

The Industry Standard in IT Infrastructure Monitoring

Purpose

This document describes how to mass deploy the NSClient++ agent. To accomplish this goal, we'll show how Microsoft's SCCM 2007 can be used to silently push NSClient++ and its configuration files to many workstations.

Target Audience

This document is intended to help System Administrators who wish to deploy NSClient++ agent to a collection of computers within a Active Directory Domain, Subnet, or IP Range. This document assumes Microsoft SCCM, its components, and Nagios XI exist in your environment.

This documentation covers the following:

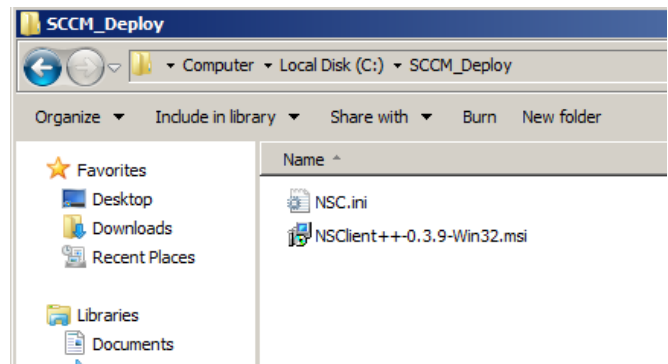
- File Preparation
- Create SCCM Distribution Package
- Task Sequence Creation
- Advertise sequence to a collection
- Deployment Verification

File Preparation

In this section we'll cover the prerequisite files needed to deploy NSClient++.

There are many methods for deploying software packages using Microsoft's SCCM. In this example, the two files listed below must be copied to the same directory on your SCCM server or on a accessible network share.

- **nsclient.ini – Configuration file**
- **NSClient++x.x.x.msi – MSI installer**



NSC.ini - is the configuration file that contains specific install variables. For example, agent password and the IP address of the Nagios server specific to your environment. This is also where you can specify whether to use NRPE or nt_check. If you don't feel comfortable editing the NSC.ini file manually, follow the basic [installation method](#) and copy the resulting NSC.ini file. A fresh copy of the NSC.ini can be found by download the .zip source here: <http://nsclient.org/nscp/downloads>

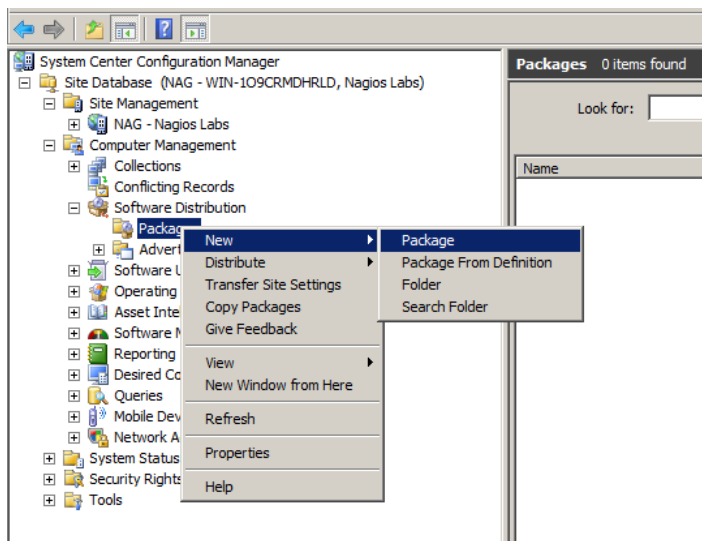
NSClient++x.x.x.msi – Download a copy of the .msi installer here: <http://nsclient.org/nscp/downloads>

Create SCCM Distribution

This topic covers the creation of the SCCM package and its program component. This document shows examples from SCCM 2007 using the ConfigMgr Console.

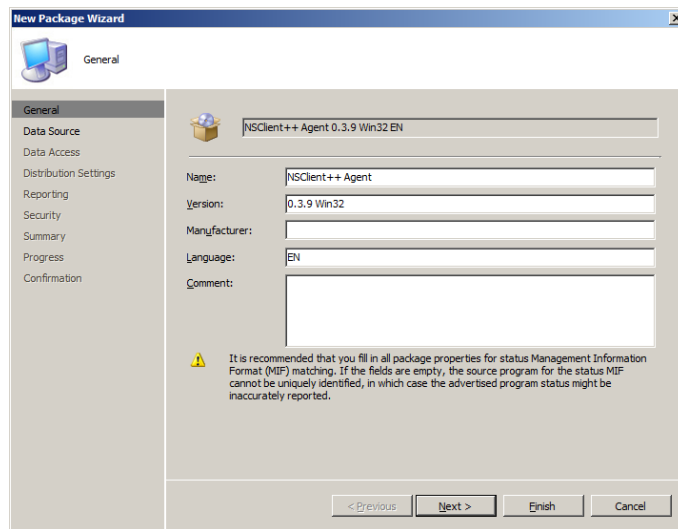
Expand Software Distribution, and right click "Package". Next, select New -> Package.

- **SCCM > Site Database > Computer Management > Software Distribution > Package**
- **New > Package**



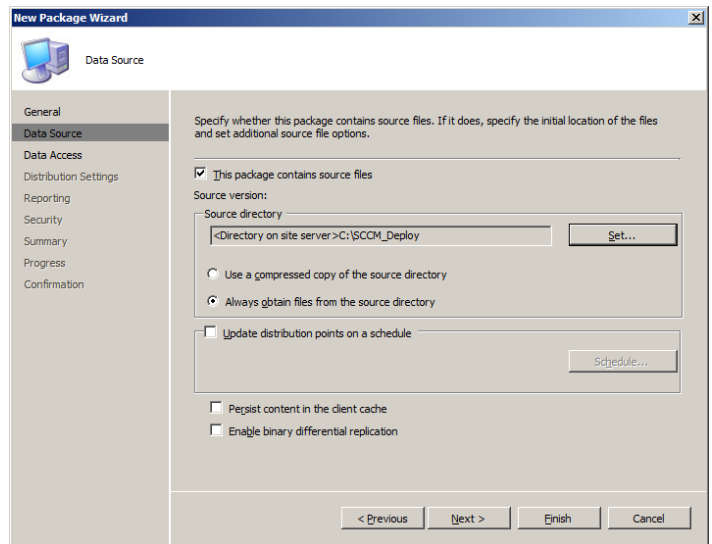
Complete the relevant fields. We are pushing NSClient 0.3.9 Win32 type. Your version/architecture may vary.

- **Name: NSClient++ Agent**
- **Version: 0.3.9 Win32**
- **Language: EN**
- **Next**



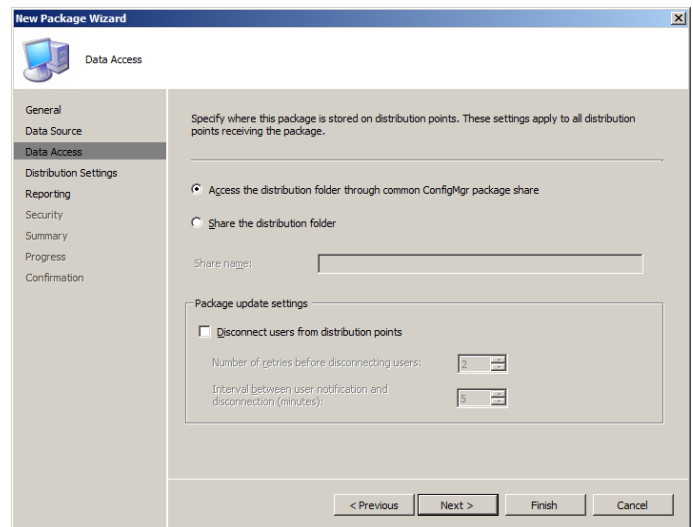
Next we'll specify the source file directory. This is the location where the .msi and .ini file are located as described above

- ✓ This Package contains source files
- ✓ Set <Directory on site server>
- ✓ Next



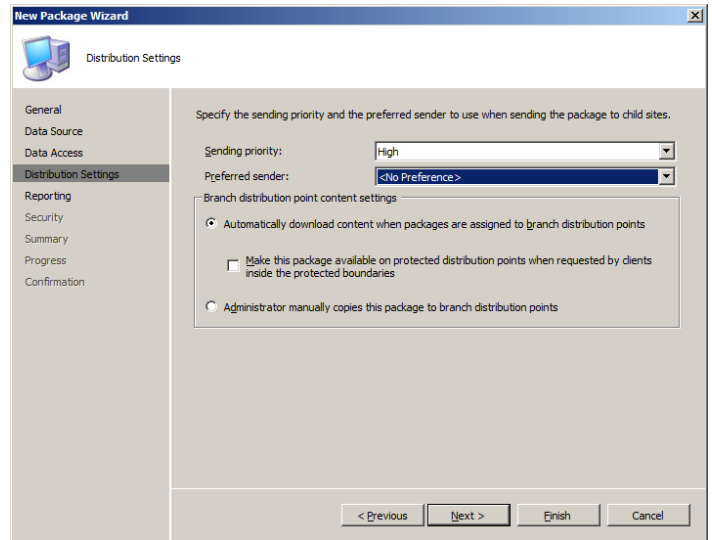
The defaults selected here are fine.

- ✓ Next



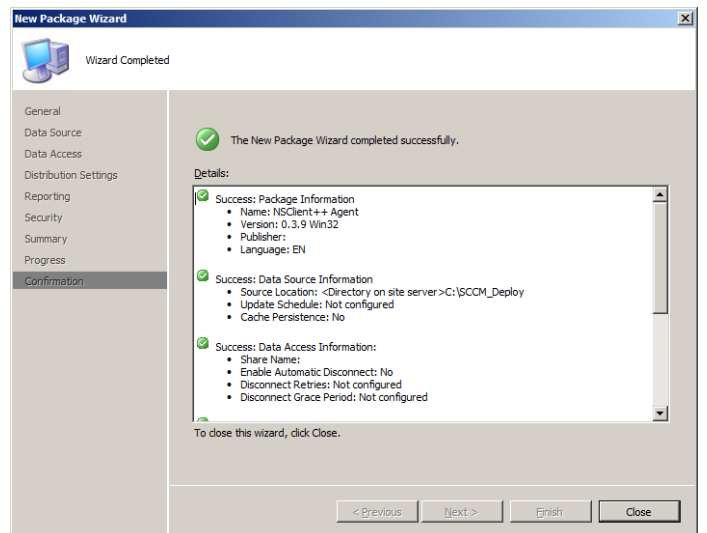
The defaults selected here are fine also. Since this is the only package being deployed, we decided to set priority to **High**.

✓ **Next**



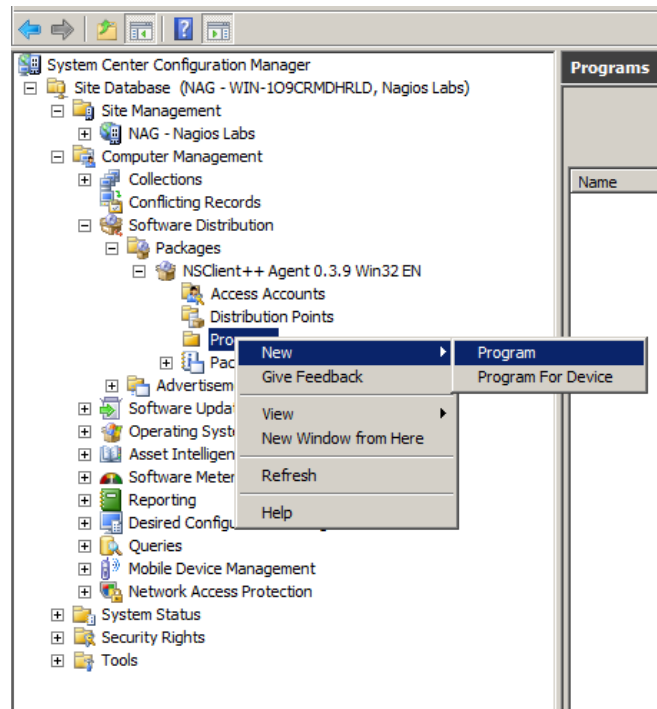
Click Finish.

✓ **Finish**



Now that the package has been created, we can create the program instructions to run. Expand NSClient ++ Agent > Right-click Programs, Select New -> Program.

- ✓ Expand NSClient++ Agent
- ✓ Right click Programs > New > Program

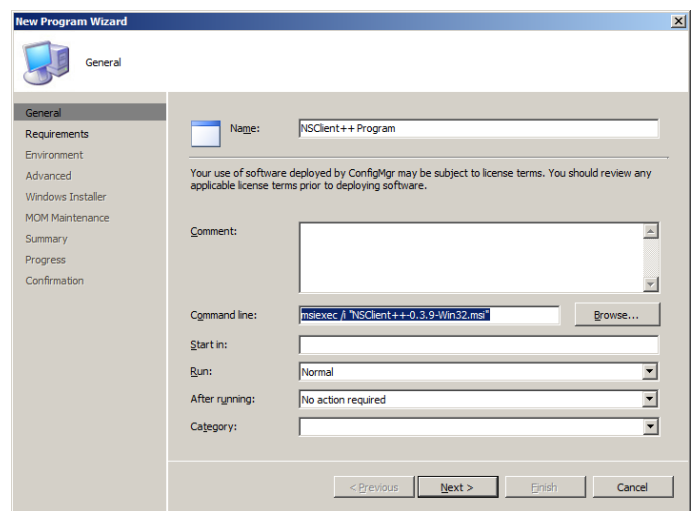


Fill in your program name, and enter command line details.

Command line to install NSClient++ msi package:

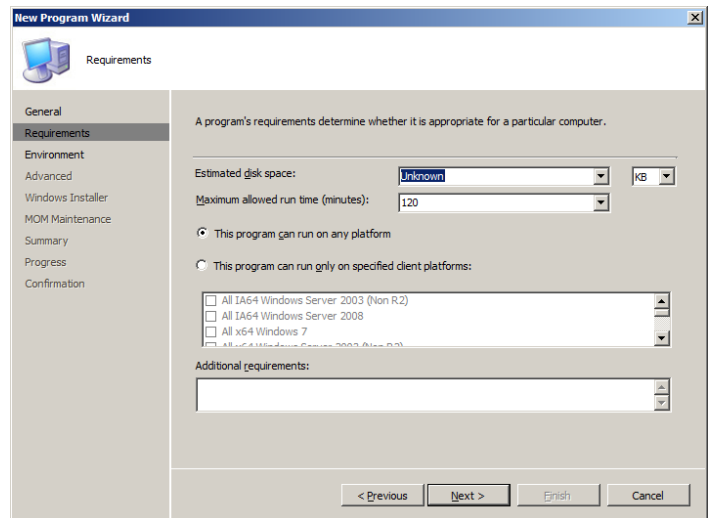
```
msiexec /i "NSClient++-0.3.9-Win32.msi"
```

- ✓ Name: NSClient++ Program
- ✓ Command Line
- ✓ Next



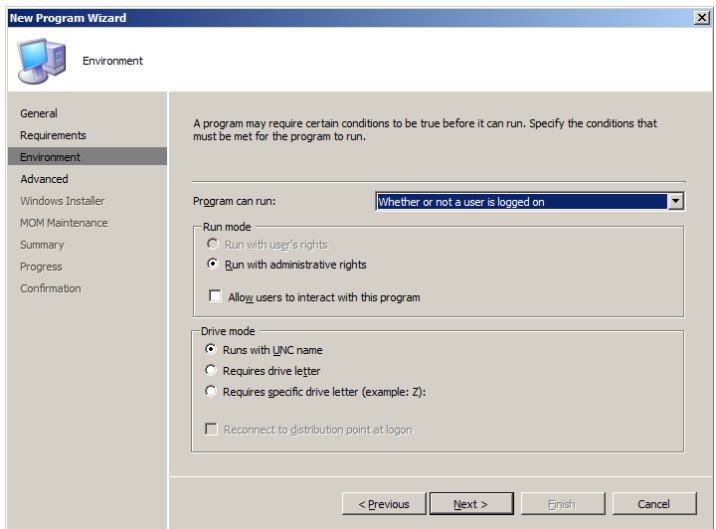
Here you can specify in more detail the conditions of the deployment. We just left the defaults for this example.

- ✓ Next



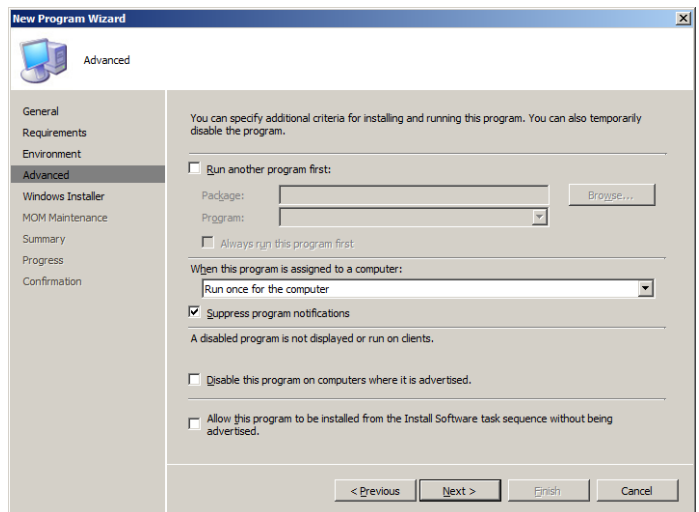
Since this is a silent install, select “Whether or not a user is logged on”

- ✓ Program can run:
“Whether or not a user is logged on”
- ✓ Next



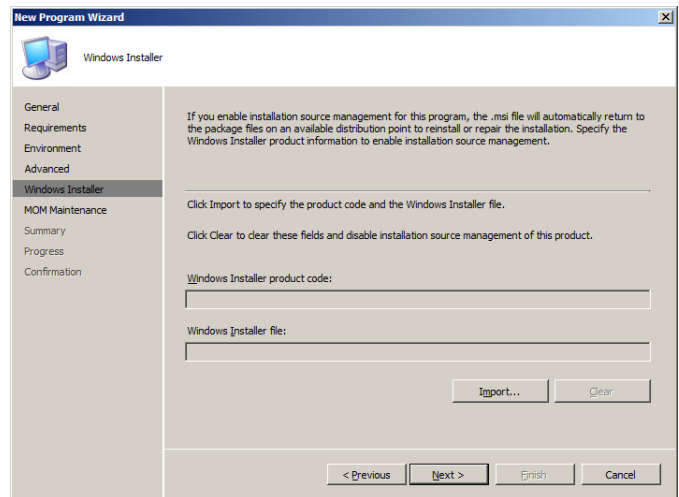
For a silent install, we also want to suppress program notifications.

- ✓ Suppress program notifications
- ✓ Next



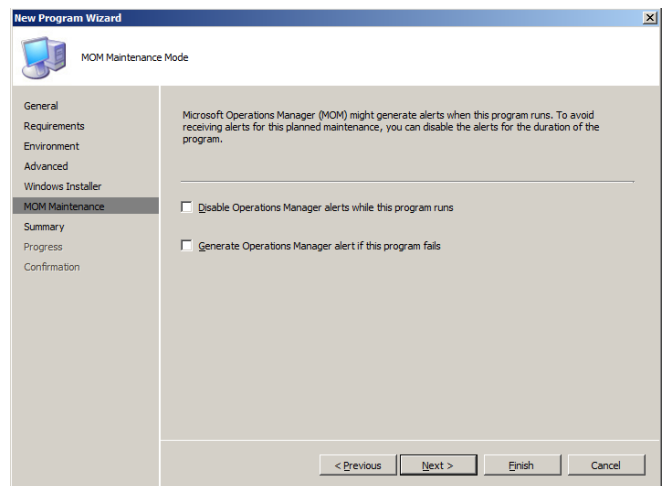
For this documentations purposes, we can leave the defaults

✓ **Next**



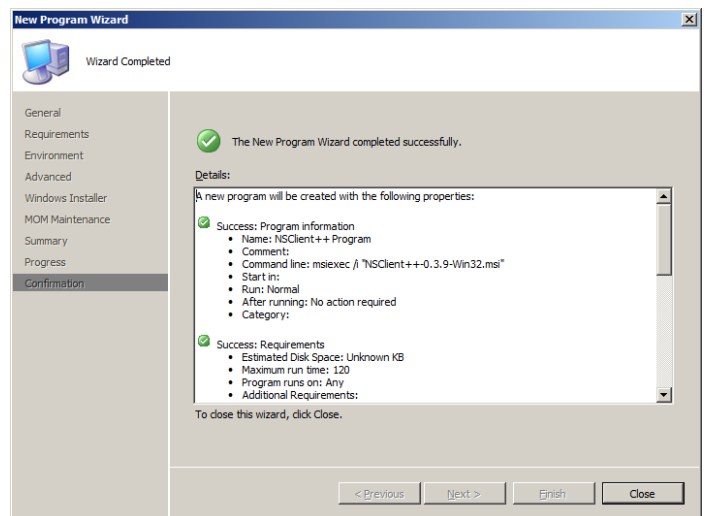
The defaults are fine here as well.

✓ **Next**



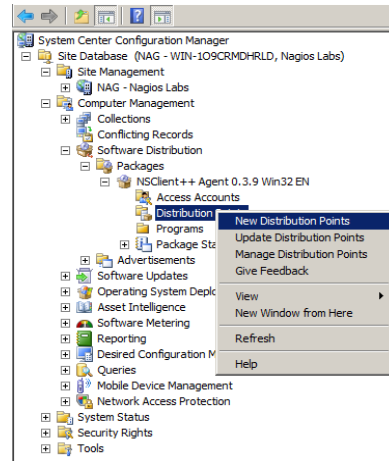
The remaining dialog boxes can all be left as default, so choose finish

✓ **Finish**



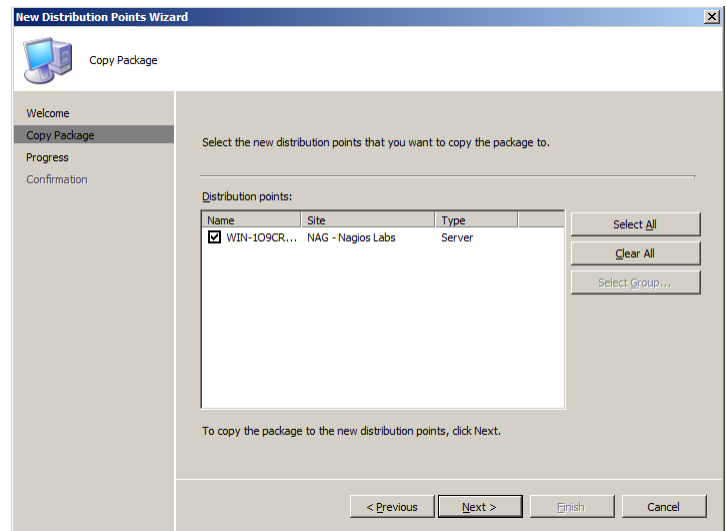
For programs to run, they must have a Distribution Point defined. Right click Distribution Point, and select New Distribution Point.

✓ **Distribution Point > New Distribution Point**



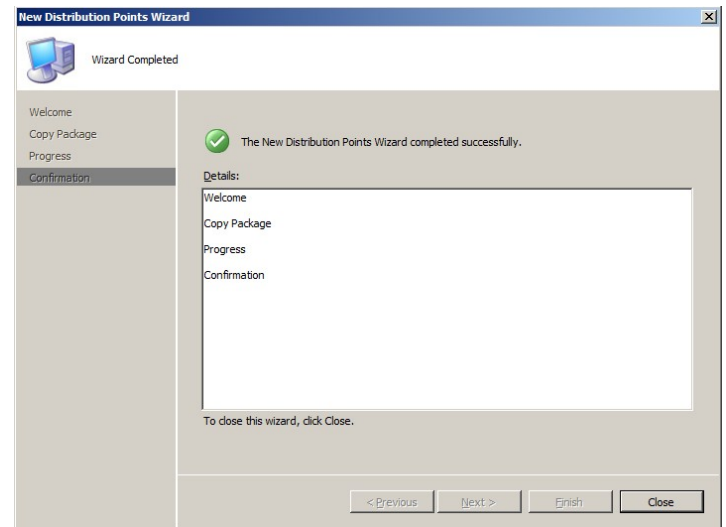
Select the system you wish to use as your distribution point.

✓ **Distribution points**



Select Finish to complete the distribution point setup

✓ **Finish**



Task Sequence Creation

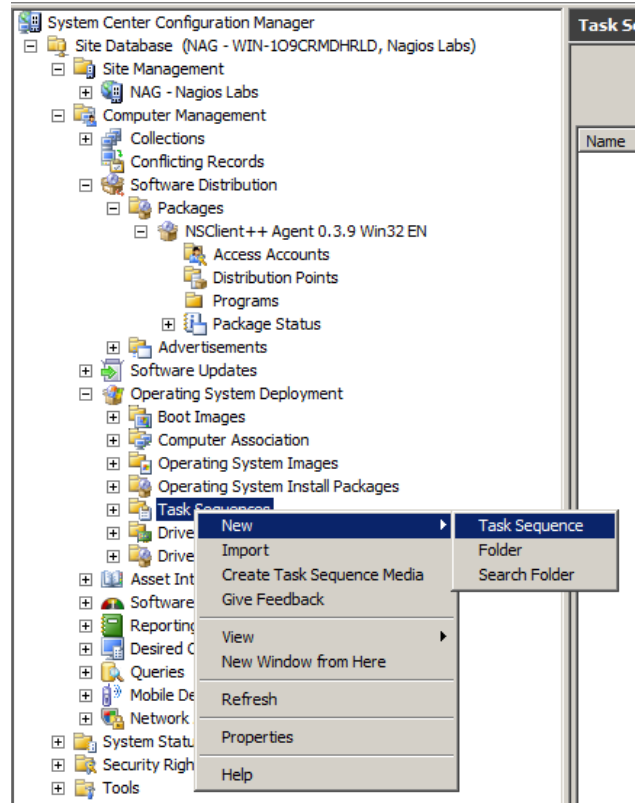
Here we'll create a task sequence to complete three objectives

- Run the MSI silent install program we just created
- Copy the nsclient.ini file to the clients machine
- Start the NSClient++ service

Name	Comment	Task ID	Creation Date
NSClient++ Sequence	Super Awesome Task Sequence	NAG00004	1/2/2012 6:03 PM

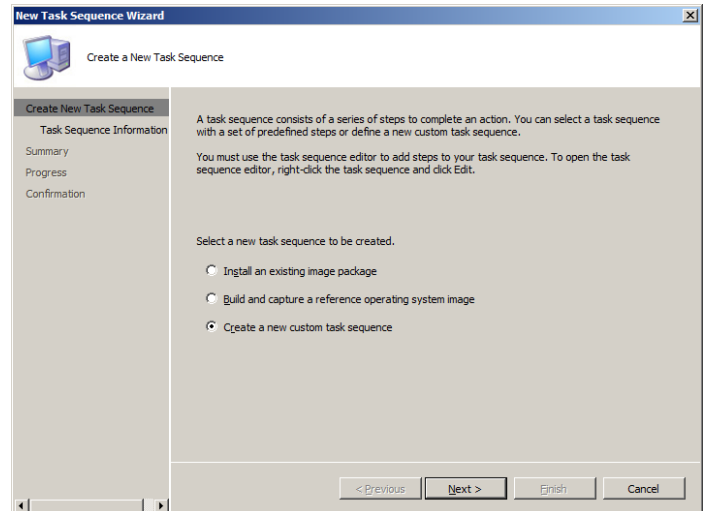
First, expand Operating System Deployment, right click Task Sequence, choose New, Task Sequence

- ✓ Operating System Deployment > Task Sequences > New > Task Sequence



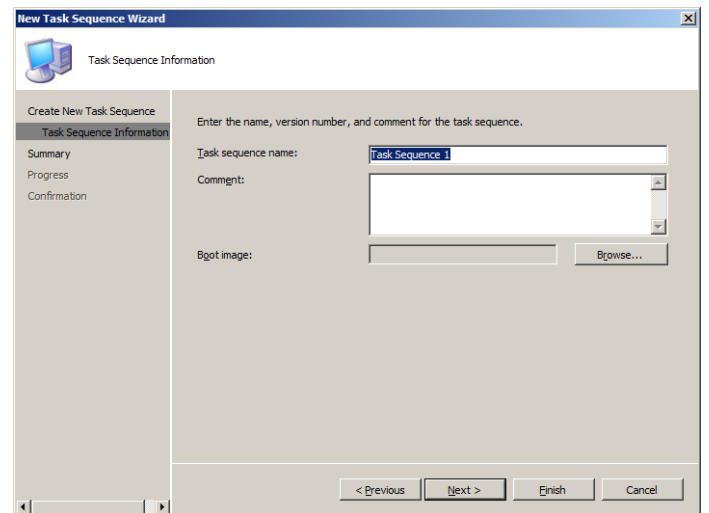
Select the “Create a new custom sequence” radio button

- ✓ **Create a new custom sequence**
- ✓ **Next**



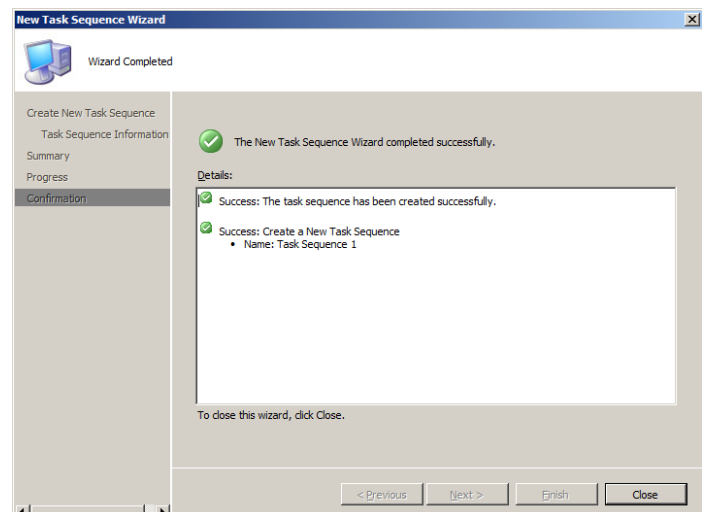
Name the task sequence and select next.

- ✓ **Task sequence name:**
- ✓ **Next**



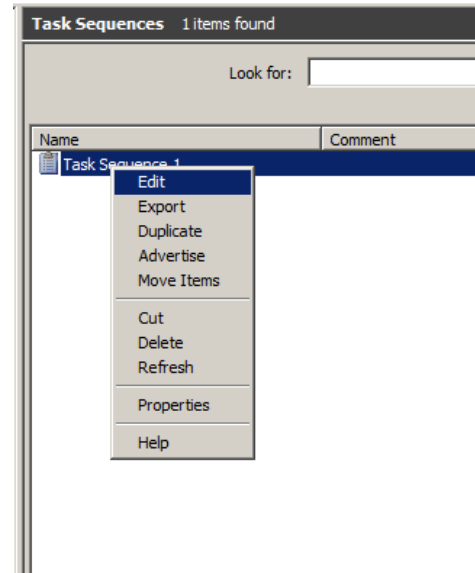
Choose finish to complete the custom task sequence

- ✓ **Finish**



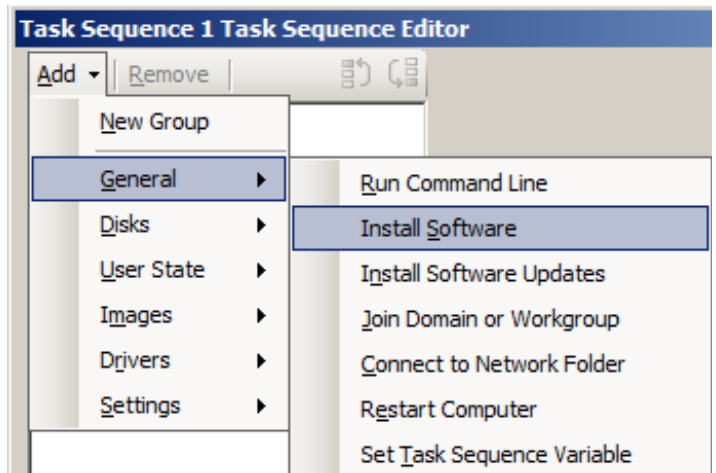
Right click on the newly created task sequence, and choose edit.

- ✓ **Right Click Sequence -> Edit**



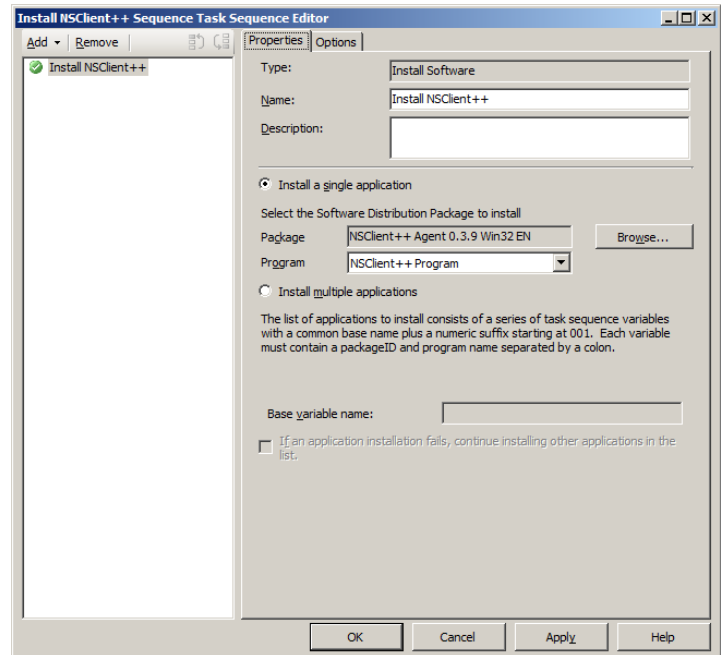
From the Sequence task bar, choose “Add”, next select “General” from the menu, lastly, select “Install Software”

- ✓ **Add > General > Install Software**



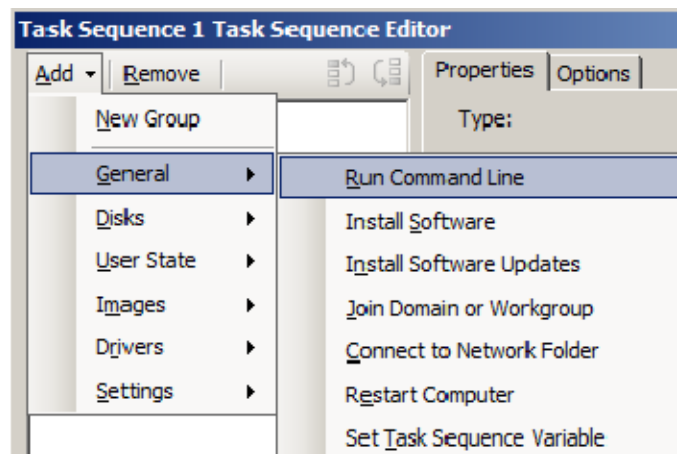
In this step, populate the sequence name, and select the package and program to install by hitting **Browse**.

- ✓ **Name: Install NSClient++**
- ✓ **Install a single application > Browse > select Package**
- ✓ **Apply**



Let's add a few command line options to run. Select "Add" once again, "General" and then "Run Command Line".

- ✓ **Add > General > Run Command Line**

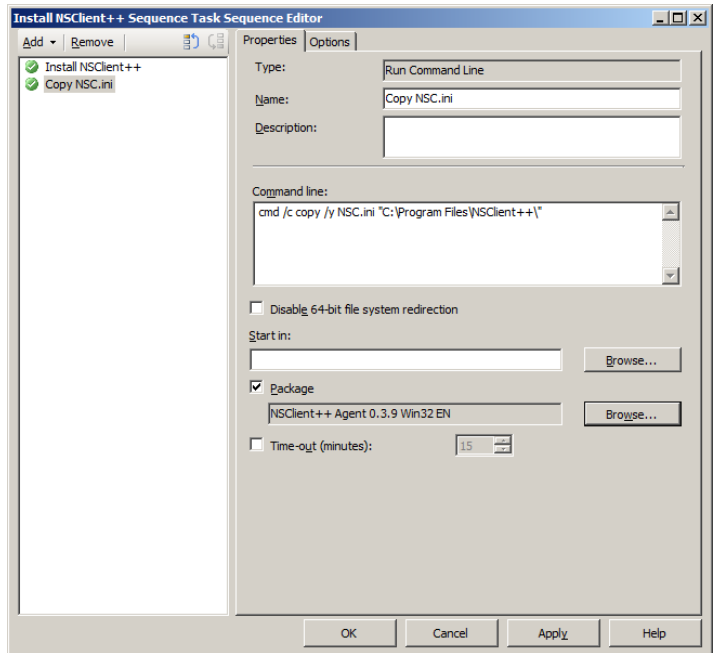


Here we once again name our task, and this time enter command line arguments. Here is the command used to copy NSC.ini file to the client computer:

```
cmd.exe /c copy /y nsclient.ini "C:\Program Files\NSClient++\"
```

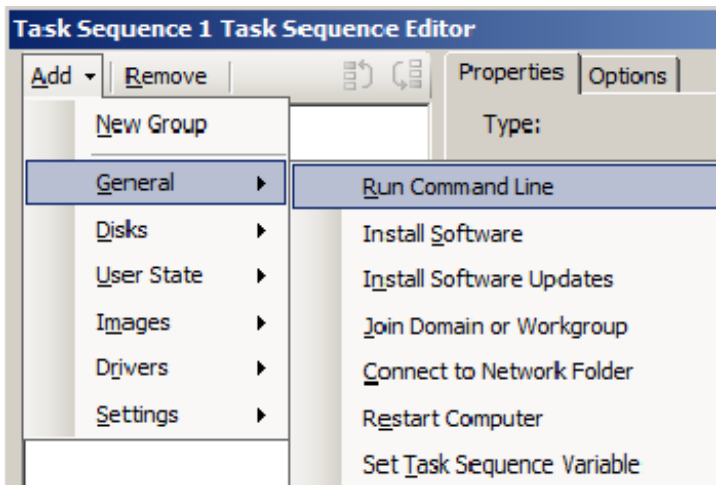
It's important to also select the Package to use since the copy command uses a local reference.

- ✓ **Command Line**
- ✓ **Package > Browse > NSClient++ Agent Package**
- ✓ **Apply**



Let's setup one more Command Line, this time to start the NSClient++ agent after installation.

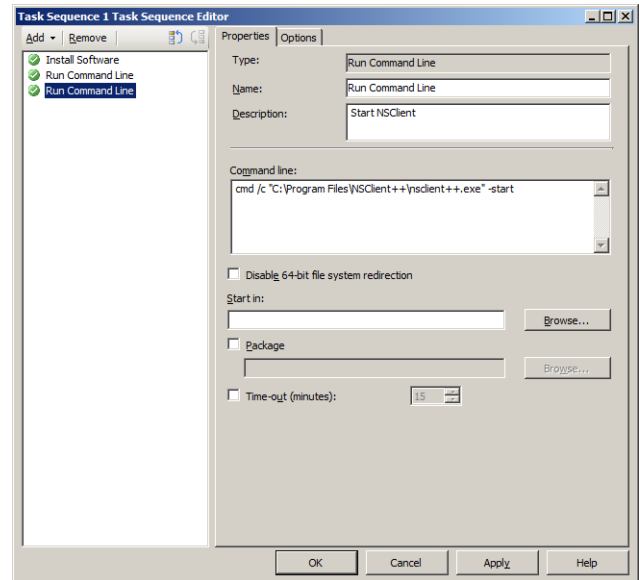
- ✓ **Add > General > Run Command Line**



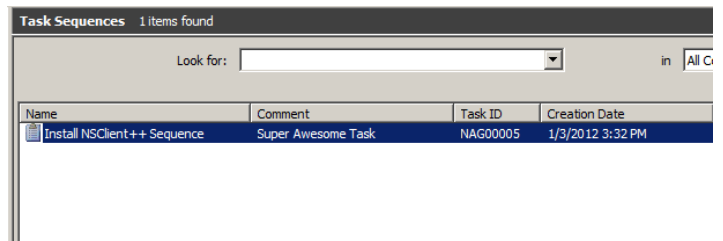
Here we add the Name, and the command to kick start NSClient++.exe:

```
cmd.exe /c "C:\Program Files\NSClient++\nsclient++.exe" -start
```

- ✓ Name: Start NSClient++
- ✓ Command Line
- ✓ OK



Now that the task sequence has been defined, we are ready to advertise our sequence

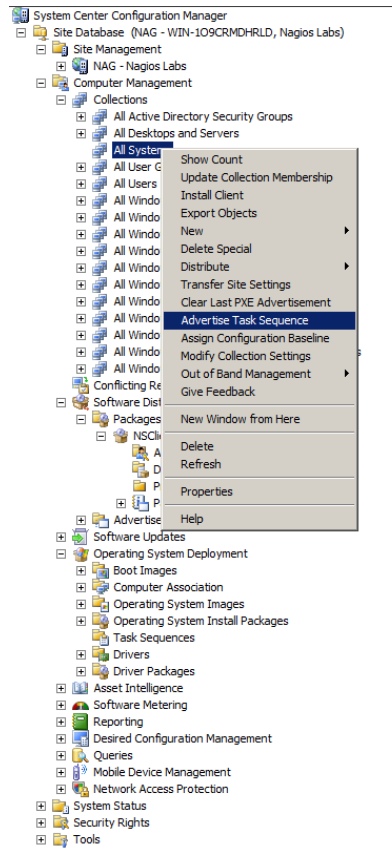


Advertise sequence to a collection

This section will describe advertising the sequence we created.

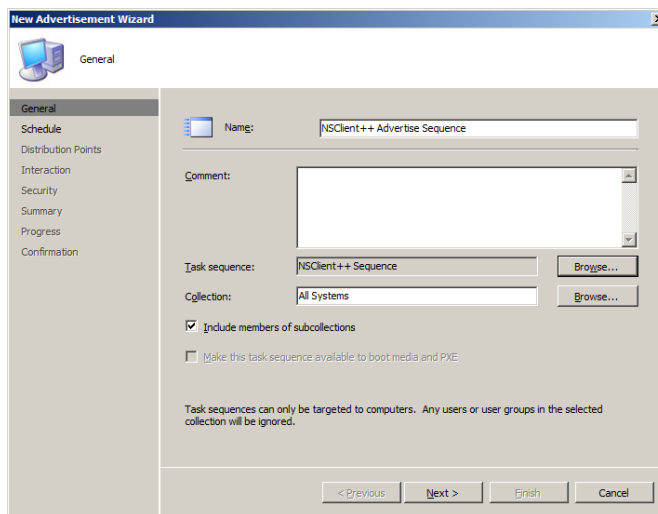
Begin by expanding the computer management section, and then expand Collections. Right click the collection, or sub-component to advertise to. In our example we'll choose "All Systems". Select "Advertise Task Sequence" to begin Wizard.

- ✓ **Computer Management > Collections > All Systems > Advertise Task Sequence**



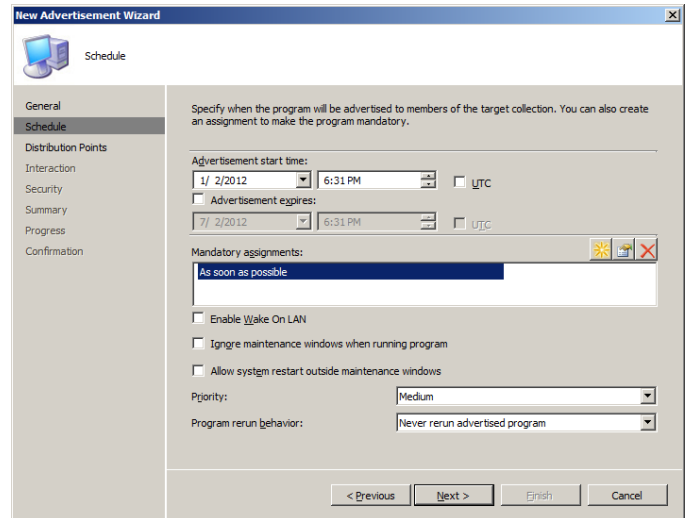
Add the sequence name and select the task sequence package to advertise.

- ✓ **Name: NSClient++ Advertise Sequence**
- ✓ **Browse > Select task sequence**
- ✓ **Next**



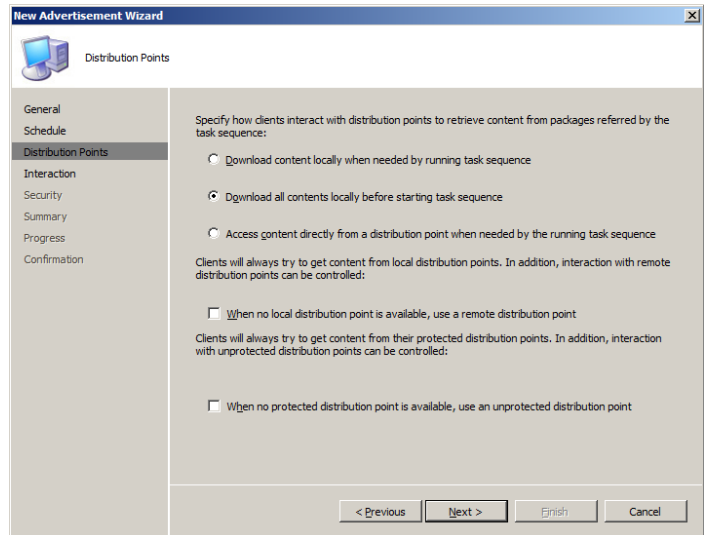
Here we create the start time of advertisement. We left the default time and selected a Mandatory Assignment time as ASAP.

- ✓ **Assign time (ASAP)**
- ✓ **Next**



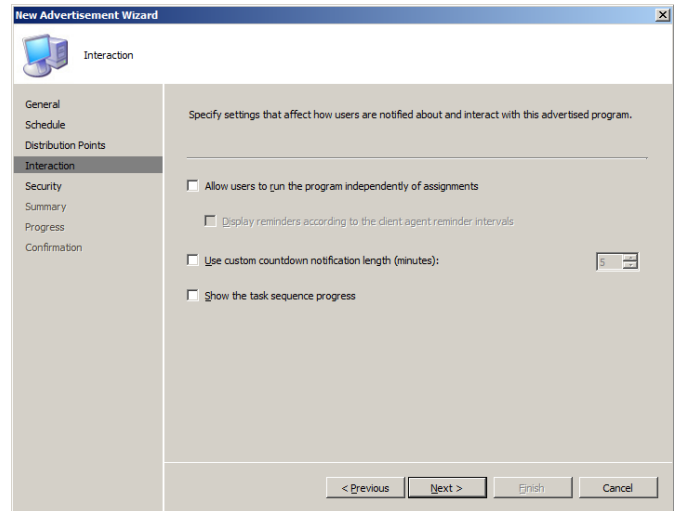
The option “Download All Content Locally before starting task sequence” is selected since our copy command relies on local files being available.

- ✓ **Select “Download all contents locally before starting task sequence”**
- ✓ **Next**



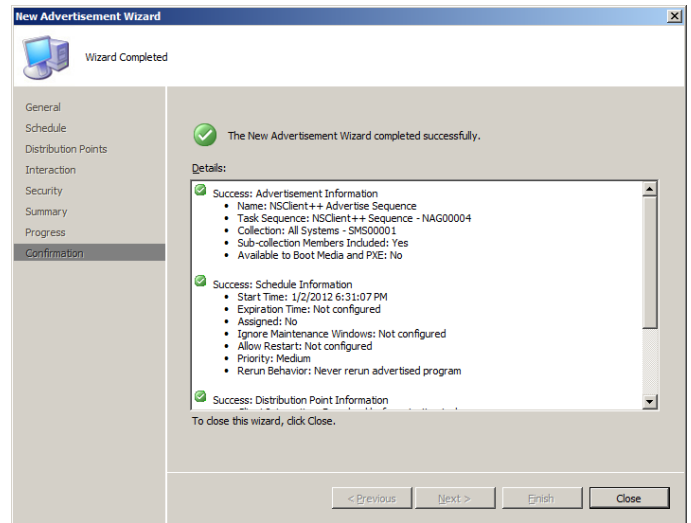
The default options are fine for the purpose of this guide.

✓ **Next**



Select Finish to leave the remaining settings default

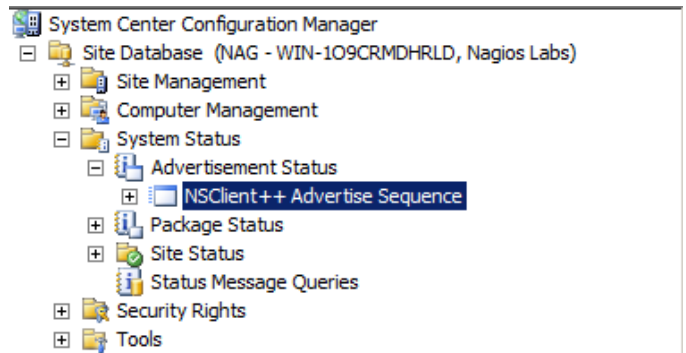
✓ **Finish**



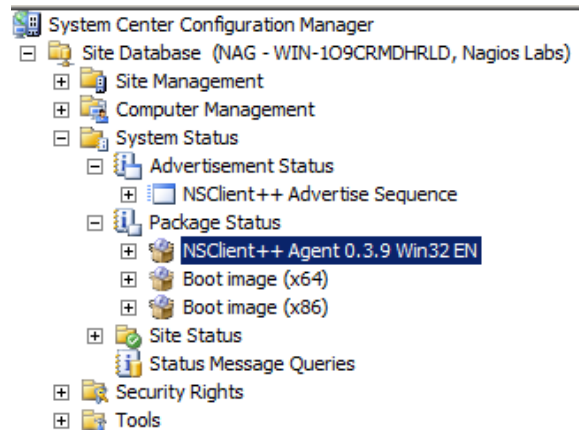
Deployment Verification

Here we'll verify the package has been successfully deployed

Under system status, Advertisement status, you should see verification that NSClient++ Advertise Sequence is being advertised.



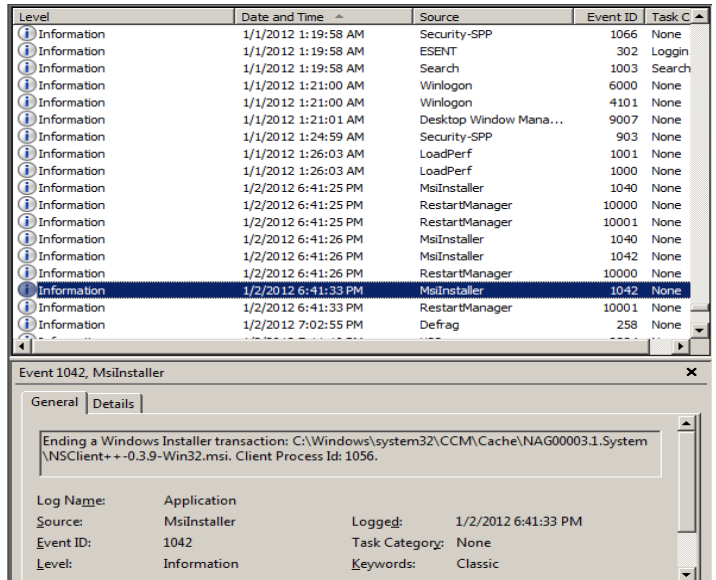
Under "Package Status", The package should be listed along with it's status.



In the right pane we see confirmation that our package has been deployed.

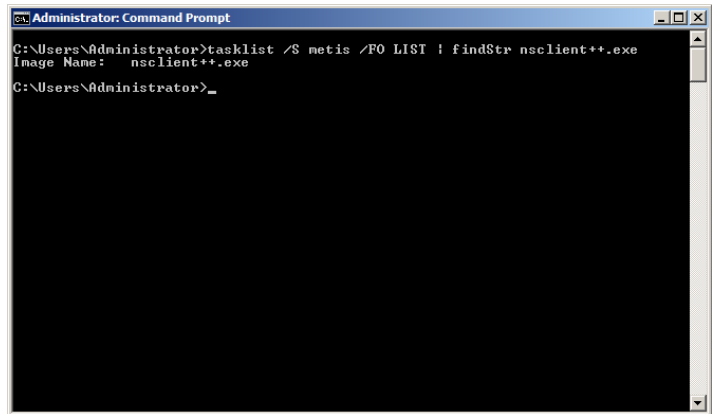
Site	Source Version	Targeted	Installed	Retrying	Failed	Summary Date
NAG - Nagios Labs	1	1	1	0	0	1/2/2012 4:55 PM

Remotely pulling the event logs confirms that our .msi package installed.



Lastly, we can verify the running PID by querying the remote computer

```
"tasklist /S metis /FO LIST | findStr nsclient++.exe"
```



Useful links:

Bulk import wizard

<http://library.nagios.com/library/products/nagiosxi/downloads/customer/491-bulk-host-import-wizard>

nsclient++ install

http://assets.nagios.com/downloads/nagiosxi/docs/Installing_The_XI_Windows_Agent.pdf

configure NRPE

http://assets.nagios.com/downloads/nagiosxi/docs/Enabling_the_NRPE_Listener_in_NSClient.pdf