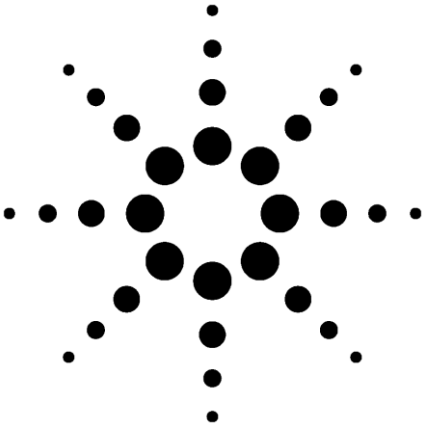
Remote Advisor for
Analytical Instruments



Agilent Technologies
Remote Advisor Installation Guide

For Software Version	A.02.09

In this Installation Guide

This Remote Advisor Installation Guide is the written instruction to install the Agilent Remote Advisor software on the Gateway and Data Source PCs, connect Instruments to the Data Source, and configure Remote Advisor to communicate to the Agilent Instruments. The Remote Advisor Installation Guide is written in the optimal order for a successful installation.

Table of Contents

REVISION HISTORY

Revision Revision A.02.09.001

Date August 2013

Changes Initial Release for Remote Advisor A.02.09

Revision Revision A.02.09.002

Date August 2013

Changes Updated Listening port chart and File Mover procedure

Revision Revision A.02.09.003

Date September 2013

Changes Added Waters ICS 1.5 requirement

Revision Revision A.02.09.004

Date October 2013

Changes Removed Draft Watermarks

Date November 2013

Revision Revision A.02.09.005

Changes Added 1.6 Configure BIOS for PC to start after power outage

Date November 2013

Revision Revision A.02.09.006

Changes Added 5.6.1 BCR/RA Configuration

Date December 2013

Revision Revision A.02.09.007

Changes Modified file path for PolicyManager.Properties in Appendix B

Revision Revision A.02.09.008

Date January 2014

Changes Added Gateway PC Requirements to Section 2 and Data Source PC requirements and Connection limits Section 3

Introduction:

This installation guide is intended to be used for the installation and configuration of Agilent Remote Advisor. The installation process refers to the Remote Advisor Installation Planner. Remote Advisor Installation Planner.xls is a tool used to collect pertinent information necessary to plan and install Remote Advisor. Remote Advisor Installation Planner.xls is supplied to the customer from the Agilent Site Prep Specialist and completed in advance.

**Important **

Verify that all Remote Advisor Gateway and Data Source PCs have a unique name. Avoid generic names for the Gateway PC. The name should be site specific to avoid duplication on the Agilent Remote Advisor Enterprise server.

PCs received from Agilent used for ChemStation, EZChrom clients, and Remote Advisor Gateway ship with a preconfigured name of Chemstation01 or DataSystem01. This name must be changed so all Remote Advisor PCs have a unique name.

Verify the installation is operational with the Agilent Customer Call Center to confirm completion of the installation

Email any corrections and suggestions to improve this Installation Guide to RemoteAdvisorSupport@agilent.com

Supporting Documents

Documents supporting the installation of Remote Advisor are found in the \documentation\Installation Documents folder of the Remote Advisor installation CD

- Remote Advisor Installation Checklist.pdf
- Remote Advisor Installation Guide for A020x.pdf
- Remote Advisor Supplemental Informatin.pdf

Image Captures

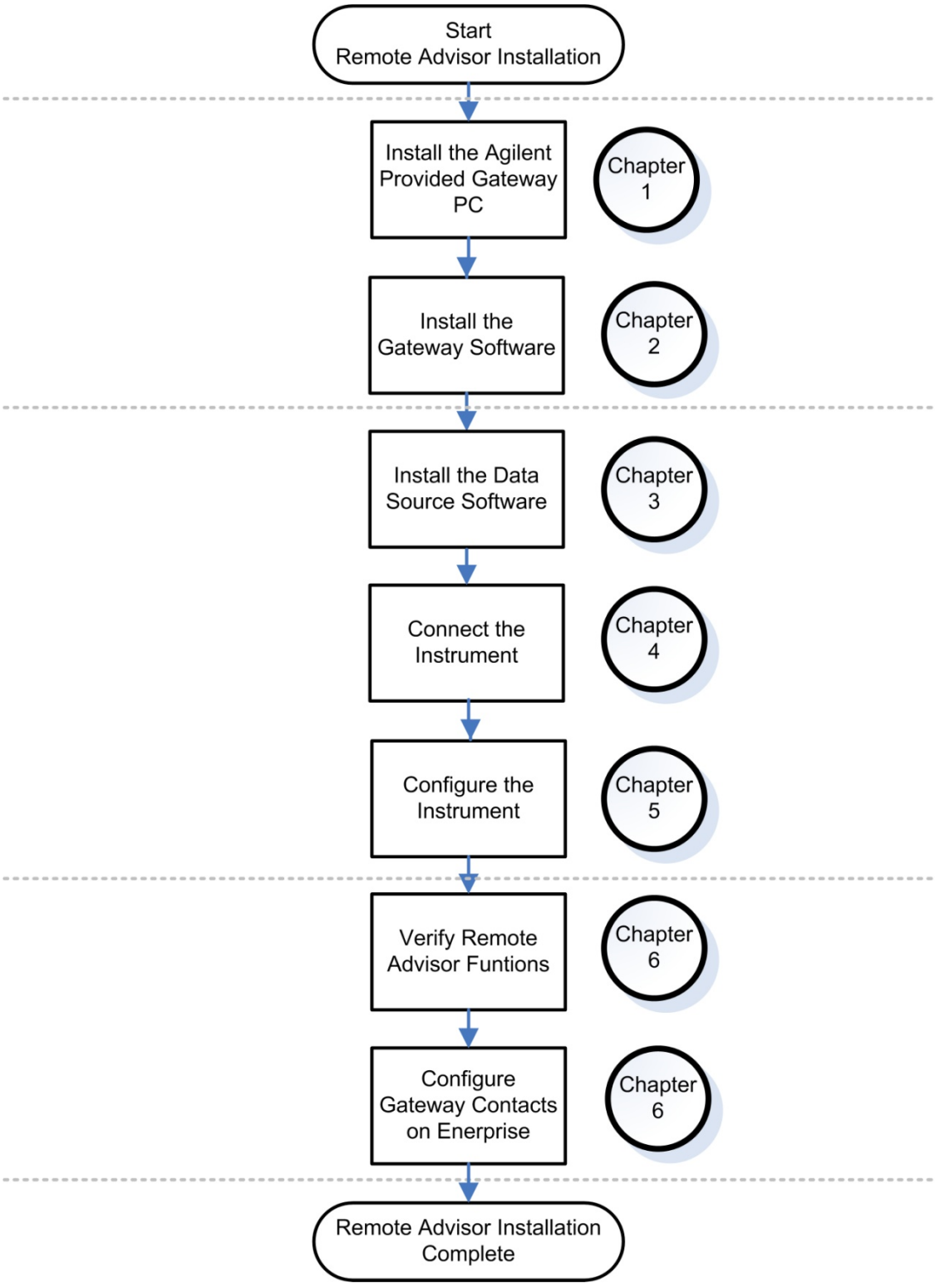
Gateway and Data Source installation images were captured with Windows 7. Images may vary with older operating systems

Important Upgrade Information:

Installation of Remote Advisor A.02.08 will upgrade A.02.04 and later Gateway and Data Source. Configuration files for the Gateway and Data Source will be archived for the reinstallation of A.02.09. Do not uninstall previous versions. The A.02.09 installer requires the previous version to archive the configuration files.

SMTP Mail server settings are not archived. Follow the Archiving SMTP Mail Server appendix.

Remote Advisor Installation Flow



1 Agilent Provided Gateway PC Installation

This section describes how to install the Agilent Provided Gateway PC with Windows 7.

1.1 Preliminary Installation for Windows 7 Gateway PC

This procedure installs the Windows 7 Gateway PC hardware and configures the basic PC settings. Refer to the Remote Advisor Installation Planner for the Gateway PC name completed by the customer for this installation. Create a PC name that will be unique to the location or the customer.

- Connect the monitor, keyboard, mouse, and power to the PC
- Do Not connect the PC to the network
- Power on the Gateway PC > Windows 7 Professional Setup window displays
- Select the appropriate Country or region, Time and currency, and Keyboard layout
- Select the Next button
- Type a user name: Suggestion RA
- Type a Computer Name that is unique to the location. The name may also be provided in the Remote Advisor Installation Planner prepared for the installation
- Select the Next button
- Type a password: Suggestion 3000hanover
- Type a hint
- Select the Next button
- Accept the license terms
- Select the Next button
- Select Ask me later for the Updates
- Select the Next button
- Select the Time Zone for the Gateway PC location
- Set the time and date
- Select the Next button
- Select the Work network
- Select the Next button > Windows starts Welcome to your Agilent Technologies Data System window is displayed
- Select the I Agree button
- Restart the computer
  - Select the Windows icon
  - Select the arrow to the right of the Shutdown button
  - Select Restart > The PC will restart
- Proceed to the next section

1.2 Windows 7 Gateway PC Configuration

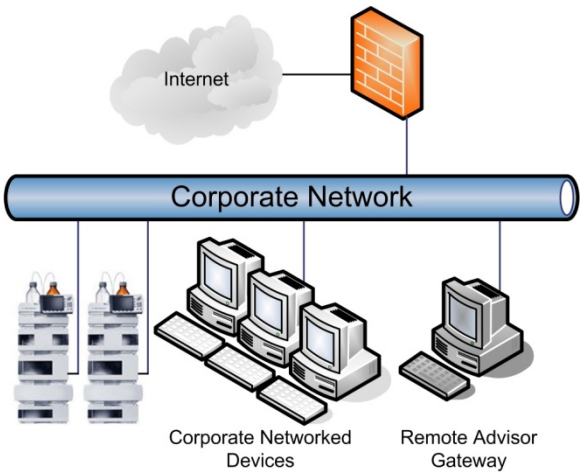
This procedure connects the Gateway PC to the network and configures the PC for use with Remote Advisor.

Single NIC Gateway Installation

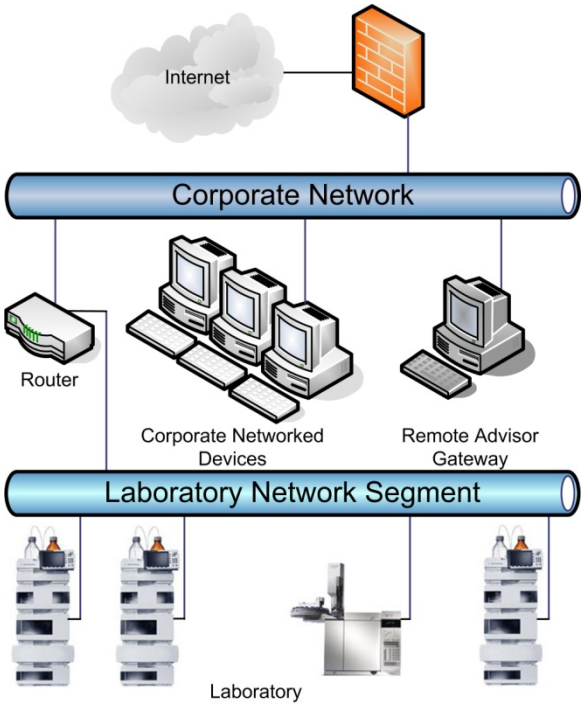
All Networked devices are connected to the corporate network. The Gateway PC is able to communicate to the Internet and to the Data Source PC through the same network connection.

A single network interface connection is used for both All in One and Segmented Networks

All in One Network

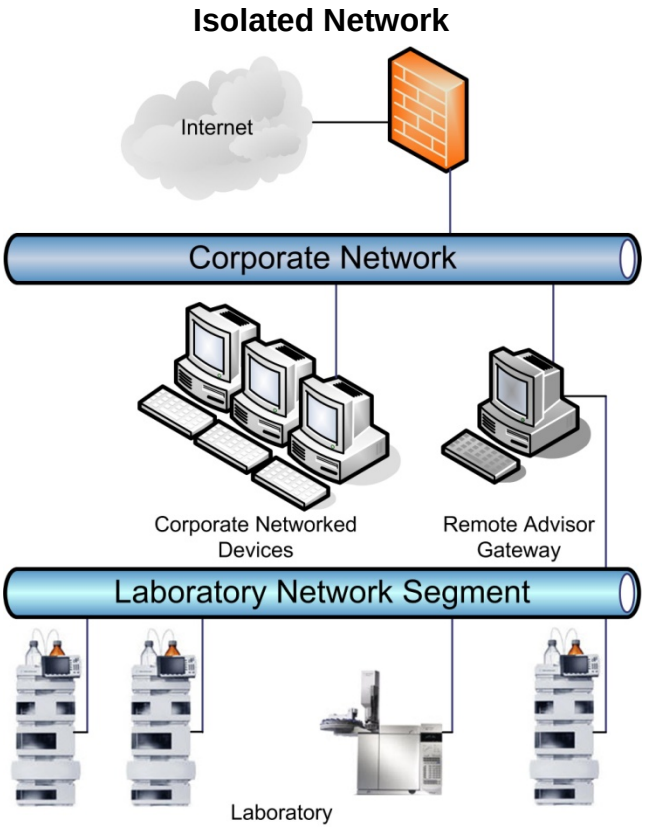


Segmented Network



Dual NIC Gateway Installation

The Laboratory network is an isolated network with no connection to the corporate network and no connection to the Internet. The Gateway PC will connect to both the corporate and isolated networks.



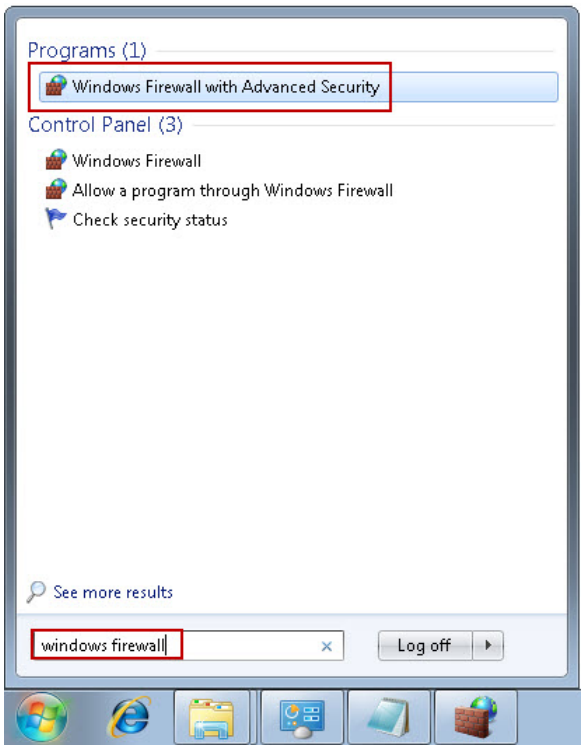
Log in and Virus Scan Installation

- Log on to the Gateway PC using the following username and password
  Username = admin
  Password = 3000hanover
- Select the I Agree button on the Welcome to your Agilent Technologies Data System window
- Instruct the customer to install their virus protection software before proceeding.

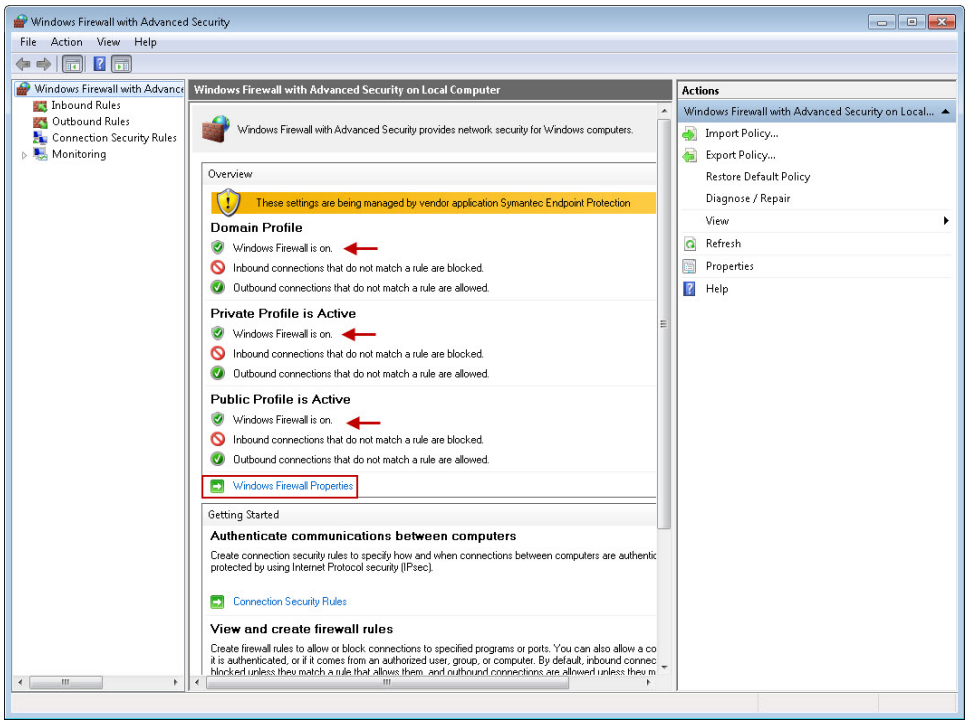
  If the network is required to install the virus protection software, have the customer install the virus protection software immediately after connecting the Gateway PC to the network.

1.3 Disable Windows Firewall

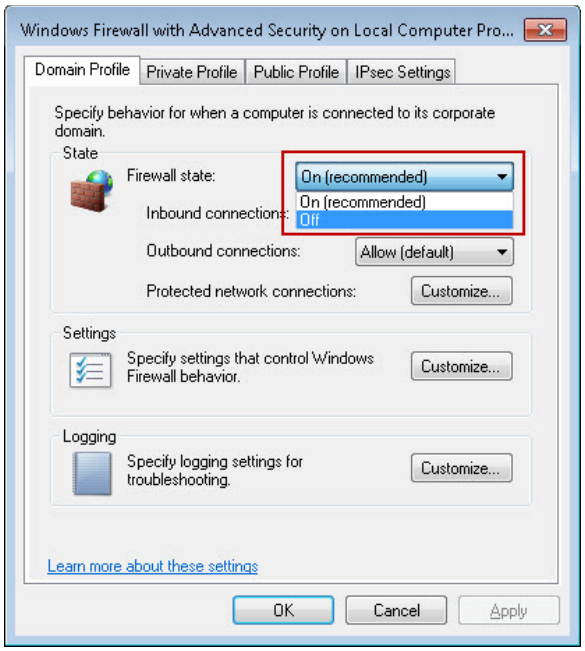
Windows Firewall may cause communication issues between the Gateway and Data Source Remote Advisor components. Windows Firewall is on by default. It is recommended to disable Windows Firewall before installation of Remote Advisor.



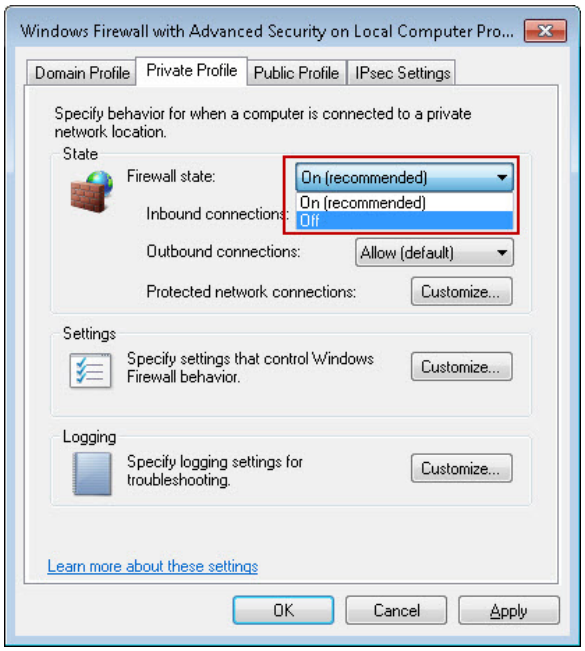
- Select the Windows Start button
- Type Windows Firewall in the search window
- Double click Windows Firewall with Advanced Security under Programs



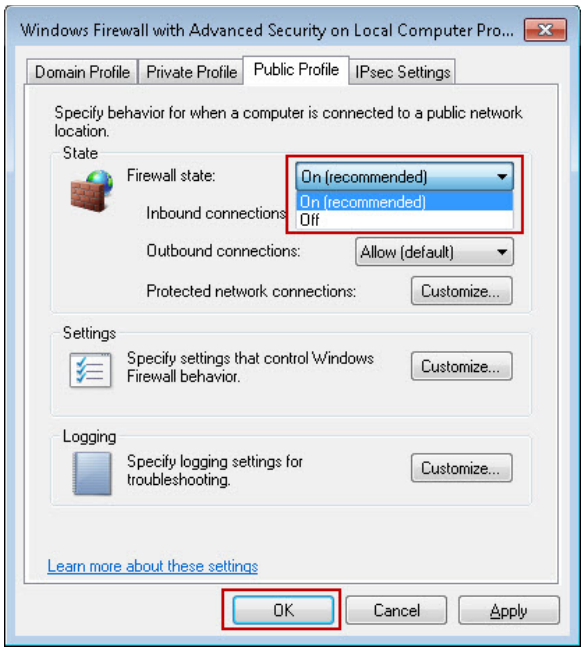
- Windows Firewall is on for all three profiles
- Select the Window Firewall Properties link



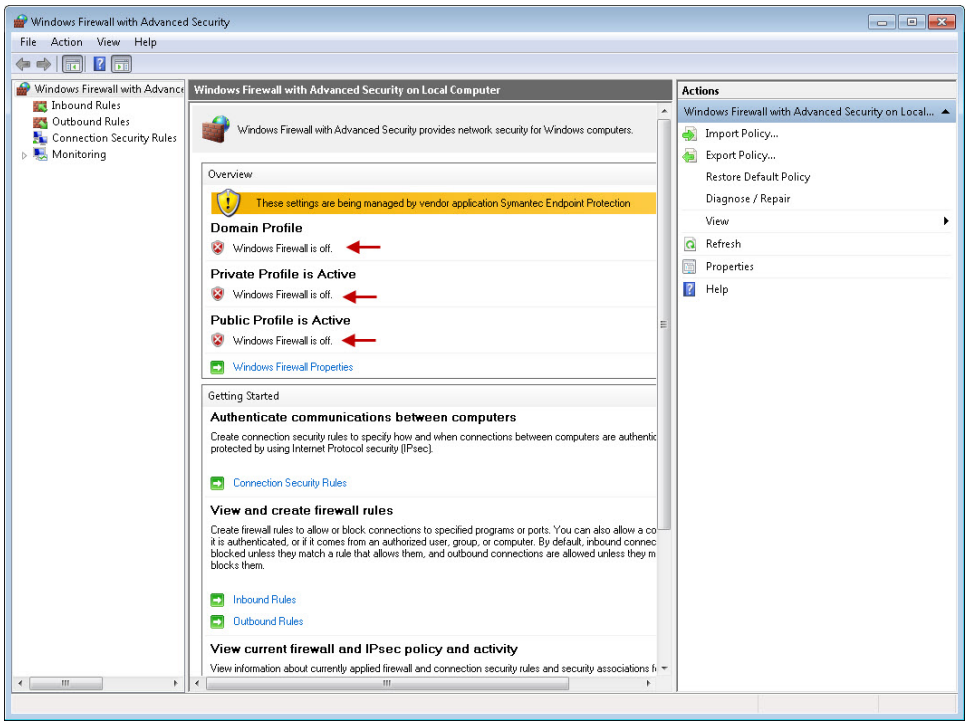
- Select off for the Firewall state in the Domain Profile tab
- Select the Private Profile tab



- Select off for the Firewall state
- Select the Public Profile tab



- Select off for the Firewall State
- Select the OK button



Windows Firewall is now off for all profiles

Single NIC Gateway Connection

- Connect the primary NIC of the gateway PC to the network. This is the NIC on the main board of the PC.

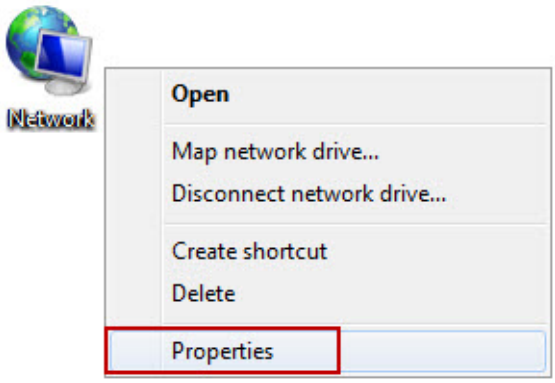
Dual NIC Gateway Connection

Dual NIC configuration requires one of the two network interface cards to be configured for a static IP address.

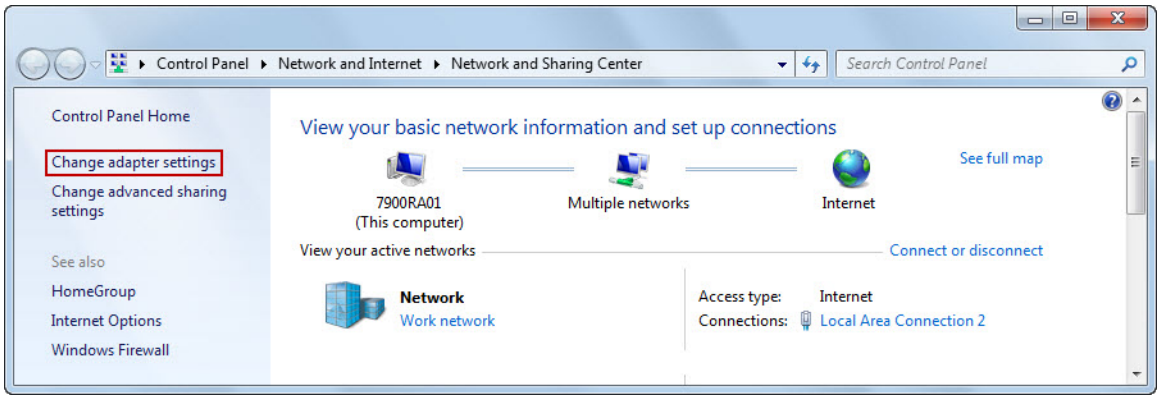
- Connect the Primary NIC of the Gateway PC to the Isolated Laboratory Network. This is the NIC on the main board of the PC.
- Connect Secondary NIC to the corporate network. This is the NIC that was added to the PC.

Disable Network Interface Power Management

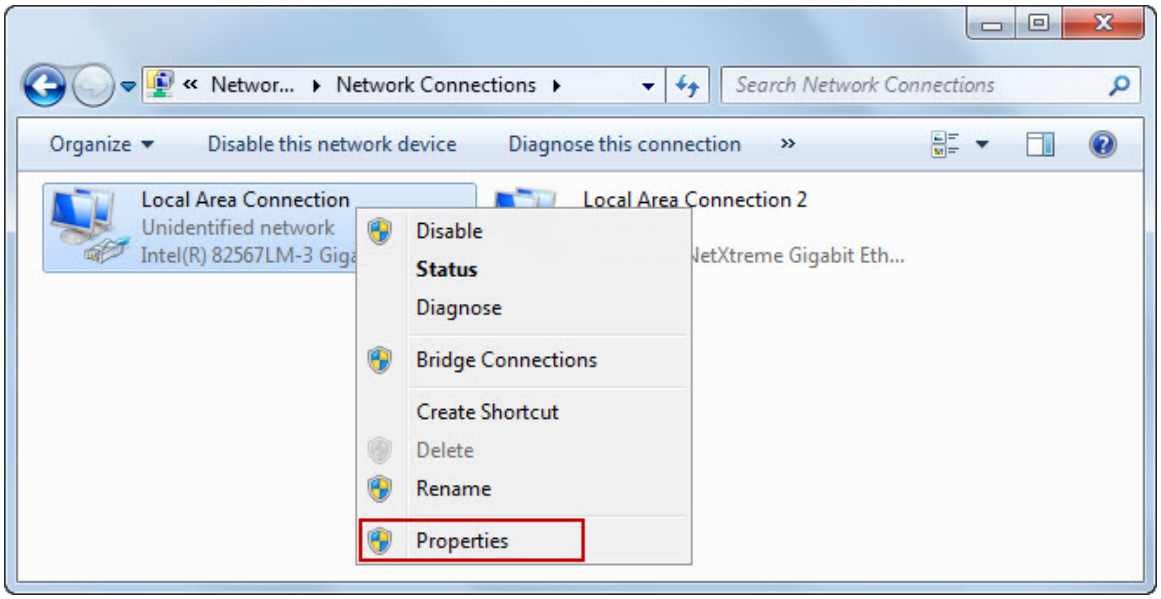
Power Management for the NIC will put the PC in sleep mode if there is no network activity. Power Management should be disabled on each network interface to prevent the computer from going to sleep if there is no network activity.



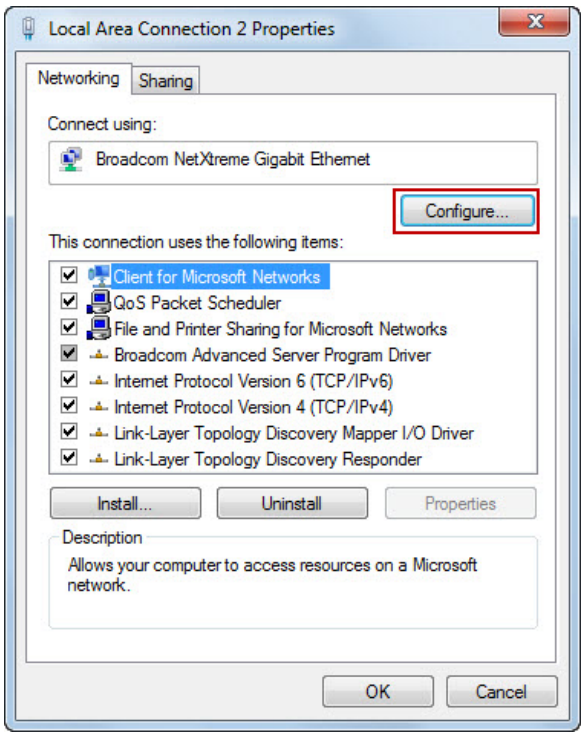
- Right click the Network icon on the desktop
- Select Properties > Network information window is displayed



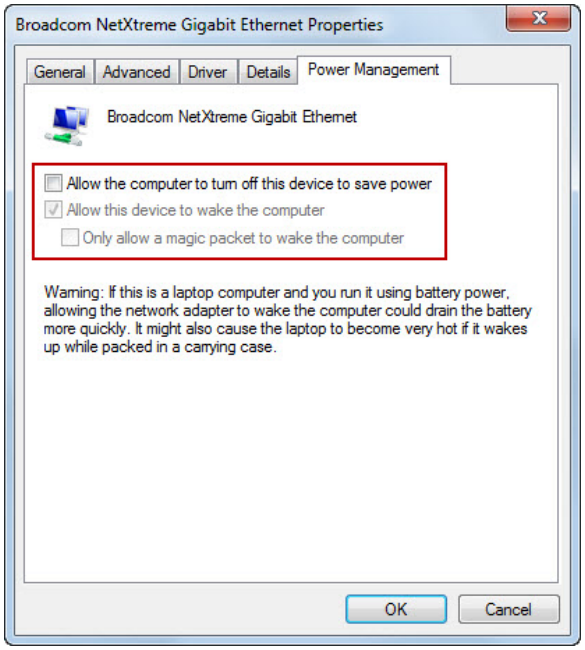
- Select the Change adapter settings link



- Right click the network adapter for Local Area Connection
- Select Properties > Local Area Connection Properties window is displayed



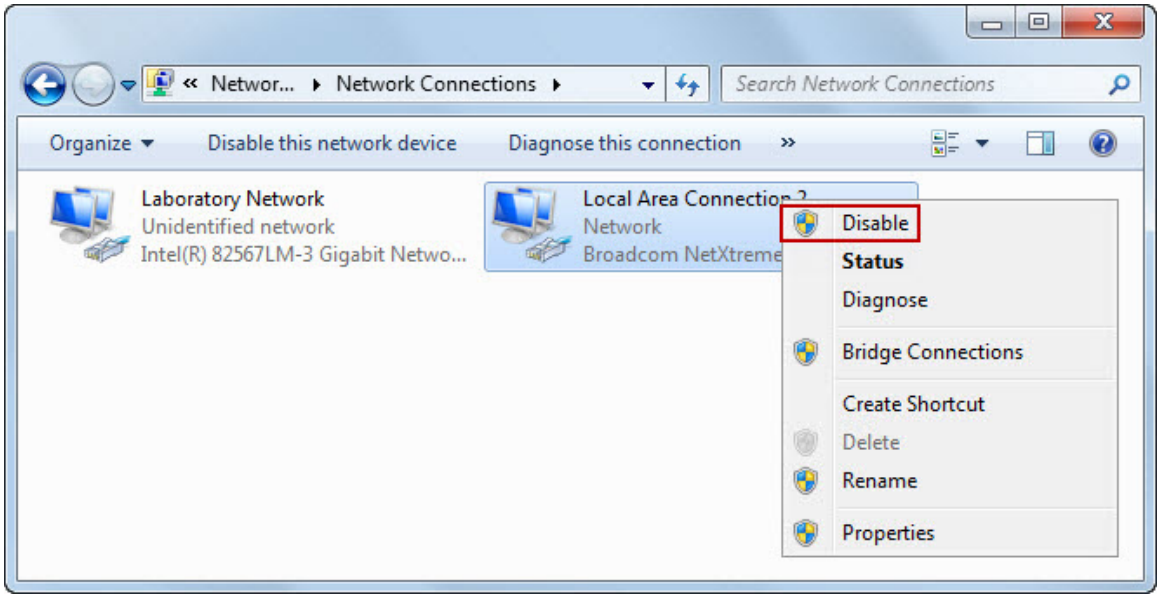
- Select the Configure button



- Select the Power Management tab
- Remove the check from Allow the computer to turn off……
- Select the OK button and OK all proceeding window
- Repeat this procedure for the Local Area Connection 2 interface

1.4 Single NIC Configuration

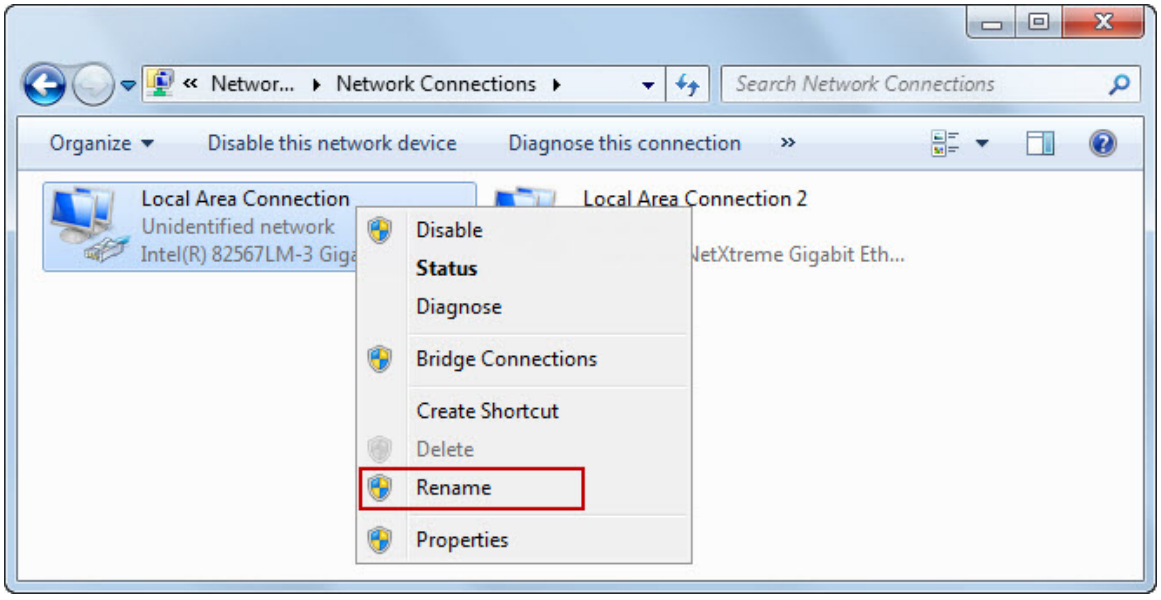
Single NIC configuration connects only one network interface to the network. This procedure disables the second NIC



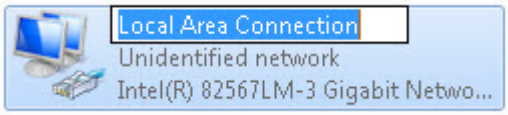
- Right click Local Area Connection 2 (Broadcom NetXtreme)
- Select Disable

1.5 Dual NIC Configuration

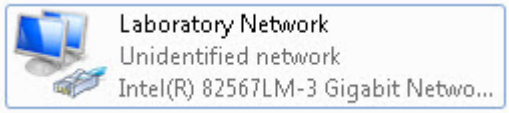
The network interfaces are renamed for clarity

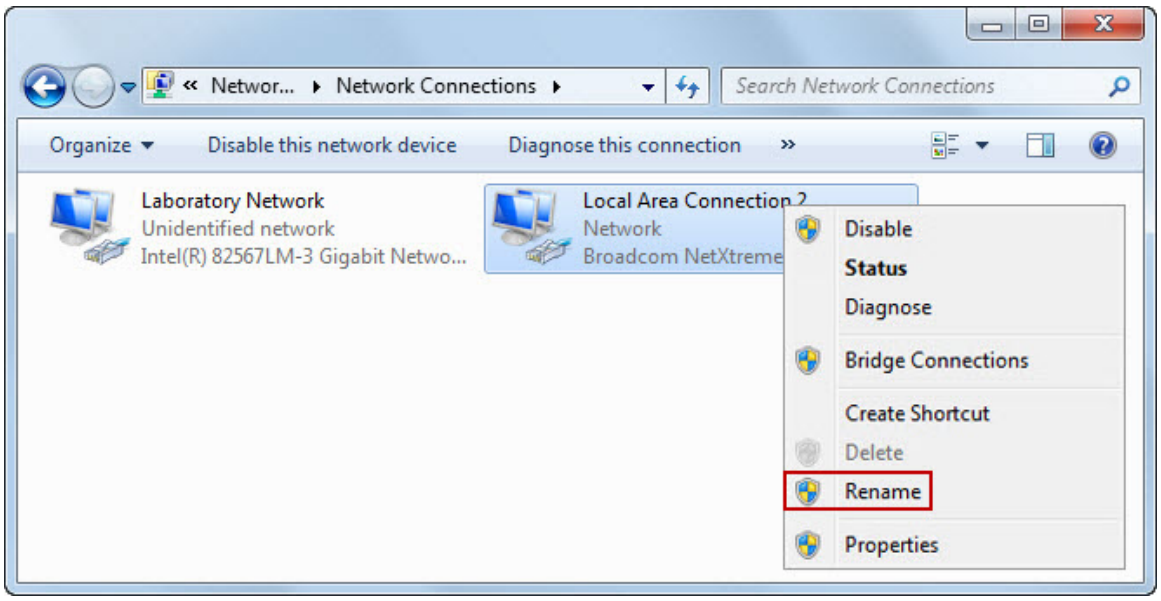


- Right click the Local Area Connection
- Select rename

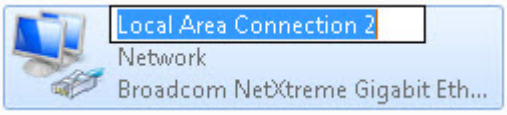


- Type Laboratory Network – The isolated network is connected to the primary interface
- Press the enter key > Laboratory Network is now displayed as the network name

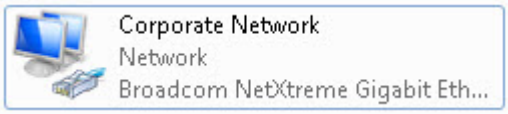




- Right click Local Area Connection 2
- Select Rename

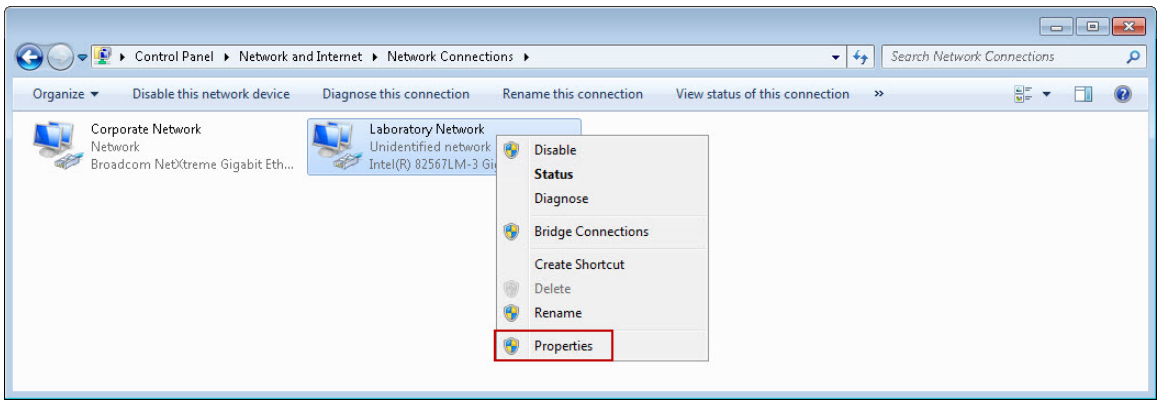


- Type Corporate Network – The isolated network is connected to the primary interface
- Press the enter key > Corporate Network is now displayed as the network name

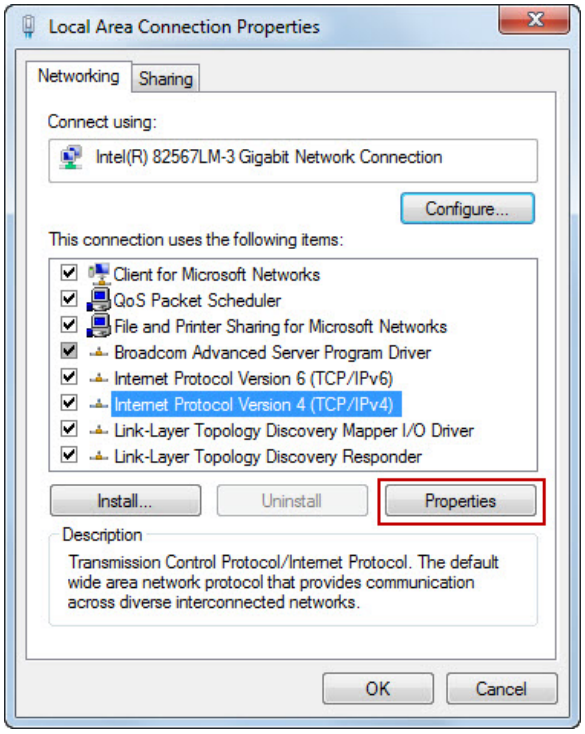


Isolated Network IP Address

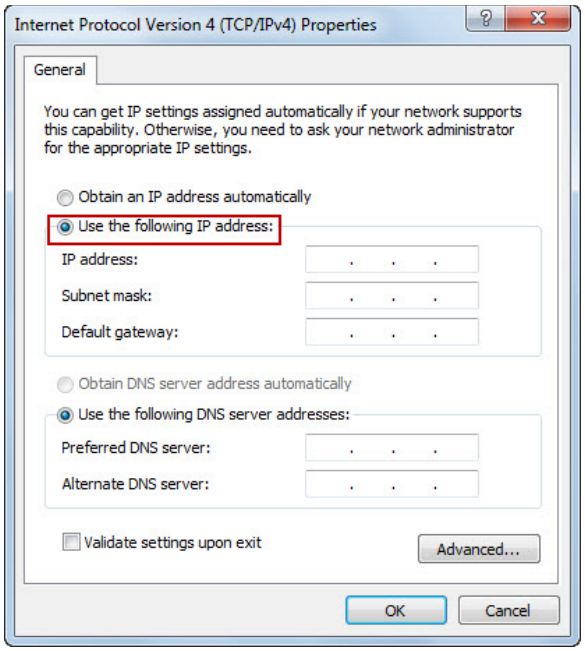
The Isolated network requires a Static IP address. This procedure configures the Isolated Network for a static IP address.



- Right click the Laboratory Network
- Select Properties



- Select Internet Protocol Version 4 (TCP/IPv4)
- Select the Properties button



- Select Use the following IP address
- Enter the IP Address, Subnet mask, and Default Gateway information

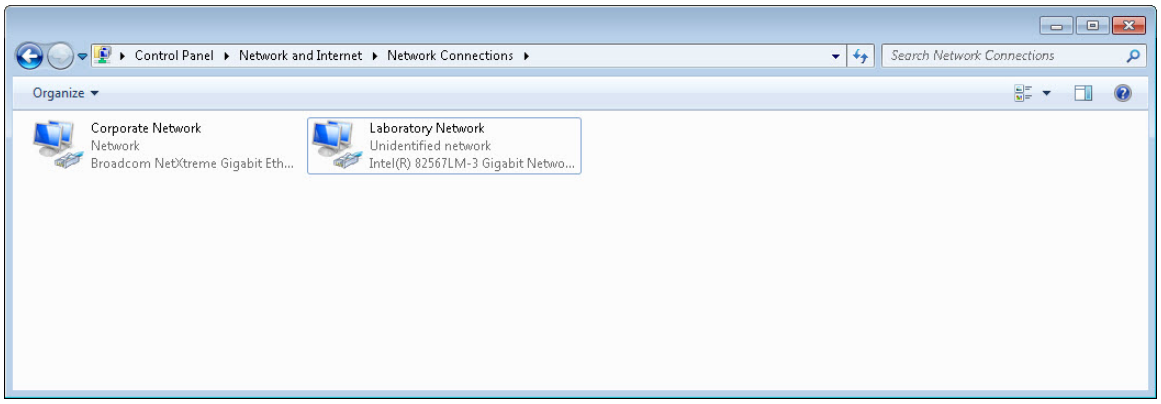
Note: The IP Address information is supplied by the customer in the Installation Planner

- Select the OK button
- Close the Laboratory Network properties window

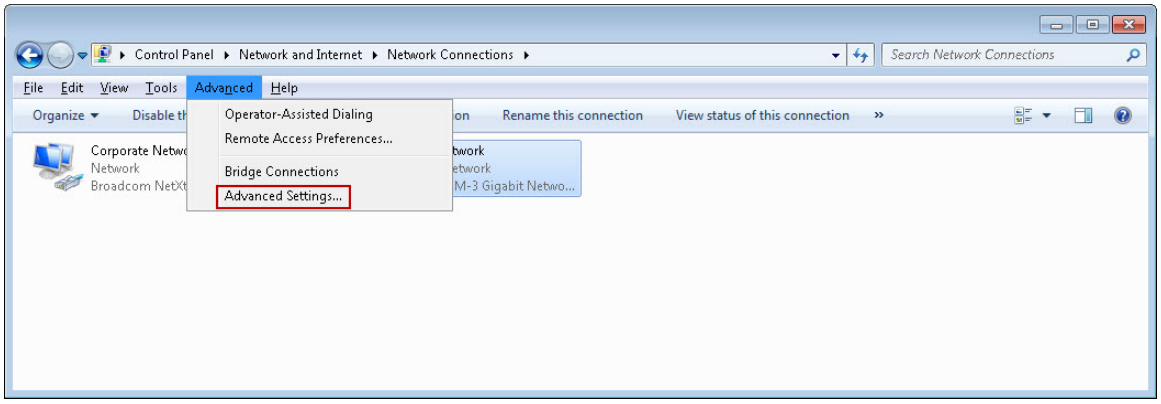
Binding Order

The Binding Order of the network interface cards determines the priority for communications. The binding for the Laboratory Network must be first for best performance.

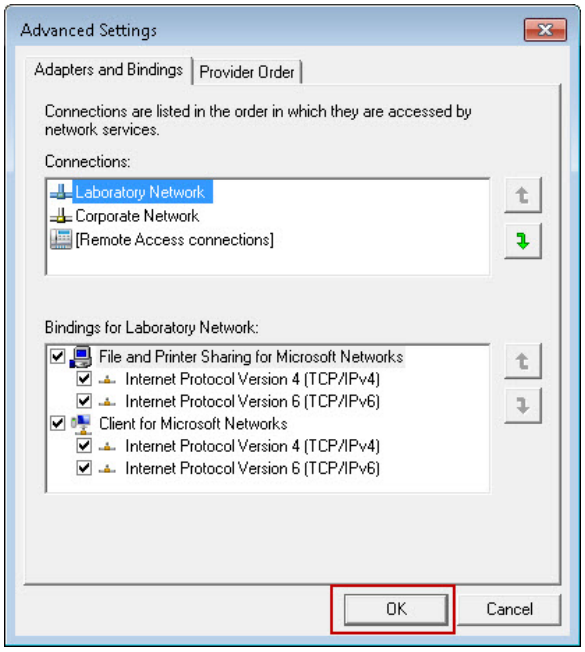
The Network Adapter screen does not display a toolbar



- Press the alt key on the keyboard > the tool bar is displayed



- Select Advanced from the toolbar
- Select Advance Settings from the menu > Advanced Settings window is displayed



- Select the Adapters and Bindings tab
- Select Laboratory Network
- Move Laboratory Network to the top using the up arrow
- Select the OK button

1.6 Configure BIOS for PC to start after Power Outage

PCs normally remain powered off after a power outage. The Gateway will be missing on the Enterprise server until the Gateway PC is powered back on. The PC BIOS can be configured so that the PC will power on after a power outage.

BIOS configuration will vary from by PC manufacturer and PC model. The Gateway PC that Agilent ships for Remote Advisor is manufactured by HP. The guidance below is to modify the BIOS for an HP PC.

HP PC BIOS Configuration to start PC after a Power Outage

- Restart the PC
- Press F10 multiple times while the PC is first powering on to enter the BIO configuration. The BIOS configuration menu will display
- Select the Advanced menu
- Select the Power on Options, this is what happens after the computer loses power, and to change the behavior of the Power On Self Test (POST)
- Modify the Power On option so that the PC will start after a power outage using the left and right arrows to change the setting.
- Save the change by following the instructions on the screen.
- Select File Menu
- Select Save and Exit

2 Gateway Software Installation

The Agilent Remote Advisor Gateway software is installed and the Gateway is deployed in this section.

Information required to complete the Gateway software installation is found in the Installation Summary workbook in the Remote Advisor Installation Planner.xls prepared for this installation. Remote Advisor Installation Planner.xls is prepared during the Site Prep phase of the Remote Advisor installation.

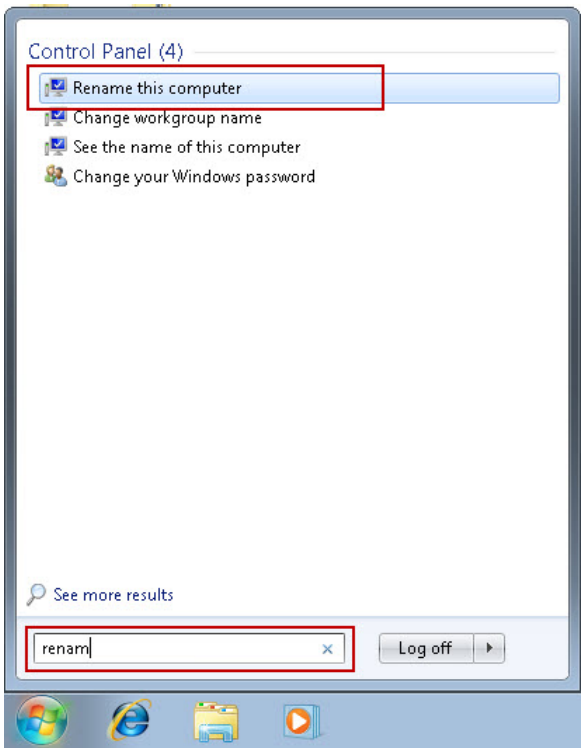
2.1 Gateway PC Requirements

Gateway PC Hardware Software Requirements	
CPU	3.4 GHz or greater
Disk Drive	10 GB or greater available free space
RAM	4 GB or greater
Optical Drive	DVD +/- RW (Required)
Supported English Operating Systems	Windows XP Professional SP3 or greater Windows Sever 2003 SP2 or greater Windows Server 2008 SP1 or 2008 R2 or greater Windows 7 32 & 64 bit
Virus scanning Software	Installed according to site policy
Maximum Instruments Supported	100

2.2 Pre-Installation Verification

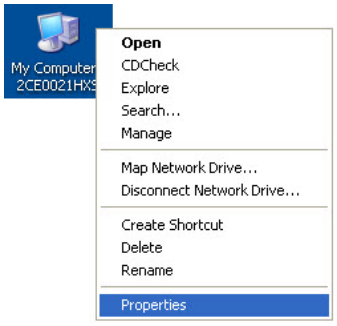
- Verify that the Gateway PC has a unique Computer Name

Windows 7



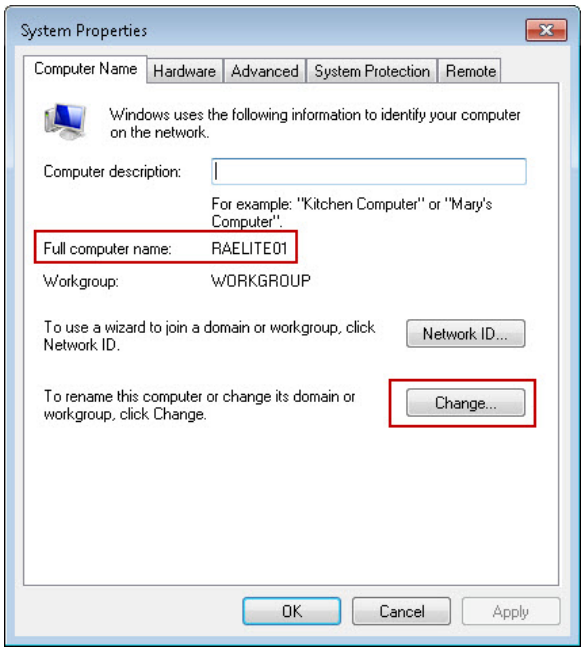
- Select the Windows Start button
- Type Rename in the Search section
- Double click Rename this computer > System Properties opens

Windows XP



- Right click the My Computer icon on the desktop
- Select Properties from the menu > System Properties opens

System Properties



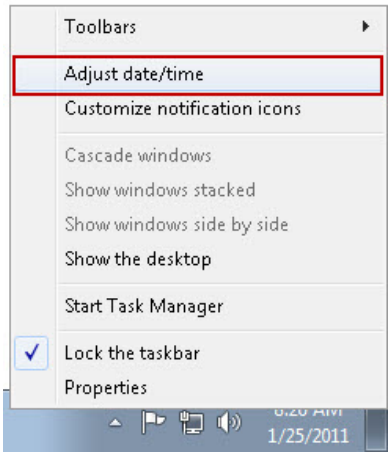
- Verify the PC name
- Change name if not a unique name

Internet Access

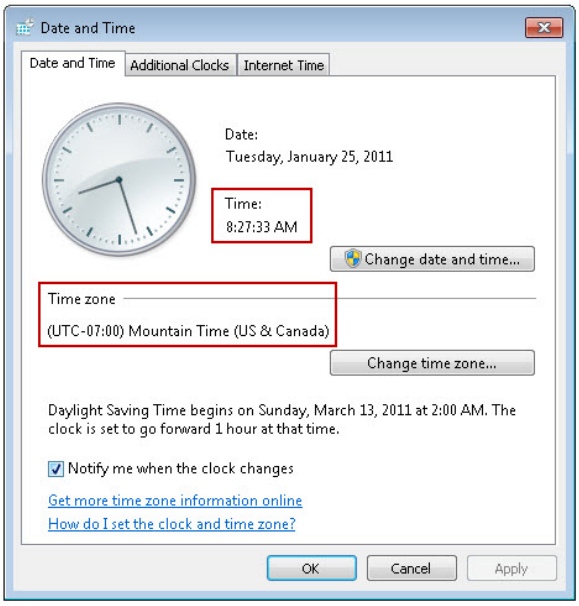
- Verify that the Gateway can access http:\\RemoteAdvisor.chem.agilent.com with Internet Explorer

System Time

- Verify that the Gateway time zone, date, and time are correct



- Right click the system time in the lower right had corner of the system notification area
- Select Adjust date/time > Date and Time window opens

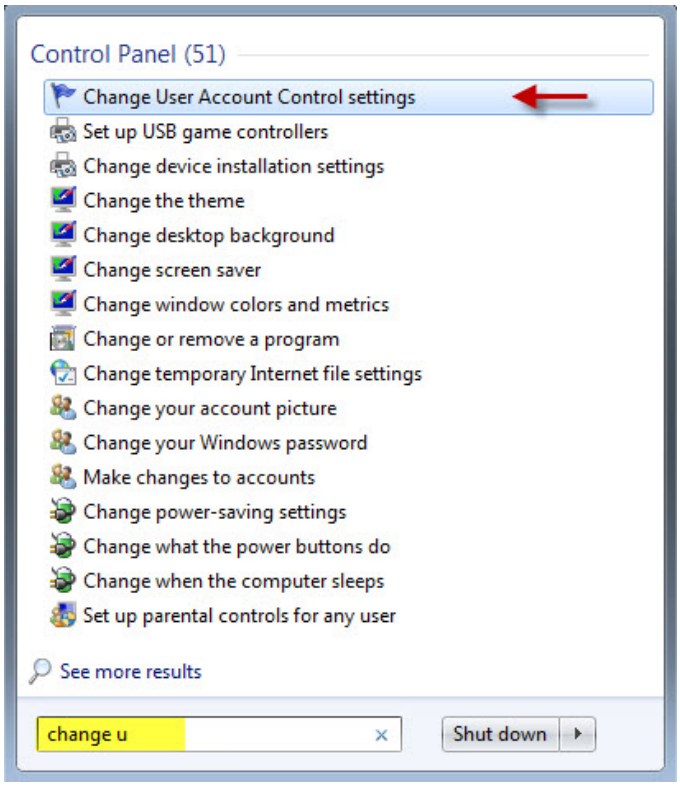


- Verify correct time and time zone
- Adjust time and time zone as required

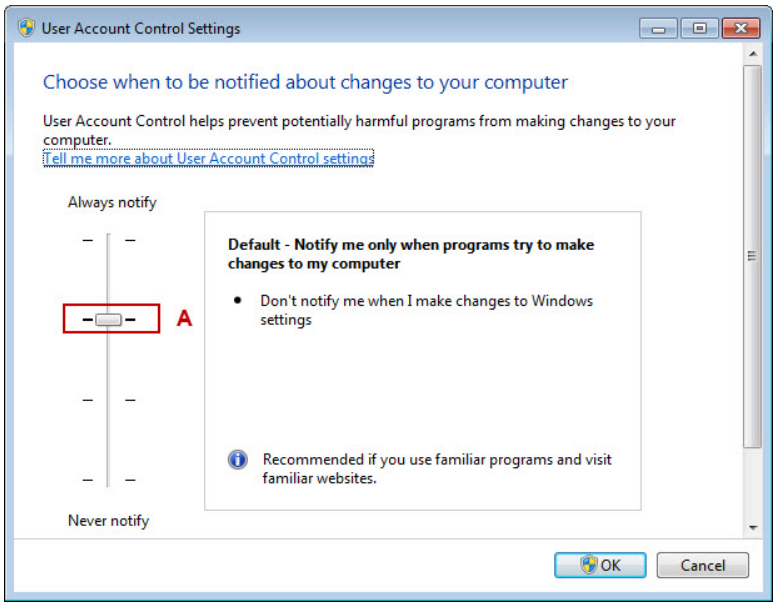
2.3 Changing the Windows 7 User Account Control to Never Notify

****Important** User Account Control (UAC) notifies the user before changes are made to the computer that require administrator-level permissions. The default setting may interfere with the installation of all software components for Remote Advisor. It is highly recommended to turn the UAC to the Never Notify Position to avoid improper installation of Remote Advisor software components.**

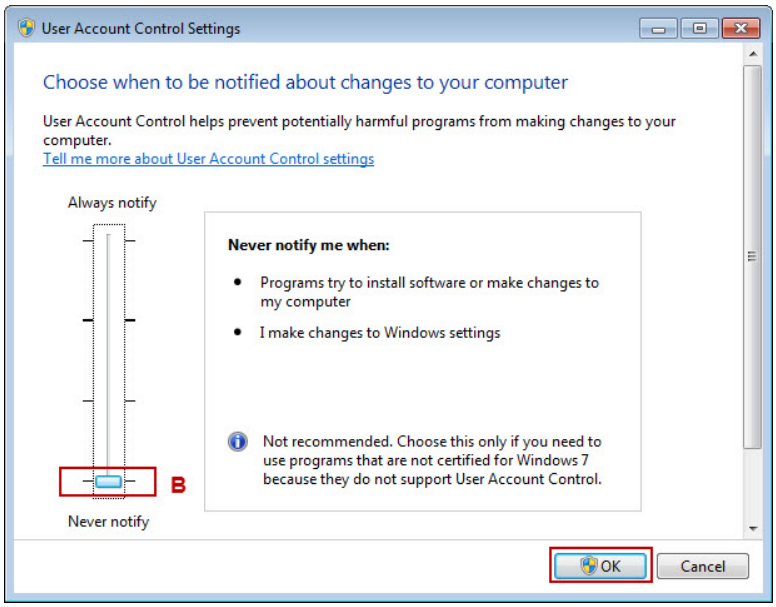
- Select the Windows Start button



- Type change user in the search field > a list of commands will display as you type
- Select Change User Account Control Settings > User Account Control Settings window displays



- Move the slide control from the current position A to Never notify position B



- Select the OK button
- Restart the computer for the changes to take effect

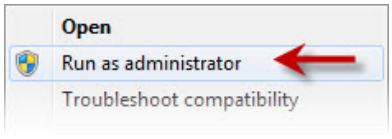
2.4 Installing the Remote Advisor Gateway Software

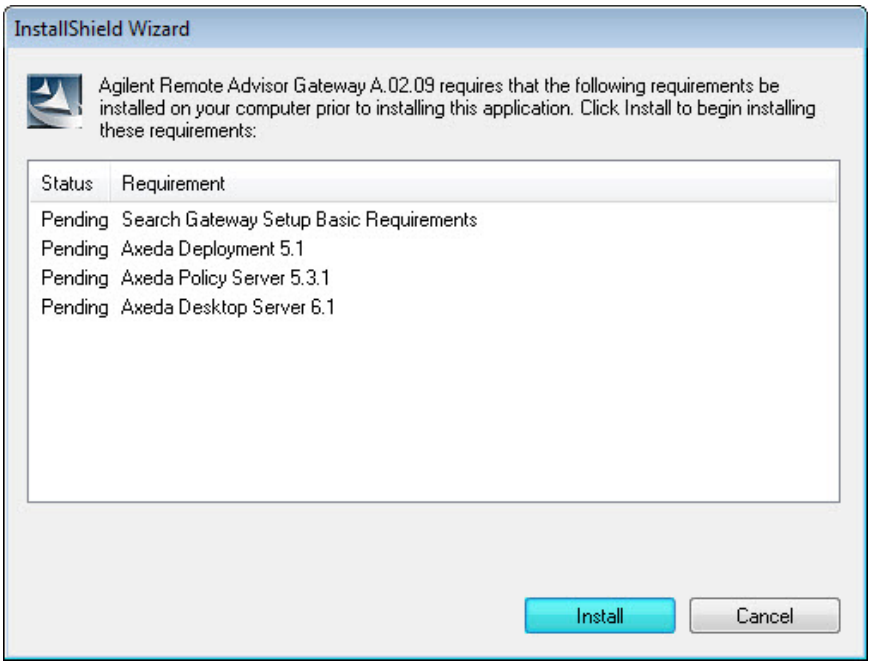
When upgrading an earlier release of Remote Advisor, install the Gateway software without uninstalling the previous version.

Installation of Remote Advisor A.02.09 will upgrade A.02.04 and later. Configuration files for the Gateway will be archived for the reinstallation of A.02.09. Do not uninstall previous versions. The A.02.09 installer requires the previous version to archive the configuration files.

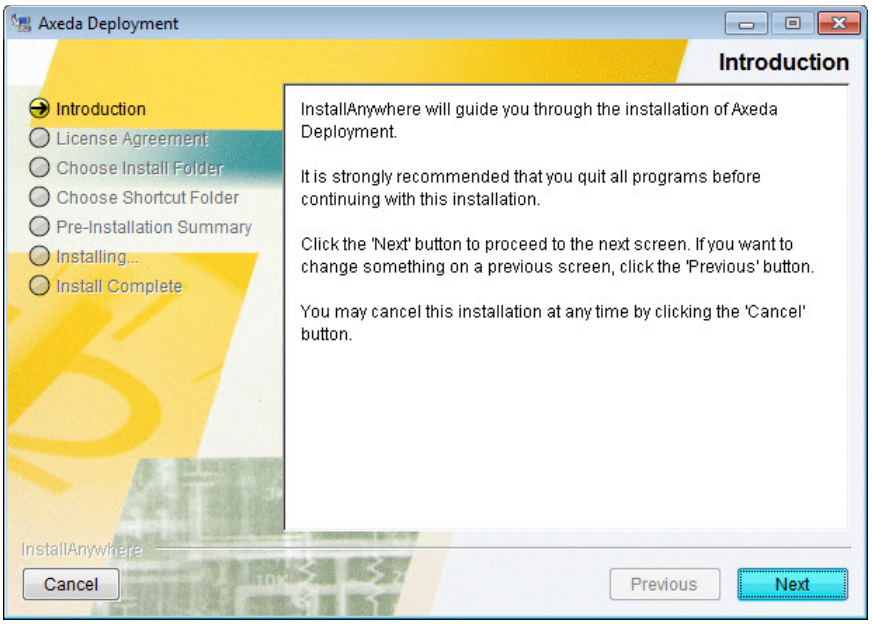
SMTP Mail server settings are not archived. Follow the Archiving SMTP Mail Server appendix, Appendix B.

- Install the Remote Advisor Gateway Installation CD in the CD drive.
- Browse the CD to :\Gateway Installer
- Double click AgilentGateway.exe > Install Shield Wizard opens
  ****Special note for Windows 7****
  Right click AgilentGateway.exe
  Select Run as Administrator

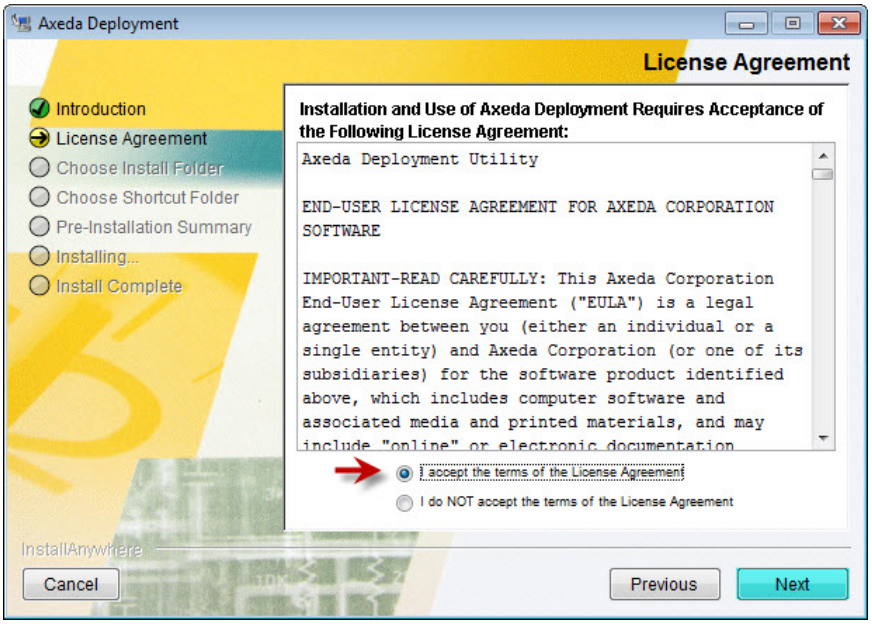




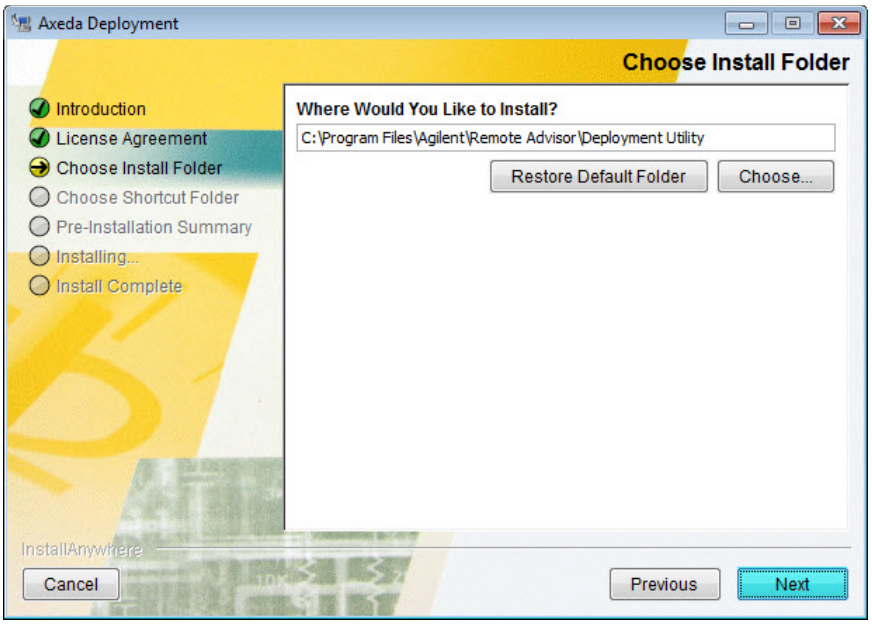
- Select the Install button > Basic requirements are installed, Axeda Deployment Introduction window opens



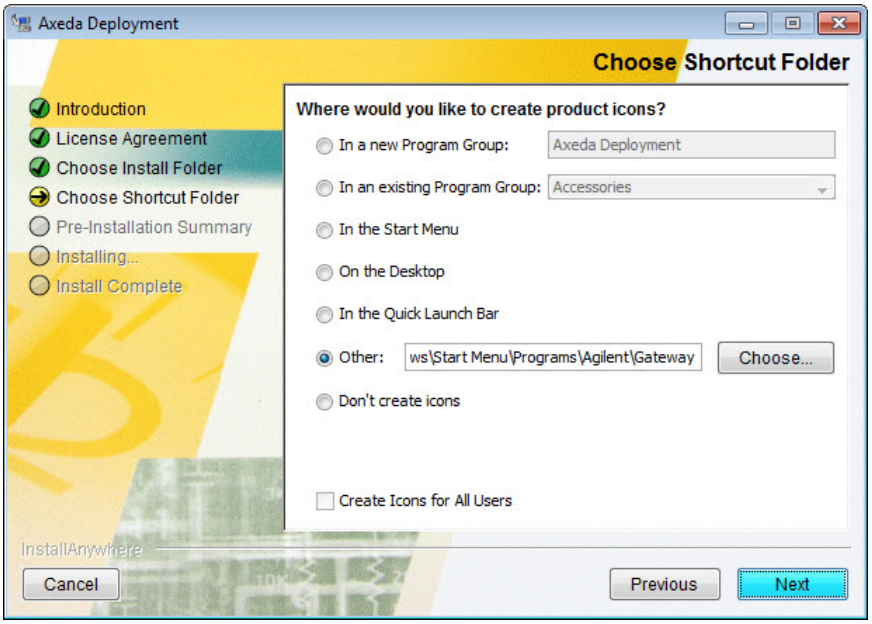
- Select the Next button > License Agreement window opens



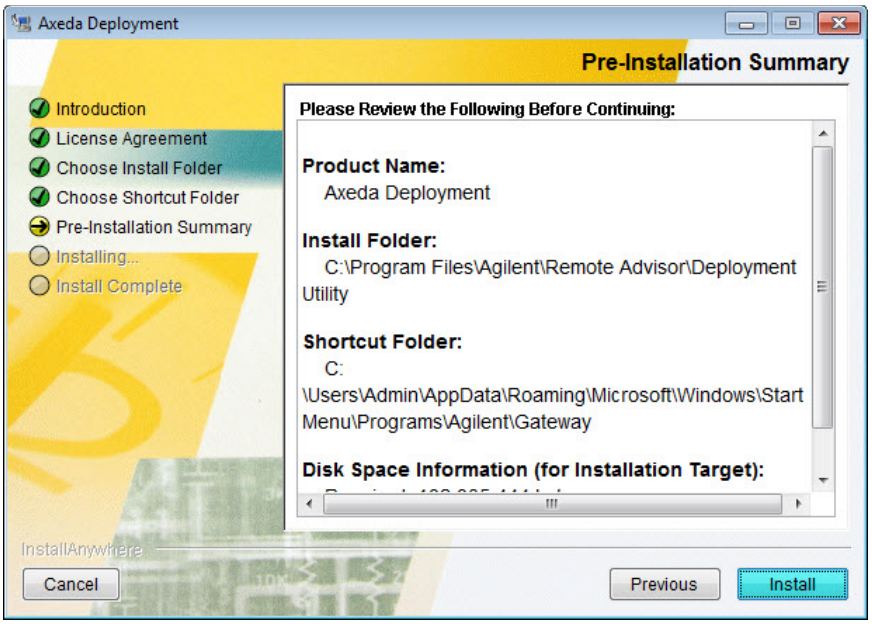
- Accept the license agreement
- Select the Next button > Choose Install Folder window opens



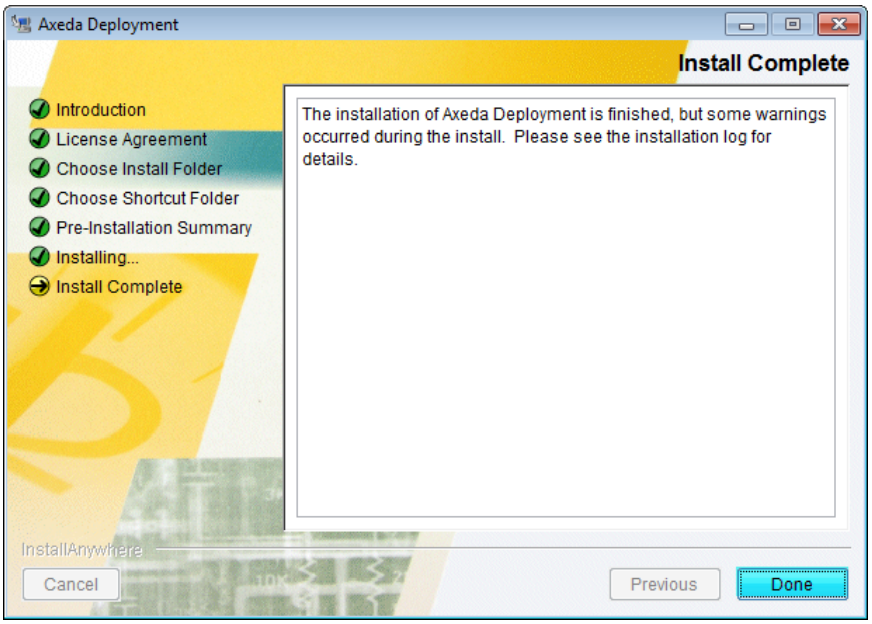
- Select the Next button > Choose Shortcut Folder window opens



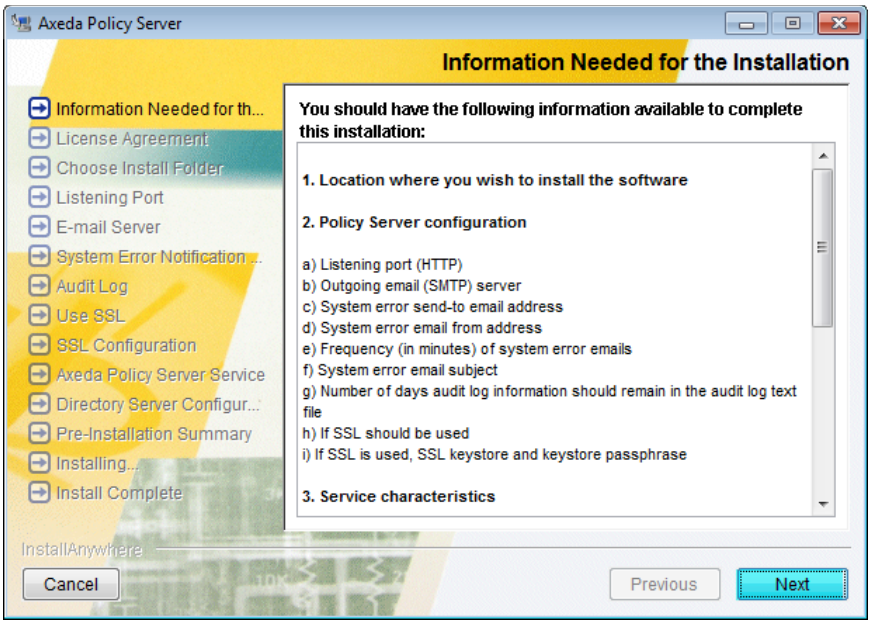
- Keep Other for the folder selection
- Select the Next button > Pre-Installation Summary window opens



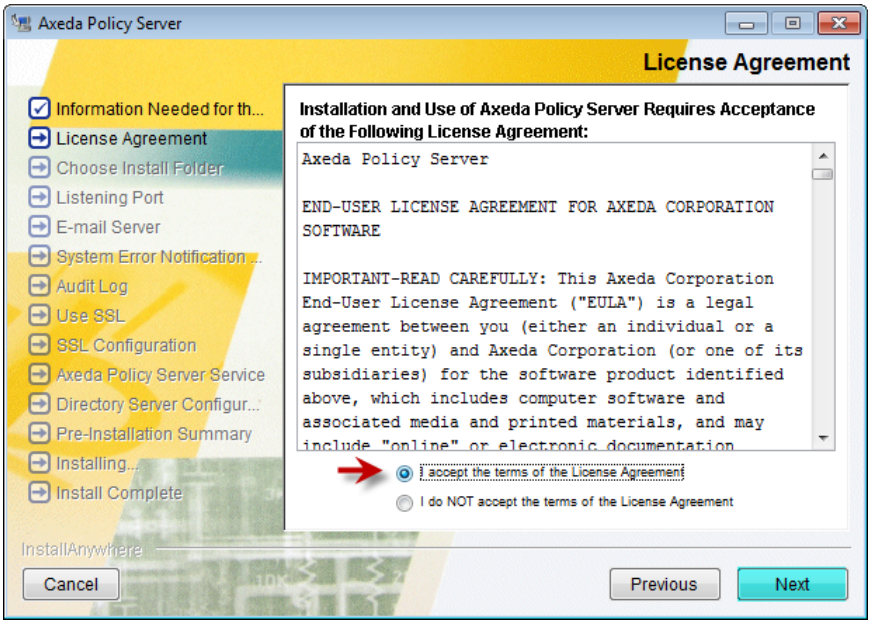
- Select the Install button > Axeda Deployment Utility installs. Install Complete window displays



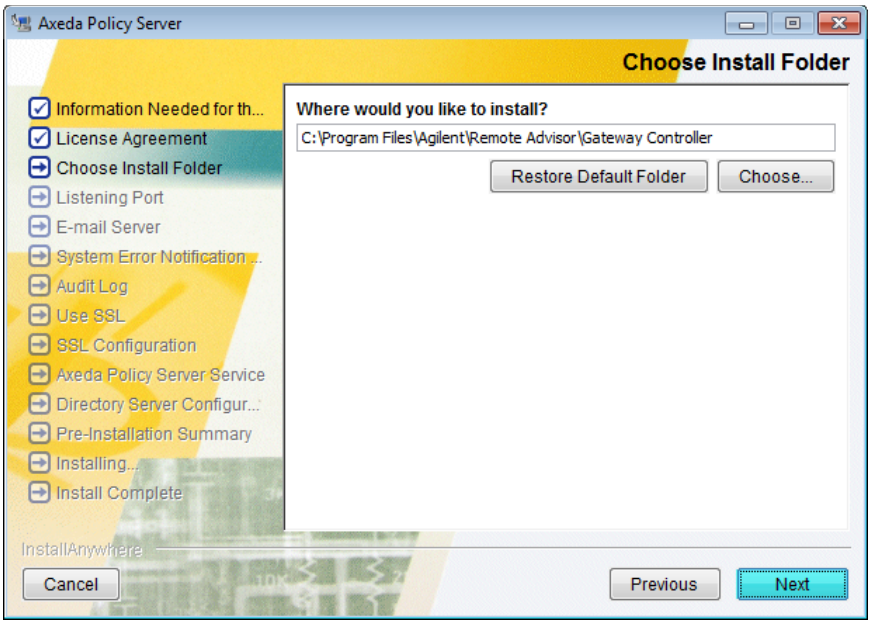
- Select the Done button > Axeda Policy Server Information Needed window opens



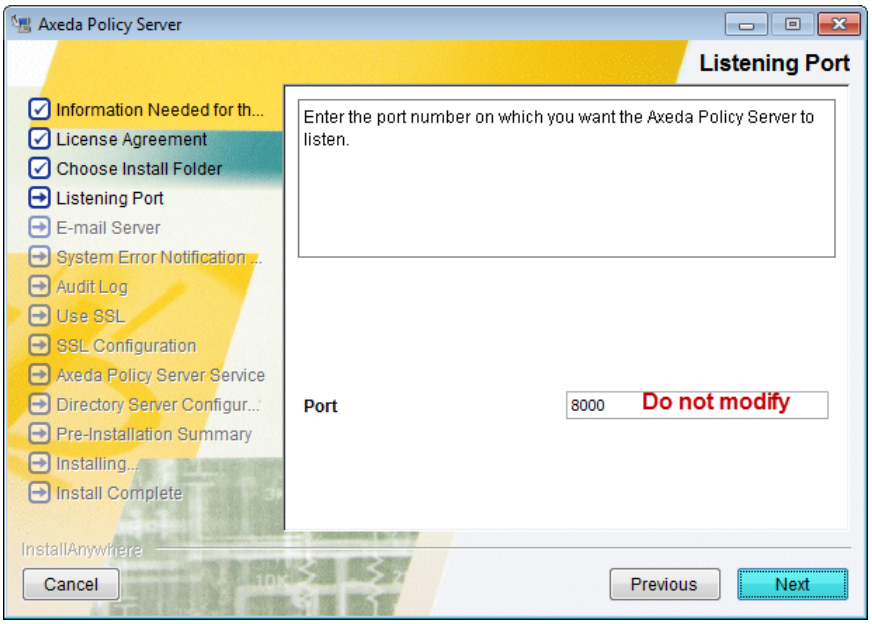
- Select the Next button > The License Agreement window opens



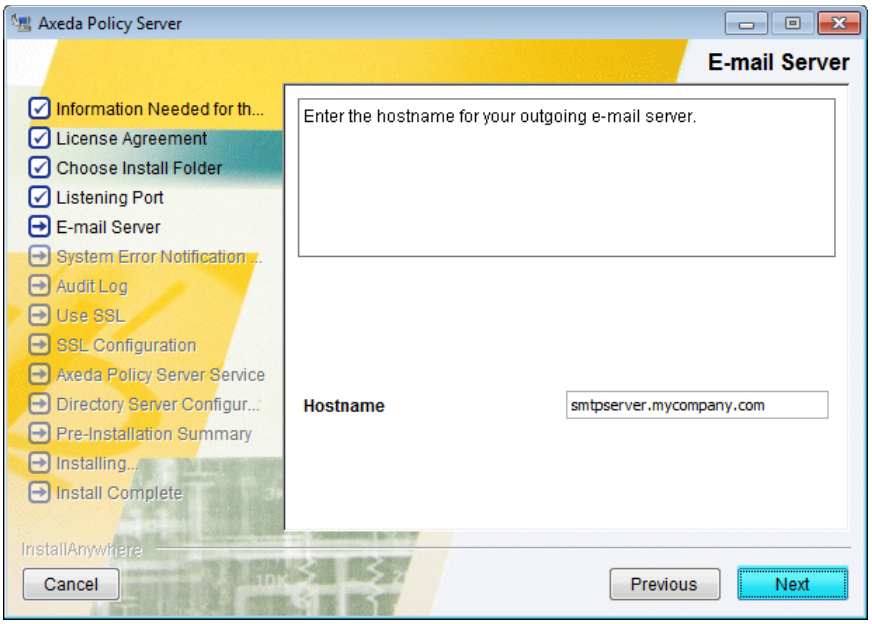
- Accept the License agreement
- Select the Next button > Choose Install Folder window opens



- Keep the default installation folder
- Select the Next button > the Listening Port window opens



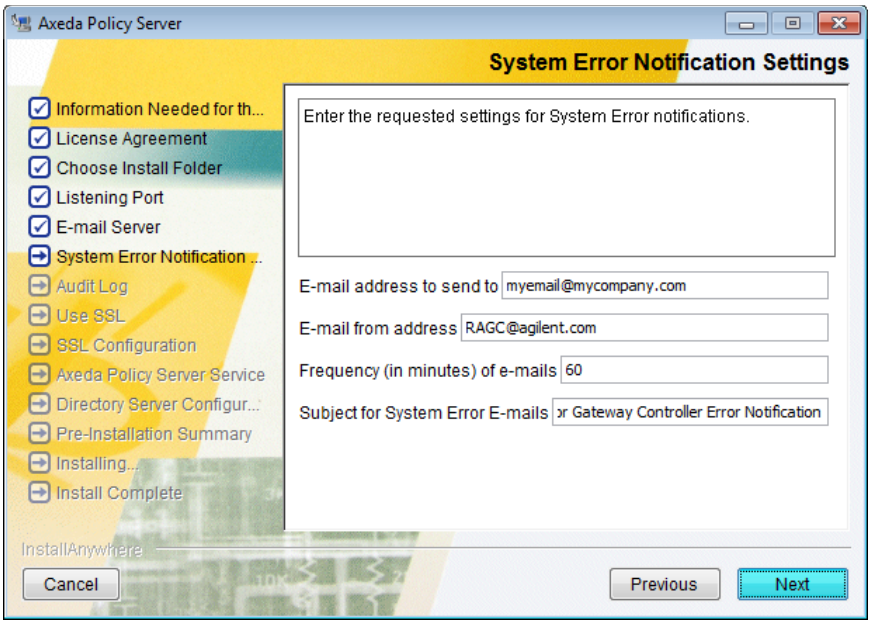
- Keep default port 8000 as the port number
- Select the Next button > E-mail Server window opens



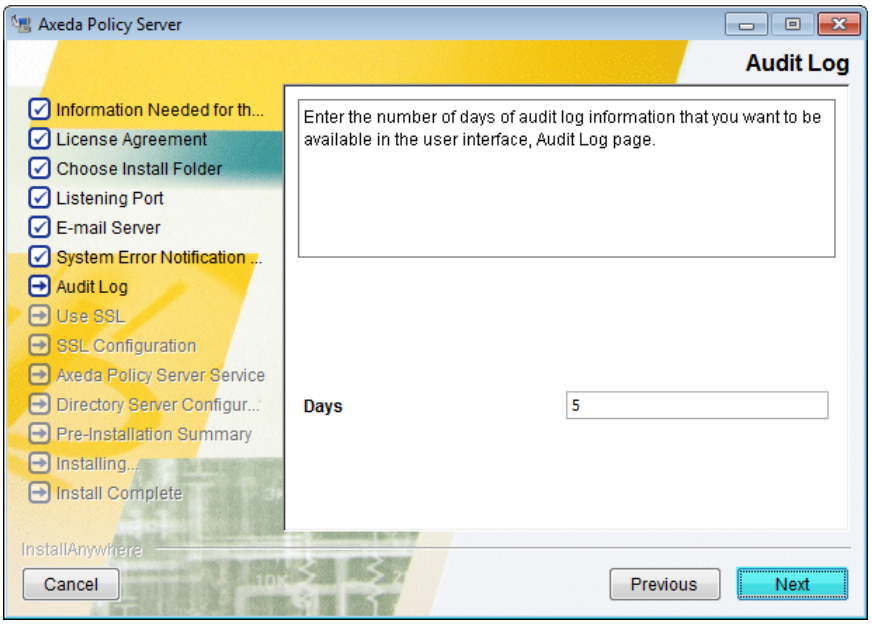
The E-mail server is used to send Axeda Policy Server error messages.

The Hostname for the SMTP E-Mail Server can be found in the Installation Summary workbook in the Remote Advisor Installation Planner.xls prepared for this installation.

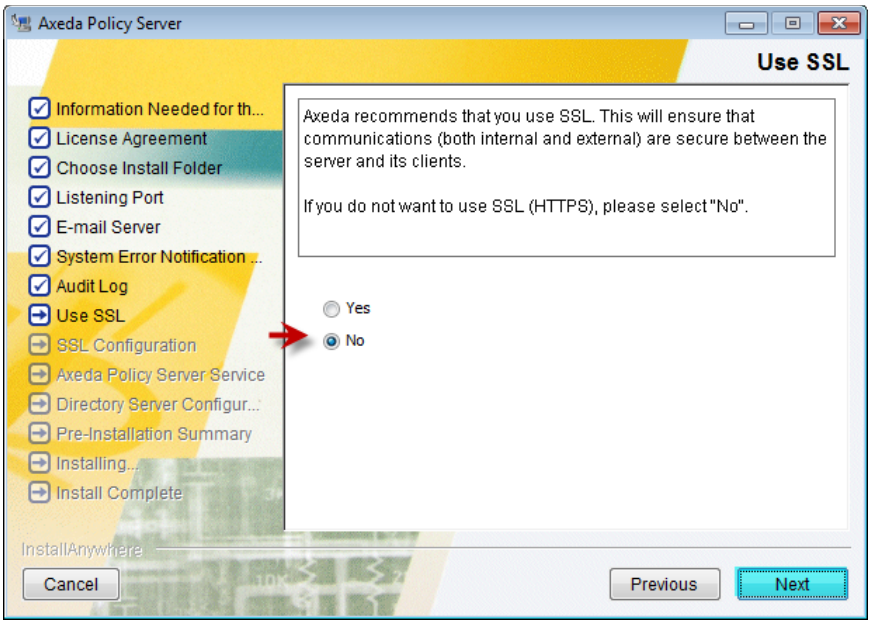
- Modify the URL to the SMTP email server URL.
- Select the Next button > Axeda Policy Server System Error Notification Settings opens



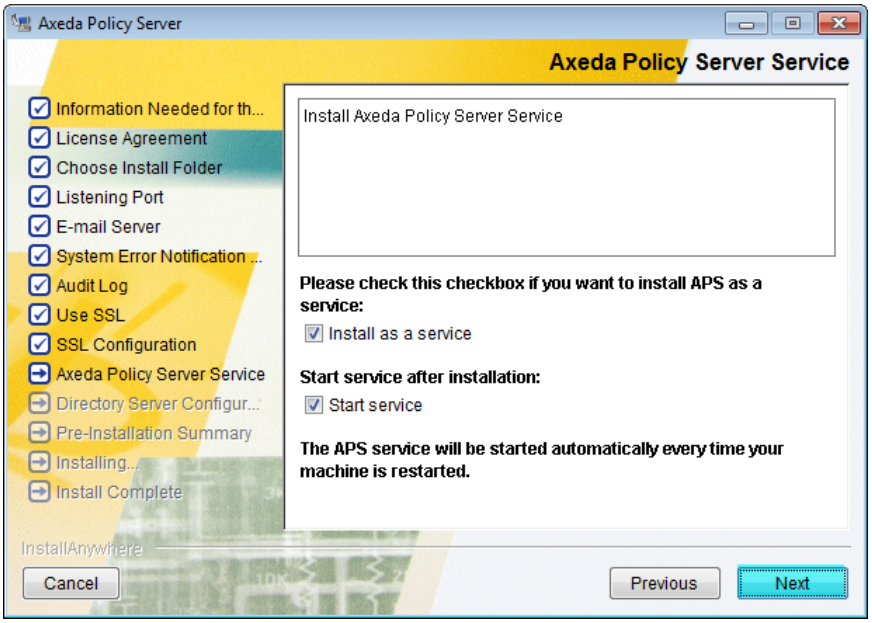
- Modify the E-mail address to send to: **remoteadvisorsupport@agilent.com**
- Modify the Email from address to**: (Gateway PC Name)@(Customer domain name)** Example RAPC321@company.com
- Select the Next button > Axeda Policy Server Audit Log window opens



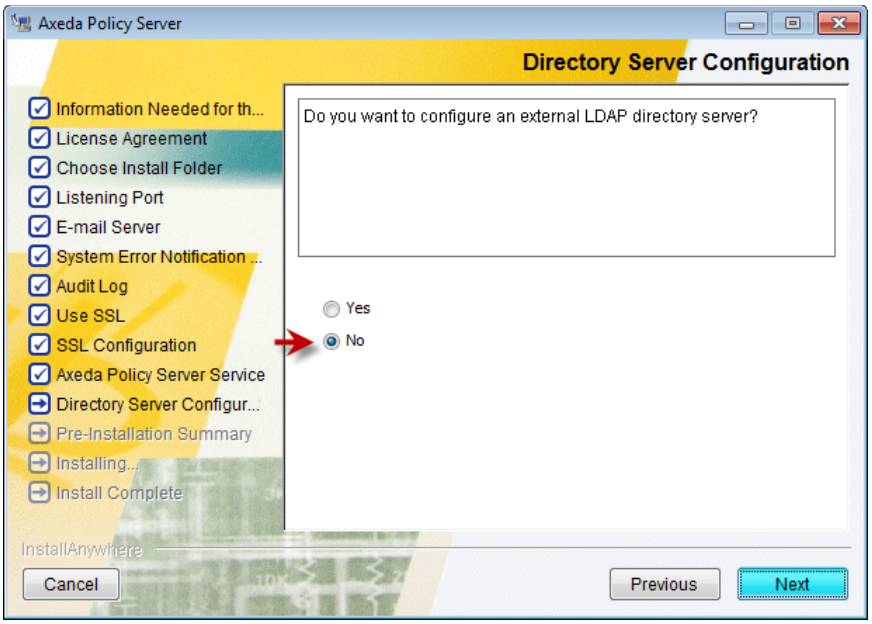
- Change the Audit Log days to the customer's requirement. Five days is the default and is recommended. 60 is the recommended maximum number of days
- Select the Next button > Use SSL window open



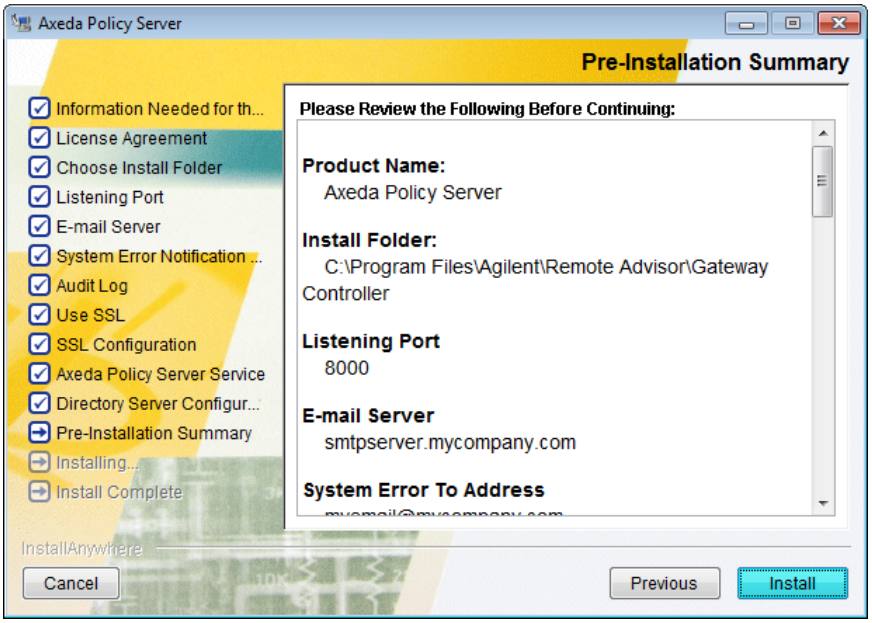
- SSL must be kept “No”
- Select the Next button > Axeda Policy Server Service window opens



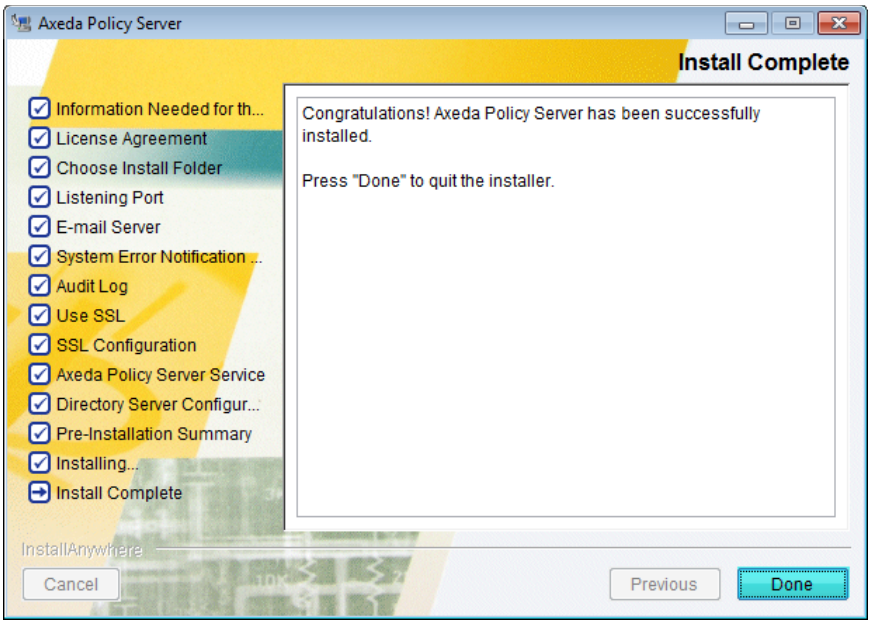
- Select the Next button > Axeda Policy Server Service window opens



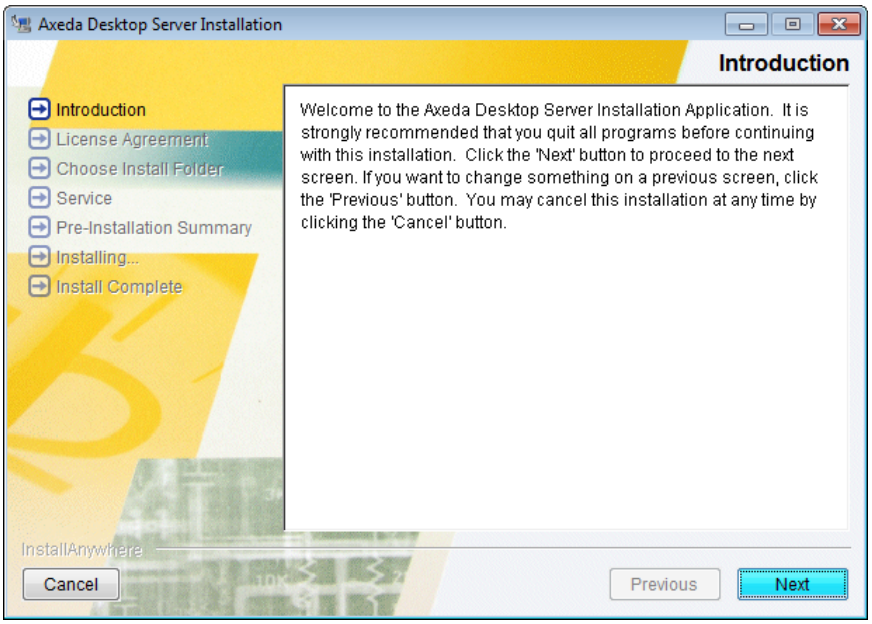
- LDAP directory server must be kept “No”
- Select the Next button > Pre-Installation Summary window opens



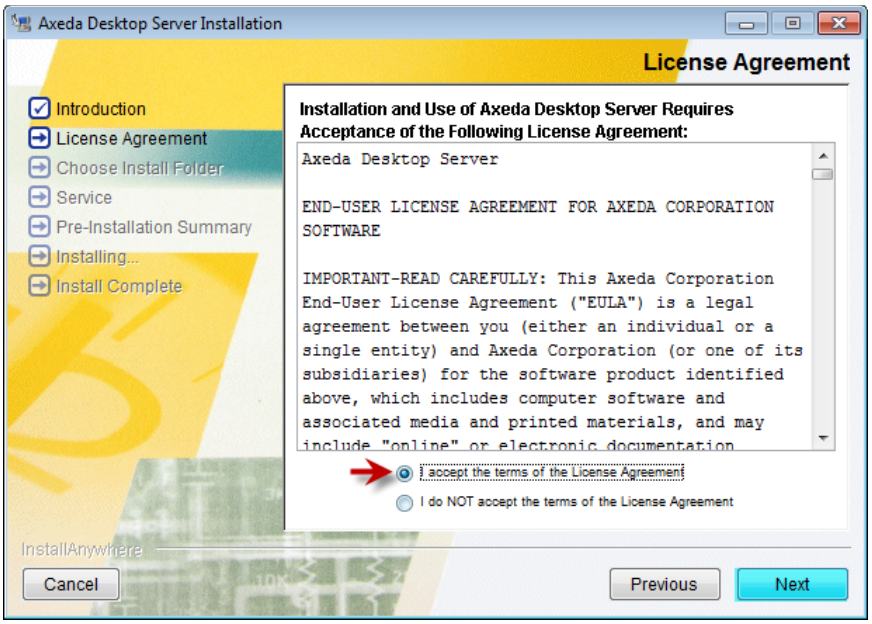
- Review the Installation Summary. Use the Previous button to make corrections
- Select the Install button > Install Complete window opens



- Select the Done button > Axeda Desktop Server Installation Introduction window opens



- Select the Next button > Axeda Desktop InstallSheild Wizard window opens



- Accept the License Agreement
- Select the Next button > Choose Install Folder window opens

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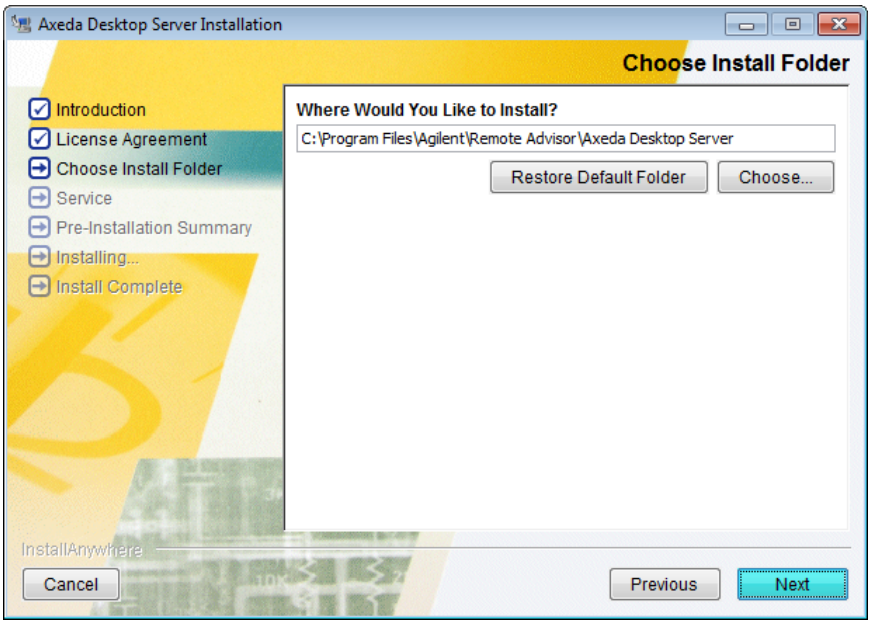
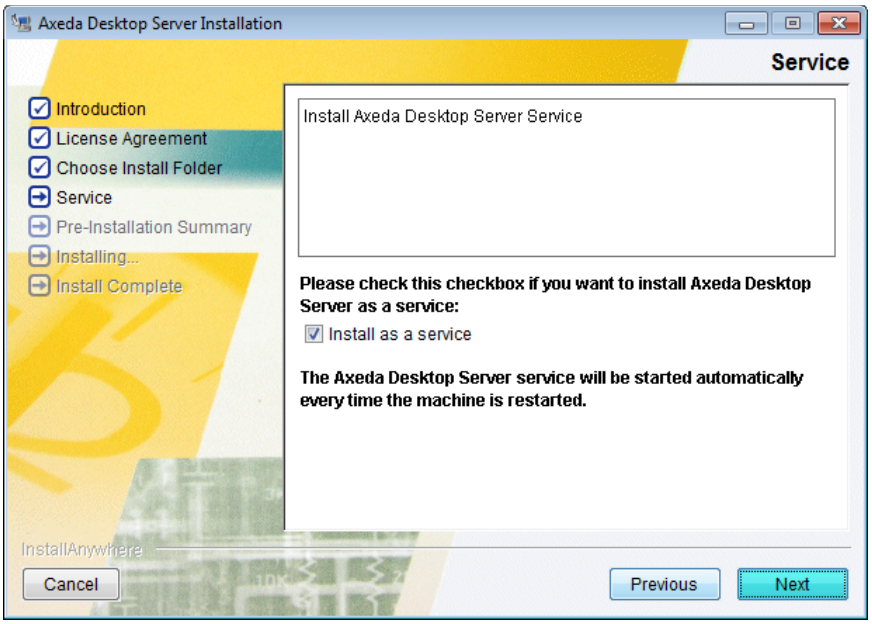
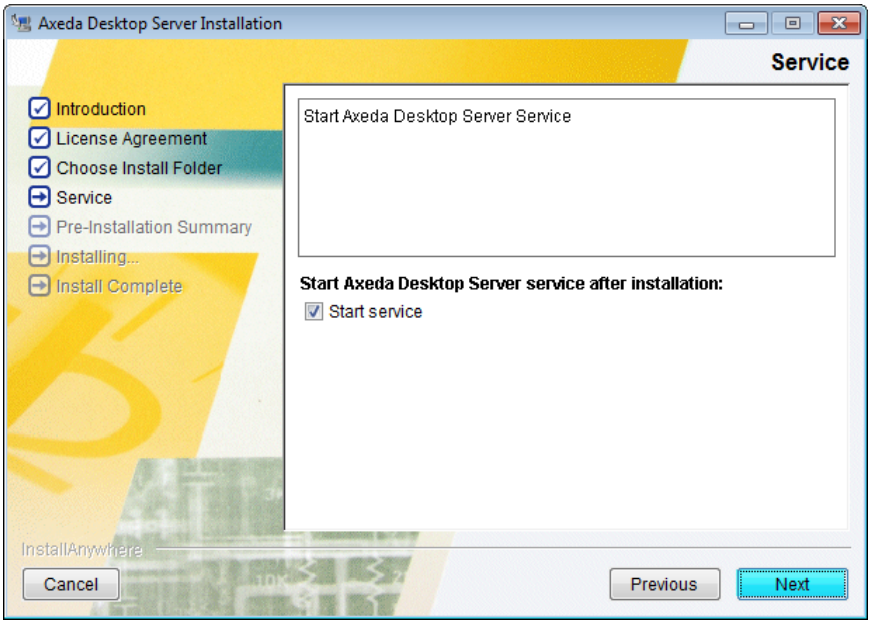


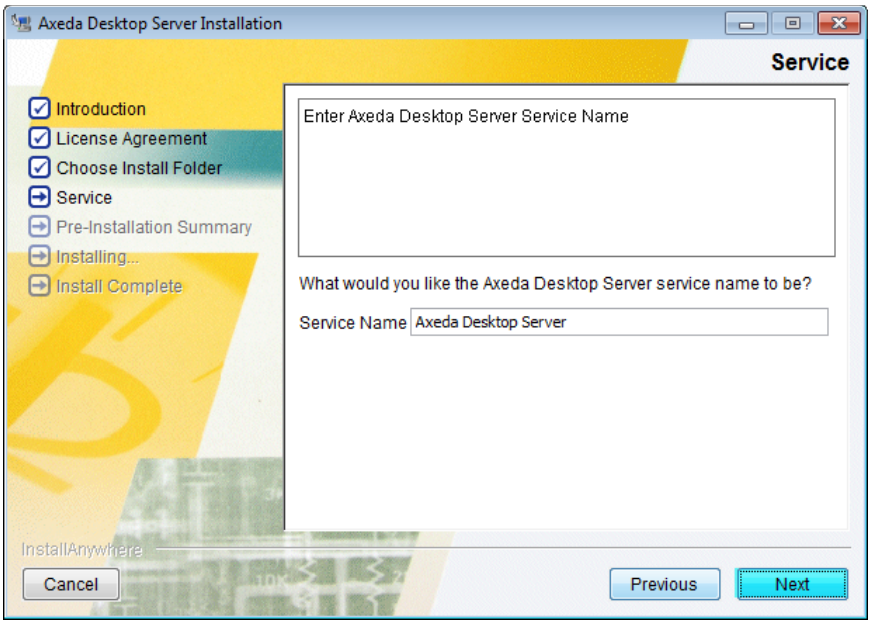
- Keep the default installation file location
- Select the Next button > Service window opens



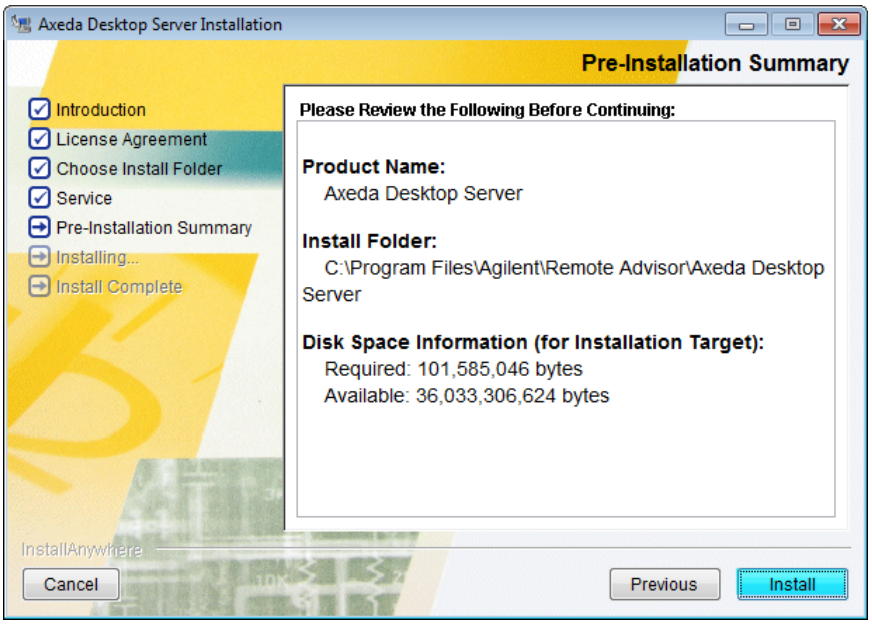
- Keep the check for Install as a service
  Note!! Remove the check if the customer does not permit desktop sharing software installation. Remote Collaboration will not function unless Install as a service is checked.
- Select the Next button > Service window opens



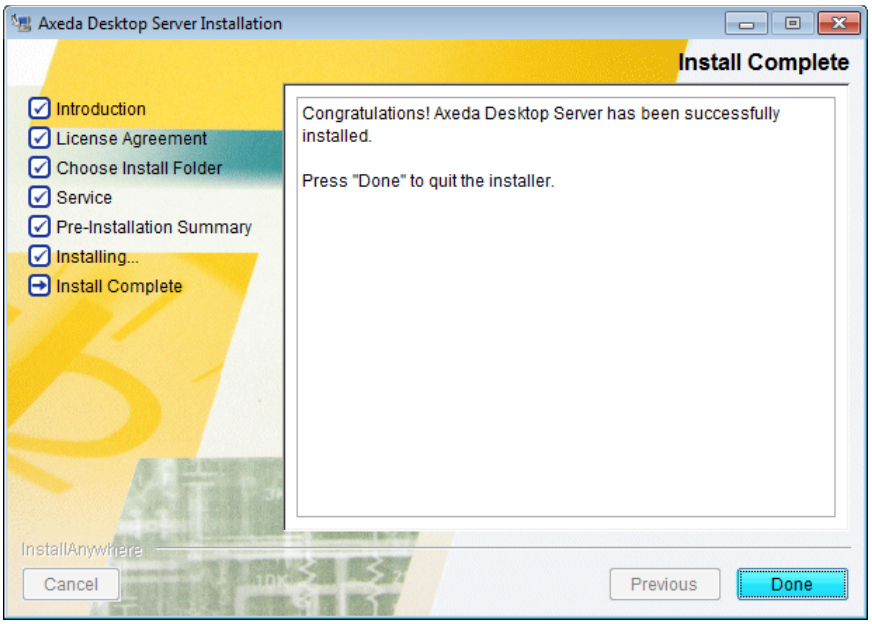
- Keep the check in Start service
- Select the Next button > Service window opens



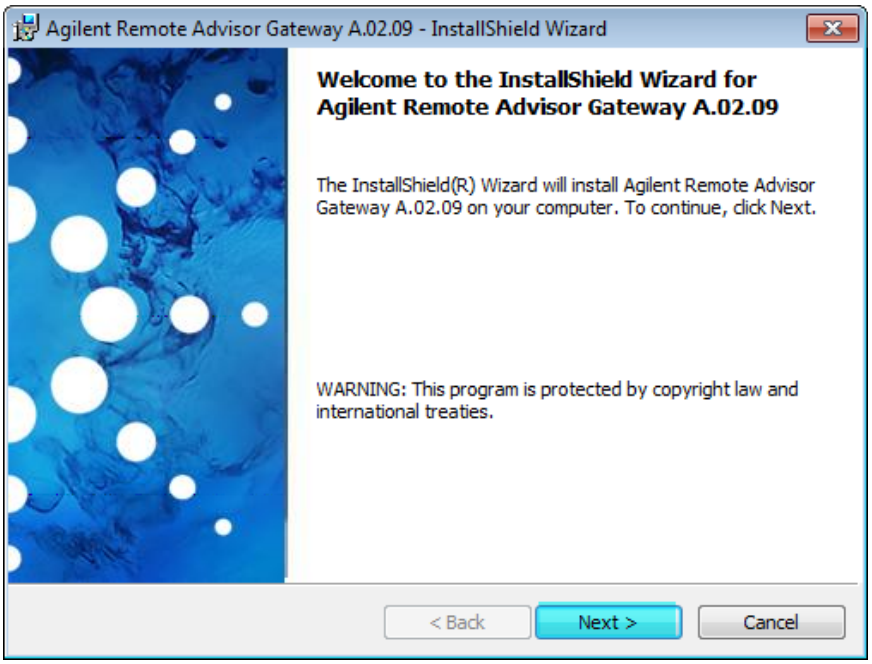
- Keep the default Axeda Desktop Service name > Pre-Installation Summary window opens



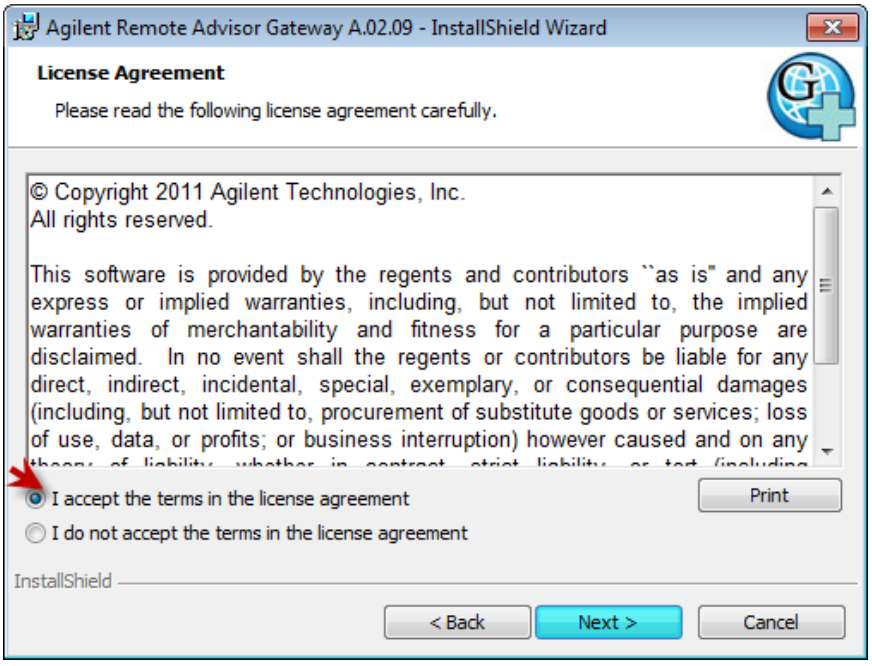
- Select the Install button > Install Complete window is opens



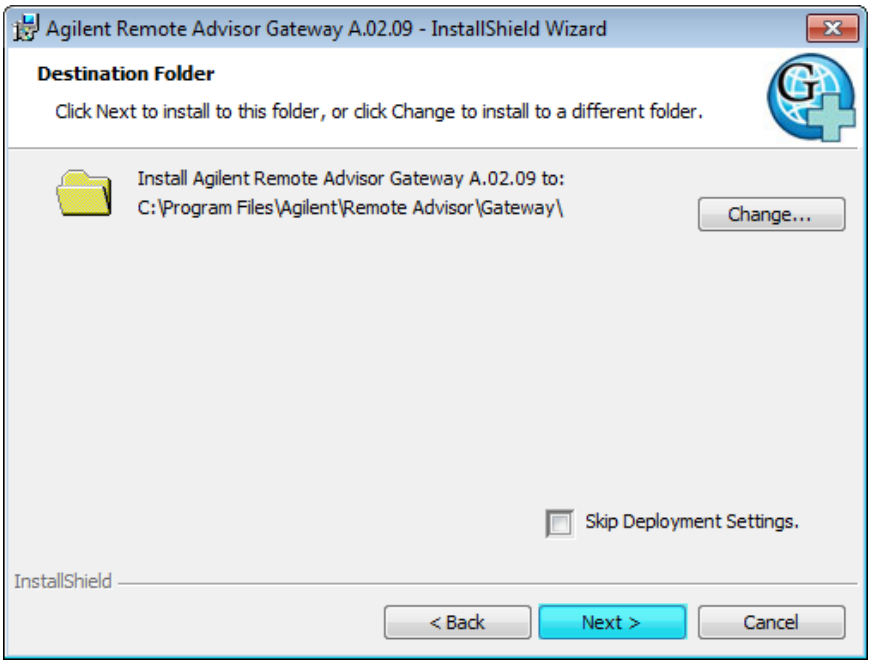
- Select the Done button > Agilent Remote Advisor Gateway A.02.09 Installation Wizard window opens



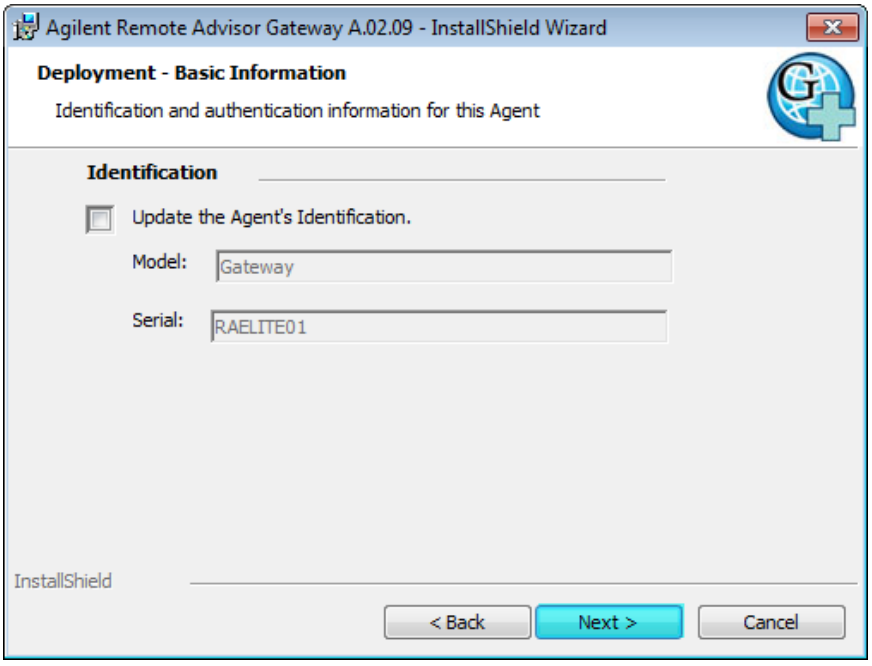
- Select the Next button > License Agreement window opens



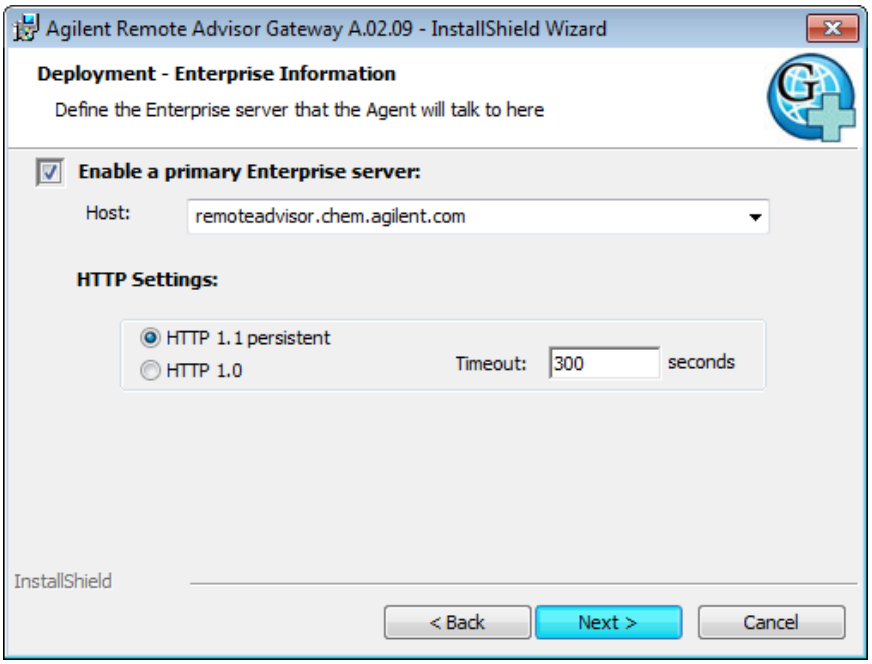
- Accept the License Agreement
- Select the Next button > Destination Folder window opens



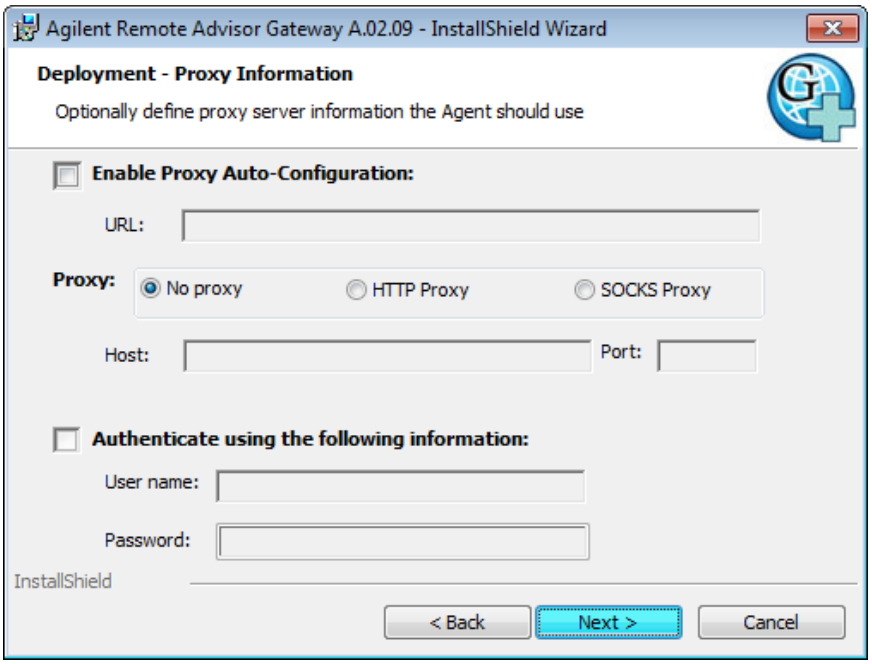
- Select the Next button > Deployment – Basic Information window opens



- Select the Next button > Deployment – Enterprise Information window opens



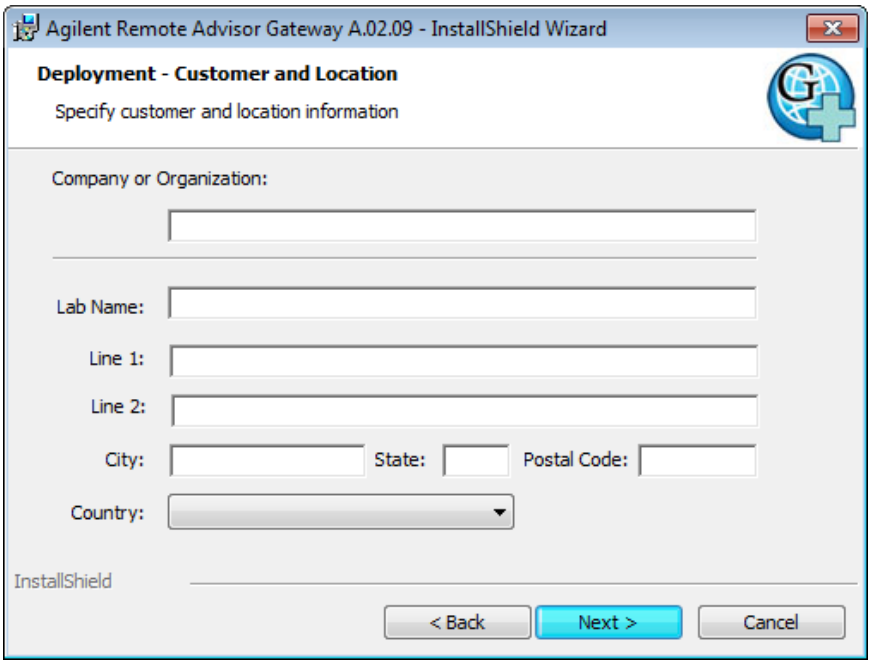
- Keep the check to Enable a Primary Enterprise server
- Select Host: remoteadvisor.chem.agilent.com
- Keep the default HTTP 1.1 persistent setting:
- Select the Next button > Deployment - Proxy Information opens



The Proxy Information required to complete this window can be found in the Installation Summary workbook of the Remote Advisor Installation Planner.xls prepared for this installation. Remote Advisor Installation Planner.xls is prepared during the Site Prep phase of the Remote Advisor installation.

The customer IT should be able to provide the Proxy information at installation time if the Planner was not completed in advance.

- Configure the Proxy Information as necessary
- Select the Next button > Deployment – Customer and Location window opens



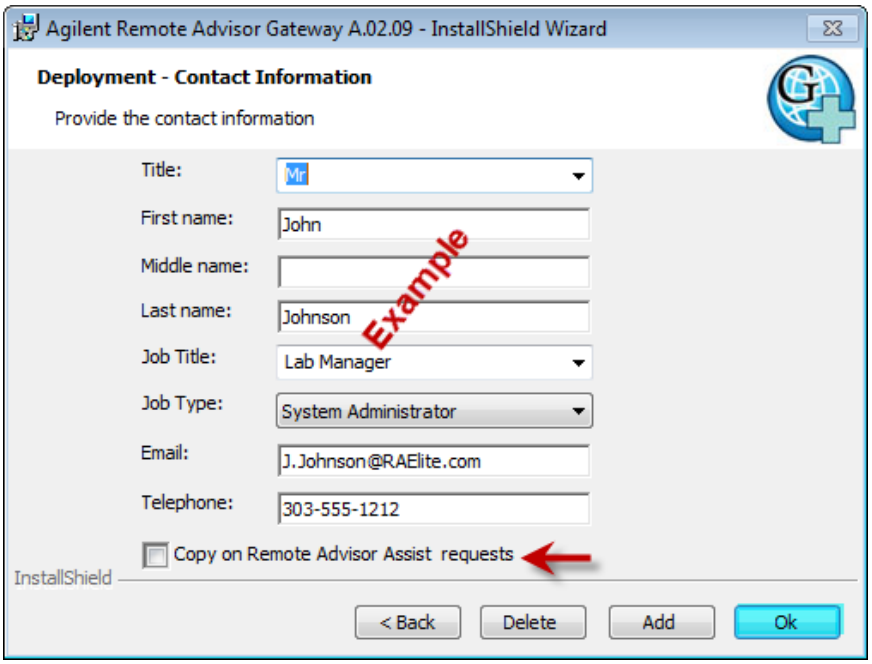
The information to complete Customer and Location Information is found in the Installation Summary workbook in the Remote Advisor Installation Planner.xls prepared for this installation. The Remote Advisor Installation Planner.xls is prepared during the Site Prep phase of the Remote Advisor installation. The customer may also assist with this information during installation.

Important

Verify that the information imported when upgrading from a previous release or re-installing the Gateway software is the same as the information displayed on the Enterprise Server.

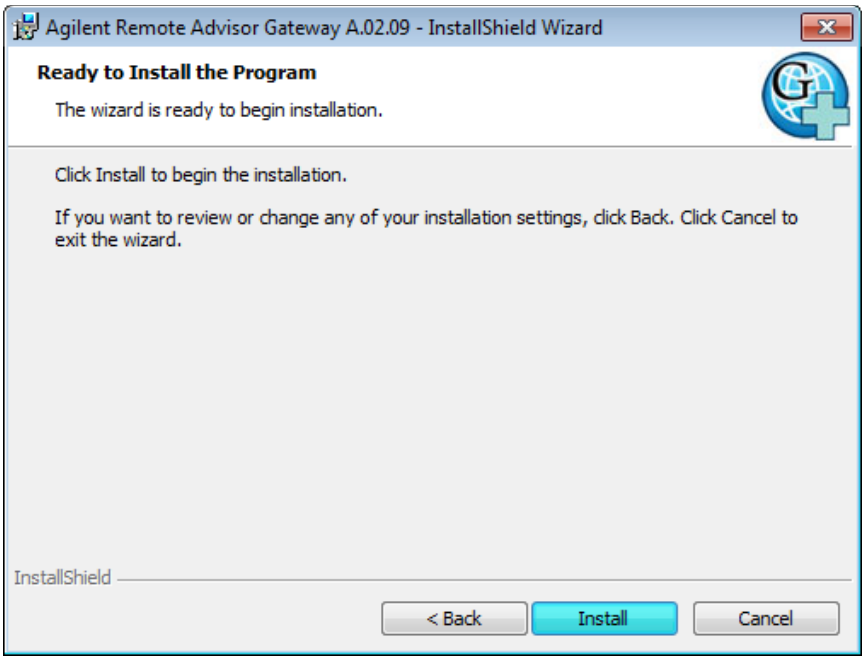
Copy and paste the information from the Enterprise Servicer if it is different from the imported data. The Enterprise server URL is http://remoteadvisor.chem.agilent.com and requires a user account.

- Complete all appropriate fields according to the Deployment Information section of the Installation Summary workbook in the Remote Advisor Installation Planner.xls prepared for this installation.
- Select the Next button > Deployment-Contact Information window opens

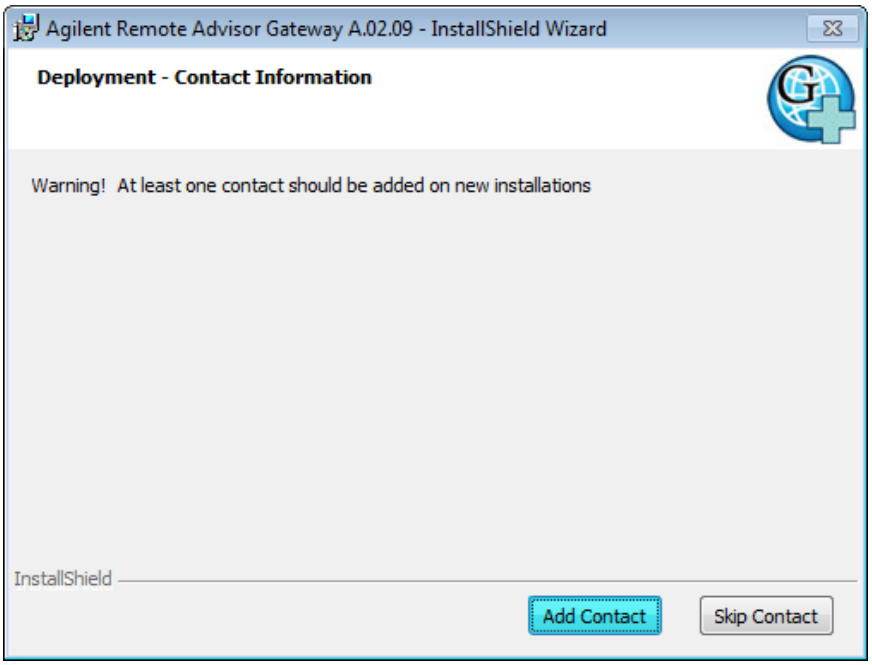


Contacts entered in the Contact Information window are used by the Agilent Customer Contact Center. The Agilent CCC will inform the contact when the Gateway goes missing from the Remote Advisor Enterprise server.

- Enter the Contact information
  ****Note**** Check Copy on Remote Advisor Assist request when the contact wants to receive confirmation emails from all Remove Advisor Assist Requests
- Select the OK button

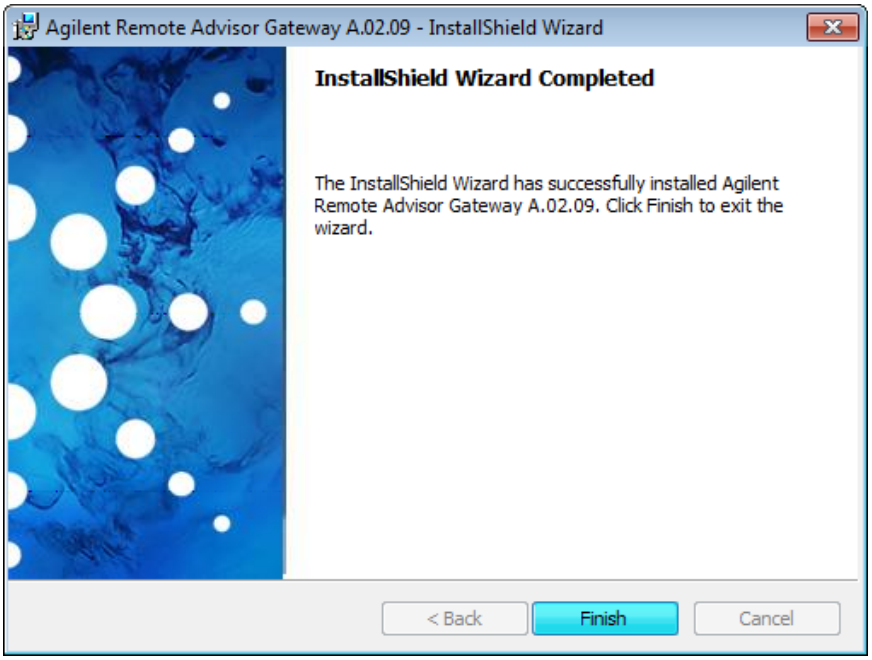


- Select the Install button > InstallShield Wizard Completed opens if contacts were added.



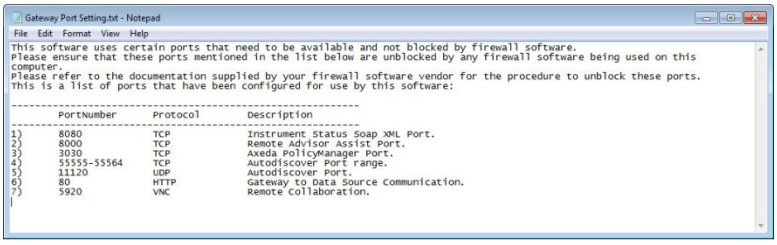
Deployment Contact information warning message will appear if contacts were not added in the previous steps.

- Select the Add Contact button to add at least one contact
- Select Skip Contact **only if this Gateway has been previously deployed and valid contacts are configured for this Gateway on the Enterprise server.**



- Select the Finish button > Agilent Remote Advisor Gateway A.02.09 Installation Info… window and Gateway Port Settings.txt – Notepad opens

*****Important Installation Note***** in the unlikely event that the installation may not completely install the installer rolls back the Installation. See Appendix F for details.



- Close Notepad
  Gateway Port Settings.txt can be referenced in the c:\Program Files\Agilent\Remote Advisor\Gateway directory

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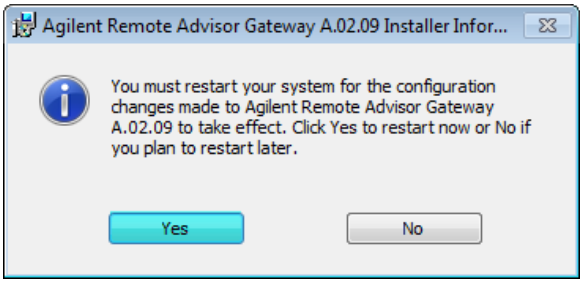
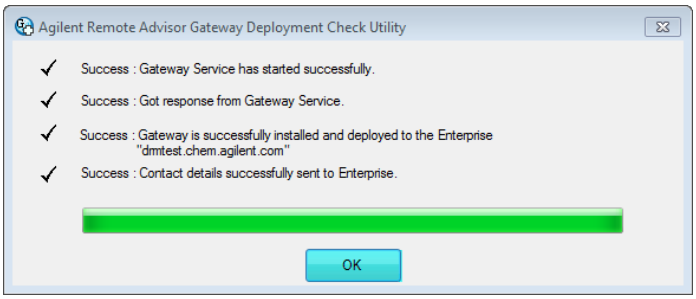


- Select the Yes button to restart the Gateway PC

Successful Deployment

Successful Deployment will be confirmed with Success as shown in the Agilent Remote Advisor Gateway Deployment Check Utility which displays after PC restart.



- Select the OK button

- Double click the Gateway Status Monitor icon in the Windows notification area to open the Agilent Remote Advisor Gateway Status Monitor

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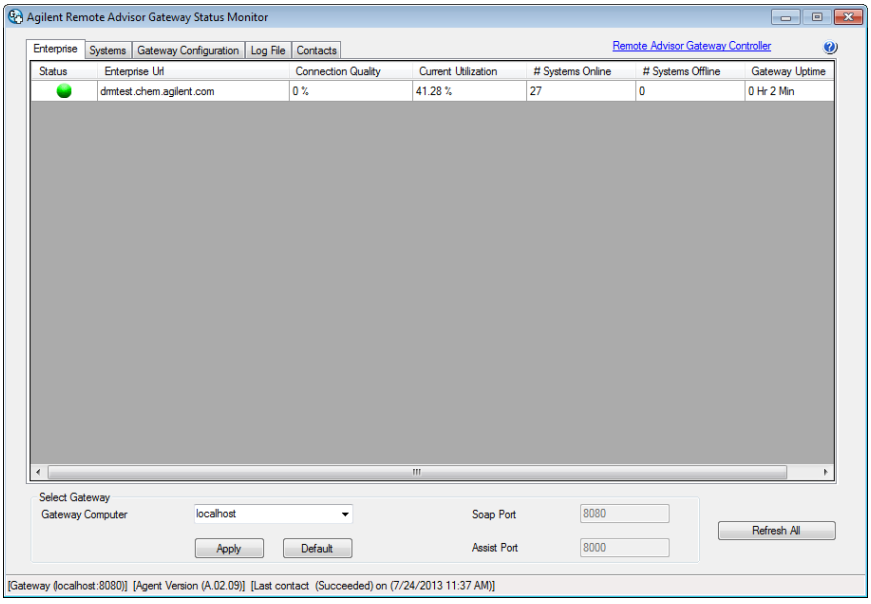
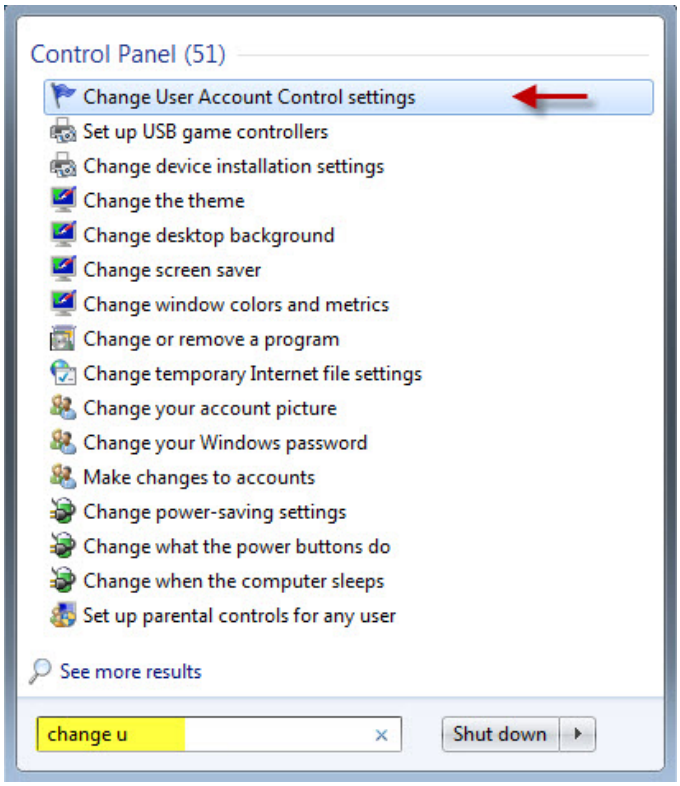


- Select the Enterprise tab
  The Status indicator will be green. Connection Quality will remain at 0% until the Gateway Uptime is 0Hr 5Min or greater.

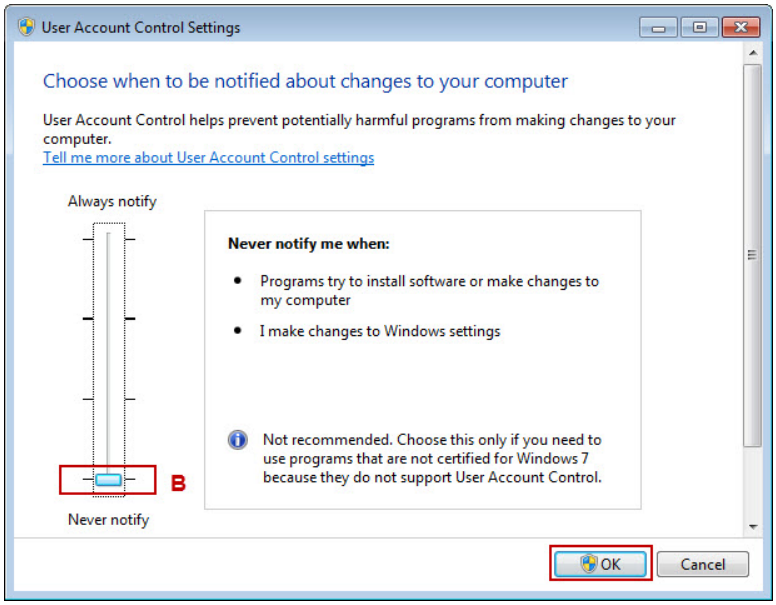
2.5 Changing the Windows 7 User Account Control to Original

****Important** ** User Account Control (UAC) must be set back to the original setting if it was set to Never Notify to install Remote Advisor Gateway software.**

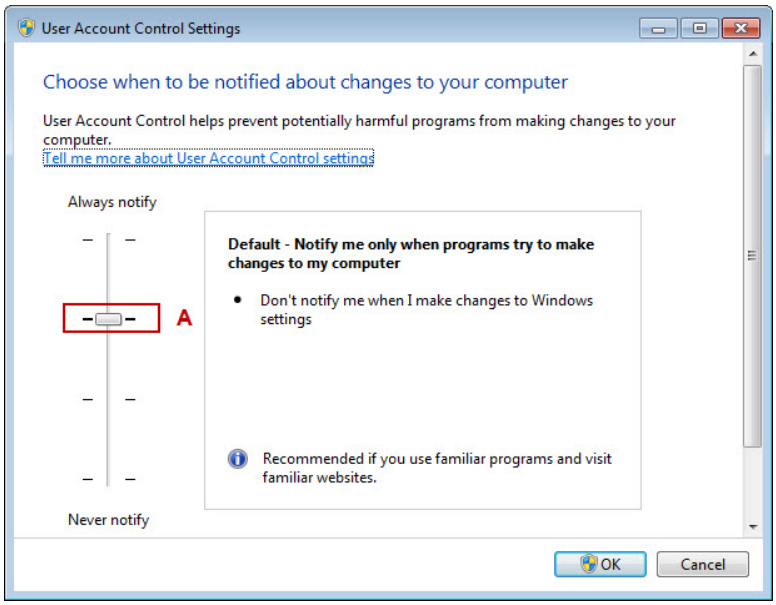
- Select the Windows Start button



- Type change user in the search field > a list of commands will display as you type
- Select Change User Account Control Settings > User Account Control Settings window displays



- Move the slide control from Never notify position B position A



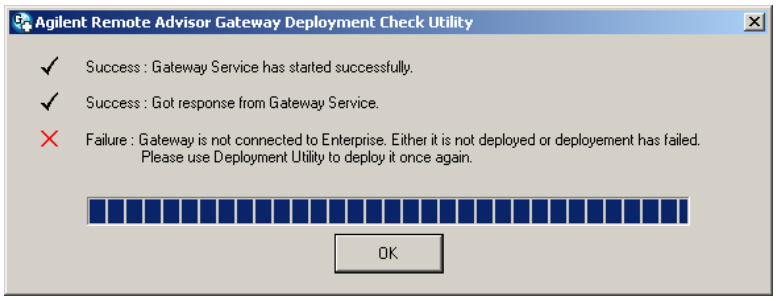
- Select the OK button
- Restart the computer for the changes to take effect

Refer to the Gateway Status Monitor help for configuration and troubleshooting the Gateway.

Deployment Failure

Failure: Gateway is not connected to Enterprise, indicates that the Gateway did not successfully connect to the Enterprise. One or more of the deployment configuration settings are incorrect.

****The Gateway must be successfully deployed to the Enterprise before proceeding with the Data Source installations.****



- Select the OK button
- Refer to the Appendix D, Axeda Deployment Utility, for instructions to correct the Deployment discrepancies and successfully deploy the Gateway.

3 Data Source Installation

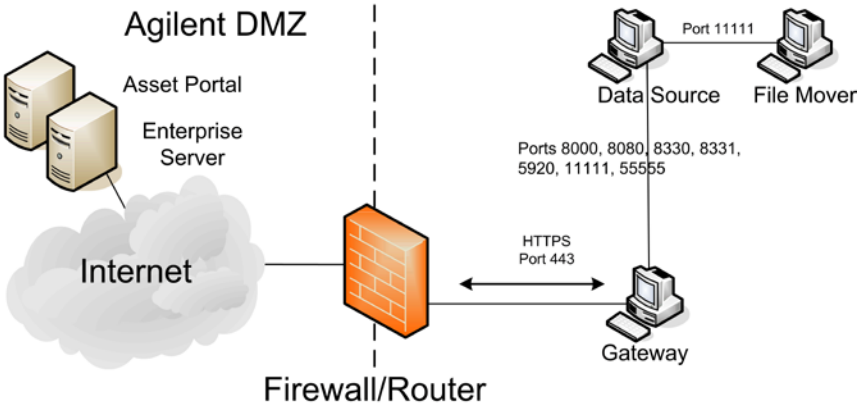
3.1 Data Source PC Prerequisites

The successful installation of Remote Advisor is dependent on meeting the Data Source PC Prerequisites. Site Prep should have been completed before the installation to determine that the Data Source PCs comply with the Prerequisites.

- The Gateway must be successfully deployed to the Enterprise before proceeding with the Data Source installations.
- Data Source PC is installed, operational, and is able to communicate to the instrument
- Data Source PCs must have a unique name to prevent duplicate PC names on the network. PCs shipped from Agilent that are used for ChemStation and EZChrom clients have a preconfigured name of Chemstation01 or DataSystem01.
- Data Source PCs with other CDS and Standalone Data Source's must have 1 GB of memory or greater
- Data Source PC is attached and communicating to the LAN that will communicate to the Gateway PC
- Data Source PC has Windows XP Pro SP2 or greater, Windows 7 32 bit or 64 bit, or Windows Server 2008 Operating System
- Agilent QQQ LCMS systems require Agilent MassHunter QQQ Acquisition Software B.01.04 or greater to be installed before installing the Remote Advisor Data Source.

Windows Firewall is disabled. The Remote Advisor Data Source will not communicate with the Gateway with Windows Firewall enabled.

Data Source PC firewall, if applicable, is configured to allow the Gateway to Data Source port communications.



3.1.1 Data Source PC Requirements (Installed on CDS)

ChemStation, EZChrom Elite, and other Data System Data Source Requirements	
CPU	Pentium 1V/Equivalent or greater
Disk Drive	3 GB or greater free disk space
RAM	1 GB or greater
Optical Drive	DVD +/1 RW
Supported Operating Systems	Windows XP Professional SP2 or greater Windows 7 32 & 64 bit Windows Server 2008 SP1 or R2 or greater

3.1.2 Standalone Data Source PC Requirements

Stand Alone Data Source PC Hardware Software Requirements	
CPU	Pentium 1V/Equivalent or greater
Disk Drive	3 GB or greater free disk space
RAM	4 GB
Optical Drive	DVD +/1 RW
Supported Operating Systems	Windows XP Professional SP3 or greater Windows 7 32 & 64 bit Windows Server 2008 SP1 or R2 or greater

3.1.3 Number of Instrument Connections for Standalone Data Source

The number of open connections to instruments may be restricted by the operating system and by policies set by IT. The maximum number of instruments connected to a Stand Alone Data Source by operating system is listed below.

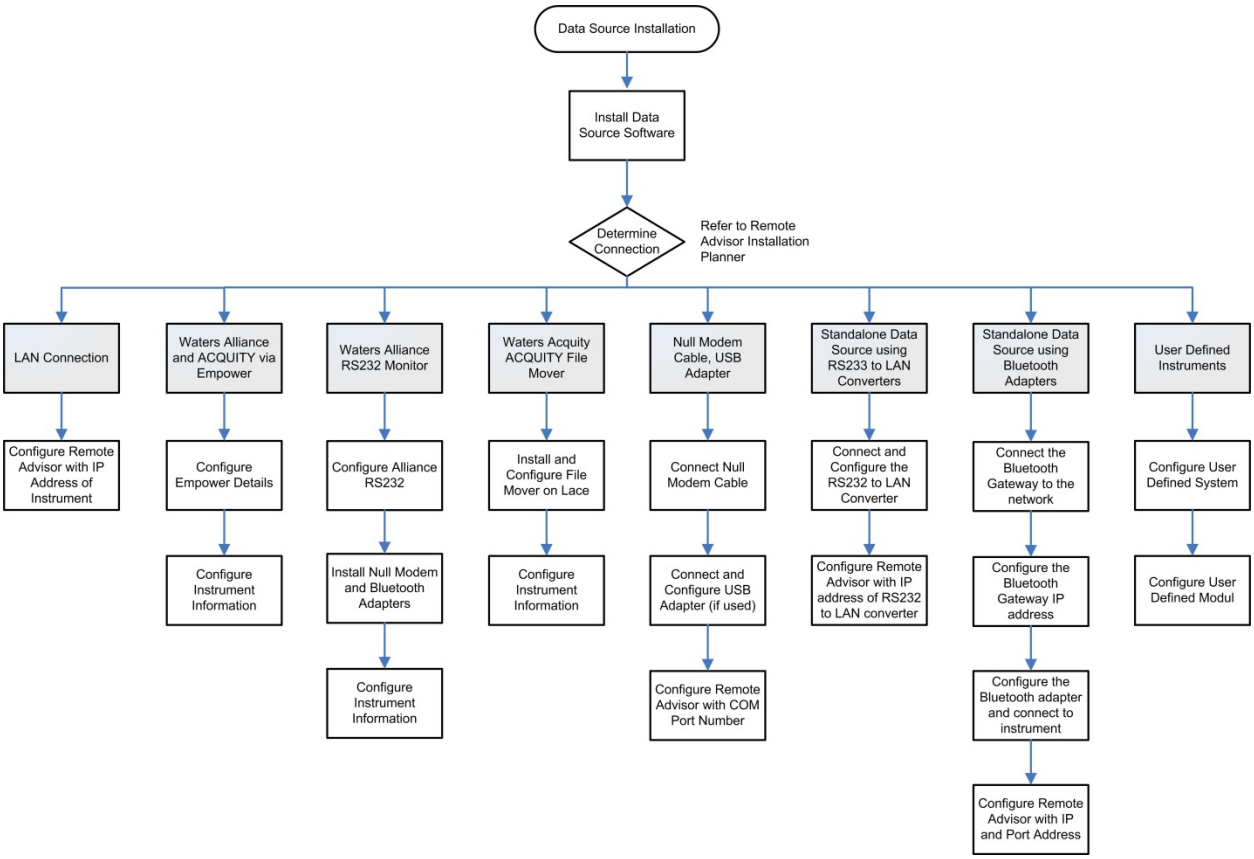
Number of Instrument Connections	
Maximum Number of Systems Supported	Operating System
20	Windows XP Professional SP3 or greater Windows 7 32 & 64 bit
56	Windows Server 2008 SP1 or R2 or greater (Recommended)

3.1.4 Remote Advisor Port List

Gateway to Enterprise		
TCP: Source port = https (443)		
Between Gateway and Data Source		
Source Port	Process Owner or Action	
TCP: Source port = 8080	Tomcat.exe	
TCP: Source port = 8000	AIService.exe	
TCP: Source port = 8330	Remote Advisor Scripts	
TCP: Source port = 8331	Remote Advisor Scripts	
TCP: Source port = 5920	AxedaDesktopServer.exe	
TCP: Source port = 11111	Networkhelper.exe	
TCP: Source port = 55555	Networkhelper.exe	
Listening Ports		
Device Listening	Process Owner or Actions	Ports
Gateway	Axeda Desktop Server.exe	5820. 5920, 8330, 8331
Gateway	Network Helper.exe	49552, 55555, 55556
Gateway	Tomcat5.exe	5001, 8000, 8005, 8009, 9170, 9176
Gateway	Xgate.exe	8443, 3011, 3030, 8080
Data Source	AIService.exe	11111, 11112
Data Source	Axeda Desktop Server.exe	5820, 5920
Between Data Source and Empower Node		
TCP Source Port = 11111	FileMover.exe	

3.2 Data Source Installation Process

The Data Source Installation Process is illustrated below. Refer to the Remote Advisor Installation Planer prepared for the installation for the instrument connection method.



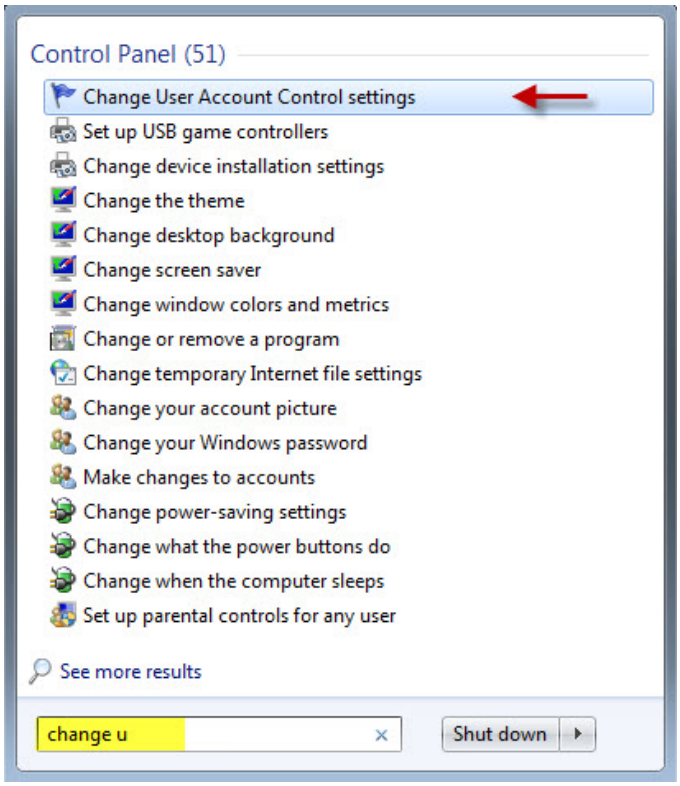
3.3 Upgrading from a Previous Release

Start the Data Source installer to upgrade from A.02.04 and newer. Configuration parameters will be saved and the older version of the Data Source removed. Proceed with the next instructions.

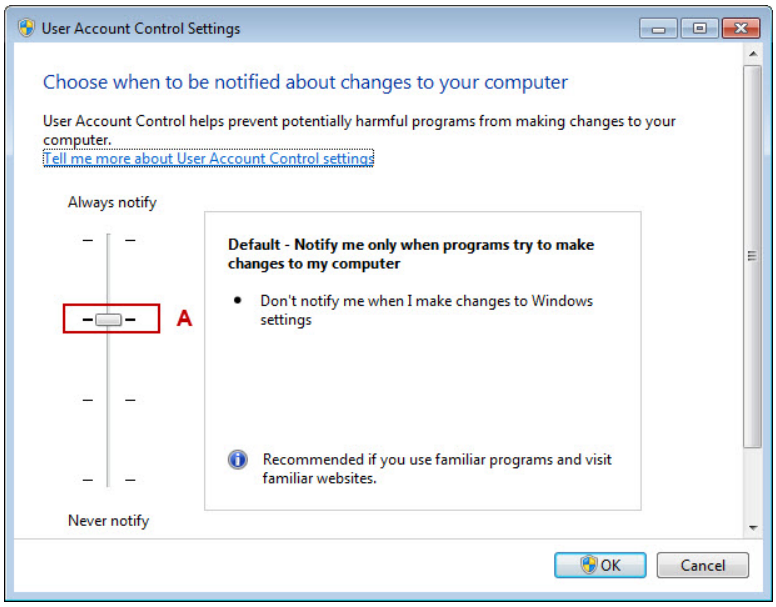
3.4 Changing the Windows 7 User Account Control to Never Notify

****Important** User Account Control (UAC) notifies the user before changes are made to the computer that require administrator-level permissions. The default setting may interfere with the installation of all software components for Remote Advisor. It is highly recommended to turn the UAC to the Never Notify Position to avoid improper installation of Remote Advisor software components.**

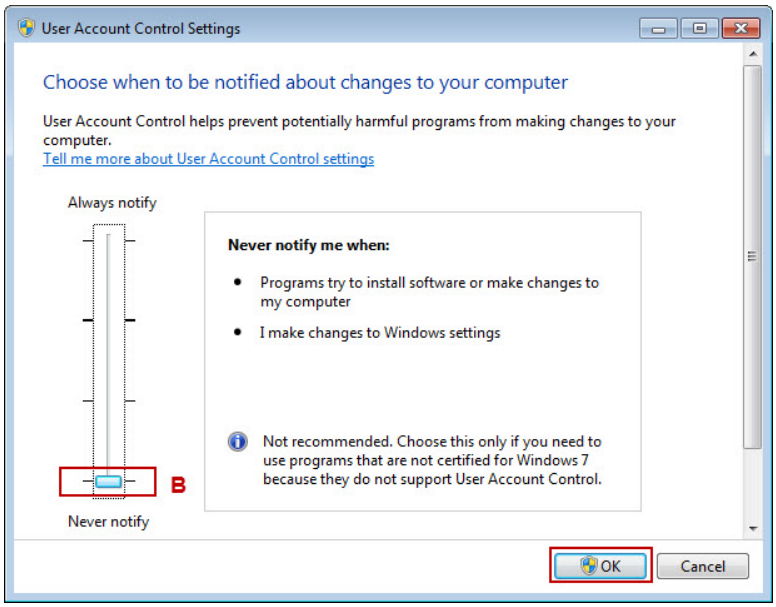
- Select the Windows Start button



- Type change user in the search field > a list of commands will display as you type
- Select Change User Account Control Settings > User Account Control Settings window displays



- Move the slide control from the current position A to Never notify position B



- Select the OK button

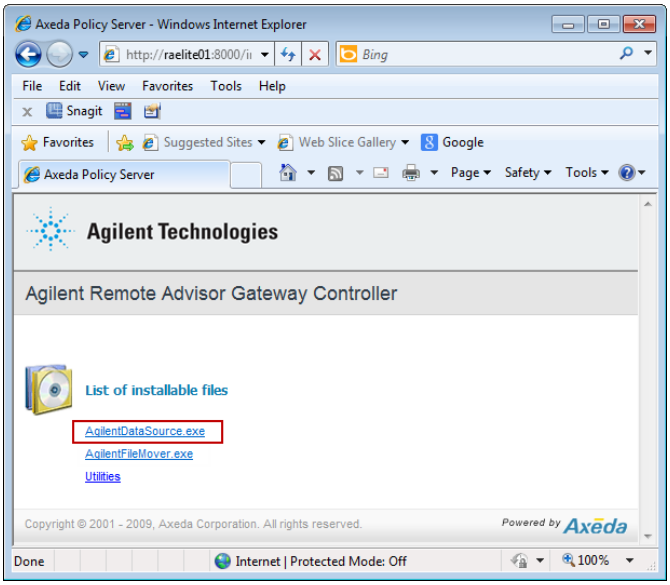
3.5 Access the AgilentDataSource.exe file from the Gateway

AgilentDataSource.exe is the executable installation file for the Remote Advisor Data Source.

- AgilentDataSource.exe can be accessed directly from the Gateway
- AgilentDataSource.exe is also located on the Remote Advisor installation CD.

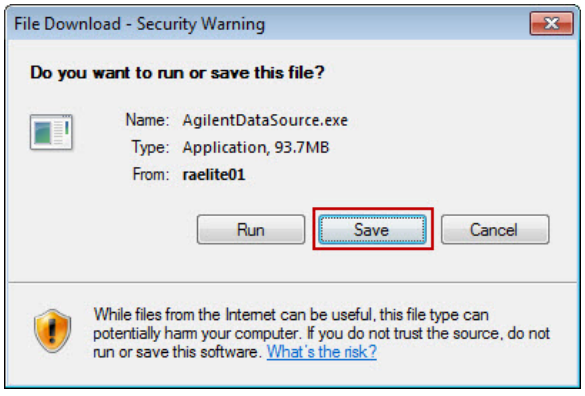
Accessing AgilentDataSource.exe from the Gateway

- Open Internet Explorer
- Enter http://gatewayPCName:8000/install into the address field of Internet Explorer.
  Example for gateway named rsgw2 http://raelite02:8000/install

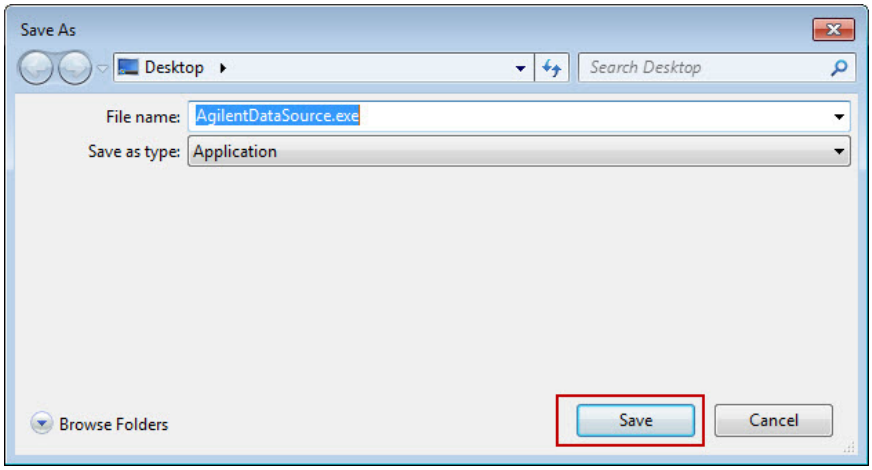


- Select the link AgilentDataSource.exe > File Download Security - Warning is displayed

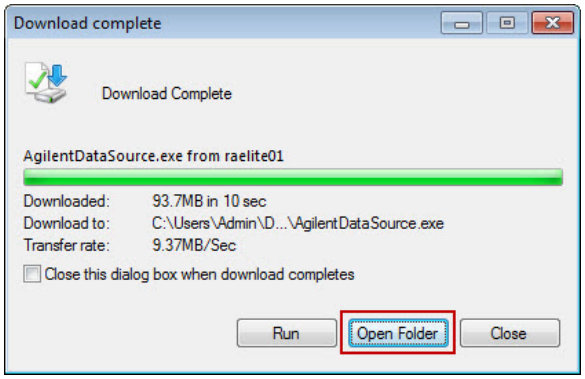
---



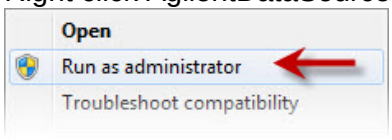
Select the Save button to improve installation performance.



- Select a location to save the file
- Select the Save Button > Download Complete window displays



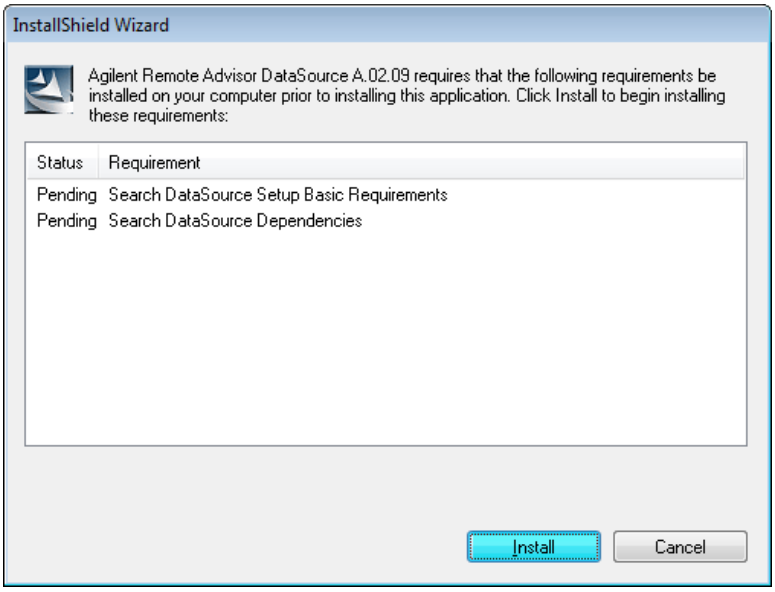
- Select the Open Folder button to be able to run as administrator
- Double click AgilentDataSource.exe > InstallSheild Wizard window opens
  ****Special note for Windows 7****
  Right click AgilentDataSource.exe, Select Run as Administrator



Installing the Data Source software from the Installation CD

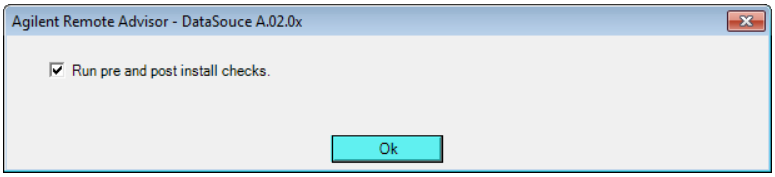
- Install the Installation CD in the CD drive
- Browse to Remote Advisor Installation CD to :\Data Source Installer
- Double Click AgilentDataSource.exe > InstallShield Wizard opens
  Right click and select Run as administrator for Windows 7
- Proceed to Data Source Software Installation

3.6 Data Source Software Installation

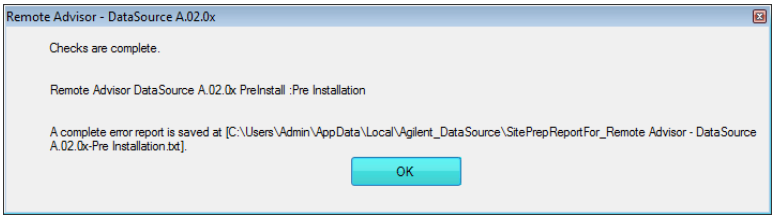


- Select the Install button > Run pre and post install checks opens within several minutes

  Previous installations of Remote Advisor will be detected, removed, and the PC will restart. Installation of Remote Advisor may resume or have to be restarted manually.

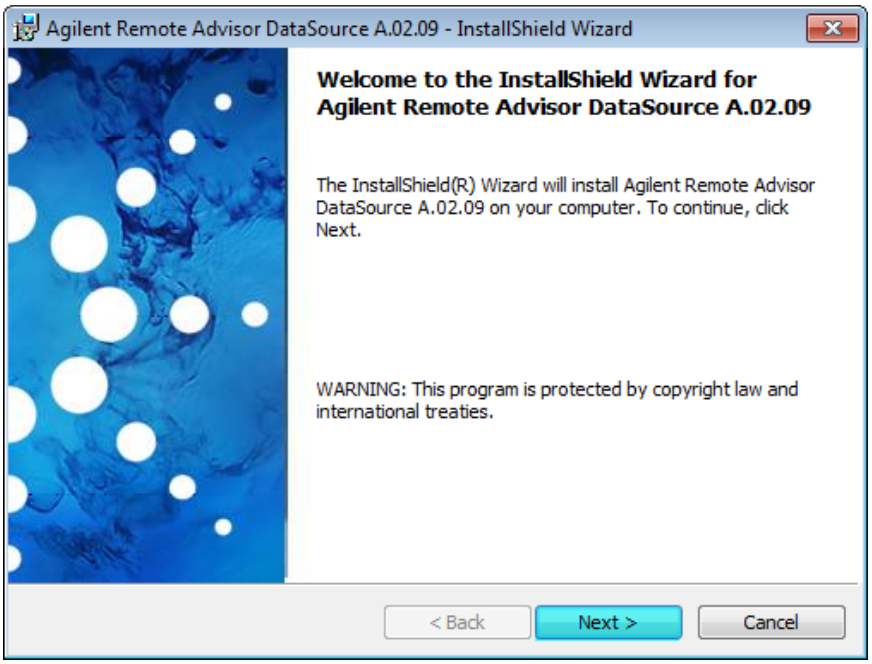


- Keep the check for Run pre and post install checks
- Select the OK button > Checks are Complete Window opens

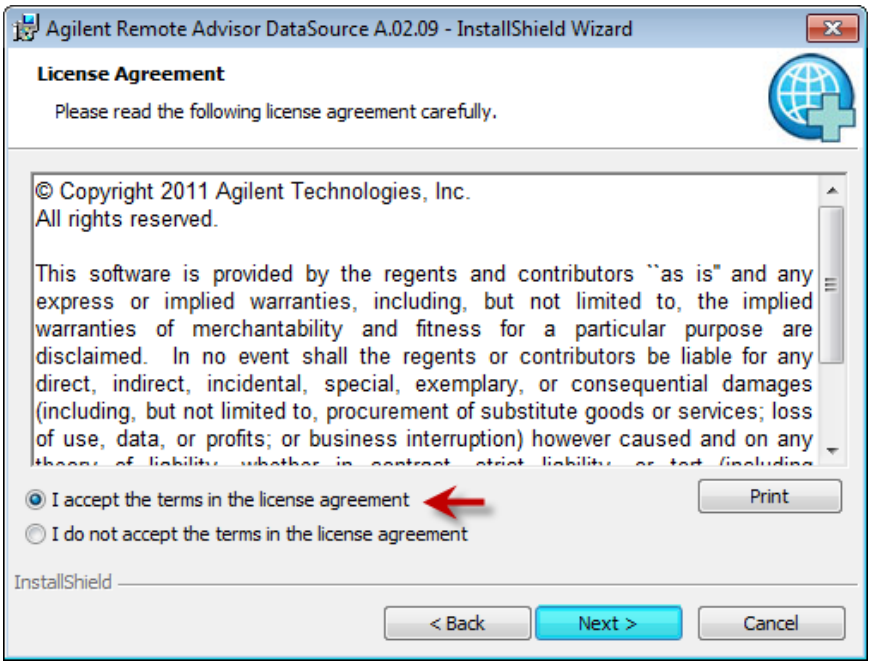


Preinstall Checks are completed. Note the file location. The file may reside in a hidden folder. Preferences to view hidden folders in Windows Explorer may have to be modified to open the AppData folder.

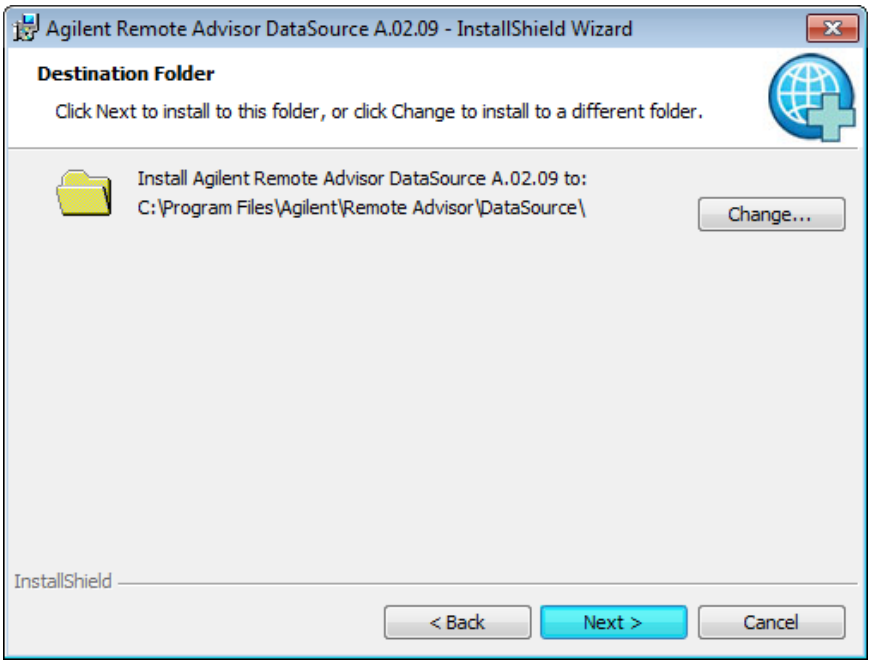
- Select the OK button > Agilent Remote Advisor Data Source InstallSheild Wizard window opens



- Select the Next Button > InstallSheild Wizard License Agreement window opens



- Accept the License Agreement
- Select the Next button > Agilent Remote Advisor Data Source InstallSheild Wizard Destination Folder window opens



- Keep the default folder location
- Select the Next button > Agilent Remote Advisor Data Source Installation Wizard Data Source Configuration Settings opens

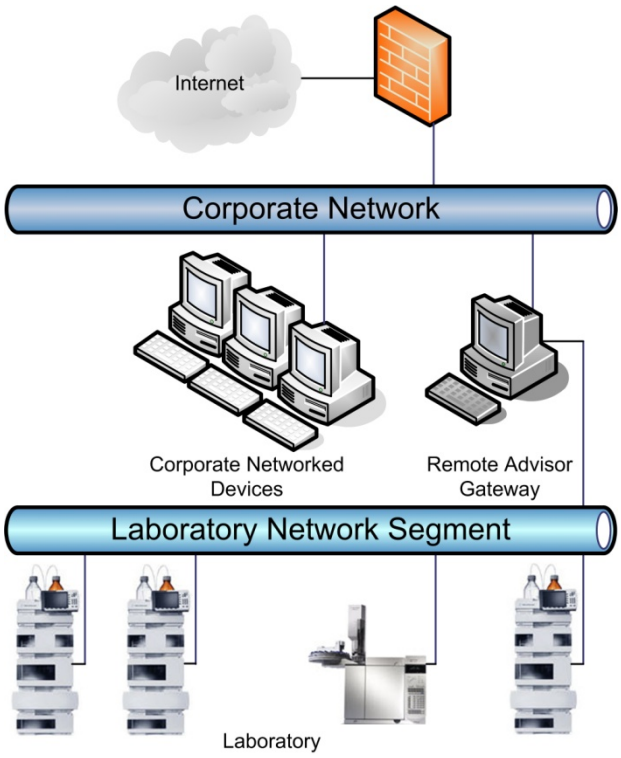
Name-IP Mapping Explanation (Please read before proceeding)

Enable Name-IP Mapping when the Data Source is installed and connected to a network that does not have DNS. Isolated laboratory netwoks typically do not have a DNS.

The Gateway PC name is entered in the Data Source Configuration Settings to point the Data Source communications to the Gateway PC. Only the Gateway PC name is required when both the Gateway and Data Source PCs are on a network that has a DNS (Domain Name Service). The Gateway PC can be pinged by name.

Check the Name-IP Mapping when the Data Source PC and the Gateway PC are on a network that does not have a DNS. This is typical of an Isolated Network where the Gateway has two network interface cards. Isolated networks usually do not have DNS. The Gateway PC cannot be pinged by name but can be pinged by IP Address.

Isolated Network Example



Desktop Sharing Redirection(Please read before proceeding)

Modern client server laboratory environments use a distributed instrument approach where the instrument is connected to an instrument controller but controlled by one of many clients. Examples include but are not limited to Agilent's Cerity, Open Lab, and Waters Empower. The Data Source software is usually installed on the instrument control PC or on a Standalone Data Source.

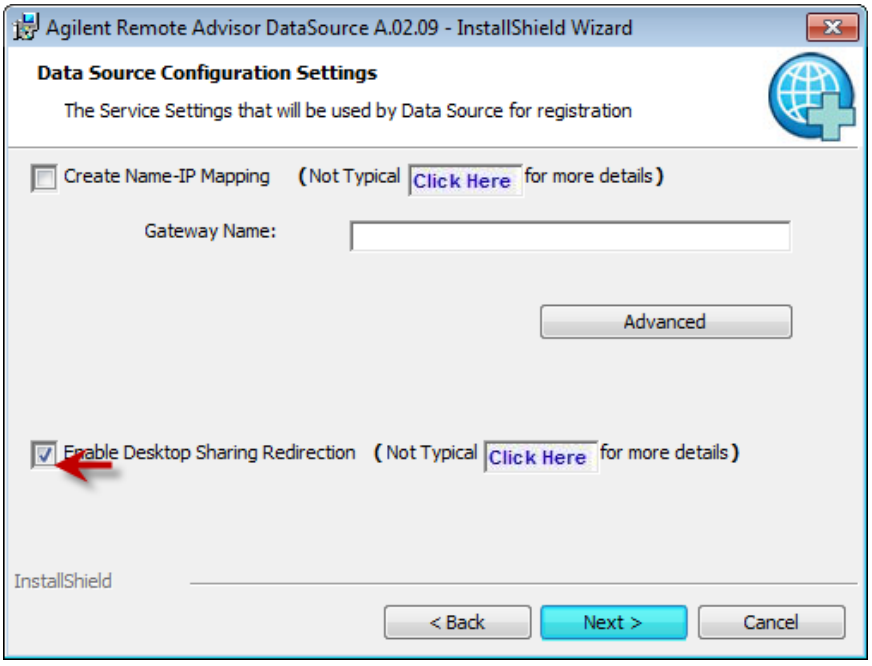
Client software can be installed on a networked PC or a virtual PC such as a Citrix client. Some customers wish to have the Remote Collaboration capability to the client that controls the instrument for Agilent Customer Contact Center to assist.

Desktop Sharing Redirection enables a user to initiate a Remote Assist to a client PC as described above. The Agilent Customer Contact Center will be able to perform a Remote Collaboration to this PC. The user must select an instrument from a list of instruments in the configuration tab to enable Remote Assist or Remote Collaboration for this PC.

Selecting Desktop Sharing Redirection for the Data Source type will install the Desktop Sharing Redirection feature. The Data Source will not be able to communicate directly to instruments when the Data Source is installed for Remote Desktop Redirection.

Install the Data Source for Desktop Sharing Redirection only when the Data Source will not be configured to connect to an instrument but will be used for initiating Remote Assist requests.

More information about configuring an instrument to redirect the Remote Collaboration to this PC or to initiate a Remote Assist from this PC can be found in Data Source help.

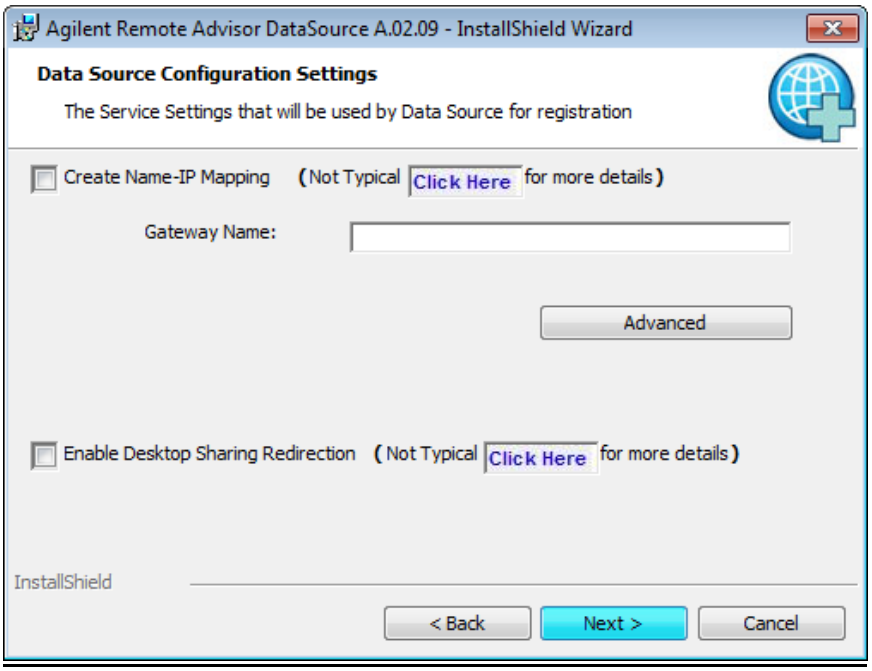


To Enable Desktop Sharing Redirection

- Check Enable Desktop Sharing Redirection and select the Next button

All in one and Segmented Network Configuration

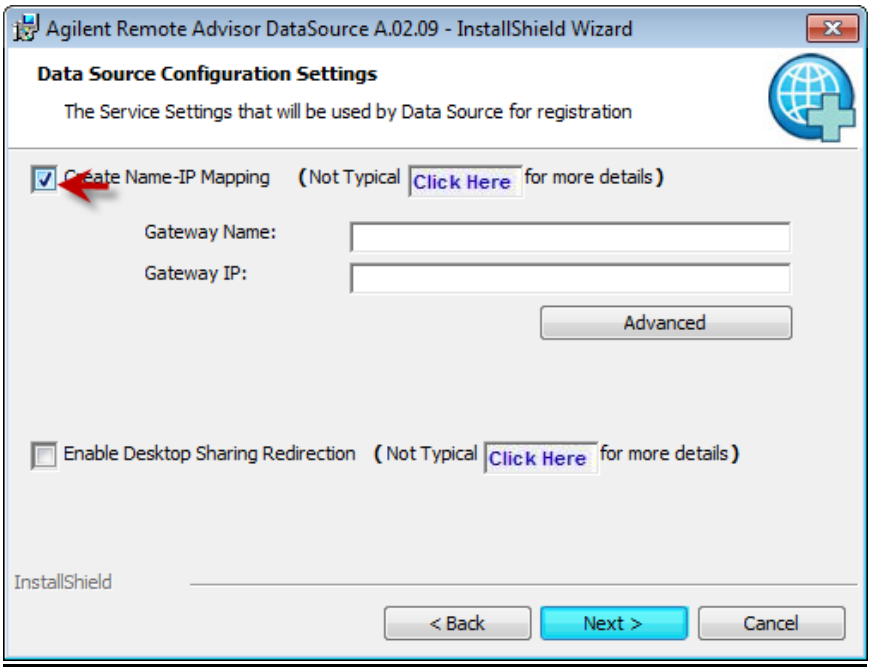
Skip to the next page for Isolated Networks.



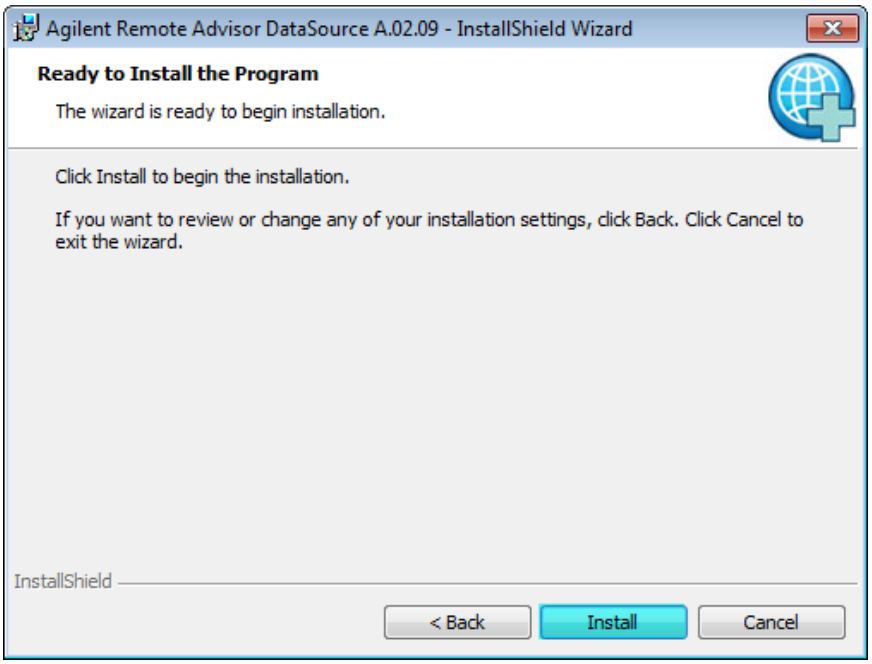
- Enter the Host name of the Gateway PC.
  Note: The data Source software may be installed on the same PC as the Gateway. Use localhost for the Gateway Name when installing the Data source on Gateway PC
- Select the Next button > Agilent Remote Advisor Data Source Installation Wizard Ready to Install the Program window opens

IP Mapping for Isolated Networks

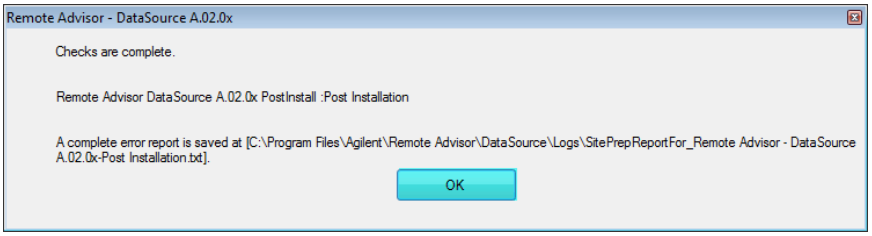
Configuration for Networks without DNS (Typically Isolated Networks)



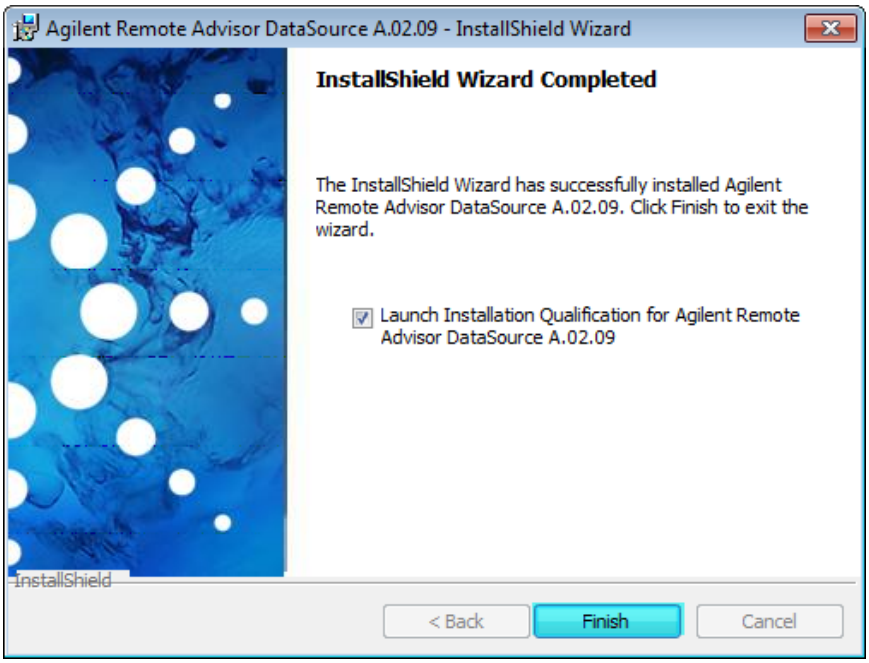
- Check Create Name-IP Mapping
- Enter the Host name of the Gateway PC, refer to the Gateway PC or the Remote Advisor Installation Planner for the Gateway PC name
- Enter the IP address of the Gateway PC for the isolated network
- Select the Next button > Agilent Remote Advisor Data Source InstallSheild Wizard Ready to Install the Program window opens
  Note: It may be necessary to update the hosts file on the Gateway PC to map Data Source names to IP addresses. See Appendix E for more instructions.



- Select the Install button > Installation of the Data Source software completes. Remote Advisor Installation Check complete window opens.



- Select the OK button > InstallShield Wizard Completed is displayed



- Check Launch Installation Qualification…..
- Select the Finish button > Installation Qualification Report window is displayed

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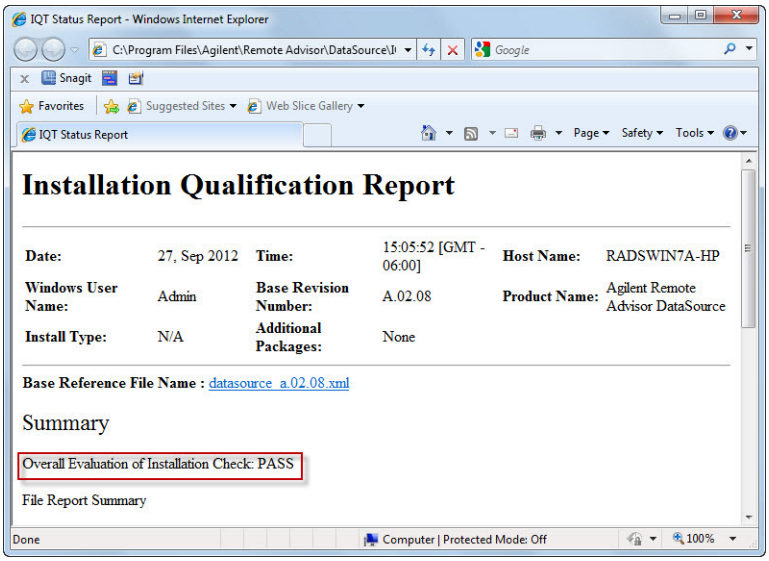
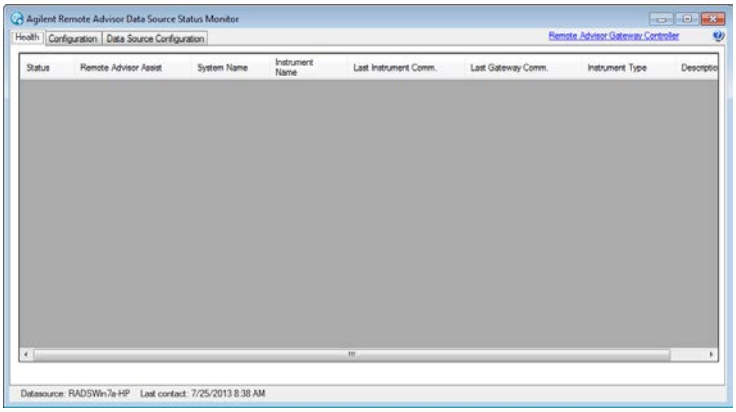
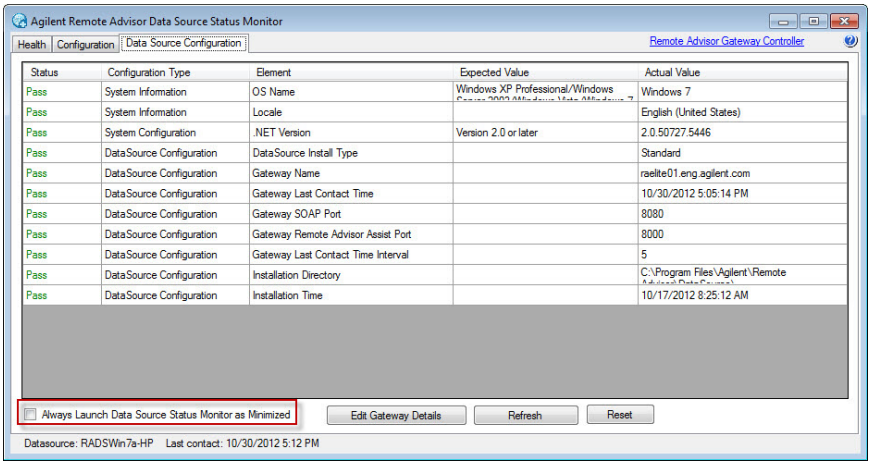


- Verify in the Summary section that the result is PASS
  Failures will be listed in the Installation Qualification Report. Investigate and resolve all failures.
- Close Internet Explorer. IQReport_Agilent Remote Advisor Data Source A.02.09 is saved in C:\Program Files\Agilent\Remote Advisor\DataSource\IQT directory

Agilent Remote Advisor Data Source Status Monitor



Agilent Remote Advisor Data Source Status Monitor opens and is now ready for configuration.



- Verify that all status are “Pass” in the Data Source Configuration tab

Always Launch Data Source Monitor as Minimized

When checked, the Data Source Status Monitor will not open on PC startup. Double click the Remote Advisor icon in the Windows notification area to open the Data Source status monitor.

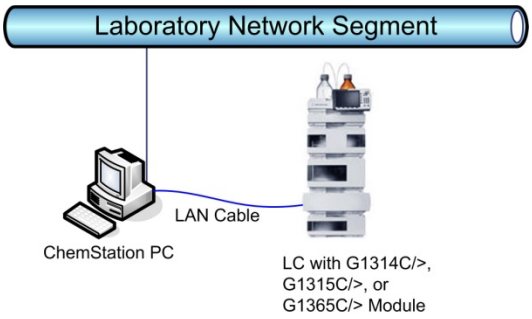
4 Data Source to Instrument Connections

Remote Advisor communicates directly to the instrument independent of ChemStation or other CDS. The method used to connect Remote Advisor to the instrument depends on how the instrument is currently connected to the existing data system and the revision of the detector.

Existing LAN Connection

Remote Advisor is able to communicate to LCMS, GCMS, QQQ, 7890 GC, and some LC Agilent LC modules over the existing LAN connection without interfering with ChemStation or other CDS communications to the instrument.

See the Remote Advisor Instrument Connection Reference on page 4-5 for a complete list of supported instruments and connection methods.

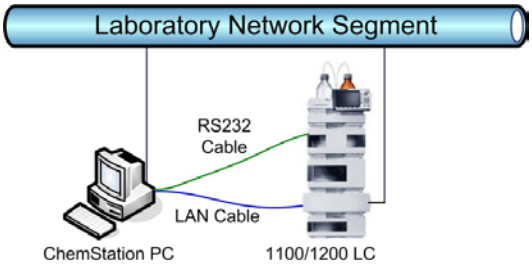


RS232 Null Modem Cable Connection

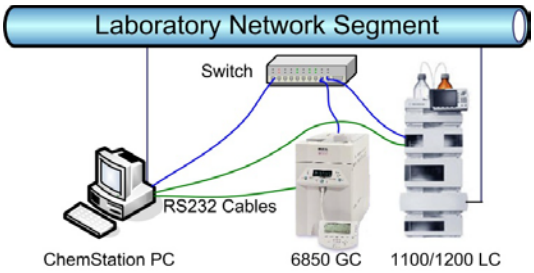
The standalone ChemStation PC connects to the Laboratory Network to communicate to the Gateway PC. One method is to add a second network interface card to the ChemStation PC and connect this interface to the laboratory network.

An RS232 null modem cable connects the ChemStation PC to the instrument for Remote Advisor communications.

See the Remote Advisor Instrument Connection Reference on page 4-5 for a complete list of supported instruments and connection methods.



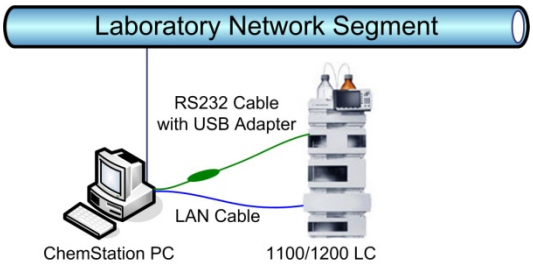
Two Instruments connected with RS232 Cables



Remote Advisor communicates to the instruments through RS232 null modem cables. USB to RS232 adapters are used when a PC comm. port is not available.

See the Remote Advisor Instrument Connection Reference on page 4-5 for a complete list of supported instruments and connection methods.

RS 232 Null Modem Cable with a USB to RS 232 Converter



A Null Modem Cable is used for the Remote Advisor connection to the instrument. The USB Adapter is used in conjunction with the Null Modem cable when a serial port is not available on the Data Source PC.

See the Remote Advisor Instrument Connection Reference on page 4-5 for a complete list of supported instruments and connection methods.

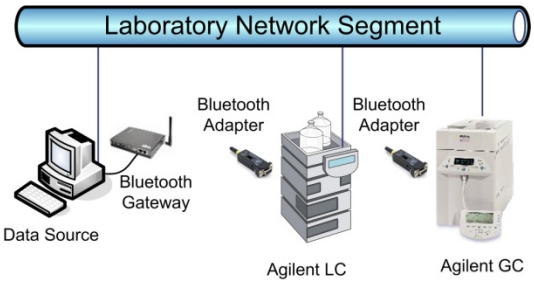
Standalone Data Source with RS232/LAN Converter

A Data Source PC is connected to the laboratory network to communicate to the instruments. A second network connection is added to each of the Agilent instruments through an RS232 to LAN converter for the Remote Advisor communications to the Data Source.

See the Remote Advisor Instrument Connection Reference on page 4-5 for a complete list of supported instruments and connection methods.

Standalone Data Source with Bluetooth Gateway and Bluetooth Adapters

A Data Source PC is connected to the laboratory network to communicate to the Gateway. A second network connection is added to each of the Agilent instruments by attaching a Bluetooth Adapter. The Data Source communicates to the instrument through the Bluetooth Gateway.

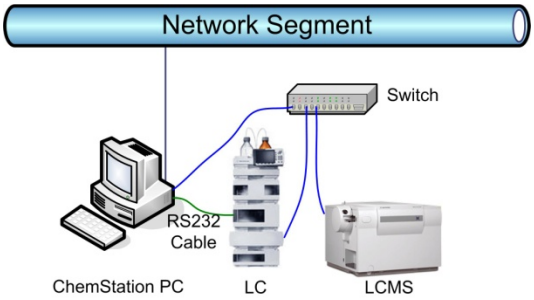


LCMS Connection

Communications between the Data Source and LCMS are concurrent with ChemStation to LCMS communications

Remote Advisor communicates to the 1100/1200 LC through an additional RS232 connection.

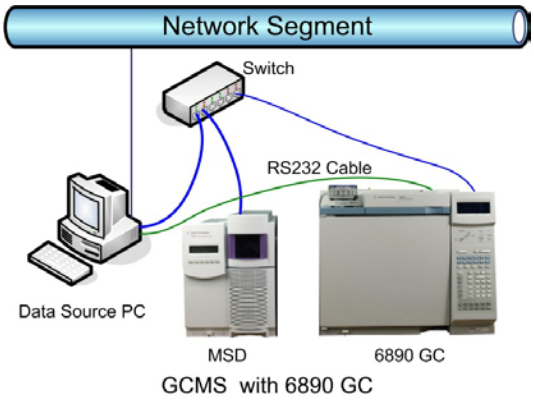
See the Remote Advisor Instrument Connection Reference on page 4-5 for a complete list of supported instruments and connection methods.



6850 and 6890 GC with GCMS Connection

ChemStation communicates to the 6850 and 6890 GC and the GCMS through a LAN connection which is usually a standalone switch.

Remote Advisor communicates to the 6850 and 6890 GC through an RS232 null modem cable and communicates to the MSD through the existing LAN connection.

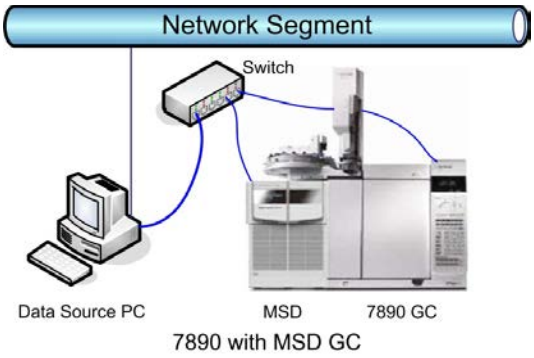


GCMS with 6890 GC

7890 GC with GCMS Connection

ChemStation communicates to the 7890 GC and GCMS through a LAN connection which is usually a standalone switch.

Remote Advisor communicates to the 7890 GC and the MSD through the existing LAN connections..

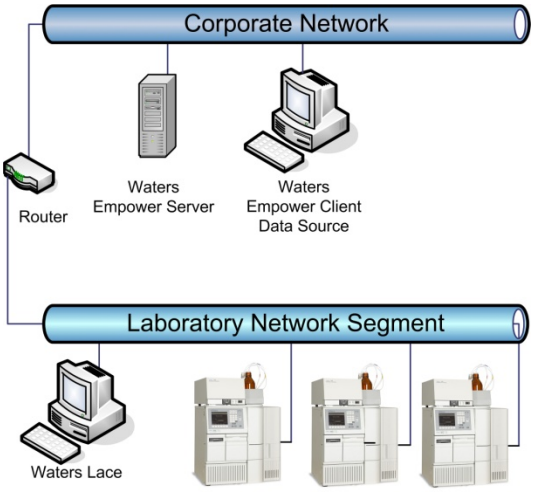


7890 with MSD GC

Waters HPLC Connection via Empower

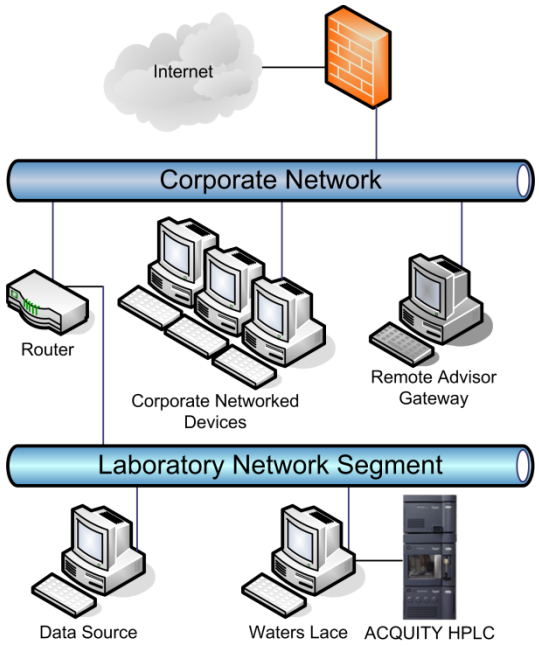
Remote Advisor communicates with the Waters Empower Toolkit interface for Waters LC instruments controlled by the Waters Empower data system. The Data Source is typically deployed on the same system hosting an Empower client.

No additional instrument connection is necessary.



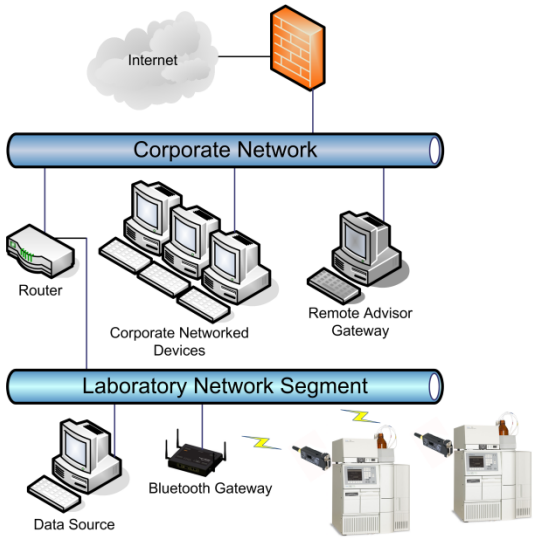
Waters Acquity

Remote Advisor requires the Acquity HPLC to be controlled by Waters Empower standalone or client/server. The Remote Advisor File Mover is installed on the Waters Node and is configured to send copies of the Acquity log files through the network to the Data Source. This installation requires the Waters Node to be on the network.



Waters Alliance

Remote Advisor connects to the Waters Alliance through a Bluetooth adapter connected to an RS232 port of the Alliance. The Alliance is configured to send events to the RS232 serial printer port.



Remote Advisor Instrument Connection Reference					
Instrument Type	**Existing LAN**	**RS232 Serial Cable**	**RS232/LAN Converter or Bluetooth serial converter**	**File Mover**	**Waters Empower**
1100 or 1200 LC with detectors: G1314A, G1314B G1314C, G1315A G1315B, G1321A G1321B, G1362A G1365A, G1365B	No	Yes Preferred	Yes	No	No
1100 or 1200 LC with detectors: G1314D, G1314E G1314F, G1315C G1315D, G1365C G1365D, G4211A G4212A, G4212B G4284A, G4284B	Yes Preferred	Yes	Yes	No	No
1120 and 1220 Compact LC	Yes Preferred	Yes	Yes	No	No
Single Quad LCMS G1946, G1956, G6110, G6120, G6130, G6140	Yes	No	No	No	No
Triple Quad LCMS G6410 and G6460	Yes	No	No	No	N0
6850, 6890 GC	Yes If other CDS is using the RS232 port	Yes Preferred	Yes	No	No
7890 GC	Yes	No	No	No	No
5973/5975 GCMS	Yes	No	No	No	N/A
Waters Acquity	No	No	No	Yes Preferred	Yes
Waters Alliance	No	No	Yes Preferred	No	Yes

4.1 Existing LAN Connection

No Additional connections are necessary.

- Proceed to the Instrument Configuration Section. Refer to Table of Contents:

4.2 Null Modem Cable Connection

- Connect an RS232 null modem cable to the RS232 port of an LC module or the RS232/Modem port of the 6850/6890 and 7890B GC and the COM port of the Data Source PC.

  No Additional configuration is necessary.
- Proceed to the Instrument Configuration Section. Refer to Table of Contents:

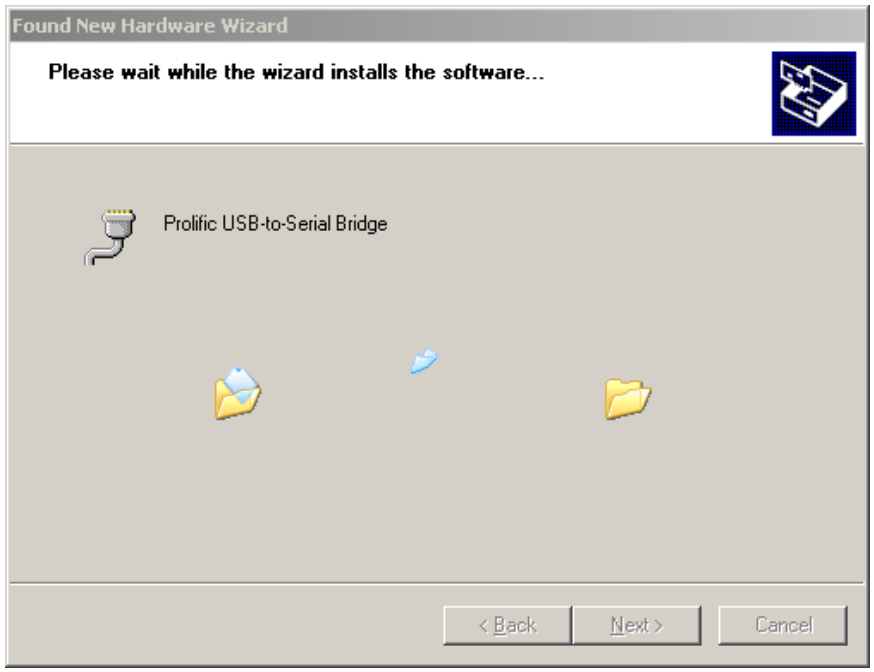
4.3 Null Modem Cable Connection with USB Adapter

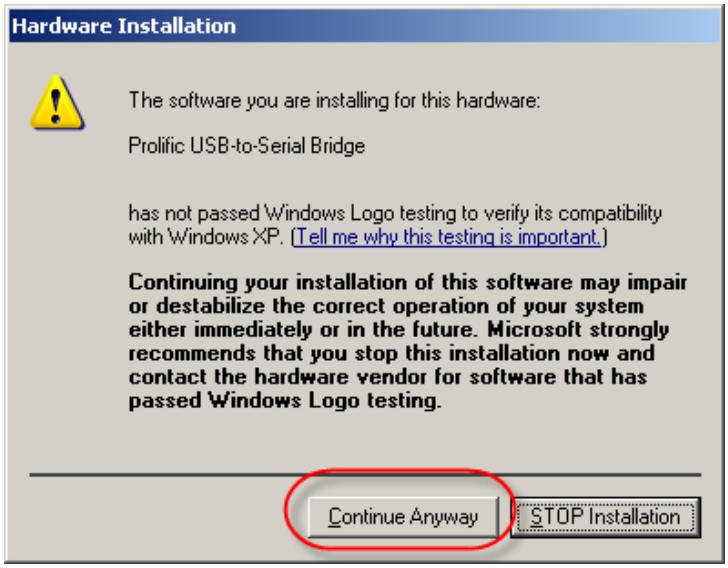
- Connect an RS232 null modem cable to the RS232 port of an LC module or the RS232/Modem port of the 6850/6890 and 7890B GC.
- Connect the RS232 to USB converter to the RS232 null modem cable and to a USB port on the Data Source PC > Found New Hardware Wizard window opens
- Configure the Prolific USB converter

Prolific USB-to-RS232 Serial Bridge Configuration

- Insert the USB installation CD that accompanies the Prolific USB-to-Serial converter, in the CD Drive of the PC
- Select No not at this time
- Select Next > The installation wizard finds the installation software on the CD

Hardware Installation window opens



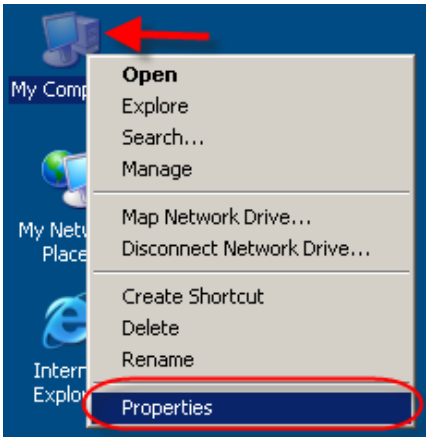


- Select the Continue Anyway button > Completing the Found new Hardware Wizard

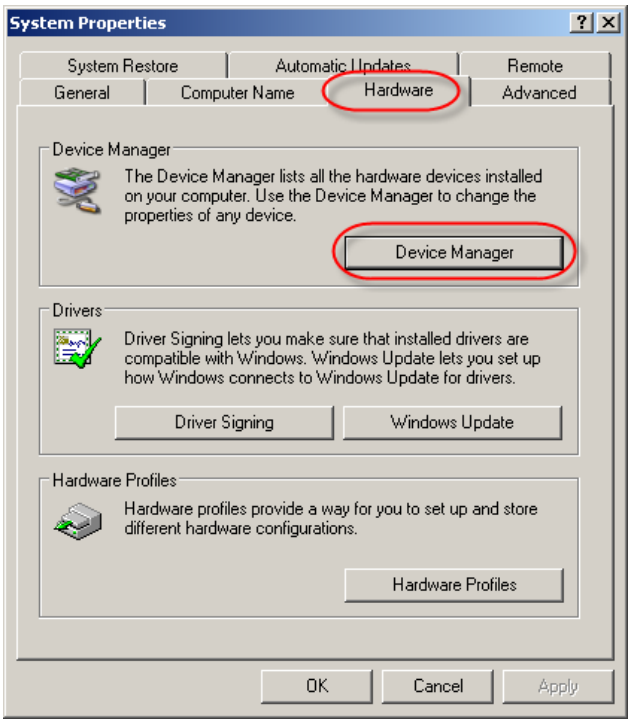
- Select the Finish button
- Remove the USB installation CD

Verify the USB to Serial Bridge Com Port number

- Right click the My Computer icon on the desktop

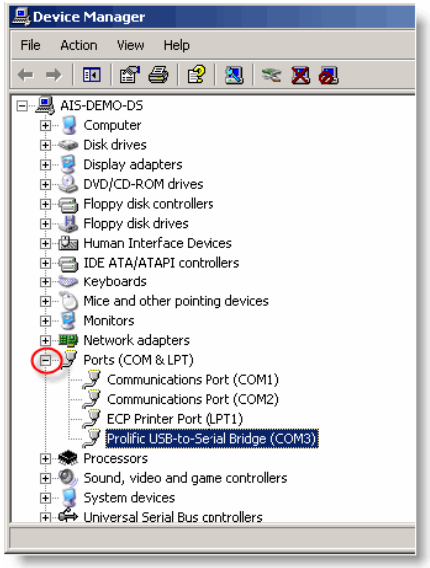


- Select Properties > System Properties window opens



- Select the Hardware Folder
- Select the Device Manager button > Device Manager Window opens

---



- Expand Ports (COM &LPT)
- Take note of the COM port number. It will be used to configure the instrument connect to this USB to RS232 Adapter

4.4 RS232 to LAN Converter Connection

- Connect the RS232 to LAN converter to the RS232 port of an LC module or the RS232/Modem port of a 6850/6890 GC
- Connect power to the RS232 to LAN converter
- Connect the LAN port of the RS232 converter to the LAN
- Configure the IP Address and Device Name of RS232 LAN converter
- Configure the Serial Port Speed to 9600 for 6850/6890 GC

IP Address Configuration of the Model AGES1A RS232 to LAN converter

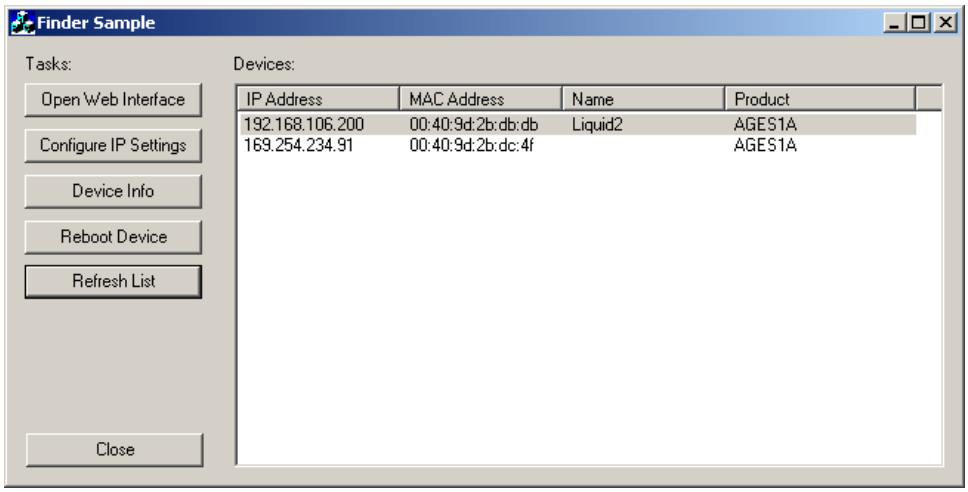
All AGES1A RS232 to LAN converters ordered from Agilent Stock before July 1, 2008 require additional configuration. Refer to the Configuration instructions on page 4-19 after configuring the IP address.

- Double-click FINDER.EXE in the \Utilities\Ethernet to RS-232 Converter\AGES1A or G1680-63722 folder of the installation CD. Finder.exe locates all converters connected to the network.

The AGES1A IP address is initially set for DHCP so that it will automatically acquire an IP address when connected to a network with a DHCP server. Isolated networks seldom have a DHCP server. The AGES1A will configure its own IP address starting with 169.254.x.x when connected a network without a DHCP server. An IP address of 0.0.0.0 may also be displayed.

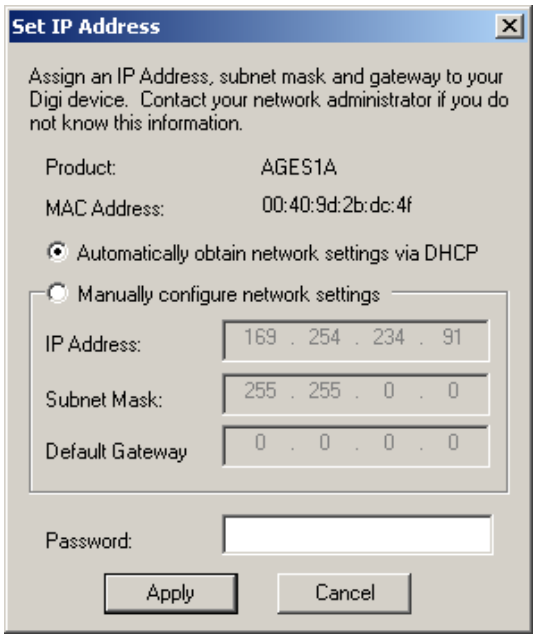
Static IP address configuration is recommended for all AGES1A converters.

Finder Sample

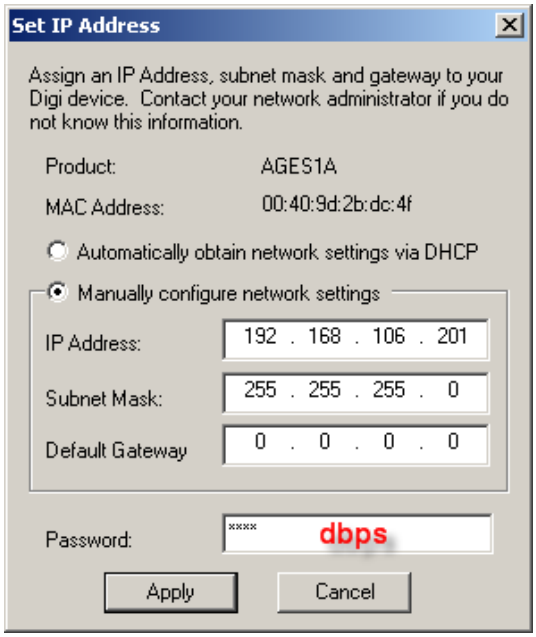


This example shows two AGES1A converters discovered on an isolated network. One converter has an IP address of 169.254.234.91. The IP address of the AGES1A was self-configured and needs to have a static IP address configured.

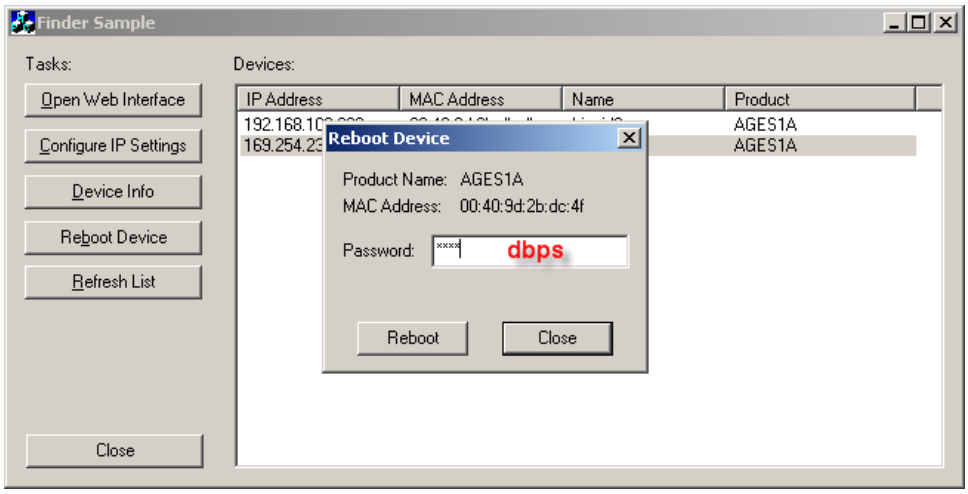
- Select the AGES1A in the Devices section of Finder Sample that will be configured
- Select the Configure IP Address button > Set IP Address opens



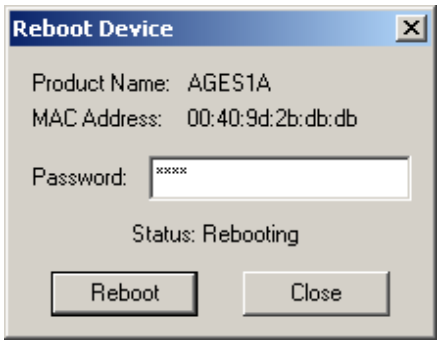
- Check Manually Configure Network Settings



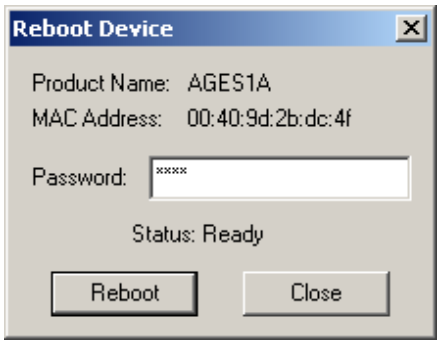
- Enter the desired IP address for the AGES1A converter, Subnet Mask, and Default Gateway (if required)
- Enter password dbps in the Password field
- Select the Apply button



- Select the Reboot Device button in the Finder Sample
- Enter dbps in the Password field of the Reboot Device window
- Select the Reboot button

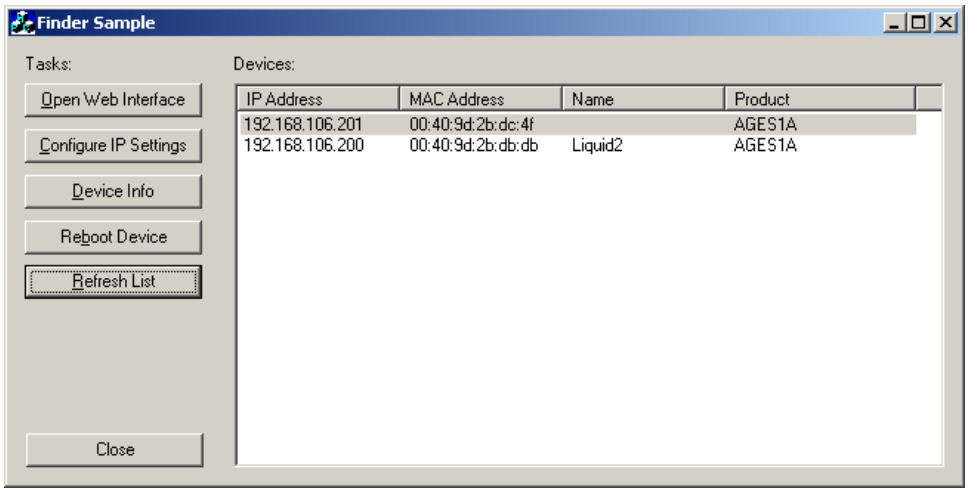


Status: Rebooting is displayed while the Adapter reboots



Status: Ready will display when the reboot is complete

- Select the Close button

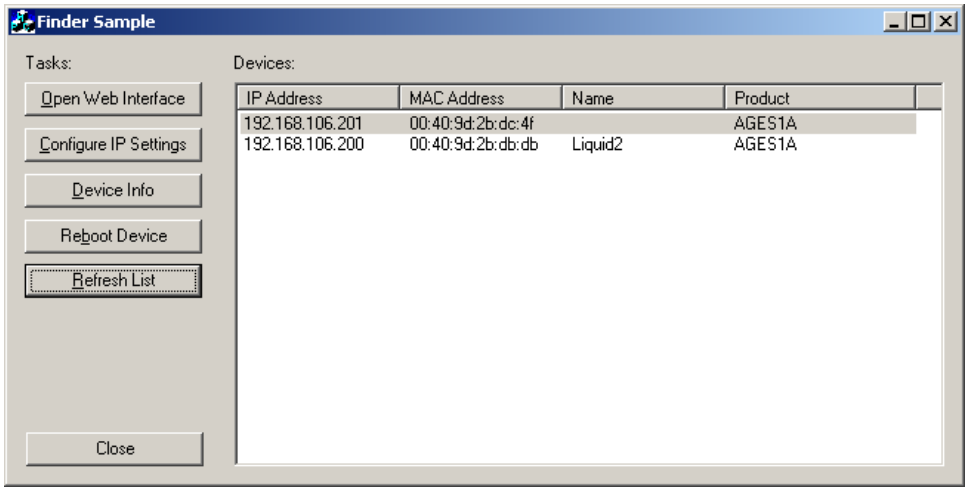


- Select the Refresh button

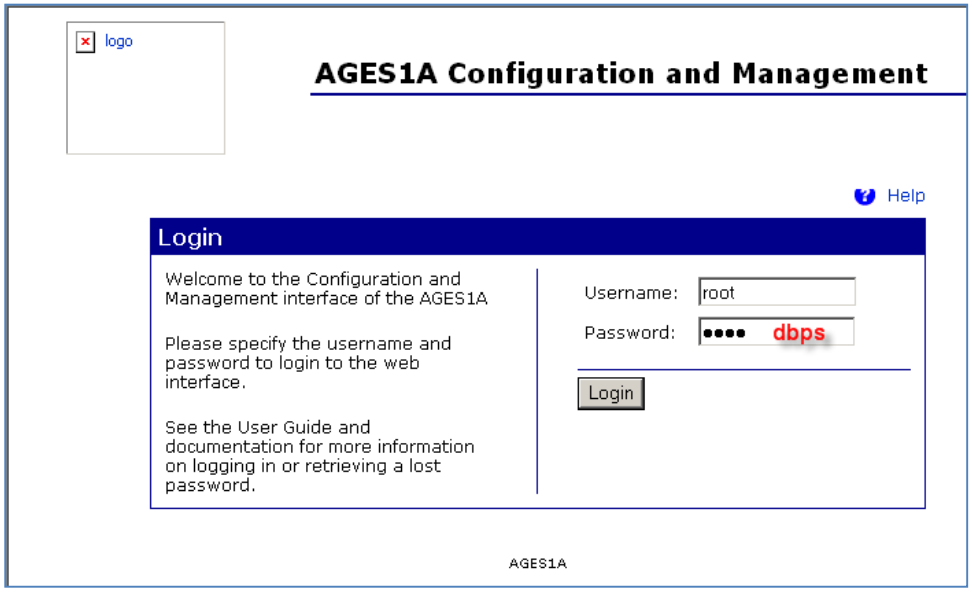
The new IP address is displayed

Name Configuration of the Model AGES1A RS232 to LAN converter

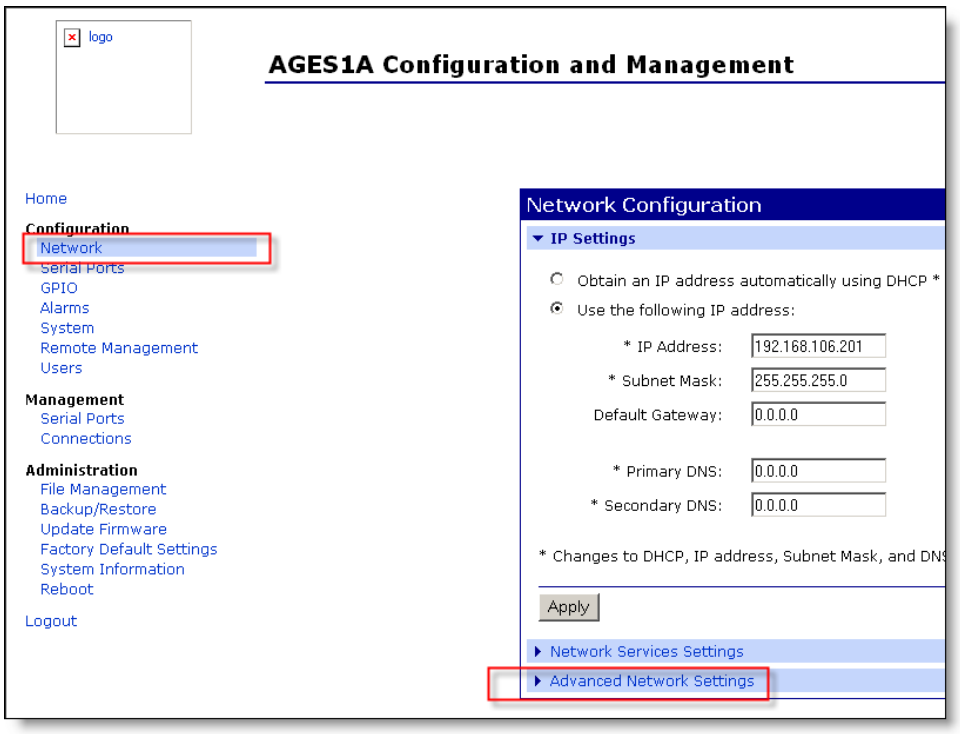
Configure the name of the AGES1A converter with the name of the Instrument that is attached to the converter.



- Select the Device to be configured
- Select the Open Web Interface button > Internet Explorer opens with the AGES1A Configuration and Management page

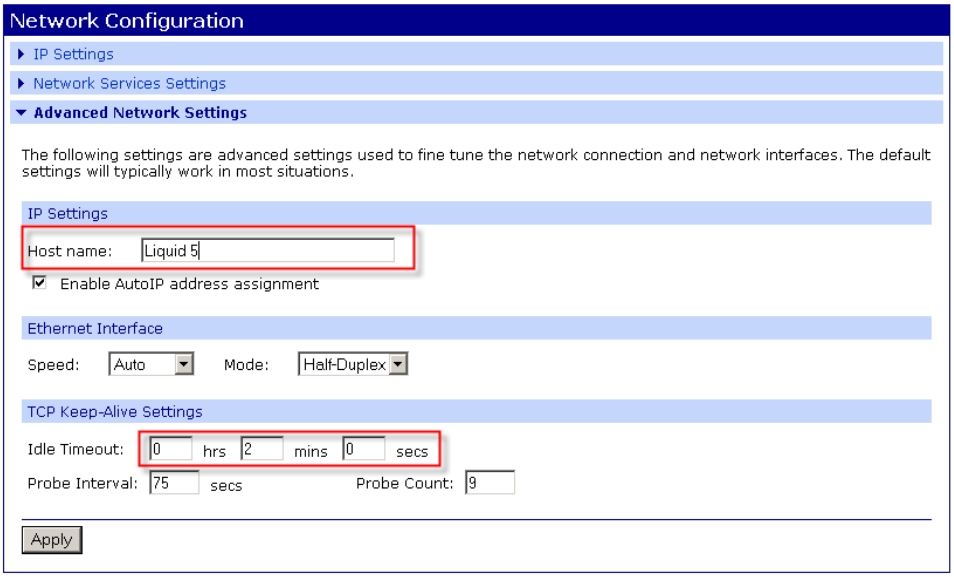


- Enter root in the Username field
- Enter dbps in the Password Field
- Select the Login button > AGES1A Configuration and Management page is displayed



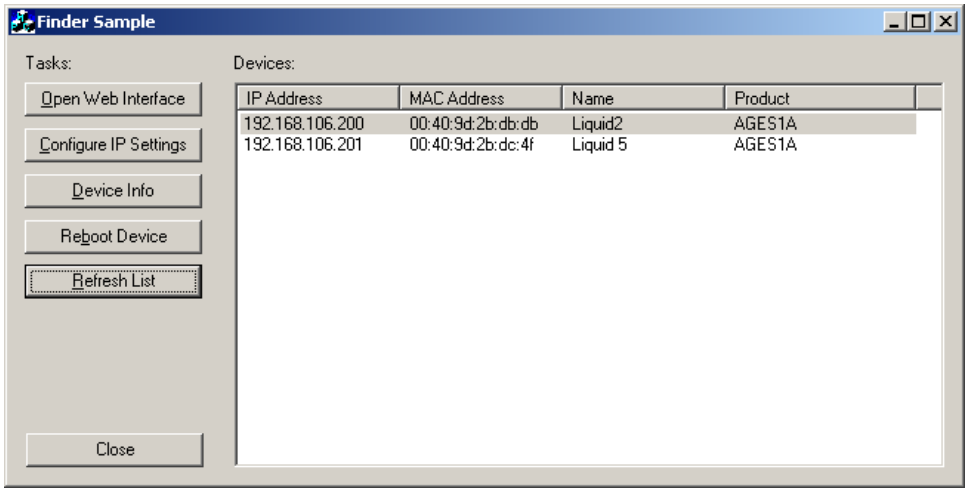
- Select Network from the Configuration Menu
- Select Advanced Network Settings from Network Configuration

Network Configuration



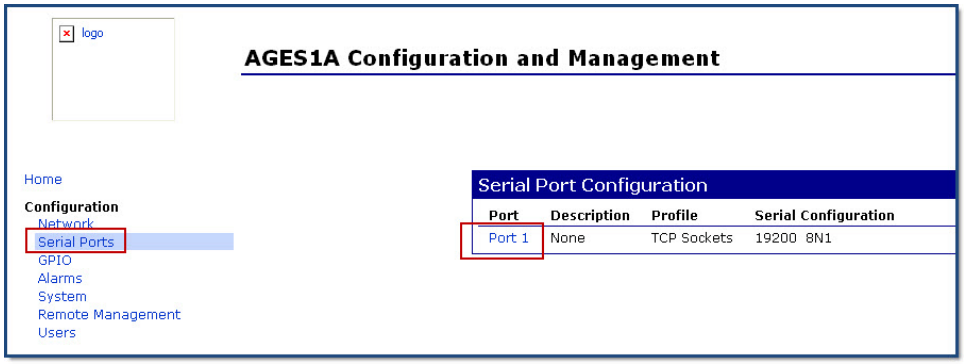
- Enter the name of the Instrument the converter is connected to in the Host name field
- Verify that Idle Timeout is set for 0 hrs 2 mins 0 secs.
  ****Important**** Proceed to the Configuration of the Model AGES1A RS232 on pages 4-19 if the Idle Timeout is different than 0 hrs, 2 mins, 0 secs
- Select the Apply button > “Changes have been saved successfully” will be displayed.

Finder Example

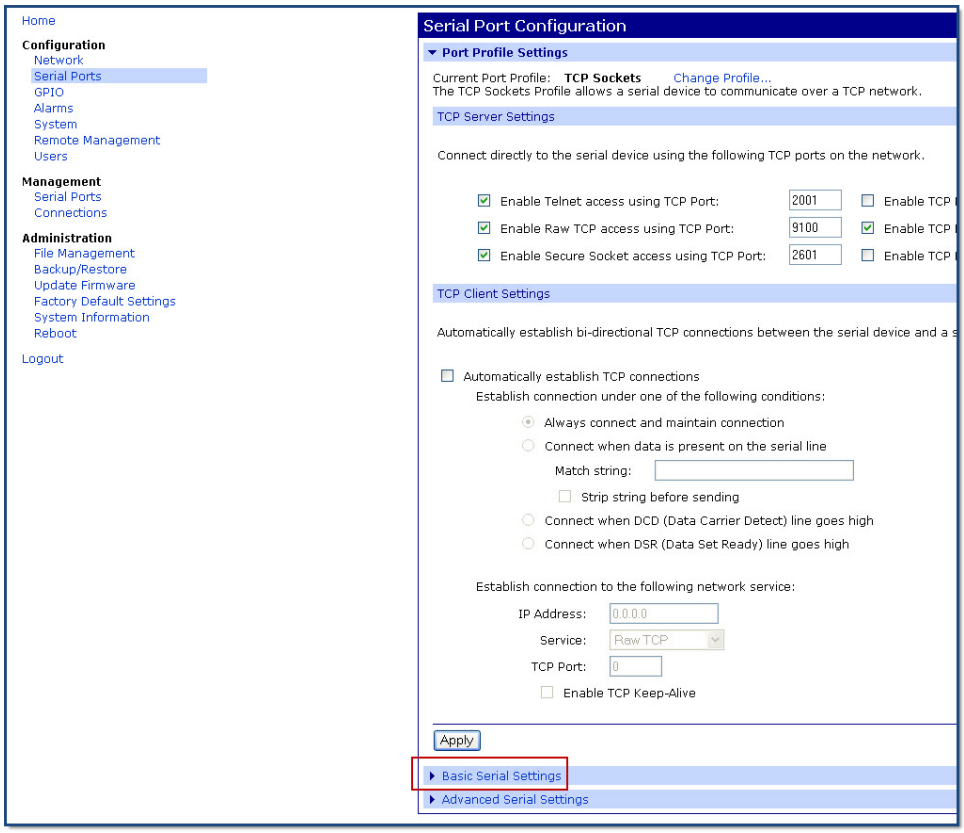


- Select the Refresh List button
- Verify the name is displayed in the Name column

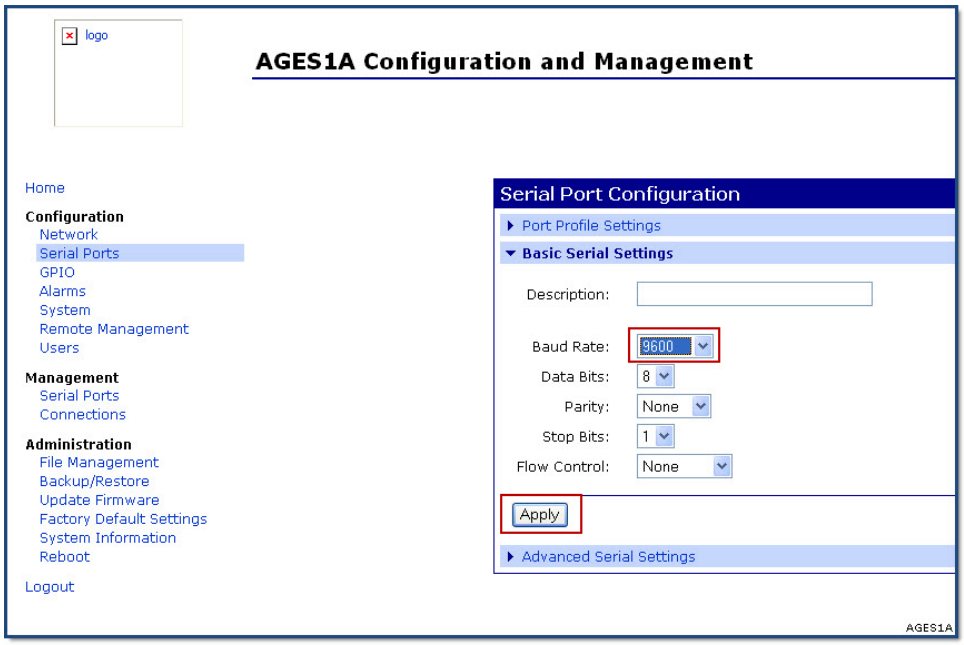
4.4.1 Serial Port Speed Configuration when connecting to 6850 and 6890 and Waters Alliance



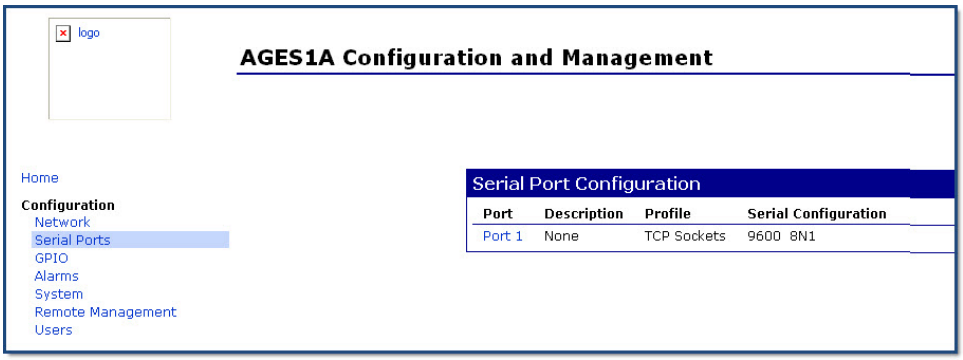
- Select Serial Ports under Configuration
- Select Port 1 > Serial Port Configuration options are displayed



- Select Basic Serial Settings > Serial Port Basic Serial settings is displayed



- Select 9600 as the Baud Rate
- Select the Apply Button

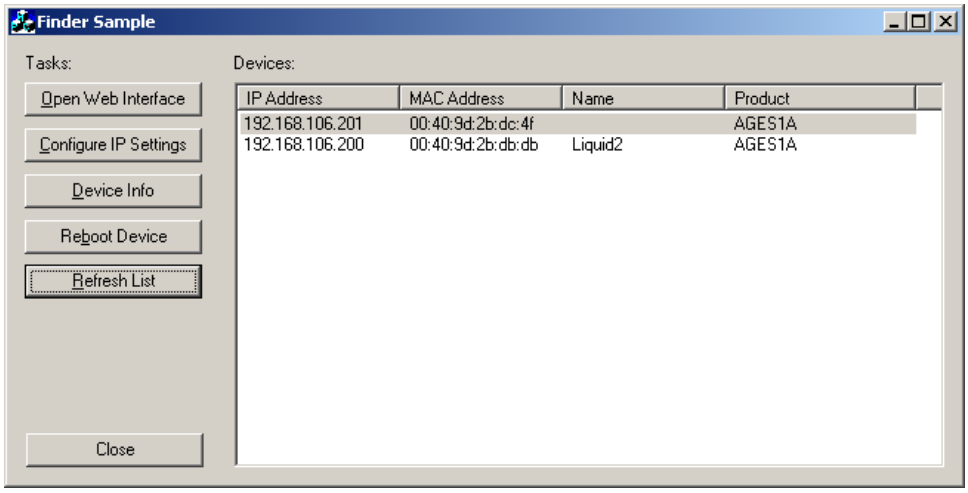


- Select Serial Ports under Configuration > The Port Speed is now displayed as 9600
- Close Internet Explorer

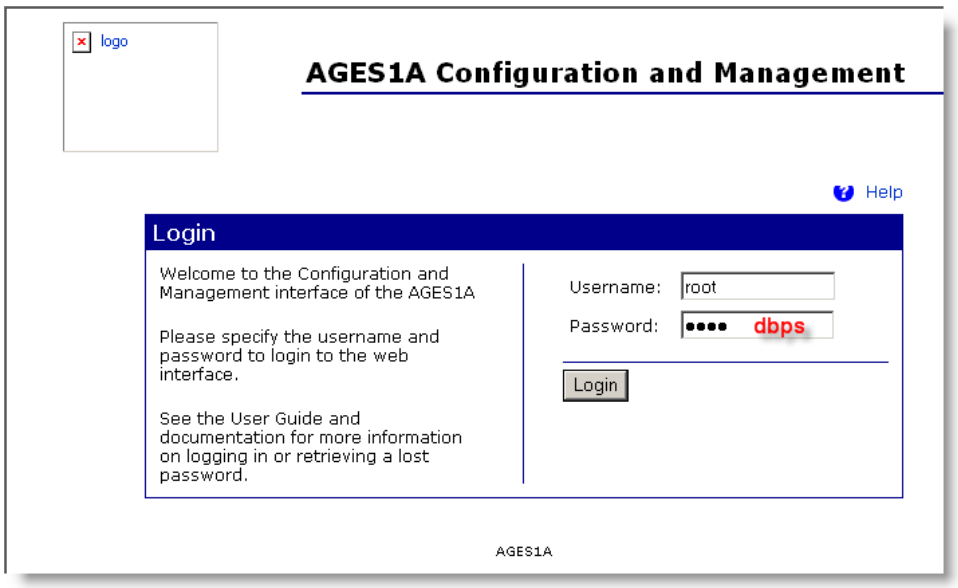
Configuration of Model AGES1A RS232 to LAN converter

AGES1A converters shipped from Agilent stock after July 1, 2008 have been preconfigured.

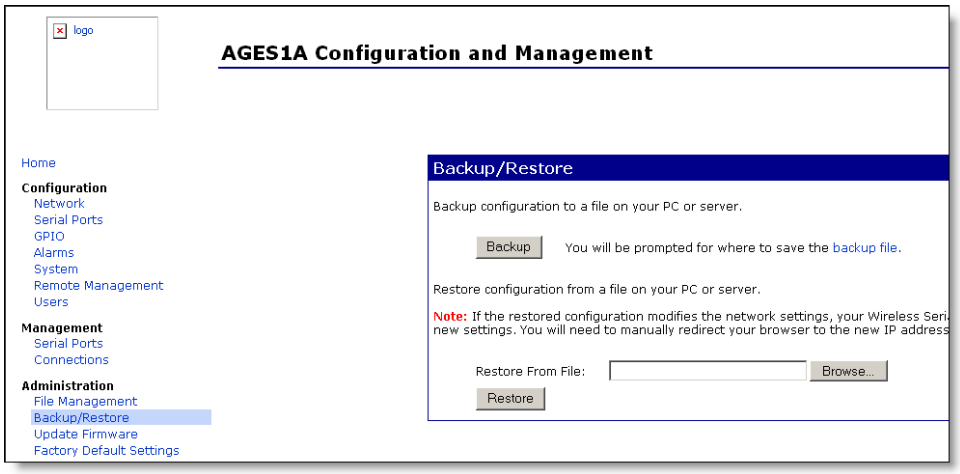
****Important**** This procedure is only necessary if Idle Timeout is set for a value other than 0 hrs 2 mins 0 secs which was verified in Name Configuration of the AGES1A RS232 to LAN converter procedure. Follow this procedure if you are unsure that the AGES1A has been previously configured.



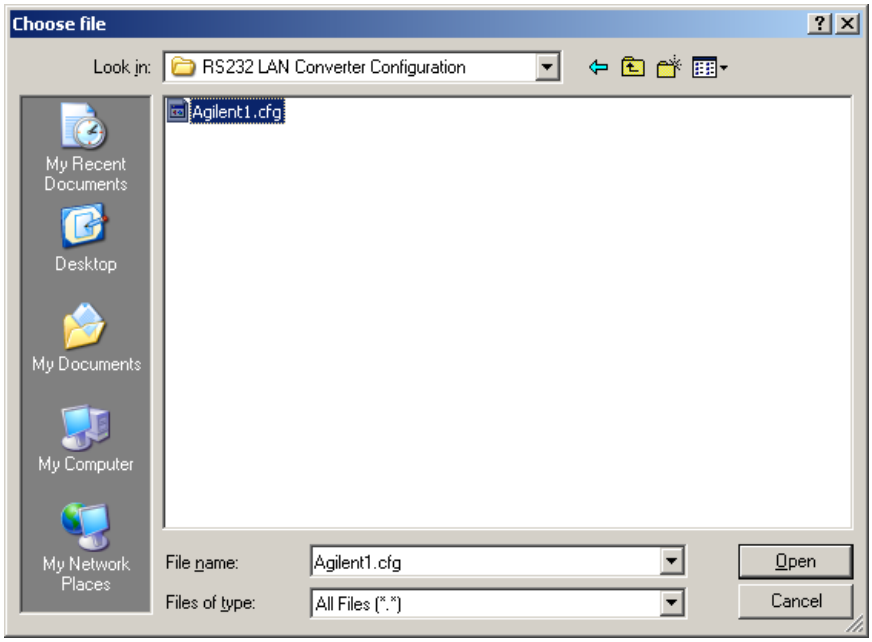
- Select the Device to be configured
- Select the Open Web Interface button > Internet Explorer opens with the AGES1A Configuration and Management page



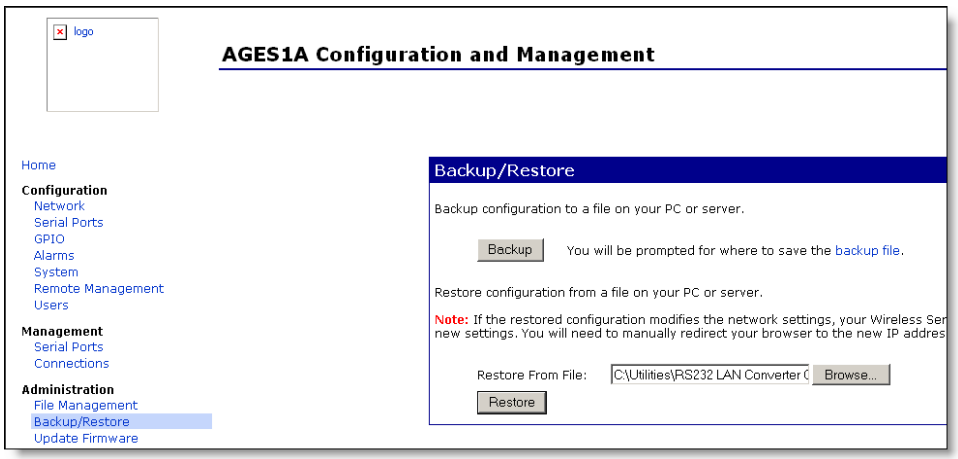
- Enter root in the Username field
- Enter dbps in the Password Field
- Select the Login button > AGES1A Configuration and Management displays



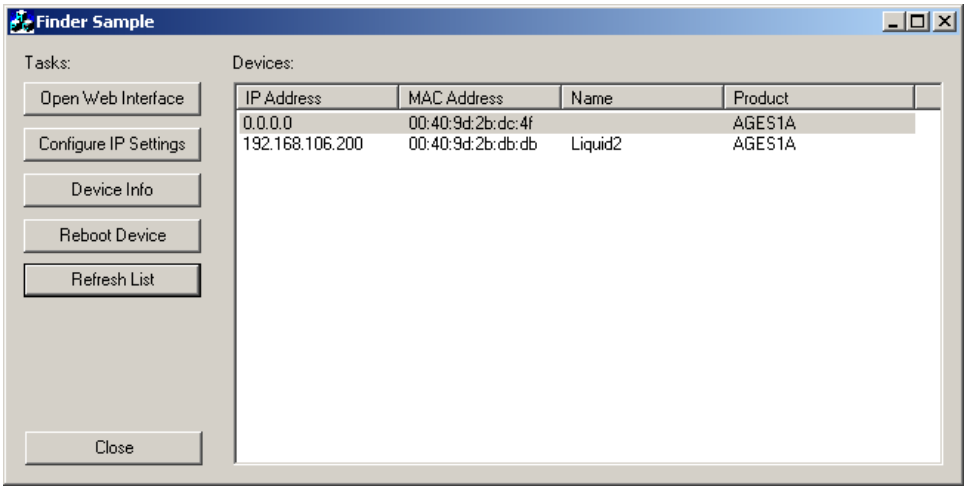
- Select Backup/Restore under Administration
- Select the Browse button in the Backup/Restore section



- Browse to the \Utilities\Ethernet to RS-232 Converter\RS232 LAN Converter Configuration folder of the installation CD
- Double click Agilent1.cfg



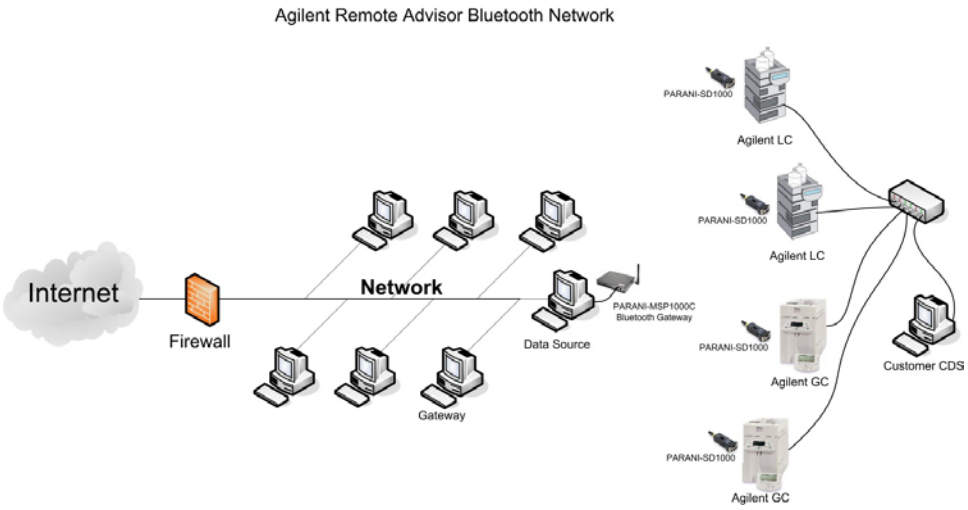
- Select the Restore button in the Backup/Restore section
- Wait about two minutes. Internet Explorer may or may not update.
- After two minutes close Internet Explorer



- Select the Refresh List button > The AGES1A will display an IP address of 0.0.0.0
- Repeat the IP Address Configuration of the Model AGES1A RS232 to LAN converter and Name Configuration of the Model AGES1A RS232 to LAN converter procedures starting on page 4-10.

4.5 Installation and Configuration of the Bluetooth Gateway Remote Advisor Bluetooth Network

Agilent Remote Advisor Bluetooth Network is a secure wireless network for Remote Advisor instrument communications. This Bluetooth network simplifies connecting Agilent instruments when Remote Advisor is deployed in a distributed data system environment with a standalone Data Source.



The Remote Advisor Bluetooth Network has two components

1. Bluetooth Gateway for every 28 instruments
2. Bluetooth serial converter that connect to each instrument
3. The Bluetooth adapter can be ordered with two power options
   a. Remote Advisor Bluetooth Adapter with AC Power converter P/N 5067-0273
   b. Remote Advisor Bluetooth Adapter with USB Power Cable P/N 5067-0273

The Bluetooth network solution is only available for installations with 12 or more instruments.

Bluetooth Gateway

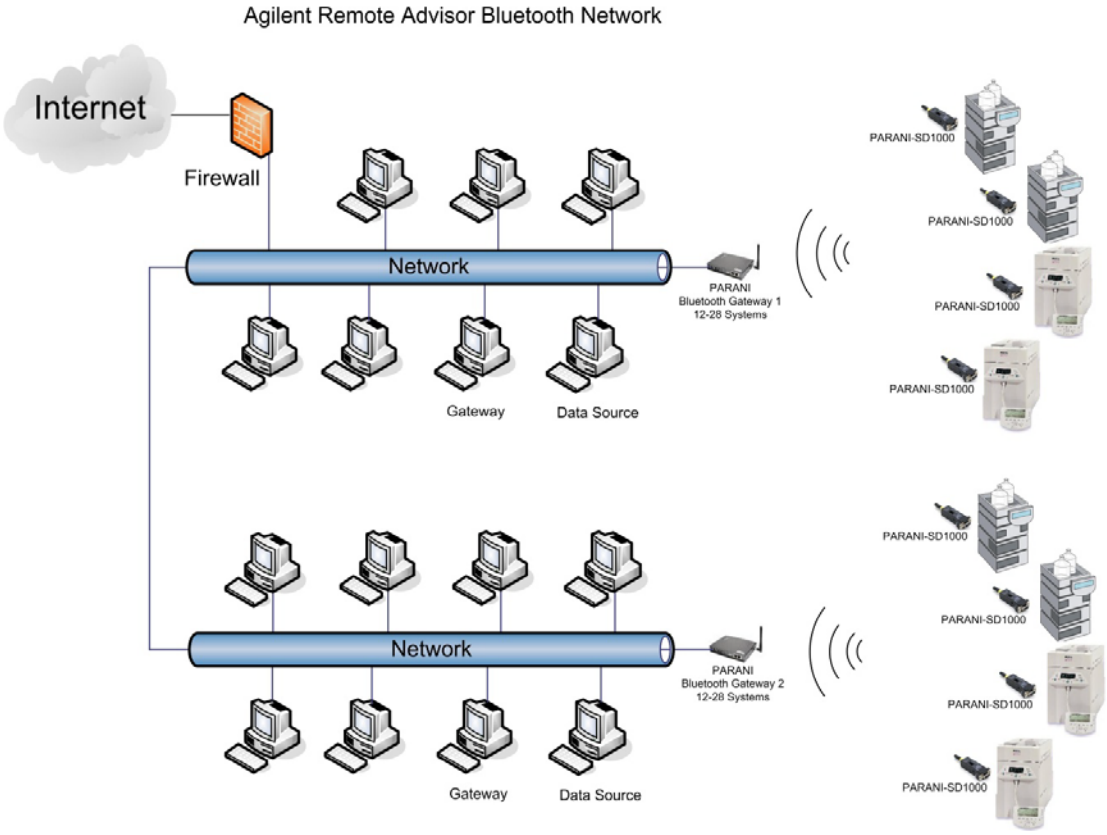
The Bluetooth Gateway requires a network connection either connected directly to the LAN or to a second NIC in the Data Source PC. A static IP address for the Bluetooth Gateway is required to ensure that network connections are restored after a power interruption. The Data Source communicates through the Bluetooth Gateway and serial converters to the instruments. Connecting the Bluetooth Gateway to the second NIC of a Data Source PC offers the maximum security since the Bluetooth Gateway is not connected to the network.

One Bluetooth Gateway will support up to 28 Bluetooth serial converters.

Range and Location

The Bluetooth Gateway signal transmission is Omnidirectional and has a tested range of 150 feet (or 45 meters) for converters on the same floor and 100 feet (30 meters) or less for converters on floors either above or below the Bluetooth Gateway. Range will vary depending on walls and other obstacles. A central location for the Bluetooth Gateway is recommended for the best reception.

Remote Advisor installations of over 28 instruments will require an additional Bluetooth Gateway. The Bluetooth Gateway should be strategically placed to provide the best reception to the most instruments. The Data Source and Bluetooth gateways will be connected to the LAN.



Bluetooth Network Introduction

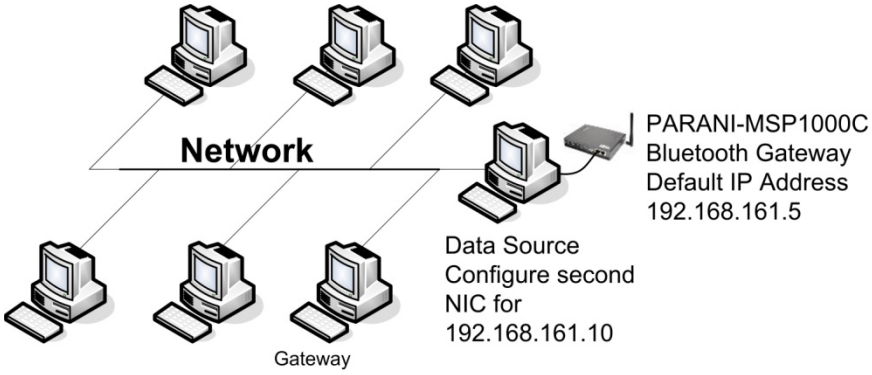
The SENA Parani Bluetooth gateway is delivered to Agilent preconfigured with the exception of the IP Address. The IP Address is configured using a computer with a terminal emulation program and a serial port. HyperTerminal is a terminal emulation program built into Windows XP. Windows 7 no longer includes HyperTerminal. HyperTerminal is included on the Remote Advisor installation CD.

This procedure requires a PC with HyperTerminal and a serial port. An RS232 to USB converter can be used on PCs without a serial port.

Cable Connections

- Connect the Bluetooth gateway ETH0 port to the to the LAN
- Connect the RS232 cable supplied to the Bluetooth gateway Console port and the serial port of a PC
- Connect the power supply

Important Note: The Bluetooth gateway can also be connected to the second NIC of the Data Source PC. Follow this procedure only if connecting the Bluetooth gateway to the second NIC of the Data Source PC



- Connect the Bluetooth gateway to the PC with an Ethernet crossover cable Configure the Data Source second NIC IP address to 192.168.161.10
- Skip the configuration of the Bluetooth gateway IP address and proceed to Bluetooth Gateway Network Operation Verification

HyperTerminal for Windows 7 PCs

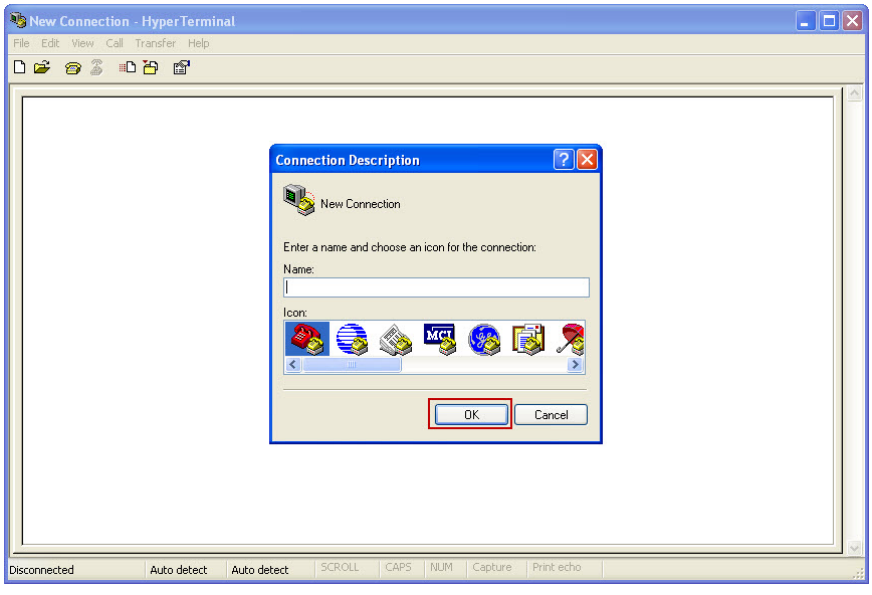
HyperTerminal must first be copied to Windows 7 PC from the Remote Advisor Installation CD.

- Insert the Remote Advisor installation CD in the CD/DVD drive
- Browse to :\Utilities\HyperTerminal folder
- Copy hypertrm.zip to the desktop or other disk location of the Windows 7 PC
- Right click hyperterm.zip
- Select Extract all > hypertrm folder is created
- Open the hypertrm folder
- Double click hypertrm.exe >
- Proceed to HyperTerminal configuration on the next page

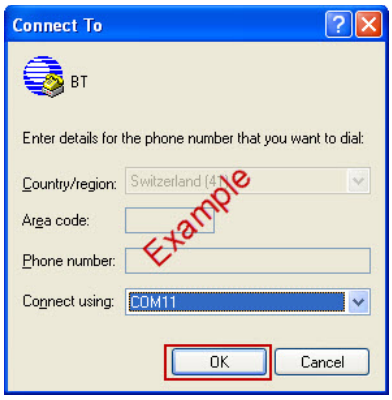
HyperTerminal for Windows XP

- Open and configure HyperTerminal
  - Select the Windows Start button
  - Select Run
  - Type hypertrm and select OK > HypterTerminal application opens

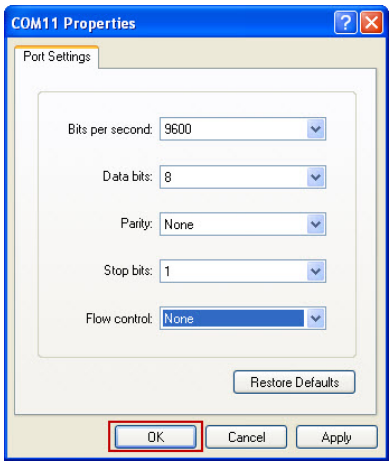
HyperTerminal Configuration



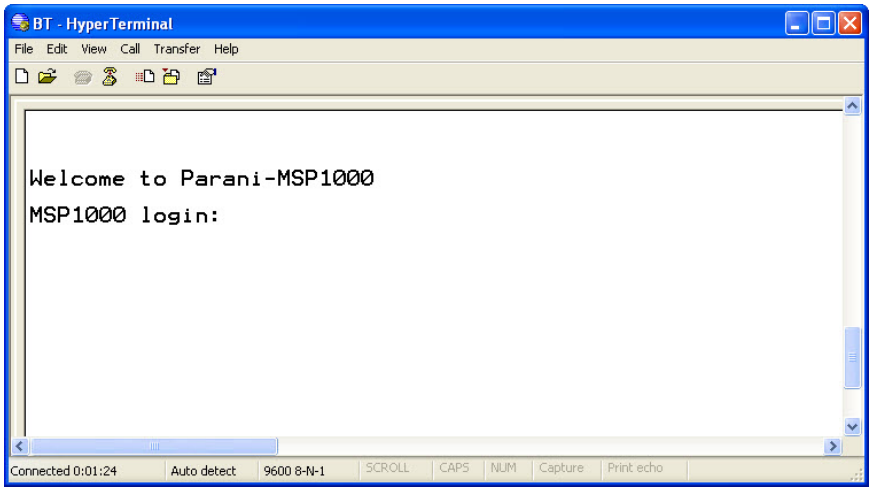
- Type a name for the connection
- Choose an icon
- Select OK > connect to window opens



- Select the correct COM port from the Connect using drop down menu
- Select the OK button



- Configure COM Properties as follows
  - Bits per second = 9600
  - Data bits = 8
  - Parity = none
  - Stop bits = 1
  - Flow control = none
- Select the OK button
  HyperTerminal is now configured



- Press the PC enter key from the HyperTerminal window
  Welcome banner and login prompt displays

- Enter root for the login
- Enter root for the password
  The command prompt is displayed
  [root@MSP1000 /]#
- Type editconf at the command prompt
  [root@MSP1000 /]#editconf
  The configuration menu displays

```
Welcome to Parani-MSP1000

MSP1000 login: root
Password:
[root@MSP1000 /]# editconf
------------------------------------------------------------------------------
 Welcome to MSP1000 configuration page
 Current Time    : 11/3/2011 11:08:12    Serial No.      : MSP1000B-100600056
 F/W Rev.        : v1.2.6b2              MAC Addr.(eth0) : 00:01:95:0B:9D:B8
 IP Mode (eth0) : Static                 IP Addr.(eth0)  : 192.168.161.5
------------------------------------------------------------------------------
 1. Network configuration
 2. System administration
 3. System status & log
 4. CF card configuration
 5. Monitoring
 6. Save changes
 7. Exit without saving
 8. Exit and apply changes
 9. Exit and reboot
  <ESC> Back, <ENTER> Refresh
 -->
```

IP Address Configuration

A static IP address of 192.168.161.5 is the default IP address of the Bluetooth gateway. A static IP address is highly recommended to insure that the Bluetooth gateway will maintain the same IP address.

The configuration menu is navigated by entering the number of the function at the prompt -->.

```
--------------------------------------------------------------------------------
 Welcome to MSP1000 configuration page
 Current Time   : 11/3/2011 14:08:32    Serial No.      : MSP1000B-100600056
 F/W Rev.       : v1.2.6b2              MAC Addr.(eth0) : 00:01:95:0B:9D:B8
 IP Mode (eth0) : Static                IP Addr.(eth0)  : 192.168.161.5
--------------------------------------------------------------------------------
 1. Network configuration
 2. System administration
 3. System status & log
 4. CF card configuration
 5. Monitoring
 6. Save changes
 7. Exit without saving
 8. Exit and apply changes
 9. Exit and reboot
  <ESC> Back, <ENTER> Refresh
 --> 1
```

4. Type 1 and press enter to select Network configuration

```
--------------------------------------------------------------------------------
  Network Configuration
--------------------------------------------------------------------------------
 1. IP configuration
 2. IP filtering configuration
 3. TCP service configuration
  <ESC> Back, <ENTER> Refresh
 --> 1
```

5. Type 1 and press enter to select IP Configuration

```
--------------------------------------------------------------------------------
  IP Configuration
--------------------------------------------------------------------------------
 1. ETHERNET 0 (eth0) configuration
 2. ETHERNET 1 (eth1) configuration
  <ESC> Back, <ENTER> Refresh
 --> 1
```

6. Type 1 and press enter to select Ethernet 0

```
--------------------------------------------------------------------------------
  ETHERNET 0 (eth0) configuration
--------------------------------------------------------------------------------
 1. IP mode: Static IP
 2. IP address: 192.168.161.5
 3. Subnetmask: 255.255.0.0
 4. Gateway: 192.168.1.1
 5. Primary DNS: 168.126.63.1
 6. Secondary DNS: 168.126.63.2
  <ESC> Back, <ENTER> Refresh
 --> 2
    Enter IP address: 10.0.1.140
```

7. Type 2 and press enter to select IP Address
   a. Type the IP address required for this installation and press enter
   Note: Proceed to #10 to configure for DHCP

```
--------------------------------------------------------------------------------
  ETHERNET 0 (eth0) configuration
--------------------------------------------------------------------------------
 1. IP mode: Static IP
 2. IP address: 10.0.1.140
 3. Subnetmask: 255.255.0.0
 4. Gateway: 192.168.1.1
 5. Primary DNS: 168.126.63.1
 6. Secondary DNS: 168.126.63.2
  <ESC> Back, <ENTER> Refresh
 --> 3
    Enter Subnetmask: 255.255.255.0
```

8. Type 3 and press enter to select Subnet mask
   a. Type the subnet subnet mask required for the installation and press enter

```
--------------------------------------------------------------------------------
  ETHERNET 0 (eth0) configuration
--------------------------------------------------------------------------------
 1. IP mode: Static IP
 2. IP address: 10.0.1.140
 3. Subnetmask: 255.255.255.0
 4. Gateway: 0.0.0.0
 5. Primary DNS: 0.0.0.0
 6. Secondary DNS: 0.0.0.0
  <ESC> Back, <ENTER> Refresh
 --> 4
    Enter Gateway: 10.1.0.1
```

9. Type 4 and press enter to select Gateway
   a. Type the default gateway IP address for this installation. If no default gateway is used type 0.0.0.0 and press enter

```
--------------------------------------------------------------------------------
  ETHERNET 0 (eth0) configuration
--------------------------------------------------------------------------------
 1. IP mode: Static IP
 2. IP address: 10.0.1.140
 3. Subnetmask: 255.255.255.0
 4. Gateway: 10.0.1.1
 5. Primary DNS: 168.126.63.1
 6. Secondary DNS: 168.126.63.2
  <ESC> Back, <ENTER> Refresh
 --> 5
    Enter Primary DNS: 0.0.0.0
```

10. Type 5 and press enter to select Primary DNS
    a. Type the IP address of the Primary DNS for this installation. If no DNS is needed enter 0.0.0.0 for the IP address

```
--------------------------------------------------------------------------------
  ETHERNET 0 (eth0) configuration
--------------------------------------------------------------------------------
 1. IP mode: Static IP
 2. IP address: 10.0.1.140
 3. Subnetmask: 255.255.255.0
 4. Gateway: 10.0.1.1
 5. Primary DNS: 0.0.0.0
 6. Secondary DNS: 168.126.63.2
  <ESC> Back, <ENTER> Refresh
 --> 6
    Enter Secondary DNS: 0.0.0.0
```

11. Type 6 and press enter to select Secondary DNS
    a. Type the IP address of the Primary DNS for this installation. If no DNS is needed enter 0.0.0.0 for the IP address

```
--------------------------------------------------------------------------------
  ETHERNET 0 (eth0) configuration
--------------------------------------------------------------------------------
 1. IP mode: Static IP
 2. IP address: 10.0.1.140
 3. Subnetmask: 255.255.255.0
 4. Gateway: 10.1.0.1
 5. Primary DNS: 0.0.0.0
 6. Secondary DNS: 0.0.0.0
  <ESC> Back, <ENTER> Refresh
 -->
```

12. Press the Esc key and proceed to #15

DHCP

The next four steps configures for DHCP

```
--------------------------------------------------------------------------------
  ETHERNET 0 (eth0) configuration
--------------------------------------------------------------------------------
 1. IP mode: Static IP
 2. IP address: 10.0.1.140
 3. Subnetmask: 255.255.255.0
 4. Gateway: 10.1.0.1
 5. Primary DNS: 0.0.0.0
 6. Secondary DNS: 0.0.0.0
  <ESC> Back, <ENTER> Refresh
 --> 1
```

13. Type 1 to select IP mode

```
  Select IP mode
    1. Static IP
    2. DHCP
 --> 2
```

14. Type 2 to select DHCP

```
--------------------------------------------------------------------------------
  ETHERNET 0 (eth0) configuration
--------------------------------------------------------------------------------
 1. IP mode: DHCP
  <ESC> Back, <ENTER> Refresh
 -->
```

15. Press the Esc key

```
--------------------------------------------------------------------------------
  ETHERNET 0 (eth0) configuration
--------------------------------------------------------------------------------
 1. IP mode: DHCP
  <ESC> Back, <ENTER> Refresh
 --> 1
  Select IP mode
    1. Static IP
    2. DHCP
 -->
```

16. Press the Esc key

DHCP and Static IP

```
--------------------------------------------------------------------------------
  IP Configuration
--------------------------------------------------------------------------------
 1. ETHERNET 0 (eth0) configuration
 2. ETHERNET 1 (eth1) configuration
  <ESC> Back, <ENTER> Refresh
 -->
```

17. Press the Esc key

```
--------------------------------------------------------------------------------
  Network Configuration
--------------------------------------------------------------------------------
 1. IP configuration
 2. IP filtering configuration
 3. TCP service configuration
  <ESC> Back, <ENTER> Refresh
 -->
```

18. Press the Esc key

```
--------------------------------------------------------------------------------
 Welcome to MSP1000 configuration page
 Current Time    : 11/3/2011 14:13:19    Serial No.      : MSP1000B-100600056
 F/W Rev.        : v1.2.6b2              MAC Addr.(eth0) : 00:01:95:0B:9D:B8
 IP Mode (eth0) : Static                 IP Addr.(eth0)  : 192.168.161.5
--------------------------------------------------------------------------------
 1. Network configuration
 2. System administration
 3. System status & log
 4. CF card configuration
 5. Monitoring
 6. Save changes
 7. Exit without saving
 8. Exit and apply changes
 9. Exit and reboot
  <ESC> Back, <ENTER> Refresh
 --> 6
    Would you like to save changes? (y/n): y
```

19. Type 6 and press enter to select Save changes
20. Type y and press enter to save changes

```
--------------------------------------------------------------------------------
 Welcome to MSP1000 configuration page
 Current Time   : 11/3/2011 14:13:38    Serial No.      : MSP1000B-100600056
 F/W Rev.       : v1.2.6b2              MAC Addr.(eth0) : 00:01:95:0B:9D:B8
 IP Mode (eth0) : Static                IP Addr.(eth0)  : 192.168.161.5
--------------------------------------------------------------------------------
 1. Network configuration
 2. System administration
 3. System status & log
 4. CF card configuration
 5. Monitoring
 6. Save changes
 7. Exit without saving
 8. Exit and apply changes
 9. Exit and reboot
  <ESC> Back, <ENTER> Refresh
 --> 8
    Would you like to save changes? (y/n): y
    Would you like to apply changes? (y/n): y
```

21. Type 8 and press enter to select Exit and apply changes
    a. Type y and press enter to save changes
    b. Type y and press enter to apply changes

    editconf is terminated and returns the command prompt

```
    bye...

[root@MSP1000 /]#
```

Use this procedure to find the IP Address for DHCP

22. Type editconf at the prompt and press enter

```
root@MSP1000 /]# editconf
--------------------------------------------------------------------------------
Welcome to MSP1000 configuration page
Current Time   : 11/3/2011 14:14:45    Serial No.      : MSP1000B-100600056
F/W Rev.       : v1.2.6b2              MAC Addr.(eth0) : 00:01:95:0B:9D:B8
IP Mode (eth0) : Static                IP Addr.(eth0)  : 10.0.1.140
--------------------------------------------------------------------------------
1. Network configuration
2. System administration
3. System status & log
4. CF card configuration
5. Monitoring
6. Save changes
7. Exit without saving
8. Exit and apply changes
9. Exit and reboot
 <ESC> Back, <ENTER> Refresh
-->
```

23. Verify that the IP address has changed

```
--------------------------------------------------------------------------------
 Welcome to MSP1000 configuration page
 Current Time   : 11/3/2011 14:16:56    Serial No.      : MSP1000B-100600056
 F/W Rev.       : v1.2.6b2              MAC Addr.(eth0) : 00:01:95:0B:9D:B8
 IP Mode (eth0) : Static                IP Addr.(eth0)  : 10.0.1.140
--------------------------------------------------------------------------------
 1. Network configuration
 2. System administration
 3. System status & log
 4. CF card configuration
 5. Monitoring
 6. Save changes
 7. Exit without saving
 8. Exit and apply changes
 9. Exit and reboot
  <ESC> Back, <ENTER> Refresh
 --> 7
    Would you like to exit without saving? (y/n): y
```

24. Type 7 and press enter to select Exit without saving
    a. Type y and press enter to exit without saving changes

```
bye...

[root@MSP1000 /]# logout
```

25. Type logout and press the enter key to log out

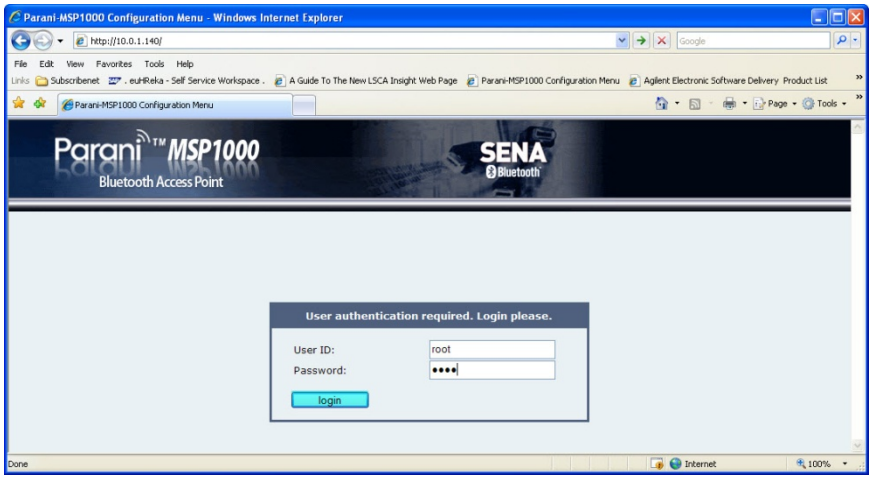
```
Welcome to Parani-MSP1000

MSP1000 login:
```

26. Disconnect the serial cable from the Bluetooth gateway and close HyperTerminal

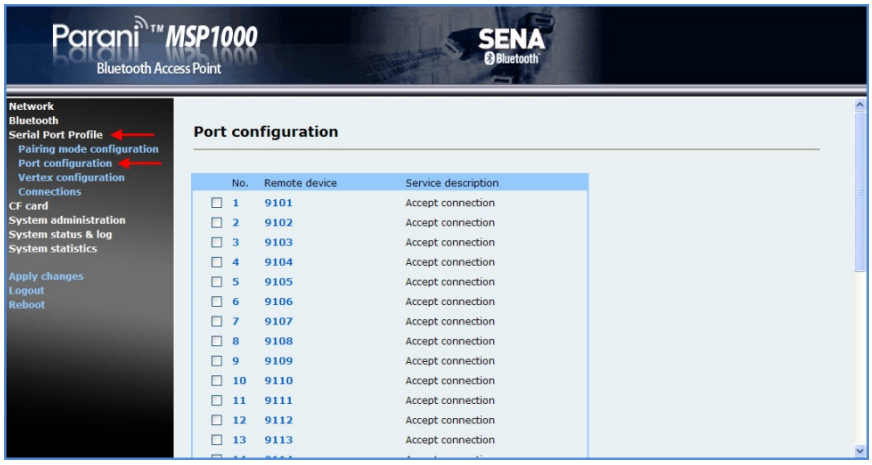
Bluetooth Gateway Network Operation Verification

Internet Explorer is used to access the Bluetooth gateway to monitor connection status and collect BD address information for the configuration of the Bluetooth adapters.

- Open Internet Explorer
- Type http://gatewayipaddress in the address field of Internet Explorer
  gatewayipaddress is the IP address of the Bluetooth gateway
  The default IP address of the Bluetooth gateway is 192.168.161.5 used when connecting to a Stand Alone Data Source



- Type root for the User ID
- Type root for the password
- Select the login button



- Select the Serial Port Profile link
- Select the Port configuration link
- Verify the ports 1-28 are preconfigured with Remote device 9101-9128

4.6 Configuration and Installation of the Bluetooth Adapter

The Bluetooth adapters must be paired with the Bluetooth gateway for the Bluetooth adapter to communicate to the Bluetooth Gateway. Bluetooth adapters are configured with the utility BluetoothAdapterConfig.exe.

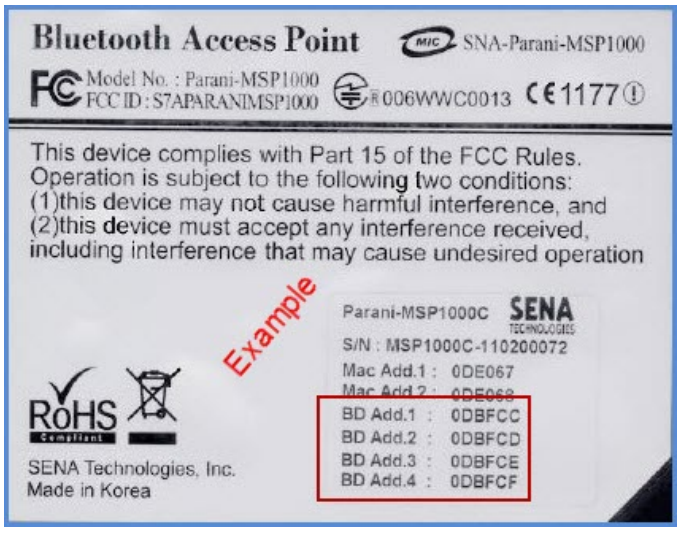
BluetoothAdapterConfig.exe communicates to the Bluetooth adapter through the serial port of the PC. Configuration requires the Bluetooth adapter to be within range of the Bluetooth gateway for pairing. The operational range is 150ft or 45 meters.

Bluetooth Gateway BD Addresses

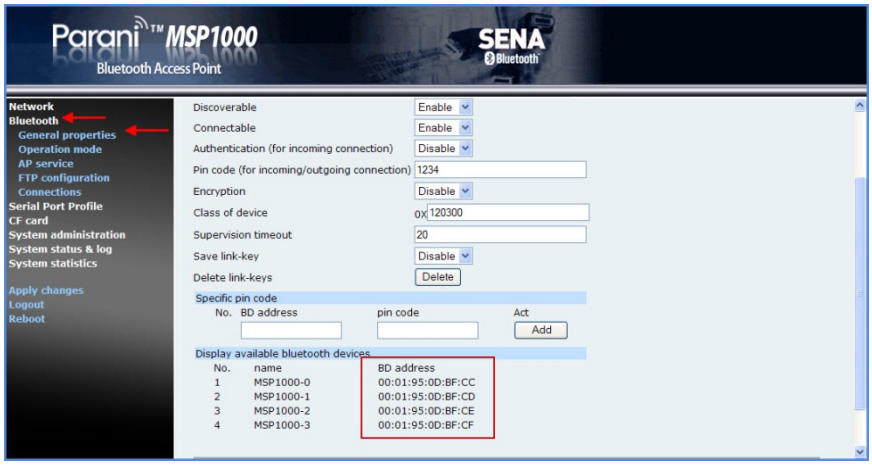
The Bluetooth gateway has four antennae. Each antenna has a BD address and communicates to seven Bluetooth adapters. The BD address is used during the configuration of the Bluetooth adapters. The BD address is six hexadecimal bytes similar to a MAC address.

BD addresses are found on a sticker on the bottom of the Bluetooth Gateway and in the Bluetooth Gateway configuration menus.

BD addresses on the bottom of the Bluetooth Gateway



Finding the BD address in the Bluetooth Gateway interface



- Select the Bluetooth link
- Select General Properties
- Scroll to the bottom of the screen to locate the BD address

The four BD address are sequential starting with the lowest number first and the highest number last. Each BD addresses will communicate to seven devices.

No.	Name	BD Address	For Adapter Numbers
1	MSP1000-0	00:01:95:xx:xx:xx	1-7
2	MSP1000-1	00:01:95:xx:xx:xx	8-14
3	MSP1000-2	00:01:95:xx:xx:xx	15-21
4	MSP1000-3	00:01:95:xx:xx:xx	22-28

Example: BD address to Port Mapping	
BD Address	Remote Device
MSP1000-0 00:01:95:0D:BF:CC	9101
	9102
	9103
	9104
	9105
	9106
	9107
MSP1000-1 00:01:95:0D:BF:CD	9108
	9109
	9110
	9111
	9112
	9112
	9114
MSP1000-2 00:01:95:0D:BF:CE	9115
	9116
	9117
	9118
	9119
	9120
	9121
MSP1000-3 00:01:95:0D:BF:CF	9122
	9123
	9124
	9125
	9126
	9127
	9128

Configuration of the Bluetooth Adapters starts with the first BD address and the first Remote Device number.

The BD address is used to configure the Bluetooth Adapters.

Bluetooth Adapter Indicators and Buttons

LEDs and Buttons of Interest for Remote Advisor

Indicator/Button	Purpose
Reset Button	Resets the Bluetooth Adapter to factory default
Mode LED	Solid indicates the Bluetooth Adapter is at factory default Flashes alternating with the Connect LED the Bluetooth adapter is attempting to connect to the Bluetooth Gateway
Connect LED	Flashes when a Bluetooth connection has been established with the Bluetooth Gateway Flashes alternating with the Mode LED the Bluetooth adapter is attempting to connect to the Bluetooth Gateway

Bluetooth Adapter Switch Configuration

- Configure the Bluetooth adapter port speed for 19.2K
- Set HW Flow Control off

Switch Settings for Configuration

19.2K required for configuration and typical for Agilent LC

S1 off
S2 on
S3 on

HW Flow Control

S4 off

9.6K is used when connecting to Agilent 6890/6850 GC because the default port speed is 9.6K and preferred setting for Waters Alliance

S1 on
S2 on
S3 on

HW Flow Control

S4 off

Bluetooth Adapter Pairing

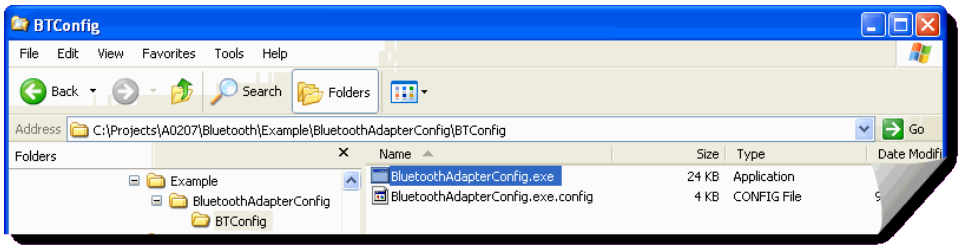
Bluetooth adapters are paired with the Bluetooth Gateway during the configuration of the Adapter. The Bluetooth adapter is configured with one of four BD address associated with the Bluetooth Gateway and a name. The Bluetooth Gateway has been pre-configured with the Bluetooth adapter names.

The Bluetooth adapter attempts communication to the Bluetooth Gateway using the BD address configured in the adapter. The Bluetooth Gateway recognizes the Bluetooth adapter name from the list of preconfigured names and begins communications.

Bluetooth Adapter Configuration

Configuration of the Bluetooth adapter pairs the Bluetooth adapter with the Bluetooth gateway. Pairing requires the Bluetooth adapter to know and communicate to a specific BD address and the Gateway to know the Bluetooth adapter's name. The Bluetooth gateway comes with the Bluetooth adapter names preconfigured.

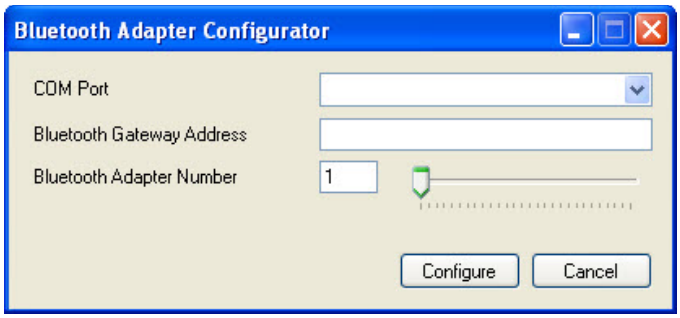
- Connect the Bluetooth adapter to the serial port of a PC
  Important: Always connect and disconnect the Bluetooth adapter with the Bluetooth Adapter powered <u>off</u>
- Copy the file BTConfig.zip from the installation CD or from the Utilities link on the Remote Advisor Gateway install web page.
  Example: http://gatewayname:8000/utilities
- Unzip BTConfig.zip to the desktop or disk drive
- Open the folder BTConfig created by the zip utility
- Double click the file BluetoothAdapterConfig.exe



The configuration tool, BluetoothAdapterConfig.exe, requires three inputs, the PC serial/com port number, BD address of the Bluetooth Gateway, and Bluetooth Adapter number. Configuration always starts with the lowest BD address and Bluetooth adapter 1.

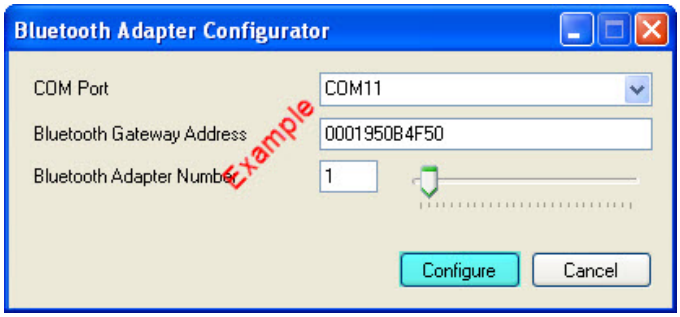
The Bluetooth adapter number in the Configurator appends to 91x to create the names for the Bluetooth adaptors as 9101 to 9128. The Bluetooth gateway is pre-configured that it will communicate to the Bluetooth adapter named 9101 on port 9101, 9102 on port 9103, and so on up through 9128 on port 9128.

Remote Advisor Data Source configuration for instrument connections with Bluetooth adapters will use the Bluetooth Gateway's IP address and the port number for the Bluetooth Adapter. Example 192.168.254.11:9102. The example uses the Bluetooth gateway's IP address, a colon, and the port number.



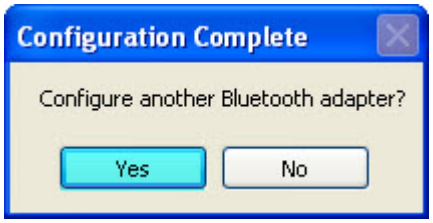
The Bluetooth Adapter Configurator automatically detects the available PC COM ports

- Select the COM Port from the drop down menu to which the Bluetooth Adapter is connected
- Enter the Bluetooth Adapter (BD) address for MSP1000-0

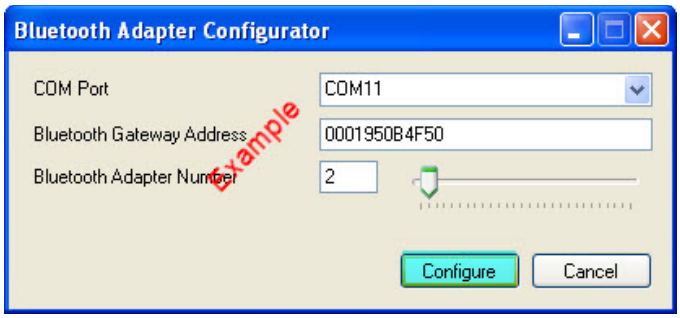


- Power on the Bluetooth Adapter
- Select the Configure button
  Configuration Complete will display if successful. The Connect LED on the Bluetooth adapter will blink.
- Power off and remove the Bluetooth adapter

Configuration Complete will display after successful configuration.



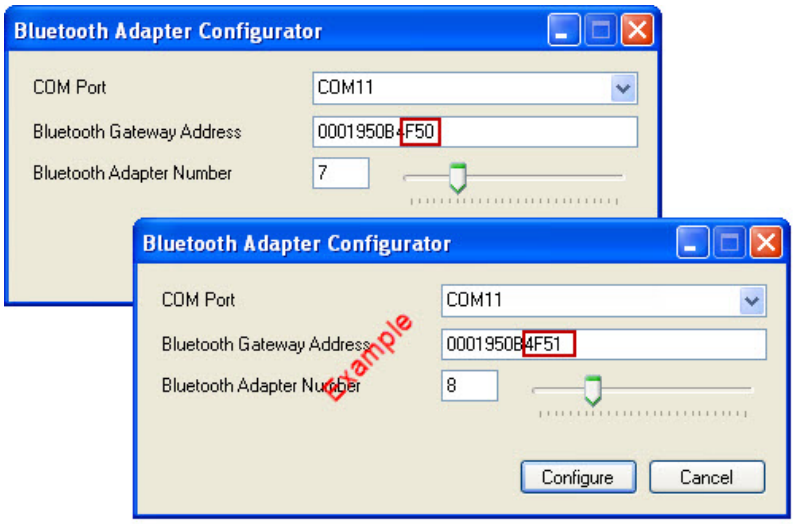
- Select the Yes button to configure another Bluetooth Adapter



The Bluetooth Adapter Number will increment by one

- Connect another Bluetooth adapter to the COM port
  Note: Connect power to the Bluetooth Converter after connecting it to the COM port
- Select the Configure button to configure the next Bluetooth adapter

The Bluetooth Adapter Configurator will increment the Bluetooth Adapter Number after each Bluetooth adapter is configured. The Bluetooth Gateway Address increments by one when the Bluetooth Adapter Number increments from 7 to 8, 14 to 15, and 21 to 22. Remember that each BD address communicates to seven Bluetooth Adapters.



Bluetooth Adapter to Bluetooth Gateway Connection Verification

Verify the Bluetooth adapter is communicating to the Bluetooth gateway using Internet Explorer

- Select the Serial Port Profile link
- Select the Connections link
  The BD Address of the Bluetooth Adapter and the Listening port is displayed

- Select the Bluetooth link
- Select the Connections link
  The BD address of the Bluetooth Adapter and the Device Name is displayed. The Device Name is programmed by the Bluetooth Adapter Configurator.
  RSSI and LQ are connection quality indicators. A lower RSSI and higher LQ indicate a better connection.

Examples with Multiple Bluetooth Connections

4.7 Waters HPLC Instrument Connections

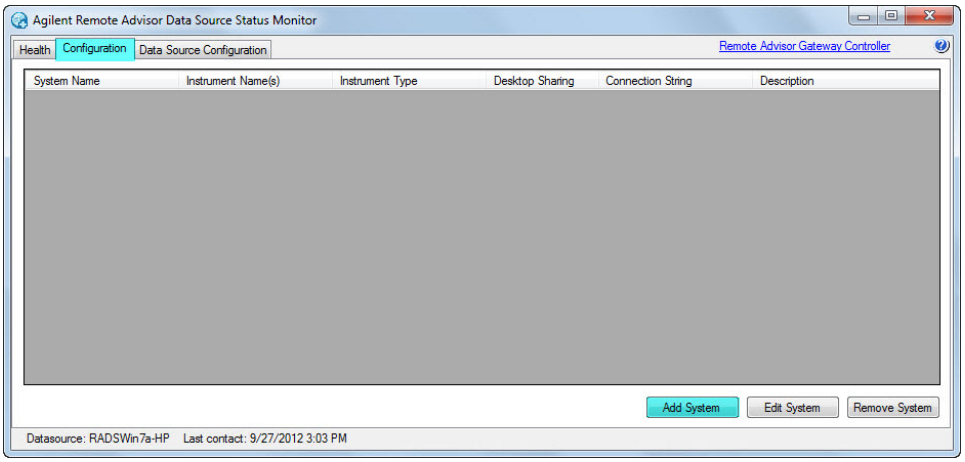
Remote Advisor acquires ACQUITY HPLC statistic information from Empower log files on the Empower PC controlling the Acquity. A light Remote Advisor utility, known as the Remote Advisor File Mover, transfers ACQUITY HPLC statistic information through the network to a Remote Advisor Data Source.

Alliance HPLC systems are configured to send system events out the printer port of the Alliance HPLC. A Bluetooth adapter or RS232 to LAN converter connects to the Alliance HPLC RS232 port to send the Alliance statistics to a Remote Advisor Data Source.

An alternate method to collect Waters Alliance and ACQUITY HPLC statistic information is using the Empower Pro Toolkit to query the Empower Pro 2 database for instrument statistics. The Data Source software is installed on an Empower client in an Empower client/server environment. Installation is restricted to Empower Pro 2 FR5.

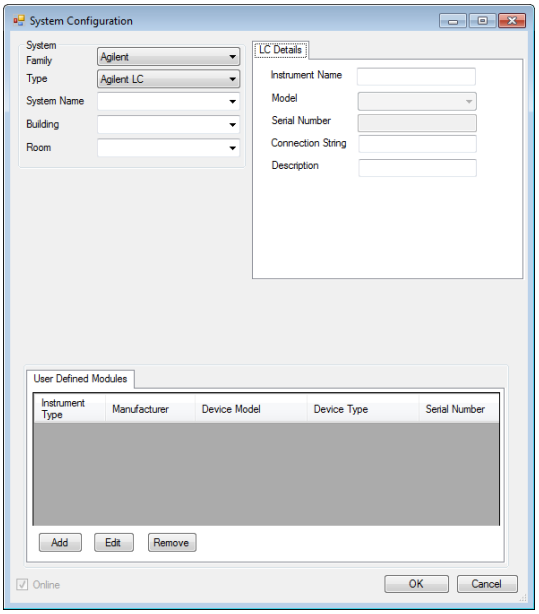
5 Instrument Configuration

5.1 System Configuration



- Select the Configuration tab
- Select the Add button > Instrument Configuration opens

System Configuration Window



System Configuration

Family — Dropdown list to select Agilent, Waters HPLC, or User Defined instruments

Type — Dropdown list of instruments that correlate to the selected Family

System Name — Enters the name of the instrument which displays on the Enterprise and in Asset Portal Reports

Building — Enters a location which refers to a building name or number or other location designation

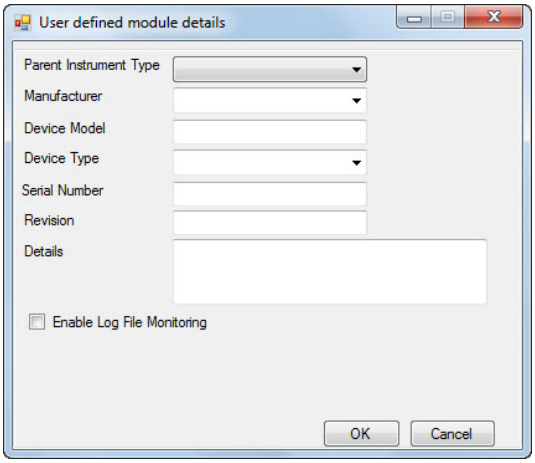
Room — Enters a location which refers to a room name or number or other location designation

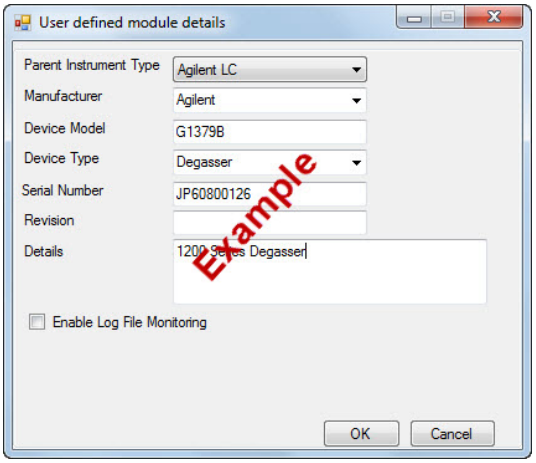
User Defined Modules — User Defined Modules are modules that belong to a system but either does not connect to the systems communication bus or are not capable of communicating to the Remote Advisor Data Source. Examples of User Defined module are LC degassers, GC Head Space, CTC auto samplers, other vendor detectors, and an unlimited selection of other devices

5.2 User Defined Modules

User Defined Modules are modules that belong to a system but either do not connect to the systems communication bus or are not capable of communicating to the Remote Advisor Data Source. Examples of User Defined module are LC degassers, GC Head Space, CTC auto samplers, other vendor detectors, and an unlimited selection of other devices

- Select the Add button in the User Defined Modules tab to configure a module. The User defined module details window opens.





User Defined Module Details

Parent Instrument Type — For future use

Manufacturer — Select the manufacturer from the drop down menu or enter a manufacturer if the desired manufacturer is not found in the list.

Device Model — Enter the manufacturer's model number

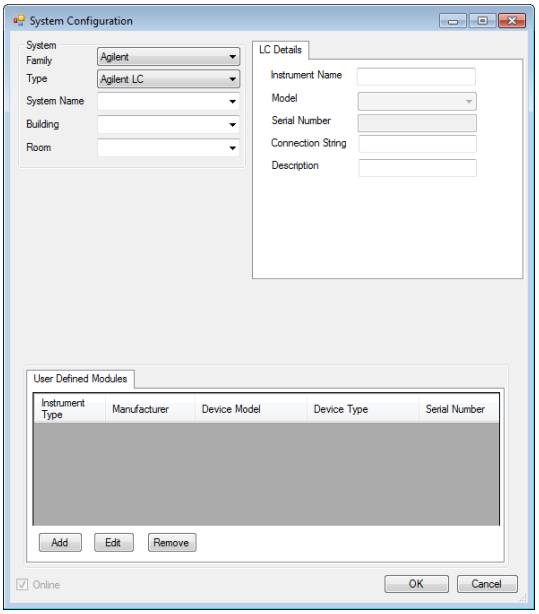
Device Type — Select the device type from the drop down menu or enter a device type if the desired device type is not found in the list.

Serial Number — Enter the serial number of the device

Revision — Enter the revision of the module

Details — Enter a short description. The description will be displayed in the Data Source Status Monitor

5.3 Agilent LC



System Configuration

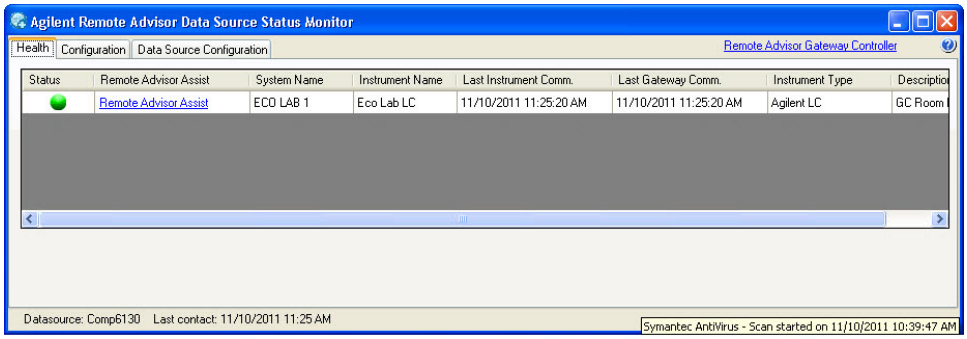
- Select Agilent for the Family
- Select Agilent LC
- Enter a System Name
- Enter Building information
- Enter Room information

LC Details

- Enter an Instrument Name (Usually the same as System Name)
- Enter the Connection string

Com#	Computer Com port where the instrument is connected. Example com1
IP address	The IP address of the instrument or RS232-to-LAN converter connected to the instrument
Bluetooth address	Combination of the IP address of the Bluetooth gateway and the Bluetooth adapter port number Example:192.168.254.11:9101

- Enter a Description which could include instrument type, location, or other information
- Select the OK button



The newly configured instrument is now displayed in the Data Source Status Monitor

- Select the Health tab to verify communications from the Data Source to the instruments

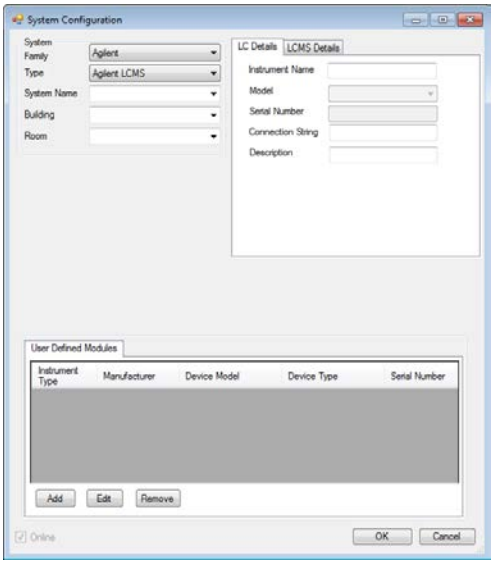
Last Instrument Comm. should have a value close to the current PC time

Last Gateway Comm. should have a value close to the current PC time

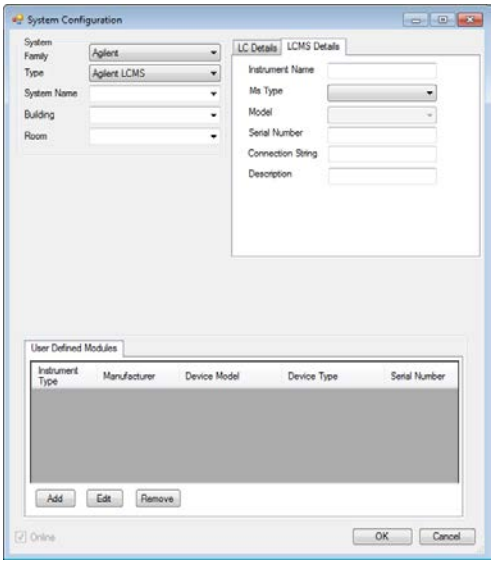
Configuration of the LC system is complete. The Data Source Status Monitor may be closed.

5.4 Agilent LCMS

LC Details



LCMS Details



System Configuration

- Select Agilent for the Family
- Select Agilent LCMS
- Enter a System Name
- Enter Building information
- Enter Room information

LC Details

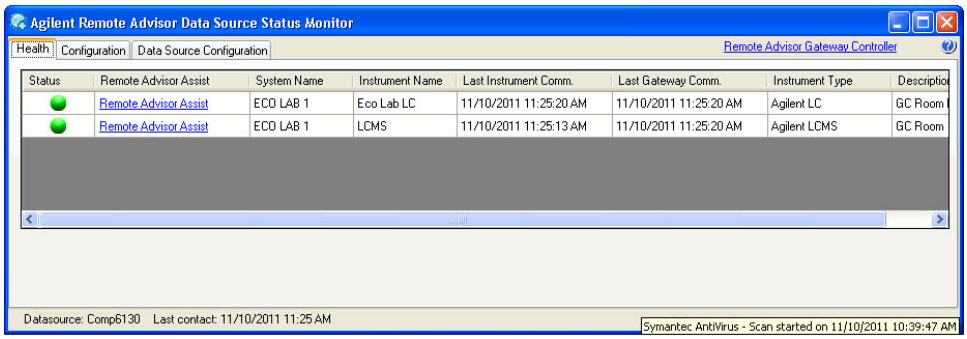
- Enter an Instrument Name (Usually the same as System Name)
- Enter the Connection string

Com#	Computer Com port where the instrument is connected. Example com1
IP address	The IP address of the instrument or RS232-to-LAN converter connected to the instrument

- Enter a Description which could include instrument type, location, or other information
- Select the LCMS Details tab

LCMS Details

- Enter an Instrument Name (Usually the same as System Name but different than entered for the LC)
- Enter the Serial Number of the LCMS
- Enter the Connection string which is the IP address of the LCMS
- Enter a Description which could include instrument type, location, or other information
- Select the OK button



The newly configured instrument is now displayed in the Data Source Status Monitor

- Select the Health tab to verify communications from the Data Source to the instruments

Last Instrument Comm. should have a value close to the current PC time

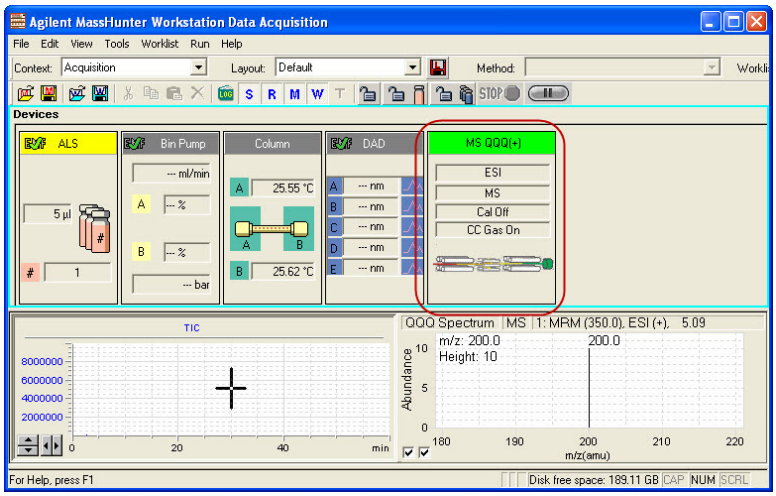
Last Gateway Comm. should have a value close to the current PC time

Configuration of the LCMS system is complete. The Data Source Status Monitor may be closed.

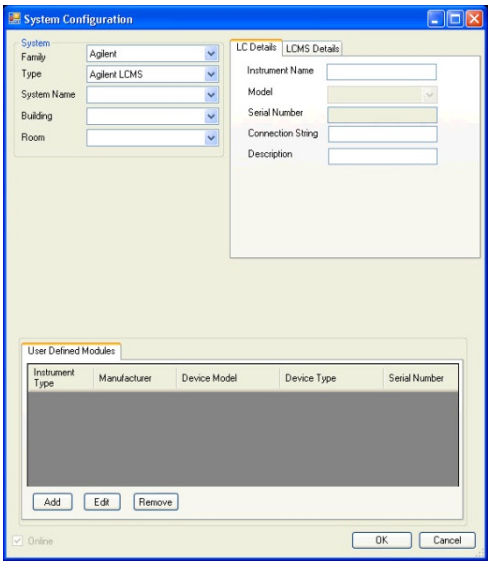
5.5 Agilent QQQ

QQQ Prerequisites

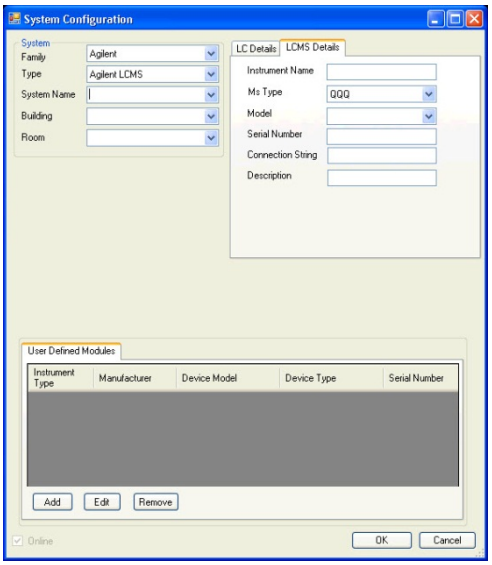
Agilent MassHunter Workstation Data Acquisition software must be running and the MS QQQ in a Ready (green), Not Ready (yellow), or Stand By (Grey) state. It should not be in an Error (red) or Power Off mode.



LC Details



LCMS QQQ Details



System Configuration

- Select Agilent for the Family
- Select Agilent LCMS for Type
- Enter a System Name
- Enter Building information
- Enter Room information

LC Details

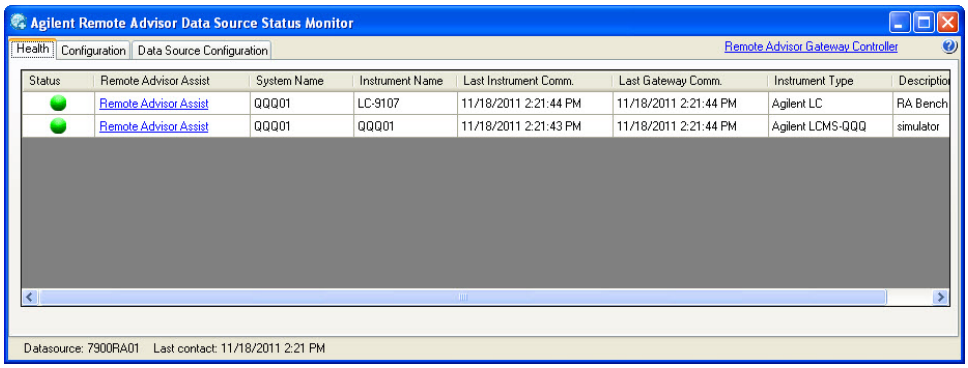
- Enter an Instrument Name (Usually the same as System Name)
- Enter the Connection string

Com#	Computer Com port where the instrument is connected. Example com1
IP address	The IP address of the instrument usually 192.168.254.11

- Enter a Description which could include instrument type, location, or other information
- Select the LCMS Details tab

LCMS-QQQ Details

- Enter an Instrument Name (Usually the same as the System Name but different than the instrument name entered for the LC)
- MS Type = QQQ
- Enter the Serial Number of the QQQ
- Enter 192.168.254.12 for the Connection string
- Enter a Description which could include instrument type, location, or other information
- Select the OK button



The newly configured instrument is now displayed in the Data Source Status Monitor

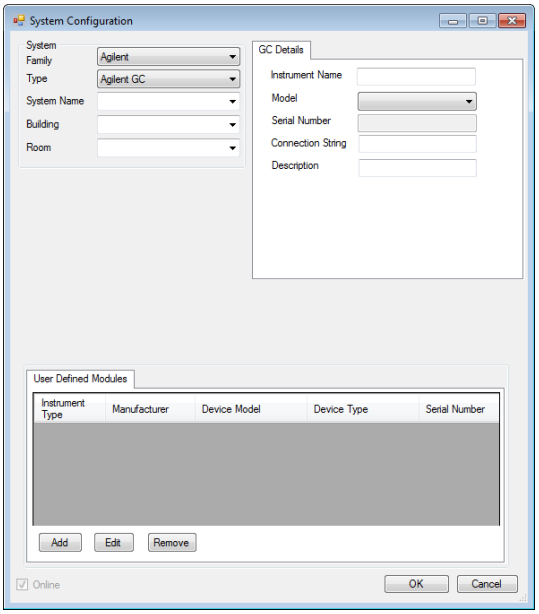
- Select the Health tab to verify communications from the Data Source to the instruments

Last Instrument Comm. should have a value close to the current PC time

Last Gateway Comm. should have a value close to the current PC time

Configuration of the QQQ system is complete. The Data Source Status Monitor may be closed.

5.6 Agilent GC



System Configuration

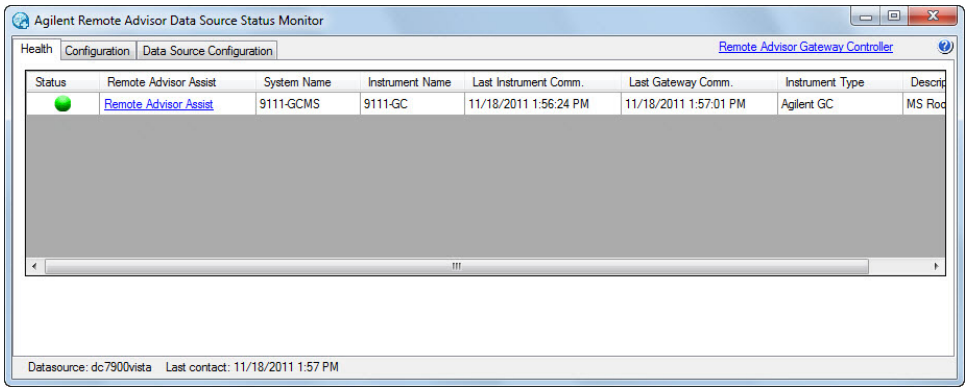
- Select Agilent for the Family
- Select Agilent GC
- Enter a System Name
- Enter Building information
- Enter Room information

GC Details

- Enter an Instrument Name (Usually the same as System Name)
- Choose the correct Model from the drop down menu
- Enter the Connection string

Com#	Computer Com port where the instrument is connected. Example com1 (6850/6890/7890B only)
IP address	The IP address of the instrument or RS232-to-LAN converter connected to the instrument
Bluetooth address	Combination of the IP address of the Bluetooth gateway and the Bluetooth adapter port number Example:192.168.254.11:9101 (6850/6890 only)
RS232 to LAN Converter with 7890B	The connection address for the 7890B with the RS232 to LAN converter is the IP Address of the converter and port 9100. Example 192.168.254.11:9100

- Enter a Description which could include instrument type, location, or other information
- Select the OK button



The newly configured instrument is now displayed in the Data Source Status Monitor

- Select the Health tab to verify communications from the Data Source to the instruments

Last Instrument Comm. should have a value close to the current PC time

Last Gateway Comm. should have a value close to the current PC time

Configuration of the GC system is complete. The Data Source Status Monitor may be closed.

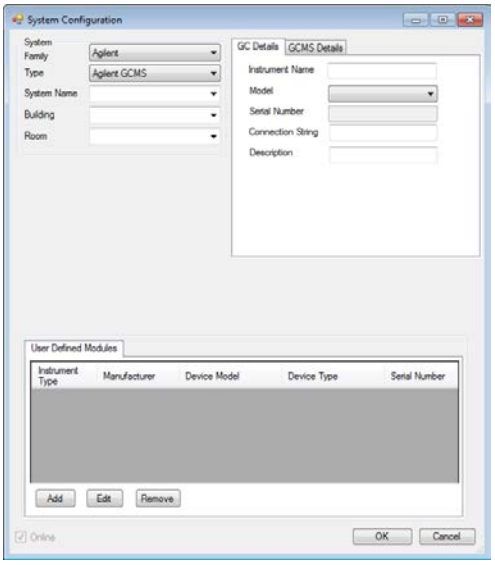
5.6.1 7890B BCR/RA Configuration

This procedure configures the 7890B BCR/RA port in back of the 7890 for Remote Advisor and sets the port speed to 19200 bps. Use this procedure when connecting the 7890B to a Standalone Data Source

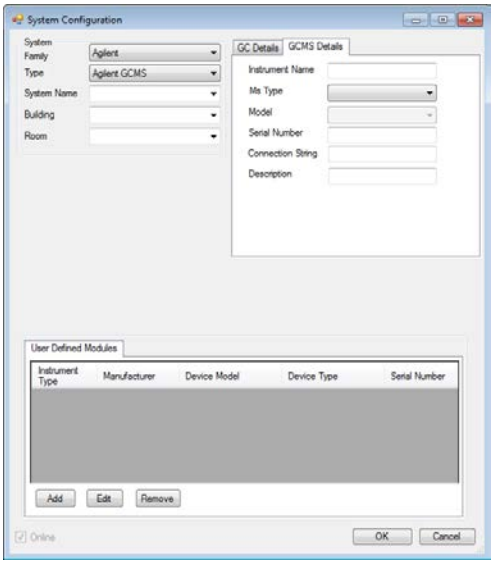
- Push the [Options] button of the 7890B front panel
- Scroll down, using the down arrow, until “Communication” displays
- Push the [Enter] button
- Scroll down until “BCR/RA connection” displays
- Push the [Enter] button
  - If “RA” is not displayed
    - Push [Mode]
    - Scroll down to “Remote advisor connection”
    - Push [Enter]
    - Ignore warning about reboot
    - Push [Enter]
- Scroll down to “RA Baud Rate”
- If “19200” is not displayed
  - Push [Mode]
    - Scroll to “19200”
    - Push [Enter]
    - Ignore warning about reboot.
    - Push [Enter]
- If any changes have been made,
  - Scroll down to Reboot GC
  - Push [Yes]
  - Push [Yes] (reboot occurs).

5.7 Agilent GCMS

GC Details



GCMS Details



System Configuration

Select Agilent for the Family

- Select Agilent GC GCMS
- Enter a System Name
- Enter Building information
- Enter Room information

GC Details

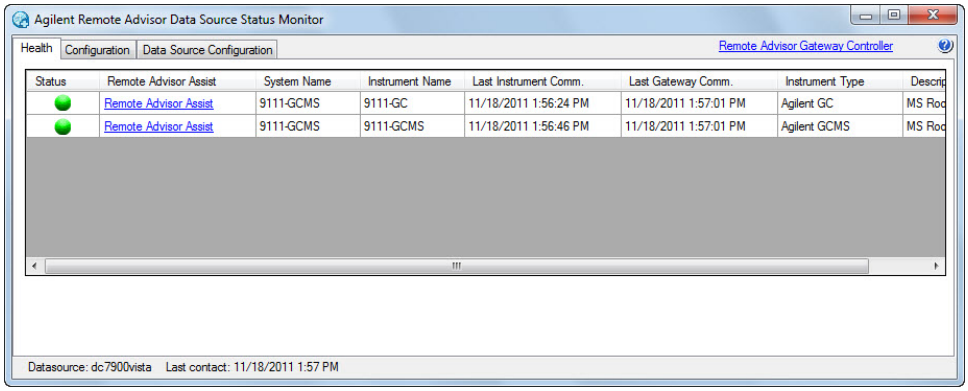
- Enter an Instrument Name (Usually the same as System Name)
- Choose the correct Model from the drop down menu
- Enter the Connection string

Com#	Computer Com port where the instrument is connected. Example com1 (6850/6890 only)
IP address	The IP address of the instrument or RS232-to-LAN converter connected to the instrument

- Enter a Description which could include instrument type, location, or other information
- Select the GCMS Details tab

GCMS Details

- Enter an Instrument Name (Usually the same as System Name but different than entered for the GC)
- Select the MS type from the dropdown list
- Select the Model number of the MS from the drop down menu list
- Enter the Serial Number of the GCMS
- Enter the IP address of the GCMS as the Connection string
- Enter a Description which could include instrument type, location, or other information
- Select the OK button



The newly configured instrument is now displayed in the Data Source Status Monitor

- Select the Health tab to verify communications from the Data Source to the instruments

Last Instrument Comm. should have a value close to the current PC time

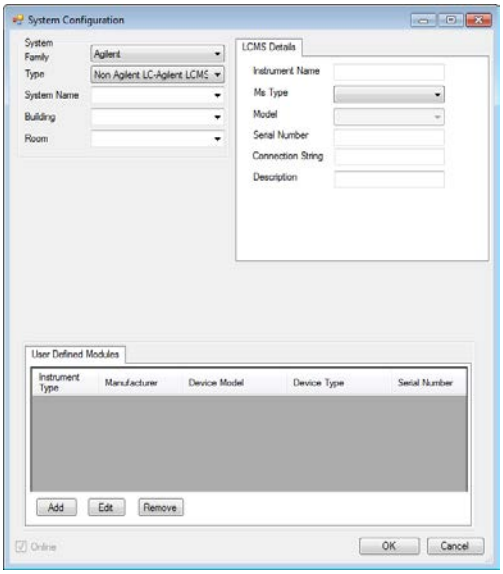
Last Gateway Comm. should have a value close to the current PC time

Configuration of the GCMS system is complete. The Data Source Status Monitor may be closed.

5.8 Non Agilent LC or GC with Agilent MS

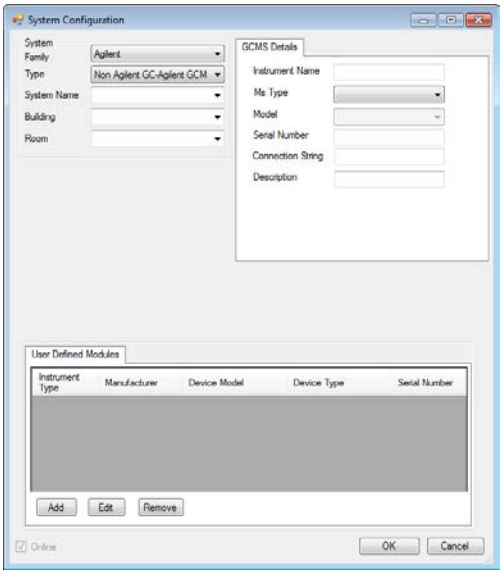
Remote Advisor may be installed for an Agilent LCMS or GCMS where the LC or GC associated with the MS in not Agilent.

Non Agilent LC-Agilent LCMS



- Select Non Agilent LC-Agilent LCMS for an LCMS system with a non-Agilent LC

Non Agilent GC-Agilent GCMS



- Select Non Agilent GC-Agilent GCMS for a GCMS system with a non-Agilent GC

5.9 User Defined Systems

User Defined systems are instrument systems that do not automatically extract diagnostic and status information from instruments. These systems are configured in Remote Advisor to provide Remote Assist and Remote Collaboration capability for systems under a service contract with Agilent.

The Remote Advisor Data Source software will be installed on the PC controlling the system to enable Remote Collaboration for remote troubleshooting. User Defined systems can be configured on a Standalone Data Source if the only objective is to enable Remote Assist for placing service requests to Agilent.

User Defined Modules can be added to any system whether the system is Agilent or User Defined. User Defined Modules are added to systems to show the module in inventory reports such as Lab at a Glance or Asset Reports.

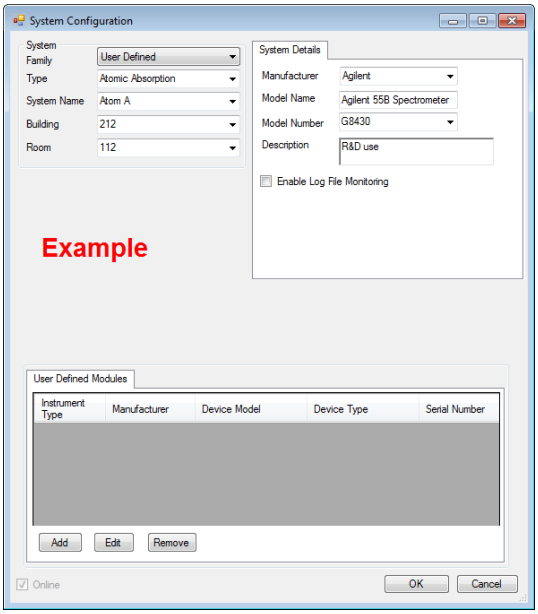
Example: An Agilent 1260 LC has a degasser which does not communicate to the Agilent system. Therefor the degasser does not display in the inventory reports. The degasser can be added as a user defined module with the correct model and serial number. The degasser will display in future inventory reports.

Log File Monitoring

Log File Monitoring is a customizable extension for any system configured on a data source, which can be used to extract instrument information from any system log created by the software controlling the instrument. Log file monitoring is configurable for both systems and modules. Custom logger files can be created on demand by trained Agilent specialists for any system that creates a log file with useful data. Loggers can be used to:

- Extract data from application software logs to populate Asset Portal or Laboratory Business Intelligence reports
- Generate events to alert the customer or Agilent about unexpected conditions such as exceeded limits and system or module errors.
- Upload packages or logs for diagnostic purposes

User Defined System Configuration



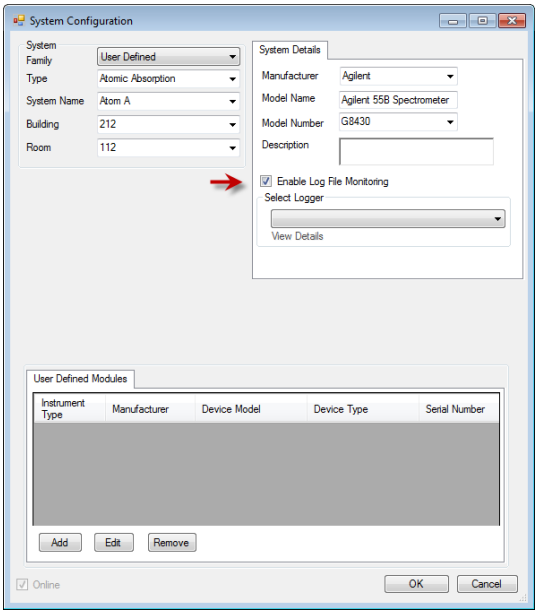
System

- Select User Defined for the Family
- Select the appropriate system type from the drop down menu or type in a system type if the system type desired is not found in the list
- Enter a name for the System Name. The way the name is typed here is how it will appear in reports
- Enter a Building name or number to designate the systems location
- Enter a Room name or number to further designate the systems location

System Details

- Select the manufacturer from the drop down menu or type in a manufacturer if the desired manufacturer is not found in the list
- Enter a model name
- Enter the model number
- Enter a short description. The description will be displayed in the Data Source Status Monitor

Log File Monitoring

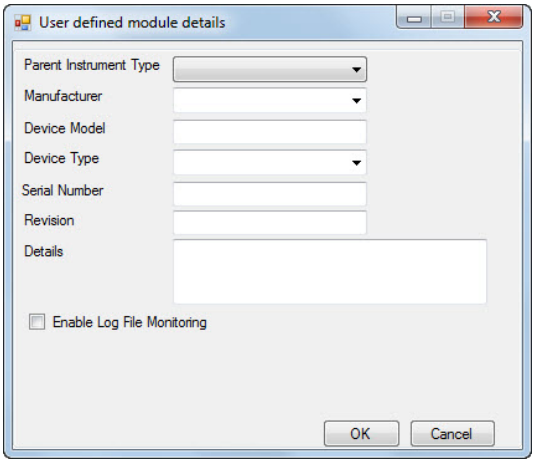


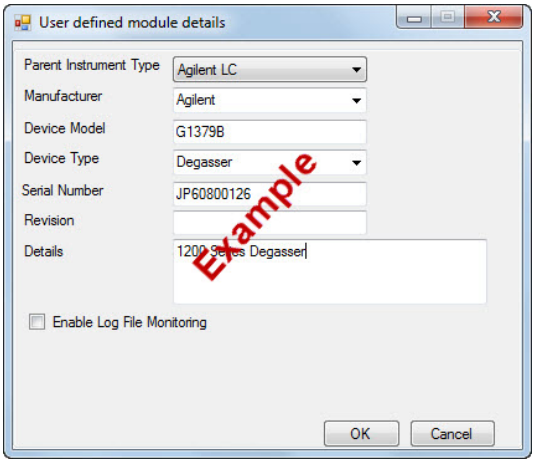
Log File Monitoring is enabled by placing a check in the Enable Log File Monitoring check box. Available loggers will be displayed only if a logger has been previously created for the User Defined instrument type that was selected.

User Defined Modules

User Defined Modules are modules that belong to a system but either does not connect to the systems communication bus or are not capable of communicating to the Remote Advisor Data Source. Examples of User Defined module are LC degassers, GC Head Space, CTC auto samplers, other vendor detectors, and an unlimited selection of other devices

- Select the Add button in the User Defined Modules tab to configure a module. The User defined module details window opens.





User Defined Module Details

Parent Instrument Type — For future use

Manufacturer — Select the manufacturer from the drop down menu or enter a manufacturer if the desired manufacturer is not found in the list.

Device Model — Enter the manufacturer's model number

Device Type — Select the device type from the drop down menu or enter a device type if the desired device type is not found in the list.

Serial Number — Enter the serial number of the device

Revision — Enter the revision of the module

Details — Enter a short description. The description will be displayed in the Data Source Status Monitor

5.10 Waters Alliance RS232 Monitor

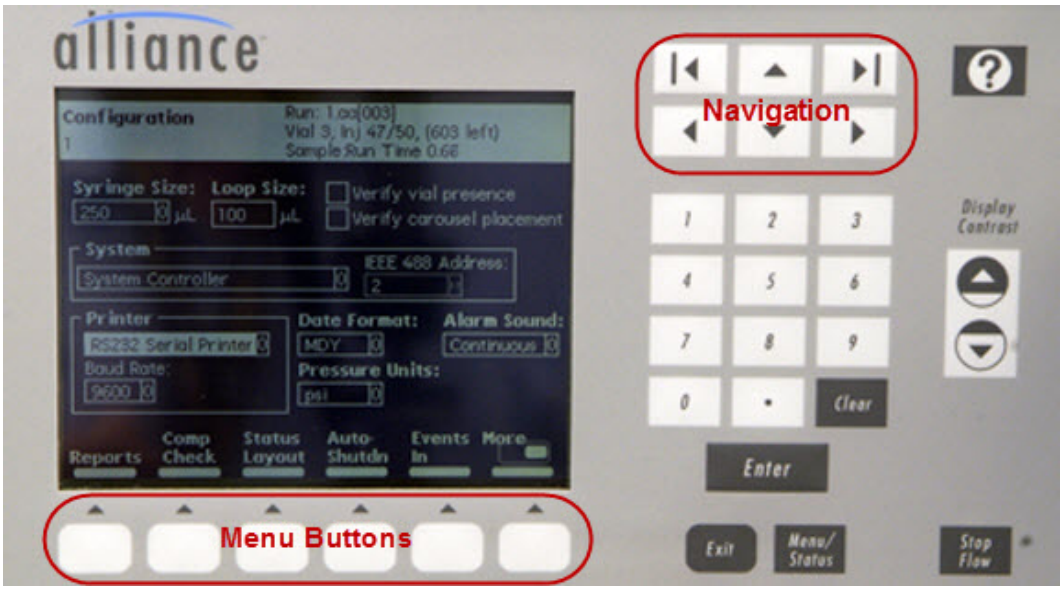
This procedure configures Alliance HPLC systems to send system events out the printer port of the Alliance HPLC. A Bluetooth adapter or RS232 to LAN converter connects to the Alliance HPLC RS232 port to send the Alliance statistics to a Remote Advisor Data Source.

Alliance Configuration

The Alliance HPLC can be configured to send system statistic information from the RS232 port located in the back of the HPLC. This procedure configures the Alliance HPLC to send data out the RS232 port and configures the Alliance in the Data Source Status Monitor.

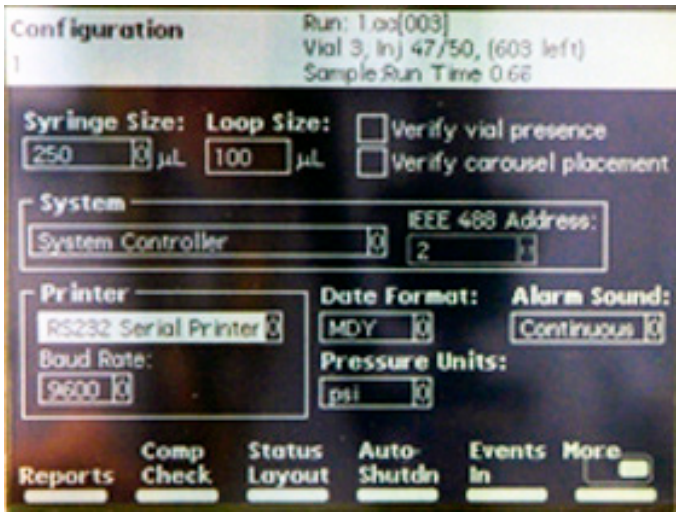
Alliance Printer Port Configuration

Configuration of the RS232 port is completed by using the Alliance front panel. Configuration of the Alliance is not accessible while Empower is controlling the Alliance to run a method.

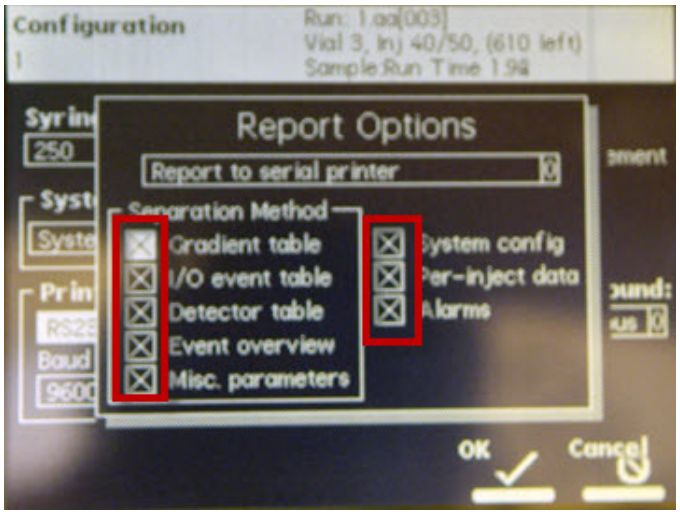


Use the navigate arrows to navigate to different fields of the Alliance display. Soft keys are a physical keypad located below the display. Each soft key is used to select the function directly above the button.

- Press the button under Config from the home screen



- Highlight the Printer field by using the navigation buttons
- Press the Enter button
- Scroll the list and select RS232 Serial Printer
- Press the Enter button
- Navigate down to Baud Rate
- Press the Enter button
- Select 9600
- Press the Enter Button
- Press the button under More to see more soft menu options
- Press the button under Reports



- Navigate to the Report Option
- Select Report to serial printer
- Navigate to each of the Separation Methods and select any number button to toggle from empty to X
  - Gradient Table
  - I/O Event Table
  - Detector Table
  - Event Overview
  - Misc parameters
- Navigate and toggle to X
  - System Config
  - Per-inject data
  - Alarms
- Press the button under OK

5.10.1 RS232 Bluetooth Adapter and LAN Converter Installation

A Bluetooth Adapter or RS232 to LAN converter will attach to either one of the RS232 ports in the back of the Alliance

An RS232 null modem gender changer, Part Number 5190-6188 attaches to either of the RS232 ports.

A Bluetooth Adapter or RS232 to LAN converter connects to the null modem gender changer.

Bluetooth Adapter Installation and Configuration

Bluetooth Adapters must be configured and paired to the Bluetooth Gateway before proceeding. Refer to 4.6 Configuration and Installation of the Bluetooth Adapter instructions on page 4-37.

- Attach an RS232 null modem gender changer, Part Number 5190-6188, to one of the RS232 connectors. Lightly tighten the screws of the gender changer.
- Set the configuration switches of a Bluetooth adapter to 9600.

  S1 on

  S2 on

  S3 on

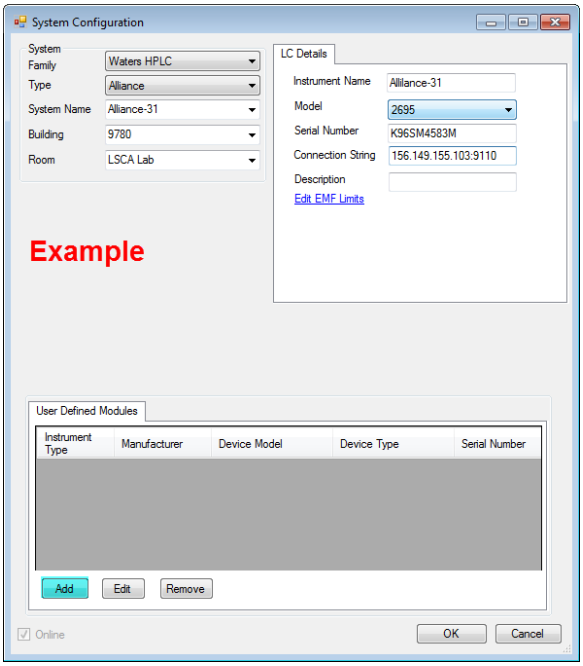
  S4 off (HW Flow Control)
- Attach the Bluetooth adapter to the gender changer.
  ****Note** Do not connect the Bluetooth adapter while the Bluetooth adapter is powered on.**
- Lightly tighten the screws to hold the Bluetooth adapter to the gender changer.
- Connect and apply power to the Bluetooth adapter.

RS232 to LAN Converter Installation and Configuration

RS232 to LAN Converters must be configured with the port speed set to 9600 before proceeding. Refer to 4.4 RS232 to LAN Converter Connection on page 4-12 instructions to configure the RS232 to LAN converter and to 4.4.1 Serial Port Speed Configuration when connecting to 6850 and 6890 GC and Waters Alliance on page 4-19 to configure the port speed to 9600.

- Attach an RS232 null modem gender changer, Part Number 5190-6188, to one of the RS232 connectors. Lightly tighten the screws of the gender changer.
- Attach the RS232 to LAN Converter to the gender changer.
  ****Note** Do not connect the RS232 to LAN Converter while the RS232 to LAN Converter is powered on.**
- Lightly tighten the screws to hold the RS232 to LAN Converter to the gender changer.
- Connect and apply power to the RS232 to LAN Converter.

5.10.2 Alliance Data Source System Configuration



System Configuration

- Select Waters HPLC for the Family
- Select Alliance for the type
- Enter a System Name
- Enter a Building where located
- Enter a Room where located

LC Details

- Enter an Instrument Name (Usually the same as System Name)
- Enter the Connection string

IP address	The IP address of the Bluetooth Gateway : Bluetooth adapter name. Example 192.168.100.22:9101 or RS232-to-LAN converter IP address

- Enter a Description

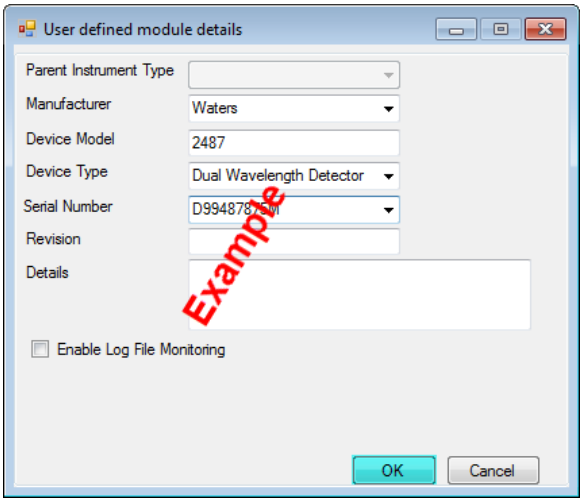
Continued on next page.

Alliance Data Source Configuration (Continued)

User Defined Modules

Add all modules of the Alliance system with the exception of the separations module. The separations module serial number is configured when the LC is configured.

Note: Modules are added for inventory purposes only. Information is collected from the Alliance regardless if User Defined Modules are configured.



Parent Instrument Type	For future use
Manufacturer	Select the manufacturer from the drop down menu or enter a manufacturer if the desired manufacturer is not found in the list.
Device Model	Enter the manufacturer's model number
Device Type	Select the device type from the drop down menu or enter a device type if the desired device type is not found in the list.
Serial Number	Enter the serial number of the device
Revision	Enter the revision of the module
Details	Enter a short description. The description will be displayed in the Data Source Status Monitor

5.11 Waters Acquity using Agilent File Mover

Collecting statistics from an Acquity HPLC is a two part connection process. A small application known as the Agilent File Mover is installed on the Waters Node PC that controls the Acquity HPLC. The file mover application sends copies of Acquity log files to a Data Source PC for processing.

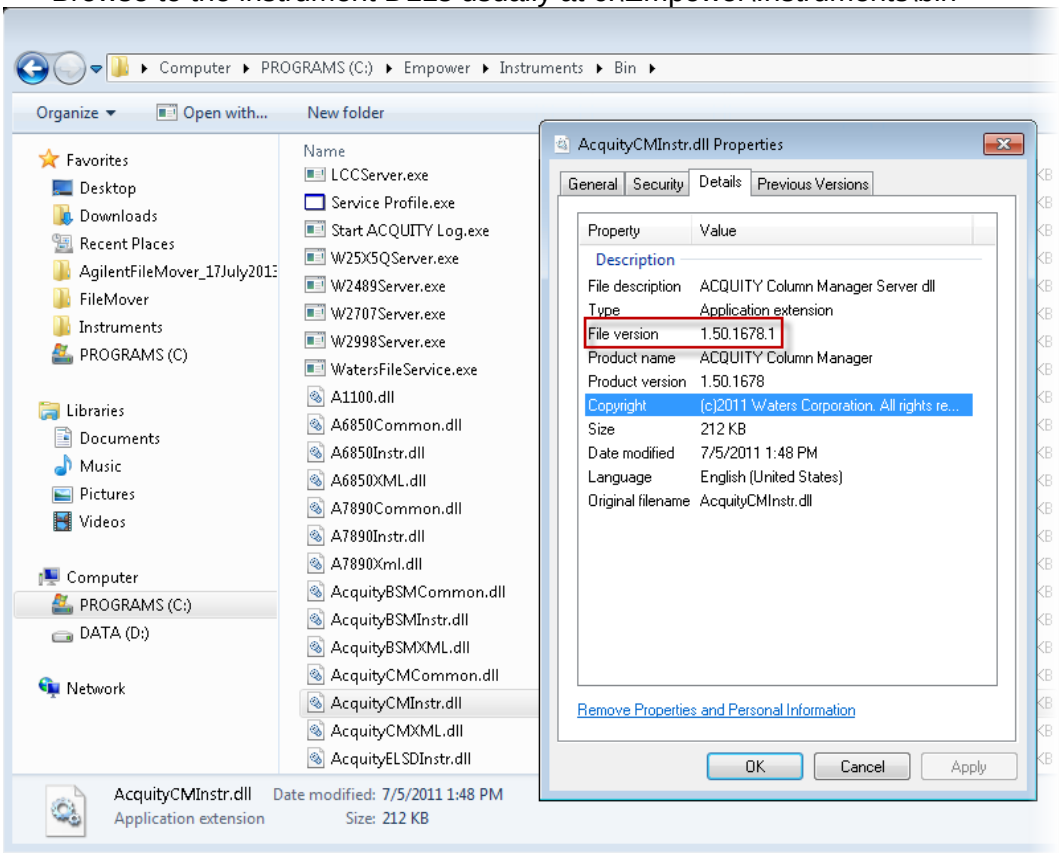
5.11.1 Preliminary Waters Software Requirement

Remote Advisor includes support for Empower Acquity UPLCs running Empower 2 or Empower 3. The minimum version required for the Waters Instrument Control Software (ICS) is 1.5. Please verify the version of ICS before installing the File Mover software on the Empower node.

Verification Method 1

This method does not require an Empower logon.

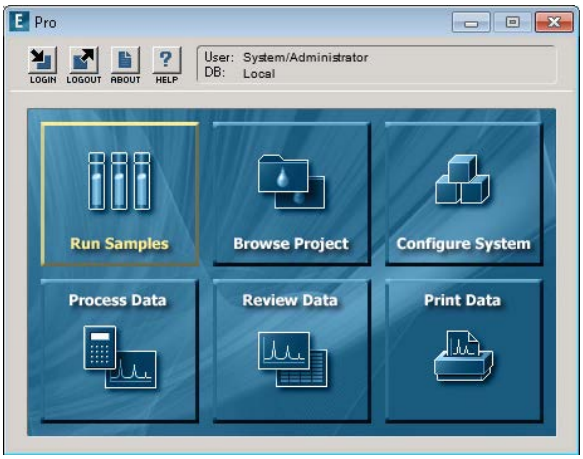
- Browse to the instrument DLLs usually at c:\Empower\Instruments\bin



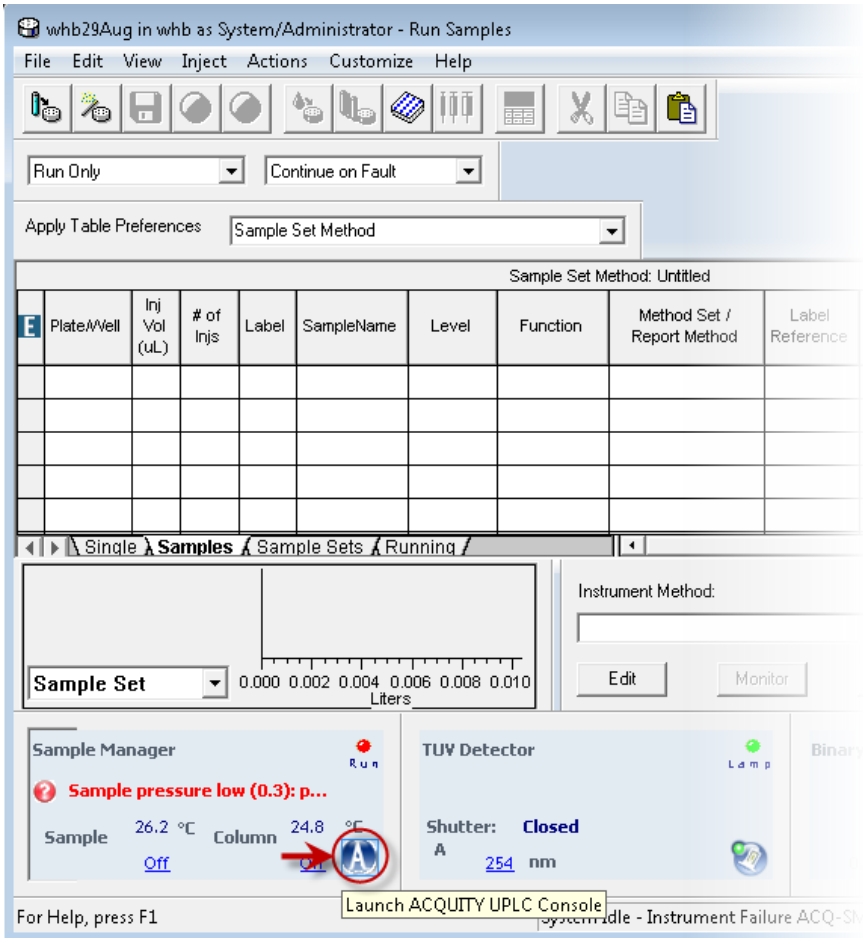
- Right click one of the Acquity modules dll
- Select Properties
- Select the Details tab
- Verify that the file version is 1.5 or greater

Verification Method 2

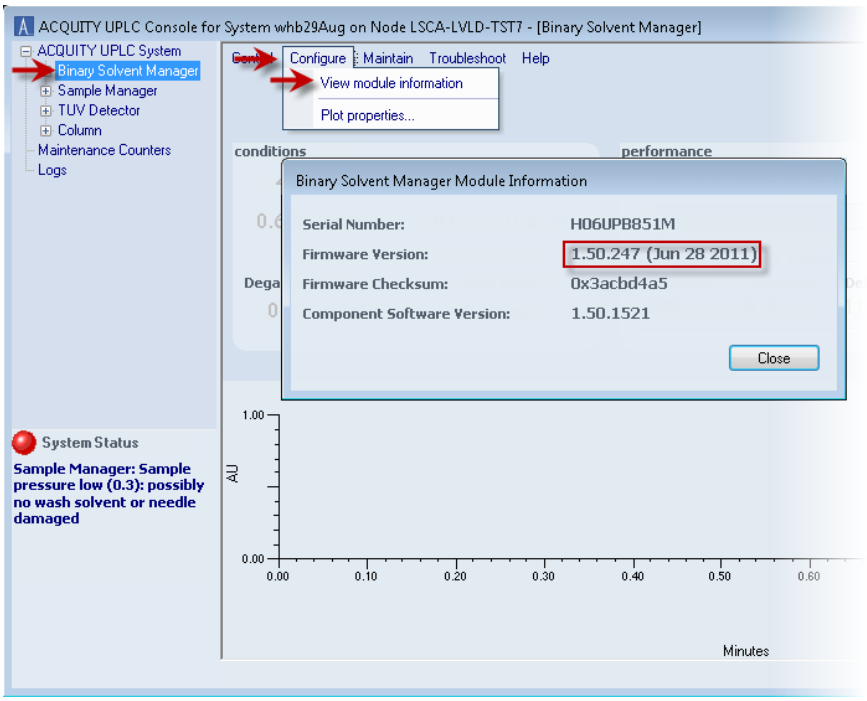
- Log on to Empower



- Select Run Samples from the menu



- Select the Launch AQUITY UPLC Console icon in the Sample Manager section of the Run Samples window



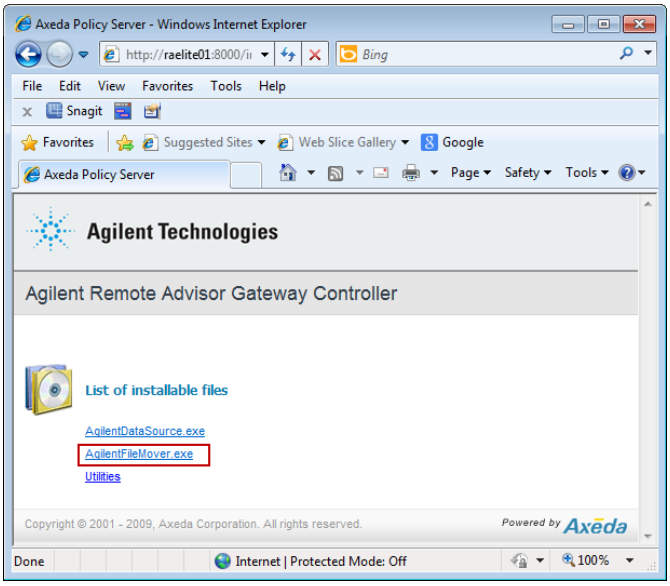
- Select an Acquity module from the Acquity UPLC System menu
- Select Configure
- Select View module information
- Verify the firmware version is 1.5 or greater

5.11.2 Agilent File Mover Installation

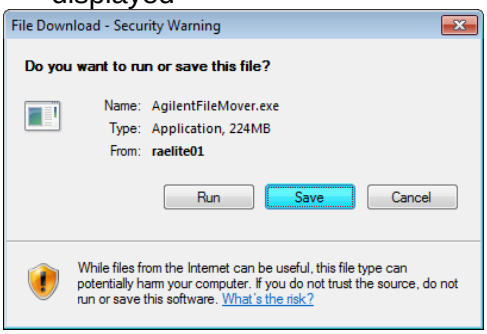
AgilentFileMover.exe is the executable installation file for the Remote Advisor file mover. AglentFileMover.exe can be accessed directly from the Gateway. AgilentDataSource.exe is also located on the Remote Advisor installation CD.

Accessing AgilentDataSource.exe from the Gateway

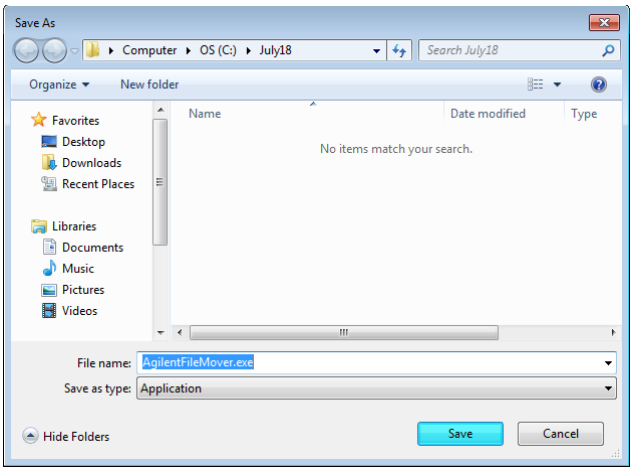
- Open Internet Explorer
- Enter http://gatewayPCName:8000/install into the address field of Internet Explorer.
  Example for gateway named rsgw2 http://raelite02:8000/install



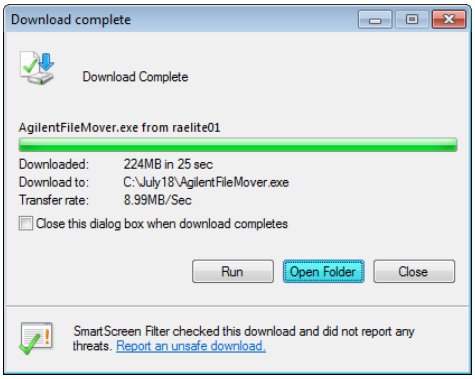
- Select the link AgilentFileMover.exe > File Download Security - Warning is displayed



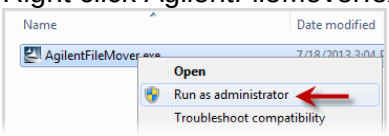
- Select the Save button to improve installation performance.



- Select a location to save the file
- Select the Save Button > Download Complete window displays



- Select the Open Folder button to be able to run as administrator
- Double click AgilentFileMover.exe > InstallSheild Wizard window opens
  ****Special note for Windows 7****
  Right click AgilentFileMover.exe, Select Run as Administrator

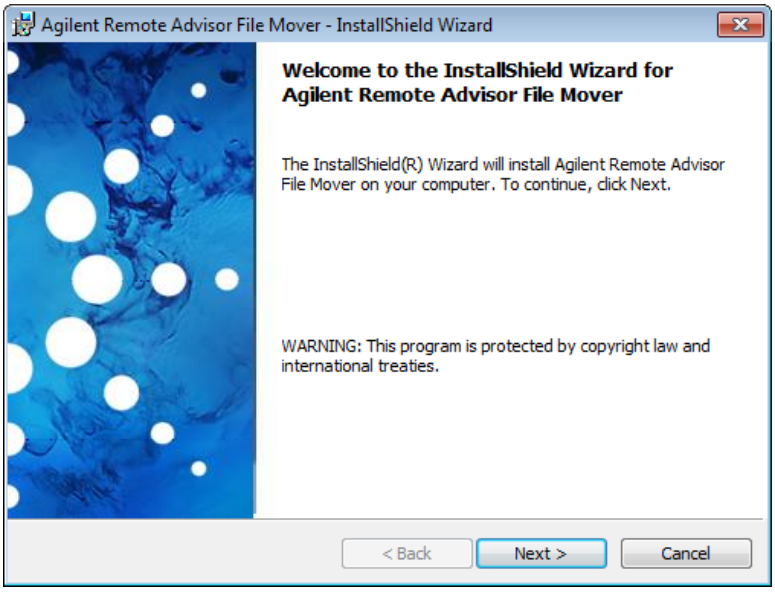


Installing the Data Source software from the Installation CD

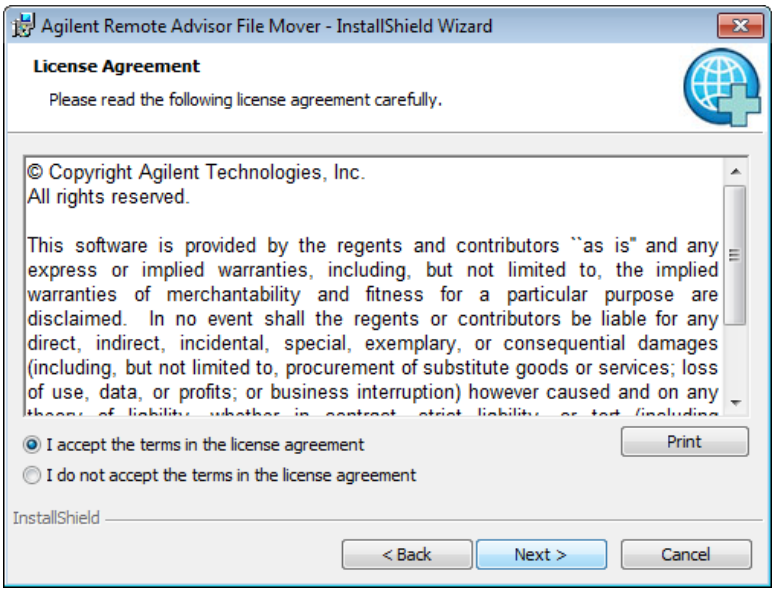
- Install the Installation CD in the CD drive
- Browse to Remote Advisor Installation CD to :\File Mover Installer
- Double Click AgilentFileMovere.exe > InstallShield Wizard opens
  Right click and select Run as administrator for Windows 7

Proceed to File Mover Software Installation

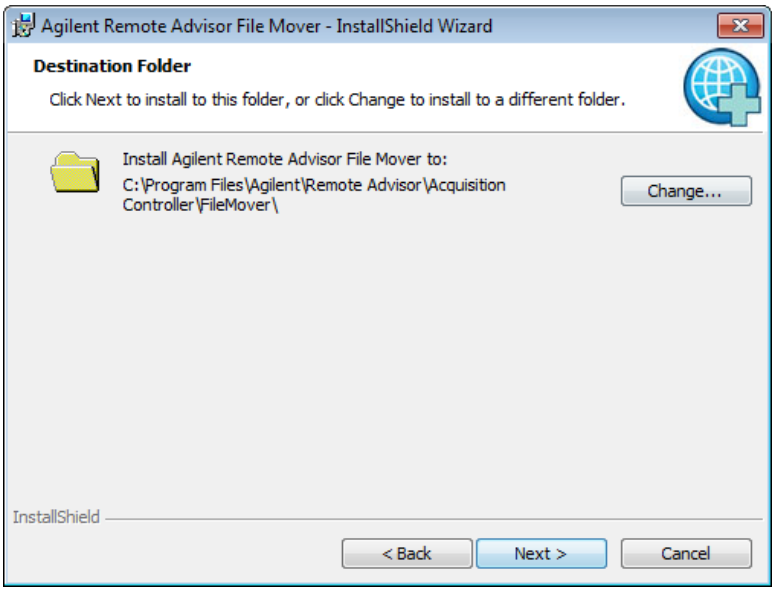
File Mover Software Installation



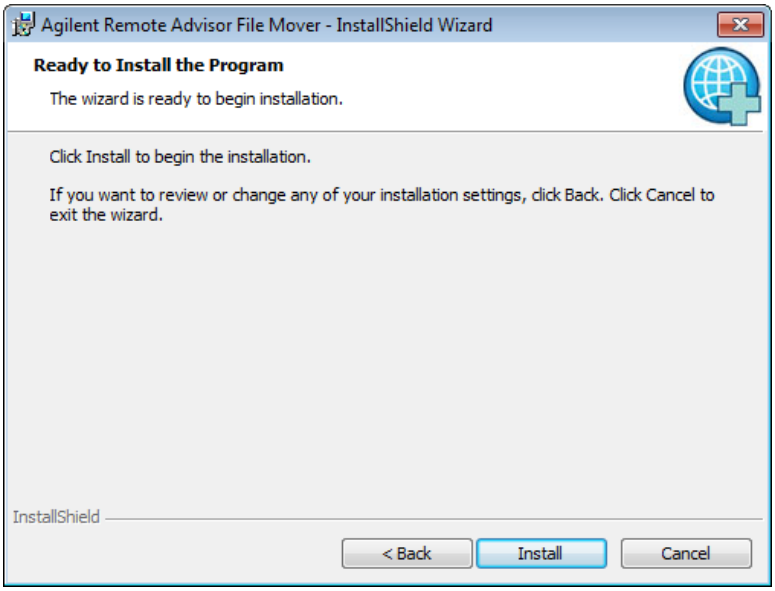
- Select the Next button > License Agreement window opens



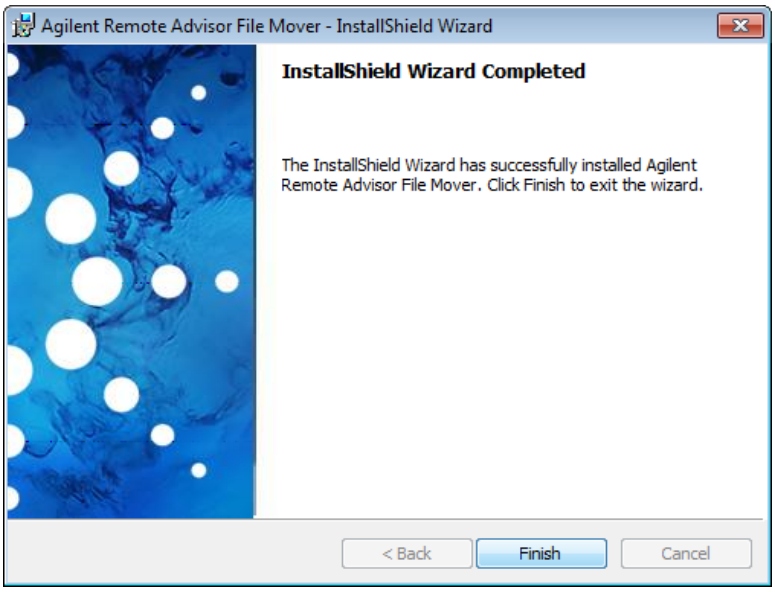
- Accept the License Agreement
- Select the Next button > Destination window opens



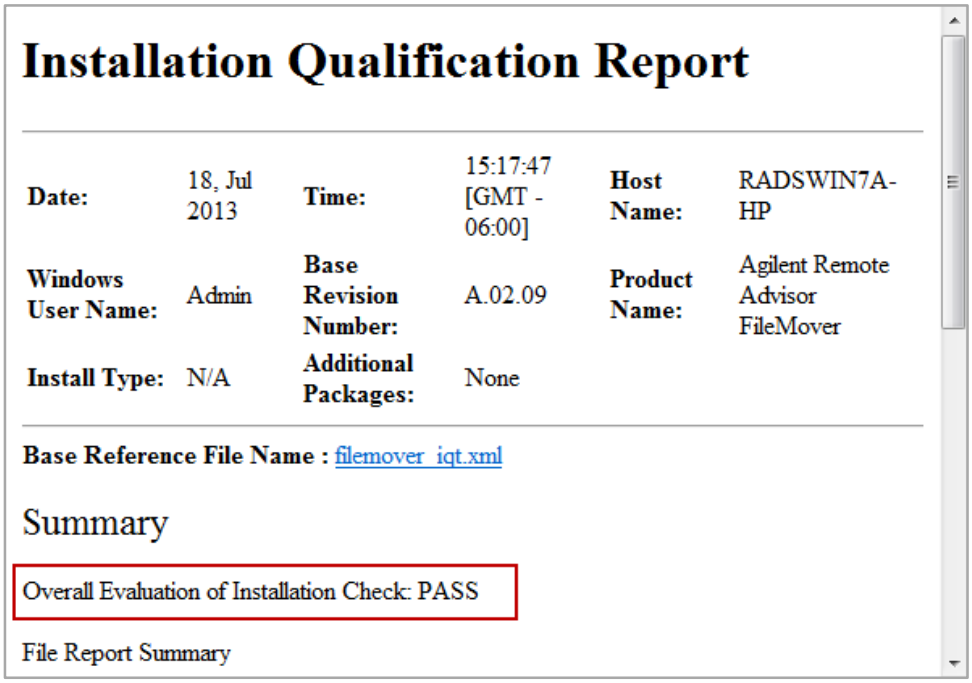
- Keep the current destination
- Select the Next button > The Install Program window opens



- Select the Install button > Installation Complete window opens



- Select the Finish button > An Internet Explorer window opens with the results of the Installation Qualification



Installation Qualification Report

Date:	18, Jul 2013	**Time:**	15:17:47 [GMT -06:00]	**Host Name:**	RADSWIN7A-HP
Windows User Name:	Admin	**Base Revision Number:**	A.02.09	**Product Name:**	Agilent Remote Advisor FileMover
Install Type:	N/A	**Additional Packages:**	None		

Base Reference File Name : filemover_iqt.xml

Summary

Overall Evaluation of Installation Check: PASS

File Report Summary

- Verify that the Overall Evaluation of the Installation Check = PASS

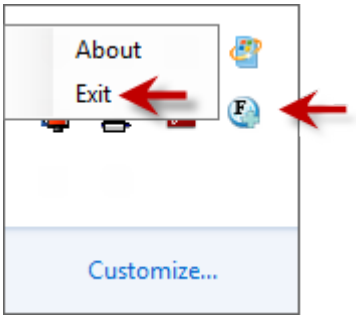
A File Mover icon will display in the Windows system notification area.

A Blue File Mover icon indicates that the File Mover is connected to the Data Source for which it is configured.

A Red File Mover icon indicates that the File Mover is not connected to the Data Source for which it is configured.

5.11.3 File Mover Configuration

The File Mover is configured by modifying the FileMover.xml file. File Mover must be stopped before modifying FileMover.xml.

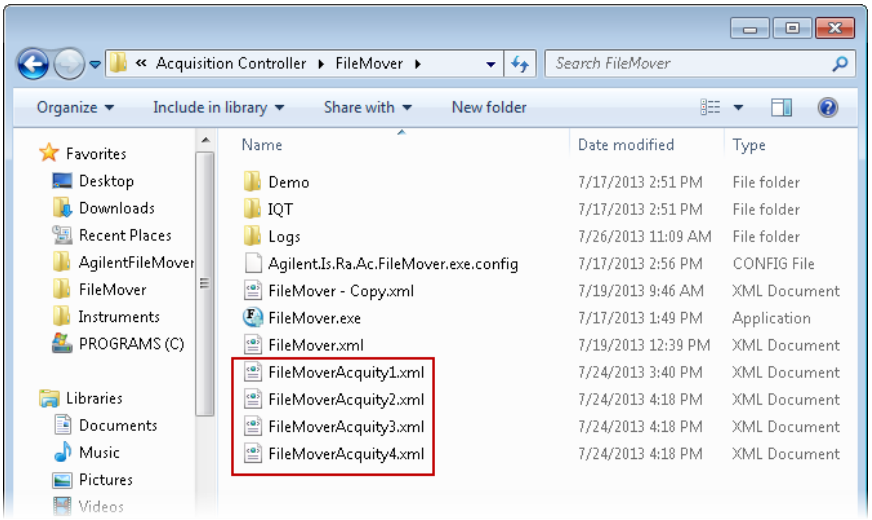


- Right click the File Mover icon in the Windows system notification area.
- Select Exit > The File Mover icon will no longer be displayed

---

Configure the FileMover.xml

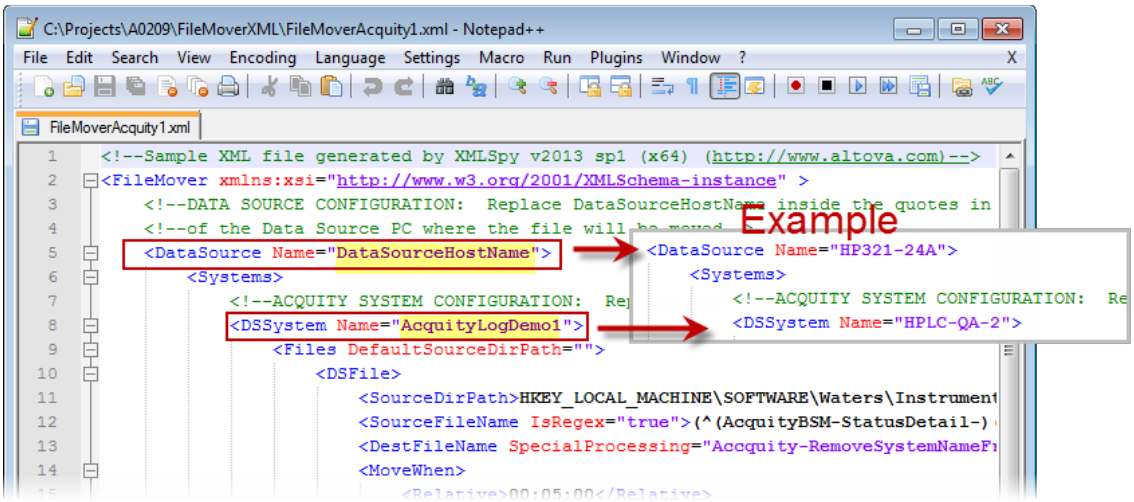
Four File Mover XML templates are located in the C:\Program Files\Agilent\Remote Advisor\Acquisition Controller\FileMover folder or C:\Program Files (x86)\ Agilent\Remote Advisor\Acquisition Controller\FileMover folder for Windows 7 64 bit PCs



Note: Modify the appropriate template for the number of Acquity systems controlled by the Empower Node.

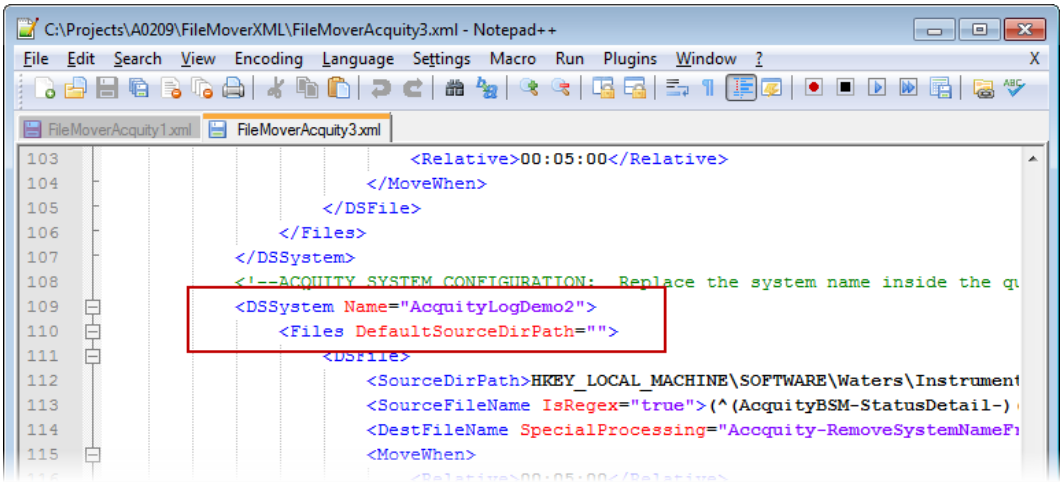
FileMoverAcquity1.xml is if for one Acquity HPLC
FileMoverAcquity2.xml is for two Acquity HPLCs
FileMoverAcquity3.xml is for three Acquity HPLCs
FileMoverAcquity4.xml is for four Acquity HPLCs

- Right click FileMoverAcquity#.xml for the number of Acquity HPLCs to be configured and select Edit to edit with Notepad or open with another text editor.



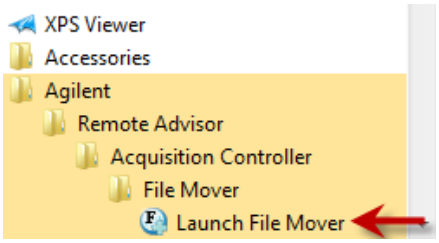
- Modify the DataSource name between the quotation marks to the host name or IP address of the Data Source PC where the files will be processed.
- Modify the DSSystem name between the quotation marks to the name of the Acquity HPLC. This will be the same name used later to configure the system in the Data Source
- **Save the file as FileMover.xml**
  ****Note** Windows will notify that FileMover.xml already exists. Choose Yes to overwrite.**

Configuring Additional Acquity HPLCs in File Mover XML

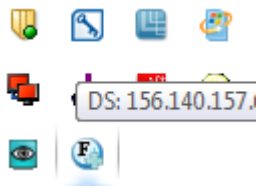


- Scroll down through the XML file to the next <DSSystem tag
- Modify the DSSystem name inside the quotes to the name of Acquity HPLC.
- Repeat for additional Acquity HPLCs.
- **Save the file as FileMover.xml**

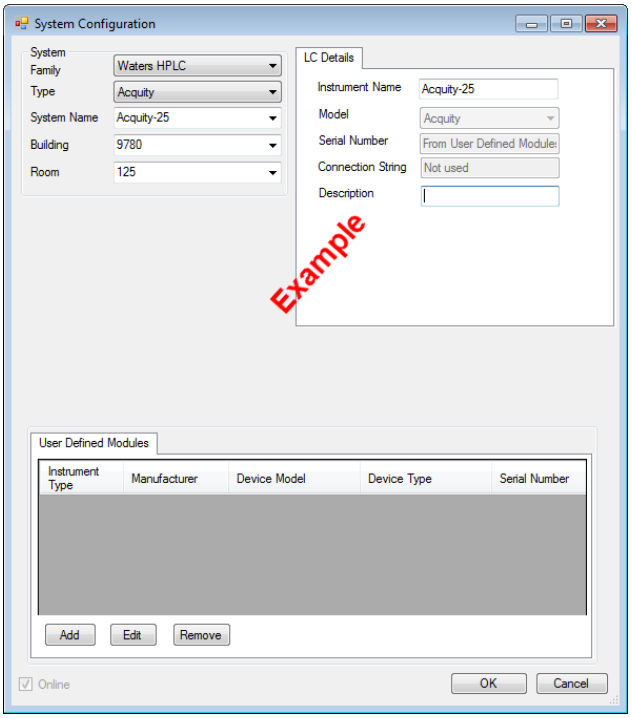
Start FileMover.exe



- Click the Windows Start button
- Select All Programs
- Select Agilent/Remote Advisor/Acquisition Controller/File Mover/Launch File Mover
- Verify the File Mover icon in the Windows notification area turns blue.



Acquity Data Source System Configuration



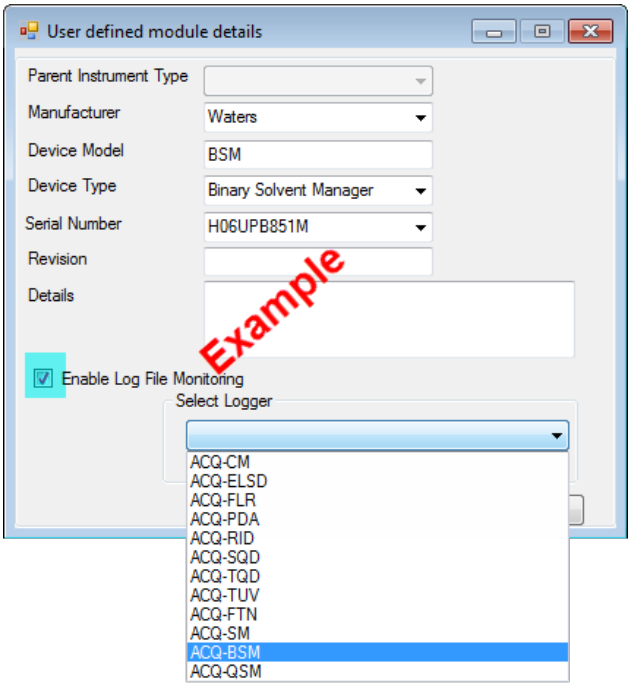
System Configuration

- Select Waters HPLC for the Family
- Select Alliance for the type
- Enter a System Name
- Enter a Building where located
- Enter a Room where located

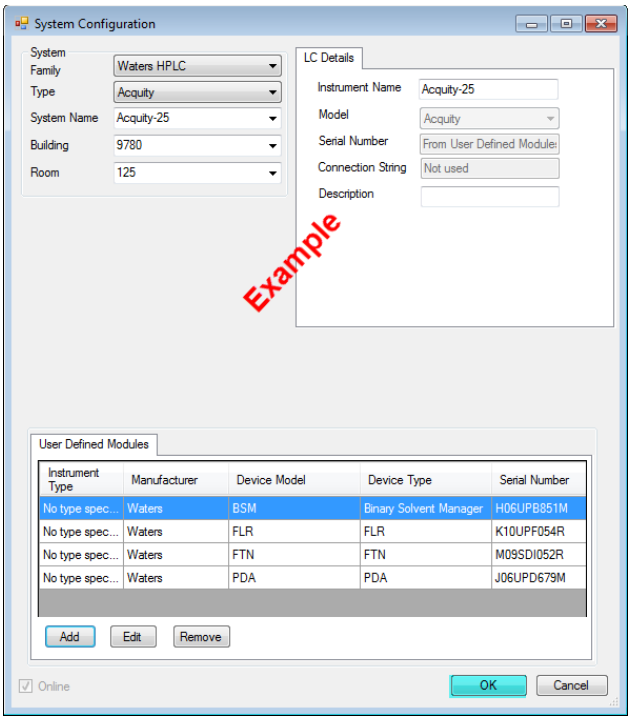
LC Details Configuration

- Enter the Instrument name. Usually the same as the System name
- Enter a short description. The description will be displayed in the Data Source Status Monitor
- Select the Add button in the User Defined Modules section to add the Acquity modules
  Remote Advisor monitors the log file each of the Acquity's modules added.

User Defined Modules



- Select or enter the Manufacturer
- Enter a Device Model number or name
- Select or enter the Device Type
- Enter the Serial number of the module. The serial number must match the serial number read from the module.
- Enter a revision
- Enter any desired details.
- Select Log File Monitoring
- Select the logger associated with the Acquity module type that is being configured
- Select the OK button
- Add all modules of the Acquity system.
  A list of all user defined modules will display



- Select the OK button to complete the configuration

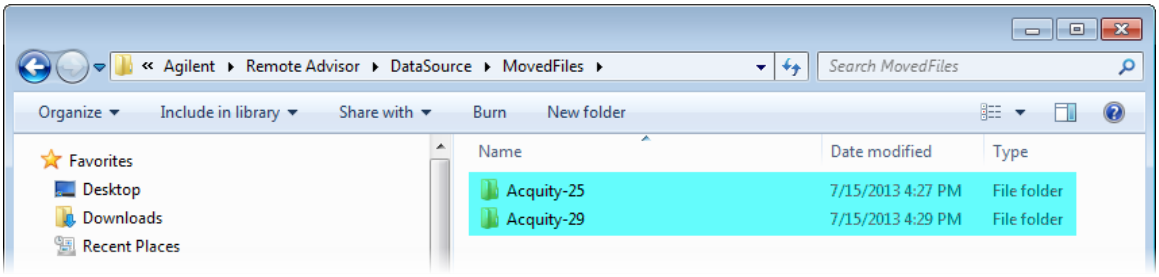
5.11.4 Serial Number Helper

Modules that make up an Acquity system are added individually in the User Defined Modules section of the configuration window.

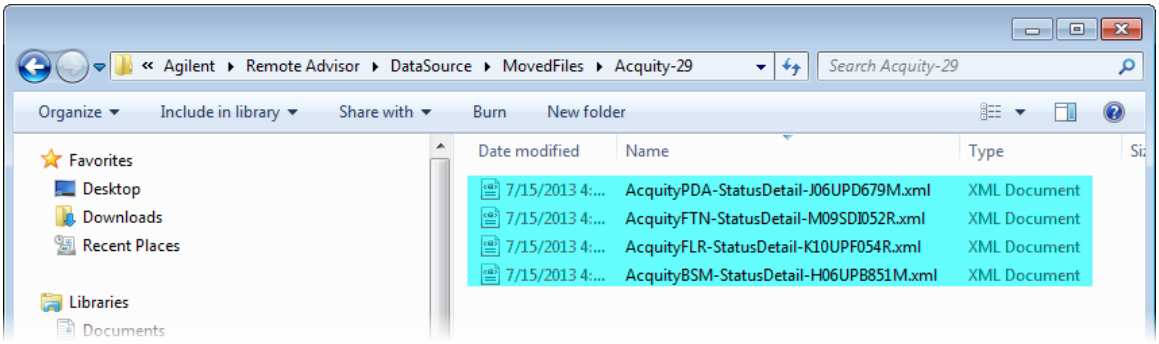
Empower reads serial numbers from the ACQUITY modules and appends the serial number and module type to the name of the log file saved for the module. Remote Advisor moves a copy of the file to the Data Source and writes the files to a folder with the instruments name.

The image below shows Windows Explorer with two example folders in the right window named Acquity-25 and Acquity-29. The two folders are a result of the file mover moving files to the Data Source from two ACQUITY systems named Acquity-25 and Acquity-29. The location of the moved files is

C:\Program Files\Agilent\Remote Advisor\Data Source\Moved Files



Open the folder named for the system that is being configured. the navigation path for the folders is C:\Program Files\Agilent\Remote Advisor\Data Source\Moved Files. A log file for each ACQUITY module that has been previously configured on the Empower Node will be in the folder. The serial number in the file name can be copied out of the file name and pasted into the serial number field when configuring the User Defined Modules.

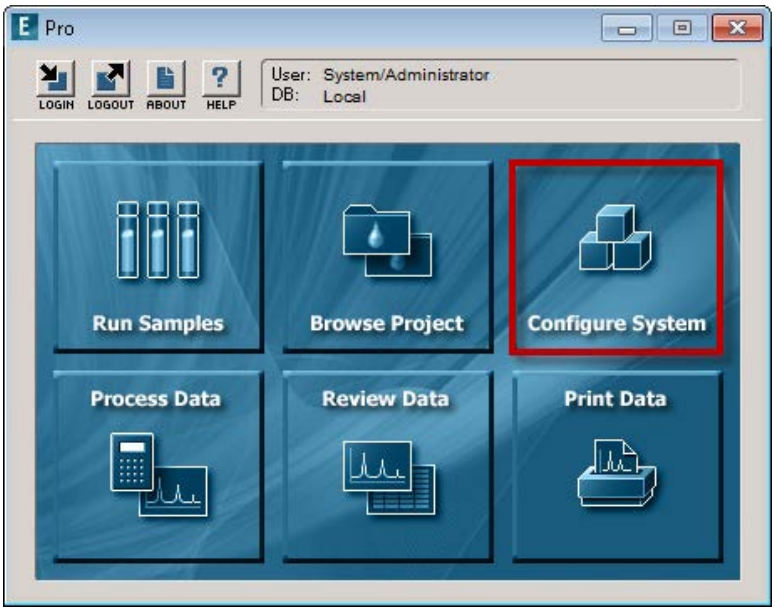


Remember that a Waters Node can control more than one ACQUITY system. Files of all modules on the Empower Node will be moved into the system's folder on the Data source. Choose only the serial numbers of modules for the systems being configured.

Verify Serial Numbers with Empower

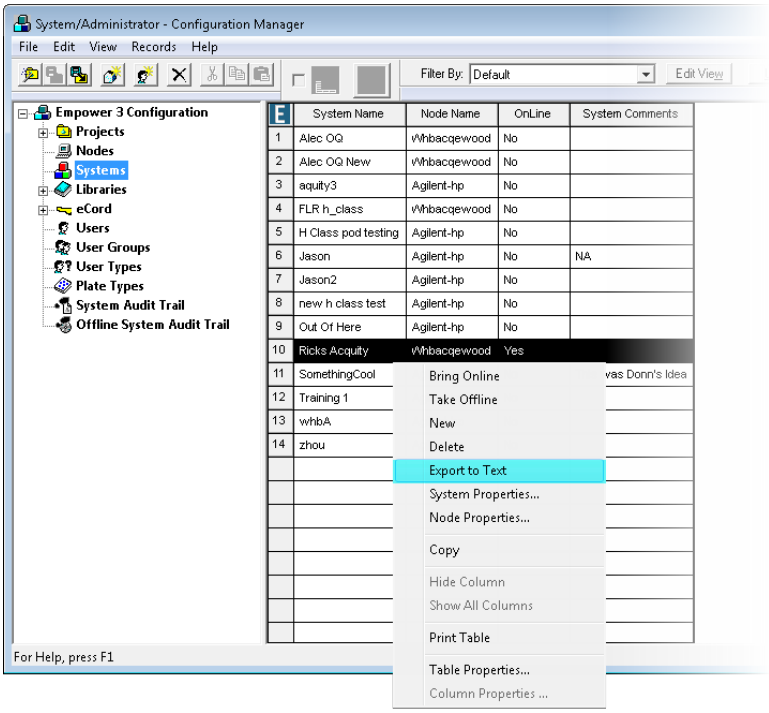
Modules that make up an Acquity system can be identified with Empower from the Empower node where the file mover is installed. A user must be logged into Empower to perform this procedure.

Empower Menu



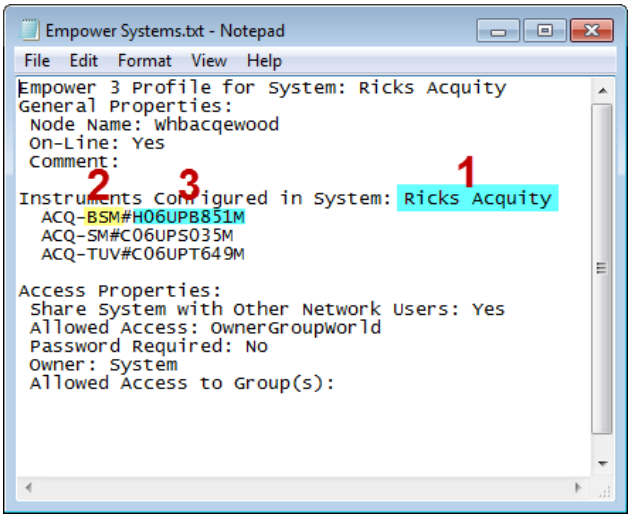
- Select Configure Systems from the Empower Menu

Configuration Menu



- Select Systems from the Systems form the Empower 3 Configuration menu to display a list of systems
- Select the System to be verified
- Right click the system
- Select Export to Text from the menu
  Notepad will open with system module information

Notepad with Serial Number Information

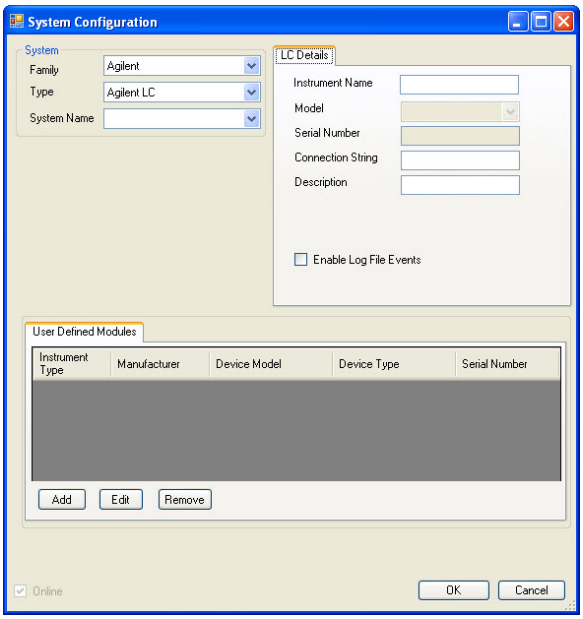


System information is displayed in Notepad

1. System name
2. Module type
3. Module serial number

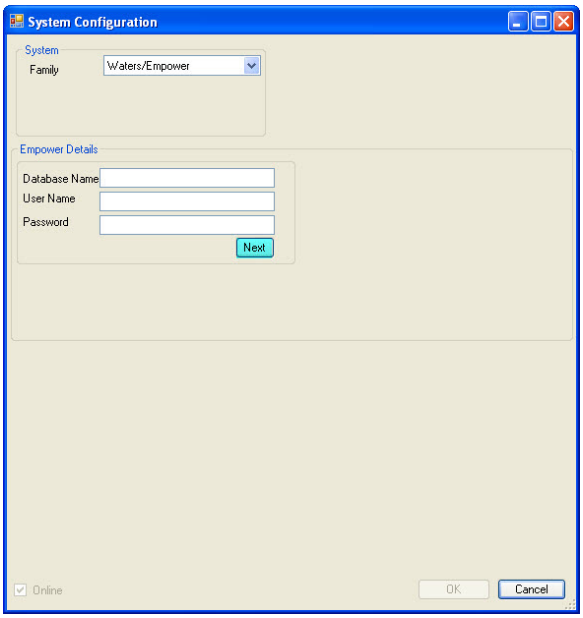
5.12 Waters HPLC Connecting via Empower

This procedure uses an alternate method to collect Waters Alliance and ACQUITY HPLC statistic information by using the Empower Pro Toolkit to query the Empower Pro 2 database for instrument statistics. Empower must be installed on an Empower client in an Empower client/server environment and is restricted to Empower Pro 2 FR5.



System

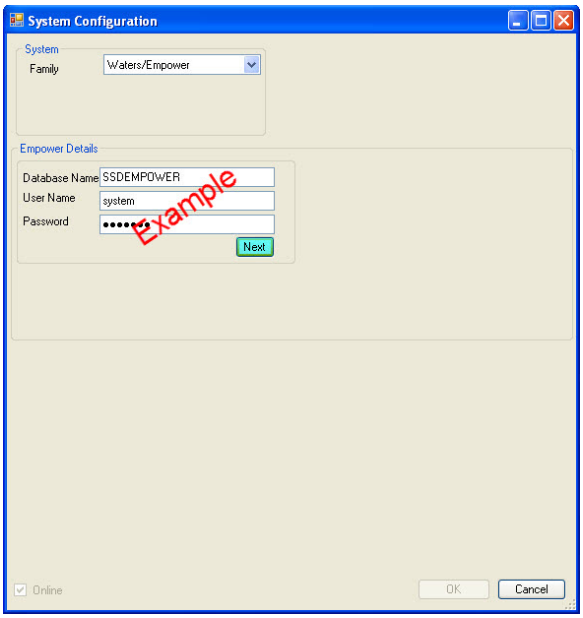
- Select Waters/Empower as the Type



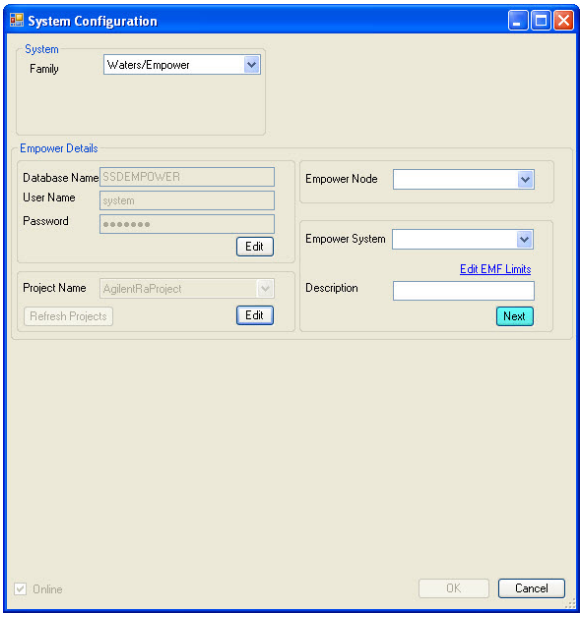
Empower Details

Empower Details are furnished by the customer and collected in the Installation Planner tool

- Enter the Empower Database Name, User Name, and Password
- Select the Next button



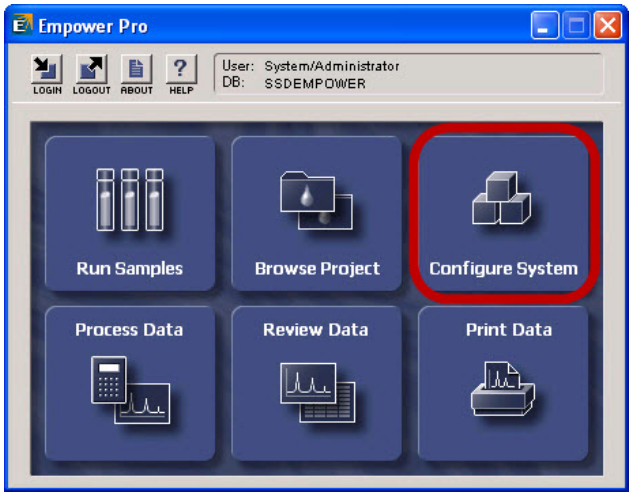
- Select the Project Name from the dropdown list
- Select the Next button



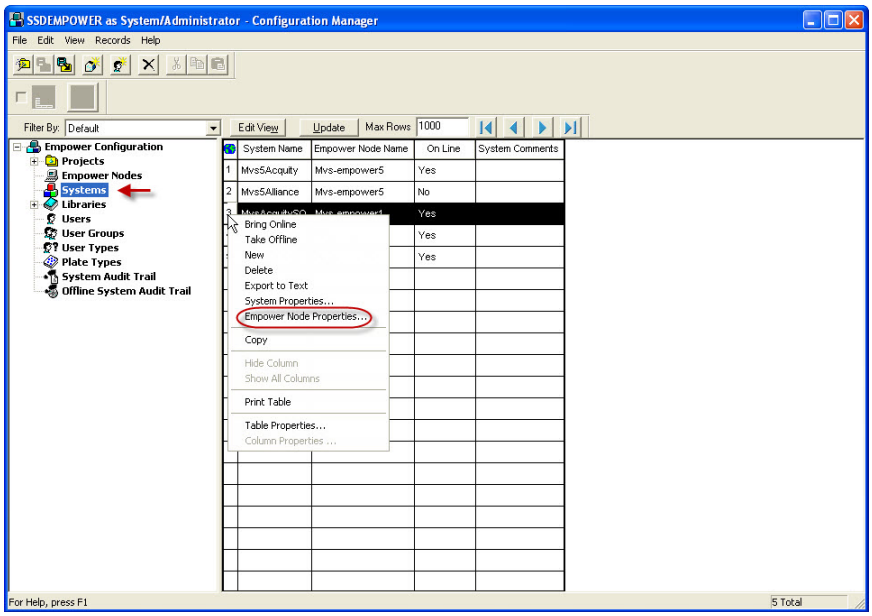
- Select the Empower Node from the dropdown list
- Select the Empower System from the dropdown list
- Enter a short description which could include location, instrument type, or other information
- Select the Next button

Instructions to determine which Waters modules belong to a system

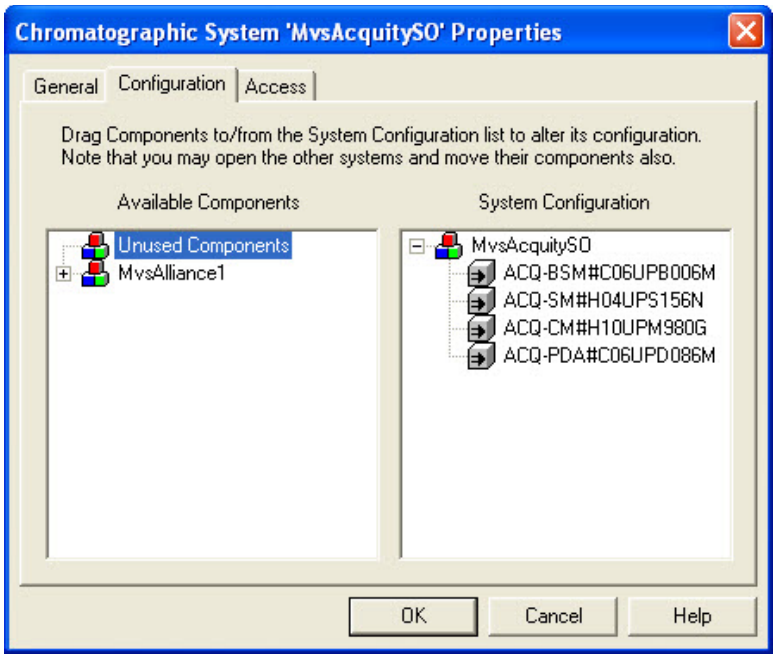
This procedure starts with the Empower Pro menu.



Select the Configure System button



- Select Systems from the left column
- Select the system to be configured from the table
- Right click the system
- Select Empower Node Properties > Chromatographic System Properties window is displayed for the system

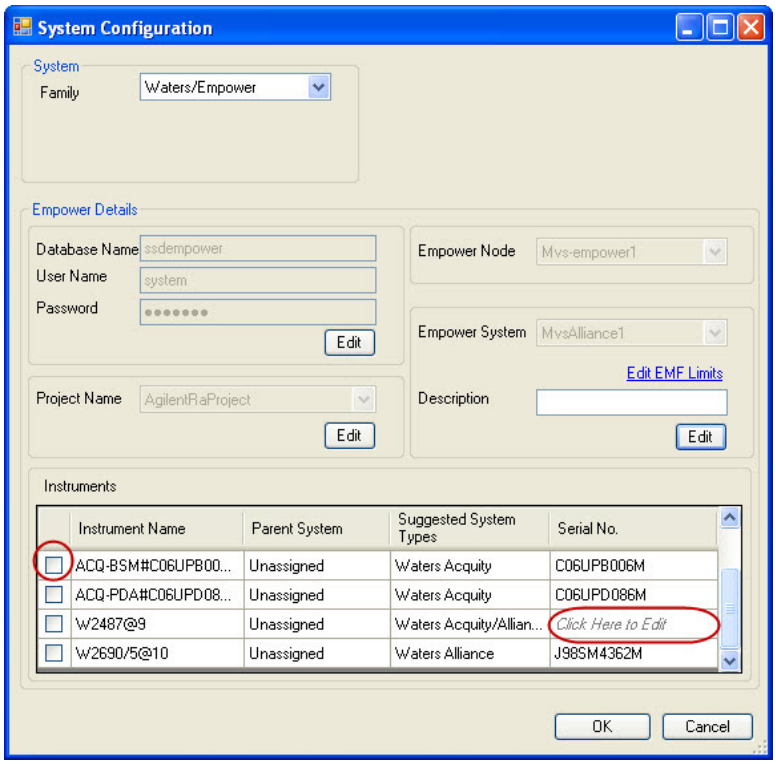


- Select the Configuration tab > Available Components and System Configuration columns are displayed

Available Components Components that do not belong to the system chosen

System Configuration Displays the system names and all components that belong to the system

- Verify the components to be configured for the system to be configured



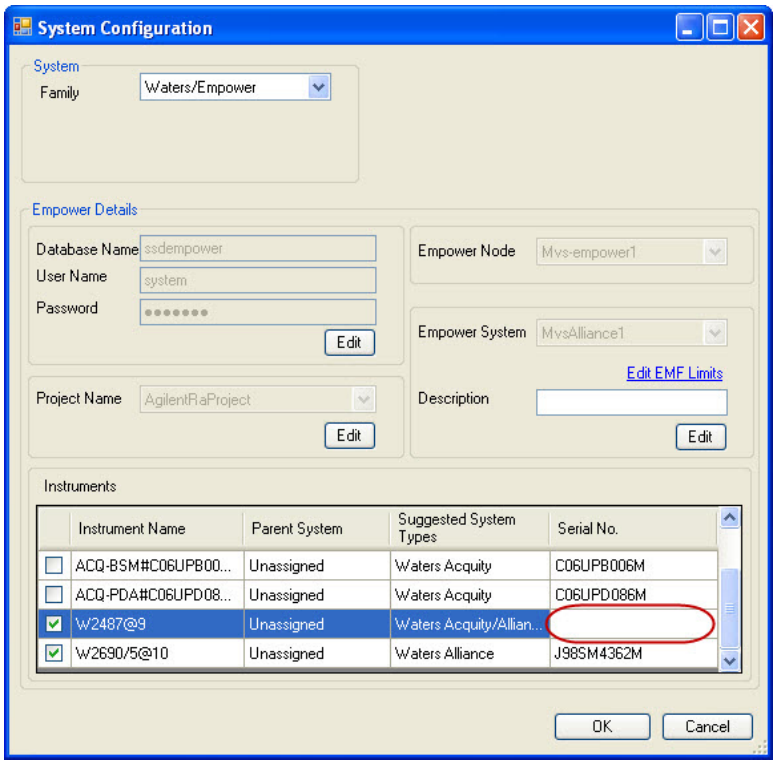
Important: All Waters modules controlled by the Empower node will display.

The Waters Empower node is also known as the Node. One Node is able to control up to four instruments. All modules of all instruments controlled by the Waters Node will be displayed in the Instruments table

- Select the Check box to the left of each instrument module that belongs to the instrument being configured

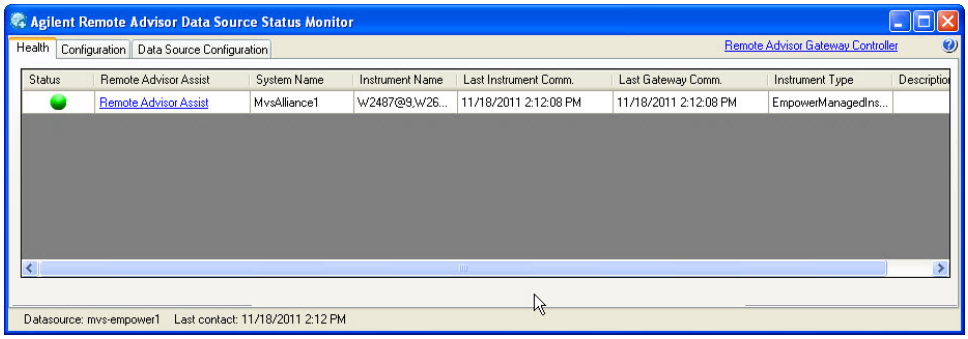
Serial number detection is automatic. A module serial number may be empty if the serial number is not configured in the instrument module. The serial number must be manually entered.

- Click in the serial cell and enter the Serial number of the Module
- Select the OK button



This image shows two modules selected for the system being configured. The serial number can be edited after the box to the left of the module is selected.

- Manually enter the module serial number
- Select the OK button



The newly configured instrument is now displayed in the Data Source Status Monitor

- Select the Health tab to verify communications from the Data Source to the instruments

Last Instrument Comm. should have a value close to the current PC time

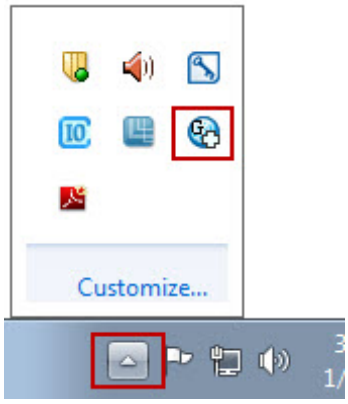
Last Gateway Comm. should have a value close to the current PC time

Configuration of the Waters HPLC system is complete. The Data Source Status Monitor may be closed.

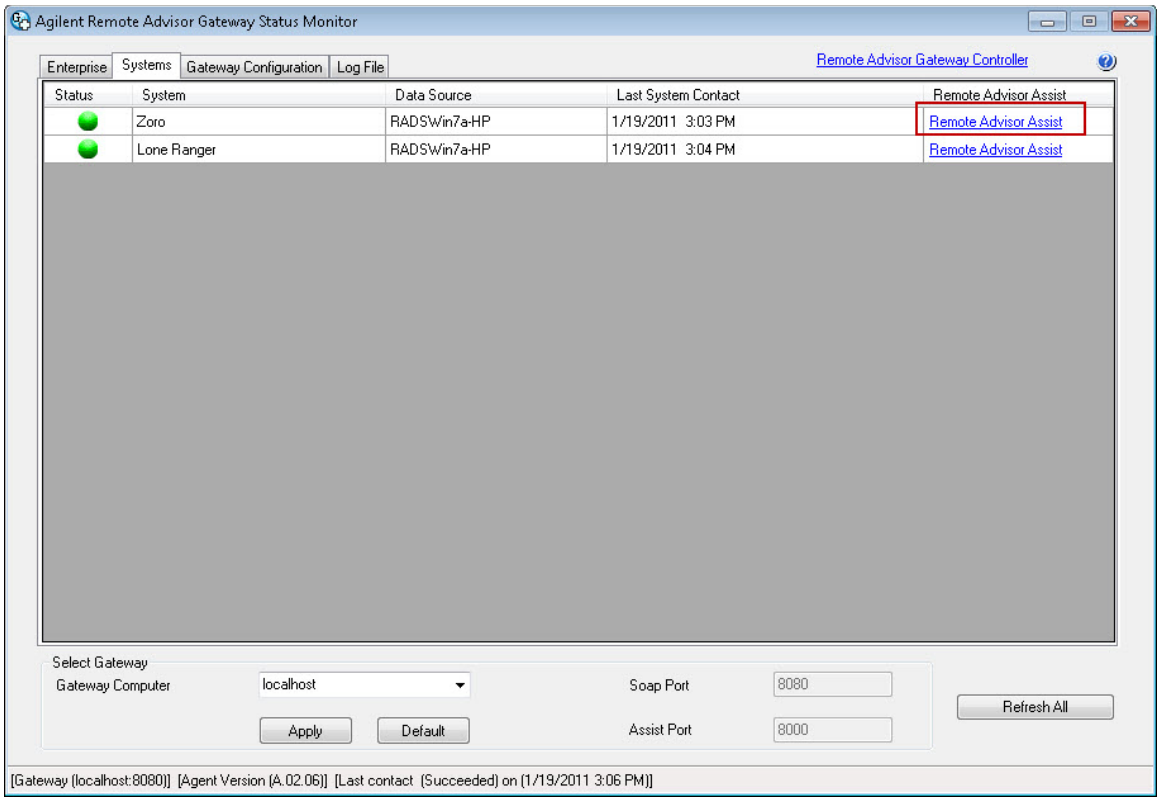
6 Remote Advisor Installation Verification Enterprise Configuration

This Remote Advisor Installation Verification and Enterprise Configuration Procedure is the written instruction to Agilent Field Service Engineer how to verify that Agilent Remote Advisor Remote Assist and scripts work correctly with the Enterprise Server. This Guide instructs the FSE how to create customer contacts for the Gateway on the Enterprise.

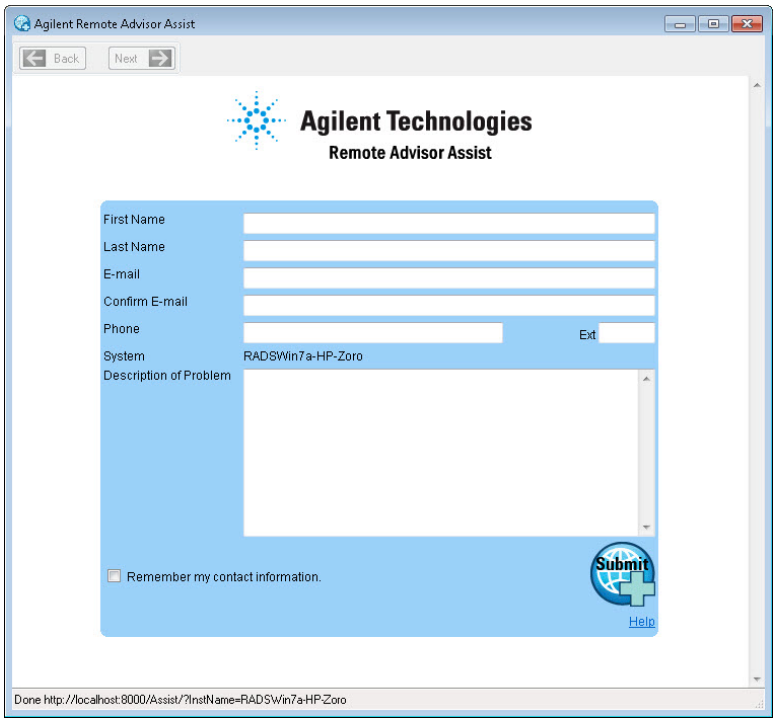
6.1 Remote Advisor Assist Initiation from the Gateway



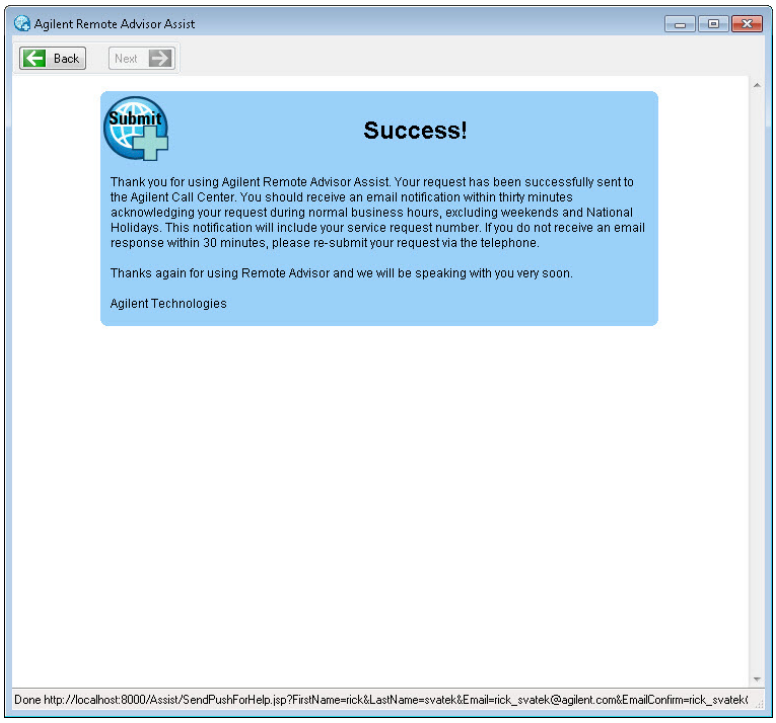
- Select the up arrow in the Windows notification area (Windows 7)
- Double click the Gateway Status Monitor icon in



- Select the Systems tab
- Select a Remote Advisor Assist URL for one of the systems to test



- Enter your First Name in the First Name field
- Enter your Last Name in the Last Name field
- Enter your E-mail in the E-mail address field
- Enter your E-mail again in the Confirmation E-mail
- Enter a phone number where you can be contacted while on site
- Enter a description that this is a new installation.
  Example:
  This is the initial Remote Advisor Assist during a new installation. Please confirm by telephone that you have received this Remote Advisor Assist
- Select the Submit button

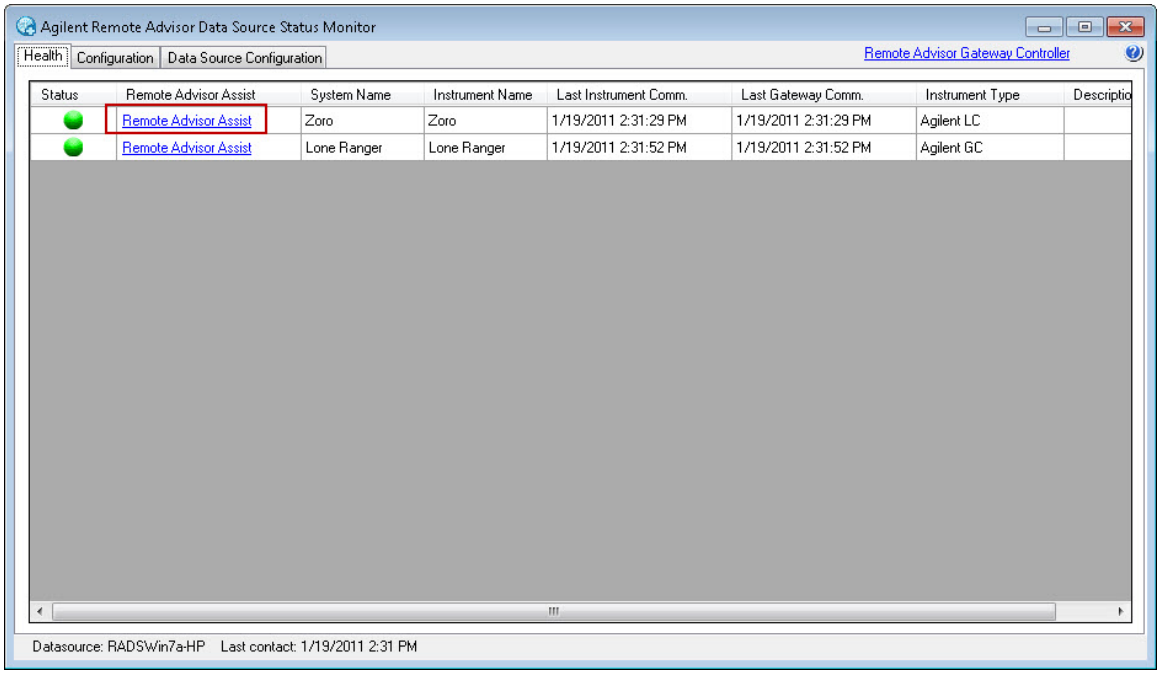


Success is displayed when the Remote Advisor Assist is successful. A failure indicates that the Gateway has lost communications with the Enterprise server.

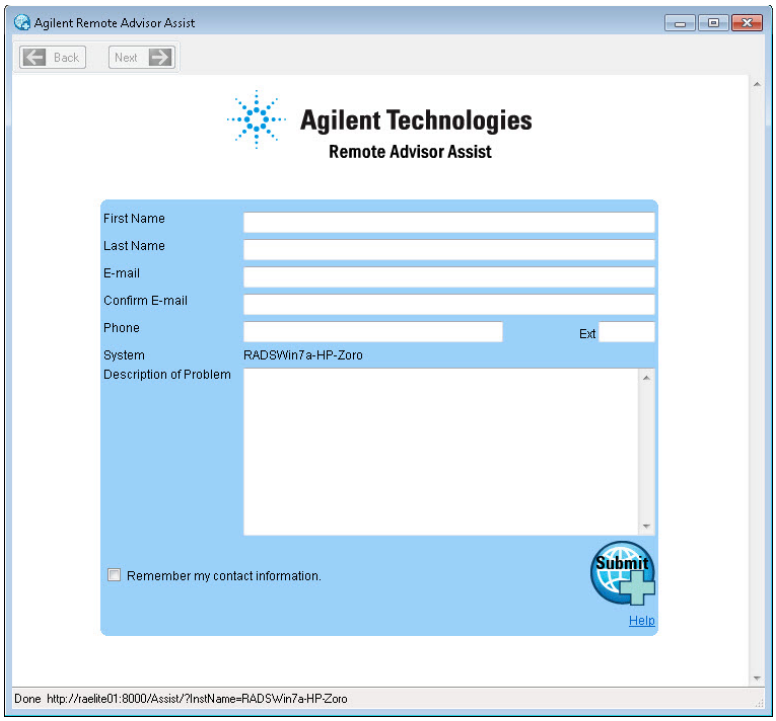
Notice that the Back button is now active. The Back button will display the Remote Advisor Assist form with original text.

6.2 Remote Advisor Assist Initiation from the Data Source

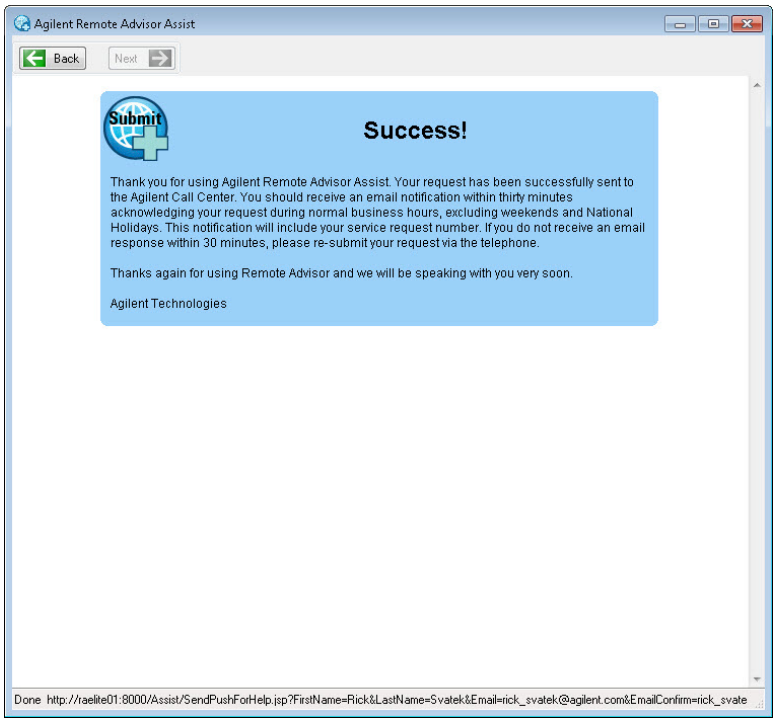
- Double click the Status Monitor icon in the Windows notification area



- Select the Health tab
- Select a Remote Advisor Assist URL for one of the systems to test



- Enter your First Name in the First Name field
- Enter your Last Name in the Last Name field
- Enter your E-mail in the E-mail address field
- Enter your E-mail again in the Confirmation E-mail
- Enter a phone number where you can be contacted while on site
- Enter a description that this is a new installation.
  Example:
  This is the initial Remote Advisor Assist during a new installation. Please confirm by telephone that you have received this Remote Advisor Assist
- Select the Submit button

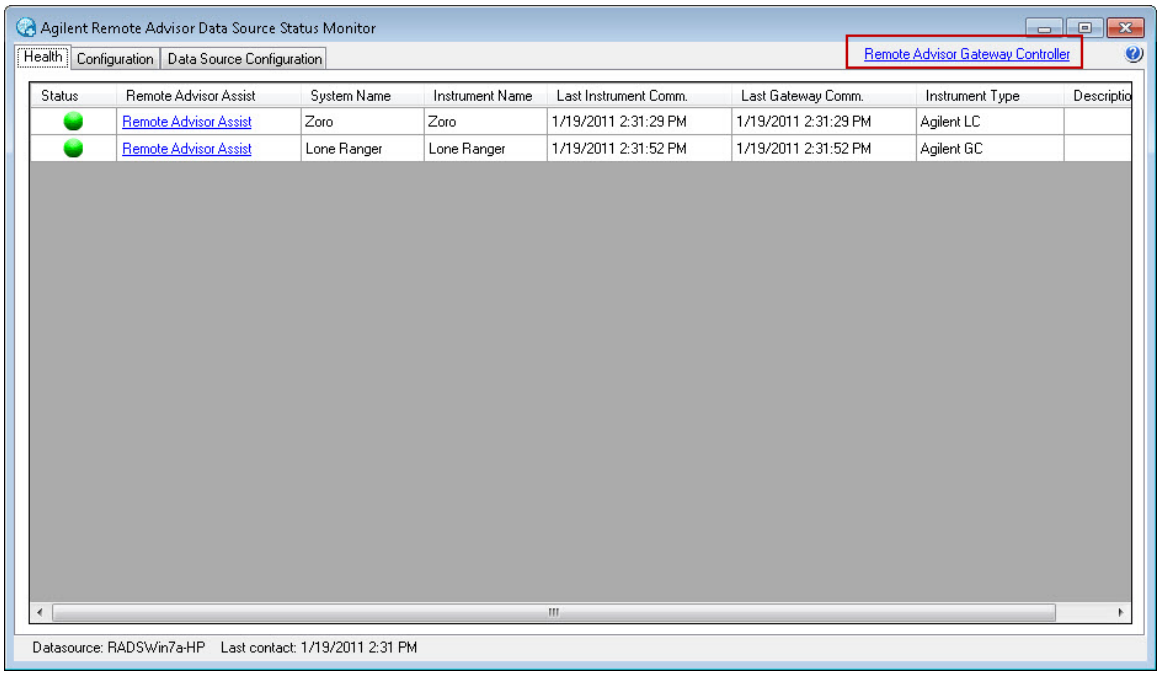


Success is displayed when the Remote Advisor Assist is successful. A failure indicates that the Gateway has lost communications with the Enterprise server.

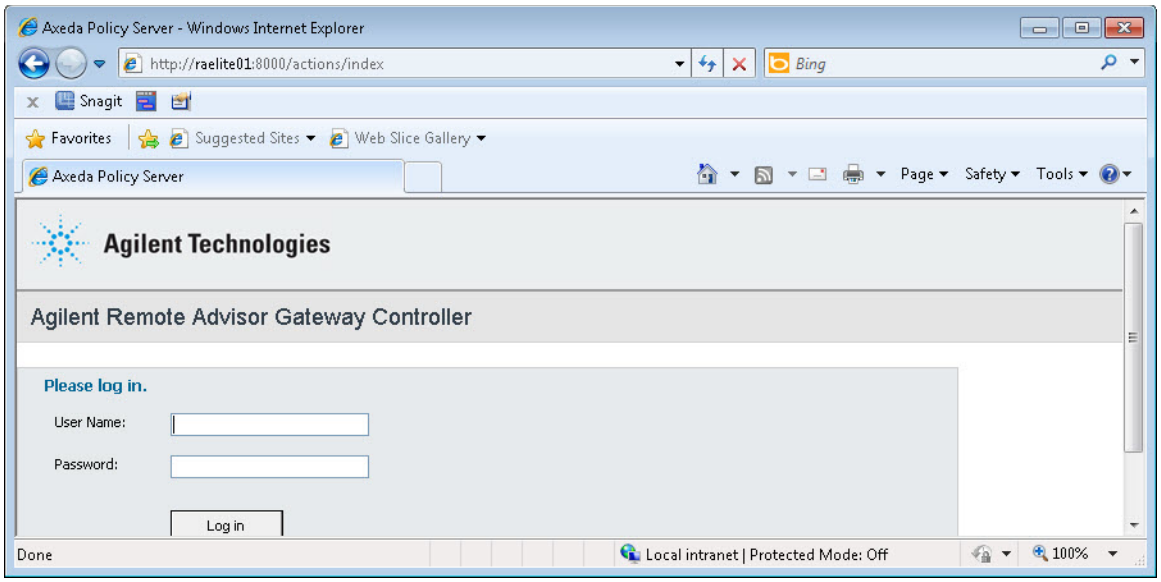
Notice that the Back button is now active. The Back button will display the Remote Advisor Assist form with original text.

6.3 Gateway Controller Verification

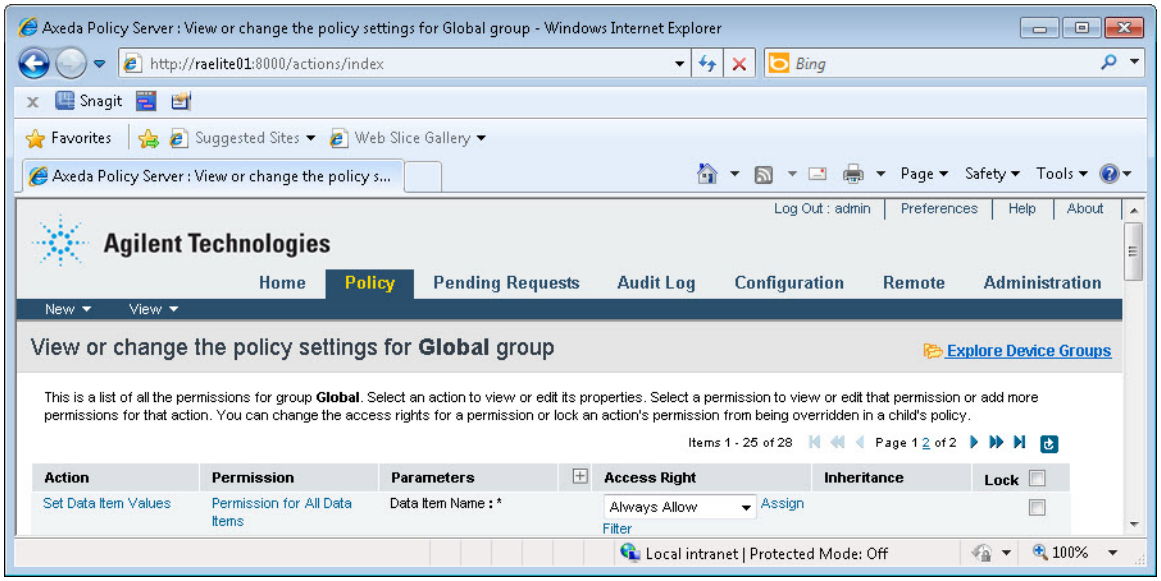
The purpose of this procedure is to verify that the Gateway Controller is functioning and that a user can log in.



- Select the Remote Advisor Gateway Controller link in the upper right corner of the Data Source Status Monitor > Internet Explorer opens with the Agilent Remote Advisor Gateway Controller log in screen



- Login to the Gateway Controller using the default username and password
  Username = admin
  Password = admin > The Home page of the Remote Advisor Gateway Controller is displayed

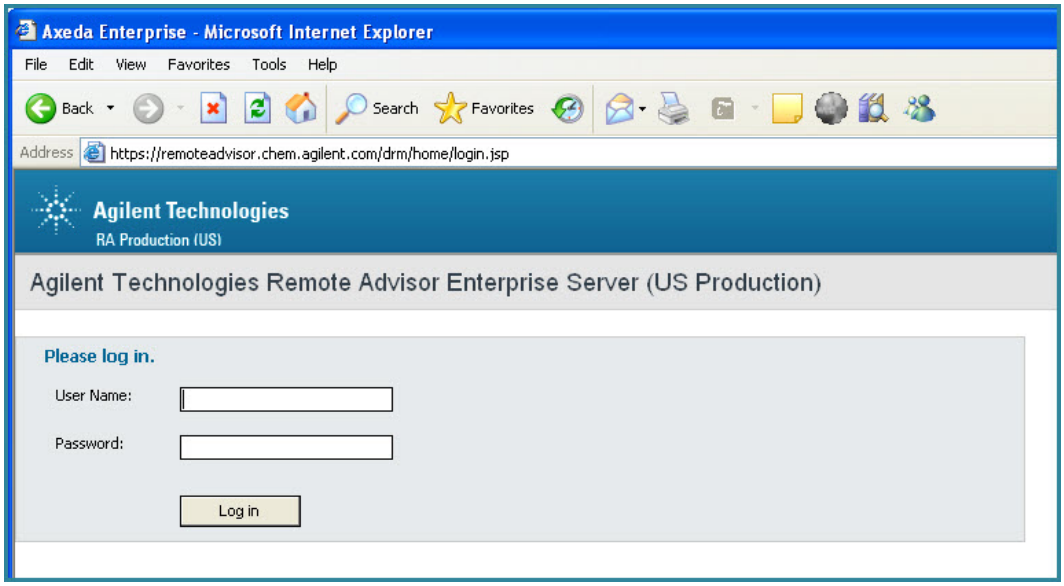


- Close Internet Explorer

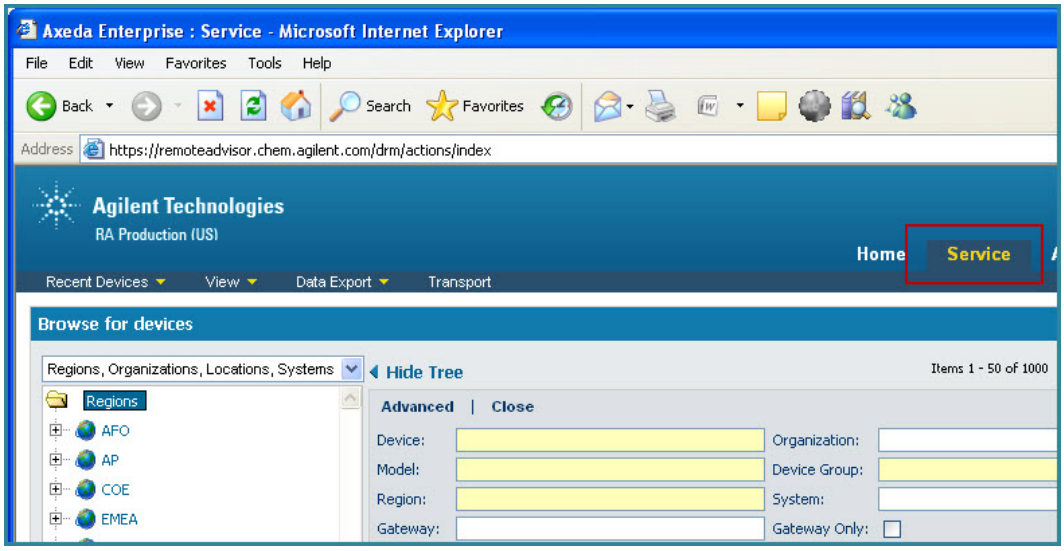
6.4 Remote Assist Verification

Remote Assist is verified on the Enterprise Server.

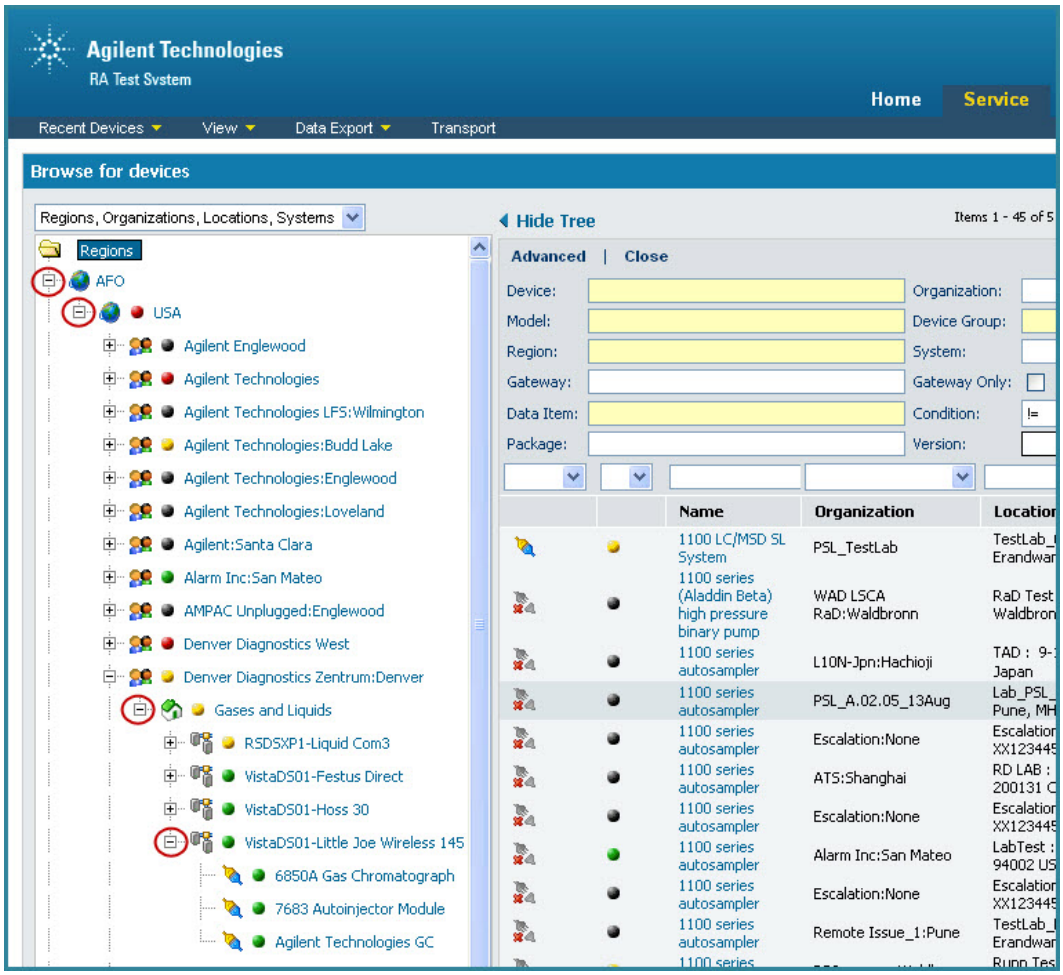
- Start Internet Explorer on the Gateway PC
- Type http://RemoteAdvisor.chem.agilent.com in the Address of Internet Explorer



- Enter your User Name
- Enter your Password
- Select the Log in button

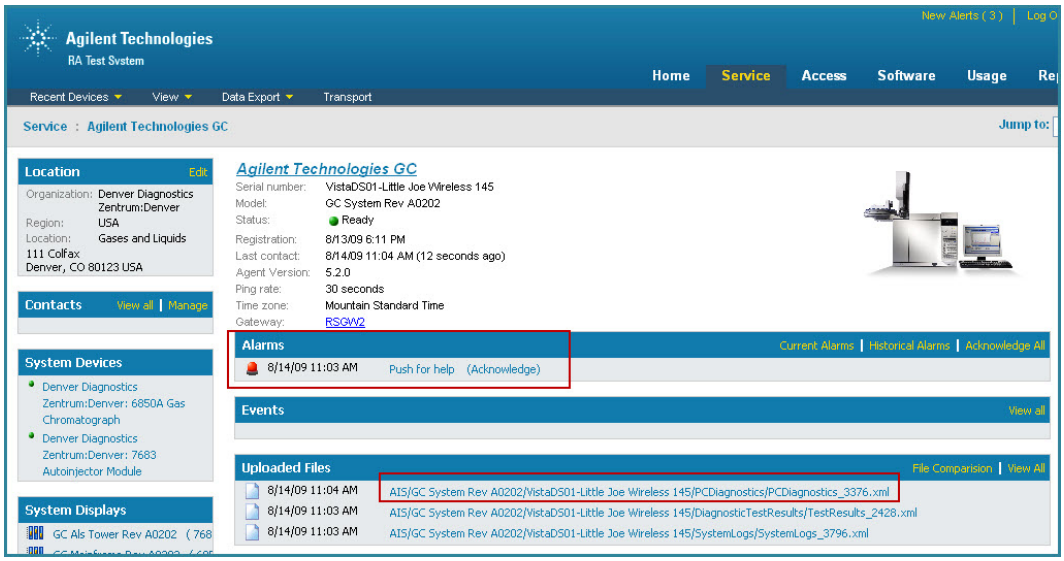


- Select the Service Folder

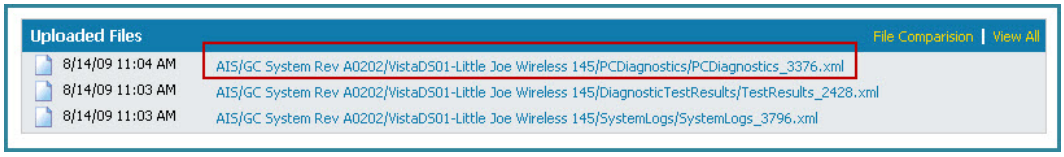


- Expand the correct Region, Country, Customer, and System by selecting the + signs

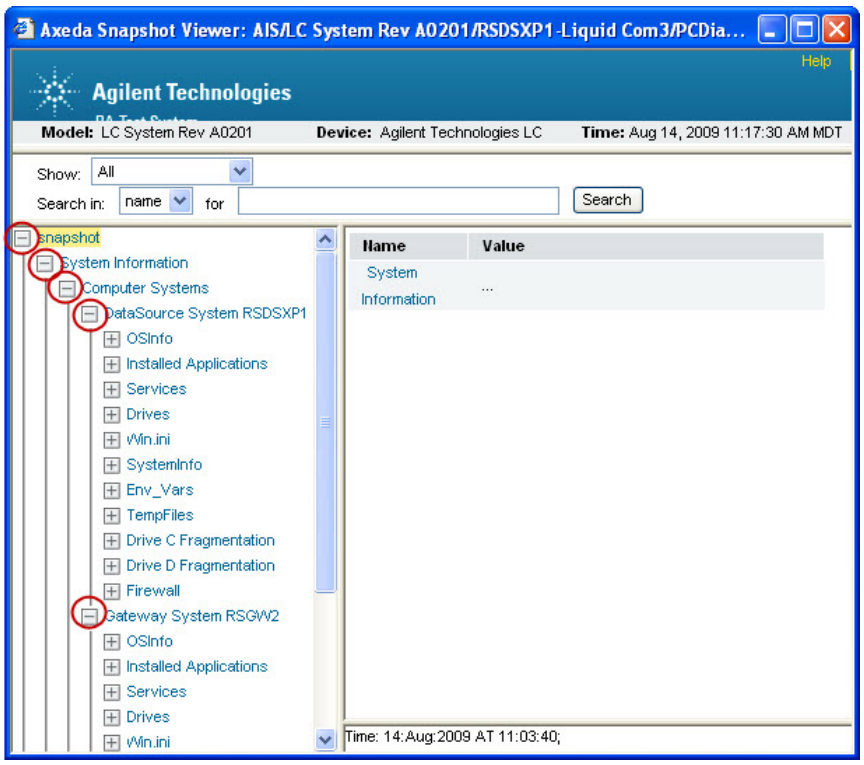
- Select the Agilent Technologies item in the list. This is known as the virtual instrument



- Verify the presence of the Push for help Alarm
- Select (Acknowledge) to acknowledge the alarm
- Verify that PCDiagnostics is present in the Uploaded Files section
- Verify that SystemLogs is present in the Uploaded Files section.
- Verify that TestResults is present in the Uploaded Files section.



- Select the link for the PCDiagnostics XML file

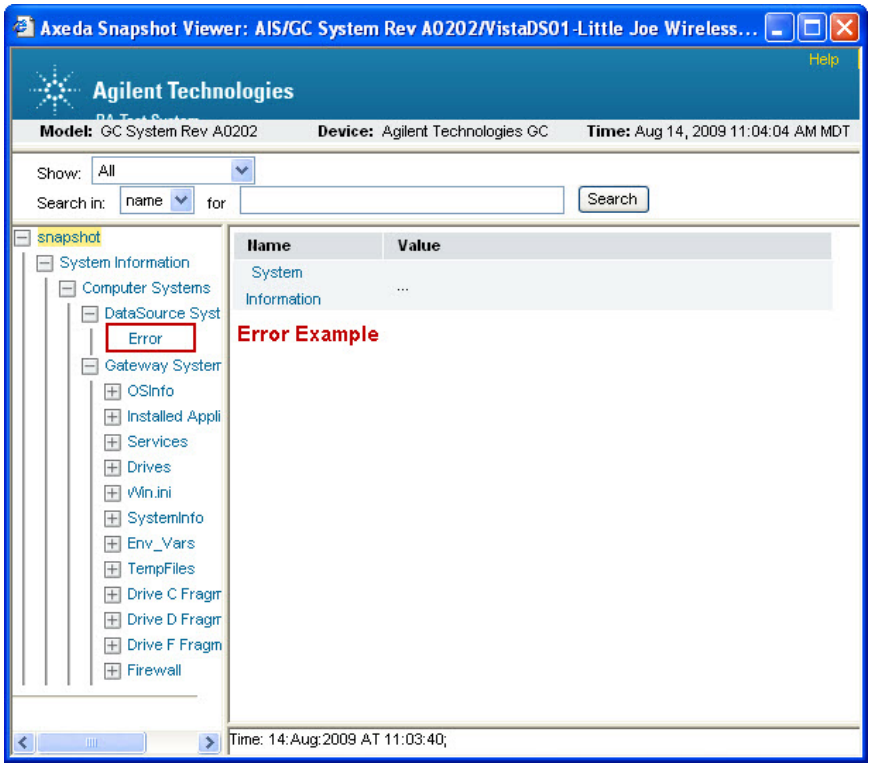


- Select the + to expand Snapshot
- Select the + to expand System Information
- Select the + to expand Computer Systems
- Select the + to expand Data Source System
- Select the + to expand Gateway System

Important

- Verify that Data Source System does not contain an error and has information
- Verify that Gateway System does not contain an error and has information

Example of a Data Source script error

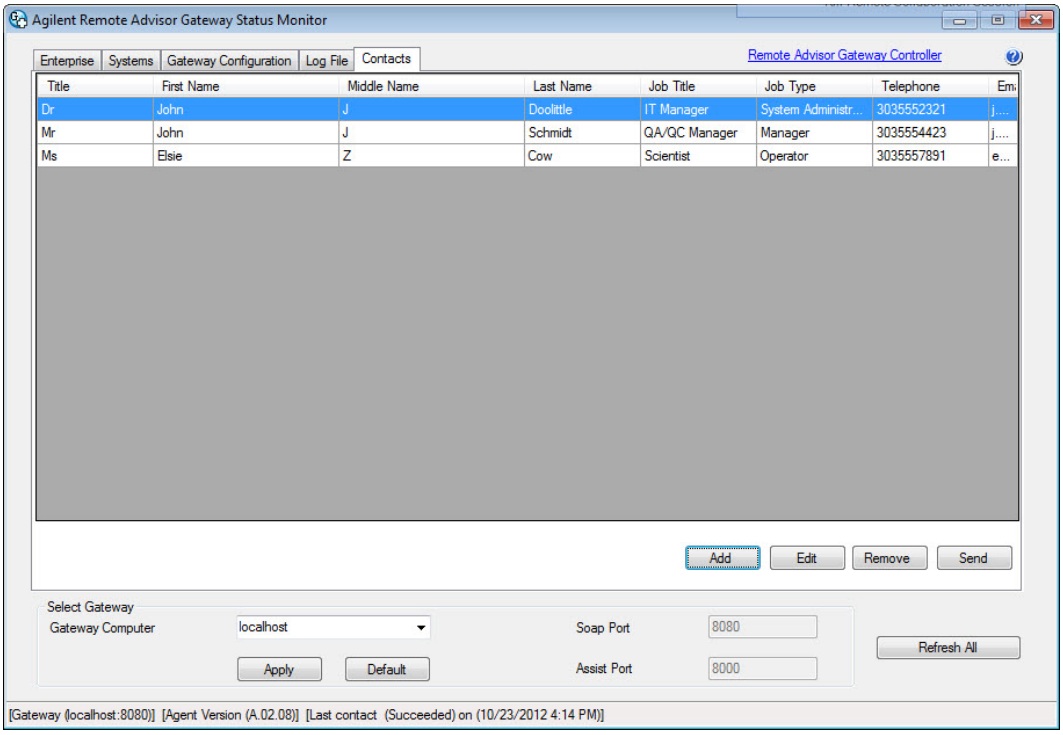


An error is shown in the example Data Source error. An error indicates a communication issue between the Data Source and the Gateway. Please refer to Appendix E for troubleshooting tips.

- Close the Axeda Snapshot Viewer
- ****Note**** Do not close the Virtual Instrument view of the Enterprise at this time. It is used in Gateway Contacts configuration.

6.5 Gateway Contact Configuration from the Gateway Status Monitor

Gateway Contacts are configurable during the installation of the Gateway software starting with A.02.08. Up to three contacts can be configured from the Gateway Status Monitor Contacts tab



Add Opens an entry window to add additional contacts to the Contacts Tab.

Edit Select a contact in the grid and select the Edit button to edit a contact's information.

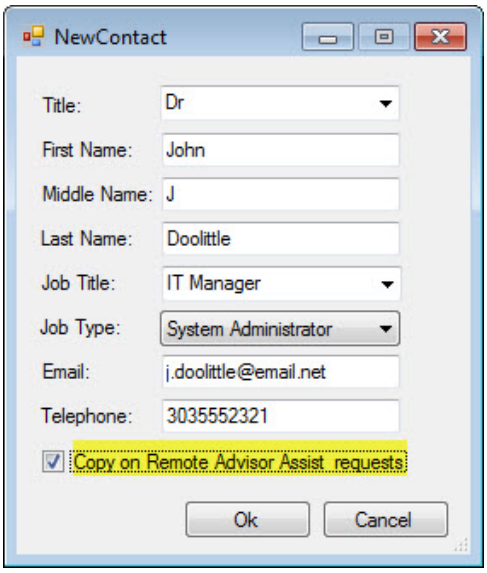
Remove Select a contact in the grid and select the Remove button to remove a contact.

Send The Send button sends the updated contact information to the Enterprise.

New Contact Window

The New Contact Windows displays after selecting the Add or Edit buttons.

Contact information is entered or edited in the New Contact Window



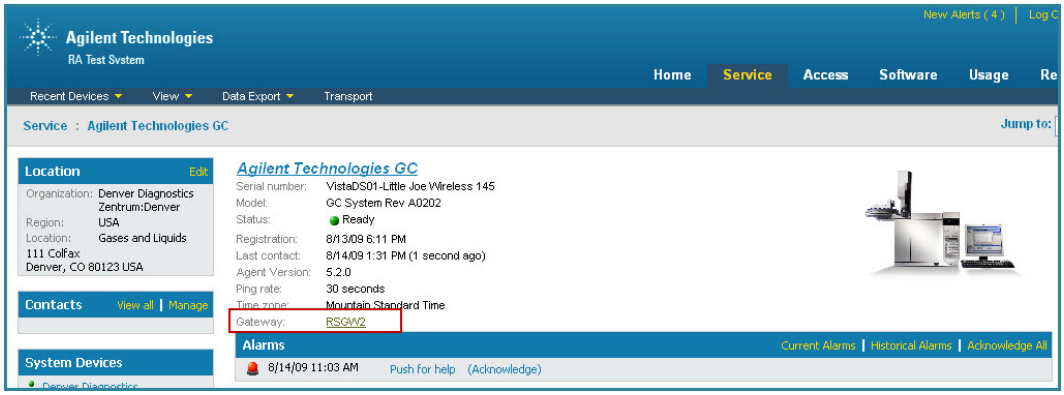
- Add or edit contact information as required

Copy on Remote Advisor Assist requests

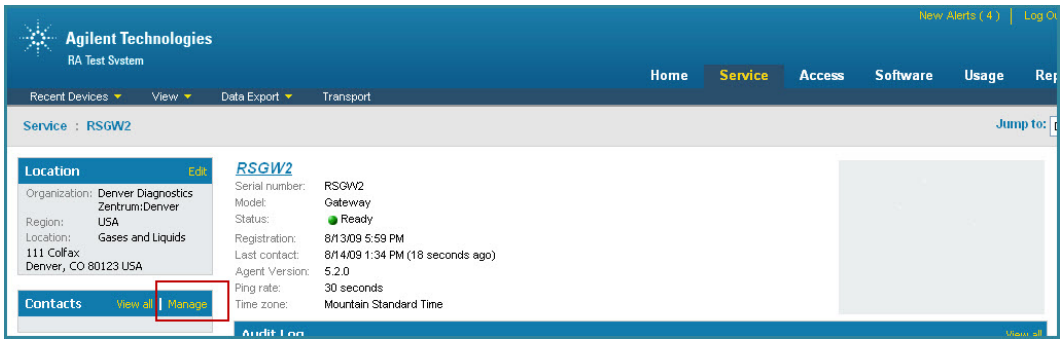
When Checked-this contact will receive an email when all Remote Advisor Assists are initiated from this Gateway or Data Source PCs connected to this Gateway.

6.6 Gateway Contact Configuration on the Enterprise

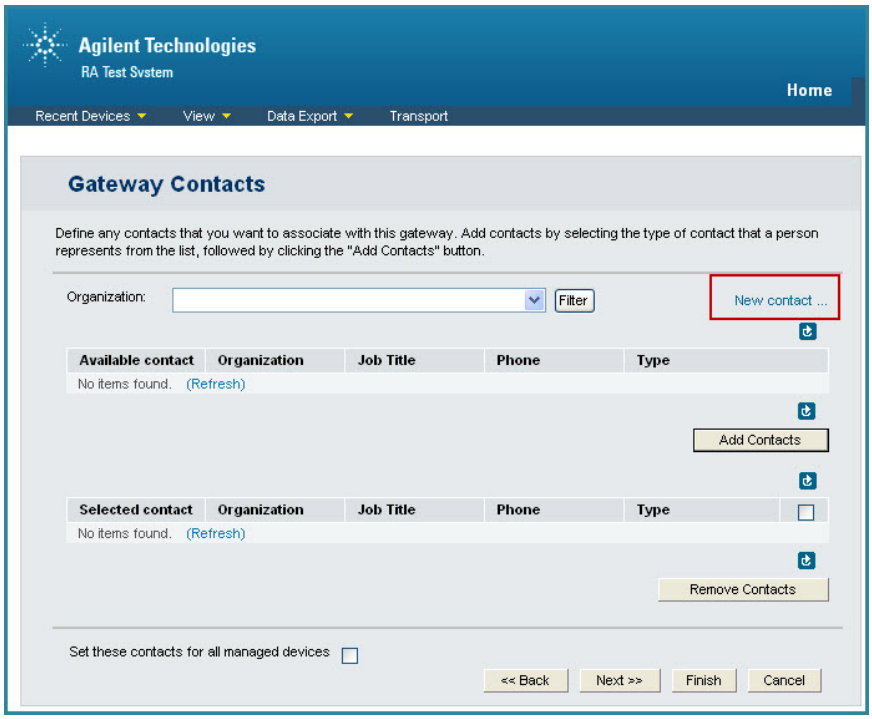
This procedure starts with the Virtual Instrument view. It adds contact information to the Gateway. Customer contact information is obtained from the Site Preparation Configuration tool and by asking the customer for additional contacts.



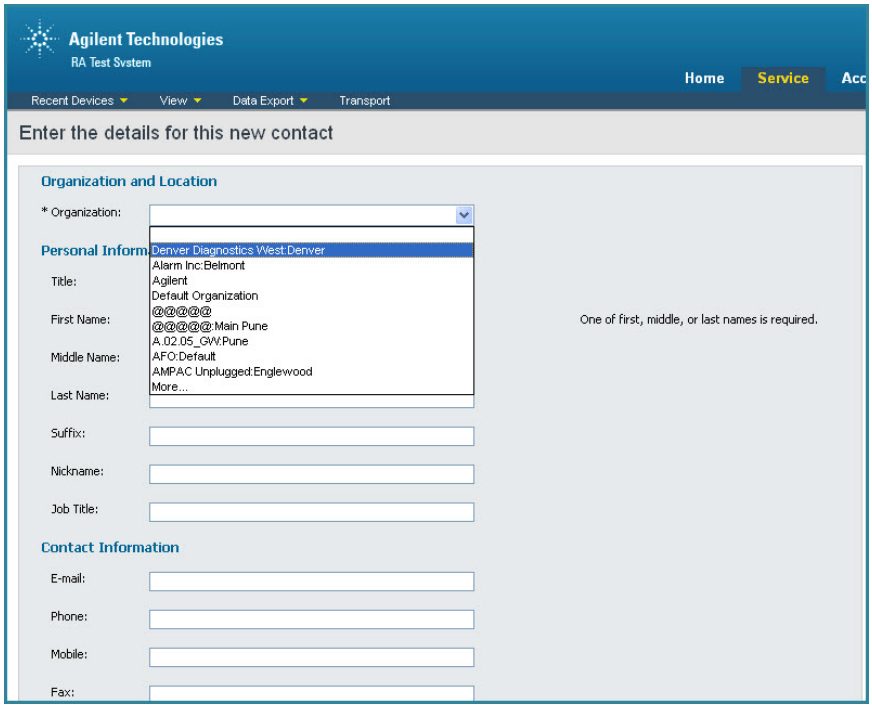
- Select the Gateway link in the Virtual Instrument view



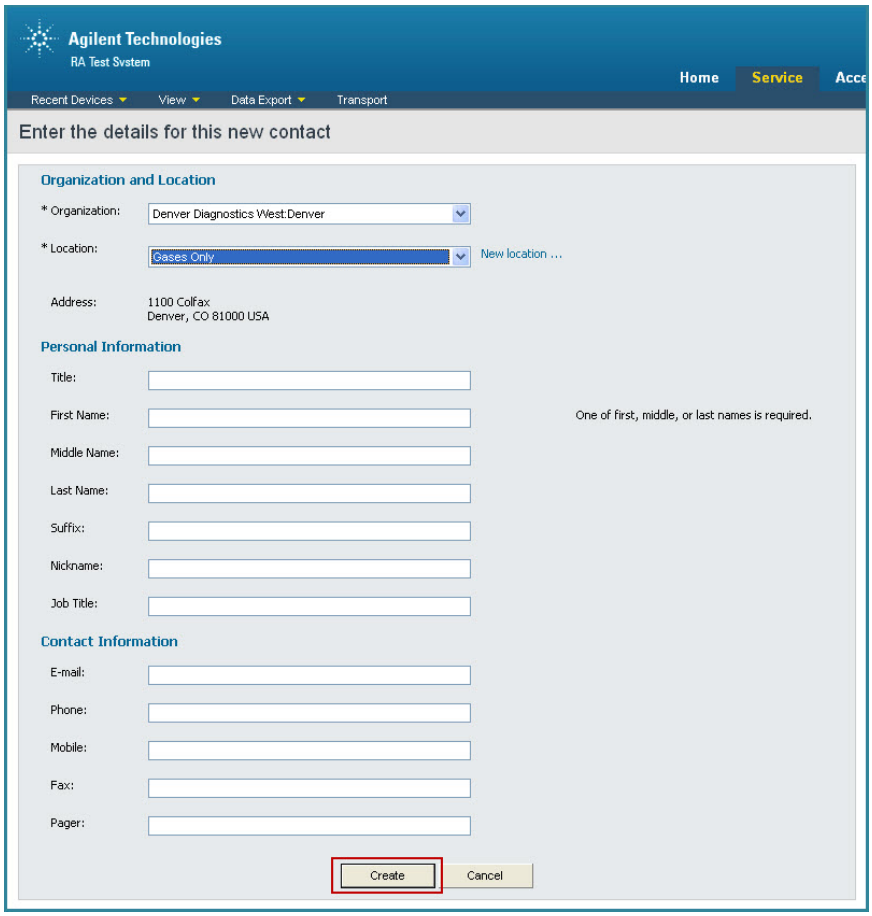
- Select the Manage link in the Contacts area on the left side of window



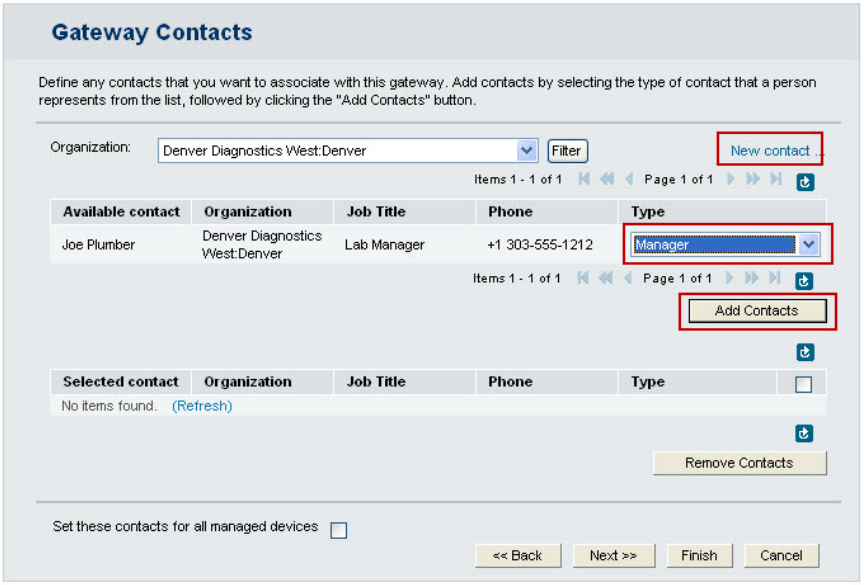
- Select the New Contact link



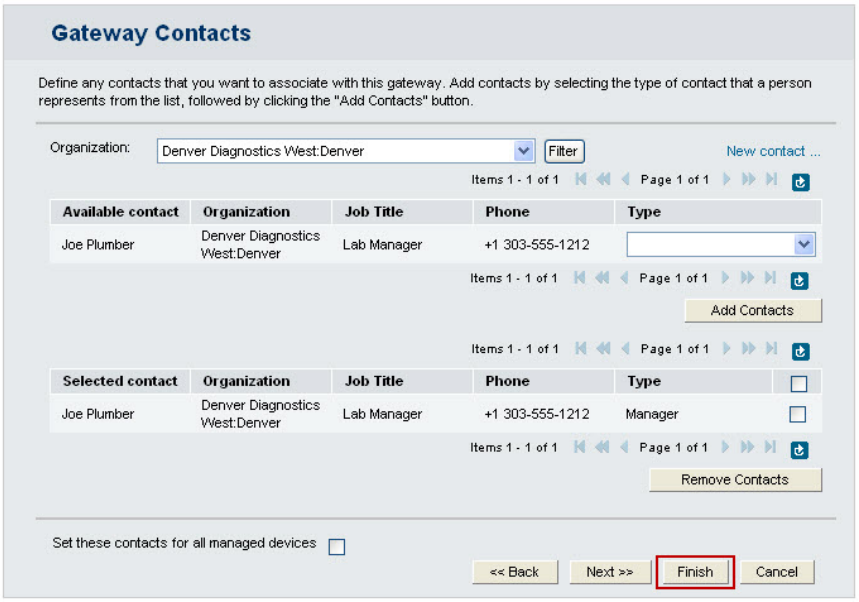
- Select the Organization for the Gateway



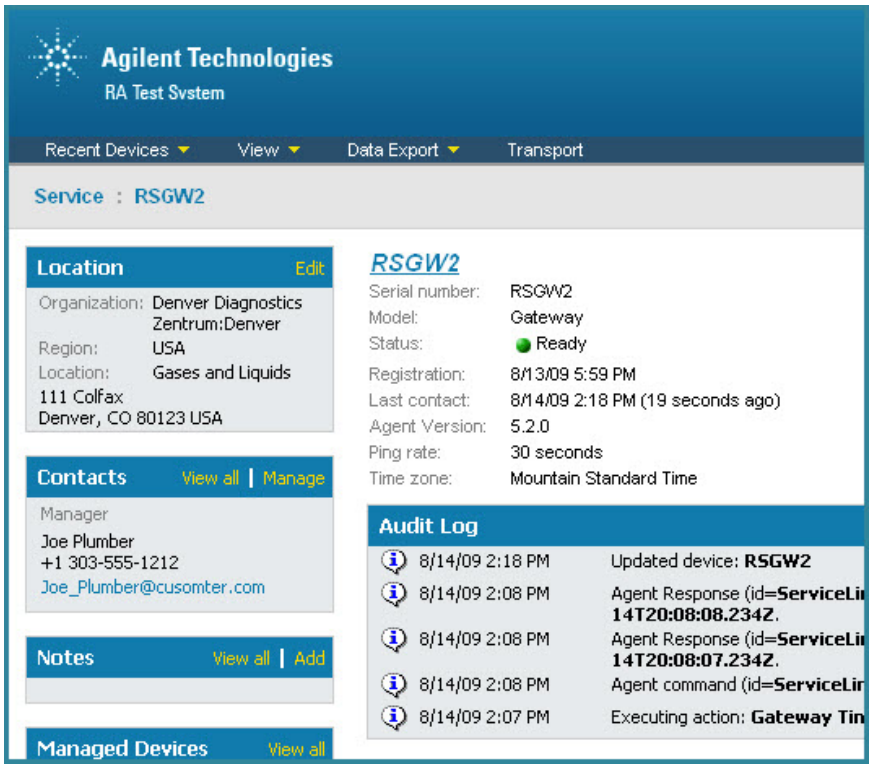
- Select the correct location for the Gateway
- Complete the Contact information
  ****Special**** Add [email cc] to the Job Title field for customers who wish to receive the email notification that is sent to the customer call center for confirmation that the Remote Assist was successful to the Enterprise.
- Select the Create button



- Select the New Contact link to add addition contacts then
- Select the Type that best describes the customer from the drop down Type list
- Select the Add Contacts button > The contact will be added to the lower portion of the window



- Select the Finish button > The contact information will display in the Contacts window

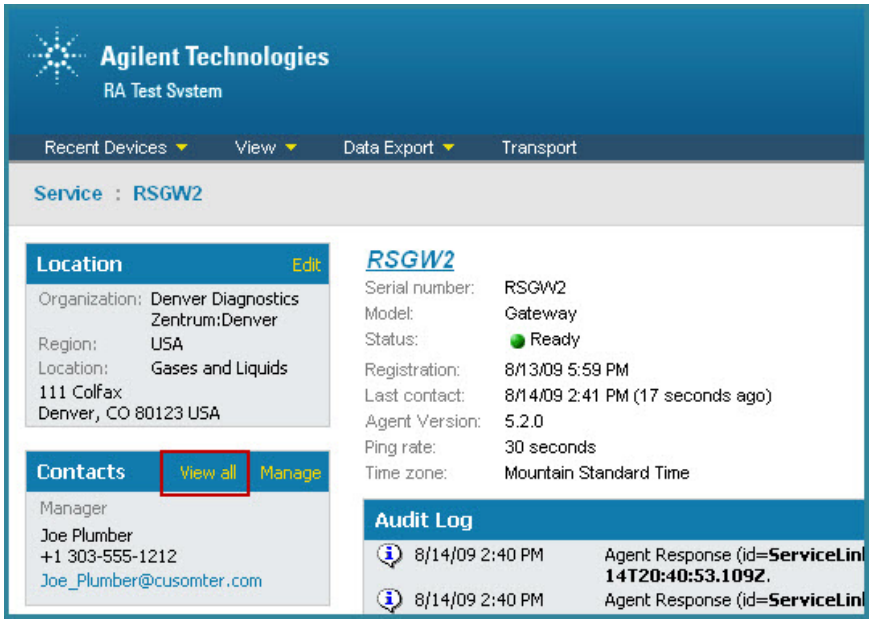


Contact information is displayed in the contacts window

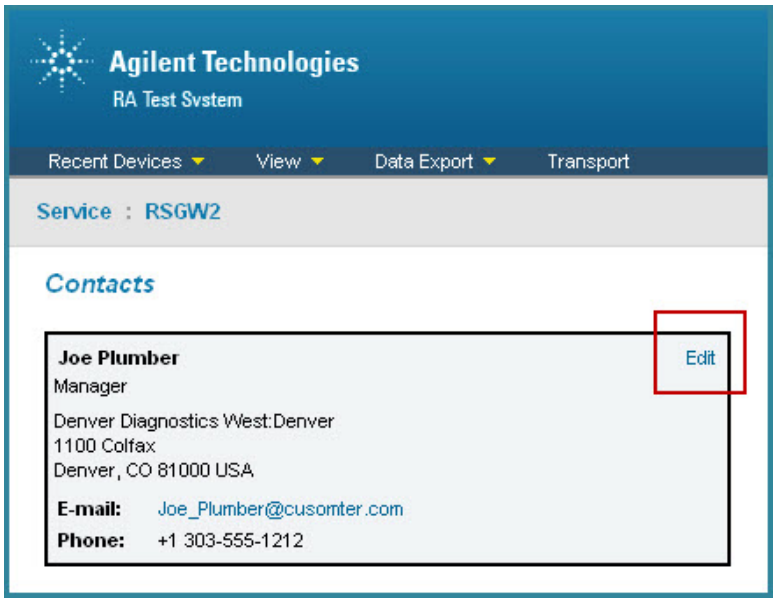
6.7 Configure Remote Assist Emails to go to the Customer

Some customers wish to receive an email when the Remote Assist is received at the Enterprise. This is their confirmation that the Remote Assist was successfully received by Agilent. The Remote Assist (Push for Help) email that is sent to the Customer Call Center can also be sent to the customer.

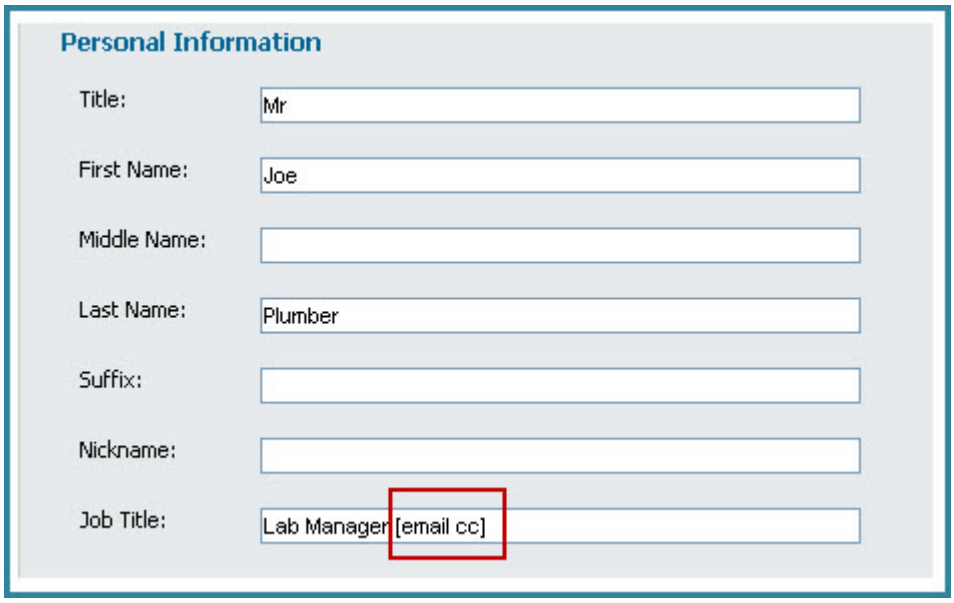
The email notification can be added to an existing customer contact or configured when the contact is first created. This procedure adds the Push for Help email notification to an existing customer starting at the Gateway screen on the Enterprise.



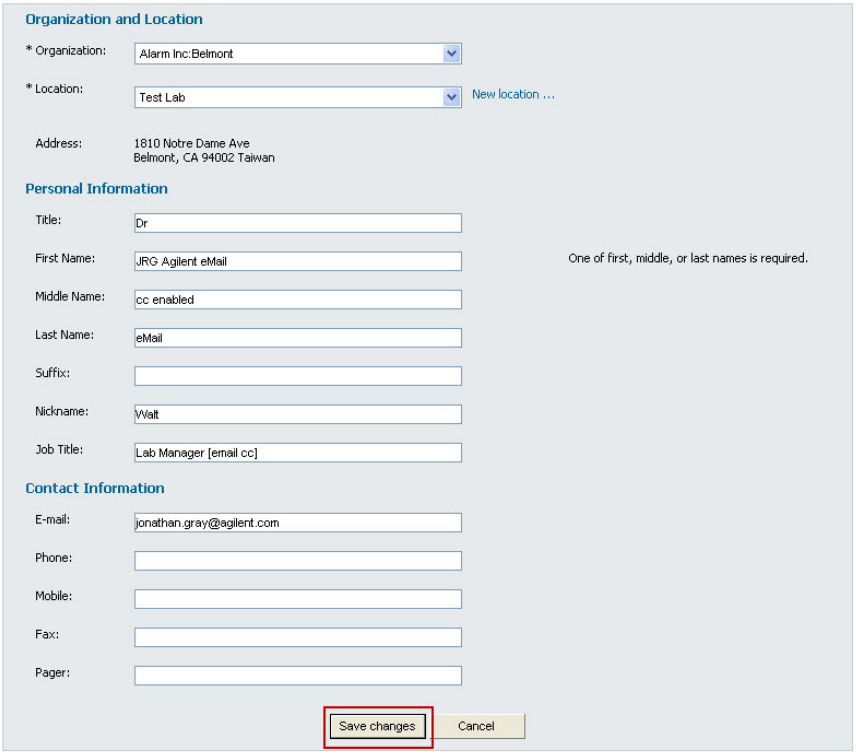
- Select the View all link from the Contacts window on the Gateway view on the Enterprise > Contacts will be displayed



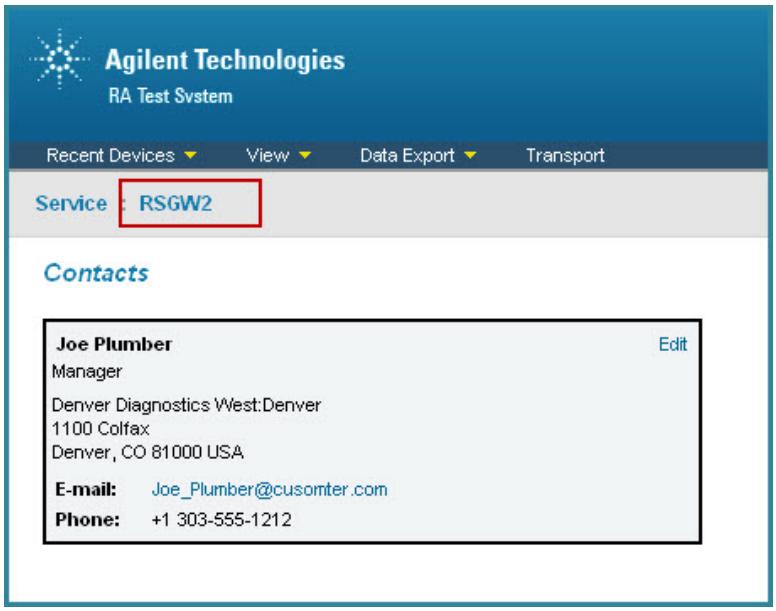
- Select the Edit link for the contact to add email notification



- Add [email cc] to the Job Title description



- Select the Save Changes button

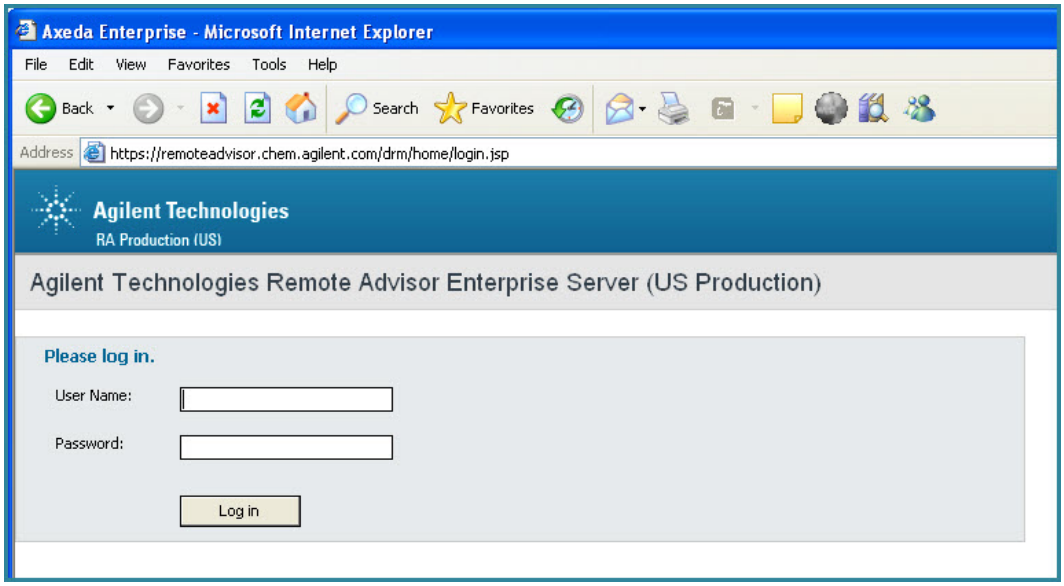


- Select the Gateway link to return to the Gateway view

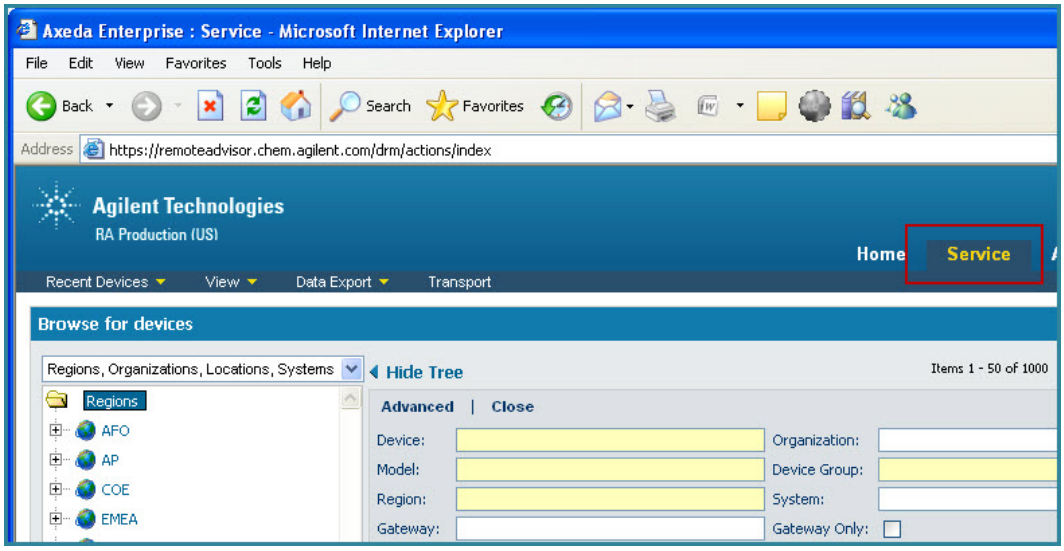
6.8 Verification of System Names

Verify that the systems names are correct using the Enterprise Server.

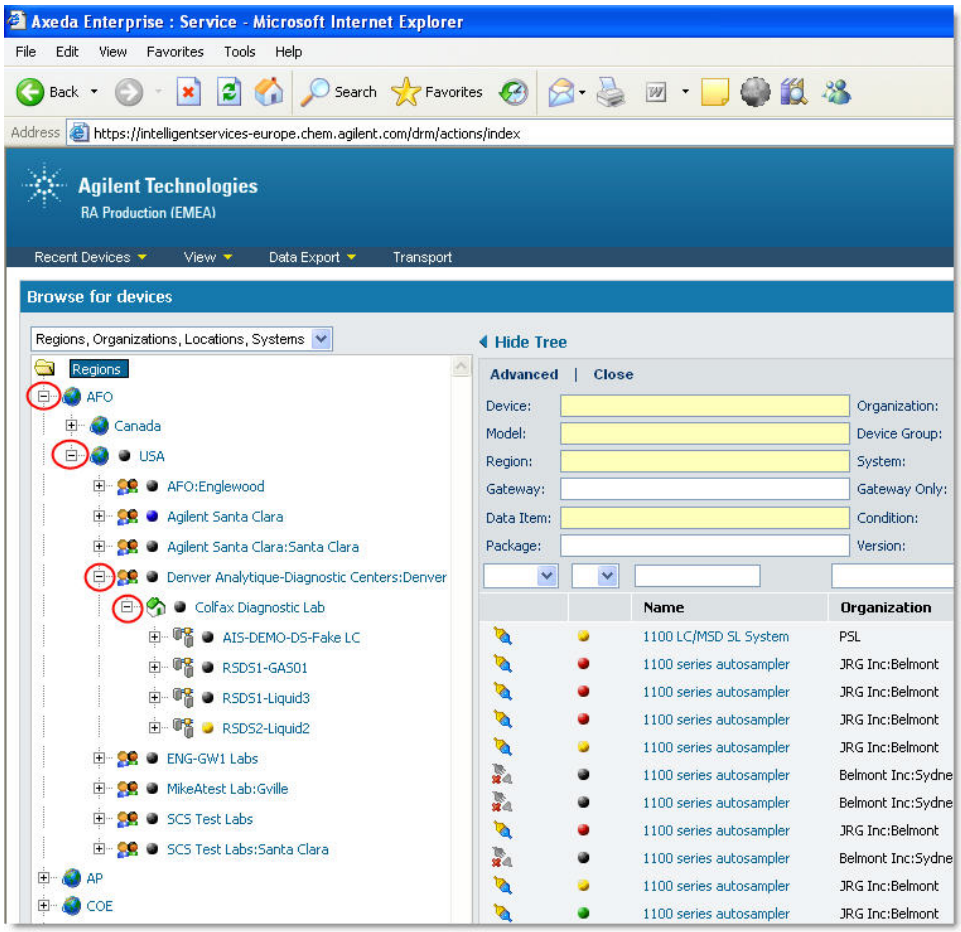
- Start Internet Explorer on the Gateway PC
- Type http://RemoteAdvisor.chem.agilent.com in the Address of Internet Explorer



- Enter your User Name
- Enter your Password
- Select the Log in button



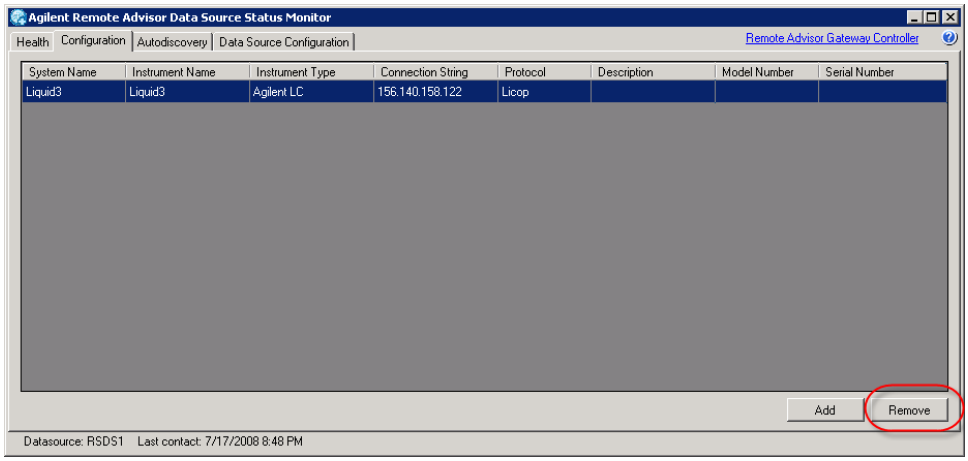
- Select the Service Tab



- Expand the correct Region, Country, and Customer, and location by selecting the + signs
- Verify the system names are correct

6.9 Correcting System Names

- Go to the Data Source of the system that needs correction
- Open the Data Source Status Monitor



- Select the system to be corrected
- Copy the information required to configure the system
- Select the Remove button to remove the system
- Select the Add button add the system back into Remote Advisor
- Complete the configuration form.
- Go to the Gateway and restart the Axeda Gateway Service
  ****Important**** The Gateway service must be restarted to propagate the changes to the Enterprise

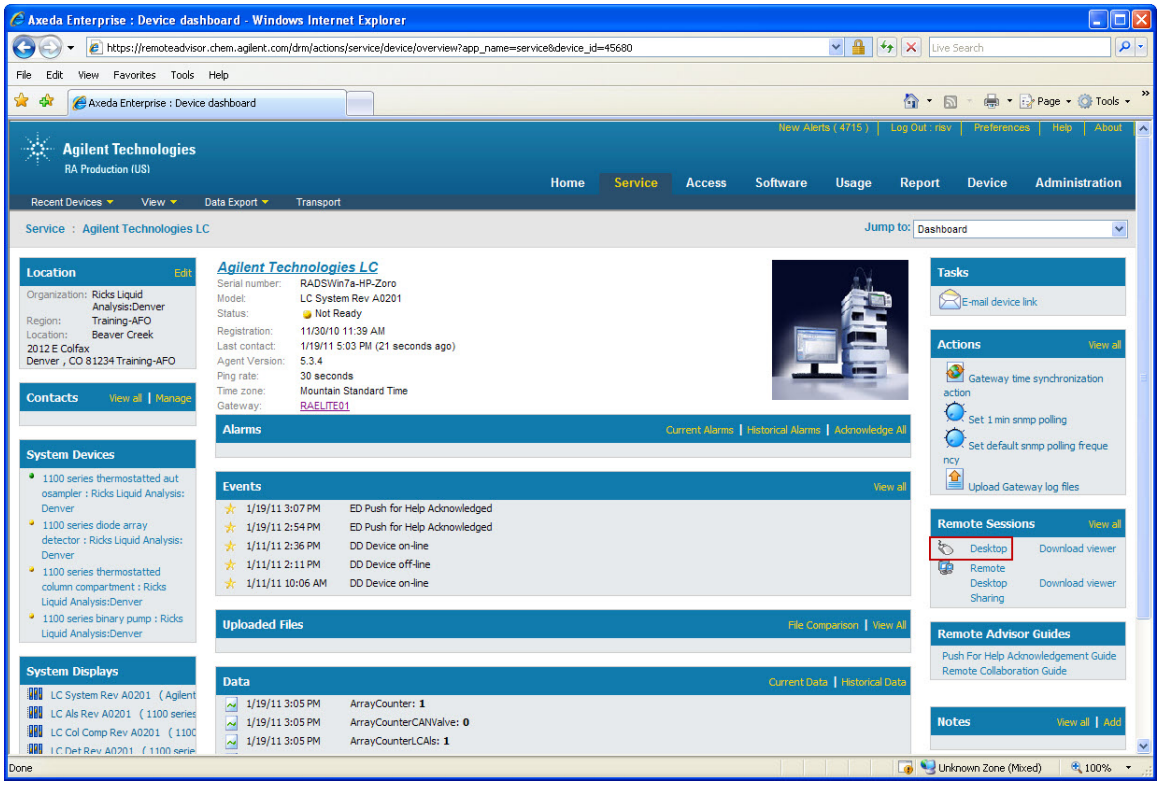
Notify RemoteAdvisorSupport@agilent.com of the name change so the original system can be deleted from the Enterprise.

6.10 Remote Collaboration Test

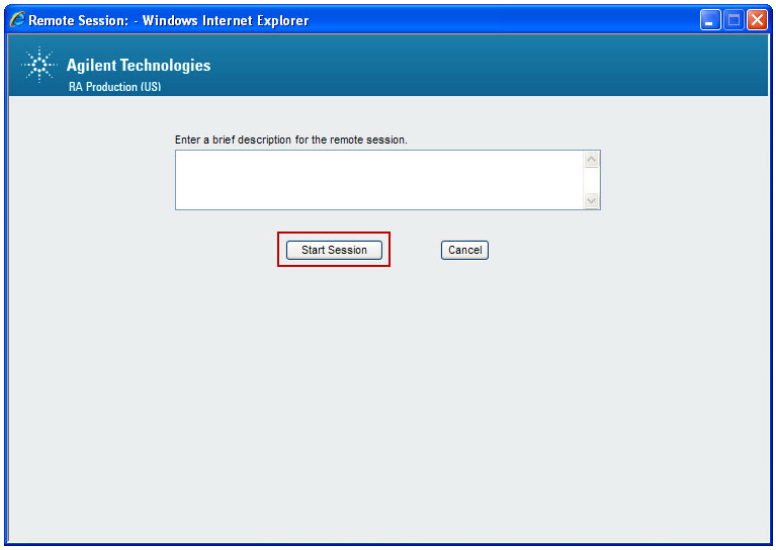
Verification of remote desktop sharing (remote collaboration) to a Data Source PC can be originated from the Gateway PC or other PC with Internet access.

Log into the Enterprise Server

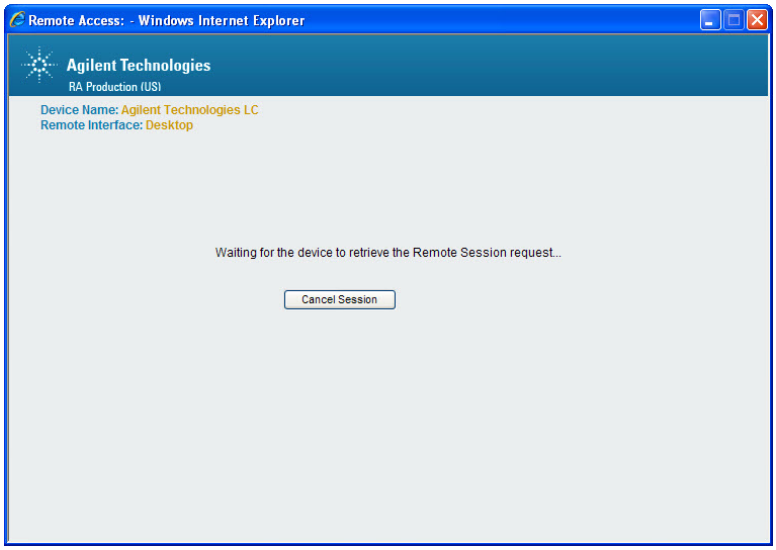
- Navigate to the Virtual Instrument used in the previous procedures in this section



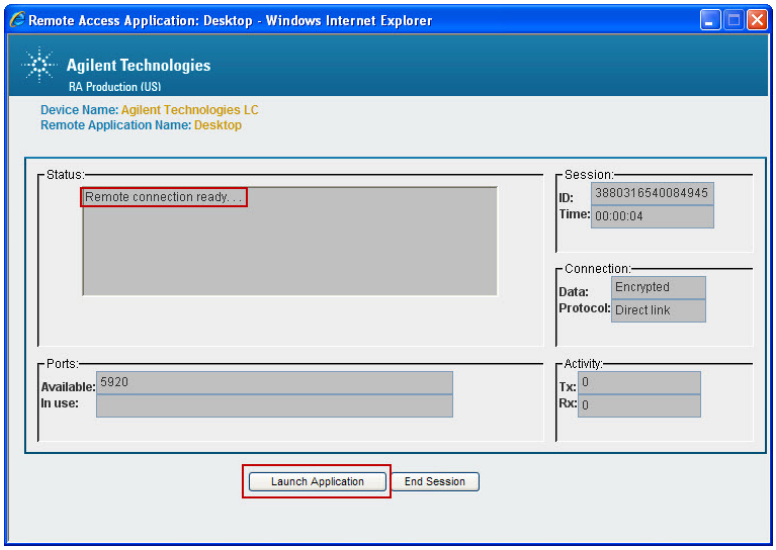
- Select the Desktop link in the Remote Session area
  The Desktop link is used to connect to A.02.06 or later Data Sources using port 5920 - > Remote Session Window opens



- Enter a brief description of the session
- Select the Start Session button

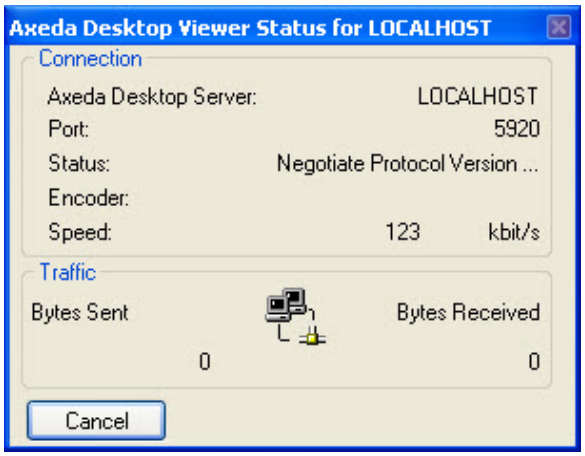


Waiting for the device to retrieve the Remote Session request will display while the session is established



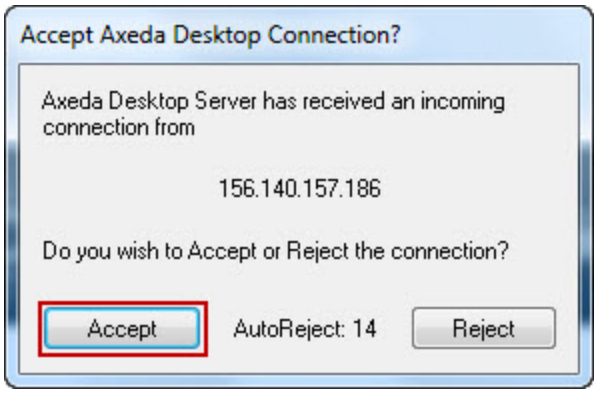
Remote Connection Ready will show in the Status window

- Select the Launch Application button

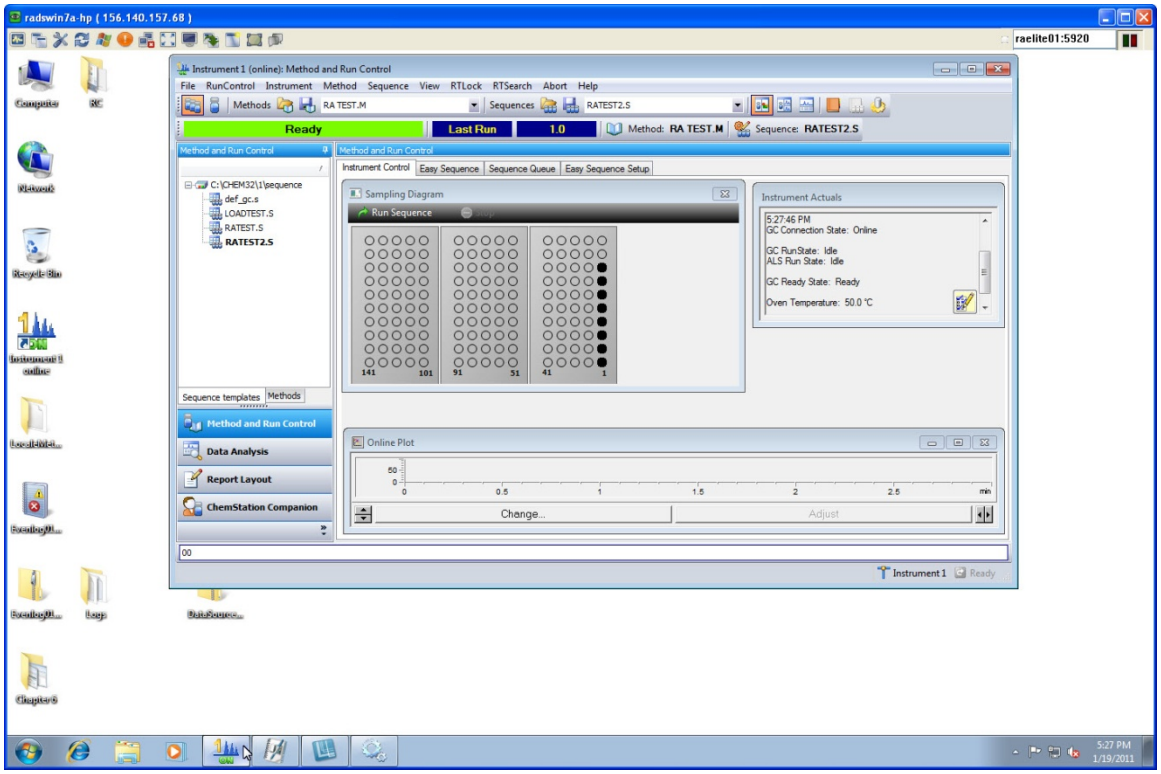


Axeda Desktop Viewer Status for LOCALHOST will display

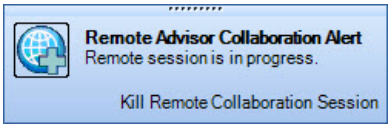
The Data Source PC will display pop up window “Accept Axeda Desktop Connection?”



- Accept the Desktop connection



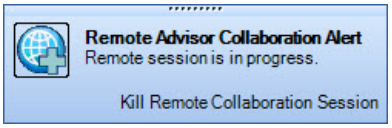
Remote Session is established



Remote Advisor Collaboration Alert Window is displayed on the Remote PC when a Remote Session is in progress

To Kill the Remote Session from the Data Source or Gateway PC

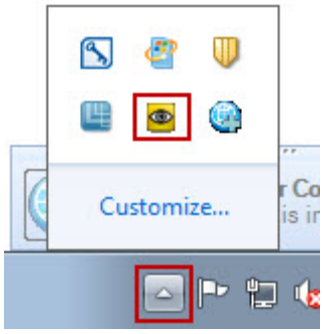
Method 1



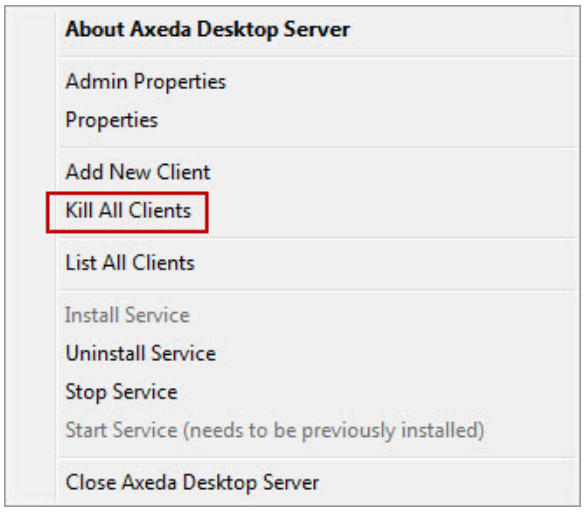
- Select the Kill Remote Collaboration Session on the Remote Advisor Collaboration Alert window

---

Method 2

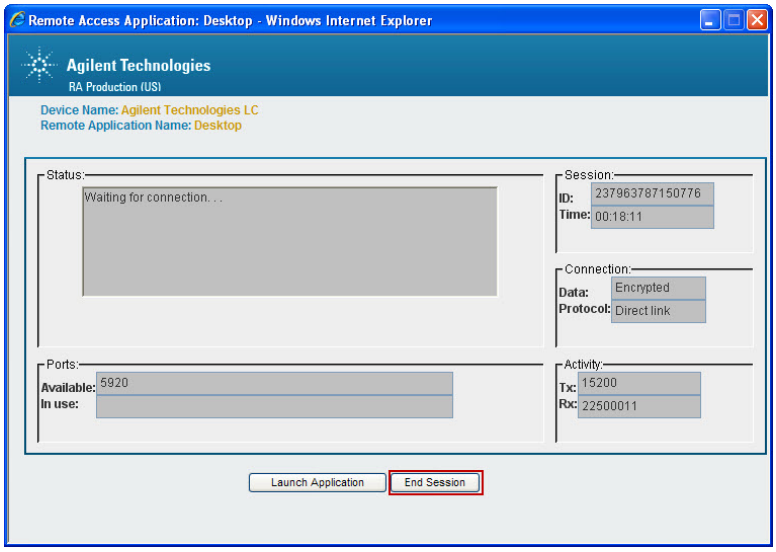


- Select the up arrow in the Windows notification area for Windows 7
- Right click the Windows Axeda Desktop server icon (yellow eye)



- Select Kill all clients to end the session

Ending the session from Enterprise display



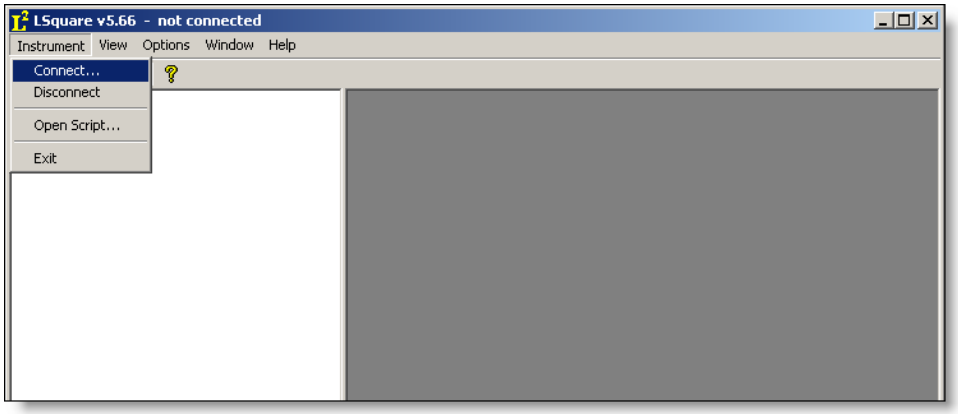
- Select the End Session button to close the session

7 Appendix A: Instrument Communication Utilities

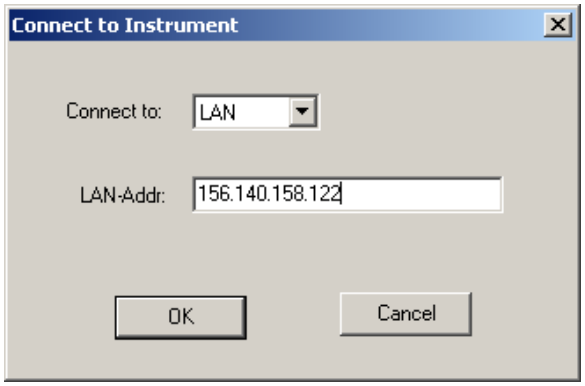
LSquare

LSquare is a diagnostic utility used to verify communications to an Agilent LC before attempting to connect to the LC with Remote Advisor.

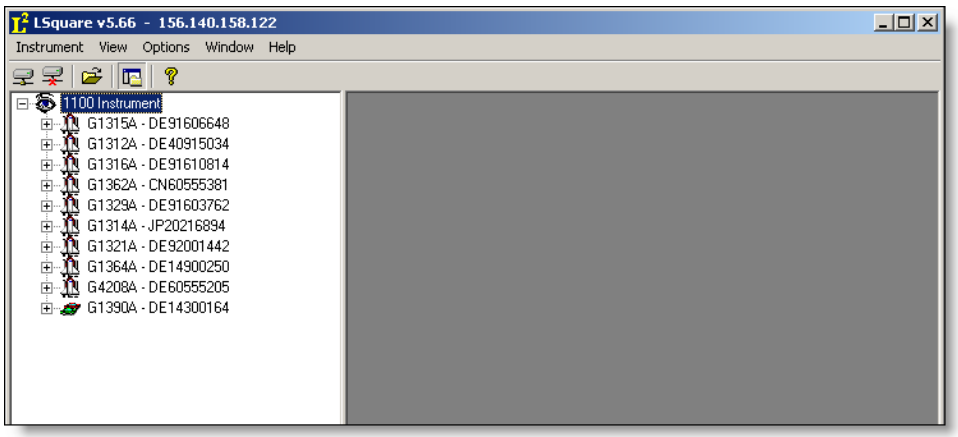
- Browse the Remote Advisor Installation CD to :\utilities\LSqauare
- Copy the LSquare folder and its contents to a portable memory stick or a temporary folder on the Data Source PC.
  ****Note**** The LSquare cannot run from the installation CD. LSquare is portable from PC to PC if copied to memory stick.
- Open the LSquare folder in it's new location
- Double click Lsquare.exe > LSquare v5.66 window opens



- Select Instrument
- Select Connect



- Select instrument connect type in the Connect to drop down menu
- Enter the IP address of the LC when LAN is selected
- Select the OK button

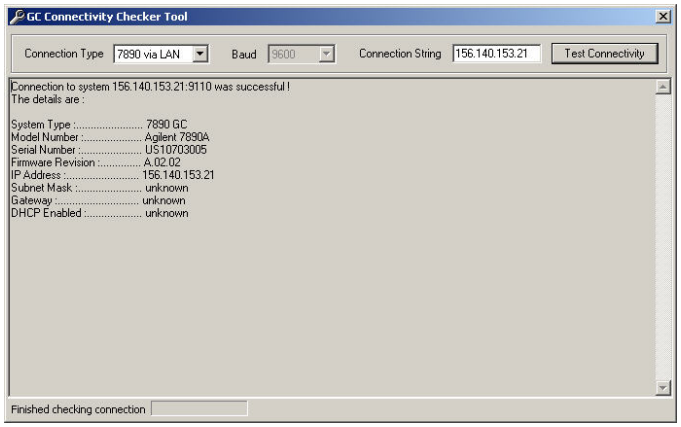


LSquare successfully connects to the LC when an instrument is displayed with a list of modules

GC ConnectivityChecker Tool

The GC ConnectivityChecker Tool is a diagnostic utility used to verify communications to an Agilent GC before attempting to connect to the GC with Remote Advisor.

- Browse the Remote Advisor Installation CD to :\utilities\GCConnectivityTool
- Double click GCConnectivityCheckerTool.exe

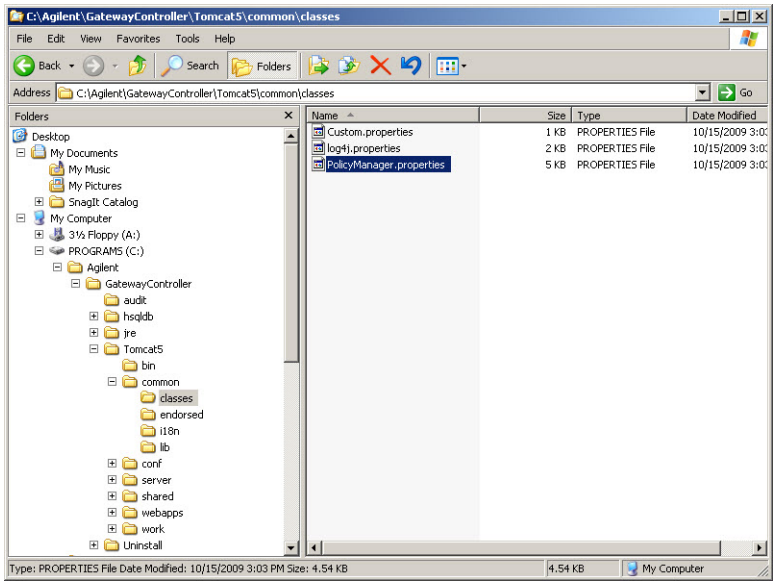


- Select the Connection Type
- Select the Baud if using Serial
- Enter IP address of the GC or the PC Com port in Connection String
- Select the Test Connectivity button > The connection status will be displayed

8 Appendix B: Gateway Upgrade Preparation

8.1 Saving SMTP Mail Server Settings

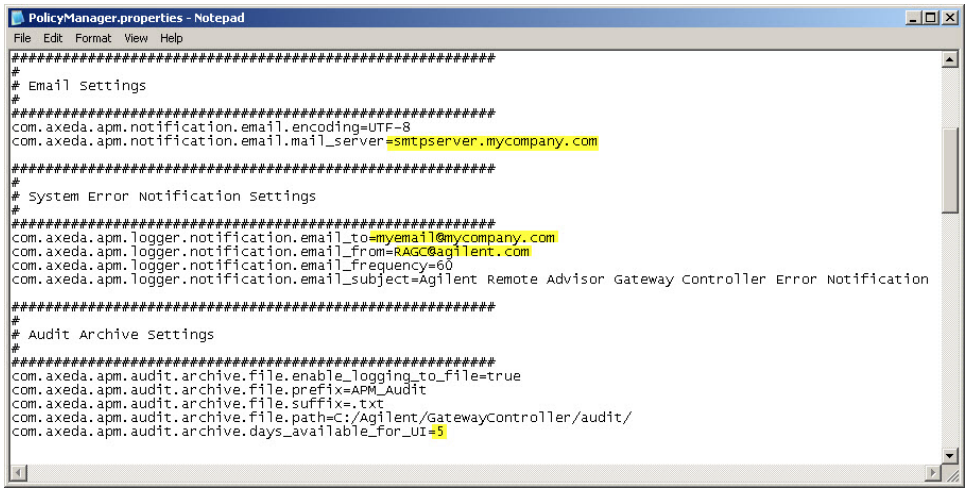
****Important**** SMTP Mail server settings are not archived for the re-installation for Remote Advisor Gateway when upgrading from a previous version. This procedure captures the SMTP Mail Server settings for the Axeda Policy Manager reinstallation.



- Browse with Windows Explorer to C:\Program Files\Agilent\Remote Advisor\Gateway Controller\Tomcat5\common\classes
- Save the PolicyManger.properties to the desktop for future reference with reinstalling the Gateway Software

Reinstallation

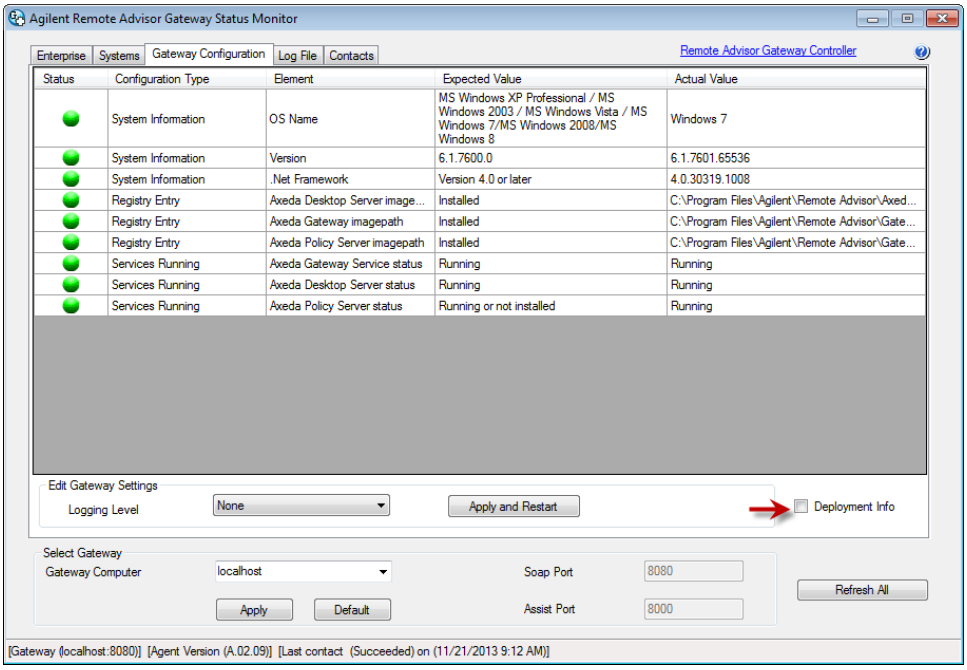
- Open the PolicyManger.properties file previously saved to the desktop



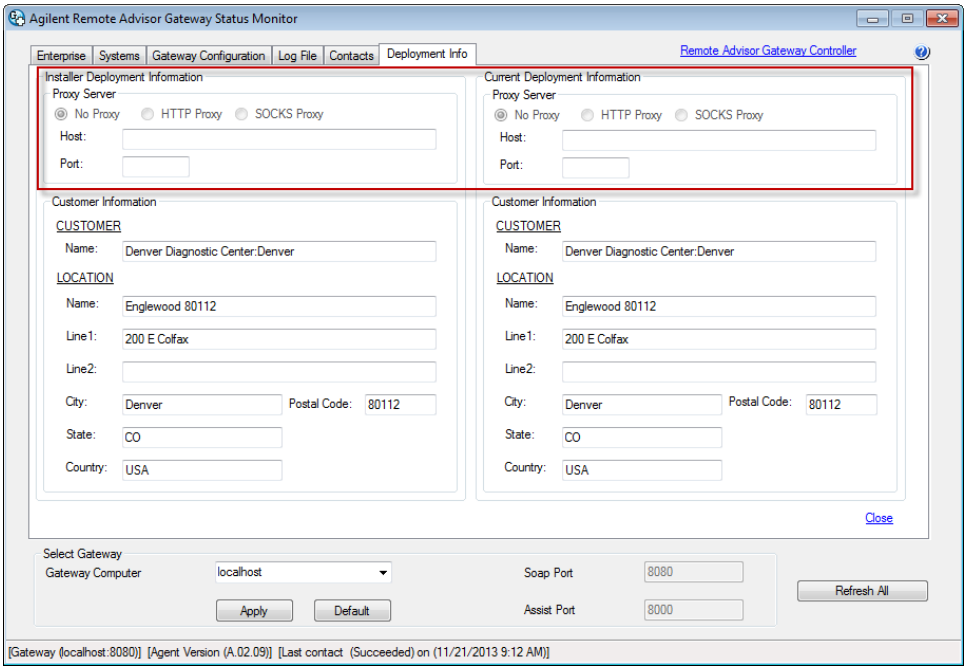
- Copy the SMTP Server address when prompted for SMTP Mail Server Address
- Copy the email_to email address when prompted for the email_to address
- Copy the email_from email address when prompted for email_from address
- Copy the Archive.days_available_for_UI number when prompted for Archive days

8.2 Collect Proxy Setting from the Gateway Status Monitor

Proxy settings can be collected from the Gateway Status Monitor or the Deployment Utility. The Gateway must be communicating to the Enterprise for the Gateway Status Monitor to display the Proxy settings.



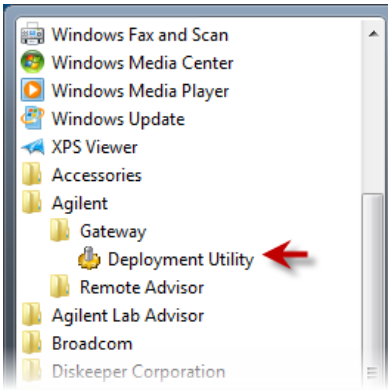
- Check the Deployment Info check box
  The Deployment Info tab will display on the Gateway Status Monitor



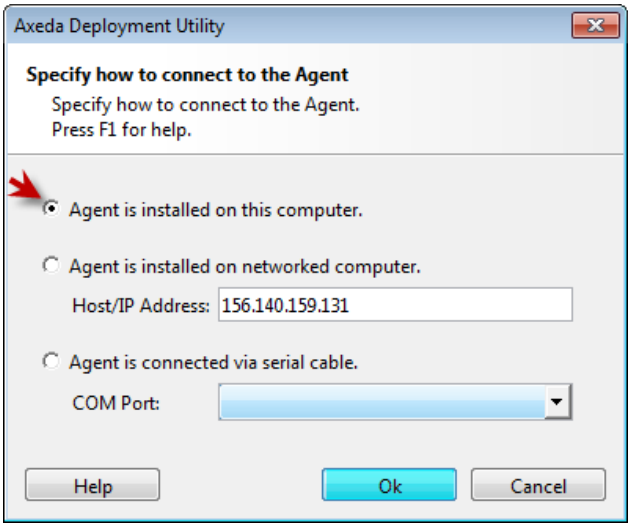
- Document the Proxy information Proxy Server section of the Gateway Status Monitor for re-installation

8.3 Collect Proxy Settings from the Deployment Utility

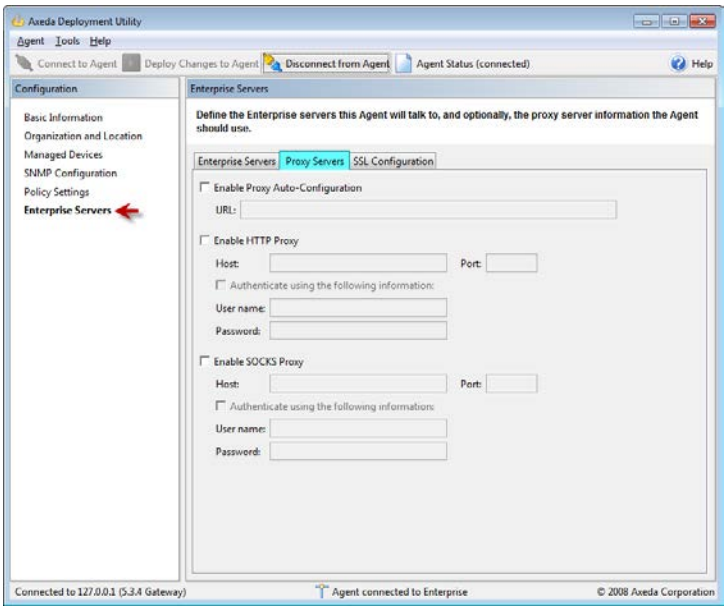
The Proxy Server Settings for the Gateway are verified from the Deployment Utility. Always verify the Proxy information before starting a Gateway Software re-installation



- Select the Windows Start button
- Select All Programs
- Select Agilent - >Gateway ->Deployment Utility
  The Axeda Deployment Utility will open



- Select Agent is installed on this computer
- Select the OK button



- Select Enterprise Server from the menu
- Select the Proxy Servers tab
- Record the Proxy information

9 Appendix C: Modify Gateway Controller Settings

The SMTP E-mail server URL is configured during installation of the Gateway software. E-mail from the Gateway Controller may not be received by the E-mail recipient. An incorrect SMTP E-mail server URL is a possible cause.

Modification of the SMTP E-mail server URL and other E-mail configuration settings are as follows:

- Open Windows Explorer
- Browse to the : :\Program Files\Agilent\Remote Advisor\Gateway Controller\Tomcat5\common\classes folder
- Open the file PolicyManager.Properties with WordPad or Notepad
- Scroll to the Email Setting section

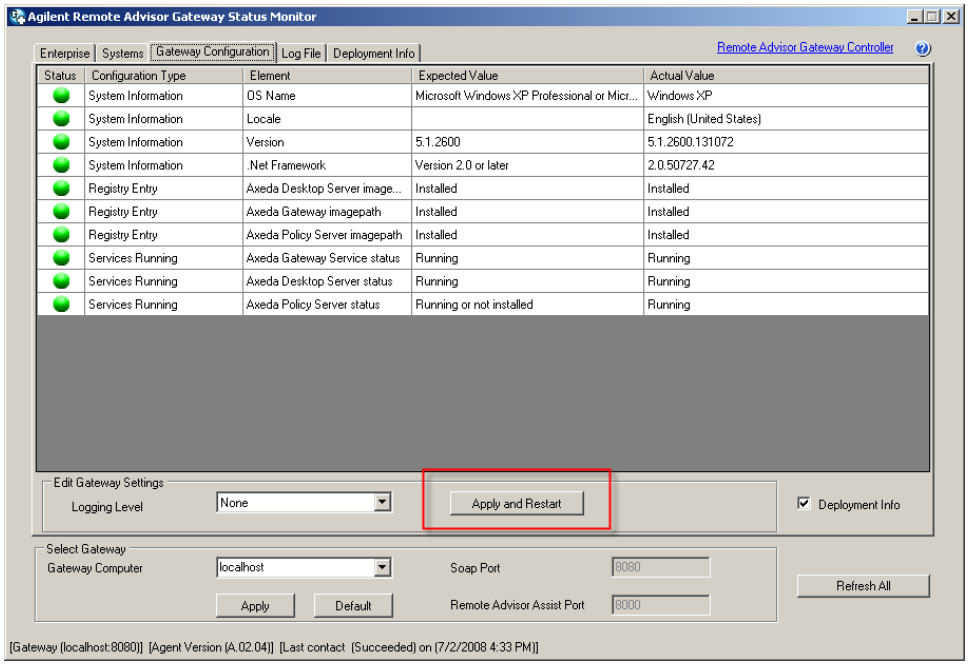
```
##################################################################
#
# Email Settings
#
##################################################################
com.axeda.apm.notification.email.encoding=UTF-8
com.axeda.apm.notification.email.mail_server=cos.smtp.agilent.com
##################################################################
```

cos.smtp.agilent.com is an example of the SMTP E-mail server URL

- Modify the SMTP E-mail server URL to the correct the name
- Save the file PolicyManager.Properties
- A restart the Gateway Controller is required for the change to take effect.

To restart the Gateway Controller

- Double click the Gateway Status Icon in the Windows notification area



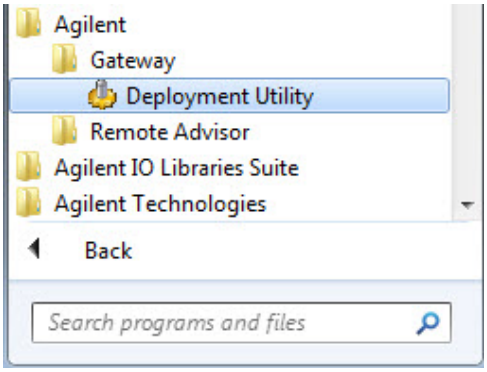
- Select the Gateway Configuration tab
- Select the Apply and Restart button in the Edit Gateway Settings in the Gateway Configuration tab

10 Appendix D: Axeda Deployment Utility

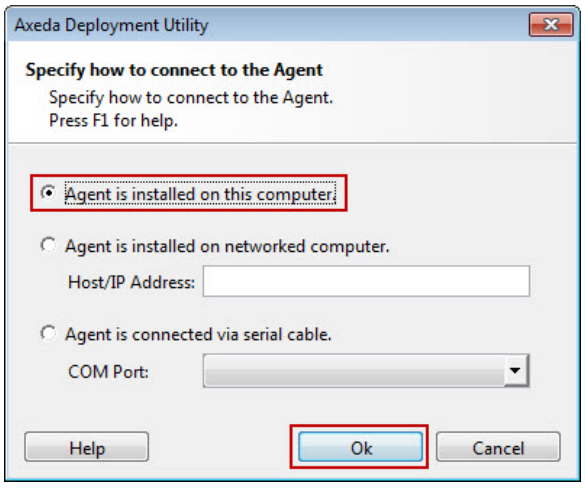
10.1 Gateway Deployment

The Axeda Deployment Utility is a standalone application that is run independent of the Gateway software installation. It is not necessary to execute the Axeda Deployment Utility if the Gateway has been successfully deployed to the Enterprise.

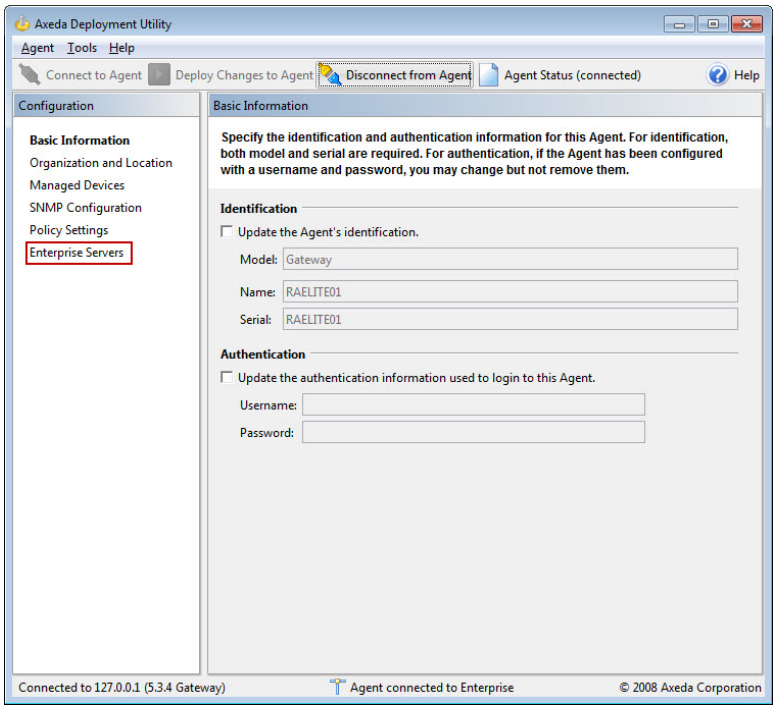
The deployment Utility can be used to correct or modify Proxy server information and modify Organization and Customer Location information that was entered incorrectly.



- Select the Windows Start button
- Select Programs
- Select Axeda Deployment from the menu
- Select Axeda Deployment > Axeda Agent Deployment Utility opens

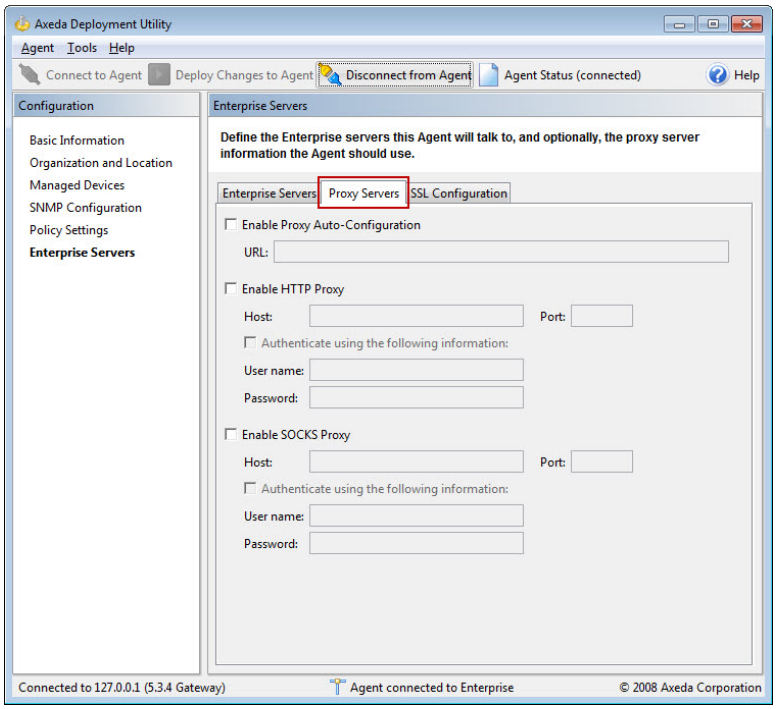


- Select Agent is installed on this computer
- Select the OK button > Axeda Deployment Utility

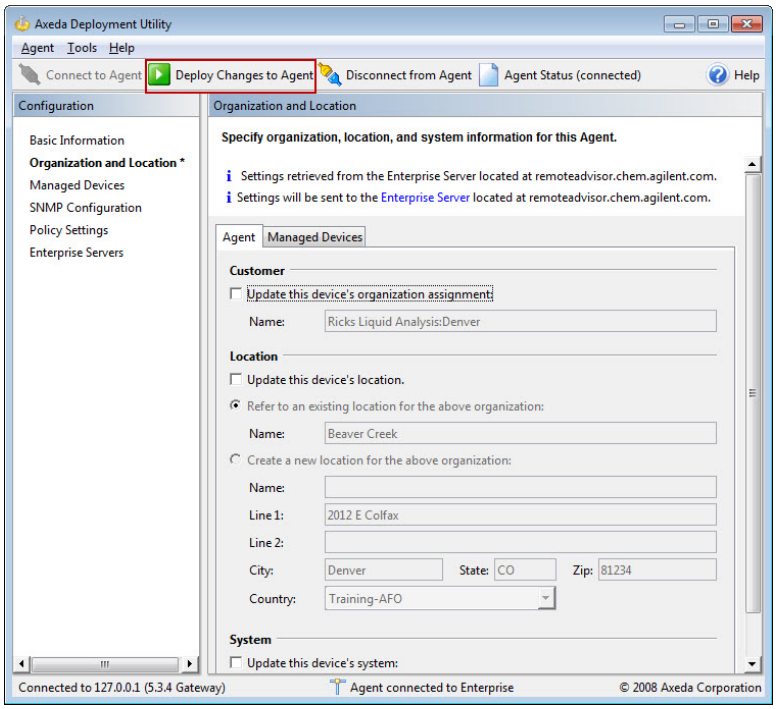


Connected to 127.0.0.1 (5.1 Gateway) is displayed in the lower left corner of the Axeda Agent Deployment Utility

- Select Enterprise Server in the Configuration Menu > Axeda Deployment Utility Enterprise Servers



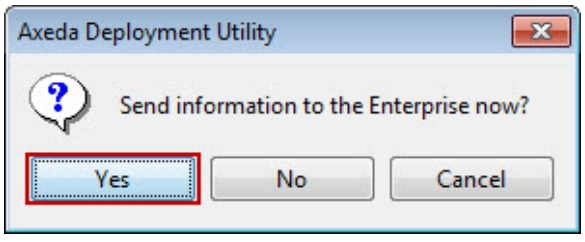
- Select the Proxy Servers tab
- Enter the correct Proxy information
- Select Organization and Location in the configuration menu



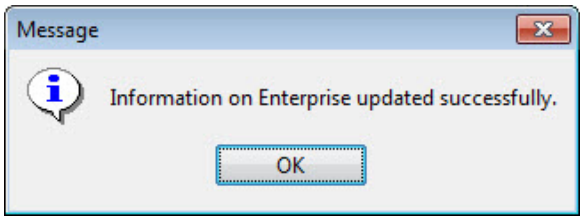
Customer information will be filled in if the Gateway was successfully deployed. This information can be modified and will be posted on the Enterprise.

- Complete or modify the customer information as necessary.
- Select the Deploy Changes to Agent when complete
  These fields are required before deployment
  - Customer Name
  - Location Name
  - Location Line 1
  - Location City
  - Location State
  - Location Zip (Postal Code)
  - Location Country

Axeda Deployment Utility

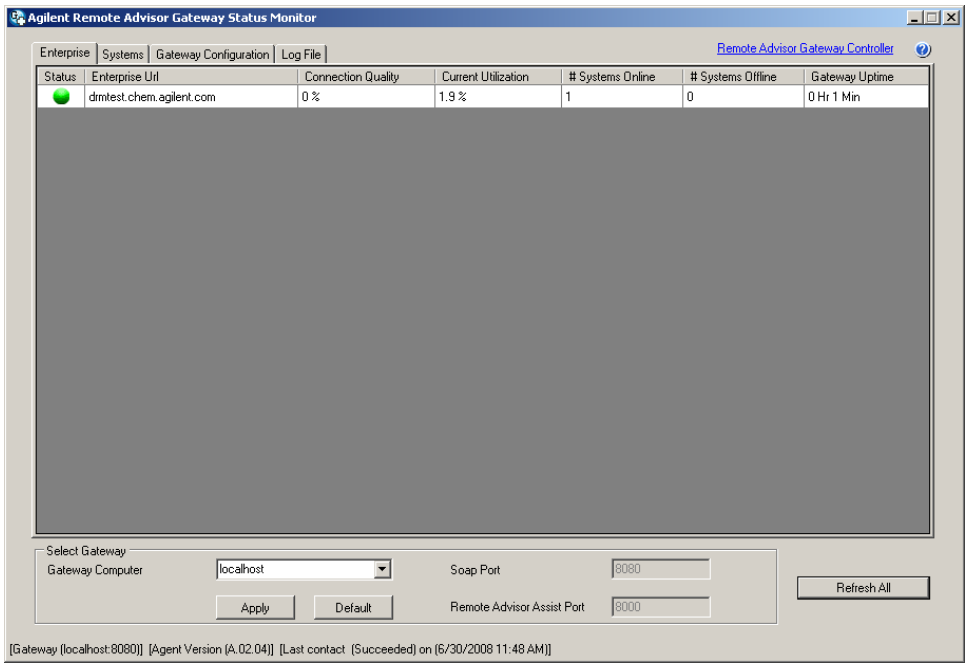


- Select the Yes button



- Select the OK button
- Close the Deployment Utility

Agilent Remote Advisor Gateway Status Monitor-Enterprise



The Status on the Agilent Remote Advisor Gateway Status Monitor will turn green within three minutes indicating good communications to the Enterprise Server

11 Appendix E: Remote Collaboration and Script Failure

The success of uploading scripts and Remote Collaboration is dependent on Data Source to Gateway communicates. Communications require computer name to IP address name resolution. This section is guidance for Remote Collaboration to Data Source failures

Some Laboratory networks are isolated from the corporate network for security purposes to keep the laboratory safe from computer virus and malicious attack. The degree of security varies from one laboratory to another. Some of the security configurations affect the function of Remote Advisor scripts and Remote Collaboration.

Isolated networks generally do not have DNS. DNS associates an IP address with a computer name. Most programs use the computer name when communicating to other computers. NetBIOS over TCP/IP is a network component that performs computer name to IP address mapping when DNS in not available. NetBIOS may be disabled in some isolated laboratory networks for security reasons. Remote Collaboration will not work to the Data Source without some sort of computer name to IP address mapping.

Hosts files are used for computer name to IP address mapping when DNS is not present and NetBIOS is disabled. Starting with release A.02.06 the Data Source software can be configured for IP address mapping which writes the entry into the hosts file. Remote Advisor communications will work successfully between the Data Source and Gateway.

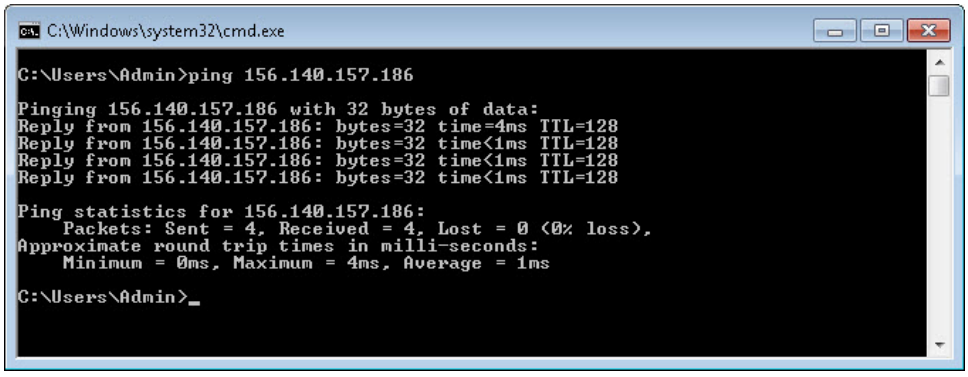
Remote Collaboration from the Enterprise to the Data Source may not be successful without modification of the Hosts file in the Gateway PC.

11.1 Test for IP Address Mapping

IP Ping from the command window can be used to verify IP address mapping for PC to PC communications.

Ping by IP address

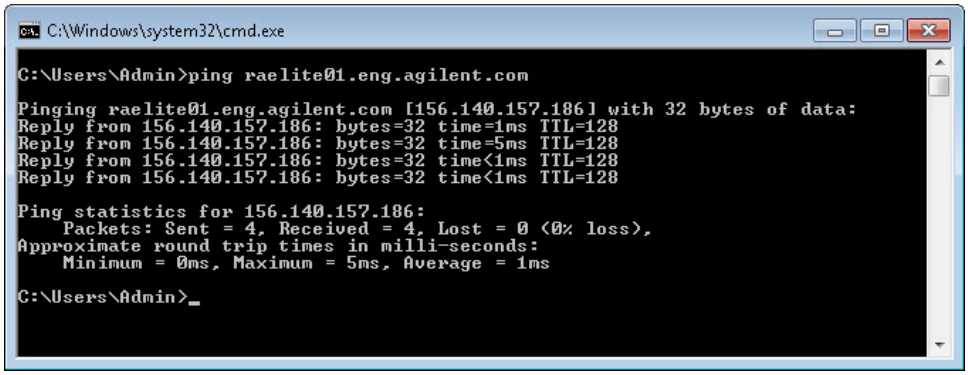
- Select the Windows Start button or Window icon depending on Windows Version
- Select Run for Windows XP or Windows Server 2003
- Type cmd in the Run or Search area
- Press Enter > The Windows command opens
- Type ping [ip address] at the command prompt and press enter
  A successful ping will return a ping reply as shown below



An unsuccessful ping indicates a communication problem between the computers. PC firewall, wrong IP address, or other network configuration errors could be the cause.

Ping by Computer name

- Type ping [computer name] at the command prompt and press enter
  A successful ping will return a ping reply as shown below

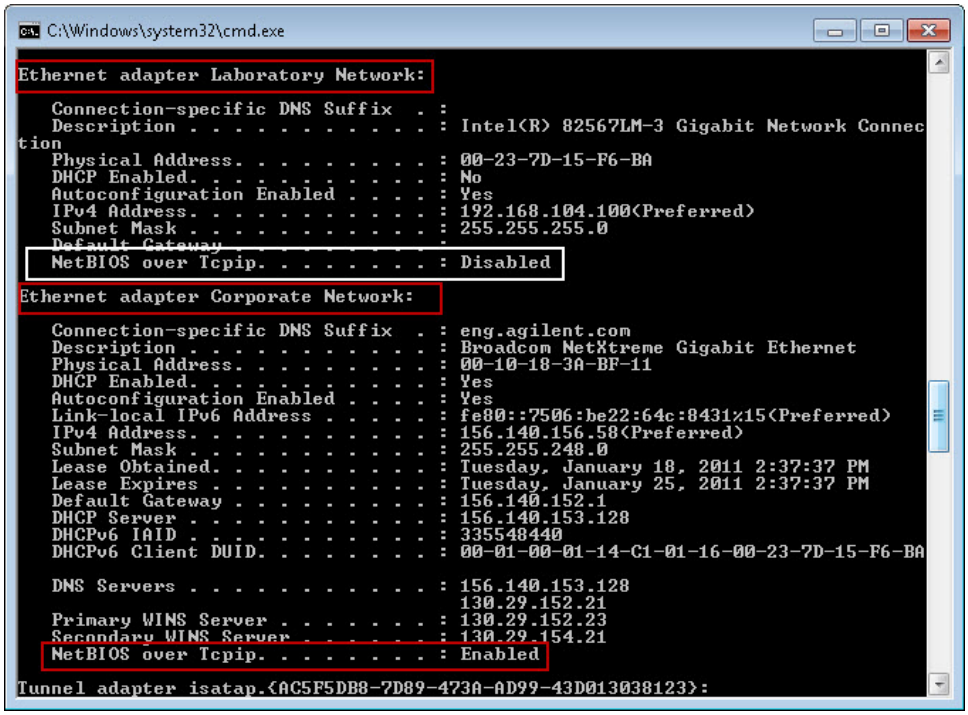


A successful ping by IP address and unsuccessful ping by name may be caused by NetBios being dissabled on the isolated network.

11.2 NetBios configuration Check

Whether NetBios is enabled or disabled can be verified several ways. The simplest way is to use the Windows command window.

- Type ipconfig/all at the command prompt and press enter

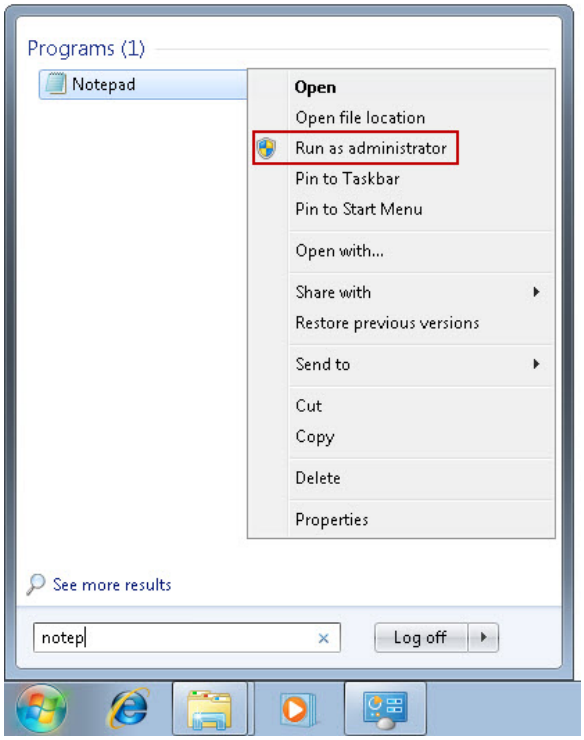


This example shows NetBios disabled for the Laboratory Network and NetBios enabled for the Corporate Network

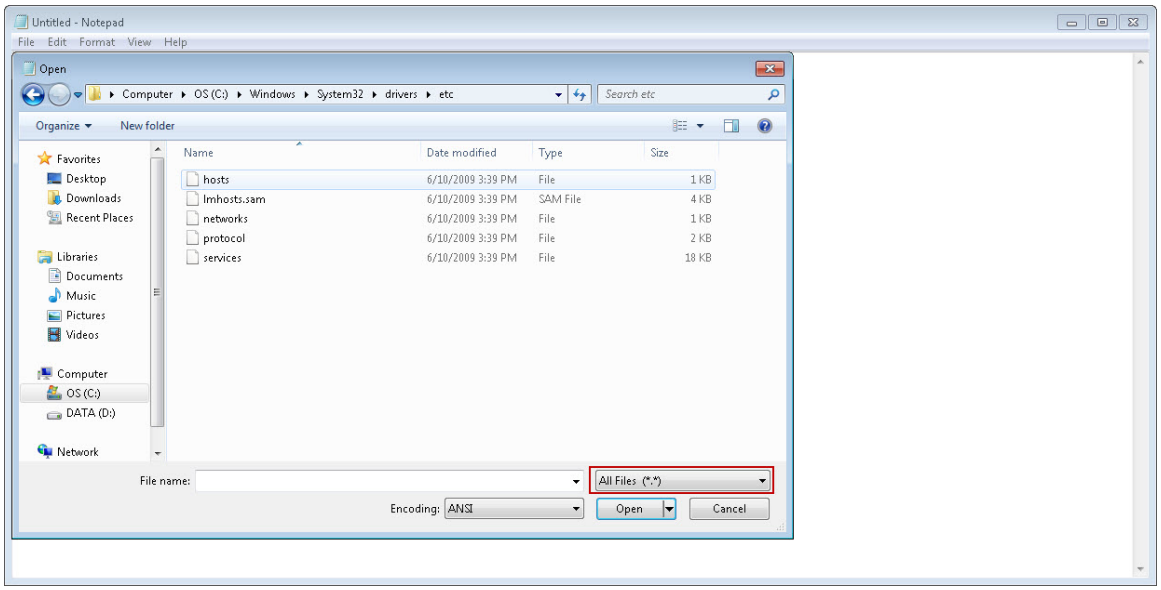
Entry of the Data Source PC names and IP address in the hosts file is recommended for this configuration.

11.3 Gateway Hosts File Configuration

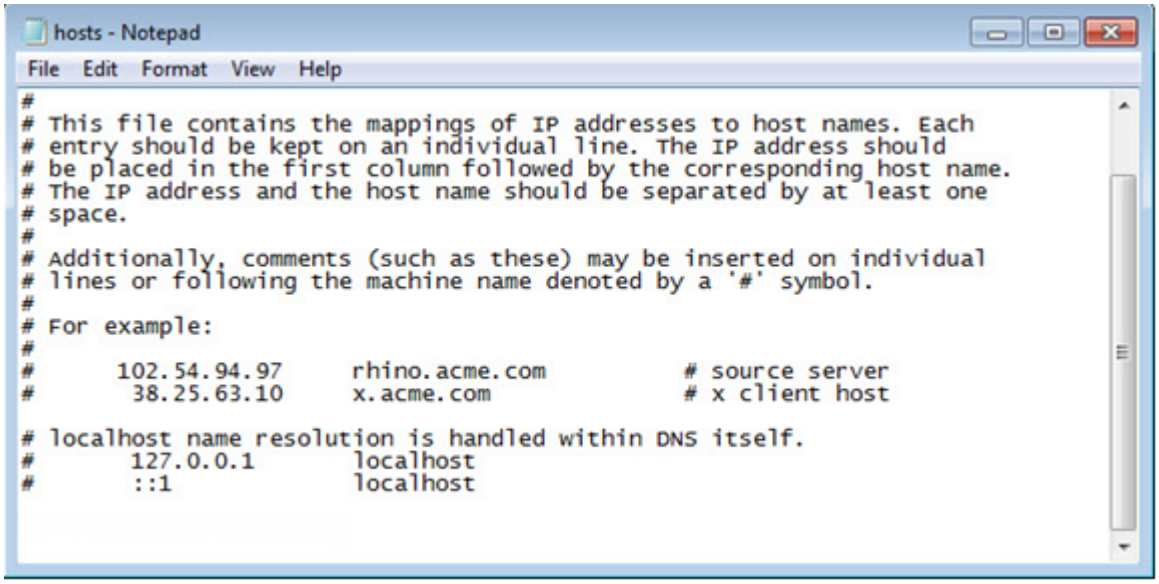
Windows uses the entries in the hosts file to map IP addresses to PC names. The hosts file is modifies with Windows Notepad. One line entry is added for each PC. Windows 7 has added security for the modification of certain files. This procedure explains how to edit the hosts file on a Windows 7 PC. The modification of the host files with earlier versions of Windows is similar.



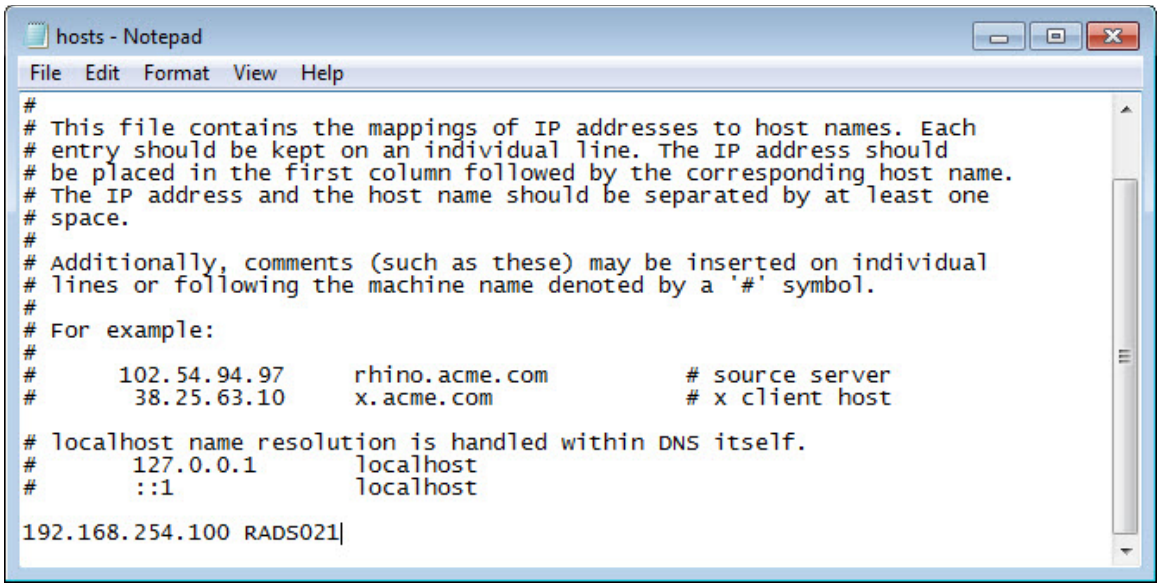
- Select the Windows Start button
- Type notepad in the search area > Notepad will display in the list of programs when the first characters are typed
- Right click Notepad
- Select Run as administrator > Windows Notepad opens. Administrator privileges are needed to save the hosts file.



- Select File from the toolbar
- Select Open from the menu
- Browse to the C:\Windows\System32\drivers\etc folder
- Change the file type to All Files (*.*)
- Double click the hosts file > Notepad opens the hosts file



The hosts file opens in Notepad. The example above shows a hosts file that has not been modified. All lines start with #. Lines starting with # are comments. The computer does not read the lines starting with #.



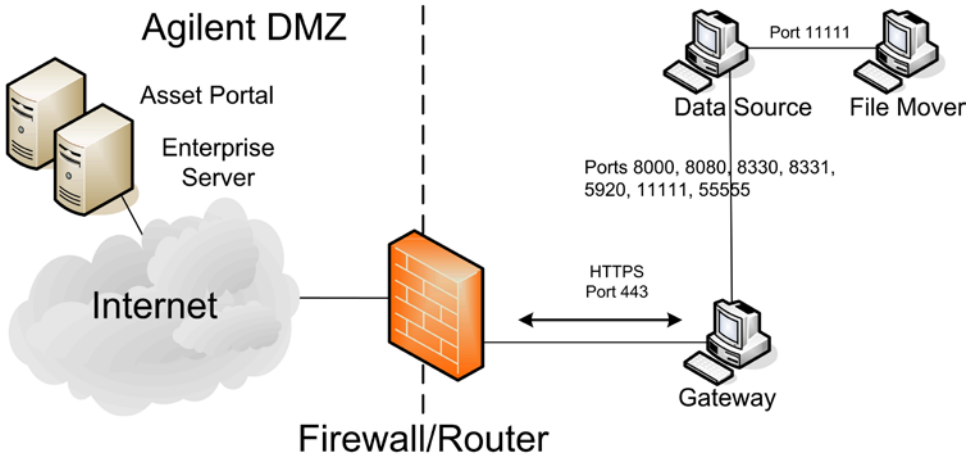
- Add the IP address and Computer name of the target computers. One Name and one IP address to a line.
- Select File from the toolbar
- Select Save from the menu
- Restart the Gateway PC > Remote Collaboration will not work until the Gateway PC has been restarted

11.4 Verify Ports between Gateway and Data Source

Communication ports between the Gateway and Data Source that are blocked by a hardware or software firewall will limit Remote Advisor functions. Blocked ports will prevent Remote Collaboration, Remote Assist, and script files from transferring from the Data Source to the Gateway.

Software firewalls are installed on PCs and networking components. Hardware firewalls are incorporated in network components.

Have IT verify that all ports listed below are open and not blocked by hardware or software firewalls

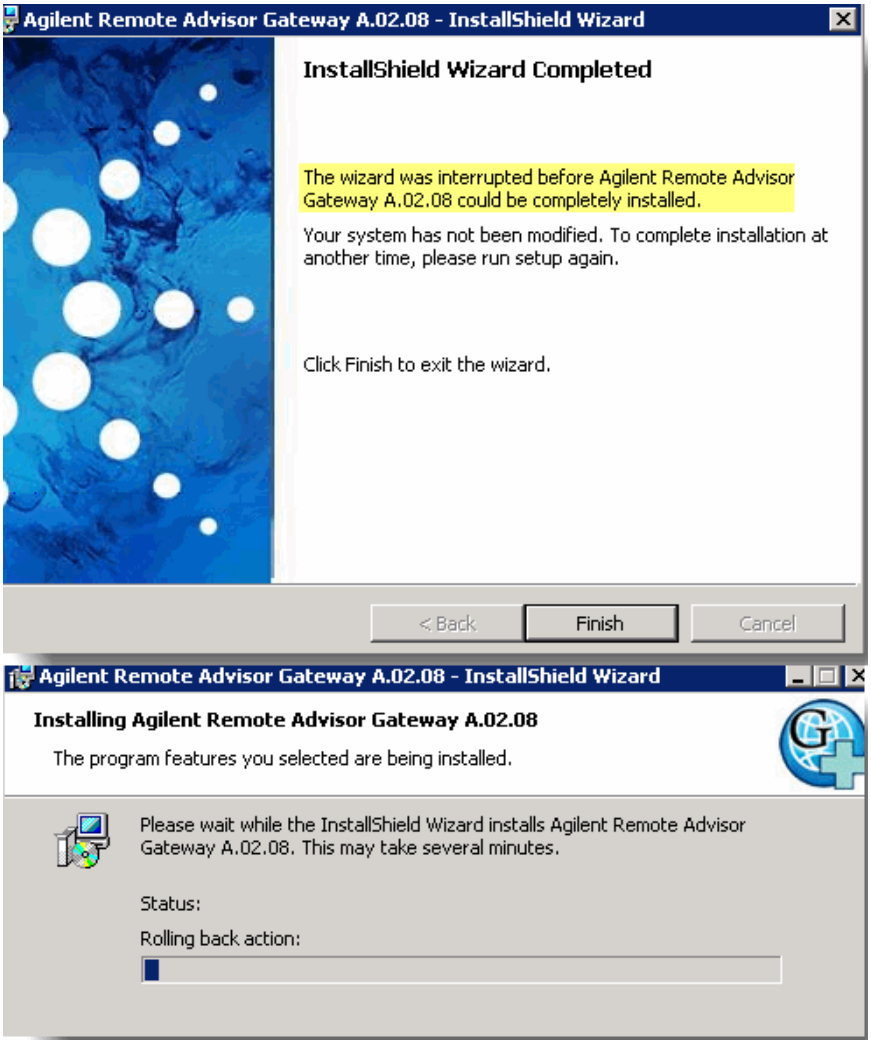


Gateway to Enterprise		
TCP: Source port = https (443)		
Between Gateway and Data Source		
Source Port	Process Owner or Action	
TCP: Source port = 8080	Tomcat.exe	
TCP: Source port = 8000	AIService.exe	
TCP: Source port = 8330	Remote Advisor Scripts	
TCP: Source port = 8331	Remote Advisor Scripts	
TCP: Source port = 5920	AxedaDesktopServer.exe	
TCP: Source port = 11111	Networkhelper.exe	
TCP: Source port = 55555	Networkhelper.exe	
Listening Ports		
Device Listening	Process Owner or Actions	Ports
Gateway	Axeda Desktop Server.exe	5820. 5920, 8330, 8331
Gateway	Network Helper.exe	49552, 55555, 55556
Gateway	Tomcat5.exe	5001, 8000, 8005, 8009, 9170, 9176
Gateway	Xgate.exe	8443, 3011, 3030, 8080
Data Source	AIService.exe	11111, 11112
Data Source	Axeda Desktop Server.exe	5820, 5920
Between Data Source and Empower Node		
TCP Source Port = 11111	FileMover.exe	

12 Appendix F: Important Installation Notes

12.1 Gateway Installation does not complete

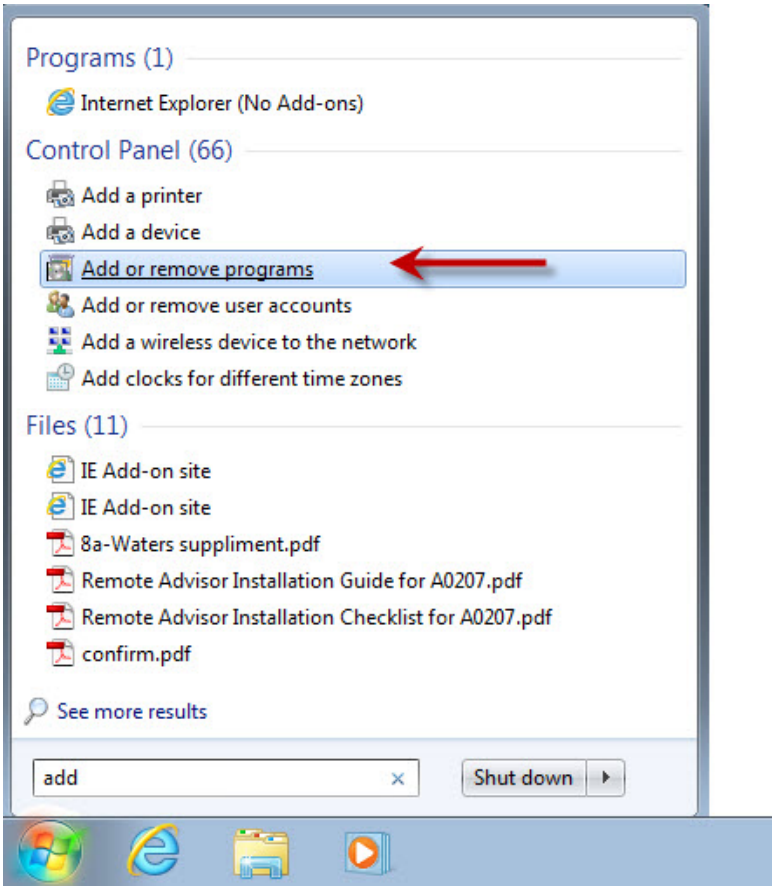
The Gateway software installation does not complete because the installation was interrupted for some unknown reason. The message, "*The wizard was interrupted before Agilent Remote Advisor Gateway A.02.09 could be completely installed."* will appear in the InstallSeild Wizard Completed window. A second window opens advising that the installation is rolling back displays after selecting the Finish button.



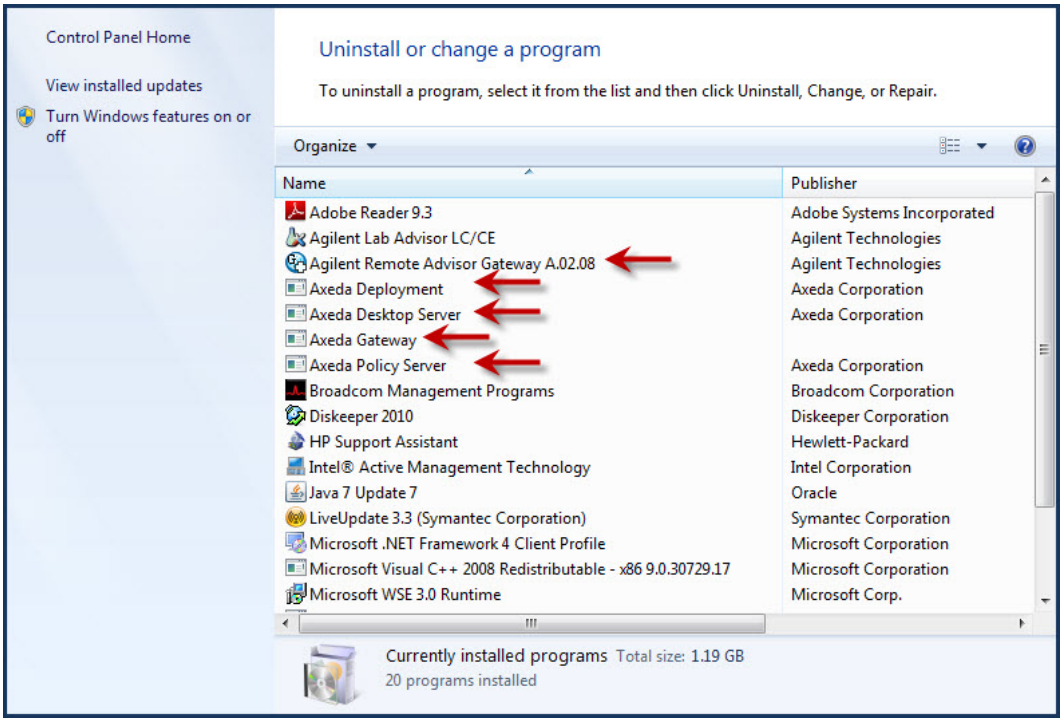
- Allow InstallSheild to complete the Rolling back action.

12.2 Corrective Action – Gateway does not complete installation

The corrective action is to remove all Agilent and Axeda components before attempting to install the Gateway software again.



- Select the Windows start button
- Type add in the See more results field
- Select Add or remove programs



- Remove all Agilent and Axeda programs
  Select a program, right click, and select uninstall/change to remove the program
  Programs to remove
  - Agilent Remote Advisor Gateway A.02.09
  - Axeda Deployment
  - Axeda Desktop Server
  - Axeda Gateway
  - Axeda Policy Server