

# NRPE - How To Install NRPE v3 From Source

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## Installing NRPE v3 From Source

This document describes how to install and configure NRPE from source for use with Nagios Core/XI. The `linux-nrpe-agent` that ships with Nagios XI is only supported on CentOS, RHEL environments consist of many different distributions, therefore may need to compile NRPE and its associated plugins.

This procedure is intended for Nagios XI administrators who are new to NRPE or Nagios XI and have to use a source-based install method for NRPE, usually due to unsupported Linux

This guide is broken up into several sections and covers different Linux distributions and non-Linux operating systems.

If you only want to install the `check_nrpe` plugin, refer to the section at the bottom of this KB article.

NRPE 3.2.1 and Nagios Plugins 2.2.1 is what this guide instructs you to install, however future versions should also work fine with these steps.

It is assumed that you are logged onto the machine you are installing NRPE as the `root` user, or a user with sufficient privileges. All of the steps below were tested on the operating systems Ubuntu and SUSE have stricter user permissions, in those cases the listed commands have `sudo` in front of them to ensure you are able to complete the steps. A best effort has been made to ensure a working installation of NRPE.

Please select your OS:

- [Red Hat Enterprise Linux \(RHEL\)](#)
- [CentOS](#)
- [Oracle Linux](#)
- [Ubuntu](#)
- [SUSE SLES | openSUSE Leap](#)
- [Debian](#)
- [Raspbian](#)
- [Fedora](#)
- [Arch Linux](#)
- [Gentoo](#)
- [FreeBSD](#)
- [Solaris](#)
- [Apple OS X](#)

## RHEL | CentOS | Oracle Linux

### Prerequisites

Make sure that you have the following packages installed.

```
yum install -y gcc glibc glibc-common openssl openssl-devel perl wget
```

### Downloading the Source

```
cd /tmp
wget --no-check-certificate -O nrpe.tar.gz https://github.com/NagiosEnterprises/nrpe/archive/nrpe-3.2.1.tar.gz
tar xzf nrpe.tar.gz
```

### Compile

Note that if you want to pass arguments through NRPE you must specify this in the configuration option as indicated below. If you prefer to you can omit the `--enable-command-args` set in the `nrpe.cfg` file on each server monitored.

```
cd /tmp/nrpe-nrpe-3.2.1/
./configure --enable-command-args
make all
```

### Create User And Group

This creates the nagios user and group.

```
make install-groups-users
```

### Install Binaries

This step installs the binary files, the NRPE daemon and the `check_nrpe` plugin.

If you only wanted to install the daemon, use the command `make install-daemon` instead of the command below. However it is useful having the `check_nrpe` plugin installed for future

If you only wanted to install the daemon, run the command `make install-daemon` instead of the command below. However it is useful having the `check_nrpe` plugin installed for testing. If you only wanted to install the `check_nrpe` plugin, refer to the section at the bottom of this KB article as there are a lot of steps that can be skipped. Installing only the plugin is usually c

```
make install
```

## Install Configuration Files

This installs the config files.

```
make install-config
```

## Update Services File

The `/etc/services` file is used by applications to translate human readable service names into port numbers when connecting to a machine across a network.

```
echo >> /etc/services
echo '# Nagios services' >> /etc/services
echo 'nrpe 5666/tcp' >> /etc/services
```

## Install Service / Daemon

This installs the service or daemon files.

==== CentOS 5.x / 6.x | RHEL 5.x / 6.x | Oracle Linux 5.x / 6.x =====

```
make install-init
```

==== CentOS 7.x | RHEL 7.x | Oracle Linux 7.x =====

```
make install-init
systemctl enable nrpe.service
```

Information on starting and stopping services will be explained further on.

## Configure Firewall

Port 5666 is used by NRPE and needs to be opened on the local firewall.

==== CentOS 5.x / 6.x | RHEL 5.x / 6.x | Oracle Linux 5.x / 6.x =====

```
iptables -I INPUT -p tcp --destination-port 5666 -j ACCEPT
service iptables save
iptables -I INPUT -p tcp --destination-port 5666 -j ACCEPT
service iptables save
```

==== CentOS 7.x | RHEL 7.x | Oracle Linux 7.x =====

```
firewall-cmd --zone=public --add-port=5666/tcp
firewall-cmd --zone=public --add-port=5666/tcp --permanent
```

## Update Configuration File

The file `nrpe.cfg` is where the following settings will be defined. It is located:

```
/usr/local/nagios/etc/nrpe.cfg
```

```
allowed_hosts=
```

At this point NRPE will only listen to requests from itself (127.0.0.1). If you wanted your nagios server to be able to connect, add its IP address after a comma (in this example it's 10.25.5.2)

```
allowed_hosts=127.0.0.1,10.25.5.2
```

```
dont_blame_nrpe=
```

This option determines whether or not the NRPE daemon will allow clients to specify arguments to commands that are executed. We are going to allow this, as it enables more advanced monitoring.

```
dont_blame_nrpe=1
```

The following commands make the configuration changes described above.

```
sed -i '^allowed_hosts=/s/$/,10.25.5.2/' /usr/local/nagios/etc/nrpe.cfg
sed -i 's/^dont_blame_nrpe=.*$/dont_blame_nrpe=1/g' /usr/local/nagios/etc/nrpe.cfg
```

## Start Service / Daemon

Different Linux distributions have different methods of starting NRPE.

==== CentOS 5.x | RHEL 5.x | Oracle Linux 5.x =====

```
service nrpe start
```

==== CentOS 6.x | RHEL 6.x | Oracle Linux 6.x ====

```
start nrpe
```

==== CentOS 7.x | RHEL 7.x | Oracle Linux 7.x ====

```
systemctl start nrpe.service
```

## Test NRPE

Now check that NRPE is listening and responding to requests.

```
/usr/local/nagios/libexec/check_nrpe -H 127.0.0.1
```

You should see the output similar to the following:

```
NRPE v3.2.1
```

If you get the NRPE version number (as shown above), NRPE is installed and configured correctly.

You can also test from your Nagios host by executing the same command above, but instead of 127.0.0.1 you will need to replace that with the IP Address / DNS name of the mach

## Service / Daemon Commands

Different Linux distributions have different methods of starting / stopping / restarting / status NRPE.

==== CentOS 5.x | RHEL 5.x | Oracle Linux 5.x ====

```
service nrpe start
service nrpe stop
service nrpe restart
service nrpe status
```

==== CentOS 6.x | RHEL 6.x | Oracle Linux 6.x ====


```
start nrpe
stop nrpe
restart nrpe
status nrpe
```

==== CentOS 7.x | RHEL 7.x | Oracle Linux 7.x ====

```
systemctl start nrpe.service
systemctl stop nrpe.service
systemctl restart nrpe.service
systemctl status nrpe.service
```

## Installing The Nagios Plugins

NRPE needs plugins to operate properly. The following steps will walk you through installing Nagios Plugins.

 These steps install nagios-plugins 2.2.1. Newer versions will become available in the future and you can use those in the following installation steps. Please see the [releases p](#)

Please note that the following steps install most of the plugins that come in the Nagios Plugins package. However there are some plugins that require other libraries which are not inc detailed installation instructions:

[Documentation - Installing Nagios Plugins From Source](#)

## Prerequisites

Make sure that you have the following packages installed.

==== CentOS 5.x ====

```
yum install -y gcc glibc glibc-common make gettext automake wget openssl-devel net-snmp net-snmp-utils epel-release
yum install -y perl-Net-SNMP
cd /tmp
wget http://ftp.gnu.org/gnu/autoconf/autoconf-2.60.tar.gz
tar xzf autoconf-2.60.tar.gz
cd /tmp/autoconf-2.60
./configure
make
make install
```

==== CentOS 6.x / 7.x ====

```
yum install -y gcc glibc glibc-common make gettext automake autoconf wget openssl-devel net-snmp net-snmp-utils epel-release
yum install -y perl-Net-SNMP
```

==== RHEL 5.x | Oracle Linux 5.x ====

```
cd /tmp
wget http://archives.fedoraproject.org/pub/archive/epel/epel-release-latest-5.noarch.rpm
rpm -ihv epel-release-latest-5.noarch.rpm
yum install -y gcc glibc glibc-common make gettext automake wget openssl-devel net-snmp net-snmp-utils
yum install -y perl-Net-SNMP
wget http://ftp.gnu.org/gnu/autoconf/autoconf-2.60.tar.gz
tar xzf autoconf-2.60.tar.gz
cd /tmp/autoconf-2.60
./configure
make
make install
```

==== RHEL 6.x | Oracle Linux 6.x ====

```
cd /tmp
wget https://dl.fedoraproject.org/pub/epel/epel-release-latest-6.noarch.rpm
rpm -ihv epel-release-latest-6.noarch.rpm
yum install -y gcc glibc glibc-common make gettext automake autoconf wget openssl-devel net-snmp net-snmp-utils
yum install -y perl-Net-SNMP
```

==== RHEL 7.x ====

```
cd /tmp
wget https://dl.fedoraproject.org/pub/epel/epel-release-latest-7.noarch.rpm
rpm -ihv epel-release-latest-7.noarch.rpm
subscription-manager repos --enable=rhel-7-server-optional-rpms
yum install -y gcc glibc glibc-common make gettext automake autoconf wget openssl-devel net-snmp net-snmp-utils
yum install -y perl-Net-SNMP
```

==== Oracle Linux 7.x ====

```
yum install -y yum-utils
yum-config-manager --enable ol7_optional_latest
cd /tmp
wget https://dl.fedoraproject.org/pub/epel/epel-release-latest-7.noarch.rpm
rpm -ihv epel-release-latest-7.noarch.rpm
yum install -y gcc glibc glibc-common make gettext automake autoconf wget openssl-devel net-snmp net-snmp-utils
yum install -y perl-Net-SNMP
```

## Downloading the Source

```
cd /tmp
wget --no-check-certificate -O nagios-plugins.tar.gz https://github.com/nagios-plugins/nagios-plugins/archive/release-2.2.1.tar.gz
tar xzf nagios-plugins.tar.gz
```

## Compile + Install

```
cd /tmp/nagios-plugins-release-2.2.1/
./tools/setup
./configure
make
make install
```

## Test NRPE + Plugins

Now you can check that NRPE is executing plugins correctly. The default configuration file `/usr/local/nagios/etc/nrpe.cfg` has the following command defined in it:

```
command[check_load]=/usr/local/nagios/libexec/check_load -w 15,10,5 -c 30,25,20
```

Using the `check_load` command to test NRPE:

```
/usr/local/nagios/libexec/check_nrpe -H 127.0.0.1 -c check_load
```

You should see the output similar to the following:

```
OK - load average: 0.01, 0.13, 0.12|load1=0.010;15.000;30.000;0; load5=0.130;10.000;25.000;0; load15=0.120;5.000;20.000;0;
```

You can also test from your Nagios host by executing the same command above, but instead of `127.0.0.1` you will need to replace that with the IP Address / DNS name of the mach

## Prerequisites

Make sure that you have the following packages installed.

```
sudo apt-get update
sudo apt-get install -y autoconf automake gcc libc6 libmcrypt-dev make libssl-dev wget openssl
```

## Downloading the Source

```
cd /tmp
wget --no-check-certificate -O nrpe.tar.gz https://github.com/NagiosEnterprises/nrpe/archive/nrpe-3.2.1.tar.gz
tar xzf nrpe.tar.gz
```

## Compile

Note that if you want to pass arguments through NRPE you must specify this in the configuration option as indicated below. If you prefer to you can omit the `--enable-command-arg` set in the `nrpe.cfg` file on each server monitored.

==== i386 ====

```
cd /tmp/nrpe-nrpe-3.2.1/
sudo ./configure --enable-command-args --with-ssl-lib=/usr/lib/i386-linux-gnu/
sudo make all
```

==== x86\_x64 ====

```
cd /tmp/nrpe-nrpe-3.2.1/
sudo ./configure --enable-command-args --with-ssl-lib=/usr/lib/x86_64-linux-gnu/
sudo make all
```

## Create User And Group

This creates the nagios user and group.

```
sudo make install-groups-users
```

## Install Binaries

This step installs the binary files, the NRPE daemon and the `check_nrpe` plugin.

If you only wanted to install the daemon, run the command `make install-daemon` instead of the command below. However it is useful having the `check_nrpe` plugin installed for te

If you only wanted to install the `check_nrpe` plugin, refer to the section at the bottom of this KB article as there a lot of steps that can be skipped. Installing only the plugin is usually c

```
sudo make install
```

## Install Configuration Files

This installs the config files.

```
sudo make install-config
```

## Update Services File

The `/etc/services` file is used by applications to translate human readable service names into port numbers when connecting to a machine across a network.

```
sudo sh -c "echo >> /etc/services"
sudo sh -c "sudo echo '# Nagios services' >> /etc/services"
sudo sh -c "sudo echo 'nrpe 5666/tcp' >> /etc/services"
```

## Install Service / Daemon

This installs the service or daemon files.

==== 13.x / 14.x ====

```
sudo make install-init
```

==== 15.x / 16.x / 17.x ====

```
sudo make install-init
sudo systemctl enable nrpe.service
```

Information on starting and stopping services will be explained further on.

## Configure Firewall

Port 5666 is used by NRPE and needs to be opened on the local firewall.

```
sudo mkdir -p /etc/uwfw/applications.d
sudo sh -c "echo '[NRPE]' > /etc/uwfw/applications.d/nagios"
sudo sh -c "echo 'title=Nagios Remote Plugin Executor' >> /etc/uwfw/applications.d/nagios"
sudo sh -c "echo 'description=Allows remote execution of Nagios plugins' >> /etc/uwfw/applications.d/nagios"
sudo sh -c "echo 'ports=5666/tcp' >> /etc/uwfw/applications.d/nagios"
sudo ufw allow NRPE
sudo ufw reload
```

## Update Configuration File

The file `nrpe.cfg` is where the following settings will be defined. It is located:

```
/usr/local/nagios/etc/nrpe.cfg
```

```
allowed_hosts=
```

At this point NRPE will only listen to requests from itself (127.0.0.1). If you wanted your nagios server to be able to connect, add it's IP address after a comma (in this example it's 1

```
allowed_hosts=127.0.0.1,10.25.5.2
```

```
dont_blame_nrpe=
```

This option determines whether or not the NRPE daemon will allow clients to specify arguments to commands that are executed. We are going to allow this, as it enables more advan

```
dont_blame_nrpe=1
```

The following commands make the configuration changes described above.

```
sudo sh -c "sed -i '/^allowed_hosts=/s/,$/,10.25.5.2/' /usr/local/nagios/etc/nrpe.cfg"
sudo sh -c "sed -i 's/^dont_blame_nrpe=.*$/dont_blame_nrpe=1/g' /usr/local/nagios/etc/nrpe.cfg"
```

## Start Service / Daemon

Different Linux distributions have different methods of starting NRPE.

==== 13.x / 14.x =====

```
sudo start nrpe
```

==== 15.x / 16.x / 17.x =====

```
sudo systemctl start nrpe.service
```

## Test NRPE

Now check that NRPE is listening and responding to requests.

```
/usr/local/nagios/libexec/check_nrpe -H 127.0.0.1
```

You should see the output similar to the following:

```
NRPE v3.2.1
```

If you get the NRPE version number (as shown above), NRPE is installed and configured correctly.

You can also test from your Nagios host by executing the same command above, but instead of 127.0.0.1 you will need to replace that with the IP Address / DNS name of the mach

## Service / Daemon Commands

Different Linux distributions have different methods of starting / stopping / restarting / status NRPE.

==== 13.x / 14.x =====


```
sudo start nrpe
sudo stop nrpe
sudo restart nrpe
sudo status nrpe
```

==== 15.x / 16.x / 17.x =====

```
sudo systemctl start nrpe.service
sudo systemctl stop nrpe.service
sudo systemctl restart nrpe.service
sudo systemctl status nrpe.service
```

## Installing The Nagios Plugins

NRPE needs plugins to operate properly. The following steps will walk you through installing Nagios Plugins.

 These steps install nagios-plugins 2.2.1. Newer versions will become available in the future and you can use those in the following installation steps. Please see the [releases p](#)

Please note that the following steps install most of the plugins that come in the Nagios Plugins package. However there are some plugins that require other libraries which are not in detailed installation instructions:

[Documentation - Installing Nagios Plugins From Source](#)

## Prerequisites

Make sure that you have the following packages installed.

```
sudo apt-get install -y autoconf gcc libc6 libmbedtls-dev make libssl-dev wget bc gawk dc build-essential snmp libnet-snmp-perl gettext
```

## Downloading the Source

```
cd /tmp
wget --no-check-certificate -O nagios-plugins.tar.gz https://github.com/nagios-plugins/nagios-plugins/archive/release-2.2.1.tar.gz
tar xzf nagios-plugins.tar.gz
```

## Compile + Install

```
cd /tmp/nagios-plugins-release-2.2.1/
sudo ./tools/setup
sudo ./configure
sudo make
sudo make install
```

## Test NRPE + Plugins

Now you can check that NRPE is executing plugins correctly. The default configuration file `/usr/local/nagios/etc/nrpe.cfg` has the following command defined in it:

```
command[check_load]=usr/local/nagios/libexec/check_load -w 15,10,5 -c 30,25,20
```

Using the `check_load` command to test NRPE:

```
/usr/local/nagios/libexec/check_nrpe -H 127.0.0.1 -c check_load
```

You should see the output similar to the following:

```
OK - load average: 0.01, 0.13, 0.12|load1=0.010;15.000;30.000;0; load5=0.130;10.000;25.000;0; load15=0.120;5.000;20.000;0;
```

You can also test from your Nagios host by executing the same command above, but instead of `127.0.0.1` you will need to replace that with the IP Address / DNS name of the mach

# SUSE SLES | openSUSE Leap

## Prerequisites

Make sure that you have the following packages installed.

===== SUSE SLES 11.3 =====

```
cd /tmp
wget 'https://nu.novell.com/repo/$RCE/SLE11-SDK-SP3-Pool/sle-11-x86_64/rpm/x86_64/sle-sdk-release-11.3-1.69.x86_64.rpm'
wget 'https://nu.novell.com/repo/$RCE/SLE11-SDK-SP3-Pool/sle-11-x86_64/rpm/x86_64/sle-sdk-release-SDK-11.3-1.69.x86_64.rpm'
sudo rpm -ivh sle-sdk-release-*
sudo suse_register
sudo zypper --non-interactive install autoconf gcc glibc libmbedtls-devel make libopenssl-devel wget
```

===== SUSE SLES 11.4 =====

```
cd /tmp
wget 'https://nu.novell.com/repo/$RCE/SLE11-SDK-SP4-Pool/sle-11-x86_64/rpm/x86_64/sle-sdk-release-11.4-1.55.x86_64.rpm'
wget 'https://nu.novell.com/repo/$RCE/SLE11-SDK-SP4-Pool/sle-11-x86_64/rpm/x86_64/sle-sdk-release-SDK-11.4-1.55.x86_64.rpm'
sudo rpm -ivh sle-sdk-release-*
sudo suse_register
sudo zypper --non-interactive install autoconf gcc glibc libmbedtls-devel make libopenssl-devel wget
```

===== SUSE SLES 12 =====

```
sudo SUSEConnect -p sle-sdk/12/x86_64
sudo SUSEConnect -p sle-module-web-scripting/12/x86_64
sudo zypper --non-interactive install autoconf gcc glibc libmbedtls-devel make libopenssl-devel wget
```

===== SUSE SLES 12.1 =====

```
sudo SUSEConnect -p sle-sdk/12.1/x86_64
sudo SUSEConnect -p sle-module-web-scripting/12/x86_64
sudo zypper --non-interactive install autoconf gcc glibc libmbedtls-devel make libopenssl-devel wget
```

===== SUSE SLES 12.2 =====

```
sudo SUSEConnect -p sle-sdk/12.2/x86_64
sudo SUSEConnect -p sle-module-web-scripting/12/x86_64
sudo zypper --non-interactive install autoconf gcc glibc libmbedtls-devel make libopenssl-devel wget
```

===== SUSE SLES 12.3 =====

```
sudo SUSEConnect -p sle-sdk/12.3/x86_64
sudo SUSEConnect -p sle-module-web-scripting/12/x86_64
sudo zypper --non-interactive install autoconf gcc glibc libmbedtls-devel make libopenssl-devel wget
```

===== openSUSE Leap 42.x =====

```
sudo zypper --non-interactive install autoconf gcc glibc libmbedtls-devel make libopenssl-devel wget
```

## Downloading the Source

```
cd /tmp
wget --no-check-certificate -O nrpe.tar.gz https://github.com/NagiosEnterprises/nrpe/archive/nrpe-3.2.1.tar.gz
tar xzf nrpe.tar.gz
```

## Compile

Note that if you want to pass arguments through NRPE you must specify this in the configuration option as indicated below. If you prefer to you can omit the `--enable-command-args` set in the `nrpe.cfg` file on each server monitored.

```
cd /tmp/nrpe-nrpe-3.2.1/
sudo ./configure --enable-command-args
sudo make all
```

## Create User And Group

This creates the nagios user and group.

```
sudo make install-groups-users
```

## Install Binaries

This step installs the binary files, the NRPE daemon and the `check_nrpe` plugin.

If you only wanted to install the daemon, run the command `make install-daemon` instead of the command below. However it is useful having the `check_nrpe` plugin installed for te

If you only wanted to install the `check_nrpe` plugin, refer to the section at the bottom of this KB article as there a lot of steps that can be skipped. Installing only the plugin is usually c

```
sudo make install
```

## Install Configuration Files

This installs the config files.

```
sudo make install-config
```

## Update Services File

The `/etc/services` file is used by applications to translate human readable service names into port numbers when connecting to a machine across a network.

```
sudo sh -c "echo >> /etc/services"
sudo sh -c "sudo echo '# Nagios services' >> /etc/services"
sudo sh -c "sudo echo 'nrpe 5666/tcp' >> /etc/services"
```

## Install Service / Daemon

This installs the service or daemon files.

===== SUSE SLES 11.x =====

```
sudo make install-init
sudo /sbin/chkconfig --set nrpe on
```

===== SUSE SLES 12.x | openSUSE Leap 42.x =====

```
sudo make install-init
sudo systemctl enable nrpe.service
```



Information on starting and stopping services will be explained further on.

## Configure Firewall

Port 5666 is used by NRPE and needs to be opened on the local firewall.

===== SUSE SLES 11.x =====

```
sudo sed -i '/FW_SERVICES_EXT_TCP=/s/\$/ 5666\$/' /etc/sysconfig/SuSEfirewall2
sudo /sbin/service SuSEfirewall2_init restart
sudo /sbin/service SuSEfirewall2_setup restart
```

===== SUSE SLES 12.x =====

```
sudo /usr/sbin/SuSEfirewall2 open EXT TCP 5666
sudo systemctl restart SuSEfirewall2.service
```

===== openSUSE Leap 42.x =====

The firewall is not enabled by default / allows port 5666.

## Update Configuration File

The file `nrpe.cfg` is where the following settings will be defined. It is located:

```
/usr/local/nagios/etc/nrpe.cfg
```

```
allowed_hosts=
```

At this point NRPE will only listen to requests from itself (127.0.0.1). If you wanted your nagios server to be able to connect, add it's IP address after a comma (in this example it's 1

```
allowed_hosts=127.0.0.1,10.25.5.2
```

```
dont_blame_nrpe=
```

This option determines whether or not the NRPE daemon will allow clients to specify arguments to commands that are executed. We are going to allow this, as it enables more advan

```
dont_blame_nrpe=1
```

The following commands make the configuration changes described above.

```
sudo sh -c "sed -i '/^allowed_hosts=/s/,$/,10.25.5.2/' /usr/local/nagios/etc/nrpe.cfg"
sudo sh -c "sed -i 's/^dont_blame_nrpe=.*$/dont_blame_nrpe=1/g' /usr/local/nagios/etc/nrpe.cfg"
```

## Start Service / Daemon

Different Linux distributions have different methods of starting NRPE.

===== SUSE SLES 11.x =====

```
sudo /sbin/service nrpe start
```

===== SUSE SLES 12.x | openSUSE Leap 42.x =====

```
sudo systemctl start nrpe.service
```

## Test NRPE

Now check that NRPE is listening and responding to requests.

```
/usr/local/nagios/libexec/check_nrpe -H 127.0.0.1
```

You should see the output similar to the following:

```
NRPE v3.2.1
```

If you get the NRPE version number (as shown above), NRPE is installed and configured correctly.

You can also test from your Nagios host by executing the same command above, but instead of 127.0.0.1 you will need to replace that with the IP Address / DNS name of the mach

## Service / Daemon Commands

Different Linux distributions have different methods of starting / stopping / restarting / status NRPE.

===== SUSE SLES 11.x =====


```
sudo /sbin/service nrpe start
sudo /sbin/service nrpe stop
sudo /sbin/service nrpe restart
sudo /sbin/service nrpe status
```

===== SUSE SLES 12.x | openSUSE Leap 42.x =====

```
sudo systemctl start nrpe.service
sudo systemctl stop nrpe.service
sudo systemctl restart nrpe.service
sudo systemctl status nrpe.service
```

## Installing The Nagios Plugins

NRPE needs plugins to operate properly. The following steps will walk you through installing Nagios Plugins.

 These steps install nagios-plugins 2.2.1. Newer versions will become available in the future and you can use those in the following installation steps. Please see the [releases page](#)

Please note that the following steps install most of the plugins that come in the Nagios Plugins package. However there are some plugins that require other libraries which are not in the detailed installation instructions:

[Documentation - Installing Nagios Plugins From Source](#)

## Prerequisites

Make sure that you have the following packages installed.

```
sudo zypper --non-interactive install autoconf gcc glibc libmcrypto-devel make libopenssl-devel wget gettext gettext-runtime automake net-tools
```

## Downloading the Source

```
cd /tmp
wget --no-check-certificate -O nagios-plugins.tar.gz https://github.com/nagios-plugins/nagios-plugins/archive/release-2.2.1.tar.gz
tar xzf nagios-plugins.tar.gz
```

## Compile + Install

```
cd /tmp/nagios-plugins-release-2.2.1/
sudo ./tools/setup
sudo ./configure
sudo make
sudo make install
```

## Test NRPE + Plugins

Now you can check that NRPE is executing plugins correctly. The default configuration file `/usr/local/nagios/etc/nrpe.cfg` has the following command defined in it:

```
command[check_load]=/usr/local/nagios/libexec/check_load -w 15,10,5 -c 30,25,20
```

Using the `check_load` command to test NRPE:

```
/usr/local/nagios/libexec/check_nrpe -H 127.0.0.1 -c check_load
```

You should see the output similar to the following:

```
OK - load average: 0.01, 0.13, 0.12 | load1=0.010;15.000;30.000;0; load5=0.130;10.000;25.000;0; load15=0.120;5.000;20.000;0;
```

You can also test from your Nagios host by executing the same command above, but instead of `127.0.0.1` you will need to replace that with the IP Address / DNS name of the machine.

## Debian | Raspbian

All steps on Debian require to run as root. To become root simply run:

Debian

```
su
```

Raspbian

```
sudo -i
```

All commands from this point onwards will be as root.

## Prerequisites

## Prerequisites

Make sure that you have the following packages installed.

```
apt-get update
apt-get install -y autoconf automake gcc libc6 libmcrpt-dev make libssl-dev wget
```

## Downloading the Source

```
cd /tmp
wget --no-check-certificate -O nrpe.tar.gz https://github.com/NagiosEnterprises/nrpe/archive/nrpe-3.2.1.tar.gz
tar xzf nrpe.tar.gz
```

## Compile

Note that if you want to pass arguments through NRPE you must specify this in the configuration option as indicated below. If you prefer to you can omit the `--enable-command-args` set in the `nrpe.cfg` file on each server monitored.

```
cd /tmp/nrpe-nrpe-3.2.1/
./configure --enable-command-args
make all
```

## Create User And Group

This creates the nagios user and group.

```
make install-groups-users
```

## Install Binaries

This step installs the binary files, the NRPE daemon and the `check_nrpe` plugin.

If you only wanted to install the daemon, run the command `make install-daemon` instead of the command below. However it is useful having the `check_nrpe` plugin installed for te

If you only wanted to install the `check_nrpe` plugin, refer to the section at the bottom of this KB article as there a lot of steps that can be skipped. Installing only the plugin is usually c

```
make install
```

## Install Configuration Files

This installs the config files.

```
make install-config
```

## Update Services File

The `/etc/services` file is used by applications to translate human readable service names into port numbers when connecting to a machine across a network.

```
echo >> /etc/services
echo '# Nagios services' >> /etc/services
echo 'nrpe 5666/tcp' >> /etc/services
```

## Install Service / Daemon

This installs the service or daemon files.

==== 7.x ====

```
make install-init
update-rc.d nrpe defaults
```

==== 8.x/9.x ====

```
make install-init
systemctl enable nrpe.service
```

Information on starting and stopping services will be explained further on.

## Configure Firewall

Port 5666 is used by NRPE and needs to be opened on the local firewall.

```
iptables -I INPUT -p tcp --destination-port 5666 -j ACCEPT
apt-get install -y iptables-persistent
Answer yes to saving existing rules

iptables-save > /etc/iptables/rule
```

## Update Configuration File

The file `nrpe.cfg` is where the following settings will be defined. It is located:

```
/usr/local/nagios/etc/nrpe.cfg
```

```
allowed_hosts=
```

At this point NRPE will only listen to requests from itself (127.0.0.1). If you wanted your nagios server to be able to connect, add it's IP address after a comma (in this example it's 1

```
allowed_hosts=127.0.0.1,10.25.5.2
```

```
dont_blame_nrpe=
```

This option determines whether or not the NRPE daemon will allow clients to specify arguments to commands that are executed. We are going to allow this, as it enables more advan

```
dont_blame_nrpe=1
```

The following commands make the configuration changes described above.

```
sed -i '^allowed_hosts=/s/$/,10.25.5.2/' /usr/local/nagios/etc/nrpe.cfg
sed -i 's/^dont_blame_nrpe=.*$/dont_blame_nrpe=1/g' /usr/local/nagios/etc/nrpe.cfg
```

## Start Service / Daemon

Different Linux distributions have different methods of starting NRPE.

==== 7.x ====

```
service nrpe start
```

==== 8.x / 9.x ====

```
systemctl start nrpe.service
```

## Test NRPE

Now check that NRPE is listening and responding to requests.

```
/usr/local/nagios/libexec/check_nrpe -H 127.0.0.1
```

You should see the output similar to the following:

```
NRPE v3.2.1
```

If you get the NRPE version number (as shown above), NRPE is installed and configured correctly.

You can also test from your Nagios host by executing the same command above, but instead of `127.0.0.1` you will need to replace that with the IP Address / DNS name of the mach

## Service / Daemon Commands

Different Linux distributions have different methods of starting / stopping / restarting / status NRPE.

==== 7.x ====


```
service nrpe start
service nrpe stop
service nrpe restart
service nrpe status
```

==== 8.x / 9.x ====

```
systemctl start nrpe.service
systemctl stop nrpe.service
systemctl restart nrpe.service
systemctl status nrpe.service
```

## Installing The Nagios Plugins

NRPE needs plugins to operate properly. The following steps will walk you through installing Nagios Plugins.

 These steps install nagios-plugins 2.2.1. Newer versions will become available in the future and you can use those in the following installation steps. Please see the [releases p](#)

Please note that the following steps install most of the plugins that come in the Nagios Plugins package. However there are some plugins that require other libraries which are not in detailed installation instructions:

[Documentation - Installing Nagios Plugins From Source](#)

## Prerequisites

Make sure that you have the following packages installed.

```
apt-get install -y autoconf automake gcc libc6 libmcrypt-dev make libssl-dev wget bc gawk dc build-essential snmp libnet-snmp-perl gett
```

## Downloading the Source

```
cd /tmp
wget --no-check-certificate -O nagios-plugins.tar.gz https://github.com/nagios-plugins/nagios-plugins/archive/release-2.2.1.tar.gz
tar xzf nagios-plugins.tar.gz
```

## Compile + Install

```
cd /tmp/nagios-plugins-release-2.2.1/
./tools/setup
./configure
make
make install
```

## Test NRPE + Plugins

Now you can check that NRPE is executing plugins correctly. The default configuration file `/usr/local/nagios/etc/nrpe.cfg` has the following command defined in it:

```
command[check_load]=/usr/local/nagios/libexec/check_load -w 15,10,5 -c 30,25,20
```

Using the `check_load` command to test NRPE:

```
/usr/local/nagios/libexec/check_nrpe -H 127.0.0.1 -c check_load
```

You should see the output similar to the following:

```
OK - load average: 0.01, 0.13, 0.12|load1=0.010;15.000;30.000;0; load5=0.130;10.000;25.000;0; load15=0.120;5.000;20.000;0;
```

You can also test from your Nagios host by executing the same command above, but instead of `127.0.0.1` you will need to replace that with the IP Address / DNS name of the mach

## Fedora

### Prerequisites

Make sure that you have the following packages installed.

```
dnf install -y gcc glibc glibc-common openssl-devel perl wget
```

### Downloading the Source

```
cd /tmp
wget --no-check-certificate -O nrpe.tar.gz https://github.com/NagiosEnterprises/nrpe/archive/nrpe-3.2.1.tar.gz
tar xzf nrpe.tar.gz
```

### Compile

Note that if you want to pass arguments through NRPE you must specify this in the configuration option as indicated below. If you prefer to you can omit the `--enable-command-arg` set in the `nrpe.cfg` file on each server monitored.

```
cd /tmp/nrpe-nrpe-3.2.1/
./configure --enable-command-args
make all
```

### Create User And Group

This creates the nagios user and group.

```
make install-groups-users
```

### Install Binaries

This step installs the binary files, the NRPE daemon and the `check_nrpe` plugin.

If you only wanted to install the daemon, run the command `make install-daemon` instead of the command below. However it is useful having the `check_nrpe` plugin installed for te

If you only wanted to install the `check_nrpe` plugin, refer to the section at the bottom of this KB article as there a lot of steps that can be skipped. Installing only the plugin is usually c

```
make install
```

### Install Configuration Files

This installs the config files.

```
make install-config
```

## Update Services File

The `/etc/services` file is used by applications to translate human readable service names into port numbers when connecting to a machine across a network.

```
echo >> /etc/services
echo '# Nagios services' >> /etc/services
echo 'nrpe 5666/tcp' >> /etc/services
```

## Install Service / Daemon

This installs the service or daemon files.

```
make install-init
systemctl enable nrpe.service
```

Information on starting and stopping services will be explained further on.

## Configure Firewall

Port 5666 is used by NRPE and needs to be opened on the local firewall.

```
firewall-cmd --zone=FedoraServer --add-port=5666/tcp
firewall-cmd --zone=FedoraServer --add-port=5666/tcp --permanent
```

## Update Configuration File

The file `nrpe.cfg` is where the following settings will be defined. It is located:

```
/usr/local/nagios/etc/nrpe.cfg
```

```
allowed_hosts=
```

At this point NRPE will only listen to requests from itself (127.0.0.1). If you wanted your nagios server to be able to connect, add it's IP address after a comma (in this example it's 1

```
allowed_hosts=127.0.0.1,10.25.5.2
```

```
dont_blame_nrpe=
```

This option determines whether or not the NRPE daemon will allow clients to specify arguments to commands that are executed. We are going to allow this, as it enables more advan

```
dont_blame_nrpe=1
```

The following commands make the configuration changes described above.

```
sed -i '/^allowed_hosts=/s/$/,10.25.5.2/' /usr/local/nagios/etc/nrpe.cfg
sed -i 's/^dont_blame_nrpe=.* /dont_blame_nrpe=1/g' /usr/local/nagios/etc/nrpe.cfg
```

## Start Service / Daemon

Different Linux distributions have different methods of starting NRPE.

```
systemctl start nrpe.service
```

## Test NRPE

Now check that NRPE is listening and responding to requests.

```
/usr/local/nagios/libexec/check_nrpe -H 127.0.0.1
```

You should see the output similar to the following:

```
NRPE v3.2.1
```

If you get the NRPE version number (as shown above), NRPE is installed and configured correctly.

You can also test from your Nagios host by executing the same command above, but instead of 127.0.0.1 you will need to replace that with the IP Address / DNS name of the mach


## Service / Daemon Commands

Different Linux distributions have different methods of starting / stopping / restarting / status NRPE.

```
systemctl start nrpe.service
systemctl stop nrpe.service
systemctl restart nrpe.service
systemctl status nrpe.service
```

## Installing The Nagios Plugins

NRPE needs plugins to operate properly. The following steps will walk you through installing Nagios Plugins.

 These steps install nagios-plugins 2.2.1. Newer versions will become available in the future and you can use those in the following installation steps. Please see the [releases page](#)

Please note that the following steps install most of the plugins that come in the Nagios Plugins package. However there are some plugins that require other libraries which are not in detailed installation instructions:

[Documentation - Installing Nagios Plugins From Source](#)

## Prerequisites

Make sure that you have the following packages installed.

```
dnf install -y gcc glibc glibc-common openssl-devel perl wget gettext make net-snmp net-snmp-utils perl-Net-SNMP automake autoconf
```

## Downloading the Source

```
cd /tmp
wget --no-check-certificate -O nagios-plugins.tar.gz https://github.com/nagios-plugins/nagios-plugins/archive/release-2.2.1.tar.gz
tar xzf nagios-plugins.tar.gz
```

## Compile + Install

```
cd /tmp/nagios-plugins-release-2.2.1/
./tools/setup
./configure
make
make install
```

## Test NRPE + Plugins

Now you can check that NRPE is executing plugins correctly. The default configuration file `/usr/local/nagios/etc/nrpe.cfg` has the following command defined in it:

```
command[check_load]=usr/local/nagios/libexec/check_load -w 15,10,5 -c 30,25,20
```

Using the `check_load` command to test NRPE:

```
/usr/local/nagios/libexec/check_nrpe -H 127.0.0.1 -c check_load
```

You should see the output similar to the following:

```
OK - load average: 0.01, 0.13, 0.12|load1=0.010;15.000;30.000;0; load5=0.130;10.000;25.000;0; load15=0.120;5.000;20.000;0;
```

You can also test from your Nagios host by executing the same command above, but instead of `127.0.0.1` you will need to replace that with the IP Address / DNS name of the machine.

## Arch Linux

### Prerequisites

Make sure that you have the following packages installed.

```
pacman --noconfirm -Syyu
pacman --noconfirm -S autoconf gcc glibc libmcrypt make openssl wget
```

### Downloading the Source

```
cd /tmp
wget --no-check-certificate -O nrpe.tar.gz https://github.com/NagiosEnterprises/nrpe/archive/nrpe-3.2.1.tar.gz
tar xzf nrpe.tar.gz
```

### Compile

Note that if you want to pass arguments through NRPE you must specify this in the configuration option as indicated below. If you prefer to you can omit the `--enable-command-args` set in the `nrpe.cfg` file on each server monitored.

```
cd /tmp/nrpe-nrpe-3.2.1/
./configure --enable-command-args
make all
```

## Create User And Group

This creates the nagios user and group.

```
make install-groups-users
```

## Install Binaries

This step installs the binary files, the NRPE daemon and the `check_nrpe` plugin.

If you only wanted to install the daemon, run the command `make install-daemon` instead of the command below. However it is useful having the `check_nrpe` plugin installed for te

If you only wanted to install the `check_nrpe` plugin, refer to the section at the bottom of this KB article as there a lot of steps that can be skipped. Installing only the plugin is usually c

```
make install
```

## Install Configuration Files

This installs the config files.

```
make install-config
```

## Update Services File

The `/etc/services` file is used by applications to translate human readable service names into port numbers when connecting to a machine across a network.

```
echo >> /etc/services
echo '# Nagios services' >> /etc/services
echo 'nrpe      5666/tcp' >> /etc/services
```

## Install Service / Daemon

This installs the service or daemon files.

```
make install-init
systemctl enable nrpe.service
```

Information on starting and stopping services will be explained further on.

## Configure Firewall

Arch Linux does not have a firewall enabled in a fresh installation. Please refer to the Arch Linux documentation on allowing TCP port 5666 inbound.

## Update Configuration File

The file `nrpe.cfg` is where the following settings will be defined. It is located:

```
/usr/local/nagios/etc/nrpe.cfg
```

```
allowed_hosts=
```

At this point NRPE will only listen to requests from itself (127.0.0.1). If you wanted your nagios server to be able to connect, add it's IP address after a comma (in this example it's 1

```
allowed_hosts=127.0.0.1,10.25.5.2
```

```
dont_blame_nrpe=
```

This option determines whether or not the NRPE daemon will allow clients to specify arguments to commands that are executed. We are going to allow this, as it enables more advan

```
dont_blame_nrpe=1
```

The following commands make the configuration changes described above.

```
sed -i '/^allowed_hosts=/s/$/,10.25.5.2/' /usr/local/nagios/etc/nrpe.cfg
sed -i 's/^dont_blame_nrpe=.*$/dont_blame_nrpe=1/g' /usr/local/nagios/etc/nrpe.cfg
```

## Start Service / Daemon

Different Linux distributions have different methods of starting NRPE.

```
systemctl start nrpe.service
```

## Test NRPE

Now check that NRPE is listening and responding to requests.

```
/usr/local/nagios/libexec/check_nrpe -H 127.0.0.1
```



You should see the output similar to the following:

```
NRPE v3.2.1
```

If you get the NRPE version number (as shown above), NRPE is installed and configured correctly.

You can also test from your Nagios host by executing the same command above, but instead of `127.0.0.1` you will need to replace that with the IP Address / DNS name of the mach


## Service / Daemon Commands

Different Linux distributions have different methods of starting / stopping / restarting / status NRPE.

```
systemctl start nrpe.service
systemctl stop nrpe.service
systemctl restart nrpe.service
systemctl status nrpe.service
```

## Installing The Nagios Plugins

NRPE needs plugins to operate properly. The following steps will walk you through installing Nagios Plugins.

 These steps install nagios-plugins 2.2.1. Newer versions will become available in the future and you can use those in the following installation steps. Please see the [releases p](#)

Please note that the following steps install most of the plugins that come in the Nagios Plugins package. However there are some plugins that require other libraries which are not in detailed installation instructions:

[Documentation - Installing Nagios Plugins From Source](#)

## Prerequisites

Make sure that you have the following packages installed.

```
pacman --noconfirm -S autoconf gcc glibc make openssl wget perl gettext net-snmp perl-net-snmp automake autoconf
```

## Downloading the Source

```
cd /tmp
wget --no-check-certificate -O nagios-plugins.tar.gz https://github.com/nagios-plugins/nagios-plugins/archive/release-2.2.1.tar.gz
tar xzf nagios-plugins.tar.gz
```

## Compile + Install

```
cd /tmp/nagios-plugins-release-2.2.1/
./tools/setup
./configure
make
make install
```

## Test NRPE + Plugins

Now you can check that NRPE is executing plugins correctly. The default configuration file `/usr/local/nagios/etc/nrpe.cfg` has the following command defined in it:

```
command[check_load]=/usr/local/nagios/libexec/check_load -w 15,10,5 -c 30,25,20
```

Using the `check_load` command to test NRPE:

```
/usr/local/nagios/libexec/check_nrpe -H 127.0.0.1 -c check_load
```

You should see the output similar to the following:

```
OK - load average: 0.01, 0.13, 0.12|load1=0.010;15.000;30.000;0; load5=0.130;10.000;25.000;0; load15=0.120;5.000;20.000;0;
```

You can also test from your Nagios host by executing the same command above, but instead of `127.0.0.1` you will need to replace that with the IP Address / DNS name of the mach

## Gentoo

### Prerequisites

Make sure that you have the following packages installed.

```
emerge --sync
emerge --noreplace sys-devel/gcc sys-libs/glibc net-misc/wget dev-libs/openssl dev-lang/perl
```

## Downloading the Source

```
cd /tmp
wget --no-check-certificate -O nrpe.tar.gz https://github.com/NagiosEnterprises/nrpe/archive/nrpe-3.2.1.tar.gz
tar xzf nrpe.tar.gz
```

## Compile

Note that if you want to pass arguments through NRPE you must specify this in the configuration option as indicated below. If you prefer to you can omit the `--enable-command-args` set in the `nrpe.cfg` file on each server monitored.

```
cd /tmp/nrpe-nrpe-3.2.1/
./configure --enable-command-args
make all
```

## Create User And Group

This creates the nagios user and group.

```
make install-groups-users
```

## Install Binaries

This step installs the binary files, the NRPE daemon and the `check_nrpe` plugin.

If you only wanted to install the daemon, run the command `make install-daemon` instead of the command below. However it is useful having the `check_nrpe` plugin installed for te

If you only wanted to install the `check_nrpe` plugin, refer to the section at the bottom of this KB article as there a lot of steps that can be skipped. Installing only the plugin is usually c

```
make install
```

## Install Configuration Files

This installs the config files.

```
make install-config
```

## Update Services File

The `/etc/services` file is used by applications to translate human readable service names into port numbers when connecting to a machine across a network.

```
echo >> /etc/services
echo '# Nagios services' >> /etc/services
echo 'nrpe 5666/tcp' >> /etc/services
```

## Install Service / Daemon

This installs the service or daemon files.

==== openrc ====

```
make install-init
sed -i 's/^command_args=.*command_args="--config=\usr\local\nagios\etc\nrpe.cfg"/g' /etc/init.d/nrpe
rc-update add nrpe default
```

==== systemd ====

```
make install-init
systemctl enable nrpe.service
```

Information on starting and stopping services will be explained further on.

## Configure Firewall

Gentoo does not have a firewall enabled in a fresh installation. Please refer to the Arch Linux documentation on allowing TCP port 5666 inbound.

## Update Configuration File

The file `nrpe.cfg` is where the following settings will be defined. It is located:

```
/usr/local/nagios/etc/nrpe.cfg
```

```
allowed_hosts=
```

At this point NRPE will only listen to requests from itself (127.0.0.1). If you wanted your nagios server to be able to connect, add it's IP address after a comma (in this example it's 1

```
allowed_hosts=127.0.0.1,10.25.5.2
```

```
dont_blame_nrpe=
```

This option determines whether or not the NRPE daemon will allow clients to specify arguments to commands that are executed. We are going to allow this, as it enables more advanced

```
dont_blame_nrpe=1
```

The following commands make the configuration changes described above.

```
sed -i '/^allowed_hosts=/s/$/,10.25.5.2/' /usr/local/nagios/etc/nrpe.cfg
sed -i 's/^dont_blame_nrpe=.*\/dont_blame_nrpe=1/g' /usr/local/nagios/etc/nrpe.cfg
```

## Start Service / Daemon

Different Linux distributions have different methods of starting NRPE.

==== openrc ====

```
service nrpe start
```

==== systemd ====

```
systemctl start nrpe.service
```

## Test NRPE

Now check that NRPE is listening and responding to requests.

```
/usr/local/nagios/libexec/check_nrpe -H 127.0.0.1
```

You should see the output similar to the following:

```
NRPE v3.2.1
```

If you get the NRPE version number (as shown above), NRPE is installed and configured correctly.

You can also test from your Nagios host by executing the same command above, but instead of `127.0.0.1` you will need to replace that with the IP Address / DNS name of the machine

## Service / Daemon Commands

Different Linux distributions have different methods of starting / stopping / restarting / status NRPE.

==== openrc ====


```
service nrpe start
service nrpe stop
service nrpe restart
service nrpe status
```

==== systemd ====

```
systemctl start nrpe.service
systemctl stop nrpe.service
systemctl restart nrpe.service
systemctl status nrpe.service
```

## Installing The Nagios Plugins

NRPE needs plugins to operate properly. The following steps will walk you through installing Nagios Plugins.

 These steps install nagios-plugins 2.2.1. Newer versions will become available in the future and you can use those in the following installation steps. Please see the [releases page](#)

Please note that the following steps install most of the plugins that come in the Nagios Plugins package. However there are some plugins that require other libraries which are not included in the detailed installation instructions:

[Documentation - Installing Nagios Plugins From Source](#)

## Prerequisites

Make sure that you have the following packages installed.

```
emerge --noreplace sys-devel/gcc sys-libs/glibc net-misc/wget sys-devel/make sys-devel/gettext sys-devel/automake sys-devel/autoconf dev
```

## Downloading the Source

```
cd /tmp
wget --no-check-certificate -O nagios-plugins.tar.gz https://github.com/nagios-plugins/nagios-plugins/archive/release-2.2.1.tar.gz
tar xzf nagios-plugins.tar.gz
```

## Compile + Install

```
cd /tmp/nagios-plugins-release-2.2.1/
./tools/setup
./configure
make
make install
chmod u+s /bin/ping
chmod u+s /bin/ping6
```

## Test NRPE + Plugins

Now you can check that NRPE is executing plugins correctly. The default configuration file `/usr/local/nagios/etc/nrpe.cfg` has the following command defined in it:

```
command[check_load]=usr/local/nagios/libexec/check_load -w 15,10,5 -c 30,25,20
```

Using the `check_load` command to test NRPE:

```
/usr/local/nagios/libexec/check_nrpe -H 127.0.0.1 -c check_load
```

You should see the output similar to the following:

```
OK - load average: 0.01, 0.13, 0.12|load1=0.010;15.000;30.000;0; load5=0.130;10.000;25.000;0; load15=0.120;5.000;20.000;0;
```

You can also test from your Nagios host by executing the same command above, but instead of `127.0.0.1` you will need to replace that with the IP Address / DNS name of the mach

## FreeBSD

### Prerequisites

Make sure that you have the following packages installed.

```
pkg install -y wget autoconf automake gettext gcc openssl libmcrypt
```

### Downloading the Source

```
cd /tmp
wget --no-check-certificate -O nrpe.tar.gz https://github.com/NagiosEnterprises/nrpe/archive/nrpe-3.2.1.tar.gz
tar xzf nrpe.tar.gz
```

### Compile

Note that if you want to pass arguments through NRPE you must specify this in the configuration option as indicated below. If you prefer you can omit the `--enable-command-arg` set in the `nrpe.cfg` file on each server monitored.

```
cd /tmp/nrpe-nrpe-3.2.1/
./configure --enable-command-args --with-ssl=/usr/local/bin --with-ssl-inc=/usr/local/include/openssl --with-ssl-lib=/usr/local/lib
make all
```

### Create User And Group

This creates the nagios user and group.

```
make install-groups-users
```

### Install Binaries

This step installs the binary files, the NRPE daemon and the `check_nrpe` plugin.

If you only wanted to install the daemon, run the command `make install-daemon` instead of the command below. However it is useful having the `check_nrpe` plugin installed for te

If you only wanted to install the `check_nrpe` plugin, refer to the section at the bottom of this KB article as there a lot of steps that can be skipped. Installing only the plugin is usually c

```
make install
```

### Install Configuration Files

This installs the config files.

```
make install-config
```

### Update Services File

The `/etc/services` file is used by applications to translate human readable service names into port numbers when connecting to a machine across a network.

```
echo >> /etc/services
echo '# Nagios services' >> /etc/services
echo 'nrpe 5666/tcp' >> /etc/services
```

## Install Service / Daemon

This installs the service or daemon files.

```
make install-init
echo '/etc/rc.d/nrpe start' >> /etc/rc.local
```

Information on starting and stopping services will be explained further on.

## Configure Firewall

Please refer to the FreeBSD documentation for information on how to enable or configure IP Filter to allow TCP port 5666 inbound.

[Documentation - Firewalls](#)

## Update Configuration File

The file `nrpe.cfg` is where the following settings will be defined. It is located:

```
/usr/local/nagios/etc/nrpe.cfg
```

```
allowed_hosts=
```

At this point NRPE will only listen to requests from itself (127.0.0.1). If you wanted your nagios server to be able to connect, add it's IP address after a comma (in this example it's 1

```
allowed_hosts=127.0.0.1,10.25.5.2
```

```
dont_blame_nrpe=
```

This option determines whether or not the NRPE daemon will allow clients to specify arguments to commands that are executed. We are going to allow this, as it enables more advan

```
dont_blame_nrpe=1
```

The following commands make the configuration changes described above.

```
sed -i '' '/^allowed_hosts=/s/$/,10.25.5.2/' /usr/local/nagios/etc/nrpe.cfg
sed -i '' 's/^dont_blame_nrpe=.* /dont_blame_nrpe=1/g' /usr/local/nagios/etc/nrpe.cfg
```

## Start Service / Daemon

```
service nrpe start
```

## Test NRPE

Now check that NRPE is listening and responding to requests.

```
/usr/local/nagios/libexec/check_nrpe -H 127.0.0.1
```

You should see the output similar to the following:

```
NRPE v3.2.1
```

If you get the NRPE version number (as shown above), NRPE is installed and configured correctly.

You can also test from your Nagios host by executing the same command above, but instead of 127.0.0.1 you will need to replace that with the IP Address / DNS name of the mach


## Service / Daemon Commands

Here are the commands for starting / stopping / restarting / status NRPE.

```
service nrpe start
service nrpe stop
service nrpe restart
service nrpe status
```

## Installing The Nagios Plugins

NRPE needs plugins to operate properly. The following steps will walk you through installing Nagios Plugins.

 These steps install nagios-plugins 2.2.1. Newer versions will become available in the future and you can use those in the following installation steps. Please see the [releases p](#)

Please note that the following steps install most of the plugins that come in the Nagios Plugins package. However there are some plugins that require other libraries which are not in detailed installation instructions:

## Prerequisites

Make sure that you have the following packages installed.

In the steps below, when installing FreeBSD packages you may be prompted with screens asking what you would like installed. You can just press **Enter** to accept the default select

```
pkg install -y wget autoconf automake gmake gettext gcc net-snmp p5-Net-SNMP-Util
```

## Downloading the Source

```
cd /tmp
wget --no-check-certificate -O nagios-plugins.tar.gz https://github.com/nagios-plugins/nagios-plugins/archive/release-2.2.1.tar.gz
tar xzf nagios-plugins.tar.gz
```

## Compile + Install

```
cd /tmp/nagios-plugins-release-2.2.1/
./tools/setup
./configure
gmake
gmake install
```

## Test NRPE + Plugins

Now you can check that NRPE is executing plugins correctly. The default configuration file `/usr/local/nagios/etc/nrpe.cfg` has the following command defined in it:

```
command[check_load]=/usr/local/nagios/libexec/check_load -w 15,10,5 -c 30,25,20
```

Using the `check_load` command to test NRPE:

```
/usr/local/nagios/libexec/check_nrpe -H 127.0.0.1 -c check_load
```

You should see the output similar to the following:

```
OK - load average: 0.01, 0.13, 0.12|load1=0.010;15.000;30.000;0; load5=0.130;10.000;25.000;0; load15=0.120;5.000;20.000;0;
```

You can also test from your Nagios host by executing the same command above, but instead of `127.0.0.1` you will need to replace that with the IP Address / DNS name of the mach

---

## Solaris

### Prerequisites

Make sure that you have the following packages installed.

#### Solaris 10

```
echo 'PATH=/usr/sfw/bin:/usr/ccs/bin:/opt/csw/bin:$PATH' >> $HOME/.profile
echo 'export PATH' >> $HOME/.profile
. $HOME/.profile
pkgadd -d http://get.opencsw.org/now
answer all
answer y
perl -ni.bak -le 'print; print "mirror=http://mirrors.ibiblio.org/opencsw/stable" if /mirror=/ ' /etc/opt/csw/pkgutil.conf
pkgutil -i autoconf
answer y for remaining questions
pkgutil -i automake
answer y for remaining questions
```

#### Solaris 11

```
echo 'export PATH=$PATH:/opt/csw/bin:/usr/xpg4/bin:/usr/sfw/bin' >> ~/.profile
source ~/.profile
pkgadd -d http://get.opencsw.org/now
answer all
answer y
perl -ni.bak -le 'print; print "mirror=http://mirrors.ibiblio.org/opencsw/stable" if /mirror=/ ' /etc/opt/csw/pkgutil.conf
pkgutil -i autoconf
answer y for remaining questions
pkgutil -i automake
answer y for remaining questions
pkg install gcc-45
```

## Downloading the Source

### Solaris 10

```
cd /tmp
wget --no-check-certificate -O nrpe.tar.gz https://github.com/NagiosEnterprises/nrpe/archive/nrpe-3.2.1.tar.gz
gunzip -c nrpe.tar.gz | tar -xf -
```

### Solaris 11

```
cd /tmp
wget --no-check-certificate -O nrpe.tar.gz https://github.com/NagiosEnterprises/nrpe/archive/nrpe-3.2.1.tar.gz
tar xzf nrpe.tar.gz
```

## Compile

Note that if you want to pass arguments through NRPE you must specify this in the configuration option as indicated below. If you prefer to you can omit the `--enable-command-args` set in the `nrpe.cfg` file on each server monitored.

```
cd /tmp/nrpe-nrpe-3.2.1/
./configure --enable-command-args
gmake all
```

## Create User And Group

This creates the nagios user and group.

```
gmake install-groups-users
```

## Install Binaries

This step installs the binary files, the NRPE daemon and the `check_nrpe` plugin.

If you only wanted to install the daemon, run the command `make install-daemon` instead of the command below. However it is useful having the `check_nrpe` plugin installed for te

If you only wanted to install the `check_nrpe` plugin, refer to the section at the bottom of this KB article as there a lot of steps that can be skipped. Installing only the plugin is usually c

```
gmake install
```

## Install Configuration Files

This installs the config files.

```
gmake install-config
```

## Update Services File

The `/etc/services` file is used by applications to translate human readable service names into port numbers when connecting to a machine across a network.

```
echo >> /etc/services
echo '# Nagios services' >> /etc/services
echo 'nrpe 5666/tcp' >> /etc/services
```

## Install Service / Daemon

This installs the service or daemon files.

```
gmake install-init
```

Information on starting and stopping services will be explained further on.

## Configure Firewall

On a manually networked system, IP Filter is not enabled by default. Please refer to the Solaris documentation for information on how to enable or configure IP Filter to allow TCP por

[Documentation - Configuring IP Filter](#)

## Update Configuration File

The file `nrpe.cfg` is where the following settings will be defined. It is located:

```
/usr/local/nagios/etc/nrpe.cfg
```

```
allowed_hosts=
```

At this point NRPE will only listen to requests from itself (127.0.0.1). If you wanted your nagios server to be able to connect, add it's IP address after a comma (in this example it's 1

```
allowed_hosts=127.0.0.1,10.25.5.2
```

```
dont_blame_nrpe=
```

This option determines whether or not the NRPE daemon will allow clients to specify arguments to commands that are executed. We are going to allow this, as it enables more advanced

```
dont_blame_nrpe=1
```

The following commands make the configuration changes described above.

```
perl -ni -le '$output=$_; $output.="10.25.5.2" if /^allowed_hosts=/; print $output' /usr/local/nagios/etc/nrpe.cfg
perl -p -i -e 's/^dont_blame_nrpe=.*\/dont_blame_nrpe=1\/g' /usr/local/nagios/etc/nrpe.cfg
```

## Start Service / Daemon

The following command is used to start NRPE.

```
svcadm enable nrpe
```

## Test NRPE

Now check that NRPE is listening and responding to requests.

```
/usr/local/nagios/libexec/check_nrpe -H 127.0.0.1
```

You should see the output similar to the following:

```
NRPE v3.2.1
```

If you get the NRPE version number (as shown above), NRPE is installed and configured correctly.

You can also test from your Nagios host by executing the same command above, but instead of 127.0.0.1 you will need to replace that with the IP Address / DNS name of the machine

## Service / Daemon Commands

The following commands are for starting / stopping / restarting / status NRPE.


```
svcadm enable nrpe
svcadm disable nrpe
svcadm restart nrpe
svcs nrpe
svcs -xv nrpe
```

The following KB article has important information on Solaris and services:

[How To Clear Solaris Service Maintenance Status](#)

## Installing The Nagios Plugins

NRPE needs plugins to operate properly. The following steps will walk you through installing Nagios Plugins.

 These steps install nagios-plugins 2.2.1. Newer versions will become available in the future and you can use those in the following installation steps. Please see the [releases page](#)

Please note that the following steps install most of the plugins that come in the Nagios Plugins package. However there are some plugins that require other libraries which are not included in the detailed installation instructions:

[Documentation - Installing Nagios Plugins From Source](#)

## Prerequisites

Already completed as part of the Nagios installation. Some of the plugins require the NET::SNMP perl module. Please refer to the following documentation:

<http://www.net-snmp.org/docs/README.solaris.html>

## Downloading the Source

Solaris 10

```
cd /tmp
wget --no-check-certificate -O nagios-plugins.tar.gz https://github.com/nagios-plugins/nagios-plugins/archive/release-2.2.1.tar.gz
gunzip -c nagios-plugins.tar.gz | tar -xvf -
```

Solaris 11

```
cd /tmp
wget --no-check-certificate -O nagios-plugins.tar.gz https://github.com/nagios-plugins/nagios-plugins/archive/release-2.2.1.tar.gz
tar zxf nagios-plugins.tar.gz
```

## Compile + Install



```
cd /tmp/nagios-plugins-release-2.2.1/
./tools/setup
./configure
gmake
gmake install
```

## Test NRPE + Plugins

Now you can check that NRPE is executing plugins correctly. The default configuration file `/usr/local/nagios/etc/nrpe.cfg` has the following command defined in it:

```
command[check_load]=/usr/local/nagios/libexec/check_load -w 15,10,5 -c 30,25,20
```

Using the `check_load` command to test NRPE:

```
/usr/local/nagios/libexec/check_nrpe -H 127.0.0.1 -c check_load
```

You should see the output similar to the following:

```
OK - load average: 0.01, 0.13, 0.12|load1=0.010;15.000;30.000;0; load5=0.130;10.000;25.000;0; load15=0.120;5.000;20.000;0;
```

You can also test from your Nagios host by executing the same command above, but instead of `127.0.0.1` you will need to replace that with the IP Address / DNS name of the mach

## Apple OS X

### Prerequisites

First, make sure Xcode is installed. If it is not installed visit the App Store and install Xcode (*3.8GB download*).

```
sudo xcodebuild -license
View the agreement and then type agree
/usr/bin/ruby -e "$(curl -fsSL https://raw.githubusercontent.com/Homebrew/install/master/install)"
Press Return to continue
brew install openssl
brew link openssl --force
```

### Downloading the Source

```
cd /tmp
curl -L -o nrpe.tar.gz https://github.com/NagiosEnterprises/nrpe/archive/nrpe-3.2.1.tar.gz
tar xzf nrpe.tar.gz
```

### Compile

Note that if you want to pass arguments through NRPE you must specify this in the configuration option as indicated below. If you prefer to you can omit the `--enable-command-arg` set in the `nrpe.cfg` file on each server monitored.

```
cd /tmp/nrpe-nrpe-3.2.1/
./configure --enable-command-args
make all
```

### Create User And Group

This creates the nagios user and group.

```
sudo make install-groups-users
```

### Install Binaries

This step installs the binary files, the NRPE daemon and the `check_nrpe` plugin.

If you only wanted to install the daemon, run the command `make install-daemon` instead of the command below. However it is useful having the `check_nrpe` plugin installed for te

If you only wanted to install the `check_nrpe` plugin, refer to the section at the bottom of this KB article as there a lot of steps that can be skipped. Installing only the plugin is usually c

```
sudo make install
```

### Install Configuration Files

This installs the config files.

```
sudo make install-config
```

### Update Services File

The `/etc/services` file is used by applications to translate human readable service names into port numbers when connecting to a machine across a network.

```
sudo sh -c "echo >> /etc/services"
sudo sh -c "sudo echo '# Nagios services' >> /etc/services"
sudo sh -c "sudo echo 'nrpe 5666/tcp' >> /etc/services"
```

## Install Service / Daemon

This installs the service or daemon files.

```
sudo make install-init
```

Information on starting and stopping services will be explained further on.

## Configure Firewall

The firewall in OS X is turned off by default. Please refer to the Apple documentation for information on how to enable or configure TCP port 5666 inbound.

## Update Configuration File

The file `nrpe.cfg` is where the following settings will be defined. It is located:

```
/usr/local/nagios/etc/nrpe.cfg
```

```
allowed_hosts=
```

At this point NRPE will only listen to requests from itself (127.0.0.1). If you wanted your nagios server to be able to connect, add it's IP address after a comma (in this example it's 10.25.5.2)

```
allowed_hosts=127.0.0.1,10.25.5.2
```

```
dont_blame_nrpe=
```

This option determines whether or not the NRPE daemon will allow clients to specify arguments to commands that are executed. We are going to allow this, as it enables more advanced monitoring.

```
dont_blame_nrpe=1
```

The following commands make the configuration changes described above.

```
sudo sed -i '' '^allowed_hosts=/s/$/,10.25.5.2/' /usr/local/nagios/etc/nrpe.cfg
sudo sed -i '' 's/^dont_blame_nrpe=.*$/dont_blame_nrpe=1/g' /usr/local/nagios/etc/nrpe.cfg
```

## Start Service / Daemon

```
sudo launchctl start org.nagios.nrpe
```

## Test NRPE

Now check that NRPE is listening and responding to requests.

```
/usr/local/nagios/libexec/check_nrpe -H 127.0.0.1
```

You should see the output similar to the following:

```
NRPE v3.2.1
```

If you get the NRPE version number (as shown above), NRPE is installed and configured correctly.

You can also test from your Nagios host by executing the same command above, but instead of 127.0.0.1 you will need to replace that with the IP Address / DNS name of the machine you are testing.

## Service / Daemon Commands

Here are the commands for starting / stopping / restarting / status NRPE.

```
sudo launchctl start org.nagios.nrpe
sudo launchctl stop org.nagios.nrpe
```

## Installing The Nagios Plugins

NRPE needs plugins to operate properly. These steps show you how to install the Nagios Plugins that are available via Homebrew. Future versions of the Nagios Plugins package will be fine.

These get installed to `/usr/local/sbin/` so the `/usr/local/nagios/etc/resource.cfg` file also needs to be updated and NRPE restarted (covered in the steps below). Execute the following commands:

```
brew install nagios-plugins
sudo sed -i '' 's/\usr/local/nagios/libexec/\usr/local/sbin/g' /usr/local/nagios/etc/nrpe.cfg
sudo launchctl stop org.nagios.nrpe
sudo launchctl start org.nagios.nrpe
```

## Test NRPE + Plugins

Now you can check that NRPE is executing plugins correctly. The default configuration file `/usr/local/nagios/etc/nrpe.cfg` has the following command defined in it:

```
command[check_load]=/usr/local/nagios/libexec/check_load -w 15,10,5 -c 30,25,20
```

Using the `check_load` command to test NRPE:

```
/usr/local/nagios/libexec/check_nrpe -H 127.0.0.1 -c check_load
```

You should see the output similar to the following:

```
OK - load average: 0.01, 0.13, 0.12|load1=0.010;15.000;30.000;0; load5=0.130;10.000;25.000;0; load15=0.120;5.000;20.000;0;
```

You can also test from your Nagios host by executing the same command above, but instead of `127.0.0.1` you will need to replace that with the IP Address / DNS name of the mach

## Install check\_nrpe Plugin Only

The steps above install the NRPE agent and plugin. In some circumstances you may want to only install the `check_nrpe` plugin, usually required on your Nagios server.

Follow the steps above in this order:

- Prerequisites
- Downloading the Source

Then execute these commands:

```
cd /tmp/nrpe/  
./configure  
make check_nrpe  
make install-plugin
```

This will place the `check_nrpe` plugin in the `/usr/local/nagios/libexec/` directory.

IF you wanted to install the plugin for testing purposes and did not want to replace your existing `check_nrpe` plugin, execute the following commands instead:

```
cd /tmp/nrpe/  
./configure  
make check_nrpe  
cd src  
/usr/bin/install -c -m 775 -o nagios -g nagios check_nrpe /usr/local/nagios/libexec/check_nrpe_v3
```

This will place the plugin in the `/usr/local/nagios/libexec/` directory named `check_nrpe_v3`.

## Final Thoughts

For any support related questions please visit the [Nagios Support Forums](#) at:

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

Posted by: **tlea** - Fri, Jun 3, 2016 at 3:28 AM. This article has been viewed 57690 times.

Online URL: <https://support.nagios.com/kb/article/nrpe-how-to-install-nrpe-v3-from-source-515.html>