Install MongoDB Community Edition on Red Hat Enterprise or CentOS Linux

On this page

Overview

Use this tutorial to install MongoDB Community Edition on Red Hat Enterprise Linux or CentOS Linux versions 6 and 7 using `.rpm` packages. While some of these distributions include their own MongoDB packages, the official MongoDB Community Edition packages are generally more up to date.

> **PLATFORM SUPPORT:**
> This installation guide only supports 64-bit systems. See Platform Support for details.
>
> MongoDB 3.2 deprecates support for Red Hat Enterprise Linux 5.

Packages

MongoDB provides officially supported packages in their own repository. This repository contains the following packages:

`mongodb-org`	A `metapackage` that will automatically install the four component packages listed below.
`mongodb-org-server`	Contains the `mongod` daemon and associated configuration and init scripts.

`mongodb-org-mongos`	Contains the `mongos` daemon.
`mongodb-org-shell`	Contains the `mongo` shell.
`mongodb-org-tools`	Contains the following MongoDB tools: `mongoimport` `bsondump`, `mongodump`, `mongoexport`, `mongofiles`, `mongooplog`, `mongoperf`, `mongorestore`, `mongostat`, and `mongotop`.

The default `/etc/mongod.conf` configuration file supplied by the packages have `bind_ip` set to `127.0.0.1` by default. Modify this setting as needed for your environment before initializing a replica set.

Init Scripts

The `mongodb-org` package includes various init scripts, including the init script `/etc/rc.d/init.d/mongod`. You can use these scripts to stop, start, and restart daemon processes.

The package configures MongoDB using the `/etc/mongod.conf` file in conjunction with the init scripts. See the Configuration File reference for documentation of settings available in the configuration file.

As of version 3.2.6, there are no init scripts for `mongos`. The `mongos` process is used only in sharding. You can use the `mongod` init script to derive your own `mongos` init script for use in such environments. See the `mongos` reference for configuration details.

The default `/etc/mongod.conf` configuration file supplied by the packages have `bind_ip` set to `127.0.0.1` by default. Modify this setting as needed for your environment before initializing a replica set.

Install MongoDB Community Edition

> **NOTE:**
> To install a version of MongoDB prior to 3.2, please refer to that version's documentation. For example, see version 3.0.

This installation guide only supports 64-bit systems. See Platform Support for details.

Configure the package management system (yum).

Create a `/etc/yum.repos.d/mongodb-org-3.2.repo` file so that you can install MongoDB directly, using `yum`.

Changed in version 3.0: MongoDB Linux packages are in a new repository beginning with 3.0.

For the *latest* stable release of MongoDB

Use the following repository file:

```
[mongodb-org-3.2]
name=MongoDB Repository
baseurl=https://repo.mongodb.org/yum/redhat/$releasever/mongodb-org/3.2/x86_
gpgcheck=1
enabled=1
gpgkey=https://www.mongodb.org/static/pgp/server-3.2.asc
```

For versions of MongoDB *earlier* than 3.0

To install the packages from an earlier release series, such as 2.4 or 2.6, you can specify the release series in the repository configuration. For example, to restrict your system to the 2.6 release series, create a `/etc/yum.repos.d/mongodb-org-2.6.repo` file to hold the following configuration information for the MongoDB 2.6 repository:

```
[mongodb-org-2.6]
name=MongoDB 2.6 Repository
baseurl=http://downloads-distro.mongodb.org/repo/redhat/os/x86_64/
gpgcheck=0
enabled=1
```

You can find `.repo` files for each release in the repository itself. Remember that odd-numbered minor release versions (e.g. 2.5) are development versions and are unsuitable for production use.

2 Install the MongoDB packages and associated tools.

When you install the packages, you choose whether to install the current release or a previous one. This step provides the commands for both.

To install the latest stable version of MongoDB, issue the following command:

```
sudo yum install -y mongodb-org
```

To install a specific release of MongoDB, specify each component package individually and append th version number to the package name, as in the following example:

```
sudo yum install -y mongodb-org-3.2.6 mongodb-org-server-3.2.6 mongodb-org-s
```

You can specify any available version of MongoDB. However `yum` will upgrade the packages when a newer version becomes available. To prevent unintended upgrades, pin the package. To pin a package add the following `exclude` directive to your `/etc/yum.conf` file:

```
exclude=mongodb-org,mongodb-org-server,mongodb-org-shell,mongodb-org-mongos,
```

Run MongoDB Community Edition

Prerequisites

Configure SELinux

> **IMPORTANT:**
> You must configure SELinux to allow MongoDB to start on Red Hat Linux-based systems (Red Hat Enterprise Linux or CentOS Linux).

To configure SELinux, administrators have three options:

> **NOTE:**
> All three options require `root` privileges. The first two options each requires a system reboot and may have larger implications for your deployment.

- Disable SELinux entirely by changing the `SELINUX` setting to `disabled` in `/etc/selinux/config`.

```
SELINUX=disabled
```

- Set SELinux to `permissive` mode in `/etc/selinux/config` by changing the `SELINUX` setting `permissive` .

```
SELINUX=permissive
```

> **NOTE:**
> You can use `setenforce` to change to permissive mode; this method does not require a reboot but is **not** persistent.

- Enable access to the relevant ports (e.g. 27017) for SELinux if in `enforcing` mode. See Default MongoDB Port for more information on MongoDB's default ports. For default settings, this can be accomplished by running

```
semanage port -a -t mongod_port_t -p tcp 27017
```

> **WARNING:**
> On RHEL 7.0, if you change the data path, the *default* SELinux policies will prevent `mongod` from having write access on the new data path if you do not change the security context.

You may alternatively choose not to install the SELinux packages when you are installing your Linux operatin system, or choose to remove the relevant packages. This option is the most invasive and is not recommended.

Data Directories and Permissions

> **WARNING:**
> On RHEL 7.0, if you change the data path, the *default* SELinux policies will prevent `mongod` from having write access on the new data path if you do not change the security context.

The MongoDB instance stores its data files in `/var/lib/mongo` and its log files in `/var/log/mongodb` by default, and runs using the `mongod` user account. You can specify alternate log and data file directories i `/etc/mongod.conf`. See `systemLog.path` and `storage.dbPath` for additional information.

If you change the user that runs the MongoDB process, you **must** modify the access control rights to the `/var/lib/mongo` and `/var/log/mongodb` directories to give this user access to these directories.

Procedure

1. **Start MongoDB.**
   You can start the `mongod` process by issuing the following command:

   ```
   sudo service mongod start
   ```

2. **Verify that MongoDB has started successfully**
   You can verify that the `mongod` process has started successfully by checking the contents of the log file at `/var/log/mongodb/mongod.log` for a line reading

   ```
   [initandlisten] waiting for connections on port <port>
   ```

   where `<port>` is the port configured in `/etc/mongod.conf`, `27017` by default.

You can optionally ensure that MongoDB will start following a system reboot by issuing the following command:

```
sudo chkconfig mongod on
```

3 **Stop MongoDB.**

As needed, you can stop the `mongod` process by issuing the following command:

```
sudo service mongod stop
```

4 **Restart MongoDB.**

You can restart the `mongod` process by issuing the following command:

```
sudo service mongod restart
```

You can follow the state of the process for errors or important messages by watching the output in the `/var/log/mongodb/mongod.log` file.

5 **Begin using MongoDB.**

To help you start using MongoDB, MongoDB provides Getting Started Guides in various driver editions. See Getting Started for the available editions.

Before deploying MongoDB in a production environment, consider the Production Notes document.

Later, to stop MongoDB, press `Control+C` in the terminal where the `mongod` instance is running.

Uninstall MongoDB Community Edition

To completely remove MongoDB from a system, you must remove the MongoDB applications themselves, th configuration files, and any directories containing data and logs. The following section guides you through the necessary steps.

> **WARNING:**
> This process will *completely* remove MongoDB, its configuration, and *all* databases. This process is not reversible, so ensure that all of your configuration and data is backed up before proceeding.

1 Stop MongoDB.

Stop the `mongod` process by issuing the following command:

```
sudo service mongod stop
```

2 Remove Packages.

Remove any MongoDB packages that you had previously installed.

```
sudo yum erase $(rpm -qa | grep mongodb-org)
```

3 Remove Data Directories.

Remove MongoDB databases and log files.

```
sudo rm -r /var/log/mongodb
sudo rm -r /var/lib/mongo
```