Chapter 1

Eclipse ICE Tutorial Installation Details

You have been provided a USB stick with all you will need for this tutorial. On this drive is the following: ICE binaries for your OS, VisIt binaries for your OS, tools to install Docker, all tutorial documentation and slides for today, data files for the tutorial, and a Eclipse ICE workspace with ICE cloned for your convenience.

Docker Installation

Before we begin, we will need to have Docker installed to enable scientific code execution with ICE. ICE handles local and remote job launching for general scientific computing, but since we don't have enough time in this tutorial to build any science codes and their dependencies, we are providing a Docker image with a science code already built and configured. To use it, you must have Docker installed, which is OS specific. To see how to install Docker for your OS, go to https://docs.docker.com/engine/installation/. For Linux this is pretty self-explanatory, just use your package manager to install docker and start the docker daemon running.

For Mac and Windows users in this tutorial, we have provided the Docker Toolbox installers on the USB stick. After installing Docker Toolbox, you will need to start up a new docker machine. To do so, run the following:

docker-machine create --driver virtualbox default

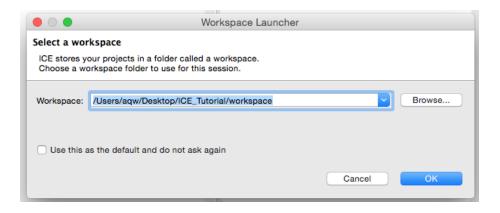
then on Mac OS, add the following to your bash_profile

```
eval "$(docker-machine env default)"
```

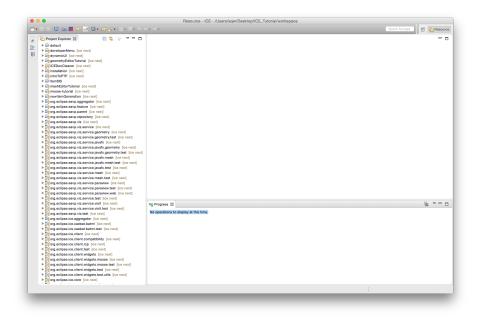
On Windows, you will need to run the following after creating the default dockermachine:

Starting ICE

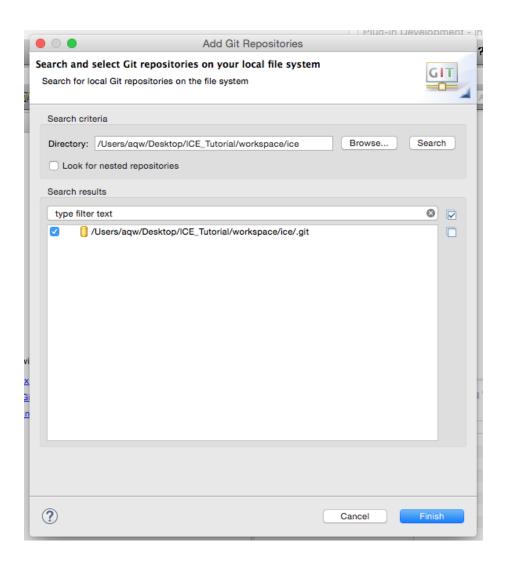
To start ICE, select the correct ice-product^{*} zip file on the USB stick and unzip it to get the ICE Application. Double-click to open up ICE. When the workspace chooser dialog opens, select the workspace we have provided on the USB stick (either to the location you copied it to on your local machine, or on the USB stick itself, see below image).



When ICE opens you should see something similar to the below image.



The first thing you should do is import the existing projects in the workspace we have provided. To do this, first open the Git perspective and select Add and Existing Local Git Repository. Point the wizard to the ice folder in the workspace, and import ICE as a new Git repository (you should have something like the image below).



Now, right click on the ICE repository and select Import Projects. You should see the below wizard pages, simply select Next on the first page, and Finish on the second page.

Wizard for project import Projects: Import existing Eclipse projects Import ausig the New Project Waard Import using the New Project Waard Import as general project Import using the New Project Waard Import as general project Import as general project Import as general p	kspace/ice/org.eclit Deselect All al/workspace/ice/org.eclipse.ice.datas
Construint/ Construin	ace/ice/org.eclipse rkspace/ice/org.ecl

After this you should see the following:

