Running a Jupyter Notebook

Start the Notebook Server

To start a notebook server, run the following command from the development server:

```
jupyter notebook --no-browser
```

Make sure that you leave your terminal open to keep the notebook server up.

Connecting to the Notebook Server

To securely connect to a notebook on a development instance, you can either connect to the notebook using the VNC or use an ssh tunnel to connect to the notebook directly.

Using the VNC

1. Follow the instructions in the VNC guide to connect to the VNC with a VNC client.

2. From within your VNC client, you can launch a browser with the following command:

   ```
   google-chrome
   ```

3. In the browser, copy and paste the link that the notebook command printed to the screen. Note that if you have problems copying and pasting the link from your terminal to the VNC client, you instead run the notebook server from a terminal within your VNC client.

Using an SSH Tunnel Directly

1. On your local machine, set up the ssh tunnel with the following command. Make sure to keep the terminal open to keep the connection open:

   ```
   ssh -L <local-port>:127.0.0.1:<dev-instance-port> -C -N ubuntu@<dev-instance-ip>
   ```

<dev-instance-port> is the port that the jupyter notebook command has included in its output (probably 8888). <local-port> is whatever port on your local machine that you would like to access the notebook on. It can be any port that is open, but if you change it to something other than <dev-instance-port>, make sure that connect to that port in the next step.

2. Open up a browser on your local computer and paste in the link from the notebook server command. If <local-port> is different from <dev-instance-port>, make sure to use <local-port>.