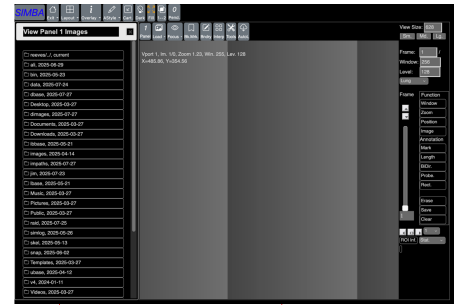
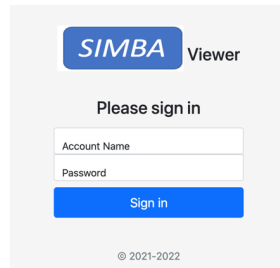
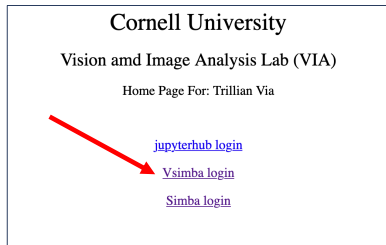


Vsimba use with servers for remote imaging viewing

A. Access

1. To access vismba go to the server home page <https://trillian.via.cornell.edu>
2. Click on the Vsimba login
3. Enter you user name and password
4. The Vsimba display will be presented

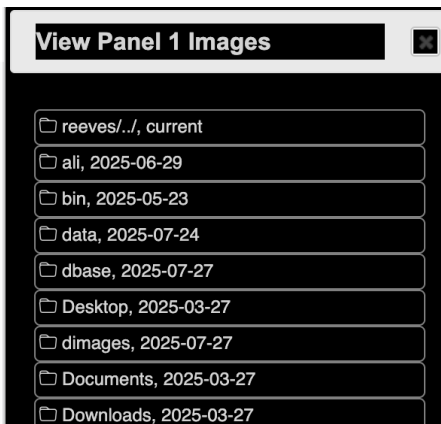


File System Browser Single Panel Display

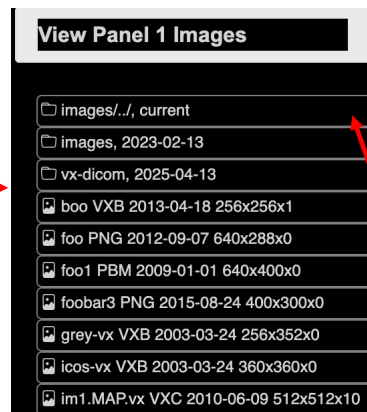
1

Vsimba File Browsing

1. On login the vsimba viewer will show the files in your user account
2. As with most browsers, click on a directory to enter it, click on the top button (current) to go up one level
3. To display an image click on an image file name



Account home directory



Images directory

4. Shown left is the result of clicking on the "images" directory

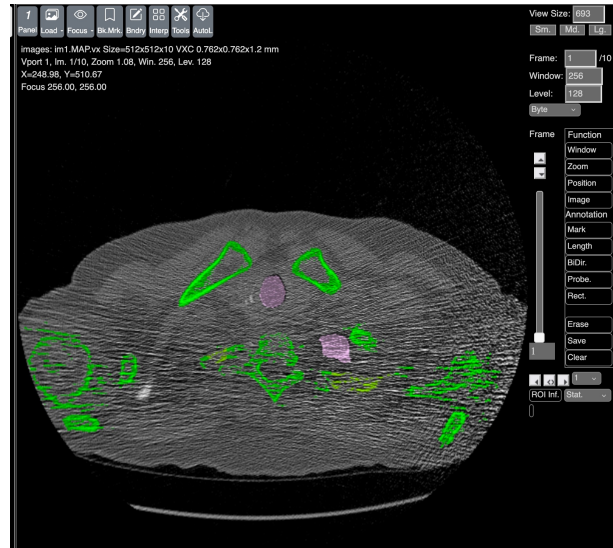
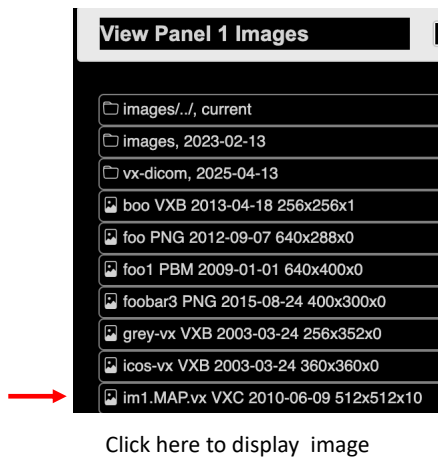
The local directories available are listed first and then the image files. Only files that can be displayed by the viewer are listed

Click on the top entry to return to the main account directory

2

Vsimba File Browsing and image viewing

1. Clicking on the file displays the image
2. This is a 3D image with 10 image frames; the first is shown



3

Vsimba Curated Dataset Image Viewing

Research image unique identifiers for curated image datasets

Research image datasets are distributed in a number of different files structures and formats. Typically, image are stored in DICOM format which means that a 3D CT image is represented as a set of 2D images in a directory.

To harmonize original data image references in our research program a file name labeling system has been developed that allows convenient naming and accessing of all our curated image datasets.

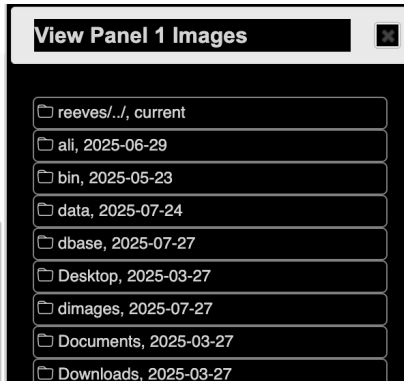
Each image is labeled with the following format <dataset><case> - <image-id> For example the first image in the VIA-ELCAP dataset is labeled W0001-s1, Where W is the dataset identifier, 001 is the case identifier and s1 is the within-case image identifier; typically, when a case has n mages these are labeled s1,s2,...sn.

There is a single user command that manages access to the created image datasets called **vdimage**. This command provides a convenient way for system users to access original curated dataset images and to view them

4

Vsimba Curated Dataset original image viewing

While the general file browser is sufficient for most image situations for a users images, a special scheme is used for curated dataset images which, in general, never need to be copied from their system location. This scheme is as follows.



1. Create a directory in your account called "dimages"
2. Identify the codes for images you want to review (say W0001-s1 and W001-s2 from the VIA-ELCAP dataset)
3. Make file links to these cases in dimages using vdimage, execute the following two commands from an account terminal

```
reeves@trillian: ~ — ssh • sv trillian — 64x41
(py312) reeves@trillian:~$ vdimage W0001-s1 -l
(py312) reeves@trillian:~$ vdimage W0002-s1 -l
(py312) reeves@trillian:~$
```

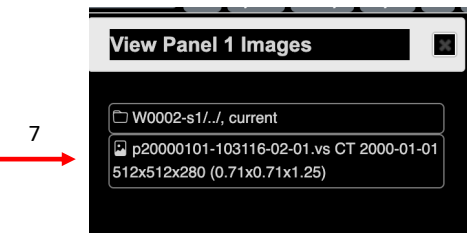
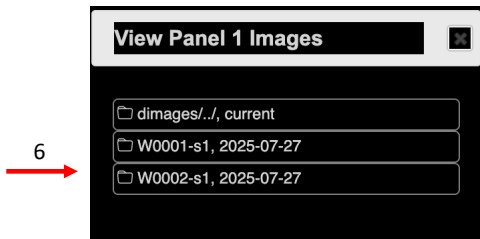
The -l option causes a link to be made for the specified image to the dimages directory

4. In the vsimba image viewer clin on the "dimages" directory

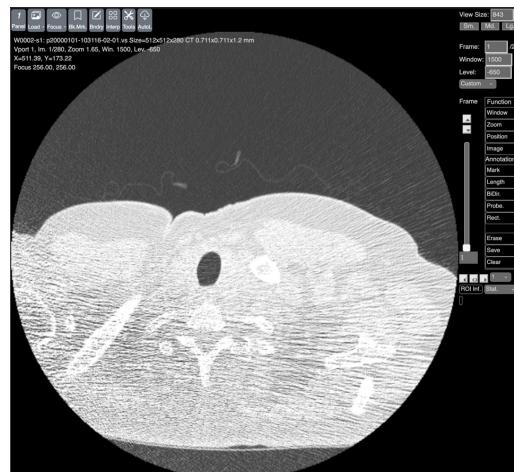
5

Vsimba Curated Dataset original image viewing

5. The images directory should show the two images that you selected
6. Click on the image you want to review (say W0002-s1).
7. Click on the single image shown to display the image



8. The selected image is now presented

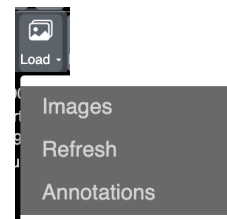


6

Vsimba Image Viewer, first time user hints

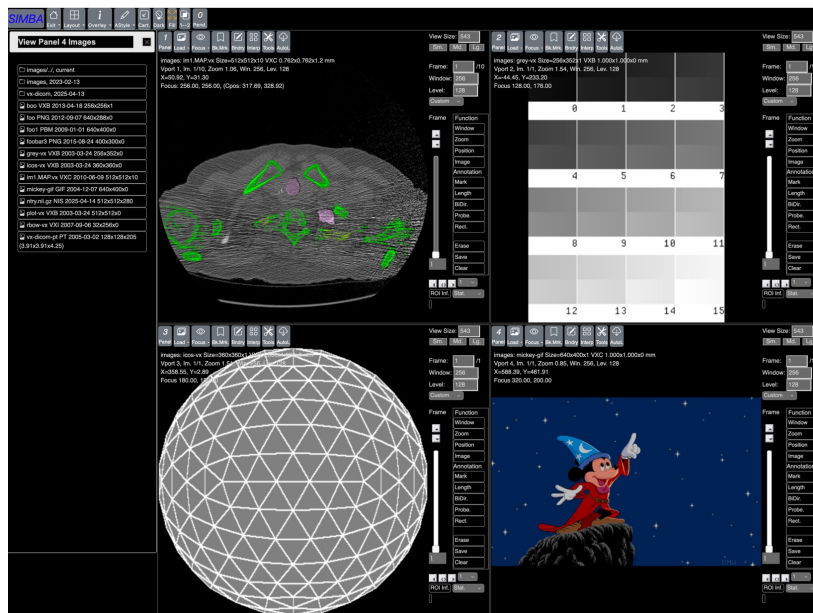
The vsimba viewer is still in development and has a couple of features that it is useful to know about.

1. Be sure to review the documentation for features such as, zooming, windowing, panning, image linking between panels, animation, image sub-region selection and statistical measures, image annotation, image scrolling, animation etc.
2. If you are a remote server or are loading an image with many frames, click on the autoload button, this will force load all the images to the viewer; otherwise, images are loaded on demand which can be frustrating on a slow or unreliable network.
3. The viewer does not actively monitor the state of the directory; thus, if you add or subtract images to the directory you are viewing, or if you update the image you are viewing, the viewer will not be aware of it. Thus, after such a change you will need to click on the load button and select the refresh option.



7

Vsimba Features



The Vsimba image viewer has a number of additional features.

It can display up to 4 panels simultaneously and synchronize frame selection between the first two.

To review the full feature set of the vsimba image viewer go to

<https://www.via.cornell.edu/visionx/simba/viewer.html?medical=med-viewer.html>

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