How To Enable The NRPE Listener In NSClient++ 0.4.x For Nagios XI 2024

Purpose

This document describes How To Enable The NRPE Listener In NSClient++ 0.4.x For Nagios XI 2024.

Some reasons you may want to use `check_nrpe` instead of `check_nt` are:

- The built in CPU / memory / disk checks are more flexible and customizable
- The `CheckExternalScripts` module can execute various user written script (VB / BAT / EXE / Perl / Python / PowerShell)
- Uses SSL

Requirements

- A running Nagios XI server
- NSClient++ 0.4.x (or newer) installed on the Windows Client as per this documentation:
  - [Installing The Windows Agent NSClient++ for Nagios XI](#)

Note: This document is for version **0.4.x** of NSClient++ and newer. For version **0.3.x** of NSClient++ see: [Enabling The NRPE Listener In NSClient 0.3.x](#)

The following documentation explains how the configuration file works in NSClient++ and may also be helpful:

[Configuring The Windows Agent NSClient++ for Nagios XI](#)

Update NSClient++ DH Key

To use check_nrpe with NSClient++, you must add an updated DH key to your NSClient++ Configuration, the default key length is 512-bit, which is no longer considered secure and must be updated to a 2048-bit key. This can be done by doing the following:

1. Generate DH key on your Nagios server. (It will take a long time to generate so be patient)

   For **OpenSSL >= 3.0**

```
openssl dhparam 2048 2> /dev/null|sed -n '/BEGIN/,/END/p'
```

   For **OpenSSL < 3.0**

```
openssl dhparam -C 2048 2> /dev/null|sed -n '/BEGIN/,/END/p'
```

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Here is an example of the output:

```
-----BEGIN DH PARAMETERS-----
MIIBCAKCAQEAsT8ZYluOSVjB67zI8HXRzAjVRsBGLktGbUm7Zfhtn5dYTMaEjSRx
+7McBGnmoJa9ty54UE/5/8rM1CFvA5VyEOakZHemTNvAofB40ZmEhgANVmbHZxtr
egvj4svxnvFM4gAfpsSe2C8DVbXXEJlUVfyacbfb4f9ko0l62XsTEQJGWGRxXca7
b66g5MY6eYxihavufmZmZPw4ZnBPEpoGpH2GKZ0obOEfACTrV01p+CbiVDJ9lpc7
KOxbXA+3nV5LRMSjlz83RuDdQ3QLcQQQ7cpWKEzAlHO/AO4BRqthmSBkTVWNeHoO
a4PNgZO2xdnLHJuK75YQJeLAOKI9xVgaCwIBAg==
-----END DH PARAMETERS-----
```

2.   Paste the DH key to a new file `nrpe_dh_2048.pem` on the Windows server in the following location:

```
C:\Program Files\NSClient++\security\nrpe_dh_2048.pem
```

3. Open a command prompt in Windows (under user with admin privileges) and run these commands:

```
cd "\Program Files\NSClient++"
nscp settings --path /settings/NRPE/server --key dh --set "${certificate-path}/nrpe_dh_2048.pem"
```

Or add the below under the `[/settings/NRPE/server]` section in the `C:\Program Files\NSClient++\nsclient.ini` file:

```
; DH KEY -
dh = ${certificate-path}/nrpe_dh_2048.pem
```

4. Restart NSClient++ service

```
sc stop nscp && sc start nscp
```

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Update NSClient++ Configuration

The configuration file in NSClient++ 0.4.x and newer is called `nsclient.ini` and is located here:

```
C:\Program Files\NSClient++\nsclient.ini
```

The configuration file can be manually edited OR you can execute commands in a command prompt to make the required changes in the configuration file. This document instructs you to execute the commands to make the changes. Following this is a summary showing you the updated settings in the configuration file.

Log onto your remote windows machine as an administrator.

Open a command prompt with administrative rights and run the following commands:

```
cd "C:\Program Files\NSClient++"
nscp settings --path /settings/NRPE/server --key "verify mode" --set none
nscp settings --activate-module NRPEServer
nscp settings --activate-module CheckExternalScripts
```

Optionally, you can allow arguments and allow nasty characters using the following:

```
nscp settings --path /settings/NRPE/server --key "allow arguments" --set true
nscp settings --path /settings/NRPE/server --key "allow nasty characters" --set true
nscp settings --path "/settings/external scripts" --key "allow arguments" --set true
nscp settings --path "/settings/external scripts" --key "allow nasty characters" --set true
```

NOTE: Though you *can* configure these options, it is more secure if you define aliases and use those commands instead. You can see more about this here: [NSClient++ Command Aliases](#)

These should not produce any output, however, don't be alarmed if you see some *Failed to register plugin* errors.

Open the configuration file `nsclient.ini` in a text editor for editing (like Notepad) to see the updated configurations.

Under the `[/modules]` section you will see the following lines:

```
NRPEServer = enabled
CheckExternalScripts = enabled
```

Under the `[/settings/NRPE/server]` section you will see the following lines (if you enabled them):

```
allow arguments = true
allow nasty characters = true insecure = true
verify mode = none
```

Under the `[/settings/external scripts]` section you will see the following lines (if you enabled them):

```
allow arguments = true
allow nasty characters = true
```

What does `allow arguments`, `allow nasty characters` and `insecure` do?

- `allow arguments`
  - This allows you send options in the `check_nrpe` command, it allows for flexible monitoring configurations
- `allow nasty characters`
  - This allows the `` `&><'"\[]{} `` characters to be used in the arguments
- `insecure`
  - Version 2.15 and earlier of `check_nrpe` on the Nagios XI server use an older SSL method that has been superseded by newer technology. `check_nrpe` **v3** and newer provide more secure methods however to allow backward compatibility the insecure setting needs to be enabled in `nsclient.ini`.

Restarting The NSClient++ Service

NSClient must now be restarted. In Windows open the **Services** console under **Administrative Tools**. If you cannot locate this, use `services.msc` to open the Services console.

You can either run the following in a command prompt:
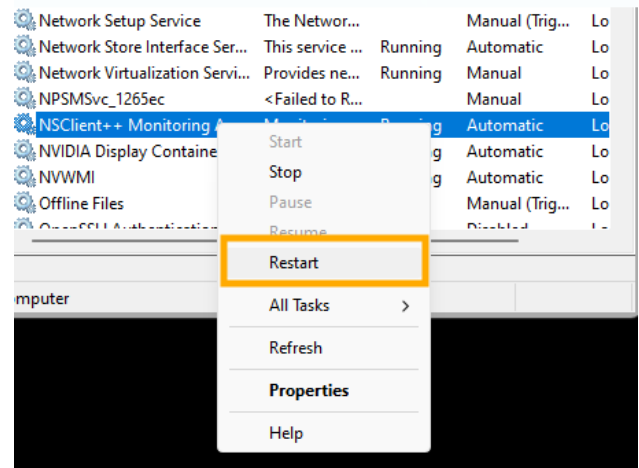
```
sc stop nscp && sc start nscp
```

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Or do the following:

Locate the NSClient++ service.

Right click the **NSClient++** service and select **Restart**.

You can close the Services console as it's no longer required.

Testing On The Nagios XI Server

Log in as root to the Nagios XI Server and enter the following:

```
cd /usr/local/nagios/libexec/./check_nrpe -H [IP of the windows system]
```

You now should see the `seem to be doing fine...` output, verifying the test is successful:

Additional Resources

The following documents demonstrate the different ways that NRPE can be utilized.

- [Integrating AutoIt With Nagios XI](#)
- [Checking For Windows Updates With Nagios XI](#)
- [Monitoring Performance Counters in Nagios Using NSClient++](#)
- [Windows Memory Usage – Physical](#)
- [How to Restart A Windows Service With NRPE](#)
- [Using Scripts / Plugins With NSClient++](#)
- [Knowledgebase Check Library](#)

Finishing Up

This completes the documentation on How To Enable The NRPE Listener In NSClient++ 0.4.x For Nagios XI 2024. If you have additional questions or other support-related questions, please visit us at our Nagios Support Forum, Nagios Knowledge Base, or Nagios Library:

Visit Nagios Support Forum   Visit Nagios Knowledge Base   Visit Nagios Library

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