

## Tutorial 1 05/08/2020 - Install Demo speaker notes

### 1. Create an IDAES folder on Desktop

- This could be anywhere, and will be the place where we will download the examples that we will use for the rest of the workshop

### 2. Open the Anaconda shell

- This was installed when you installed Anaconda

### 3. `cd Desktop; cd IDAES`

- Get into the folder we just created

### 4. `conda info --envs`

- List my current conda environments. These are really nice for keeping you python environments, for example, I have a separate one for ccsi

### 5. `conda create --name idaes-pse python=3.7`

- I'll create a new environment for IDAES. The "idaes-pse" here could be anything, specify the version of python to use in that environment.

### 6. `conda activate idaes-pse`

- Get into that environment, notice the prompt changes telling you what env you are in

### 7. `pip list`

- Notice that there are only a few packages installed

### 8. `pip install idaes-pse`

- This downloads and installs IDAES into the current conda environment. This is going to take about 5 mins on this VM.
  1. This same install command is done to upgrade an existing install. It will upgrade just the packages that need upgrading.
  2. Show the [readthedocs](#) site.
  3. We can be contacted a few different ways:
    1. [idaes-users@idaes.org](mailto:idaes-users@idaes.org) list
    2. [idaes-support@idaes.org](mailto:idaes-support@idaes.org)
    3. Github issues
  4. Take any questions so far

### 9. *pip list*

- Show that we have a lot of new packages installed now, specifically *idaes-pse*

### 10. *idaes --version*

- Show the version that was installed

### 11. *idaes get-extensions*

- Get some pre-build binary solvers. We don't yet have binaries for OSX but the vanilla *ipopt* can be installed via: `conda install -c conda-forge ipopt` it just won't have all the solvers we have built into our extensions

### 12. *idaes get-examples -V 1.5.2*

- Get the examples for the rest of the workshop, point out that an *examples* dir is now in the IDAES folder. The "*-V 1.5.2*" will be unneeded in the next release of IDAES. Note that this created a new *examples* folder in the current directory.

### 13. *jupyter notebook*

- Start the notebook that will be used for the rest of the workshops

14. Navigate to *examples/notebook\_index.ipynb* and open the Workshop 0, then shift-enter through the first cell to show the passing messages.

15. End with showing that to restart things for the next workshop, you don't need to create any new conda env or reinstall *idaes-pse*, you only need to:

1. Open Anaconda shell
2. `conda activate idaes-pse`
3. `jupyter notebook examples/notebook_index.ipynb`