Installing the GeoMx NGS Pipeline (DND)

Installing on Linux

> Based on different Linux distributions and permissions on the account used to install the software, some commands may need to be run as 'sudo'.

GEOMX NGS PIPELINE (DND) PRE-INSTALLATION ON LINUX

Download and install Docker Engine for Linux following the instructions from Docker website: https://docs.docker.com/install/linux/docker-ce/ubuntu/.

INSTALL AND RUN GEOMX NGS PIPELINE (DND) ON LINUX (SINGLE-USER)

These steps allow a single user to quickly install GeoMx NGS Pipeline (DND) on a Linux system. This install can be used on a server, however we recommend using the multiple-user installation in the next section for larger groups using the Pipeline on a server.

Using ssh or local terminal, connect to your Linux server and follow the steps below.

1. **Unpack the DND installer for Linux**, *dnd-1.0.0.156-linux-installer.tar.gz* (or similar) using `tar -xvf file.tar.gz`.

2. **Run** `./install.sh`.

3. **Run** `./dnd_1_0_0/dnd` to test the GeoMx NGS Pipeline (DND) software. Directory name may vary.

4. **Read and accept** the terms.

INSTALL AND RUN GEOMX NGS PIPELINE (DND) ON LINUX (MULTI-USER)

1. To install GeoMx NGS Pipeline (DND) as a shared resource, follow these steps or use **/home/directory** instead of **/var/dnd**:

2. • Run `sudo mkdir -p /var/dnd`

   • Run `sudo groupadd dnd`

   • Run `sudo usermod -a -G dnd $USER`

   • Run `sudo chgrp -R dnd /var/dnd`

   • Run `sudo chmod -R 2775 /var/dnd`

   • Add users to the Pipeline group by using this command: `sudo usermod -a -G dnd {username}` (replace {username} with actual username of user you want to give access to the Pipeline folder).

3. **Unzip DND installer for Linux**, *dnd_1.0.0.138_lin_installer.tar.gz* (or similar) in **/var/dnd** using `sudo tar -xvf dnd_1.0.0.138_lin_installer.tar.gz`.

4. **Open** the extracted folder (**/var/dnd**).

5. **Run** `install.sh` and follow the prompts.

6. **Run DND executable** from the **/var/dnd** folder using `sudo ./dnd-cli.sh`

7. Type `y` to read and accept the terms.

8. Wait until GeoMx NGS Pipeline (DND) sets up the environment (it may take some time to pull the image from Docker Hub).

9. Type `q` to exit the CLI.

POST-INSTALLATION STEPS TO SETUP GEOMX NGS PIPELINE (DND) AS A REMOTE PROCESSING SERVER

1. Start GeoMx NGS Pipeline (DND) by calling the help command in terminal: `sudo /var/dnd/start-cli.sh` (shared) or `dnd --help`.

2. The Pipeline process will need to be restarted after the server reboots or you can set it to autostart as a service (see your platform documentation on setting up new services).

nanoString