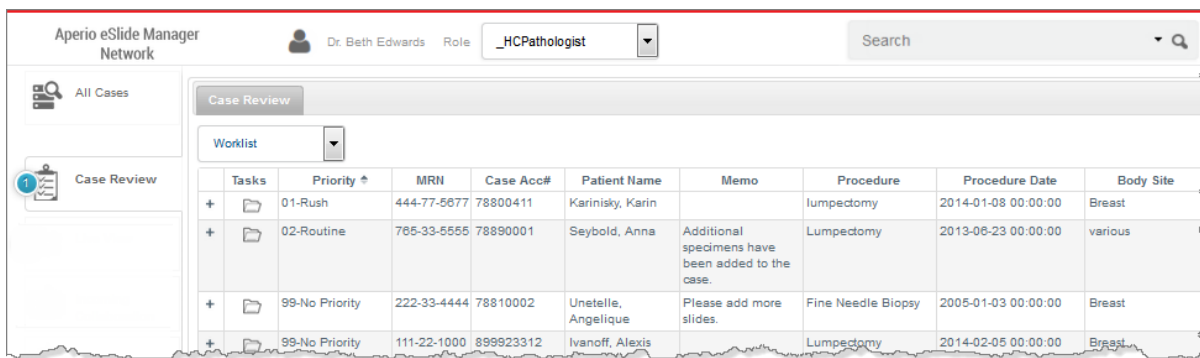
- ▶ The case is automatically assigned to you.
- ▶ The case opens in a read-only format.
- ▶ The system asks you if you want to accept the case review assignment or open the case in read-only format. Select the answer that indicates your choice.

For more details, see *“Case Assignments for User Groups” on page 81.* You must have administrator access to view or change this setting.

Reviewing a Case

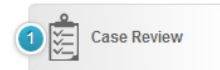
To review a case:

1. On the Aperio eSlide Manager Network page, click **Case Review**. The Case Review page opens to the worklist.

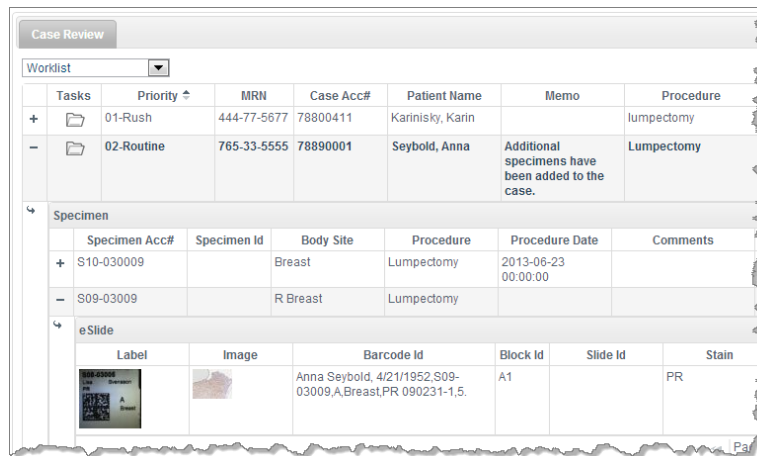


When viewing the Case Review page:

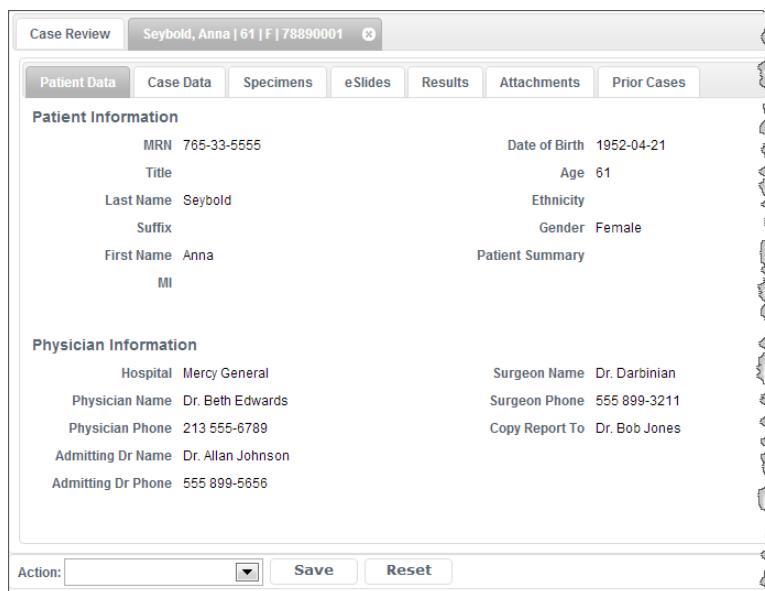
- ▶ Highest priority cases are at the top of the list.
- ▶ Cases that you have not viewed appear in bold.
- ▶ A blue numbered badge on the Case Review workflow tab means you have cases to review. The number indicates the amount of cases to review.



- ▶ For a quick look at specimens and digital slides, click the + symbol next to the case in the worklist. Continue down the levels of information by clicking the + symbols.



2. To open the case, click the folder icon  in the Tasks column.



3. Review the case by selecting the following tabs:
 - ▶ **Patient Data** - General patient information.
 - ▶ **Case Data** - Clinical information, such as clinical history.
 - ▶ **Specimens** - Case specimen data, such as procedure, comment, and gross description.
 - ▶ **eSlides** - This tab shows the digital slides attached to the specimens. From here, you can use the viewer to annotate the digital slides to indicate areas of interest, or start an online conference to share the digital slide with other colleagues on the same Aperio eSlide Manager or Aperio eSlide Manager Network location. For details on using the viewer and conferencing, see the *Aperio WebViewer User's Guide*.
 - ▶ **Attachments** - View attachments, such as reports or gross images. Add your own attachments.

- ▶ **Prior Cases** – Prior procedures, case state, physician, and result. For more information, see “*Viewing Prior Cases*” on page 74.
4. If the case requires additional information or reassignment, select the specific action in the **Action** drop-down list at the bottom of the page.
 - ▶ **Assign To** – Assigns the case to specific users or user groups. You can write a memo to the person who is receiving the case assignment.
 - ▶ **Request Additional Work** – Reassigns the case to Case Assembly. You can include instructions or comments.

Completing the Case

After you have reviewed the case and determined that no additional work is needed, you can complete the case.

1. Go to the **Results** tab:

The screenshot shows the 'Case Review' interface for patient 'Ivanoff, Alexis | 57 | F | 899923312'. The 'Results' tab is selected. A large text area for the result is present. A 'Save and Complete' button is highlighted with a blue box. Below this is a table with the following data:

| Type | Result | Pathologist |
|-----------------------|--------|------------------|
| Case Review (pending) | | Dr. Beth Edwards |

Below the table are pagination controls: 'Page 1 of 1' and '30' with a dropdown arrow. At the bottom, there is an 'Add Report' button.

You can create a report on this tab (see “*Creating Reports*” on page 69).

2. Type your result in the **Result** box and click **Save and Complete**.

The case is complete and no longer appears in your worklist.

Viewing Prior Cases



For information on viewing digital slides for prior cases, see the Aperio WebViewer User’s Guide.

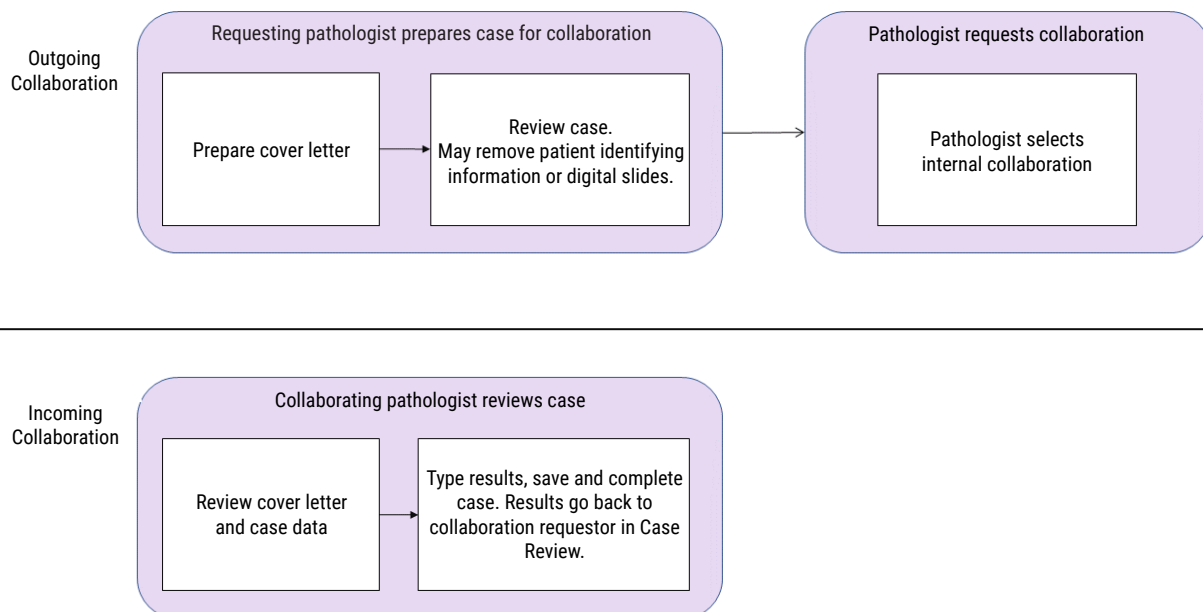
When using the Case Review workflow, pathologists can view prior cases to receive additional information on the patient, which can provide invaluable context to the case currently being reviewed. A prior case is associated with a case if the two cases have the same MRN number and both cases are in Case Review and assigned to a pathologist.

To view prior cases for a case being reviewed, select the Prior Cases tab. The following information is displayed:

- ▶ Tasks
- ▶ MRN
- ▶ Case Acc#
- ▶ Patient Name
- ▶ Memo
- ▶ Procedure
- ▶ Procedure Date
- ▶ Body Site
- ▶ #Sp
- ▶ #SI
- ▶ #At
- ▶ Case State
- ▶ Assigned To.

Collaborations

The Collaborations workflow allows pathologists to request and perform collaborative reviews.



Outgoing Collaboration

As you review a case in Case Review, you can request an internal collaboration. This places a copy of the case in the Outgoing Collaboration workflow.

Prior to sending the case, you can remove patient data to de-identify the patient, and rearrange or delete digital slides from the slide tray. You can also enter a cover letter for the receiving pathologist. Any annotations on the remaining digital slides are copied and transferred with the case.

During the collaboration process, the original case remains in your Case Review workflow with a state of Ready for Review and a badge displaying the number of pending collaborations.

Sending an Outgoing Collaboration

To send a case for collaboration:

1. In the Case Review workflow, select **Copy for Outgoing Collaboration** in the **Action** drop-down list. Or drag and drop the case to the Outgoing Collaboration workflow.

A copy of the case is placed in Outgoing Collaboration and the new case is highlighted in bold.

2. From Outgoing Collaboration, open and review the case.

The screenshot displays the 'Outgoing Collaboration' window for a case titled 'Ivanoff, Alexis | 57 | F | 899923312'. The interface is divided into several tabs: Patient Data, Cover Letter, Case Data, Specimens, eSlides, Results, Attachments, and Prior Cases. The 'Patient Information' section includes fields for MRN (111-22-1000), Date of Birth (1956-02-28), Title, Age (57), Last Name (Ivanoff), Ethnicity, Suffix, Gender (Female), First Name (Alexis), and MI. The 'Physician Information' section includes Hospital (Mercy General), Surgeon Name, Physician Name (Dr. Beth Edwards), Surgeon Phone, Physician Phone (555 899-3443), Copy Report To, Admitting Dr Name, and Admitting Dr Phone. At the bottom, there is a footer with the Leica logo, 'BIO SYSTEMS', copyright notice '© 2006 - 2015 All Rights Reserved | About eSlideManager', and an 'Action:' dropdown menu with 'Save' and 'Reset' buttons, and an 'Exit Network' button.

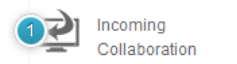
3. To de-identify the patient, delete any identifying information from the Patient Data tab. The data is removed from the collaboration copy only.
4. Go to the **Cover Letter** tab to add a letter to collaboration package.
5. Click the **eSlides** button to work with the digital slides, as needed:

| To do this: | Do this: |
|--|---|
| Delete digital slides from the collaboration copy of the case. | <ol style="list-style-type: none"> 1. Select one or more digital slides (use the Control key to select multiple digital slides). 2. Right-click one of the selected digital slide images and select Delete Selected Slide(s) to delete the selected digital slides. 3. The digital slides are only removed from the collaboration copy. |
| Create a blank slot in the slide tray. | Right-click a digital slide, and select Insert Blank Slot . |
| Mark a digital slide as read or unread. | Right-click a digital slide, and select Toggle Read/Unread . |
| Annotate digital slides as needed. | <p>The annotations are made only in the collaboration copy.</p> <p>See the <i>Aperio WebViewer User's Guide</i> for more information on creating annotations.</p> |

4. To assign the collaborator, select **Request Collaboration** in the **Action** drop-down list.
5. When the Send Case Collaboration window appears, select a collaborator from the **Internal Collaborator** list, and click **Request Collaboration**.
 - ▶ The case is sent to a pathologist on the same Aperio eSlide Manager Network location.
 - ▶ The collaborating pathologist types results on the Results tab, which are copied to the original case. (See *"Incoming Collaboration"* on page 77 for more on internal collaborations.)

Incoming Collaboration

If a pathologist in Case Review requests an internal collaboration, the collaborating pathologist sees a numbered badge in the Incoming Collaboration workflow.



To collaborate on a case:

1. Go to Incoming Collaboration, and open the case.
2. Review the case. Click the **eSlides** button to review and annotate the images, as needed. Any annotations you add are not sent to the requesting pathologist.
3. Click the **Results** tab, and enter the results in the **Collaboration Result** text area.
4. Click **Save and Complete**.
5. When the Complete the Case window appears, click **Yes** to complete the case. The case is returned to the requester with your results as Collaboration Completed.

Reviewing Internal Collaboration Results

When a case is completed in the Incoming Collaboration workflow, the case appears in the requesting pathologist's Case Review worklist. The **Results** tab includes the results from the collaborating pathologist.

Enter your own results in the **Results** tab, then save or complete the case. The case is now completed.

Administrative Settings

This section contains information on the administrative functions of the Network case workflows.

Because the case workflows are part of Aperio eSlide Manager, administrative settings made directly in Aperio eSlide Manager affect Network users.

This section discusses the administrative settings that you can make either in Aperio eSlide Manager or directly within Network.

Aperio eSlide Manager Administrative Settings



To change Aperio eSlide Manager administrative settings:

1. Log into Aperio eSlide Manager with a user name that has administrative privileges.
2. Select the **Clinical** hierarchy.
3. Use the **Administrative** menu to change Aperio eSlide Manager settings described below.

Defining Network Users—User Groups

If you add new users to the Network, a user must be added to the correct user group in Aperio eSlide Manager. The user group defines the workflows and data the user can access.

To add a user to a Network user group:

1. Select **User Group Management** from the Aperio eSlide Manager **Administrative** menu.
The User Groups page shows the existing user groups. User groups that begin with the characters **_HC** are Network user groups.
2. Click the name of a user group to access the User Group Details page.
3. Select one or more user names from the **Available Users** list, and then click  to move their names to the Assigned Users list.
You can use the  button to remove selected users from the group. (You can also select and drag user names from one list to another.)
4. Save your changes.

The Network user groups currently defined are:

- ▶ **_HCPathologyAssistants**
- ▶ **_HCPathologists**
- ▶ **_HCLabDirectors**
- ▶ **_HCLabAssistants**
- ▶ **_HCHistologists**

Only users who are Lab Directors at your facility with administrative privileges should be assigned to this user group.

Note that users may belong to more than one user group. For details on the access rights for each user group, see *“Who Uses the Case Workflows?”* on page 57.

Setting the User Start Page

Setting the start page for a user allows them to go directly to the appropriate case workflow after logging into Aperio eSlide Manager. For example, a Pathology Assistant can go directly to the Case Assembly workflow.

To set a user's start page:



1. Select **User Management** from the Aperio eSlide Manager **Administrative** menu.
2. On the Users page, click the name of the user.
3. On the User Details page, select the appropriate start page from the Spectrum Start Page drop-down list:
4. Save your changes.

Users can select their own start page by going to the Aperio eSlide Manager **Administrative** menu and selecting **My Settings**.

Search Settings

The administrator defines the data fields that are available for use in a search (the search fields) and the fields that appear in the search results (the display fields). These settings affect the entire Aperio eSlide Manager location, not just the Network case workflows.

To define search settings:

1. Select **Search Settings** from the Aperio eSlide Manager **Administrative** menu to access the Search Settings page.
2. Select **Search Fields** from the drop-down list at the top of the page.
3. Select one or more fields from the **Available Search Fields** list, and then click  to add the fields to the **Selected Search Fields** list. You can use the  button to remove selected fields from the list. (You can also select and drag field names from one list to another.)
4. To define the fields that appear in the search result list, select **Display Fields** from the drop-down list. Assign the fields using the same process used in the previous step.

For example, if Case.Last Name is selected as a search field and Case.Physician Name is not selected, searches for "Miller" will return any results in which the patient's name is Miller, but not for physicians of that name.

For more information on searches and search settings, see the *Aperio eSlide Manager Administrator's Guide*.

Email Settings

Network users can receive email notifications when cases are assigned for review. Users can also set their own email address by using the My Settings page.

To enable this option:

1. Make sure all users have a valid email address defined in their user settings.
2. Select **User Management** from the Aperio eSlide Manager **Administrative** menu.
3. On the Users page, edit the settings for a user by clicking the user's name.
4. On the User Details page, type the user's email address in the **E-mail Address** field.
5. Set the Aperio eSlide Manager SMTP Alert Settings.
6. Select **System Settings** from the Aperio eSlide Manager **Administrative** menu.

7. In the SMTP Alert Settings section, enter the information for your Aperio eSlide Manager location that defines how email is sent and received on your location. For more information on site email settings, see the *Aperio eSlide Manager Administrator's Guide*.
8. Enable email alerts in Network. (See "Case Review Administrative Settings" on page 80.)

Network Administrative Settings

To change Network administrative settings:

1. Log into Aperio eSlide Manager with a user name that has administrative privileges.
2. Select the **Clinical** hierarchy.
3. Click the **Network** icon to enter the case workflows.
4. Click the **Admin** button at the top of the Network page, next to the User Role drop-down box. (Note that this button now becomes the **Standard** button.)

If this button does not appear, the user name you logged in with does not have sufficient administrative privileges.

5. Select the case workflow on the left side of the page for which you want to change administrative settings.

To exit an Admin Settings page, click the **Standard** button at the top of the page.

Administrative Settings

To view or change the administrative settings, select **Admin Settings** in the left pane.



Global Settings

Select the **Automatically mark slides as read in slide tray** option if you want the digital slide to "flip" in the tray after it is read, so that the slide label is on the right. This behavior provides a visual cue that the digital slide was reviewed. For more on this feature, see the *Aperio WebViewer User's Guide*.

Individual users can go to My Settings to disable this functionality for their account.

Case Tab Fields Selection

Use the Case Tab Fields Selection section to select the fields that appear on the Case tab for a case.

Select one or more fields from the **Available Case Tab Fields** list, and then click  to move them to the **Selected Case Tab Fields** list. You can use the  button to remove fields from the selected fields list. (You can also select and drag user names from one list to another.)

Case Priorities

The Case Priority section allows you to modify, create, or delete priorities for cases. After you add and save a new priority, a new box appears in which you can enter another priority. If the user does not select a priority, the default priority 99 – No Priority is used. For examples of using case priorities, see "Setting Case Priority" on page 65.

Case Review Administrative Settings

Select **Case Review** in the left panel to access the Case Review administrative settings.

Email Settings

Select the **Automatically send e-mails to users** check box if you want email messages automatically sent to Network users if an action is required on their part (for example, when a pathologist has a case to review).

Case Assignments for User Groups

Select an option from the **Select action taken when a Case that is assigned to a Group is opened for review** list to determine how case assignments are handled for user groups:

- ▶ **Prompt the User** – when a member of the user group selects a case to open, the system gives the user the choice to assign the case to himself or herself, or open the case as read-only.
- ▶ **Open the Case as read-only** – enables the user to open and view the case without taking the case assignment.
- ▶ **Automatically Assign the Case to the User** – automatically assigns the case to the first user in the group who opens the case.

12 Reporting

Overview

Technicians often need to produce reports containing information about the glass slides processed. Aperio eSlide Manager Reporting provides this capability.

Designed to work with Leica Biosystems Aperio Image Analysis algorithms, Aperio eSlide Manager Reporting creates an attractive report that gives details about the case or project.

Some features of Aperio eSlide Manager Reporting include:

- ▶ **Predefined Comments** – Although you can type your own comments on a report (if the report template you are using allows it), you can also use predefined, custom comments. Many laboratory reports contain the same text, so Aperio eSlide Manager Reporting allows the administrator to create a library of comments that you can add to a report.
- ▶ **Customized Customer Heading** – Reports may be generated for different clients or customers. Aperio eSlide Manager Reporting allows the administrator to create multiple sets of customer information (address, logo, etc.) that can be selected to place at the top of a report.
- ▶ **Report Format** – Reports are created as Adobe Acrobat files that can be read with the free Acrobat Reader available from www.adobe.com.
- ▶ **Organize Report Templates** – You can assign a specific report template to a customer for use when creating their reports.
- ▶ **Digital Signatures and Revision Control** – Each revision of a report is saved. Saved reports appear on the Case or Project information page, along with their state (Amended, Corrected, Final) and the date and time they were created or changed.

An Aperio eSlide Manager operator can sign the report (after entering a password), which adds the operator's name to the report.

The following sections contain an overview of how Aperio eSlide Manager Reporting works.

Aperio eSlide Manager Reporting Prerequisites

This section discusses the prerequisites for using Aperio eSlide Manager Reporting.

The Report Template

Several basic templates are delivered with Aperio eSlide Manager Reporting. For information on other templates that may be available, contact your Leica Biosystems Sales representative. For information on obtaining customized reports, contact your Leica Biosystems Sales representative. Any data maintained in the Aperio eSlide Manager database can be included in an Aperio eSlide Manager report if the template is designed for that purpose.

How Reporting Works

Once licensed, Aperio eSlide Manager Reporting features appear on an individual case or project details page along with the information about that case or project. Creating a report for that case or project is as easy as selecting a report template and clicking a **Generate Report** link.

Aperio eSlide Manager Reporting uses Adobe Acrobat to create the report from the case or project information.

Getting Started

This section discusses steps you need to complete before creating reports.

Updating Organizational Information in Report Files

The files used to generate reports contain sample organizational information. You need to update the contact information and corporate logo in the report files to reflect your organization. Organizational information appears in the top left of your report, as shown in the following example.



Follow these steps:

1. Edit the **labinfo.txt** file (Program Files\\Spectrum\ReportTemplates\labinfo.txt) so that it contains the information for your organization.
2. Replace the **LaboratoryLogo.jpg** file (Program Files\\Spectrum\htdocs\images\LaboratoryLogo.jpg) with a file of the same name that contains the logo for your organization.

If you do not update these files, sample organizational information will appear on your reports.

For information on adding customer information to reports, see *"Adding Report Customers and Assigning Report Templates"* on page 84.

Creating Comments

If you often use the same comments for different reports, the Aperio eSlide Manager administrator can create and save comments that will be permanently available for Aperio eSlide Manager operators to use when creating reports.

1. Log into Aperio eSlide Manager as an administrator.
2. Go to the **Administrative** menu and select **Comments**.

A Comments page displays:

| Type ↑ | Name | Comment Text | Tasks |
|-----------------------|--------------------|---|---|
| Case | BRCA | Genetic analysis recommended for BRCA1 and BRCA2 genes. | Edit Delete |
| Slide | Aberrant Cytoplasm | Extensive aberrant cytoplasmic staining is evident. | Edit Delete |

3. Click **Add** to create a comment.
4. In the Comments window, select the **Type** of comment you want to add. The comment types available depend on the data hierarchy of your user role and your licensed Aperio eSlide Manager features.

The comment type you select identifies where the comment can be used. For example, a Case or Project comment can be used in the comment field of the Case or Project details page. A Specimen comment can be used in the comment field of the Specimen details page.

5. Enter a name for the comment and enter the comment text.
6. Click **Save**.

Adding Report Customers and Assigning Report Templates

This procedure describes how to add report customers in Aperio eSlide Manager. This allows you to include customer information (name, address, logo, etc.) to the top of the page on reports you are creating for a specific customer. This procedure also describes how to assign report templates to a customer, which you must do before you can create reports for a customer.

1. Log into Aperio eSlide Manager as an administrator.
2. Go to the **Administrative** menu and select **Report Customers**.

The Customers page displays:

| Id ↑ | Name | Street Address | City | State | Country | Postal Code | Phone | Fax | Logo File Name |
|------|---------------------|----------------|--------------|-------|---------|-------------|----------------|----------------|----------------|
| 1 | General Hospital | 1234 Main St. | Capital City | NY | | 14227 | (555) 555-1234 | (555) 555-5678 | |
| 2 | General Hospital B2 | 1234 Main St. | Capital City | NY | | 14227 | (555) 555-1234 | (555) 555-5678 | |

- Click **Add** to add a customer. The Customer Details page displays:

Customer Details

DataGroup:

Name:

Address:

City:

State/Province/Region:

Country:

Zip/Postal Code:

Telephone:

Fax:

Logo File:

Assign Report Templates

| Template Name | Template Description | Assign to Customer |
|-----------------|--------------------------------|--------------------------|
| CaseReport.apml | Case Report | <input type="checkbox"/> |
| IHCReport.apml | IHC Report - H&E, HER2, ER, PR | <input type="checkbox"/> |

- Type the customer information you want to appear on the report.
- You can select a graphic file for the customer logo by clicking **Browse** from the **Logo File** field. (We recommend an original graphic of about 120 x 120 pixels for best results.)

Important! In order to create a report for a customer, you *must* assign one or more templates to that customer, or reports cannot be generated for that customer.

- Select the report templates that can be used for that customer by selecting the check boxes next to the report templates.
- Click **Save**.

See “*Creating a Report*” on page 85 for information on selecting the customer when creating the report.

Creating a Report


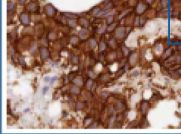
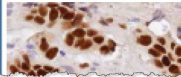
This chapter contains information about reports, including how to create a report. See “*Sample eIHC Report*” on page 91 for a sample report.

Report Contents

The templates available with Aperio eSlide Manager Reporting display information in the report that is acquired from the Aperio eSlide Manager database.

For eIHC, Project, and Case templates, if slide-specific configuration (that defines how scores are created and interpreted for specific stain/body site combinations) is used, the score that displays on the report is defined in the Calculated Score field of the Slide Specific Configuration page. This score may be calculated from a formula, or manually entered by a pathologist if automated scoring is not used. Whether or not automated scoring is used depends on the Slide Specific Configuration page settings. The interpretation comes from the Interpretation field on the Slide Specific configuration page.

If slide specific scoring is not used, the report acquires the score and interpretation from the Score and Interpretation fields in the digital slide's Slide data table.

| Score | Interpretation |
|---|--|
|  | <p>with small nodules of invasive ductal carcinoma.</p> |
|  <p>HER2 Score: 3 Used computer assisted image analysis</p> | <p>POSITIVE Scoring performed on invasive component only.</p> |
|  <p>ER Score: 78.9625</p> | <p>POSITIVE Scoring performed on invasive component only.</p> |


Selecting Digital Slides for the eIHC and Project Templates

The eIHC and Project reports display information about the first available eIHC digital slide of each stain (H&E, HER2, PR, and ER) associated with the case's or project's first specimen.

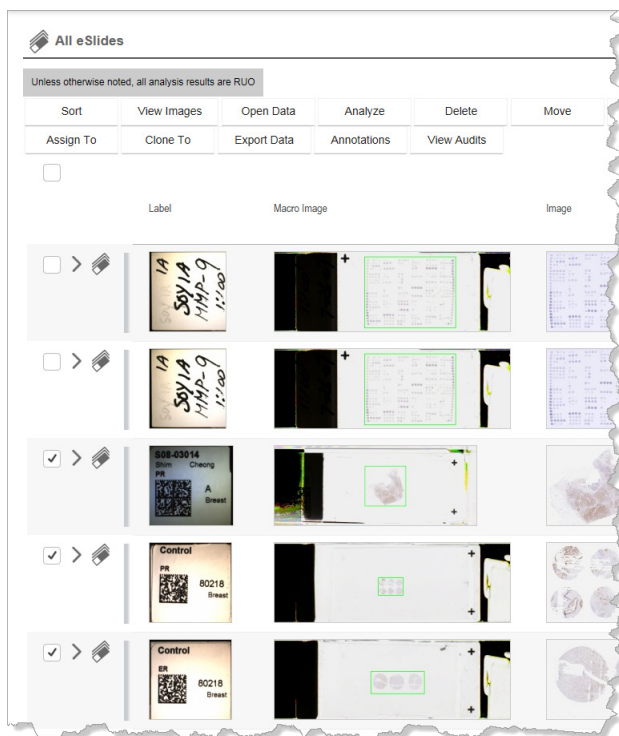
Selecting Digital Slides for the Case Template

The Case report displays information about the case. Because there may be a large number of digital slides associated with a case's specimen, a digital slide is included in the report only if **Include in Report** is selected in the digital slide section of a details page. (This check box only displays if the **IncludeInReport** field is made visible in the Slides data table.)

To set this check box for multiple digital slides:

1. Select multiple digital slides on any digital slide list and open them by clicking **Open Data**. For example, to select digital slides in a case:
 - a. Open the case
 - b. On the Case Details page, expand the Specimen Details section and click on the Specimen icon  to see digital slide details for that specimen.

- c. Select multiple digital slides and open them by clicking **Open Data**.



2. Go to the eSlide Details section of the page and select the **Include in Report** check box:

When you create the Case report, the selected digital slides are included. (If the **Include in Report** check box is not visible on this page, ask the Aperio eSlide Manager administrator to edit the Slides data table to make it visible.)

Specifying the Order of the Slides in the Case Report

By default, the slides are listed in the Case Report by stain order. (The Display Order column in the Stains page specifies this order. For information on changing the stain order, see the *Aperio eSlide Manager Administrator's Guide*.)

You can modify the Case template and use the Report Display Order text box to specify a display order for each digital slide on the eSlide Details page. For information on template modification services, contact your Leica Biosystems representative. (If the Report Display Order text box is not visible on the eSlide Details page, ask the Aperio eSlide Manager administrator to edit the Slides data table to make the ReportDisplayOrder field visible.)

Secure Reports

To provide security for Aperio eSlide Manager reports, the operator cannot change the Case and eIHC reports after they are automatically generated. All comments must be pre-defined and assigned to the elements in the report in order for them to appear in the report. Analysis scores are created automatically by Image Analysis, as defined in the body site/stain configuration for the digital slide's slide-specific processing configuration, and automatically added to the report.

The report template defines whether a report can be manually changed. Leica Biosystems Imaging clinical report templates do not permit manual changes.

Opening a Case or Project

The first step to creating a report is to open the Aperio eSlide Manager case or project on which to base the report.

1. Log into Aperio eSlide Manager.
2. On the Aperio eSlide Manager main page, click the **Cases** or **Projects** icon.
3. When the cases or projects appear in list view, click the folder icon on the line for the case or project you want to open, or select the case or project check box and click **Open Data** at the top of the list. The details page for the case or project opens, which contains the reporting options.

Selecting the Report Customer

Before you create the report, you can select the customer that appears at the top of the report:

1. Go to a Case or Project details page and go to the **Customer Name** field.



Make sure that you have assigned report templates to this customer on the Customer Details page as discussed in the previous chapter, or reports cannot be generated for this customer.

The screenshot shows the 'Case Details' page for Case Acc#: [redacted], Last Name: Unetelle, MRN: AU810001. The page has three tabs: 'Add New Specimen', 'Add Existing Specimen', and 'eSlideShare'. Below the tabs, it says 'Last Change on: 2015/06/05, Reason for Change:'. The form contains the following fields:

- Id: 16
- MRN: AU810001
- First Name: Angellique
- Last Name: Unetelle
- Date of Birth: 1981/12/03
- Gender: Female
- Hospital: General Hospital
- Physician Name: Dr. Corina Dupont
- Customer Name: General Hospital (highlighted with a blue box)
- Physician Phone: (213) 245-7699
- Clinical Impression: [text area]
- Final Diagnosis: [text area]
- Patient Summary: [text area]
- Comment: [text area]

2. Type the name of the customer in the **Customer Name** box.
3. Click **Save**.

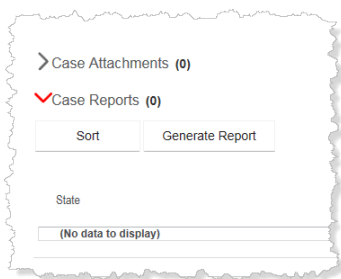
Selecting Images to Display on the Report

For templates that contain images, use the Report annotation tool in your Aperio viewer to select a region of interest to display on the report.

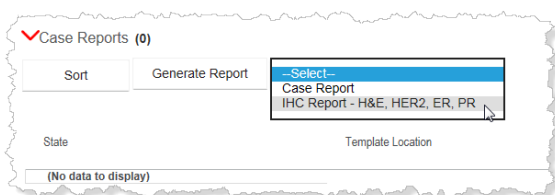
Generating the Report

To generate a report for a case or project:

1. Go to a Case or Project information page and go to the Report section.



2. Click **Generate Report**.
3. Select a report template:



The report opens in your web browser. (See “Sample eIHC Report” on page 91 for a sample report.)

Signing and Revising a Report

Aperio eSlide Manager reporting provides electronic signatures and an audit trail to ensure the security of your reports.

Report States

Reports can be in the following states:

| This report state: | Means this: | And the report: |
|-------------------------------------|--|--|
| DRAFT | The report was generated but not signed. | Contains the word “Draft” at the top of the report, and does not appear in the report history. |
| FINAL | The report is signed. | Appears in the report history. |
| FINAL-AMENDED or FINAL-CORRECTED | The report was amended or corrected, and signed again. | Appears in the report history with the new state. |

Signing a Report

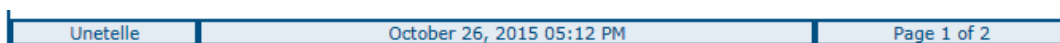
To sign a report for the first time and approve it as final:

1. Generate the report and click the **Sign** button.
2. Enter your Aperio eSlide Manager password.

An unalterable Adobe Acrobat file of the report is saved and the report appears in the report history section:

| State | Template Location | Report File | Signed By |
|-------|--------------------------------|--|---------------|
| FINAL | IHC Report - H&E, HER2, ER, PR | Unetelle (1981-12-03) - ID 14 - Rev D (2015-10-27_00_14).pdf | Administrator |

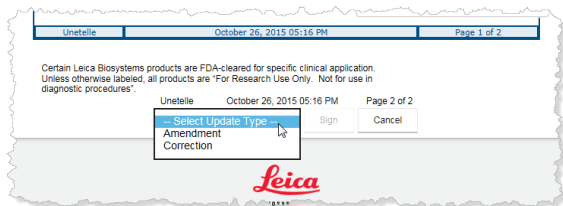
The signature displays at the bottom of the first page of the report:



Every version of a signed report is saved to preserve an audit trail, and cannot be deleted on its own. The only way to delete a signed report is to delete its associated case or project.

Amending or Correcting a Report

To change the content of an existing report, click the **Generate Report** link. Before signing it, you must select **Amendment** or **Correction** from the signing drop-down list.



Viewing or Printing a Signed Report



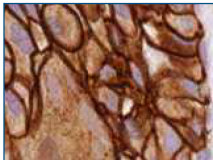
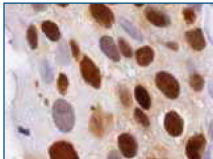
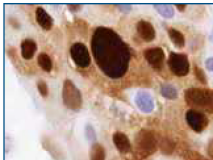
To open the signed Acrobat file of the report, click the name of the report listed in the report history section under Case Reports or Project Reports.

Your web browser asks if you want to save the file to your workstation.

If you have Acrobat Reader installed on your workstation, you can open the saved file in the Reader. (Acrobat Reader is a free application available from www.adobe.com.) Once the report is open in Acrobat Reader, you can view it, print it, or email it to a colleague.

Sample eIHC Report

The following images show the first page of a sample eIHC report. Note that for this template, images shown must be pre-selected by using the report annotation tool of your viewer.

| FINAL - AMENDED Report | | CASE REPORT | | | November 17, 2014 | | |
|---|--|---|---|------------------|-------------------|-----------------------|----------|
|  | | | Capistrano Oncology 7932 Via Cordelia San Juan Capistrano, CA 92675 Phone: (949) 555-3566 Fax: (949) 555-3567 | | | | |
| | | | PATIENT | PATIENT ID | DOB | GENDER | AGE |
| Unetelle | | 222-33-4444 | 1981-12-03 | Female | 32 | Dr. Bob Jones | 555-1212 |
| CASE COMMENTS | | | | | | | |
| Genetic analysis recommended for BRCA1 and BRCA2 genes. | | | | | | | |
| COLLECTED DATE | | RECEIVED DATE | | BODY SITE | | PROCEDURE | |
| 2005-01-02 | | 2005-01-03 | | Breast | | Fine Needle Biopsy | |
|  | | H&E | | | | | |
|  | | HER2 Score: 3. Used computer assisted image analysis | | | | POSITIVE 1+ | |
|  | | ER Score: 58.673 Used computer assisted image analysis | | | | POSITIVE 1% | |
|  | | PR Score: Manually reviewed | | | | 3% | |
| Signature: Administrator | | November 17, 2014 11:36 AM | | | Page 1 of 2 | | |

A

Creating a Workspace (Dashboard)

This appendix describes the features and functions of the Aperio Dashboard

After the Aperio eSlide Manager client software is installed on your computer, two icons appear at the bottom right of your desktop in the system tray:




These icons are for the Aperio Service Manager and the Aperio Dashboard.


The Dashboard allows you to set up the windows on your desktop and save the settings for each user configuration. For example, you may want to open a browser for Aperio eSlide Manager, your Outlook calendar, Word and Aperio ImageScope in a particular desktop arrangement and save it as Joe's Desktop.

Creating a Workspace

To create a workspace:

1. Open all of the applications that you want to display in your dashboard view, and size the windows accordingly.
2. Click on the Dashboard icon  to open the Dashboard menu.
3. Select **Create Workspace**.
4. From the Create Workspace window, select the applications you want to save in your workspace, and click **Create**.
5. In the Create Workspace window, type the name of the workspace, and click **Create**.
6. When the message window appears, click **OK**.

Opening an Existing Workspace

1. Click  to open the **Dashboard** menu.
2. Select **Open Workspace**, and select the workspace you want to open. The default workspaces are:
 - ▶ **eSlide Manager** – use if you have a single monitor. This workspace opens Aperio ImageScope and a browser.
 - ▶ **eSlide Manager - 4 Panel Display** – use if you have a multiple monitor setup. This workspace opens Aperio ImageScope, a browser, Microsoft Outlook, and Microsoft Word.

Other Dashboard Features

Other features in the Dashboard menu are:

- ▶ **Close Workspace** - Closes all workspace windows
- ▶ **Edit Workspace** - Enables you to add or remove programs in an existing worklist. Before editing a workspace, make sure all of the new windows that you want to add to the workspace are open. When the Edit Workspace menu item is selected, a window appears listing the program names for the windows in the worklist, followed by the program names for the windows that are not in the worklist. Select the check box next to each of the programs that you want to include in the workspace. Clear the check box for programs that you want to remove from the workspace. Click **OK** to save the edited workspace.
- ▶ **Delete Workspace** - Enables you to delete one or more of your workspaces. A window appears listing the names of all your workspaces. Select the check box next to each workspace that you want to delete, and click **OK**. If you delete the workspace that is open, the workspace windows do not automatically close.
- ▶ **Preferences** – select your workspace preferences
- ▶ **About Dashboard** - Displays the Dashboard version.
- ▶ **Close Dashboard**
 - Select this menu item to close the Dashboard program. If a workspace is open, it is not automatically closed when Dashboard exits.
 - Selecting **Close Dashboard** removes the icon from your desktop, unless you have set the default preference **Start Dashboard When You login**. If this is not your preference, you can display the Dashboard icon again by selecting **Start> Programs> ScanScope> Dashboard**.

B

Managing Aperio Services

The Aperio Service Manager allows you to stop or restart various Aperio services. If you contact Leica Biosystems Technical Services with a problem opening or accessing images or data, they may ask you to access this tool.

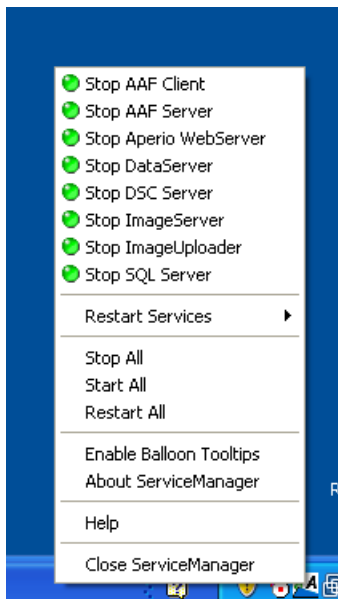
After the Aperio eSlide Manager client software is installed on your computer, you see two icons at the bottom right of your desktop in the system tray:



These icons are for the Service Manager and the Desktop Manager.

Accessing the Service Manager

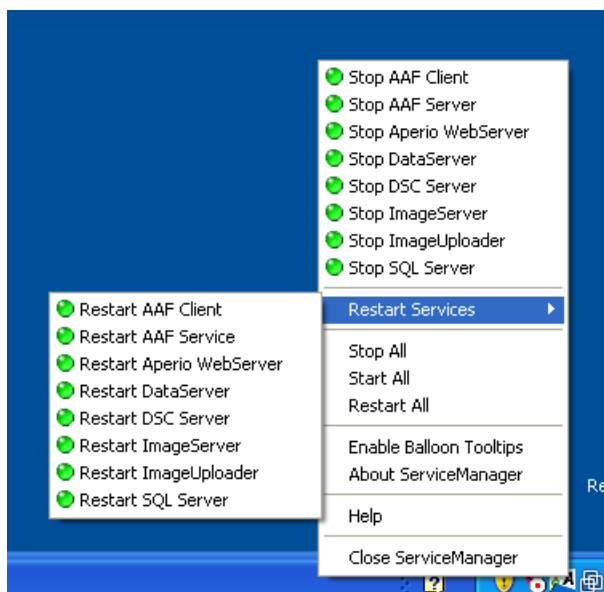
1. Click the  icon to open the Service Manager tool:



A green light on this menu means the service is currently running, and a red light means the service has stopped.

2. To start a stopped service, click the stopped service on this menu.
3. To stop a running service, click the service on this menu.

4. To restart a service, select **Restart Services** on this menu and then select the service you want to restart.



If you select Stop All, Start All, or Restart All, we recommend that you restart your workstation.

Index

A

- account locked 16
- adding
 - attachments 32
 - image to digital slide 36
 - new case 33, 35, 36
 - specimen to case 34, 35
- administrative settings
 - case priorities, defining 81
 - email notifications, enabling 82
- algorithm macro. See macro
- algorithms 53
- amending or correcting report 91
- analysis job queue 57
 - canceling jobs 57
- Aperio services 95
 - restarting/stopping 95
- attachments 70
 - adding 70

B

- batch analysis 54

C

- canceling analysis jobs 57
- case
 - adding 33
 - adding specimen 34
 - bulk editing 34
- case assembly. See case workflows
- case review. See case workflows
- cases
 - adding digital slides 68

- assigning 75
- assigning for review 69
- completing 75
- creating 65
 - tips 68
- prior. See prior cases
- priority 66
 - defining 81, 82
- receiving for additional work 70
- reviewing 73
- tracking status 72

- case workflows
 - administrative settings 81
 - case assembly 65
 - reports
 - creating 71
 - sample 71
 - updating 71
 - viewing 72
 - specimens
 - adding 66
 - adding image 67
 - case review 73
 - assigning the case 75
 - completing the case 75
 - collaborations 76
 - incoming 78
 - results 78
 - outgoing 76
 - de-identifying patient 77
 - working with digital slides 77
 - results, entering 78
 - results, reviewing 78
- logging in 59
- overview 58
- users 58

- changing password 16
 - child data 21
 - cloning data 45
 - Clone To command 45
 - collaborations. See case workflows
 - comments
 - adding pre-defined 84
 - entering 23
 - composite digital slides 36
 - conferencing 41
 - changing control 43
 - chat 43
 - host a conference 43
 - participate in a conference 43
 - start a conference 41
 - customers. See report, customers
 - CWS files, uploading 36
- D**
- Dashboard, using 93
 - data group 22
 - data hierarchy 21
 - data table 19, 21
 - data update messages 20
 - deleting data 28
 - details pages 31, 32
 - digitally signing reports 91
 - digital slides
 - adding to specimen 35
 - in a case 68
 - composite. See composite digital slides
 - creating 35
 - finding 68
 - documents, adding 32
- E**
- electronic signatures 24
 - entering data 23
 - barcodes 23
 - comments 23
 - electronic signatures 24
 - LIS 23
 - predefined lists 24
 - error message 20
 - account locked 16
 - change password 16
 - session timed out 16
 - eSlide Manager
 - administrative settings 79
 - data update confirmation 20
 - email settings 80
 - error message display 20
 - general tips 19
 - main page 18
 - menu bar 19
 - multi-level sort 29
 - eSlides. See digital slides
 - exporting data
 - options 31
- F**
- folder view 26
- I**
- images
 - adding 36
 - adding from server 37
 - analyzing 53
 - referencing 36
 - test. See test image
 - uploading 36
 - ImageScope
 - auto-view 40
 - disabling auto-view 40
 - opening digital slides 39
 - intended use 4
- L**
- license warning 16
 - LIS interchange 23
 - list pages
 - about 22
 - commands 27
 - list view 26

logging in 15, 59

login

- account locked 16
- change password 16
- change password message 16
- session timed out 16

logo, adding to reports 84

M

macro 53

- adding to eSlide Manager 56
- deleting from eSlide Manager 56
- exporting from eSlide Manager 55

Mirax digital slides, composite 36

multi-level sort 29

N

navigating eSlide Manager 19

notifications 82

P

parent data 21

Positive Pixel Count algorithm 53

predefined lists 24

preferences 64

printing a report 91

prior cases

- viewing 75

profile 64

R

report customers, adding 85

Reporting

- amending 91
- comments, adding pre-defined 84
- correcting 91
- customers
 - adding 85
 - assigning templates 86
 - logo, defining 86
- prerequisites 83
- printing 91
- sample 92

signing 91

states 91

templates 83

viewing 91

reports. See case workflows, case assembly

results, reviewing 78

S

sample report 92

saving specimens and digital slides when deleting cases 29

scan data group 16

search 47

- advanced 49
 - operators 50
 - results 51
- saved searches
 - ownership 52
- saving 49
- setting fields 80

selecting scan data group 16

session timeout 16

setting case priority 66

specimen

- adding digital slide 35, 36
- adding image 35
- adding to case 34
- creating 34

starting eSlide Manager 15

synchronizing eSlide Manager database 44

T

template 83

- selecting 90

test image 76

U

universal image support

- eSlide Manager 37

user groups 58

- assigning 79
- definitions 79

- histotechnicians 58
- lab assistants 59
- pathologists 59
- pathology assistants 59

user role

- defined 22
- sample 22
- selecting 15
- switching 15

V**viewing images**

- disabling automatic viewing 40

- viewing prior cases 75

- viewing reports 91

W**WebViewer**

- open images 38

- workflows. See case workflows

worklist

- tools 62

- workspace, creating 93

www.LeicaBiosystems.com/Aperio

