# Meta Imaging Series 7.0 – Network Key Installation Procedure

## A note on 3rd-party firewall applications.

The Sentinel installation will update Windows firewall as needed, but there may be other firewall software installed on the network key server. If there is, configure it to allow spnsrvnt.exe access. This program is installed during the Sentinel driver install, and is typically located at c:\Program Files\Common Files\Safenet Sentinel\Sentinel Protection Server\WinNT\.

If you continue to have trouble connecting, try allowing incoming and outgoing traffic on TCP/IP port 6002. You may also refer to Appendix 3: Known issues.

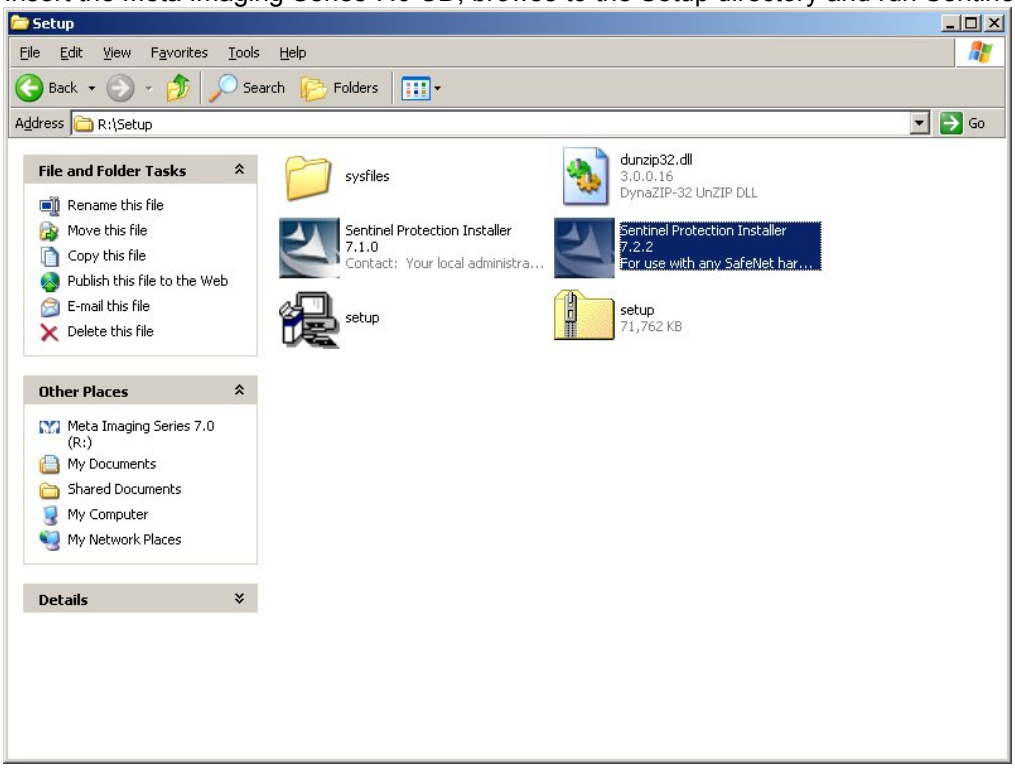
## Installing the Network Key Server

The network key server is the system that will have the network key dongle connected to it. Any systems that will be used as clients must be able to access this system.

The first step is to install the Sentinel driver. The Sentinel driver allows the network key to communicate with the Meta series applications.

**Important:** Remove the network key before installing the Sentinel driver.

Insert the Meta Imaging Series 7.0 CD, browse to the Setup directory and run Sentinel Protection Installer 7.2.2.




If a version of the Sentinel driver earlier than 7.2.2 is on the MIS CD, download and run the latest Sentinel SuperPro driver from http://www.safenet-inc.com/support/tech/sentinel.asp or contact Downingtown Customer Support.

The install process for the Sentinel driver will begin.

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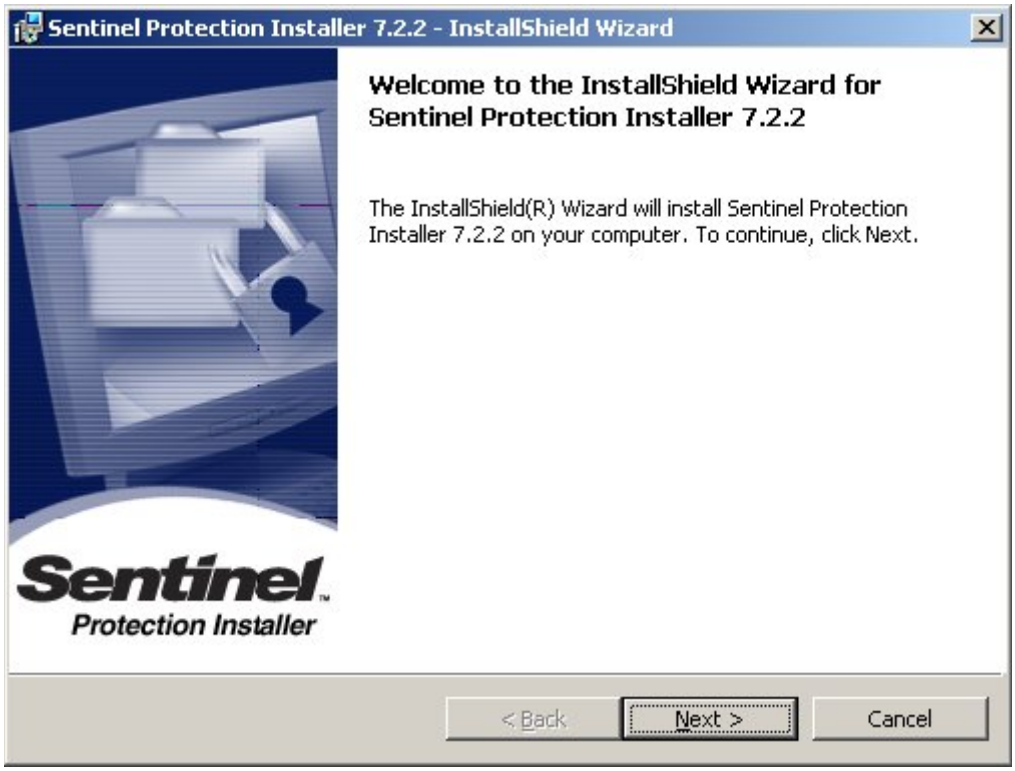
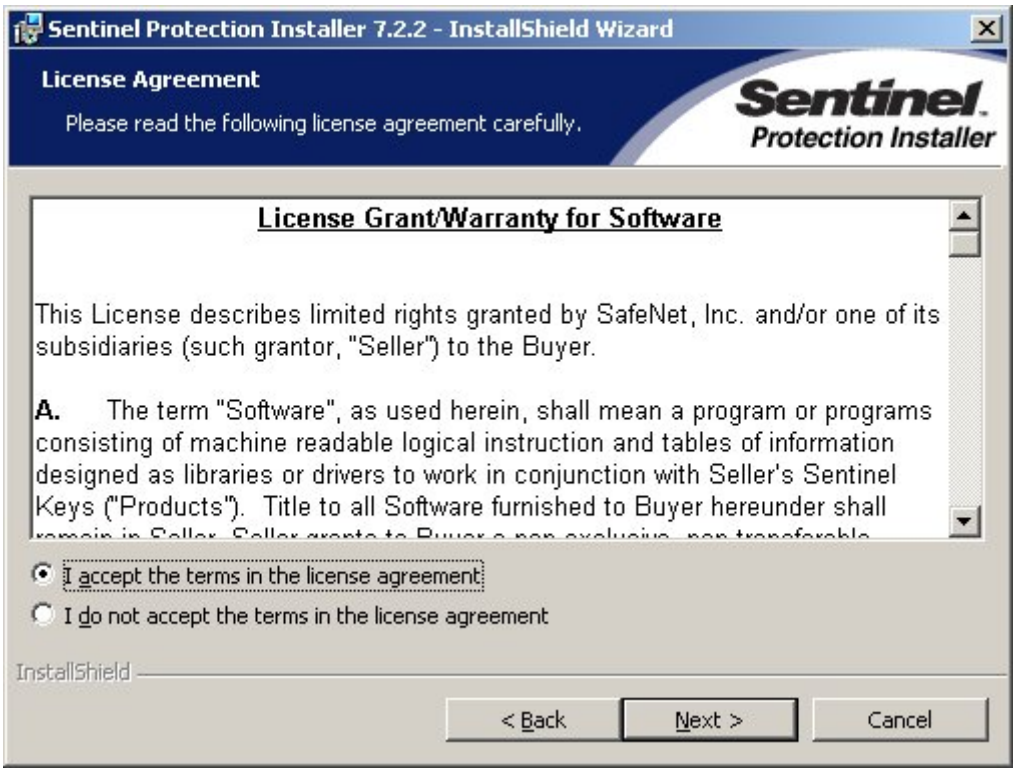



Select “Next.”




Review the License terms and, if you agree to the terms, select the ‘I accept’ radio button and select “Next.”


Select to perform a “Complete” setup, then select “Next.”


Select “Install.”
If you are running Windows XP, you may get this dialog:

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**IMPORTANT:** In order for client system to be able to access the network key, the firewall settings for Windows Filewall must be modified. Select “Yes” at this point.


The installation will continue and eventually finish. Select “Finish” to complete the installation. Reboot the system if requested.

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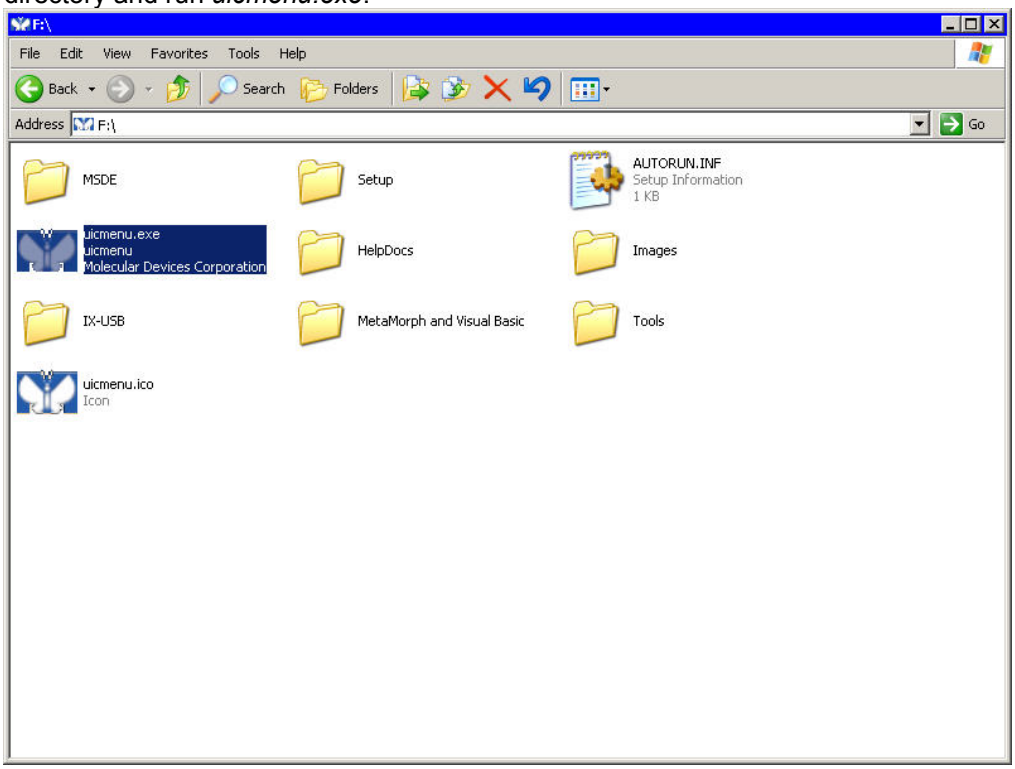
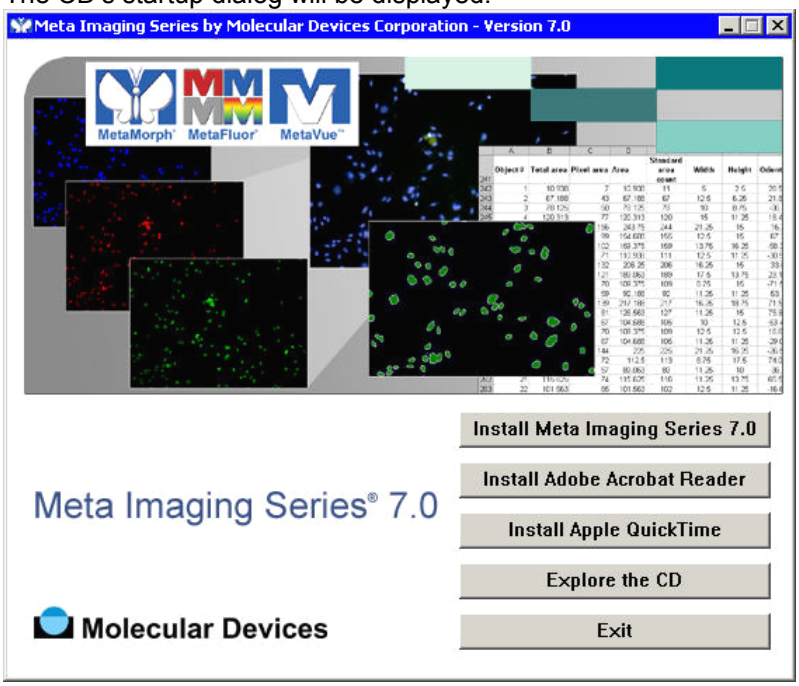
At this point, insert the network key dongle into a USB port.

## Install Meta Series 7.0 on the Network Key Server

Insert the Meta Imaging Series 7.0 CD if it is not already inserted. If the CD does not autoplay, browse to the CD's directory and run *uicmenu.exe*:




The CD's startup dialog will be displayed:

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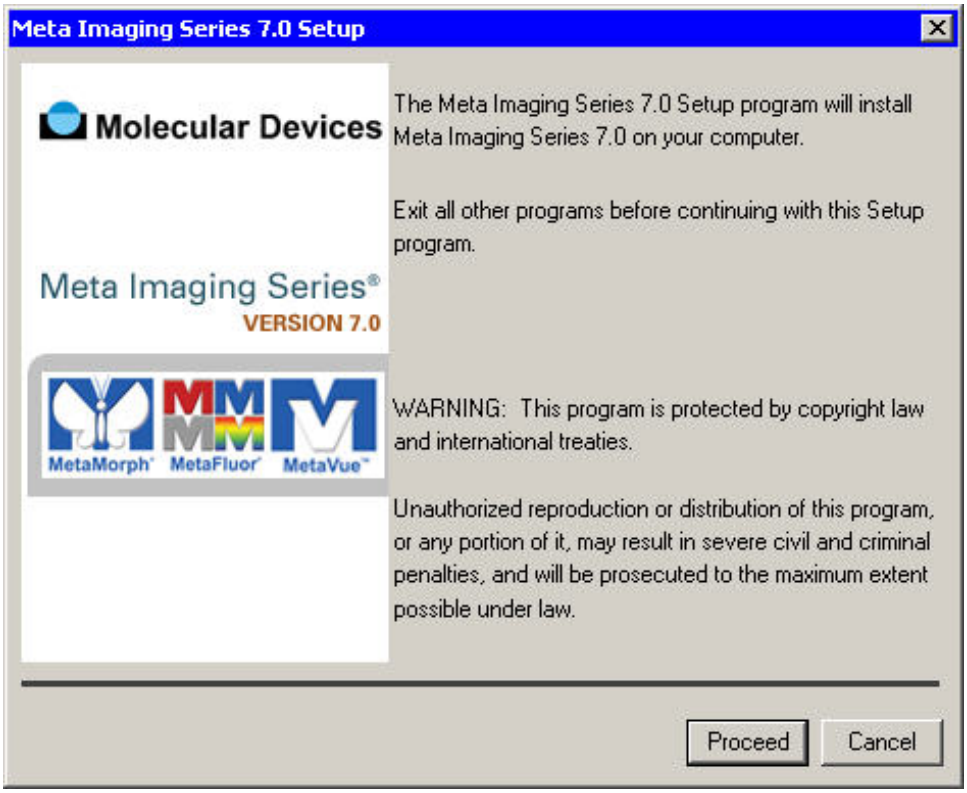
1.) Select Install Meta Imaging Series 7.0. You will get a message stating that Meta Imaging Series 7.0 is about to be installed:




Select Proceed.

2.) There is a good chance that some windows files will need to be updated. If so, you will be presented with a dialog similar to this:

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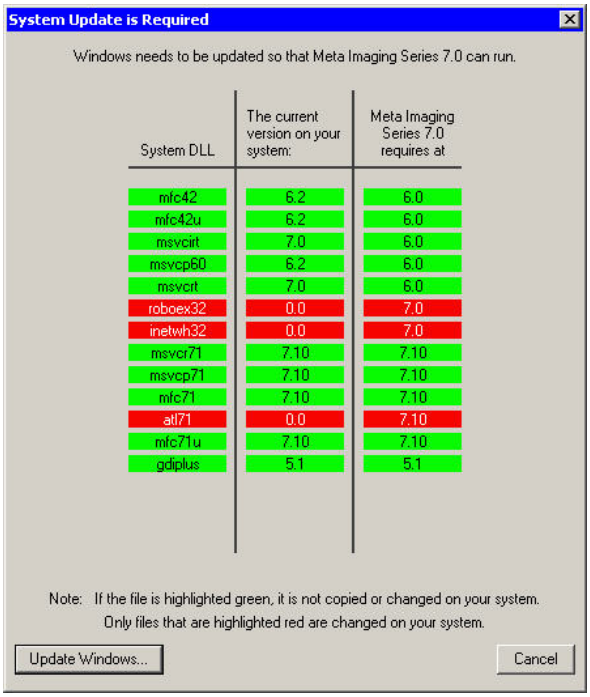
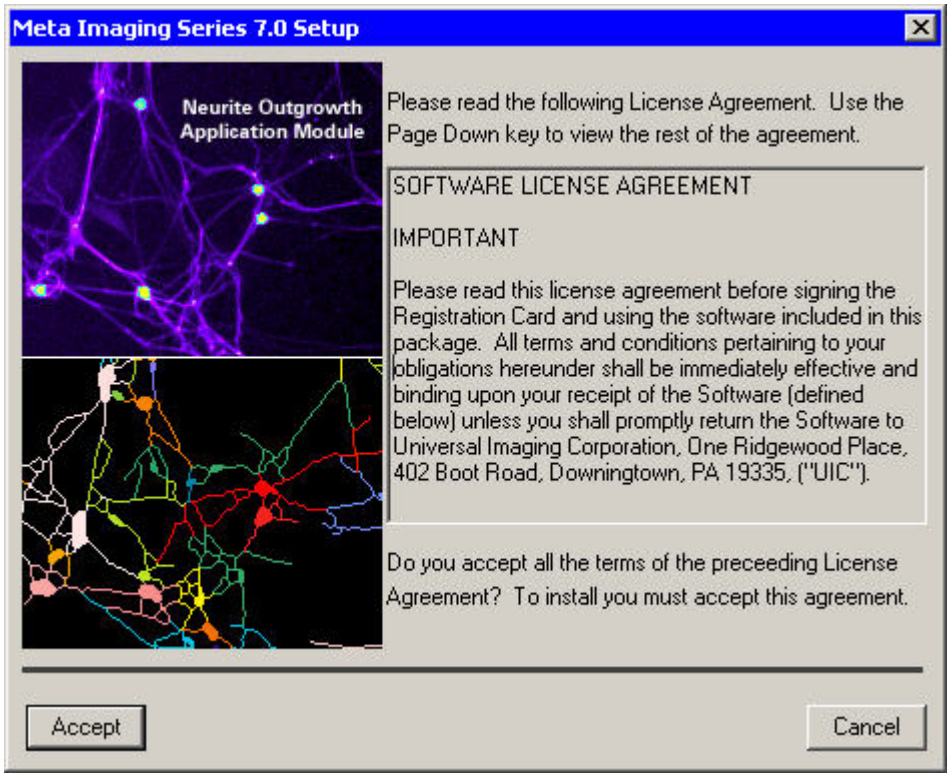



Select Update Windows.

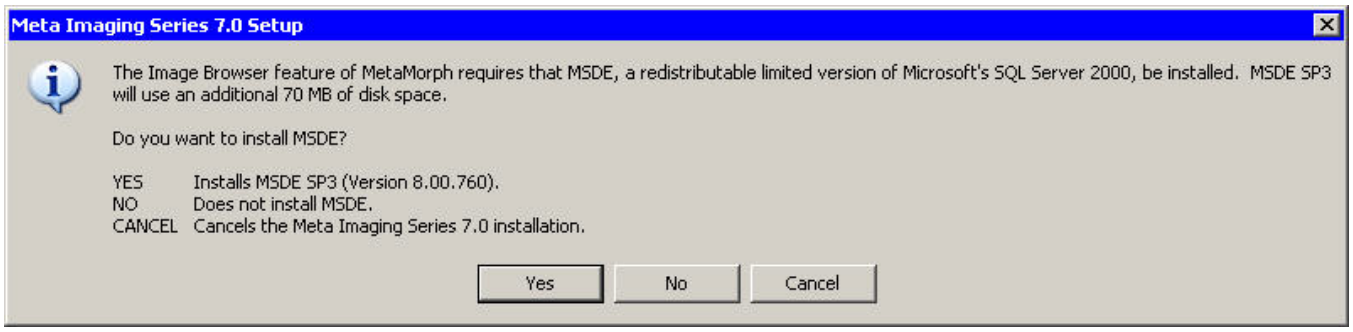
Depending on what files are updated, you may be prompted to restart your system. If so, please restart your system. The installation routine will continue when Windows restarts.

3.) The software license agreement will be displayed.



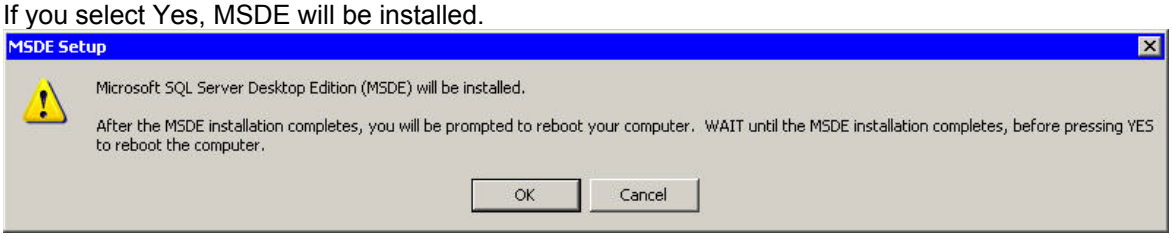

Read the license agreement and, if you agree to the terms, select Accept.

4.) A dialog asking you if you want to install MSDE SP3 may be displayed:



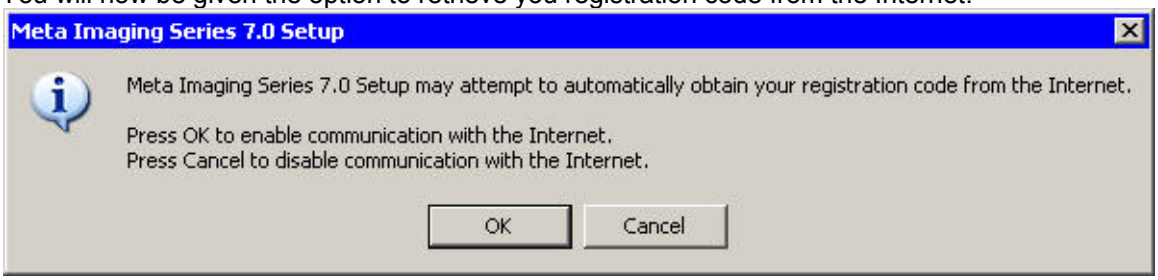

If you already have another version of Microsoft SQL Server installed, or are not interested in using the Image Browser feature, select No. If you are only updating the Net Key Server and Not actually installing Meta Imaging Series, then select No here.

If you select Yes, MSDE will be installed.




After MSDE is installed, you will be prompted to restart your system. Please restart the system at this point. The installation routine will continue when Windows restarts.

5.) You will now be given the option to retrieve you registration code from the Internet.




Select the desired option.

6.) You will now be able to enter your Name and Affiliation. If you retrieved your registration code from the Internet, it will be displayed. Otherwise, please enter your registration code at this point.

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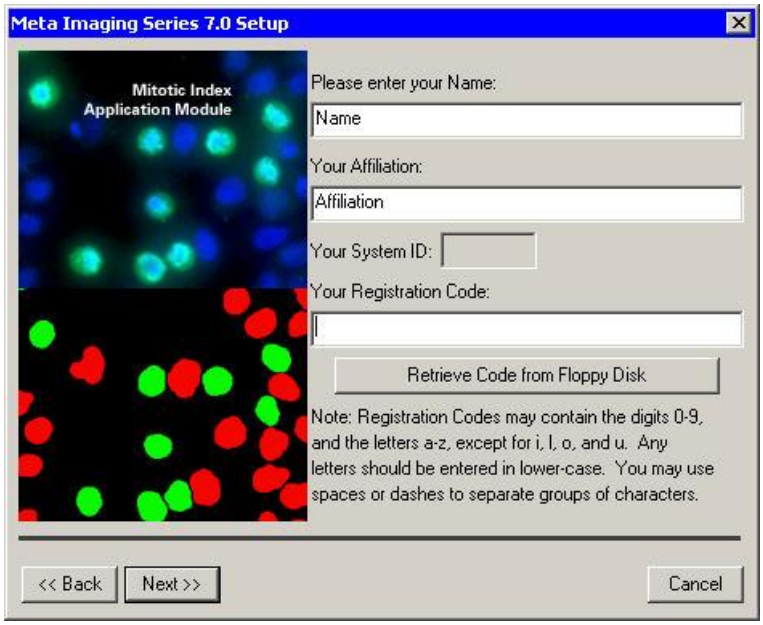
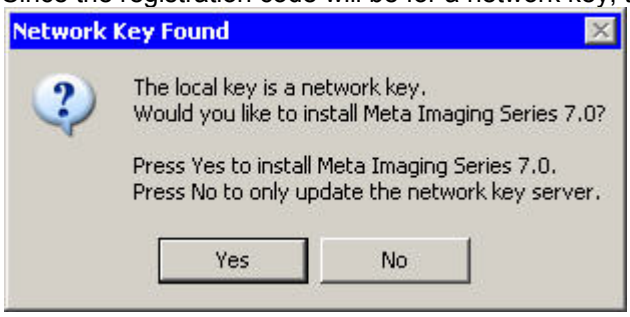
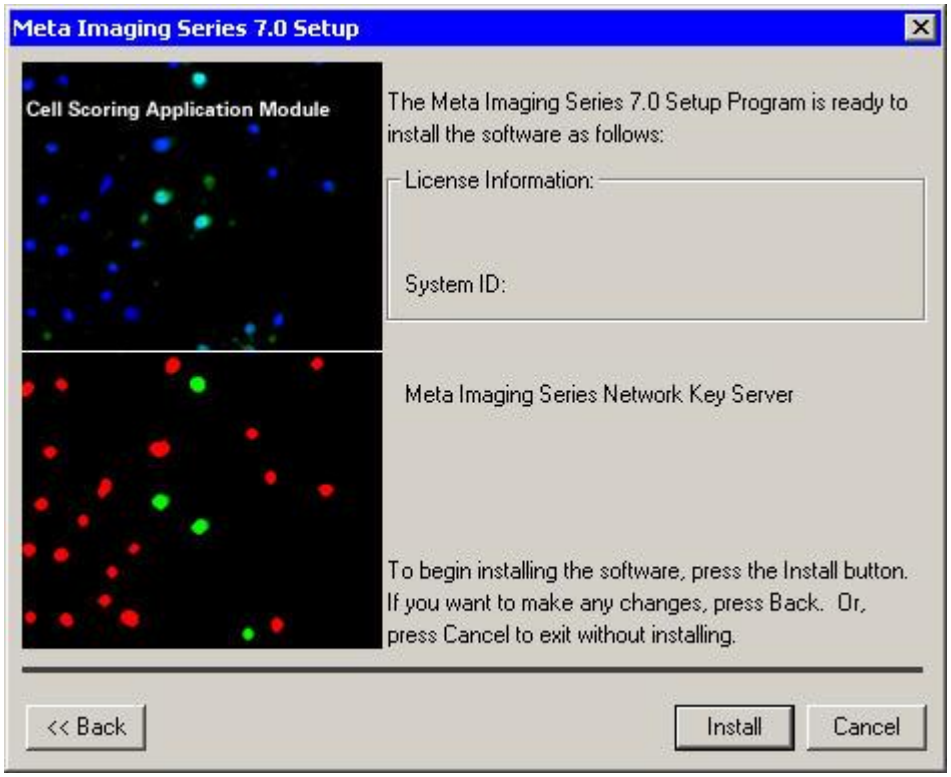



Select Next to continue.

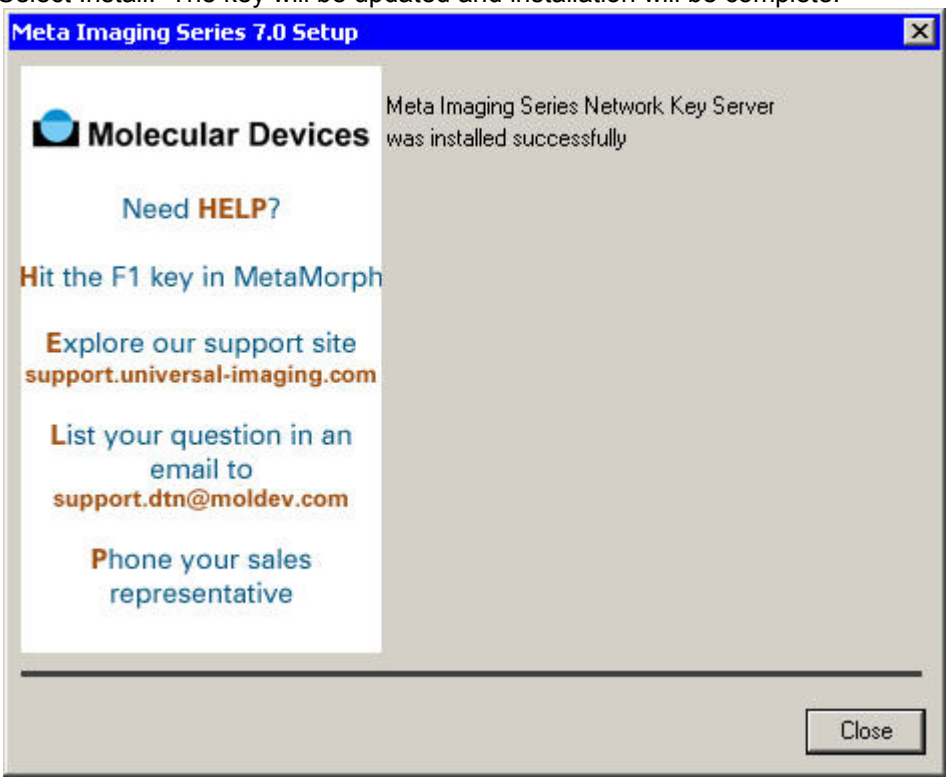
7.) Since the registration code will be for a network key, the following dialog will be presented:




7a.) If you do not wish to install Meta Imaging Series 7.0 on the Network Key Server, select No. A confirmation dialog will be displayed:

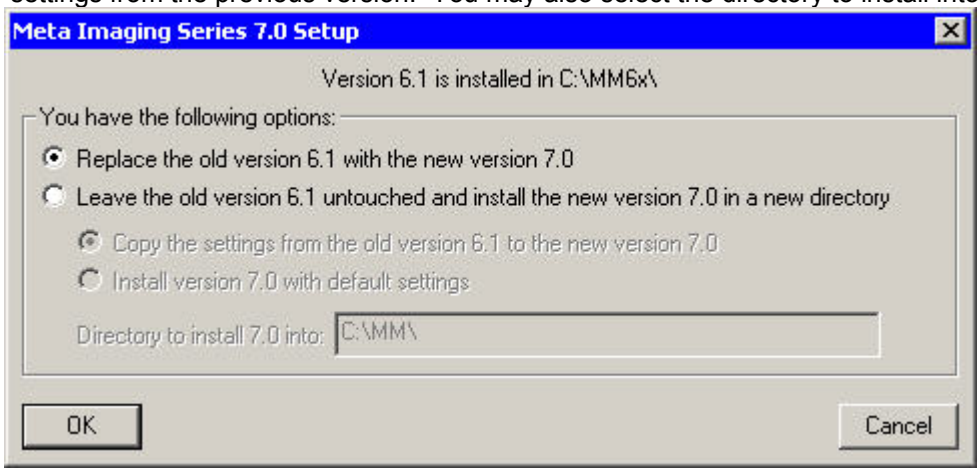



Select Install. The key will be updated and installation will be complete:



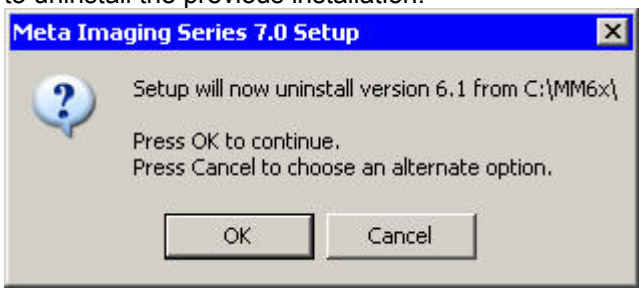

7b.) If you wish to install Meta Imaging Series 7.0 on the Network Key Server, select Yes.

If another installation of Meta Series is detected, you will be given the option of overwriting it or installing Version 7.0 into another directory. If you wish to install into another directory, you may opt to copy settings from the previous version. You may also select the directory to install into.



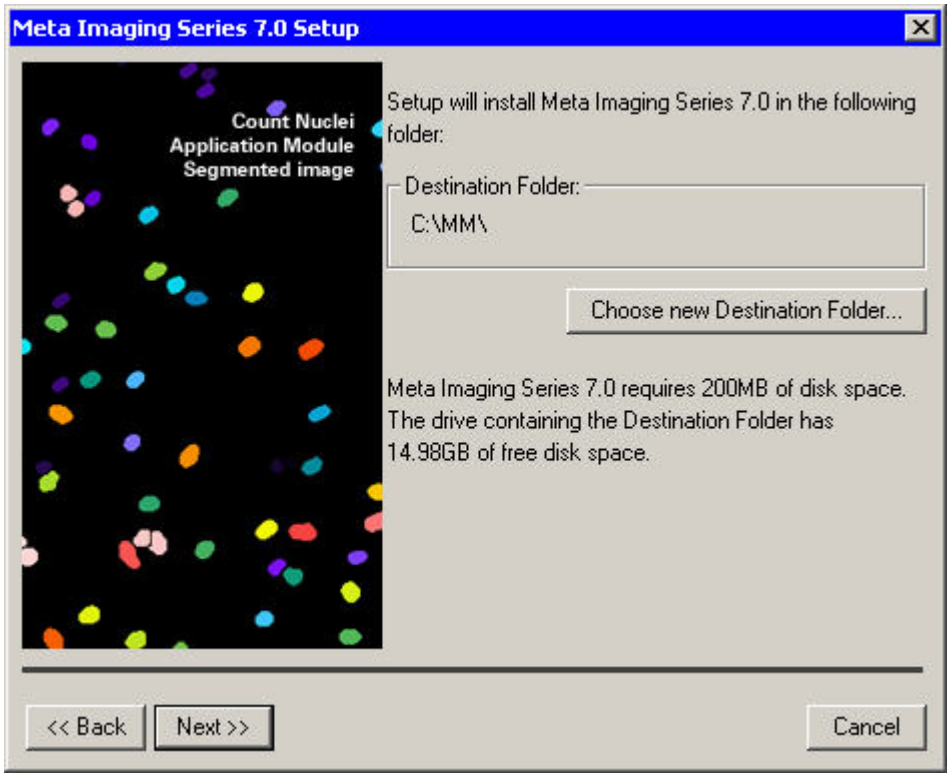

Press OK to continue.

If you are replacing an installation of Meta Series, you will then get a message stating that you are about to uninstall the previous installation.



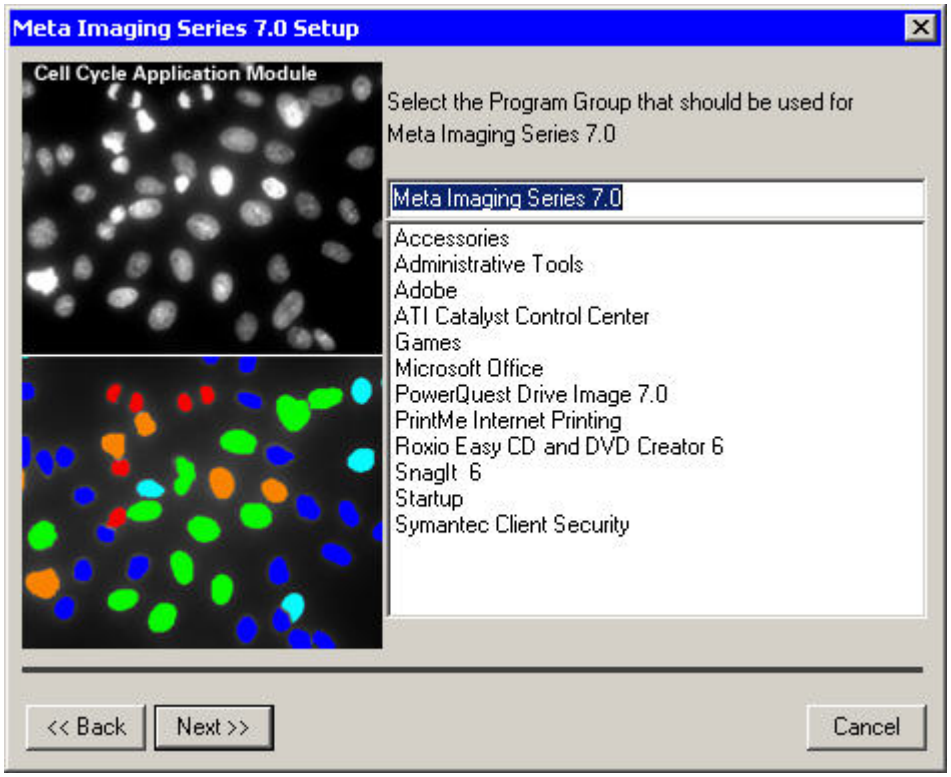

Press OK to continue. The old installation will be uninstalled.

You will then be asked where to install Meta.



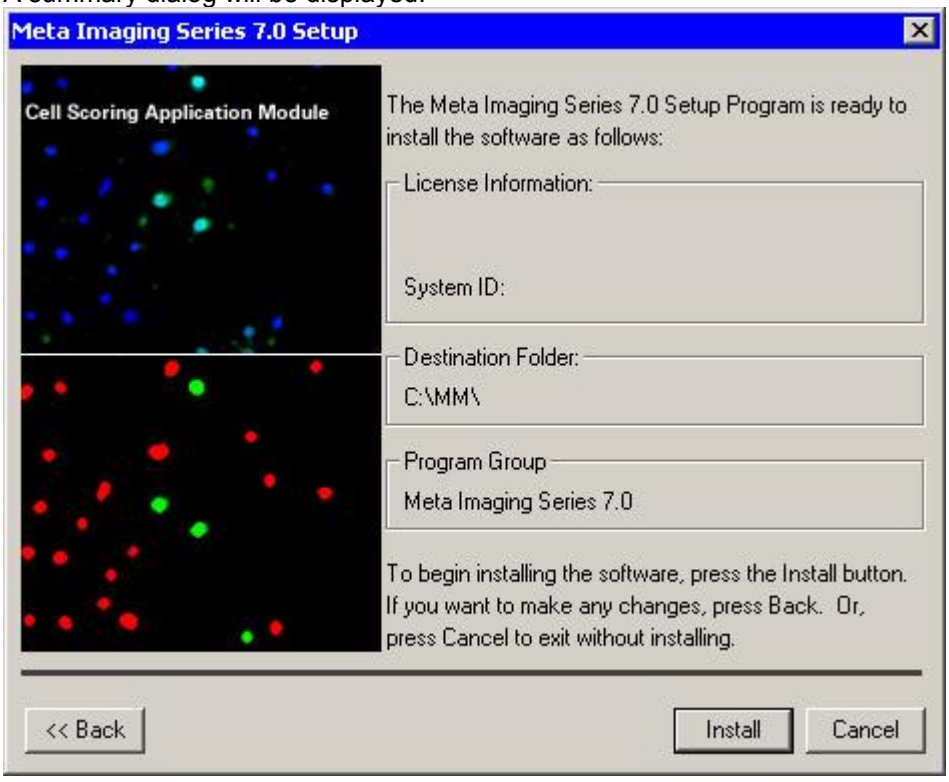

If you are replacing an old installation, the option to choose a new Destination Folder will be disabled. The default destination folder will be displayed. This may be changed by selecting Choose new Destination Folder.
Select Next to continue.

You may now select the name of the Meta Imaging Series program group.



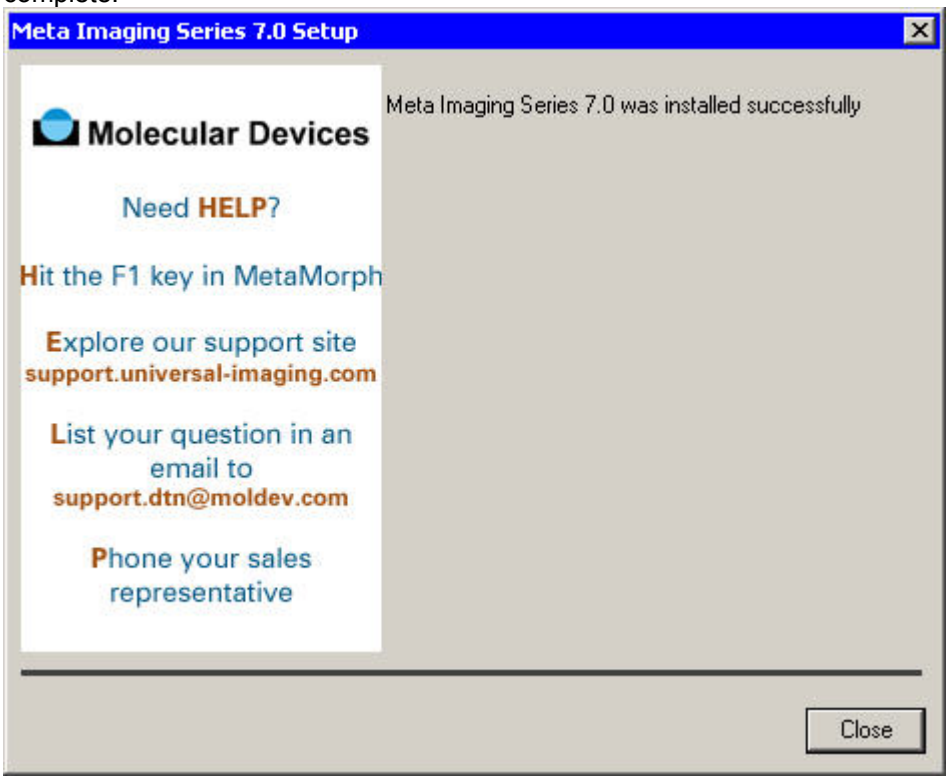

Enter the name of the program group that you wish to use and select Next.

A summary dialog will be displayed.




Select Install to begin installing Meta Imaging Series 7.0.

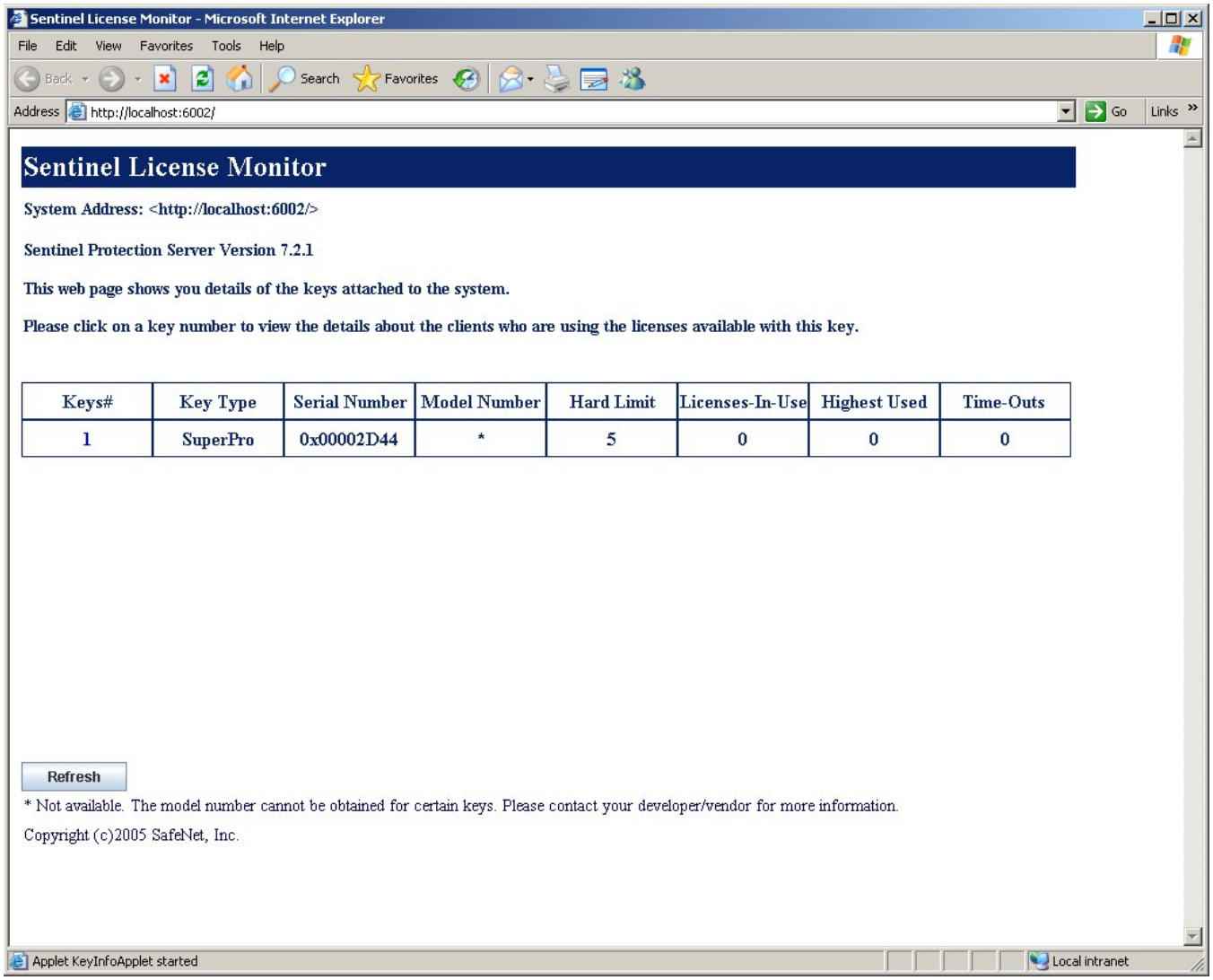
Meta Imaging Series 7.0 will be installed. A confirmation dialog will be displayed when installation is complete:




8,) You will probably want to make note of the network key server's TCP/IP address and/or host name, since this information will be needed to install client systems. Refer to Appendix 1 for information on determining the TCP/IP address of your network key server. Refer to Appendix 2 for information on determining the host name of your network key server.

## The Sentinel License Monitor

The Sentinel License Monitor is a utility that may be used to track the number of licenses being used on a network key. On the network key server, the Monitor may be viewed by opening a web browser and pointing it to the address: http://localhost:6002.




Java Runtime must be installed. If it hasn't been, the web browser may automatically offer to install it.

The Hard Limit will not necessarily be the total number of licenses that may be used. Each network dongle has a hard limit that is preprogrammed onto it and cannot be updated. This is the total number of licenses that is possible to be programmed onto the key. The actual number of available licenses is controlled by the keycode, and may be less than the hard limit.

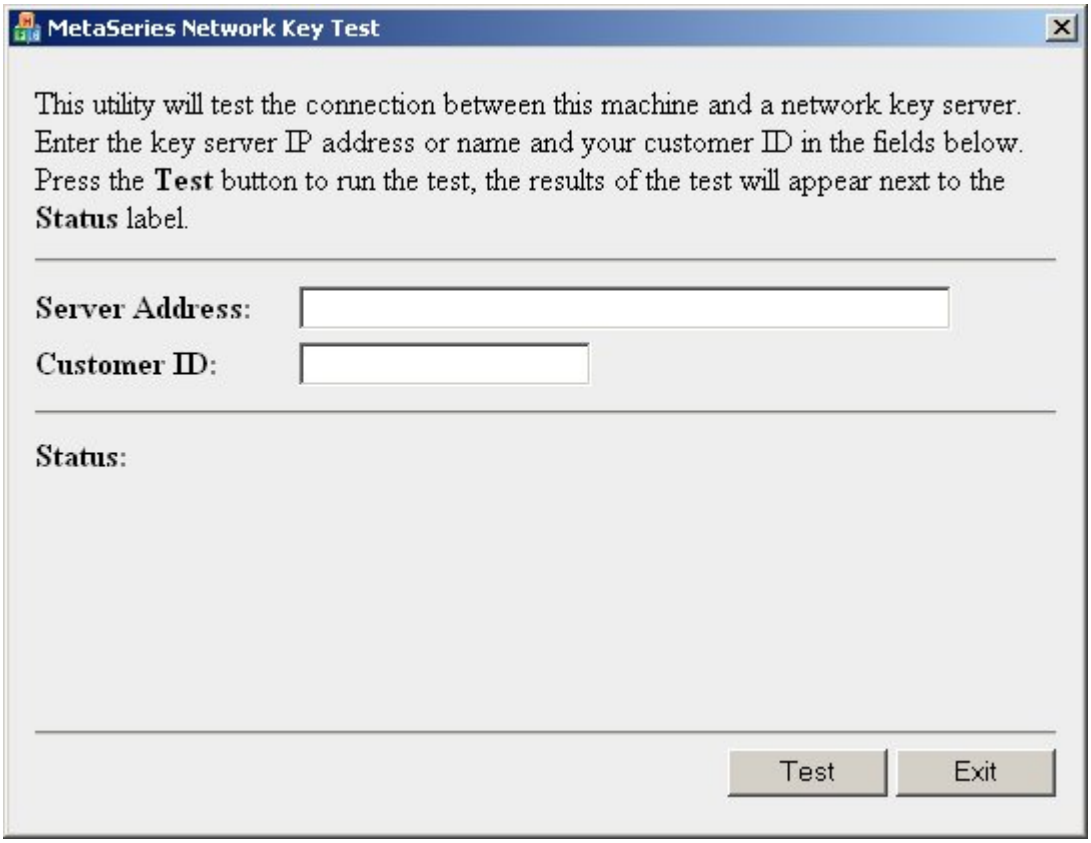
The License Monitor may also be viewed from any system that can access the network key server on TCP/IP port 6002. One a web browser and point it to http://xxx.xxx.xxx.xxx:6002. Replace the X's with the TCP/IP address of the network key server; for example, http://192.168.1.1:6002.

Please be aware that the screen will not update automatically as licenses are used and released. The Refresh button must be selected to update the screen.

## Installing a network key client

A network key client is a system that runs one or more Meta applications, but does not have a memory key connected to it directly. It contacts a network key server and requests a license. If a license is available, the application starts and may be used as if the memory key was installed on the system being used, and a network key license is taken up. If a license is not available, the application gives a message that no licenses are available and immediately exits.

Before installing a client, it would be a good idea to verify that it can communicate with the network key. In the Tools folder on the Meta Series 7.0 CD, there is a program called NetKey Test. If you run it, you will be able to enter the TCP/IP address and the customer ID of the network key server and the network connection will be tested.




Once the TCP/IP address and customer ID are entered, select Test.

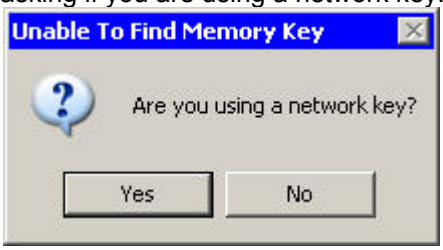
If the Status is anything other than 'Key Was Successfully Read', verify that the client system can ping the network key server, and that there are no firewalls (software or hardware-based) blocking either spnsrvnt.exe or port 6002.

1.) Remove any memory key (parallel port or USB) that is already connected to the client computer.

2.) Install the Sentinel driver from the Setup directory on the Meta Series 7.0 CD, as was done for the network key server installation (version 7.2.2 or greater)

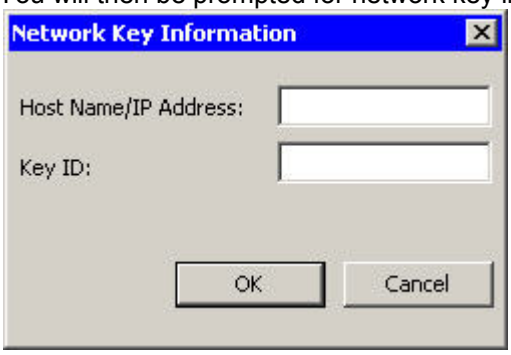
3.) Begin the Meta Series 7.0 installation procedure as you did for the key server. Then start the Meta Series install. Updating Windows files, installing MSDE and retrieving the registration code off of the Internet will be the same as installing for the key server.

4.) After the dialog that allows you to retrieve the installation code off of the Internet, a dialog will be displayed asking if you are using a network key.




This dialog is displayed because the installation routine could not detect a memory key attached to the client system.
Select Yes.

5.) You will then be prompted for network key information.




Enter either the host name or the TCP/IP address of the network key server in the Host Name/IP Address field. Do not enter both. You do **not** need to enter any slashes, quotes, just the IP Address or host name.

Enter the system ID of the network key into the Key ID field.

Select OK to continue.

A TCP/IP address is a unique set of four numbers with periods between them, such as: 192.168.1.1 that identifies a system on a network.

A host name is the unique name that can identify a system on a network.

Refer to Appendix 1 for information on determining the TCP/IP address of your network key server. Refer to Appendix 2 for information on determining the host name of your network key server.

6.) You will now be able to enter your Name, Affiliation and, if it wasn't already retrieved from the Internet, the registration key. The registration key should be the same that was used during the network key server installation.

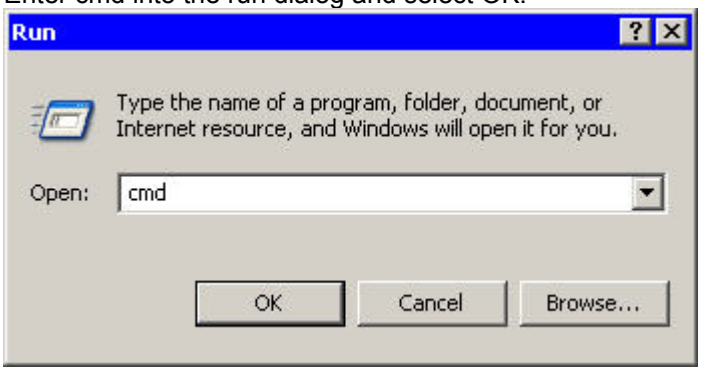
From this point on, Meta Series Version 7.0 installation is the same as installation on the network key server.

## Appendix 1: Determining the TCP/IP address of your network key server

Perform the following operations on the network key server.

1.) Display the command prompt. Click on the Start button in Windows and select Run from the menu.


2.) Enter cmd into the run dialog and select OK.




3.) A command prompt will appear. In it, type ipconfig and press enter. A number of lines of text will be displayed. One line will read:
IP Address. . . . . .: xxx.xxx.xxx.xxx
The numbers displayed, along with the periods, is the IP address of the system.

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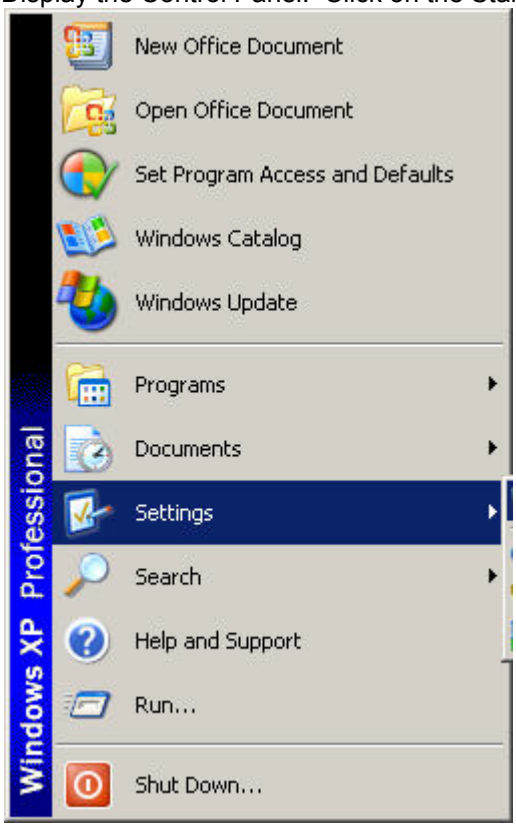
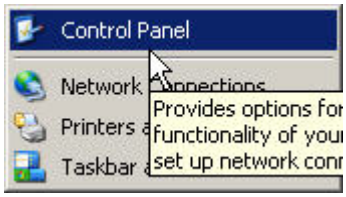
## Appendix 2: Determining the host name of your network key server

Perform the following operations using the network key server.

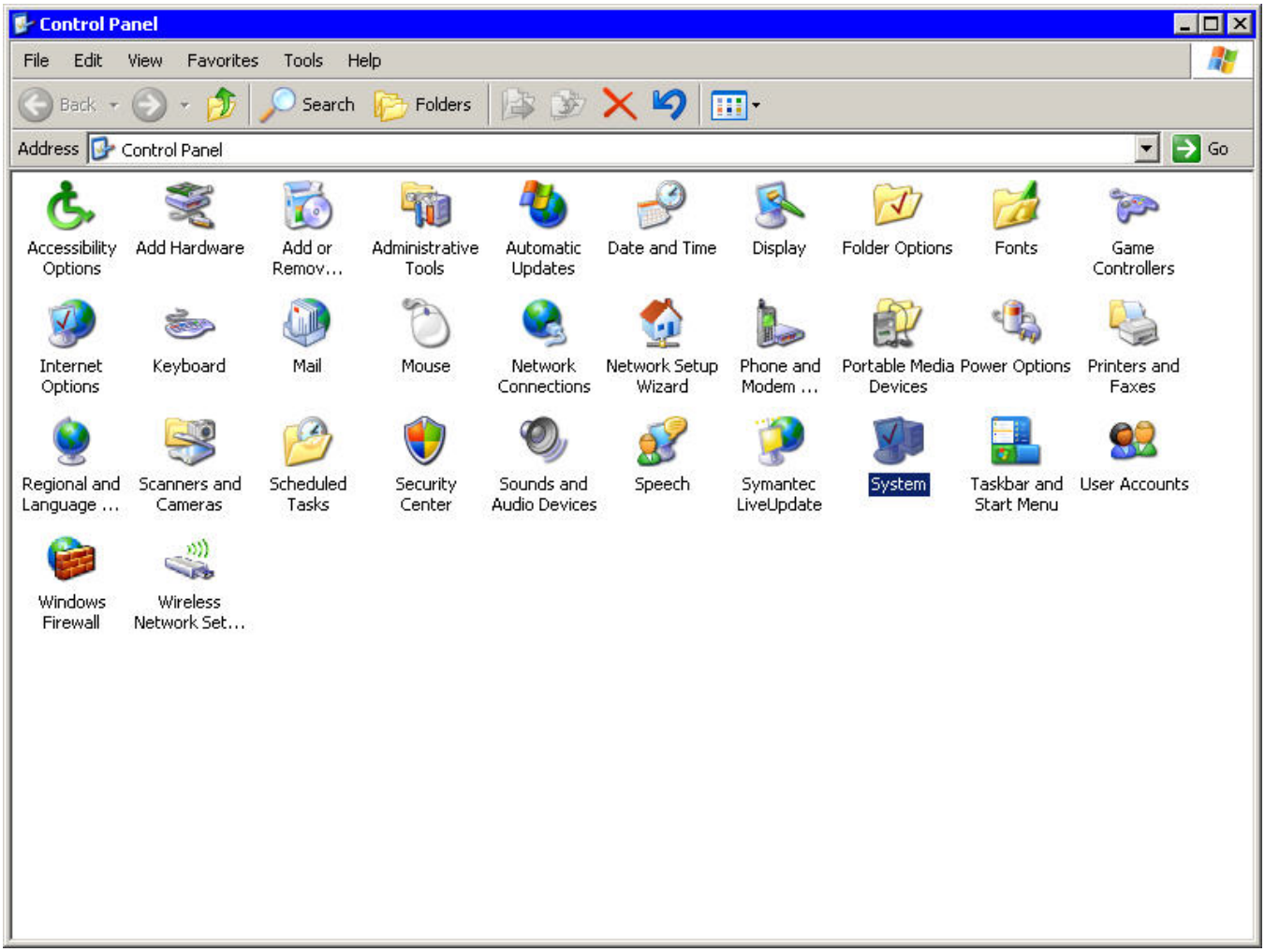
1.) Display the Control Panel. Click on the Start button in Windows and select Settings from the menu.




Select Control Panel from the Settings menu.




2a.) If the Control Panel looks like this…




…double click on System.

2b.) If the control panel looks like this…

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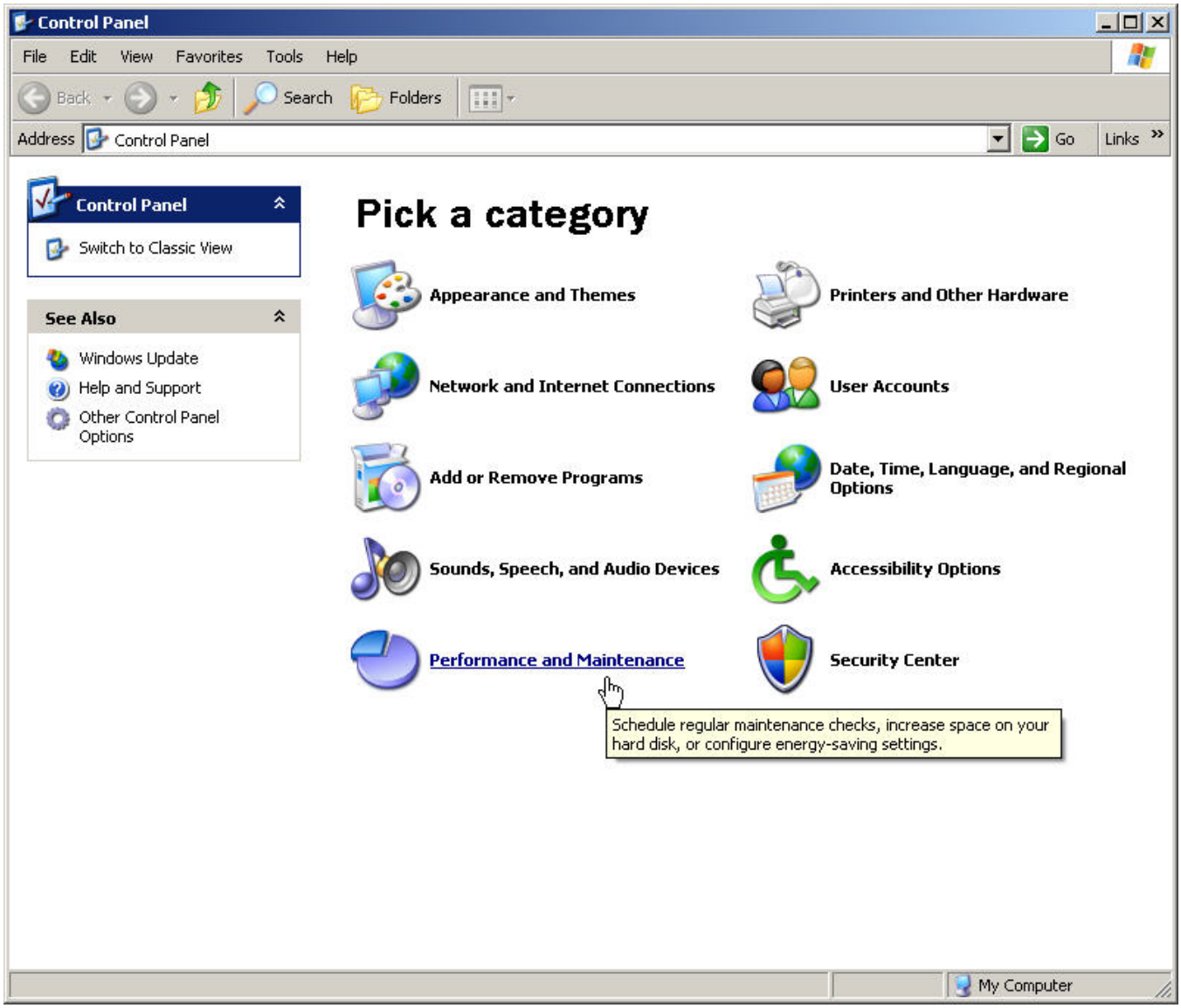


…Select Performance and Maintenance to display the Performance and Maintenance Category.

Select the System Control Panel

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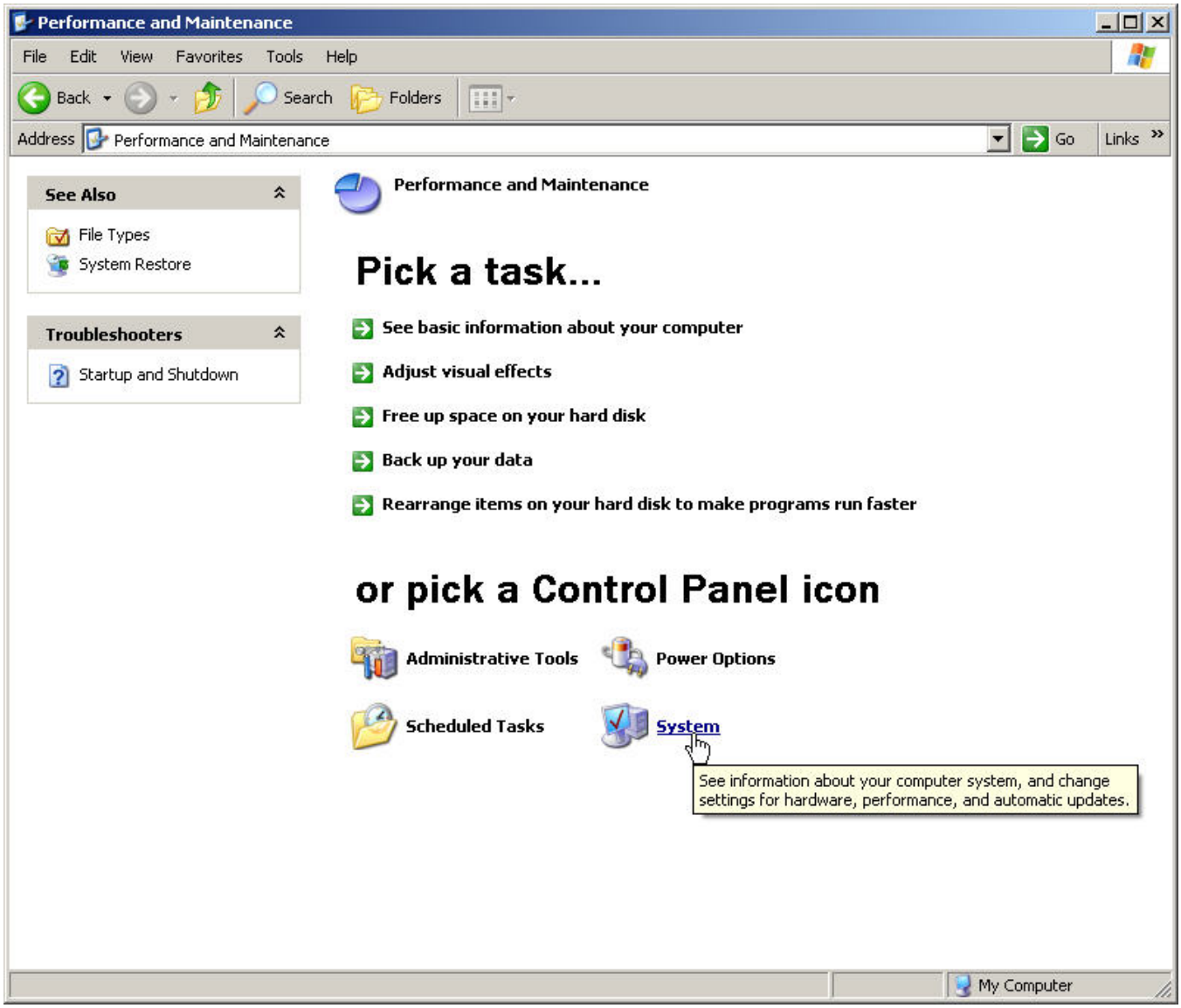


3.) The System Properties dialog will now be displayed. Select the Computer Name tab.

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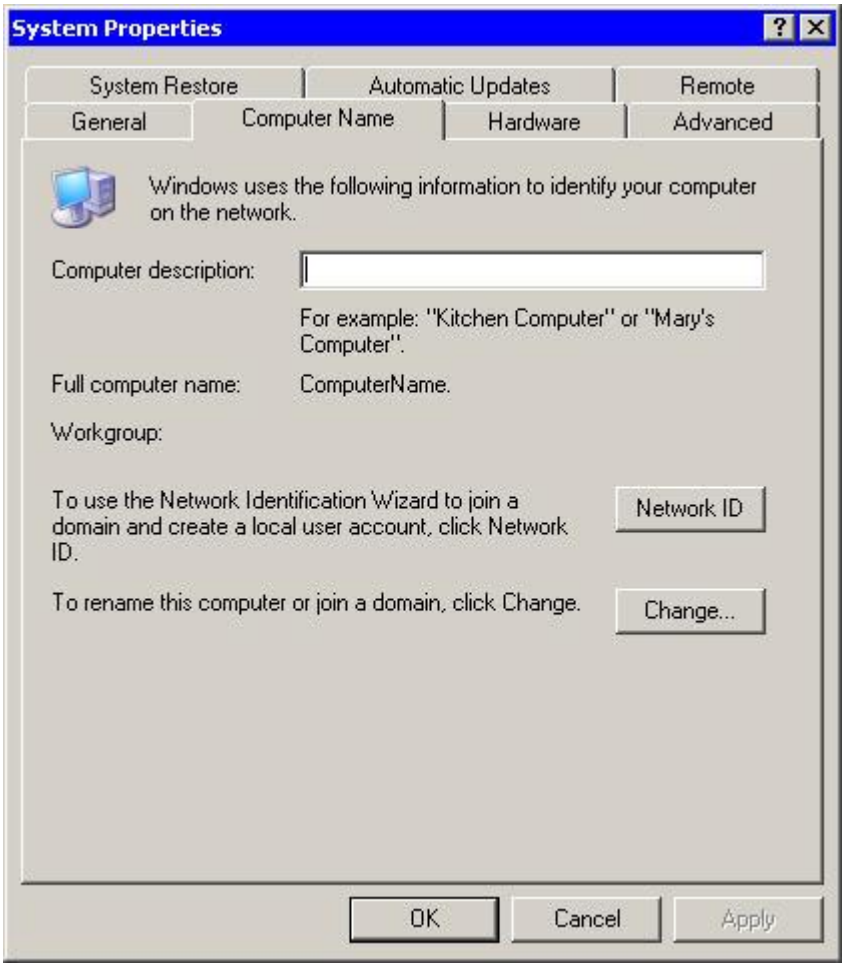


The host name is the name listed as being the full computer name. In the above example, it would be: ComputerName

Ignore the period at the end of the name. It is not part of the host name.

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## Appendix 3: Known issues

Here are a few known issues from Safenet's web site concerning SuperPro keys.

**Question:** After installing Windows XP SP2, I can no longer find the Sentinel SuperPro key on the network. What should I do?

**Answer:** Microsoft has released SP2 and its default firewall policy is to block inbound connections. Therefore, after installing SP2, UDP port 6001 might get blocked and therefore the trouble. So, whenever this is the case, open the port in the advanced option of the IP firewall. This applies to networked implementation of security only.

**Ref:** http://c3.safenet-inc.com/Display_Results.asp?DocId=3709

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**Question:** My USB SuperPro seems not to work with my VIA motherboard. Is this a known problem?

**Answer:** The VIA chipset used in a number of motherboards (KT133,KT7, Asus A7V) has exhibited such problems. To solve this, turn on "Enhance Chip Performance" in the BIOS via CPU soft menu. Turn off "Assign IRQ to USB" and download the 4 in 1 drivers from VIA hardware.

**Ref:** http://c3.safenet-inc.com/Display_Results.asp?DocId=3107

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**Question:** Why can't my hardware key be found on Dell Optiplex GX110?

**Answer:** The Rainbow Sentinel keys cannot be seen with the default port mode of ECP ( Extended Capabilities Port ) on the Dell Optiplex . This appears to be the case for most Dell machines: Dimension, Optiplex, Precison. ).

In order to get your Rainbow key recognized, go into the BIOS and change the parallel port mode to either PS/2 or AT. Save the applied changes and reboot. Your key should now become recognized with the protected software and Rainbow's Sentinel Medic utility. NOTE: You will need to uninstall and re-install the Sentinel System Drivers after you have completed the BIOS change.

**Ref:** http://c3.safenet-inc.com/Display_Results.asp?DocId=2564

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**Description:** Key not found/working on IBM ThinkPad X-series ( X22, X23, X24 )

**Answer:** Thus far, Rainbow has successfully discovered BIOS updates from IBM in order for Sentinel keys to work with the ThinkPad line.

The BIOS update for the X-series which will allow the parallel port to longer be "OS Controlled", but instead set to "Enable" which then allows the port mode, port address and port memory setting to stay set ( ECP, 378, DMA 3 ), is version 1.25.

The 1.25 BIOS version can be found from the following IBM URL:
http://www.pc.ibm.com/qtechinfo/MIGR-39672.html

**Ref:** http://c3.safenet-inc.com/Display_Results.asp?DocId=2342