



Agilent Technologies

Remote Advisor for MP-AES

Site Preparation Guide

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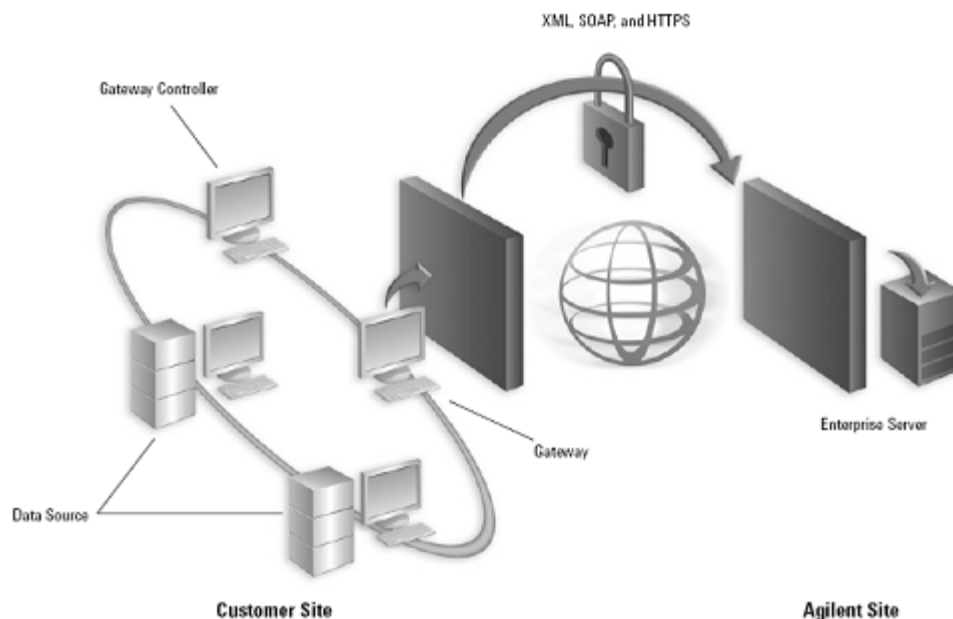
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Purpose of this Document

The purpose of this document is to describe the installation of Remote Advisor for MP-AES system installations, discuss workflow, and define responsibilities for the installation.

Introduction

Agilent Remote Advisor is a secure, remote monitoring and diagnostics solution for your laboratory instruments. These services provide the laboratory faster problem resolution, reduced instrument downtime, and predictive maintenance scheduling.



Agilent Remote Advisor subsystems are designed to deliver superior performance, security, and manageability for site-wide deployments. The architecture is designed to address key issues such as communication through firewalls, security, and scalability necessary for effective remote support. Data Source Agents collect instrument diagnostics information from each connected instrument and provide this to the Remote Advisor Gateway PC at your site. The Remote Advisor Gateway initiates secure communications to Agilent's Remote Advisor Enterprise server over the Internet. The Remote Advisor Gateway at your site is safe behind your corporate firewall and Remote Advisor supports proxy server environments. Communications remain secure through HTTPS/SSL. No security modifications are required, so setting up the connection is simple.

Remote Advisor Components

Remote Advisor is comprised of three primary components, Enterprise server, Gateway, and Data Source. The Gateway and Data Source are located at the customer site while the Enterprise is located in the Agilent DMZ.



Data Source

The Remote Advisor Data Source software component collects statistical and diagnostic information from analytical instruments, parses the information, then sends the information to the Gateway. MP-Expert controls the MP-AES and produces a diagnostic log file with MP-AES statistical and diagnostic information for the Data Source to process.

Gateway

The Remote Advisor Gateway software component connects to the Internet to securely communicate to the Remote Advisor Enterprise server. Instrument statistical and diagnostic information is received from the Data Source, repackaged and forwarded by the Gateway to the Enterprise.

Site Requirements

Agilent Remote Advisor components, which include the Agilent Remote Advisor Enterprise Server, Gateway, and Data Source have specific communication requirements. A list of requirements is provided in Table 1 to ensure a successful implementation of Agilent Remote Advisor. Please verify that the following requirements can be achieved before starting the implementation of Agilent Remote Advisor.

Table 1: Preliminary Requirements

Requirements	Description / Comment
Gateway to Enterprise Internet Communications	Internet access is required for the Gateway to communicate to the Agilent Remote Advisor Enterprise Server. The Gateway will communicate through the proxy server, modifications to the firewall are not necessary. Firewall filters for the Gateway to communicate to the Enterprise can be opened for the Gateway to communicate to two URLs. http://remoteadvisor.chem.agilent.com and http://intelligentservices.chem.agilent.com using Outbound Port: HTTPS Port 443
Administrator Privileges	Local Administrator logon privileges are required for the installation of Agilent Remote Advisor Data Source and Gateway software.
Virus Scanning Software	Installed according to site policy

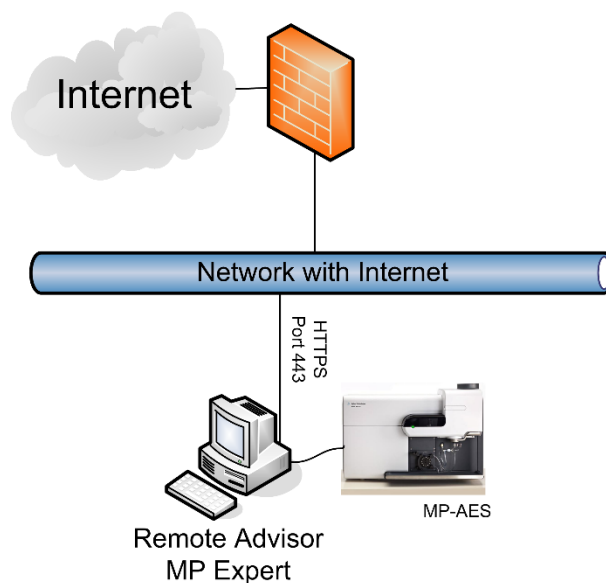
MP-AES Installation Types

Single MP-AES Installation

MP-AES systems are installed in locations where only one MP-AES system is installed. The installation of the Remote Advisor Gateway and Data Source onto the MP Expert PC offers the benefits of Remote Assist, remote diagnostics, and troubleshooting without the need of a separate PC for the Remote Advisor Gateway.

Remote Advisor Gateway and Data Source software are installed on the MP Expert PC. Log files created by MP Expert are parsed by the Data Source and information is passed to the Gateway. The Gateway sends MP-AES statistic data securely through the Internet to the Remote Advisor Enterprise server.

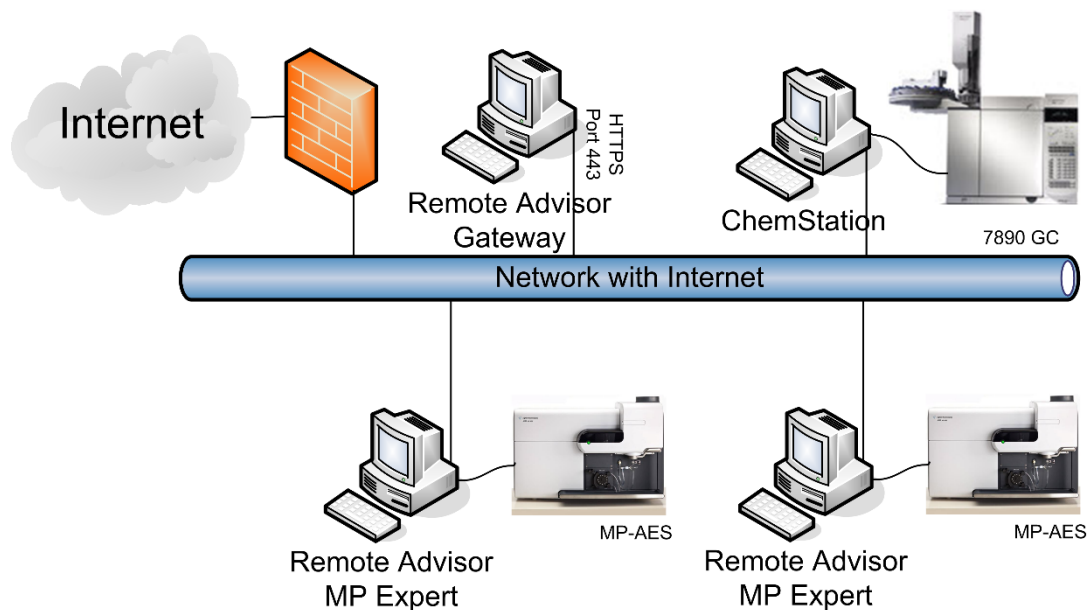
The installation of Remote Advisor requires the MP-Expert PC to connect to a network with Internet. The connection to the Internet must be maintained for Remote Advisor to collect utilization and static data and that the connection is available when needed for Remote Assist.



Multiple MP-AES Installations

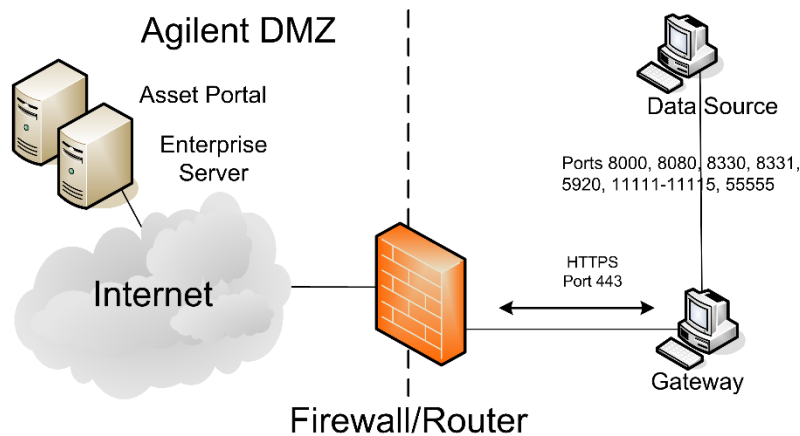
Multiple MP-AES systems may be installed in one laboratory or location along with other Agilent instruments. One dedicated Remote Advisor Gateway is the preferred configuration for a multiple instrument installation.

Data Source software is installed on each of the MP-Expert PCs controlling MP-AES and on other acquisition systems controlling Agilent instruments. Each Data Source PC connects to the network to forward instrument data to the Gateway.



The installation of Remote Advisor with multiple Data Source and one Gateway utilizes a number of TCP ports for communications. Network Port Usage on the next page lists the ports used and application associated with the ports. These ports must be opened in any network component or firewall separating the Gateway and Data Source.

Network Port Usage



Gateway to Enterprise		
TCP: Source port = https (443)		
Gateway to 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



PC Requirements

An HP Z230 64 Bit PC is available through Agilent for MP-AES. Remote Advisor and MP Expert were tested together using the HP Z230. Any manufacturer's PC can be used for this application. It is recommended that the PC used meets or exceeds the specifications of the HP Z230 listed in table 2.

Table 2: PC Requirements

PC Hardware Software Requirements	
CPU	Intel(R) Xeon(R) CPU E3-1225 v3 @ 3.20GHz, 3201 Mhz, 4 Core(s), 4 Logical Processor(s)
Disk Drive	10 GB or greater available free space
RAM	4 GB or greater
Optical Drive	DVD +/- RW (Required)
Supported English Operating Systems	Windows 7 32 & 64 bit English
Virus scanning Software	Installed according to site policy

Customer Provided PC Installation and Configuration

Your responsibilities, for a Customer Provided PC, are as follows:

1. Install your corporate image which includes a supported Windows 7 English version operating system and the required software for the PC to conform to your corporate security policy.
2. Install the Gateway PC on the network and verify that it can connect to the Internet and obtain a login prompt at <http://remoteadvisor.chem.agilent.com>.

Agilent's responsibilities, for a Customer Provided PC, is as follows:

1. Agilent will install the Remote Advisor software.
2. Agilent will deploy the Gateway to the Enterprise server.
3. Agilent will familiarize a site contact with the operation of Remote Advisor.

Agilent PC Bundle

Your responsibilities, for an Agilent PC bundle, are as follows:

1. Install the required software for the PC to conform to your corporate security policy.
2. Install the Gateway PC on the network and verify that it can connect to the Internet and obtain a login <http://remoteadvisor.chem.agilent.com>.

Agilent's responsibilities, for an Agilent PC bundle is as follows:

1. Agilent will install the Remote Advisor software.
2. Agilent will deploy the Gateway to the Enterprise server.
3. Agilent will train a site contact on the operation of Remote Advisor.

Responsibilities

Agilent Responsibilities

Provide Site Preparation Guide

Conduct the necessary installation planning meetings

Determine the configuration of the Remote Advisor System

Procure the necessary parts for the installation Agilent Remote Advisor

Install Remote Advisor software and verify all system components are functional.

Familiarize a site contact with system operation

Customer Responsibilities

Install and configure the PC on the network

Provide any network connections or network infrastructure for Remote Advisor.

Provide the Agilent Installation Specialist with local Administrator access to the PC for Remote Advisor software installation.

Verify that the customer provided PCs meet minimum or exceed hardware and software requirements.

