

Installing the GeoMx NGS Pipeline (DND)

Installing on Windows

If you are running Windows, you will install the GeoMx NGS Pipeline graphical user interface (GUI) on your computer. You may install the Pipeline software on your computer as well, but this requires Docker to be installed locally (see step 1, below) and may limit the computing power and processing speed of your process. Most users will choose to install the Pipeline software on a server for increased processing power and speed (see step 5, below).

1. If you will be running the Pipeline locally, you will need to **download and install Docker Desktop** for Windows from the Docker website: <https://hub.docker.com/editions/community/docker-ce-desktop-windows/>. Note that Docker Desktop requires Windows 10, 64-bit. If you will be running the Pipeline on a server, proceed to step 2.
 - Give access to Docker for I/O operations on preferred drive. After starting docker, check Settings (right-click tray icon) > Resources > File Sharing.

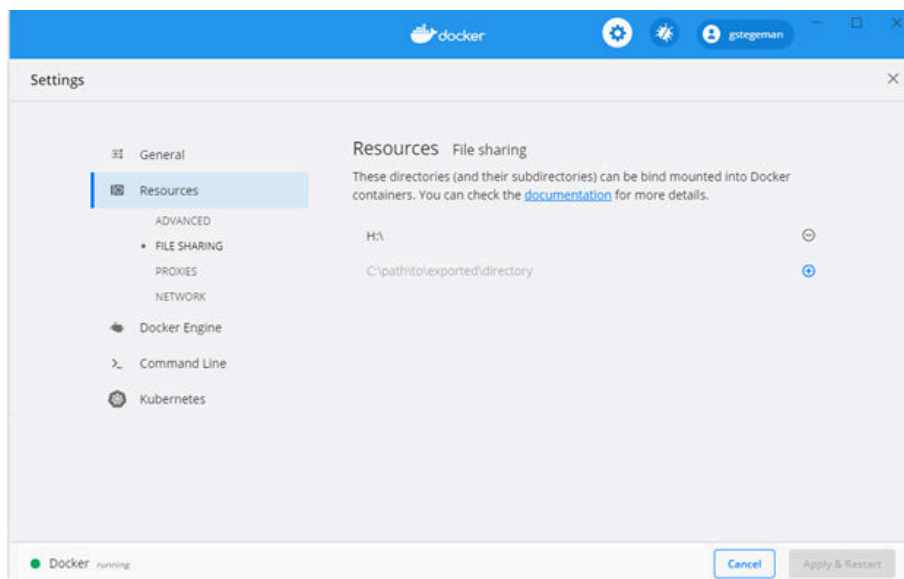


Figure 1: Docker Resources

2. **Download** the Windows installer and instructions for installation on all platforms.
3. Double-click on the **Windows installer application**, *DND_1.0.0.141-windows-installer.exe* (or similar).

- Follow the instructions in the Wizard to install the GeoMx NGS Pipeline (DND) software.
 - If encountering an error, it may be due to other programs (e.g., Docker) running in the background; restart your computer and try again.
 - If you plan on using command line interface, keep box **DND CLI** checked.
4. Once the GeoMx NGS Pipeline (DND) software has been installed, **open the application**.
- If using the **GUI**, open *DND.exe*.
 - Read and accept the terms of GeoMx NGS Pipeline (DND) and wait until the Pipeline sets up the environment.
 - If using **command line interface**, open windows terminal - *cmd.exe* or *Powershell*.
 - Run `dnd --help` inside the terminal.
 - Type `y`, as needed, to read and accept the terms of GeoMx NGS Pipeline (DND).
 - Wait until GeoMx NGS Pipeline (DND) sets up the environment (it may take some time to pull the image from Docker Hub).
5. (Optional) If you plan on using a **remote server** for processing, you will first need to **install the GeoMx NGS Pipeline (DND) on your server**.

- Once installed, add the server in the GUI by clicking on the **gear icon**, then clicking **Add server**.

- Enter **API server address**, including port (insert your server name in lieu of the red text): `http:// <remote server address>:5000`

- Consult with your system administrator on what **memory upper limit** (default is 4) and **# parallel processing jobs** (default is 1) is appropriate.

- Click **Save**.

- In the main GeoMx NGS Pipeline (DND) menu, ensure the toggle **Run locally** is switched to **Run on server**, and the server you saved is selected from the adjacent dropdown menu (if not already by default).

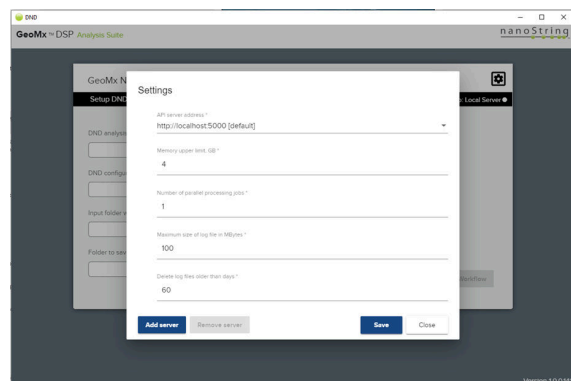


Figure 2: Adding a server

- For all GeoMx NGS Pipeline (DND) runs moving forward, you can click the gear icon and select the server from server address drop down, click save, then move slider and run on the server.