

SIP Personal Information Manager

(SIP Enablement Services)

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Warranty

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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.

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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 Contacts link that is located under the Support Tools heading. Then click the appropriate link for the type of support that you need.
- Outside the United States, click the Escalation Contacts link that is located under the Support Tools heading. 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)

 The first control of capabilities are a first linear and a first linear and
- 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, or IEC 60950-1, 1st 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, or CAN/CSA-C22.2 No. 60950-1-03 / UL 60950-1.

Safety Requirements for Information Technology Equipment, AS/NZS 60950:2000.

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 used in Avaya equipment typically operate within the following parameters:

Typical Center Wavelength	Maximum Output Power
830 nm - 860 nm	-1.5 dBm
1270 nm - 1360 nm	-3.0 dBm
1540 nm - 1570 nm	5.0 dBm

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, EN55022:1998, and AS/NZS

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

Power Line Emissions, IEC 61000-3-2: Electromagnetic compatibility (EMC) - Part 3-2: Limits - Limits for harmonic current emissions.

Power Line Emissions, IEC 61000-3-3: Electromagnetic compatibility (EMC) - Part 3-3: Limits - Limitation of voltage changes, voltage fluctuations and flicker in public low-voltage supply systems.

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

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.

Installation and Repairs

Before installing this equipment, users should ensure that it is permissible to be connected to the facilities of the local telecommunications company. The equipment must also be installed using an acceptable method of connection. The customer should be aware that compliance with the above conditions may not prevent degradation of service in some situations.

Repairs to certified equipment should be coordinated by a representative designated by the supplier. Any repairs or alterations made by the user to this equipment, or equipment malfunctions, may give the telecommunications company cause to request the user to disconnect 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 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).

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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Web site: http://www.avaya.com/support.

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About this Document

This document, SIP Personal Information Manager.

- Contains new Session Initiation Protocol (SIP) information
- Is a revised document. Support for the SIP Personal Information Manager (PIM) was introduced in Release 3.0 of SIP Enablement Services (SES), a component of Avaya's Converged Communications Server family of products.
- Presents additional information about SIP for Avaya Communication Manager. Refer to Avaya Communication Manager documentation for non-SIP issues.

This document is available online or in paper format. For your convenience, consider using the embedded cross-references to locate information. In addition, there is a table of contents and index for your convenience.

Audience

This document is for users of SIP Enablement Services, with or without media servers running Communication Manager, and related systems supporting SIP. It is intended to assist with the setup and configuration of SIP devices (such as telephones or IP Softphone clients) and the ongoing management of user profile and contact information for the SES system.

This document assumes that the reader has a working knowledge of SIP telephony and IP endpoint fundamentals and setup practices. This document also assumes that the SES system was initially installed and tested properly, and brought into service with every fault cleared. Adjuncts and other devices are covered by their own end-user and service documentation.

If you do not have these experiences and qualifications, please make arrangements for a mentor.

Document set

Although this book is published separately, it is part of a set. Use this document as an adjunct to the following references:

- SIP Enablement Services documentation, including the document Installing and Administering SIP Enablement Services, 03-600768.
- The SIP Support for Avaya Communication Manager document.
- The Avaya Communication Manager Release 3.1.x documentation set, including the Administrator's Guide for Avaya Communication Manager document
- The Administration for Network Connectivity for Avaya Communication Manager document.

Equipment

This book contains information pertaining to the following equipment:

- Avaya SIP Enablement Services, running on one or more Avaya S8500B server(s)
- Avaya S8700/S8710 Media Servers with or without Avaya media gateway(s)
- Avaya S8500/S8500B Media Servers with or without Avaya media gateway(s)
- Avaya S8300 Media Servers with or without Avaya media gateway(s).

Organization

- About this Document, what you are reading now, gives general information on what system is documented, and how to use this document and other related documents.
- Chapter 1: Introduction. This section relates high-level information about SIP Enablement Services, what the Personal Profile Manager (PPM) server software is and what it does, and how to access the SIP Personal Information Manager web interface to use it.
- Chapter 2: SIP PIM Web Interface. This section describes in detail the use and meaning of the SIP Personal Information Manager screens in the web-based user interface
- Appendix: Licenses. This section presents an example of the text of the licenses you will need.
- Glossary provides explanations of abbreviations, acronyms, and terms
- Index

Conventions

Table 1: Explanation of typography

To represent	This typeface and syntax are shown as	For example
commands	 Bold for commands Bold italic for variables Square brackets [] around optional parameters " " between exclusive choices 	refresh ip-route [all location]
screen input and output	Bold for input Constant width for output (screens and messages)	Set the Save Translation field to daily. The message Command successfully completed should appear.
Web interface	 Bold for menu selections, tabs, buttons, and field names Right arrow > to separate a sequence of menu selections 	Select Alarms and Notification, the appropriate alarm, and then click Clear. Select Diagnostics > View System Logs, then click Watchdog Logs.
Keys	Special font for keyboard keys and SAT screen clickable buttons	Press Tab . Click Next Page .

Other conventions used in this book:

- Physical dimensions are in English units [Foot Pound Second (FPS)], followed by metric units [Centimeter Gram Second (CGS)] in parentheses.
 - Wire-gauge measurements are in AWG, followed by the diameter in millimeters in parentheses.
- Circuit-pack codes (such as TN790B or TN2182B) are shown with the minimum acceptable alphabetic suffix (like the "B" in the code TN2182B).
 - Generally, an alphabetic suffix higher than that shown is also acceptable. However, not every vintage of either the minimum suffix or a higher suffix code is necessarily acceptable. The Hardware Guide for Avaya Communication Manager (555-245-207), contains current information on circuit pack codes and functionality.

Safety labels and security alert labels

Observe all caution, warning, and danger statements to help prevent loss of service, equipment damage, personal injury, and security problems. This book uses the following safety labels and security alert labels:



CAUTION:

A caution statement calls attention to a situation that can result in harm to software, loss of data, or an interruption in service.



WARNING:

A warning statement calls attention to a situation that can result in harm to hardware or equipment.



A DANGER:

A danger statement calls attention to a situation that can result in harm to personnel.



SECURITY ALERT:

A security alert calls attention to a situation that can increase the potential for unauthorized use of a telecommunications system.

Trademarks

All trademarks identified by the ® or ™ are registered trademarks or trademarks, respectively, of Avaya Inc. All other trademarks are the property of their respective owners.

Related resources

Table 2: Additional document resources, lists additional documentation that is available for you, some of which is referenced within this document. Use the doc number provided to obtain the latest version.

Table 2: Additional document resources,

Document	Number
4600 Series IP Telephone R2.2 LAN Administrator's Guide	555-233-507
4600 Series IP Telephone R2.2 Installation Guide	555-233-128
4602/4602SW SIP Telephone Quick Reference	16-300471
4602/4602SW SIP Telephone User's Guide	16-300470
4610SW SIP Telephone Quick Reference	16-300473
4610SW SIP Telephone User's Guide	16-300472
4620/4621SW SIP Telephone Quick Reference	16-300475
4620/4621SW SIP Telephone User's Guide	16-300474
4600 Series IP Telephone R2.2 Document Library	16-300091
Avaya Communication Manager Capacities Table	555-245-601
online help for Avaya IP Softphone Release 5.x	
online help for Avaya SIP SoftPhone Release 2.x	
SIP Implementation Guide	16-300140
Administration for Network Connectivity for Avaya Communication Manager	<i>555-233-</i> 504
Administrator's Guide for Avaya Communication Manager	03-300509
Feature Description and Implementation for Avaya Communication Manager	555-245-205
Avaya Extension to Cellular and OPS Installation and Administration Guide	210-100-500
Avaya Extension to Cellular User's Guide	210-100-700
Avaya Toll Fraud and Security Handbook	555-025-600
SIP Support in Avaya Communication Manager	555-245-206
Converged Communications Server Installation and Administration	555-245-705
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Table 2: Additional document resources, (continued)

Document	Number
Hardware Guide for Avaya Communication Manager	555-245-207
Quick Start for Hardware Installation: Avaya S8500 Media Server	555-245-701
Quick Start for Hardware Installation: Avaya S8700 Series Media Server	555-245-703
Installation and Upgrades for the Avaya G700 Media Gateway and Avaya S8300 Media Server	555-234-100
Installing and Configuring the Avaya S8500 Media Server	03-300143
The Avaya Server Availability Management Processor (SAMP) User Guide	03-300322
Job Aids for Field Replacements for the Avaya S8500 Media Server	03-300529
Job Aid: Upgrading Firmware on the BIOS — Avaya S8500 Media Server	03-300411
Maintenance Alarms Reference (03-300190)	03-300190
Maintenance Commands Reference (03-300191)	03-300191
Maintenance Procedures (03-300192)	03-300192
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Technical assistance

Avaya provides the following resources for technical assistance.

- Within the U.S.
- International
- Downloading this book from the Web

Within the U.S.

For help with:

- Feature administration and system applications, call the Avaya Helpline at 1-800-225-7585
- Maintenance and repair, call the Avaya National Customer Care Support Line at 1-800-242-2121
- Toll fraud, call Avaya Toll Fraud Intervention at 1-800-643-2353

International

For all international resources, contact your local Avaya authorized dealer for additional help.

Downloading this book from the Web

You can download the latest version of this book from the Avaya Web site. You must have access to the Internet, and a copy of Adobe Acrobat or Reader must be installed on your personal computer.

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Introduction

Chapter 1: Introduction

This chapter describes Avaya SIP Personal Information Manager (PIM), what it is and what it does.

Converged Communications Server Positioning Statement

The Converged Communications Server establishes the foundation for the Communication Services layer within the Avaya Communication Architecture. This layer unifies all enterprise real-time communications over an open SIP-based infrastructure, and provides the glue that binds with Avaya MultiVantage communication applications, exposing them as Web service components that can be easily invoked through standards-based clients or business applications, or as open APIs that provide a secure, reliable and highly scalable application development platform for access to Communication Manager services.

The Converged Communications Server is a family of related product offerings that currently consists of two primary components:

- SIP Enablement Services
- Application Enablement Services.

SIP Enablement Services and Application Enablement Services are distinct offerings that are ordered independently and implemented as needed by the enterprise on separate, dedicated server platforms. In combination, the new services of the Converged Communications Server create an application environment that combines the loosely coupled multi-modal services and presence capabilities available via a SIP-based architecture with the open APIs that expose the full breadth of features and functions of Avaya Communication Manager.

SIP Enablement Services

Avaya SIP Enablement Services (SES) R3.1.x incorporates the SIP functionality previously introduced as Converged Communications Server Release 2.1, combined with new feature and scalability enhancements. The application combines the standard functions of a SIP proxy/ registrar server with SIP trunking support and duplicated server features to create a highly scalable, highly reliable SIP communications network supporting telephony, instant messaging. conferencing and collaboration solutions.

Application Enablement Services

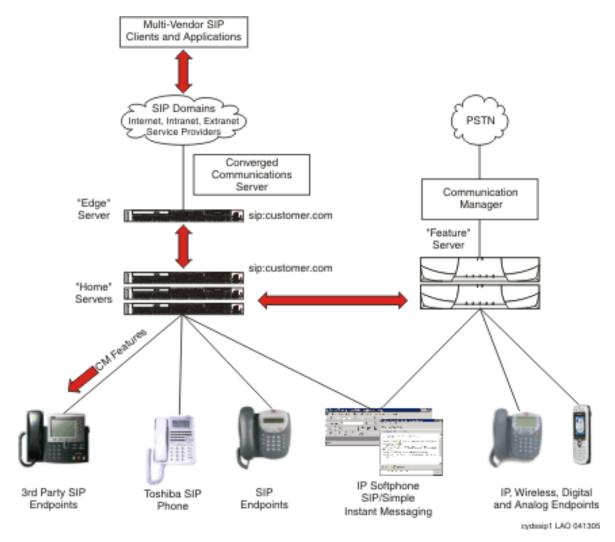
Avaya Application Enablement Services 3.x.x consolidates Avaya's existing application enablement assets — such as Communication Manager Application Programming Interface (CMAPI) and Avaya CT — into a single, Linux-based platform. This enables enterprises to leverage the tremendous variety of computer-telephony integration and interactive response applications developed for these interfaces. Application Enablement Services allow for powerful new applications to be written and deployed that fully leverage Communication Manager via standards-based APIs and Web service components.

Introduction to SIP PIM

SIP is the Session Initiation Protocol, an endpoint-oriented, network messaging standard defined by the Internet Engineering Task Force (IETF).

What is SIP PIM?

The Avaya SIP Personal Information Manager (PIM) provides SIP users access to the Personal Profile Manager (PPM) software component of Avaya's SIP Enablement Services. The SIP PIM is dedicated to helping users easily access and manage their own SIP application feature data. Some examples of this include managing and viewing lists of other users that they contact. various settings related to certain, supported SIP devices (the Toshiba SIP Business Telephone, SP-1020A), and whether other SES users can watch their presence in the system. Administered users can manage and view their user (and in some cases, also their SIP-enabled device) information using any standard web browser client software, such as the newest versions of Internet Explorer or Mozilla/Firefox. Just enter the network host name or IP address of the Home server (or Home/Edge combination, for single-server configurations) of which you are a user in the web browser's location box or address bar.

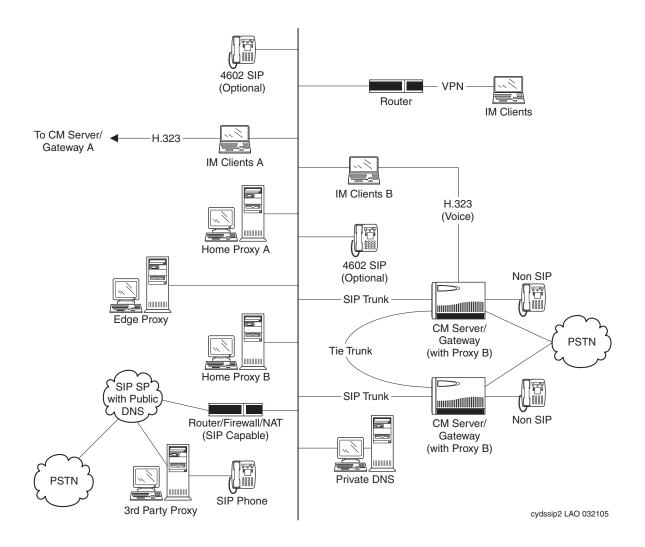


Many SIP-enabled endpoint devices are supported by SIP Enablement Services, such as the new Toshiba SIP Business Telephone SP-1020A, the Avaya 4600-series SIP Telephones and the Avaya SIP Softphone Release 2.2 and IP Softphone Release 5.1 and later releases. SIP-enabled devices such as these can register with the Avaya proxy server running SES; also (optionally), note that they can be managed by an Avaya media server running Communication Manager software. In this way, Avaya is able to extend across all of these managed stations (analog and DCP sets, as well as SIP endpoints) a number of features, some of which may not be supported natively within the SIP standard. In addition, the SES system supports the SIP-enabled Instant Messaging (IM) application between users of the appropriate IP Softphone R5.x client software; for voice communications, note that all the users of this client software also must be logged in to, and their communication managed by, one or more properly configured Avaya media server(s) running an appropriate, SIP-enabled release of Communication Manager.

System Architecture

The SIP PIM runs on any Avaya SES host configured as either a Home or the Home/Edge combination server, but not on the host configured as the Edge server in a multi-server configuration. (Avaya's SIP solution architecture supports these three different Types of Hosts.)

Illustration



Types of Hosts

Edge server

The Edge server handles SIP requests from all domains, forwarding requests received from Home servers. If an Edge server is used, then one or more Home server(s) must also exist in the system architecture. Only one Edge server (or combined Home/Edge server) is allowed for any one domain; for example, one Edge server forwards requests to and from the "systemdomain.com" domain.

Home server

A Home server handles SIP requests for the users assigned to this server, and it forwards any requests pertaining to others to the Edge server. One to ten Home server(s) and exactly one Edge server are required in this scenario. For example, customers might use one Home server for all their users in one geographic area and another Home for users in another area within its system. As a user, you would log on to the SIP PIM web interface running on your Home server. Other users would log on to their own Home servers' web interfaces.

Home/Edge server

A combined Home/Edge server performs the functions of both a Home server and an Edge server for an enterprise. This is a single-server scenario; that is, no other Home or Edge servers may exist in this architecture. To log on to the SIP PIM web interface on a combined Home/ Edge server, just type that server's DNS hostname in your browser to display its "home" page.

Note:

It is best to design your system (i.e., a combined Home/Edge server, or multiple servers) with scalability in mind, as this release of the server software does not support fully non-disruptive database migration.

Related Systems

Refer to Installing and Administering SIP Enablement Services, 03-600768 for more details on the setup, installation, and initial configuration and administration of the server running the Avaya SIP PIM web interface. NOTE: Maintenance of the physical server hardware is performed using a separate web interface.

Refer to the SIP Support by Avaya Communication Manager, 555-245-206, document for more details on media server administration requirements for SIP. SIP Trunks and all users and their endpoints, dial plans, and extensions must be administered correctly in Communication Manager to use these extensions (telephone numbers) within their URI-based, SIP user contact information.

Refer to Toshiba SIP Business Telephone documentation for more information about the device. Refer to the documentation or online help files that came with your Avaya IP SoftPhone R5.1 (or later)/Avaya SIP Softphone R2.2 (or later), and/or a SIP-enabled Avaya 4600 Series Telephone, for more details on the client requirements for using Instant Messaging (by means of the former) and SIP voice calling (by means of the latter).

For more information about the support provided in Avaya's SIP solution for third-party endpoints, see the Application Notes contained within the Resource Library on Avaya's DevConnect website:

http://www1.avaya.com/enterprise/resourcelibrary/applicationnotes/devconnect network.html

Chapter 2: SIP PIM Web Interface

List of Screens

Use the following screens to administer the Personal Profile Manager (PPM) software component of SIP Enablement Services. Through the SIP Personal Information Manager (PIM) web-based interface, SIP users can log on and manage or view data contained in the user database, including their contacts, and also enable the tracking of presence and availability information. Note that these SIP PIM screens are applicable on any Home server, a dedicated Home or a combined Home/Edge proxy server (in single-server configurations only); other than managing personal profiles through the SIP PIM web interface, the other capabilities of an administrative user account on Home servers typically are limited to a subset of Services and Export/Import tasks. Note that the Master Administration web interface is installed and running on the Edge server in multi-server configurations.

Logon

At the top-most level of the master administrative interface are the following:

Logon screen on page 27

My Contact List

The names of the screens (and the links to them) from the My Contact List screen on page 30 are as follows:

Note:

Note that this user information can be changed by an authorized administrator in the Master Administration web interface on the Edge server in an SES system, as well as by a SIP user in this Personal Information Manager (PIM) web interface.

- Speed Dial List screen on page 33
- Add Contact screen on page 35
- Contact Details screen on page 38
 - Update Contact screen on page 41
 - Delete Contact screen on page 44

- Add Group screen on page 45 completing this screen to add names of new groups to the existing Default is optional, but is recommended if your contact list contains a number of entries, and you wish to organize and categorize this list of contacts, for example via their shared characteristics. You may edit the name of any group (other than Default) using the **Update Group screen on page 48**. Newly added groups will be empty until contacts are associated with them; when groups are deleted using the Delete Group screen on page 50, any associated contacts may be moved to other existing groups, are their contact records may be deleted along with the group. You must confirm your deletion option.
- Group Details screen on page 46
 - Update Group screen on page 48.
 - Delete Group screen on page 50.

My Devices

The names of the screens (and the links to them) from the My Devices screen on page 60 are as follows (note that these example screens apply only to the Toshiba SIP Business Telephone SP-1020A of the SIP Personal Information Manager and not to the Avaya 4600-series IP Telephones, Avaya Softphone R5.x or Avaya SIP Softphone 2.x clients):

- Tones and Volumes screen on page 62
- Ringer Settings screen on page 64
- One Touch Dial List screen on page 66
- Reload Device Config screen on page 68.

My Profile

The names of the screens/functions to help manage your own personal profile are as follows:

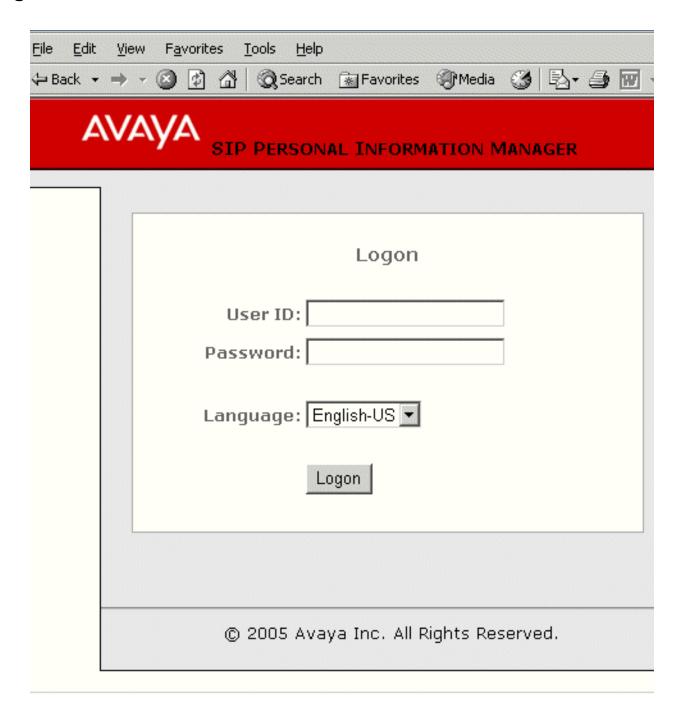
- My Profile screen on page 51
- My Permissions screen on page 54
- My Watchers screen on page 56
- Change Password screen on page 58

Note:

The database of user contact information forbids certain characters. For example, the less-than sign (<), forward slash (/), backward slash (\), and apostrophe or single-quote mark ('), as well as certain character combinations, for example HTML tagging, may be silently disallowed and discarded if they have been input as field entries using the SIP Personal Information Manager (PIM) web-based interface.

Logon Screen

Logon screen



Logon screen description

User ID

(Required) Enter a valid user ID with which to log on to your account. It may be entered as a user's alphanumeric handle identifier, or as the full primary handle@systemdomain.com syntax. After entering this and before selecting the Logon button, you must complete the following Password field.

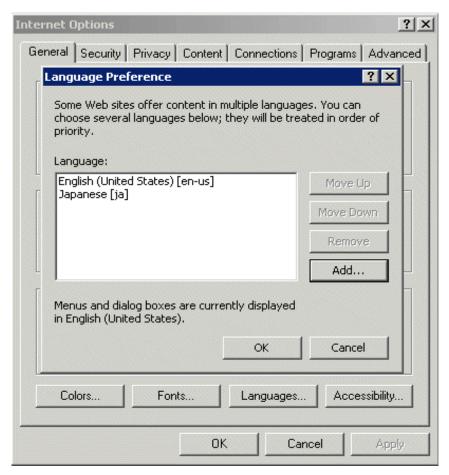
Password

(Required) Enter the password for your user account. Valid passwords may be 6-12 characters, either alphanumeric or valid punctuation characters (like period, comma, colon or semi-colon, and exclamation mark), and may not contain any slashes, spaces, apostrophes, quotes or backslash characters.

Language

(Required) Select the language you prefer for the SIP Personal Information Manager (PIM) web interface from the drop-down list of available languages. The list of languages displayed is prioritized based upon the settings in the client browser software you use to access the web-based interface. (See the following illustration for an example of Microsoft Internet Explorer Options settings.)

The prioritized list is obtained directly from your web browser's General Internet Options for Language Preference. The first listed entry, selected by default, is your top-preferred language.



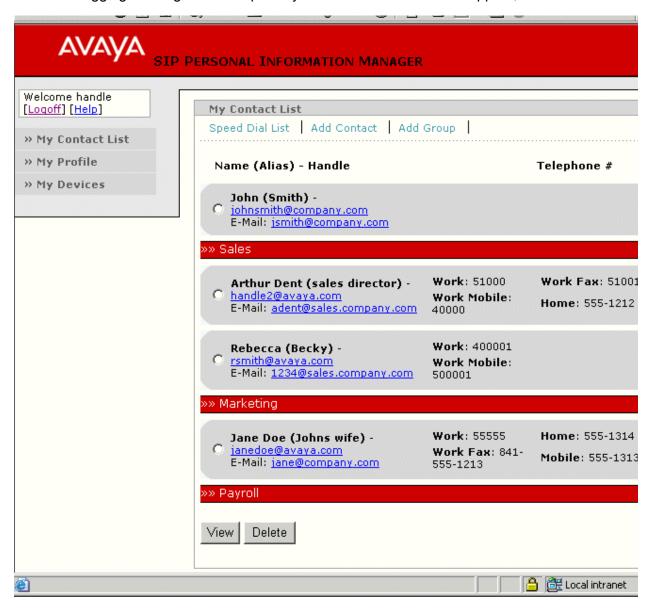
Shift_JIS character encoding is made available in the web browser when Japanese is selected from the list of available languages. UTF-8 character encoding is used for web pages displayed in U.S. English.

After completing the fields on the Logon screen, click on the Logon button or press the Enter or Return key on your keyboard.

My Contact List screens

My Contact List screen

The My Contact List screen shows link(s) to the next screen(s) needed to configure the Avaya Personal Profile Manager (PPM) for use. The first My Contact List screen to be displayed for a user after logging in using his or her primary handle of "handle" would appear, as follows:



My Contact List screen command description

Speed Dial List

Select this link to go to the Speed Dial List screen on page 33. The Speed Dial List entries are created by using the Add Contact screen on page 35 to create a contact list entry, and then by specifying via checkbox(es) one or more Contact Phone(s) be added to this Speed Dial List.

Add Contact

Select this link to go to the Add Contact screen on page 35 and create a new entry for a user contact in your contact list. You may optionally add any associated Contact Phone(s) to your Speed Dial List screen on page 33.

Add Group

Select this link to go to the Add Group screen on page 45 and create a new group to contain user contacts, or you may choose to add contacts to the list first and add groups to associate them with later.

My Contact List screen field descriptions

Name

(Read Only) Displays the name (of as many as 64 UTF-8 characters) associated with this user handle in the user database. The name will be assigned to the speed dial button for this contact. In Japanese, this name string uses Kanji characters. (Contrast this with (Alias)).

(Alias)

(Read Only) Displays the optional alias name (of as many as 32 UTF-8 characters) associated with this user handle in the user database. In Japanese, this alias string is in Kana characters, and it is designed to help with contact sorting. (Contrast this with Name).

Handle

(Read Only) Displays (as a selectable link) a valid "handle" for the user. Selecting the link displays the detailed user contact information for the associated user. Handles must be unique contact Uniform Resource Identifiers (URIs) within the SIP system domain, but users may have multiple valid handles assigned to them. Only the primary handle matches the user ID.

Note:

The SES system automatically appends the "@systemdomain.com" portion of the handle. This portion of the handle should not be entered as part of the handle field when adding/updating user contacts on other screens.

Telephone

(Read Only) Lists a phone number or valid SIP user address, for example, contact Uniform Resource Identifiers (URIs) beginning with sip: or sips: or tel: and associated with this handle in the contact database. This field may contain a maximum of 256 ASCII characters.

Note:

For Speed Dial List entries in which Label 1 and Label 2 have not been specified. the system default is to display the Phone Type category name(s) selected from the drop-down list(s) for the associated Contact Phones field(s).

Group Name

Displays a valid name for the group with which the user has been associated, as a selectable link. This field may contain a maximum of 32 UTF-8 characters. Select the link to view the contact details screen for this Group.



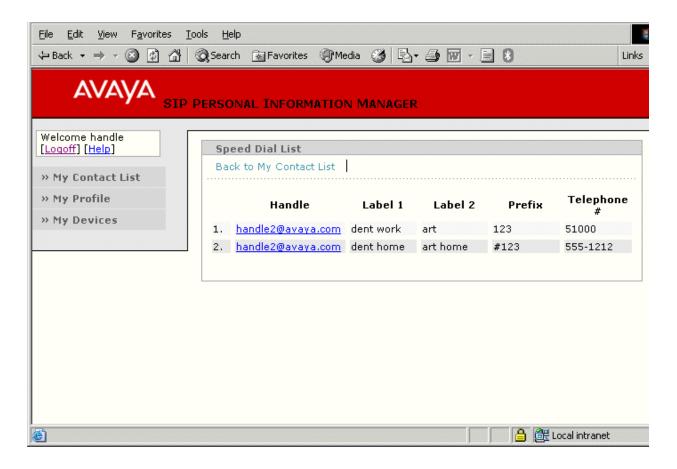
If your contact list is quite lengthy, you may wish to use your web browser's "Find in This Page" function to search down the list for a particular contact entry.

You may select a user contact to View or Delete using the radio button to the left of the associated name and/or handle. After you choose a contact, select the "View" button to display the Contact Details screen for the associated user, or select the "Delete" button to display a warning message for you to confirm the deletion from your contact list.

Note:

Deleting a user contact from your contact list does not affect the associated provisioned user's information in the user database. This information can be edited or deleted by an authorized system administrator using the Master Administration web interface (running on an Edge server in the system).

Speed Dial List screen



Speed Dial List screen field descriptions

Handle

(Read Only) Displays (as a selectable link) a valid "handle" for the contact. Selecting the link displays the detailed user contact information for the associated user. Handles must be unique contact Uniform Resource Identifiers (URIs) within the SIP system domain, but users may have multiple valid handles assigned to them. Only the primary handle matches the user ID.

Note:

The SES system automatically appends the "@systemdomain.com" portion of the handle, so this data must be included in the 256-character maximum length. This portion of the handle should not be entered as part of the handle field when adding/updating user contacts on other screens.

Label 1

(Read Only) Displays part of the name (of as many as 16 UTF-8 characters) associated with this user handle in the database. The name is assigned to the speed dial button for this contact. For the Toshiba SIP Business Telephone SP-1020A, this name string uses Kanji characters (contrast this with the alias string in Label 2).

Note:

For Speed Dial List entries in which Label 1 and Label 2 have not been specified. the system default is to display the Phone Type category name(s) selected from the drop-down list(s) for the associated Contact Phones field(s).

Label 2

(Read Only) Typically, displays the optional alias name (of as many as 16 UTF-8 characters) associated with this user handle in the database. For the Toshiba SIP Business Telephone SP-1020A, this alias string is in Kana characters, and it is designed to help with user contact sorting (contrast this with the name string in Label 1).

Note:

The Toshiba SIP Business Telephone SP-1020A does not display half-width, "Han Kaku Kana" characters.

Prefix

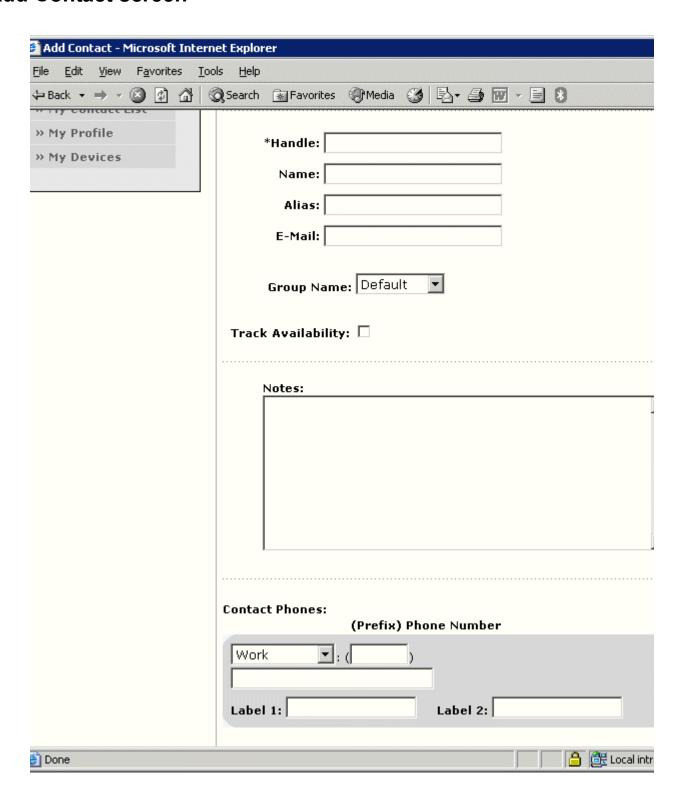
(Read Only) Lists the optional prefix digits associated with this user's extension (Telephone #) in the user database. An example of a prefix would be an AAR or ARS dial access code of 0-4 digits; or you also may leave this field blank if no such prefix code applies to this user contact.

Telephone

(Read Only) Lists a phone number or valid SIP user address, for example, contact Uniform Resource Identifiers (URIs) beginning with sip: or sips: or tel: and associated with this handle in the contact database. This field may contain a maximum of 256 ASCII characters.

Select the link for a "Handle" to view the associated user's detailed contact information. Select the link "Back to My Contact List" when you are done to return to the My Contact List screen.

Add Contact screen



Add Contact screen description

Handle

(Required) Enter the valid SIP address for a user contact. This SIP user does not necessarily have to be registered on a Home server or be a subscriber within this SES system, but handles must be unique contact Uniform Resource Identifiers (URIs) within the SIP system domain. The URIs may be of the form sip: URI or sips: URI or tel: digits, or the entry may be any valid alphanumeric user handle. Handles must be no more than 256 ASCII characters in length; users may have multiple valid handles assigned to them. A user's primary handle matches the user ID that he or she uses to log on to their SIP device.

Note:

The SES system automatically appends the "@systemdomain.com" portion of the handle, so this data must be included in the 256-character maximum length. This portion of the handle should not be entered as part of the handle field when adding/updating user contacts on other screens.

Name

(Optional) Enter the name (of as many as 64 UTF-8 characters) to be associated with this user handle in the database. Typically, the name will be assigned to Label 1 for the speed dial button for this user contact. In Japanese, this name string uses Kanji characters. (Contrast this with Alias).

Alias

(Optional) Enter an optional alias name (of as many as 32 UTF-8 characters) associated with this user handle in the database. Typically, the Alias will be assigned to Label 2 for the speed dial button of this user contact. In Japanese, this alias name is in Kana characters and helps with contact sorting. (Contrast this with Name).

Group Name

(Optional) Select a previously administered group from the alphabetized drop-down list of existing group names, or you may accept the selected Default. User contacts associated with the Default Group appear without Group Name separators on the My Contact List screen.

E-Mail

(Optional) Enter a string in this field as the e-mail address associated with this handle. It may contain as many as 256 ASCII characters. When displayed in the read-only fields on the My Contact List on page 25, this becomes a selectable "mailto:" link on the web page.

Track Availability

(Optional) Check the box if you want to "watch" this user's presence in the system, using a client like SIP Softphone. Users of clients that recognize this optional parameter then will be able to watch this contact's presence and availability in the system.

Notes

(Optional) Enter any informational notation to be associated with this user handle in this field. It is free-form text, and may contain as many as 1,024 UTF-8 characters.

Contact Phones

(Optional) Use this area to designate from zero to six telephone numbers to be associated with this contact. You may choose one of six different categories in the drop-down list to the left of any contact prefix/phone entry for this contact (including for example, Work, Home, Mobile, Fax, and Pager) to describe that entry for this contact. Each associated Prefix (of 0-4 characters, comprising digits 0-9, the asterisk * or the pound sign #) and Phone Number entries must contain all numeric digits, or alternatively, the Phone Number field may contain a valid form of a SIP user address (contact Uniform Resource Identifiers (URIs)) of as many as 256 ASCII characters in length. For each of these entries, you also may select the Speed Dial check box if you wish to show the number(s) in your Speed Dial List. Optionally, you also may designate one or two Label name(s)/alias(es) and/or a dial Prefix (of 0-4 digits) for the associated buttons in the Speed Dial List. Shift JIS characters may be displayed for Japanese-language Label names.

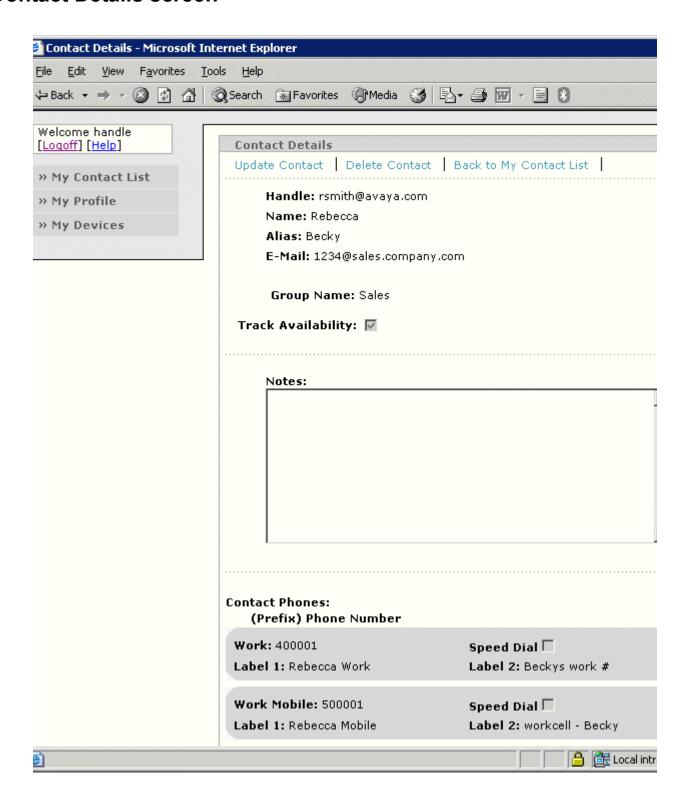
Note:

At least one Phone Number must be entered in order for new Contact Phone data to be created in the user database when you select the "Submit" button.

Select the link "Back to My Contact List" to return to the My Contact List screen.

When you have finished entering data, select "Submit" to add this user contact to your list.

Contact Details screen



Contact Details screen description

Handle

(Read Only) Displays as a selectable link a valid "handle" for the contact. Selecting the link displays the detailed contact information for the associated user. Handles must be unique contact Uniform Resource Identifiers (URIs) within the SIP system domain, but users may have multiple valid handles assigned to them. The primary handle matches their user ID.

The SES system automatically appends the "@systemdomain.com" portion of the handle. This portion of the handle should not be entered as part of the handle field when adding/updating user contacts on other screens.

Note:

If you have Avava IP Softphone properly installed and configured, certain strings of characters (such as 10-digit phone numbers) should be clickable to dial via selecting the links on this web page. See your Softphone help for more details.

Name

(Read Only) Displays the optional name (of as many as 64 UTF-8 characters) associated with this handle in the database, if any. Typically, the name will be assigned to Label 1 for the optional speed dial button of this user contact. In Japanese, this name string uses Kanji characters (contrast this with Alias).

Alias

(Read Only) Displays an optional alias name (of as many as 32 UTF-8 characters) associated with this handle in the database. Typically, the Alias will be assigned to Label 2 for the speed dial button of this contact. In Japanese, this alias name is in Kana characters and helps with contact sorting (contrast this with Name).

Group Name

(Read Only) Displays the name of the group to which this user contact belongs, or the Default.

E-Mail

(Read Only) Displays a string of characters if entered for this user contact in this field as the e-mail address associated with this handle. It may be 3-256 ASCII characters in length.

Notes

(Read Only) Displays any informational notation, if associated with this user handle in this field. It is optional, free-form text, and may contain as many as 1,024 UTF-8 characters.

Contact Phones

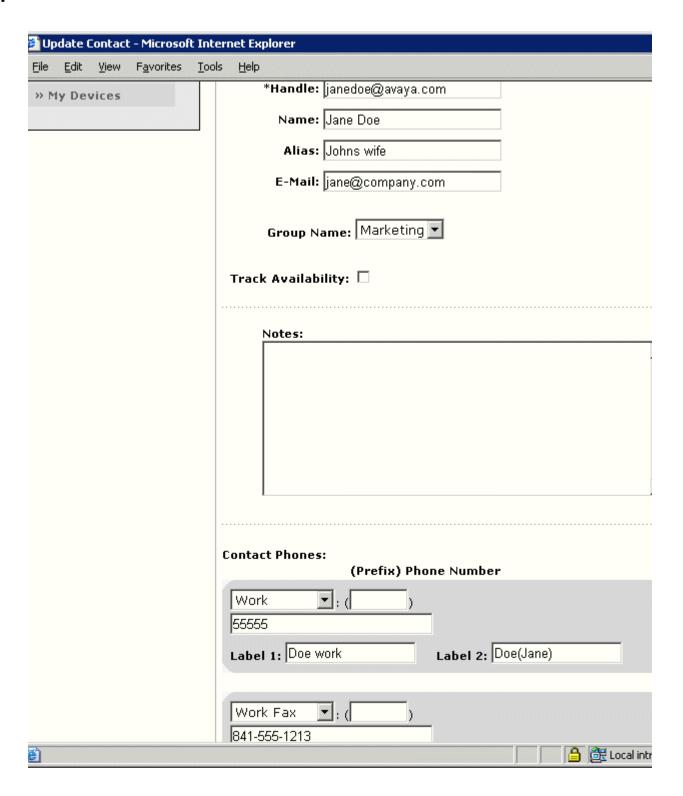
(Read Only) This area designates from zero to six telephone numbers associated with this contact. One of six different **Phone Type** categories may be displayed to the left of any contact prefix/phone entry for this contact (including for example, Work, Home, Mobile, Fax, and Pager) to describe that phone-number entry for this contact. The Phone Number entry must contain all numeric digits, or alternatively, the entry in that field may contain a valid form of a SIP user address (that is, contact Uniform Resource Identifiers (URIs)) of as many as 256 ASCII characters in length. For each of these phone-number entries, the Speed Dial check box indicates if the number is shown in your Speed Dial List. Optionally, one or two Label name(s)/ alias(es) and/or a dial Prefix (of 0-4 digits, * or #) for the associated buttons in the Speed Dial List may have been specified. Shift_JIS characters may be displayed for Japanese-language Label names.



If your contact entry is guite lengthy, you may wish to use your web browser's "Find in This Page" function to search for particular user data.

When you have viewed details, select the "Update Contact" link to change this user contact information, or the "Delete Contact" link to delete this user contact from your contact list.

Update Contact screen



Update Contact screen description

Handle

(Required) Enter the valid SIP address for a user contact. This SIP user does not necessarily have to be registered on a Home server or be a subscriber within this system, but handles must be unique contact Uniform Resource Identifiers (URIs) within the SIP system domain. The URIs may be of the form sip: URI or sips: URI or tel: digits, or the entry may be any valid alphanumeric user handle. Handles must be no more than 256 ASCII characters in length; users may have multiple valid handles assigned to them. The primary handle matches the user ID that a user logs on with.

Note:

The SES system automatically appends the "@systemdomain.com" portion of the handle, so this data must be included in the 256-character maximum length. This portion of the handle should not be entered as part of the handle field when adding/updating user contacts on other screens.

Name

Enter the name (of as many as 64 UTF-8 characters) to be associated with this user handle in the database. Typically, the name will be assigned to Label 1 for the speed dial button for this user contact. In Japanese, this name string uses Kanji characters (contrast this with Alias).

Alias

(Optional) Enter an optional alias name (of as many as 32 UTF-8 characters) associated with this user handle in the database. Typically, the Alias will be assigned to Label 2 for the speed dial button of this user contact. In Japanese, this alias name is in Kana characters and helps with contact sorting (contrast this with Name).

Group Name

Change the Group with which this Contact is associated in the user contact database by selecting a previously administered group from the alphabetized drop-down list of existing group names, or you may accept the Default. User contacts associated with the Default Group appear without Group Name separators on the My Contact List screen.

E-Mail

(Optional) Enter a string in this field as the e-mail address associated with this handle. It may contain as many as 256 ASCII characters. When displayed in the read-only fields on the My Contact List on page 25, this becomes a selectable "mailto:" link on the web page.

Track Availability

(Optional) Check the box if you want to "watch" this user's presence in the system, using a client like SIP Softphone. Users of clients that recognize this optional parameter then will be able to watch this contact's presence and availability in the system.

Notes

(Optional) Enter any informational notation to be associated with this user contact handle in this field. It is optional, free-form text, and may contain as many as 1,024 UTF-8 characters.

Contact Phones

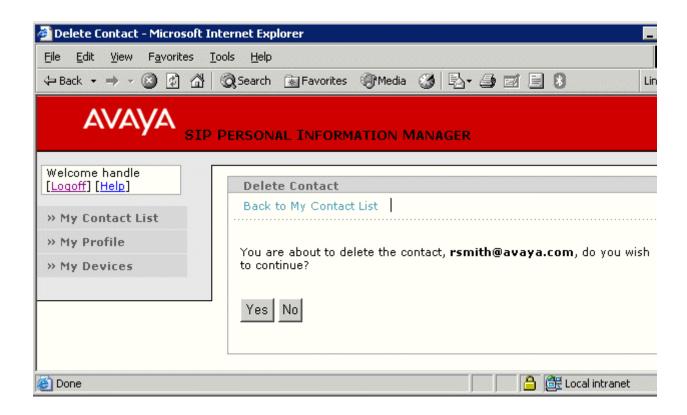
(Optional) Use this area to designate from zero to six telephone numbers to be associated with this contact. You may choose one of six different categories in the drop-down list to the left of any contact prefix/phone entry for this contact (including for example, Work, Home, Mobile, Fax, and Pager) to describe that entry for this contact. Each associated Prefix (of 0-4 characters, comprising digits 0-9, the asterisk * or the pound sign #) and Phone Number entries must contain all numeric digits, or alternatively, the Phone Number field may contain a valid form of a SIP user address (contact Uniform Resource Identifiers (URIs)) of as many as 256 ASCII characters in length. For each of these entries, you also may select the Speed Dial check box if you wish to show the number(s) in your Speed Dial List. Optionally, you also may designate one or two Label name(s)/alias(es) and/or a dial Prefix (of 0-4 digits) for the associated buttons in the Speed Dial List. Shift JIS characters may be displayed for Japanese-language Label names.

Note:

At least one Phone Number must be entered in order for new Contact Phone data to be created in the user database when you select the "Submit" button.

When you have finished updating data, select "Submit" to add this user contact to your list.

Delete Contact screen



Delete Contact screen description

Displays a message warning about this command.

To delete the selected user contact from your contact list, select the "Yes" button; to ignore the previous contact deletion command, select the "No" button. Note that deleting user contacts from your list does not affect the database information for that user administered using the Master Administration web interface running on the system's Edge server.

Add Group screen

Completing this screen to add names of new groups to the existing Default is optional, but is recommended if your contact list contains a number of entries, and you wish to organize and categorize this list of contacts, for example, via their shared characteristics. You may edit the name of any group (other than Default) using the **Update Group screen on page 48**. Newly added groups will be empty until contacts are associated with them; when groups are deleted using the **Delete Group screen on page 50**, any associated contacts may be moved to other existing groups, or their contact records may be deleted along with the group. You must confirm your deletion option.



Note that Group Names will not be shown on SIP phones; they are contact organizational tools exclusively supported within the web-based, SIP Personal Information Manager (PIM) interface.

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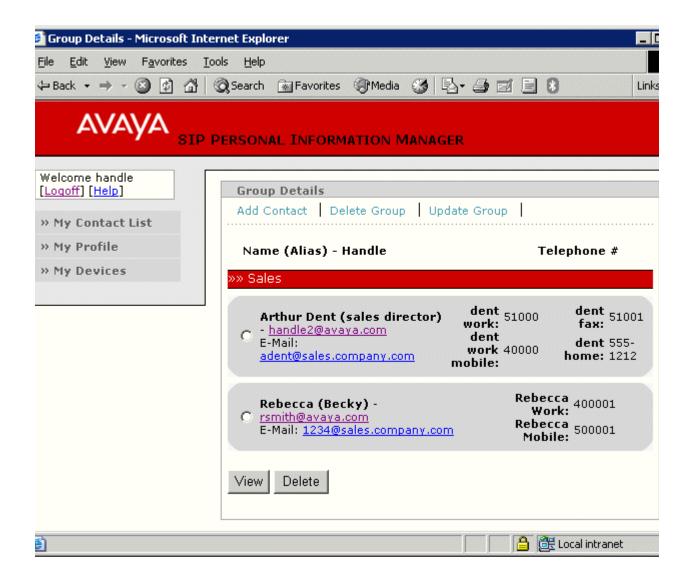
Add Group screen description

Group Name

Enter a name of as many as 32 UTF-8 characters in length for a new group for user contacts that you would like to create. This is a logical name for organizational purposes, not a list name for addressing purposes via SIP contact Uniform Resource Identifiers (URIs).

When your entry is complete, select "Submit" to add the (empty) group to your list of contacts.

Group Details screen



Group Details screen description

Group Name

Displays the name of as many as 32 UTF-8 characters in length for an existing group.

Handle

(Read Only) Displays as a selectable link a valid "handle" for the user of as many as 256 alphanumeric characters in length. Selecting the link displays the detailed user contact information for the associated user. Handles must be unique contact Uniform Resource Identifiers (URIs) within the SIP system domain, but users may have multiple valid handles assigned to them. The primary handle matches the user ID a user logs on with.

The SES system automatically appends the "@systemdomain.com" portion of the handle, so this data must be included in the 256-character maximum length. This portion of the handle should not be entered as part of the handle field when adding/updating user contacts on other screens.

Note:

E-mail links on this web page are selectable "mailto:" links; select a link will use your default e-mail client software to create a new message to this address.

After viewing the details of this group, select the "Add Contact" link to go to the Add Contact screen and associate a contact with this group in your list of user contacts; select the "Delete Group" link to go the Delete Group screen and delete this group name from your contact list; or select the "Update Group" link to go to the Update Group screen and change the name of this group in your user contact list.

Update Group screen

Completing this screen to edit the names of new groups (except the existing Default group) is optional, but using groups is recommended if your contact list contains a number of contacts, and you wish to organize and logically categorize this list of contacts, for example via their shared characteristics. Note that the contacts associated with a group cannot be addressed via that group name, for example, within SIP addresses or Uniform Resource Identifiers (URIs). You may add a name of a new group using the Add Group screen on page 45. Newly added groups will be empty until contacts are associated with them; when groups are deleted using the Delete Group screen on page 50, any associated contacts may be moved to other existing groups, are their contact records may be deleted along with the group.

Update Group Back to My Conta	ct List		
Old Group Name:	marcus		
Group Name:			
	Submit		

Update Group screen description

Old Group Name

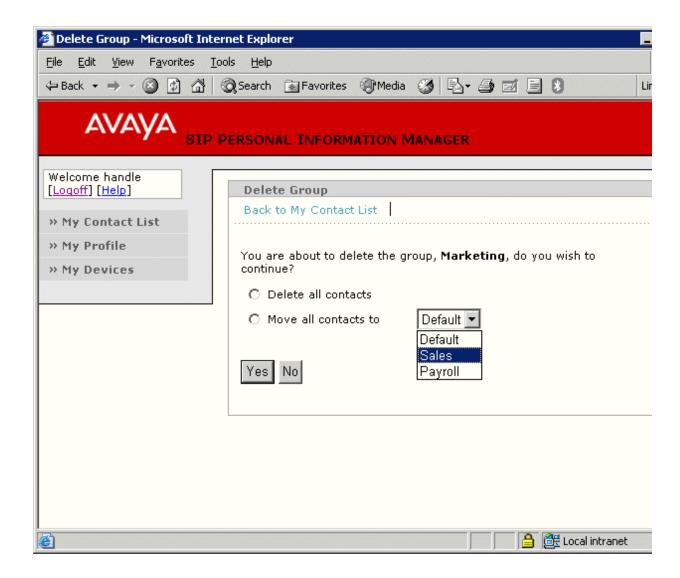
(Read Only) Displays the name of the existing group that you are about to change.

Group Name

(Required) Enter a new name for the existing group, of as many as 32 UTF-8 characters in length.

When you've finished entering data, select "Submit" to rename the group in your contact list.

Delete Group screen



Delete Group screen description

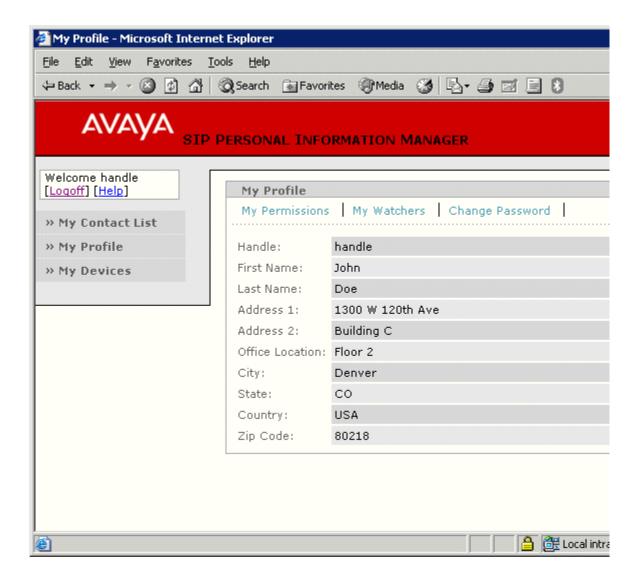
Displays a message warning about this command, or asking you for confirmation.

To delete the selected group and its associated contacts from your user contact list, then select the "Delete all contacts" option and then the "Yes" button; to delete the selected group and move all those contacts to a different group, select the "Move all contacts to" radio button, followed by an existing Group Name from the drop-down list, and then the "Yes" button; or to ignore the previous command and not delete the group name, select the "No" button.

My Profile screens

The My Profile screen shows your user data and provides link(s) to access the next screen(s) needed to change your user password (which is also used to log in to your SIP device), to configure your user permissions, and to allow or block users from watching your presence and availability in the system. The first My Profile data screen to be displayed for a user after logging in using his or her primary handle of "handle" would appear, as follows

My Profile screen



My Profile screen description

Handle

(Read Only) Displays your current, valid user "handle" identifier string. Handles must be unique contact Uniform Resource Identifiers (URIs) within the SIP system domain, but you may have multiple valid handles assigned to you. Use only the primary handle as your user ID for logon.

First Name

(Read Only) Displays the administered first name (given name) of this user contact. It may contain as many as 32 UTF-8 characters.

Last Name

(Read Only) Displays the administered last name (surname) of this user contact. It may contain as many as 32 UTF-8 characters.

Address 1, Address 2

(Read Only) Displays the administered first line and second lines, respectively, of your address for this user contact. It may contain as many as 256 ASCII characters for each of the two lines.

Office Location

(Read Only) Displays an administered location designating your specific address (for example, your suite or floor, etc.) for this user contact. It may contain as many as 32 UTF-8 characters.

City

(Read Only) Displays your administered name of the city or town for this user contact. It may contain as many as 64 UTF-8 characters.

State

(Read Only) Displays the administered name of your state or province for this user contact. It may contain as many as 64 UTF-8 characters.

Country

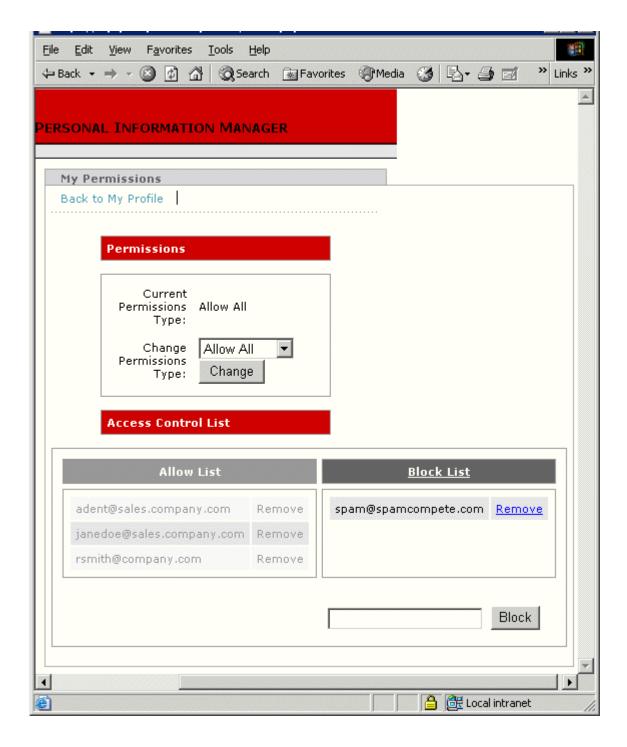
(Read Only) Displays the administered name of your country for this user contact in the database. It may contain as many as 32 UTF-8 characters.

Zip Code

(Read Only) Displays the administered number of the Zone InterPostal (ZIP) or similar postal code for your user contact in the database. It may contain as many as 32 UTF-8 characters.

If you wish to change your user password for this contact, select the "Change Password" link. The Change Password screen will be displayed.

My Permissions screen



My Permissions screen description

Current Permissions Type

(Read Only) Note the type of Permissions that now are set for the current user, who is identified above left. The types of Permissions are Allow All, Block All, and Contact List Only. Block All is the default permission type for any user unless you specify a different type of permissions or modify the user's permissions. To modify the current Permissions type that is displayed for this user, you may use Change Permissions Type.

Change Permissions Type

Choose from the drop-down list of user-contact permissions: Allow All, Block All or Contact List Only. Select Allow All if you want all administered SIP users to be able to watch your presence and availability in the system, using any presence-enabled SIP client like Avaya IP Softphone. Select Block All if you want no administered SIP users to be able to watch your presence and availability in the system. Select Contact List Only if you want only those administered SIP users that you have added to your contact list to be able to watch your presence and availability in the system. After selecting the appropriate permissions type, select the Change button to commit the entry to the user contact database.

Allow List/Block List

(Read Only) Lists any users for whom you have added discrete entries to Allow permission (on the left) or Block permission (on the right) to watch your presence and availability in the system. If the Current Permissions Type is set to Contact List Only, then the Allow List/Block List do not appear. Instead, you may select the link to go to the My Contact List screen and view the members who are allowed to watch your presence and availability in the system. If you wish to delete the **Block** (or **Allow**) permission type entry for a specific user on the right-hand (or left-hand) list, then select the Remove link to the right of the listed user's handle.

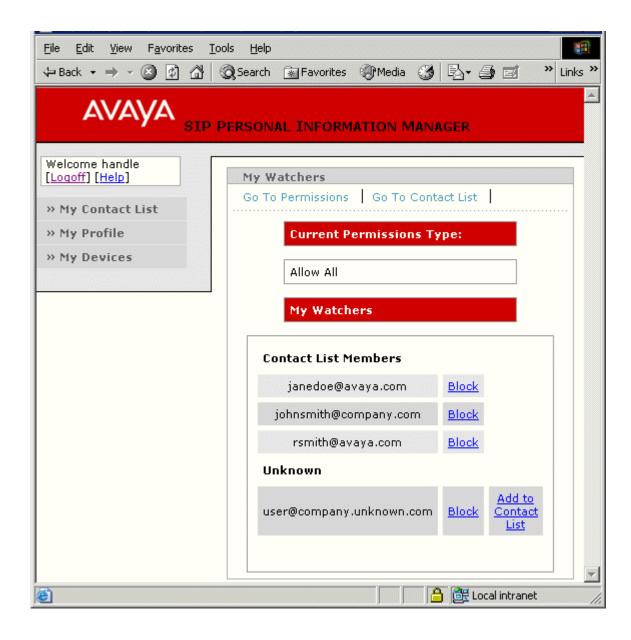
Note:

If you didn't specify a domain for a user on either list, then the SIP system domain.com will be appended automatically to the user contact entry.

Add Entry

Use this area to add a valid user Handle to one of the two permissions lists (Allow or Block). To delete a permissions entry you have added, select "Remove" in the Allow List/Block List area.

My Watchers screen



My Watchers screen description

Current Permissions Type

(Read Only) Note the type of Permissions that now are set for the current user, who is identified above left. The types of Permissions are Allow All, Block All, and Contact List Only. Block All is the default permission type for any user unless you specify a different type of permission or modify the user's permissions. To modify the current Permissions type displayed for this user, you may use Change Permissions Type on the My Permissions screen on page 54.



Changing the Current Permissions Type does not interactively add or delete existing exception entries made on the Allow List/Block List. That is, if you change from Block All to Allow All, then any exceptions on the Block List remain in effect; likewise if you change from Allow All to Block All, then any exceptions on the Allow List remain in effect.

Contact List Members

(Read Only) This area of the screen lists members of your user-contact list who are "watching" you, that is, who have subscribed to be updated on your presence and availability in the system. If no such users exist and are subscribed, then this field does not appear on this page.

Select the associated link to the right to **Block** a **Contact List Member** from being able to watch your presence and availability in this system.

Unknown (SIP Users)

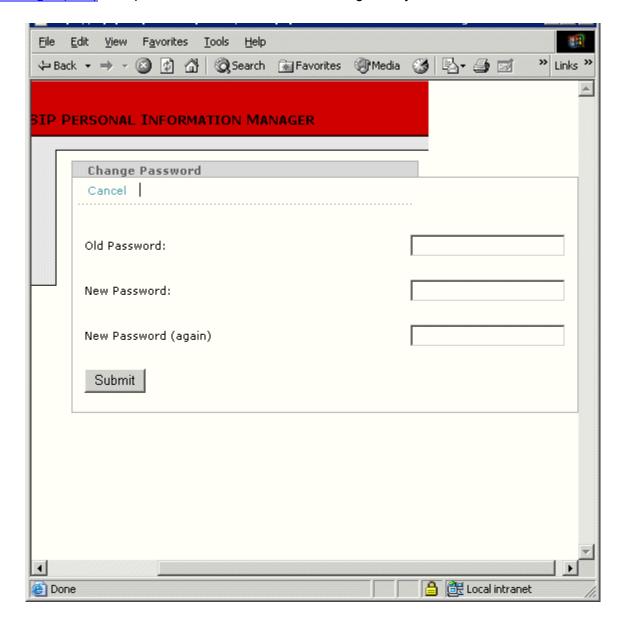
(Read Only) Lists any SIP users not on your contact list, but provisioned in this system, and for whom you have added discrete entries to Allow permission to watch your presence. If no such entries have been made, this field does not appear on this page. If you wish to Block permission for a specific unknown SIP user from being able to watch your presence and availability in this system, then select the link to the right of the list entry. To change the default permissions for all SIP users, then select the "Go To Permissions" link and use Change Permissions Type on the My Permissions screen on page 54. If you want to add any of the SIP users who are unknown to this system to your list of (known) user contacts, for example to watch their presence and availability, then you may select the Add to Contact List link to the right of any Unknown list member.

Select Go To Permissions to go to the My Permissions screen on page 54.

Select Go To Contact List to go to the My Contact List screen on page 30.

Change Password screen

Select the Change Password link to access the screen to change your SIP Personal Information Manager (PIM) user password, which is also used to log on to your SIP device, as follows:



Change Password screen description

Old Password

(Required) Enter the existing password for your user account in the system. Valid passwords may be 6-12 characters, either alphanumeric or valid punctuation characters (like period, comma, colon or semi-colon, and exclamation mark), and may not contain any spaces, apostrophes, quotes or backslash characters.

New Password

(Required) Enter the new password you've chosen for your user account in the system. Valid passwords may be 6-12 characters, either alphanumeric or valid punctuation characters (like period, comma, colon or semi-colon, and exclamation mark), and may not contain any spaces, apostrophes, quotes or backslash characters.

New Password (again)

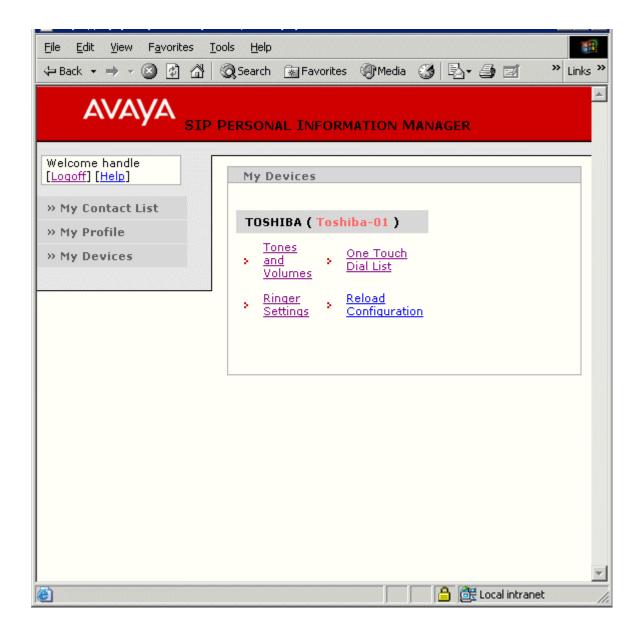
(Required) Re-enter the new user password you've chosen for your account to confirm it. Note that your entry in this field must exactly match the entry in the New Password field.

If you do not wish to make any changes to your user account password, select the "Cancel" link. You will be returned to the My Profile screen on page 51.

My Devices screens

The My Devices screens allow the users of certain supported SIP devices to view, change, and reload certain configuration settings. Note that the example screens shown in this section apply exclusively to the new Toshiba SIP Business Telephone SP-1020A in this release of Avaya SIP Personal Information Manager (PIM), and they do not apply to the other SIP-enabled client devices offered by Avaya, like the Avaya 4600-series IP Telephones, Avaya Softphone Release 5.x or Avaya SIP Softphone Release 2.x.

My Devices screen



My Devices screen description

Vendor [Device Type]

This label indicates the name of the manufacturer and station type for certain SIP phones; for this release of SIP Personal Information Manager (PIM), this example applies to the Toshiba SIP Business Phone SP-1020A. If the information is not provided by the device, a message to that effect will be displayed in this area and the additional links, below, will not apply.

Tones and Volumes

Select this link to go to the Tones and Volumes screen on page 62 and view your phone's ring tones and the volume of your phone's handset and speakerphone.

Ringer Settings

Select this link to go to the Ringer Settings screen on page 64 and turn the ringer on or off for specific buttons used for bridged call appearances configured on your phone.

One Touch Dial List

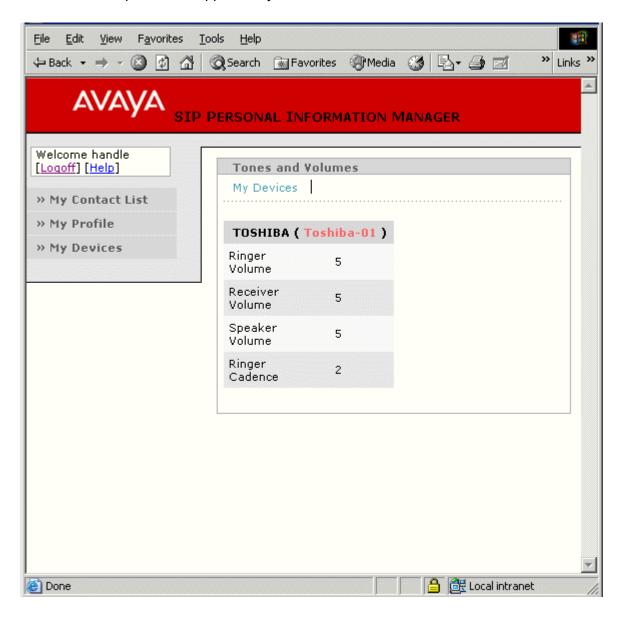
Select this link to go to the One Touch Dial List screen on page 66 and view or edit the One Touch Dial List entries for the buttons on the phone, which are administered via the auto-dial list feature within Avaya Communication Manager running on a supported media server.

Reload Configuration

Select this link to go to the Reload Device Config screen on page 68 and you can submit the device configuration. For SIP users, you may wish to reload the configuration data for your phone, like its Ringer Settings, its Speed Dial List entries (from My Contact List), and its One Touch Dial List entries; select this link and then submit the reload request. For system administrators, a variety of data affecting the device (for example, changes to network node information, or on the station form for an Off-Premises Station (OPS) station, the data regarding station aliasing, any associated Dial Plan assignments, etc.) may have been updated and submitted on the media server running Avaya Communication Manager; then submitting this request will reload this updated device configuration data.

Tones and Volumes screen

Note that this example screen applies only to the Toshiba SIP Business Phone SP-1020A.



Tones and Volumes screen description

Ringer Volume

(Read Only) Displays the default Ringer Volume (default is 5) for your device administered for users in the database. This number represents how loudly your phone will ring (1-10).

Receiver Volume

(Read Only) Displays the default Receiver Volume (default is 5) for your device administered for users in the database. This number represents the loudness of your handset (1-10).

Speaker Volume

(Read Only) Displays the default Speaker Volume (default is 5) for your device administered for users in the database. This number represents the loudness of your speakerphone (1-10).

Ringer Cadence

(Read Only) Displays the default Ringer Cadence (default is 2) for your device administered for users in the database. This number represents the speed of your phone's ringing (1-3).

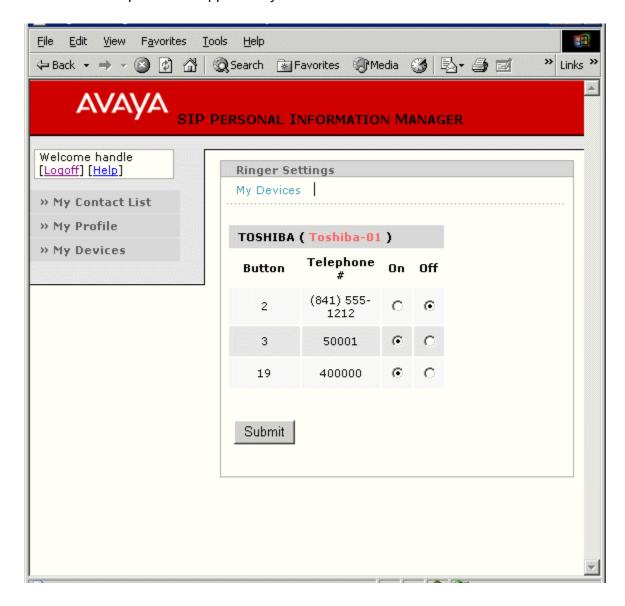


' Tip:

If recent modifications have been made to any of these entries in the system, you may use your browser's "Reload" or "Refresh" web page function to obtain and display the modified data.

Ringer Settings screen

Note that this example screen applies only to the Toshiba SIP Business Phone SP-1020A.



Ringer Settings screen description

Button

(Read Only) Displays one or more number(s) designating the bridged appearance button(s) on your phone for which you may turn the ringer on or off (and independent of and not reflecting the OPS settings for the station in Avaya Communication Manager running on a media server).

Telephone

(Read Only) Lists the phone number or SIP address (that is, one of several possible, valid contact Uniform Resource Identifiers (URIs), for example, beginning with sip: or sips: or tel:) associated with this bridged appearance button on your SIP phone in the user database. This field may contain a maximum of 256 ASCII characters, and must have been administered for the station in Avaya Communication Manager running on the media server.

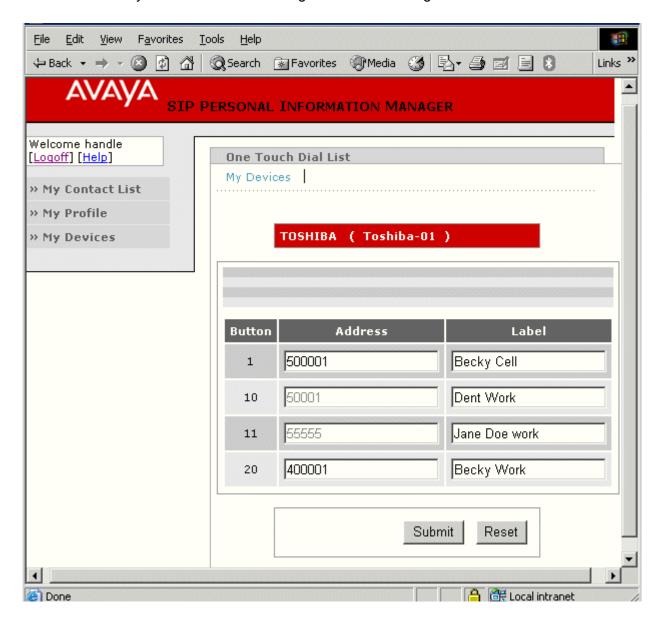
On/Off

If the ringer of any available button is set to off, you may select the radio button under On to enable its ringer. Likewise, if it is set to on, you may select the button under Off to disable it.

After choosing settings, select "Submit" to change the ringer settings for this device's buttons.

One Touch Dial List screen

Use this screen to view or edit the applicable One Touch Dial List entries for the buttons on your telephone, if any, which have been administered using the screens for the station's auto-dial feature within Avaya Communication Manager software running on a media server.



Note that this example screen applies only to the Toshiba SIP Business Phone SP-1020A.

One Touch Dial List description

Button

The number designating the button which is assigned to this "auto-dial" list entry in Avaya Communication Manager running on the media server. The maximum button number is 66.

Address

(Optional) May be blank, in which case SIP contact Uniform Resource Identifiers (URIs) for the auto-dial list entry may be entered here, or it may display the non-blank auto-dial list entry or entries made in Avaya Communication Manager running on the media server for the associated button. In the latter case, if the entry is edited in this SIP PIM web interface, any changes made to these entries here will *not* be reflected in Communication Manager on the media server(s). The maximum length of any Address field entry is 256 ASCII characters.

Label

(Optional) May be blank, in which case a label for the auto-dial entry may be entered here, or it may display (read-only) the non-blank auto-dial entry label made in Avaya Communication Manager running on the media server for the associated button. In the latter case, the entry may not be edited here. The maximum length of any Label field entry is 20 UTF-8 characters. Note that UTF-8 characters can include ASCII, Kanji and Kana characters.

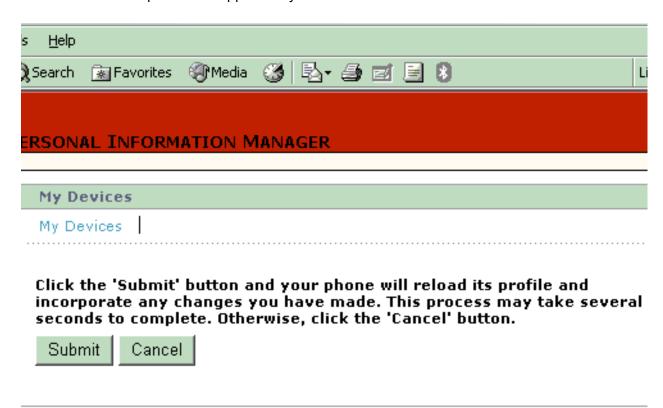
Note:

The Toshiba SIP Business Telephone SP-1020A does not display half-width, "Han Kaku Kana" characters.

Select the "Submit" button when you have finished viewing and/or editing data for the entries on the One Touch Dial List screen. Select the "Reset" button to discard any changes you made on this screen, but had not yet submitted to the user database.

Reload Device Config screen

Note that this example screen applies only to the Toshiba SIP Business Phone SP-1020A.



Reload Device Config screen description

Displays a warning message regarding this command, allowing the user to confirm it first.

For SIP users, you may wish to reload the configuration data for your phone, like its Ringer Settings, its Speed Dial List entries (from My Contact List), and its One Touch Dial List entries; select this link and then submit the reload request.

For system administrators, a variety of data affecting the device (for example, changes to network node information, or on the station form for an Off-Premises Station (OPS), the data regarding station aliasing, associated Dial Plan assignments, etc.) may have been updated and submitted on the media server running Avaya Communication Manager; then submitting this request reloads this updated device configuration data.

Note:

Provisioned users who have been administered in the SES system may not have logged on to their device, registering it with the proxy server software component of SIP Enablement Services. Submitting the Reload Device Configuration (or executing the Reload Complete task on a host) will take effect the next time they log on successfully to their SIP device.

When you are ready to reload your configuration for this device, including any station-affecting changes made in Avaya Communication Manager running on the media server, then select the "Submit" button on this screen. Otherwise, select the "Cancel" button to ignore this request.

SIP PIM Web Interface

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Glossary

Α

ΔAR **Automatic Alternate Routing**

access code A dial code of 1 digit to 3 digits that is used to activate a feature, cancel a

feature, or access an outgoing trunk.

Access Security A software module that secures Avaya Global Services login accounts on host computers. Each login attempt to the Access Security Gateway (ASG) is met Gateway (ASG)

with a one-time challenge string of characters that must be answered with the

correct one-time response.

Active In a duplex configuration supporting local failover, this is the server that is

running the SIP applications and services. Sometimes referred to as the

primary. Compare with Standby.

AES See Application Enablement Services.

American National Standards Institute

(ANSI)

A professional technical association that supports standards for transmission. protocol, and high-level languages, and that represents the US in the

International Organization for Standards. ANSI standards are for voluntary use

in the US.

Application Enablement Services

The Communication Manager Application Programming Interface (API) and

Avaya CT software consolidated on a single, Linux-based platform.

Application Programming Interface (API)

A set of functions and values used by one program to communicate with another program or with an operating system, that is, a "hook" into the software.

automatic route selection (ARS)

A feature of some telephone systems in which the system automatically chooses the most cost-effective way to send a toll call.

Avaya Media Gateway

A family of application-enabling hardware elements that includes intraswitch connectivity, control interfaces, port interfaces, and cabinets. Media gateways support both bearer traffic and signaling traffic that is routed between packet-switched networks and circuit-switched networks to deliver data, voice, fax and messaging capabilities. Media gateways provide protocol conversion (IP to ATM to TDM), conferencing, presence (on-hook/off-hook), connectivity (to Point-to-Point Protocol (PPP)s and public networks, IP/ATM/TDM) and

networking (QSIG/DCS/ISDN). Optional form factors are supported.

Avaya Media Server

A family of application-enabling processing platforms that are based on open CPUs and industry-standard operating systems. Media Servers provide centralized Enterprise Class call processing that can be distributed across a multiprotocol network that includes, but is not limited to, Internet Protocol (IP). In addition to supporting a highly diversified network architecture, media servers provide user functionality, system management functionality, intelligent call routing, application integration, mobility, and conferencing.

Avava Communication Manager

An open, scalable, highly reliable, and secure telephony application. Communication Manager provides user functionality and system management functionality, intelligent call routing, application integration and extensibility, and Enterprise Communications networking.

В

bearer channel (B-channel)

A 64-kbps channel or a 56-kbps channel that carries a variety of digital information streams. One B-channel carries voice at 64 kbps, data at up to 64 kbps, wideband voice encoded at 64 kbps, and voice at less than 64 kbps, alone or combined. See also data channel (D-channel).

bus

A multiconductor electrical path that is used to transfer information over a common connection from any of several sources to any of several destinations. See also packet bus; time-division multiplex (TDM) bus.

C

Call Detail Recording (CDR) A file that uses software and hardware to record call data. CDR was formerly called Station Message Detail Recording (SMDR).

carrier

An enclosed shelf that contains vertical slots that hold circuit packs.

central office (CO)

Telephone switching equipment that provides local telephone service and access to toll facilities for long distance calling.

channel

- (1) A circuit-switched call. (2) A communications path that is used to transmit voice and data.
- (2) In wideband transmission, all the contiguous time slots or non contiguous time slots that are necessary to support a call. For example, an H0-channel uses six 64-kbps time slots. (4) A digital signal-0 (DS0) on a T1 facility or an E1 facility that is not specifically associated with a logical circuit-switched call. See also data channel (D-channel).

circuit

- (1) An arrangement of electrical elements through which electric current flows.
- (2) A channel or a transmission path between two or more points.

circuit pack

A circuit card on which electrical circuits are printed, and integrated circuit (IC) chips and electrical components are installed. A circuit pack is installed in a SSH carrier. One example is the TN2302.

Class of Restriction

A feature that allows up to 96 classes of call-origination restrictions and call-termination restrictions for telephones, telephone groups, data modules, and trunk groups. See also Class of Service (COS).

Class of Service

(COS)

A feature that uses a number to specify whether telephone users can activate the Automatic Callback (ACB), Call Forwarding All Calls, Data Privacy, or

Priority Calling features. See also Class of Restriction (COR).

CCITT

Comitte Consultatif International Telephonique et Telegraphique. See

International Telecommunications Union (ITU).

communications system

A software-controlled processor complex that interprets dial pulses, tones, and keyboard characters, and makes the proper connections within the system and externally. The communications system consists of a digital computer, software,

storage devices, and carriers, with special hardware to perform the

connections. A communications system provides communications services for the telephones on customer premises and the data terminals on customer premises, including access to public networks and Point-to-Point Protocol

(PPP)s. See also SSH.

contacts

In the web-based interface to the SIP Personal Information Manager (PIM), contacts are sets of database entries describing users known to the system, or alternatively, entries for other listed contacts which may be addressed by valid SIP Uniform Resource Identifiers (URIs).

Controlled Local **Area Network** (CLAN) circuit pack A circuit pack (TN799B) in an Avaya DEFINITY port network (PN) that provides TCP/IP connectivity to adjuncts over Ethernet or Point-to-Point Protocol (PPP). The CLAN circuit pack serves as the network interface for a DEFINITY server. The CLAN terminates IP (TCP and UDP), and relays those sockets and connections up to the Avaya DEFINITY or S8x00 media server.

Converged **Communications** Server (CCS)

A family of Avaya products, consisting of SIP Enablement Services (SES), as described in this document, and also Application Enablement Services.

CPE See customer-premises equipment (CPE).

CPN called-party number

CPN/BN calling-party number/billing number

customer-premises equipment (CPE)

Equipment that is connected to the telephone network, and that resides on a customer site. CPE can include telephones, modems, fax machines, video

conferencing devices, switches, and so on.

D

data channel (D-channel)

A 16-kbps channel or a 64-kbps channel that carries signaling information or data on an Integrated Services Digital Network Basic Rate Interface (ISDN-BRI) or Integrated Services Digital Network Primary Rate Interface (ISDN-PRI). See also bearer channel (B-channel); data channel (D-channel).

data communications equipment (DCE) Equipment on the network side of a communications link that makes the binary serial data from the source or the transmitter compatible with the communications channel. DCE is usually a modem, a data module, or a packet

assembly/disassembly (PAD).

data module

data module An interconnection device between a Basic Rate Interface (BRI) or a Digital

Communications Protocol (DCP) interface of the SSH, and the data terminal

equipment (DTE) or data channel (D-channel).

data terminal An input/output (I/O) device that has either switched access or direct access to

a host computer or to a processor interface.

data terminal equipment (DTE) Equipment that comprises the endpoints in a connection over a data circuit. In a connection between a data terminal and a host, the terminal, the host, and the

associated modems or data modules comprise the DTE.

digital The representation of information by discrete steps. Compare with analog.

Digital Communications Protocol (DCP)

A proprietary protocol that is used to transmit both digitized voice and digitized data over the same communications link. A DCP link consists of two 64-kbps information (I) channels, and one 8-kbps signaling (S) channel. The DCP protocol supports two information-bearing channels, and thus two telephones or data modules. The I1 channel is the DCP channel that is assigned on the first page of the 8411 Station screen. The I2 channel is the DCP channel that is assigned on the analog adjunct page of the 8411 Station screen, or on the data

module page.

DIMM **Dual Inline Memory Module**

Domain Name System (DNS) A hierarchical network-naming scheme. DNS servers provide a mapping of

domain names to Internet Protocol (IP) addresses.

dual-tone multifrequency (DTMF)

The touchtone signals that are used for in-band telephone signaling.

duplex

The host configuration supporting local failover via the interchange of the Active and Standby servers. Therefore, any one SES host node may comprise two interconnected servers, only one of which is active. Compare with simplex.

Dynamic Host Configuration Protocol (DHCP) An IETF protocol (RFCs 951, 1534, 1542, 2131, and 2132) that assigns IP addresses dynamically from a pool of addresses instead of statically.

E

Edge In Avaya's SIP architecture, this is the proxy server that forwards requests to/

from the customer's network. It sends inbound SIP requests or messages to the

Home proxy servicing the specified user.

endpoint The means by which an entity outside the network, such as an end user,

> connects with the network. Avaya endpoints include Smart Devices and User Agents. Smart Devices consist of analog, digital, wireless, and IP telephones. User Agents consist of software that runs on workstations, laptop computers.

and pocket PCs.

Ethernet A widely implemented local area network (LAN) architecture that uses a bus or

> a star topology, and transfer rates of 10 Mbps. A newer version of Ethernet called 100Base-T or Fast Ethernet supports data transfer rates of 100 Mbps. The newest version *Gigabit Ethernet* supports data transfer rates of 1 gigabit

per second.

Ethernet L2 switch In the G700 Avaya Media Gateway and in the Avaya stackable switch and

router family, an Ethernet L2 switch consists of one or more 8-port. wire-speed

application-specific integrated circuit (ASIC) devices.

A device that provides for port multiplication by having more than one network Ethernet switch

segment. An Ethernet switch directs data only to the target device, instead of to

all devices that are attached to the local area network (LAN).

extension A number from 1 digit to 5 digits that is used to route calls through a

> communications system. With a Uniform Dial Plan (UDP) or a main-satellite dialing plan, extensions are also used to route calls through a Point-to-Point

Protocol (PPP).

F

FTP File Transfer Protocol.

Н

H.323 An International Telecommunications Union (ITU) standard for switched

multimedia communication between a LAN-based multimedia endpoint and a

gatekeeper. See also Session Initiation Protocol (SIP).

Home This is the domain providing service to a SIP user, used in registering that user

with a Home proxy.

A computer that is connected to a network, and that processes data from host computer

data-entry devices.

I

ΙE See information element (IE).

IEEE See Institute of Electrical and Electronics Engineers (IEEE).

IETF See Internet Engineering Task Force (IETF).

IM Instant Messaging. The instant-messaging client software required for Release

2.x or later of Avaya Converged Communications Server (CCS) is a version of

the Avava IP Softphone R5 or later.

information element

(IE)

The name for the data fields within an Integrated Services Digital Network

(ISDN) Layer 3 message.

Institute of Electrical and Electronics

Engineers (IEEE)

An organization that, among other things, produces standards for local area

network (LAN) equipment.

Integrated Services Digital Network (ISDN)

A public network or a Point-to-Point Protocol (PPP) that provides end-to-end digital communications for all services to which users have access. An ISDN uses a limited set of standard multipurpose user-network interfaces that are defined by the CCITT. Through internationally accepted standard interfaces, an ISDN provides digital circuit switching communications or packet switching communications within the network. An ISDN provides links to other ISDNs to provide national digital communications and international digital communications. See also Integrated Services Digital Network Basic Rate Interface (ISDN-BRI); Integrated Services Digital Network Primary Rate Interface (ISDN-PRI).

Integrated Services Digital Network Basic Rate Interface (ISDN-BRI)

The interface between a communications system and terminal that includes two 64-kbps bearer channel (B-channel)s for transmitting voice or data, and one 16-kbps data channel (D-channel) for transmitting associated B-channel call control and out-of-band signaling information. ISDN-BRI also includes 48 kbps for transmitting framing and D-channel contention information, for a total interface speed of 192 kbps. ISDN-BRI serves ISDN terminals and digital terminals that are fitted with ISDN terminal adapters. See also Integrated Services Digital Network Primary Rate Interface (ISDN-PRI).

Integrated Services Digital Network Primary Rate Interface (ISDN-PRI)

The interface between multiple communications systems that in North America includes 24 64-kbps channels that correspond to the North American digital signal-level 1 (DS1) standard rate of 1.544 Mbps. The most common arrangement of channels in ISDN-PRI is 23 64-kbps bearer channel (B-channel)s for transmitting voice and data, and one 64-kbps data channel (D-channel) for transmitting associated B-channel call control and out-of-band signaling information. With nonfacility-associated signaling (NFAS), ISDN-PRI can include 24 B-channels and no D-channel. See also Integrated Services Digital Network (ISDN); Integrated Services Digital Network Basic Rate Interface (ISDN-BRI).

interchange

Term used for when the Active server in a duplex configuration relinquishes control and its Standby server takes over that control, running all the SIP Enablement Services software for this system node.

International **Organization for Standards**

A worldwide federation of standards bodies who issue International Standards for technological, scientific, intellectual, and economic activity. The federation is called ISO, and the US representative to the federation is the American National Standards Institute (ANSI).

International Telecommunications Union (ITU)

An international organization that sets universal standards for data communications, including Integrated Services Digital Network (ISDN). ITU was formerly known as International Telegraph and Telephone Consultative Committee (CCITT).

International Telegraph and **Telephone** Consultative Committee

See International Telecommunications Union (ITU).

Internet Engineering Task Force (IETF)

One of two technical working bodies of the Internet Activities Board. The IETF develops new Transmission Control Protocol (TCP)/Internet Protocol (IP) (i.e., TCP/IP) standards for the Internet.

Internet Protocol (IP)

A connectionless protocol that operates at Layer 3 of the Open Systems Interconnect (OSI) model. IP protocol is used for Internet addressing and routing packets over multiple narrowbands to a final destination. IP protocol works in conjunction with Transmission Control Protocol (TCP), and is usually identified as TCP/IP.

L

local area network (LAN)

A networking arrangement that is designed for a limited geographical area. Generally, a LAN is limited in range to a maximum of 6.2 miles, and provides high-speed carrier service with low error rates. Common configurations include daisy chain, star (including circuit-switched), ring, and bus.

local failover

This feature, introduced in SES Release 2.1, supports database replication and interchange, as needed, between two servers (one Active, one Standby), which are connected in a duplex configuration.

M

MAC address (or MAC name)

A 48-bit number, uniquely identifying and programmed into each network interface card or device.

Management **Information Base** (MIB)

A directory listing logical names of resources on a network, pertinent to the network's management.

Ν

narrowband A circuit-switched call at a data rate of 64 kbps or less. All switch calls that are

not wideband are considered to be narrowband. Compare with wideband.

NAT See network address translation (NAT).

network A series of points, nodes, or stations that are connected by communications

channels. See also local area network (LAN); or wide area network (WAN).

network address translation (NAT) A feature that enables a local area network (LAN) to use one set of IP addresses for internal traffic, and a second set of IP addresses for external traffic. Thus, many IP addresses within an intranet can be used internally without colliding with public IP addresses on the Internet. The NAT device only allocates a public IP address when IP entities require service outside the firewall.

network interface (NI)

A common boundary between two systems in an interconnected group of systems.

network region

A group of IP endpoints and switch IP interfaces that are interconnected by an network region

> IP network. IP interconnection is used because IP interconnection is less expensive, or provides better performance than interconnections between

members of different regions.

node A switching point or a control point for a network. Nodes are either tandem or

> terminal. Tandem nodes receive signals, and pass the signals on. Terminal nodes originate a transmission path, or terminate a transmission path.

0

Off-Premises Station A telephone that Avaya Communication Manager does not control, such as a

(OPS)

cellular telephone or the home telephone of a user. Features of Avava Communication Manager can be extended to an OPS through switch administration by associating the extension of the office telephone with the off-site telephone. For example, for the aforementioned cell phone, this media server feature is called "Extension to Cellular." NOTE: Session Initiation

Protocol (SIP) endpoints are administered in Communication Manager as OPS.

Open Systems Interconnect (OSI) A system of seven independent communication protocols defined by the International Organization for Standards or ISO. Each of the seven layers enhances the communications services of the layer below, and shields the layer above from the implementation details of the lower layer. In theory, this structure can be used to build communications systems from independently

developed lavers.

Р

packet A group of bits that is used in packet switching and that is transmitted as a

> discrete unit. A packet includes a message element and a control information element (IE). The message element is the data. The control IE is the header. In each packet, the message element and the control IE are arranged in a

specified format.

packet assembly/ disassembly (PAD)

The process of packetizing control data and user data from a transmitting device before the data are forwarded through the packet network. The receiving

device disassembles the packets, removes the control data, and then reassembles the packets, thus reconstituting the user data in its original form.

packet bus A bus with a wide bandwidth that transmits packets.

packet switching A data-transmission technique that segments and routes user information in

discrete data envelopes that are called *packets*. Control information for routing, sequencing, and error checking is appended to each packet. With packet switching, a channel is occupied only during the transmission of a packet. On completion of the transmission, the channel is made available for the transfer of

other packets.

Personal Profile Manager (PPM)

Avaya's server software component of SIP Enablement Services (SES) which manages user profile data, including contacts and certain device data. Users may access their data via the SIP PIM web interface on their Home server.

Personal Information Manager (PIM) A PIM is a software program that logs personal and business information such as lists of contacts, notes about them, etc.

Plain Old Telephone Service (POTS)

Basic voice communications with standard, single-line phones accessing the public switched telephone network (PSTN).

Point-to-Point Protocol (PPP) A standard (largely replacing SLIP) allowing a computer to use TCP/IP with a

regular telephone line.

A data-transmission access point or voice-transmission access point on a port

device that is used for communicating with other devices.

Another name for the Active server, or server A, running the SIP applications primary

and/or proxy services in a duplex configuration. Compare with secondary.

private network A network that is used exclusively for the telecommunications needs of a

particular customer.

A set of conventions or rules that governs the format and the timing of message protocol

exchanges. A protocol controls error correction and the movement of data.

An intermediary client/server entity for making requests on behalf of other client proxy server

entities. The job of an Avaya SIP proxy is to ensure that a request is sent to the entity closest to the specified user. For example, an Edge proxy server will interpret and forward requests intended for specific users to their particular

Home proxy servers.

public network A network to which all customers have open access for local calling and long

distance calling.

public switched telephone network (PSTN)

The public worldwide voice telephone network.

Q

Quality of Service (QoS)

The measurement of transmission rates, error rates, and other characteristics to define the quality of the service that is provided to telephone subscribers or users of a network. QoS is of particular concern for the continuous transmission of high-bandwidth video and multimedia information. Transmitting this kind of content dependably is difficult in public networks using ordinary best-effort protocols.

R

RAS Remote Access Server (or in Microsoft Windows operating systems, Remote

Access Service).

Real Time Transfer Protocol (RTP)

An Internet Engineering Task Force (IETF) protocol (RFC 1889 and 3550) that addresses the problems that occur when video and other exchanges with real-time properties are delivered over a local area network (LAN) that is designed for data. RTP gives higher priority to video and other real-time interactive exchanges than to connectionless data.

RFA

RFA Remote Feature Activation is a web-based application which is used to obtain

Avaya authentication and licensing files. The home page for this application is

at http://rfa.avava.com

RNIS Remote Network Implementation Services is a contract installation services

group within Avaya Inc.

RPM RedHat Package Manager **RSA** Remote Supervisor Adapter **RTCP** Real Time Control Protocol

RTP See Real Time Transfer Protocol (RTP).

S

secondary Another name for a Standby server in a duplex configuration. Compare primary.

Session Initiation Protocol (SIP)

An IETF standard (RFC 3261) signaling protocol for Internet conferencing, telephony, presence, events notification, and instant messaging. SIP initiates call setup, routing, authentication, and other feature messages to endpoints

within an IP domain. See also H.323; Voice over IP (VoIP).

A standard for character encoding for the Japanese language. This standard is Shift_JIS

used by the web-based SIP PIM interface when Japanese is selected as the top language preference in the user's web-browser Language options.

signaling Information that a communications system uses to complete calls, including the

> status of the communications channel, the arrival of an incoming call, and the routing of an outgoing call. Modern systems use out-of-band signaling.

Simple Network Management Protocol (SNMP) The industry-standard protocol that governs network management, and the monitoring of network devices and the functions of those devices. The use of SNMP is not necessarily limited to TCP/IP networks, but can be implemented

over Ethernet and Open Systems Interconnect (OSI) transports.

The standard SES host configuration with one server/database per system. simplex

node. A simplex node does not support local failover. Compare with duplex.

SES See SIP Enablement Services (SES). SIP See Session Initiation Protocol (SIP).

Avaya's proxy server and registrar software for Session Initiation Protocol SIP Enablement Services (SES)

(SIP), supporting instant messaging (for example, using Avaya SIP Softphone R2 or later), and voice communication (using the Toshiba SIP Business Phone

SP-1020A and/or the Avaya 4602SIP phone).

SSH Secure SHell is a protocol for secure remote login and other secure network

services over an insecure network. It provides for server authentication, and

data integrity with perfect port-forwarding secrecy.

Standby In a duplex configuration supporting local failover, this is the server which is

synchronized and ready to interchange with the Active server. Sometimes

referred to as the secondary.

subscriber A Session Initiation Protocol (SIP) "subscriber" is one of the following: an SES

host or other SIP node, a SIP user (per Contact), or a Media Server (running,

for example, Release 3.0 or later of Avaya Communication Manager).

switch Any kind of telephone switching system. See also communications system.

Т

TCP See Transmission Control Protocol (TCP).

TCP/IP See Internet Protocol (IP). See also Transmission Control Protocol (TCP).

Telecommunications channel directly connecting two private switching systems. tie trunk

time-division

A bus that is time-shared regularly by pre-allocating short time slots to each multiplex (TDM) bus transmitter. In a SSH, all Plain Old Telephone Service (POTS) circuits are

connected to the time-division multiplex (TDM) bus, and any port can send a

signal to any other port. See also time-division multiplexing (TDM).

time-division multiplexing (TDM) A form of multiplexing that divides a transmission channel into successive time

slots. See also time-division multiplex (TDM) bus.

time slot In the SSH, a time slot refers to either a digital signal level-0 (DS0) on a T1

> facility or an E1 facility, or a 64-kbps unit on the time-division multiplex (TDM) bus or fiber connection between port networks (PNs) that is structured as 8 bits

every 125 microseconds.

Transmission Control Protocol (TCP)

A connection-oriented transport-layer protocol, IETF STD 7. RFC 793, that governs the exchange of sequential data. Whereas the Internet Protocol (IP) deals only with packets, TCP enables two hosts to establish a connection and

exchange streams of data. TCP guarantees delivery of data, and also guarantees packets are delivered in the same order in which they are sent.

Transport Layer Security (TLS)

An IETF standard (RFC 2246) to supersede Netscape's Secure Socket Layer

(SSL) and provide host-to-host data connections with encryption and

certification at the transport layer, as the name implies.

A dedicated communications channel between two communications systems or trunk

central office (CO)s.

trunk access code

(TAC)

trunk group

A dial access code used to access a specific trunk. Note that SIP trunks in Avaya Communication Manager cannot be accessed by means of TACs.

Telecommunications channels that are assigned as a group for certain

functions, and that can be used interchangeably between two communications

systems or central office (CO)s.

U

UDP (1) User Datagram Protocol (UDP); (2) Uniform Dial Plan.

Unicode See UTF-8.

universal serial bus

(USB)

A high-speed serial interface that is used primarily to add a printer, a modem, a

keyboard, a mouse, or another peripheral device to a personal computer.

Uniform Resource Identifiers (URIs)

Uniform Resource Identifiers (URIs)

URIs (also known as Uniform Resource Locations, or URLs) are short strings of characters that identify internet-accessible resources on the world-wide web. They make resources available under a variety of naming schemes and access methods such as HTTP, FTP, SIP, and Internet mail addressable (or

User Datagram Protocol (UDP) A packet format that is included in the TCP/IP suite of protocols. UDP is used for the unacknowledged transmission of short user and control messages.

"requestable"), in the same, relatively simple way. A SIP "address" is a URI.

users

In the web-based interface to the SIP Personal Information Manager (PIM), there are contact database entries for users who are known to the system, as well as other listed contacts not administered in the system, but which may be addressed using any valid SIP Uniform Resource Identifiers (URIs).

UTF-8

Unicode Transformation Format, 8-bit. A lossless, variable-length character encoding for Unicode, the universal encoding standard for textual documents. In the web-based interface to the SIP Personal Information Manager (PIM), UTF-8 character encoding is used unless Shift JIS encoding for Japanese users has been specified in the Language settings option in your web browser.

V

Voice over IP (VoIP) A set of facilities that use the Internet Protocol (IP) to manage the delivery of

voice information. In general, VoIP means to send voice information in digital form in discrete packets instead of in the traditional circuit-committed protocols of the public switched telephone network (PSTN). Users of VoIP and Internet telephony avoid the tolls that are charged for ordinary telephone service.

W

WebLM Web-based License Management (WebLM) is a server-based application which

helps to manage various software licenses.

wide area network (WAN)

A computer network that spans a relatively large geographic area. A WAN usually consists of two or more local area networks (LANs). Computers that are connected to a WAN are often connected through public networks, such as the telephone system. They can also be connected through leased lines or

satellites. Compare with local area network (LAN).

wideband A circuit-switched call at a data rate that is greater than 64 kilobits per second.

> A circuit-switched call on a single T1 facility or a single E1 facility with a bandwidth that is between 128 kilobits per second and 1536 kilobits per second (T1) or 1984 kilobits per second (E1) in multiples of 64 kilobits per second.

Compare with narrowband.

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