Install MongoDB Community Edition on Windows

Overview

Use this tutorial to install MongoDB Community Edition on Windows systems.

Platform Support: Starting in version 3.6 MongoDB requires Windows Server 2008 R2, Windows 7, or later.

Important: If you are running any edition of Windows Server 2008 R2 or Windows 7, please install a hotfix to resolve an issue with memory mapped files on Windows.

Note: Starting in MongoDB 3.6, MongoDB binaries, `mongod` and `mongos`, bind to localhost by default. Previously, starting in MongoDB 2.6, only the binaries from the official MongoDB RPM (Red Hat, CentOS, Fedora Linux, and derivatives) and DEB (Debian, Ubuntu, and derivatives) packages bind to localhost by default. For more details, see Localhost Binding Compatibility Changes.

Requirements

MongoDB Community Edition requires Windows Server 2008 R2, Windows 7, or later. The `.msi` installer includes all other software dependencies and will automatically upgrade any older version of MongoDB installed using an `.msi` file.

To find which version of Windows you are running, enter the following commands in the Command Prompt or Powershell:

```
wmic os get caption
wmic os get osarchitecture
```

Get MongoDB Community Edition

Note: To install a different version of MongoDB, please refer to that version's documentation. For example, see version 3.4.

Download the latest production release of MongoDB from the MongoDB Download Center.

Install MongoDB Community Edition

Interactive Installation

In Windows Explorer, locate the downloaded MongoDB `.msi` file, which typically is located in the default `Downloads` folder. Double-click the `.msi` file. A set of screens will appear to guide you through the installation process.

You may specify an installation directory if you choose the "Custom" installation option.

Note: These instructions assume that you have installed MongoDB to `C:\Program Files\MongoDB\Server\3.6\`.

During the installation process you will be given the option to install *MongoDB Compass* in addition to MongoDB Server.

MongoDB is self-contained and does not have any other system dependencies. You can run MongoDB from any folder you choose. You may install MongoDB in any folder (e.g. `D:\test\mongodb`).

Unattended Installation

You may install MongoDB Community unattended on Windows from the command line using `msiexec.exe`.

Step 1: Open an Administrator command prompt.

Execute the remaining steps from the Administrator command prompt.

Step 2: Install MongoDB for Windows.

Change to the directory containing the `.msi` installation binary of your choice and invoke:

```
msiexec.exe /q /i mongodb-win32-x86_64-2008plus-ssl-3.6.0-signed.msi ^
            INSTALLLOCATION="C:\Program Files\MongoDB\Server\3.6.0\" ^
            ADDLOCAL="all"
```

You can specify the installation location for the executable by modifying the `INSTALLLOCATION` value.

By default, this method installs all MongoDB binaries. To install specific MongoDB component sets, you can specify them in the `ADDLOCAL` argument using a comma-separated list including one or more of the following component sets:

Component Set	Binaries
`Server`	`mongod.exe`
`Router`	`mongos.exe`
`Client`	`mongo.exe`
`MonitoringTools`	`mongostat.exe`, `mongotop.exe`
`ImportExportTools`	`mongodump.exe`, `mongorestore.exe`, `mongoexport.exe`, `mongoimport.exe`
`MiscellaneousTools`	`bsondump.exe`, `mongofiles.exe`, `mongoperf.exe`

For instance, to install *only* the MongoDB utilities, invoke:

```
msiexec.exe /q /i mongodb-win32-x86_64-2008plus-ssl-3.6.0-signed.msi ^
            INSTALLLOCATION="C:\Program Files\MongoDB\Server\3.6.0\" ^
            ADDLOCAL="MonitoringTools,ImportExportTools,MiscellaneousTools"
```

Run MongoDB Community Edition

Warning: Do not make `mongod.exe` visible on public networks without running in "Secure Mode" with the `auth` setting. MongoDB is designed to be run in trusted environments, and the database does not enable "Secure Mode" by default.

Step 1: Set up the MongoDB environment.

MongoDB requires a *data directory* to store all data. MongoDB's default data directory path is the absolute path `\data\db` on the drive from which you start MongoDB. Create this folder by running the following command in a Command Prompt:

```
md \data\db
```

You can specify an alternate path for data files using the `--dbpath` option to `mongod.exe`, for example:

```
"C:\Program Files\MongoDB\Server\3.6\bin\mongod.exe" --dbpath d:\test\mongodb\data
```

If your path includes spaces, enclose the entire path in double quotes, for example:

```
"C:\Program Files\MongoDB\Server\3.6\bin\mongod.exe" --dbpath "d:\test\mongo db data"
```

You may also specify the `dbpath` in a configuration file.

Step 2: Start MongoDB.

To start MongoDB, run `mongod.exe`. For example, from the Command Prompt:

This starts the main MongoDB database process. The `waiting for connections` message in the console output indicates that the `mongod.exe` process is running successfully.

Depending on the security level of your system, Windows may pop up a Security Alert dialog box about blocking "some features" of `C:\Program Files\MongoDB\Server\3.6\bin\mongod.exe` from communicating on networks. All users should select `Private Networks, such as my home or work network` and click `Allow access`. For additional information on security and MongoDB, please see the Security Documentation.

Step 3: Connect to MongoDB.

To connect to MongoDB through the `mongo.exe` shell, open another Command Prompt.

```
"C:\Program Files\MongoDB\Server\3.6\bin\mongo.exe"
```

If you want to develop applications using .NET, see the documentation of C# and MongoDB for more information.

Step 4: 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.

Configure a Windows Service for MongoDB Community Edition

Step 1: Open an Administrator command prompt.

Press the `Win` key, type `cmd.exe`, and press `Ctrl + Shift + Enter` to run the Command Prompt as Administrator.

Execute the remaining steps from the Administrator command prompt.

Step 2: Create directories.

Create directories for your database and log files:

```
mkdir c:\data\db
mkdir c:\data\log
```

Step 3: Create a configuration file.

Create a configuration file. The file **must** set `systemLog.path`. Include additional configuration options as appropriate.

For example, create a file at `C:\Program Files\MongoDB\Server\3.6\mongod.cfg` that specifies both `systemLog.path` and `storage.dbPath`:

```
systemLog:
    destination: file
    path: c:\data\log\mongod.log
storage:
    dbPath: c:\data\db
```

Step 4: Install the MongoDB service.

Important: Run all of the following commands in Command Prompt with "Administrative Privileges".

```
"C:\Program Files\MongoDB\Server\3.4\bin\mongod.exe" --config "C:\Program Files\MongoDB\Ser
```

To use an alternate `dbpath`, specify the path in the configuration file (e.g. `C:\mongodb\mongod.cfg`) or on the command line with the `--dbpath` option.

If needed, you can install services for multiple instances of `mongod.exe` or `mongos.exe`. Install each service with a unique `--serviceName` and `--serviceDisplayName`. Use multiple instances only when sufficient system resources exist and your system design requires it.

Step 5: Start the MongoDB service.

```
net start MongoDB
```

Step 6: Stop or remove the MongoDB service as needed.

To stop the MongoDB service use the following command:

```
net stop MongoDB
```

To remove the MongoDB service use the following command:

```
"C:\Program Files\MongoDB\Server\3.4\bin\mongod.exe" --remove
```

Manually Create a Windows Service for MongoDB Community Edition

You can set up the MongoDB server as a Windows Service that starts automatically at boot time.

The following procedure assumes you have installed MongoDB Community using the `.msi` installer with the path `C:\Program Files\MongoDB\Server\3.4\`.

If you have installed in an alternative directory, you will need to adjust the paths as appropriate.

Step 1: Open an Administrator command prompt.

Press the `Win` key, type `cmd.exe`, and press `Ctrl + Shift + Enter` to run the Command Prompt as Administrator.

Execute the remaining steps from the Administrator command prompt.

Step 2: Create directories.

Create directories for your database and log files:

```
mkdir c:\data\db
mkdir c:\data\log
```

Step 3: Create a configuration file.

Create a configuration file. The file **must** set `systemLog.path`. Include additional configuration options as appropriate.

For example, create a file at `C:\Program Files\MongoDB\Server\3.6\mongod.cfg` that specifies both `systemLog.path` and `storage.dbPath`:

```
    destination: file
    path: c:\data\log\mongod.log
storage:
    dbPath: c:\data\db
```

Step 4: Create the MongoDB service.

Create the MongoDB service.

```
sc.exe create MongoDB binPath= "\"C:\Program Files\MongoDB\Server\3.6\bin\mongod.exe\" --se
```

`sc.exe` requires a space between "=" and the configuration values (eg "binPath= "), and a "" to escape double quotes.

If successfully created, the following log message will display:

```
[SC] CreateService SUCCESS
```

Step 5: Start the MongoDB service.


```
net start M...
```

Step 6: Stop or remove the MongoDB service as needed.

To stop the MongoDB service, use the following command:

```
net stop MongoDB
```

To remove the MongoDB service, first stop the service and then run the following command:

```
sc.exe delete MongoDB
```

Additional Resources

- MongoDB for Developers Free Course
- MongoDB for .NET Developers Free Online Course
- MongoDB Architecture Guide