# Running Your Server on the Microcloud Node<sup>1</sup>

#### Remote login

Remotely login to stargate by running the following command in the terminal:

ssh yourUsername@stargate.cs.usfca.edu

Note that you need to replace "yourUsername" with your actual CS login name. Once you login to stargate you will be able to access any of the machines inside of the CS firewall. To log in to a microcloud node, use ssh, for example, to connect to node mc08, run "ssh yourUsername@mc08.cs.usfca.edu". The microcloud nodes mount your /home/username CS directory.

### **Creating a Jar file**

You will next need to get your executable code to your home directory on the departmental file system. The simplest way to do it is to package your code into a jar file and upload that jar file to the node. Here are instructions for packaging your code into an executable jar file through IntelliJ:

- 1. Select the project and from the menu on the top, select File->Project Structure.
- 2. In the window that shows up, under Project Settings, choose Artifacts.
- 3. Click on the + and select Jar -> From modules with dependencies.
- 4. Select the class that has the main method, and select Extract to the target JAR. Output directory is where IntelliJ will place your jar file.
- 5. Click Apply/Ok. Then go to Build->Build Artifacts. IntelliJ will create your runnable jar file.

Note: You need to create two jar files total, one for each of your servers.

#### File Transfer

You need to transfer your files to your home directory. One approach is to use scp from the command line. Another option is to use a tool like Fugu (for Mac) or WinScp (for Windows).

## **Running remotely**

Run each jar file using java -jar <filename>.

<sup>&</sup>lt;sup>1</sup> These instructions were modified from the instructions of Prof. Rollins.