




# Quick Reference: IMPAX Volume Viewing MIP/MPR

## Launching the application


1. Open a study for display in IMPAX Image area.
2. Click the **Volume Viewing** icon.   
If relevant, the **Series Selection Box** opens.
3. Select one series and click **OK**.  
The application opens in Viewing mode with the selected series displayed.

## Image manipulations


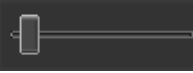
Action	
<b>Scroll</b>	Hold down the left mouse button and drag the mouse up/down. Or use the mouse scroll wheel.
<b>Zoom</b>	Select the zoom tool*, and use the mouse scroll wheel. Or hold down the right mouse button and drag the mouse up/down.
<b>Pan</b>	Select the zoom tool*, hold down the left mouse button and drag the mouse up/down. Or hold down both left and right mouse buttons and drag the mouse up/down.
<b>W/L</b>	Select the W/L tool*, left click on the image and move the mouse, then right click to exit. Or hold down the middle mouse button and drag the mouse.

\* The zoom tool  and window/level tool  can be selected from the top toolbar or the right-mouse-click menu.

## Using Window/Level presets


The application also contains a set of default W/L presets. You can access and configure these presets by right clicking the W/L icon in the top toolbar. 

## Changing the crosshairs

- You can show/hide the crosshairs by clicking the **Cursor Mode** button in the left toolbar, or by pressing 'X' on the keyboard. 
- You can change the gap size of the crosshairs by moving the **Crosshair slider**. 



## Placing Mark-ups

It is possible to place mark-ups on the images.

1. Click the arrow next to the **Mark-up** button in the top toolbar. 
2. Select one of the mark-up options in the dropdown menu.
3. Place the selected mark-up on the image.
4. Right-mouse-click to attach the mark-up to the image.


## Changing projection method and slab thickness

Move the mouse cursor to the bottom of a viewport, and...



1. select a **projection method** from the dropdown menu. 
2. move the **slice thickness** slider. 

Pressing a number on the keyboard will also set the slice thickness (in mm).


## Performing (double) oblique MPR

1. Move the mouse cursor over the outer end of a crosshair, until the cursor indicates the rotate action. 
2. Hold down the left mouse button and drag the mouse to rotate the crosshairs.



## Creating secondary captures

1. To capture a single viewport, select **Create capture** from the right-mouse-click menu. 
2. To capture all viewports, select **Create capture of full screen** from the right-mouse-click menu. 

To delete a capture, select it in the Captures panel, and press 'Delete' on the keyboard.



Click the **Save to PACS** button in the Captures panel to save the secondary captures as a new series of images. 

## Performing curved reformations

1. Select the **CPR mode** from the top toolbar. 
2. Activate the **curve tool** on the top toolbar. 
3. Click on the MPR to draw the curve.
4. Finish drawing the curve with a right-mouse-click.
5. Activate the **curve tool** again to restart drawing the curve.


## Reformatting Mode

In **Reformatting** mode, you can create new a series of images (with different slice orientation and thickness), and save it to IMPAX.

1. Select the **Reformatting** mode from the top toolbar. 
2. Change the slice settings (slice thickness, number of slices, orientation, etc.) in the top toolbar. The resulting new series is displayed in the top-left viewport.
3. Use the clipping planes and crosshairs to adjust the size and orientation of the reformatted volume.
4. Save the reformatted series by clicking the **Save to PACS** button. 
5. Enter a series description and click **OK**.

Alternatively, in **Viewing** mode, select **Export series** from the right-mouse-click menu to copy the MPR settings to **Reformatting** mode.


















## Closing the application










Click the **Close** button on the top toolbar. The application also closes when you navigate to another patient in IMPAX. 

## Keyboard shortcuts

F1 – F12	Apply window/level presets
X	Show / hide crosshairs
Z	Zoom & pan mode
0 – 9	Set slice thickness
A, C, S	Set view to axial, coronal, sagittal

## Toolbar buttons

General	
	Show / hide crosshairs.
	Window/level (presets).
	Text annotation.
	Distance measurement.
	Angle measurement.
	Circular ROI.
	Polygon ROI.
	Arrow annotation.
	Delete annotation.
	Reset the images to their initial state.
	Show / hide demographics.
	Show / hide mark-ups.
	Open the online help in a web browser.
	Open the configuration dialog.
	Minimize the application.
	Close the application.
	Open the About dialog.

	Toggle between default and alternative monitor.
<b>MIP/MPR Viewing mode</b>	
	Select a screen layout.
<b>Reformatting mode</b>	
	Set the reformatted dataset to axial slices.
	Set the reformatted dataset to coronal slices.
	Set the reformatted dataset to sagittal slices.
	Link / unlink slice thickness and distance.
	Invert the slice ordering.
	Send reformatted series to IMPAX.
<b>Curved Planar Reformat (CPR) mode</b>	
	Draw or redraw the curve.