



**Avaya Integrated Management**  
**Release 2.1**  
**Network Infrastructure Management**  
**Installation and Upgrade**

555-233-167  
700316003  
Issue 2  
June 2004

**Copyright 2004, Avaya Inc.  
All Rights Reserved**

**Notice**

Every effort was made to ensure that the information in this document was complete and accurate at the time of printing. However, information is subject to change.

**Warranty**

Avaya Inc. provides a limited warranty on this product. Refer to your sales agreement to establish the terms of the limited warranty. In addition, Avaya's standard warranty language as well as information regarding support for this product, while under warranty, is available through the following Web site: <http://www.avaya.com/support>.

**Preventing Toll Fraud**

"Toll fraud" is the unauthorized use of your telecommunications system by an unauthorized party (for example, a person who is not a corporate employee, agent, subcontractor, or is not working on your company's behalf). Be aware that there may be a risk of toll fraud associated with your system and that, if toll fraud occurs, it can result in substantial additional charges for your telecommunications services.

**Avaya Fraud Intervention**

If you suspect that you are being victimized by toll fraud and you need technical assistance or support, in the United States and Canada, call the Technical Service Center's Toll Fraud Intervention Hotline at 1-800-643-2353.

**How to Get Help**

For additional support telephone numbers, go to the Avaya support Web site: <http://www.avaya.com/support>. If you are:

- Within the United States, click the *Escalation Management* link. Then click the appropriate link for the type of support you need.
- Outside the United States, click the *Escalation Management* link. Then click the *International Services* link that includes telephone numbers for the international Centers of Excellence.

**Providing Telecommunications Security**

Telecommunications security (of voice, data, and/or video communications) is the prevention of any type of intrusion to (that is, either unauthorized or malicious access to or use of) your company's telecommunications equipment by some party.

Your company's "telecommunications equipment" includes both this Avaya product and any other voice/data/video equipment that could be accessed via this Avaya product (that is, "networked equipment").

An "outside party" is anyone who is not a corporate employee, agent, subcontractor, or is not working on your company's behalf. Whereas, a "malicious party" is anyone (including someone who may be otherwise authorized) who accesses your telecommunications equipment with either malicious or mischievous intent.

Such intrusions may be either to/through synchronous (time-multiplexed and/or circuit-based) or asynchronous (character-, message-, or packet-based) equipment or interfaces for reasons of:

- Utilization (of capabilities special to the accessed equipment)
- Theft (such as, of intellectual property, financial assets, or toll facility access)
- Eavesdropping (privacy invasions to humans)
- Mischief (troubling, but apparently innocuous, tampering)
- Harm (such as harmful tampering, data loss or alteration, regardless of motive or intent)

Be aware that there may be a risk of unauthorized intrusions associated with your system and/or its networked equipment. Also realize that, if such an intrusion should occur, it could result in a variety of losses to your company (including but not limited to, human/data privacy, intellectual property, material assets, financial resources, labor costs, and/or legal costs).

**Responsibility for Your Company's Telecommunications Security**

The final responsibility for securing both this system and its networked equipment rests with you - Avaya's customer system administrator, your telecommunications peers, and your managers. Base the fulfillment of your responsibility on acquired knowledge and resources from a variety of sources including but not limited to:

- Installation documents
- System administration documents
- Security documents
- Hardware-/software-based security tools
- Shared information between you and your peers
- Telecommunications security experts

To prevent intrusions to your telecommunications equipment, you and your peers should carefully program and configure:

- Your Avaya-provided telecommunications systems and their interfaces
- Your Avaya-provided software applications, as well as their underlying hardware/software platforms and interfaces
- Any other equipment networked to your Avaya products

**TCP/IP Facilities**

Customers may experience differences in product performance, reliability and security depending upon network configurations/design and topologies, even when the product performs as warranted.

**Standards Compliance**

Avaya Inc. is not responsible for any radio or television interference caused by unauthorized modifications of this equipment or the substitution or attachment of connecting cables and equipment other than those specified by Avaya Inc. The correction of interference caused by such unauthorized modifications, substitution or attachment will be the responsibility of the user. Pursuant to Part 15 of the Federal Communications Commission (FCC) Rules, the user is cautioned that changes or modifications not expressly approved by Avaya Inc. could void the user's authority to operate this equipment.

**Product Safety Standards**

This product complies with and conforms to the following international Product Safety standards as applicable:

Safety of Information Technology Equipment, IEC 60950, 3rd Edition including all relevant national deviations as listed in Compliance with IEC for Electrical Equipment (IECEE) CB-96A.

Safety of Information Technology Equipment, CAN/CSA-C22.2 No. 60950-00 / UL 60950, 3rd Edition

Safety Requirements for Customer Equipment, ACA Technical Standard (TS) 001 - 1997

One or more of the following Mexican national standards, as applicable: NOM 001 SCFI 1993, NOM SCFI 016 1993, NOM 019 SCFI 1998

The equipment described in this document may contain Class 1 LASER Device(s). These devices comply with the following standards:

- EN 60825-1, Edition 1.1, 1998-01
- 21 CFR 1040.10 and CFR 1040.11.

The LASER devices operate within the following parameters:

- Maximum power output: -5 dBm to -8 dBm
- Center Wavelength: 1310 nm to 1360 nm

Luokan 1 Laserlaite

Klass 1 Laser Apparat

Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposures. Contact your Avaya representative for more laser product information.

### Electromagnetic Compatibility (EMC) Standards

This product complies with and conforms to the following international EMC standards and all relevant national deviations:

Limits and Methods of Measurement of Radio Interference of Information Technology Equipment, CISPR 22:1997 and EN55022:1998.

Information Technology Equipment – Immunity Characteristics – Limits and Methods of Measurement, CISPR 24:1997 and EN55024:1998, including:

- Electrostatic Discharge (ESD) IEC 61000-4-2
- Radiated Immunity IEC 61000-4-3
- Electrical Fast Transient IEC 61000-4-4
- Lightning Effects IEC 61000-4-5
- Conducted Immunity IEC 61000-4-6
- Mains Frequency Magnetic Field IEC 61000-4-8
- Voltage Dips and Variations IEC 61000-4-11
- Powerline Harmonics IEC 61000-3-2
- Voltage Fluctuations and Flicker IEC 61000-3-3

### Federal Communications Commission Statement

#### Part 15:

**Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.**

#### Part 68: Answer-Supervision Signaling

Allowing this equipment to be operated in a manner that does not provide proper answer-supervision signaling is in violation of Part 68 rules. This equipment returns answer-supervision signals to the public switched network when:

- answered by the called station,
- answered by the attendant, or
- routed to a recorded announcement that can be administered by the customer premises equipment (CPE) user.

This equipment returns answer-supervision signals on all direct inward dialed (DID) calls forwarded back to the public switched telephone network. Permissible exceptions are:

- A call is unanswered.
- A busy tone is received.
- A reorder tone is received.

Avaya attests that this registered equipment is capable of providing users access to interstate providers of operator services through the use of access codes. Modification of this equipment by call aggregators to block access dialing codes is a violation of the Telephone Operator Consumers Act of 1990.

### REN Number

#### For MCC1, SCC1, CMC1, G600, and G650 Media Gateways:

This equipment complies with Part 68 of the FCC rules. On either the rear or inside the front cover of this equipment is a label that contains, among other information, the FCC registration number, and ringer equivalence number (REN) for this equipment. If requested, this information must be provided to the telephone company.

#### For G350 and G700 Media Gateways:

This equipment complies with Part 68 of the FCC rules and the requirements adopted by the ACTA. On the rear of this equipment is a label that contains, among other information, a product identifier in the format US:AAAEQ##TXXXX. The digits represented by ## are the ringer equivalence number (REN) without a decimal point (for example, 03 is a REN of 0.3). If requested, this number must be provided to the telephone company.

#### For all media gateways:

The REN is used to determine the quantity of devices that may be connected to the telephone line. Excessive RENs on the telephone line may result in devices not ringing in response to an incoming call. In most, but not all areas, the sum of RENs should not exceed 5.0. To be certain of the number of devices that may be connected to a line, as determined by the total RENs, contact the local telephone company.

REN is not required for some types of analog or digital facilities.

### Means of Connection

Connection of this equipment to the telephone network is shown in the following tables.

#### For MCC1, SCC1, CMC1, G600, and G650 Media Gateways:

Manufacturer's Port Identifier	FIC Code	SOC/REN/ A.S. Code	Network Jacks
Off premises station	OL13C	9.0F	RJ2GX, RJ21X, RJ11C
DID trunk	02RV2-T	0.0B	RJ2GX, RJ21X
CO trunk	02GS2	0.3A	RJ21X
	02LS2	0.3A	RJ21X
Tie trunk	TL31M	9.0F	RJ2GX
Basic Rate Interface	02IS5	6.0F, 6.0Y	RJ49C
1.544 digital interface	04DU9-BN	6.0F	RJ48C, RJ48M
	04DU9-IKN	6.0F	RJ48C, RJ48M
	04DU9-ISN	6.0F	RJ48C, RJ48M
120A4 channel service unit	04DU9-DN	6.0Y	RJ48C

## For G350 and G700 Media Gateways:

Manufacturer's Port Identifier	FIC Code	SOC/REN/A.S. Code	Network Jacks
Ground Start CO trunk	02GS2	1.0A	RJ11C
DID trunk	02RV2-T	AS.0	RJ11C
Loop Start CO trunk	02LS2	0.5A	RJ11C
1.544 digital interface	04DU9-BN	6.0Y	RJ48C
	04DU9-DN	6.0Y	RJ48C
	04DU9-IKN	6.0Y	RJ48C
	04DU9-ISN	6.0Y	RJ48C
Basic Rate Interface	02IS5	6.0F	RJ49C

### For all media gateways:

If the terminal equipment (for example, the media server or media gateway) causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice is not practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make necessary modifications to maintain uninterrupted service.

If trouble is experienced with this equipment, for repair or warranty information, please contact the Technical Service Center at 1-800-242- 2121 or contact your local Avaya representative. If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved.

A plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by the ACTA. A compliant telephone cord and modular plug is provided with this product. It is designed to be connected to a compatible modular jack that is also compliant. It is recommended that repairs be performed by Avaya certified technicians.

The equipment cannot be used on public coin phone service provided by the telephone company. Connection to party line service is subject to state tariffs. Contact the state public utility commission, public service commission or corporation commission for information.

This equipment, if it uses a telephone receiver, is hearing aid compatible.

### Canadian Department of Communications (DOC) Interference Information

This Class A digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe A est conforme à la norme NMB-003 du Canada.

This equipment meets the applicable Industry Canada Terminal Equipment Technical Specifications. This is confirmed by the registration number. The abbreviation, IC, before the registration number signifies that registration was performed based on a Declaration of Conformity indicating that Industry Canada technical specifications were met. It does not imply that Industry Canada approved the equipment.

## Declarations of Conformity

United States FCC Part 68 Supplier's Declaration of Conformity (SDoC)

Avaya Inc. in the United States of America hereby certifies that the equipment described in this document and bearing a TIA TSB-168 label identification number complies with the FCC's Rules and Regulations 47 CFR Part 68, and the Administrative Council on Terminal Attachments (ACTA) adopted technical criteria.

Avaya further asserts that Avaya handset-equipped terminal equipment described in this document complies with Paragraph 68.316 of the FCC Rules and Regulations defining Hearing Aid Compatibility and is deemed compatible with hearing aids.

Copies of SDoCs signed by the Responsible Party in the U. S. can be obtained by contacting your local sales representative and are available on the following Web site: <http://www.avaya.com/support>.

All Avaya media servers and media gateways are compliant with FCC Part 68, but many have been registered with the FCC before the SDoC process was available. A list of all Avaya registered products may be found at: <http://www.part68.org> by conducting a search using "Avaya" as manufacturer.

## European Union Declarations of Conformity



Avaya Inc. declares that the equipment specified in this document bearing the "CE" (*Conformité Européenne*) mark conforms to the European Union Radio and Telecommunications Terminal Equipment Directive (1999/5/EC), including the Electromagnetic Compatibility Directive (89/336/EEC) and Low Voltage Directive (73/23/EEC). This equipment has been certified to meet CTR3 Basic Rate Interface (BRI) and CTR4 Primary Rate Interface (PRI) and subsets thereof in CTR12 and CTR13, as applicable.

Copies of these Declarations of Conformity (DoCs) can be obtained by contacting your local sales representative and are available on the following Web site: <http://www.avaya.com/support>.

## Japan

This is a Class A product based on the standard of the Voluntary Control Council for Interference by Information Technology Equipment (VCCI). If this equipment is used in a domestic environment, radio disturbance may occur, in which case, the user may be required to take corrective actions.

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

## To order copies of this and other documents:

Call: Avaya Publications Center  
Voice 1.800.457.1235 or 1.207.866.6701  
FAX 1.800.457.1764 or 1.207.626.7269

Write: Globalware Solutions  
200 Ward Hill Avenue  
Haverhill, MA 01835 USA  
Attention: Avaya Account Management

E-mail: [totalware@gwsmail.com](mailto:totalware@gwsmail.com)

For the most current versions of documentation, go to the Avaya support Web site: <http://www.avaya.com/support>.

# Contents

<b>1</b>	<b>Introduction</b>	<b>7</b>
	• Purpose	7
	• Prerequisites	7
	• Intended Audience	7
	• Conventions Used in This Book	7
	• Support Resources	8
	Avaya Technology and Consulting (ATAC)	8
	Avaya Remote Network Integration Services (RNIS)	8
	Avaya Technical Service Organization (TSO)	8
	Avaya Network Management Software Systems Support Group (NMSSS)	9
	Customized Management Solutions for Avaya Integrated Management	9
	Avaya Contact Information	10
	• Product Documentation	10
	• How to Access Books on the Web	11
	• Tell Us What You Think!	11
<b>2</b>	<b>Overview</b>	<b>13</b>
	• Network Infrastructure Management	13
	• HP OpenView Integration	13
	• Pre-Installation Tasks	13
<b>3</b>	<b>Network Infrastructure Server Installation</b>	<b>15</b>
	• Network Infrastructure Server CD	15
	• Network Infrastructure Server Requirements	16
	• Installing the Network Infrastructure Server Products	17
	<b>Index</b>	<b>21</b>



# 1 Introduction

## Purpose

---

The purpose of this book is to provide the following information:

- Hardware and software requirements for Microsoft® Windows® servers.
- Pre-installation tasks that must be completed prior to installation.
- Procedures to install the products in the Network Infrastructure Management offer. If any of the products included in this offer are already installed on your system, those products will be upgraded during this installation.

## Prerequisites

---

System administrators who install Network Infrastructure Management should be experienced in installing software on Windows operating systems in a data infrastructure network environment.

## Intended Audience

---

This book is written for system administrators who are responsible for installing software on Windows servers.

## Conventions Used in This Book

---

The following typographical conventions are used:

- **Bold** type is used to indicate information that you type, buttons in a window, and the **Enter** key on the keyboard. It is also used for emphasis.
- `Courier` font is used for any information that the computer screen displays.
- Arrows indicate options that you select from cascading menus; for example, “Select File > Open” means choose the “Open” option from the “File” menu.

## Support Resources

---

Avaya provides a variety of planning, consulting, and technical services. The following sections describe the resources and services that are available.

### Avaya Technology and Consulting (ATAC)

Avaya Technology and Consulting (ATAC) works with client teams to develop detailed solutions for connectivity to Avaya Communication Manager solutions. The ATAC also designs network configurations.

### Avaya Remote Network Integration Services (RNIS)

Avaya Remote Network Integration Services (RNIS) offers customers the following services:

- Platform readiness verification
- Remote implementation and installation
- Network management server configuration
- Customer acceptance verification
- Custom on-site services

The RNIS provides support on a contract basis. You can purchase various implementation offers from RNIS in Tampa, Florida. See [Table 1, Customer-Accessible Resources](#), on page 10 for contact information.

RNIS does not handle technical support questions on Avaya Integrated Management installations from customers who do not purchase a contract.

### Avaya Technical Service Organization (TSO)

The Avaya Technical Service Organization (TSO) provides support to the Avaya Integrated Management client teams, field technicians, and customers. The TSO will bill customers for support on a time and materials basis if the following conditions exist:

- Customers do not provide remote access.
- Customers do not have a current maintenance agreement.
- Customers do not procure and install the required systems and software as defined in the Integrated Management Services Support Plan.
- Customers request support that is outside the purchase agreement.

The TSO does not support hardware or software that customers purchase from third-party vendors.

## Avaya Network Management Software Systems Support Group (NMSSS)

The Avaya Network Management Software Systems Support Group (NMSSS) in Tampa Bay, Florida answers customer calls about products in Avaya Integrated Management. NMSSS will either answer your questions directly or connect you with an associate who can answer questions about the products.

## Customized Management Solutions for Avaya Integrated Management

The Integrated Management Product Team understands customer's needs and is focused on customer satisfaction. The Product Team will assist customers with Avaya Integrated Management projects and will provide:

- **Project Management** — An Integrated Management project person will work with the customer to access configuration and customization requirements for any or all applications within the Avaya Integrated Management suite. If custom work is required, the evaluation will include a proposed statement of work and price. Note that this offer is *not* intended to provide installation for customers that choose to implement Integrated Management applications using Avaya Services or third-party implementation services.
- **Training** — Basic training can be performed remotely using an interactive medium to display the applications and a conference bridge for audio. On-site training can be customized to meet the customer's needs. Customized training will focus on application functionality that is relevant to the customer and provide focused knowledge transfer to facilitate application-specific training.

Training and Project Management is available for the following Integrated Management applications:

- Avaya Site Administration
- Avaya Voice Announcement Manager
- Avaya Fault and Performance Manager/Proxy Agent
- Communication Manager Native SNMP Agent Alarms
- Avaya MultiSite Administration
- Avaya Voice Over IP Monitoring Manager
- Avaya Directory Enabled Management
- Avaya Terminal Configuration
- Avaya Network Management Console with VoIP System View

## Avaya Contact Information

[Table 1](#) and [Table 2](#) provide contact information that you may use if you need assistance during the process of installing and setting up Avaya Integrated Management.

**Table 1: Customer-Accessible Resources**

Resource	Contact Information
Avaya Support Center	<a href="http://www.avaya.com/support">http://www.avaya.com/support</a>
Network Management Software Systems Support (NMSSS)	+1 800 237-0016
Remote Network Integration Services (RNIS)	+1 800 730-9108, prompt 3 <a href="http://www1.avaya.com/enterprise/brochures/svc1369.pdf">http://www1.avaya.com/enterprise/brochures/svc1369.pdf</a>
Toll Fraud Intervention	+1 800 643-2353, prompt 1

**Table 2: Avaya Internal Resources**

Resource	Contact Information
Avaya System Management Support	<a href="http://aem-support.dr.avaya.com">http://aem-support.dr.avaya.com</a>
Avaya Technology and Consulting (ATAC)	+1 888 297-4700, prompt 2,6 <a href="http://forum.avaya.com">http://forum.avaya.com</a> (requires a password)
Remote Network Integration Services (RNIS)	<a href="http://associate2.avaya.com/sales_market/products/data-implementation-services/">http://associate2.avaya.com/sales_market/products/data-implementation-services/</a>
Integrated Management Services Support Plan	<a href="http://associate2.avaya.com/solution/support_plans/#Enterprise">http://associate2.avaya.com/solution/support_plans/#Enterprise</a>
AIM001 Form	<a href="http://associate2.avaya.com/sales_market/products/data-implementation-services">http://associate2.avaya.com/sales_market/products/data-implementation-services</a> Click Avaya Integrated Management Configuration Request Form #1.

## Product Documentation

---

The installation, configuration, and getting started books; user guides; and release notes for this release of all Avaya Integrated Management products are available on the Avaya Integrated Management Home Page. The configuration books provide tasks that must be completed after the products are installed.

The latest version of Avaya Integrated Management product documentation, including this book, is available from the Avaya Support Web Site. To view or download these books from the Web, you must have access to the Internet, an Internet browser, and Adobe Acrobat Reader, version 5.0 or later. Adobe Acrobat Reader is provided on the Windows Server CD and is also available from <http://www.adobe.com>. See [How to Access Books on the Web](#) for instructions on how to view or download these books.

## How to Access Books on the Web

---

To view or download books before the products are installed, follow these steps:

- 1 Access <http://www.avaya.com/support>.
- 2 In the left column, click **System and Network Management**.
- 3 Scroll to **Integrated Management**, locate the product name, and click the link corresponding to the software release to display a list of available books for that product.

To view or download books after the products are installed, follow these steps:

- 1 Use your Web browser to go to the Integrated Management Home Page.
- 2 In the left column, click **User Documents**.
- 3 At the User Documents page, scroll to the product name and click the book title.

## Tell Us What You Think!

---

Let us know how this book measured up to your expectations. Your opinions are crucial to helping us meet your needs! Send us your comments by mail, fax, or e-mail as follows:

Mail                    Avaya Inc.  
                            Avaya Integrated Management Documentation Team  
                            Room 3C-313  
                            307 Middletown Lincroft Rd.  
                            Lincroft, NJ 07738  
                            USA

Fax:                    Avaya Integrated Management Documentation Team  
                            + 1 732 852-2469

E-mail:                document@avaya.com  
Subject:                Avaya Integrated Management Documentation Team



# 2 Overview

## Network Infrastructure Management

---

Network Infrastructure Management contains the applications to manage wired and wireless infrastructure environments that include Avaya data switches and Avaya network devices.

See [Network Infrastructure Server CD](#) on page 15 for the Integrated Management products provided in this offer.

## HP OpenView Integration

---

The Network Management applications can integrate with HP OpenView on the Network Infrastructure server. HP OpenView must be installed on the server *before* the Network Management applications are installed.

HP OpenView is not included in any of the Integrated Management offers. Customers must purchase and maintain HP OpenView separately. Avaya Services does not support HP OpenView or other third party products.

## Pre-Installation Tasks

---

Before installing Avaya Integrated Management products, you must complete the following pre-installation tasks.

- 1 Check the minimum hardware and software requirements for the server. (See [Network Infrastructure Server Requirements](#) on page 16.)
- 2 Check that all previous sequential upgrades and/or major releases were installed before installing this release. If the wizard detects a software upgrade that is not sequential, the wizard will stop and display a message to install the skipped releases. The wizard will then abort the installation.
- 3 Carefully review *Avaya Integrated Management Implementation Guidelines*, document number 555-233-163. This document is available from the Avaya Support Web Site. (See [How to Access Books on the Web](#) on page 11.) This document describes server configuration requirements and provides pre-installation forms that must be completed before you begin installing the Avaya Integrated Management products. The pre-installation forms contain information that you will need to install the products, such as IP addresses, server domain names, and port addresses.

- 4 HP OpenView (Optional).** If you plan to run HP OpenView, you must install HP OpenView on the Network Infrastructure server **before** you install the Network Management applications. When HP OpenView is present, the Network Management Console is not available, and HP OpenView acts as the launch point for the applications and device managers.

**NOTE:**

HP OpenView is not included in any of the Integrated Management offers. Customers must purchase and maintain HP OpenView separately. Avaya Services does not support HP OpenView or other third party products.

- 5** Carefully review this entire book before you start the installations on the servers.

# 3 Network Infrastructure Server Installation

## Network Infrastructure Server CD

---

The Network Infrastructure Management Server CD contains the following Integrated Management products:

- Avaya VoIP Monitoring Manager (90-day trial) — The full version is available in the Enhanced Converged Management and Advanced Converged Management offers.
- Network Management applications:
  - Avaya Network Management Console
  - Avaya Network Configuration Manager
  - Avaya Software Update Manager
- Device Managers:
  - Avaya C460 Manager
  - Avaya P130 Manager
  - Avaya P330/G700 Manager
  - Avaya G350 Manager
  - Avaya Wireless AP 3/4/5 Manager
  - Avaya C360 Manager
  - Avaya W310 Manager
  - Avaya P580/P882 Manager

The Network Infrastructure Management Server CD also contains the following components:

- Avaya Integrated Management Home Page
- Java Runtime Environment
- Adobe Acrobat Reader (required to view documents)

## Network Infrastructure Server Requirements

[Table 3](#) provides the minimum requirements for the Network Infrastructure server.

**Table 3: Network Infrastructure Server Requirements**

Component	Recommended	Comments
Operating system	Microsoft Windows 2003 Standard Edition or Enterprise Edition server.	Microsoft Windows 2000 server is supported.
Processor	1.3 GHz Pentium® 4	1.3 GHz Pentium 3 is acceptable. A maximum of two processors is supported.
Hard Drive	40 GB	
Memory	1.5 GB RAM	
Network Connectivity	TCP/IP 100 Mbit Network Card	
Modem	56K modem for remote access	
CD-ROM Drive	Required	Needed for installation.
Extra Software	Anti-virus software pcAnywhere	Required for Avaya support. pcAnywhere is needed for remote access by Avaya Services.
Web Browser	Internet Explorer 6.0	Needed for access to the Integrated Management Home Page and web-based clients.
Network Management System	HP OpenView 7.0.1 for Windows	<b>Optional.</b> HP OpenView 6.4 for Windows is also supported. HP OpenView is <b>not</b> included on the Windows server CD. Customers must purchase, install, and maintain HP OpenView. Avaya Services does not support HP OpenView in any Integrated Management offer.
Java Runtime Environment	1.4.2	Needed to support web-based applets and Java applications. JRE is included on the Network Infrastructure Server CD.

# Installing the Network Infrastructure Server Products

---

The procedure to install or to upgrade the Avaya Integrated Management products on the Network Infrastructure server is generally the same. If an earlier release of an Integrated Management product on the Network Infrastructure Server CD is already installed on the server, you are given the option to uninstall it prior to installing the current release.

- 1 Ask all users to log off the system.
- 2 Close all open windows and applications.
- 3 Insert the **Avaya Integrated Management 2.1, Network Infrastructure Management Windows Server** CD into the CD-ROM drive.

The Avaya Integrated Management Windows Infrastructure Server window appears. It provides the main menu.

**NOTE:**

Install Acrobat Reader if it is not already installed on the computer.

- 4 Perform one of the following steps:
  - If this is a new installation of Integrated Management, go to [Step 5](#).
  - If this is an upgrade installation, you must uninstall the previous release of Integrated Management applications and Java Runtime Environment. Do the following:
    - a Click **Install Server Products** and follow the prompts to uninstall the previous release of Integrated Management applications.
    - b After the Integrated Management applications are uninstalled, reboot the computer. After the computer reboots, the Avaya Integrated Management Windows Infrastructure Server window appears. It provides the main menu.
    - c Click **Install Java Runtime Environment** from the main menu. The Program Maintenance dialog box appears.
    - d Select **Remove**, and then click the **Next** button. After Java Runtime Environment is removed, the Avaya Integrated Management Windows Infrastructure Server window appears. It provides the main menu.
    - e Continue with [Step 14](#).

- 5 Click **Install Apache**.

The Welcome dialog box appears.

**NOTE:**

Apache must be installed in order to install the Server Products.

- 6 Click the **Next** button.  
The Apache License Agreement dialog box appears.
- 7 Read the license agreement. To accept the license agreement, select **I accept the terms of the license agreement**, and then click the **Next** button.

The Choose Destination Location dialog box appears. By default, the files will be installed in **c:\Program Files\Avaya**.

- 8** Perform one of the following steps:
- To install the files in the default folder, click the **Next** button.
  - To change the folder where the files will be installed, click the **Change** button, specify the folder you want to use, and then click the **Next** button.

The Apache HTTP Server Information dialog box appears.

- 9** Enter the following information:
- In the **Network** field, enter the network name.
  - In the **Server** field, enter the server IP address.
  - In the **Administrator's e-mail** field, enter the e-mail address of the administrator. This allows the system to notify the administrator if problems occur during the Apache installation.

- 10** Click the **Next** button.

A dialog box appears stating that you need to disable IIS to continue the installation.

- 11** Click the **Yes** button to disable IIS.

The Ready to Install the Program dialog box appears.

- 12** Click the **Install** button.

The installation status bar appears. When Apache 2 is installed, the InstallShield Wizard Complete dialog box appears.

- 13** Click the **Finish** button.

The Avaya Integrated Management Windows Infrastructure Server window appears. It provides the main menu.

- 14** Click **Install Java Runtime Environment**.

The Java 2 Runtime Environment License Agreement dialog box appears.

- 15** Read the license agreement. To accept the license agreement, select **I accept the terms in the license agreement**, click the **Next** button.

The Setup Type dialog box appears. By default, **Typical** is selected.

- 16** Click the **Next** button.

After Java Runtime Environment is installed, the Install Shield Wizard Complete dialog box appears.

- 17** Click the **Finish** button.

The Avaya Integrated Management Windows Infrastructure Server window appears. It provides the main menu.

- 18** Click **Install Server Products**.

The Welcome dialog box appears.

- 19** Click the **Next** button.

The Information dialog box appears.

- 20** Click the **Next** button.

The Avaya License Types dialog box appears.

- 21** Read the license types. To accept the license types, click the **Yes** button.

**NOTE:**

You must accept the terms of the license types in order to continue with the installation.

The Choose Destination Location dialog box appears. By default, the files will be installed in **c:\Program Files\Avaya**.

- 22** Perform one of the following steps:

- To install the files in the default folder, click the **Next** button.
- To change the folder where the files will be installed, click the **Change** button, specify the folder you want to use, and then click the **Next** button.

The Select Features dialog box appears. This dialog box displays the applications and components you can install.

**NOTE:**

Required Components, Network Management, and Home Page are grayed out. This indicates that the wizard automatically installs these components. They cannot be deselected.

- 23** Make sure the applications you want to install are selected. Perform the following steps:

- a** Click **Device Managers** and then click the **Change** button. The Select Subcomponents dialog box appears. By default, all Device Managers are selected.
- b** If you do not want to install a Device Manager, click the check box to deselect it, and then click the **Continue** button.

The Select Features dialog box appears.

- 24** Click the **Next** button.

The Enter Network Management Server IP Address dialog box appears.

- 25** Enter the IP address of the Network Management server, and click the **Next** button.

The Enter VoIP Monitoring Manager Server IP Address dialog box appears.

- 26** Enter the IP Address of the VoIP Monitoring Manager server, and click the **Next** button.

The Enter VoIP Monitoring Manager Server Port dialog box appears.

- 27** Enter the number of the RTCP Listen Port, and click the **Next** button.

The Enter Integrated Management Home Page Server IP Address dialog box appears.

- 28** Enter the IP address of the Integrated Management Home Page server, and click the **Next** button.

The Setup Summary dialog box appears. It lists the applications that you selected to install.

**29** Click the **Next** button.

The installation status bar appears. When the installation is complete, the InstallShield Wizard Complete dialog box appears. By default, **Yes, I want to restart my computer now** is selected. Go to [Step 30](#).

If VoIP Monitoring Manager (trial) was installed and the SNMP service is not installed on the server, the Insert Disk dialog box appears. Perform the following steps:

- a** Remove the Network Infrastructure Management Windows Server CD from the CD-ROM drive.
- b** Insert the Microsoft Windows Operating System CD into the CD-ROM drive, and click the **OK** button.
- c** Follow the installation wizard prompts.

**NOTE:**

When prompted to install the SNMP service, you must configure a community name with write-access. VoIP Monitoring Manager will attempt to initially connect using the community name, **private**. For security reasons, it is recommended that a different community name be chosen.

When completed, **Installation Wizard Complete** appears.

- d** Remove the Microsoft Windows Operating System CD from the CD-ROM drive.
- e** On the InstallShield Wizard Complete dialog box for Integrated Management, click the **Finish** button to restart the Windows server. Go to [Step 31](#).

**30** Remove the CD from the drive, and then click the **Finish** button to restart the Windows server.

**31** Refer to the Avaya Integrated Management Home Page for documentation on the applications you installed. Also, the latest versions of these books are available on the Avaya Support Web Site. See [How to Access Books on the Web](#) on page 11. The documents are in PDF format. To view a PDF, you must install Adobe Acrobat Reader on your computer. Adobe Acrobat Reader is provided on the Windows Server CD.

**NOTE:**

Regularly check the Avaya Support Web Site for software updates.

# Index

---

## Symbols

>, meaning of in text, [7](#)

---

## A

Avaya  
support resources, [8](#)  
support web site, [11](#)

---

## B

bold text, meaning of, [7](#)

---

## C

contact information for Avaya, [10](#)  
courier font, meaning of, [7](#)

---

## F

feedback about this book, [11](#)

---

## I

installation  
Windows server, [17](#)

---

## M

message URL [http  
//www.avaya.com/support](http://www.avaya.com/support), [11](#)

---

---

## N

Network Infrastructure Management  
defined, [13](#)  
pre-installation tasks, [13](#)  
Network Infrastructure Server CD  
device managers, [15](#)  
Network Infrastructure Windows server CD  
network management applications, [15](#)

---

## P

prerequisites, for installing, [7](#)

---

## R

requirements  
Windows server, [16](#)  
resources  
Avaya Network Management Software Systems Support Group (NMSSS), [9](#)  
Avaya Remote Network Integration Services (RNIS), [8](#)  
Avaya Technical Service Organization (TSO), [8](#)  
Avaya Technology and Consulting (ATAC), [8](#)  
Customized Management Solutions for Avaya Integrated Management, [9](#)

---

## T

typographical conventions, [7](#)

---

