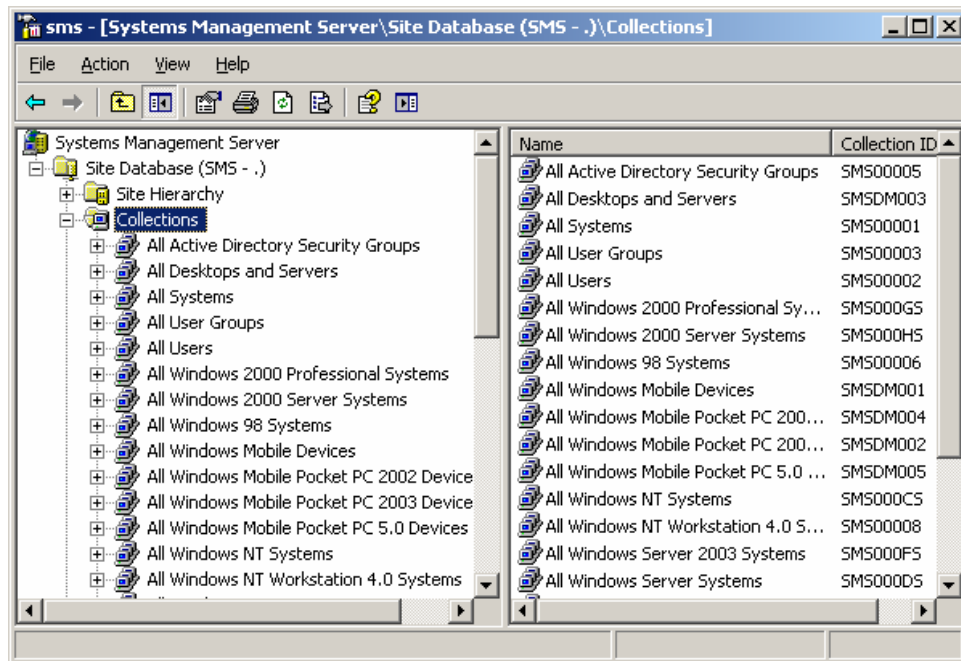


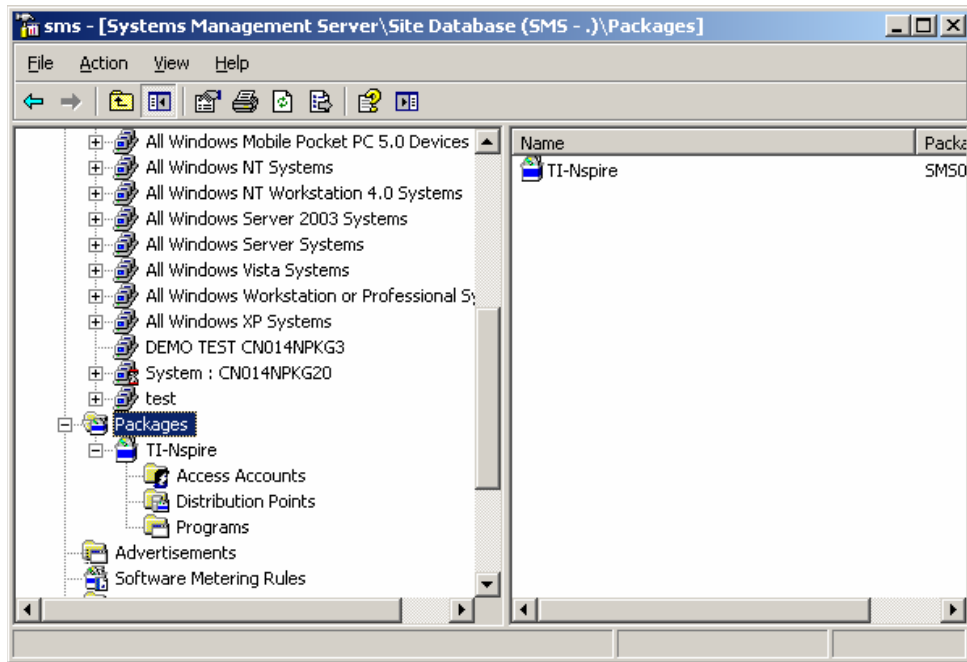
Packaging TI-Nspire™ software with Microsoft® SMS 2003

This document provides step-by-step instruction for creating and deploying a TI-Nspire network package using Microsoft® SMS 2003 platform. This document is intended as an example.

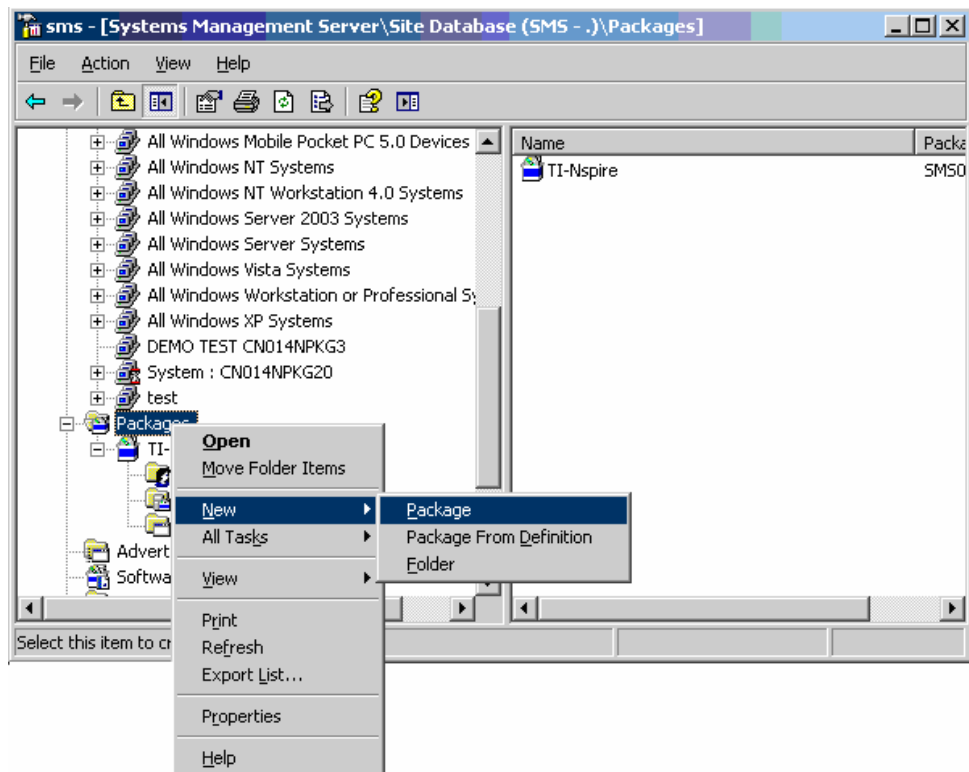
1. From the SMS administrator console, navigate to **Collections**.



2. Expand the **Collections** directory and scroll down to **Packages**.

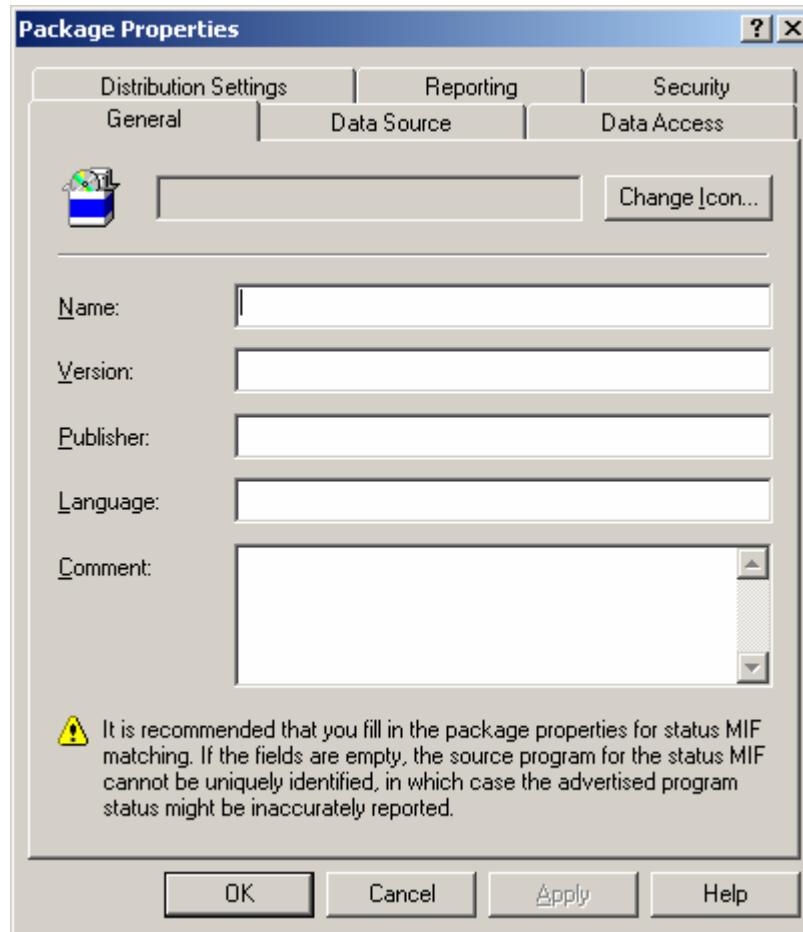


3. Right-click on **Packages** and select **New > Package** from the drop down menu.



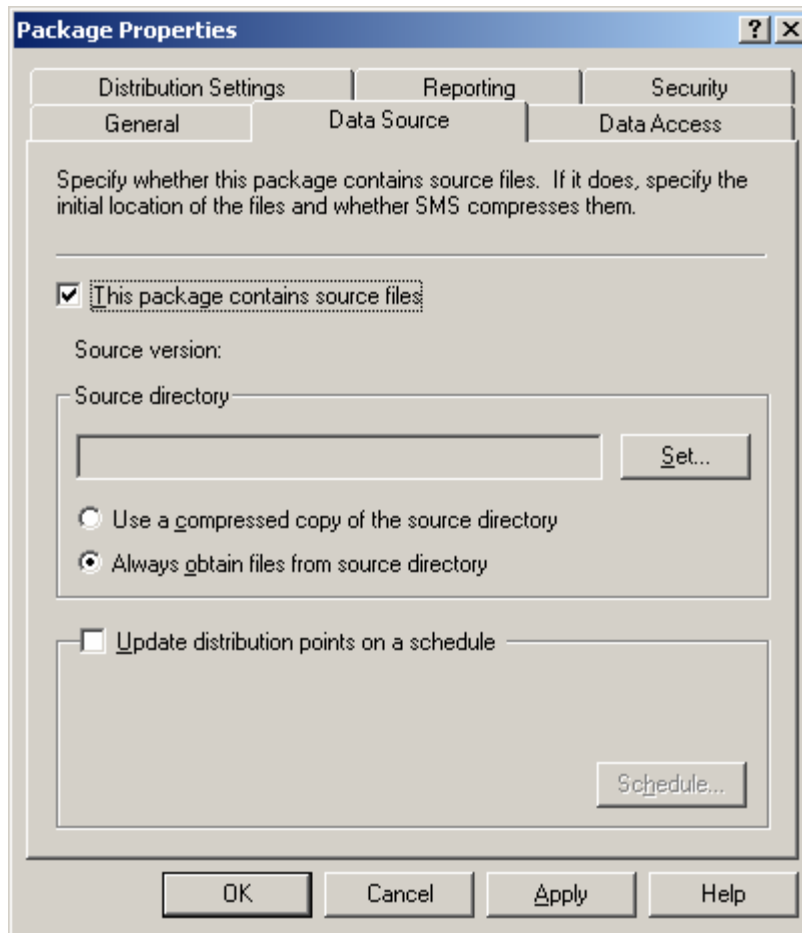
4. On the **General** tab, type a name for the package and other information describing your installation.

Note: It is important to provide all information to generate accurate MIF status.

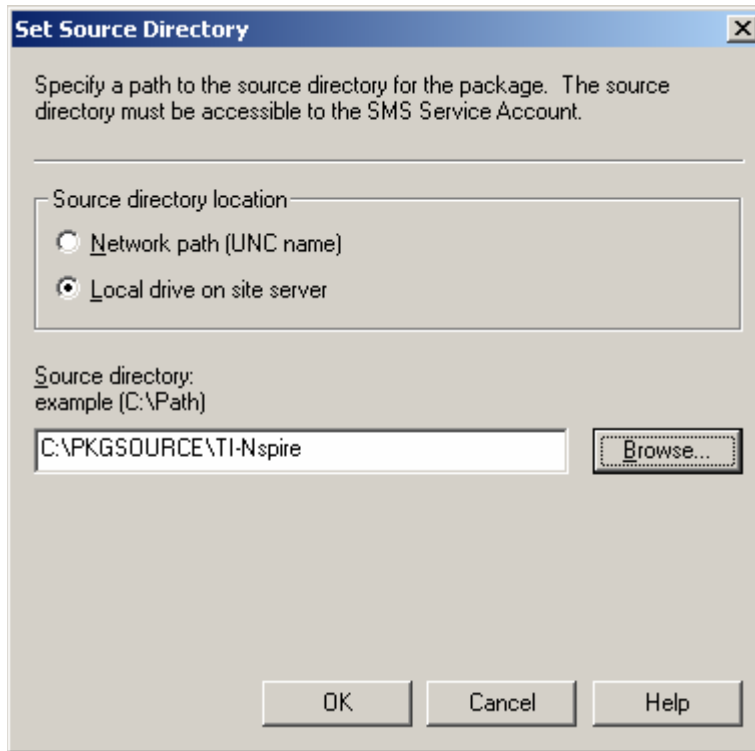


The screenshot shows the 'Package Properties' dialog box with the 'General' tab selected. The dialog has a title bar with a question mark and a close button. Below the title bar are three tabs: 'Distribution Settings', 'Reporting', and 'Security'. Under 'Distribution Settings', there are three sub-tabs: 'General', 'Data Source', and 'Data Access'. The 'General' sub-tab is active. It contains a 'Change Icon...' button next to a small icon of a package. Below this are five text input fields: 'Name:', 'Version:', 'Publisher:', 'Language:', and 'Comment:'. At the bottom of the dialog, there is a warning icon and a message: 'It is recommended that you fill in the package properties for status MIF matching. If the fields are empty, the source program for the status MIF cannot be uniquely identified, in which case the advertised program status might be inaccurately reported.' At the very bottom are four buttons: 'OK', 'Cancel', 'Apply', and 'Help'.

5. Click the **Data Source** tab.
6. Select the **This package contains source files** check box.

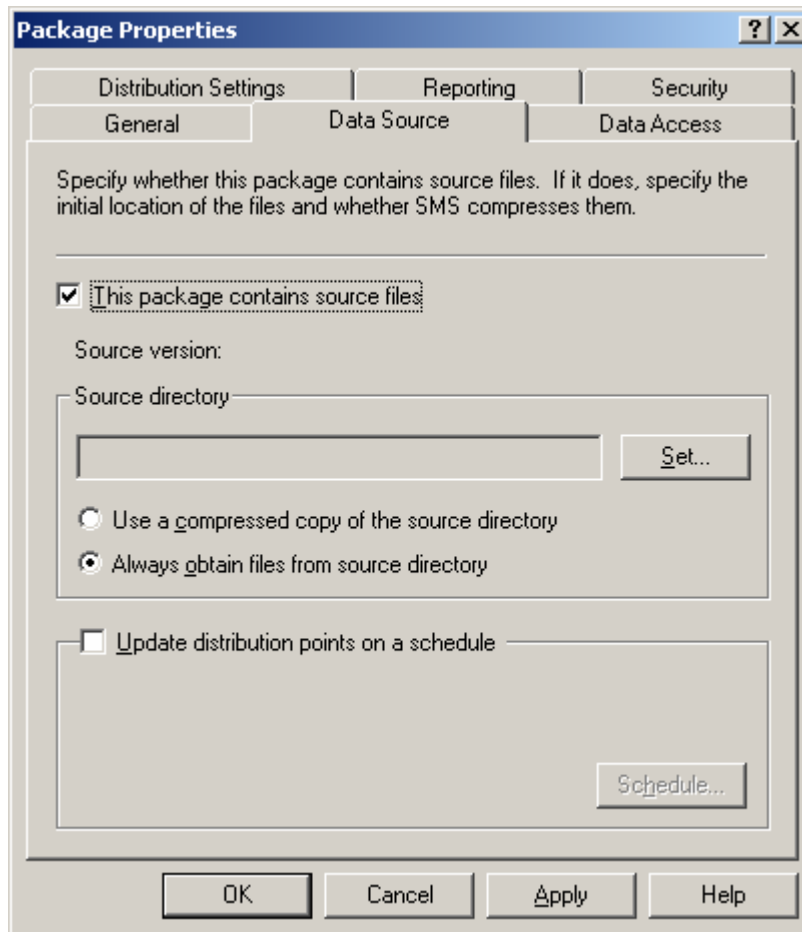


7. Next, set the source directory by clicking the **Set** button, and click **Browse...** to navigate to the directory when the source files reside.



8. Click **OK** to return to the Data Source tab.

9. Select an option for the source directory, depending on how you prefer to deploy and support software licensing.



- Select **Always obtain files from source directory** if you want to continuously update the license.sc file with newer versions. Selecting this option will cause SMS to obtain files from source directory to pull the latest version of the license.sc file.
- Select **Use a compressed copy of the source directory** if you prefer to create a one-time compressed package that contains the license.sc file.
- You may choose to pull the files manually (by manually updating the distribution points) or by checking the **Update distribution points on a schedule** check box, which schedules the process for you.

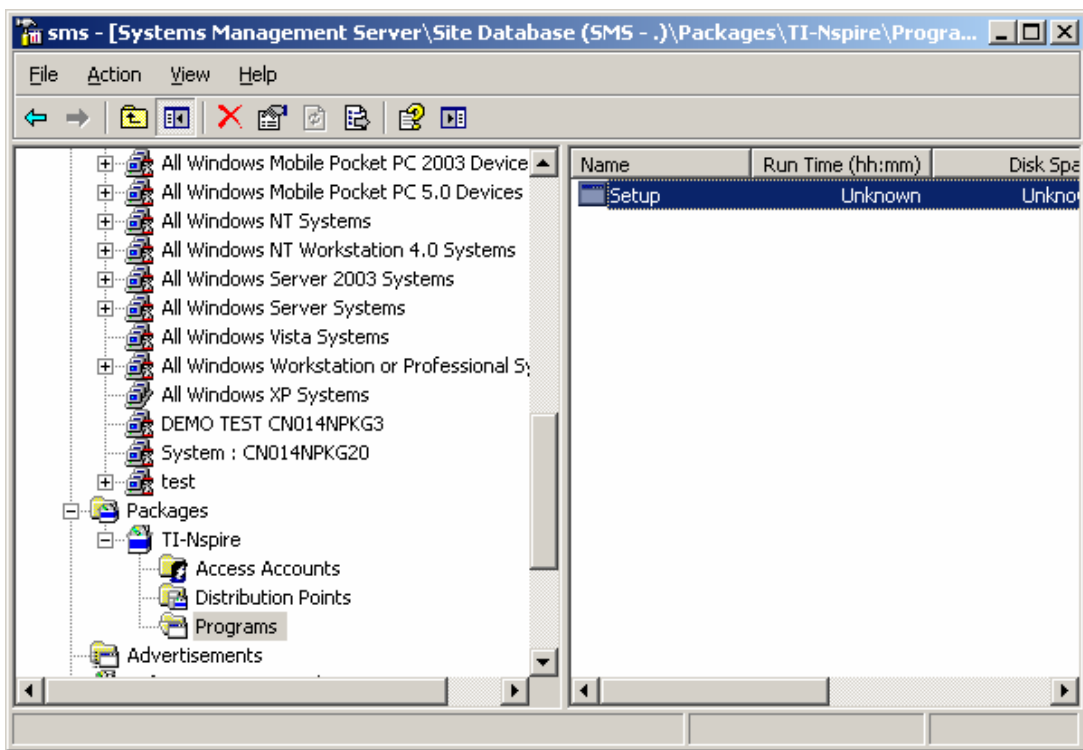
10. Click **OK** to create the package.

Note: As a best-practice, your source code directories should be fairly locked down to avoid unintended sourcing issues or accidental deletions.

Creating the Program

After the source directory has been identified, the next step is to create a program that will run on the workstation. **Setup.exe** or **Setup.bat** are names frequently used for this program.

You can create two types of programs to install TI-Nspire computer software. The first type of program, a Non-interactive (silent) installation, installs the software with no interaction from the user. The second type of program, an Interactive installation, allows the end-user to participate in the installation process.



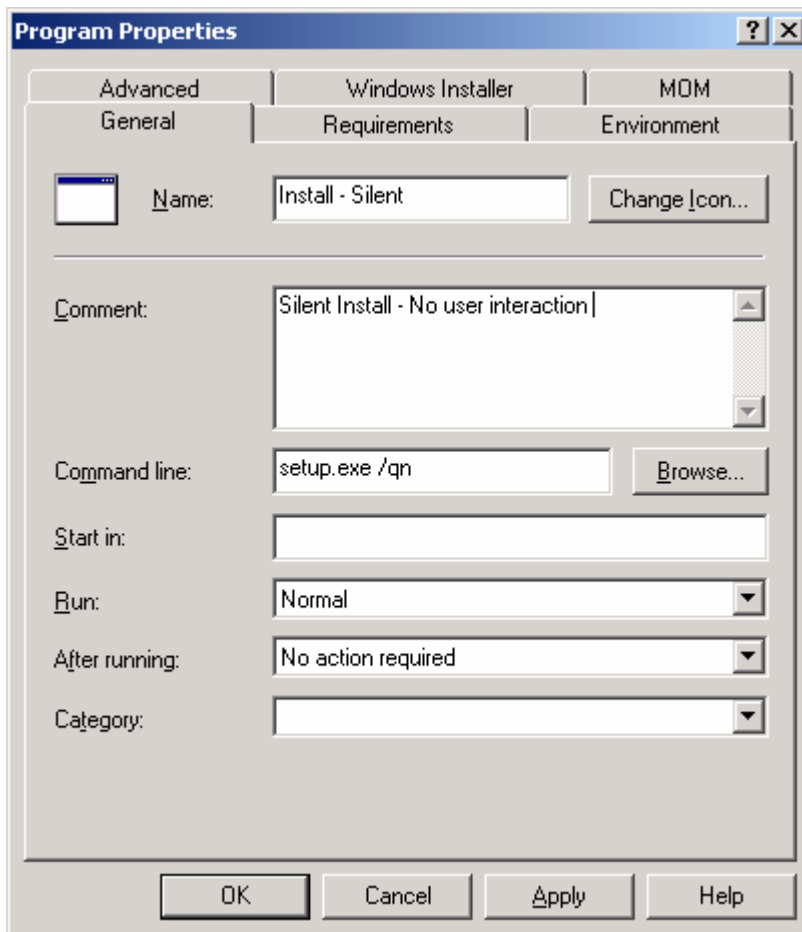
Both types of installations their affects on the Installation and activation of TI-Nspire computer software are discussed below.

Non-Interactive (silent) Installations

Silent Installation is the most typical installation type for large scale software deployments.

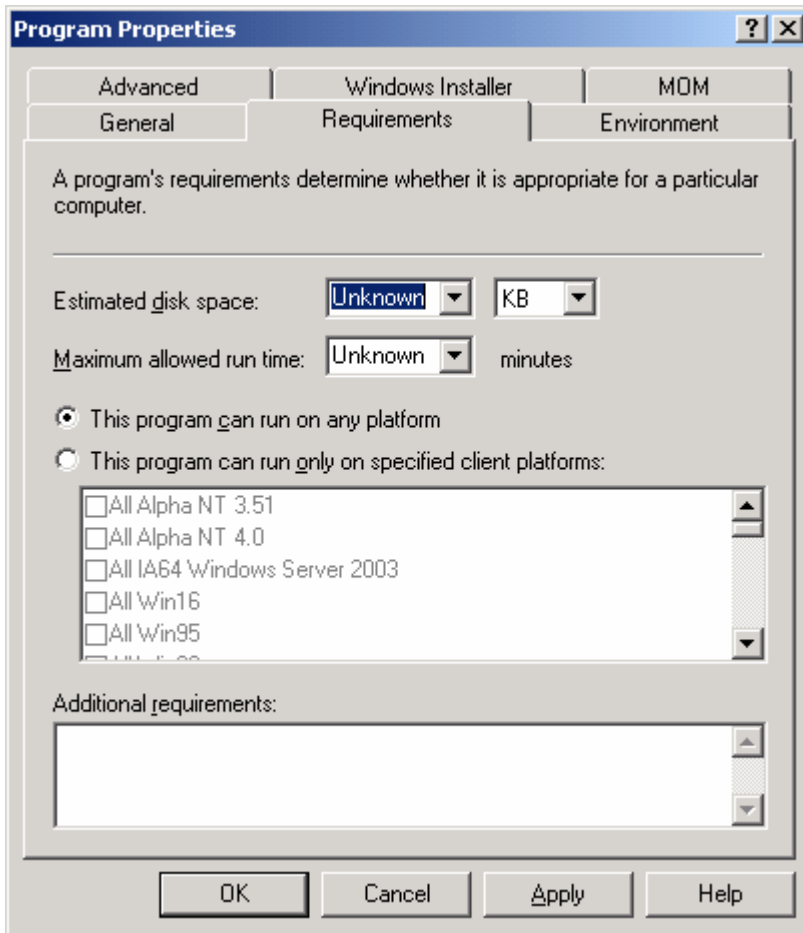
When setting up a silent installation it is important to be aware of some of the functional logic built into the TI-Nspire product and what additional supplemental logic is provided in many of today's desktop management clients such as Microsoft® SMS 2003 advanced client. The following example Program Properties tabs illustrate critical main concepts.

On the General tab, you may choose any name for your program. **Install-Silent** is used for this example.



The most important property on the General tab is the command line. For our example we have typed in **setup.exe /qn**. **Setup** is the installation executable name. The **/qn** switch informs the MSIEXEC to run quietly and with no GUI interactions allowed.

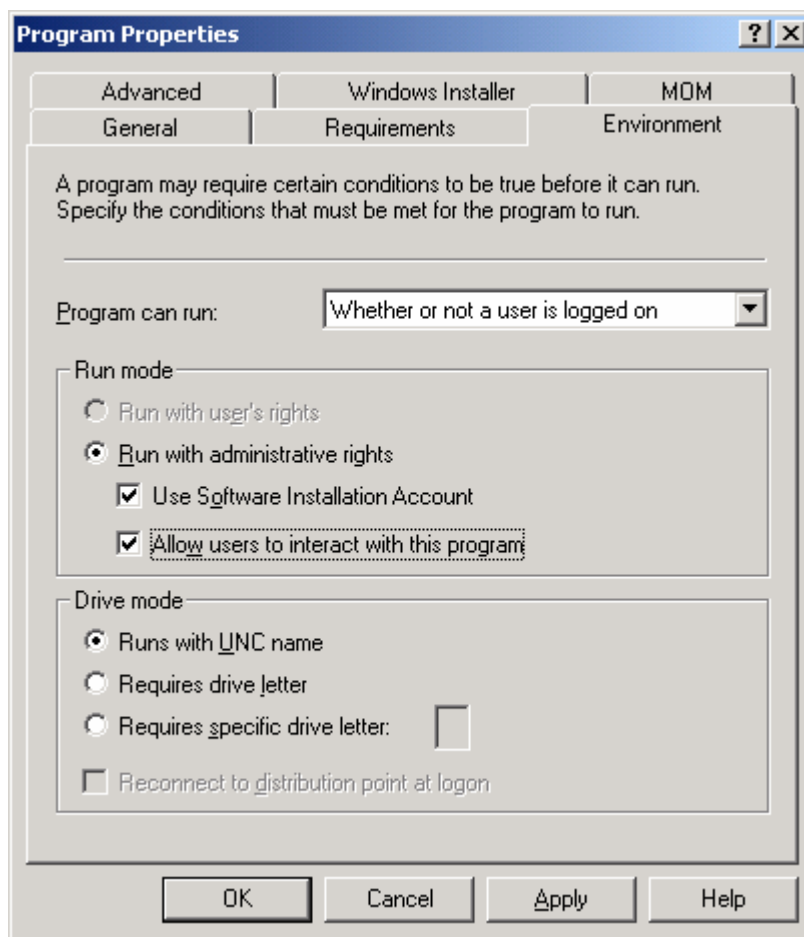
The **Requirements** tab should be treated as “informational” only because the installer portion of TI-Nspire computer software checks and verifies that the install is being performed on a supported platform.



Note: Although the settings on this tab can be modified, recommended practice for this product is to leave them as-is. Checking the **ALL IA64 Windows Server 2003** box, for example, will not allow the product to install on this unsupported platform, and may create confusion later, when trying to determine why a particular installation success or failure occurred.

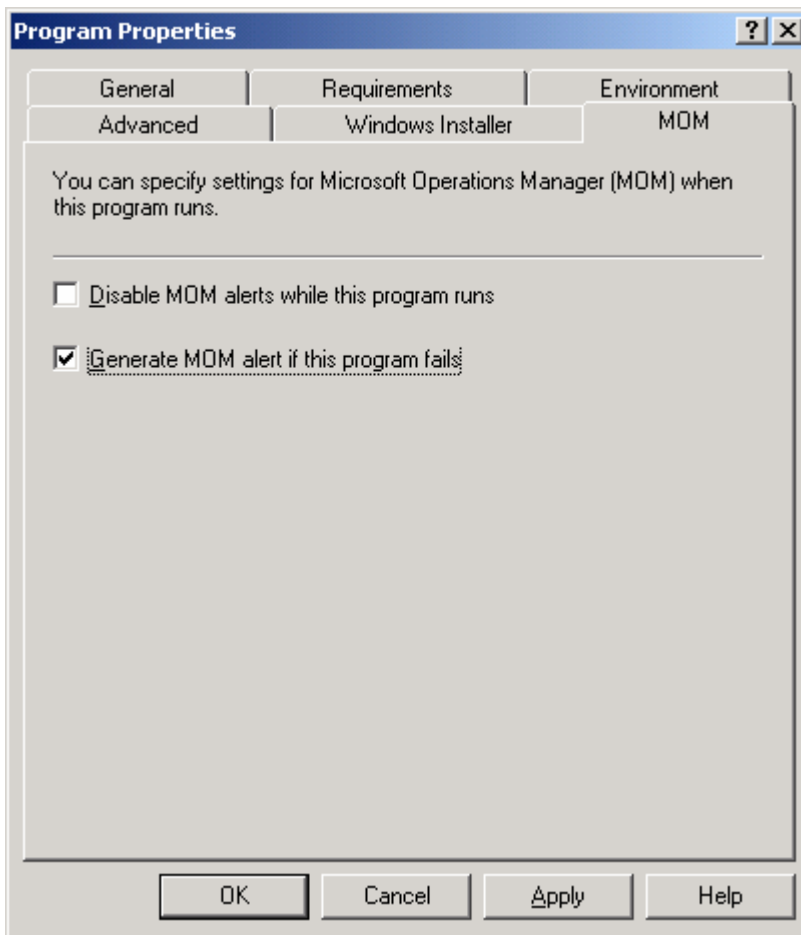
The **Environment** settings are particularly important when setting up a program to install silently or interactively. In silent mode, it shouldn't matter if a user is logged on or off when the installation package runs. This statement is **ONLY** true if the package runs with administrative rights. (either using a Network Software Installation Account or if the software is targeted to a machine account rather than a user account.) If the software administrator chooses to "Run with user's rights" then, in order to successfully install and activate, the logged on user must be a member of the local administrators group.

Finally, Drive mode shouldn't have any issues running via UNC connections as both the installation program and the available deployment.cf file are UNC aware.



We've purposefully skipped over the **Advanced** and **Installer** tabs because the Advanced tab is outside the scope of this type of software installation and the Installer tab is over-ridden by the software installer which, by default, upgrades the local MSI installer to version 3.1 v2.

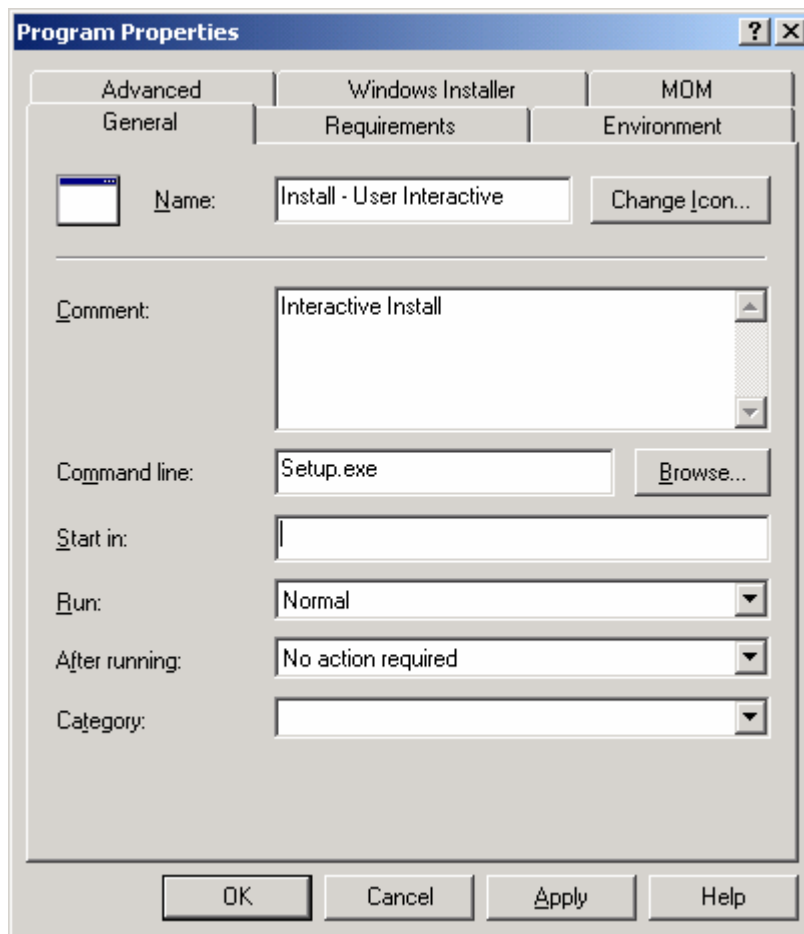
The **MOM** tab (not available in all versions of SMS) allows the configuration of MOM alerts when the program runs and or fails. If MOM is installed and running on your network, the recommendation is to take advantage of its alert response capabilities. If MOM is not available, you should ignore this screen and work with the deployment.cf file to write logs to a network location that can give you real-time access to the success or failure of an installation.



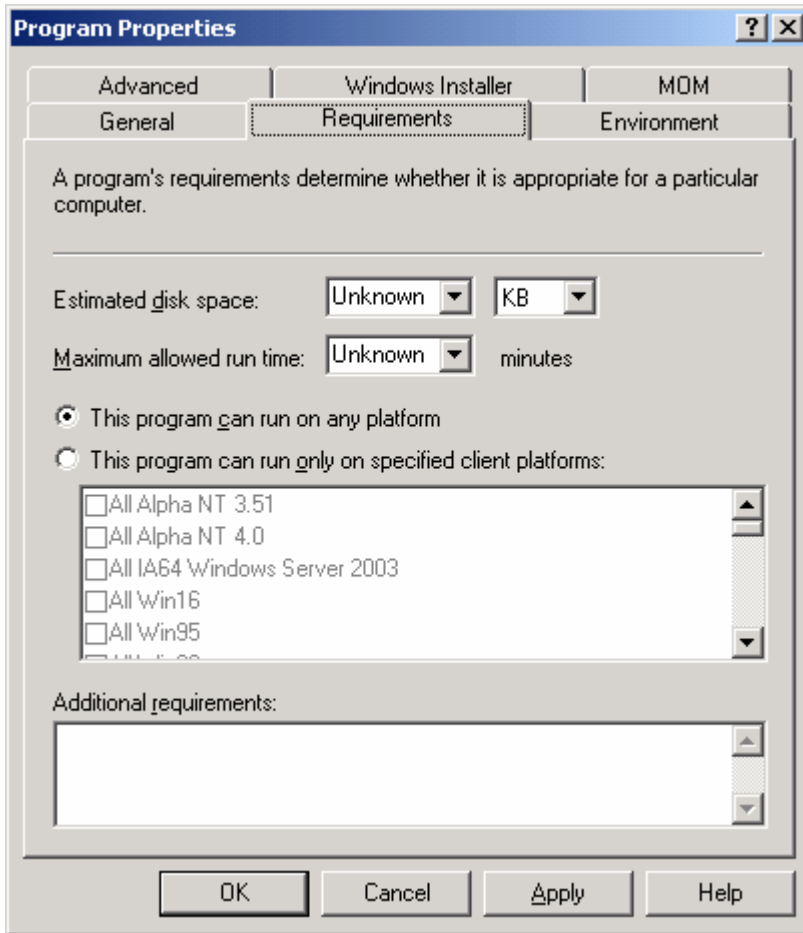
Interactive Installations: Setting up Program Properties in SMS

The second type of installation is the Interactive install. The example below illustrates a program called **Interactive install**.

On the **General** tab, type a name for the installation and in the Command Line place the "setup.exe" argument with no additional switches. This has the effect of making the installation of TI-Nspire interactive. There are ramifications which are further explored in subsequent sections.

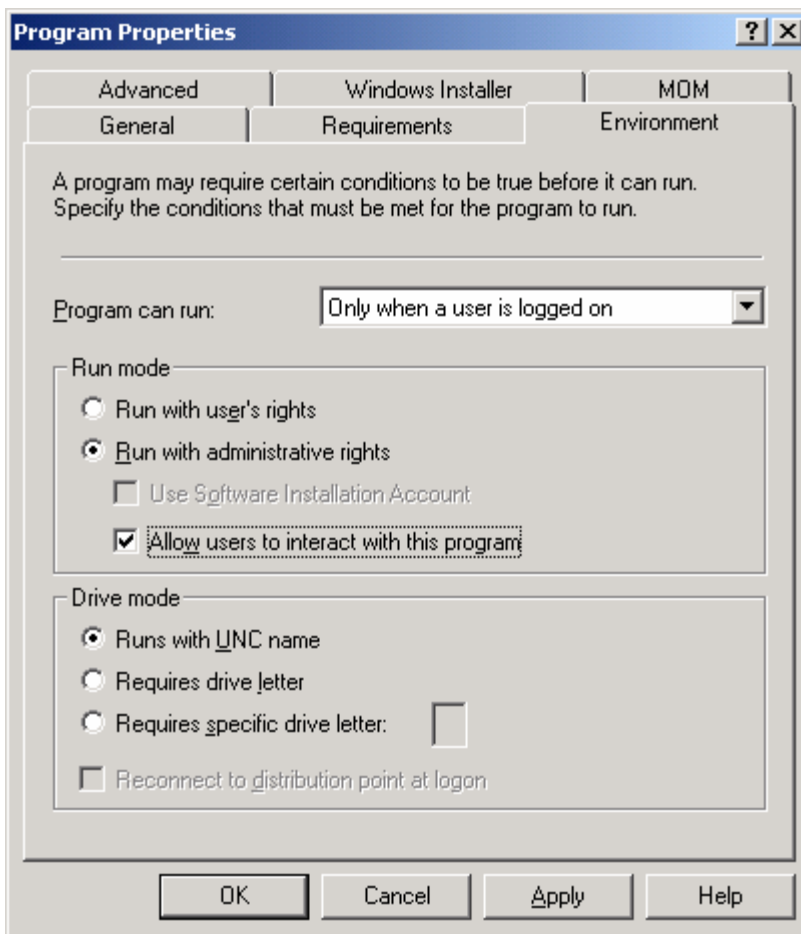


As with the “Silent Activation” example, we recommend leaving these screens blank and allowing the installer logic to identify and install on the correct target platforms.



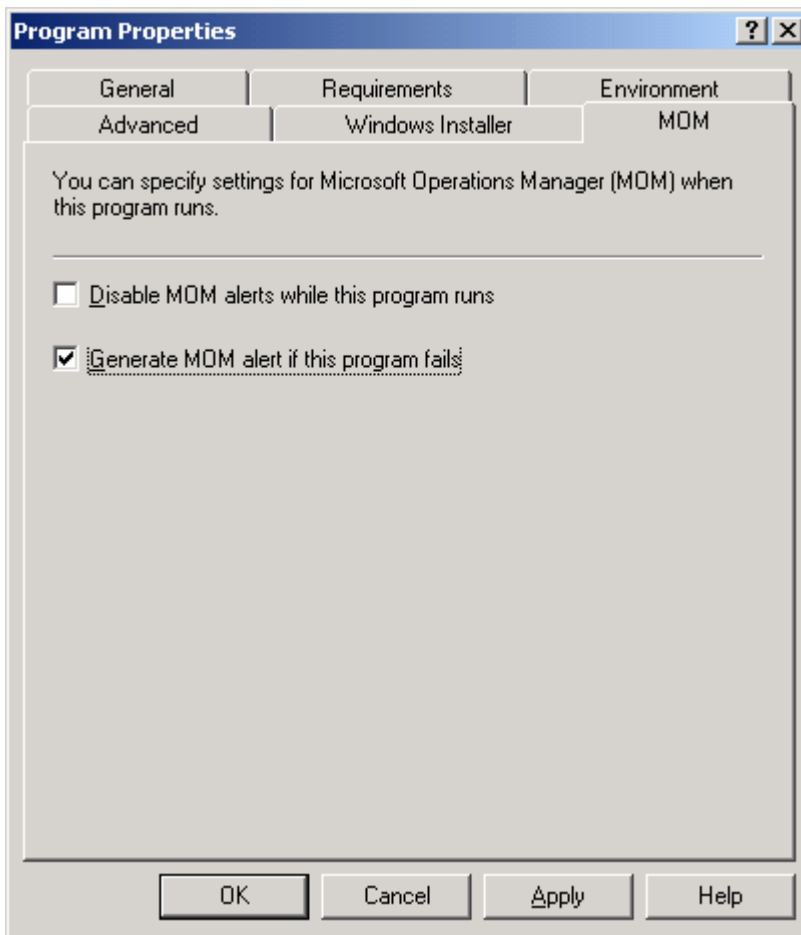
When running an interactive install, it is critical that the Program can only run when a user is logged on. The security rights of the logged on user may also not be known in advance (especially if the software advertisement is being offered to a computer and not a user). In this case, selecting the checkbox "Run with administrative rights" allows the program to install with administrative privileges that are independent of the logged on user.

Running under UNC for drive mode will again be the most likely scenario for most administrators.



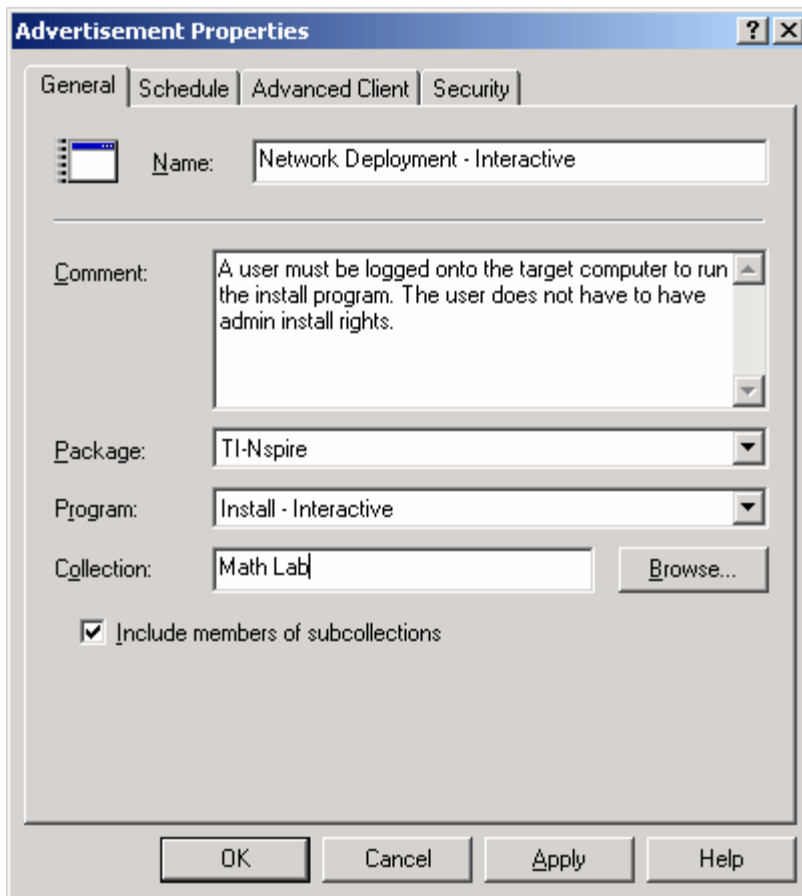
We skip over the **Advanced** and **Windows Installer** tabs for the same reasons as before (Advanced is outside of the scope of this discussion and Windows Installer 3.1 is by default installed during the installation).

The **MOM** tab (not available in all versions of SMS) allows the configuration of MOM alerts when the program runs and or potentially fails. If MOM is installed and running on your network, the recommendation is to take advantage of its alert response capabilities. If MOM is not available, you should ignore this screen and work with the **deployment.cf** file to write logs to a network location that can give you real-time access to the success or failure of a particular installation.



Setting up a software installation Advertisement for Interactive Deployments

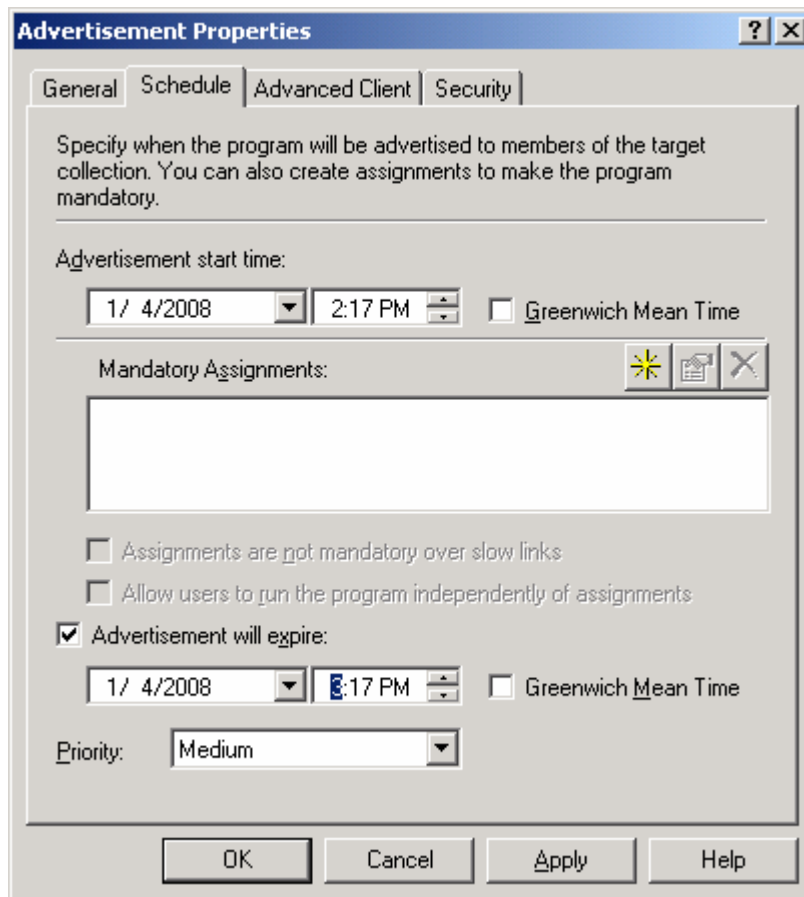
When creating a software advertisement, you should give it a descriptive name and provide comments that will describe why this advertisement was created. The Package must be selected and then a program associated with the package selected. (in our example we only have 2 programs available: Silent and Interactive). Finally, we should choose a predefined collection of computers or users as the target of our advertisement. Because of the licensing schema associated with TI-Nspire, the selection of a predefined collection of computers would be more likely than a collection comprised of users.



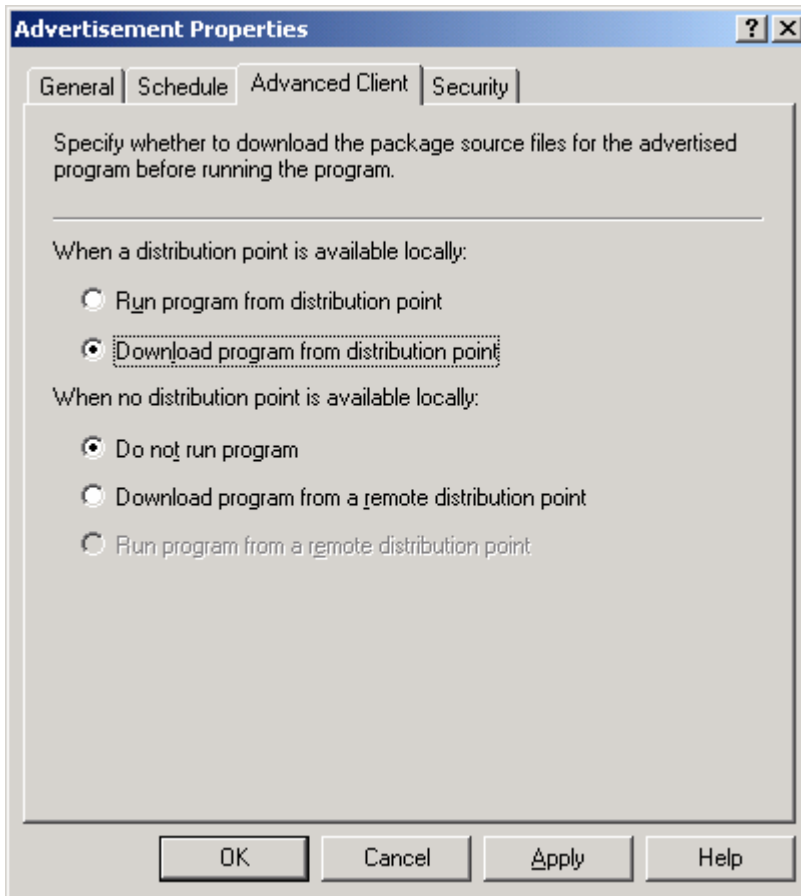
The screenshot shows the "Advertisement Properties" dialog box with the following fields and options:

- General** tab selected.
- Name:** Network Deployment - Interactive
- Comment:** A user must be logged onto the target computer to run the install program. The user does not have to have admin install rights.
- Package:** TI-Nspire
- Program:** Install - Interactive
- Collection:** Math Lab (with a "Browse..." button)
- Include members of subcollections
- Buttons: OK, Cancel, Apply, Help

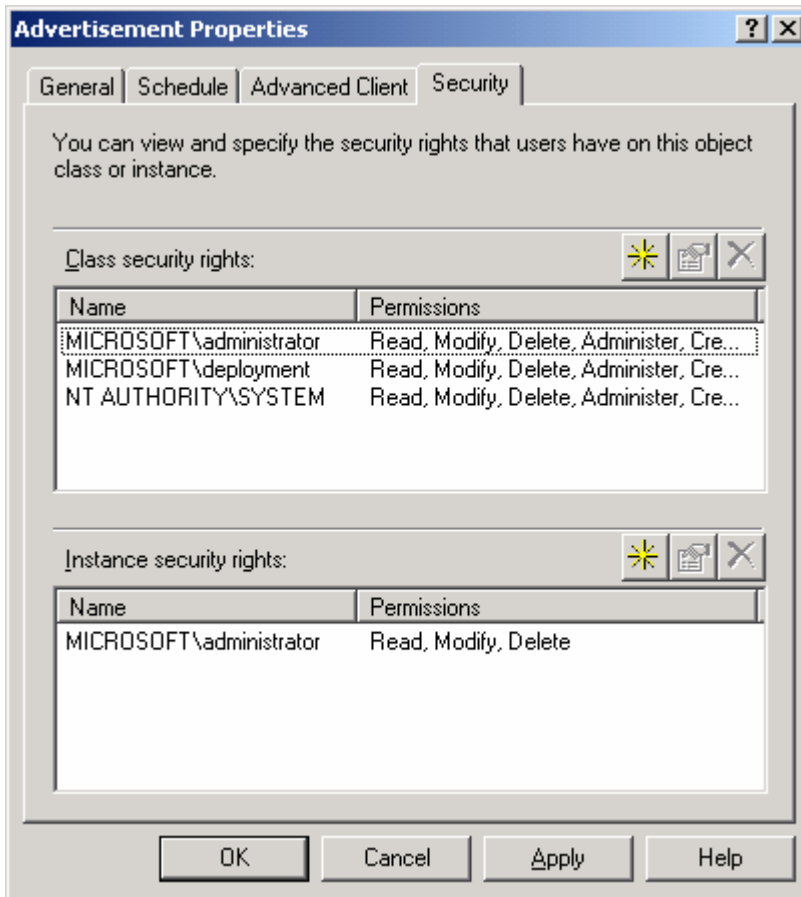
Use the **Schedule** tab to specify a schedule for the Start and Expiration dates and times are established for the software advertisement. For the interactive install, Mandatory Assignments are usually not created.



The **Advanced Client** tab indicates how the SMS advanced client should run the program. Because of its large size (100 plus megabytes) most administrators would choose to download the program from the distribution point to minimize the effect of a large install running across a network. For the same reasons if a local distribution point is unavailable, network administrators may choose not to download the program from a distant network node. The selection choices depend on the design and strengths of the network that the software will be deployed from.

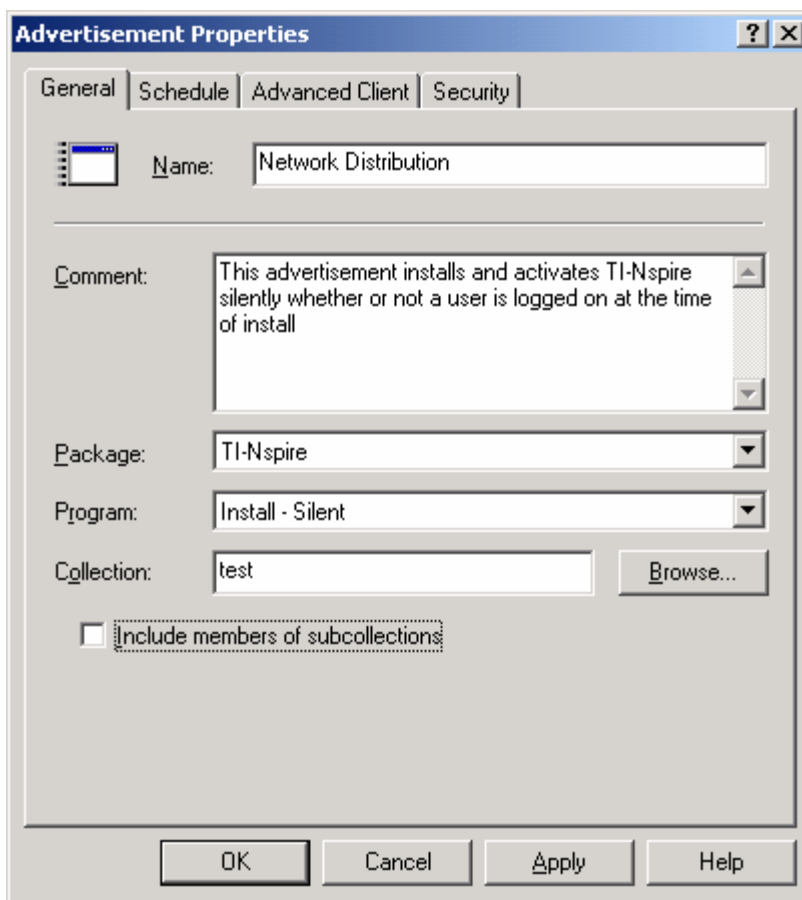


The **Security** tab displays the security instance of the advertisement and the security rights of the object in the targeted collection. Detailed modification and/or explanation of this tab is outside the scope of this particular text.

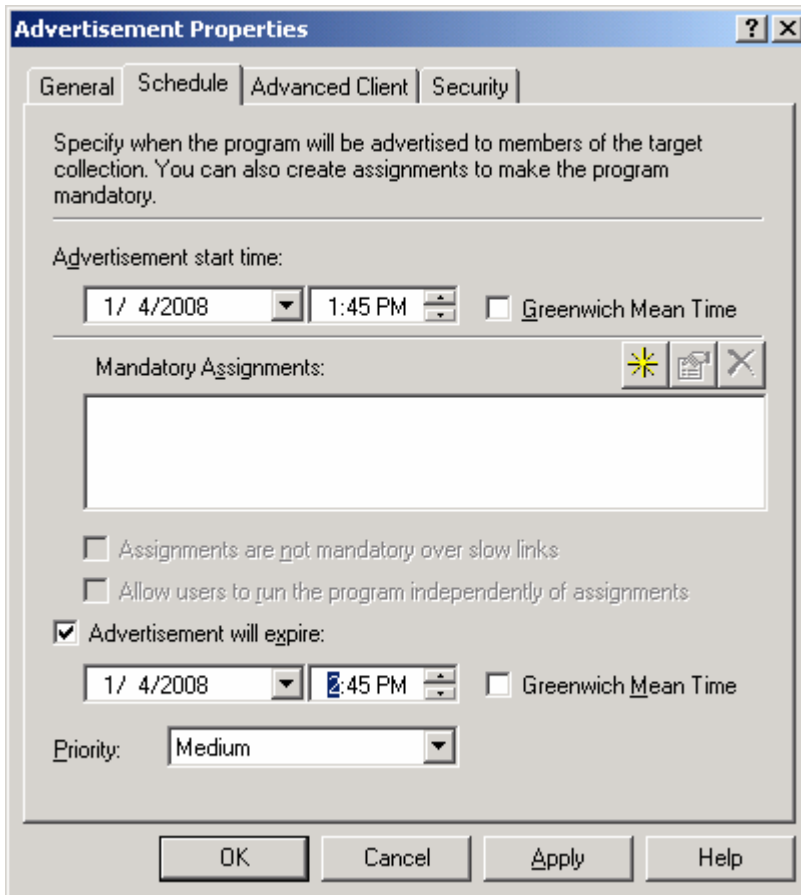


Creating an Advertisement to Silently Deploy and Activate TI-Nspire:

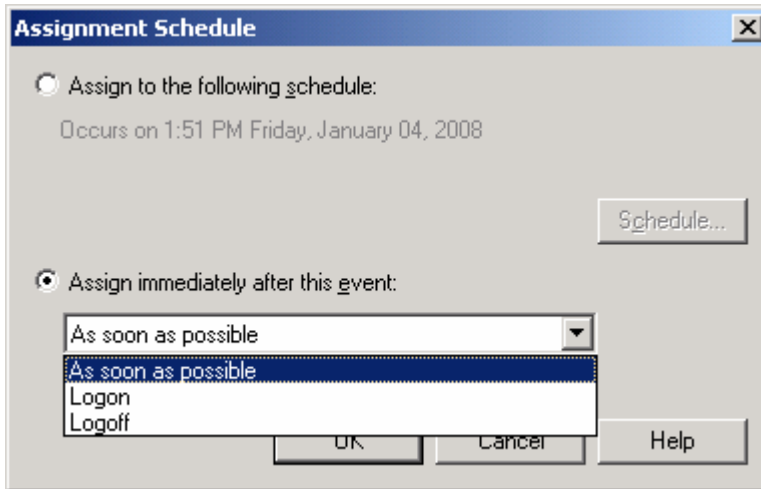
When creating a software advertisement, give it a descriptive name and provide comments that will describe the purpose of this advertisement. The Package must be selected and then a program associated with the package. In the example below, Install-Silent is the selected program. Finally, choose a predefined collection of computers or users as the target of the advertisement. Because of the licensing schema associated with TI-Nspire, selecting a predefined collection of computers would be more likely than a collection comprised of users.



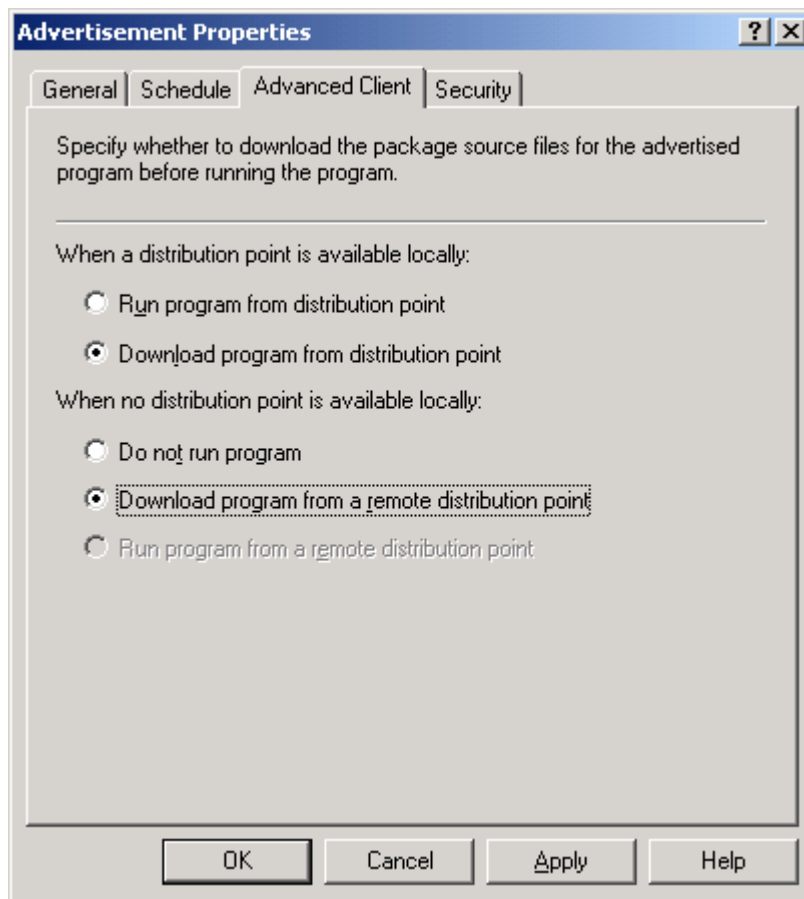
Use the **Schedule** tab to specify a schedule for the Start and Expiration dates and times are established for the software advertisement. For Silent network installations, it is common to create a Mandatory Assignment to ensure that the advertisement is acted upon.



In the example below, the SMS advanced client will act on the advertisement immediately. You can also schedule installations to run after business hours (Assign to the Following Schedule) or schedule the silent install to occur after the computer user logs off (for the day, lunch, etc).



Choices on the **Advanced Client** tab depend on the design and strengths of the network deploying the software. Because of the relatively large size of the TI-Nspire™ software installation executable, (100 plus megabytes) most administrators would choose to download program from a software distribution point to a local cache on the hard drive, and then execute the install process. For others, network bandwidth might easily handle 100mb UMB installations without adversely affecting network performance. Using similar logic on a high-bandwidth network, administrators may choose to download or run the program from a distant network node if the local Distribution Point is unavailable.



Generally, downloading large installs into a local cache and then executing the installation from the local cache is considered the industry standard. The impacts to the setup of TI-Nspire™ software as part of a network deployment package depend greatly on the location the installation process will originate from. Considerations such as network and local security privileges, as well as %working_dir%, should be taken into account when running a TI-Nspire™ deployment from the network, the local hard drive, or some combination of both.

The **Security** tab displays the security instance of the advertisement and the security rights of the object in the targeted collection. For detailed explanation or instructions for modifying security rights, refer to Microsoft® SMS product documentation.

