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# Install on RPM-based Linux (CentOS, Fedora, OpenSuse, Red Hat)

This topic explains how to install Grafana dependencies, download and install Grafana, get the service up and running on your RPM-based Linux system, and the installation package details.

# Note on upgrading

While the process for upgrading Grafana is very similar to installing Grafana, there are some key backup steps you should perform. Read [Upgrading Grafana]({{< relref "upgrading.md" >}}) for tips and guidance on updating an existing installation.

**Note:** You can use <u>Grafana Cloud</u> to avoid the overhead of installing, maintaining, and scaling your observability stack. The free forever plan includes Grafana, 10K Prometheus series, 50 GB logs, and more. <u>Create a free account to get started.</u>

## 1. Download and install

You can install Grafana from a YUM repository, manually using YUM, manually using RPM, or by downloading a binary .tar.gz file.

#### **Install from YUM repository**

If you install from the YUM repository, then Grafana is automatically updated every time you run sudo yum update.

Grafana Version	Package	Repository
Grafana Enterprise	grafana-enterprise	https://packages.grafana.com/enterprise/rpm
Grafana Enterprise (Beta)	grafana-enterprise	https://packages.grafana.com/enterprise/rpm-beta
Grafana OSS	grafana	https://packages.grafana.com/oss/rpm
Grafana OSS (Beta)	grafana	https://packages.grafana.com/oss/rpm-beta

**Note:** Grafana Enterprise is the recommended and default edition. It is available for free and includes all the features of the OSS Edition. You can also upgrade to the <u>full Enterprise feature set</u> and has support for <u>Enterprise plugins</u>.

Add a new file to your YUM repo using the method of your choice. The command below uses nano.

sudo nano /etc/yum.repos.d/grafana.repo

Choose if you want to install the Open Source or Enterprise edition of Grafana and enter the information from the edition you've chosen into grafana.repo. If you want to install the beta version of Grafana you need to replace the URL with a beta URL from the table above.

We recommend all users to install the Enterprise Edition of Grafana, which can be seamlessly upgraded with a Grafana Enterprise <u>subscription</u>.

#### For Enterprise releases:

```
[grafana]
name=grafana
baseurl=https://packages.grafana.com/enterprise/rpm
repo_gpgcheck=1
enabled=1
gpgcheck=1
gpgcheck=1
gpgkey=https://packages.grafana.com/gpg.key
sslverify=1
sslcacert=/etc/pki/tls/certs/ca-bundle.crt
```

#### For OSS releases:

```
[grafana]
name=grafana
baseurl=https://packages.grafana.com/oss/rpm
repo_gpgcheck=1
enabled=1
gpgcheck=1
gpgkey=https://packages.grafana.com/gpg.key
sslverify=1
sslcacert=/etc/pki/tls/certs/ca-bundle.crt
```

#### Install Grafana with one of the following commands:

```
sudo yum install grafana
# or
sudo yum install grafana-enterprise
```

## Install manually with YUM

If you install manually with YUM, then you will need to manually update Grafana for each new version. To enable automatic updates for your Grafana installation please use the instructions below to install via our YUM repository.

- 1. On the Grafana download page, select the Grafana version you want to install.
  - The most recent Grafana version is selected by default.
  - The Version field displays only finished releases. If you want to install a beta version, click Nightly
     Builds and then select a version.
- 2. Select an Edition.
  - **Enterprise** Recommended download. Functionally identical to the open source version, but includes features you can unlock with a license if you so choose.
  - **Open Source** Functionally identical to the Enterprise version, but you will need to download the Enterprise version if you want enterprise features.
- 3. Depending on which system you are running, click Linux or ARM.

4. Copy and paste the code from the installation page into your command line and run. It follows the pattern shown below.

```
wget <rpm package url>
sudo yum localinstall <local rpm package>
```

You can also install Grafana using YUM directly:

```
sudo yum install <rpm package url>
```

#### **Install with RPM**

If you install with RPM, then you will need to manually update Grafana for each new version. This method varies according to which Linux OS you are running. Read the instructions fully before you begin.

Note: The .rpm files are signed, you can verify the signature with this public GPG key.

- 1. On the Grafana download page, select the Grafana version you want to install.
  - The most recent Grafana version is selected by default.
  - The Version field displays only finished releases. If you want to install a beta version, click Nightly
     Builds and then select a version.
- 2. Select an Edition.
  - **Enterprise** Recommended download. Functionally identical to the open source version, but includes features you can unlock with a license if you so choose.
  - **Open Source** Functionally identical to the Enterprise version, but you will need to download the Enterprise version if you want Enterprise features.
- 3. Depending on which system you are running, click  ${\bf Linux}$  or  ${\bf ARM}.$
- 4. Copy and paste the .rpm package URL and the local .rpm package information from the installation page into the pattern shown below, then run the commands.

#### On CentOS, Fedora, Red Hat, or RHEL:

```
sudo yum install initscripts urw-fonts wget
wget <rpm package url>
sudo rpm -Uvh <local rpm package>
```

#### On OpenSUSE or SUSE:

```
wget <rpm package url>
sudo rpm -i --nodeps <local rpm package>
```

# Install from binary .tar.gz file

Download the latest .tar.gz file and extract it. The files are extracted into a folder named after the Grafana version that you downloaded. This folder contains all files required to run Grafana. There are no init scripts or install scripts in this package.

```
wget <tar.gz package url>
sudo tar -zxvf <tar.gz package>
```

## 2. Start the server

This starts the <code>grafana-server</code> process as the <code>grafana</code> user, which was created during the package installation. The systemd commands work in most cases, but some older Linux systems might require init.d. The installer should prompt you with the correct commands.

If you installed with an .rpm package, then you can start the server using systemd or init.d. If you installed a binary .tar.gz file, then you need to execute the binary.

#### Start the server with systemd

To start the service and verify that the service has started:

```
sudo systemctl daemon-reload
sudo systemctl start grafana-server
sudo systemctl status grafana-server
```

Configure the Grafana server to start at boot:

```
sudo systemctl enable grafana-server
```

**SUSE or OpenSUSE users:** You might need to start the server with the systemd method, then use the init.d method to configure Grafana to start at boot.

#### Serving Grafana on a port < 1024

{{< docs/shared "systemd/bind-net-capabilities.md" >}}

#### Serving Grafana behind a proxy

When serving Grafana behind a proxy, you need to configure the <a href="http\_proxy">http\_proxy</a> and <a href="http\_proxy">https\_proxy</a> environment variables.

#### Centos 6

If you are on Centos 6, add the following lines to the /etc/sysconfig/grafana-server file.

```
export no_proxy=internal.domain,127.0.0.1
export http_proxy=http://proxy.domain:3128/
export https_proxy=http://proxy.domain:3128/
```

#### Centos 7

If you are on Centos 7, add the following lines to the /etc/sysconfig/grafana-server file.

```
http_proxy=http://proxy.domain:3128/
https_proxy=http://proxy.domain:3128/
no_proxy=internal.domain,127.0.0.1
```

#### Start the server with init.d

To start the service and verify that the service has started:

```
sudo service grafana-server start
sudo service grafana-server status
```

Configure the Grafana server to start at boot:

```
sudo /sbin/chkconfig --add grafana-server
```

## **Execute the binary**

The grafana-server binary needs the working directory to be the root install directory where the binary and the public folder are located.

Start Grafana by running:

```
./bin/grafana-server web
```

# **Package details**

- Installs binary to /usr/sbin/grafana-server
- Copies init.d script to /etc/init.d/grafana-server
- Installs default file (environment vars) to /etc/sysconfig/grafana-server
- Copies configuration file to /etc/grafana/grafana.ini
- Installs systemd service (if systemd is available) name grafana-server.service
- The default configuration uses a log file at /var/log/grafana/grafana.log
- The default configuration specifies an sqlite3 database at /var/lib/grafana/grafana.db

# **Next steps**

Refer to the [Getting Started]({{< relref "../getting-started/getting-started/" >}}) guide for information about logging in, setting up data sources, and so on.

# **Configure Grafana**

Refer to the [Configuration]({{< relref "../administration/configuration.md" >}}) page for details on options for customizing your environment, logging, database, and so on.