

Install MongoDB on Ubuntu¶

Overview¶

Use this tutorial to install MongoDB on Ubuntu Linux systems. The tutorial uses packages to install. While Ubuntu includes its own MongoDB packages, the official MongoDB packages are generally more up-to-date.

If you use an older Ubuntu that does **not** use Upstart (i.e. any version before 9.10 “Karmic”), please follow the instructions on the *Install MongoDB on Debian*^[1] tutorial.

Packages¶

The MongoDB package repository contains five packages:

- `mongodb-org`

This package is a metapackage that will automatically install the four component packages listed below.

- `mongodb-org-server`

This package contains the `mongod` daemon and associated configuration and init scripts.

- `mongodb-org-mongos`

This package contains the `mongos` daemon.

- `mongodb-org-shell`

This package contains the `mongo` shell.

- `mongodb-org-tools`

This package contains the following MongoDB tools: `mongoimport`, `bsondump`, `mongodump`, `mongoexport`, `mongofiles`, `mongoimport`, `mongooplog`, `mongoperf`, `mongorestore`, `mongostat`, and `mongotop`.

Control Scripts¶

The `mongodb-org` package includes various *control scripts*, including the init script `/etc/init.d/mongod`.

The package configures MongoDB using the `/etc/mongod.conf` file in conjunction with the control scripts.

As of version 2.6.1, there are no control scripts for `mongos`. The `mongos` process is used only in *sharding*^[2]. You can use the `mongod` init script to derive your own `mongos` control script.

You cannot install this package concurrently with the `mongodb`, `mongodb-server`, or `mongodb-clients` packages provided by Ubuntu.

Install MongoDB¶

Import the public key used by the package management system.¶

The Ubuntu package management tools (i.e. `apt` and `dpkg`) ensure package consistency and authenticity by requiring that distributors sign packages with GPG keys. Issue the following command to import the MongoDB public GPG Key^[3]:

```
sudo apt-key adv --keyserver hkp://keyserver.ubuntu.com:80 --recv 7F0CEB10
```

Create a list file for MongoDB.¶

Create the `/etc/apt/sources.list.d/mongodb.list` list file using the following command:

```
'deb http://downloads-distro.mongodb.org/repo/ubuntu-upstart dist 10gen' | sudo tee /etc/apt/sources.list.d/mongodb.list
```

Reload local package database.¶

Issue the following command to reload the local package database:

```
sudo apt-get update
```

Install the MongoDB packages.¶

You can install either the latest stable version of MongoDB or a specific version of MongoDB.

Install the latest stable version of MongoDB.¶

Issue the following command:

```
sudo apt-get install mongodb-org
```

Install a specific release of MongoDB.¶

Specify each component package individually and append the version number to the package name, as in the following example that installs the 2.6.1 release of MongoDB:

```
apt-get install mongodb-org2.6.1 mongodb-org-server2.6.1 mongodb-org-shell2.6.1 mongodb-org-mongos2.6.1 mongodb-org-tools2.6.1
```

Pin a specific version of MongoDB.¶

Although you can specify any available version of MongoDB, `apt-get` will upgrade the packages when a newer version becomes available. To prevent unintended upgrades, pin the package. To pin the version of MongoDB at the currently installed version, issue the following command sequence:

```
"mongodb-org hold" | sudo dpkg --set-selections
"mongodb-org-server hold" | sudo dpkg --set-selections
"mongodb-org-shell hold" | sudo dpkg --set-selections
"mongodb-org-mongos hold" | sudo dpkg --set-selections
"mongodb-org-tools hold" | sudo dpkg --set-selections
```

Previous versions of MongoDB packages use different naming conventions. See the 2.4 version of documentation for more information^[4].

Run MongoDB¶

The MongoDB instance stores its data files in `/var/lib/mongo` and its log files in `/var/log/mongo`, and runs using the `mongod` user account. 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/mongo` directories.

Start MongoDB.¶

Issue the following command to start `mongod`:

```
sudo /etc/init.d/mongod start
```

Verify that MongoDB has started successfully¶

Verify that the `mongod` process has started successfully by checking the contents of the log file at `/var/log/mongodb/mongod.log`.

Stop MongoDB.¶

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

```
sudo /etc/init.d/mongod stop
```

Restart MongoDB.¶

Issue the following command to restart `mongod`:

```
sudo /etc/init.d/mongod restart
```

Begin using MongoDB.¶

To begin using MongoDB, see *Getting Started with MongoDB*^[5].

1. <http://docs.mongodb.org/manual/tutorial/install-mongodb-on-debian/>
2. <http://docs.mongodb.org/manual/core/sharding/>
3. <http://docs.mongodb.org/10gen-gpg-key.asc>
4. <http://docs.mongodb.org/v2.4/tutorial/install-mongodb-on-linux>
5. <http://docs.mongodb.org/manual/tutorial/getting-started/>