



# **Avaya Interchange**

Release 5.4

Installation and System Recovery

585-313-809  
Comcode 700223809  
Issue 4  
January 2002

## Notice

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

## Your Responsibility for Your System's Security

Toll fraud is the unauthorized use of your telecommunications system by an unauthorized party, for example, persons other than your company's employees, agents, subcontractors, or persons working on your company's behalf. Note that there may be a risk of toll fraud associated with your telecommunications system and, if toll fraud occurs, it can result in substantial additional charges for your telecommunications services.

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- Answered by the called station
- Answered by the attendant

- Routed to a recorded announcement that can be administered by the CPE user

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

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- A busy tone is received
- A reorder tone is received

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Issue 4, January 2002

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Avaya Inc. Business Communications Systems declares that the equipment specified in this document conforms to the referenced European Union (EU) Directives and Harmonized Standards listed below:

EMC Directive 89/336/EEC  
Low-Voltage Directive 73/23/EEC



The "CE" mark affixed to the equipment means that it conforms to the above directives.

## Comments

To comment on this document, see the section titled "About This Book."

## Acknowledgment

This document was prepared by Information Development, Avaya Inc., Denver, CO and Milpitas, CA.

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## About This Document

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### Purpose

This book, [Avaya Interchange Release 5.4 Installation and System Recovery](#), contains system requirements, new and RFU installation instructions, a new installation and system recovery checklist, and a new installation or system recovery procedures for the Avaya Interchange system.

It contains only information that is specific to the Avaya Interchange system. See the installation and maintenance books for the MAP/5P or MAP/100P platform as needed for additional information about system hardware.

### Intended Audiences

This book is intended primarily for the personnel responsible for configuring the Avaya Interchange system and performing new installation and system recovery tasks. In most cases, Avaya personnel will be responsible for the tasks in this book.

### Release History

This is the third release of this book.

### How to Use This Book

This book is organized into the following sections:

- [Chapter 1, Avaya Interchange System Requirements](#), describes the hardware and software requirements for an Avaya Interchange installation.

- [Chapter 2, RFU Installation](#), contains instructions for installing remote field updates (RFUs).
- [Chapter 3, New Installation and System Recovery Checklist](#), contains a checklist for performing an Avaya Interchange Release 5.4 new installation or system recovery.
- [Chapter 4, New Installation and System Recovery Procedures](#), contains the procedures for performing a new installation or system recovery on an Avaya Interchange Release 5.4 system.

## Conventions Used in This Book

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This section describes the conventions used in this book.

### Terminology

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The following terms are used in this book:

- The word “type” means to press the key or sequence of keys specified. For example, an instruction to type the letter “y” is shown as  
Type **y** to continue.
- The word “enter” means to type a value and then press `ENTER`. For example, an instruction to type the letter “y” and press `ENTER` is shown as  
Enter **y** to continue.
- The word “select” means to move the cursor to the desired menu item and then press `ENTER`. For example, an instruction to move the cursor to the start test option on the Network Loop-Around Test screen and then press `ENTER` is shown as  
Select Start Test.
- The terms “subscriber” and “user” are interchangeable terms that describe a person administered on the Interchange system. The term “subscriber” is the preferred term in the text and is the command word you must type at the command line, for example, **change subscriber “Jane Doe.”**
- The Avaya Interchange system displays *screens*, *windows*, and *menus*. Screens make up the Interchange user interface through which you can enter data or commands or access windows or menus ([Figure 1](#)). Windows show and request system information ([Figure 2](#)). Menus present options from which you can choose to view another menu, screen or window ([Figure 3](#)).



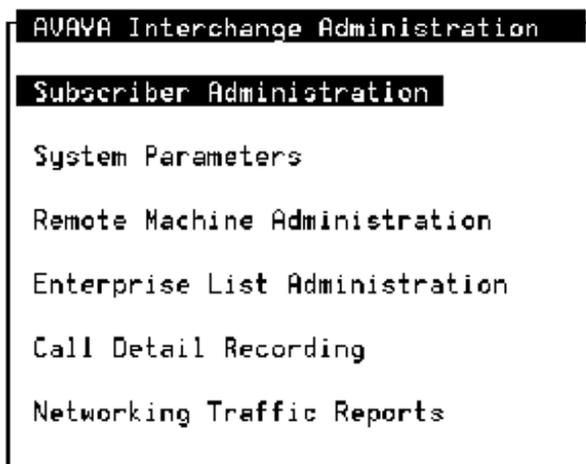


Figure 3. Example of an Avaya Interchange Menu

## Terminal Keys

The following list identifies actions you perform on the computer keyboard:

- Keys that you press on the computer *keyboard* are shown as rounded boxes. For example, an instruction to press the Enter key is shown as  
Press **ENTER**.
- Two or three keys that you press at the same time on the computer *keyboard* (that is, you hold down the first key while pressing the second and third keys) are shown as a series of separate rounded boxes. For example, an instruction to press and hold **ALT** while typing the letter "d" is shown as  
Press **ALT** **D**.
- A combination keystroke is a series of keystrokes that combines two key functions plus a third key. You press and hold down the first key, press the second key, and then release those keys and press a third key. A combination keystroke is represented as an equation. For example, an instruction to press and hold while typing the letter "d" and then typing the number "1" is shown as  
Press **ALT-D** **1**.
- Function keys on the computer keyboard or system screens, also known as *soft keys*, are shown as round boxes followed by the function or value of that key enclosed in parentheses. For example, an instruction to press function key 2 is shown as  
Press **F2** (Choices).

- Keys that you press on the *telephone keypad* are shown as square boxes. For example, an instruction to press the first key on the telephone keypad is shown as

Press 1 to record a message.

## Screen Displays

---

The following list identifies formats used in Interchange screens:

- Values, system messages, field names, and prompts that appear on the screen are shown in typewriter-style `constant-width` type, as shown in the following examples:

Example 1:

```
Enter the number of ports to be dedicated to outbound traffic in the
Maximum Simultaneous Ports field.
```

Example 2:

```
Alarm Form Update was successful.
Press <Enter> to continue.
```

- The sequence of menu options that you must select to display a specific screen or submenu is shown as follows:

Start at the Avaya Interchange Main Menu and select

```
>Interchange Administration
> Subscriber Administration
```

In this example, you would access the Avaya Interchange Administration menu and then select the Avaya Interchange Administration menu. From the Interchange Administration menu, you would then select the Subscriber Administration screen.

- Screens shown in this book are examples only. The screens you see on your machine will be similar, but not exactly the same.

## Other Typography

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The following list identifies how bold and italic type are used:

- Commands and text you type in or enter appear in **bold type**, as in the following example:

Type **high** or **low** in the `Speed:` field.

- Command variables are shown in ***bold italic*** type when they are part of what you must type in and *regular italic* type when they are not, for example:

Enter **ch ma *machine\_name***, where *machine\_name* is the name of the call delivery machine you just created.

## Safety and Security Alert Labels

---

This book uses the following symbols to call your attention to potential problems that could cause personal injury, damage to equipment, loss of data, service interruptions, or breaches of toll fraud security:

### CAUTION:

*Indicates the presence of a hazard that, if not avoided, can or will cause minor personal injury or property damage, including loss of data.*

### WARNING:

*Indicates the presence of a hazard that, if not avoided, can cause death or severe personal injury.*

### DANGER:

*Indicates the presence of a hazard that, if not avoided, will cause death or severe personal injury.*

## Trademarks and Service Marks

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The following trademarked products are mentioned in books in the Interchange document set:

- 5ESS is a registered trademark of Lucent Technologies.
- AT is a trademark of Hayes Microcomputer Products, Inc.
- AUDIX is a registered trademark of Avaya Inc.
- cc:Mail is a registered trademark of cc:Mail, a subsidiary of Lotus Development Corporation.
- COMSPHERE is a registered trademark of Paradyne Corp.
- CONVERSANT is a registered trademark of Avaya Inc.
- DEFINITY is a registered trademark of Avaya Inc.
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- Netware Loadable Module is a trademark of Novell, Inc.
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- Novell is a registered trademark of Novell, Inc.
- Paradyne is a registered trademark of Paradyne Corporation.
- Phillips is a registered trademark of Phillips Screw Company.
- SL-1 is a trademark of Northern Telecom Limited.
- softFAX is a registered trademark of VOXEM, Inc.
- SUPERSET is a trademark of Mitel Corporation.
- SX-100 is a trademark of Mitel Corporation.
- SX-200 is a trademark of Mitel Corporation.
- SX-2000 is a trademark of Mitel Corporation.
- Telephony OneStop is a trademark of Lotus Development Corporation.
- TMI is a trademark of Texas Micro Systems, Inc.
- UNIX is a registered trademark of UNIX System Laboratories, Inc.
- VB-PC is a trademark of Voice Technologies Group, Inc.
- VoiceBridge is a registered trademark of Voice Technologies Group, Inc.
- VOXEM is a registered trademark of VOXEM, Inc.

- VT100 is a trademark of Digital Equipment Corporation.
- Windows is a trademark of Microsoft Corporation.

## Related Resources

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This section describes additional documentation and training available for you to learn more about installation of the Avaya product.

### Documentation

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It is suggested that you obtain and use the following books in conjunction with this installation and system recovery book, depending on whether you have a MAP/5P or MAP/100P platform:

- [Avaya Interchange Release 5.4 MAP/5P System Installation](#) for installation procedures for Avaya systems
- [Avaya Interchange Release 5.4 MAP/5P System Maintenance](#) for maintenance procedures for Avaya systems
- [Avaya Interchange Release 5.4 MAP/100P System Installation](#) for installation procedures for Avaya systems
- [Avaya Interchange Release 5.4 MAP 100/P System Maintenance](#) for maintenance procedures for Avaya systems

It is recommended that you obtain and use the following book for information on security and toll fraud issues:

- *Avaya Products Security Handbook*, 555-025-600

See the inside front cover for information on how to order Avaya documentation.

### Training

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For more information on Interchange training, call the Avaya University at one of the following numbers:

- Organizations within Avaya: (904) 636-3261
- Avaya customers and all others: (800) 255-8988

### Technical Assistance

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The following resources are available for technical assistance:

- Within the United States:
  - Call 1-800-242-2121, extension 85474.

- Within Canada:
  - For all systems, call 1-800-242-1234.
- Within any other country:
  - For all systems, call your local distributor.

## **How to Comment on This Book**

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We are interested in your suggestions for improving this book. Please complete and return the reader comment card located behind this page. If the reader comment card has been removed, send your comments via the internet to [infodev@avaya.com](mailto:infodev@avaya.com) or mail your comments to:

Avaya Inc.  
Product Documentation  
Room D1-B53  
1300 W. 120th Avenue  
Denver, Colorado 80234-2703 US

You may also fax your comments to the attention of the Avaya Interchange writing team at (303) 538-9625.

## **Product Support**

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If you have questions about how to use Avaya Interchange, contact one of the following resources:

- your Avaya Account Representative
- the Avaya Remote Support Center at + 800-242-2121



# Avaya Interchange System Requirements

# 1

## What's in This Chapter?

---

This chapter describes the hardware and software requirements for an Avaya Interchange installation. The purpose of this chapter is to ensure that the customer site has the materials necessary for an installation of the Avaya Interchange system.

 **NOTE:**

Avaya Interchange systems are assembled, loaded, and tested prior to shipment to the customer site.

## Hardware Requirements

---

The following are the hardware requirements for the Avaya Interchange:

- Avaya MAP/5P platform with dual hard disk drives (0 and 1) and an IVC6 or *ngtr* circuit card and one SSP circuit card

or

- Avaya MAP/100P platform with six hard disk drives (0, 1, 2, 3, 4, and 5) using disk mirroring and at least one IVC6 or *ngtr* circuit card and one SSP circuit card

 **NOTE:**

*ngtr* cards are for customers outside the U.S., Canada, and Mexico.



**CAUTION:**

*SSP cards (in the amounts listed above) ARE REQUIRED for the Avaya Interchange to load. Your system might require additional cards.*

- An Ethernet Workgroup Switch, which is a dedicated LAN segment, with a switched Ethernet hub



**NOTE:**

You can use any brand/model switch that fulfills these requirements:

- Standards-based switched 10BASE-T Hub with standard IEEE 802.3, ISO/IEC 8802-3 Ethernet
- RJ-45 (UTP cable, EIA/TIA categories 3, 4, and 5) interface
- Minimum of six ports
- Diagnostic capabilities (LEDs for network and system monitoring)
- SNMP agent, needed if you use SNMP in your network

You can alternatively choose a 10/100BASE-T hub, for which you would also need to ensure that each port:

- Automatically senses the speed of the attached device.
- Complies with IEEE 802.3, 802.3u, and ISO/8802.3 standards.

## Switch Connections

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The Avaya Interchange connects to a switch (Avaya or non-Avaya) through the analog lines from the switch to the IVC6 or *ngtr* circuit cards in the platform. See your system switch integration documentation for connection information.

## Software Requirements

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The following are the software requirements for the Avaya Interchange:

- UNIX SVR4.x
- A subset of AUDIX Voice Messaging Release 4.4 or higher software modules



**NOTE:**

Avaya Interchange R5.4 cannot be built from a 5.x release of AUDIX. The system can, however, be part of a messaging network that includes AUDIX releases of 5.x.

- Avaya Interchange remote field update (RFU), if necessary

- Oracle 7.1.3 (unique for the Avaya Interchange)
- Avaya Interchange application software
- Avaya switch software

## List of Software

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The following list identifies the software components, including floppy disks and cartridge tapes, that make up the Avaya Interchange:

- Five UnixWare boot floppies labeled as follows:
  - “J1P321TE-1 List 20 UnixWare© for INTUITY™ Boot Floppy 1” (3 floppies)
  - “Pentium HBA Floppy” (1 floppy)
  - “UnixWare© for INTUITY™ Emergency Boot Floppy” (1 floppy)
- Cartridge tape labeled “J1P321TE-1 L21 INTUITY R4 UnixWare Image Tape”
- Cartridge tape labeled “J1P321TE-1 L69 INTUITY R4 INTUNIX +M SFTW Update”
- Cartridge tape labeled “J1P321TE-1 L374 INTUITY R4 AUDIX 4.4-7 Platform Set”
- Cartridge tape labeled “J1P321TE-1 L264 INTUITY R4 AUDIX 4.4-7 Platform Set RFU+A”
- Cartridge tape labeled “J1P321TE-1 L104 INTUITY R4 AUDIX R4.4 Voice Messaging”
- Cartridge tape labeled “J1P321TE-1 L212 5.4 Avaya Interchange 5.4 Software Set”
- Cartridge tape labeled “J1P321TE-1 L213 5.4 Avaya Interchange R5.4 RFU+A (G54rfu+a)”



### NOTE:

The letter “A” in RFU tape labels will change as RFUs are issued (for example, RFU+A, RFU+B, RFU+C, and so on).

- Cartridge tape labeled “J1P321TE-1 L84 INTUITY AUDIX R4.4 Interchange R5.1 ORACLE 7 Set”
- Cartridge tape labeled “J1P321TE-1 L16 INTUITY R4 INTUITY Platform DCIU Set”
- Cartridge tape labeled “J1P321TE-1 L67 INTUITY R4 AUDIX R4.3/R4.4 RMBset v1.4.8 Software”
- Backup data cartridge if you are performing a system recovery
- Scratch tape for filesystem creation if you are performing a system recovery

<b>1</b>	Avaya Interchange System Requirements <i>Software Requirements</i>	<b>4</b>
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# RFU Installation

# 2

## What's in This Chapter

---

This chapter contains RFU installation procedures for the Avaya Interchange.

## RFU Overview

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Before you can install an RFU, you must first determine if the system has any existing RFUs. Use the procedures in this chapter, [Removing an Existing RFU](#), [Installing a New RFU](#), and [Verifying the RFU Installation](#) as needed.

The Avaya Interchange system uses two procedures for loading an RFU:

1. Onsite installation
2. Remote download

Remote downloads of an RFU are done by your remote maintenance center. If the remote maintenance center downloads an RFU, it is not necessary to install the RFU onsite. RFUs contain updates to the basic system software.

### CAUTION:

*Always verify with the remote maintenance center that the RFU is the most recent RFU available before loading.*

*The following procedures are to be used for installing an RFU to an existing system that requires a new RFU. Do not use these procedures to load an RFU to an ALT (assembled, loaded, and tested) system that already has the RFU installed. Contact the remote maintenance center with questions about RFU identity and procedures.*

## Removing an Existing RFU

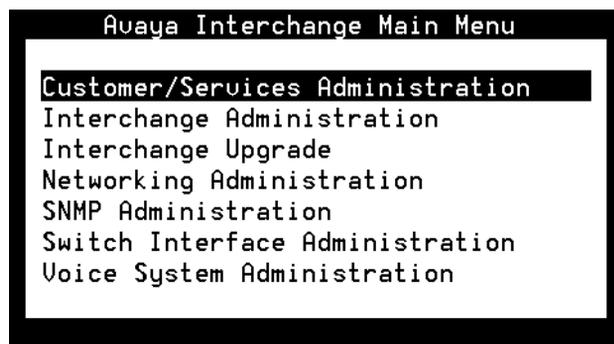
---

To remove an existing RFU, do the following:

1. Log in as **craft**.

The system displays the Avaya Interchange Main Menu ([Figure 2-1](#)).

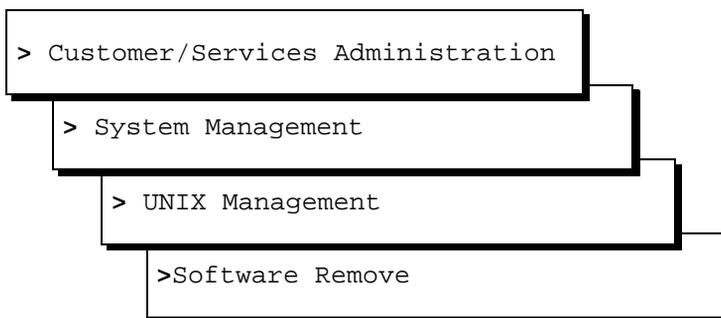
---



---

Figure 2-1. Avaya Interchange Main Menu

2. Select



The system displays the Software Remove screen ([Figure 2-1](#)), which lists the software installed on the system.

```
The following packages are available:
 1 I16rfu+c      Remote Field Update C for IP16
                   (486) 1.0-16
 2 IVR          Intuity Intro Voice Response Set
                   (486) 1.0.16.1
 3 UM           AUDIX(R) Module marker file
                   (AUDIX) NA
 4 UM+3        AUDIX(R) Software Patches
                   (AUDIX) 2.0-16
 5 UM-british   British System Announcements
                   (AUDIX) 2.0-14
 6 UM-dfltdb   AUDIX(R) Default db
                   (AUDIX) 2.0-14
 7 UM-french   French-c System Announcements
                   (AUDIX) 2.0-14
 8 UM-sat      AUDIX(R) English Announcements
                   (AUDIX) 2.0-14
 9 UM-spansh   Lat-Span System Announcements
                   (AUDIX) 2.0-14
10 UM-sw       AUDIX(R) Software
                   (AUDIX) 2.0-16

... 53 more menu choices to follow;
<RETURN> for more choices, <CTRL-D> to stop display:
```

Figure 2-2. Software Remove Screen

3. Locate the existing RFUs.

Existing RFUs are marked "IXrfu+n," where X is a number such as 15 or 16 and n is a letter such as a, b, c, or d.

For example, the system can display RFUs I15rfu+a, I15rfu+b, I16rfu+a, I16rfu+b, or IP16rfu+a.

4. Note the number of the RFU given in the first column.

If there is no RFU listed, enter **q** to quit and see [Installing a New RFU](#) to install the new RFU.

5. Press **CONTROL D**.

The system displays the following message:

```
Select package(s) you wish to process (or 'all' to
process all packages). (default: all) [?,??,q]
```

6. Enter the **number** of the RFU package.

The system displays the name and version number for the package selected as shown below for the sample screen in [Figure 2-3](#):

```
Remote Field Update C for IP16 (486) 1.0-16
```

7. Enter **y**.

The system removes the existing RFU.

**⇒ NOTE:**

If the system displays any messages warning of dependencies, enter **y** again to continue with the software removal.

8. Press **ENTER**.
9. Continue with the next procedure, [Installing a New RFU](#).

## Installing a New RFU

---

To install a new RFU, do the following:

**⇒ NOTE:**

The x's that appear in the examples represent the IP load number for the software and the letter designation (a, b, c,...) for the RFU.

1. Start at the Avaya Interchange Main Menu ([Figure 2-1](#)) and select

```
> Customer/Services Administration
> System Management
> UNIX Management
>Software Install
```

The system displays the Software Install menu ([Figure 2-3](#)).

```
Software Install
>Floppy drive
Tape drive
```

---

Figure 2-3. Software Install Menu

2. Insert the tape labeled "J1P321TE-1-L213 5.4 Avaya Interchange R5.4 RFU+A (G54rfu+a)" in the tape drive.

**⇒ NOTE:**

The letter "A" in RFU tape labels changes as RFUs are issued (for example, RFU+A, RFU+B, RFU+C, and so on)

3. Select Tape drive.

The system displays the following message:

```
Insert a cartridge into Tape Drive 1.  
Type [go] when ready  
    or [q] to quit: (default: go)
```

4. Press **ENTER**.

The system displays the following message:

```
Installation in progress. Do not remove the cartridge.
```

```
The following pkgs are available:
```

```
    1      Ixxrfu+x      Remote Field Update X for IPxx  
                        (486) 3.0-xx
```

```
Select package(s) you wish to process (or 'all' to  
process all packages). (default: all) [?,??,q]
```

**⚠ CAUTION:**

*RFUs (Remote Field Updates) apply to a particular software load. Avaya Interchange software loads are labeled with the release number such as 2.0-x or 3.0-x, where x is a number such as 15 or 16. The RFU software cartridge tape lists x as IP15 or IP16.*

*If the RFU does not match the software loaded on the Avaya Interchange system, do not load the RFU. Contact the remote maintenance center for assistance if you have a question about whether the RFU matches the system's software load.*

5. Press **ENTER**.

The system displays:

```
Processing of <Remote Field Update X for IPxx> is  
completed.
```

```
Insert a cartridge into Tape Drive 1.  
Type [go] when ready  
    or [q] to quit: (default: go)
```

6. Enter **q**.

## 2 RFU Installation

### Verifying the RFU Installation

10

7. Remove the tape labeled "Avaya Interchange RFU Software Update" from the tape drive.
8. Shut down and reboot the system. See [5. Rebooting the Avaya Interchange System](#) in [Chapter 4, New Installation and System Recovery Procedures](#).

## Verifying the RFU Installation

To verify the RFU installation, do the following:

1. Start at the Avaya Interchange Main Menu ([Figure 2-1](#)) and select

```
> Customer/Services Administration
> System Verification
> View Installed Software
```

The system displays the View Installed Software window ([Figure 2-4](#) and [Figure 2-5](#)).

```
View Installed Software
Displaying pkginfo (long version) for only the application
packages...
Displaying pkginfo for package Vex
  PKGINST: Vex
  NAME: Intuity Application Software Set
CATEGORY: set
  ARCH: 486
  VERSION: 3.0-38
  PSTAMP: 3.38.0 R3.0 IP38 Tue Jul 11 10:22:32 EDT 1995
```

Figure 2-4. Sample View Installed Software Window (Detailed Version)

```
View Installed Software

Displaying pkginfo for all packages installed on this system...

application IVC6DI          AT&T Intuity IVC6 Device Interface for
softFAX 2.0
intuity    OSmods          Intuity Operating System Modifications
Module
application VM             AUDIX(R) Module marker file
intuity    VM-dfltdb       AUDIX(R) Default db
intuity    VM-files        AUDIX(R) Files
intuity    VM-sw           AUDIX(R) Software
system     acp             Enhanced Application Compatibility
```

Figure 2-5. Sample View Installed Software Window (Abbreviated Version)

2. Locate the RFU title to verify that the RFU is installed.

<b>2</b>	<b>RFU Installation</b>	
	<i>Verifying the RFU Installation</i>	12

## New Installation and System Recovery Checklist

# 3

---

### What's in This Chapter

---

This chapter contains a new installation and system recovery checklist for the Avaya Interchange. Use the information in this chapter in conjunction with [Chapter 4, New Installation and System Recovery Procedures](#).

### Checklist for New Installation and System Recovery of the Avaya Interchange System

---

Perform the procedures in [Table 3-1](#) when you are performing a new installation or system recovery on the Avaya Interchange MAP/5P or MAP/100P system. All of the tasks listed in this checklist are documented in [Chapter 4, New Installation and System Recovery Procedures](#). Refer to this chapter for instructions on how to perform recovery tasks.

**Table 3-1. New Installation or System Recovery Checklist for an Avaya Interchange System**

(v)	Task	Task Description
	<p><a href="#">1. Checking for Availability of Software</a></p>	<p>Look for the following at the system's site:</p> <ul style="list-style-type: none"> <li>■ J1P321TE-1-L20 UnixWare© for INTUITY™ Boot Floppy 1 (3 floppies), Pentium HBA Floppy (1 floppy), and UnixWare© for INTUITY™ Emergency Boot Floppy (1 floppy)</li> <li>■ J1P321TE-1-L21 INTUITY R4 UnixWare Image Tape</li> <li>■ J1P321TE-1-L69 INTUITY R4 INTUNIX +M SFTW Update</li> <li>■ J1P321TE-1-L374 INTUITY R4 AUDIX 4.4-7 Platform Set</li> <li>■ J1P321TE-1-L264 INTUITY R4 AUDIX 4.4-7 Platform Set RFU+A</li> <li>■ J1P321TE-1-L104 INTUITY R4 AUDIX R4.4 Voice Messaging</li> <li>■ J1P321TE-1-L212 Avaya Interchange R5.4 Software Set</li> <li>■ J1P321TE-1-L213 Avaya Interchange R5.4 RFU+A (G54rfu+a)</li> </ul> <p> <b>NOTE:</b>                      The letter "A" changes as RFUs are issued.</p> <ul style="list-style-type: none"> <li>■ J1P321TE-1-L84 INTUITY AUDIX R4.4 Interchange R5.1 ORACLE 7 Set</li> <li>■ J1P321TE-1-L16 INTUITY R4 INTUITY Platform DCIU Set</li> <li>■ J1P321TE-1-L67 INTUITY R4 AUDIX R4.3/R4.4 RMBset v1.4.8 Software</li> </ul>

**Table 3-1. New Installation or System Recovery Checklist for an Avaya Interchange System**

(√)	Task	Task Description
	<a href="#">2. Installing UnixWare</a>	With the three J1P321TE-1-L20 UnixWare© for INTUITY™ Boot Floppies and the J1P321TE-1-L21 INTUITY R4 UnixWare Image Tape, do the following: <ul style="list-style-type: none"> <li>■ <a href="#">2.1 Starting the UnixWare Installation</a></li> <li>■ <a href="#">2.2 Loading the Host Bus Adapter</a></li> <li>■ <a href="#">2.3 Continuing the UnixWare Installation</a></li> <li>■ <a href="#">2.4 Configuring the System Date and Time</a></li> <li>■ <a href="#">2.5 Choosing the Continent Location</a> (as needed for systems located on continents other than North America)</li> <li>■ <a href="#">2.6 Partitioning the Primary Hard Disk Drive</a></li> <li>■ <a href="#">2.7 Choosing the Installation Type</a></li> <li>■ <a href="#">2.8 Performing a Hard Disk Drive Surface Analysis and UNIX Installation</a></li> </ul>
	<a href="#">3. Cleaning the Disk Drive(s)</a>	Using the command <b>fdisk /dev/rdisk/c0t1d0s0</b> to delete partitions on the disk drive(s) so Interchange software can be properly installed.
	<a href="#">4. Installing the INTUNIX Software</a>	Using the command <b>pkgadd -d ctape1</b> , install the tape labeled "J1P321TE-1-L69 INTUITY R4 INTUNIX +M SFTW Update."
	<a href="#">5. Rebooting the Avaya Interchange System</a>	Using the root login, use the command <b>init 6</b> .
	<a href="#">6. Performing the installit Command</a>	Still logged in as root, use the command <b>installit</b> .

**Table 3-1. New Installation or System Recovery Checklist for an Avaya Interchange System**

(√)	Task	Task Description
	<a href="#">7. Installing the Platform Software</a>	Using the command <b>pkgadd -d ctape1</b> , install the tape labeled "J1P321TE-1-L374 INTUITY R4 AUDIX 4.4-7 Platform Set."
	<a href="#">8. Installing Intuity Platform AUDIXSet RFU+A</a>	Using the command <b>pkgadd -d ctape1</b> , install the tape labeled "J1P321TE-1-L264 INTUITY R4 AUDIX 4.4-7 Platform Set RFU+A."
	<a href="#">9. Installing Intuity AUDIX Voice Messaging</a>	Using the command <b>pkgadd -d ctape1 netw tpcadm sdialer</b> , install software from the tape labeled "J1P321TE-1-L104 INTUITY R4 AUDIX R4.4 Voice Messaging."  Reboot the systems before performing the next procedure.
	<a href="#">10. Adding Hard Disk Drives</a>	Log in as <b>tsc</b> and bring up the Interchange system with the Vex command. Use the Install Disk window to enter jumper IDs 1 through 5, taking care to skip jumper ID 3 for MAP/100P systems. Add 1 hard drive to MAP/5P systems.   <b>CAUTION:</b> <i>Do not enter 0 or 3. Entering these values results in having to restart the recovery process.</i>
	<a href="#">11. Setting Up the Base for Oracle Software</a>	Using the command <b>pkgadd -d ctape1</b> , install software from the tape labeled "J1P321TE-1-L212 Avaya Interchange R5.4 Software Set."

**Table 3-1. New Installation or System Recovery Checklist for an Avaya Interchange System**

(√)	Task	Task Description
	<a href="#">12. Installing Oracle Software</a>	<p>Continuing with the <code>pkgadd</code> command in the previous step, install the tape labeled “J1P321TE-1-L84 INTUITY AUDIX R4.4 Interchange R5.1 ORACLE 7 Set.”</p> <p><b>⚠ CAUTION:</b>  <i>You must reboot using the <code>init 6</code> command after installing this software.</i></p>
	<a href="#">13. Installing Avaya Interchange Application Software</a>	<p>Stop the voice system with the <code>stop_vs 0</code> command. Then, with the command <code>pkgadd -d ctape1</code>, install software from the tape labeled “J1P321TE-1-L212 Avaya Interchange R5.4 Software Set.” From the list of packages, select option 1, “all packages.”</p> <p><b>⇒ NOTE:</b>                      This task <b>does not</b> install the upgrade software.</p>
	<a href="#">14. Installing the DCIU Switch Integration Set</a>	<p>With the command <code>pkgadd -d ctape1 dciutism</code>, install software from the tape labeled “J1P321TE-1-L16 INTUITY R4 INTUITY Platform DCIU Set.”</p>
	<a href="#">15. Installing the Remote Maintenance Board Software Set</a>	<p>With the command <code>pkgadd -d ctape1</code>, install software from the tape labeled “J1P321TE-1-L67 INTUITY R4 AUDIX R4.3/R4.4 RMBset v1.4.8 Software”</p>

**Table 3-1. New Installation or System Recovery Checklist for an Avaya Interchange System**

(√)	Task	Task Description
	<a href="#">16. Enabling Hours of Speech</a>	<p>Contact the remote maintenance center or the Avaya Technical Assistance Center (ITAC) to add speech hours (285 for MAP/100P or 200 for MAP/5P).</p> <p>You <i>must</i> reboot with the <b>init 6</b> command when the Remote Maintenance Center completes the tasks above.</p> <p> <b>WARNING:</b>  <i>Do NOT reboot the system until contacted by the remote maintenance center or ITAC.</i></p>
	<a href="#">17. Creating a New Filesystem</a>	<p>From the Interchange Upgrade menu, select the “Create a New Filesystem” option. The system automatically reboots.</p> <p> <b>NOTE:</b>                      Insert a scratch cartridge tape for this task.</p>
	<a href="#">18. Stopping the Voice System</a>	<p>Use the Stop Voice System window to stop the voice system.</p>
	<a href="#">19. Adding Hard Disk Drives 1, 2, and 5 for Mirroring</a>	<p>For a MAP/100P system only, add hard disk drives 1, 2, and 5 for mirroring.</p>
	<a href="#">20. Restoring Administration Data</a>	<p>Use the Restore window to restore Interchange data from a backup tape.</p> <p> <b>NOTE:</b>                      Restoring system data can take up to six hours, depending on the amount of data to be restored.</p>
	<a href="#">21. Rebooting the Avaya Interchange System through System Screens</a>	<p>Use the System Shutdown window to reboot the system.</p>

3 New Installation and System Recovery Checklist

Checklist for New Installation and System Recovery of the Avaya Interchange

**Table 3-1. New Installation or System Recovery Checklist for an Avaya Interchange System**

(√)	Task	Task Description
	<a href="#">22. Turning on Customer Purchased Features</a>	For both the MAP/5P and the MAP 100/P systems, contact the Remote Maintenance Center or International Technical Assistance Center (ITAC) to turn on customer purchased features.
	<a href="#">23. Turning on Mirroring for MAP/100P Systems</a>	For a MAP/100P system only, contact the Remote Maintenance Center or International Technical Assistance Center (ITAC) to turn on mirroring.

<b>3</b>	<b>New Installation and System Recovery Checklist</b> <i>Checklist for New Installation and System Recovery of the Avaya Interchange</i>	<b>20</b>
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# 4

## New Installation and System Recovery Procedures

### What's in This Chapter

This chapter contains new installation and system recovery procedures for the Avaya Interchange. Use the information in this chapter in conjunction with [Chapter 3, New Installation and System Recovery Checklist](#).

### 1. Checking for Availability of Software

To perform new installation and system recovery, you must have the following software:

Table 4-1. Software Required

Software Description or Label	J-Code	List
Five boot floppies: <ul style="list-style-type: none"> <li>■ J1P321TE-1-L20 UnixWare© for INTUITY™ Boot Floppy 1 (3 floppies)</li> <li>■ Pentium HBA Floppy (1 floppy)</li> <li>■ UnixWare© for INTUITY™ Emergency Boot Floppy (1 floppy)</li> </ul>	J1P321TE-1	L20
INTUITY R4 UnixWare Image Tape	J1P321TE-1	L21
INTUITY R4 Intunix +M SFTW Update	J1P321TE-1	L69

**Table 4-1. Software Required**

Software Description or Label	J-Code	List
INTUITY R4 AUDIX 4.4-7 Platform Set	J1P321TE-1	L374
INTUITY R4 AUDIX 4.4-7 Platform Set RFU+A	J1P321TE-1	L264
INTUITY R4 AUDIX R4.4 Voice Messaging	J1P321TE-1	L104
Avaya Interchange R5.4 Software Set	J1P321TE-1	L212
Avaya Interchange R5.4 RFU+A (G54rfu+a)	J1P321TE-1	L213
 <b>NOTE:</b> The letter "A" in RFU tape labels will change as RFUs are issued (for example, RFU+A, RFU+B, RFU+C, and so on).		
INTUITY AUDIX R4.4 Interchange R5.1 ORACLE 7 Set	J1P321TE-1	L84
INTUITY R4 INTUITY Platform DCIU Set	J1P321TE-1	L16
INTUITY R4 AUDIX R4.3/R4.4 RMBset v1.4.8 Software or later	J1P321TE-1	L67

(2 of 2)

## 2. Installing UnixWare

### CAUTION:

*If you press **DELETE** to stop the UNIX installation at any time, you must start the software recovery process again with "UNIX SVR4.2 Operating System Independent Image Boot Floppy 1 of 3."*

Installing UnixWare consists of the following nine procedures:

- [2.1 Starting the UnixWare Installation](#)
- [2.2 Loading the Host Bus Adapter](#)
- [2.3 Continuing the UnixWare Installation](#)
- [2.4 Configuring the System Date and Time](#)
- [2.5 Choosing the Continent Location](#) (as needed for systems located on continents other than North America)
- [2.6 Partitioning the Primary Hard Disk Drive](#)
- [2.7 Choosing the Installation Type](#)
- [2.8 Performing a Hard Disk Drive Surface Analysis and UNIX Installation](#)

## 2.1 Starting the UnixWare Installation

---

To start the UnixWare installation, do the following:

1. Press the power switch to turn off the Interchange system.



**NOTE:**

The power switch for the MAP/100P system ([Figure 4-1](#)) is located on the rear of the box. The power switch for the MAP/5P system ([Figure 4-2](#)) is located on the front of the box. A rear view of the MAP/5P box is provided to identify peripheral connection locations for this system.

2. Insert the diskette labeled "UnixWare© for INTUITY™ Boot Floppy 1 of 3" in the diskette drive.
3. Press the power switch to turn on the Interchange system.

The system displays the number of hard drives on the system and the UnixWare introduction screen as it begins to load the base system software. When the system is done with the first boot diskette, it displays the following message:

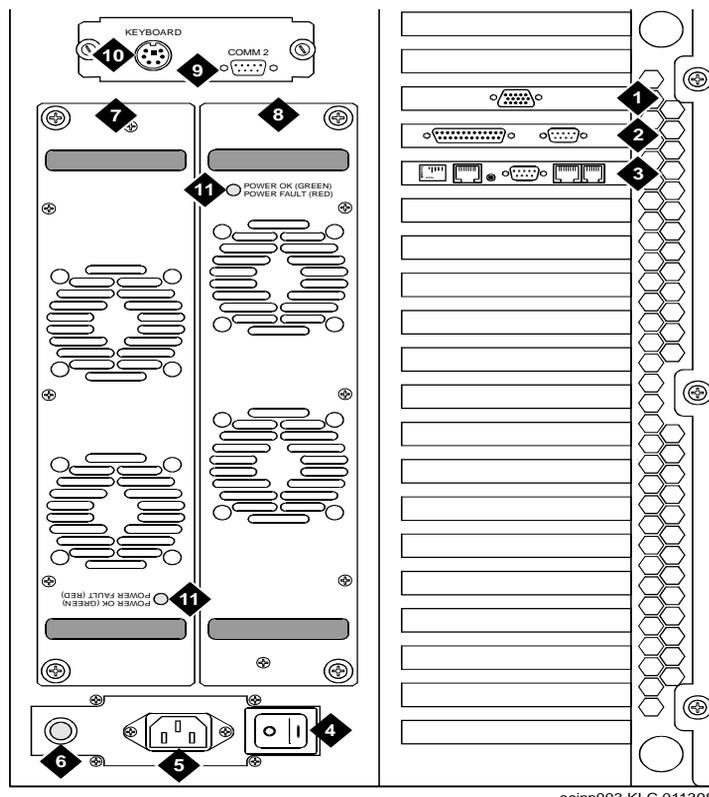
```
Remove the diskette labeled 'Boot Floppy 1 of 3'.
```

```
If you have a diskette labeled 'Pentium HBA Floppy',  
insert that diskette now.
```

```
For more information on Host Bus Adapter diskettes, see  
the UnixWare Installation Handbook.
```

```
Otherwise, if you do not have (or do not need to use) a  
Host Bus Adapter diskette, insert the diskette labeled  
'Boot Floppy 2 of 3' now.
```

```
Press 'ENTER' to continue.
```



scinp003 KLC 011398

- |                            |                      |
|----------------------------|----------------------|
| 1. Video circuit card      | 7. Power supply 1    |
| 2. P5 200 MHz CPU          | 8. Power supply 2    |
| 3. Remote maintenance card | 9. COM2 port         |
| 4. ON/OFF power switch     | 10. Keyboard port    |
| 5. AC power input          | 11. Power supply LED |
| 6. Fuse                    |                      |

Figure 4-1. Rear View of the MAP/100P

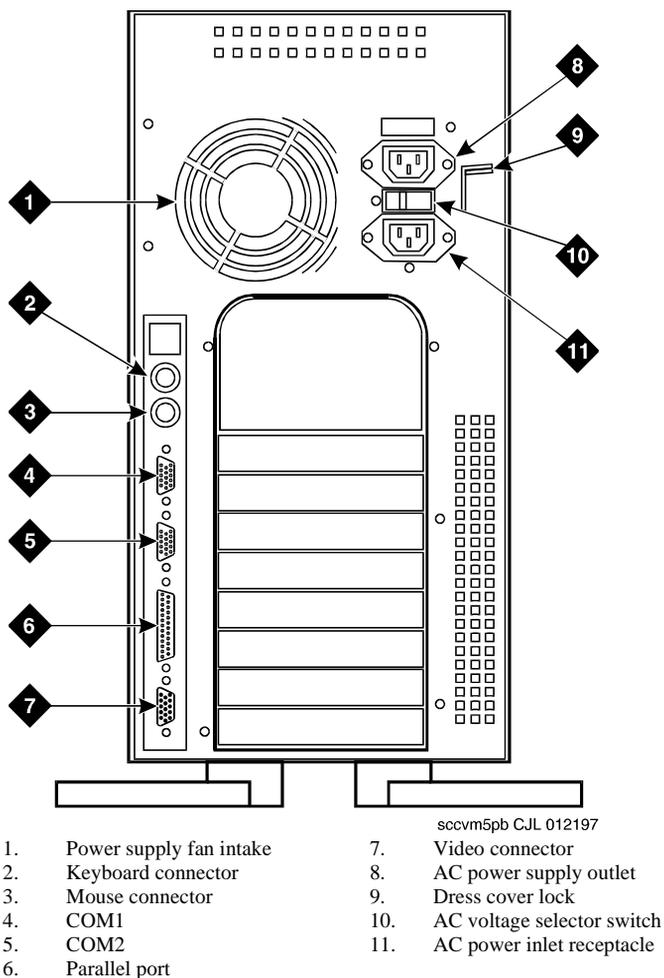


Figure 4-2. Rear View of the MAP/5P

4. Remove the UnixWare Boot Floppy 1 of 3 from the diskette drive.
5. Continue with the next procedure, [2.2 Loading the Host Bus Adapter](#).

## 2.2 Loading the Host Bus Adapter

---

To load the host bus adapter (HBA), do the following:

1. Insert the diskette labeled "Pentium HBA Floppy (1 floppy)" in the diskette drive.
2. Press `ENTER`.

The system displays the following message:

```
Loading the Host Bus Adapter drivers. This will take a few moments...
```

```
The Host Bus Adapter driver(s) on the Host Bus Adapter diskette have been loaded and you can now remove the diskette.
```

If you have another Host Bus Adapter diskette (for different adapters) insert that disk now.

For more information, see the UnixWare Installation Handbook.

Otherwise, if you do not have (or do not need to use) another Host Bus Adapter diskette, insert the diskette labeled 'Boot Floppy 2 of 3' now.

3. Remove the diskette labeled "Pentium HBA Floppy (1 floppy)" from the diskette drive.
4. Continue with the next procedure, [2.3 Continuing the UnixWare Installation](#).

## 2.3 Continuing the UnixWare Installation

---

To continue the UnixWare installation, do the following:

1. Insert the diskette labeled "R4.3/R4.4 Boot Floppy 2 of 3" in the diskette drive.
2. Press `ENTER`.

The system displays the following message:

```
Continuing UnixWare Installation...
```

```
Welcome to the UnixWare installation process!
```

```
If you have never installed UnixWare before, it is recommended that you press the 'F1' (or '?') key now to learn more about the installation process and the hardware requirements of UnixWare.
```

```
-Pressing the 'F1' (or '?') key at any time during installation will display more information or help.
```

-Pressing the 'Del' key at any time cancels the installation.

Press the 'F1' (or '?') key for more information or 'ENTER' to continue.

**⇒ NOTE:**

If the system displays a message that the system must have at least 60 MB of space in the hard disk drive for you to install UNIX, the hard disk drive is experiencing problems. For example, the cable might not be connected, or the hard disk drive might be damaged. Turn the system off and check the hard disk drive cables. See "Removing Power from the Computer" in Chapter 4, "Getting Inside the Computer," in your platform maintenance document for the procedure.

3. Press .

**⇒ NOTE:**

The installation process takes a few moments.

The system should display the following message. If so, continue with Step 4. Otherwise, see the Note below.

UnixWare Installation Keyboard Setup

The UnixWare Installation procedure supports the following international keyboards. You may select alternate keyboard types by using the left and right arrow keys and then press the ENTER (or RETURN) key.

Keyboard Nationality:U.S. ASCII

When finished, move the cursor to 'Apply' and then press 'Enter' to continue.

**⇒ NOTE:**

If Hard Disk Drive 0 has been replaced with a new hard disk drive, the system displays the following message:

Warning: Files have been detected in the active partition(s) of your hard disk(s).

In order to install the operating system, you must have an active UNIX partition occupying 100% of your hard disk. No other partitions may share the disk.

You have the option of removing the existing partitions at this point and creating a new UNIX partition. You should remove only the existing partitions if you don't want to save any files on your disk.

If you elect to abort the installation, the existing partitions will not be removed and installation will be halted.

1. Destroy existing partitions and create a new UNIX partition.

2. Abort the installation, leaving existing partitions untouched.

Type '1' or '2' followed by 'ENTER': 1

4. Check that the Keyboard Nationality is U.S. ASCII. If not, use the Left arrow (◀) and Right arrow (▶) keys on the keyboard to move through the field selections until you have selected U.S. ASCII.
5. Press the Down arrow (▼) to move to the Apply field and then press .

The system displays the following message:

```
UnixWare Installation                Configure Date and Time
```

On this screen, you will check the current date and time that is set on your computer and change them if necessary. You also select what timezone configuration you require. Either select a continent(s) which will lead you onto a further screen with locations or Manual Entry for a custom timezone.

**⇒ NOTE:**

As part of selecting the time zone, you also select the continent(s) if needed. The default for the location is set at US. The default for time zone is set at Eastern time.

Continue with the next procedure, [2.4 Configuring the System Date and Time](#).

## 2.4 Configuring the System Date and Time

---

To configure the system date and time, do the following:

1. Starting at the Configure Date and Time screen, use the Left arrow (◀) and Right arrow (▶) keys on the keyboard to move through the field selections. Use the Down arrow (▼) to move to the next field.
2. Select the appropriate data for each field.
3. Press the Down arrow (▼) to move to the Apply field and press (ENTER).

The system displays the following message:

```
UnixWare Installation Continent Location Choice Screen
```

```
On this screen you choose the country/location you are  
in, having already selected the continent. To go back  
to the continent screen select 'BACK ONE SCREEN'. Use  
the left and right arrow keys.
```

```
Location:    US/Eastern
```

Apply

Reset

```
Press 'TAB' to move the cursor between fields. When  
finished, move the cursor to 'APPLY' and then press  
'ENTER' to continue.
```

4. Continue with the next procedure, [2.5 Choosing the Continent Location](#), to select a location that differs from the default.

## 2.5 Choosing the Continent Location

---

To choose the continent location, do the following:

1. Starting at the Continent Location Choice screen, use the Left arrow (◀) and Right arrow (▶) on the keyboard to move through the field selections.



### CAUTION:

*If you are outside the United States, choose US/Eastern for this field.*

2. Select the appropriate data for each field.
3. Press the Down arrow (▼) to move to the Apply field and press (ENTER).

The system displays the following message:

```
UnixWare Installation Primary Hard Disk Partitioning
```

```
In order to install UnixWare, you must reserve a
partition (a portion of your hard disk's space) on your
primary hard disk for the UNIX System. After you press
'ENTER', you will be shown a screen that will allow you
to create new partitions, delete existing partitions or
change the active partition of your primary hard disk
(the partition that your computer will boot from).
```

```
WARNING: All files in any partition(s) you delete will
be destroyed. If you wish to attempt to preserve any
files from an existing UNIX System, do not delete its
partition(s).
```

```
The UNIX System partition that you intend to use on the
primary hard disk must be at least 120 MBs and labeled
'ACTIVE'.
```

4. Continue with the next procedure, [2.6 Partitioning the Primary Hard Disk Drive](#).

## 2.6 Partitioning the Primary Hard Disk Drive

To partition the Primary Hard Disk Drive when you have used the SCSI Disk Utilities to format the disk drives, do the following:

1. Starting at the Primary Hard Disk Partitioning screen, press **ENTER**.

The system displays an example of the Partition Creation screen.

```
Total disk size is 261 cylinders (2047.3 MB)
```

Partition	Status	Type	Start	End	Length	%	Approx MB

1. Overwrite system master code
2. Create a partition
3. Change active (boot from partition)
4. Cancel (Exit without updating disk configuration)

```
Enter Selection 2:
```

- Press **ENTER** to select the default 2 to create partition.

The system displays the following screen:

```
Partition Type: UNIX System
Request % of disk: 
```

- Use the Down arrow **▼** to move the cursor to the Request % of disk field (box). Type **100** in the field (box).
- Use the Down arrow **▼** to move the cursor to select Apply.
- The system displays the Partition Creation Screen.

Total disk size is 261 cylinders (2047.3 MB)

Partition	Status	Type	Start	End	Length	%	Approx MB
1	Active	UNIX System	0	260	261	100	2047.3

- Overwrite system master code
- Delete a partition
- Exit (Update disk configuration and exit)
- Cancel (Exit without updating disk configuration)

Enter Selection 3:

- Press **ENTER** to select the default 3 to exit.

The system displays the following screen:

Unixware Installation Secondary Hard Disk Partitioning

You may use a partition of your secondary hard disk for the UNIX system. If you choose to use a partition of your secondary hard disk, you will be shown a screen that will allow you to partition your secondary hard disk.

**WARNING:** All files in any partition(s) you delete will be destroyed.

If you choose to create a UNIX System partition on your secondary hard disk, it must be at least 40 MBs.

Your options are:

1. Do not use a partition of the secondary hard disk for the UNIX System.
2. Use a partition of the secondary hard disk for the UNIX System.

Press '1' or '2' followed by 'ENTER': 1

7. Press  to select the default option 1. Do not use a partition.

The system displays the Installation Type Selection screen.

Unix System Installation      Installation Type Selection

You must choose a system type. The system type you choose will determine the default file system sizes you will specify on the next screen.

Press the 'F1' or '?' key to see more information about these different system types.

Platform Type: MAP/5P  
CPU Type: 80486  
Offer Type: Intuity Audix

Press 'TAB' to move between fields. Press 'ENTER' to apply fields.

**⇒ NOTE:**

The screen displays the CPU Type as 80486. In Step 3 of the next procedure, [2.7 Choosing the Installation Type](#), be sure to change this value to Pentium 200

8. Continue with the next procedure, [2.7 Choosing the Installation Type](#).

## 2.7 Choosing the Installation Type

To choose the installation type, do the following:

1. Starting at the Installation Type Selection screen, use the Left arrow (◀) and Right arrow (▶) on the keyboard to move through the field selections. Use the Down arrow (▼) to move to the next field.



### CAUTION:

*In the next step, be sure the platform type has "P" at the end of the name, as in MAP/100P. **Do not** select MAP/100 or MAP/5 without the P. Failure to add the P causes the recovery to fail.*

2. Select MAP/100P or MAP/5P for the Platform Type field.
3. Select Pentium-200 for the CPU Type field.
4. Select INTUITY AUDIX for the Offer Type field.
5. Press the Down (▼) arrow to move to the Apply field.
6. Press (ENTER).

The system displays the following screen. **Do not** change the values in this screen.

```
UNIX System Installation                               Set Slice Sizes
```

You have selected the MAP/100P system. Now you must specify the sizes of the filesystem slices. The recommended sizes for a MAP/100P system are provided as defaults on this screen.

Press the 'F1' or '?' key to see more information about these different system types.

```
Size of /stand in MB: xx
Size of /dev/dump in MB: xx
Size of /dev/swap in MB: xx
Size of / in MB: xx
```

Apply

Reset

Press 'TAB' to move the cursor between fields. When finished, move the cursor to 'Apply' and then press 'ENTER' to continue.



**NOTE:**

If you are using a MAP/5P system, the message states, "You have selected the MAP/5P system."



**NOTE:**

The default slice sizes are standard.

7. Press the Down arrow (▼) to move to the Apply field.
8. Press (ENTER) to use the default slice sizes.

The system displays the Hard Disk Surface Analysis screen:

```
UnixWare Installation          Hard Disk Surface Analysis
```

```
Surface analysis is recommended but not required.  
Here you must choose to skip or perform surface  
analysis.
```

```
Your choices are:
```

- ```
1.Perform surface analysis  
2.Skip surface analysis
```

```
Press '1' or '2' followed by 'ENTER':1
```

9. Continue with the next procedure, [2.8 Performing a Hard Disk Drive Surface Analysis and UNIX Installation](#).

## 2.8 Performing a Hard Disk Drive Surface Analysis and UNIX Installation

---



**CAUTION:**

*Surface analysis is required for all systems because this analysis makes a configuration change to the disk. Failure to perform surface analysis can cause the Avaya Interchange system to fail.*

To perform a hard disk drive surface analysis and install UNIX, do the following:

1. Starting at the Hard Disk Surface Analysis screen, press (ENTER).

This accepts the default of 1 and performs the surface analysis. The system displays the following message:

```
Unix System Installation          Verifying Hard Disk(s)
```

```
Checking hard disk for defects and creating file  
systems. This will take a few minutes. Please wait.
```

The system then displays the following screen:

```
Unix System Installation                Copying Files
Copying UNIX System files from the diskette onto your
hard disk. This will take a few minutes. Please wait.
```

The system then displays the following screen:

```
UnixWare Installation                Exchange Diskette
Remove the diskette from the drive and insert the
diskette labeled "Boot Floppy 3 of 3".
```

Press 'Enter' to continue

2. Remove the "AUDIX R4.3/R4.4 Boot Floppy 2 of 3" from the diskette drive.
3. Insert the diskette labeled "UNIX SVR4.2 Operating System Independent Image Boot Floppy 3 of 3" in the diskette drive.
4. Press .

The system displays the following message:

```
Copying Unix System files from the diskette onto your
hard drive. This will take a few minutes. Please wait.
```

The system then displays the following message:

```
Making file systems on your hard disk. This will take a
few minutes. Please wait.
```

The system finally displays the following message:

```
UnixWare Installation                Remove Diskette 3
Remove boot floppy 3 of 3 from the drive now.
```

Press 'Enter' to continue.

5. Remove the "UNIX SVR4.2 Operating System Independent Image Boot Floppy 3 of 3" from the diskette drive.
6. Press .

The system displays the following message:

```
UnixWare Installation  Application Server Media Type
```

```
The Application Server software is available on
diskette or tape or network server. You must select the
source you will use to install the software.
```

Your choices are:

1. Diskette Drive 1
2. Unixware for Intuity Conversant Tape
3. Network Install Server
4. INTUITY Image/Snap Tape

Press a number between '1' and '4'  
followed by 'ENTER': 1

7. Insert the cartridge tape labeled "J1P321TE-1 L21INTUITY R4.0 UnixWare Image Tape" in the tape drive.
8. Type **4** to select INTUITY R4.0 Image/Snap Tape and press **ENTER**.

The system displays the following message:

```
UnixWare Installation          Insert Intuity Image Tape
Please insert the INTUITY Image cartridge tape into the
tape drive and press 'ENTER'.
```

Your choices are:

1. The tape has been inserted in the tape drive.
2. Go back to previous menu.

Press '1' or '2' followed by 'ENTER':

9. Press **ENTER** to select the default 1.

This action allows the system to accept the default of 1 to indicate that the tape has been inserted and is ready for access.

The system then displays the following message:

```
Installation in progress. This will take several
minutes. Please do not remove the tape.
```

The system then displays a series of informational messages.

When all files are loaded, the system reboots and displays the following message:

```
The system is ready.
```

```
The system's name is Intuity.
```

```
Welcome to USL UNIX System V Release 4.2 Version 1
Console Login:
```

**⇒ NOTE:**

Ignore the following message if it is displayed:

```
Error: IRQ chosen for driver does not match adapter
configuration XXXXXX Equinox Megaport STREAMS
Device Driver.
```

10. Remove the cartridge tape labeled "INTUITY R4.0 UnixWare Image Tape" from the tape drive.
11. Continue with the next procedure, [3. Cleaning the Disk Drive\(s\)](#).

### 3. Cleaning the Disk Drive(s)

**⇒ NOTE:**

If disk(s) 1 through 5 are new or have been formatted using the SCSI Utilities, skip this procedure and go to [4. Installing the INTUNIX Software](#).

To clean the disk drives, do the following”

1. Type **root** at the Console Login prompt and press **(ENTER)**.
2. Press **(ENTER)** at the password prompt.

The system displays the Old Password prompt.

3. Press **(ENTER)**.

The system displays the New Password prompt.

4. Type **install1** for the password and press **(ENTER)**.

The system displays the prompt: Re-enter new password.

5. Type **install1** again and press **(ENTER)**.

The system displays with the UNIX prompt.

6. At the UNIX prompt, type **fdisk /dev/rdisk/c0t1d0s0** and press **(ENTER)**.

**⇒ NOTE:**

There is a space between “fdisk” and “/dev/rdisk/c0t1d0s0” in this command.

The system displays the Delete Partition screen:

Total disk size is 263 cylinders (2063.0MB)

| Partition | Status | Type        | Start | End | Length | %   | Approx MB |
|-----------|--------|-------------|-------|-----|--------|-----|-----------|
| 1         | Active | UNIX System | 0     | 260 | 261    | 100 | 2047.3    |

0. Overwrite system master code
1. Create a partition
2. Change Active (Boot from) partition
3. Delete a partition
4. Update (Update disk configuration and exit)
5. Exit (Exit without updating disk configuration)

Enter selection:

7. Type **3** and press **(ENTER)**.

The system displays the following message:

```
Enter the number of the partition
(or enter x to exit):
```

8. Type **1** to delete partition 1 and press **(ENTER)**.

The system displays the prompt, "Do you want to delete Partition 1?"

9. Type **y** and press **(ENTER)**.

The system displays the following message:

```
Partition 1 has been deleted. This was the active
partition."
```

The system returns to the Delete Partition screen.

10. Type **0** to overwrite the system master boot code and press **(ENTER)**.

The system displays the message:

```
The system master boot code has been overwritten. You
must "Update" for the change to take effect.
```

The system returns to the Delete Partition screen.

11. Type **4** to update the disk configuration and exit the screen and press **(ENTER)**.

The system displays a message about deleting the partition, and then displays the UNIX prompt.

12. **For a MAP/100P platform system only**, repeat Step 6 through Step 11 for Disks 2, 3, 4, and 5 using the following commands:

- Disk 2: **fdisk /dev/rdisk/c0t2d0s0**
- Disk 3: **fdisk /dev/rdisk/c0t3d0s0**
- Disk 4: **fdisk /dev/rdisk/c0t4d0s0**
- Disk 5: **fdisk /dev/rdisk/c0t5d0s0**

 **NOTE:**

Make sure you type a space after you type **fdisk**.

13. Continue with the next procedure, [4. Installing the INTUNIX Software](#).

## 4. Installing the INTUNIX Software

### ⇒ NOTE:

Make sure you are installing the INTUNIX+m or later version of the software.

To install the INTUNIX software, do the following:

1. Verify that the diskette drive is empty.

### ▲ CAUTION:

*If the diskette drive contains a diskette, the system reboot will fail. If this happens, remove the floppy from the diskette drive and press*

**CONTROL** **ALT** **DELETE**.

### ⇒ NOTE:

If you are installing the operating system on a machine that is not equipped with a LAN circuit card, the system might display a message that states that an invalid check sum occurred. Ignore this message.

2. At the UNIX prompt, type **pkgadd -d ctape1** and press **ENTER**.

The system displays the following message:

```
Insert a cartridge into Tape Drive 1.  
Type [go] when ready  
or [q] to quit: (default: go)
```

3. Insert the cartridge tape labeled "INTUITY R4 INTUNIX+M SFTW Update" in the tape drive.
4. Press **ENTER**.

The system displays the following message:

```
Installation in progress. Do not remove the cartridge.
```

```
The following sets are available:
```

1. INTUNIX+m INTUITY UnixWare 1.1.2 Enhancement Set  
- Update M  
(486)i.1.3

```
Select package(s) you wish to process (or 'all' to  
process all packages). (default: all) [?,??,q]:
```

5. Press **ENTER**.

The system displays the following message:

```
PROCESSING:
```

```
Set: INTUITY UnixWare 1.1.2 Enhancement Set - Update M  
(INTUNIX+m) from (ctape1)
```

```
INTUITY UnixWare 1.1.2 Enhancement Set - Update M  
(486)i.1.3
```

Using </> as the package base directory

The following packages are available:

1. year2000 Year 2000 updates for UnixWare for Intuity
2. ezsetup SMC LAN Adapter Setup Program
3. smeUW11 SMC Ethernet Device Driver ISA
4. audfs AUDIX File System
5. rpcfix Remote Procedure Calls fix
6. installit Installit utility for INTUITY
7. adslodvr Adslod driver from Microport
8. lboltfix lbolt Roll-out Patch
9. memfix 1 CONNLD driver from Microport - fixes kernel memory leak
10. svcmod1 SVC driver from Microport - fixes kernel stack overrun

Select package(s) you wish to process (or 'all' to process all packages). (default: all) [?,??,q]:

6. Press **ENTER** to select all packages.

The system displays a series of messages and then the following message:

```
A version of the LAN driver is already installed.  
Do you want to overlay that driver and re-use the kernel  
options for the driver? The overlay option, which is  
often used during field upgrades, will preserve the  
network environment.
```

```
y) to overlay
```

```
q) to quit (default: quit)
```

Do you want to overlay the driver:



**CAUTION:**

*Do not automatically press **ENTER**. Doing so causes the installation to quit.*

7. Type **y** to overlay the driver and press **ENTER**.

The system displays the following message:

```
The board currently installed in the system  
is the 8416 LAN adapter.
```

```
1) 8216 LAN adapter
```

```
2) 8416 LAN adapter
```

```
q) to abort installation
```

Please enter the board type you wish to use:

8. Check what the system says the current board is, and type the corresponding number from the list (usually you type **2**). Press **ENTER**.



**NOTE:**

Ignore any warning messages displayed by the system.

The system installs the software, and when finished, displays the following message:

```
Processing of <INTUITY UnixWare 1.1.2 Enhancement Set -  
Update M> is completed.
```

```
Insert a cartridge into Tape Drive 1.  
Type [go] when ready,  
    or [q] to quit: (default: go)
```

9. Type **q** and press **ENTER**.

The system displays the following message, and then the UNIX prompt:

```
*** IMPORTANT NOTICE ***
```

```
    If installation of all desired packages is  
    complete the machine should be rebooted in order  
    to ensure sane operation. Execute the shutdown  
    command with the appropriate options and wait for  
    the "Console Login:" prompt.
```

10. Remove the tape labeled "INTUITY R4 INTUNIX+M SFTW Update" from the tape drive.
11. Continue with the next procedure, [5. Rebooting the Avaya Interchange System](#).

## 5. Rebooting the Avaya Interchange System

---

To reboot the AVAYA Interchange system, do the following:

1. At the UNIX prompt, type **init 6** and press **ENTER**.

The system begins by shutting down the system and continues by rebooting the system. When complete, the system displays the following message:

```
The system's name is Intuity.
```

```
Welcome to USL UnixWare System V Release 4.2 Version 1  
Console Login:
```

2. Continue with the next procedure, [6. Performing the installit Command](#).

## 6. Performing the `installit` Command

---

To run the `installit` command, do the following:

1. Log in to the system as **root**, using the password **install1**.
2. At the UNIX system prompt, type **installit** and press `(ENTER)`.

The system displays the following message:

```
Press "Enter" to continue Volume Manager installation.
```

```
The system must now be rebooted to continue  
reconfiguration.
```

```
Press "Return" to continue.
```

3. Press `(ENTER)`.

### NOTE:

The `installit` command causes the system to reboot three times and asks the installer to verify the reboot. In all cases, press `(ENTER)` to reboot.

Once the reboot process is complete, the system displays the following prompt:

```
The system's name is Intuity  
Welcome to ULS UNIX System Release 4.2 Version 7  
Console Login:
```

4. Continue with the next procedure, [7. Installing the Platform Software](#).

## 7. Installing the Platform Software

---

To install the platform software, do the following:

1. Log in to the system as **root**.
2. At the UNIX prompt, enter **pkgadd -d ctape1**.

The system displays the following message:

```
Insert a cartridge into Tape Drive 1.  
Type [go] when ready  
or [q] to quit: (default: go)
```

3. Insert the cartridge tape labeled "INTUITY R4 AUDIX 4.4-7 Platform Set" in the tape drive.

### NOTE:

This tape contains the Cornerstone i.2.5 software.

4. Press **ENTER**.



**NOTE:**

Ignore any messages that indicate that the base Oracle package has not been loaded and that give installation procedures.

The system displays the following message:

```
Installation in progress. Do not remove the cartridge.
```

```
The following sets are available:
```

```
1      AUDIXset      INTUITY Platform AUDIX Set  
                        (i486)i.2.5
```

```
Select package(s) you wish to process (or 'all' to  
process all packages). (default: all) [?,??,q]
```

5. Press **ENTER**.

The system displays the following message:

```
Processing:
```

```
Set: INTUITY Platform AUDIX Set (AUDIXset) from  
<ctapel>.
```

```
INTUITY Platform AUDIX Set  
(i486)i.2.5
```

```
Using </> as the package base directory.
```

```
Do you want to install the Interchange set?  
(default: y)
```

6. Press **ENTER**.

The system displays the following message:

```
Do you want to run default set installation?
```

7. Press **ENTER**.

The system displays the following message:

```
Enter password for craft:  
New password
```

8. Enter the **password** you want to set for the **craft** login.

The system displays the following message:

```
Re-enter new password:
```

9. Enter the **password** you want to set for the **craft** login a second time.

The system displays the following message:

```
Enter password for tsc:  
New password
```

10. Enter the **password** you want to set for the **tsc** login.

The system displays the following message:

```
Re-enter new password:
```

11. Enter the **password** you want to set for the **tsc** login a second time. The system now loads the platform package.

After the system has loaded the platform package, the system displays the following message:

```
Processing of <INTUITY Platform AUDIX Set> is  
completed.
```

```
Insert a cartridge into Tape Drive 1.  
Type [go] when ready  
or [q] to quit: (default: go)
```

12. Remove the cartridge tape labeled "INTUITY R4 AUDIX 4.4-7 Platform Set" from the tape drive.
13. Continue with the next procedure, [8. Installing Intuity Platform AUDIXSet RFU+A](#).

## 8. Installing INTUITY Platform AUDIXSet RFU+A

---

To install the platform RFU, do the following:

1. Insert the cartridge tape labeled "INTUITY R4 AUDIX 4.4-7 Platform Set RFU+A." Press **ENTER**.

The system displays the following message:

```
The following sets are available:  
1          C25 RFU+A    Cornerstone Remote Field Update A  
                    (i486)i.2.5+A
```

```
Select package(s) you wish to process (or 'all' to  
process all packages).  
(default: all) [?,??,q]
```

Press **ENTER**

The system installs the software. When finished, the system displays the message:

```
Processing of <Cornerstone Remote Field Update A for  
i.2.5> is completed.
```

```
Insert a cartridge into Tape Drive 1.  
Type [go] when ready  
or [q] to quit: (default: go)
```

2. Type **q** and press **(ENTER)**.

The system displays the UNIX prompt.

3. Remove the cartridge tape labeled "INTUITY R4 AUDIX 4.4-7 Platform Set RFU+A" from the tape drive.

**⇒ NOTE:**

The letter "A" in RFU tape labels will change as RFUs are issued (for example, RFU+A, RFU+B, RFU+C, and so on).

4. Continue with the next procedure, [9. Installing Intuity AUDIX Voice Messaging](#).

## 9. Installing INTUITY AUDIX Voice Messaging

---

To install the necessary Intuity AUDIX application packages, do the following:

1. Insert the cartridge tape labeled "INTUITY R4 AUDIX R4.4 Voice Messaging" in the tape drive.
2. At the UNIX prompt, type **pkgadd -d ctape1 netw tcpadm sdialer** and press **(ENTER)**.

The system displays the following message:

```
Insert a cartridge into Tape Drive 1.  
Type [go] when ready,  
    or [q] to quit: (default:go)
```

3. Press **(ENTER)**.

Once the package has been installed, the system displays the following message and then the UNIX prompt:

```
Installation of Intuity TCP/IP Networking and  
Maintenance (tcpadm) was successful.
```

4. Remove the cartridge tape labeled "INTUITY R4 AUDIX R4.4 Voice Messaging" from the tape drive.
5. At the UNIX prompt, type **init 6** and press **(ENTER)** to reboot.
6. Continue with the next procedure, [10. Adding Hard Disk Drives](#).

## 10. Adding Hard Disk Drives

---

In procedure [3. Cleaning the Disk Drive\(s\)](#) of the new installation and system recovery procedures, you cleaned hard disk 1 of the MAP/5P system or disks 1, 2, 3, 4, and 5 of the MAP/100P system. This procedure tells you how to add hard disk drives so that the Avaya Interchange can use them.

### NOTE:

**For a MAP/5P system**, add *only* hard disk 1.

**For a MAP/100P system**, at this point of this procedure, add *only* hard disk 4. Hard disk 3 is automatically added later in the process.

### CAUTION:

For a MAP/100P system, do *not* add hard disks 1, 2, and 5 at this time. Add hard disks 1, 2, and 5 *only after* all software has been installed since these disks are for mirroring only. **Installing these disks at this time will cause the software to be installed incorrectly, and you will need to restart the entire installation and system recovery procedure.** These disks will be added later in procedure [19. Adding Hard Disk Drives 1, 2, and 5 for Mirroring](#).

To add a new hard disk drive, do the following:

1. Log in to the system as **tsc**.

The system displays the following prompt:

```
TERM=[ 4425 ] ?
```

2. At the prompt, enter the terminal type.

If you are working from the console, the terminal type is **at386**. If you are working from a remote terminal, the remote terminal emulation is normally **4425**.

3. At the UNIX prompt, type **Vex** and press .

### NOTE:

The "Vex" command is case sensitive. Type a capital **V**.

4. Start at the Avaya Interchange Main Menu ([Figure 4-5](#)), and select

```
> Customer/Services Administration
> System Management
> Disk Management
> Install Disk
```

The system displays the Install Disk window ([Figure 4-3](#)).

```
Install Disk
Enter jumper id of the disk being added (0-7): _
```

Figure 4-3. Install Disk Window

5. For a MAP/5P system, type **1** as the jumper ID of the disk being added.  
For a MAP/100P system, type **4** as the jumper ID of the disk being added.



**CAUTION:**

*Do not enter 0 or 3. Entering either of these values restarts the recovery process.*

6. Press **F3** (Save).

The system displays the following message:

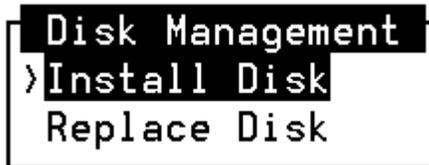
```
clean
Install Disk Operation In Progress.
```

This operation will require approximately 10 minutes per gig to complete.

```
The disk install was successful
Hit Enter to continue.
```

7. Press **ENTER**.

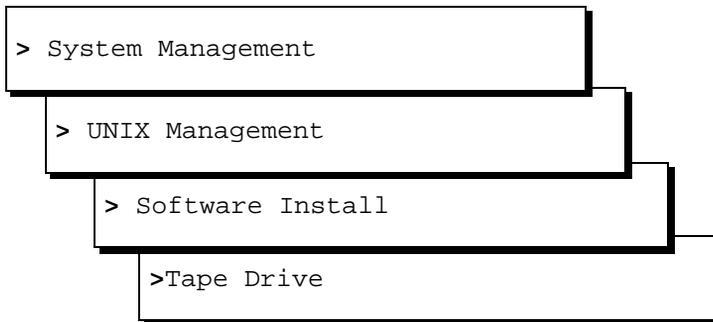
The system displays the Disk Management menu ([Figure 4-4](#)).



---

Figure 4-4. Disk Management Menu

8. Press **(F6)** (Cancel) to return to the System Management menu. Select



9. Continue with the next procedure, [11. Setting Up the Base for Oracle Software](#).

## 11. Setting Up the Base for Oracle Software

---

To set up the base for the Oracle software, do the following:

1. Wait for the system to display the following message:  
Insert a cartridge tape into Tape Drive 1.  
Type [go] when ready  
or [q] to quit: (default: go)
2. Insert the cartridge tape labeled “Avaya Interchange R5.4 Software Set” in the tape drive.

3. Press **ENTER**.

The system displays the following message:

```
Installation in progress. Do not remove the cartridge
```

```
The following sets are available:
```

```
1  interchg      Avaya Interchange Software Set  
                        (INTERCHANGE) 5.4.x
```

```
Select package(s) you wish to process (or 'all' to  
process all packages). (default: all)
```

4. Press **ENTER**.

The system displays the following message:

```
Avaya Interchange Software Set  
(INTERCHANGE) 5.4
```

```
Using </> as the package base directory
```

```
Select type of installation:
```

```
1) All Packages-Installs Software and Initial Database  
2) Software Only - Installs only the Software  
3) Interchange Announcement Sets  
4) Setup Oracle for Interchange  
5) Custom Installation  
6) Upgrade Package Only-Installs only the Upgrade  
Software  
7) Quit Installation
```

```
Select (1-7):
```



**CAUTION:**

*Selecting the wrong number in Step 5 causes the recovery to fail. Be sure to select Installation Type 4, Setup Oracle for Interchange.*

5. Enter **4**.

The system displays the following message:

```
You have selected to do a setup  
Oracle for Interchange
```

```
Do you wish to continue "y"?
```

6. Enter **y**.

Once the Oracle base has been installed, the system the displays the following message:

```
Processing of <Avaya Interchange Software Set> is  
completed
```

Insert a cartridge tape into Tape Drive 1.  
Type [go] when ready  
or [q] to quit: (default: go)

**⇒ NOTE:**

This completes only the setup of Interchange so it can receive the installed Oracle software.

7. Remove the tape labeled “Avaya Interchange R5.4 Software Set” from the tape drive.

**⇒ NOTE:**

This tape is used again in the recovery process to install Avaya Interchange application software, which follows the procedure to install Oracle software.

8. Continue with the next procedure, [12. Installing Oracle Software](#).

## 12. Installing Oracle Software

To install the Oracle software, do the following:

1. Insert the tape labeled “INTUITY AUDIX 4.4 Interchange 5.1 ORACLE 7 Set” in the tape drive.
2. Press **(ENTER)** at the “Insert a cartridge tape ....” prompt.

The system displays the following message:

```
Installation in progress. Do not remove the cartridge  
The following pkgs are available:
```

```
1 ORACLEset Intuity Interchange Oracle RDMBS 7.1.3 Set  
      (486) i.2.3
```

```
Select package(s) you wish to process (or 'all' to  
process all packages). (default: all) [?,??,q]:
```

3. Press **(ENTER)**.

The system displays the following message:

```
Do you want to run default set installation (y)
```

4. Press **(ENTER)**.

**⇒ NOTE:**

Installing ORACLE RDMBS 7.1.3 takes approximately 45 minutes.

When installation is complete, the system displays the following message:

```
Processing of <ORACLE RDMBS 7.1.3 Set> is completed.
```

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Insert a cartridge tape into Tape Drive 1.

Type [go] when ready

or [q] to quit: (default: go)

5. Remove the tape labeled "INTUITY AUDIX 4.4 Interchange 5.1 ORACLE 7 Set" from the tape drive.
6. Type **q** and press **ENTER**.
7. Press **F6** (Cancel) until you return to the UNIX prompt.
8. At the UNIX prompt, type **init 6** and press **ENTER** to reboot.

The system displays the following message:

The Voice System is initializing cards

Startup of the Voice System is complete

Console Login:

9. Continue with the next procedure, [13. Installing Avaya Interchange Application Software](#).

## 13. Installing Avaya Interchange Application Software

---

To install the Avaya Interchange Application software, do the following:

1. Log in to the system as **tsc**.
2. At the UNIX prompt, type **stop\_vs 0** and press **ENTER**.

### ⇒ NOTE:

You type **0** after the **stop\_vs** command so you do not have to wait 180 seconds for the voice system to stop.

The system displays the following message:

The voice system is now stopping.

When the voice system has stopped, the system displays the following message, followed by the UNIX prompt:

```
UX:modadmin INFO:Modules lbt loaded ID = 11
```

3. Press **ENTER**.
4. At the UNIX prompt, type **pkgadd -d ctape1** and press **ENTER**.

The system displays the following message:

Insert a cartridge tape into Tape Drive 1.

Type [go] when ready

or [q] to quit: (default: go)

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5. Insert the tape labeled "Avaya Interchange R5.4 Software Set" again in the tape drive.

6. Press **ENTER**.

The system displays the following message:

```
Installation in progress. Do not remove the cartridge
```

```
The following pkgs are available:
```

```
1  interchg  Avaya Interchange Software Set
              (INTERCHANGE) 5.4.x
```

```
Select package(s) you wish to process (or 'all' to
process all packages). (default: all)
```

7. Press **ENTER**.

The system displays the following message:

```
Avaya Interchange Software Set
(INTERCHANGE) 5.4
```

```
Using </> as the package base directory
```

```
Select type of installation:
```

```
1) All Packages-Installs Software and Initial Database
2) Software Only - Installs only the Software
3) Interchange Announcement Sets
4) Setup Oracle for Interchange
5) Custom Installation
6) Upgrade Package Only-Installs only the Upgrade
Software
7) Quit Installation
```

```
Select (1-7):
```

8. Type **1** and press **ENTER**.

The system displays the following message:

```
Do you wish to continue [y,n,?,q]
```

9. Type **y** and press **ENTER**.

Several software packages load. The system then displays the following message:

```
Enter a password for icftp:
```

```
New password for icftp:
```

10. Type **icftppw** and press **ENTER**.

The system displays the following message:

```
Re-enter password:
```

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11. Type **icftppw** and press **(ENTER)**.

The system begins to install software. Several software packages load.

12. When all packages have been installed, the system displays the following message:

```
Processing of <Avaya Interchange Software Set> is
completed
```

```
Insert a cartridge tape into Tape Drive 1.
```

```
Type [go] when ready
```

```
or [q] to quit: (default: go)
```

13. Type **q** and press **(ENTER)**.
14. Remove the tape labeled "Avaya Interchange R5.4 Software Set" from the tape drive.
15. Install any RFUs at this time. See [Chapter 2, RFU Installation](#) for the procedures.
16. Continue with the next procedure, [14. Installing the DCIU Switch Integration Set](#).

## 14. Installing the DCIU Switch Integration Set

---

To install the DCIU Switch Integration set, do the following:

1. At the UNIX prompt, type **pkgadd -d ctape1 dciutism** and press **(ENTER)**.

The system displays the following message:

```
Insert a cartridge into Tape Drive 1.
```

```
Type [go] when ready
```

```
or [q] to quit: (default: go)
```

2. Insert the cartridge tape labeled "INTUITY R4 INTUITY Platform DCIU Set" in the tape drive.
3. Press **(ENTER)**.

The system installs the software. When finished, the system displays the following message and the UNIX prompt:

```
Installation of DCIU Telephony Interface Switch Module
(dciutism) was successful.
```

4. Remove the tape labeled "INTUITY R4 INTUITY Platform DCIU Set" from the tape drive.
5. Continue with the next procedure, [15. Installing the Remote Maintenance Board Software Set](#).

## 15. Installing the Remote Maintenance Board Software Set

---

To install the Remote Maintenance Board (RMB) software set, do the following:

1. Insert the tape labeled "INTUITY R4 AUDIX R4.3/R4.4 RMBset v1.4.8 Software" into the tape drive.
2. At the UNIX prompt, type **pkgadd -d ctape1** and press .

The system displays the following message:

```
Insert a cartridge into Tape Drive 1.  
Type [go] when ready  
    or [q] to quit: (default: go)
```

3. Press .

The system displays the following message:

```
Installation in progress. Do not remove the cartridge.
```

```
The following sets are available:
```

```
    1      RMBset      INTUITY RMB V2 set  
                        (i486) i.2.3
```

4. Press .

The system displays the following message:

```
Processing:
```

```
Set: RMB Software Set R2.0 (RMBset) from <ctapel>.
```

```
Intuity RMB Software Set R2.0  
(i486)
```

```
Using </> as the package base directory.
```

```
Please select the country code:
```

```
01 - United States  
02 - International
```

```
Country code [01]:
```

5. Press  to select the default **01** for the United States.

The system installs the software and, when completed, displays the following message:

```
Insert a cartridge into Tape Drive 1.  
Type [go] when ready  
    or [q] to quit: (default: go)
```

6. Type **q** and press .

7. Remove the tape labeled "INTUITY R4 AUDIX R4.3/R4.4 RMBset v1.4.8 Software" from the tape drive.
8. Continue with the next procedure, [16. Enabling Hours of Speech](#)

## 16. Enabling Hours of Speech

---

To enable hours of speech, do the following:

1. Contact the Remote Maintenance Center or International Technical Assistance Center (ITAC). Provide center personnel with the following information:
  - Facility location
  - Customer name
2. The Remote Maintenance Center or ITAC enables hours of speech (285 for a MAP/100P system and 200 for a MAP/5P system).



### CAUTION:

*DO NOT reboot the system until you have been contacted by the Remote Maintenance Center or ITAC and told to do so.*

3. At the UNIX prompt, type **init 6** and press `(ENTER)` to reboot.

The system shuts down and then reboots. When these processes are complete, the system displays the following message:

```
Startup of the Voice System is complete.
```

```
Console Login: Interchange Module Started
```

4. Press `(ENTER)` to get the login prompt.
5. Continue with the next procedure, [17. Creating a New Filesystem](#).

## 17. Creating a New Filesystem

---

To create a new filesystem, do the following:

1. Log in as **craft**.

The system displays the Avaya Interchange Main Menu ([Figure 4-5](#)).

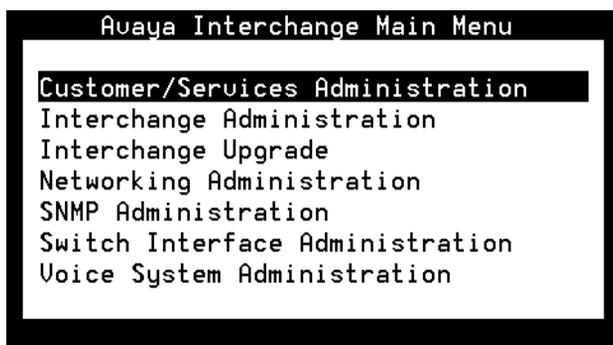


Figure 4-5. Avaya Interchange Main Menu

2. Select



The system displays the Interchange Upgrade menu.

```
==== Interchange Upgrade ====
1) READ ME
2) Invoke Upgrade
3) Create New File System
4) View Upgrade Logs
5) Exit
Enter selection number [1]:
```

3. Type **3** to create a new file system and press **ENTER**.

The system displays the following message:

```
*****
* !!! IMPORTANT !!! IMPORTANT !!! IMPORTANT !!! *
*
*Prior to this file system reconfiguration, Interchange*
*Upgrade Utility, Interchange Software Set 5.3 and RFUs*
*(if provided) should have been successfully installed.*
*
*Also, please have a blank tape ready.
*
*Note: You may press [delete] or [break] at any time
* to terminate this upgrade.
*
*****
```

Press [enter] when you have finished reading this.

4. Press **(ENTER)** to continue.

The system displays the following message:

```
Do you want to override the default file system sizes
y or n (default: n)?
```

**⚠ CAUTION:**

*Do NOT enter y to override the default file system sizes. This prompt is for use only by remote support center personnel. If you enter y, the upgrade will fail.*

5. Press **(ENTER)** to accept the default n.

The system displays the following message:

```
Press [enter] to stop the voice system or [delete] to
abort the upgrade.
```

**⇒ NOTE:**

The system may or may not display the following message: If you see the following message, continue with Step 6 to stop the voice system.

```
File system/voice 1 does not need to be remade
Number of i nodes = xxxxxxx
```

```
***          Voice system is running          ***
                Must be stopped before continuing
```

6. Press **(ENTER)** to stop the voice system.

The system displays the following message:

```
The Voice System is now stopping.
```

```
Initiating request to clear all calls in next 6
seconds.
```

The system then displays a series of messages. Wait until the system displays the following message:

```
Please insert a scratch tape inside the tape drive and
press [enter] or [q] to quit:
```

7. Insert a scratch cartridge tape.

A scratch cartridge tape does not need to be blank, but the contents must be unneeded. Any data on the tape is overwritten during the next process.

**⚠ CAUTION:**

*Do not use the backup tape.*

8. Press **ENTER**.

The system displays the following message:

NOTE: Filesystem configuration is a lengthy process. It could take up to six hours to complete.

Six hours is the approximate maximum amount of time. The system displays a more accurate estimate after determining the number and size of the filesystems.

When the file system reconfiguration is complete, the system displays a message listing the file systems that were remade and then the following message:

Remake of File System is now completed.

The system then automatically reboots. **Do not** try to log in again until the system produces the prompt as follows:

Startup of the Voice System is complete.

Console Login:

9. Remove the scratch tape.
10. Continue with the next procedure, [18. Stopping the Voice System](#).

## 18. Stopping the Voice System

---

### CAUTION:

*Only stop the voice system when it is absolutely necessary. All calls in progress will be disconnected.*

To stop the voice system, do the following:

1. Log in as **craft**.
2. Starting at the Avaya Interchange Main menu ([Figure 4-5](#)) and select

```
> Customer/Services Administration
> System Management
> System Control
> Stop Voice System
```

The system displays the Wait Time window ([Figure 4-6](#)).



---

**Figure 4-6. Wait Time Window**

3. Enter a number between 60 and 600 to designate how long the system will wait for calls in progress to finish before stopping the voice system.
4. Press **F3** (Save).

The system displays the following message:

The Voice System is now stopping.

Initiating request to clear all calls in the next 60 seconds.

Orderly idling of the system succeeded.

After the Voice System has completely stopped, use the "Start Voice System" choice from the System Control menu to restart the Voice System.

The Voice System has stopped.

Press Enter to Continue.

5. Press **ENTER** to return to System Control.
6. Press **F6** (Cancel) until you return to the Customer/Services Administration menu.
7. **For a MAP/5P new system installation**, continue with procedure [22. Turning on Customer Purchased Features](#).  
**For a MAP/5P system recovery**, continue with procedure [20. Restoring Administration Data](#).  
**For a MAP/100P new system installation or system recovery**, continue with the next procedure, [19. Adding Hard Disk Drives 1, 2, and 5 for Mirroring](#).

## 19. Adding Hard Disk Drives 1, 2, and 5 for Mirroring

This procedure only applies to Map 100/P systems.

To add hard disk drives for 1, 2, and 5 for mirroring, do the following:

1. Log in to the system as **tsc**.

The system displays the following prompt:

```
TERM=[ 4425 ]?
```

2. At the prompt, enter the terminal type.

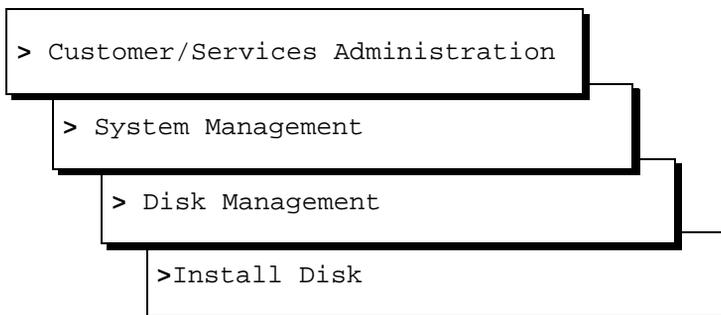
If you are working from the console, the terminal type is **at386**. If you are working from a remote terminal, the remote terminal emulation is normally **4425**.

3. At the UNIX prompt, type **Vex** and press .

**⇒ NOTE:**

The "Vex" command is case sensitive. Type a capital **V**.

4. Start at the Avaya Interchange Main Menu ([Figure 4-5](#)), and select



The system displays the Install Disk window ([Figure 4-3](#)).



Figure 4-7. Install Disk Window

5. Type **1** as the jumper ID when adding hard disk 1.  
Type **2** as the jumper ID when adding hard disk 2.  
Type **5** as the jumper ID when adding hard disk 5.



**CAUTION:**

*Do not enter 0 or 3. Entering either of these values restarts the recovery process.*

6. Press **F3** (Save).

The system displays the following message:

```
clean
Install Disk Operation In Progress.
```

This operation will require approximately 10 minutes per gig to complete.

```
The disk install was successful
Hit Enter to continue.
```

7. Press **ENTER**.

The system displays the Disk Management menu ([Figure 4-4](#)).



---

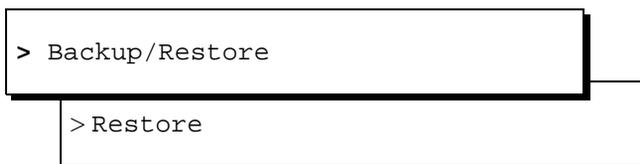
**Figure 4-8.** Disk Management Menu

8. Repeat Steps 4 through 7 to add hard disks 2 and 5.
9. For new system installation, continue with procedure [22. Turning on Customer Purchased Features](#).  
For system recovery, continue with the next procedure, [20. Restoring Administration Data](#).

## 20. Restoring Administration Data

To restore Avaya Interchange administration data, do the following:

1. Start at the Customer/Services Administration menu and select



The system displays the following message.

```
please insert a tape into the tape drive to restore
press <Enter> when tape is inserted
press <Esc> key to terminate the restore
```

2. Insert the cartridge tape that contains the backup data in the tape drive.
3. Press .

The system displays the header information for the tape. It includes product ID, date, package contents, and data type.

The following is an example of the tape header:

```
PRODUCT_ID=2299999999
DATE=09/11/96 09:51
PKG=VM:0:R1.1
PKG=mtce:1.0:1.0-4
PKG=netw:0:1.0-4.3
PKG=vs:1.0:1.0-4
TYPE=System Data:
```

The system displays the following prompt after the tape header information:

```
Press <Enter> to select data type.
Press <Esc> to terminate the restore.
```

4. Check the data types listed under TYPE=System Data to verify that this tape contains the appropriate data.

If it does not, perform Step a through Step c:

- a. Press .
- b. Return to Step 3.
- c. Try another tape.

If it does, continue with step 5.

5. Press .

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6. Enter **y** in the `System Data` and `Voice Name` fields that display the data types you want to restore.
7. Enter **n** in all of the other fields.
8. Press **F3** (Save) to restore the data types selected.
9. Insert subsequent tapes if prompted.

When the restore is complete, the system displays the following message:

```
restore process has been completed successfully  
press any key to continue
```

If the restore fails, the system displays the following message:

```
Restore Failed.
```

Perform Step a through Step c to resolve the failure:

- a. Rewind the tape by removing it from the tape drive and then reinserting it.
  - b. Return to Step 4 and attempt the restore again.
  - c. If the restore fails a second time, access the alarm log. See [Avaya Interchange](#) and follow associated repair actions for any active alarms in the log.
10. Press **ENTER**.
  11. Press **F6** (Cancel) until you return to the System Management menu.
  12. Replace the nightly unattended backup cartridge tape in the tape drive.
  13. Continue with the next procedure, [21. Rebooting the Avaya Interchange System through System Screens](#).

## 21. Rebooting the Avaya Interchange System through System Screens

---

To reboot the Avaya Interchange system through system screens, do the following:

1. Start at the System Management menu, and select

```
> System Control
```

```
>Shutdown System
```

The system displays the following:

```
Wait Time seconds (0-60):
```

2. Enter the **number** of seconds until the system is to be shut down.
3. Press **F3** (Save).

The system displays the following message:

```
Shutdown started.
```

When the system is completely shut down, the system displays the following message:

```
The system is down.  
Press Ctrl-Alt-Del to reboot your computer.
```

4. Press **CTRL** **ALT** **DELETE**.

The system performs a power-on self test (POST). The screen lists various hardware components and the status of the tests performed on those components.

**⇒ NOTE:**

The system displays the following message during the reboot:

```
The UNIX operating system kernel will now be  
rebuilt to incorporate recent configuration  
changes.
```

```
Strike ENTER when ready or Esc to stop.
```

You do *not* have to take action to continue the shutdown.

Once the reboot is completed, the system displays the following prompt:

```
Console Login:
```

The system recovery is complete.

## 22. Turning on Customer Purchased Features

---

**For a MAP 5/P system**, do the following:

1. Contact the Remote Maintenance Center or International Technical Assistance Center (ITAC) to turn on customer purchased features.
2. Reboot the system to verify the system boots up correctly.

The new installation for a MAP 5/P system is complete.

**For a MAP 100/P system, do the following:**

1. Contact the Remote Maintenance Center or International Technical Assistance Center (ITAC) to turn on any customer purchased features at this time, *except for mirroring*.

 **CAUTION:**

*Do not turn on mirroring before you reboot the system.*

2. Reboot the system and the new features will become active.
3. Continue with the next procedure, [23. Turning on Mirroring for MAP/100P Systems](#).

## 23. Turning on Mirroring for MAP/100P Systems

---

 **CAUTION:**

*This procedure must be completed before any additional reboots are attempted. Rebooting before this procedure has completed entirely can prevent the mirroring from completing properly.*

For a MAP/100P system only, do the following to turn on mirroring:

1. Contact the Remote Maintenance Center or International Technical Assistance Center (ITAC) to turn on mirroring.

 **NOTE:**

Once the mirroring features are turned on, the Remote Maintenance Center or ITAC will monitor the mirroring process to ensure it is complete successfully. This process can take a few hours to complete.

The new installation for a MAP/100P system is complete.

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