

How To Install MSSQL & Plugin Prerequisites For Nagios XI

Purpose

This document describes how to install the prerequisites for the MSSQL wizards and plugins.

Target Audience

This document is intended for use by Nagios XI Administrators who need to monitor MSSQL databases. It should be noted that these steps are automatically performed by Nagios XI installations and upgrades.

Installing Prerequisites

There are three plugins total that you will need to accommodate for if you're running the entire suite of MSSQL wizards. However, these three plugins both require the same prerequisites, which makes installation very easy.

The plugins that the MSSQL wizards runs require the Python package `pymssql`, which has a prerequisite that we need to take care of before installing it. That prerequisite is `freetds v0.91`. I should note here that the package will work fine with earlier version of `freetds`, however it will not be able to connect to MSSQL instances.

If you do not need the ability to connect to MSSQL instances, than an earlier version of `freetds` will do. For purposes of this document, I will be assuming `freetds v0.91` or later will be installed.

Installing freetds

Establish a terminal session to your Nagios XI server and execute the following command:

```
yum info freetds
```

This should return information about the `freetds` version that is available for install. Make sure that there is a version of `freetds` equal to or later than `v0.91`, as of the time of the writing the EPEL (el5 and el6) repo had `freetds v0.91` available.

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In the screenshot below you can see it is already installed, there is nothing you need to do.

```
[root@xi-c7x-x64 ~]# yum info freetds
Loaded plugins: fastestmirror
Loading mirror speeds from cached hostfile
Installed Packages
Name       : freetds
Arch       : x86_64
Version    : 0.95.81
Release    : 1.el7
Size       : 2.7 M
Repo       : installed
From repo  : epel
Summary    : Implementation of the TDS (Tabular DataStream) protocol
URL        : http://www.freetds.org/
License    : LGPLv2+ and GPLv2+
Description: FreeTDS is a project to document and implement the TDS (Tabular
           : DataStream) protocol. TDS is used by Sybase(TM) and Microsoft(TM) for
           : client to database server communications. FreeTDS includes call
           : level interfaces for DB-Lib, CT-Lib, and ODBC.
```

If you need in install freetds, execute the following command:

```
yum install -y freetds
```

Common Package Conflicts

Yum may complain about dependencies. There are two major conflicts that are addressed here:

perl-DBD-Sybase – This was included on Nagios XI for implementation later. It currently is not an essential part of a default Nagios XI install. However, if you have installed other plugins that pertain to Sybase or MSSQL, it would be wise to investigate the necessity of this package for your own needs before removing it.

nagiosxi-deps – This was included to ensure certain versions of programs are installed for the proper functionality of the Nagios XI. If you are running pre-2011 v1.10 you may need to remove this repo in order to move forward. Removing this repo does not remove any functionality from Nagios XI.

Installing PHP drivers

```
yum install php-pdo
```

```
yum install php-odbc
```

```
yum install php-mssql (Required for el7)
```

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Installing pymssql

Once you have the proper version of freetds installed, you can move on to the pymssql portion. To see if it is already installed execute the following command (the 'pip' command may be 'pip3' depending on your version of python):

```
pip list | grep pymssql
```

The output if it is installed will be:

```
pymssql (2.1.1)
```

If it is not installed, execute the following command to install it:

```
pip install pymssql
```

Check Functionality

MSSQL Database wizard version 2.0.0 and Higher:

To test the plugin(s), navigate to your `/usr/local/nagios/libexec` directory and test running the plugin. The plugin has a `-h` flag if you don't know which flags do what:

```
/usr/local/nagios/libexec/check_mssql_server.php -h
```

Example:

```
/usr/local/nagios/libexec/check_mssql_server.php -H x.x.x.x --checktype 'database' -U 'username' -P 'password' --instancename 'master' --perftype default -p 1433 --mode test --warning 10 --critical 20
```

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MSSQL Database wizard less than version 2.0.0:

To test the plugin(s), navigate to your `/usr/local/nagios/libexec` directory and test running the plugin. The plugin has a `-h` flag if you don't know which flags do what:

```
/usr/local/nagios/libexec/check_mssql_server.py -h
```

Use the necessary credentials to connect.

For the `.py` plugins, if you enter both a port and an instance it will attempt to use both. So let's say you enter the following command:

```
./check_mssql_server.py -H 192.168.5.5 -U user -P password -I dbase -p 1900
```

It will attempt to connect using the following string:

```
192.168.5.5\dbname:1900
```

Note: If you have installed the MSSQL Wizards previous to versions having the "Instance" ability, you may need to remove the plugins before installing the wizard again.

```
rm /usr/local/nagios/libexec/check_mssql_database.py
rm /usr/local/nagios/libexec/check_mssql_server.py
rm /usr/local/nagios/libexec/check_mssql
```

The wizards can be downloaded using the following locations:

- [MSSQL Database Wizard](#)
- [MSSQL Query Wizard](#)
- [MSSQL Server Wizard](#)

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Finishing Up

If you have additional questions or other support-related questions, please visit us at our Nagios Support Forums:

<https://support.nagios.com/forum>

The Nagios Support Knowledgebase is also a great support resource:

<https://support.nagios.com/kb>