

**Lucent Technologies**  
Bell Labs Innovations



**GuestWorks™ *server***

Issue 3.0

Technicians Handbook

555-231-105  
Comcode 107998411  
Issue 1  
April 1997

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Issue 1, April 1997

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#### European Union Declaration of Conformity

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Single-Carrier Cabinet (SCC), AC Powered with 25Hz ring generator  
EMC Directive 89/336/EEC  
Low Voltage Directive 73/23/EEC



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#### Acknowledgment

This document was prepared jointly by the Lucent Technologies Customer Training & Information Products Organization and the BCS Product Documentation Development group, Lucent Technologies Bell Laboratories, Denver, CO 80234-2703.

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## About This Handbook

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This handbook provides instructions for installing the GuestWorks™ *server* and all adjuncts offered as part of the GuestWorks *server* solution. The information provided in this handbook includes information about preparing the site, unpacking and installing the cabinets, connecting cabling and adjuncts, translating the server and adjuncts, and activating and testing the server.

### Suggested Training

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It is suggested that technicians installing this equipment receive training on the GuestWorks *server* and other Lucent Technologies Communications System equipment, such as the DEFINITY® G3V4 switch, before installing this equipment. Except for connectivity of hospitality adjuncts and translations, this handbook contains high-level reminders of the tasks required to install the server, and is not intended to replace normal training.

### Reasons for Reissue

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This document replaces the GuestWorks *server* Technician's Handbook, (555-231-103, Issue 2) that is still valid on Issue 2.0 and earlier GuestWorks servers. This document is reissued for the following reasons:

- To update all information related to Issue 3.0 of the GuestWorks *server* product.
- To add information about the 8400B digital data module.
- To introduce the TN2214 digital line circuit pack. The TN2214 is a 2-wire digital communications protocol (DCP) circuit pack that is used with the 8400-series digital voice terminals.
- To change the command path structure to match existing DEFINITY products.

## Conventions

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The following conventions are followed in this handbook:

- The terms “attendant console” and “backup voice terminal” are used in this document. The attendant console is the model 302B, 302C, or PC console that is usually found at the front desk. The preferred backup voice terminal is the model 8434 voice terminal with attendant-type feature buttons. The model 8410 can be used as a secondary backup to the model 8434.
- Administration command paths and options you enter in the administration fields are shown as follows:  
**change system-parameters hospitality**
- Field names referring to the administration screens are shown as follows:  
Queue Length
- On the cabling diagrams, the << and >> symbols are used to show the plug-receptacle relationship. If this relationship is not known, the diagrams show a rectangular box.

## Related Documents

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- 555-020-706 — *7400A Data Module User Guide*
- 555-020-709 — *8400B Plus Data Module User's Guide*
- 555-025-600 — *DEFINITY® BCS Products Security Handbook*
- 555-204-105 — *DEFINITY® Communications System Generic 3i/s/vs Maintenance*
- 555-230-027 — *DEFINITY® Business Communications System Issue 3.0 Overview*
- 555-230-124 — *DEFINITY® ECS Installation and Upgrades for Compact Single-Carrier Cabinets*
- 555-230-655 — *DEFINITY® Communications System Generic 3 Version 4 Implementation*
- 555-230-894 — *DEFINITY® ECS Installation and Test for Single-Carrier Cabinets*
- 555-231-104 — *GuestWorks™ server Technician Connectivity Training (video tape)*
- 555-231-205 — *GuestWorks™ server INTUITY™ Lodging Call Accounting User's Guide*
- 555-231-207 — *GuestWorks™ server Issue 3.0 Feature Descriptions*

- 555-231-601 — *DEFINITY® ECS, GuestWorks™ server, and System 75 PBX Property Management System Interface Specifications*
- 555-231-735 — *DEFINITY® Business Communications System and GuestWorks™ server Issue 3.0 Console Operations*
- 555-231-741 — *GuestWorks™ server Issue 3.0 Hospitality Operations*
- 555-231-777 — *GuestWorks™ server 8403 Voice Terminal Quick Reference*
- 555-231-780 — *GuestWorks™ server 8410 Voice Terminal Quick Reference*
- 555-231-783 — *GuestWorks™ server 8434 Voice Terminal Quick Reference*
- 555-231-801 — *DEFINITY® Business Communications System and GuestWorks™ server Issue 3.0 Documents (CD)*
- 585-310-146 — *INTUITY™ MAP/5 Hardware Installation*
- 585-310-160 — *INTUITY™ Software Installation for Release 3.0*
- 585-310-214 — *INTUITY™ Integration with DEFINITY G3*
- 585-310-234 — *INTUITY™ Lodging Property Management System Specifications*
- 585-310-559 — *INTUITY™ Lodging Administration and Feature Operations*

## Overview of GuestWorks *server* Features

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The GuestWorks *server* has most features available on the DEFINITY Communications System G3V4. The following is an abbreviated list of the GuestWorks features most related to hospitality:

- Answer detection
- ASCII Data Over the Server-to-PMS Link
- Attendant Backup (requires activation by Lucent Technologies technical support)
- Attendant Crisis Alert
- Attendant Split Swap (new for Issue 3.0)
- Authorization Codes
- Automatic Alternate Routing (AAR) (new for Issue 3.0)
- Automatic Call Distribution (ACD) (new for Issue 3.0; requires activation by Lucent Technologies technical support)
- Automatic Route Selection (ARS)
- Attendant-activated Automatic Wakeup service
- Attendant-activated Do Not Disturb
- Basic Call Management System (BCMS) (new for Issue 3.0; requires activation by Lucent Technologies technical support)
- Busy verification
- Check-in/check-out
- Controlled restrictions (the Toll Restriction option requires activation by Lucent Technologies technical support)
- Dial by Name (new for Issue 3.0; requires activation by Lucent Technologies technical support)
- Direct Access Calling (formerly known as Call Vectoring; requires the TN750C circuit pack)
- Dual Automatic Wakeup (new for Issue 3.0; requires activation by Lucent Technologies technical support)
- Emergency Access to the Attendant
- Guest-activated Automatic Wakeup (requires the TN725B speech synthesizer circuit pack)
- Guest-activated Do Not Disturb (requires the TN725B speech synthesizer circuit pack)

- Integrated Services Digital Network (ISDN) access using Primary Rate Interface (PRI) and Basic Rate Interface (BRI) voice terminals and adjuncts (requires activation by Lucent Technologies technical support)
- Maid status (requires enhanced hospitality)
- Message Waiting lamps, either LED or neon on guest room telephones
- Names Registration
- PC-based TERRANOVA<sup>®</sup> ECS Administration software
- PMS Interface
- Recorded announcements (requires the TN750C circuit pack)
- Room status (requires enhanced hospitality)
- Server/INTUITY/PMS Link Integration
- Terminal Translation Initialization (requires activation by Lucent Technologies technical support)
- Trunk identification
- Wakeup Activation via Tones (new for Issue 3.0; requires activation by Lucent Technologies technical support)  
If Wakeup Activation via Tones is enabled, the Speech Synthesizer circuit pack (TN725B) is disabled from service.
- World Class Routing (WCR)



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# Installation

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This section describes the procedures you must use to install the hardware used with the GuestWorks product.

## Installation Overview

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Except for the section about connecting hospitality adjuncts and translations, the information given in this document is a high-level listing of the tasks required when installing the Lucent Technologies single-carrier cabinet (SCC) or compact single-carrier cabinet (CSCC). Therefore, you should have access to the following documents when detailed information is required:

- *DEFINITY ECS Installation and Test for Single-Carrier Cabinets*, (555-230-894)
- *DEFINITY ECS Installation and Upgrades for Compact Single-Carrier Cabinets*, (555-230-124)
- *DEFINITY® BCS Products Security Handbook*, (555-025-600).



**NOTE:**

The CSCC is also known as the very small (VS) cabinet. When the CSCC is used with GuestWorks, it is also known as the Extended Stay (ES) cabinet.

The installation of the GuestWorks *server* involves the following major tasks:

- Plan and prepare the site
- Upgrade existing equipment (if part of the installation)
- Unpack the cabinets
- Install and connect the cabinets
- Install the management interface
- Install telecommunications cabling
- Activate the server
- Connect the hospitality adjuncts
- Translate and test the hospitality adjuncts

- Test the server
- Install and wire telephones and other equipment
- Test telephones and other equipment
- Turn the server over to the customer.

### **Additional Parts and Test Equipment**

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Other than the tools and test equipment specified in the SCC Installation manual, you should also have the following items available on-site:

- RS232 mini-tester (provided with the GuestWorks)

 **NOTE:**

The mini-tester shipped with GuestWorks shows positive voltage with a green LED and negative voltage with a red LED. This can be verified by connecting the mini-tester to a printer's EIA port, adding power to the printer, and then putting the printer on-line. The DTR lamp should then light with a positive (green) voltage. You may already have your own mini-tester that shows positive voltage as red and negative voltage as green. If this is true at your installation, the mini-tester result diagrams shown in this handbook must be read from an "opposite" perspective; that is, if the book shows that DTR should be green, and you have a mini-tester that operates in an "opposite" mode, your mini-tester will show DTR being red. This change in perspective should be true for all data leads.

- RS232 gender changers and M25A/M25B RS232 cables
- Analog line used to place test calls
- GuestWorks *server* crash kits

There are two crash kits used with GuestWorks. Crash Kit 30 has a TN791 and Crash Kit 37 has backup flash memory cards.

See "Appendix B — Parts List" on Page 147 for a listing of the parts used in this installation. Part numbers are provided in case replacements must be ordered.

## Plan and Prepare the Site

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See *DEFINITY ECS Installation and Test for Single-Carrier Cabinets*, (555-230-894) and *DEFINITY ECS Installation and Upgrades for Compact Single-Carrier Cabinets*, (555-230-124), for more information about the tasks in this section.

1. Inventory the equipment delivered to the customer site and verify that it matches the customer's order. If the equipment does not match the customer's order, follow the appropriate claims process or report the discrepancies to your Lucent Technologies representative. If this is a dealer-installed site, report the discrepancies to the dealer.

The equipment includes the following:

- GuestWorks *server* cabinets  
The cabinets used for this installation are the SCC and CSCC design. This design has one carrier per cabinet as found with other Lucent Technologies ECS products.
- TERRANOVA ECS Administration software for a PC or a 715 management terminal
- Multi-Application Platform/5 (MAP/5) for Lucent INTUITY Lodging Voice Messaging, Lucent INTUITY AUDIX<sup>®</sup> Voice Messaging, and Lucent INTUITY Lodging Call Accounting
- Attendant console (Model 302B, 302C, or a PC console)
- Multiappearance voice terminals (usually the 8400-series terminals; the 8434 should be used for the primary attendant backup voice terminal)
- Guest room telephones (Teledex\* analog sets or equivalent)  
If Teledex telephones are being ordered, coordinate the translations on the server with any special feature access buttons being programmed by Teledex. If programming is done ahead of time, this could save time at installation.
- Modems

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\* Teledex is a registered trademark of Teledex Corporation.

- Customer documentation

All customer documentation must be delivered to the customer's representative so they can distribute it to their employees.

- Miscellaneous equipment.



**NOTE:**

Part of the miscellaneous equipment is a set of adapters used with the Lucent INTUITY system. These adapters are labeled as Equinox adapters and are vitally important for the connections in and out of the Lucent INTUITY system. Place these adapters with the Lucent INTUITY system equipment.

2. Locate the equipment room and lay out the equipment room floor plan. When laying out the equipment locations, consider the following:
  - The MAP/5 hardware must be within 50 feet of the Property Management System (PMS).
  - The IDI link from the server to the MAP/5 can be up to 200 feet apart.
  - The call accounting link between the server and the MAP/5 is limited to 50 feet unless you use a 7400A or 8400B data module. This limit assumes that you are using the Lucent INTUITY Lodging Call Accounting system; if a generic call accounting system is being used, there is still the 50 foot limit, but the placement is more flexible.

See Figure 3 for an overview of the GuestWorks connections.

Additional equipment that you must consider when laying out the floor plan include the following:

- A customer-provided PC with TERRANOVA ECS Administration, or a 715 management terminal
  - Cross-connect fields
  - Space requirements and room layout; use standard floor plans found with other Lucent Technologies ECS products
  - Cable slack manager.
3. Lay out and ensure appropriate power for the server and the management terminal in the equipment room, and arrange for an electrician to install.
  4. Lay out and ensure appropriate grounding in the equipment room, including provisions for a coupled bonding conductor (CBC).
  5. Determine the location of equipment closets where feeder cables can be terminated.

6. Determine where external trunk lines come into the building and where external trunk converters and adapters will be installed.
7. Determine an appropriate available port circuit on the server for each telephone, trunk, and peripheral connection needed and create a provisioning plan based on standard procedures.
8. Have the customer contact the PMS vendor and, if not using the Lucent INTUITY Lodging Call Accounting, the call accounting system vendor to find out if there are any special connections required to interface with their equipment. It is highly recommended that the customer schedule the vendors to be on-site when the connections are made and the testing is done for the PMS and the call accounting. If the vendors cannot be on-site, they should at least be available remotely.
9. If this is an upgrade from an existing system, remind the customer that during the cutover all wakeup requests and Do Not Disturb requests must be noted manually. After the cutover is complete, the customer must manually input these requests on the new server.

## Unpack the Cabinets

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### **CAUTION:**

*Lifting the SCC cabinet may require two people, as it may weigh as much as 130 pounds (60 kilograms). Use caution to avoid injury.*

See *DEFINITY ECS Installation and Test for Single-Carrier Cabinets*, (555-230-894) and *DEFINITY ECS Installation and Upgrades for Compact Single-Carrier Cabinets*, (555-230-124) for more information about the tasks in this section.

1. Unpack the cabinets.
2. Open and remove the front door and back panels from each cabinet.
3. Inspect the cabinets for any damage. Report any damages according to local shipping instructions.
4. Ensure that all circuit packs are fully inserted into the proper slots according to the Customer Service Document (CSD). Report any discrepancies to your Lucent Technologies representative or authorized dealer.

## **Install and Connect the Cabinets**

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The cabinets must be installed and connected following standard procedures as defined by Lucent Technologies. See *DEFINITY ECS Installation and Test for Single-Carrier Cabinets*, (555-230-894) and *DEFINITY ECS Installation and Upgrades for Compact Single-Carrier Cabinets*, (555-230-124) for more information about the tasks in this section. The installation document covers both the SCC and CSCC products.



**DANGER:**

*If the label near the circuit breaker on the power supply is different from the voltage type at the site, notify your Lucent Technologies representative or authorized dealer immediately for a replacement power supply. Do **not**, under any circumstances, connect an incorrect power supply to power!*

1. Install earthquake floor mounting as determined by local requirements.
2. Position and stack the cabinets in the location shown in the room layout. The CSD shows the order in which each SCC should be stacked.
3. Connect the cabinet grounds.



**NOTE:**

It is very important that the cabinet grounds are connected properly for this system. Follow the instructions given in the installation documents.

4. Connect the cabinets to power.
5. Connect the standby power if it has been engineered for the site. Use the installation instructions given with the standby power product.
6. Locate and connect the Time Division Multiplexing (TDM) bus.
7. Verify the port cabinet address plugs.
8. Replace the cabinet back panels.
9. Install the ground plates. This is done differently depending on whether or not you are using earthquake protection.
10. Install the cable clamps.
11. Install the front plates (if needed for electromagnetic shielding and/or earthquake protection).
12. Install the cabinet clips (used only if you do not have earthquake protection or electromagnetic shielding).

## **Install the Management Interface**

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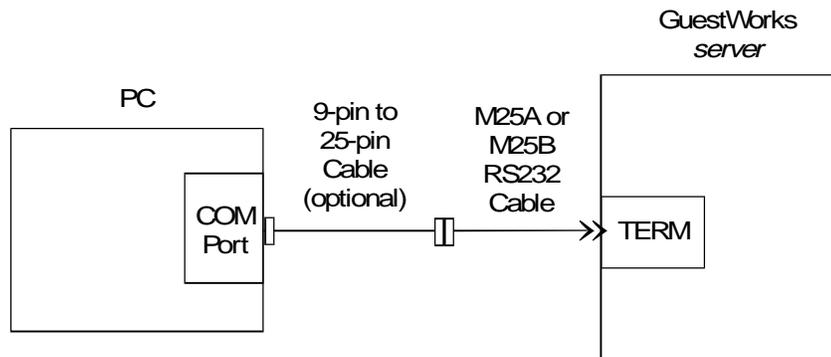
The management interface for administration can be either the customer's PC loaded with the TERRANOVA ECS Administration terminal emulation software or the 715 management terminal. The customer is supposed to set up his or her own PC with TERRANOVA ECS Administration, but technicians are responsible for connecting and setting up the 715. For customers that use their PC for administration, you can use their PC to access administration, or you can use a laptop with terminal emulation software.

If the PC or management terminal is further than 50 feet from the server, there are two ways the remote connection can be done:

- You can install and administer a 7400A/8400B data module for the connection. See *DEFINITY ECS Installation and Test for Single-Carrier Cabinets*, (555-230-894) and *DEFINITY ECS Installation and Upgrades for Compact Single-Carrier Cabinets*, (555-230-124) for more information.
- Customers may want to use a PC located remotely from the server. They can use the modem on the PC to dial in to the Initialization and Administration System (INADS) port.

Figure 1 shows how to connect the customer's PC directly to the server. The components used for this connection include the following:

- Customer's PC, keyboard, and monitor
- One M25A or M25B RS232 cable (or equivalent 25-pin straight-through cable); see Table 15 on Page 147
- One 9-pin to 25-pin transition cable (if using a 9-pin COM port) (comcode 847106945)
- Gender changers, as needed.



**Figure 1. PC Direct Connection to the Server**

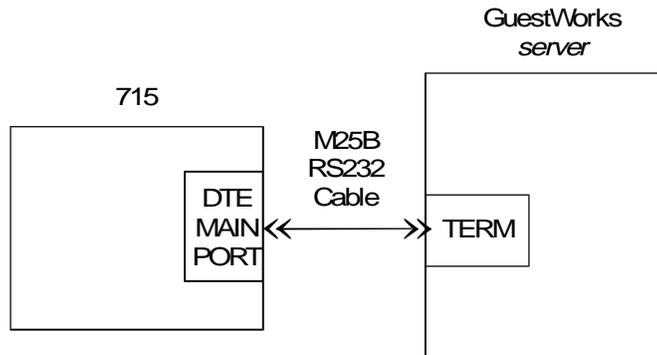
When using the TERRANOVA ECS Administration software, the customer must first access the **Controls** pull-down menu, select **Line Options**, and set the **host** option to **other**. The customer must then set the communication options as shown in Table 1.

**Table 1. TERRANOVA Communication Options**

Option	Value
Emulation	4410
Duplex	Full
Speed	9600
Parity	None
Data Bits	8
Stop Bits	1

Figure 2 shows how you connect the 715 to the server. The components used for this connection include the following:

- One 715 terminal and keyboard
- One M25B RS232 cable (or equivalent straight-through cable)



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**Figure 2. 715 Management Terminal Connections**

Administer the 715 parameters given in Table 2. All but one of these options should default correctly, but they are given here and should be checked for proper operation.

**Table 2. 715 Options**

Terminal Option	Value
Font Size	Large (default)
Autowrap	Off (default)
Baud Rate	9600 (default)
Stop Bit	1 (default)
Data Bits	7 (default)
Parity	Space (default)
Check Parity	Yes (default)
Transmission Flow Control	Xon, Xoff (default)
Enter Key	escapeSB (must be set)

## **Install Telecommunications Cabling**

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See *DEFINITY ECS Installation and Test for Single-Carrier Cabinets*, (555-230-894) and *DEFINITY ECS Installation and Upgrades for Compact Single-Carrier Cabinets*, (555-230-124) for more information about the tasks in this section.

1. Install the cross-connect equipment.
2. Install the cable slack manager.
3. Label the cables and main distribution frame.
4. Route the cables from the cabinet to the cross-connect field.
5. Connect the control carrier outputs cable (the AUX port cable).
6. Install trunk cables among the network interface, the sneak fuse or circuit breaker panel, and the server cabinet.
7. Install the coupled bonding conductor grounding.

## **Activate the Server**

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See *DEFINITY ECS Installation and Test for Single-Carrier Cabinets*, (555-230-894) and *DEFINITY ECS Installation and Upgrades for Compact Single-Carrier Cabinets*, (555-230-124) for more information about the tasks in this section.

1. Set the write-enable switch on the flash-memory card to the write position. A flash card is provided with every server, but you may get a version that has the customer's translations already administered. Save any extra flash cards and return them for reuse.
2. Insert the flash-memory card into the TN777B circuit pack.
3. Ensure that the circuit breakers at the power panel are set to the **ON** position.
4. Set the circuit breakers on the back of each cabinet to the **ON** position.
5. After the server powers up, log into the server at the customer's PC or the 715. Use the `craft` login id and the `crftpw` password.
6. Set the required country options. Use the command path **change system-parameters country-options**.

7. Change the craft password. Use the command path **change password craft**.



**CAUTION:**

*After the craft password is changed, the new password must be safeguarded to prevent unauthorized administration changes. This password **MUST NOT BE REVEALED** to the customer.*

8. Set the date and the time. Use the command path **set time**.
9. Set the server maintenance parameters if the Packet Controller (TN778 circuit pack) is included to support ISDN PRI and BRI. Use the command path **change system-parameters maintenance**.
10. Save the translations. Use the command path **save translation**. Label the translation card with the current date and server name.

## **Connect Hospitality Adjuncts**

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The hospitality adjuncts include the following:

- **Lucent INTUITY Lodging Voice Messaging**

Lucent INTUITY Lodging Voice Messaging is an optional adjunct installed on the MAP/5 platform. Lucent INTUITY Lodging is used for the guest access to voice messages, and Lucent INTUITY AUDIX is used for the office staff to access voice messaging.

- **Lucent INTUITY Lodging Call Accounting**

Lucent INTUITY Lodging Call Accounting is an optional adjunct installed on the MAP/5 platform. If Lucent INTUITY Lodging Call Accounting is not purchased, other call accounting systems can be installed if the call record format is compatible with the GuestWorks *server*. Two typical formats are *Teleser* and *printer*.

Lucent INTUITY Lodging Call Accounting is based on a product from the Homisco Corporation. At most installations, you can expect a technician from Homisco to be on-site to install the software and hardware for the call accounting piece of the product. The Homisco technician will assist you in connecting the call accounting equipment.

For installations that include Lucent INTUITY Lodging Voice Messaging and Lucent INTUITY Lodging Call Accounting, all connections are shown in complete detail. For installations that include voice mail or call accounting from another vendor, the connections are shown up to a definable demarcation point. Connections beyond that demarcation point must be coordinated with the vendor.

- Property Management System (PMS)

The PMS is a vendor-provided product that interfaces to the GuestWorks server according to the *DEFINITY® Enterprise Communications Server (ECS)*, *GuestWorks™ server*, and *System 75 Property Management System Interface Specifications*, (555-231-601). If the PMS follows this specification, the PMS will connect to the server when the correct cabling is installed. The PMS connections are shown up to a definable demarcation point. Connections beyond that demarcation point must be coordinated with the vendor.

- Printers

Up to two serial printers can be installed to print hospitality reports and keep a log of events as they occur on the server. Each printer connects to the server using a 7400A or 8400B data module. The printers are designated as either a “journal/schedule” printer or a “log” printer. The journal/schedule printer records Emergency Access to Attendant calls and Automatic Wakeup calls. The log printer records housekeeping updates when the PMS link is down, in addition to recording any other PMS-related events. These PMS events are shown in “Appendix D — List PMS Down Events” on Page 150.



**NOTE:**

In most cases, only one printer is provided to perform both the journal/schedule and log printer functions.

## **Overall GuestWorks Connectivity**

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Figure 3 shows the overall connectivity for the GuestWorks server when using the MAP/5 for Lucent INTUITY Lodging Voice Messaging, Lucent INTUITY Lodging Call Accounting, plus connections to a PMS. References to the detailed connectivity drawings are shown in this figure. Table 3 also gives references to the detailed connectivity drawings based on the equipment you are installing.

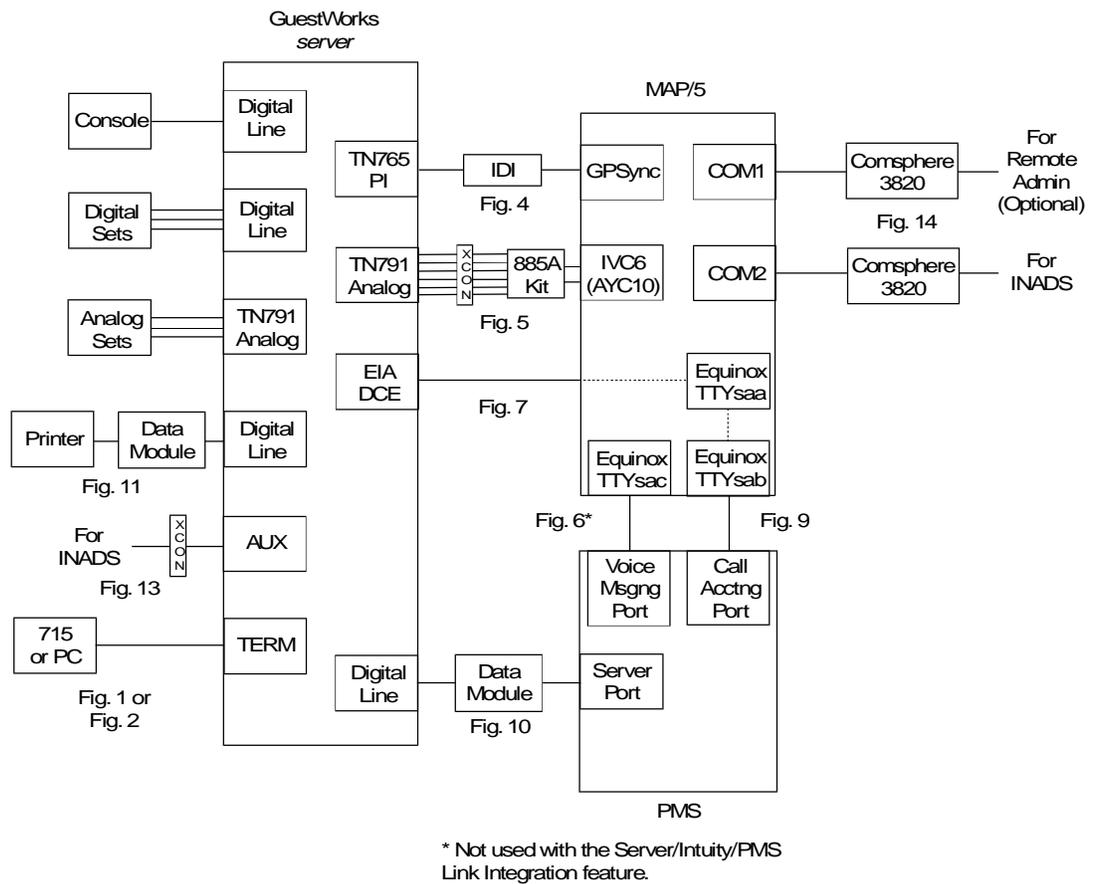


Figure 3. Overall GuestWorks server Connectivity

**Table 3. Matrix for Cabling Diagrams**

From...	To...					
	Server	INTUITY Lodging Voice Messaging	INTUITY Voice Ports	INTUITY Lodging Call Accounting	Generic Call Accounting	PMS
Server		Figure 4	Figure 5	Figure 7	Figure 8	Figure 10
INTUITY Lodging Voice Messaging	Figure 4					Figure 6*
INTUITY Lodging Call Accounting	Figure 7					Figure 9

\* This cabling is not required when using the Server/INTUITY/Link Integration feature.

In Figure 3, there are a variety of digital line circuit packs and voice terminal/data modules that can be used. Table 4 shows which circuit packs should be used to support the different digital voice terminals and data modules.

**Table 4. Digital Line Circuit Packs and Terminal Equipment Compatibility**

Terminal Equipment	Circuit Packs			
	TN754B (4-wire)	TN2181 (2-wire)	TN2214 (2-wire)	TN2224 (2-wire)
302B Console (2-wire)	Yes	Yes	Yes	Yes
302B Console (4-wire)	Yes	No	No	No
302C Console (2-wire)	Yes	Yes	Yes	Yes
7400-Series terminals (4-wire)	Yes	No	No	No
8400-Series terminals (2-wire)	Yes	Yes	Yes	Yes
9400-Series terminals (2-wire)*	Yes	Yes	Yes	Yes

\* Not supported in the United States.

## Server-to-INTUITY Admin Link

Figure 4 shows a detailed connection for the Processor Interface (PI) port on the server to the GPSync card on the MAP/5. This connection is required for any GuestWorks installation using the MAP/5. This data link transfers information to support the Lucent INTUITY AUDIX service for office staff voice messaging. The components used for this connection include the following:

- The PI port (TN765) on the server
- One H600-210 Group 3 cable (50 feet)

The distance limit between the server and the 105B Isolating Data Interface (IDI) is 200 feet. If you need a cable longer than the 50 foot cable provided, order a Group 4 cable (100 feet) or a Group 5 cable (200 feet). See "Appendix B — Parts List" on Page 147 for a list of cables.



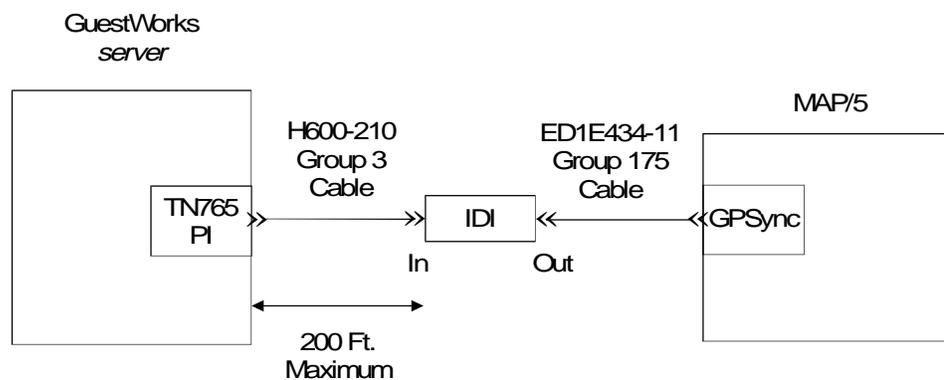
**NOTE:**

If you do locate the server more than 50 feet from the MAP/5 and are using the coresident Lucent INTUITY Lodging Call Accounting system on the MAP/5, the call accounting link limit (50 feet) must be taken into account.

- One 105B IDI unit (comcode 105778179)

The 105B IDI provides electrical isolation and protection between the server and the Lucent INTUITY hardware.

- One ED1E434-11 Group 175 cable (4.5 feet)
- One GPSync card (comcode 406801647) installed in the MAP/5; usually located in slot 1.



**Figure 4. Server-to-INTUITY Admin Link**

## Server-to-INTUITY Voice Port Connections

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Figure 5 shows the connections between the TN791 analog circuit pack ports on the server and the IVC6 (AYC10) voice port card on the MAP/5. This connection provides the voice ports used when guests and office staff call the Lucent INTUITY system for their voice messages. For more information about this connection, consult the *INTUITY MAP/5 Hardware Installation*, (585-310-146). The components used for this connection include the following:

- One or two IVC6 (AYC10) cards in the MAP/5 (comcode 106406580)  
Each IVC6 card supports six voice ports. You can have up to 12 ports for voice messaging. If you have 12 voice ports, you must install two of the 885A connector kits. This figure shows connections for one kit using all six voice ports. Depending on the customer's order, you will install 4, 6, 8, 10, or 12 voice ports.
- Two or four ED5P208-30 Group 16 modular cords  
You need two cords for each IVC6 card.
- One 885A connector kit for each IVC6 card installed in the MAP/5 (comcode 601419666)  
These kits come with the 885A connecting block (comcode 106079270), six RJ11C 2-wire modular cords (comcode 103732582), and two RJ25 6-wire modular cords. The two RJ25 6-wire modular cords are not used in this application. **Do not use the RJ25 cords for any GuestWorks connections; the wiring in the RJ25 cords will not work in this application.**
- Four to twelve 103A modular connecting blocks (one for each voice port) (comcode 105164818)
- Standard cross-connect hardware
- TN791 analog interface.



**NOTE:**

Each TN791 supports 16 analog voice connections. The TN791 wires out the same as a TN746B. When making cross-connects for voice messaging, skip every other port to spread out the voice messaging traffic (for example, 0, 2, 4, 6, and so on); do not connect the voice ports in a contiguous fashion (that is, 0, 1, 2, and so on). This should be done because the TN791 supports simultaneous ringing for only 4 out of 8 ports on each half of the circuit pack. See more about this circuit pack in "Appendix F — Circuit Pack Characteristics" on Page 165.

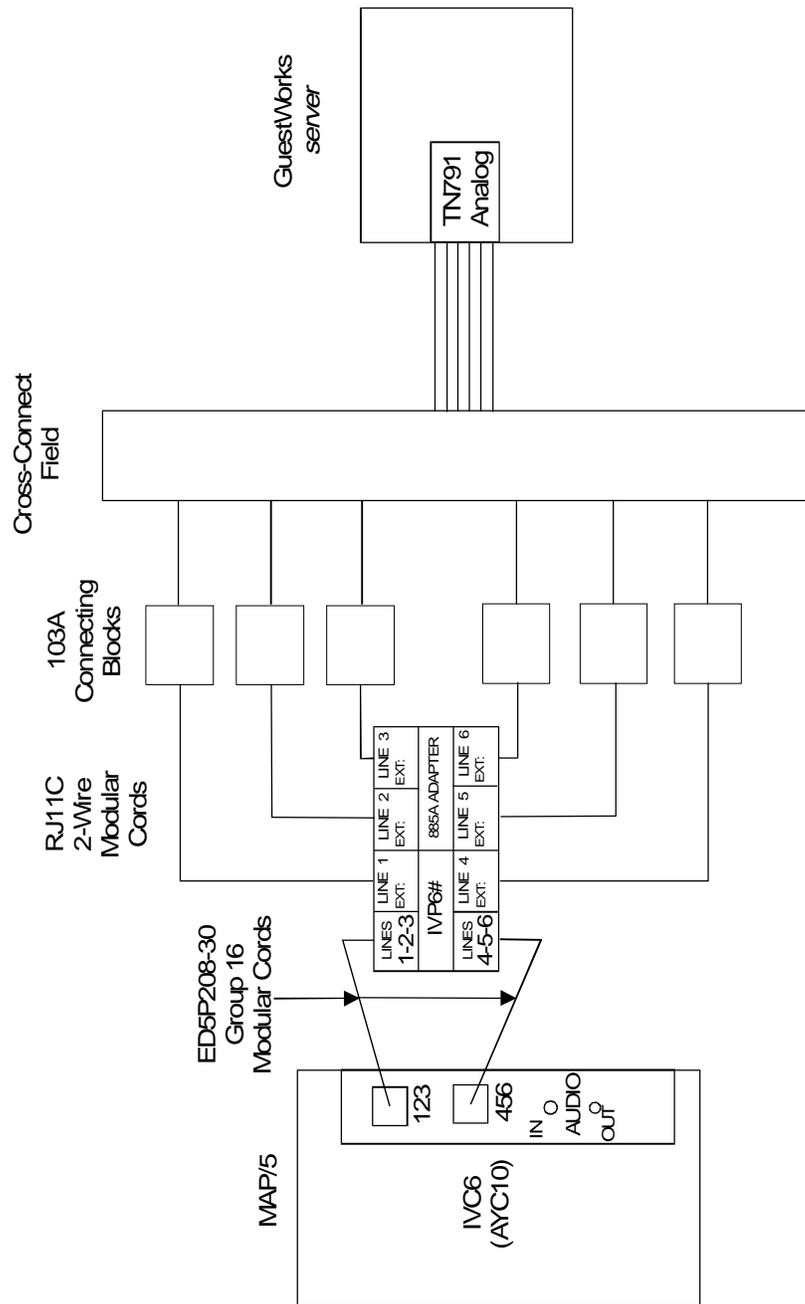


Figure 5. Server-to-INTUITY Voice Port Connections

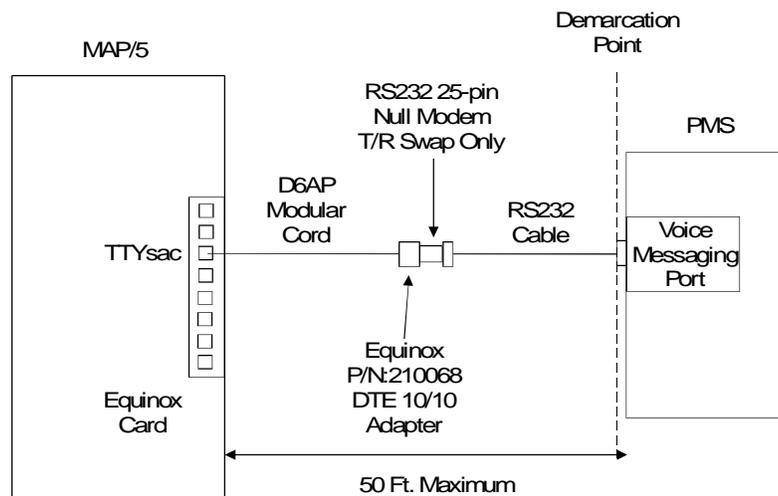
## INTUITY Lodging-to-PMS Link

Figure 6 shows how to connect the MAP/5 to a PMS. This connection is used to activate and deactivate guest voice messaging mailboxes when guests check-in and check-out.

**⇒ NOTE:**  
If the Server/INTUITY/PMS Link Integration feature is used, this connection is not required. See “INTUITY Lodging-to-PMS Translations” on Page 101 for more information about this feature.

The components used for this connection include the following:

- One Equinox card on the MAP/5 (comcode 407009406; J1P260AA1, List 12)
- For this connection, use the third port on the Equinox card. This port is not marked on the card, but is administered in software as port TTYsac.
- One D6AP modular cord (comcode 102937604)
  - One Equinox P/N:210068 DTE 10/10 adapter (DB25 DTE, comcode 406983155); see “Appendix C — Connector Pinouts”
  - One null modem with transmit/receive swapped (all other leads are straight-through) (comcode 407122043)
  - One RS232 cable (use gender changers as needed).



**Figure 6. INTUITY Lodging-to-PMS Link**

### Test Procedure for INTUITY Lodging-to-PMS Link

Using the RS232 Mini-Tester (see the Note on Page 8), check the status of the link where the Equinox adapter connects to the null modem as shown in Figure 6. The leads marked with an asterisk are controlled by the Lucent INTUITY system, and the PMS controls the other leads. Translations for this connection begin on Page 101.

With the mini-tester connected to only the Equinox adapter coming from the MAP/5, the mini-tester should show the following:

TD* ● red	dark ○ RD
RTS* ○ dark	dark ○ CTS
DSR ○ dark	green ● DTR*
CD ○ dark	

With the mini-tester connected to only the PMS at the null modem, the mini-tester should show the following:

TD* ○ dark	red ● RD
RTS* ○ dark	red ● CTS
DSR ● red	dark ○ DTR*
CD ● red	

After the connection is complete but in an idle state, the mini-tester should show the following:

TD* ● red	red ● RD
RTS* ○ dark	red ● CTS
DSR ● red	green ● DTR*
CD ● red	

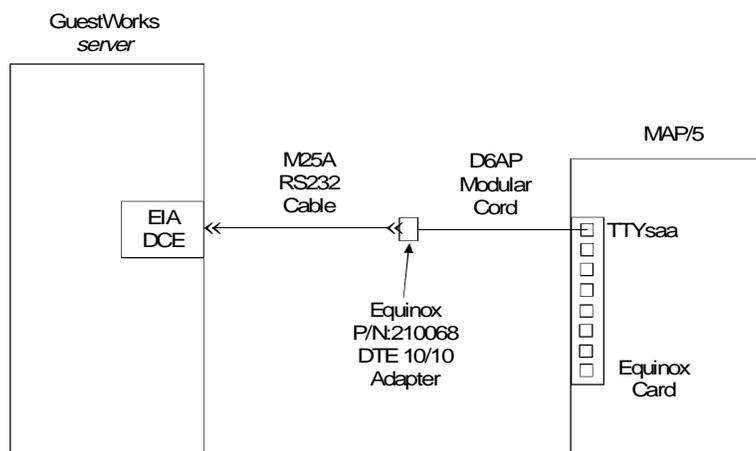
## Server-to-Call Accounting Link (with INTUITY Lodging Call Accounting)

Figure 7 shows how to connect the DCE port on the server to the MAP/5. This connection is used to transfer Call Detail Recording (CDR) information to the Lucent INTUITY Lodging Call Accounting software. The components used for this connection include the following:

- The EIA DCE port on the server
- One M25A RS232 cable (or equivalent straight-through cable) (comcode 105193668)
- One Equinox P/N:210068 DTE 10/10 adapter (DB25 DTE, comcode 406983155); see “Appendix C — Connector Pinouts”
- One D6AP modular cord (comcode 102937604)
- One Equinox card on the MAP/5 (comcode 407009406; J1P260AA1, List 12)

For this connection, use the first port on the Equinox card. This port is not marked on the card, but is administered in software as port TTYsaa.

⇒ **NOTE:**  
 If the distance from the server and the MAP/5 is farther than 50 feet, substitute the DCE port and the M25A RS232 cable with a DCP port and a 7400A or 8400B data module. The connection is similar to the one shown in Figure 10.



**Figure 7. Server-to-Call Accounting Link (with INTUITY Lodging Call Accounting)**

### Test Procedure for Server-to-Call Accounting Link

Using the RS232 Mini-Tester (see the Note on Page 8), check the status of the link where the Equinox adapter connects to the M25A cable as shown in Figure 7. The leads marked with an asterisk are controlled by the server, and the INTUITY system controls the other leads. Translations for this begin on Page 108.

With the mini-tester connected to only the M25A cable, the mini-tester should show the following:

TD	○	dark	red	●	RD*
RTS	○	dark	green	●	CTS*
DSR*	●	green	dark	○	DTR
CD*	●	green			

With the mini-tester connected to only the Equinox adapter, the mini-tester should show the following:

TD	●	red	dark	○	RD*
RTS	○	dark	dark	○	CTS*
DSR*	○	dark	green	●	DTR
CD*	●	red			

After the connection is complete, the mini-tester should show the following (if any of the server leads are dark on an end-to-end connection, the processor pack should be replaced):

TD	●	red	red	●	RD*
RTS	○	dark	green	●	CTS*
DSR*	●	green	green	●	DTR
CD*	●	green			

Another way to test this connection is to connect a dumb terminal to the port and look for call records being sent to the terminal.

## Server-to-Call Accounting Link (Generic Call Accounting)

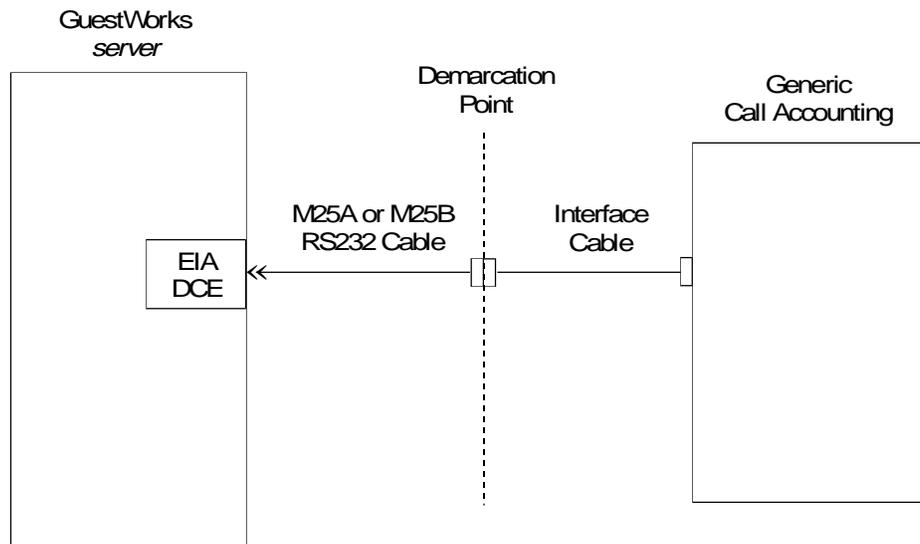
Figure 8 shows how to connect the DCE port on the server to a generic call accounting system. This connection is used to transfer CDR information to the call accounting system. The components used for this connection include the following:

- The DCE port on the server
- One M25A or M25B cable plus gender changers as needed (or equivalent 25-pin straight-through cable)
- One cable to connect from the M25 cable and the interface port on the call accounting system (customer- or vendor-supplied)



### NOTE:

If the distance from the server and the generic call accounting system is farther than 50 feet, substitute the DCE port and the M25A or M25B RS232 cable with a DCP port and a 7400A or 8400B data module. The connection is similar to the one shown in Figure 10.



**Figure 8. Server-to-Call Accounting Link (Generic Call Accounting)**

### Test Procedure for Server-to-Call Accounting Link

Using the RS232 Mini-Tester (see the Note on Page 8), check the status of the link at the demarcation point as shown in Figure 8. The leads marked with an asterisk are controlled by the server, and the generic call accounting controls the other leads. Translations for this connection begin on Page 108.

With the mini-tester connected to only the M25 cable from the server, the mini-tester should show the following:

TD	○ dark	red	● RD*
RTS	○ dark	green	● CTS*
DSR*	● green	dark	○ DTR
CD*	● green		

With the mini-tester connected to only the interface cable to the generic call accounting, the mini-tester should show the following:

TD	● red	dark	○ RD*
RTS	● green	dark	○ CTS*
DSR*	○ dark	green	● DTR
CD*	○ dark		

After the connection is complete, the mini-tester should show the following (if any of the server leads are dark in an end-to-end connection, the processor pack should be replaced):

TD	● red	red	● RD*
RTS	● green	green	● CTS*
DSR*	● green	green	● DTR
CD*	● green		

Another way to test this connection is to connect a dumb terminal to the port and look for call records being sent to the terminal.

## INTUITY Lodging Call Accounting-to-PMS Link

Figure 9 shows another connection between the MAP/5 and a PMS. This connection is used to transmit the call accounting information from the MAP/5 to the PMS. This call detail information has been reformatted from its format on the server for use by the PMS.



**NOTE:**

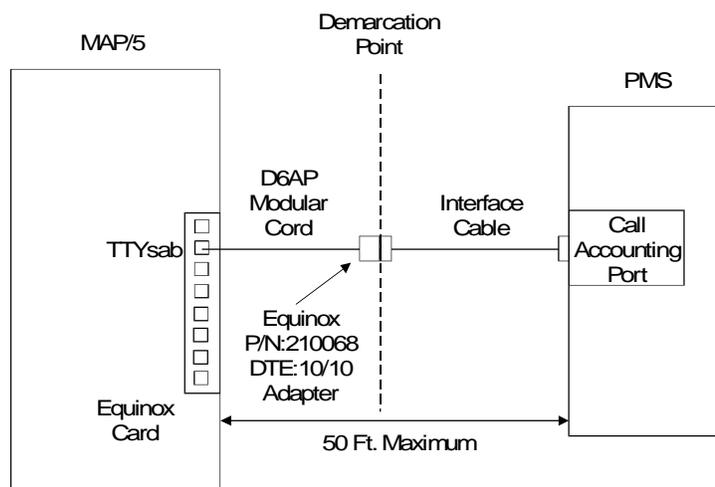
This link between the MAP/5 and the PMS is required to transmit call detail records between the call accounting system and the PMS. This link is separate from the Server/INTUITY/PMS Link Integration feature that allows you to remove one of the links in the integrated solution. See “INTUITY Lodging-to-PMS Link” on Page 24 for more information.

The components used for this connection include the following:

- One Equinox card on the MAP/5 (comcode 407009406; J1P260AA1, List 12)

For this connection, use the second port on the Equinox card. This port is not marked on the card, but is administered in software as port TTYsab.

- One D6AP modular cord (comcode 102937604)
- One Equinox P/N:210068 DTE 10/10 adapter (DB25 DTE, comcode 406983155); see “Appendix C — Connector Pinouts”
- One cable used to connect to the PMS (customer- or vendor-supplied).



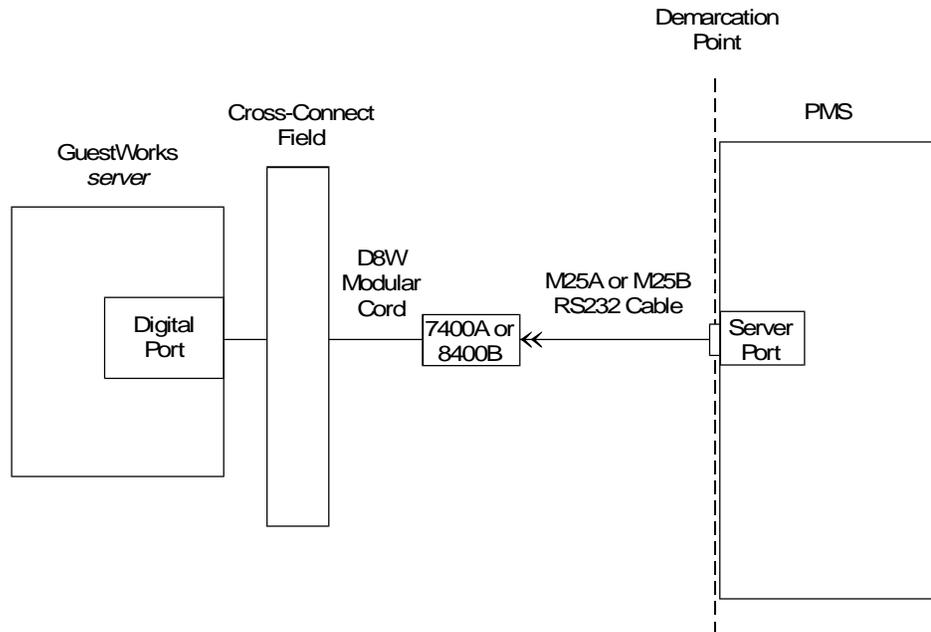
**Figure 9. INTUITY Lodging Call Accounting-to-PMS Link**

## Server-to-PMS Link

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Figure 10 shows how to connect the server to a PMS. This connection is used to transfer the normal hospitality information such as names registration, check-in, check-out, and so on. The components used for this connection include the following:

- One digital communications protocol (DCP) port on the server; the 7400A data module uses a TN754B 4-wire digital port, and the 8400B data module uses a TN2214 or TN2224 2-wire digital port
- Standard cross-connect hardware
- One D8W modular cord
- One 7400A DCP data module optioned as shown in Table 5 or an 8400B data module optioned as shown on Page 33
- One M25A or M25B cable (or equivalent 25-pin straight-through cable); see Table 15.



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**Figure 10. Server-to-PMS Link**

The options for the 7400A used for the server-to-PMS connection are given in Table 5. These options must match the PMS communication parameters, which are usually 9600 bps, 8 data bits, 1 stop bit, and no parity.

The data module interface board must be positioned at the DCE location, and the interface option must be set for Answer-Only mode.

**Table 5. 7400A Options for Server-to-PMS Link**

<b>Set Interface</b>	<b>Set Values</b>
Option	Answer-only mode
<b>Set Option Displays</b>	<b>Set Values</b>
*Set 300 speed	OFF
*Set 1200 speed	OFF
*Set 2400 speed	OFF
*Set 4800 speed	OFF
*Set 9600 speed	ON
*Set 19200 speed	OFF
Set Answer	AUTO
Set Break DISC	LONG
Set CI Lead	OFF
Set CH Lead	OFF
Set CTS Lead	NORMAL
Set DCD Lead	NORMAL
Set DSR Lead	NORMAL
Set DTR Detect	50
Set DTR Lead	FOLLOW
Set LL Lead	OFF
Set Remote Loop	GRANT
Set RI Lead	ON
Set RL Lead	OFF
Set SIGLS DISC	ON
Set TM Lead	OFF

\* The speed is typically set to 9600 for Transparent mode and 1200 for Normal mode. Verify the speed setting with the PMS vendor. Enable other speeds as needed.

The options on the 8400B must be set using an ASCII data terminal or a PC using a terminal emulation package (such as TERRANOVA ECS Administration). You must connect the data terminal or PC to the EIA interface connector on the back of the 8400B. For the server-to-PMS link, only a subset of options must be changed. These options are changed using the AT command set. Use the following steps to set the options on the 8400B:

1. Set the speed on the data terminal or terminal emulation package to match the speed of the PMS link. By doing this, the speed on the 8400B will auto-baud to match the correct speed.
2. From the data terminal or PC, type **a t** . This automatically sets the speed and parity for the connection. The **OK** prompt should display.
3. Type the following command as shown. Before you press , make sure that the command has been entered correctly, because one part of this command turns off keyboard echo (E0); this means that after you enter this command, any keyboard entries will not be displayed.  
**at&F&C1&D2E0Q1S0=1&W0&Y0**
4. Disconnect the data terminal or PC from the 8400B and reconnect the unit as shown in Figure 10.

If your PMS requires a different set of options, consult the *8400B Plus Data Module User's Guide*, (555-020-709).

### Test Procedure for Server-to-PMS Link

Using the RS232 Mini-Tester (see the Note on Page 8), check the status of the link at the 7400A or 8400B as shown in Figure 10 before you connect to the PMS. The leads marked with an asterisk are controlled by the server, and the PMS controls the other leads. Translations for this connection begin on Page 110.

When the mini-tester is connected to only the 7400A or 8400B, the mini-tester should show the following:

TD <input type="radio"/> dark	red <input checked="" type="radio"/> RD*
RTS <input type="radio"/> dark	red <input checked="" type="radio"/> CTS*
DSR* <input checked="" type="radio"/> red	dark <input type="radio"/> DTR
CD* <input checked="" type="radio"/> red	

**⇒ NOTE:**  
RTS will be lit on the front panel of the 7400A.

With the mini-tester connected to only the PMS, the mini-tester should show the following:

TD <input checked="" type="radio"/> red	dark <input type="radio"/> RD*
RTS <input checked="" type="radio"/> green	dark <input type="radio"/> CTS*
DSR* <input type="radio"/> dark	green <input checked="" type="radio"/> DTR
CD* <input type="radio"/> dark	

After the connection is complete, the link will be idle, but the mini-tester should show the following (if any of the server leads are dark in an end-to-end connection, the processor circuit pack should be replaced):

TD <input checked="" type="radio"/> red	red <input checked="" type="radio"/> RD*
RTS <input checked="" type="radio"/> green	red <input checked="" type="radio"/> CTS*
DSR* <input checked="" type="radio"/> red	green <input checked="" type="radio"/> DTR
CD* <input checked="" type="radio"/> red	

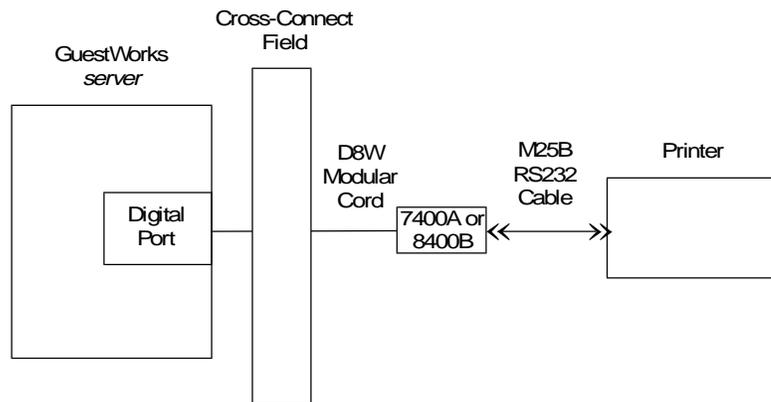
## Journal/Log Printer Connections on the Server

Figure 11 shows how to connect either a journal/schedule printer or a log printer to the server. These printers are used to run hospitality service reports, and to report failed wakeup calls and Do Not Disturb requests.

⇒ **NOTE:**  
In most cases, only one printer is provided to perform both the journal/schedule and log printer functions.

The components used for each printer connection include the following:

- One or two DCP ports on the server; the 7400A data module uses a TN754B 4-wire digital port, and the 8400B data module uses a TN2214 or TN2224 2-wire digital port
- Standard cross-connect hardware
- One or two D8W modular cords
- One or two 7400A DCP data modules optioned as shown in Table 6, or one or two 8400B DCP data modules optioned as shown on Page 37
- One or two M25B cables (or equivalent 25-pin straight-through cables); see Table 15
- One or two model 572 journal/log serial printers (or equivalent; in many cases, a similar Okidata\* printer is now being shipped for GuestWorks).



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**Figure 11. Printer Connections on the Server**

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\* Registered trademark of OKI Electric Co., LTD.

**Table 6. 7400A Options for Journal/Log Printers**

<b>Set Interface</b>	<b>Set Values</b>
Option	Answer-only mode
<b>Set Option Displays</b>	<b>Set Values</b>
Set 300 speed	OFF
Set 1200 speed	OFF
Set 2400 speed	OFF
Set 4800 speed	OFF
Set 9600 speed	ON
Set 19200 speed	OFF
Set Answer	AUTO
Set Break DISC	LONG
Set CI Lead	OFF
Set CH Lead	OFF
Set CTS Lead	NORMAL
Set DCD Lead	NORMAL
Set DSR Lead	NORMAL
Set DTR Detect	50
Set DTR Lead	FOLLOW
Set LL Lead	OFF
Set Remote Loop	GRANT
Set RI Lead	ON
Set RL Lead	OFF
Set SIGLS DISC	ON
Set TM Lead	OFF

The options on the 8400B must be set using an ASCII data terminal or a PC using a terminal emulation package (such as TERRANOVA ECS Administration). You must connect the data terminal or PC to the EIA interface connector on the back of the 8400B. For the journal/log printers, only a subset of options must be changed. These options are changed using the AT command set. Use the following steps to set the options on the 8400B:

1. Set the speed on the data terminal or terminal emulation package to match the speed of the PMS link. By doing this, the speed on the 8400B will auto-baud to match the correct speed.
2. From the data terminal or PC, type **a t** . This automatically sets the speed and parity for the connection. The **OK** prompt should display.
3. Type the following command as shown. Before you press , make sure that the command has been entered correctly, because one part of this command turns off keyboard echo (E0); this means that after you enter this command, any keyboard entries will not be displayed.  
**at&F&C1&D2E0Q1S0=1&W0&Y0**
4. Disconnect the data terminal or PC from the 8400B and reconnect the unit as shown in Figure 11.

If your printer requires a different set of options, consult the *8400B Plus Data Module User's Guide*, (555-020-709).

**Table 7. Model 572 (or Equivalent) Journal/Log Printer Options**

Function		Menu	
Number	Name	Number	Status
01	FORM LENGTH	09	11
02	LPI	01	6
03	CPI	01	10
04	LQ or NLQ	01	LQ
05	BUZZER	01	ON
06	FONT	02	FONTCART
07	RESOLUTION	01	144
11	BUFFER	02	N-LINE
13	PW ON MODE	01	ON-LINE
14	DIRECTION	01	B1-DIR.1
15	BUFF FULL	02	LF + CR
16	P.E.	01	ACTIVE
17	AUTO CARRIAGE RETURN (CR)	01	CR + LF
18	ZERO	01	0
22	AUTO LINE FEED	01	CR ONLY
31	1" SKIP	01	OFF
32	CHAR.SET (GO, GL)	02	USA
33	CHAR.SET (G1, GR)	01	UK
34	CHAR SET (G2)	03	GE
35	CHAR SET (G3)	07	LINE DRAWING
81	OFF-LINE STATE	01	ALL RECEIVE
82	DSR	02	OFF
83	REQUEST TO SEND TIMING	01	RTS
84	CD	02	OFF
85	CLEAR TO SEND (CTS)	02	OFF
91	OVER RUN	02	256
92	DATA BIT	02	8
93	PROTOCOL	03	XON/XOFF
94	STOP BIT	01	1
95	PARITY	01	NONE
96	PBS	01	9600

### Test Procedure for Journal/Log Printers

Using the RS232 Mini-Tester (see the Note on Page 8), check the status of the connection at the 7400A or 8400B as shown in Figure 11. The leads marked with an asterisk are controlled by the server, and the printer controls the other leads. Translations for this connection begin on Page 127.

With the mini-tester connected to only the 7400A or 8400B, the mini-tester should show the following:

TD <input type="radio"/> dark	red <input checked="" type="radio"/> RD*
RTS <input type="radio"/> dark	red <input checked="" type="radio"/> CTS*
DSR* <input checked="" type="radio"/> red	dark <input type="radio"/> DTR
CD* <input checked="" type="radio"/> red	

**⇒ NOTE:**  
RTS will be lit on the front panel of the 7400A.

With the mini-tester connected to only the printer, the mini-tester should show the following:

TD <input checked="" type="radio"/> red	dark <input type="radio"/> RD*
RTS <input checked="" type="radio"/> green	dark <input type="radio"/> CTS*
DSR* <input type="radio"/> dark	green <input checked="" type="radio"/> DTR
CD* <input type="radio"/> dark	

After the connection is complete, the link is idle and no software is running, but the mini-tester should show the following:

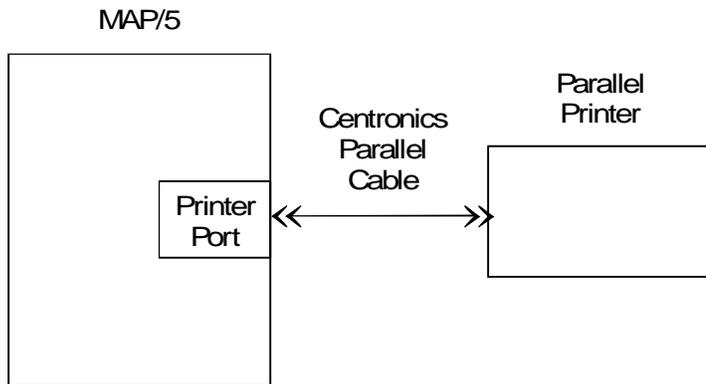
TD <input checked="" type="radio"/> red	red <input checked="" type="radio"/> RD*
RTS <input checked="" type="radio"/> green	red <input checked="" type="radio"/> CTS*
DSR* <input checked="" type="radio"/> red	green <input checked="" type="radio"/> DTR
CD* <input checked="" type="radio"/> red	

### Printer Connection on the INTUITY

---

Figure 12 shows how to connect a printer to the MAP/5. This is an optional printer that the customer may purchase to print Lucent INTUITY Lodging Call Accounting reports. The components used for this connection include the following:

- One Centronics parallel printer cable (customer-provided)
- One parallel printer (customer-provided).



---

**Figure 12. Printer Connection on the INTUITY**

## Server-to-INADS Connections

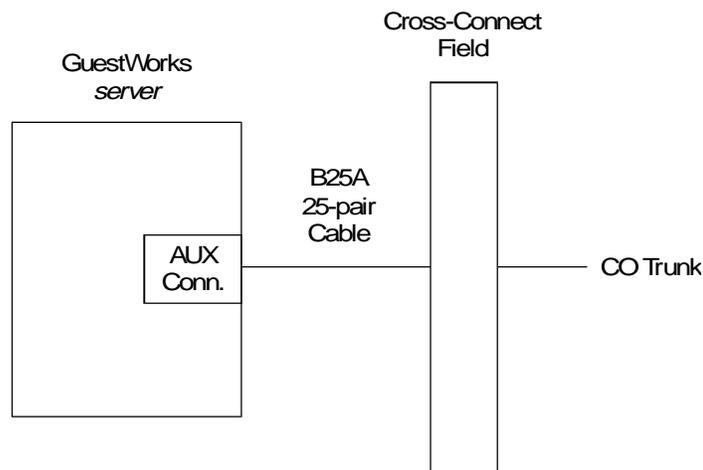
---

Figure 13 shows how the INADS port is connected at the server for remote maintenance access.

**⇒ NOTE:**  
This INADS connection is typically installed only for installations in the United States. Contact your local support organization to see if INADS is required in your service area.

The components used for this connection include the following:

- The AUX connector on the server
- One B25A 25-pair cable for cross-connections (tie the CO trunk to the last pair on this cable)
- Standard cross-connect hardware
- One CO trunk for dedicated access.



---

**Figure 13. INADS Connection for Remote Access**

## INADS Acceptance

After connecting the CO trunk for INADS access, call the INADS hotline at 1-800-248-1111 in the United States. If the installation is outside of the United States, contact your Center of Excellence (COE) for information about registering the server. You will be instructed to give them the dial-up number, the customer identification number, serial number, and other information. You will also be instructed to add some information to the system maintenance parameters screen.

```
change system-parameters maintenance                               Page 1 of 2
      MAINTENANCE-RELATED SYSTEM PARAMETERS

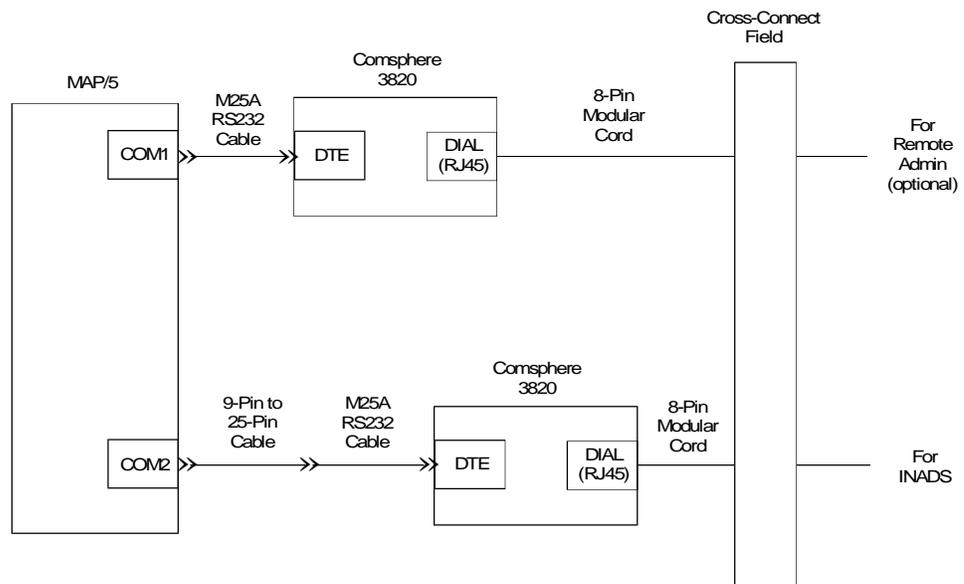
OPERATIONS SUPPORT PARAMETERS
  Product Identification: 1000000000
    OSS Telephone Number:
  Alarm Origination Activated? n      Abbrev Alarm Report: y
  Cleared Alarm Notification? n      Suspension Threshold: 5
  Restart Notification? n
  Test Remote Access Port? n
  CPE Alarm Activation Level: none
  Packet Bus Activated? n
  Customer Access to INADS Port? n

SCHEDULED MAINTENANCE
  Start Time: 05 : 00  Stop Time: 06 : 00
  Daily Maintenance: daily
  Save Translation: daily
  Control Channel Interchange: no
  System Clocks Interchange: no
  SPE Interchange: no
  EXP-LINK Interchange: no
```

## MAP/5 Remote Access Connections

Figure 14 shows how to connect the Paradyne Comsphere\* 3820 modems to the MAP/5 for remote access. The INADS access is required, but the remote administration is optional. See the Lucent INTUITY documentation for more information about this remote access connection. The components required for this connection include the following:

- One or two Comsphere 3820 modems (comcode 107560534)
- One straight-through 9-pin to 25-pin transition cable (required for the INADS connection) (comcode 847106945)
- One or two M25A cables (or equivalent straight-through cable) (comcode 105193668)
- One or two 8-pin modular cords
- Standard cross-connect hardware
- One or two CO or DID trunks.



**Figure 14. MAP/5 Remote Access Connections**

\* Comsphere is a registered trademark of Paradyne Corp.

## INADS Alarm Origination Download

You can have the Comsphere 3820 automatically configured by doing an alarm origination download. To start this download, do the following:

1. Use the **Customer/Services Administration, Alarm Management** command to display the following screen:

Alarm Management	
Product ID	2200000000
Alarm Destination	18005353573
Alarm Origination	ACTIVE
Alarm Level	MAJOR
Alarm Suppression	INACTIVE
Clear Alarm Notification	ACTIVE

2. Enter the information as shown in the screen, using your actual Product ID, Alarm Destination phone number (the INADS number) and Alarm Level (MINOR or MAJOR depending on the maintenance contract).
3. Once the options are correct, press **F3** to save the options. Press  to continue.
4. Press **F8** to select the Chg Keys function.
5. Press **F1** to select the Test Alarm function.
6. Select the Execute Alarm Origination Test menu item.
7. Press **y** to start the test. The alarm origination download takes 2 to 5 minutes to complete.
8. After the download is complete, select the Review Latest Test Results menu item. The result message should say Alarm origination test successful.

For more details on this procedure, see *INTUITY Software Installation for Release 3.0*, (585-310-160).

---

## Translations and Testing

---

The following sections contain translations and testing required to successfully administer the GuestWorks *server*, the Lucent INTUITY Lodging Voice Messaging, and the Lucent INTUITY Lodging Call Accounting. Only the most important fields are highlighted with either required or suggested translations. Unless specified otherwise, the server defaults are acceptable.



### NOTE:

While you are doing these translations, occasionally save what you have done using the command **save translation**. This could save you time retranslating if you lose power during installation. It takes about 10 minutes for each translation save to complete.

## Miscellaneous Translations

---

The following miscellaneous translations should be done before you administer the links to the GuestWorks adjuncts:

- Time of day and date on the Lucent INTUITY
- Server billable features
- Dial plan on the server and the Lucent INTUITY
- Class of restriction (COR) on the server
- Class of service (COS) on the server and the Lucent INTUITY
- Lucent INTUITY system and FAX parameters
- Trunk groups on the server
- Feature access codes on the server
- Station translations on the server
- Subscribers on the Lucent INTUITY
- Attendant Backup
- Attendant console button layouts
- Backup voice terminal button layouts
- Recorded Announcements

- Emergency Access to Attendant
- Attendant Crisis Alert
- Direct Access Calling
- Dial by Name
- Trunk-to-Trunk Transfer.

### **Time of Day and Date (INTUITY)**

---

Use the **Customer/Services Administration, System Management, UNIX Management, UNIX Date and Time** command to set the time and date on the Lucent INTUITY.

```
+-----+
+   UNIX Date and Time   +
+-----+
| Date:           April 22, 1997 |
| Time:                3:39 |
| AM/PM:                PM |
| Time Zone:           Mountain |
| Is Daylight Saving Time used: YES |
+-----+
```

## Billable Features (Server)

---

Use the following screens to verify that the features paid for by the customer have been enabled. If all the customer's features have not been enabled, call the INADS group (or your COE) and have them dial in and enable the correct features.

```
display system-parameters customer-options
                                OPTIONS
```

```

        Hospitality (Basic)? y
        Hospitality Enhancements? y
                ISDN-PRI? y
        ISDN-PRI over PACCON? y

        Terminal Trans. Init. (TTI)? y

                ACD? n
                BCMS (Basic)? n
```

(NOTE: You must logoff & login to effect the permission changes.)

```
display system-parameters guestworks-bcs-options
                                GUESTWORKS/BCS OPTIONS
```

Page 1 of 1

```

        Day Mode TAAS Pickup & Backup Station Audible Alerting? y
        Controlled Toll Restriction replaces: nothing
                Dual Wakeups? y
        Room Activated Wakeup With Tones? y
                Dial By Name? y
```



**NOTE:**

If the Wakeup Activation via Tones feature is enabled (Room Activated Wakeup With Tones?), the Speech Synthesizer circuit pack (TN725B) is disabled from service. This means that guests cannot enter their own Do Not Disturb requests.

## Dial Plan (Server)

Use the following screens to administer the server dial plan based on the customer's requirements.



**NOTE:**

The PMS interface supports 3-, 4-, or 5-digit extensions, but be aware that prefixed extensions do not send the entire number across the interface. Only the assigned extension number is sent. Therefore, you should not use prefixed extensions for numbers that are also going to use the Insert/Delete Digit function (see "Hospitality Parameters" on Page 111).

```
change dialplan
                                DIAL PLAN RECORD

North American Area Code: 303
ARS Prefix 1 Required? y
Uniform Dialing Plan: none

FIRST DIGIT TABLE
First                               Length
Digit - 1 -           - 2 -           - 3 -           - 4 -           - 5 -           - 6 -
1:                               extension
2:                               extension
3:                               extension
4:                               extension
5:                               extension
6:                               extension
7: misc
8: fac
9: fac
0: attd
*:                               fac
#:                               fac
```

```
change second-digit 7
                                SECOND DIGIT TABLE FOR DIGIT 7

SECOND DIGIT TABLE
Digit Identification  Number of      Digit Identification  Number of
                        Digits                    Digits
0: tac                2              5:                    0
1: extension          3              6:                    0
2: tac                3              7:                    0
3: fac                3              8: extension          4
4: fac                3              9: extension          4
```

## Dial Plan (INTUITY)

The following screen identifies the range of mailboxes that can be activated by the Lucent INTUITY. This is part of the Lucent INTUITY **AUDIX Administration** and must be administered to match the server's dial plan.

```

change machine                                     Page 1 of 1
                                     MACHINE PROFILE
Machine Name: local                             Type: local                             Location: local

Voiced Name? n                                  Extension Length: 3
Voice ID: 0                                     Default Community: 1

ADDRESS RANGES
Prefix          Start Ext.  End Ext.      Warnings
1:              100          799
2:
3:
4:
5:
6:
7:
8:
9:
10:

```

If you change the `Extension Length` field, you must stop and restart the voice system. To stop the voice system, use the path **Customer/Services Administration, System Management, System Control, Stop Voice System**. To start the voice system, use the path **Customer/Services Administration, System Management, System Control, Start Voice System**.

## Class of Restriction (Server)

You must create several Classes of Restriction (COR) to separate features and services among the different groups of users and equipment. The COR also controls calling permissions between CORs. You can restrict one group of users from calling another group through the COR. The following is a list of these general COR groups (and the COR number used in the screen examples):

- Guest rooms (COR 1)
- Front desk and housekeeping (COR 2; same setup as COR 1)
- Office staff (COR 3; same setup as COR 1)
- Guest services (room service, kitchen, etc) (COR 4)
- Direct Access Calling procedures (COR 30)
- Lucent INTUITY AUDIX voice ports and hunt groups (COR 40; same setup as COR 30)

- Netcon, processor interface, and data modules (COR 50)
- Trunk groups (each trunk group must have a unique COR) (COR 20 and COR 21).

The following screens show typical COR assignments for each of the groupings. All levels of restriction must be agreed upon by the customer.

This is an example COR for the guest rooms, front desk and housekeeping, and the office staff.

```

change cor 1                                     Page 1 of 2
                                     CLASS OF RESTRICTION
COR Number: 1
COR Description: GUEST ROOMS
FRL: 7                                           APLT? y
Calling Party Restriction: none
Called Party Restriction: none
Time of Day Chart: 1                            Forced Entry of Account Codes? n
Priority Queuing? n
Restriction Override: all                       Facility Access Trunk Test? n
Restricted Call List? n
Access to MCT? y                               Fully Restricted Service? n
Category For MFC ANI: 7
Send ANI for MFE? n
Hear System Music on Hold? y
    
```

```

change cor 1                                     Page 2 of 2
                                     CLASS OF RESTRICTION
CALLING PERMISSION (Enter "y" to grant permission to call specified COR)
0? n  12? n  24? n  36? n  48? n  60? n  72? n  84? n
1? y  13? n  25? n  37? n  49? n  61? n  73? n  85? n
2? y  14? n  26? n  38? n  50? n  62? n  74? n  86? n
3? y  15? n  27? n  39? n  51? n  63? n  75? n  87? n
4? y  16? n  28? n  40? y  52? n  64? n  76? n  88? n
5? n  17? n  29? n  41? n  53? n  65? n  77? n  89? n
6? n  18? n  30? n  42? n  54? n  66? n  78? n  90? n
7? n  19? n  31? n  43? n  55? n  67? n  79? n  91? n
8? n  20? n  32? n  44? n  56? n  68? n  80? n  92? n
9? n  21? n  33? n  45? n  57? n  69? n  81? n  93? n
10? n 22? n  34? n  46? n  58? n  70? n  82? n  94? n
11? n 23? n  35? n  47? n  59? n  71? n  83? n  95? n
    
```

This is an example COR for the guest services.

```

change cor 4                                     Page 1 of 2
                                     CLASS OF RESTRICTION
COR Number: 4
COR Description: GUEST SERVICES
FRL: 3                                           APLT? y
Calling Party Restriction: none
Called Party Restriction: none
Time of Day Chart: 1                            Forced Entry of Account Codes? n
Priority Queuing? n
Restriction Override: all                       Facility Access Trunk Test? n
Restricted Call List? n
Access to MCT? y                               Fully Restricted Service? n
Category For MFC ANI: 7
Send ANI for MFE? n
Hear System Music on Hold? y
    
```

```

change cor 4                                     Page 2 of 2
                                     CLASS OF RESTRICTION
CALLING PERMISSION (Enter "y" to grant permission to call specified COR)
0? n  12? n  24? n  36? n  48? n  60? n  72? n  84? n
1? y  13? n  25? n  37? n  49? n  61? n  73? n  85? n
2? y  14? n  26? n  38? n  50? n  62? n  74? n  86? n
3? y  15? n  27? n  39? n  51? n  63? n  75? n  87? n
4? y  16? n  28? n  40? y  52? n  64? n  76? n  88? n
5? n  17? n  29? n  41? n  53? n  65? n  77? n  89? n
6? n  18? n  30? n  42? n  54? n  66? n  78? n  90? n
7? n  19? n  31? n  43? n  55? n  67? n  79? n  91? n
8? n  20? n  32? n  44? n  56? n  68? n  80? n  92? n
9? n  21? n  33? n  45? n  57? n  69? n  81? n  93? n
10? n 22? n  34? n  46? n  58? n  70? n  82? n  94? n
11? n 23? n  35? n  47? n  59? n  71? n  83? n  95? n
    
```

This is an example COR for the Direct Access Calling procedures, Lucent INTUITY AUDIX voice ports, and Lucent INTUITY AUDIX hunt groups.

```

change cor 30                                     Page 1 of 2
                                     CLASS OF RESTRICTION
COR Number: 30
COR Description: DIRECT ACCESS CALLING
FRL: 0                                           APLT? y
Calling Party Restriction: outward
Called Party Restriction: none
Time of Day Chart: 1                            Forced Entry of Account Codes? n
Priority Queuing? n
Restriction Override: all                       Facility Access Trunk Test? n
Restricted Call List? n
Access to MCT? y                               Fully Restricted Service? n
Category For MFC ANI: 7
Send ANI for MFE? n
Hear System Music on Hold? y
    
```

```

change cor 40                                     Page 2 of 2
                                     CLASS OF RESTRICTION
CALLING PERMISSION (Enter "y" to grant permission to call specified COR)
0? n  12? n  24? n  36? n  48? n  60? n  72? n  84? n
1? y  13? n  25? n  37? n  49? n  61? n  73? n  85? n
2? y  14? n  26? n  38? n  50? n  62? n  74? n  86? n
3? y  15? n  27? n  39? n  51? n  63? n  75? n  87? n
4? y  16? n  28? n  40? n  52? n  64? n  76? n  88? n
5? n  17? n  29? n  41? n  53? n  65? n  77? n  89? n
6? n  18? n  30? n  42? n  54? n  66? n  78? n  90? n
7? n  19? n  31? n  43? n  55? n  67? n  79? n  91? n
8? n  20? n  32? n  44? n  56? n  68? n  80? n  92? n
9? n  21? n  33? n  45? n  57? n  69? n  81? n  93? n
10? n 22? n  34? n  46? n  58? n  70? n  82? n  94? n
11? n 23? n  35? n  47? n  59? n  71? n  83? n  95? n
    
```

This is an example COR for the netcon, processor interface link, and data modules.

```

change cor 50                                     Page 1 of 2
                                         CLASS OF RESTRICTION
COR Number: 50
COR Description: NETCON/PROC LINK/DATA MODULES
FRL: 7                                           APLT? y
Calling Party Restriction: none
Called Party Restriction: none
Time of Day Chart: 1                            Forced Entry of Account Codes? n
Priority Queuing? n
Restriction Override: all                       Facility Access Trunk Test? n
Restricted Call List? n
Access to MCT? y                               Fully Restricted Service? n
Category For MFC ANI: 7
Send ANI for MFE? n
Hear System Music on Hold? y
    
```

```

change cor 50                                     Page 2 of 2
                                         CLASS OF RESTRICTION
CALLING PERMISSION (Enter "y" to grant permission to call specified COR)
0? n  12? n  24? n  36? n  48? n  60? n  72? n  84? n
1? n  13? n  25? n  37? n  49? n  61? n  73? n  85? n
2? n  14? n  26? n  38? n  50? y  62? n  74? n  86? n
3? n  15? n  27? n  39? n  51? n  63? n  75? n  87? n
4? n  16? n  28? n  40? n  52? n  64? n  76? n  88? n
5? n  17? n  29? n  41? n  53? n  65? n  77? n  89? n
6? n  18? n  30? n  42? n  54? n  66? n  78? n  90? n
7? n  19? n  31? n  43? n  55? n  67? n  79? n  91? n
8? n  20? n  32? n  44? n  56? n  68? n  80? n  92? n
9? n  21? n  33? n  45? n  57? n  69? n  81? n  93? n
10? n 22? n  34? n  46? n  58? n  70? n  82? n  94? n
11? n 23? n  35? n  47? n  59? n  71? n  83? n  95? n
    
```

This is an example COR for an outgoing trunk group. Each trunk group must have a unique COR.

```
change cor 20                                     Page 1 of 2
                                     CLASS OF RESTRICTION
COR Number: 20
COR Description: OUTGOING TRUNK GROUP
FRL: 0                                           APLT? y
Calling Party Restriction: outward
Called Party Restriction: none
Time of Day Chart: 1                            Forced Entry of Account Codes? n
Priority Queuing? n
Restriction Override: all                       Facility Access Trunk Test? n
Restricted Call List? n
Access to MCT? y                               Fully Restricted Service? n
Category For MFC ANI: 7
Send ANI for MFE? n
Hear System Music on Hold? y
```

```
change cor 20                                     Page 2 of 2
                                     CLASS OF RESTRICTION
CALLING PERMISSION (Enter "y" to grant permission to call specified COR)
0? n  12? n  24? n  36? n  48? n  60? n  72? n  84? n
1? n  13? n  25? n  37? n  49? n  61? n  73? n  85? n
2? n  14? n  26? n  38? n  50? n  62? n  74? n  86? n
3? n  15? n  27? n  39? n  51? n  63? n  75? n  87? n
4? n  16? n  28? n  40? n  52? n  64? n  76? n  88? n
5? n  17? n  29? n  41? n  53? n  65? n  77? n  89? n
6? n  18? n  30? n  42? n  54? n  66? n  78? n  90? n
7? n  19? n  31? n  43? n  55? n  67? n  79? n  91? n
8? n  20? y  32? n  44? n  56? n  68? n  80? n  92? n
9? n  21? y  33? n  45? n  57? n  69? n  81? n  93? n
10? n 22? y  34? n  46? n  58? n  70? n  82? n  94? n
11? n 23? y  35? n  47? n  59? n  71? n  83? n  95? n
```

This is an example COR for an incoming trunk group. Each trunk group must have a unique COR.

```
change cor 21                                     Page 1 of 2
                                         CLASS OF RESTRICTION
COR Number: 21
COR Description: INCOMING TRUNK GROUP
FRL: 0                                           APLT? y
Calling Party Restriction: none
Called Party Restriction: none
Time of Day Chart: 1                            Forced Entry of Account Codes? n
Priority Queuing? n
Restriction Override: all                       Facility Access Trunk Test? n
Restricted Call List? n
Access to MCT? y                               Fully Restricted Service? n
Category For MFC ANI: 7
Send ANI for MFE? n
Hear System Music on Hold? y
```

```
change cor 21                                     Page 2 of 2
                                         CLASS OF RESTRICTION
CALLING PERMISSION (Enter "y" to grant permission to call specified COR)
0? n  12? n  24? n  36? n  48? n  60? n  72? n  84? n
1? n  13? n  25? n  37? n  49? n  61? n  73? n  85? n
2? n  14? n  26? n  38? n  50? n  62? n  74? n  86? n
3? n  15? n  27? n  39? n  51? n  63? n  75? n  87? n
4? n  16? n  28? n  40? n  52? n  64? n  76? n  88? n
5? n  17? n  29? n  41? n  53? n  65? n  77? n  89? n
6? n  18? n  30? y  42? n  54? n  66? n  78? n  90? n
7? n  19? n  31? n  43? n  55? n  67? n  79? n  91? n
8? n  20? n  32? n  44? n  56? n  68? n  80? n  92? n
9? n  21? n  33? n  45? n  57? n  69? n  81? n  93? n
10? n 22? n  34? n  46? n  58? n  70? n  82? n  94? n
11? n 23? n  35? n  47? n  59? n  71? n  83? n  95? n
```

## Class of Service (Server)

You must assign the Class of Service (COS) on the server. A unique COS must be assigned to each of the following groups of users and equipment types on the server:



**CAUTION:**

*Do not assign the Client Room feature to the front desk, housekeeping, office staff, and guest services COS. If assigned as a Client Room COS, the name field on the station form will not be saved in translations. In addition, do not assign Console Permissions to any Class of Service except for the attendant consoles and backup voice terminals.*

- Front desk and housekeeping (COS 0)

Voice terminals and attendant consoles used for check-in/check-out and Message Waiting Notification must have Console Permissions enabled in the COS. Designated stations used for housekeeping updates must have Console Permissions enabled in the COS.

- Guest rooms (COS 1)

Guest rooms where Message Waiting Notification is used to light message lamps must have Client Room enabled in the COS.

- Office staff (COS 2)

- Guest services (COS 3)

- Data modules (COS 15).

The following screen shows an example COS using the COS numbers given in the previous list. Features assigned with the COS must be approved by the customer.

change cos	CLASS OF SERVICE															Page	1 of	1	
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15			
Auto Callback	y	n	y	y	n	n	n	n	n	n	n	n	n	n	n	n			
Call Fwd-All Calls	n	n	y	n	n	y	n	n	n	n	n	n	n	n	n	n			
Data Privacy	n	y	n	n	n	n	n	n	n	n	n	n	n	n	n	n			y
Priority Calling	y	n	y	y	n	n	n	n	n	n	n	n	n	n	n	n			
Console Permissions	y	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n			
Off-hook Alert	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n	n			
Client Room	n	y	n	n	n	n	n	n	n	n	n	n	n	n	n	n			
Restrict Call Fwd-Off Net	n	y	n	y	y	y	y	y	y	y	y	y	y	y	y	y			n
Call Forwarding Busy/DA	n	n	y	n	n	n	n	n	n	n	n	n	n	n	n	n			

## Class of Service (INTUITY)

Use the following screens to administer the Lucent INTUITY COS for the guest rooms and the office staff Lucent INTUITY AUDIX subscribers. To access the Lucent INTUITY COS screens, use the **AUDIX Administration** path. On Page 1, the **Type** field must be set to **call-answer**.

```
change cos 0                                     Page 1 of 2
                                     CLASS OF SERVICE

Name: class00      COS Number: 0      Modified? y
Addressing Format: extension

Login Announcement Set: System
System Multilingual is ON      Call Answer Primary Annc. Set: System
Call Answer Language Choice? n  Call Answer Secondary Annc. Set: System

PERMISSIONS  Type: call-answer      Announcement Control? n
Outcalling? n      Priority Messages? n      Broadcast: none
IMAPI Access? n   IMAPI Voice File Transfer? n      Fax? y
```

```
change cos 0                                     Page 2 of 2
                                     CLASS OF SERVICE

INCOMING MAILBOX      Order: fifo      Category Order: nuo
Retention Times (days), New: 10      Old: 10      Unopened: 10

OUTGOING MAILBOX      Order: fifo      Category Order: unfda
Retention Times(days),File Cab: 10      Delivered/Nondeliverable: 5

Voice Mail Message (seconds), Maximum Length: 300 Minimum Needed: 32
Call Answer Message (seconds), Maximum Length: 120 Minimum Needed: 8

End of Message Warning Time (seconds):

Maximum Mailing Lists: 25      Total Entries in all Lists: 250
Mailbox Size (seconds), Maximum: 1200      Minimum Guarantee: 0
```

## System Parameters (INTUITY)

Use the following screens to assign the Lucent INTUITY system parameters. The parameters will vary according to the customer's needs.

```
change system-parameters features                               Page 1 of 4
                        SYSTEM-PARAMETERS FEATURES

LOG-IN PARAMETERS
  Login Retries: 3                Consecutive Invalid Attempts: 18
  System Guest Password:                Minimum Password Length: 6

PASSWORD AGING LIMITS (DAYS)
  Password Expiration Interval: 0      (0 for no password aging)
  Minimum Age Before Changes: 0
  Expiration Warning: 0              (0 for no warning)

INPUT TIME LIMITS (SECONDS)
  Normal: 60      Full Mailbox Timeout: 5      Wait (*W): 180
  Between Digits at Auto-attendant or Standalone Menu: 3  (3-12)

DISCONNECT OPTIONS
  Quick Silence Disconnect? n          Silence Limit? 30 (5-30 seconds)
```

```
change system-parameters features                               Page 2 of 4
                        SYSTEM-PARAMETERS FEATURES

MISCELLANEOUS PARAMETETERS
  Broadcast Mailbox Extension:
  System Prime Time, Start: 08:00      End: 17:00d Length: 6
  Increment(1/s), Rewind: s           Advance: s

FEATURE ACTIVATION
  Traffic Collection? y
  Name Record by Subscriber? y
  Multiple Personal Greetings? y
  End of Message Warning? y           Warning Time (seconds): 15
  Priority on Call Answer? n
  Call Answer Disable? n
  Address Before Record? n
```

There are several fields important to system security. On Page 3, the Transfer Type field should be set to **enhanced\_cover\_0**. This will restrict the voice ports from calling trunk access codes assigned to the trunk groups. The Transfer Restriction field should be set to **subscribers** to restrict call transfers out of Lucent INTUITY AUDIX for subscribers (office staff) only and not guests. The Covering Extension field must have either the attendant console extension number or a front desk extension number. If the Covering Extension is not administered, callers that "zero out" from the voice messaging system will hear "Operator not assigned," and the caller cannot receive assistance.

```
change system-parameters features                                     Page 3 of 4
                        SYSTEM-PARAMETERS FEATURES

CALL TRANSFER OUT OF AUDIX
Transfer Type: enhanced_cover_0                                Transfer Restriction: subscribers
Covering Extension: 195

ANNOUNCEMENT SETS
System: us-eng                                                Administrative:

RESCHEDULING INCREMENTS FOR UNSUCCESSFUL MESSAGE DELIVERY
Incr 1: 0 days 0 hrs 5 mins      Incr 2: 0 days 0 hrs 15 mins
Incr 3: 0 days 0 hrs 30 mins     Incr 4: 0 days 1 hrs 0 mins
Incr 5: 0 days 2 hrs 0 mins      Incr 6: 0 days 6 hrs 0 mins
Incr 7: 1 days 0 hrs 0 mins      Incr 8: 2 days 0 hrs 0 mins
Incr 9: 7 days 0 hrs 0 mins      Incr10: 14 days 0 hrs 0 mins
```

```
change system-parameters features                                     Page 4 of 4
                        SYSTEM-PARAMETERS FEATURES

NETWORKING PARAMETERS

Automatic Deletion of Non-administered Remote Subscribers
Days without Activity: 0                                          Even If on a Mailing List? n

FAX PARAMETERS
Called Subscriber Id:
Print Destination Prefix:
```

## FAX Parameters (INTUITY)

If FAX messaging is installed on the Lucent INTUITY system, use the following screens to enable FAX messaging options. See *INTUITY Lodging Administration and Feature Operations*, (585-310-559), and *INTUITY Software Installation for Release 3.0*, (585-310-160), for more information.

Use the **Lodging Administration, FAX Add-on Administration, FAX System Parameters Administration** command to enable the system FAX messaging options.

```
+-----+
+           FAX System Parameter Administration           +
+-----+
|           Allow delivery of FAX to any number?: Yes     |
| Maximum number of digits allowed in the FAX number:15  |
|   Naximum number of tries to deliver a FAX:5          |
| Maximum number of channels to use for FAX delivery:2   |
|           First retry interval (min):5                 |
|           Second retry interval (min):10               |
|           Subsequent retries interval (min):30         |
| String of digits to prefix to the FAX number:*99      |
| Use prefix only if entered number is greater than:6   |
|           digits                                       |
|           Guest services FAX machine:810               |
+-----+
```

Use the **Lodging Administration, FAX Add-on Administration, Guest FAX Profile Administration** command to enable the system FAX messaging options.

```
+-----+
+           Guest FAX Profile Administration             +
+-----+
|           Extension:733                                 |
|           FAX mailbox for guest ON?:Yes               |
|           Naximum number of FAX messages:3           |
|           Deliver FAX messages to any phone number?:Yes |
| Keep FAX messages active in the mailbox after delivery?:No |
|           Extension of the in-room FAX machine:345     |
+-----+
```

## Trunk Groups (Server)

Use the following screen to assign each trunk group. Each trunk group must have a different COR, enable CDR Reports for every trunk group, and the Dial Access field should be set to n.

```

add trunk-group 1                                     Page 1 of 10
                                                    TRUNK GROUP

Group Number: 1                                     Group Type: co          CDR Reports: y
Group Name: Outside Call                           COR: 20                TN: 1            TAC: 710
Direction: two-way                                Outgoing Display? n
Dial Access? n                                     Busy Threshold: 10     Night Service:
Queue Length: 0                                    Country: 1             Incoming Destination: attd
Comm Type: voice                                  Auth Code? n          Digit Absorption List:
Prefix-1? y                                       Trunk Flash? n        Toll Restricted? y

TRUNK PARAMETERS
Trunk Type: ground-start
Outgoing Dial Type: tone                          Cut-Through? n
Trunk Termination: rc                            Disconnect Timing(msec): 500

Auto Guard? n   Call Still Held? n   Sig Bit Inversion: none
Terminal Balanced? n                                     RA Trunk Loss: 0db

Trunk Gain: high

Disconnect Supervision - In? y Out? n
Answer Supervision Timeout: 10           Receive Answer Supervision? n

```



### NOTE:

When the Lucent INTUITY Lodging Call Accounting package is first installed, the set of extensions and trunks administered on the GuestWorks server is coordinated with Homisco. If extensions and trunks are added at a later date, Homisco must be notified so changes can be added to the call accounting package.

## Feature Access Codes (Server)

The following screens show the different features that can have feature access codes assigned. Unless the customer requests a feature or a feature is needed for maintenance personnel, do not assign a feature access code to unused features.

```
change feature-access-codes                                Page 1 of 5
                FEATURE ACCESS CODE (FAC)
Abbreviated Dialing List1 Access Code: #1
Abbreviated Dialing List2 Access Code: #2
Abbreviated Dialing List3 Access Code: #3
Abbreviated Dial - Prgm Group List Access Code: *03
Announcement Access Code: *26
Answer Back Access Code: #9
Auto Alternate Routing (AAR) Access Code:
Auto Route Selection (ARS) - Access Code 1: 9      Access Code 2: 8
Automatic Callback Activation: *22      Deactivation: *20
Call Forwarding Activation Busy/DA:      All: *47      Deactivation: *48
Call Park Access Code: #8
Call Pickup Access Code: #7
Answer Hold-Unhold Access Code:
CDR Account Code Access Code:
Data Origination Access Code:
Data Privacy Access Code:
Emergency Access to Attendant Access Code: *91
Facility Test Calls Access Code:
Flash Access Code: *15
Group Control Restrict Activation:      Deactivation:
```

```
change feature-access-codes                                Page 2 of 5
                FEATURE ACCESS CODE (FAC)
Hunt Group Busy Activation:      Deactivation:
ISDN-PRI Access Code:
Last Number Dialed Access Code: #5
Leave Word Calling Message Retrieval Lock:
Leave Word Calling Message Retrieval Unlock:
Leave Word Calling Send A Message: *51
Leave Word Calling Cancel A Message: *50
Malicious Call Trace Activation:      Deactivation:
Print Messages Access Code:
Priority Calling Access Code: *77
Program Access Code: #0
Refresh Terminal Parameters Access Code:
Send All Calls Activation: *72      Deactivation: *70
```

change feature-access-codes Page 3 of 5  
FEATURE ACCESS CODE (FAC)  
Terminal Dial-Up Test Access Code: \*31  
Terminal Translation Initialization Merge Code: Separation Code:  
Transfer to AUDIX Access Code: \*29  
Trunk Answer Any Station Access Code: #6  
User Control Restrict Activation: \*27 Deactivation: \*28  
Voice Coverage Message Retrieval Access Code: \*35  
Voice Principal Message Retrieval Access Code: \*36

change feature-access-codes Page 4 of 5  
FEATURE ACCESS CODE (FAC)  
Automatic Call Distribution Features  
After Call Work Access Code:  
Assist Access Code:  
Auto-In Access Code:  
Aux Work Access Code:  
Login Access Code:  
Logout Access Code:  
Manual-in Access Code:  
Call Vectoring/Prompting Features  
Converse Data Return Code:

change feature-access-codes Page 5 of 5  
FEATURE ACCESS CODE (FAC)  
Hospitality Features  
Automatic Wakeup Call Access Code: \*98  
Housekeeping Status (Client Room) Access Code: \*81  
Housekeeping Status (Client Room) Access Code: \*82  
Housekeeping Status (Client Room) Access Code: \*83  
Housekeeping Status (Client Room) Access Code: \*84  
Housekeeping Status (Client Room) Access Code:  
Housekeeping Status (Client Room) Access Code:  
Housekeeping Status (Station) Access Code:  
Verify Wakeup Announcement Access Code: \*89  
Voice Do Not Disturb Access Code: \*33

## Stations (Server)

You must assign the voice terminals for the office staff, the front desk, guest room services, and guest rooms. Use the following screens to administer the office staff and front desk voice terminals. Depending on the model of the voice terminal, the screens show different fields. This example shows the model 8434 used as an attendant backup voice terminal.



**NOTE:**

When the Lucent INTUITY Lodging Call Accounting package is first installed, the set of extensions and trunks administered on the GuestWorks server is coordinated with Homisco. If extensions and trunks are added at a later date, Homisco must be notified so changes can be added to the call accounting package.

```

add station 195                                     Page 1 of 4
                                                STATION
Extension: 195                                     BCC: 0                                     TN: 1
Type: 8434D                                       Lock Messages? n                          COR: 2
Port: 01A0201                                    Security Code:                             COS: 0
Name: FRONT DESK                                Coverage Path:
FEATURE OPTIONS
  LWC Reception: none                            Auto Select Any Idle Appearance? n
  LWC Activation? n                              Coverage Msg Retrieval? y
  CDR Privacy? n                                 Auto Answer: none
  Redirect Notification? y                       Data Restriction? n
  Per Button Ring Control? n                     Idle Appearance Preference? n
  Bridged Call Alerting? y                       Personalized Ringing Pattern: 1
  Active Station Ringing: single                 Restrict Last Appearance? y
  Data Module? n                                 Mute Button Enabled? y
  Speakerphone: 2-way                            Expansion Module? n

Display Language: english                        Disp Client Redir? n
Message Lamp Ext: 195                           Select Last Used Appearance? n
    
```

```
add station 195                                     Page 2 of 4
                                                    STATION

SITE DATA
  Room:                                             Headset? n
  Jack:                                             Speaker? n
  Cable:                                           Mounting: d
  Floor:                                           Cord Length: 0
  Building:                                        Set Color:

ABBREVIATED DIALING
  List1: personal 1      List2:
                        List3: system

BUTTON ASSIGNMENTS
  1: call-appr          6: autodial  Number:
  2: call-appr          7: autodial  Number:
  3: call-appr          8: autodial  Number:
  4: call-appr          9: autodial  Number:
  5: last-numb         10: int-aut-an
```

```
add station 195                                     Page 3 of 4
                                                    STATION

FEATURE BUTTON ASSIGNMENTS

  1: atd-qcalls          13: pms-alarm
  2: atd-qtime          14: cdrl-alm
  3: night-serv         15: aut-msg-wt Ext: 399
  4: aut-msg-wt Ext: 699 16: autodial  Number: *271
  5: auto-wkup          17: autodial  Number: *281
  6: ext-dn-dst         18: next
  7: check-in           19: delete-msg
  8: check-out          20:
  9: mwn-act            21:
  10: mwn-deact         22:
  11:                   23:
  12: autodial  Number: #6 24:
```

Use the following screens to add guest room telephones. Once you have created one telephone, use the **duplicate** command to create the rest of the guest rooms since all rooms should have the same features, COS, and COR. The Message Waiting Indicator is hardware-dependent and must match the type of message waiting lamps on the guest telephones. This can vary from room to room.

```

add station 107                                     Page 1 of 2
                                     STATION
Extension: 107                                     BCC: 0                                     TN: 1
Type: 2500                                         Lock Messages? n                           COR: 1
Port: 01A0301                                     Security Code:                               COS: 1
Name: GUEST ROOM                                  Coverage Path: 1                             Tests? y
FEATURE OPTIONS
  LWC Reception: audix
  LWC Activation? n
  CDR Privacy? n
  Redirect Notification? y
  Per Button Ring Control? n
  Bridged Call Alerting? n
  Off Premise Station? n
  Switchhook Flash? y
  Ignore Rotary Digits? n
  Coverage Msg Retrieval? n
  Auto Answer: none
  Data Restriction? y
  Call Waiting Indication? n
  Att. Call Waiting Indication? n
  Distinctive Audible Alert? n
  Message Waiting Indicator: neon
  Adjunct Supervision? y
  Audible Message Waiting? n

Message Lamp Ext: 107
    
```

On Page 2, enter the room number in the **Room** field and enter **call-appr** in the **Line Appearance** field. Also, you may want to populate an Abbreviated Dialing system list to be used for one-button access to guest services.

```

add station 107                                     Page 2 of 2
                                     STATION
SITE DATA
  Room: 107                                     Headset? n
  Jack:                                             Speaker? n
  Cable:                                           Mounting: d
  Floor:                                           Cord Length: 0
  Building:                                        Set Color:

ABBREVIATED DIALING
  List1: System 1                               List2:                               List3:

HOT LINE DESTINATION
  Abbreviated Dialing List Number (From above 1, 2 or 3):
  Dial Code:

Line Appearance: call-appr
    
```

After you have administered the guest rooms, you can use the **list station** command to display the stations.

## Subscribers (INTUITY)

The following screens show an example of how office staff subscribers should be administered on the Lucent INTUITY. Access these screens using the **AUDIX Administration** command. The default class of service, **class00**, is a good option to use.

```

add subscriber 150                                     Page 1 of 2
                                                    SUBSCRIBER
Name: Jean Collins                                     Locked? n
Extension: 150                                         Password:
COS: class00                                           Miscellaneous:
Switch Number: 1                                       Covering Extension: 161
Community ID: 1                                       Broadcast Mailbox? n
Secondary Ext:
    
```

On Page 2, you must set the **Type** field to **call-answer**.

```

add subscriber 150                                     Page 2 of 2
                                                    SUBSCRIBER CLASS OF SERVICE PARAMETERS
Addressing Format: extension
                                                    Login Announcement Set: System
System Multilingual is ON                             Call Answer Primary Annc. Set: System
Call Answer Language Choice? n                       Call Answer Secondary Annc. Set: System

PERMISSIONS  Type: call-answer                       Announcement Control? n
Outcalling? n                                     Priority Messages? n       Broadcast: none
IMAPI Access? n   IMAPI Voice File Transfer? n     Fax? y

INCOMING MAILBOX      Order: fifo                   Category Order: nuo
Retention Times (days), New: 10                   Old: 10                   Unopened: 10
OUTGOING MAILBOX      Order: fifo                   Category Order: unfda
Retention Times(days), File Cab: 10                 Delivered/Nondeliverable: 5

Voice Mail Message (seconds), Maximum Length: 300  Minimum Needed: 32
Call Answer Message (seconds), Maximum Length: 120 Minimum Needed: 8
End of Message Warning Time (seconds):
Maximum Mailing Lists: 25   Total Entries in all Lists: 250
Mailbox Size (seconds), Maximum: 1200              Minimum Guarantee: 0
    
```

**⇒ NOTE:**  
Mailboxes are created automatically for the guest rooms (when the INTUITY-to-PMS link comes up) and do not require subscriber administration.

## Attendant Backup (Server)

---

Verify that the TAAS Pickup and Audible Alerting feature is enabled using the following screen.

```
display system-parameters guestworks-bcs-options          Page 1 of 1
                                GUESTWORKS/BCS OPTIONS

Day Mode TAAS Pickup & Backup Station Audible Alerting? y
                                Controlled Toll Restriction replaces: nothing
                                                Dual Wakeups? y
                                Room Activated Wakeup With Tones? y
                                                Dial By Name? y
```

If it has not been enabled, call the INADS group (or your COE) and have them dial in and enable this feature. In addition, you must assign a  button to the backup voice terminals. See Page 74 for more information.

Use the following screen to administer the Attendant Backup parameters.

- The `Calls in Queue Warning` level should be set to **1** if the customer uses the backup voice terminals for most call handling. If the customer uses the attendant console, you can set this level to a higher threshold.
- The `Ext Alert Port (TAAS)` field must have an analog circuit equipment location administered even if you do not have external ringing equipment connected to the circuit. This is required to allow the Attendant Backup feature to work properly.
- The `No Answer Timeout` controls when ringing at the console will stop after a call is waiting in queue. When the timeout occurs, the console stops ringing, but the call can still be answered. A good value to begin with is **10**.
- The `Alerting` field controls the timeout limit before the console automatically goes into Night mode and Position Busy when calls are not answered. This is a good feature to administer in the situation where the attendant takes a break or leaves at the end of the day, and forgets to put the console into Night service. For example, if the `No Answer Timeout` field is set to **10** seconds and the `Alerting` field is set to **10** seconds, the following occurs: a call rings at the console, after 10 seconds the console ringing

shuts off, the call continues to queue for 10 seconds, then the console goes into Night mode and Position Busy. The call can now be answered from a backup voice terminal.

```

change console-parameters                               Page 1 of 3
                CONSOLE PARAMETERS
Attendant Group Name: OPERATOR
                COS: 1                                COR: 1
Calls in Queue Warning: 1                             Attendant Lockout? y
Ext Alert Port (TAAS): 01A1216

                Night Service Act. Ext.: 195

                Alternate FRL Station:
                DID-LDN Only to LDN Night Ext? n

TIMING
Time Reminder on Hold (sec): 30                       Return Call Timeout (sec): 30
Time in Queue Warning (sec): 15

INCOMING CALL REMINDERS
No Answer Timeout (sec): 10                           Alerting (sec): 10
                Secondary Alert on Held Reminder Calls? y

ABBREVIATED DIALING
List1:                                List2:                                List3: system

                COMMON SHARED EXTENSIONS
Starting Extension: 670                             Count: 3
    
```

### Attendant Console Recommended Button Layout (Server)

The attendant console feature buttons are assigned using the **change attendant 1** command. The recommended button layout differs depending on whether or not the property has voice messaging, a PMS, or call accounting.

**⇒ NOTE:** Although the button layout between the Model 302B and Model 302C attendant consoles differ, you still have 8 display buttons and 24 feature buttons that can be administered. The examples in this section are based on the punch-out button labels that come with the 302B console. You must administer the same buttons for the 302C console, but the button label sheets must be typed on-site. For a PC console, the electronic “button labels” should be similar to the labels shown in this section.

For information on installing the attendant console, see *DEFINITY ECS Installation and Test for Single-Carrier Cabinets*, (555-230-894) and *DEFINITY ECS Installation and Upgrades for Compact Single-Carrier Cabinets*, (555-230-124)

Figure 15 shows the recommended button layout for the eight display buttons.

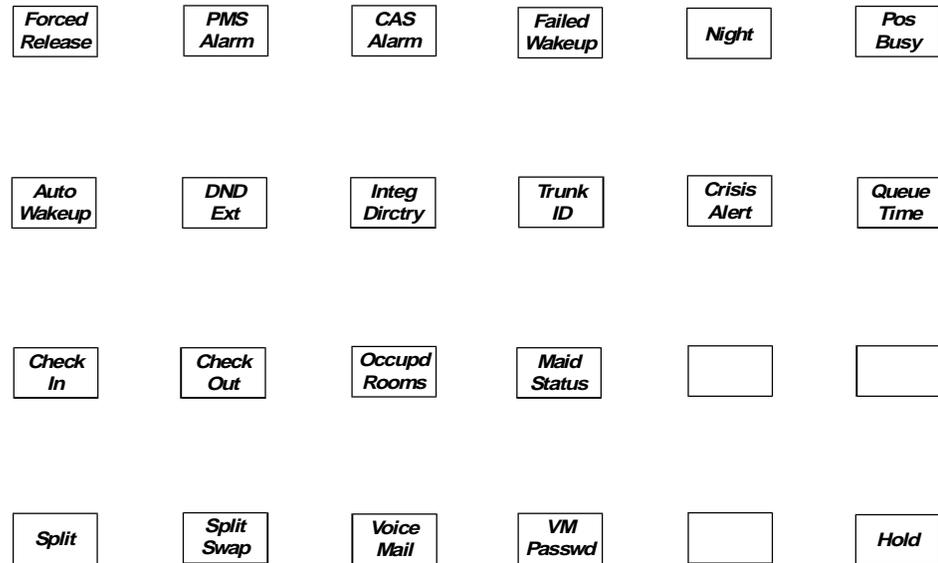


**Figure 15. Console Buttons for Display Features**

The display buttons are administered with the following button types:

- **normal**
- **inspect**
- **cov-msg-rt**
- **next**
- **delete-msg**
- **call-disp**
- **date-time**
- **timer**

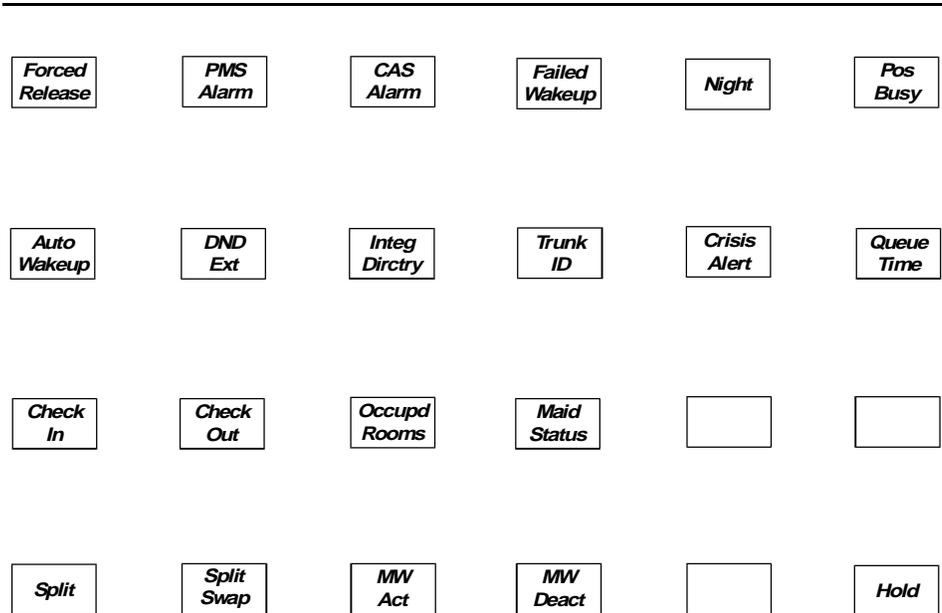
Figure 16 shows the recommended button layout if you have voice messaging. Do not translate the PMS Alarm or CAS Alarm buttons if there is no PMS or call accounting system. Any unused buttons can be customized based on customer needs.



---

**Figure 16. Console Buttons with Voice Messaging**

Figure 17 shows the recommended button layout if you do not have voice messaging. Do not translate the PMS Alarm or CAS Alarm buttons if there is no PMS or call accounting system. Any unused buttons can be customized based on customer needs.



**Figure 17. Console Buttons Without Voice Messaging**

The buttons shown in Figure 16 and Figure 17 are administered using the following button types:

- **forced-rel** (this button assignment cannot be changed)
- **pms-alarm**
- **cdr1-alm**
- **aut-msg-wt** (administer the extension where failed wakeups are reported)
- **night-serv**
- **pos-busy**
- **auto-wkup**
- **ext-dn-dst**
- **directory**
- **trk-id**
- **crss-alert**

- **atd-qtime**
- **check-in**
- **check-out**
- **occ-rooms**
- **maid-stat**
- **split** (this button assignment cannot be changed)
- **split-swap**
- **busy-ind** or **abr-dial** (with the voice mail extension programmed)
- **busy-ind** or **abr-dial** (with the master voice mail password programmed)
- **mwn-act**
- **mwn-deact**
- **hold**

There are other buttons you may want to add to the attendant console. If preprinted labels are not available for these features, you must create them on-site. These other buttons include the following:

- Controlled Restrictions (assigned as an Abbreviated Dialing button, **abr-dial**; the Abbreviated Dialing button emulates dialing the feature access code followed by the desired restriction code, such as Outward Restriction)

For example, if the User Controlled Restriction Activate feature access code is \*27, assign an Abbreviated Dialing button that dials \*271. This automatically dials the feature access code and the code (1) for Outward Restriction. All the customer has to do now is enter the room number where the restriction is to be applied. Another button can be assigned for the deactivate code.

- Automatic Wakeup printer alarm (assigned as **pr-awu-alm**)
- PMS printer alarm (assigned as **pr-pms-alm**)
- System printer alarm (assigned as **pr-sys-alm**)

## Backup Voice Terminal Recommended Button Layouts (Server)

---

The voice terminals used for the Attendant Backup feature should have most of the hospitality feature buttons. These are assigned using the command **change station XXXX**, where the **XXXX** is the extension number. The following is a list of the recommended feature buttons:

- Attendant Queue Calls (**atd-qcalls**) (this button is required for the Attendant Backup feature)
- Attendant Call Pickup (this is an **abr-dial** button that is programmed with the TAAS feature access code)
- Attendant time in queue (**atd-qtime**)
- Do Not Disturb - Extension (**ext-dn-dist**)
- Automatic Wakeup (**auto-wkup**)
- Night Service (**night-serv**) (only one backup voice terminal can have a Night Service button)
- Ringer Cutoff (**ringer-off**)
- Check-In (**check-in**)
- Check-Out (**check-out**)
- Busy Indication for the attendant console extension and any other backup voice terminals (**busy-ind**)
- PMS Alarm (**pms-alarm**)
- CAS Alarm (**cdr1-alarm**)

In addition, make sure that the backup voice terminal's class of service has console permissions assigned (**change cos**).

Figure 18, Figure 19, and Figure 20 show a typical setup if you had three voice terminals used as backups to the attendant console. The recommended primary backup voice terminal is the model 8434. The second and third backup voice terminals could be a model 8410. In this example, actual extension numbers are not given. Extension 1 represents the published front desk telephone number. Extensions 2 and 3 are nonpublished numbers known only to the hotel office staff. In this example, there are call appearances or bridged appearances of Extension 1 on all voice terminals, plus each voice terminal has at least one other extension they can access as needed. With this arrangement, it makes it easy for front desk staff to answer a call at one voice terminal, put the call on hold, and pick up the call from another voice terminal.

For information on installing the voice terminals, see *DEFINITY ECS Installation and Test for Single-Carrier Cabinets*, (555-230-894) and *DEFINITY ECS Installation and Upgrades for Compact Single-Carrier Cabinets*, (555-230-124)

---

Extension 1 (bridged app)	Extension 2 (call app)	Do Not Disturb	PMS Alarm
Extension 1 (bridged app)	Extension 2 (call app)	Extension 3 (bridged app)	CAS Alarm
Extension 1 (bridged app)	Extension 2 (call app)	Extension 3 (bridged app)	Failed Wakeup
Extension 1 (bridged app)	Attendant Queue Calls	Extension 3 (bridged app)	Next
Auto Wakeup	Attendant Call Pickup		Delete
			Check-In
			Check-Out
			MW Act
			MW Deact
			Night
			Attendant Busy

---

**Figure 18. First Backup Button Layout**

---

Extension 1 (call app)	Extension 2 (bridged app)
Extension 1 (call app)	Extension 2 (bridged app)
Extension 1 (call app)	Extension 2 (bridged app)
Extension 1 (call app)	Attendant Queue Calls
Auto Wakeup	Attendant Call Pickup

---

**Figure 19. Second Backup Button Layout**

---

Extension 1 (bridged app)	Extension 3 (call app)
Extension 1 (bridged app)	Extension 3 (call app)
Extension 1 (bridged app)	Extension 3 (call app)
Extension 1 (bridged app)	Attendant Queue Calls
Auto Wakeup	Attendant Call Pickup

---

**Figure 20. Third Backup Button Layout**

---

## Recorded Announcements (Server)

Use the following screen to assign extension numbers to be used for recorded announcement numbers. These extensions must be in the dialing plan but are not used for regular extensions.

change announcements										Page 1 of 8
ANNOUNCEMENTS/AUDIO SOURCES										
Ext.	Type	COR	TN	Name	Queue	Q-Len	Prot?	Rate	Port	
1: 380	integrated	1	1	Wakeup	n	N/A	n	32	01A14	
2: 381	integrated	1	1	1st Auto Atnd	n	N/A	n	32	01A14	
3: 382	integrated	1	1	Dial Extension	n	N/A	n	32	01A14	
4: 383	integrated	1	1	Directory	n	N/A	n	32	01A14	
5:		1	1		n					
6:		1	1		n					
7:		1	1		n					
8:		1	1		n					
9:		1	1		n					
10:		1	1		n					
11:		1	1		n					
12:		1	1		n					
13:		1	1		n					
14:		1	1		n					
15:		1	1		n					
16:		1	1		n					

Once you have designated which extensions will be used for recorded announcements, use the following procedures to record and test the announcements. It is recommended that you have a hotel employee record the announcements so the same person can be used for later changes or additions.

To record a message, do the following:

1. Go off-hook at a voice terminal and dial the Announcement feature access code \_\_\_\_\_.
2. Dial the extension number of the announcement you need to record.
3. Press **(1)** and record after the tone. Hang up, press **(Drop)**, or press the switchhook when finished.
4. Dial the extension number of the announcement you just recorded.
5. Listen to the recording. If you need to re-record the message, repeat Steps 1 through 3.
6. If the message is satisfactory, hang up and repeat Steps 1 through 3 to record the rest of the messages.

## Emergency Access to Attendant (Server)

Use the following screen to administer parameters for the Emergency Access to Attendant feature.

```

change system-parameters features                               Page 3 of 6
      FEATURE-RELATED SYSTEM PARAMETERS

      Reserved Slots for Attendant Priority Queue: 5
      Time before Off-hook Alert: 10
      Emergency Access Redirection Extension:

      Number of Emergency Calls Allowed in Attendant Queue: 5

      Call Pickup Alerting? n
      Deluxe Paging and Call Park Timeout to Originator? y

      Controlled Outward Restriction Intercept Treatment: attendant
      Controlled Termination Restriction (Do Not Disturb): attendant
      Controlled Station to Station Restriction: attendant

AUTHORIZATION CODE PARAMETERS      Authorization Codes Enabled? n
  
```

Enter a delay time value in the Time before Off-hook Alert field, a backup extension in the Emergency Access Redirection Extension field, and a value in the Number of Emergency Calls Allowed in Attendant Queue field. You must also administer the feature access code (see Page 62) and the Off-Hook Alert option for the COS (see Page 56). If the off-hook alert option is enabled, users in that COS will automatically place emergency calls to the attendant if they leave their telephones off-hook. Consult the customer about this option.

## Attendant Crisis Alert (Server)

To ensure that the Attendant Crisis Alert feature operates properly, you must administer ARS patterns to accept any combination of digits that guests could possibly dial while trying to dial the emergency service agency, and route the call to the correct location. For example, some guests might dial 9 (for an outside line) and then 911. Other guests may only dial 911. Without the correct routing patterns, the call will not go through. These screens show two examples of how this routing can be administered.

Assign a routing pattern and the **alrt** Call Type to the desired emergency service access code. For example, if your emergency service access code is 911, assign the 911 digit string to a routing pattern and assign it the **alrt** Call Type. This takes care of the condition when the guest dials 9 (for local access) and then 911. If a guest only dials 911, you also want the call to route to the emergency service agency. You must assign a dialed string of 11 with a different routing pattern that removes the dialed digits 11 and inserts the dialed digit string 911. The following screens show these two examples administered as part of the ARS Digit Analysis Table.

Miscellaneous Translations

change ars analysis 9

Page 1 of 2

ARS DIGIT ANALYSIS TABLE  
Partitioned Group Number: 1      Percent Full: 6

Dialed String	Total Mn	Rte Mx	Call Pat	Nd Type	ANI Num	Rq	Dialed String	Total Mn	Rte Mx	Call Pat	Nd Type	ANI Num	Rq
911	3	3	5	alrt		n							n
						n							n
						n							n
						n							n
						n							n
						n							n
						n							n
						n							n

change ars analysis 1

Page 1 of 2

ARS DIGIT ANALYSIS TABLE  
Partitioned Group Number: 2      Percent Full: 6

Dialed String	Total Mn	Rte Mx	Call Pat	Nd Type	ANI Num	Rq	Dialed String	Total Mn	Rte Mx	Call Pat	Nd Type	ANI Num	Rq
11	2	2	6	alrt		n							n
						n							n
						n							n
						n							n
						n							n
						n							n
						n							n
						n							n

Use the following screens to assign a routing pattern for the emergency service access code. In this first example, Preference 1 of Pattern 5 is used when guests dial 9911 (9 for the ARS access code, and 911 for the emergency service agency).

```

change route-pattern 5                                     Page 1 of 1
                                     Pattern Number: 5

  Grp.  FRL NPA Pfx Hop Toll No. Del Inserted          IXC
  No.   Mrk Lmt List Digits  Digits
1: 5    0
2:
3:
4:
5:
6:

      BCC VALUE   TSC  CA-TSC   ITC  BCIE  Service/Feature          Numbering
      0 1 2 3 4 W      Request                                Format
1: y y y y y n   n                rest
2: y y y y y n   n                rest
3: y y y y y n   n                rest
4: y y y y y n   n                rest
5: y y y y y n   n                rest
6: y y y y y n   n                rest
    
```

In this second example, Preference 1 of Pattern 6 is used when guests dial 911. Pattern 6 deletes the two digits dialed after the ARS access code (11) and inserts the correct digit string (911).

```

change route-pattern 6                                     Page 1 of 1
                                     Pattern Number: 6

  Grp.  FRL NPA Pfx Hop Toll No. Del Inserted          IXC
  No.   Mrk Lmt List Digits  Digits
1: 5    0                2    911
2:
3:
4:
5:
6:

      BCC VALUE   TSC  CA-TSC   ITC  BCIE  Service/Feature          Numbering
      0 1 2 3 4 W      Request                                Format
1: y y y y y n   n                rest
2: y y y y y n   n                rest
3: y y y y y n   n                rest
4: y y y y y n   n                rest
5: y y y y y n   n                rest
6: y y y y y n   n                rest
    
```

## Direct Access Calling (Server)



### NOTE:

If you use a Direct Access Calling procedure to route calls to a location outside of your hotel, the COR of the Direct Access procedure must route using its own ARS restricted partition to prevent toll fraud, and the FRL should be set to 0.

The Direct Access Calling feature is used to set up an auto-attendant for incoming calls to the hotel. Coordinate this administration with your customer. You will need to record announcements for this feature (see Page 77).

You must first assign a direct access number using the **add direct-access number XXXX** command. The extension number **XXXX** is an unused extension on the server. You can have up to four direct access numbers. One of the numbers is usually the published telephone number for the hotel. A second number could be used by hotel guests to provide a menu of information about hotel services and events. After you add a number, you can later change the number if needed.

The next step is to create the procedure used by callers to access different numbers at the hotel. You can assign up to four procedures that define how calls will be handled as users select the different prompts. The following example shows a Direct Access procedure.

```

change direct-access procedure 1                               Page 1 of 2
                                DIRECT ACCESS PROCEDURE
Procedure: 1                               Name auto-attd-1

01 wait-time      2   secs hearing ringback
02 collect        1   digits after announcement 381
03
04 route-to      number 0                with cov n if digit      = 0
05 route-to      number 105             with cov n if digit      = 1
06 goto          step 12 if digits        = 2
07 route-to      number 699             with cov n if digit      = 3
08 goto          step 20 if digits        = 4
09 goto          step 16 if digits        = 5
10 route-to      number 0                with cov n if unconditionally
11

```

```
change direct-access procedure 1                                Page 2 of 2
                                DIRECT ACCESS PROCEDURE
```

```
12 collect      3 digits after announcement 382
13 route-to     digits with coverage y
14 route-to     number 0          with cov n if unconditionally
15
16 goto         step 2   if unconditionally
17
18
19
20 collect      3 digits after announcement 383
21 goto         step 13  if unconditionally
22
```

The procedure above does the following:

1. When someone calls the hotel, the caller hears ringback for 2 seconds.
2. Announcement 381 plays. This announcement asks the caller to do one of the following:
  - Press **0** or wait if they want the front desk; if they press **0** or wait for the timeout, they are routed to the front desk.
  - Press **1** if they want the reservation desk; if they press **1**, they are routed to extension 105, which is the reservations desk.
  - Press **2** if they know the guest room extension; if they press **2**, they are routed to announcement 382, which tells them to dial the guest room extension.
  - Press **3** if they want to retrieve their voice messages; if they press **3**, the call is routed to the voice messaging system.
  - Press **4** if they know the department they wish to access (such as catering); if they press **4**, they are routed to announcement 383, which gives them a listing of several extensions at the hotel that they can dial directly.
  - Press **5** to start over again; if they press **5**, the caller hears announcement 381, which repeats all of the options.
  - If the caller dials anything else, the call is routed to the front desk.

## Dial by Name

The Dial by Name feature allows you to “dial” someone by entering their name from your touch-tone keypad. This feature is accessible by using the Direct Access Calling feature and the integrated announcement circuit pack (TN750C) to create an “auto-attendant” procedure where one of the options allows callers to enter a person’s name instead of their extension number. The system processes the name characters received, and, when a match is found, the number is dialed automatically. For more information, see *GuestWorks server Issue 3.0 Feature Descriptions*, (555-231-207).

You must first assign a direct access number using the **add direct-access number XXXX** command. The extension number **XXXX** is an unused extension on the server. You can have up to four direct access numbers. The number used for Dial by Name would be the published telephone number for the hotel.

The next step is to create the Direct Access Calling procedure that enables the Dial by Name feature. The following example shows a procedure that includes steps for Dial by Name.

```
change direct-access procedure 2                                Page 1 of 3
                                DIRECT ACCESS PROCEDURE
Procedure: 2                                Name Dial by Name

01 wait-time      2   secs hearing ringback
02 collect        1   digits after announcement 381
03
04 route-to      number 0                                with cov n if digit = 0
05 route-to      number 105                              with cov n if digit = 1
06 goto          step 12 if digits                        = 2
07 goto          step 21 if digits                        = 3
08 goto          step 19 if digits                        = 4
09 goto          step 16 if digits                        = 5
10 route-to      number 0                                with cov n if unconditionally
11
```

```
change direct-access procedure 2                                Page 2 of 3
                                DIRECT ACCESS PROCEDURE

12 collect      3 digits after announcement 382
13 route-to    digits with coverage y
14 route-to    number 0 with cov n if unconditionally
15
16 goto        step 2 if unconditionally
17
18
19 collect      3 digits after announcement 383
20 goto        step 13 if unconditionally
21 collect      4 digits after announcement 661
22 route-to    name1 with coverage y
```

```
change direct-access procedure 2                                Page 3 of 3
                                DIRECT ACCESS PROCEDURE

23 goto        step 30 if nomatch
24 collect      11 digits after announcement 662
25 route-to    name2 with coverage y
26 goto        step 30 if nomatch
27 collect      2 digits after announcement 663
28 route-to    name3 with coverage y
29 goto        step 30 if nomatch
30 collect      1 digits after announcement 660
31 goto        step 21 if digits = 1
32 route-to    number 0 with cov n if unconditionally
```

The procedure above does the following:

1. When someone calls the system, the person receives ringback for 2 seconds.
2. Announcement 381 plays. This announcement asks them to do one of the following:
  - Press **0** or wait if they want the operator; if they press **0** or wait for the timeout, they are routed to the operator.
  - Press **1** if they want the help desk; if they press **1**, they are routed to extension 105, which is the help desk.
  - Press **2** if they know the person's extension; if they press **2**, they are routed to announcement 382, which tells them to dial the person's extension.

- Press **3** if they know the person's name; if they press **3**, the following sub-procedure occurs:
  - a. Announcement 661 plays requesting they enter the first four characters of the person's last name.  
If there is a match, the call is redirected.  
If there are multiple matches, continue with Step b.  
If there is no match, go to Step d.
  - b. Announcement 662 plays requesting they enter the rest of the person's last name, followed by the **#** key.  
If there is a match, the call is redirected.  
If there are multiple matches, continue with Step c.  
If there is no match, go to Step d.
  - c. Announcement 663 plays requesting they enter the first two characters of the person's first name.  
If there is a match, the call is redirected.  
If there is no match, continue with Step d.
  - d. Since there are still no matches, announcement 660 plays telling them they can press **1** to try again, or press **0** to get an operator.
- Press **4** if they know the department they wish to access (such as engineering); if they press **4**, they are routed to announcement 383, which gives them a listing of several departments that they can dial directly.
- Press **5** to start over again; if they press **5**, the caller hears announcement 381, which repeats all of the options.
- If the caller dials anything else, the call is routed to the operator.

## Trunk-to-Trunk Transfer

---

Use the following screen to enable Trunk-to-Trunk Transfer only if it is requested by the customer. This feature is normally disabled.



**CAUTION:**

*If Trunk-to-Trunk Transfer is enabled, calls made to guest rooms can be transferred outside of the hotel and toll charges may be lost for some toll calls.*

```
change system-parameters features                               Page 1 of 6
      FEATURE-RELATED SYSTEM PARAMETERS
      Trunk-to-Trunk Transfer: none
Coverage Subsequent Redirection/CFWD No Answer Interval: 2
  Coverage - Caller Response Interval (seconds): 4
    Keep Held SBA at Coverage Point? y
Automatic Callback - No Answer Timeout Interval (rings): 3
  Call Park Timeout Interval (minutes): 10
  Off-Premises Tone Detect Timeout Interval (seconds): 20
    ARS Dial Tone Required? y
      Music/Tone on Hold: music Port: 01B1101
  Music (or Silence) on Transferred Trunk Calls? no
    DID/Tie/ISDN Intercept Treatment: attd
  Messaging Service Adjunct (MSA) Connected? n
Internal Automatic Answer for Attendant Extended Calls? n
  Automatic Circuit Assurance (ACA) Enabled? n

Abbreviated Dial Programming by Assigned Lists? n
Auto Abbreviated/Delayed Transition Interval (rings): 2
```

## Server-to-INTUITY Translations

---

The following translations and tests must be done to administer the server-to-INTUITY connections:

- Processor Interface (PI) link (Lucent INTUITY and server)
- Voice ports used to call in for messages
- Hunt groups for the voice ports
- Test the server-to-INTUITY link and the voice ports
- Coverage paths to route calls to Lucent INTUITY AUDIX.

### PI Link (INTUITY)

---

The following screen is used to determine if the link is active. Access this screen in the Lucent INTUITY using the **Customer/Services Administration, Diagnostics, Switch Interface Diagnostics** command. During initial installation, this screen will show that the link is busied out.

```
+-----+
+                               Diagnose Switch Link                               +
+-----+
| STATUS SWITCH-LINK                                                     |
|                                                                           |
|  Type  Baud   State                                                     |
|  DCIU  9600   Busied                                                    |
|                                                                           |
|  Link Level 2 is Down                                                  |
|                                                                           |
|  DCIU switches (In/Out of data transfer)                               |
|    1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20         |
|    I                                                                           |
+-----+
```

After pressing **F8** to change the function key labels, the following function keys control the status of the link:

- **F2** busies-out the link
- **F3** releases the link from busy-out
- **F4** performs diagnostics on the link.

Using the **Switch Interface Administration** command on the Lucent INTUITY, administer the link to the server using the following screen. You must assign Logical Channel to **1** and Switch Port to **59**.

```

+-----+
+          Switch Interface Administration          +
+-----+
|Switch Link Type: DCIU           Switch Release: System 75 type|
|Extension Length: 3              |
|Host Switch Number: 1           |
|AUDIX Number: 1                 |
|          HOST SWITCH LINK ASSIGNMENTS          |
|          AUDIX Port          AUDIX Port          |
|Switch Logical Switch          Switch Logical Switch|
|Number Channel Port            Number Channel Port|
|  1          1          59      2                |
|  3                4                |
|  5                6                |
|  7                8                |
|  9                10               |
| 11                12               |
| 13                14               |
| 15                16               |
| 17                18               |
| 19                20               |
+-----+

```

### PI Link (Server)

The following screens are used to administer the link between the server and the Lucent INTUITY for administrative voice messaging.

Use this screen on the server to administer the data module parameters for the link. For this connection, the data modules are integrated into the TN765 PI circuit pack. The Name you administer here must match the Identification field on the Interface Links screen.

```

add data-module 7991                                     Page 1 of 1
                                     DATA MODULE

  Data Extension: 7991
    Type: procr-intf          COS: 15      Maintenance Extension: 7995
Physical Channel: 01          COR: 50
      Name: intuity          TN: 1

ABBREVIATED DIALING
List1:

SPECIAL DIALING OPTION:

ASSIGNED MEMBER ( Station with a data extension button for this data module )

  Ext      Name
  1:

```

The Processor Channel screen on the server must be administered as shown. Use channel **59**, set the application type to **audix**, and set the Machine-ID to **1**.

```

change communication-interface processor-channels                               Page 4 of 4
                                PROCESSOR CHANNEL ASSIGNMENT
Proc      Interface      Remote
Chan Appl.  Link Chan  Priority Proc Chan Machine-ID
49:
50:
51:
52:
53:
54:
55:
56:
57:
58:
59: audix  1    1    h      1      1
60:
61:
62:
63:
64:
    
```

You must assign all four processor interface channels. The following table is an example of how you can administer the processor interface channels (your extensions will differ):

<b>Data Extension</b>	<b>Physical Channel</b>	<b>Maintenance Extension</b>
7991	01	7995
7992	02	7996
7993	03	7997
7994	04	7998

The interface link on the server must be administered as shown in this screen. The name in the Identification field must match the Name field on the Data Module screen, the Connected to field must be set to **DCE**, and the Clocking field must be set to **internal**.

```
change communication-interface links

                                INTERFACE LINKS

Link  Enable  Est  PI  Destination  DTE/
1:     y      Y  7991 BX25  eia          DTE  intuity
2:     n      n  7992 BX25          DCE
3:     n      n  7993 BX25          DTE
4:     n      n  7994 BX25          DTE
5:     n      n          BX25          DTE
6:     n      n          BX25          DTE
7:     n      n          BX25          DTE
8:     n      n          BX25          DTE

Link 1 [eia] - Connected to : DCE   Clocking : internal
```

### Voice Ports (Server)

Use these screens to administer the voice ports on the server that are used by guests and administrative users to access their messages. On Page 1, assign the following fields as shown:

- Extension — The extension must be in the dial plan but not assigned for any other purpose.
- Type — Enter **2500** for the station type.
- Port — Each TN791 supports 16 analog voice connections. When making cross-connects for voice messaging, skip every other port to spread out the voice messaging traffic (that is, 0, 2, 4, 6, and so on); do not connect the voice ports in a contiguous fashion (that is, 0, 1, 2, and so on).
- Name — Assign the first port as **AUDIX 1**, and then increment the number for each subsequent port (**AUDIX 2**, **AUDIX 3**, and so on).
- LWC Reception — This must be set to **audix**.
- COR — Use the same COR for the voice ports that you use for the hunt groups. This COR should have the FRL set to 0 and should not allow access to trunk group CORs.

- COS — Use a COS that allows data privacy.
- Switchhook Flash — This must be set to **y**.

```
add station 720                                     Page 1 of 2
                                                    STATION
Extension: 720                                     BCC: 0          TN: 1
Type: 2500                                         Lock Messages? n COR: 40
Port: 01A0901                                     Security Code:   COS: 5
Name: AUDIX 1                                     Coverage Path:   Tests? y
FEATURE OPTIONS
  LWC Reception: audix
  LWC Activation? n                               Coverage Msg Retrieval? n
  CDR Privacy? n                                 Auto Answer: none
  Redirect Notification? n                       Data Restriction? n
  Per Button Ring Control? n                   Call Waiting Indication? n
  Bridged Call Alerting? n                     Att. Call Waiting Indication? n
  Off Premise Station? n                       Distinctive Audible Alert? n
  Switchhook Flash? y                           Message Waiting Indicator:
  Ignore Rotary Digits? n                       Adjunct Supervision? y
```

On Page 2, set the Line Appearance field to **call-appr**.

```
add station 720                                     Page 2 of 2
                                                    STATION
SITE DATA
Room:                                             Headset? n
Jack:                                           Speaker? n
Cable:                                          Mounting: d
Floor:                                         Cord Length: 0
Building:                                       Set Color:

ABBREVIATED DIALING
List1:                                         List2:         List3:

HOT LINE DESTINATION
Abbreviated Dialing List Number (From above 1, 2 or 3):
Dial Code:

Line Appearance: call-appr
```

After you assign the first port, use the **duplicate** command to assign the rest of the ports. You will have 4, 6, 8, 10, or 12 ports.

## Voice Ports (INTUITY)

You must assign the voice port extension numbers to each activated voice port. Use the **Voice System Administration, Voice Equipment** command. For each channel (0-5) you must assign an extension number. The channel state should normally be `Inserv` (in-service), but it could be `foos` (facility out-of-service) or `manoos` (manually out-of-service).

```

+-----+
+                               Voice Equipment                               +
+-----+
Card 0 is IVC6   O.S.Index: 0      Function: TipRing
                State: Inserv
CD.PT CHN STATE STATE-CHNG-TIME SERVICE-NAME PHONE  GROUP  TYPE
0.0  0  Inserv Mar 20 18:49:25 *DNIS_SVC  720    2    IVC6
0.1  1  Inserv Mar 20 18:49:25 *DNIS_SVC  721    2    IVC6
0.2  2  Inserv Mar 20 18:49:25 *DNIS_SVC  722    2    IVC6
0.3  3  Inserv Mar 20 18:49:25 *DNIS_SVC  723    2    IVC6
0.4  4  Inserv Mar 20 18:49:25 *DNIS_SVC  724    2    IVC6
0.5  5  Foos  Mar 20 18:49:25 *DNIS_SVC  725    2    IVC6
+-----+
    
```

## Voice Port Hunt Groups (Server)

The following screens contain server administration for Lucent INTUITY AUDIX voice port hunt groups. The first set of screens show the hunt group used by the office staff when they call for their messages. The second set of screens show the hunt group used by the hotel guests when they call for their messages.

On Page 1, assign a `Group Extension` and `Group Name`. The `Group Type` must be set to `ucd`, the `COR` should match the one used for the Lucent INTUITY AUDIX voice ports, and the `Queue Length` must equal the number of installed voice ports.

```

add hunt-group 1                                     Page 1 of 7
                                         HUNT GROUP

Group Number: 1          Group Extension: 699      Group Type: ucd
Group Name: AUDIX              ACD? n
Queue? y
Security Code:          Night Service Destination: COR: 40
ISDN Caller Disp:      Coverage Path:            TN: 1

Measured: none

Queue Length: 6
Calls Warning Threshold:  Calls Warning Port:
Time Warning Threshold:  Time Warning Port:
    
```

On Page 2, set the Message Center field to **audix**.

```
add hunt-group 1                                     Page 2 of 7
                                                    HUNT GROUP
      Message Center: audix
      LWC Reception: none
      First Announcement Extension:                  First Announcement Delay (sec):
```

On Page 3, assign each extension in the correct hunting order. The name field is populated after you add the list of extensions and redisplay the hunt group.

```
add hunt-group 1                                     Page 3 of 7
                                                    HUNT GROUP
      Group Number: 1      Group Extension: 699      Group Type: ucd
      Member Range Allowed: 1 - 200      Administered Members (min/max): 1 /6
                                                    Total Administered Members: 6
GROUP MEMBER ASSIGNMENTS
  Ext      Name      Ext      Name      Ext      Name
1: 720    AUDIX 1    14:
2: 721    AUDIX 2    15:
3: 722    AUDIX 3    16:
4: 723    AUDIX 4    17:
5: 724    AUDIX 5    18:
6: 725    AUDIX 6    19:
7:
8:
9:
10:
11:
12:
13:
At End of Member List      27:
                              28:
                              29:
                              30:
                              31:
                              32:
                              33:
                              34:
                              35:
                              36:
                              37:
                              38:
                              39:
                              40:
```

## Services to Phone Number Mapping (INTUITY)

The following screen shows where you must associate the extension numbers used to access voice mail messages to the services the extensions provide. In the examples shown in this section, extension 699 is used by the office staff, extension 710 is used by the guests, and extension 770 is used for printing FAX messages. If the AUDIX field is not assigned, calls placed to the office staff extensions will hear an "Extension not valid" message when the call is transferred to Lucent INTUITY AUDIX, and the caller cannot leave a message.

Use the **Voice System Administration, Voice Equipment** command to access the voice equipment screen (see Page 92). Once there, press the **F8** function key to change the function key labels, followed by **F3** (the ASSIGN function key). Then you must select the **Services to Called Numbers** option. This displays the Assign Service to Called Number screen. Your administration should look similar to this screen.

Assign Service to Called Number	
SERVICE NAME	CALLED NUMBER
AUDIX	699
AUDIX+ldg	ANY
lodging	710
LGfax	770



**NOTE:**

When you enter the AUDIX+ldg entry, you must enter lower-case **any**.  
When the entry is accepted, upper-case **ANY** is displayed.

## Attendant and Administrator Passwords (INTUITY)

---

Use the **Lodging Administration, Lodging Administrator Registration** command to access the administrator registration screen. Using this screen, you must assign an administrator extension (an unused extension on the server), an administrator password, and an attendant password. These passwords can be used to retrieve voice messages for the guests. Your administration should look similar to this screen.



### CAUTION:

*When creating passwords, do not use a sequential digit string (such as 1234) or a repeated digit (such as 5555).*

```
+-----+
+Lodging Administrator Registration+
+-----+
|Administrator Extension: 475
| Administrator Password: 3872
|   Attendant Password: 6391
+-----+
```

## Guest Message Retrieval (Server)

---

The way guests retrieve their messages is to call an extension that has Call Coverage to the Lucent INTUITY AUDIX hunt group. This is done using a standard station line that covers to the hunt group.

Use the following screen to add a station extension that is used only for accessing the Lucent INTUITY AUDIX voice messages. The `Type` field must be **2500** and the `Port` field must have an **X** (administration without hardware). You must manually call forward this extension to the main Lucent INTUITY AUDIX hunt group extension. To allow Call Forwarding, the Class of Service used for this station must have Call Forwarding enabled for that Class of Service (see Page 56). In this example, you would forward extension 710 to extension 699. You can do this from any voice terminal that has console permissions.

```
add station 710                                     Page 1 of 2
Extension: 710                                     STATION
Type: 2500                                         BCC: 0
Port: X                                           Lock Messages? n
Name: GUEST VOICE MAI                            Security Code:
Coverage Path: 10                                TN: 1
Tests? y                                         COR: 40
COS: 5
FEATURE OPTIONS
LWC Reception: audix
LWC Activation? n
CDR Privacy? n
Redirect Notification? n
Per Button Ring Control? n
Bridged Call Alerting? n
Off Premise Station? n
Switchhook Flash? y
Ignore Rotary Digits? n
Coverage Msg Retrieval? n
Auto Answer: none
Data Restriction? n
Call Waiting Indication? n
Att. Call Waiting Indication? n
Distinctive Audible Alert? n
Message Waiting Indicator:
Adjunct Supervision? y
```

On Page 2, set the Line Appearance field to **call-appr**.

```

add station 710                                     Page 2 of 2
                                         STATION

SITE DATA
  Room:                                         Headset? n
  Jack:                                         Speaker? n
  Cable:                                       Mounting: d
  Floor:                                       Cord Length: 0
  Building:                                    Set Color:

ABBREVIATED DIALING
  List1:                                       List2:                                       List3:

HOT LINE DESTINATION
  Abbreviated Dialing List Number (From above 1, 2 or 3):
  Dial Code:

Line Appearance: call-appr
    
```

Use the following screen to assign the coverage group and coverage path for guest message retrieval.

```

add group coverage path 10                       COVERAGE PATH
                                         Coverage Path Number: 10
                                         Next Path Number:           Linkage

COVERAGE CRITERIA
  Station/Group Status  Inside Call  Outside Call
  Active?               n             n
  Busy?                 y             y
  Don't Answer?        y             y           Number of Rings: 1
  All?                  n             n
  DND/SAC/Goto Cover? y             y

COVERAGE POINTS
  Terminate to Coverage Pts. with Bridged Appearances? n
  Point1: hl           Point2: attd           Point3:
    
```

## Coverage Paths (Server)

Use the following screen to define the coverage path that redirects unanswered guest room calls to the Lucent INTUITY Lodging voice messaging. This coverage path uses hunt group 1 (as defined earlier) and the attendant (in case the voice ports are all busy).

```

add coverage path 1
                                COVERAGE PATH
                                Coverage Path Number: 1
                                Next Path Number:          Linkage
COVERAGE CRITERIA
  Station/Group Status   Inside Call   Outside Call
    Active?              n             n
    Busy?                 Y             Y
    Don't Answer?        Y             Y           Number of Rings: 3
    All?                  n             n
  DND/SAC/Goto Cover?   Y             Y
COVERAGE POINTS
  Terminate to Coverage Pts. with Bridged Appearances? n
  Point1: hl              Point2: attd   Point3:
  
```

## Testing the Server-to-INTUITY Link and Voice Ports

Use the following screens to verify that the server-to-INTUITY link and the voice ports are working. The link must be operational before you can test the voice ports. Use the command **Lodging Administration**, press **F7** to bring up the command menu, and select **LDG/PMS Link Restart** to restart the server-to-INTUITY link.

Use this screen on the server to check the status of the processor interface link. The **Link Status** should show **in-service** and the **LOCAL/REMOTE PROCESSOR CHANNELS** should display **59/1**.

```

status link 1
                                PI LINK STATUS
Link Number: 1                   Destination: EIA-LINK
Link Status: in-service
                                ERROR COUNT
Hardware Device Check (receive): 0   Level 2 I-frames Retransmitted: 0
Hardware Device Check (transmit): 0   Level 2 Reset (SABM): 1
    Far-End MOOS Count: 0             Invalid Frame Count: 0
    Far-End FRMR: 0                   Far-End SABM(E)/DM: 0
    Far-End DISC: 0                   Protocol Error Detected: 0
    Timeout: 0                         Local Busy Out: 0
Software Initiated Link Down: 0       Firmware Initiated Link Down: 0
                                LOCAL/REMOTE PROCESSOR CHANNELS:
59/1
  
```

Access this screen in the Lucent INTUITY using the **Customer/Services Administration, Diagnostics, Switch Interface Diagnostics** command. This screen shows the link being in service and the link level as up.

```

+-----+
+                               Diagnose Switch Link                               +
+-----+
| STATUS SWITCH-LINK |
|                               |
| Type  Baud   State           |
| DCIU  9600   In Service      |
|                               |
| Link Level 2 is Up          |
|                               |
| DCIU switches (In/Out of data transfer) |
|   1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20 |
|   I                                     |
+-----+

```

After pressing **F8** to change the function key labels, the following function keys control the status of the link:

- **F2** busies-out the link
- **F3** releases the link from busy-out
- **F4** performs diagnostics on the link.

On the Lucent INTUITY, use the **Customer/Services Administration, Diagnostics, Voice Board Diagnostics** command to display the following screen.

```

+-----+
+                               Diagnose Voice Equipment                               +
+-----+
| Card  0 is IVC6   O.S.Index:  0           Function: TipRing |
|                               State: Inserv |
| CD.PT CHN STATE  STATE-CHNG-TIME  SERVICE-NAME  PHONE  GROUP  TYPE |
| 0.0  0  Inserv  Mar 20 18:49:25  *DNIS_SVC    720    2    IVC6 |
| 0.1  1  Inserv  Mar 20 18:49:25  *DNIS_SVC    721    2    IVC6 |
| 0.2  2  Inserv  Mar 20 18:49:25  *DNIS_SVC    722    2    IVC6 |
| 0.3  3  Inserv  Mar 20 18:49:25  *DNIS_SVC    723    2    IVC6 |
| 0.4  4  Inserv  Mar 20 18:49:25  *DNIS_SVC    724    2    IVC6 |
| 0.5  5  Foos   Mar 20 18:49:25  *DNIS_SVC    725    2    IVC6 |
+-----+

```

This shows you the extension numbers directly assigned to each Lucent INTUITY AUDIX voice port and you can call each one to test the ports. There are four possible port states:

- In-Service (Inserv) — The channel is ready to accept telephone calls.
- Facility-out-of-service (Foos) — The channel is not in service. This occurs when a channel has been released through the **Voice Board Diagnostics** screen to Inserv, and it does not detect loop current. A channel in the Foos state should automatically convert to the Inserv state when it detects loop current, but it may need to be reset. If you connected the ports to the server and the ports remain in the Foos state, there is a problem with the server, the connection, or the Lucent INTUITY hardware.
- Manually-out-of-service (Manoos) — The channel has been busied-out under the **Voice Board Diagnostics** screen, or the channel is on a new IVC6 circuit card. A channel in the Manoos state will remain until it is released under the **Voice Board Diagnostics** screen.
- Non-Existent (NONEX or no entry on any screen) — The system does not see the channel. The system will not see a channel that has not been properly activated even if the IVC6 is present. To change a channel from non-existent to recognized, the remote maintenance center must activate it.

In this example, extension 725 is possibly out of service. It can be verified by calling the port extension to see if the call is answered by Lucent INTUITY AUDIX. Refer to the section "Assign Service to Channels for Testing" in *INTUITY Software Installation for Release 3.0*, (585-310-160) for more information about testing.

## INTUITY Lodging-to-PMS Translations

There are two ways that the Lucent INTUITY Lodging software and the PMS software can exchange messages for database updates:

- Use the Server/INTUITY/PMS Link Integration feature. This feature uses the server to exchange the voice mail database update messages between the Lucent INTUITY Lodging and the PMS. This option is known as the "GuestWorks Interface." The Lucent INTUITY system must be modified during software installation to include this option. The Lucent INTUITY system currently defaults to this option.
- Use a hard-wired link between the MAP/5 and the PMS voice messaging port. This link is illustrated in Figure 6 on Page 24. This option is known as the "Standalone Mode."

### GuestWorks Interface Link

To enable the Server/INTUITY/PMS Link Integration feature (the "GuestWorks Interface" link), enter a **y** in the Forward PMS Messages to Intuity Lodging? field.

```

change system-parameters hospitality                               Page 1 of 3
                                HOSPITALITY

                                Message Waiting Configuration: act-nopms
                                Controlled Restrictions Configuration: act-pms
                                Housekeeper Information Configuration: act-pms
                                Number of Housekeeper ID Digits: 0
                                Extension of PMS Log Printer:
                                Extension of Journal/Schedule Printer:
                                Client Room Coverage Path Configuration: act-nopms
                                Default Coverage Path for Client Rooms: 1
                                Forward PMS Messages to Intuity Lodging? y

                                PMS LINK PARAMETERS
                                Extension of PMS: 7899
                                PMS Protocol Mode: transparent ASCII mode? y
                                Seconds before PMS Link Idle Timeout: 20
                                Milliseconds before PMS Link Acknowledgement Timeout: 500
                                PMS Link Maximum Retransmissions: 5
                                PMS Link Maximum Retransmission Requests: 5
                                Take Down Link for Lost Messages? y
    
```

You must then verify that the Lucent INTUITY system has the GuestWorks Interface link installed and active. Use the **Customer/Services Administration, System Management, System Control, PMS Interface Administration** screen to display the current interface (press **F1**).

- If the “PMS Interface for GuestWorks” is currently installed, no changes are needed.
- If the “Stand-alone PMS Interface” is currently active, you must insert the Lucent INTUITY Release 1.1 tape into the MAP/5, press **F8** to display the **ACTIVATE** function key, and press **F2** to install the software. Follow any other instructions displayed to install the software.

Use this screen to administer the system parameters for Lucent INTUITY Lodging. Use the **Lodging Administration, System Parameter Administration** command. Enter the backup voice terminal extensions as well as any extensions that will be used to retrieve messages for guests in the **Attendant Extensions** field. Enter the attendant console dial-up number (usually 0) or extension in the **Primary Attendant** field, and select the default language option.

```
+-----+
+               System Parameter Administration               +
+-----+
+               Attendant Extensions:                        +
+-----+
195
      Hunt Group Or
      Primary Attendant: 0
      Voice Mail Parameters
      Mailbox Size: 6 min           Mailbox Type: Separate
      Pause For TT Input: 4 sec     Play Back Format: FIFO
      Maximum Extension Length: 4
      Maximum Message Length: 120 sec
Allow Guests To Save Messages?: Yes
Lamp ON For New Messages Only?: Yes
      Automatic Transfer to
      Operator At End Of Call?: No
      Default Language: American English
+-----+
```

## Standalone Mode

To use the hard-wired link between the Lucent INTUITY and the PMS (Figure 6), you must first disable the Server/INTUITY/PMS Link Integration feature. Enter an **n** in the Forward PMS Messages to Intuity Lodging? field.

```

change system-parameters hospitality                               Page 1 of 3
                                HOSPITALITY

                                Message Waiting Configuration: act-nopms
                                Controlled Restrictions Configuration: act-pms
                                Housekeeper Information Configuration: act-pms
                                Number of Housekeeper ID Digits: 0
                                Extension of PMS Log Printer:
                                Extension of Journal/Schedule Printer:
                                Client Room Coverage Path Configuration: act-nopms
                                Default Coverage Path for Client Rooms: 1
                                Forward PMS Messages to Intuity Lodging? n

                                PMS LINK PARAMETERS
                                Extension of PMS: 7899
                                PMS Protocol Mode: transparent ASCII mode? y
                                Seconds before PMS Link Idle Timeout: 20
                                Milliseconds before PMS Link Acknowledgement Timeout: 500
                                PMS Link Maximum Retransmissions: 5
                                PMS Link Maximum Retransmission Requests: 5
                                Take Down Link for Lost Messages? y
    
```

You must then verify that the Lucent INTUITY system has the Standalone Mode link installed and active. Use the **Customer/Services Administration, System Management, System Control, PMS Interface Administration** screen to display the current interface (press **F1**).

- If the “Stand-alone PMS Interface” is currently installed, no changes are needed.
- If the “PMS Interface for GuestWorks” is currently active, you must insert the Lucent INTUITY Release 1.1 tape into the MAP/5, press **F8** to display the ACTIVATE function key, and press **F2** to install the correct software. Follow any other instructions displayed to install the software.

Use this screen on the Lucent INTUITY to administer the standard hard-wired link between the Lucent INTUITY Lodging and the PMS. Use the **Lodging Administration, PMS Parameter Administration** command to access this screen. The Device for Link field must match the physical port connected to the Equinox card. All other translations must match the vendor requirements.

```

+-----+
+ PMS Parameter Administration +
+-----+
      Device for Link: /dev/ttysac
      Maximum Link Error: 50
Link Acknowledgement Timeout: 20 sec
      Link Idle Timeout: 20 sec
      Maximum Retransmission: 5
Maximum Retransmission Request: 5
      Baud Rate: B9600
+-----+
  
```

Use this screen to administer the system parameters for Lucent INTUITY Lodging. Use the **Lodging Administration, System Parameter Administration** command. Enter the backup voice terminal extensions as well as any extensions that will be used to retrieve messages for guests in the Attendant Extensions field. Enter the attendant console dial-up number (usually 0) or extension in the Primary Attendant field. The PMS Integration Parameters must match the vendor requirements.

```

+-----+
+ System Parameter Administration +
+-----+
      Attendant Extensions:
195
      Hunt Group Or
Primary Attendant: 0

      Voice Mail Parameters
      Mailbox Size: 6 min           Mailbox Type: Separate
Pause For TT Input: 4 sec         Play Back Format: FIFO
      Maximum Extension Length: 4
      Maximum Message Length: 120 sec
Allow Guests To Save Messages?: Yes
Lamp ON For New Messages Only?: Yes
      Automatic Transfer to Operator At End Of Call?: No
      Default Language: American English
      PMS Integration Parameters
      Message Lamp Controlled By: LDG
      When PMS link is down, calls
      For Guests Handled By: LDG
+-----+
  
```



**NOTE:**

The Message Waiting Lamp Controlled By field should be set to **LDG** if you want Lucent INTUITY Lodging to control the guest room message lamps. If the lamp control is enabled for the PMS, the front desk personnel should take messages for guests when the PMS link is down because the message lamps will not be turned on even when the Lucent INTUITY has taken a message.

### **Testing the INTUITY Lodging-to-PMS Link**

After the connection is complete and the link is active, the mini-tester should show the following results (see the Note on Page 8). The leads marked with an asterisk are controlled by the Lucent INTUITY system, and the PMS controls the other leads.

TD* ● red	red ● RD
RTS* ○ dark	green ● CTS
DSR ● green	green ● DTR*
CD ● green	

After the connection is complete and the Lucent INTUITY link is active, the following may indicate that the PMS is not active. Check with the vendor to verify.

TD* ● red	red ● RD
RTS* ○ dark	red ● CTS
DSR ● red	green ● DTR*
CD ● red	

Table 8 gives a list of PMS alarm codes, the event IDs, a description of the problem, and a method to clear the problem. Use the **Customer/Services Administration, Log Administration, Maintenance Log** command to display the events.

**Table 8. PMS Event IDs Generated on the INTUITY**

<b>Alarm Code</b>	<b>Event IDs</b>	<b>Description</b>	<b>Clearing</b>
11	PMS01, PMS02, PMS04, PMS05, PMS06, PMS07	The PMS communication link is down.	Restart PMS through the command menu.
12	PMS08	An unknown PMS communication link problem.	Stop and restart the voice system.
13	PMS10, PMS11, PMS38	Unable to manage allocated memory.	Stop and restart the voice system.
14	PMS14	PMS received a message of an invalid size.	Stop and restart the voice system.
15	PMS03, PMS09, PMS12, PMS13, PMS15, PMS16, PMS27, PMS29, PMS30, PMS31, PMS33, PMS34, PMS35, PMS39, PMS43	The PMS communication interface is having problems.	Restart PMS through the command menu.
16	PMS20, PMS22, PMS24, PMS25	Unable to use the assigned serial port.	Stop and restart the voice system.

Use the following screens to test the voice mailboxes for the guest rooms.



**NOTE:**

Mailboxes are created automatically for the guest rooms and do not require administration.



## Server-to-Call Accounting Translations

---

You must assign the link between the server and the Lucent INTUITY, administer the CDR parameters, and enable CDR for each incoming and outgoing trunk group.

### Link Parameters (INTUITY)

---

The data link between the server and the Lucent INTUITY Lodging Call Accounting must be administered by the Homisco technician when he or she installs the software on the Lucent INTUITY platform.

### CDR Parameters (Server)

---

Use this screen to assign the CDR parameters on the server. If using the Lucent INTUITY Lodging Call Accounting, set the Primary Output Format field to **printer**.

```
change system-parameters cdr
                                CDR SYSTEM PARAMETERS

Node Number (Local PBX ID):          CDR Date Format: month/day
Primary Output Format: printer      Primary Output Ext: eia
Secondary Output Format:
  Use ISDN Layouts? n                EIA Device Bit Rate: 9600
  Use Enhanced Formats? n

                                Record Outgoing Calls Only? n
                                Intra-switch CDR? n
Suppress CDR for Ineffective Call Attempts? y    CDR Call Splitting? y
  Disconnect Information in Place of FRL? n      Attendant Call Recording? y
                                                Interworking Feat-flag? n
Force Entry of Acct Code for Calls Marked on Toll Analysis Form? n
                                                Calls to Hunt Group - Record: member-ext
  Record Called Direct Access Number Instead of Group or Member? n

Record Non-Call-Assoc TSC? n
  Record Call-Assoc TSC? n    Digits to Record for Outgoing Calls: dialed
  Privacy - Digits to Hide: 0    CDR Account Code Length: 2
```

As shown on Page 61, enable CDR Reports for each trunk group.

### **Testing the Server-to-Call Accounting Link**

---

To test the CDR link, use the following status command on the server.

```
status cdr-link                                     Page 1 of 1
          Primary          CDR LINK STATUS          Secondary
          Link State: up          extension not administered
          Maintenance Busy? no
```

You should also work with the vendor to test the link from the call accounting end. If you are installing the Lucent INTUITY Lodging Call Accounting, work with the Homisco technician to test the link.

### **INTUITY Lodging Call Accounting-to-PMS Translations**

---

The data link between the Lucent INTUITY Lodging Call Accounting and the PMS must be administered by the Homisco technician when he or she installs the software on the Lucent INTUITY platform.

### **Testing the INTUITY Lodging Call Accounting-to-PMS Link**

---

To test the call accounting link, make a test call from a test guest room to verify that the call is posted on the call accounting system and the PMS.

## Server-to-PMS Link Translations

Administration of the server-to-PMS link includes the following:

- Network control (netcon)
- 7400A or 8400B data module
- Hospitality parameters
- Housekeeping status feature access codes and definitions
- Controlled restrictions.

### Network Control (Netcon)

Use the following screen to administer the netcon connection on the server.

```

add data-module 7891
                                DATA MODULE

Data Extension: 7891             BCC: 2
                                Type: netcon      COS: 15   Maintenance Extension: 7995
Physical Channel: 01            COR: 50
                                Name: NETCON 01    TN: 1
                                ITC: restricted

ABBREVIATED DIALING
List1:

SPECIAL DIALING OPTION:

ASSIGNED MEMBER ( Station with a data extension button for this data module )

Ext      Name
1:
    
```

You must assign all four netcon channels. The following table is an example of how you can administer the netcon channels:

Data Extension	Physical Channel	Maintenance Extension
7891	01	7895
7892	02	7896
7893	03	7897
7894	04	7898

## Data Modules

---

Use the following screen to administer the 7400A or 8400B data module connected between the server and the PMS.

```
add data-module 7899
                                DATA MODULE

Data Extension: 7899           BCC: 2
Type: pdm                     COS: 15   Remote Loop-Around Test? n
Port: 01B0102                COR: 50   Secondary data module? n
Name: PMS LINK               TN: 1       Connected to: dte
ITC: restricted

ABBREVIATED DIALING
List1:

SPECIAL DIALING OPTION:

ASSIGNED MEMBER ( Station with a data extension button for this data module )

      Ext      Name
1:
```

## Hospitality Parameters

---

Use the following screens to administer the hospitality parameters. These assignments must be coordinated with the PMS vendor and the customer. On Page 1, administer the following:

- For the Message Waiting Configuration field, enter **act-nopms** if the Lucent INTUITY is controlling the message waiting lamps, and enter **act-pms** if the PMS is controlling the message waiting lamps.
- The Controlled Restrictions Configuration, Housekeeper Information Configuration, and Client Room Coverage Path Configuration fields control features offered by some PMS vendors. If the PMS vendor supports the feature, enter **act-pms** in the corresponding field. If the PMS vendor does not support the feature, enter **act-nopms** in the corresponding field. Note that if the Client Room Coverage Path Configuration field is administered incorrectly, administered coverage paths for rooms will be deleted.

- If the PMS Protocol Mode is **transparent**, set the PMS Link Idle Timeout to **20** and the PMS Link Acknowledgement Timeout to **500**. If the PMS Protocol Mode is **normal**, set the PMS Link Idle Timeout to **20** and the PMS Link Acknowledgement Timeout to **300**. If the PMS supports ASCII data mode, enter a **y** in the ASCII mode? field.

```
change system-parameters hospitality                               Page 1 of 3
      HOSPITALITY

      Message Waiting Configuration: act-nopms
      Controlled Restrictions Configuration: act-pms
      Housekeeper Information Configuration: act-pms
      Number of Housekeeper ID Digits: 0
      Extension of PMS Log Printer:
      Extension of Journal/Schedule Printer:
      Client Room Coverage Path Configuration: act-nopms
      Default Coverage Path for Client Rooms: 1
      Forward PMS Messages to Intuity Lodging? y

      PMS LINK PARAMETERS
      Extension of PMS: 7899
      PMS Protocol Mode: transparent ASCII mode? y
      Seconds before PMS Link Idle Timeout: 20
      Milliseconds before PMS Link Acknowledgement Timeout: 500
      PMS Link Maximum Retransmissions: 5
      PMS Link Maximum Retransmission Requests: 5
      Take Down Link for Lost Messages? y
```

⇒ **NOTE:**  
Use the commands **busyout pms-link** followed by **release pms-link** whenever you change the link timer values.

On Page 2, the Number of Digits From PMS field should be left blank and the Digit to Insert/Delete field may need to be administered. If the room numbers use a combination of 3- and 4-digit or 4- and 5-digit extension numbers, you must enter the leading digit that must be inserted when sent from the PMS to the server and deleted when sent from the server to the PMS.

⇒ **NOTE:**  
The PMS interface supports 3-, 4-, or 5-digit extensions, but be aware that prefixed extensions do not send the entire number across the interface. Only the assigned extension number is sent. Therefore, you should not use prefixed extensions for numbers that are also going to use the Insert/Delete Digit function.

This works as shown in the following example:

- **Digit Insertion** — If the digits received by the server are 123 and the insertion digit is 7, extension 7123 is checked to see if it is a valid extension. If 7123 is valid, the message is processed for extension 7123; if extension 7123 is not valid, the server assumes that the message is for extension 123 and processes it accordingly. If both 7123 and 123 are valid, the message will only be processed for extension 7123. Numbering conflicts such as this should be avoided when possible.
- **Digit Deletion** — The server checks the extension before it is sent to the PMS. If the extension contains the maximum number of digits translated for a leading digit and the leading digit matches the administered Insert/Delete digit, the digit is deleted before sending the extension to the PMS. For example, if the Insert/Delete digit is 7 and extensions 712 and 7123 are valid on the server, 712 will be sent as 712; however, 7123 is sent as 123 (this assumes there are no 5-digit extensions starting with 7 exist on the server).

```
change system-parameters hospitality                               Page 2 of 3
                                HOSPITALITY

                                Time of Scheduled Wakeup Activity Report:
                                Time of Scheduled Wakeup Summary Report:
                                Time of Scheduled Emergency Access Summary Report:

                                Announcement Type: mult-integ
                                Default Announcement Extension: 380

                                Length of Time to Remain Connected to Announcement: 30
                                Extension to Receive Failed Wakeup LWC Messages: 399
                                Routing Extension on Unavailable Voice Synthesis:
                                Display Room Information in Call Display? n

                                Number of Digits from PMS:
                                PMS Sends Prefix? n
                                Number of Digits in PMS Coverage Path: 3
                                Digit to Insert/Delete:
```

## Housekeeping Status

Use the following screen to assign the housekeeping status feature access codes. Administer only the feature access codes that the vendor supports and that match the status definitions.

```
change feature-access-codes                                     Page 5 of 5
                    FEATURE ACCESS CODE (FAC)
                    Hospitality Features

Automatic Wakeup Call Access Code: *98
Housekeeping Status (Client Room) Access Code: *81
Housekeeping Status (Client Room) Access Code: *82
Housekeeping Status (Client Room) Access Code: *83
Housekeeping Status (Client Room) Access Code: *84
Housekeeping Status (Client Room) Access Code:
Housekeeping Status (Client Room) Access Code:
Housekeeping Status (Station) Access Code:
Verify Wakeup Announcement Access Code: *89
Voice Do Not Disturb Access Code: *33
```

Use the following screen to administer the housekeeping status definitions. Coordinate these assignments with the PMS requirements.

```
change system-parameters hospitality                         Page 3 of 3
                    HOSPITALITY

Definition for Rooms in State 1: OCCUPIED/DIRTY
Definition for Rooms in State 2: OCCUPIED/MAID IN ROOM
Definition for Rooms in State 3: OCCUPIED/CLEAN
Definition for Rooms in State 4: VACANT/CLEAN
Definition for Rooms in State 5: Rooms in state 5
Definition for Rooms in State 6: Rooms in state 6
```

## Controlled Restrictions

When Controlled Restrictions are applied to guest rooms, calls made to those rooms or from those rooms are routed to intercept treatment. The recommended intercept treatment is to route the calls to the attendant console. Use the following screen to set the controlled restriction intercept treatment.

```

change system-parameters features                               Page 3 of 6
      FEATURE-RELATED SYSTEM PARAMETERS

      Reserved Slots for Attendant Priority Queue: 5
      Time before Off-hook Alert: 10
      Emergency Access Redirection Extension:

      Number of Emergency Calls Allowed in Attendant Queue: 5

      Call Pickup Alerting? n
      Deluxe Paging and Call Park Timeout to Originator? y

      Control Outward/Toll Restriction Intercept Treatment: attendant
      Controlled Termination Restriction (Do Not Disturb): attendant
      Controlled Station to Station Restriction: attendant

AUTHORIZATION CODE PARAMETERS      Authorization Codes Enabled? n
  
```

The PMS automatically applies controlled restrictions to guest rooms as they check in and check out. If the PMS link is down, you will have to apply and remove controlled restrictions manually. Administer the controlled restriction feature access codes using the screens found on Page 62.

Optionally, you can substitute Toll Restriction for the standard Outward or Station-to-Station restrictions. Enter **nothing**, **outward**, or **station-station** into the Controlled Toll Restriction replaces field. If you enter **nothing**, you have access to Outward, Total, Termination, and Station-to-Station restrictions. If you enter **outward**, you have access to Toll, Total, Termination, and Station-to-Station restrictions. If you enter **station-station**, you have access to Outward, Total, Termination, and Toll restrictions. In this example, Toll Restriction is substituted for Outward Restriction.

```

display system-parameters guestworks-bcs-options             Page 1 of 1
      GUESTWORKS/BCS OPTIONS

      Day Mode TAAS Pickup & Backup Station Audible Alerting? y
      Controlled Toll Restriction replaces: outward
      Dual Wakeups? y
      Room Activated Wakeup With Tones? y
      Dial By Name? y
  
```

## Testing the Server-to-PMS Link

---

To test the server-to-PMS link, have the hotel designate a room for testing. Testing the server-to-PMS link includes the following:

- Testing with the RS232 Mini-Tester
- Netcon and 7400A or 8400B data module
- PMS testing and status
- Database swap
- Check-in and check-out
- Message delivery (both manual messages and voice messages)
- Controlled restrictions
- Housekeeping status.

During the server-to-PMS testing, you will use the list maintenance pms-down command often to view events that may indicate problems with the link. These events are found in “Appendix D — List PMS Down Events” on Page 150.

### Server-to-PMS Link Testing with the RS232 Mini-Tester

Using the RS232 Mini-Tester (see the Note on Page 8), check the status of the PMS link. The leads marked with an asterisk are controlled by the server, and the PMS controls the other leads. If any of the server leads are dark, there is no connection.

If the link to a PMS is active, the mini-tester should show the following. The Physical Link State should be up and the Protocol State should be up. If this is the status of the link, proceed to “Netcon and 7400A or 8400B Testing” on Page 118. Otherwise, look at the other results in this section.

TD ● red	red ● RD*
RTS ● green	green ● CTS*
DSR* ● green	green ● DTR
CD* ● green	

If the link is idle, the mini-tester may show the following. The Physical Link State will be down and the Protocol State will be down. Possible causes may be that the server or the PMS is not administered correctly, or the PMS software is not running.

TD ● red	red ● RD*
RTS ● red	red ● CTS*
DSR* ● red	red ● DTR
CD* ● red	

If the link to a PMS is idle, the mini-tester may also show the following. The Physical Link State will be down and the Protocol State will be down. Possible causes may be that the PMS hardware is powered-up but the server is not administered correctly, or the PMS link is busied out at the server.

TD ● red	red ● RD*
RTS ● green	red ● CTS*
DSR* ● red	green ● DTR
CD* ● red	

## Netcon and 7400A or 8400B Testing

To test the netcon and the 7400A or 8400B, do the following:

1. Run the command **status data-module XXXX** (where **XXXX** is the extension of the netcon data module).

```
status data-module 7891                                     Page 1 of 1
                                     DATA-MODULE STATUS

Data Ext/Stn Ext for Stn DM: 7891      Service State: in-service/active
Port/Channel Number: 01A0502          Maintenance Busy? no
CF Destination Ext:

Connected Ports: 01AXX01
```

If the status message shows that the netcon data module is in the in-service/active state and shows the connected port of the 7400A or 8400B data module, this indicates that there was an available netcon data channel and that the 7400A or 8400B extension has been added to the hospitality parameters form.

If the status message shows that the netcon data module is in the in-service/idle state, the PMS link may have been busied out. Release the PMS link.

2. Run the command **status data-module XXXX** (where **XXXX** is the extension of the PMS link data module).

```
status data-module 7899                                     Page 1 of 1
                                     DATA-MODULE STATUS

Data Ext/Stn Ext for Stn DM: 7899      Service State: in-service/active
Port/Channel Number: 01AXX01          Maintenance Busy? no
CF Destination Ext:

Connected Ports: 01A0502
```

If the status message shows that the PMS link data module is in the in-service/active state and shows the connected port of the netcon, this indicates that the PMS link data module extension has been added to the hospitality parameters form.

If the status message shows that the netcon data module is in the in-service/idle state, the PMS link may not be providing DTR. Contact the PMS vendor for assistance.

3. Dial the netcon extension and the PMS link data module extension. If these facilities are operational, you will hear a high-pitched data tone.

## PMS Testing and Status

Use the **test pms** command to test the PMS link. If the link was not active, this command sometimes causes the link to be established. Test 215 should PASS before testing can proceed.

Use the **status pms-link** command to display the current status of the PMS link. The following is an example of that screen:

```
status pms-link
                PMS LINK STATUS

Physical Link State: Up
  Protocol State: Up
  Number of Retries: 1
  Maintenance Busy? yes
  Database Swapping? No
```

The fields are defined as follows:

- **Physical Link State** — If the link state is Up, the transmit/receive lamps will be flashing, and all other lamps will be lit (except for the ringing indicator lamp). This indicates that the link is active, and the call has been placed from the netcon to the data module.
- **Protocol State** — If the protocol state is Up, the 7400A or 8400B carrier detect lamp is lit, and at least one status inquiry message has been received and understood from the PMS. The 7400A or 8400B transmit/receive lamps will be flashing if the server is talking with the PMS. If the lamps stay on longer than the link idle timeout setting (usually 20 seconds), the server and the PMS are communicating. If the TD lamp flashes every 15 to 20 seconds, this indicates that the PMS is sending data to the server.
- **Number of Retries** — This count increments every 5 minutes for the first 12 retries, and then every 15 minutes until the link is established. This could indicate that the netcon data channel is not available because too many resources are assigned, or the data module could be busy. If there are no retries to report, this field is not displayed.
- **Maintenance Busy?** — This field shows whether the link is currently maintenance busied-out. If the link is not maintenance busied-out, this field is not displayed.
- **Database Swapping?** — If the field displays yes, the room images are being transmitted between the server and the PMS. If the field displays pending, the database swap has been requested by the server. If the field displays no, the PMS link is up.

## Database Swap Testing

To test database swapping, do the following:

1. Busy-out the PMS link using the command **busyout pms-link**.
2. Do a check-in or check-out on the test room from the attendant console or backup voice terminal. This sets the flag for the server to request a database swap from the PMS.
3. Release the PMS link using the command **release pms-link**.
4. Run the **status pms-link** command to verify the database swap between the server and the PMS. A database swap can take from 20 minutes to 1 hour.

```
status pms-link
                PMS LINK STATUS

Physical Link State: Up
  Protocol State: Up

Database Swapping? Yes
```



### NOTE:

Before the database swapping begins, the Database Swapping field may show Pending.

5. When the database swapping is complete, the Database Swapping field is No. Use the **status station XXXX** command (where **XXXX** is a guest room number) on a few guest rooms to confirm that the check-in and check-out status agrees between the server and the PMS.
6. Use the command **list pms-down** to display any PMS messages that may help you troubleshoot link problems. The meanings of the PMS messages are found in “Appendix D — List PMS Down Events” on Page 150.

## Check-In and Check-Out Testing

To test check-in and check-out, do the following:

1. Do a check-in for the test room from the PMS terminal.
2. Run the command **status station XXXX** (where **XXXX** is the test room number). The status should appear as follows:

```
status station 1005

                                GENERAL STATUS

      Type: 2500                Service State: in-srv/on-hook or disc
      Extension: 1005           Download Status: not-applicable
      Port: 01B0601            SAC Activated? no
      Call Parked? no          User Cntrl Restr: none
      Ring Cut Off Act? No     Group Cntrl Restr: none
      CF Destination Ext:

      Message Waiting:
      Connected Ports:

                                HOSPITALITY STATUS
      AWU Call At:
      User DND: not activated
      Group DND: not activated
      Room Status: occupied
```

Normally at check-in, the Room Status field should be occupied, and the User Cntrl Restr field is none. If an occupied room's restriction is set to outward, this indicates that the guest is a cash-paying customer and is restricted from placing calls external to the server.

3. Use the **list station** command to list the guest room stations. The test room guest name should display on that listing, as well as other guest names received on a database swap.
4. Use the command **list maintenance pms-down** to display any PMS messages that may help you troubleshoot link problems. The meanings of the PMS messages are found in "Appendix D — List PMS Down Events" on Page 150.
5. Do a check-out on the test room.
6. Run the command **status station XXXX** again.  
The Room Status field should be vacant and the restrictions should be set to outward.
7. Use the command **list pms-down** to display any PMS messages that may help you troubleshoot link problems. The meanings of the PMS messages are found in "Appendix D — List PMS Down Events" on Page 150.

## Message Waiting Testing

You must test manual message waiting and voice messaging (if installed).

To test manual message waiting, do the following:

1. Activate manual message waiting for the test room from the PMS terminal.
2. Run the command **status station XXXX** (where **XXXX** is the test room number). The status should appear as follows:

```
status station 1005

                                GENERAL STATUS

      Type: 2500                Service State: in-srv/on-hook or disc
      Extension: 1005           Download Status: not-applicable
      Port: 01B0601            SAC Activated? no
      Call Parked? no          User Cntrl Restr: none
      Ring Cut Off Act? No     Group Cntrl Restr: none
      CF Destination Ext:

      Message Waiting: pms
      Connected Ports:

                                HOSPITALITY STATUS
      AWU Call At:
      User DND: not activated
      Group DND: not activated
      Room Status: occupied
```

3. Use the command **list pms-down** to display any PMS messages that may help you troubleshoot link problems. The meanings of the PMS messages are found in “Appendix D — List PMS Down Events” on Page 150.
4. Deliver the message from the PMS terminal.
5. Run the command **status station XXXX** again.  
The `Message Waiting` field should be blank.
6. Use the command **list pms-down** to display any PMS messages that may help you troubleshoot link problems. The meanings of the PMS messages are found in “Appendix D — List PMS Down Events” on Page 150.

To test voice messaging by retrieving the message from the test room, do the following:

1. Call the test room and leave a message after the tone.
2. Run the command **status station XXXX** (where **XXXX** is the test room number). The status should appear as follows:

```
status station 1005

                                GENERAL STATUS

      Type: 2500                Service State: in-srv/on-hook or disc
      Extension: 1005          Download Status: not-applicable
      Port: 01B0601           SAC Activated? no
      Call Parked? no         User Cntrl Restr: none
      Ring Cut Off Act? No    Group Cntrl Restr: none
      CF Destination Ext:

      Message Waiting: audix
      Connected Ports:

                                HOSPITALITY STATUS
      AWU Call At:
      User DND: not activated
      Group DND: not activated
      Room Status: occupied
```

3. Use the command **list pms-down** to display any PMS messages that may help you troubleshoot link problems. The meanings of the PMS messages are found in “Appendix D — List PMS Down Events” on Page 150.
4. From the test room, call the voice messaging system. You will hear “Welcome to the guest voice mail system. You have one new message.” Listen to the message, and then delete the message.
5. Run the command **status station XXXX** again.  
The `Message Waiting` field should be blank.
6. Use the command **list pms-down** to display any PMS messages that may help you troubleshoot link problems. The meanings of the PMS messages are found in “Appendix D — List PMS Down Events” on Page 150.

To test voice messaging by retrieving the message from the attendant console, do the following:

1. Call the test room and leave another message after the tone.
2. Run the command **status station XXXX** (where **XXXX** is the test room number). The status should appear as follows:

```
status station 1005
                                GENERAL STATUS
                                Type: 2500           Service State: in-srv/on-hook or disc
                                Extension: 1005       Download Status: not-applicable
                                Port: 01B0601        SAC Activated? no
                                Call Parked? no      User Cntrl Restr: none
                                Ring Cut Off Act? No  Group Cntrl Restr: none
                                CF Destination Ext:
                                Message Waiting: audix
                                Connected Ports:
                                HOSPITALITY STATUS
                                AWU Call At:
                                User DND: not activated
                                Group DND: not activated
                                Room Status: occupied
```

3. Use the command **list pms-down** to display any PMS messages that may help you troubleshoot link problems. The meanings of the PMS messages are found in “Appendix D — List PMS Down Events” on Page 150.
4. From the attendant console or backup voice terminal, call the voice messaging system. You will hear “Please enter your room extension.” Enter the test room extension. You will hear “You have one new voice mail message.” Listen to the message, and then delete the message.
5. Run the command **status station XXXX** again.  
The Message Waiting field should be blank.
6. Use the command **list pms-down** to display any PMS messages that may help you troubleshoot link problems. The meanings of the PMS messages are found in “Appendix D — List PMS Down Events” on Page 150.

## Controlled Restrictions Testing

To test Controlled Restrictions, do the following:

1. Activate Outward Restriction on the test room from the PMS terminal.
2. Run the command **status station XXXX** (where **XXXX** is the test room number). The status should appear as follows:

```
status station 1005

                                GENERAL STATUS

      Type: 2500                Service State: in-srv/on-hook or disc
      Extension: 1005          Download Status: not-applicable
      Port: 01B0601           SAC Activated? no
      Call Parked? no         User Cntrl Restr: outward
      Ring Cut Off Act? No     Group Cntrl Restr: none
      CF Destination Ext:

      Message Waiting:
      Connected Ports:

                                HOSPITALITY STATUS
      AWU Call At:
      User DND: not activated
      Group DND: not activated
      Room Status: occupied
```

3. Use the command **list pms-down** to display any PMS messages that may help you troubleshoot link problems. The meanings of the PMS messages are found in “Appendix D — List PMS Down Events” on Page 150.
4. Deactivate Outward Restriction on the test room from the PMS terminal.
5. Run the command **status station XXXX** again.  
The `User Cntrl Restr` field should be blank.
6. Use the command **list pms-down** to display any PMS messages that may help you troubleshoot link problems. The meanings of the PMS messages are found in “Appendix D — List PMS Down Events” on Page 150.

## Housekeeping Status Testing

To verify that the housekeeping status is updated, do the following:

1. At the test room, update the housekeeping status. If the PMS confirms the status change within 40 seconds, you will hear confirmation tone. If the status was not accepted, you will hear reorder tone. If you dialed an invalid code, you will hear intercept tone.
2. Verify that the status changed at the PMS terminal. You can also check the housekeeping status from the attendant console.
3. Use the command **list pms-down** to display any PMS messages that may help you troubleshoot link problems. The meanings of the PMS messages are found in “Appendix D — List PMS Down Events” on Page 150.
4. At a designated telephone, update the housekeeping status for the test room. If the PMS confirms the status change within 40 seconds, you will hear confirmation tone. If the status was not accepted, you will hear reorder tone. If you dialed an invalid code, you will hear intercept tone.
5. Verify that the status changed at the PMS terminal. You can also check the housekeeping status from the attendant console.

Provide a list of feature access codes and housekeeping status codes to the customer and the PMS vendor.

## Journal/Log Printer Translations (Server)

---

To administer a printer, you must assign a 7400A or 8400B data module and assign the data module extension to the hospitality parameters form. In the example below, the same printer is used for journal/schedule printing and log printing. If you have two different printers, you must administer two different 7400A or 8400B data modules, and you will assign a different extension for each printer.



**NOTE:**

A log printer must be administered if the "list PMS down" feature is to log errors. If an actual log printer is not being installed, you should administer an **X** in the equipment location field (administration without hardware) to represent the log printer assignment.

```
add data-module 7850
                                DATA MODULE
Data Extension: 7850             BCC: 2
Type: pdm                       COS: 15   Remote Loop-Around Test? n
Port: 01B0101                  COR: 50   Secondary data module? n
Name: JOURNAL PRT              TN: 1     Connected to: dte
ITC: restricted

ABBREVIATED DIALING
List1:

SPECIAL DIALING OPTION:

ASSIGNED MEMBER ( Station with a data extension button for this data module )
      Ext      Name
1:
```

Enter the extensions of the printers in the Extension of PMS Log Printer and Extension of Journal/Schedule Printer field.

```
change system-parameters hospitality                               Page 1 of 3
                        HOSPITALITY

                        Message Waiting Configuration: act-nopms
                        Controlled Restrictions Configuration: act-pms
                        Housekeeper Information Configuration: act-pms
                        Number of Housekeeper ID Digits: 0
                        Extension of PMS Log Printer: 7850
                        Extension of Journal/Schedule Printer: 7850
                        Client Room Coverage Path Configuration: act-nopms
                        Default Coverage Path for Client Rooms: 1
                        Forward PMS Messages to Intuity Lodging? y

                        PMS LINK PARAMETERS
                        Extension of PMS: 7899
                        PMS Protocol Mode: transparent ASCII mode? y
                        Seconds before PMS Link Idle Timeout: 20
                        Milliseconds before PMS Link Acknowledgement Timeout: 500
                        PMS Link Maximum Retransmissions: 5
                        PMS Link Maximum Retransmission Requests: 5
                        Take Down Link for Lost Messages? y
```

Enter the time of day when you want the scheduled reports to print.



**CAUTION:**

*Do not set the time for these reports to coincide when the server does its scheduled maintenance tests (usually at 1 a.m.). See the **change system-parameters maintenance** screen to verify the time and coordinate this administration so the times do not overlap.*

```
change system-parameters hospitality                               Page 2 of 3
                        HOSPITALITY

                        Time of Scheduled Wakeup Activity Report: 02:00:am
                        Time of Scheduled Wakeup Summary Report: 02:30:am
                        Time of Scheduled Emergency Access Summary Report: 03:00:am

                        Announcement Type: silence

                        Length of Time to Remain Connected to Announcement: 30
                        Extension to Receive Failed Wakeup LWC Messages: 399
                        Routing Extension on Unavailable Voice Synthesis:
                        Display Room Information in Call Display? n

                        Number of Digits from PMS:
                        PMS Sends Prefix? n
                        Number of Digits in PMS Coverage Path: 3
                        Digit to Insert/Delete:
```

### Testing the Journal/Log Printer

---

Using the RS232 Mini-Tester (see the Note on Page 8), check the status of the printer connection. The leads marked with an asterisk are controlled by the server, and the printer controls the other leads; if any of the server leads are dark, there is no connection.

If the link is active, the mini-tester should show the following.

TD ● red	red ● RD*
RTS ● green	green ● CTS*
DSR* ● green	green ● DTR
CD* ● green	

The following test results occur if the link is idle, but the reasons for the results are different.

The following will display if the link is not up; try the **test journal pms** command to start the link. The printer could also be busied out; try the **release journal pms** command to release the printer.

TD ● red	red ● RD*
RTS ● green	red ● CTS*
DSR* ● red	green ● DTR
CD* ● red	

The following will display if the printer is turned off; turn on the printer power.

TD ○ dark	red ● RD*
RTS ○ dark	red ● CTS*
DSR* ● red	dark ○ DTR
CD* ● red	

The following will display if the printer is off-line; press the on-line button on the printer.

TD <input type="radio"/> red	red <input type="radio"/> RD*
RTS <input type="radio"/> red	green <input type="radio"/> CTS*
DSR* <input type="radio"/> green	green <input type="radio"/> DTR
CD* <input type="radio"/> green	

Another way to test the log printer connection is to create an Automatic Wakeup Call for the test room. If the printer is working, a wakeup call request message prints on the log printer.

## Customer Logins (Server)

---

Use the following screen to add customer logins and passwords to the server. The logins and passwords must be 3 to 6 characters long using any combination of 0-9, a-z, and A-Z. You should add only the logins that the customer requests. Instruct the customer that the logins and passwords must be kept secure to avoid security issues.

```
add login staff1                               Page 1 of 1
                LOGIN ADMINISTRATION
                Password of Login Making Change:
LOGIN BEING ADMINISTERED
                Login's Name: staff1
                Login Type: customer
                Service Level: non-super-user
LOGIN'S PASSWORD INFORMATION
                Login's Password:
                Reenter Login's Password:
                Password Aging Cycle Length (Days): 30
LOGOFF NOTIFICATION
Facility Test Call Notification? y      Acknowledgement Required? y
Remote Access Notification? y          Acknowledgement Required? y
```

## Customer Logins (INTUITY)

---

Use the **Customer/Services Administration, System Management, UNIX Management, Password Administration** command to create a password for the customer. The customer will use the "sa" login. Remind the customer to change the password as soon as the system is turned over, and to change it frequently.

## Security Notification (Server)

---

Use the following screen to add security notification to the server. You must enter y in the two highlighted fields before the other entry fields will display

```
change system security-parameters                               Page 1 of 1
                        SECURITY-RELATED SYSTEM PARAMETERS

SECURITY VIOLATION NOTIFICATION PARAMETERS

SVN Login Violation Notification Enabled? y
  Originating Extension:                                       Referral Destination:
  Login Threshold:                                           Time Interval:
  Announcement Extension:

SVN Authorization Code Violation Notification Enabled? y
  Originating Extension:                                       Referral Destination:
  Authorization Code Threshold:                               Time Interval:
  Announcement Extension:
```

## Save Translations (Server)

---

After you have finished all translations, tested the translations, and verified them with the customer, save the translations using the command **save translation**. After saving translations, log off using the command **logoff**.

## Create Backup Tape (INTUITY)

---

Use the **Customer/Services Administration, Backup/Restore, Backup** command to create a backup tape for the Lucent INTUITY.



---

## Additional Installation Tasks

---

### Server Testing

---

The following tests should be done after you have completed the translations. See *DEFINITY ECS Installation and Test for Single-Carrier Cabinets*, (555-230-894) and *DEFINITY ECS Installation and Upgrades for Compact Single-Carrier Cabinets*, (555-230-124).

1. Check the server status for each cabinet.
2. Check the circuit pack configuration.
3. Test the TDM bus in the Processor Port Network (PPN).
4. Test the Tone-Clock circuit packs.
5. Check the circuit pack configuration again.
6. Save and back up translations.
7. Reinstall the front doors on the server cabinets.

### Install and Wire Telephones and Other Equipment

---

See *DEFINITY ECS Installation and Test for Single-Carrier Cabinets*, (555-230-894) and *DEFINITY ECS Installation and Upgrades for Compact Single-Carrier Cabinets*, (555-230-124) for more information about the tasks in this section.

1. Make and label the wiring cross-connections for this customer, using the provisioning plan described earlier in this handbook.
2. Install and label the equipment.
3. Install the 302B or 302C attendant console. Part of installing the attendant console is putting the button labels in place. There are special buttons used for hospitality products, and they must be installed in the correct positions. See "Attendant Console Recommended Button Layout (Server)" on Page 69.
4. Install the 8400-series voice terminals. This includes preparing the button designation strips. See "Backup Voice Terminal Recommended Button Layouts (Server)" on Page 74.

5. Install the 8100-series voice terminals (if needed).
6. Install the Teledex guest room telephones if time and material charges have been contracted for this installation.
7. Install the trunks.
8. Install the emergency transfer units and associated telephones.
9. Install the external ringing equipment.
10. Install the auxiliary equipment.
11. Install the 7400/8400-series data modules not already installed for the hospitality adjuncts.

## Test Telephones and Other Equipment

---

See *DEFINITY ECS Installation and Test for Single-Carrier Cabinets*, (555-230-894) and *DEFINITY ECS Installation and Upgrades for Compact Single-Carrier Cabinets*, (555-230-124) for more information about the tasks in this section.

1. Make test calls.
2. Test the attendant console and selector console.
3. Test the external ringing.
4. Test the music-on-hold.
5. Test the emergency transfer.
6. Test the remote access interface (known as INADS).

## Customer Turnover

---

After you have installed and tested the GuestWorks *server* and installed adjuncts, and have determined that the solution is operating correctly, you will turn control of the system over to the customer. This transfer includes the following:

- Do a final save of the translations.
- Give the customer the following documentation:
  - Issue 3.0 Console Quick Reference, (555-231-735)
  - Issue 3.0 Hospitality Operations, (555-231-741)
  - Voice terminal quick reference guides, (555-231-777, 555-231-780, and 555-231-783)
  - Issue 3.0 Feature Descriptions, (555-231-207)

- INTUITY Lodging Call Accounting Users Guide, (555-231-205) (this document is used by Homisco technicians when they train the customer)
  - INTUITY voice messaging instructions
  - A copy of the dialing plan, a list of the feature access codes, and a list of the trunk access codes
  - Customer logins and passwords for the server and the Lucent INTUITY system
- Show the customer how to record announcements for wakeup calls or the Direct Access Calling feature.
  - Explain any Direct Access Calling procedures that have been administered.
  - Remind the customer to provide information about any new telephone numbers and services to the guests, such as instructions that show guests how to do their own wakeup calls and Do Not Disturb requests. The information about those features is in *GuestWorks server Issue 3.0 Hospitality Operations*, (555-231-741).
  - If the customer has a maintenance contract with Lucent Technologies, tell them that all trouble calls, whether it is the *GuestWorks server*, the Lucent INTUITY AUDIX or INTUITY Lodging, or the Lucent INTUITY Lodging Call Accounting, should go to 1-800-242-2121. Outside of the United States, the customer should call their local Lucent Technologies authorized representative.

## Maintenance

---

Maintenance procedures for the *GuestWorks server* are the same as other Lucent Technologies ECS products. See the *DEFINITY Communications System Generic 3vs/s/i Maintenance*, (555-204-105). The new hardware on the *GuestWorks server* includes the following:

- TN791 analog line circuit pack (similar to the TN746B)
- TN796B processor (similar to the TN786B)
- TN2214 digital line circuit pack (similar to the TN2224)
- TN2215 analog line circuit pack (similar to the TN2183).

See “Appendix F — Circuit Pack Characteristics” on Page 165 for more information.



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# Appendixes

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Additional information about the GuestWorks *server* is provided in the following appendixes:

- Appendix A — Command Path Conversions
- Appendix B — Parts List
- Appendix C — Connector Pinouts
- Appendix D — List PMS Down Events
- Appendix E — Server Capacities
- Appendix F — Circuit Pack Characteristics

## Appendix A — Command Path Conversions

Issue 1.0 and 2.0 of the GuestWorks server used a unique set of command paths. For Issue 3.0, the command paths have been enhanced to match the command set used with existing Lucent Technologies DEFINITY systems. Table 9 through Table 14 show the command paths used with GuestWorks Issue 1.0/2.0 and the new paths used for GuestWorks Issue 3.0.

**Table 9. Command Path Conversions - add**

<b>GuestWorks 1.0/2.0 Commands</b>	<b>GuestWorks 3.0 Commands</b>
add attendant	add attendant
add data-module	add data-module
add feature abbreviated-dialing	add abbreviated-dialing
add feature direct-access number	add direct-access number
add feature intra-switch-cdr	add intra-switch-cdr
add group coverage	add coverage
add group hunt	add hunt-group
add group intercom	add intercom-group
add group personal-co-line	add personal-co-line
add group pickup	add pickup-group
add group term-extensions	add term-ext-group
add group trunk	add trunk-group
add maintenance ds1	add ds1
add maintenance eda-external-dev-alm	add eda-external-device-alm
add maintenance login	add login
add maintenance prec	add prec
add maintenance signaling-group	add signaling-group
add network access-endpoint	add access-endpoint
add network administered-connection	add administered-connection
add network pri-endpoint	add pri-endpoint
add station	add station
add system dialplan second-digit	add second-digit
N/A	add vrt

**Table 10. Command Path Conversions - change**

<b>GuestWorks 1.0/2.0 Commands</b>	<b>GuestWorks 3.0 Commands</b>
change attendant	change attendant
change data-module	change data-module
change feature abbreviated-dialing	change abbreviated-dialing
change feature access-codes	change feature-access-codes
change feature alias	change alias
change feature alphanumeric-dial-table	change alphanumeric-dial-table
change feature announcements	change announcements
change feature bulletin-board	change bulletin-board
change feature direct-access number	change direct-access number
change feature direct-access procedure	change direct-access procedure
change feature display-messages	change display-messages
change feature integ-annc-brd-loc	change integrated-annc-boards
change feature intra-switch-cdr	change intra-switch-cdr
change feature meas-selection	change meas-selection
change feature paging	change paging
change group coverage	change coverage
change group hunt	change hunt-group
change group intercom	change intercom-group
change group mct-extensions	change mct-group-extensions
change group personal-co-line	change personal-CO-line
change group pickup	change pickup-group
change group term-extensions	change term-ext-group
change group trunk	change trunk-group
change maintenance circuit-packs	change circuit-packs
change maintenance communication-interface	change communication-interface
change maintenance ds1	change ds1
change maintenance eda-external-dev-alm	change eda-external-device-alm
change maintenance login	change login
change maintenance mst	change mst
change maintenance signaling-group	change signaling-group
change maintenance site-data	change site-data
change maintenance synchronization	change synchronization
change network access-endpoint	change access-endpoint
change network administered-connection	change administered-connection

**Table 10. Command Path Conversions - change**

<b>GuestWorks 1.0/2.0 Commands</b>	<b>GuestWorks 3.0 Commands</b>
change network ars	change ars
change network authorization-codes	change authorization-code
change network digit-absorption	change digit-absorption
change network isdn	change isdn
change network ixc-codes	change ixc-codes
change network pri-endpoint	change pri-endpoint
change network rhnpa	change rhnpa
change network route-pattern	change route-pattern
change network time-of-day	change time-of-day
change network toll	change toll
change restriction alternate-frl	change alternate-frl
change restriction cor	change cor
change restriction cos	change cos
change restriction password	change password
change restriction permissions	change permissions
change station	change station
change system cdr-parameters	change system-parameters cdr
change system console-parameters	change console-parameters
change system country-parameters	change system-parameters country-options
change system dialplan first-digit	change dialplan
change system dialplan second-digit	change second-digit
change system feature-parameters	change system-parameters features
change system guestworks-options	change system-parameters guestworks-bcs-options
change system hospitality-parameters	change system-parameters hospitality
change system listed-directory-numbers	change listed-directory-numbers
change system maintenance-parameters	change system-parameters maintenance
change system mf-signaling-parameters	change system-parameters multifrequency-signaling
change system options	change system-parameters customer-options
change system report-scheduler	change report-scheduler
change system security-parameters	change system-parameters security
change system terminal-parameters	change terminal-parameters
N/A	change aar
N/A	change call-screening
N/A	change node-routing

**Table 10. Command Path Conversions - change**

<b>GuestWorks 1.0/2.0 Commands</b>	<b>GuestWorks 3.0 Commands</b>
N/A	change sit-treatment
N/A	change udp
N/A	change vrt

**Table 11. Command Path Conversions - display**

<b>GuestWorks 1.0/2.0 Commands</b>	<b>GuestWorks 3.0 Commands</b>
display attendant	display attendant
display data-module	display data-module
display feature abbreviated-dialing	display abbreviated-dialing
display feature aca-button-location	display button-location-aca
display feature access-codes	display feature-access-codes
display feature alias	display alias
display feature alphanumeric-dial-table	display alphanumeric-dial-table
display feature announcements	display announcements
display feature bulletin-board	display bulletin-board
display feature direct-access number	display direct-access number
display feature direct-access procedure	display direct-access procedure
display feature display-messages	display display-messages
display feature integ-annc-brd-loc	display integrated-annc-boards
display feature intra-switch-cdr	display intra-switch-cdr
display feature meas-selection	display meas-selection
display feature paging	display paging
display feature svn-button-location	display svn-button-location
display group coverage	display coverage
display group hunt	display hunt-group
display group intercom	display intercom-group
display group mct-extensions	display mct-group-extensions
display group personal-co-line	display personal-CO-line
display group pickup	display pickup-group
display group term-extensions	display term-ext-group
display group trunk	display trunk-group
display maintenance alarms	display alarms
display maintenance circuit-packs	display circuit-packs

**Table 11. Command Path Conversions - display**

<b>GuestWorks 1.0/2.0 Commands</b>	<b>GuestWorks 3.0 Commands</b>
display maintenance communication-interface	display communication-interface
display maintenance disabled-tests	display disabled-tests
display maintenance ds1	display ds1
display maintenance eda-external-dev-alm	display eda-external-device-alm
display maintenance events	display events
display maintenance hardware-log	display errors
display maintenance initcauses	display initcauses
display maintenance internal-data	display internal-data
display maintenance login	display login
display maintenance mst	display mst
display maintenance port	display port
display maintenance signaling-group	display signaling-group
display maintenance site-data	display site-data
display maintenance software-log	display software
display maintenance synchronization	display synchronization
display network access-endpoint	display access-endpoint
display network administered-connection	display administered-connection
display network ars	display ars
display network authorization-codes	display authorization-code
display network digit-absorption	display digit-absorption
display network isdn	display isdn
display network ixc-codes	display ixc-codes
display network pri-endpoint	display pri-endpoint
display network rhnpa	display rhnpa
display network route-pattern	display route-pattern
display network time-of-day	display time-of-day
display network toll	display toll
display restriction alternate-frl	display alternate-frl
display restriction cor	display cor
display restriction cos	display cos
display restriction permissions	display permissions
display station	display station
display system capacity	display capacity
display system cdr-parameters	display system-parameters cdr
display system console-parameters	display console-parameters

**Table 11. Command Path Conversions - display**

<b>GuestWorks 1.0/2.0 Commands</b>	<b>GuestWorks 3.0 Commands</b>
display system country-parameters	display system-parameters country-options
display system dialplan first-digit	display dialplan
display system dialplan second-digit	display second-digit
display system feature-parameters	display system-parameters features
display system guestworks-options	display system-parameters guestworks-bcs-options
display system hospitality-parameters	display system-parameters hospitality
display system listed-directory-numbers	display listed-directory-numbers
display system maintenance-parameters	display system-parameters maintenance
display system mf-signaling-parameters	display system-parameters multifrequency-signaling
display system options	display system-parameters customer-options
display system security-parameters	display system-parameters security
display system terminal-parameters	display terminal-parameters
display system time	display time
N/A	display aar
N/A	display call-screening
N/A	display node-routing
N/A	display sit-treatment
N/A	display udp
N/A	display vrt

**Table 12. Command Path Conversions - list**

<b>GuestWorks 1.0/2.0 Commands</b>	<b>GuestWorks 3.0 Commands</b>
list data-module	list data-module
list feature abbreviated-dialing	list abbreviated-dialing
list feature aca-parameters	list aca-parameters
list feature call-forwarding	list call-forwarding
list feature direct-access number	list direct-access number
list feature direct-access procedure	list direct-access procedure
list feature do-not-disturb	list do-not-disturb
list feature emergency	list emergency
list feature extension-type	list extension-type
list feature integ-annc-brd-loc	list integrated-annc-boards

**Table 12. Command Path Conversions - list**

<b>GuestWorks 1.0/2.0 Commands</b>	<b>GuestWorks 3.0 Commands</b>
list feature intra-switch-cdr	list intra-switch-cdr
list feature measurements	list measurements
list feature set-data	list set-data
list feature usage	list usage
list feature wakeup	list wakeup
list group bridged-extensions	list bridged-extensions
list group coverage	list coverage
list group extensions-category	list groups-of-extension
list group hunt	list hunt-group
list group intercom	list intercom-group
list group members	list members
list group partitioned	list partitioned-group
list group personal-co-line	list personal-CO-line
list group pickup	list pickup-group
list group term-extensions	list term-ext-group
list group trunk	list trunk-group
list maintenance disabled-MOs	list disabled-MOs
list maintenance eda-external-dev-alm	list eda-external-device-alm
list maintenance history	list history
list maintenance isdn-testcall	list isdn-testcall
list maintenance logins	list logins
list maintenance marked-ports	list marked-ports
list maintenance mst	list mst
list maintenance performance	list performance
list maintenance pms-down	list pms-down
list maintenance signaling-group	list signaling-group
list network access-endpoint	list access-endpoint
list network administered-connection	list administered-connection
list network ars	list ars
list network authorization-codes	list authorization-code
list network pri-endpoint	list pri-endpoint
list network route-pattern	list route-pattern
list network toll	list toll
list restriction cor	list cor

**Table 12. Command Path Conversions - list**

<b>GuestWorks 1.0/2.0 Commands</b>	<b>GuestWorks 3.0 Commands</b>
list station	list station
list system configuration	list configuration
list system mct-history	list mct-history
list system report-scheduler	list report-scheduler
N/A	list aar
N/A	list bcms
N/A	list monitored-station
N/A	list node-routing
N/A	list suspend-alm-orig
N/A	list udp

**Table 13. Command Path Conversions - remove**

<b>GuestWorks 1.0/2.0 Commands</b>	<b>GuestWorks 3.0 Commands</b>
remove attendant	remove attendant
remove data-module	remove data-module
remove feature abbreviated-dialing	remove abbreviated-dialing
remove feature direct-access number	remove direct-access number
remove group coverage	remove coverage
remove group hunt	remove hunt-group
remove group intercom	remove intercom-group
remove group personal-co-line	remove personal-CO-line
remove group term-extensions	remove term-ext-group
remove group trunk	remove trunk-group
remove maintenance ds1	remove ds1
remove maintenance eda-external-dev-alm	remove eda-external-device-alm
remove maintenance login	remove login
remove maintenance prec	remove prec
remove maintenance signaling-group	remove signaling-group
remove network access-endpoint	remove access-endpoint
remove network administered-connection	remove administered-connection
remove network pri-endpoint	remove pri-endpoint
remove station	remove station

**Table 13. Command Path Conversions - remove**

<b>GuestWorks 1.0/2.0 Commands</b>	<b>GuestWorks 3.0 Commands</b>
remove system dialplan second-digit	remove second-digit
N/A	remove pickup-group
N/A	remove vrt

**Table 14. Command Path Conversions - miscellaneous**

<b>GuestWorks 1.0/2.0 Commands</b>	<b>GuestWorks 3.0 Commands</b>
execute busyout	busyout
execute cancel	cancel
execute clear	clear
execute disable	disable
execute enable	enable
execute get	get
execute go	go
execute mark	mark
execute recycle	recycle
execute release	release
execute reset	reset
execute resume	resume
execute rp	rp
execute rva	rva
execute set	set
execute test	test
execute wp	wp
execute wva	wva
server download	download
server duplicate	duplicate
server erase	erase
server monitor	monitor
server restore	restore
server save	save
server status	status
server upgrade	upgrade
server upload	upload

## Appendix B — Parts List

Table 15 shows many of the parts used with the GuestWorks server. Use this list as a reference if you need to order additional or replacement parts.

**Table 15. Parts List**

Part	Number
MAP/5 Equinox card	407009406; J1P260AA1, List 12
Equinox DTE 10/10 adapter, P/N:210068	406983155
IVC6 (AYC10) analog interface	106406580
6-pin modular cords, 3 ft.	ED5P208-30, Group 16
885A connector kit	601419666; ED5P90770, Group 1
885A connecting block	106079270
RJ11C 2-wire modular cords, 25 ft.	103732582
103A connecting blocks	105164818
PI-to-IDI cable	
10 ft.	H600-210, Group 1
25 ft.	H600-210, Group 2
50 ft.	H600-210, Group 3
100 ft.	H600-210, Group 4
200 ft.	H600-210, Group 5
IDI-to-GPSync card cable, 4.5 ft.	ED1E434-11, Group 175
GPSync card	406801647
D6AP 6-pin modular cord	
7 ft.	102937620
14 ft.	102937604
25 ft.	102937588
D8W 8-pin modular cord	
7 ft.	103786786 or 103786778
14 ft.	103786802
25 ft.	103786828
M25A cable, plug-to-receptacle	
5 ft.	102269602 or 846823649
9 ft.	102269610 or 846823656
25 ft.	102269628 or 846823664
50 ft.	102269636 or 846823680
M25B cable, plug-to-plug	
4 ft.	102269669 or 846823706
10 ft.	102269677 or 846823714
25 ft.	102986643 or 846823722
50 ft.	846823730
B25A distribution cable	
10 ft.	846300994
15 ft.	846301000

**Table 15. Parts List**

<b>Part</b>	<b>Number</b>
Null modem	407122043
7400A data module	105558050
8400B data module	407444835
Comsphere 3820 modem	107560534
9-pin to 25-pin transition cable, 1 ft.	847106945; ED3G1115
RS232 Mini-Tester	407515139
Processor circuit pack*	
TN786B	107753931
TN796B	107885709
Network control circuit pack, TN777B	106577422
Processor Interface circuit pack, TN765	103557187

\* The TN786B was the original processor used for GuestWorks, but it can be replaced with a TN796B if needed. If you receive a replacement processor card that does not have the GuestWorks software preloaded, obtain Crash Kit 37 which has the GuestWorks software.

## **Appendix C — Connector Pinouts**

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Connections from the Equinox card on the MAP/5 to the hospitality adjuncts (PMS or call accounting) can often cause problems. The following list gives you the pinouts and EIA leads provided when using a D6AP modular cord from the Equinox card to the Equinox 10/10 adapter (P/N:210068, comcode 406983155). These pinouts are on the 25-pin end of the adapter.

- Pin 2 - TD (transmit data)
- Pin 3 - RD (receive data)
- Pin 7 - GND (ground)
- Pin 8 - DCD (data carrier detect)
- Pin 20 - DTR (data terminal ready)

This arrangement of EIA is standard in the industry, but these pinouts may become valuable if the adjunct vendor needs to provide a special adapter to interface to this arrangement.

## Appendix D — List PMS Down Events

Whenever an error occurs between the server and the PMS, a log of the event is kept on the server. The following is an example of some PMS down events and reasons.

```
list pms-down                                Page 1
PROPERTY MANAGEMENT SYSTEM ACTIVITY

Extension      Event                Reason                Date/Time
2900           from room, code 1    active - nopms        18/20:10 PM
3100           from sta., code 2    active - nopms        18/21:00 PM
3344           checkout, MWL off    PMS Link Out          18/21:25 PM
3302           room check in        PMS Link Out          18/21:34 PM
3320           PBX chng stn rstr    active - nopms        18/22:00 PM
```

You can use these events to troubleshoot link problems or verify link events. If there is a log printer installed and administered on the server, these events are logged to that printer as they occur. If there is not a log printer, the **list pms-down** command displays the events that occurred on the server for the last 24 hours. The **list pms-down long** command displays the last 100 events that occurred on the server, regardless of time frame. Table 16 is a listing of the events and their meanings, and Table 17 is a listing of the reasons and their meanings.

**Table 16. PMS Down Events**

Event	Meaning
checkin, occupied	Check in confirmed; room already occupied
checkout, message	Check out confirmed; messages exist
checkout, MWL off	Check out confirmed; MWL off
checkout, MWL on	Check out confirmed; MWL on
checkout, vacant	Check out confirmed; room already vacant
cnf data link rel	Confirm data link release
end data swap	End of database exchange
from room, code 1	Housekeeping from room; process code 1
from room, code 2	Housekeeping from room; process code 2
from room, code 3	Housekeeping from room; process code 3
from room, code 4	Housekeeping from room; process code 4
from room, code 5	Housekeeping from room; process code 5
from room, code 6	Housekeeping from room; process code 6
from room, PMS acc	PMS accepts housekeeping status change from room
from room, PMS rej	PMS rejects housekeeping status change from room
from stn, code 1	housekeeping from station; process code 1
from stn, code 2	Housekeeping from station; process code 2

**Table 16. PMS Down Events**

<b>Event</b>	<b>Meaning</b>
from stn, code 3	Housekeeping from station; process code 3
from stn, code 4	Housekeeping from station; process code 4
from stn, PMS acc	PMS accepts housekeeping status change from station
from stn, PMS rej	PMS rejects housekeeping status change from station
gst info: complt	Guest info completed
gst info: no chg	Guest info no change
gst info: request	Guest info request
gst info: vacant	Guest info vacant
invalid PMS msg	Server received a message with either a bad feature code or process code
MWL, another type	PMS attempted clearing MWL
PBX chng stn rstr	Server change the station's restriction value
PBX cleared MWL	Server cleared a station's MWL
PBX enabled MWL	Server enabled a stations MWL
PBX room image	Server's room data image for synchronization
PMS chng stn rstr	PMS changes station's restriction value
PMS cleared MWL	PMS wants station's MWL cleared
PMS enabled MWL	PMS wants station's MWL enabled
PMS room change	Room change message from PMS
PMS room image	PMS's room data image for synchronization
PMS room swap	Room swap message from PMS
req data link rel	Request data link release
room ch/sw error	Room change/swap data error
room checkin	Room check-in
room checkout	Server is to check-out room
room data request	Room data request
room data resp	Room data response
start data swap	Start of database exchange
status inquiry	Status inquiry from PMS
status : OK	Status response: OK
status : PBX init	Status response: server-initiated
status : UC	Status response: uncommunicated changes

**Table 17. PMS Down Reasons**

<b>Reason</b>	<b>Meaning</b>
active-nopms	Feature is active, no PMS
ADX link out	AUDIX link is out of service
ADX rej msg	AUDIX rejected message
PBX bfr ovfl	Server buffer overflow
PBX rej msg	Server rejected message
PMS link out	PMS link is out of service
PMS prot vio	PMS protocol violation
PMS rej msg	PMS rejected the message
rcv viol msg	Received violation message
viol:bad cp	Coverage path not between 0 and 600 or equal to a special code representing the "Default Coverage Path for Client Rooms"
viol:bad ext	Extension does not exist or does not have a client room COS
viol:bad fea	Invalid feature code
viol:bad fmt	Message format not correct (for example, 0xff characters or 0xf bytes not present where required)
viol:bad mw	Invalid Message Waiting message
viol:bad nm	At least one name character is invalid
viol:bad occ	Invalid occurrence
viol:bad pro	Invalid process code for the associated feature code
viol:bad res	Invalid restriction level
xmt viol msg	Transmitted violation message

## Appendix E — Server Capacities

The maximum capacities for the GuestWorks *server* hardware and software are shown in Table 18. Some of these capacities can be viewed using the **display capacity** command. The capacities are given for the Issue 2.0 and Issue 3.0 software releases.



**NOTE:**

The capacities shown in this table is the maximum for an SCC configuration that supports up to four cabinets. The CSCC has access to the same set of features, but with smaller capacities based on the type of port circuits used in the configuration.

**Table 18. Capacity Limits**

Feature	Capacity	
	Issue 2.0	Issue 3.0
<b>Abbreviated Dialing (AD)</b>		
AD Lists Per Server	400	400
AD List Entry Size	24	24
AD Entries Per Server	2000	2000
Auto Dialing Button		
Entries per Server <sup>a</sup>		
Enhanced List (System List)	1	1
Maximum entries	2000	2000
Group Lists	100	100
Maximum entries	100	100
Group lists/extension	3	3
System List	1	1
Maximum entries	100	100
Personal Lists	400	400
Maximum entries	100	100
Personal lists/extension	3	3
<b>Applications Adjuncts</b>		
Asynchronous Links (RS232)	5	5
CDR Output Devices	2	2
Journal: System Printer	2:1	2:1
Property Management Systems	1	1
BX.25 Physical Links	4	4
AUDIX Adjuncts	1	1
ICM Adjuncts (ISDN Gateway)	1	1
BX.25 Processor Channels	64	64
Hop Channels	64	64

**Table 18. Capacity Limits**

Feature	Capacity	
	Issue 2.0	Issue 3.0
<b>Attendant Service</b>		
Attendant Consoles (day:night)	6:1	6:1
Attendant Console 100s Groups/Attendant	20	20
Attendant Control Restriction Groups	96	96
Other Access Queues		
Maximum Number of Queues	12	12
Maximum Number of Queue Slots	30	30
Size range of Reserved Queue	2-25	2-25
Reserved Queue Default Size	5	5
Queue Length	30	30
Switched Loops/Console	6	6
<b>Authorization</b>		
Authorization Codes	300	1500
Classes of Restriction	96	96
Classes of Service	16	16
Length of Authorization Code	4-7	4-7
Length of Forced Entry Account Codes	1-15	1-15
Restricted Call List	1	1
CDR Forced Entry Account Code List	1	1
Toll Call List	1	1
Unrestricted/Allowed Call Lists	10	10
Total Call List Entries	1000	1000
<b>Automatic Call Distribution</b>		
Announcements per Hunt Group	N/A	2
Announcements per Server	N/A	128
Hunt Groups	N/A	24
ACD Members per Hunt Group	N/A	150
Hunt Group Members per Server	N/A	150
Measured ACD Hunt Group Members (Server Limits)		
Logged in Hunt Groups per Member	N/A	20
Queue Slots per Group	N/A	200
Queue Slots per Server	N/A	200
<b>Automatic Callback Calls<sup>b</sup></b>	80	100

**Table 18. Capacity Limits**

Feature	Capacity	
	Issue 2.0	Issue 3.0
<b>Automatic Route Selection/Automatic Alternate Routing<sup>c</sup></b>		
ARS/AAR Patterns	40	40
ARS/AAR Table Entries (NPA,NXX,RXX,HNPA, FNPA)	2000	2000
Choices per RHNPA Table	12	12
Digit Conversion Entries	400	400
ARS/AAR Digit Conversion		
Digits Deleted for ARS/AAR <sup>d</sup>	28	28
Digits Inserted for ARS/AAR	18	18
Entries in HNPA & RHNPA Tables	1000	1000
FRLs	8	8
Inserted Digit Strings <sup>e</sup>	450	450
Patterns for Measurement	20	20
RHNPA Tables	32	32
Routing Plans	8	8
Toll Tables	32	32
Entries per Toll Table	800	800
Trunk Groups in an ARS/AAR Pattern	6	6
UDP (Entries)	N/A	240
TOD Charts	8	8
Toll Analysis Table Entries	N/A	1000
<b>Automatic Wakeup</b>		
Simultaneous Display Requests	10	10
Wakeup Requests per Server <sup>f</sup>	800	800
Wakeup Request per Extension	1	2
Wakeup Requests per 15-minute Interval	150	150
<b>Basic Call Management System</b>		
Measured Hunt Group Members or Login IDs	N/A	20
Measured Hunt Groups	N/A	5
Measured Trunk Groups	N/A	32
Measured Direct Access Calling Numbers	N/A	0
Reporting Periods		
Intervals	N/A	25
Days	N/A	7
<b>Cabinets</b>		
Inter-Port Network Connectivity		
Port Networks	1	1
Maximum Number of Port Networks/Cabinet	1	1
PPN		
SCC	4	4
CSCC	1	1

**Table 18. Capacity Limits**

Feature	Capacity	
	Issue 2.0	Issue 3.0
<b>Call Appearances</b>		
Bridged Images/Appearance	7	7
Call Appearances/Station <sup>g</sup>	54	54
Maximum Appearances per Extension	10	10
Minimum Appearances per Extension	0	0
Total Bridged Appearances	800	800
Maximum Simultaneous Off-Hook per Call <sup>h</sup>	5	5
<b>Call Coverage</b>		
Coverage Answer Groups (CAG)	10	30
Coverage Paths	400	400
Coverage Paths Included in Call Coverage Report	15	15
Coverage Path per Station	4	4
Coverage Points in a Path	3	3
Max Users/Coverage Path <sup>i</sup>	500	800
Members per CAG	8	8
Number of Coverage Paths for which each Station can be a member	300	300
<b>Call Detail Recording</b>		
Intra-switch Call Trackable Extensions	100	100
Maximum Number of CDR Records that can be Buffered in the Server	500	500
Number of Records Buffered for the Primary Output Device That Will Cause Secondary Device to be Busied Out for 2 Minutes	200	200
<b>Call Forwarding (Follow-me)</b>		
Call Forwarded Digits (off-net)	16	16
Call Forwarded Numbers	800	800
<b>Call Park</b>		
Attendant Group Common Shared Extension Numbers	10	10
Number of Parked Calls	180	180
<b>Call Pickup Groups</b>		
Number of Groups	15	100
Call Pickup Members/Group	50	50
Call Pickup Members/Server	200	200
<b>Conference Parties</b>		
Simultaneous 3-way Conference Calls	6	6
Simultaneous 6-way Conference Calls	161	161
	80	80
<b>Data Parameters</b>		
Administered Connections	N/A	24
Alphanumeric Dialing		
Maximum entries	50	50
Characters/Entry	22	22
PRI Endpoints (PE)	25	25
Access Endpoints (Number of Trunks)	100	100

**Table 18. Capacity Limits**

Feature	Capacity	
	Issue 2.0	Issue 3.0
<b>Digital Data Endpoints</b>	75	75
<b>Dial Plan</b>		
DID LDNs	8	8
Extensions	1000	1200
Feature Dial Access Codes		
Number of Access Codes	70	78
Number of Digits	1-4	1-4
Integrated Directory Entries <sup>j</sup>	807	1007
Maximum Extension Size	5	5
Minimum Extension Size	1	1
Miscellaneous Extensions <sup>k</sup>	150	150
Names		
Number of names <sup>l</sup>	1064	1264
Number of characters in a name	15	15
Non-DID LDNs	50	50
Prefix Extensions	Yes	Yes
Trunk Dial Access Codes		
Number of Access Codes	65	65
Number of digits	1-4	1-4
<b>Direct Access Calling</b> (replaces Call Vectoring)		
Priority Levels	N/A	4
Recorded Announcements	N/A	128
Steps per Procedure	32	32
Numbers (formerly VDNs)	4	4
Procedures (formerly Vectors per Server)	4	4
Number of Collected Digits for Call Prompting	N/A	16
Number of Dial-Ahead Digits for Call Prompting	N/A	24
Routing Tables	N/A	5
<b>Do Not Disturb (DND)</b>		
DND Requests per Server <sup>f</sup>	800	800
Simultaneous Display Requests	10	10
<b>Facility Busy Indicators</b>		
Buttons per Tracked Resource	100	100
Number of Indicators (Station and Trunk Groups)	800	800
<b>Hunt Groups</b>		
Announcements per Group	2	2
Announcements per Server	128	128
Groups	12	24
Group Members per Group	150	150
Group Members per Server	150	150
Queue Slots per Group	200	200
Queue Slots per Server	120	200

**Table 18. Capacity Limits**

Feature	Capacity	
	Issue 2.0	Issue 3.0
<b>Intercom Translation Table (ICOM)</b>		
Automatic/Manual and Dial ICOM groups per Server	10	10
Auto/Manual	10	10
Dial	10	10
Members per ICOM group		
Auto	32	32
Dial	32	32
Members per Server	320	320
<b>Last Number Dialed</b>		
Entries/Server <sup>m</sup>	882	1082
Number of Digits	24	24
<b>Leave Word Calling (Server-Based)</b>		
Messages Stored	800	1000
Messages per User	10	10
Simultaneous Message Retrievers	60	60
Server-wide Message Retrievers	10	10
<b>Malicious Call Trace</b>		
Maximum Simultaneous Traces	16	16
<b>MLDN</b>		
Via DID	8	8
Via CO <sup>n</sup>	16	32
<b>Paging (via Aux Trunk TN763D)</b>		
Code Calling IDs	125	125
Loudspeaker Zones	9	9
<b>Personal CO Lines (PCOL)</b>		
PCOL Appearances	4	4
PCOL Lines (Trunk Groups)	15	15
PCOL Trunks Per Trunk Group	1	1
<b>Port Circuit Pack Slots<sup>o</sup></b>		
Per PPN		
SCC Standard Reliability	70	70
CSCC Standard Reliability	10	10

**Table 18. Capacity Limits**

Feature	Capacity	
	Issue 2.0	Issue 3.0
<b>Recorded Announcements</b>		
Analog and Auxiliary Trunk Announcements		
Queue Slots per Announcement	50	50
Queue Slots per Server	150	150
Calls Connected per Announcement		
Auxiliary and Analog Trunks	50	50
Integrated Announcements		
Integrated Announcement Circuit Packs	1	1
Channels per Integrated Announcement Circuit Pack	16	16
Calls Connected per Integrated Announcement	25	25
Recording Time (Minutes:Seconds)		
16KB recording	8:32	8:32
32KB recording	4:16	4:16
64KB recording	2:8	2:8
Integrated Queue Slots per Server	25	25
Total Recorded Announcements	128	128
<b>Server Administration</b>		
Number Of Logins	15	15
Admin History File Entries	50	50
Simultaneous Administration Command	1	1
Simultaneous Maintenance Command	1	1
Simultaneous SM Sessions	3	3
Printer Queue Size	50	50
<b>Speech Synthesizer Circuit Packs<sup>P</sup></b>		
Channels per Speech Circuit Pack	4	4
<b>Terminating Extension Groups (TEG)</b>		
TEGs	32	32
Users That May Share a TEG	4	4
<b>Time Slots</b>		
Simultaneous Circuit-Switched Calls	180	180
Total Slots	512	512
Time Slots for Voice and Data	483	483
<b>Tone Classifiers</b>		
Tone Receivers (General) <sup>Q</sup>	200	200
TTR Queue Size	4	4
Prompting TTR Queue Size	80	80

**Table 18. Capacity Limits**

Feature	Capacity	
	Issue 2.0	Issue 3.0
<b>Trunks</b>		
DS1 Circuit Packs	5	5
Queue Slots for Trunks	64	64
PRI Interfaces via PI <sup>f</sup>	4	4
PRI Interfaces via PACCON	8	8
PRI Temporary Signaling Connections		
TSCs in Server	164	164
Call Associated TSCs	100	100
Non-Call Associated TSCs	64	64
Administered TSCs	32	32
Ringback Queue Slots	64	64
Total PRI Interfaces <sup>g</sup>	8	8
Trunk Group Hourly Measurements	25	25
Trunk Groups in the Server	16	32
Trunk Members in a Trunk Group	99	99
Total Trunk Circuits in Server	120	120
Measured Trunks In Server	120	120
<b>Voice Terminals (stations)<sup>h</sup></b>		
Associated Data Modules (for example, 7400A or 8400B)	75	75
BRI Stations <sup>u</sup>	50	50
Digital Stations	200	200
Display Stations	200	200
Station Records <sup>v</sup>	800	1000
Station Button Capacity <sup>w</sup>	103600	121000

- a. There is no limit on the maximum number of auto dial buttons (other than the system limit on button capacity).
- b. This is the number of stations divided by 10.
- c. The Automatic Alternate Routing (AAR) feature was previously not available on this product.
- d. Plus up to seven inter-exchange carrier (IXC) digits.
- e. This is the number of available 12-character inserted-digit-strings available for ARS preferences.
- f. This limit is shared between the Automatic Wakeup feature and the Do Not Disturb feature. Therefore, you cannot have more than the maximum number of Automatic Wakeup requests *and* Do Not Disturb requests at one time.
- g. The number of call appearances is the sum of primary and bridged appearances; at most 10 can be primary.
- h. Does not apply to conferencing.
- i. The maximum number of users per coverage path is equal to the number of extensions.
- j. The Integrated Directory Entries = Stations + Attendant Consoles.
- k. Used for PCOL groups, common shared extensions, access endpoints, administered TSCs, code calling IDs, LDNs, hunt groups, announcements, and TEGs.
- l. The Number of Names = number of stations + attendant consoles + trunk groups + digital data endpoints + miscellaneous extensions.
- m. The Last Number Dialed Entries = Stations + Digital Data Endpoints + Attendant Consoles.
- n. This number is equal to the number of trunk groups in the system.

- o. Only port slots are included in this count. There may be other service circuits required which would further reduce the number of port slots available.
- p. This only provides English announcement and mu-law protocol.
- q. The system will use the TN744 Call Classifier for basic TTR usage as well as call prompting/call classification/MFC. In addition, the TN2182 Tone/Clock/Detector will also be used for multiple tone detection functions. The number of TN748, TN420, or TN744 circuit packs is limited only by the number of available slots, and the number of TN2182 circuit packs is limited to one. There is a single limit on the total number of tone receiver (classifier) ports for the system: the TN748/TN420 have four ports for TTR use, the TN748/TN420 have two ports for GPTD use, the TN744 has eight ports for call prompting/call classification/MFC/TTR use, and the TN2182 has eight ports for call prompting/Call Classification/MFC/TTR use.
- r. Only one Processor Interface (PI) circuit pack is supported, and therefore a total of four physical links (used for BX.25 or PRI) are available. PRI interface via the PI is not available in Germany. PRI via the PACCON must be used.
- s. Since the SCC or CSCC can support only one PI circuit pack, a total of four physical links (used for BX.25 or PRI) is available. When using the PACCON, the limit bounded by the DS1 CP limit.
- t. The following items detract from the total number of available "Stations" on a given system: analog music-on-hold, attendants, TAAS port, stations (digital, display, BRI, and so on), analog announcements, and analog external alarm ports.
- u. All BRI stations can be display stations.
- v. Including extensions administered without associated hardware.

w. The station button capacity cannot be exceeded based on the number and type of voice terminals administered on the system. The following examples show how this capacity is determined. Unless otherwise noted, the assumption is that only 3 call appearances (CA) are assigned to the sets (except analog sets which have no call appearances).

- Analog set: 62 units
- Digital set with 10 buttons: 102 units
- Digital set with 34 buttons, no display: 342 units
- Digital set with 34 buttons, display: 472 units
- 8410D digital sets with display: 292 units
- BRI set with 17 buttons, display: 250 units

The following is a list of specific terminal types and the button units required for each of the terminal types. **Default** means there are no nondefault buttons administered. **Loaded** means that all possible buttons are administered.

- 8403B (default): 32 units
- 8403B (loaded with 3 CA): 152 units
  
- 8410B (default): 32 units
- 8410B (loaded with 3 CA): 102 units
  
- 8410D/8411D (default): 292 units
- 8410D/8411D (loaded with 3 CA): 292 units
- 8410D/8411D (loaded with 10 CA): 362 units
  
- 8434D, no expansion module (default): 252 units
- 8434D, no expansion module (loaded with 3 CA): 562 units
- 8434D, expansion module (loaded with 3 CA): 802 units
- 8434D, expansion module (loaded with 52 CA): 1292 units
  
- 8510 (default): 190 units
- 8520 (default): 180 units
- 8520 (loaded with 3 CA): 350 units
- 8520 (loaded with 20 CA): 520 units

Some notes on figuring button units: a button takes 10 units. Call appearance/bridged appearance buttons on stations with displays take twice the normal button amount. Administering button 12 allocates space for buttons (or call appearances) 1 through 12, NOT just for button 12.

The GuestWorks *server* is a hospitality-specific version of Lucent Technologies' industry-leading DEFINITY Communications System Generic 3 offering (G3V4). Being a basic system, the GuestWorks *server* does not support all of the features available with the DEFINITY G3V4 product. The following is a list of features (and feature attributes) not supported on the GuestWorks *server*:

- Adjunct Switch Applications Interface (ASAI)
- Answering Machine Detection
- Barrier Codes
- Basic Call Management System (BCMS)/VuStats LoginIDs
- BCMS/VuStats Service Level
- Call Management System (CMS)
- Call Vectoring (replaced with Direct Access Calling)
- Call Work Codes
- CallVisor Adjunct Switch Applications Interface
- Centralized Attendant Service (CAS)
- CAS Main
- Calling Party Number/Billing Number (CPN/BN)
- Distributed Communications System (DCS)
- DTMF Feedback Signals for VRU
- Expert Agent Selection (EAS)
- Extension Number Portability (ENP)
- Flexible Billing
- Forced ACD Calls
- Hospitality Parameter Reduction
- Internally Measured Data
- Logged-In ACD Agents
- Lookahead Interflow
- Modem Pooling
- Multiple Call Handling (Forced)
- Multiple Call Handling (On Request)
- PASTE (Display PBX Data on Phone)
- PNC Duplication
- Remote Access

- Service Observing (Basic, Remote/by FAC, and VDNs)
- Switch Classified Calls/Predictive Dialing
- Tenant Partitioning
- Traveling Class Mark (TCM)
- VDN of Origin Announcement
- VDN Return Destination
- VuStats
- Wideband Signaling
- Wideband Switching
- Wireless

This system does support the DEFINITY Wireless Business System (DECT Release 1) adjunct and the DEFINITY Wireless PCM adjunct. Both of these are available only outside of the United States.

## **Appendix F — Circuit Pack Characteristics**

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There are four new circuit packs used with the GuestWorks server:

- TN2214 Digital Line (24-Port)
- TN2215 Analog Line (16-Port)
- TN791 Analog Line (16-Port)
- TN796B Processor

### **TN2214 — Digital Line (24-Port)**

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The TN2214 digital line circuit pack is designed for use with 2-wire digital communications protocol (DCP) voice terminals. The TN2214 supports either A-Law or Mu-Law companding (as selected by software), and operates with the following voice terminals and adjuncts:

- 302B and 302C attendant console
- 603E Callmaster voice terminal
- 8400B+ data module
- 8403B voice terminal
- 8410B/D voice terminal
- 8411B/D voice terminal
- 8434DX voice terminal
- 9403B voice terminal (not supported in the United States)
- 9410B/D voice terminal (not supported in the United States)
- 9434D voice terminal (not supported in the United States)

The distance limit for 8400-series voice terminals using the TN2214 is 3500 feet (1066 m).

### **TN2215 — Analog Line (16-Port)**

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The TN2215 analog line circuit pack is designed for use globally with any standard analog telephone. The TN2215 has the following characteristics:

- Supports installations in Australia, Belgium, China, France, Germany, Italy, The Netherlands, Spain, and the United Kingdom. For North American installations, the TN791 should be used.
- 16 ports
- Supports LED Message Waiting indicators
- Supports selectable ringing cadence
- Supports balanced ringing (when configured for France with the TN2202 Ring Generator)
- Supports selectable impedance and gain for various country requirements
- Feed voltage of -48V
- Supports hard bridging
- Supports station adjuncts
- Secondary lightning protection
- Same premises, out-of-building support
- Supports the 500-type, 2500-type, 7100-series, 8102-type, and 8110-type telephones

The distance limit for the 500-type, 2500-type, and 7102A telephones is 20,000 feet (6096 m). The distance limit for the 7101A and 7103A telephones is 15,200 feet (4633 m). The distance limit for the 8100-series and 9100-series telephones (not supported in the United States) is 12,000 feet (3657 m). All distances are with 24-gauge wire.

- Ringer load of 3
- Supports simultaneous ringing on 8 ports

The TN2215 allows ringing on four ports of each half of the circuit pack for a maximum of eight simultaneous ports ringing. A user attempting to ring one half of the circuit pack when all four ports are busy receives a busy tone.

### **TN791 — Guest Line (16-Port)**

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The TN791 analog line circuit pack (labeled Guest Line) is intended for use with analog telephone connections. The TN791 contains the circuitry to support many types of analog telephones, including most telephones used today in sites that have neon or LED message lamps. The TN791 has the following characteristics:

- 16 ports
- Supports neon and LED Message Waiting indicators
- Feed voltage of -48V
- Supports A-law and Mu-law companding and administrable timers
- Supports queue warning level lamps and paging system circuits
- Supports hard bridging
- Supports station adjuncts
- Secondary lightning protection
- Same premises, out-of-building support
- Supports the 500-type, 2500-type, 7100-series, 8102-type, and 8110-type telephones

The distance limit for the 500-type, 2500-type, and 7102A telephones is 20,000 feet (6096 m). The distance limit for the 7101A and 7103A telephones is 15,200 feet (4633 m). The distance limit for the 8100-series and 9100-series telephones (not supported in the United States) is 12,000 feet (3657 m). All distances are with 24-gauge wire.

- Ringer load of 3
- Supports simultaneous ringing on 8 ports

The TN791 allows ringing on four ports of each half of the circuit pack for a maximum of eight simultaneous ports ringing. A user attempting to ring one half of the circuit pack when all four ports are busy receives a busy tone.

### **TN796B — Processor**

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The TN796B Processor circuit pack manages the system and executes stored programs to perform call processing and maintenance. The TN796B contains a 16 MHz 386SX Intel\* central processing unit, 7 Mbytes of flash read-only memory for the system program, 4 Mbytes of random access memory for customer translations, and an 80188 MTP. The MTP contains field upgradable 32 Kbytes of random access memory, 64 Kbytes of flash read-only memory, a 1200/2400 bps modem, three serial ports, and the emergency transfer and power management functions.

The TN796B is identical in function to the TN786B Processor circuit pack except the CPP1 Memory circuit pack is not used.

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\* Registered trademark of Intel, Inc.

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