AVAYA

Avaya Integrated Management Release 2.0

Enterprise Converged Management and
Enhanced Converged Management
Installation and Upgrade

The LASER devices operate within the following parameters:

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

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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

CE

Avaya Inc. declares that the equipment specified in this document bearing the "CE" (*Conformité Europeénne*) 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。

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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

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

Table of Contents

1 Introduction

Purpose

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

- Hardware and software requirements for Microsoft® Windows® servers and Windows client PCs.

- Pre-installation tasks that must be completed prior to installation.

- Procedures to install the products in the Enterprise Converged Management and Enhanced Converged Management offers. If any of the products included in these offers are already installed on your system, those products will be upgraded during this installation.

Prerequisites

System administrators who install the Integrated Management Enterprise Converged Management and Enhanced Converged Management software should be experienced in installing software on Windows operating systems in a converged 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 1-1 on page 3 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.

Avaya Contact Information

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

Table 1-1. Customer-Accessible Resources

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

Table 1-2. Avaya Internal Resources

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

Product Documentation

The configuration books for all of the 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 installation, configuration, and other user books for products included in the Avaya Integrated Management offers are available from the Avaya Support Web site. The latest version of this book is also available. 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

Enterprise Converged Management

Enterprise Converged Management is a Windows solution for Avaya Integrated Management. It is designed for small-to-medium size networks that run Windows platforms. It provides a complete converged solution that helps you manage your network through a common web-based user interface. The System View provides the ability to see your whole voice system structure and hierarchy. With this offer, you can administer and manage Avaya voice systems and Avaya network switches. The Enterprise offer is for one Avaya Communication Manager and provides one user license for Avaya Communication Manager administration. A 90-day trial version of Avaya VoIP Monitoring Manager is provided.

Enterprise Converged Management is provided on the following two CDs:

- Windows Enterprise Server CD (includes 90-day trial version of Avaya VoIP Monitoring Manager)

- Windows Client CD

Enhanced Converged Management

Like the Enterprise offer, Enhanced Converged Management is a Windows® solution for Avaya Integrated Management. It is designed for small-to-medium size networks that run Windows platforms. It provides a complete converged solution that helps you manage your network through a common web-based user interface. The System View provides the ability to see your whole voice system structure and hierarchy. With this offer, you can administer Avaya voice systems, Avaya network switches, and IP endpoints; monitor the quality of data transmissions over the network; and set up and manage the rules for quality of service parameters. The Enhanced offer is for multiple Avaya Communication Managers and provides five user licenses for Avaya Communication Manager administration. In addition to the products provided in the Enterprise offer, the Enhanced offer provides the full version of Avaya VoIP Monitoring Manager.

Enhanced Converged Management is provided on the following two CDs:

- Windows Server CD

- Windows Client CD

Integrated Management Products

The Integrated Management products provided in the Enterprise Converged Management and Enhanced Converged Management offers are listed in Table 2-1.

Table 2-1. Products on each CD

Product Name	Enterprise Converged Management		Enhanced Converged Management	
	Windows Server	Windows Client	Windows Server	Windows Client
Avaya Network Management Console with System View[1]	✓		✓	
Avaya Site Administration		✓[2]		✓[3]
Avaya Voice Announcement Manager		✓[2]		✓[3]
Avaya Device Managers	✓		✓	
Avaya Network Configuration Manager	✓		✓	
Avaya Software Update Manager	✓		✓	
Avaya Address Manager	✓		✓	
Avaya VLAN Manager	✓		✓	
Avaya QoS Manager	✓		✓	
Avaya VoIP Monitoring Manager		✓[4]	✓	✓[5]
Avaya SMON™ Manager[6]	✓		✓	
Network Management System Integration (NMSI)			N/A[7]	

1. The Console with System View is not available when HP OpenView is installed on the Windows server.
2. Enterprise offer provides one user license for Avaya Communication Manager administration.
3. Enhanced offer provides five user licenses for Avaya Communication Manager administration.
4. The Windows Client CD for the Enterprise offer contains a trial version of VoIP Monitoring Manager. The trial version installs the client and server components that allow you to preview the product for 90 days.
5. The Windows Client CD for the Enhanced offer contains both the VoIP Monitoring Manager 90-day trial version and the VoIP Monitoring Manager client component. You should install the client component only if the server component is installed on the Windows server.
6. SMON Manager 90-day trial version. Customers can purchase a license key to fully activate the SMON Manager beyond the 90-day trial period.
7. NMSI for Windows is only available in the Advanced Converged Management offer. This CD is shipped in both the Advanced Converged Managment and Enhanced Converged Management offers. For the Enhanced offer, skip this option.

Avaya SMON Manager License Key

Customers have the option of purchasing the SMON Manager license key. This key is required to fully activate the SMON Manager beyond the 90-day trial period. The license key is available as an add-on option for the Enterprise Converged Management, Enhanced Converged Management, and Advanced Converged Management offers.

HP OpenView Integration

For both the Enterprise Converged Management and Enhanced Converged Management offers, the Network Management applications can integrate with HP OpenView on the Windows 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 following:

   • Windows server (see "Windows Server Requirements" on page 12).

   • Windows client PC (see "Windows Client PC Requirements" on page 18).

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 Planning and Implementation*, document number 555-233-680. This document is available from the Avaya Support Web site (see "How to Access Books on the Web" on page 5). 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 Windows server **before** you install the Network Management applications. When HP OpenView is present, the Network Management Console with System View 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 and client PCs.

3   Windows Server Installation

Windows Server CD

The products provided on the Windows Enterprise Server CD are the same as those provided on the Windows Server CD that comes with the Enhanced offer, except VoIP Monitoring Manager is not included on the Enterprise CD.

The Windows Server CD contains the following Integrated Management products:

- Network Management applications:
    - Avaya Network Management Console with System View
    - Avaya Network Configuration Manager
    - Avaya Software Update Manager
    - Avaya SMON Manager (90-day trial) – Customers can purchase the license key to activate the SMON Manager beyond the 90-day trial.
    - Avaya Address Manager
    - Avaya VLAN Manager
    - Avaya QoS Manager
    - Avaya VoIP Monitoring Manager (not included on Windows Enterprise Server CD)
- Avaya Device Managers
- Network Management System Integration (NMSI) for Windows (integrates Avaya Fault and Performance Manager with HP OpenView)

The Windows Server CD also contains the following components:

- Avaya Integrated Management Home Page
- Java Runtime Environment
- Apache2 Web Server
- Adobe Acrobat Reader (required to view documents)

Windows Server Requirements

Table 3-1 provides the minimum requirements for the Windows server.

Table 3-1. Windows Server Requirements

Component	Recommended	Comments
Operating system	Microsoft Windows 2000 server	
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 6.4 for Windows	**Optional**. HP OpenView 6.2 for Windows is also supported. HP OpenView is **not** 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.

Installing the Windows Server Products

The procedure to install or to upgrade the Avaya Integrated Management products on the Windows server is generally the same. If an earlier release of an Integrated Management product on the Windows 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 2.0, Windows Server** CD into the CD-ROM drive.

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

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

4. Click **Install Java Runtime Environment (Required)**.

    The License Agreement dialog box appears.

    Note: Java Runtime Environment (JRE) is required for a new computer that does not have JRE already installed. If you select this option and the installation wizard detects JRE, the wizard displays a message that JRE is already installed and aborts the JRE installation. Go to **Step 10**.

5. Read the license agreement. If you accept the license agreement, click **I accept the terms in the license agreement**, and then click the **Next** button.

    Note: You must accept the terms of the license agreement in order to continue with the installation.

    The Setup Type dialog box appears.

6. You are required to install the JRE version on this CD in order to run the Integrated Management products. However, to avoid conflicts with other installed JRE versions, you need to turn off this version as the default. Therefore, select the **Custom** option, and then click the **Next** button.

    The Custom Setup dialog box appears.

7. Make sure **Java 2 Runtime Environment** is selected, and then click the **Next** button.

    The Browser Registration dialog box appears. **Microsoft Internet Explorer** and, if present on your PC, **Netscape 6 or later** will appear with check marks.

8. Click the **Microsoft Internet Explorer** check box to deselect this option (and **Netscape 6 or later**, if present) and then click the **Next** button. Leaving these options checked can potentially prevent other applications from launching properly.

    The JRE software is installed. A message box shows the status of the installation.

    When the installation is complete, the InstallShield Wizard Completed dialog box appears.

9. Click the **Finish** button.

   The Avaya Integrated Management Windows Server window appears.

10. Click **Install Server Products**.

    The Welcome dialog box appears.

11. Click the **Next** button.

    The Information dialog box appears.

12. Click the **Next** button.

    The Avaya License Types dialog box appears.

13. 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 Apache License Agreement dialog box appears.

14. Read the license agreement. To accept the license agreement, click the **Yes** button.

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

15. 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 Components dialog box appears. This dialog box displays the applications and
    components you can install.

    Note: Apache2, Required Components, and Home Page are grayed out. This indicates that
    the wizard automatically installs the required components. They cannot be
    deselected.

16. Make sure the applications you want to install are selected, and then click the **Next** button.

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

17. Click the **Yes** button to disable IIS.

    The Apache HTTP Server Information dialog box appears.

18. 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.

19. Click the **Next** button.

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

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

- If HP OpenView is already installed on the server, the Installation Mode dialog box appears. Perform one of the following steps:

  — If you do **not** plan to run HP OpenView, select **Network Management in Standalone Mode** (default), and then click the **Next** button. The Enter Network Management Server IP Address dialog box appears. Go to **Step 21**.

  — If you plan to run HP OpenView, select **Network Management in HP OpenView mode**, and then click the **Next** button. The Enter Network Management Server IP Address dialog box appears. Go to **Step 21**.

- If HP OpenView is not installed on the server, the Enter Network Management Server IP Address dialog box appears. Go to **Step 21**.

21. Enter the IP address of the Network Management server and click the **Next** button.

- If you are installing the Windows Enterprise Server CD, the Setup Summary dialog box appears. It lists the applications that you selected to install. Go to **Step 25**.

- If you are installing the Windows Server CD, the Enter VoIP Monitoring Manager Server IP Address dialog box appears. Go to **Step 22**.

22. 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.

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

The Network Management System Integration Server IP Address dialog box appears.

24. Click the **Next** button to skip the dialog boxes requesting IP addresses for Network Management System Integration (NMSI), Avaya MultiSite Administration, Avaya Fault and Performance Manager, Avaya Proxy Agent, and Avaya Integrated Management Database. These products are not provided in the Enterprise and Enhanced offers.

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

25. 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 26**.

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 Windows Server CD from the CD-ROM drive.

    b. Insert the Microsoft Windows 2000 Operating System CD into the CD-ROM drive and click **OK**.

    c. Follow the installation wizard prompts. When completed, **Installation Wizard Complete** appears.

    d. Remove the Microsoft Windows 2000 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 27**.

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

27. 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 4. 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.

4   Windows Client Installation

Windows Client CD

The Windows Client CD contains products that you install directly onto the PCs. After the Windows server installation is completed (see Chapter 3, Windows Server Installation), you can also download and install the same products provided on this CD from the Avaya Integrated Management Home Page.

The Windows Client CD contains the following Integrated Management products:

- Avaya Site Administration

- Avaya Voice Announcement Manager

- Avaya VoIP Monitoring Manager (90-day trial version) for the Enterprise offer

- Avaya VoIP Monitoring Manager (client) for the Enhanced offer

The Windows Client CD also contains the following components:

- Java Runtime Environment

- Adobe Acrobat Reader (required to view documents)

Windows Client PC Requirements

Table 4-1 provides the requirements for the Windows client PC.

Table 4-1. Windows Client PC Requirements

Component	Recommended	Comments
Operating system	Microsoft Windows 2000 and XP Professional	
Processor	600 MHz Pentium®	
Hard Drive	1 GB	Required to install all of the client components.
Memory	256 MB RAM	
Monitor	SVGA	Required for Avaya support.
Network Connectivity	TCP/IP 10/100 Network Card	
Modem	56K Modem	**Optional**. May be needed for remote access to the client PC.
CD-ROM Drive	Required	Needed for installation.
Web Browser	Internet Explorer 6.0	Required to access the Integrated Management Home Page and web-based clients.

Installing the Windows Client Products

The procedure to install or upgrade the contents of the Windows Client CD is generally the same.

1. Close all open windows and applications.

2. Insert the **Avaya Integrated Management 2.0, Windows Client** CD into the CD-ROM drive.

    The Avaya Integrated Management Windows Client window appears. It provides a main menu.

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

3. Click **Install Java Runtime Environment (Required)**.

    The License Agreement dialog box appears.

    Note: Java Runtime Environment (JRE) is required for a new computer that does not have JRE already installed. If you select this option and the installation wizard detects JRE, the wizard displays a message that JRE is already installed and aborts the JRE installation. Go to **Step 9**.

4. Read the license agreement. If you accept the license agreement, click **I accept the terms in the license agreement**, and then click the **Next** button.

    Note: You must accept the terms of the license agreement in order to continue with the installation.

    The Setup Type dialog box appears.

5. You are required to install the JRE version on this CD in order to run the Integrated Management products. However, to avoid conflicts with other installed JRE versions, you need to turn off this version as the default. Therefore, select the **Custom** option, and then click the **Next** button.

    The Custom Setup dialog box appears.

6. Make sure **Java 2 Runtime Environment** is selected, and then click the **Next** button.

    The Browser Registration dialog box appears. **Microsoft Internet Explorer** and, if present on your PC, **Netscape 6 or later** will appear with check marks.

7. Click the **Microsoft Internet Explorer** check box to deselect this option (and **Netscape 6 or later**, if present) and then click the **Next** button. Leaving these options checked can potentially prevent other applications from launching properly.

    The JRE software is installed. A message box shows the status of the installation.

    When the installation is complete, the InstallShield Wizard Completed dialog box appears.

8. Click the **Finish** button.

    The Avaya Integrated Management Windows Client window appears.

9. Click **Install Client Products**.

    The Welcome dialog box appears.

10. Click the **Next** button.

The Avaya License Types dialog box appears.

11. Read the license types. If you accept the license types, click the **I accept the terms of the license agreement** option button, and then click the **Next** button.

   Note: You cannot install the Avaya Integrated Management products unless you accept the license types.

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

12. Perform one of the following steps:

   - To install the applications in the default folder, click the **Next** button.

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

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

   Note: If you are installing the Windows Enterprise Client CD, you can install **VoIP Monitoring Manager Trial**. This trial version installs the client and server components that allow you to preview the product for 90 days. If you are installing the Enhanced version of the Windows Client CD, you can install **VoIP Monitoring Manager Client** if the VoIP Monitoring Manager server components are installed on the Windows server.

13. Make sure the applications you want to install are selected, and then click the **Next** button.

14. Perform one of the following steps:

   - If you are installing the VoIP Monitoring Manager, the Enter VoIP Monitoring Manager Server IP Address dialog box appears. Go to **Step 15**.

   - If you are not installing the VoIP Monitoring Manager, the Enter Avaya Integrated Management Server IP Address dialog box appears. Go to **Step 17**.

15. In the Enter VoIP Monitoring Manager Server IP Address dialog box, enter the IP address of the VoIP Monitoring Manager server, and then click the **Next** button.

   - If you are installing **VoIP Monitoring Manager Trial**, the Enter VoIP Monitoring Manager Server Port dialog box appears. Go to **Step 16**.

   - If you are installing **VoIP Monitoring Manager Client**, the Avaya Integrated Management Server IP Address dialog box appears. Go to **Step 17**.

16. Enter the number of the RTCP Listen Port, and then click the **Next** button.

The Enter Avaya Integrated Management Server IP Address dialog box appears.

17. In the Enter Avaya Integrated Management Server IP Address dialog box, enter the IP address of the Avaya Integrated Management Home Page server, and then click the **Next** button.

The Ready to Install the Program dialog box appears.

18. Click the **Install** button.

    The Setup Status message box appears showing the status of the installation. When the installation is complete, the InstallShield Wizard Complete dialog box appears.

19. Click the **Finish** button and then remove the CD from the drive.

20. If you are installing Avaya VoIP Monitoring Manager on a PC that does not have Windows SNMP Service running, a request for the Windows Operating System CD will appear at the end of the installation. Finish this installation and then install the SNMP Service from the Windows Operating System CD.

You can access the products by selecting **Start > Programs > Avaya**. For more information about an Avaya Integrated Management product, access the online help after you start the application.

Note: Regularly check the Avaya Support Web Site for software updates.

5   Avaya Mailbox Manager

About Mailbox Manager

Mailbox Manager for the Avaya S3400 Message server is a Windows interface for performing moves, adds, and changes on the Message Storage Server (MSS) component. The software maintains an off-line database of your subscriber and class of service data. You make your changes to subscribers and classes of service in this interface, and it sends the changes to your MSS.

For more information about Avaya Mailbox Manager, see the following books:

- Getting Started Guide

- User Guide

These books are available from the User Documents page, which is on the Avaya Integrated Management Home Page.

Launching Mailbox Manager

The Avaya Mailbox Manager option is available from the Launch Products page, which is on the Avaya Integrated Management Home Page. In order to launch Mailbox Manager from the Launch Products page, you must:

- Install Avaya Site Administration and/or Avaya Voice Announcement Manager which are provided on the Windows Client CD (see Chapter 4, "Windows Client Installation, on page 17.) The installation of at least one of these products automatically installs the components required to launch the Mailbox Manager from the Avaya Integrated Management Home Page.

- Install Avaya Mailbox Manager on your PC. Installation software for Mailbox Manager is included on the Avaya Modular Messaging Installation CD that comes with the Avaya S3400. Follow the single-user instructions provided in the *Mailbox Manager Getting Started Guide*.

- Complete the licensing procedure as described in "Licensing Mailbox Manager."

Licensing Mailbox Manager

When you install Avaya Mailbox Manager, a single-user license is created. If your organization also manages other Avaya legacy message servers that are supported by Mailbox Manager (for example, Octel 250/350, Octel 200/300, or Intuity AUDIX) you may already have Mailbox Manager licenses for those as well. You can combine the licenses for these systems into one license and manage them from one interface if you upgrade those licenses to Mailbox Manager 5.0.

Note: If you plan to use Mailbox Manager to manage your Messaging Services system along with Octel 250/350, Octel 200/300, or Intuity AUDIX system, then you cannot run Mailbox Manager from the Messaging Application software.

To get a combined license for all of your Avaya message servers, do the following:

1. Install Mailbox Manager for your Avaya S3400 by following the single-user instructions provided in the *Mailbox Manager Getting Started Guide*.

2. Locate your license file **C:\MBMData\Config\Config.2nl**.

3. Send an e-mail to **license@unimax.com** requesting the license. You will need to include a copy of your license file and identifying numbers for your legacy systems, as follows:

   • Octel 200/300 with system software 2.0 or newer — system serial number and current system software version.

   • Octel 250/350 with system software 2.0 or newer — system serial number (also known as VPMOD serial number) and current system software version.

   • Intuity AUDIX with system software 4.4 or newer — system serial number, current system software version, and model type. (MAP 40 and MAP 100 were sold with bundled licenses. MAP 5 is supported by Mailbox Manager but did not include a license.)

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