

# SofTrack<sup>®</sup>

Enterprise Software Audit and Control Platform



## Technical Reference: Deploying the SofTrack MSI Installer

**INTEGRITY**  
*Software*

# Table of Contents

<b>Overview</b> .....	<b>3</b>
Prerequisites .....	3
<b>Component Descriptions</b> .....	<b>3</b>
<b>Deploying the MSI</b> .....	<b>3</b>
<b>Script Method</b> .....	<b>3</b>
Defining Public Properties .....	4
Public Property Tables .....	4
LWASETUP.MSI .....	4
QIASETUP.MSI.....	6
Script Examples.....	6
<b>Transform Files</b> .....	<b>7</b>
Creating a Transform File.....	7
Script Examples .....	8
<b>Automated Deployment Method</b> .....	<b>9</b>
Group Policy Configuration .....	9
Step 1: Configuring a Network Share .....	9
Step 2: Creating an Organizational Unit .....	10
Step 3: Moving Computer Objects .....	10
Step 4: Creating the Group Policy Object.....	11
<b>Upgrading the MSI</b> .....	<b>14</b>
<b>Script Method</b> .....	<b>14</b>
<b>Automated Deployment Method</b> .....	<b>14</b>
Group Policy Configuration .....	14
<b>Making Changes</b> .....	<b>15</b>
<b>Script Method</b> .....	<b>15</b>
<b>Automated Deployment Method</b> .....	<b>16</b>
Group Policy Configuration .....	16
<b>Removing the MSI</b> .....	<b>17</b>
<b>Script Method</b> .....	<b>17</b>
Script Examples.....	17
<b>Automated Deployment Method</b> .....	<b>18</b>
Group Policy Configuration .....	18
<b>Troubleshooting</b> .....	<b>19</b>
<b>Event Log Error Messages</b> .....	<b>19</b>
<b>Windows Error Messages</b> .....	<b>19</b>
<b>Contacting Technical Support</b> .....	<b>20</b>
<b>Online Links</b> .....	<b>20</b>

# Overview

SofTrack utilizes the Local Workstation Agent (LWA) and the Quick Inventory Agent (QIA) to gather audit, metering, and inventory data from each client workstation. This guide was developed to assist LAN administrators in becoming familiar with the different deployment methods available when utilizing either of the SofTrack MSI installer package. We recommend that this guide be reviewed in its' entirety before proceeding with any deployment steps.

**Before you begin:** The SofTrack MSI installer package was created using Windows Installer technology made available by Microsoft Corporation. Every effort has been made to follow best practices related to the implementation of this technology. If any issues should occur as a result of limitations and/or known issues with the Windows Installer, support inquires should be directed to Microsoft Technical Support. Integrity Software is unable to provide support for issues related to Windows Installer, and/or environmental problems including the proper configuration of Active Directory and Group Policy. If after reviewing this guide you are unclear about the appropriate steps to proceed with your deployment, we highly recommend contacting a qualified IT professional and/or a Microsoft Certified consultant.

## Prerequisites

This document presumes the following:

- Familiarization with deployment strategies and best practices.
- Familiarization with third-party deployment tools (*if required*).
- Familiarization with your network topology.

And when using the Group Policy Object (GPO) deployment method:

- Familiarization with Windows 2000/2003 Active Directory administration.
- Familiarization with Group Policy Object implementation and administration.
- The target workstations must be members of the Active Directory Domain.
- The target workstations must have Windows 2000 Professional or above installed.
- The target workstations have the current version of the MSI installer installed.

## Component Descriptions

- **LWASETUP.MSI** – This file contains the logic to install **both** the SofTrack Local Workstation Agent and Quick Inventory Agent components on to the target workstation.
- **QIASETUP.MSI** – This file contains the logic to install **only** the Quick Inventory Agent components on to the target workstation.

## Deploying the MSI

Deployment of the LWA can be performed by utilizing 1) a Script, 2) Group Policy Deployment, or 3) third-party deployment tools. The first two of these methods are described in this guide. Please also note that deployment methods are not interchangeable. For example, if you originally deploy the MSI using a Group Policy Object, you should not use the script method to perform an upgrade.

### Script Method

The process of deployment via a script is accomplished by passing appropriate parameters to the Windows Installer (MSIEXEC.EXE). This method may be used by administrators who do not utilize Active Directory or other third-party deployment tools, but wish to automate the installation process.

The MSI package contains several public properties (or variables) that are normally modified through the use of dialogs when the package is launched manually, however, it is recommended that these properties be pre-defined when the MSI is deployed using an automated method. These properties can be defined directly, or through the use of a transform file (see [“Creating a Transform File”](#)).

**Note:** While pre-defining variables is not required, it is recommended to prevent the end user from being able to enter their own settings if you deploy the MSI to the end-user with the GUI dialogs visible.

## Defining Public Properties

Public properties are defined within a script by specifying the property name, an equals (=) sign, and then the corresponding value. For example:

**SERVERNAME=INTEGRITY-2K**

Multiple properties can also be defined with a command. This is performed by specifying each property, one after the other, with a single space in-between each entry. For example:

**SERVERNAME=INTEGRITY-2K SSATYPE=1 INVINTERVAL=1**

**Tip:** It is not necessary to pre-define properties unless the default value is being changed. For example, an administrator would not define “SSATYPE=0” if the LWA is going to be targeting a Windows-based SofTrack Server Agent (SSA). The **SSATYPE** property (see [“Public Property Tables”](#)) is set to a value of zero (0) [Windows Server] by default.

## Public Property Tables

The following are the public properties (and descriptions) recognized by the SofTrack Local Workstation Agent (LWA) and SofTrack Quick Inventory Agent (QIA) MSI installer packages. These properties can be pre-defined by specifying them within a script (see [“Defining Public Properties”](#)), or through the use of a transform file (see [“Creating a Transform File”](#)).

### LWASETUP.MSI

Property Name	Default Value	Available Values	Description
<b>SERVERNAME</b>	<blank>	The name of the target server.	Defines the name of the server hosting the SofTrack Server Agent.
<b>SSATYPE</b>	0	0 = Windows 1 = NetWare	Defines the Operating System platform of the server hosting the SofTrack Server Agent.
<b>ENABLELD</b>	1	0 = Disabled 1 = Enabled	Enables or disables the “Load Delay” feature, and is used in conjunction with the <b>LOADDELAY</b> property.  See Chapter 3 of the SofTrack Administrator’s Guide for more information on the “Load Delay” feature.
<b>LOADDELAY</b>	30	30 Seconds 60 Seconds 90 Seconds 120 Seconds	Defines the “Load Delay” interval in seconds, and is used in conjunction with the <b>ENABLELD</b> property. This property will be ignored if the <b>ENABLELD</b> property is set to zero (0).
<b>INSTALLSTUSER</b>	0	0 = Disabled 1 = Enabled	Enables or disables the installation of the STUSER utility.  See Chapter 8 of the SofTrack Administrator’s Guide for more information on the STUSER feature.

<b>INVINTERVAL</b>	0	0 = At LWA Service Start (Boot) 1 = At LWA Service Start and daily at <u>INVTIME</u> .	Defines the interval at which an inventory should be gathered from the workstation, and is used in conjunction with the <u>INVTIME</u> and <u>NOQIA</u> properties. This property will be ignored if the <u>NOQIA</u> property is set to one (1).
<b>INVTIME</b>	12	00 = 12:00 AM 01 = 1:00 AM 02 = 2:00 AM 03 = 3:00 AM 04 = 4:00 AM 05 = 5:00 AM 06 = 6:00 AM 07 = 7:00 AM 08 = 8:00 AM 09 = 9:00 AM 10 = 10:00 AM 11 = 11:00 AM 12 = 12:00 PM 13 = 1:00 PM 14 = 2:00 PM 15 = 3:00 PM 16 = 4:00 PM 17 = 5:00 PM 18 = 6:00 PM 19 = 7:00 PM 20 = 8:00 PM 21 = 9:00 PM 22 = 10:00 PM 23 = 11:00 PM	Defines the time of day at which a daily inventory from the client workstation should be gathered, and is used in conjunction with the <u>INVINTERVAL</u> and <u>NOQIA</u> properties. This property will be ignored if the <u>INVINTERVAL</u> property is set to zero (0), or the <u>NOQIA</u> property is set to one (1).
<b>LOCALREMOTE</b>	1	0 = Local Only 1 = Local and Remote	Defines "Local" or "Local and Remote" metering. When this feature is set to "Local", the Local Workstation Agent will only monitor executables that reside locally. When this feature is set to "Local and Remote", the Local Workstation Agent will monitor executables both locally and from the network.
<b>WAITFOREVER</b>	0	0 = Disabled 1 = Enabled	Enables or disables the "Wait Forever" option.  For more information regarding the "Wait Forever" feature, please refer to the README.TXT file included within <b>Install.LWA.and.QIA</b> directory of the product distribution.
<b>BUILDERROR</b>	0	0 = Enabled 1 = Disabled	Enables or disables the "build error", and may be used in conjunction with the <u>WAITFOREVER</u> property.  The build error is a dialog that appears to the end user when the LWA is unable to contact the SSA.
<b>USENDSNAME</b>	1	0 = Disabled 1 = Enabled	Defines whether the NDS or Windows user name should be passed when transmitted user audit data (i.e., "user.context" or "USER"), and is used in conjunction with the <u>SSATYPE</u> property. This property will be ignored if the <u>SSATYPE</u> property is set to zero (0).
<b>NOQIA</b>	0	0 = Disabled 1 = Enabled	Defines whether or not Quick Inventory Agent components should be installed on the client workstation.  If the QIA components are not installed, and inventory will not be gathered from the client workstation.

## QIASETUP.MSI

Property Name	Default Value	Available Values	Description
<b>SERVERNAME</b>	<blank>	The name of the target server.	Defines the target name of the server hosting the SofTrack Server Agent.
<b>INVINTERVAL</b>	0	0 = At LWA Service Start (Boot) 1 = At LWA Service Start and daily at <u>INVTIME</u> .	Defines the interval at which an inventory should be gathered from the workstation, and is used in conjunction with the <u>INVTIME</u> property.
<b>INVTIME</b>	12	00 = 12:00 AM 01 = 1:00 AM 02 = 2:00 AM 03 = 3:00 AM 04 = 4:00 AM 05 = 5:00 AM 06 = 6:00 AM 07 = 7:00 AM 08 = 8:00 AM 09 = 9:00 AM 10 = 10:00 AM 11 = 11:00 AM 12 = 12:00 PM 13 = 1:00 PM 14 = 2:00 PM 15 = 3:00 PM 16 = 4:00 PM 17 = 5:00 PM 18 = 6:00 PM 19 = 7:00 PM 20 = 8:00 PM 21 = 9:00 PM 22 = 10:00 PM 23 = 11:00 PM	Defines the time of day at which a daily inventory from the client workstation should be gathered, and is used in conjunction with the <u>INVINTERVAL</u> property. This property will be ignored if the <u>INVINTERVAL</u> property is set to zero (0).

## Script Examples

The following are examples of how to perform various installations using a script.

**Scenario 1:** The administrator wishes to configure the LWA to target a server named SOFTRACK. The server has Novell NetWare loaded, and the administrator also wants to install the STUSER utility on the client workstation.

The proper command syntax would be:

***MSIEXEC /i<path to MSI>LWAsSetup.MSI SERVERNAME=SOFTRACK SSATYPE=1 INSTALLSTUSER=1***

**Scenario 2:** The administrator wishes to configure the LWA to target a server named BRIAN, the server has Microsoft Windows loaded, and the administrator wants the inventory to be gathered both on startup and at 11:00 AM daily.

The proper command syntax would be:

***MSIEXEC /i<path to MSI>LWAsSetup.MSI SERVERNAME=BRIAN INVINTERVAL=1 INVTIME=11***

**Scenario 3:** The administrator wishes to configure the LWA to target a server named INTEGRITY. The server has Microsoft Windows loaded, and the administrator wants the inventory to be gathered both on startup and at 10:00 AM daily. The administrator also wants to suppress the GUI dialogs, and force the workstation to NOT reboot after completing the installation.

The proper command syntax would be:

**MSIEXEC /i<path to MSI>LWAssetup.MSI SERVERNAME=INTEGRITY INVINTERVAL=1 INVTIME=10 /passive /norestart**

**Tip:** The “/passive” and “/norestart” switches are specific to “MSIEXEC.EXE”, not the SofTrack MSI installer packages. Additional switches specific to MSIEXEC can be reviewed by executing the following from a command-line: **MSIEXEC /?**

## Transform Files

As an alternative to specifying individual properties within a script, an administrator can make use of a [Microsoft] transform file (MST). When using a transform file, property values are stored within the transform file, and then used to modify default values when launched together with the MSI installer package; a transform file is a kind of overlay.

## Creating a Transform File

Creating the transform file is a process which requires the use of a utility that can create or modify a transform file. In the following example, we make use of a free Microsoft tool called “ORCA”. This tool is available as part of the Microsoft Platform SDK tool package.

**Note:** Please note that the SDK is a large multi-part download, and will require multiple files to be obtained before ORCA can be installed. ORCA is NOT installed automatically when installing the SDK. After installing the SDK, search for “ORCA.MSI”, and double-click to install the utility.

1. Open the LWASETUP.MSI or QIASETUP.MSI file for editing from within ORCA by clicking **File**, then **Open**.
2. Once the MSI has been loaded, select the **Property** table in the left-hand column (see Figure 1.0).

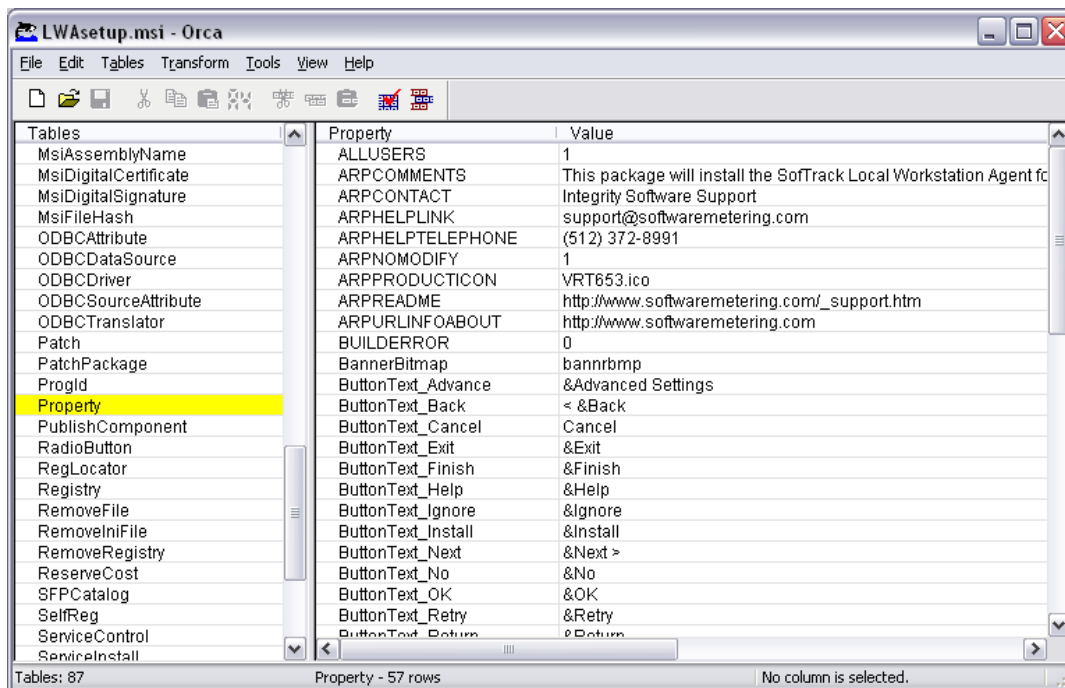


Figure 1.0

- Next, select the **Transform** menu, and then the **New Transform** menu option. The title bar of ORCA should change to read “*LWAsSetup.MSI (transformed by Untitled)*”.
- Within the **Property** table, locate the property you wish to modify in the right-hand column, and double-click the value.

**Note:** If you are defining the **SERVERNAME** property, it will need to first be created; there is no pre-existing entry for this variable. A new property is defined by 1) creating a new line within the Property table, 2) defining the property name in the Property column, and 3) defining the value in the value column.

- Change the **value** to the new setting (see “[Public Property Tables](#)”). When the value has been changed, press **Enter**. The value will now be outlined in green (see Figure 1.1).

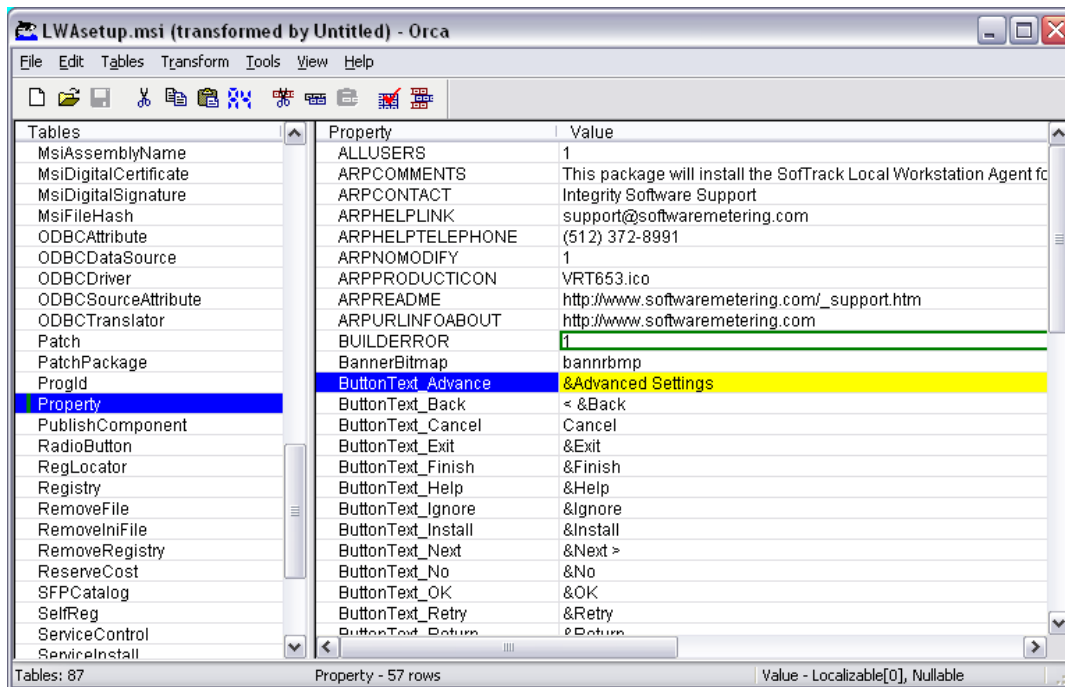


Figure 1.1

- Once the necessary changes have been made, select the **Transform** menu, and then **Generate Transform**. The “Save Transform As” dialog should appear.
- Save** the transform file to the appropriate location on your workstation, and **close** ORCA.

## Script Examples

Once a transform file has been created, it can be used with both the automated deployment method and the script method. When defining a transform file within a script, it is called by specifying the word “TRANSFORMS” (sans quotes), an equals (=) symbol, and then the transform filename. For example:

**TRANSFORMS=INTEGRITY-2K.MST**

It is also possible to define both a transform file and a property together on the same line. For example:

**SERVERNAME=INTEGRITY-2K TRANSFORMS=SETTINGS.MST**

## Automated Deployment Method

Administrators can utilize Active Directory or other third-party deployment tools to deploy the SofTrack MSI installer packages.

**Note:** Deployment of the SofTrack MSI packages using Active Directory requires an “Advanced” deployment and use of a transform file (see “[Creating a Transform File](#)”). It is also recommended that the MSI be deployed at a “Computer level”, not a “User Level” to ensure proper installation of SofTrack components; the MSI creates a SYSTEM -level service, which requires Administrative rights on the workstation.

If a third-party deployment tool will be utilized to deploy the MSI, please make note of any special procedures related to the deployment tool.

## Group Policy Configuration

The following is a step-by-step process of creating a **TEST** deployment using a Group Policy Object in Active Directory, and include procedures for Windows 2000 Server, as well as Windows 2003 Server both with the Group Policy Management Console (GPMC) installed and not installed. Please be sure to choose the appropriate method while proceeding.

**Before you begin:** If you are uncertain of Active Directory and configuration practices, we highly recommend contacting a qualified IT professional and/or a Microsoft Certified consultant before proceeding with the following steps. Improper configuration of an Active Directory deployment could lead to a failed deployment, and require extensive efforts to correct any issues. It is also recommended that any deployment be tested first in a non-production environment to ensure that it will function correctly.

## Step 1: Configuring a Network Share

In order for the MSI to be successfully installed on the remote client workstation, it **must** be placed on a network share. Sufficient rights are also required for the client workstation to be able to read the installer file.

1. **Select** a network server to host the MSI installer and transform files. This server does not need to be a Domain Controller. **Access** the console of the server, either remotely using Remote Desktop or physically.
2. **Create** a NEW folder to host the MSI installer package.

**Note:** If a network share already exists that you would like to use, copy the MSI installer and transform file to the share and ensure that the share has the appropriate share permissions applied.

3. After creating the new folder, **Open** the folder properties and select the **Sharing** tab.
4. Select the **Share this folder**, and type a name for the network share. Select the **Permissions** button.
5. Click the **Add** button, and add the following users/user groups. **Apply** the permissions to each item in the following order:
  - **Domain Admins:** Full Control
  - **Domain Computers:** Read
  - **SYSTEM:** Read

**Note:** On Windows 2000 servers, you may need to also verify that NTFS permissions match those listed above.

- Click the **OK** button twice to apply the new settings.
- Locate** the appropriate MSI installer package from either the **Install.LWA.and.QIA** or **Install.QIA.only** directory of the product distribution, and **copy** the appropriate MSI installer package to the new network share you have just created.

**Tip:** Record the UNC path (i.e.: \\SERVERNAME\SHARE\) location of this network share for use later in this guide.

## Step 2: Creating an Organizational Unit

- Access** the console of your Domain Controller, either remotely via Remote Desktop or physically. Open **Administrative Tools**, and select **Active Directory Users and Computers**.
- Right-Click** the top of the domain tree. Select **New**, and then **Organizational Unit**. The “New Object – Organizational Unit” dialog will appear on your screen (see figure 1.2).

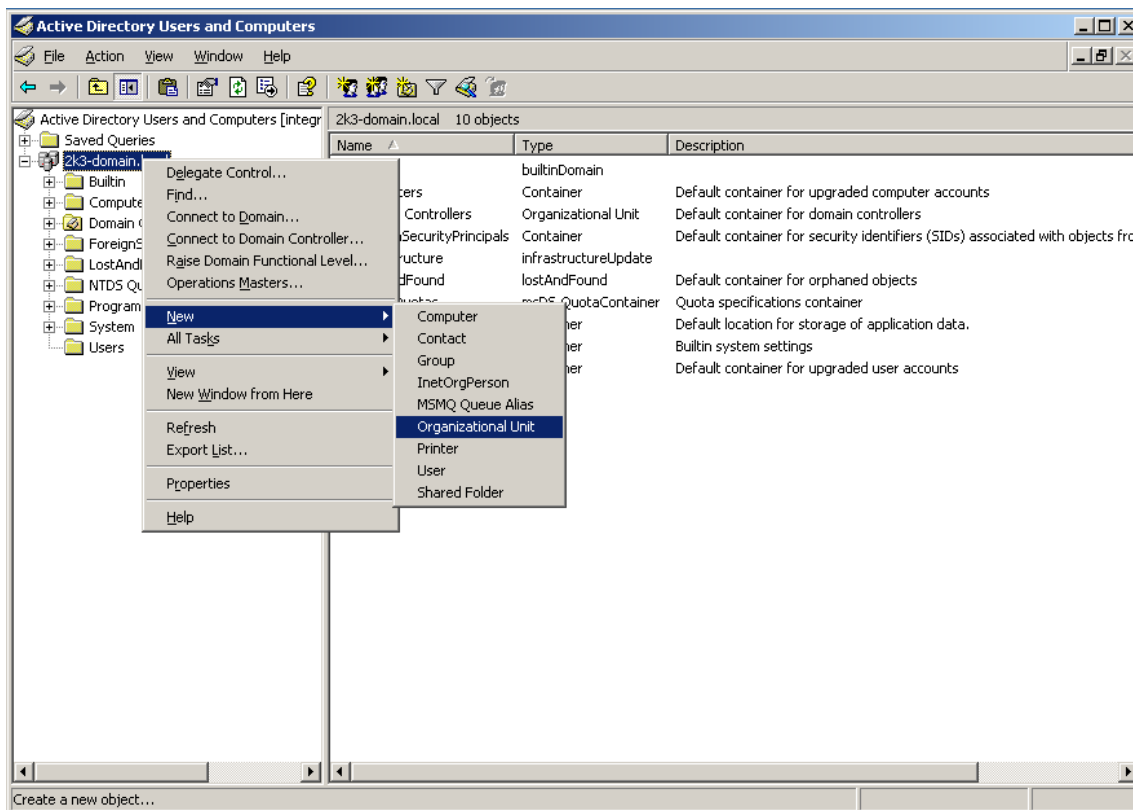


Figure 1.2

- Type** an appropriate name for the new Organizational Unit, and click **OK**. You should now see the new Organizational Unit within Active Directory Users and Computers.

## Step 3: Moving Computer Objects

**Tip:** If you have multiple domain controllers in your environment, you may receive errors when attempting the next few steps (see “[Troubleshooting](#)”).

After creating an Organizational Unit, it will need to be populated with computer objects. The computer objects will need to be either 1) moved from another location, or 2) manually created. The following instructions highlight the procedure for moving an **existing** computer object to the new Organizational Unit.

1. **Access** the console of your Domain Controller, either remotely via Remote Desktop or physically. Open **Administrative Tools**, and select **Active Directory Users and Computers**.
2. **Locate** an existing **COMPUTER** object by browsing to the appropriate location. By default, COMPUTER objects are stored within the “Computers” folder. **Right-click** the computer object and select **Move** (see figure 1.3).

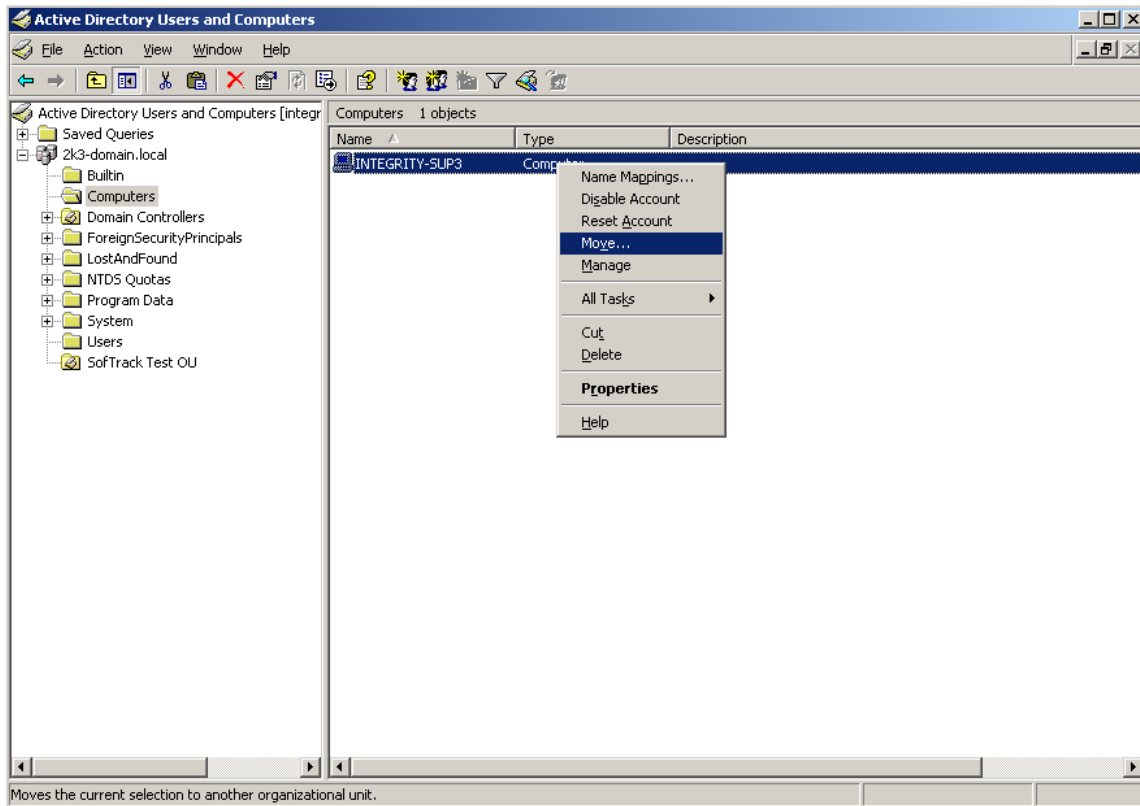


Figure 1.3

3. The “Move” dialog box will appear on your screen. **Select** the new Organization Unit, and click **OK**. Once the computer object has been moved, it will appear under the new Organizational Unit.

#### Step 4: Creating the Group Policy Object

1. **Access** the console of your Domain Controller, either remotely via Remote Desktop or physically. Proceed with one of the following:
  - Windows 2003 with the GPMC: Open **Administrative Tools**, and select **Group Policy Management**.
  - Windows 2000/2003 without the GPMC: Open **Administrative Tools**, and select **Active Directory Users and Computers**.
2. **Right-click** the new Organizational Unit. Proceed with the one of following:
  - Windows 2003 with the GPMC: Select **Create and Link a GPO Here**. Enter an appropriate name for the Group Policy Object, and click **OK**. **Right-click** the new GPO in the right-hand window pane, and select **Edit**. The “Group Policy Object Editor” dialog should appear.
  - Windows 2000/2003 without the GPMC: Select **Properties**, and then the **Group Policy** tab. Click **New**, and then enter an appropriate name for the Group Policy Object. Click **OK**. The “Group Policy Object Editor” dialog should appear.

- In the Group Policy Object Editor dialog, expand **Computer Configuration**, select **Software Settings**, and then select **Software Installation**. **Right-click** in the right-hand window pane. Select **New**, and then **Package** (see figure 1.4). The “Open” dialog should appear.

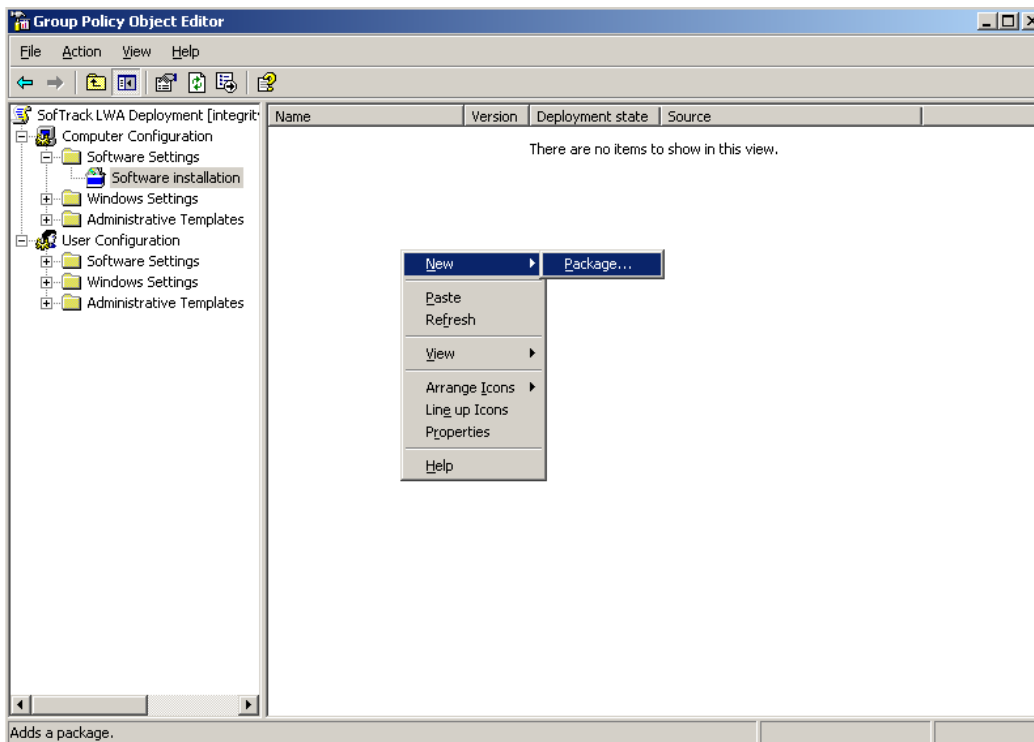


Figure 1.4

- In the **left-hand** corner of the dialog select **My Network Places**. Browse to the network share hosting the MSI installer package, and select the MSI file. Click **Open**. The “Deploy Software” dialog box should appear.

**Note:** **NOT** using an UNC path will result in an error being displayed about the location of the MSI file. This may also cause the MSI deployment to fail.

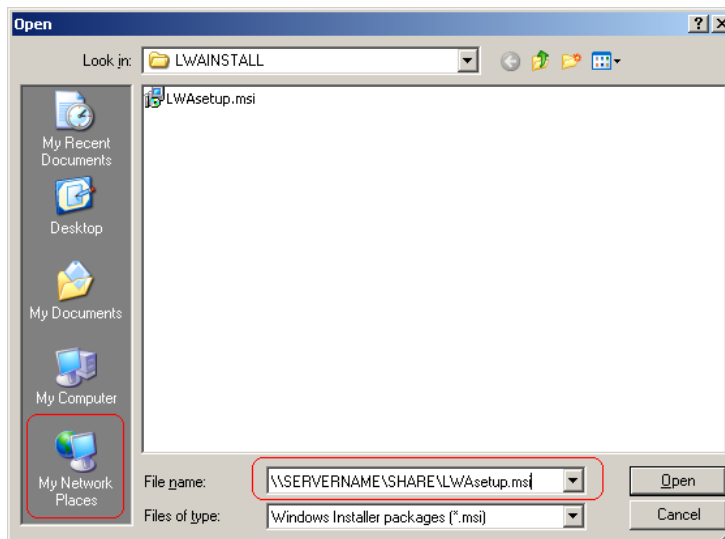


Figure 1.5

5. Select **Advanced**, and click **OK** (see figure 1.6). The “SofTrack Agent for Windows” properties dialog should appear.

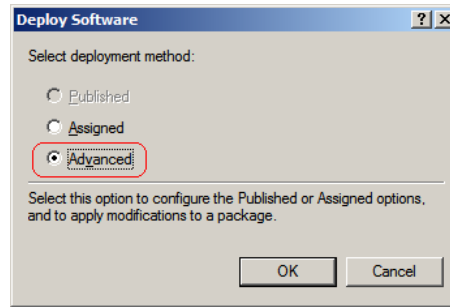


Figure 1.6

6. Select the **Modifications** tab, and click **Add** (see figure 1.7). The “Open” dialog should appear.

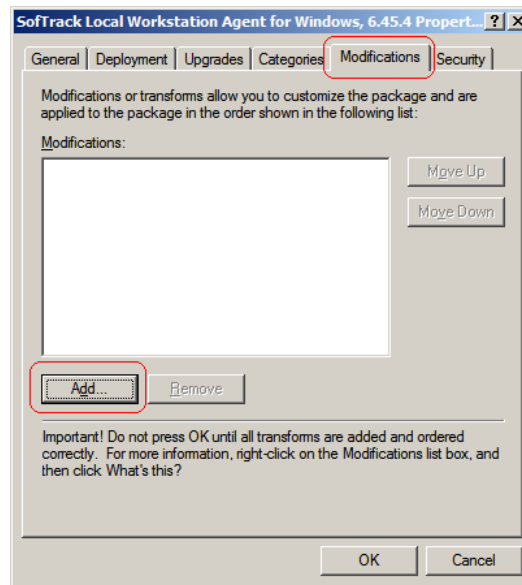


Figure 1.7

7. **Select** the appropriate transform (MST) file that contains pre-defined values for the SofTrack MSI installation package (see figure 1.8). Click **Open**. The transform (MST) file should now appear under the Modifications tab. Click **OK** to return to the “Group Policy Object Editor” dialog.

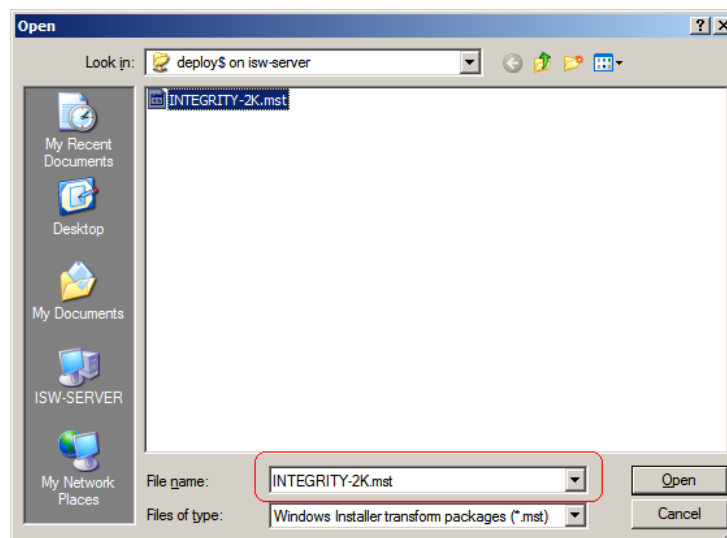


Figure 1.8

8. The MSI installation package should now appear within the “Group Policy Object Editor” dialog. The deployment procedure is now complete. In order for the deployment to take effect on client workstations that reside within the Organizational Unit, they must be restarted.

**Note:** If the creation of the SofTrack LWA deployment is successful, you should see the message “Installing managed application: SofTrack Local Workstation Agent for Windows” or similar appear in the Windows startup dialog on the client workstation.

**Tip:** If the deployment appears to take place, but the MSI is not properly installed, check the target workstations’ event log. The MSI is designed to record specific event log entries in the Application Log if a configuration issue has occurred. In addition, “Software Deployment” event log entries may exist on the Domain Controller.

## Upgrading the MSI

Upgrading the MSI is very similar to performing a new deployment. When performing an upgrade, the same method used to originally deploy the MSI should be used. If a transform file was created to install the MSI, the same transform file can be used again with the new MSI package.

**Note:** The SofTrack MSI installer now also provides support for automatically upgrading a previous "manual" installation of the LWA, and no longer requires that a "manual method" installation be removed prior to deploying the MSI. More information regarding the manual installation method can be found in the SofTrack Administrator’s Guide.

## Script Method

Upgrading an MSI installation that was originally performed using the script method can typically be achieved by replacing the original MSI in the deployment path with the latest version, and then using the original deployment script (see [“Deploying the MSI - Script Examples”](#)).

## Automated Deployment Method

Upgrading the MSI installation using a Group Policy Object or third-party deployment tools can typically be achieved by replacing the original MSI in the deployment path with the latest version, and then instructing the deployment tool to redistribute the MSI package. Detailed step-by-step instructions for the Group Policy Object deployment method are provided below.

If a third-party deployment tool was utilized to deploy the MSI, please make note of any special procedures related to the deployment tool.

## Group Policy Configuration

When updates to the SofTrack LWA are released, obtain the latest SofTrack distribution from our web site, and extract it. Locate the appropriate MSI installer package within either the **Install.LWA.and.QIA** or **Install.QIA.only** directory of the product distribution, and proceed with the following:

1. **Locate** the path of the LWASETUP.MSI or QIASETUP.MSI file originally used to perform the deployment.
2. **Rename** the new LWASETUP.MSI or QIASETUP.MSI to a different filename (ex: “LWA\_date.MSI” or “QIA\_date.MSI”), and **copy** it into the deployment path. Do not overwrite or remove the original MSI file.

3. **Access** the console of your Domain Controller, either remotely via Remote Desktop or physically. Proceed with one of the following:
  - Windows 2003 with the GPMC: Open **Administrative Tools**, and select **Group Policy Management**.
  - Windows 2000/2003 without the GPMC: Open **Administrative Tools**, and select **Active Directory Users and Computers**.
4. **Locate** the appropriate Organizational Unit. Proceed with one of the following:
  - Windows 2003 with the GPMC: **Double-click** the appropriate Organizational Unit to expand it. **Right-click** the appropriate Group Policy Object, and then select **Edit**. The “Group Policy Object Editor” dialog should appear.
  - Windows 2000/2003 without the GPMC: Select **Properties**, and then the **Group Policy** tab. Click to **highlight** the appropriate Group Policy Object, and click **Edit**. The “Group Policy Object Editor” dialog should appear.
5. In the Group Policy Object Editor dialog, expand **Computer Configuration**, select **Software Settings**, and then select **Software Installation**. **Right-click** in the right-hand window pane. Select **New**, and then **Package** (see figure 1.4). The “Open” dialog should appear.
6. **Add** the new MSI package renamed in step 2, and click **Open**. The “Deploy Software” dialog should appear.
7. Select **Advanced**, and click **OK** (see figure 1.6 above). The “SofTrack Agent for Windows” properties dialog should appear.
8. Select the **Modifications** tab, and click **Add** (see figure 1.7 above). The “Open” dialog should appear.
9. **Select** the original transform (MST) file that was used to deploy the old MSI installation package, and then click **Open**. The transform (MST) file should now appear under the Modifications tab.
10. Select the **Upgrades** tab. **Confirm** that an entry appears showing that the older MSI installation package will be upgraded.

**Tip:** SofTrack MSI Installation packages will display their version number immediately after the title (ex: “SofTrack Local Workstation Agent for Windows, 6.45.4”).
11. Click **OK** to return to the “Group Policy Object Editor” dialog. The upgrade should now take place once client workstations that are a member of the Organizational Unit are rebooted.

**Note:** Once you have verified that the new version of the LWA has been deployed to all of your workstations, the old MSI package can be removed from the Group Policy Object.

## Making Changes

Changes to the MSI post-install can be made on client-by-client basis by using original “manual” installation switches (see the SofTrack Administrator’s Guide for more information regarding the manual installation method). The administrator can also push configuration changes to a large number of client workstations using any of the deployment methods.

## Script Method

When using the script deployment method, the MSI will need to be first completely uninstalled and then reinstalled with the new values assigned (See [“Deploying the MSI - Script Method”](#)).

## Automated Deployment Method

If an automated deployment method such as Active Directory was utilized to deploy the MSI, the associated transform file can be modified to include the new property values. Afterwards, the Group Policy Object would be instructed to redeploy the MSI package. Detailed step-by-step instructions for the Group Policy Object deployment method are provided below.

If a third-party deployment tool was utilized to deploy the MSI, please make note of any special procedures related to the deployment tool when making configuration changes.

### Group Policy Configuration

1. **Modify** the existing transform file or create a new one for your MSI deployment (See the "[Creating a Transform File](#)"). If a new transform file is created, **copy** it to the deployment path containing the MSI installation package.
2. **Access** the console of your Domain Controller, either remotely via Remote Desktop or physically. Proceed with one of the following:
  - Windows 2003 with the GPMC: Open **Administrative Tools**, and select **Group Policy Management**.
  - Windows 2000/2003 without the GPMC: Open **Administrative Tools**, and select **Active Directory Users and Computers**.
3. **Locate** the appropriate Organizational Unit. Proceed with one the following:
  - Windows 2003 with the GPMC: **Double-click** the appropriate Organizational Unit, and expand it. **Right-click** the appropriate Group Policy Object, and then select **Edit**. The "Group Policy Object Editor" dialog should appear.
  - Windows 2000/2003 without the GPMC: Select **Properties**, and then the **Group Policy** tab. Click to **highlight** the appropriate Group Policy Object, and select **Edit**. The "Group Policy Object Editor" dialog should appear.
4. In the Group Policy Object Editor dialog, expand **Computer Configuration**, select **Software Settings**, and then select **Software Installation**.

5. **Click** to highlight the SofTrack deployment package. Proceed with one of following:

- If the original transform file was modified: **Right-click** the deployment package, select **All Tasks**, and then **Redeploy Application** (see figure 1.9). The change should now take place once client workstations that are a member of the Organizational Unit are rebooted.

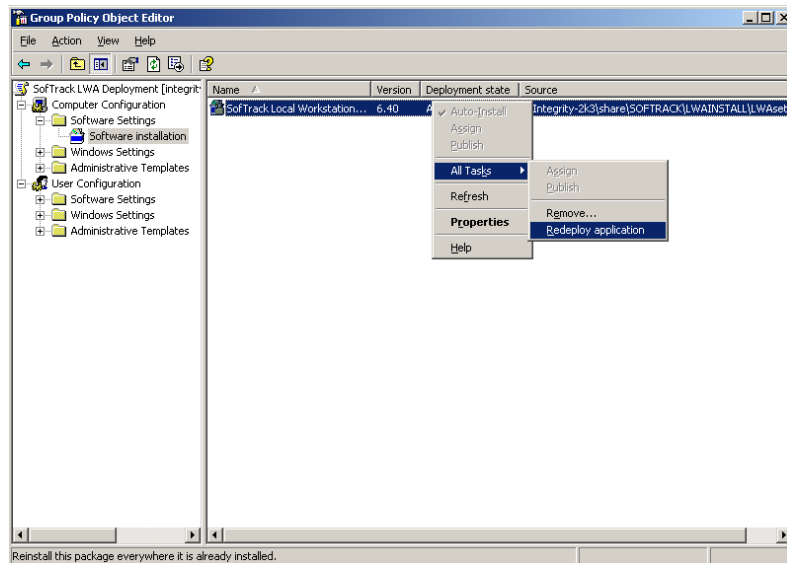


Figure 1.9

- If a new transform (MST) file was created: **Right-click** the deployment package, select **Properties**, and then the **Modifications** tab. **Highlight** the old transform file, and click the **Remove** button. Click the **Add** button, and select the new transform file you created. **Confirm** the new transform is now listed under the Modifications tab. Click **OK**. The change should now take place once client workstations that are a member of the Organizational Unit are rebooted.

## Removing the MSI

**Note:** The same method used to deploy the MSI should be used to remove the MSI, unless otherwise stated. Manually removing the MSI from a client workstation that was deployed using Group Policy can result in a "ghosted" package appearing in "Add/Remove Programs" on the client workstation.

## Script Method

If the MSI was installed using the script method, it can be removed by performing the following:

- Clicking the REMOVE button from within Add/Remove Programs on the client workstation
- Executing the removal via a script (see "[Script Examples](#)" below).

## Script Examples

Removing the MSI using a script can be accomplished by instructing MSIEXEC which package to remove. The following are examples of how to perform various removals using a script.

**Scenario 1:** The administrator wishes to remove the LWA.

The proper command syntax would be:

***MSIEXEC /x<path to MSI>\LWAsSetup.MSI***

**Scenario 2:** The administrator wishes to remove the LWA, suppress the GUI dialogs, and force the workstation to reboot after removal.

The proper command syntax would be:

***MSIEXEC /x<path to MSI>\LWAsSetup.MSI /suppress /forcerestart***

**Scenario 3:** The administrator wishes to remove the LWA, suppress the GUI dialogs, and force the workstation to not reboot and removal.

The proper command syntax would be:

***MSIEXEC /x<path to MSI>\LWAsSetup.MSI /suppress /norestart***

## ***Automated Deployment Method***

If an automated deployment method such as Active Directory was utilized to deploy the MSI, the package can be removed from the Group Policy Object.

If a third-party deployment tool was utilized to deploy the MSI, please make note of any special procedures related to the deployment tool.

## **Group Policy Configuration**

1. **Access** the console of your Domain Controller, either remotely via Remote Desktop or physically. Proceed with one of the following:
  - Windows 2003 with the GPMC: Open **Administrative Tools**, and select **Group Policy Management**.
  - Windows 2000/2003 without the GPMC: Open **Administrative Tools**, and select **Active Directory Users and Computers**.
2. **Locate** the appropriate Organizational Unit. Proceed with one the following:
  - Windows 2003 with the GPMC: **Double-click** the appropriate Organizational Unit to expand it. **Right-click** the appropriate Group Policy Object, and then select **Edit**. The “Group Policy Object Editor” dialog should appear.
  - Windows 2000/2003 without the GPMC: Select **Properties**, and then the **Group Policy** tab. Click to highlight the appropriate Group Policy Object, and select **Edit**. The “Group Policy Object Editor” dialog should appear.
3. In the Group Policy Object Editor dialog, expand **Computer Configuration**, select **Software Settings**, and then select **Software Installation**.
4. **Right-click** the SofTrack MSI deployment package, select **All Tasks**, and then **Remove**. The “Remove Software” dialog should appear.

5. Select **Immediately uninstall the software from users and computers**, and click **OK** (see figure 1.10). The change should now take place once client workstations that are a member of the Organizational Unit are rebooted.

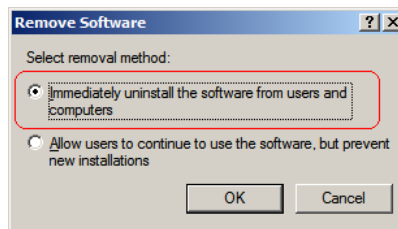


Figure 1.10

## Troubleshooting

### Event Log Error Messages

In all cases of installing the MSI (manual, script, automated deployment) the server name must be defined. If the administrator does not define a server name, either through the GUI, the use of a transform file, or by defining the property value via a script, the MSI installation will exit and display an error dialog with the following text. In addition, an event will be written to the application event log.

***“You must define the name of the server hosting the SofTrack Server Agent (SSA) when repairing an existing installation or deploying a new installation. Please review the product installation manual for more instructions.”***

In the event a newer MSI package already exists on the target workstation, the MSI installation will exit and display an error similar to the following. In addition, an event will be written to the application event log.

***“A newer version of the SofTrack Local Workstation Agent for Windows is already installed. Please remove the existing version before attempting to downgrade your installation.”***

### Windows Error Messages

***“I receive an error when trying to create a GPO on the newly created SofTrack “Test” OU.”***

If there are multiple domain controllers in your environment, you will have to wait until replication of the new OU takes place, otherwise an error will be presented to you upon attempting to administer the new OU. Replication can be manually forced to take place immediately by completing the following steps:

- a. Start the Microsoft Management Console (MMC) “Active Directory Sites and Services” snap-in.
- b. Expand the “Sites” branch to show the sites.
- c. Expand the site that contains the appropriate domain controllers (the default site “Default-First-Site-Name” may be the only site listed).
- d. Expand the “Servers” branch.
- e. Select the server you want to replicate to, and expand that server.
- f. Double-click NTDS Settings for the server.
- g. Right-click the server you want to replicate from.
- h. Select “Replicate Now” from the drop-down menu.
- i. Click OK in the confirmation dialog box.

This replication is one-way. If you want two-way replication, you will need to replicate in each direction.

# Contacting Technical Support

If you have any trouble in completing this procedure, please contact our Senior Support Engineers via e-mail or telephone.

Email: [support@softwaremetering.com](mailto:support@softwaremetering.com)

Phone: (512) 372-8991 x611

Technical Support is provided 7:30 A.M. through 5:30 P.M., U.S. Central Time.

## ***Online Links***

SofTrack Full Distribution:

[http://www.softwaremetering.com/outgoing/softrack\\_full.zip](http://www.softwaremetering.com/outgoing/softrack_full.zip)

SofTrack Quick Inventory Only Distribution:

[http://www.softwaremetering.com/outgoing/softrack\\_qi.zip](http://www.softwaremetering.com/outgoing/softrack_qi.zip)

SofTrack Administrator's Guide for Windows:

[http://www.softwaremetering.com/outgoing/stnt\\_manual.pdf](http://www.softwaremetering.com/outgoing/stnt_manual.pdf)

SofTrack Administrator's Guide for NetWare:

[http://www.softwaremetering.com/outgoing/stnw\\_manual.pdf](http://www.softwaremetering.com/outgoing/stnw_manual.pdf)