

# Nagios XI - Using Scripts / Plugins With NCPA

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## Overview

This KB article explains how to use external scripts / plugins with NCPA.

NCPA has a lot of built in functionality however you will likely run into a situation where you need to use a script to provide additional monitoring capabilities.

NCPA is capable of executing scripts such as:

- Batch Script = .bat
- Visual Basic Script = .vbs
- PowerShell Script = .ps1

This KB article will provide examples for these three types of scripts as each method is slightly different.

## Requirements

This KB requires that NCPA is installed, please refer to the following KB article:

[NCPA - Agent Installation Instructions](#)

## Batch Script

This example demonstrates how to add a batch script to NCPA.

For this example you are going to create a basic script that takes two arguments.

- Argument 1 = A number (0, 1, 2, 3) that will be used as the exit code the script will exit with (this is how Nagios XI determines the status)
- Argument 2 = A message that the script will display

### Create Batch Script

On your windows machine open the Notepad program.

Type / paste the following into Notepad.

```
@echo off
if [%1] == [] echo No exit code was supplied, aborting! & exit /B 3
if [%2] == [] echo No dummy message was supplied, aborting! & exit /B 3
echo %~2
exit /B %1%
```

Save the file into C:\Program Files (x86)\Nagios\NCPA\plugins with the name check\_dummy.bat

Open a command prompt on your Windows machine and execute the following commands:

```
cd "\Program Files (x86)\Nagios\NCPA\plugins"
check_dummy.bat 2 "Something is CRITICAL"
echo %errorlevel%
```

The output will be as follows:

```
C:\Program Files (x86)\Nagios\NCPA\plugins>check_dummy.bat 2 Something_is_CRITICAL
Something_is_CRITICAL

C:\Program Files (x86)\Nagios\NCPA\plugins>echo %errorlevel%
2
```

The output from the first command is what will be displayed in Nagios XI.

The output from the second command, the number 2, is how Nagios XI will determine that this plugin is reporting a CRITICAL state.

## Test Script From Nagios XI

The last step is to test the script from your Nagios XI server. Open a terminal session to Nagios XI server and execute the following:

```
/usr/local/nagios/libexec/check_ncpa.py -H your_windows_server_ip_address -t your_windows_server_ncpa_token -P 5693 -M 'plugins/check_d
echo $?
```

The output should look like this:

```
/usr/local/nagios/libexec/check_ncpa.py -H your_windows_server_ip_address -t your_windows_server_ncpa_token -P 5693 -M 'plugins/check_d
Something_is_CRITICAL

echo $?
2
```

The output from the first command is what will be displayed in Nagios XI.

The output from the second command, the number 2, is how Nagios XI will determine that this plugin is reporting a CRITICAL state.

This completes the example of configuring NCPA to use a batch script. You will now need to go and create a service in Nagios XI which is covered in the [Creating Service In Nagios X](#)

## Visual Basic Script

This example demonstrates how to add a visual basic script (vbs) to NCPA.

For this example you are going to create a script that takes two arguments.

- Argument 1 = A number (0, 1, 2, 3) that will be used as the exit code the script will exit with (this is how Nagios XI determines the status)
- Argument 2 = A message that the script will display

### Create Visual Basic Script

On your windows machine open the Notepad program.

Type / paste the following into Notepad.

```
on error resume next
If wscript.Arguments.Count < 1 Then
    wscript.Echo "No exit code was supplied, aborting!"
    wscript.Quit(3)
ElseIf Wscript.Arguments.Count < 2 Then
    wscript.Echo "No dummy message was supplied, aborting!"
    wscript.Quit(3)
End If
wscript.Echo wscript.arguments.item(1)
wscript.Quit(wscript.arguments.item(0))
```

Save the file into C:\Program Files (x86)\Nagios\NCPA\plugins with the name check\_dummy.vbs

Open a command prompt on your Windows machine and execute the following commands:

```
cd "\Program Files (x86)\Nagios\NCPA\plugins"
cscript.exe //T:30 //NoLogo check_dummy.vbs 2 Something_is_CRITICAL
echo %errorlevel%
```

The output will be as follows:

```
C:\Program Files (x86)\Nagios\NCPA\plugins>cscript.exe //T:30 //NoLogo check_dummy.vbs 2 Something_is_CRITICAL
Something_is_CRITICAL

C:\Program Files (x86)\Nagios\NCPA\plugins>echo %errorlevel%
2
```

The output from the first command is what will be displayed in Nagios XI.

The output from the second command, the number 2, is how Nagios XI will determine that this plugin is reporting a CRITICAL state.

You need to execute the check\_dummy.vbs script using cscript.exe as if forces the command to run in a command prompt and all output is passed to the command prompt.

- //T:30 is a timeout of 30 seconds
- //NoLogo suppresses the Microsoft banner from being displayed

### Test Script From Nagios XI

The last step is to test the script from your Nagios XI server. Open a terminal session to Nagios XI and execute the following:

```
/usr/local/nagios/libexec/check_ncpa.py -H your_windows_server_ip_address -t your_windows_server_ncpa_token -P 5693 -M 'plugins/check_d
echo $?
```

The output should look like this:

```
/usr/local/nagios/libexec/check_ncpa.py -H your_windows_server_ip_address -t your_windows_server_ncpa_token -P 5693 -M 'plugins/check_d
Something is CRITICAL

echo $?
2
```

The output from the first command is what will be displayed in Nagios XI.

The output from the second command, the number 2, is how Nagios XI will determine that this plugin is reporting a CRITICAL state.

This completes the example of configuring NCPA to use a visual basic script. You will now need to go and create a service in Nagios XI which is covered in the [Creating Service In Na](#)

## PowerShell Script

This example demonstrates how to add a PowerShell script to NCPA.

For this example you are going to create a basic script that takes two arguments.

- Argument 1 = A number (0, 1, 2, 3) that will be used as the exit code the script will exit with (this is how Nagios XI determines the status)
- Argument 2 = A message that the script will display

### Create PowerShell Script

On your windows machine open the Notepad program.

Type / paste the following into Notepad.

```
if ($args.count -lt 1) { write-host "No exit code was supplied, aborting!"; exit 3 }
if ($args.count -lt 2) { write-host "No dummy message was supplied, aborting!"; exit 3 }
write-host $args[1]
exit $args[0]
```

Save the file into C:\Program Files (x86)\Nagios\NCPA\plugins with the name check\_dummy.ps1

Open a command prompt as an administrator on your Windows machine and execute the following commands:

```
cd "\Program Files (x86)\Nagios\NCPA\plugins"
powershell.exe -executionpolicy bypass -File check_dummy.ps1 2 Something_is_CRITICAL
echo %errorlevel%
```

The output will be as follows:

```
C:\Program Files (x86)\Nagios\NCPA\plugins>powershell.exe -executionpolicy bypass -File check_dummy.ps1 2 Something_is_CRITICAL
Something_is_CRITICAL

C:\Program Files (x86)\Nagios\NCPA\plugins>echo %errorlevel%
2
```

The output from the first command is what will be displayed in Nagios XI.

The output from the second command, the number 2, is how Nagios XI will determine that this plugin is reporting a CRITICAL

state.

### Test PowerShell Script From Nagios XI

The last step is to test the script from your Nagios XI server. Open an SSH session to Nagios XI and execute the following:

```
/usr/local/nagios/libexec/check_ncpa.py -H your_windows_server_ip_address -t your_windows_server_ncpa_token -P 5693 -M 'plugins/check_d
echo $?
```

The output should look like this:

```
/usr/local/nagios/libexec/check_nrpe -H your_windows_server_ip_address -c check_dummy.ps1 -q "args=2 Something_is_CRITICAL"
Something_is_CRITICAL

echo $?
2
```

The output from the first command is what will be displayed in Nagios XI.

The output from the second command, the number 2, is how Nagios XI will determine that this plugin is reporting a CRITICAL state.

This completes the example of configuring NCPA to use a PowerShell script. You will now need to go and create a service in Nagios XI which is covered in the [Creating Service In Nag](#)

## Creating Service In Nagios XI

The last step is to create the service in Nagios XI. It is assumed that you have already run the NCPA Agent configuration wizard in Nagios XI to monitor your Windows machine. The first step is to log into Nagios XI and then change it so it uses the custom plugin on the Windows machine (this makes it quick and easy). If you have not run the wizard already please refer to the following document [Documentation - How To Monitor Devices Using The NCPA Agent and Wizard](#)

Log into Nagios XI and navigate to **Configure > Core Config Manager**.

In the left pane under **Monitoring** click **Services**.

Locate the existing services of the Windows machine being monitored and click the **Copy** icon to create a duplicate of this service. From the screenshot below you can see the CPU Usage service.

<input type="checkbox"/>	Config Name	Service Description	Active	Status	Actions	ID
<input type="checkbox"/>	10.25.14.10	CPU Usage	Yes	Applied	  	917

Click the new **\_copy\_1** service that has been created to edit it.

Remove **\_copy\_1** from the Config Name field.

In the **Description** field provide a name, this example will use **Check Dummy**.

In the **\$ARG1\$** field you will need to replace everything past the **-M** just the same as you tested from the Nagios XI terminal session. In the screenshot below the field is cut off but the command is:

```
-M 'plugins/check_dummy.ps1' -q "args=2 Something_is_CRITICAL"
```

Common Settings | **Check Settings** | Alert Settings | Misc Settings

**Config Name \***  
10.25.14.10

**Description \***  
Check Dummy

**Display name**  
[Empty]

Active

**Check command**  
check\_xi\_ncpa

**Command view**  
\$USER1\$/check\_ncpa.py -H \$HOSTADDRESS\$ \$ARG1\$

\$ARG1\$ -P 5693 -M 'plugins/check\_dummy.ps1' -a "2 Some

\$ARG2\$

\$ARG3\$

\$ARG4\$

\$ARG5\$

\$ARG6\$

\$ARG7\$

\$ARG8\$

Click the **Active** check box and then click the **Save** button.

Click **Apply Configuration** so Nagios XI can begin monitoring the new service.

Once the service has been checked it should resemble what you saw in the terminal session:

Host	Service	Status	Duration	Attempt	Last Check	Status Information
10.25.14.10	Check Dummy	Critical	10s	1/5	2017-07-20 14:21:09	Something_is_CRITICAL
	CPU Usage	Ok	34m 58s	1/5	2017-07-20 14:21:13	OK: Percent was 5.90 %

## Final Thoughts

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

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

Posted by: **tlea** - Wed, Jul 19, 2017 at 9:14 PM. This article has been viewed 5888 times.

Online URL: <https://support.nagios.com/kb/article/nagios-xi-using-scripts-plugins-with-ncpa-722.html>