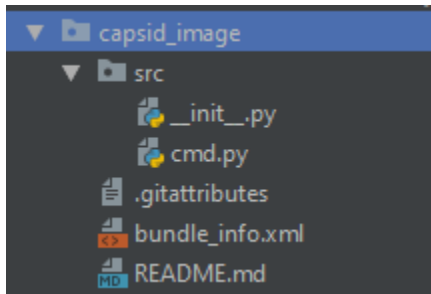


Procedure for Installing the capsid_image ChimeraX Command Bundle

The capsid_image command is installed using a ChimeraX Bundle, which consists of python code that provides the functionality of the command, and an XML file that provides information about the bundle such as its name and a description of the command.

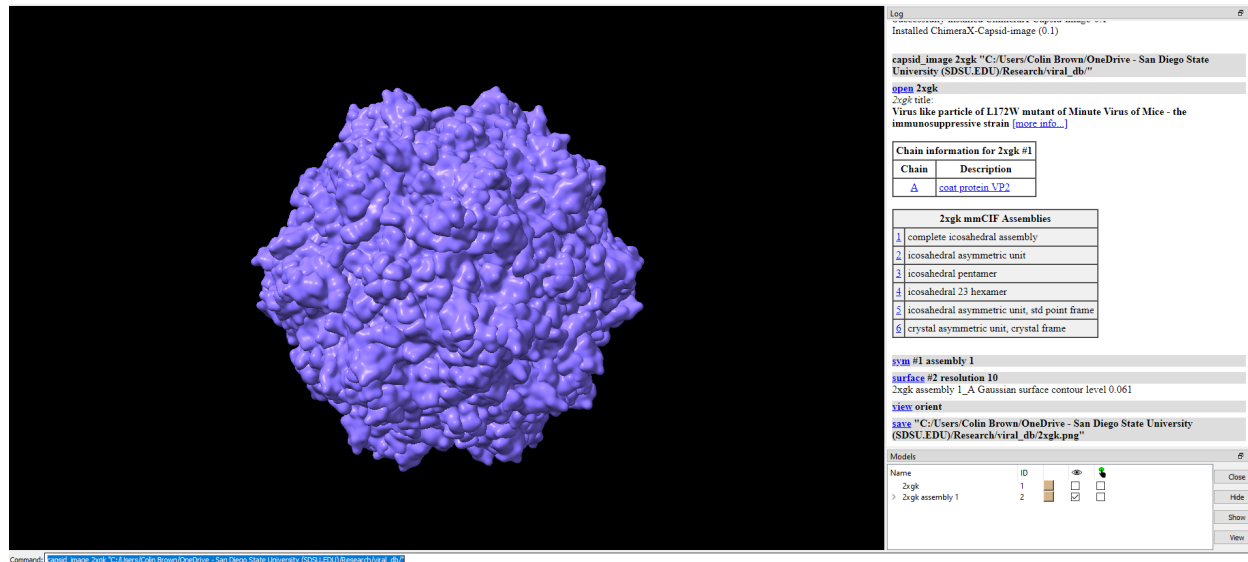
The capsid_image package has the following structure:



The specifics of this structure are not necessary for installing the bundle, all you need is the folder.

1. Acquire the bundle archive as capsid_image.zip.
2. Extract the bundle to a location of your choice. (I have the bundle in: 'C:\Users\Colin Brown\PycharmProjects\chimerax\capsid_image')
3. Now that you have a copy of the bundle, installation will be done via ChimeraX.
4. Launch your copy of ChimeraX.
5. In the command input of ChimeraX type the following command.
 - a. *devel install [path to bundle folder]*
6. If the installation was successful the following will appear in the ChimeraX Output.
Successfully installed ChimeraX-Capsid-image-0.1
Installed ChimeraX-Capsid-image (0.1)
7. Test the standard functionality of the new command by running the following command and ensuring that you get the following output.

a. "capsid_image 2xgk [path_to_save]"



8. The command is just a way to run the following commands in order.

```
def capsid_image(session, pdb, path_to_save):
    # All command functions are invoked with ``session`` as its
    # first argument. Useful session attributes include:
    # logger: chimerax.core.logger.Logger instance
    # models: chimerax.core.models.Models instance
    run(session, 'open ' + pdb)
    run(session, 'sym #1 assembly 1')
    run(session, 'surface #2 resolution 10')
    run(session, 'view orient')
    run(session, 'save "' + path_to_save + pdb + '.png"')
```

a.

Reinstalling during testing:

1. Restart ChimeraX
2. In the command input of ChimeraX type the following commands.
 - a. `devel clean [path to bundle folder]`
 - b. `devel install [path to bundle folder]`
3. Test by running the command `'capsid_image [pdb ID] ['some valid path']'`