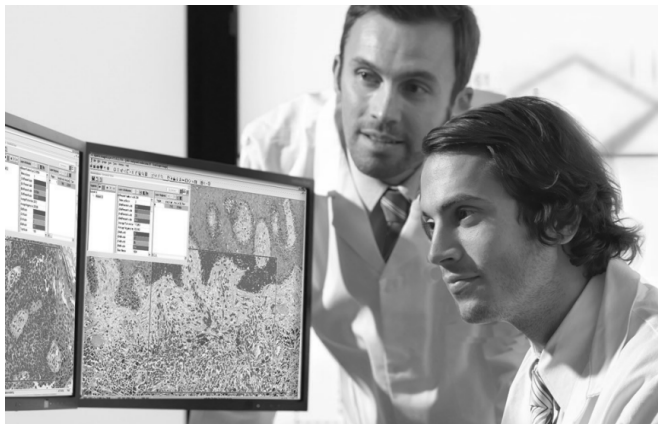# Aperio eSlide Manager

## Release 12.5 Notes & News

# Aperio eSlide Manager Release 12.5 Notes & News

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

## Copyright Notice

## 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 | General Information |
|---|---|---|
| Leica Biosystems Imaging, Inc.<br>1360 Park Center Drive<br>Vista, CA 92081<br>USA<br>Tel: +1 (866) 478-4111 (toll free)<br>Direct International Tel: +1 (760) 539-1100 | Contact your local support representative with any query and service request.<br><br>https://www.leicabiosystems.com/service-support/technical-support/ | US/Canada Tel: +1 (866) 478-4111 (toll free)<br>Direct International Tel: +1 (760) 539-1100<br>Email: ePathology@LeicaBiosystems.com |

REF Worldwide: 23SPOKE, 23SPOKETOHUB; U.S. Only: 23ESM5Y01, 23SPOKE5Y01

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# Notices

## Revision History

| Rev. | Issued | Sections Affected | Detail |
|---|---|---|---|
| A | January 2022 | All | New document for Aperio eSlide Manager 12.5. |

## 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 document *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.**

# Customer Service Contacts

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# Contents

# 1 About Aperio eSlide Manager Release 12.5

In addition to containing fixes requested by customers, Aperio eSlide Manager 12.5 also contains significant enhancements to performance and function.

This document summarizes the changes in this release, both new features and defect fixes.

## New Features

### Aperio Reporting and Aperio Network Modules Included in Aperio eSlide Manager

Aperio Reporting and Aperio eSlide Manager Network were formerly optional modules for Aperio eSlide Manager. They are now included in Aperio eSlide Manager for all customers.

- **Aperio Reporting -** Histotechnicians often need to produce reports containing information about the digital slides processed or analyzed. The Aperio Reporting module creates an attractive report that gives details about the digital slides in the case or project. For information on using the Reporting features, refer to the *Aperio eSlide Manager User's Guide*.

- **Aperio eSlide Manager Network** - Although Aperio eSlide Manager provides all the tools you need to manage digital slides, cases, specimens, and image analysis, Aperio eSlide Manager Network offers a more workflow-oriented approach to handling that data. For example, it provides histotechnicians the tools to assemble a case and assign it to a pathologist for review. Histotechnicians can also use Network to QC a case.

  Pathologists see a worklist of cases to review and may send a case back to the histotechnician for more work, review prior cases for the current patient, and send a case to another pathologist for review. For more on Network, refer to the *Aperio eSlide Manager User's Guide*.

### New Aperio WebViewer Features

We continue to add new features to Aperio WebViewer, a web-based digital slide viewer. Major features for this version of Aperio WebViewer are:

- **Image Enhancements** - Enables you to adjust gamma, brightness, and contrast levels when viewing a digital slide image. If you use the same image enhancement settings frequently, you can save custom presets. Additionally, after you have created presets, you can set preferences for automatically applying presets. For details, see *"Image Enhancements" on page 20*.

- **Enlarged Macro Image -** When hovering over a slide in the Slide Tray, you see an enlarged macro image that allows you to assess tissue coverage in the slide.

▶ **Custom Sort in the Slide Tray** - Slides are always grouped by specimen in the Slide Tray. Your Aperio eSlide Manager administrator can now further define how your slides are sorted under each specimen in the Slide Tray. For example, under each specimen, you can sort the slides by stain, block ID, and so on. For details, see *"Custom Sort in the Slide Tray" on page 24.*

▶ **New Aperio WebViewer Toolbar Icons** - The toolbar icons have a new look and feel. While most of the new toolbar icons have familiar imagery, the new icons are described in *"New Toolbar Icons" on page 25*.

▶ **Product Information** - A new Product Information pane enables you to easily view the Unique Device Identifier (UDI) number and Leica Biosystems Customer Support contact information. For details, see *"Product Information" on page 26.*

▶ **New Aperio WebViewer User's Guide with Training Workflows** - There is now a separate *Aperio WebViewer User's Guide* that provides instructions for using Aperio WebViewer. The guide also includes example training workflows that introduce key features by guiding you through example quality control and slide-viewing scenarios.

For more on Aperio WebViewer, see *"Chapter 3: Aperio WebViewer" on page 20* and the *Aperio WebViewer User's Guide*.

## Advanced Stain Display Sort

The Stain Management page allows the Aperio eSlide Manager administrator to create a more complex stain sort than offered by just the Display Order column. For more information, see *"Chapter 2: Administrator System-wide Sorting Options" on page 16*. This sort is used by reporting and the Aperio WebViewer slide tray.

ⓘ *Two sorting modes are now available, natural and alphabetical. The modes sort numbers differently. Natural mode results in a sort order in which numbers appear in the order you would expect. For details, see "About Natural and Alphabetical Sort Methods" on page 19.*

## Aperio WebViewer System-Wide Settings

Aperio eSlide Manager Administrators now have two new tools to set system-wide Aperio WebViewer options in the WebViewer Settings section on the System Settings page:



### Aperio WebViewer Slide Tray Sort

The Administrator can define an advanced multi-level sort used to display digital slides in the Aperio WebViewer slide tray. Note that this setting is system-wide. Slides in the slide tray are first grouped by specimen, then sorted by the method defined in these settings. For more information, see *"Chapter 2: Administrator System-wide Sorting Options" on page 16* and the *Aperio eSlide Manager Administrator's Guide.* For an example of how the custom sort appears in Aperio WebViewer, see *"Custom Sort in the Slide Tray" on page 24.*

*Two sorting modes are now available, natural and alphabetical. The modes sort numbers differently. Natural mode results in a sort order in which numbers appear in the order you would expect. For details, see "About Natural and Alphabetical Sort Methods" on page 19.*

### Aperio WebViewer Measurement Unit

The Administrator can set the unit of measurement Aperio WebViewer uses when displaying measurements. In the Aperio WebViewer Settings section, click **Edit** next to **Line Length**. Choose and save the unit of measure, Microns (the default) or Millimeters. For more information, see the *Aperio eSlide Manager Administrator's Guide*.

## Cosmetic Changes to Aperio eSlide Manager

- Several command names in the Administrative menu have been updated (some of the Aperio eSlide Manager pages reflect these new names). For example,  **Data Tables** is now **Data Table Management.**

- In Aperio eSlide Manager Network Case Assembly, the eSlides tab has been replaced with an eSlides button ⬤ eSlides   which will open all digital slides in the case in the Aperio WebViewer slide tray.

## Unique Device Identifier (UDI)

Regulatory bodies now require that devices and software contain a UDI (Unique Device Identifier) that uniquely identifies that product.

To see the UDI for Aperio eSlide Manager, go to the bottom of the Aperio eSlide Manager screen and click on the About eSlide Manager link:



# Performance Enhancements

## High Performance: Up to 150 Concurrent Users

A formerly optional performance module has been incorporated into Aperio eSlide Manager to support up to 150 concurrent users when high-performance server requirements are met. See the *Aperio eSlide Manager System Requirements* for details on server requirements.

## New Microsoft SQL and Server Software Supported

Aperio eSlide Manager 12.5 supports Microsoft Windows Server 2019 and Microsoft SQL Server 2019. For information on earlier versions supported, see the document *Aperio eSlide Manager System Requirements*.

# Aperio ImageScope Compatibility and Security

As of Aperio eSlide Manager release 12.5, end-to-end security is available with Aperio ImageScope 12.4.5 and later. If Aperio eSlide Manager is using SSL to encrypt data traffic, network port 443 (a secured port) is used to transmit all Aperio ImageScope data. (Traditionally, port 443 was used to send encrypted Aperio ImageScope data, but port 80 (an unsecured port) was still required to transmit some unencrypted traffic.)

If you want to use an earlier version of Aperio ImageScope (12.4.3 or 12.4.4) with Aperio eSlide Manager 12.5 and later, and you are using SSL, you will need to keep both port 443 and port 80 open on the network firewall to transmit encrypted and unencrypted data. Contact your IT manager to discuss port use on your network and to request port 80 be opened. If your institution's security requirements do not allow opening port 80, you will need to use version 12.4.5 or later of Aperio ImageScope on Aperio eSlide Manager 12.5 and later.

# Infrastructure Changes

## New Authentication Server Provides System Authentication

A new AuthServer module that provides authentication services to Aperio eSlide Manager sets the stage for future authentication features.

## Aperio eSlide Manager No Longer Uses Adobe Flash Player

As Adobe Flash Player is no longer supported by Adobe Systems, modules of Aperio eSlide Manager that formerly used Adobe Flash Player (TMALab segmentation and Aperio eSlide Manager Network image and document uploads) have been modified to use HTML5 instead.

## Updated Infrastructure

The following Aperio eSlide Manager components have been updated to these versions:

- OpenSSL - 1.1.1k
- ProxyServer: Nginx 1.19.9.1 Whitehorse

## Deprecated Software Removed

Certain software modules/functions no longer used by Aperio eSlide Manager have been removed:

- Aperio WebScope (replaced by Aperio WebViewer)
- SysInfo utility (Leica Biosystems Technical Services representatives will now help you set up SSL certificates).
- Aperio eSlide Manager IVD/RUO modes
- ePath Access record transfer sync (ePath Access is no longer supported)
- ImageUploader

Aperio WebViewer and Aperio ImageScope Installers Available Separately

The Aperio WebViewer and Aperio ImageScope installers have been removed from the DSR (Digital Slide Repository) installer and made separate installers. This allows customers to more easily deploy these installers to clients and gives Leica Biosystems more flexibility in updating the viewers independently of Aperio eSlide Manager releases.

# New and Updated User Manuals for This Release

The following new or updated user manuals apply to the 12.5 release of Aperio eSlide Manager.

- ▶ Aperio eSlide Manager User's Guide, MAN-0488, Revision A
- ▶ Aperio eSlide Manager Administrator's Guide, MAN-0490, Revision A
- ▶ Aperio WebViewer User's Guide, MAN-0489, Revision A
- ▶ Aperio eSlide Manager System Specifications, MAN-0495, Revision A
- ▶ Configuring the Aperio LDAP Interface, MAN-0172, Revision E
- ▶ TMALab User's Guide, MAN-0055, Revision I
- ▶ Aperio eSlide Manager Product Documentation Map, MAN-0497, Revision A

# Defects Corrected in This Release

Leica Biosystems is always responsive to the needs of our customers. This release contains many fixes to defects based on customer input and our own internal continuous quality improvement process.

*Indicates that a hot fix patch was made available for the correction.

## General Improvements in Aperio eSlide Manager

| Case | Description |
|------|-------------|
| 22241 | You can now download TMA spots set to size of 5000 or larger. |
| 22545 | Data was misaligned in a CVS export. |
| 23391 | An error occurred in Network Case Assembly when the Compliance Module was installed. |
| 23423 | SessionMode, SessionModeGroup, and SessionModeRoleComponent were incorrectly shown in Role Management command permissions and have been removed. |
| 23655 | After changing the order of fields on the Data Table Management page, the new order was not reflected on the modified data page. |
| 23834 | Intermittent errors in Network Find Slides and in assigning images to cases in Case Assembly. |
| 24030 | A cybersecurity enhancement now does not allow a blank password to be defined for a user. |
| 24148 | Special characters in the System description on the License Administration page caused license upgrades to fail. These special characters are now not allowed in the System description: ( ) { } < > " ' |
| 24315 | If the name of the user running DBINSTALL was greater than 15 characters, the install would fail. |
| 24320 | The slide tray was not displaying in Aperio WebViewer when the viewer was opened by an LIS. |
| 24595 | Digital Slide Studio became nonresponsive when performing a batch conversion. |
| 24649 | A user was prompted to change a password even though they were authenticated by LDAP. |
| 24694 | Universal Image Importer could not import Mirax images. |
| 24703 | Text overlapped in an Audit Trail PDF report when a large number of items were selected. |
| 24706* | Aperio ImageScope became unresponsive when annotations were deleted. |
| 24787 | International date formats could not be applied. |
| 25508 | The page number on Aperio eSlide Manager list pages was incorrect when using the left and right navigation arrows to move between columns. |
| 25547 | An error occurred when updating data under case eSlide columns. |
| 25552 | Barcode parsing failed after an upgrade due to a GlobalUpdater problem. |
| 25581 | Algorithm analysis results were missing from exported data. |
| 25615 | A user was logged off after selecting a data hierarchy. |
| 25646 | A cybersecurity improvement was included. |
| 25661 | When installing to a non-C: drive, the log files were created on C:. |
| 25830 | Aperio ImageScope was enhanced to work with pre-12.4.3 versions of ImageServer. |
| 25865 | A user received the error message "Cannot use a scalar value as an array" when logging in. |
| 27484* | The *Created by* field could not be made visible. This field was included in error and has been removed. |

| Case | Description |
|------|-------------|
| 27499* | In Aperio eSlide Manager Network, an error occurred when adding slides to a specimen, the incorrect slides displayed in Aperio WebViewer, and an error occurred in Search. |
| 27521* | In Aperio eSlide Manager Network, the email link in a case assignment was not working. |
| 27626 | The **Reference an Image** option did not work when adding an image to a digital slide.. |

## Performance Improvements

| Case | Description |
|------|-------------|
| 23171 | Improvements were made in Aperio eSlide Manager navigation performance. |
| 23837 | Enhancement in database handling improved general performance. |
| 2477 | Annotation display performance was improved. |
| 24902 | Aperio eSlide Manager became unresponsive when a large number of users logged in simultaneously. |
| 25114 | Users could not re-log in after an error. PHP and Aperio WebServer were updated to improve use of resources. |
| 25544 | The new authentication server (AuthServer) improves login performance. |

## Image Analysis Improvements

Several improvements increase the robustness of Aperio image analysis.

| Case | Description |
|------|-------------|
| 23034 24581 | Analysis failed if the digital slide contained a zero-length annotation (for example, a dot was made by accident). |
| 24269 | Canceling an analysis job failed to cancel the job. |

## Search Improvements

Several improvements increase the robustness of Aperio eSlide Manager and Aperio eSlide Manager Network search.

| Case | Description |
|------|-------------|
| 23520 | An error message occurred when clicking a free text Search result. |
| 23699 | Including an @ symbol in a search string caused incorrect results in Advanced Search. |
| 24848 | All search results were not returned. |

## Aperio WebViewer Improvements

Several improvements enhance Aperio WebViewer performance and function.

| Case | Description |
|------|-------------|
| 24386 | At certain magnifications (when the image displays were interpolated), images in Aperio WebViewer appeared blurry. ImageServer was improved to use a linear interpolation algorithm to provide clearer images at these magnifications. |
| 25769 | When rotating images in Aperio WebViewer, the images appeared pixelated. |
| 27644* | Aperio WebVIewer performance degraded after upgrading to Aperio eSlide Manager 12.4.4. |

# 2 Administrator System-wide Sorting Options

Administrators now have two new types of sorts that take effect system wide.

As before, you can manually sort stains on the Stain Management page by changing the numbers in the Display Order column. But now you can define a more complex stain sort for that page which also affects the order in which stains are shown within a specimen in the Aperio WebViewer slide tray and within reports.

Additionally, you can define a complex sort specifically for the Aperio WebViewer slide tray that uses multiple sorting criteria such as barcode, block ID, and body site.
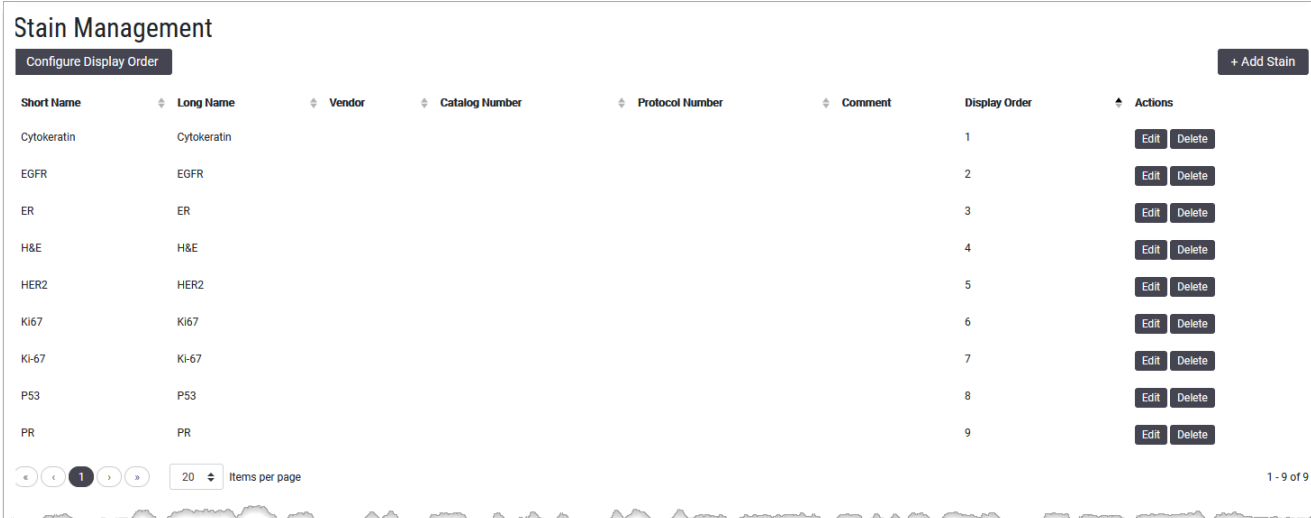
For more information on these features, see below and the *Aperio eSlide Manager Administrator's Guide*.

ℹ️ *For information on using the Aperio WebViewer slide tray and on how sorting affects the slide tray display, refer to the* **Aperio WebViewer User's Guide***.*

## Advanced Stain Display Sort

On the Stain Management page, the Display Order field dictates the order in which digital slides will appear in reports and in the Aperio WebViewer slide tray (if stain sort is used). For example, if the HER2 stain has a Display Order value of 1, slides using that stain will be listed first. To change the display order, click **Edit** in the row for the stain and change the Display Order value.

You can also define a more advanced multi-level stain sort by clicking the **Configure Display Order** button (see the next section for more information).



| Short Name | Long Name | Vendor | Catalog Number | Protocol Number | Comment | Display Order | Actions |
|---|---|---|---|---|---|---|---|
| Cytokeratin | Cytokeratin | | | | | 1 | Edit Delete |
| EGFR | EGFR | | | | | 2 | Edit Delete |
| ER | ER | | | | | 3 | Edit Delete |
| H&E | H&E | | | | | 4 | Edit Delete |
| HER2 | HER2 | | | | | 5 | Edit Delete |
| Ki67 | Ki67 | | | | | 6 | Edit Delete |
| Ki-67 | Ki-67 | | | | | 7 | Edit Delete |
| P53 | P53 | | | | | 8 | Edit Delete |
| PR | PR | | | | | 9 | Edit Delete |

To create a multi-level sort for the Stain Management page stains, click the **Configure Display Order** button at the top of the page. You see the Configure Display Order window.



The first selection on this window is **Set Stain Display Order**.

▶ **Manually** - If you select **Manually**, you are choosing to determine stain order by editing the Display Order column on the Stain Management page.

▶ **Automatically** - If you select **Automatically**, you are choosing to determine the stain order by using the options on this window to configure a multi-level sort.

To create an Automatic sort:

1. Select **Automatically** on the Configure Display Order window.

2. Select an element in the **Sort By** drop-down list (such as **Short Name**). All slides will first be sorted by this element.

   a. Select the Order of the sort (**Ascending** or **Descending**).

3. To sort within that first sort choice, click the **Add Row** button.

   a. Select an element in the **Sort By** drop-down list (such as **Vendor**). All slides are first sorted by the element in the first row of the sort, then by the element in the second row.

   b. Select the Order of the sort (**Ascending** or **Descending**).

For example, if you have multiple PR stains, this sort will sort all PR stains together (short name), and then within that group, sort by the stain vendor.

Once you have defined multiple sort rows, you can use the up and down arrows to change the precedence of the sort row. You can also use the X button to delete a row.

*Remember that Aperio WebViewer uses the stain order defined to sort digital slides within a specimen in the Aperio WebViewer slide tray if you select the stain as a sort criteria. See the section below for more information on defining the Aperio WebViewer slide tray sort.*

# Aperio WebViewer Slide Tray Slide Sort

At the top of the System Settings page you see the Aperio WebViewer settings for defining sort order of digital slides in the Aperio WebViewer slide tray.



The Aperio WebViewer slide tray groups digital slides by specimen.

You can define a multi-level sort here. For example, you can define a sort that first sorts by stain name and then sorts by block ID. In this case, you might have HER2 slides appear as a group within a specimen, and then those HER2-stained slides would appear sorted in block ID order.

To define a multi-level sort for the Aperio WebViewer slide tray:

1.  Click **Edit** under the sort table. You see the Aperio WebViewer Sort Order window:
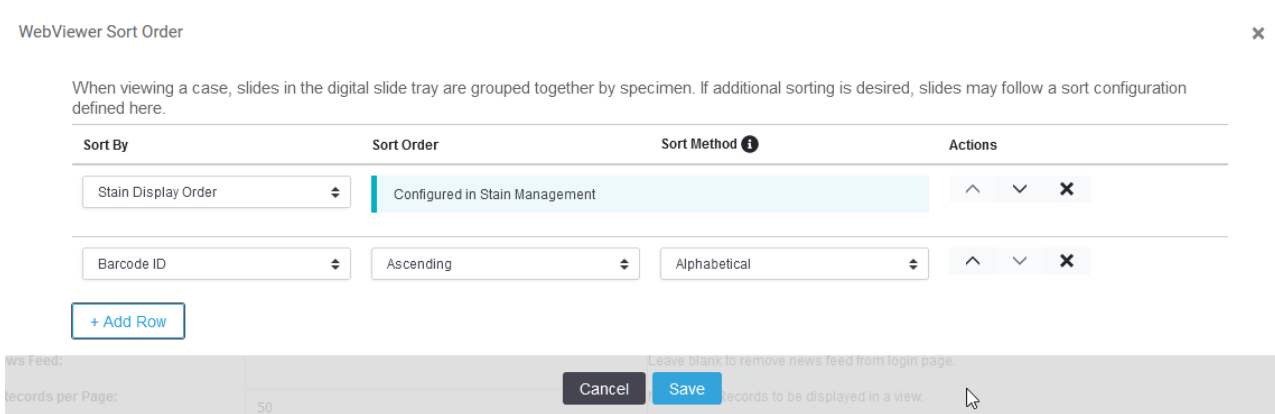


2.  If there are no sort rows defined, click **Add Row**.

3.  Select the first sort criteria from the **Sort By** drop-down list.

    ⓘ   *If you select **Stain Display Order**, you must go to the Stains Management page to configure the stain sort order. You can click the **Configured in Stain Management** link on this window to go to that page. For information on configuring the stain sort order, see the section above.*

4.  If you select a sort criteria other than **Stain Display Order**, you can choose these options for that criteria:

    a.  In the **Sort Order** column, select **Ascending** or **Descending**.

    b.  In the **Sort Method** column, select **Natural** or **Alphabetical** (see *"About Natural and Alphabetical Sort Methods"* below).

5. Click **Add Row** to define another, lower-level sort criteria.

6. To move the order of a sort criteria in the list, use the up and down arrows in the **Action** column. For example, moving the second sort criteria row to the top position makes it the primary sort criteria that is used first in the sort.

7. To delete a sort criteria, click the **X** in the **Action** column.

8. When you have finished defining the sort, click **Save**.

## About Natural and Alphabetical Sort Methods

Natural and alphabetical sort methods sort numbers differently.

Natural sort order is an ordering of strings in alphabetical order, except that multi-digit numbers are treated as if they were a single character.

An alphabetical sort uses a strict character sort.

For example, if you are sorting by Block ID, and you have Block 2, Block 3, Block 4, and Block 21:

▶ An alphabetical sort lists these as Block 2, Block 21 (two characters "2" and "1"), Block 3, and Block 4

▶ A natural sort lists these as Block 2, Block 3, Block 4, and Block 21 (one character "21").

*For information on using the Aperio WebViewer slide tray and on how sorting affects the slide tray display, refer to the* ***Aperio WebViewer User's Guide***.

# 3 Aperio WebViewer

Aperio WebViewer is a web-based digital slide viewing software product that enables you to navigate through whole slide images for a case in an organized manner. You can open whole slide images in Aperio WebViewer from an image and data management system (IDMS), such as Aperio eSlide Manager, or from your Laboratory Information System (LIS).

With Aperio eSlide Manager 12.5 release, Aperio WebViewer includes the new features described in the following sections. For complete details on using Aperio WebViewer, including example training workflows, refer to the *Aperio WebViewer User's Guide*.

## Image Enhancements

The Image Enhancements feature enables you to adjust the brightness, contrast, and gamma levels on your digital slides. The enhancements are for viewing purposes only and do not change the original scanned image.

ⓘ *We recommend not using the Image Enhancement tools to correct a suboptimal scanned image. In this case, you should request a re-scan of the slide.*

Image Enhancements include:

▸ **Gamma** - allows contrast adjustment to vary as a function of brightness. If the image appears too light and washed-out, reduce gamma and the image will become darker with more contrast. If the image appears to too dark, increase gamma and the image will become lighter with less contrast.

▸ **Brightness** - use to make the overall image brighter or darker.

▸ **Contrast** - use to adjust the bright and dark areas of an image in relation to each other.

After making adjustments, you can save them as a preset to use in future viewing sessions. You can also specify which (if any) image enhancements you wish to use during each viewing session.

## Adjust the Brightness, Contrast, and Gamma

1. Click ◑ on the main toolbar to open the Image Enhancements tool box:
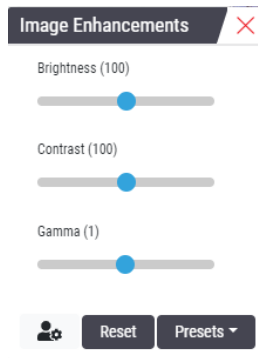


2. Click and drag the **Gamma** slider to left to increase the gamma levels, or right to decrease the gamma levels.

3. Click and drag the **Contrast** slider left for less contrast, and right for greater contrast.

4. Click and drag the **Brightness** slider left to make the image darker, and right to make the image brighter.

   ℹ️ *You can use the Up Arrow and Down Arrow keyboard keys to fine-tune the adjustments in increments of 0.01 for Gamma, and 0.1 for Brightness and Contrast.*

5. To save your adjustments for future use, create a preset as described in the following section.

## Image Enhancement Presets

If you use the same set of Image Enhancement settings often, you can save them as a preset.

1.  Use the Image Enhancement Toolbox to make the desired adjustments to Gamma, Brightness, and Contrast.

2.  Click **Presets**, then click **Save as Preset**.
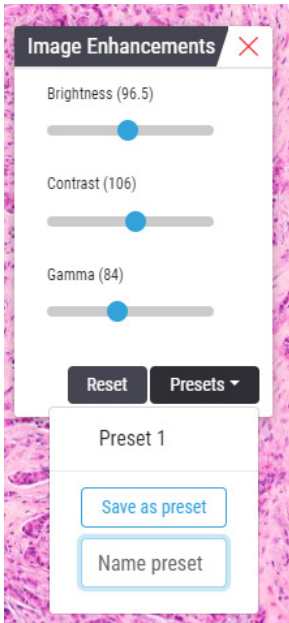


3.  Type a name for the new preset.

4.  Click **Save as Preset** to finish.

5.  To close the Image Enhancements Toolbox, click the red X.

## Apply a Preset

With the digital slide you want to view open in the viewer:

1.  Hover your mouse over the Image Enhancements tool.



    The small triangle in the lower-right of the tool indicates that presets are available. If the triangle does not appear, this means you have not defined any presets yet.

2.  Select a preset you want to apply. The image is adjusted according to the preset you selected.

## Set Image Enhancement Preferences

If you have defined Image Enhancement presets, you have the option of starting each viewing session with a specified preset. Automatically applied presets affect unread slides only. During your viewing session, the system doesn't overwrite an image enhancement adjustment or a preset you have already applied to a slide.

> *In order to use the Image Enhancement Preset Preferences, ensure "Image Enhancements" is selected in the Visibility window. For details on using the Visibility window, see "Options" on page <?>.*

To set Image Enhancement preferences:

1. Click ◐ on the main toolbar to open the Image Enhancements tool box.
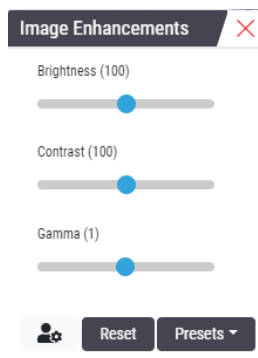
2. Click 👤⚙ to open the Preferences tab in the Options window.
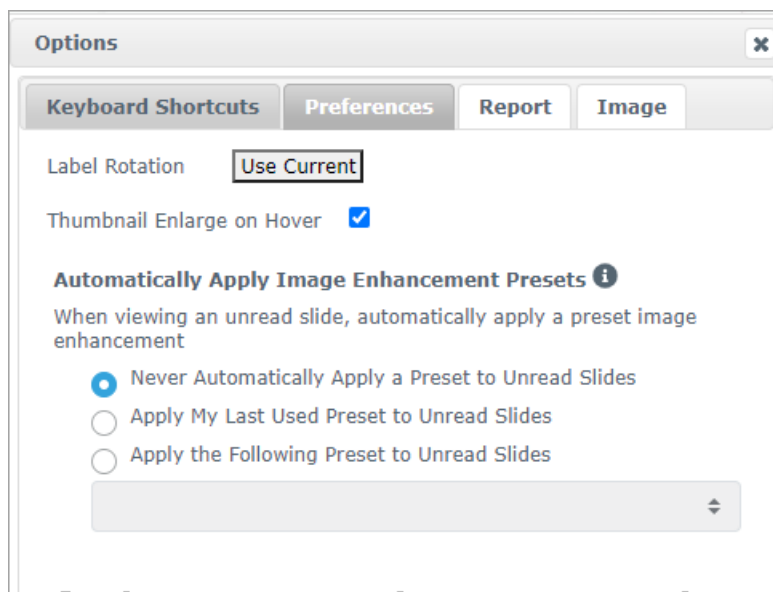
3. Select one of the following:

    ▸ **Never** - this is the default setting. Select if you do not want the system to automatically apply presets.

▸ **Apply My Last Used Preset** - select if you want the system to automatically apply the last preset you used to all unread slides.

Example: Suppose you create a preset called "Preset 1," and apply that preset to the current active slide. The system then applies "Preset 1" to the remaining unread slides in your tray. If you then open a new case, the system remembers your setting, and applies "Preset 1" to all slides in your tray. If you then apply "Preset 2" to a slide, the system then remembers "Preset 2," and applies it to all remaining unread slides in your tray.

If you manually adjust the Image Enhancement values on a slide without using a preset, the system does not carry that value over to other slides.

▸ **Apply the Following Preset** - select if you want the system to automatically apply the preset you select from the drop-down list. This option allows you to set a "default" preset to apply to all unread slides in your tray.

Example: If you frequently start your viewing sessions with "Preset 3," you may wish to set "Preset 3" as your default preset. The system then always applies "Preset 3" to all unread slides in your tray. If you change the Image Enhancements settings or apply a different preset to a slide, only that slide is affected. All remaining unread slides in your tray still use the default preset you specify.

# Macro Image in the Slide Tray

Hover over a slide in the slide tray and view the Macro View to confirm tissue coverage.
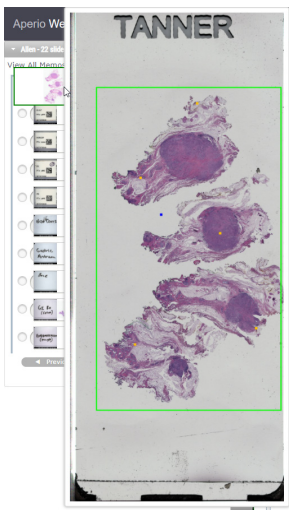


The green box defines the scanned area that can be viewed in the image viewing window. If there is tissue outside the green box in the Macro View, the slide should be rescanned or prepared again if necessary.

# Custom Sort in the Slide Tray

Slides are always grouped by specimen in the Slide Tray. With Aperio eSlide Manager 12.5, your Aperio eSlide Manager administrator can now further define how your slides are sorted under each specimen in the Slide Tray. For example, under each specimen, you can sort the slides by stain, block ID, and so on.

The sort order is indicated in the upper portion of the slide tray. You can click ℹ️ to view further details about the sort order, as shown below. (The ⌃ and ⌄ symbols indicate ascending or descending order.)
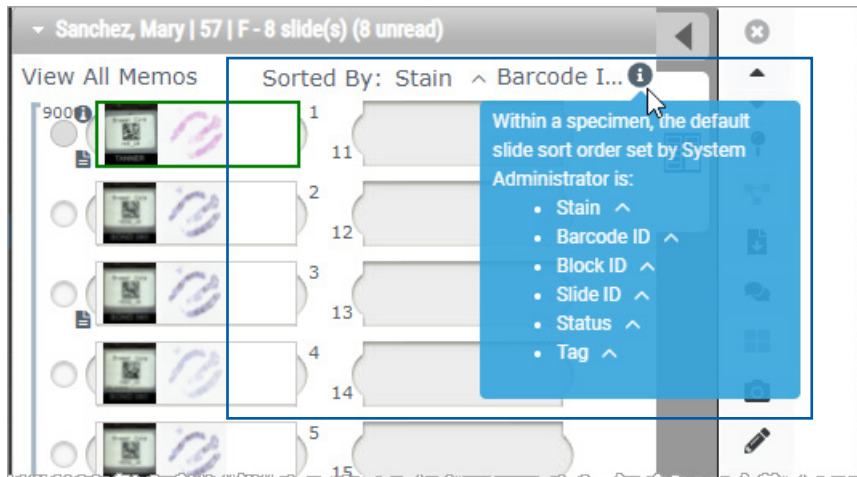
Your site administrator defines the Slide Tray sort order in Aperio eSlide Manager. For more information, see Chapter 2 (X-REF) and the *Aperio eSlide Manager Administrator's Guide*.

## New Toolbar Icons

Most of the new toolbar icons have familiar imagery. The table below shows and describes each tool.

| | |
|---|---|
|  | Close the current digital slide, if there is more than one digital slide open. |
|  | View the previous digital slide in the tray. |
|  | View the next digital slide in the tray. |
|  | Open the Raster Scan navigation tool. |
|  | Open the Pin drop navigation tool. |
|  | Use synchronized navigation to pan, zoom, and rotate multiple digital slides together. |
|  | Download the .sis file (ScanScope Image Set file) to open the active digital slide in the Aperio ImageScope viewing software. |
|  | Host a conference to share digital slides with colleagues working in your Aperio eSlide Manager location. |
|  | Change the image tiling pattern when you have multiple digital slide images open. |
|  | Take a snapshot of the digital slide, and save it as a JPEG image file. |

Add or edit annotations.

Enables you to resize the Viewer window.

Opens the Image Enhancement settings, which allow you to apply gamma, brightness, and contrast settings to the image.

Open the Aperio WebViewer Visibility panel and Options window.

# Default Units of Measure

The new global setting for WebViewer Length Unit in the Aperio eSlide Manager System Settings determines whether Aperio WebViewer uses microns or millimeters when displaying measurements in the viewer. The default value is Microns.

# Product Information

A new Product Information pane enables you to easily view the Unique Device Identifier (UDI) number and Leica Biosystems Customer Support contact information.

To view product information and service contact information:

1.  Click the Leica Biosystems logo that appears in the upper-right corner of the viewer.



2.  The Product Information pane appears, which includes the Unique Device Identifier (UDI) and service contact information.

Product Information

**Product Name**    Aperio WebViewer

**UDI**    00815477020426(8012) 1.0

**Updated**    8/20/21, 11:01:07 AM

Customer Support

**North America**
+1 844 534 2262
techservices@leicabiosystems.com

**International**
Contact us online

© Leica BioSystems.
1360 Park Center Drive
Vista, CA 92081 USA

For Research Use Only. Not for use in
diagnostic procedures

3.    To close the Product Information pane, click the Leica Biosystems logo again.

# New Aperio WebViewer User's Guide with Training Workflows

In previous versions of Aperio eSlide Manager, the Aperio WebViewer instructions were included in your *Aperio eSlide Manager Operator's Guide*. New with Aperio eSlide Manager 12.5 is a separate *Aperio WebViewer User's Guide* that includes detailed information on using Aperio WebViewer, including the features described previously in this chapter.

The *Aperio WebViewer User's Guide* also includes all-new example training workflows that introduce key features by guiding you through example quality control and slide-viewing scenarios. The training workflows are located in the "Get Started" chapter.