



## **Avaya MultiVantage™ running on:**

**Avaya DEFINITY Media Server R**

**Avaya DEFINITY Media Server SI**

**Avaya DEFINITY Media Server CSI**

Avaya MultiVantage 1.1, Issue 1.0 (01.0.060.4)  
Change Description

555-233-422  
Comcode 700250681  
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## Notice

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

## 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.

If you need technical support or assistance and are outside of the United States, contact the equipment vendor from whom you purchased your equipment service maintenance contract. If you need to report toll fraud issues regarding a public telephone, contact the in-country telephone service provider.

## How to Get Help

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

If you are:

- Within the United States, click *Escalation Lists*, which includes escalation phone numbers within the USA.
- Outside the United States, click *Escalation Lists* then click *Global Escalation List*, which includes phone numbers for the regional Centers of Excellence.

## Providing Telecommunications Security

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

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

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

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

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

Be aware that there may be a risk of unauthorized intrusions associ-

ated 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.

## Voice Over Internet Protocol (VoIP)

If the equipment supports Voice over Internet Protocol (VoIP) facilities, you may experience certain compromises in performance, reliability and security, even when the equipment performs as warranted. These compromises may become more acute if you fail to follow Avaya’s recommendations for configuration, operation and use of the equipment. YOU ACKNOWLEDGE THAT YOU ARE AWARE OF THESE RISKS AND THAT YOU HAVE DETERMINED THEY ARE ACCEPTABLE FOR YOUR APPLICATION OF THE EQUIPMENT. YOU ALSO ACKNOWLEDGE THAT, UNLESS EXPRESSLY PROVIDED IN ANOTHER AGREEMENT, YOU ARE SOLELY RESPONSIBLE FOR (1) ENSURING THAT YOUR NETWORKS AND SYSTEMS ARE ADEQUATELY SECURED AGAINST UNAUTHORIZED INTRUSION AND (2) BACKING UP YOUR DATA AND FILES.

## 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.

The equipment described in this manual complies with standards of the following organizations and laws, as applicable:

- Australian Communications Agency (ACA)
- American National Standards Institute (ANSI)
- Canadian Standards Association (CSA)
- Committee for European Electrotechnical Standardization (CENELEC) – European Norms (EN’s)
- Digital Private Network Signaling System (DPNSS)
- European Computer Manufacturers Association (ECMA)
- European Telecommunications Standards Institute (ETSI)
- FCC Rules Parts 15 and 68
- International Electrotechnical Commission (IEC)
- International Special Committee on Radio Interference (CISPR)
- International Telecommunications Union - Telephony (ITU-T)

- ISDN PBX Network Specification (IPNS)
- National ISDN-1
- National ISDN-2
- Underwriters Laboratories (UL)

### Product Safety Standards

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

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

Safety of Laser products, equipment classification and requirements:

- IEC 60825-1, 1.1 Edition
- Safety of Information Technology Equipment, CAN/CSA-C22.2 No. 60950-00 / UL 60950, 3rd Edition
- Safety Requirements for Customer Equipment, ACA Technical Standard (TS) 001 - 1997
- One or more of the following Mexican national standards, as applicable: NOM 001 SCFI 1993, NOM SCFI 016 1993, NOM 019 SCFI 1998

### Electromagnetic Compatibility (EMC) Standards

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

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

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

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

### Federal Communications Commission Statement

#### Part 15:

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

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

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

This equipment returns answer-supervision signals on all direct

inward dialed (DID) calls forwarded back to the public switched telephone network. Permissible exceptions are:

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

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

This equipment complies with Part 68 of the FCC Rules. On the rear 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.

The REN is used to determine the quantity of devices which 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 table.

| Manufacturer's Port Identifier | FIC Code           | SOC/REN/ A.S. Code | Network Jacks       |
|--------------------------------|--------------------|--------------------|---------------------|
| Off/On premises station        | OL13C              | 9.0F               | RJ2GX, RJ21X, RJ11C |
| DID trunk                      | 02RV2-T            | 0.0B               | RJ2GX, RJ21X        |
| CO trunk                       | 02GS2              | 0.3A               | RJ21X               |
| CO trunk                       | 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, 1KN, 1SN | 6.0F               | RJ48C, RJ48M        |
| 120A2 channel service unit     | 04DU9-DN           | 6.0Y               | RJ48C               |

If the terminal equipment (for example, the MultiVantage™ Solution equipment) 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.

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 digital apparatus does not exceed Class A limits for radio noise emission set out in the radio interference regulation of the Canadian Department of Communications.

Le Présent Appareil Numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils manucres de la class A prescrites dans le reglement sur le brouillage radioélectrique édicté par le ministère des Communications du Canada.

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

#### **DECLARATIONS OF CONFORMITY**

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

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

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

Copies of SDoCs signed by the Responsible Party in the U. S. can be obtained by contacting your local sales representative and are available on the following Web site:

[http://support.avaya.com/elmodocs2/DoC/SDoC/index.jhtml/](http://support.avaya.com/elmodocs2/DoC/SDoC/index.jhtml)

All MultiVantage™ system products are compliant with FCC Part 68, but many have been registered with the FCC before the SDoC process was available. A list of all Avaya registered products may be found at:

<http://www.part68.org/>

by conducting a search using "Avaya" as manufacturer.

##### **European Union Declarations of Conformity**



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

Copies of these Declarations of Conformity (DoCs) signed by the Vice President of MultiVantage™ Solutions research and development, Avaya Inc., can be obtained by contacting your local sales representative and are available on the following Web site:  
<http://support.avaya.com/elmodocs2/DoC/IDoC/index.jhtml/>

#### **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。

#### **Network Connections**

Digital Connections - The equipment described in this document can be connected to the network digital interfaces throughout the European Union.

Analogue Connections - The equipment described in this document can be connected to the network analogue interfaces throughout the following member states:

|             |         |                |
|-------------|---------|----------------|
| Belgium     | Germany | Luxembourg     |
| Netherlands | Spain   | United Kingdom |

#### **LASER Product**

The equipment described in this document may contain Class 1 LASER Device(s) if single-mode fiber-optic cable is connected to a remote expansion port network (EPN). The LASER devices operate within the following parameters:

- Maximum power output -5 dBm to -8 dBm
- Center Wavelength 1310 nm to 1360 nm
- CLASS 1 LASER PRODUCT IEC 60825-1: 1998

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

#### **To order copies of this and other documents:**

Call: Avaya Publications Center

Voice 1.800.457.1235 or 1.410.568.3680

FAX 1.800.457.1764 or 1.410.891.0207

Write: Globalware Solutions

200 Ward Hill Avenue

Haverhill, MA 01835 USA

Attention: Avaya Account Management

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

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## Highlights

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This section presents highlights of features and enhancements added to Avaya MultiVantage™ software, running on Avaya™ Media Servers.

### **General enhancements**

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This release of Avaya MultiVantage software includes the following general telephony and system-wide enhancements. For more information, see the *Administrator's Guide for Avaya MultiVantage Software*.

### **Conference/Transfer Enhancements**

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These are enhancements to digital phones for the conference, transfer and hold features that make them easier to use. The enhancements include:

- new display prompts based on users' Class Of Restriction (COR)
- toggle or swapping the caller's connection to multiple conference parties by pressing the new Toggle/Swap button
- selective conference party display and drop, or forced release on the attendant console
- Meet-me Conference, a special VDN that is secured via an access code, allows a number of parties to be conferenced together with other parties up to the system's Conference limit.

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## **Dial-Plan Expansion (DPE)**

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Avaya MultiVantage software provides dial plans with up to 7-digit extensions. This affects all extensions and increases the total number of extensions that can exist in an Avaya MultiVantage solution.

## **Uniform Dial Plan (UDP)**

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Uniform Dial Plan (UDP) extensions can range from 3 digits to 7 digits, and combinations of extension lengths are allowed. Users can also replace up to 3 digits in the UDP tables.

## **Analog Busy Automatic Callback without Flash**

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Automatic callback without the caller flashing the hook or entering a feature access code is possible on analog phones. When the called station is busy and no other coverage path or call forwarding is in place, announcements allow the caller to have the call queued to Automatic Callback, routed to an extension, or dropped.

## **Capacity Changes**

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The most up-to-date system capacity information is available online at <http://www.avaya.com/support>. Select Product Documentation and search on on Avaya MultiVantage Solutions System Capacities Table.

## **International Enhancements**

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### **France 25% Trunk Alarming**

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When France 25% Trunk Alarming is active and 25% or more of the system trunks are out of service, a warning alarm is generated instead of a major alarm.

### **Support Russia DATS/ISDN Network**

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ISDN/DATS trunk networks are supported when the tone generator field is set to 15 (Russia) on the System-Parameters Country-Options screen. When the feature is activated, the overlap sending delay and ISDN T302 and T304 timers are modified to support the Russian trunk network.

## **Hardware enhancements**

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### **New Avaya Media Servers and Media Gateways**

New components of Avaya MultiVantage Solutions include:

- Avaya™ S8300 Media Server with an Avaya™ G700 Media Gateway
- Avaya™ S8700 Media Server with an Avaya™ G700 Media Gateway
- Avaya™ S8700 Media Server with MCC1 or SCC1

### **Enhanced Avaya Media Gateways**

Enhanced hardware products for Avaya MultiVantage Solutions are:

- Avaya™ G600 Media Gateway configurations
- Avaya™ CMC1, MCC1 and SCC1 Media Gateways.

### **New Avaya IP telephones**

The following telephones are new components of Avaya MultiVantage Solutions:

- Avaya™ 4620 IP screenphone
- Avaya™ 4602 IP telephone
- Avaya™ 2420 IP telephone.

For more information on these phones, see IP Solution enhancements.

## **IP Solution enhancements**

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### **C-LAN QoS and CIDR Support**

The TN799 Control-LAN (C-LAN) circuit pack support for both Classless Inter-Domain Routing (CIDR) and Variable Length Subnet Mask (VLSM) enhances flexibility in IP addressing and routing, and helps ensure customer-network compatibility. Quality of Service (QoS) features provide superior call quality for voice-over-IP (VoIP) signaling. Examples of these quality-related standards include ISDN QSIG, 802.1p/Q, VLANs and DiffServ (Differentiated Services).

Two new codecs, G.729A and G.729AB, can be administered.

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## **Location by Region**

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Use Location by Region to administer endpoint location by IP network region, and to provide the correct date and time information and trunk routing based on the IP network region.

## **Time of Day**

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An Avaya server can synchronize its internal clock to Coordinated Universal Time (UTC) time provided by Internet time servers. Linux or Windows 2000 platforms, running NTP or SNTP software, poll the time servers for the UTC time. UTC time is converted to the local time of the switch, and the platform system clock provides the synched time to the Avaya server.

For more information, see the *Administrator's Guide for Avaya MultiVantage Software* and also the documentation or online help for the software products comprising Avaya VisAbility™ Management Suite.

## **4620 IP Screenphone**

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The 4620 IP telephone has an optional feature expansion module and downloadable call appearance/feature button information such as speed dial, call log, and Web browsing using the Wireless Markup Language (WML). The 4620 button information appears on a screen on the phone, and icons indicate the status of call appearances, bridge call appearances and features. Labels on the 4620 can be downloaded in English, French, Italian, Spanish, and user-defined languages.

## **4602 IP telephone**

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The 4602 IP telephone has two call appearance buttons, a Drop button, a listen-only Speaker button, a Redial button, and a button for retrieving voice mail. The 4602 IP telephone has separate LEDs to indicate the on/off status of the speakerphone and mute buttons, and a 2-line by 24-character display. The call log maintains information on outgoing and incoming calls.

## **2420 IP telephone**

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The 2420 digital phone has an optional feature expansion module and downloadable information for its call appearance and feature buttons. The button information appears on a screen on the phone, and icons indicate the status of call appearances, bridge call appearances and features. Eurofont and Katakana fonts are available for the display screen. The 2420 has 24 administrable call appearance/feature buttons, a 40-character display, and a headset.

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## Change Descriptions

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The following problems have been addressed and corrected in Avaya MultiVantage™ 1.1 running on Avaya DEFINITY® Servers, Issue 1.0 (01.0.060.4).

1. The save translation command failed due to time-out.
2. Media-gateway screens did not include a yes/no “Registered?” field.
3. Channel 24 on a DS1 ISDN-EXT could not be used for voice.
4. The MAC address displayed on the media-gateway screen was inversed.
5. Station download fails.
6. Errors logged against the IPSI control MO were “IPSV-DUP.” Now, the MO name is “IPSV-CTL”.
7. X-Mobile stations could not be administrated because an invalid range was used.
8. Alarms did not build.
9. The restartcause manpage command did not display errors.
10. The stop command manpage was incorrect.
11. Time measurements (list measurements) were incorrect.
12. There was no native admin support for 4602 IP phones.



**Feature or category    See item numbers**

**A**

Administration            1, 2, 4, 7

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Alarms                      8

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**D**

Digital phones            5

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**E**

EC500                      7

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**I**

IP Server Interface (IPSI) 6

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**Feature or category    See item numbers**

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