

Installation Requirements

This guide provides instructions for installing the ORNMS in Red Hat Enterprise Linux (RHEL)-based, Debian-based operating systems.

Before you begin

The following abbreviations will be used to refer to their respective entry through this documentation.

Table 3: Operating System Requirements

| Operating System | |
|------------------|--|
| Debian | Debian 9 or higher, Ubuntu 16.04 LTS or higher |
| RHEL | Red Hat Enterprise Linux 7 or higher, CentOS 7 or higher |

Table 4: Hardware Requirements

| Minimum Hardware Requirements | |
|-------------------------------|--|
| Processor | Intel Dual Core or better |
| Memory | min 16 GB (Memory must be increased depending up on the number of devices) |
| Hard Disk | 1 TB hard disk |

Software Prerequisites

- OpenJDK 8
- PostgreSQL
- TFTP

Installing ORNMS

New Installation of 2.2.x

- 1) Download the latest software in NMS system
- 2) Execute the following command for new installation of ORNMS 2.2
\$ dpkg -i ornms_2.2.0.20210415_amd64.deb
- 3) Once the installation is completed, go to /opt/ornms/bin folder and execute the following command.
\$./installnconfigure.sh
- 4) Wait till the installation is completed, which will start the ornms service automatically
- 5) Check the active status of ornms by using the following command.
systemctl ornms status
 The status of Active will be shown as active(running) if ORNMS is started properly.
 (Active: active (running) since Fri 2021-05-21 04:02:05 PDT; 24s ago)
- 6) Open browser enter the following address
http://localhost:8980/ornms - > replace "localhost" with the IP address of the NMS system, if launching in another system.

Upgrading ORNMS from 2.2 to higher

Repeat the steps from 1 to 6 from installation of 2.2.x section

Upgrading ORNMS from prior to 2.2 version

- 1) Go to /opt/ornms/bin folder and stop the ornms server by executing below command
./ornms stop
- 2) Download the latest software in NMS system
- 3) Execute the following command for new installation of ORNMS 2.2
\$ dpkg -i ornms_2.2.0.20210415_amd64.deb
- 4) Once the installation is completed, go to /opt/ornms/bin folder and execute the following command.
\$./installnconfigure.sh
- 5) Wait till the installation is completed, which will start the ornms service automatically
- 6) Check the active status of ornms by using the following command.
systemctl status ornms
The status of Active will be shown as active(running) if ORNMS is started properly.
(Active: active (running) since Fri 2021-05-21 04:02:05 PDT; 24s ago)
- 7) Open browser enter the following address
http://localhost:8980/ornms - > replace "localhost" with the IP address of the NMS system, if launching in another system.

To manually stop the ORNMS server use the following command

- 1) Using service to stop the server
systemctl stop ornms
- 2) Using manual command - Go to ORNMS installation folder - /opt/ornms/bin and execute the following command
./ornms stop

To manually start the ORNMS server

- 1) Using service to start the server
systemctl start ornms
- 2) Using manual command - Go to ORNMS installation folder - /opt/ornms/bin and execute the following command
./ornms start

To check the status of ORNMS if it started properly or not

- 1) Using service command
systemctl status ornms
The status of Active will be shown as active(running) if ORNMS is started properly.
(Active: active (running) since Fri 2021-05-21 04:02:05 PDT; 24s ago)

- 2) Using manual command - Go to ORNMS installation folder - /opt/ornms/bin and execute the following command
./ornms status
- 3) The text "ornms is running" will be shown on console if NMS is running properly.

Troubleshooting/Debugging ORNMS if the server is not started

Once the installation is complete and "installnconfigure.sh" command is executed, and NMS is not started properly follow the below steps:

- Check Java
 - 1) Check the version of java installed
 - **java -version**
The output should contain the following text
"openjdk version "1.8.0_292"
 - 2) If the above step output is not showing JDK in the text. run the following command from ORNMS installation folder - /opt/ornms/bin
 - **./runjava -s**
Check for the following output
"runjava: found an appropriate JRE"
- Check Postgres

Check if Postgres is installed

 - 1) Enter the following command to switch to postgres user
\$ su – postgres
 - 2) Enter the following command to check the postgres version
\$ psql –version
Check if postgres version is supported by ORNMS (9.5 to 11)
 - 3) Check postgres service active state
\$ systemctl status postgresql

Output should contain the active state as below
Active: active (exited) since Tue 2021-05-04 21:31:53 PDT; 2 weeks 2 days ago
 - 4) If Postgres is not running start the postgres using the following command
\$ systemctl start postgresql
- Check ORNMS
 - 1) Go to ORNMS installation folder (/opt/ornms/bin) and execute the following command
./install -dis
If the output shows the following text "Upgrade completed successfully!"
 - 2) Start the ornms service
\$ systemctl start ornms
or from the ORNMS installation folder (/opt/ornms/bin)

- % ./ornms start**
- 3) Check the ornms running status
- \$./ornms status**

Supported Browsers

ORNMS supports the following browsers:

Table 5: Supported Browsers

| Browsers | Versions | |
|----------|----------------------|--|
| Chrome | Version 90.0.4430.93 | |
| Firefox | Version 88.0.1 | |