



Section 3

Digital Slide Viewer

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3.1 Examining Slides

View/Annotate Slide

View Slide Details

Add Regional MCQ

You can access the slide viewer by clicking on the VIEW / ANNOTATE SLIDES tab on the slide details screen. Alternatively, you can click on the slide thumbnail on the FOLDER CONTENTS screen. The slide viewer allows you to examine and annotate digital slides within the current folder. A number of tools are available to aid your examination of slides:

- Changing Magnification
- Lateral Scrolling
- Adjusting Image Quality
- Through-focussing of multi-focal plane slides



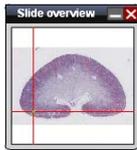
Note: The slide viewer is the first of its kind to be vendor neutral. This means that Digital Slidebox can support images scanned from any of the main scanner hardware vendors such as Aperio, Zeiss and Hamamatsu.



You can scroll through the entire slide by clicking and dragging on the image in the main viewer window. Alternatively, the following controls are available to assist in your examination of the digital slide:



The NAVIGATION CONTROLS allow a user to scroll laterally in the digital slide. The four arrow icons scroll the slide in the X and Y directions. The central button returns the user to a low-power overview image



The SLIDE OVERVIEW can also be used to navigate the slide. Users click on a particular region of interest within the overview, and they will be directed to that region in the main viewer. The green box at the centre of the red cross-hair indicates the current field of view



The MAGNIFICATION CONTROLS allow users to zoom in and out of the digital slide.

The (+) and (-) icons at either end of the toolbar increase and decrease magnification respectively. The four arrows allow the user to rapidly switch between 4x (left-most arrow), 10x, 20x and 40x (right-most arrow) magnifications, similar to switching objectives on a microscope. At higher magnifications, you will see an additional arrow for 60x at the extreme right. Note, you can also right-click on the viewer window to change magnifications.



Click on the BACK ARROW to return to the FOLDER CONTENTS page



Click the SELECT SLIDE button to switch between slides in the current folder.

3.2 Advanced Options



Note: The slide viewer uses a windows-style dialogue box for each of the different tools. Click the dash to minimise, the red X to close and click / drag to move.



Click the VIEW OPTIONS button to access advanced viewer tools.

The options menu lists all the additional tools available within the viewer. Note, a blue border and tick mean the option is currently displayed within the viewer. You can toggle display status by clicking on the circle icon.



Toggles the display of annotations on the slide

Displays a list of annotations on the slide

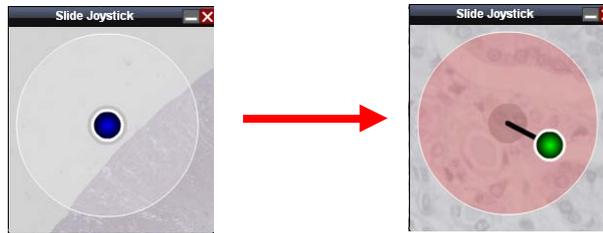
Toggles display of the slide overview window

Toggles the slide joystick control

Switches navigation controls to "auto-hide"

3.3 Slide Joystick

The slide Joystick is a simple control designed to allow users to “screen” a digital slide rather than examine field by field.



To use the joystick, click and hold your mouse over the blue button. As you move your mouse, the joystick will indicate which direction you are moving across the digital slide.

3.4 Information Window

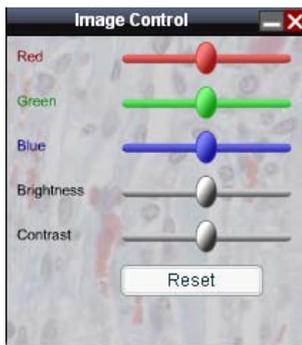


The information window displays any additional details about the current slide, including slide name and tissue stain.

3.5 Colour Control



User's can adjust brightness, contrast and colour settings to optimise the digital slide for their monitor. These tools can be accessed from the COLOUR CONTROL button in the toolbar.



Adjust Red / Green / Blue Saturation

Adjust Brightness

Adjust Contrast

Use the sliders to adjust parameters to suit your viewing requirements. You can reset all parameter at any stage by clicking the RESET button.



Note: The balances you set are stored in Digital Slidebox, even after you close the colour control toolbox. Once you leave the slide, they will be reset to default automatically.

3.6 Multi-Focal Plane Slides

The digital slide viewer is now capable of displaying multi-focal plane (MFP) slides. MFP slides are created at point of scanning, whereby a number of scans at different focal depths are embedded within a single image.

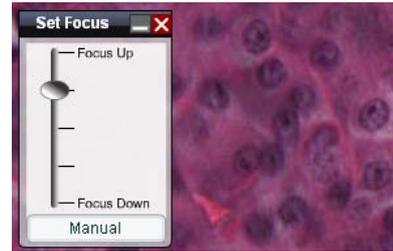
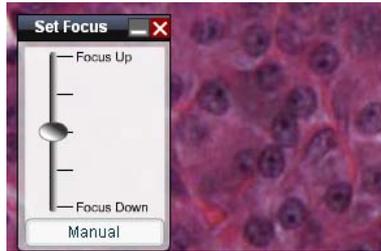
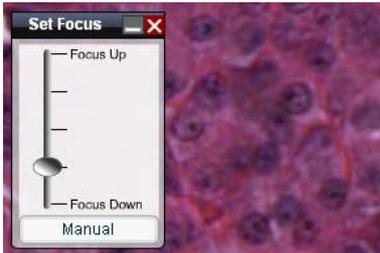


If the slide being viewed has been scanned using MFP, the FOCUSING button will appear in the toolbar. Click to activate the SLIDE FOCUSING controls.



The Focus Controls allow you to “through-focus” the digital slide. This is done by smooth transition between the individual planes within the image. You can view each image plane by moving the slider to one of the stop marks. As you move the slider, you will observe the focus changing on the slide in the background.

By clicking on the MODE button, you can switch from MANUAL to AUTO focus. Auto focus initiates a through-focus scrolling, whereby the slide will scroll back and forth through all the focal planes within the image



Note, you can also access the slide focussing tool by right-clicking on the main viewer window.



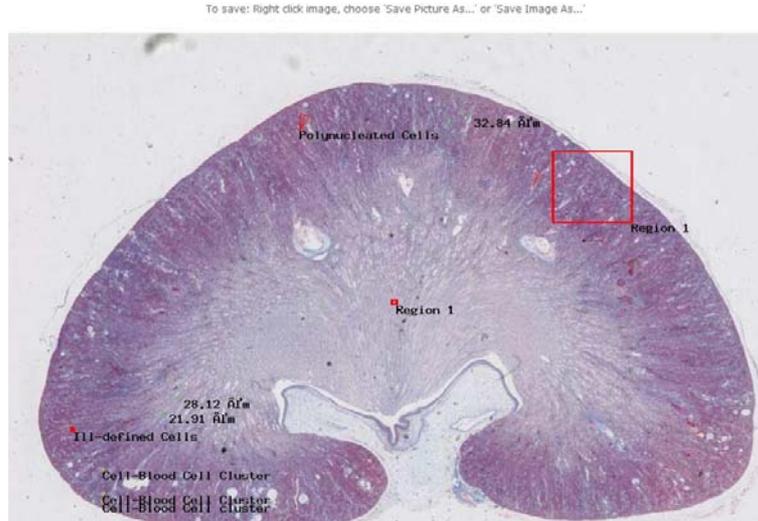
Note: MFP slides contain multiple images, and thus are multiples of the standard digital slide file size! Pay particular attention to our recommended computer specifications for viewing these type of slides. More information is available at <http://www.slidepath.com/speclist.php>

3.7 Saving Snapshots



Use the SNAPSHOT button to capture a still image of the current field of view, and export it as a JPEG. When you take a snapshot, it opens in a new window.

Right click on the image and choose “SAVE AS” or “SAVE IMAGE AS” to store the image to your computer. Note that the snapshot records annotations and measurements that have been marked on the slide, along with associated text descriptions.



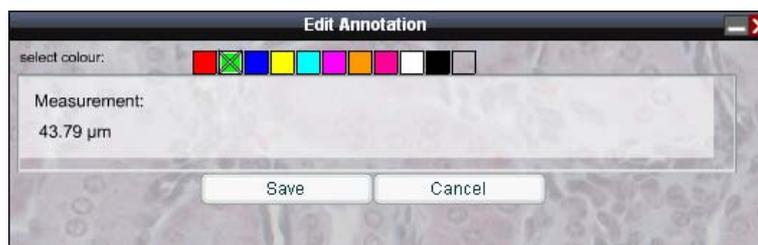
Note, you can also access the snapshot function by right-clicking on the main viewer window.

3.8 Performing Measurements



You can use Digital Slidebox's built in calliper tool to perform measurements on screen.

Click the measurement button; you will notice the hand icon change to a cross-hair. Draw your measurement, and Digital Slidebox will return a value for that measurement.



You can choose to save your measurement on the slide (temporarily) if you wish. Note that when you mouse back over a measurement, the value will be displayed.



Note: The measurement tool scales automatically from Micrometers, to millimeters, to centimeters as you draw the marker.

3.9 Annotation List

If a digital slide has been annotated, the annotation list appears automatically when you open the slide. The list shows all annotations made on all slides in the current folder.



- Red text are annotations. Click on these to navigate to the position of the annotation.
- Blue text are annotation LAYERS. Click on a layer to show ONLY that layer. Click the slide name to show all annotations

You can access the slide narrative by clicking on the NARRATIVE button

3.10 Slide Narrative

The narrative is a detailed description of a slide which has been set up by the module coordinator. It contains useful information about the slide, along with links to other slides, annotations, multimedia and external websites. Links are identified with **blue underlined text**. Click on this text to activate the link

