



Avaya™ Interactive Response
Release 1.0
Release Notes

Document Number: 585-310-410
Issue 1
Publication Date: December 2002
Compas ID: 95711

Contents

Release Notes overview	7
Site-specific setup	9
Information required	10
Setting up site-specific configuration	12
Initial administration	16
Installing individual packages	16
Installing optional packages	17
Provisioning feature channels	17
Setting up user accounts	18
Starting the Web Administration interface	20
Setting up features	20
Configuring the modem	22
Backing up the system for the first time	23
Software Installation	25
Preinstallation	26
Installing system software	27
Installing individual packages	33
Installing optional packages	35
Provisioning feature channels	36
Installing database software	37
Local Oracle configuration guidelines	37
Network port usage	37
New alarms and log messages	39
NMS alarms and log messages	40
NMS001	40
NMS002	40
NMS003	41
NMS004	41
NMS005	41
NMS006	42
NMS007	42
VOIP alarms and log messages	43

Contents

VoIP001	43
VOIP002	43
VOIP003	44
VOIP004	44
VOIP005	44
VOIP006	45
VOIP007	45
VOIP008	45
VOIP009	46
VOIP010	46
VOIP011	47
VOIP012	47
VOIP013	47
VOIP014	48
VOIP015	48
VOIP016	49
Known issues	51
Problems starting callprg	52
Some trunks incorrectly reported in service	53
Some PRI channels may not come up INSERV	54
ISDN calls blocked	55
Reconnecting to the Speechify service	56
Using uploadcdh with multiple systems and a single database	57
Using TTS and speech recognition languages with VoiceXML	58
Location of VoiceXML timeout properties	59
Netscape CPU usage	60
Index	61

© 2002, Avaya Inc.
All Rights Reserved

Notice

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

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 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, call Technical Service Center Toll Fraud Intervention Hotline at +1 800 643 2353 for the United States and Canada. For additional support telephone numbers, see the Avaya Web site:

<http://www.avaya.com>

Select **Support**, then select **Escalation Lists US and International**. This Web site includes telephone numbers for escalation within the United States. For escalation telephone numbers outside the United States, select **Global Escalation List**.

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 working on your company's behalf. Whereas, a "malicious party" is anyone (including someone who may be otherwise authorized) who accesses your telecommunications equipment with either malicious or mischievous intent.

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

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

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

Your Responsibility for Your Company's Telecommunications Security

The final responsibility for securing both this system and its networked equipment rests with you - an Avaya customer's 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.

Federal Communications Commission Statements

Part 15: Class A Statement

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 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.

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.

European Union Declarations of Conformity



Avaya Inc. declares that the switch 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 R&D, Avaya Inc., can be obtained by contacting your local sales representative and are available on the following Web site:

<http://support.avaya.com>

Trademarks

Avaya, CONVERSANT, and Intuity are registered trademarks of Avaya, Inc.

Adobe and Adobe Acrobat are trademarks or registered trademarks of Adobe Systems, Inc. in the United States and in other countries.

U.S. Robotics and Sportster are registered trademarks of 3Com Corporation or its subsidiaries.

Alliance Generation is a registered trademark and NMS Communications, Natural MicroSystems, AG, Natural Access, NaturalFax are trademarks or service marks of NMS Communications Corporation or its subsidiaries.

Informix, DB2 are registered trademarks of IBM Corporation.

Microsoft, Windows, and Windows NT are either registered trademarks or trademarks of Microsoft Corporation in the United States and/or other countries.

Nuance and Nuance Vocalizer are trademarks of Nuance Communications, Inc.

Oracle is a registered trademark, and Oracle8i, and Oracle9i are trademarks or registered trademarks of Oracle Corporation

Sybase is a trademark of Sybase, Inc.

Speechify, OpenSpeech Server, OpenSpeech Recognizer, and OpenVXI are registered trademarks of SpeechWorks International, Inc.

Sun, Sun Microsystems, docs.sun.com, Java, Solaris, Sun Blade are trademarks or registered trademarks of Sun Microsystems, Inc. in the United States and in other countries.

Technical Support

Avaya provides a telephone number for you to use to report problems or to ask questions about your contact center. The support telephone number is 1-800-242-2121 in the United States. For additional support telephone numbers, see the Avaya Support Centre Web site.

Select **Escalation Lists**. This Web site includes telephone numbers for escalation within the United States. For escalation telephone numbers outside the United States, select **Global Escalation List**.

Warranty

Avaya Inc. provides a limited warranty on this product. Refer to the Limited use Software License Agreement provided with your package.

Ordering Information: Avaya Publications Center

Voice: +1 207 866 6701
+1 800 457 1764 (Toll-free, U.S. and Canada only)

Fax: +1 207 626 7269
+1 800 457 1764 (Toll-free, U.S. and Canada only)

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

Web: <http://www.avayadocs.com>

E-mail: totalware@gwsmail.com

Acknowledgment

This document was written by the CRM Information Development group.

Release Notes overview

Release Notes provides important information about the Avaya IR system, including known issues with Release 1.0 and workarounds.

This document is updated periodically when known issues are fixed or enhancements added to the system. Please check the Avaya Support Centre Web site (<http://support.avaya.com>), for new information.

Release Notes also includes additional information about the system that was not included in the *Avaya IR System Help*. Avaya will incorporate this information into the official documentation in the next release.

In some case the information in this document supercedes the information published in the *Avaya IR System Help*. You should use the following sections of this document instead of the equivalent information in the Help:

- Site-specific setup on page 9
- Installing software on page 25

Site-specific setup

When you start the Avaya IR system for the first time with factory-installed software, you must perform a number of tasks to get the system running at your site.

Note:

Site-specific setup is usually performed by an Avaya service technician or certified third-party service provider.

Information required

The following site-specific information is required to respond to system prompts when the system boots up for the first time with factory-installed software:

For general information:

- Language
- Locale
- Type of terminal

To configure the system on the IP network:

- Networked? (yes/no)
- DHCP? (yes/no)
- Host names
- IP addresses
- System part of a subnet? (yes/no)
- Network mask
- IPv6 enabled? (yes/no)

To specify security option:

- Configure Kerberos security? (yes/no)

To configure the system for the default router:

- Set default network router IP address? (yes/no)
- Default router IP address
- Default gateway
- Default route through

To configure the system for name service:

- Name service
- DNS name service requires:
 - DNS server addresses

- DNS search list
- NIS name service requires:
 - Server's host name
 - Server's IP address

To configure the system for date and time:

- Geographic region
- Time zone for region
- Date and time

To configure administrative passwords:

- Root password
- TSC password
- CRAFT password

Setting up site-specific configuration

The first time you turn on the power to the Avaya IR system, the system prompts you for information that sets up many of the site-specific parameters.

Step	System prompt	Action
1.	Select a Language 0. English 1. Fr Please make a choice (0 - 1), or press h or ? for help:	Type 0 and press Enter .
2.	Select a Locale 0. English (C - 7-bit ASCII) 1. Canada-English (ISO8859-1) 2. Thai 3. U.S.A. (en_US.ISO 8859-1) 4. U.S.A. (en_US.ISO 8859-15) 5. Go Back to Previous Screen Please make a choice (0 - 5), or press h or ? for help:	Type 0 and press Enter .
3.	The next two screens describe the installation program and what you will need to answer the prompts.	Press F2 to acknowledge the screens. If the system is attached to a network, it assumes that you want to configure the system for network usage. Go to Step 6. If the system is not attached to the network, it displays the following prompt:
4.	Networked [] Yes [] No	If you plan to connect your system to a network, position the cursor between the Yes brackets using the arrow keys. Press Enter . An X appears in the brackets to indicate your selection. Press F2 .
5.	Use DHCP [] Yes [] No	Select whether DHCP is to be used on your LAN. Press F2 . If you choose No (the preferred option), the system uses static IP addresses for proxy connections.
6.	Host name:	Type your host name (the name of your computer on the network) and press F2 .
7.	IP address:	Type the IP address of the computer and press F2 .

Setting up site-specific configuration

Step	System prompt	Action
8.	System part of a subnet <input type="checkbox"/> Yes <input type="checkbox"/> No	Choose whether your system is part of a subnet and press F2 . If you choose Yes , the system prompts you for the subnet mask. In this case, enter the subnet mask and press F2 .
9.	Netmask:	Type the subnet mask and press F2 .
10.	Enable IPv6 <input type="checkbox"/> Yes <input type="checkbox"/> No	Choose whether to enable IPv6 and press F2 . Typically you would choose No . After a short wait (approximately 30 seconds), the system displays the network information you entered similar to the following example:
11.	Host name: <i>host</i> IP address: <i>IP address</i> System part of a subnet: Yes Netmask: <i>subnet mask</i> Enable IPv6: No	Review the information to make sure it is accurate and press F2 to continue. If the information is not correct, press F4 and correct the information starting with the Networked question.
12.	Configure Kerberos Security <input type="checkbox"/> Yes <input type="checkbox"/> No F2_Continue F6_Help	If your network uses Kerberos Security, select Yes and press F2 .
13.	The system displays a confirmation screen.	Press F2 to acknowledge.
14.	Configuring default router Set default network router IP address [y,n,?]	To configure the default network router IP address, type y then press Enter .
15.	Set Router IP Address (ex. 192.1.7.254):	Type the router IP address then press Enter .
16.	The system asks if the address you entered is correct.	If it is, type y then press Enter .
17.	Name service <input type="checkbox"/> NIS+ <input type="checkbox"/> NIS <input type="checkbox"/> DNS <input type="checkbox"/> LDAP <input type="checkbox"/> None	Select your name service and press F2 . This choice and the prompts that follow are specific to your site. If you selected DNS , the system displays the following series of messages to set up the name server:
17a.	Domain name:	Type your domain name and press F2 .
17b.	Server's IP address: Server's IP address: Server's IP address:	You can enter up to three IP addresses for DNS servers. Type the IP address and press Enter to move to the next field. When done, press F2 .

Site-specific setup

Step	System prompt	Action
17c.	Search domain: Search domain: Search domain: Search domain: Search domain: Search domain:	<p>You can enter up to six search domains. Type the search domain and press Enter to move to the next field. When done, press F2.</p> <p>The system displays the information you entered, similar to the following:</p>
17d.	Name service: DNS Domain name: domain.com Server address(es): 127.0.0.1 Search domain(s): search.domain.com	<p>Review the information to make sure it is accurate and Press F2 to continue. If the list is not correct, press F4 and correct the information starting with the domain name prompt.</p> <p>After the system accepts your name service information, it displays a series of messages requesting information about the time zone for the system.</p>
18.	Regions <input type="checkbox"/> Asia, Western <input type="checkbox"/> Australia / New Zealand <input type="checkbox"/> Canada <input type="checkbox"/> Europe <input type="checkbox"/> Mexico <input type="checkbox"/> South America <input type="checkbox"/> United States <input type="checkbox"/> other - offset from GMT <input type="checkbox"/> other - specify time zone file	<p>Select the region for the system and press F2.</p> <p>The system displays a menu for selecting the time zone for the region you selected. The following example shows the time zones for the United States:</p>
19.	Time zones <input type="checkbox"/> Eastern <input type="checkbox"/> Central <input type="checkbox"/> Mountain <input type="checkbox"/> Pacific <input type="checkbox"/> East-Indiana <input type="checkbox"/> Arizona <input type="checkbox"/> Michigan <input type="checkbox"/> Samoa <input type="checkbox"/> Alaska <input type="checkbox"/> Aleutian <input type="checkbox"/> Hawaii	<p>Select your time zone and press F2.</p>
20.	Date and time: <i>date time</i> Year (4 digits): <i>year</i> Month (1-12) : <i>month</i> Day (1-31) : <i>day</i> Hour (0-23) : <i>hour</i> Minute (0-59) : <i>minute</i>	<p>Verify that these values for year, month, day, hour, and minute are correct. If any values need to be changed, position the cursor in the appropriate field and type the correct value. Press Enter to move between field. When done, press F2.</p> <p>The system displays the time zone information you entered, similar to the following:</p>

Setting up site-specific configuration

Step	System prompt	Action
21.	Time zone: US/Mountain Date and time: 2002-07-03 10:38:00	Review the information to make sure it is accurate and press F2 to continue. If the information is not correct, press F4 and correct the information starting with the region prompt.
22.	Root password:	Type the root password to be used on the system and press Enter .
23.	Re-enter your root password.	Type the root password again and press Enter .
24.	System identification is completed. Setting netmask of eri0 to XXX.XXX.XXX.X Setting default IPv4 interface for multicast: add net 224.0/4: gateway XXXXX syslog service starting. Print services started. volume management starting. Jul 3 10:48:56 XXXXX sendmail[293]: My unqualified host name (XXXXX) unknown; sleeping for retry The system is ready.	The system automatically reboots and displays the login prompt for Solaris 8. You are ready to log in and administer the system.

Initial administration

Once the system has been initialized with site-specific information, you need to install additional software packages that have not been pre-installed by Avaya, provision feature channels, and set up the features to begin operation.

Installing individual packages

Factory-installed software or a system installed from CD does not have the following optional packages installed:

- NMS package
- Proxy Text-to-Speech package
- Speech Proxy package
- Speech Proxy - Speech Recognition package
- TBCT package
- Voice over IP package
- Third-party packages

These packages need to be individually installed using the **pkgadd** command. Once the packages have been installed, Avaya provisions the feature channels for each package as appropriate. See [Provisioning feature channels](#) on page 17 for more information.

 **Important:**

You must install either the NMS package or the Voice over IP (VoIP) package to achieve voice communication and call processing with the Avaya IR system. The NMS package contains the software for interfacing with the telephony cards. The VoIP package contains the software for telephony communications using VoIP with a DEFINITY switch.

To install individual packages:

1. If you are not logged in, log in as root.
2. At the command prompt, type **cd /export/optional_features** and press **Enter**.

This directory contains all of the optional and licensed packages.

3. Type **pkgadd -d . package_name** where *package_name* is the short name for the package you want to install. Press **Enter**.

The package installation starts. Depending on the package you are installing, the system displays various messages. In most cases, the system requires you to confirm some messages by pressing **Enter** (to choose the default **Yes** response).

Note:

If you do not confirm the package installation messages, the process will exit and the package will not be installed.

After a short time, the system displays a message indicating that the installation is complete.

4. If you are installing the AVnms package, type `/vs/bin/nms.install` and press **Enter**. Otherwise, skip this step.
5. Repeat Step 3 for additional packages you need to install.
6. When you have completed installing packages you must reboot the system. Type `shutdown -y -g0 -i6` and press **Enter** to reboot the system.

Installing optional packages

The following software packages are password-protected and must be installed by an Avaya technician or certified third-party service provider:

- WholeWord Recognition Base package (Avaya Recognizer)
- WholeWord speech recognition language packages
- VoiceXML package
- ASAI package
- CTI DIP package
- Enhanced Basic Speech packages
- Fax Actions package
- NG FAX package

Provisioning feature channels

Once installed, some features must be provisioned by an Avaya service technician or certified third-party service provider to allow the system to use the feature. Provisioning is based on the number of channels of the feature purchased by the customer.

The following features must be provisioned by Avaya:

- Digital protocol - loop start

Site-specific setup

- Digital protocol - PRI
- Digital protocol - wink start
- NMS NaturalFax
- Avaya Recognizer (WholeWord speech recognition)
- Natural Language Speech Recognition (NLSR)
- Proxy Text-To-Speech (TTS)
- Voice over IP (VoIP)

Setting up user accounts

To use the Web Administration tool to set up features on Avaya IR, you can use the root login and password, or you can set up one or more additional user accounts with the correct administrative privileges.

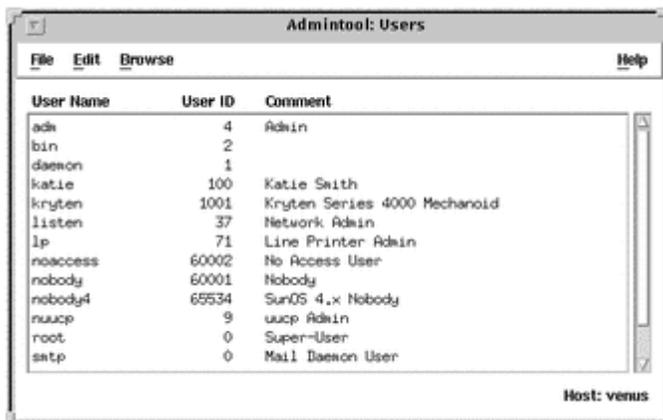
Setting up user accounts for administering Avaya IR includes:

1. Establishing the user account with `admintool`
2. Assigning administration privileges with the `assign_permissions` command.

To establish user accounts:

1. Log in as root, if necessary.
2. At the command prompt, type **admintool &** and press **Enter**.

The **Admintool** interface starts, as shown in the following figure.



3. On the Edit menu, choose **Add**.

The system displays the **Add User** window.

4. Complete the Add User window with information about the new user and click **OK**.

Consider the following points when entering data about the new user:

- User ID numbers must be a whole number less than or equal to 2147483647. They are required for both regular user accounts and special system accounts. Although User ID numbers 0 through 99 are reserved, you can add a user with one of these numbers. However, do not use them for regular user accounts. By definition, root always has User ID 0, daemon has User ID 1, and pseudo-user bin has User ID 2.
- When adding a user account, you must assign a primary group for a user or accept the default group, staff (group 10). The primary group should already exist (if it does not exist, specify the group by a GID number).

For more information, see the Sun Solaris 8 System Administration Guide, Volume 1.

A user account other than root must be set up with an Avaya IR privilege of Administration or Operations in order to log in to Web Administration. The Operations privilege allows access to fewer Web Administration menu items than the Administration privilege. For example, a user with an Operations privilege cannot administer Backup and Restore.

To assign administrative privileges:

1. At the command prompt, type **assign_permissions *username* Administration** where *username* is the user you added using the admintool. Press **Enter**.

The system displays:

```
Assigning VIS permissions:      Administration
      for user login:          username
```

Confirm (Y/N)

2. Type **y** and press **Enter**.

The system displays:

```
login: username has been assigned VIS permissions level:
Administration
```

You can now access the Web Administration interface using the new user name.

Starting the Web Administration interface

To set up the features on Avaya IR, you can use the Web Administration interface or the command-line interface.

Note:

Avaya recommends using the Web Administration interface until you are familiar with the administration commands.

To start the Web Administration interface:

1. Start a Web browser.

To run Netscape locally on the Avaya IR platform, type `/usr/dt/bin/netscape &` at the command prompt and press **Enter**.

If you are accessing Avaya IR remotely, start the browser as you normally do on the remote system.

2. In the browser address field, type `http://domain` where *domain* is the domain name of the Avaya IR system and press **Enter**.

If you are running the browser locally, you can use `http://127.0.0.1` in the address field.

The browser displays the **Web Administration entry** screen.

3. Click **Web Administration** from the menu.

The browser displays the **Login** screen.

4. Log in to the system using an account with root or administration privileges.

The browser displays the **Web Administration** screen, the entry point for the Web Administration interface.

Setting up features

Once packages have been installed, features must be configured to provide the required functionality. You use the Web Administration interface or the command-line interface to administer features on the Avaya IR system.

Common administration tasks in *Avaya IR System Help* provides step-by-step instructions for administering and setting up features.

To set up features:

1. Configure switch interfaces (such as T1/E1 or Voice over IP).
2. Configure JDBC interface for database access.

3. Configure Call Data Handling settings.
4. Configure UCID settings.
5. Configure speech features (such as PTTS, NLSR, or WholeWord speech recognition), if required.
6. Configure CTI DIP settings, if required.
7. Configure the ASAI settings, if required.
8. Configure the fax settings, if required.
9. Configure the system for backups.

Configuring the modem

The modem is automatically configured by a script that runs at startup.

The following commands are run by the script:

Command	Description
set ProductID <i>product_id</i>	Sets the product ID.
set AlarmDest <i>telno</i>	Sets the telephone number (<i>telno</i>) to INADS alarming.
set Alarming [on off]	Turns dial-out alarming on or off.
send Test Alarm	Sends a test alarm to INADS.
set-ppp-options <i>tsc_ppp</i> <i>local_IP remote_ID</i>	Sets up PPP for login account <i>tsc_ppp</i> .

Note:

If you want to modify the configuration after installation, you can use the Web Administration interface.

Backing up the system for the first time

Avaya strongly recommends that you create a full backup of the system after you have completed administering the features for the first time. By doing so, you will preserve your setup and minimize the amount of work you will need to do if the system becomes disabled and has to be restored.

See *Creating backups* in the *Avaya IR System Help* for more information.

Software Installation

All Avaya IR system software is pre-installed and tested at the factory. The information provided in this section explains the procedures for installing the system software from CD media if it is necessary after your system arrives from Avaya. For example, if your system experienced a catastrophic hardware failure, you will need to follow the steps in this section to reinstall the base software.

Another method of installing the software system is to restore the system from backup, which may be preferable if you have applications, data, and feature administration that also needs to be restored. See Restoring the system from backup for more information.

Note:

Many of the software installation prompts and menus require the use of function keys. Typically, if the function keys do not work, you can use them by pressing **Ctrl+F** then pressing **#** where **#** is the function key number. If the terminal type is **xterm**, then use the following procedure so the function keys will work properly:

1. Type **export TERM=xterm** and press **Enter**.
2. Type **export SMTERM=xterm** and press **Enter**.

Preinstallation

You will need the following information to respond to system prompts when you install the system from CDs:

To configure the system for IP network:

- Host name
- IP address
- Part of a subnet? (yes/no)
- Subnet mask
- IPv6 (Internet protocol Version 6)? (yes/no)
- Kerberos (network authentication protocol)? (yes/no)

To configure the system for the default router:

- IP address of default router
- IP address of default gateway
- IP address of default route

To configure the system for name services:

- NIS or DNS
- Domain name
- IP addresses of DNS servers
- Domains to search

Installing system software

Follow the steps below to install the system software from the Avaya IR CD media, which includes the Solaris 8 operating system and the base Avaya IR packages:

Step	System prompt	Action
1.	After powering the system up, it displays messages indicating that it is attempting to boot the operating system from the hard disk.	At any point during or after the attempted boot process, display the open boot (ok) prompt by either: <ul style="list-style-type: none"> Pressing Stop-A from the Sun console Pressing Ctrl-Break from a serial port console
2.	ok	Open the CD-ROM drive bay and insert the CD labeled Avaya IR R1.0 System Media and Drivers . Close the CD-ROM drive bay.
3.	ok	Type boot cdrom - install and press Enter . The system displays messages indicating that it is resetting itself and initializing memory.
4.	Select a Language 0. English 1. French 2. German 3. Italian 4. Spanish 5. Swedish Please make a choice (0 - 5), or press h or ? for help:	Type the number of the language you want to use and press Enter .

Software Installation

Step	System prompt	Action
5.	<p>Select a Locale</p> <ul style="list-style-type: none"> 0. English (C - 7-bit ASCII) 1. Albania (ISO8859-2) 2. Australia (ISO8859-1) 3. Belgium-Flemish (ISO8859-1) 4. Belgium-Flemish (ISO8859-15 - Euro) 5. Bosnia (ISO8859-2) 6. Brazil (ISO8859-1) 7. Bulgaria (ISO8859-5) 8. Canada-English (ISO8859-1) 9. Catalan,Spain (ISO8859-1) 10. Catalan,Spain (ISO8859-15 - Euro) 11. Croatia (ISO8859-2) 12. Czech Republic (ISO8859-2) 13. Denmark (ISO8859-1) 14. Denmark (ISO8859-15 - Euro) 15. Egypt (ISO8859-8) 16. Estonia (ISO8859-15) 17. Finland (ISO8859-1) 18. Finland (ISO8859-15 - Euro) <p>Press Return to show more choices.</p> <p>Please make a choice (0 - 50), or press h or ? for help:</p>	<p>Type the number of the locale you want to use, which determines the format of screen text, and press Enter.</p> <p>Note: If the Sun keyboard is not connected to the computer's USB port, the system prompts you to specify the terminal type for the session. In this case, choose the terminal type you want to use and press Enter.</p>
6.	<p>Configuring default router</p> <p>Enter default router IP address (ex. 192.1.7.254) or 'none':</p>	<p>Type the IP address of the default router and press Enter.</p> <p>The system verifies the default router. This activity takes a few minutes to complete.</p>
7.	<p>The next two screens describe the installation program.</p>	<p>Press F2 to acknowledge the screens.</p> <p>If the system is attached to a network, it assumes that you want to configure the system for network usage. Go to Step 10.</p> <p>If the system is not attached to the network, it displays the following prompt:</p>
8.	<p>Networked</p> <ul style="list-style-type: none"> [] Yes [] No 	<p>If you plan to connect your system to a network, position the cursor between the Yes brackets using the arrow keys. Press Enter. An X appears in the brackets to indicate your selection. Press F2.</p>

Step	System prompt	Action
9.	Use DHCP <input type="checkbox"/> Yes <input type="checkbox"/> No	Select whether DHCP is to be used on your LAN. Press F2 . If you choose No (the preferred option), the system uses static IP address for proxy connections.
10.	Host name:	Type your host name (the name of your computer on the network) and press F2 .
11.	IP address:	Type the IP address of the computer and press F2 .
12.	System part of a subnet <input type="checkbox"/> Yes <input type="checkbox"/> No	Choose whether your system is part of a subnet and press F2 If you choose Yes , the system prompts you for the subnet mask. In this case, enter the subnet mask and press F2 .
13.	Netmask:	Type the subnet mask and press F2 .
14.	Enable IPv6 <input type="checkbox"/> Yes <input type="checkbox"/> No	Choose whether to enable IPv6 and press F2 . Typically, you would choose <i>No</i> . After a short wait (approximately 30 seconds), the system displays the network information you entered similar to the following example:
15.	Host name: <i>host</i> IP address: <i>IP address</i> System part of a subnet: <i>Yes</i> Netmask: <i>subnet mask</i> Enable IPv6: <i>No</i>	Review the information to make sure it is accurate and press F2 to continue. If the information is not correct, press F4 and correct the information starting with the Networked question.
16.	Configure Kerberos Security <input type="checkbox"/> Yes <input type="checkbox"/> No	If your network uses Kerberos Security, select Yes and. Press F2 .
17.	The system displays a confirmation screen.	Press F2 to acknowledge.
18.	Name service <input type="checkbox"/> NIS+ <input type="checkbox"/> NIS <input type="checkbox"/> DNS <input type="checkbox"/> LDAP <input type="checkbox"/> None	Select your name service and press F2 . Although this is specific to your site, the most common selection is DNS . If you selected DNS, the system displays the following series of messages to set up the DNS name service.
18a.	Domain name:	Type your domain name and press F2 .
18b.	Server's IP address: Server's IP address: Server's IP address:	You can enter up to three IP addresses for DNS servers. Type the IP address and press Enter to move to the next field. When done, press F2 .

Software Installation

Step	System prompt	Action
18c.	Search domain: Search domain: Search domain: Search domain: Search domain: Search domain:	<p>You can enter up to six search domains. Type the search domain and press Enter to move to the next field. When done, press F2.</p> <p>The system displays the information your entered, similar to the following:</p>
18d.	Name service: DNS Domain name: domain.com Server address(es): 127.0.0.1 Search domain(s): search.domain.com	<p>Review the information to make sure it is accurate and Press F2 to continue. If the list is not correct, press F4 and correct the information starting with the domain name prompt.</p> <p>After the system accepts your name service information, it displays a series of messages requesting information about the time zone for the system.</p>
19.	Regions [] Asia, Western [] Australia / New Zealand [] Canada [] Europe [] Mexico [] South America [] United States [] other - offset from GMT [] other - specify time zone file	<p>Select the region for the system and press F2.</p> <p>The system displays a menu for selecting the time zone for the region you selected. The following example shows the time zones for the United States:</p>
20.	Time zones [] Eastern [] Central [] Mountain [] Pacific [] East-Indiana [] Arizona [] Michigan [] Samoa [] Alaska [] Aleutian [] Hawaii	<p>Select your time zone and press F2.</p>

Step	System prompt	Action
21.	<p>Date and time: <i>date time</i></p> <p>Year (4 digits): <i>year</i></p> <p>Month (1-12) : <i>month</i></p> <p>Day (1-31) : <i>day</i></p> <p>Hour (0-23) : <i>hour</i></p> <p>Minute (0-59) : <i>minute</i></p>	<p>Verify that these values for year, month, day, hour, and minute are correct. If any values need to be changed, position the cursor in the appropriate field and type the correct value. Press Enter to move between field. When done, press F2.</p> <p>The system displays the time zone information you entered, similar to the following:</p>
22.	<p>Time zone: US/Mountain</p> <p>Date and time: 2002-07-03 10:38:00</p>	<p>Review the information to make sure it is accurate and press F2 to continue. If the information is not correct, press F4 and correct the information starting with the region prompt.</p> <p>The system installs the system software and configures the network. This takes a few minutes. When completed, the system displays the following prompt:</p>
23.	<p>Welcome To Avaya Interactive Response R1 Installation and Recovery.</p> <p>Please select one of the choices below.</p> <p>I to Install or R for Restore</p>	<p>To begin installing the base packages for the Avaya IR system, type I and press Enter.</p> <p>Note: To restore the system from backup at this prompt, see Restoring the system from backup.</p> <p>The system begins installing the base packages. After several minutes the system reboots and displays the following prompt:</p>
24.	<p>Root password:</p>	<p>Type the root password to be used on the system and press Enter.</p>
25.	<p>Re-enter your root password.</p>	<p>Type the root password again and press Enter.</p> <p>Lines similar to the following will appear:</p>

Software Installation

Step	System prompt	Action
26.	<p>System identification is completed. Setting netmask of eri0 to XXX.XXX.XXX.X Setting default IPv4 interface for multicast: add net 224.0/4: gateway XXXXX syslog service starting.</p> <p>Print services started. volume management starting.</p> <p>Jul 3 10:48:56 XXXXX sendmail[293]: My unqualified host name (XXXXX) unknown; sleeping for retry The system is ready.</p>	<p>The system reboots and returns to the console login prompt. However, you may need to press Enter to display it.</p>
27.	Console login:	Type root and press Enter .
28.	Password:	Type your root password and press Enter . The system logs you in and automatically opens the CD-ROM drive.
29.	<p>The installation process will now continue.</p> <p>Put the CD labeled Avaya IR Recognizer Media R1.0 into the drive.</p> <p>Press enter when ready.</p>	<p>Remove the Avaya IR R1.0 System Media and Drivers CD and insert the Avaya IR Recognizer Media R1.0 CD into the CD-ROM drive. Press Enter.</p> <p>The system copies files from the CD. This takes a few minutes.</p> <p>When it is complete, the system automatically opens the CD-ROM drive and displays the following message:</p>
30.	<p>The contents of the Avaya IR Recognizer Media R1.0 CD have been installed.</p> <p>Put the CD labeled Avaya IR R1.0 Server and Proxy Media R1.0 into the drive.</p> <p>Press enter when ready.</p>	<p>Remove the Avaya IR Recognizer Media R1.0 CD and insert the Avaya IR R1.0 Server and Proxy Media R1.0 CD into the CD-ROM drive. Press Enter.</p> <p>The installation process continues for several minutes.</p> <p>When it is complete, the system displays the following message:</p>
31.	<p>Software installation is complete. Please reboot the system.</p>	<p>Type shutdown -y -g0 -i6 and press Enter.</p> <p>The system reboots and returns to the console login prompt. You must now login and install individual packages required for your particular site. See Installing individual packages on page 16 for more information.</p>

Installing individual packages

Factory-installed software or a system installed from CD does not have the following optional packages installed:

- NMS package
- Proxy Text-to-Speech package
- Speech Proxy package
- Speech Proxy - Speech Recognition package
- TBCT package
- Voice over IP package
- Third-party packages

These packages need to be individually installed using the **pkgadd** command. Once the packages have been installed, Avaya provisions the feature channels for each package as appropriate. See [Provisioning feature channels](#) on page 17 for more information.

Important:

You must install either the NMS package or the Voice over IP (VoIP) package to achieve voice communication and call processing with the Avaya IR system. The NMS package contains the software for interfacing with the telephony cards. The VoIP package contains the software for telephony communications using VoIP with a DEFINITY switch.

To install individual packages:

1. If you are not logged in, log in as root.
2. At the command prompt, type **cd /export/optional_features** and press **Enter**.

This directory contains all of the optional and licensed packages.

3. Type **pkgadd -d . package_name** where *package_name* is the short name for the package you want to install. Press **Enter**.

The package installation starts. Depending on the package you are installing, the system displays various messages. In most cases, the system requires you to confirm some messages by pressing **Enter** (to choose the default **Yes** response).

Note:

If you do not confirm the package installation messages, the process will exit and the package will not be installed.

Software Installation

After a short time, the system displays a message indicating that the installation is complete.

4. If you are installing the AVnms package, type **/vs/bin/nms.install** and press **Enter**. Otherwise, skip this step.
5. Repeat Step 3 for additional packages you need to install.
6. When you have completed installing packages you must reboot the system. Type **shutdown -y -g0 -i6** and press **Enter** to reboot the system.

Installing optional packages

The following software packages are password-protected and must be installed by an Avaya technician or certified third-party service provider:

- WholeWord Recognition Base package (Avaya Recognizer)
- WholeWord speech recognition language packages
- VoiceXML package
- ASAI package
- CTI DIP package
- Enhanced Basic Speech packages
- Fax Actions package
- NG FAX package

Provisioning feature channels

Once installed, some features must be provisioned by an Avaya service technician or certified third-party service provider to allow the system to use the feature. Provisioning is based on the number of channels of the feature purchased by the customer.

The following features must be provisioned by Avaya:

- Digital protocol - loop start
- Digital protocol - PRI
- Digital protocol - wink start
- NMS NaturalFax
- Avaya Recognizer (WholeWord speech recognition)
- Natural Language Speech Recognition (NLSR)
- Proxy Text-To-Speech (TTS)
- Voice over IP (VoIP)

Installing database software

Database software is typically installed on the LAN or locally on the Avaya IR system. Follow the instructions given by your software provider for installing the database, keeping in mind the [network port usage by the system](#) on page 37.

Important:

Of the certified databases, only Oracle may be installed locally on the Avaya IR platform. When installing Oracle do *not* start the Oracle Apache Web Server. The Oracle Apache Web Server conflicts with the Apache Web Server that is installed as part of the Web administration package and is not required for using Oracle on Avaya IR.

Local Oracle configuration guidelines

Avaya recommends using a specific memory usage configuration for local installations of Oracle. The default configuration that is generated by the installation process causes Oracle to consume too much system memory.

The Avaya-provided `/vs/data/init.ora` file contains the recommended configuration for running Oracle on the Avaya IR system. Use this file in place of the default `init.ora` file (usually located in the `$ORACLE_HOME/dbs` directory) or modify the file using the following values as guidelines:

```
#db_cache_size=67108864
db_block_buffers=500
hash_area_size=262144
#dispatchers=          - disable MTS
#java_pool_size=67108864
#large_pool_size=1048576
shared_pool_size=5000000
```

Network port usage

The following table shows which network ports are used by features. If you are installing new software, be sure not to use any of these ports.

Software Installation

Feature	Network Ports	Protocol
Avaya Recognizer (WholeWord)	2345 to 2345+N-1 where N is the number of ASR ports. The default is 60.	TCP
Web Administration	80 for Apache Web Server, 8081 for Tomcat Servlet Engine	HTTP
Web Administration	8007 for Tomcat Servlet Engine	ajpv12

New alarms and log messages

The alarms and log messages in this section are additional messages not fully documented in the *Avaya IR System Help*.

NMS alarms and log messages

NMS alarms and messages report events related to NMS cards for systems containing those cards.

NMS001

Alarm level

Minor to major.

Description

A general internal software error has occurred in NMSIP. This includes OS related API failures, and so on.

Action

Contact your Avaya support representative.

NMS002

Alarm level

Minor to major.

Description

A software error has occurred in NMSIP. This can be the result of protocol errors, configuration errors, and so on. The log message should indicate the error type and a possible solution.

Action

Contact your Avaya support representative.

NMS003

Alarm level

Minor to major.

Description

An internal software error has occurred in NMSIP. The Object identified is in error.

Action

Contact your Avaya support representative.

NMS004

Alarm level

Minor to major.

Description

A software error has occurred in NMSIP. This is the result of an error as the result of a NMS API request or an API response EVENT.

Action

Contact your Avaya support representative.

NMS005

Alarm level

Minor to major.

New alarms and log messages

Description

Trunk specific activity, such as a trunk going up or coming down.

Action

Contact your Avaya support representative.

NMS006

Alarm level

Minor to major.

Description

A general error has occurred in NMSIP. The log message should indicate the specific error.

Action

Contact your Avaya support representative.

NMS007

Alarm level

Minor to major.

Description

A problem with the NMS card.

Action

Contact your Avaya support representative.

VOIP alarms and log messages

VoIP alarms and messages report events related to VoIP cards for systems containing those cards.

VoIP001

Alarm level

Minor to major.

Description

No VoIP Card has been assigned to the IR system. The reason is indicated in the reason field of the message.

Action

Contact your Avaya support representative.

VOIP002

Alarm level

Minor.

Description

More than one VoIP card is detected on the system. Only the first VoIP card will be used for VoIP, the rest will be ignored.

Action

Contact your Avaya support representative.

VOIP003

Alarm level

Major.

Description

You are trying to use a corrupt or non-existent VoIP configuration file. This may be caused by file corruption or a system environment change.

Action

Contact your Avaya support representative.

VOIP004

Alarm level

Major.

Description

The configuration parameter value is illegal.

Action

Check the configuration of your VoIP card.

VOIP005

Alarm level

Major.

Description

The system variable VS_CONFIG_DIR specified is not a valid directory. The directory may not exist or is not readable.

Action

Contact your Avaya support representative.

VOIP006

Alarm level

Major.

Description

Failed to setup the VoIP card OA&M interface. This may be caused by corrupted shared memory or a corrupted system bulletin board.

Action

Contact your Avaya support representative.

VOIP007

Alarm level

Major.

Description

Failed to initialize the VoIP card. The card will be marked broken. This may be caused by a broken card or message sending error.

Action

Contact your Avaya support representative.

VOIP008

Alarm level

Minor.

New alarms and log messages

Description

The VoIP card is unable to process the OA&M request. This may be caused by message receiving error or invalid message request.

Action

Contact your Avaya support representative.

VOIP009

Alarm level

Major.

Description

Failed to restore the VoIP card. The card will stay out of service. This may be caused by message sending error.

Action

Contact your Avaya support representative.

VOIP010

Alarm level

Major.

Description

Failed to remove the VoIP card. This may be caused by a message sending error.

Action

Contact your Avaya support representative.

VOIP011

Alarm level

None.

Description

This is an informational message showing signaling traffic over the H.323 trunk.

Action

No action is required.

VOIP012

Alarm level

Major.

Description

A error ocured in the VoIP subsystem. It is probably not functioning correctly.

Action

The error should be fixed and the system restarted.

Contact your Avaya support representative.

VOIP013

Alarm level

Minor.

New alarms and log messages

Description

A non-fatal error occurred on a VoIP channel. Any call on the channel was not dropped, but it may experience problems.

Action

Contact your Avaya support representative.

VOIP014

Alarm level

Major.

Description

A fatal error occurred on a call on a VoIP channel. The call was dropped.

Action

Contact your Avaya support representative.

VOIP015

Alarm level

None.

Description

This is an informational message indicating that the VoIP card has been started up.

Action

No action is required.

VOIP016

Alarm level

None.

Description

This is an informational message indicating that the VoIP card has been shut down.

Action

No action is required.

Known issues

The current version of the Avaya IR system has the following known issues:

- [Problems starting callprg](#) on page 52
- [Some trunks incorrectly reported in service](#) on page 53
- [Some PRI channels may not come up INSERV](#) on page 54
- [ISDN calls blocked](#) on page 55
- [Reconnecting to the Speechify service](#) on page 56
- [Using uploadcdh with multiple systems and a single database](#) on page 57
- [Using TTS and speech recognition languages with VoiceXML](#) on page 58
- [Location of VoiceXML timeout properties](#) on page 59
- [Netscape CPU usage](#) on page 60

Problems starting callprg

If the Avaya IR system is started before the digital telephony or VoIP cards have been set up, the `/vs/bin/vrs/callprg` process has problems starting up. The system reports a number of errors related to this problem on the screen during startup. One such error is that the process is responding too quickly.

This problem occurs when the `callprg` process attempts to reserve memory based on the number of channels provisioned on the system. If there are no channels provisioned, it creates a problem for the process.

This problem is fixed by properly setting up the cards on the system and rebooting.

Some trunks incorrectly reported in service

After the system is rebooted, some trunks on the telephony cards may be reported as in service (the INSERV state), when there is no trunk connected to the card.

To repair the problem:

1. Plug any trunk cable into the empty trunk port.
2. Unplug the cable.

This will cause all the channels on that trunk to go into the NETOOS state.

Some PRI channels may not come up INSERV

Periodically, especially after a heavy load has been on the system for two or more hours, some PRI channels may not come up in the INSERV state after the voice system has been restarted or the Avaya IR system has been rebooted. This problem may also occur the first time the voice system has been started after the NMS cards have been assigned.

To repair this problem:

1. Remove and restore the B-channels, using the **remove** and **restore** commands.

See *Avaya IR System Help* for complete details on these commands.

2. If the **restore** command does not bring the channels to the INSERV state, remove and restore the associated D-channels.

You may need to do this several times.

3. If restoring the D-channel does not fix the problem, stop and restart the voice system using the **stop_vs** and **start_vs** commands.

ISDN calls blocked

At times, software inadvertently triggers events to block calls on some ISDN channels. As a result, the B-channels do not come into service (they are in a MANOOS state).

To repair this problem:

1. Remove and restore the B-channels, using the **remove** and **restore** commands.
See *Avaya IR System Help* for complete details on these commands.
2. If the **restore** command does not bring the channels to the INSERV state, remove and restore the associated D-channels.
3. If restoring the D-channel does not fix the problem, stop and restart the voice system using the **stop_vs** and **start_vs** commands.

Reconnecting to the Speechify service

If you are using SpeechWorks Speechify, the Proxy-Text-to-Speech software on the Avaya IR system does not automatically reconnect with the Speechify service when the Speechify service is stopped and restarted.

To repair this problem:

1. At the command prompt, type **sproxyadm -r tts0 -f inserv** and press **Enter**.

This command forces the proxy to reinitialize the connection with the Speechify server.

2. After a minute, type **sproxyadm -r tts0 -d** and press **Enter**.

The system will display the port states. The ports should all be in service (in the INSERT state).

3. If all ports are not in service, type **sproxyadm -r tts0 -s server_name -p port -f inserv** and press **Enter**, where *server_name* is the name assigned to the speech proxy server, and *port* is the port number.

The connection for the port is initialized.

4. If the **sproxyadm** command does not re-establish connection, stop and restart the voice system using the **stop_vs** and **start_vs** commands.

See *Avaya IR System Help* for complete details on these commands.

Using uploadcdh with multiple systems and a single database

The **uploadcdh** cron job can be used to upload CDH data from multiple Avaya IR systems into a single database. To use **uploadcdh** this way, perform the following procedure:

1. Create another user for the database, and give the user permission to do the following with the database:
 - Connect
 - Create tables
 - Create an index
 - Insert records

The user also should have enough space quota.

2. Set up the FCDH_DESTDIP or the **Database CDH** configuration with the newly created username and password.
3. If you are using **File CDH**, set up the DBDIP configurations with the new user for the DBDIP specified in the FCDH_DESTDIP parameter. If you are using **Database CDH**, supply the new user and password information in the form.
4. If you choose one of the DBDIP configurations for FCDH_DESTDIP, that DIP needs to be restarted after the configuration change. If you choose **Database CDH**, it needs to be restarted.

See also

- Administering databases
- JDBC administration screens

Using TTS and speech recognition languages with VoiceXML

TTS languages

To use text-to-speech (TTS) with VoiceXML for languages other than English, you must set the **encoding** attribute in the **xml** tag to **ISO-8859-1**. For this release of the Avaya IR system, this is the only encoding type fully supported.

If the **lang** attribute is set to something other than English and English is used in the prompt, the TTS engine attempts to translate the English into the specified language.

Note

The encoding type **shift-jis** is not supported.

If not otherwise specified in the VoiceXML **/vs/data/vxml/defaults.xml** file or the VoiceXML application, the default TTS voice for VoiceXML is US English and female. To change the default gender to male at the system level, the following line can be added to the **defaults.xml** file:

```
<property name="promptgender" value="male"/>
```

To change the default language at the system level, modify the **xml:lang** property in the **defaults.xml** file. Note that there must be a TTS voice administered as part of Text-to-Speech administration that matches the defaults for VoiceXML. For example, if the VoiceXML defaults of US English and female are used, then there must be a TTS voice available that is US English and female.

Speech recognition languages

Using languages other than English for speech recognition is not supported by this release of Avaya VoiceXML interpreter on the Avaya IR system.

Location of VoiceXML timeout properties

The *Avaya IR System Help* incorrectly states that the speech recognition timeout properties are set in the **`/vs/data/vxml/default.cfg`** file.

The defaults for these properties, which include timeout, completetimeout, and incomplete timeout, are set in the **`/vs/data/vxml/defaults.xml`** file.

Netscape CPU usage

Netscape version 4.76 is pre-installed on the Avaya IR system. You can use this version of Netscape to access the locally installed version of *Avaya IR System Help*.

When accessing the Index (which is a large HTML file) or some other large topic in the *System Help*, the browser can occupy up to 100 percent of the CPU. If you are monitoring system performance, please be aware of this issue with Netscape and plan your usage accordingly.

This excessive CPU usage does not occur when accessing *System Help* with Netscape or any other browser from a remote system.

Index

B

Backing up the system for the first time • 23

C

Configuring the modem • 22

I

Information required • 10
Initial administration • 16
Installing database software • 37
Installing individual packages • 16, 32, 33
Installing optional packages • 17, 35
Installing system and base software • 7
Installing system software • 27
ISDN calls blocked • 51, 55

K

Known issues • 51

L

Local Oracle configuration guidelines • 37
Location of VoiceXML timeout properties • 51, 59

N

Netscape CPU usage • 51, 60
Network port usage • 37
New alarms and log messages • 39
NMS alarms and log messages • 40
NMS001 • 40
NMS002 • 40
NMS003 • 41
NMS004 • 41
NMS005 • 41
NMS006 • 42
NMS007 • 42

P

Preinstallation • 26
Problems starting callprg • 51, 52
Provisioning feature channels • 16, 17, 33, 36

R

Reconnecting to the Speechify service • 51, 56
Release Notes overview • 7

S

Setting up features • 20
Setting up site-specific configuration • 12
Setting up user accounts • 18
Site-specific setup • 7, 9
Software Installation • 25
Some PRI channels may not come up INSERT • 51, 54
Some trunks incorrectly reported in service • 51, 53
Starting the Web Administration interface • 20

U

Using TTS and speech recognition languages with
VoiceXML • 51, 58
Using uploadcdh with multiple systems and a single
database • 51, 57

V

VOIP alarms and log messages • 43
VoIP001 • 43
VOIP002 • 43
VOIP003 • 44
VOIP004 • 44
VOIP005 • 44
VOIP006 • 45
VOIP007 • 45
VOIP008 • 45
VOIP009 • 46
VOIP010 • 46
VOIP011 • 47
VOIP012 • 47
VOIP013 • 47
VOIP014 • 48
VOIP015 • 48
VOIP016 • 49