

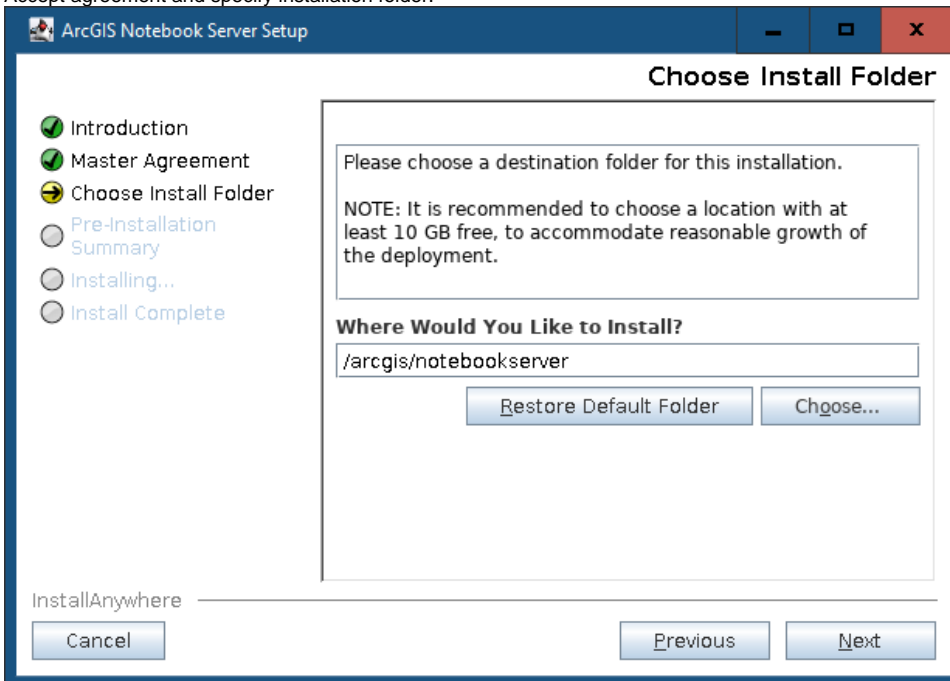
Install ArcGIS Linux Notebook Server

Step-by-step guide

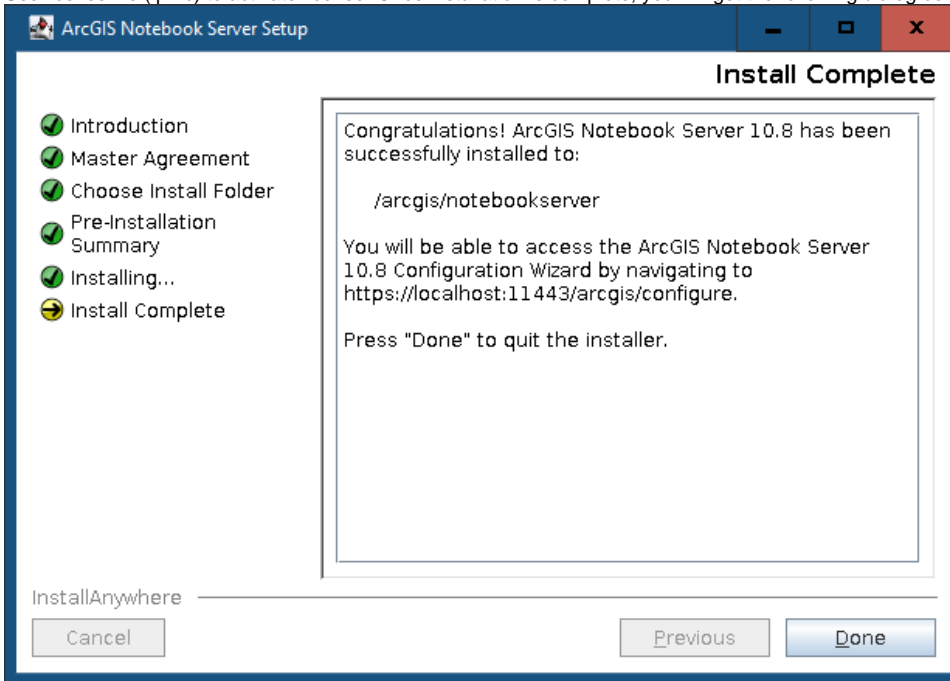
1. Login [Esri download website](#) using NASA account.
2. Click My Organizations.
3. Click Downloads.
4. Select ArcGIS Enterprise (Linux) 10.8.
5. Select and download ArcGIS Notebook Server (1.4G).
6. Select and download ArcGIS Notebook Docker Standard Image (2.5G).
7. Install [Docker Engine CE](#).
 - a. ssh as ubuntu user and become root.
 - b. apt-get update
 - c. apt-get install apt-transport-https ca-certificates curl gnupg-agent software-properties-common
 - d. curl -fsSL https://download.docker.com/linux/ubuntu/gpg | sudo apt-key add -
 - e. apt-key fingerprint 0EBFCD88
 - f. add-apt-repository "deb [arch=amd64] https://download.docker.com/linux/ubuntu \$(lsb_release -cs) stable"
 - g. apt-get update
 - h. apt-get install docker-ce docker-ce-cli containerd.io
 - i. docker run hello-world

```
Hello from Docker!  
This message shows that your installation appears to be working correctly.
```

8. sudo usermod -aG docker arcgis
9. ssh as arcgis and run docker run hello-world. (Logout and login back if you see permission denied error.)
10. Become root again. Run
 - a. systemctl stop docker.service
 - b. mkdir -p /data/docker
 - c. chmod 755 /var/lib/docker
 - d. mv /var/lib/docker /data/docker
 - e. ln -s /data/docker /var/lib/docker
 - f. systemctl start docker.service
11. tar xzvf ArcGIS_Notebook_Server_Linux_108_173012.tar.gz
12. cd NotebookServer_Linux/
13. Run X server on your machine (e.g., Xming). Then run ./Setup.
14. Accept agreement and specify installation folder.



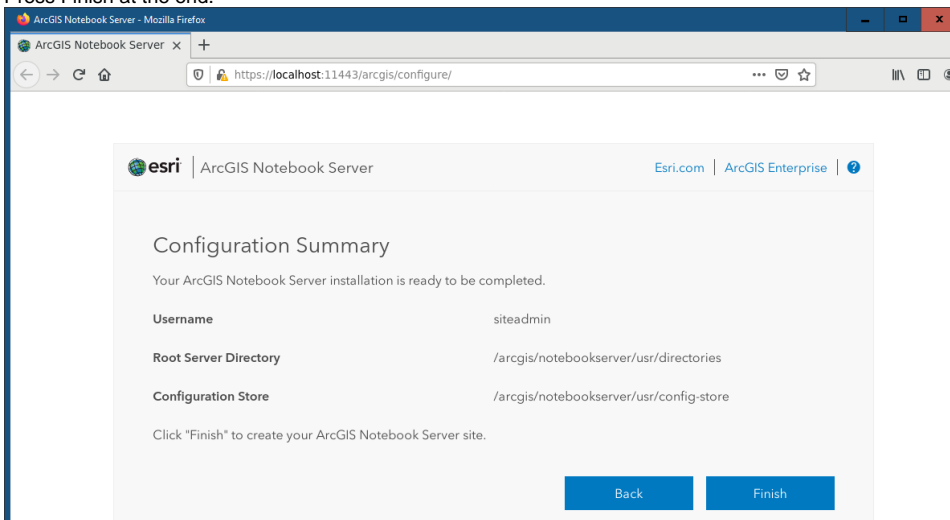
15. Use license file (.prvc) to activate license. Once installation is complete, you will get the following dialog box.



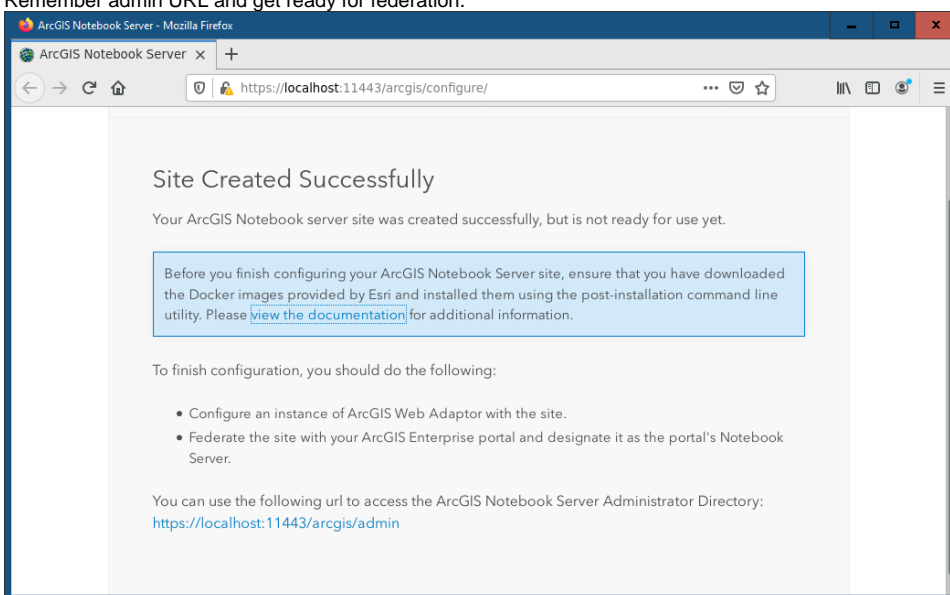
16. At the end, it will run Firefox and Firefox may crash. Let the installer exit and launch firefox <https://localhost:11443/arcgis/configure>.
17. On ssh terminal with arcgis user, run `cd /arcgis/notebookserver/tools/postInstallUtility`.
18. `./PostInstallUtility.sh -l /home/arcgis/ArcGIS_Notebook_Docker_Standard_108_172942.tar.gz`

```
Checking Docker health:[OK]
Loading Docker image: /home/arcgis/ArcGIS_Notebook_Docker_Standard_108_172942.tar.gz.
Apr 03, 2020 8:43:31 PM com.esri.arcgis.turing.tools.PostInstallUtility loadDockerImage
INFO: Loading Docker image: /home/arcgis/ArcGIS_Notebook_Docker_Standard_108_172942.tar.gz.
Done. Successfully loaded Docker Image /home/arcgis/ArcGIS_Notebook_Docker_Standard_108_172942.tar.gz.
Apr 03, 2020 8:45:37 PM com.esri.arcgis.turing.tools.PostInstallUtility loadDockerImage
INFO: Done. Successfully loaded Docker Image /home/arcgis/ArcGIS_Notebook_Docker_Standard_108_172942.tar.gz.
```


19. Go back to Firefox window and enter username and password for notebook server administrator.
20. Press Finish at the end.



21. Remember admin URL and get ready for federation.



22. Become root and run `cp /arcgis/notebookserver/framework/etc/scripts/agsnotebook.service /etc/systemd/system`
23. `systemctl enable agsnotebook.service`
24. `systemctl stop agsnotebook.service`
25. `systemctl start agsnotebook.service`
26. `systemctl status agsnotebook.service`
27. Open port 11443 of the EC2 instance that runs Notebook Server.
28. Create load balancer with certificate, forward 443 traffic to the EC2 target with port 11443 and add it to Route 53 DNS (e.g., `argis-n-8.gisdemo.net`).
29. Federate with the portal.
 - a. Use load balancer DNS name for service URL: <https://arcgis-n-8.gisdemo.net/arcgis>
 - b. Use server name for admin URL: <https://arcgis-server-8.gisdemo.net:11443/arcgis>
 - c. Select Notebook server from drop down menu. The new entry <https://arcgis-n-8.gisdemo.net/arcgis> will appear.
 - d. Press Save.
30. Test server by creating a new notebook from portal.

 Docker uses the /var directory as its local registry for container images. During the upgrade process for subsequent releases, new images will be copied to the /var directory as well. To avoid running out of disk space during future upgrades, ensure that the /var directory has at least 50 GB of disk space.

Related articles

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