3D Visualization of DICOM Images for Radiology Applications Tutorial

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Loading a DICOM volume

First, click on **Load DICOM Data**
Loading a DICOM volume

The DICOM Details window appears
Loading a DICOM volume

Click on LocalDatabase and select the folder 3Dvisualization_DICOM_Data-Part1
First, click **Import**

Then, locate and select the folder **dataset1_CT-Thorax-Abdomen** in the **3Dvisualization_DICOM_Data-Part1** directory, then click **Import** to import the selected volume.
A window indicating the completion of the DICOM volumes appears, as well as the `patient1` dataset. Click **OK** to close the window, then click on the `patient1` dataset.
The file hierarchy appears after **patient1** is selected. Click on **CT_Thorax_Abdomen**, then click on **CT_Thorax_Abdomen CT**.
Once **CT_Thorax_Abdomen CT** is selected, the snapshots of the DICOM images of the file are displayed in the bottom-left corner of the DICOM Details window. Click **Load Selection to Slicer** to load the volume to Slicer.
Loading a DICOM volume

Slicer displays the axial, coronal and sagittal slices of the DICOM dataset.
Loading a DICOM volume

Select the module **Volumes** in the Modules Menu.
Loading a DICOM volume

Under the **Window Level Editor Presets**, click on **CT-abdomen**, or adjust manually the Window and Level using the Manual W/L slider.
Position the mouse cursor over the red banner in the Red Viewer to display the slice menu. Click on the **Link Icon** to link the three slice controls across all Slicer Viewers.
Loading a DICOM volume

Click on the **eye icon** to display the three anatomical slices in the 3D Viewer.
Loading a DICOM volume

Use the left-mouse button in the 3D Viewer to rotate the 3D volume.
Loading a DICOM volume

Click on the center icon next to the ‘1’ in the blue banner to center the 3D view on the scene.
Loading a DICOM volume

The 3D View is now centered on the scene
Loading a DICOM volume

Click on the Slicer layout menu icon, and select the Conventional Widescreen layout.
Loading a DICOM volume

Slicer displays the DICOM volume in the **Conventional Widescreen** layout.
Loading a DICOM volume

Use the red slice, yellow slice and green slice sliders to slice through the volume in all three anatomical directions.
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