



MeetingPlace™

Customer Engineer Guide

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1 Introduction

This document provides the following information on MeetingPlace software and hardware:

- Hardware and software functional descriptions
- Installation procedures
- Software configuration procedures
- Upgrade information
- Maintenance and troubleshooting

Intended Audience

This document supports Application and Customer Support Engineers responsible for MeetingPlace installation and for properly trained MeetingPlace System Managers responsible for maintenance and upgrades. Document users should have a solid understanding of voice and data communication terminology and concepts.

What is different in this revision?

This document is a revision of the *MeetingPlace Customer Engineer Guide*, Latitude part number 9900-7411-01, Rev. B0 published 4/99. Table 1-1 lists the major changes made from the last revision.

Table 1-1. Summary of Changes from Last Revision

| Summary of Change | Page Number |
|--|-------------|
| Added <i>Single Number Access</i> , Chapter 8 | 8-1 |
| Added <i>MeetingPlace IP</i> , Chapter 9 | 9-1 |
| Added <i>MeetingPlace IP Card Identification and Location</i> , Appendix F | F-1 |
| Added <i>Merge Procedure</i> , Appendix G | G-1 |
| Added section on <i>Testing Network Latency</i> | 5-42 |

| Summary of Change | Page Number |
|--|-------------|
| Updated <i>Figure D-5. PCI Card Slot Locations</i> | D-4 |
| Updated diskcopy procedure in <i>CLI Reference</i> , Appendix A | A-21 |
| Made corrections to page references and confusing terminology reported by the field. | Throughout |
| Changed formatting to reflect the <i>MeetingPlace Installation Planning Guide</i> | Throughout |
| Changed pagination from consecutive to by chapter | Throughout |

Hardware and Software Version

The information in this document reflects PCI systems. This document contains sufficient information on the older, EISA servers to perform repair and upgrades. EISA information is identified as such. If a repair or upgrade procedure does not indicate EISA or PCI, it applies to both.

Using this Document

If the document is viewed with Microsoft™ Word, the following items can be clicked to jump to the referenced location in the document:

- References to figures or tables in the text, within the same chapter.
- Page numbers in the text, within the same chapter.
- Any reference to section headings, within the same chapter.

To visually group information, this document uses bulleted lists and tables. If you recall that the information is in a table, use the Table of Tables located after the Table of Figures to locate the information. This document also contains an index.

To streamline document use for more experienced users, many terms are introduced without a definition. For those unfamiliar with these terms a glossary resides near the end of this document. There is also a list of acronyms preceding the glossary.

Related Documents

The following documents augment the information presented in this Customer Engineer Guide:

- *MeetingPlace 99.2 Installation Planning Guide*, Latitude part number 9900-7401-01, Rev. K0
- *MeetingPlace 2000 Installation Planning Guide*, Latitude part number 9900-7421-01, Rev. A0
- *MeetingPlace 99.2 System Manager's Guide*, Latitude part number 9900-7400-01, Rev. K0
- *Newton's Telecom Dictionary* 14th Edition
- *National Electrical Code*, specifically Part K of Article 250 pertaining to grounding of electrical equipment
- Receiving Inspection/Upgrade Procedure T1 Card, Latitude part number 6500-0008-01
- Receiving Inspection/Upgrade Procedure E1 Card/120 OHM, Latitude part number 6500-0017-01
- Receiving Inspection/Upgrade Procedure E1 Card/75 OHM, Latitude part number 6500-0016-01
- Receiving Inspection/Upgrade Procedure 12 Port Analog Trunk Interface Card, Latitude part number 6500-0007-01
- MeetingPlace System Configuration, Latitude part number 9530-0001-01
- *MeetingPlace Data Conferencing Systems Managers Guide*, Latitude part number 9900-7409-01
- *Installation/Upgrade Procedure MeetingPlace Shadow Network Server*, Latitude part number 0520-0016-01

Visual Cues Used in This Guide

Bold text indicates words to be entered by keyboard. The terms enter or entering refer to typing the indicated words *and* pressing the enter key. Procedures in this book do not include instructions to press the enter key.

Italics are used to indicate:

- A term to be followed by a definition
- A document title
- Emphasis

Icons in the left margin highlight information that relates to networked systems or specific countries as explained in Table 1-2.

Table 1-2. Visual Cues Used in this Guide



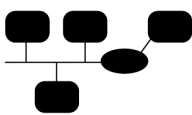
Note: Notes contain “for your information” text that corresponds to a topic.



Tip: Tips offer helpful hints and timesaving suggestions about using MeetingPlace features.



WARNING: Warnings identify essential steps, actions, or system messages that should not be ignored.



Identifies information specific to networked systems.



U.S./Canada: These icons represent the United States and Canada and specific information for these countries only.



UK: This icon represents the United Kingdom and specific information for this country.



Hong Kong: This icon represents Hong Kong and specific information for this country.



Singapore: This icon represents Singapore and specific information for this country.



Japan: This icon represents Japan and specific information for this country.



Australia: This icon represents Australia and specific information for this country.

Getting Technical Assistance

Should you have questions or problems with MeetingPlace, Latitude Communications and its authorized distributors are available to help you within the guidelines of your support program.

Before getting technical assistance, please check the printed or online product documentation. Then call your MeetingPlace support center or e-mail the information to Support@Latitude.com.

When you call, be ready to provide the following information:

- The version number of your Windows NT system or Windows server and any service packs that are installed (from the Windows Explorer Help menu, select About Windows NT/2000)
- The version number of your MeetingPlace system software (from the Help menu in MeetingTime, select About MeetingTime)
- The version number of MeetingTime you are using (select About MeetingTime from the Help menu)
- The exact wording of any messages or alarm codes reported by MeetingTime
- Questions you have or a description of the problem you are experiencing
- Configuration of your system in terms of number of trunks, options installed, number of profiles, and so forth

2 Overview

MeetingPlace enables users to conduct telephone conferences with near face-to-face meeting functionality such as document sharing. MeetingPlace also goes beyond the conference to help make people more productive before, during, and after the meeting with options that, for example, allow the recording of all or part of the meeting.

This chapter contains:

- Application
- Deployment
- MeetingPlace functions

Application

MeetingPlace servers interface with a company's LAN and existing private branch exchange (PBX) or to a public switch telephone network (PSTN) to:

- Schedule and manage multiple user meetings using touch-tone phones or PC software and existing network connections.
- View meeting material on client platforms over network connections.

MeetingPlace can interface with PBXs and PSTNs that use digital or analog trunks.

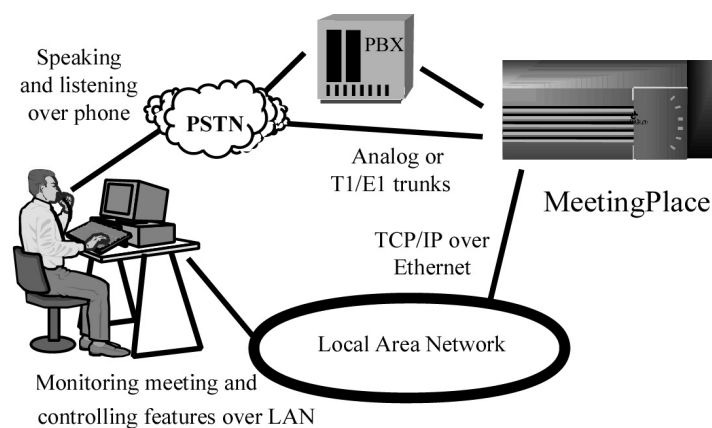


Figure 2-1. Attending a Conference via MeetingPlace

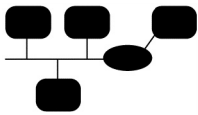
MeetingPlace allows users to interface with conference servers to access a full set of conferencing capabilities. There are three user interfaces:

- Touch-tone telephone
- MeetingTime™ desktop client
- Web browser via MeetingPlace Web, an optional Windows NT-based application that integrates MeetingPlace with a company's intranet

A server database maintains full details of past and pending conference calls.

Deploying the System

MeetingPlace systems reside completely at the customer site. Deployment options range from a single conference server to a network of up to eight conference servers, a required network server, and an optional network shadow server. Conference servers can be located at different sites if a wide area network (WAN) connection exists.



MeetingPlace servers can network together to expand system capacity. Servers in networked systems divide the work load:

- The Network server maintains the MeetingPlace system database and facilitates server communication
- The Conference servers interface with users to schedule meetings, each meeting must be assigned to a specific conference server, and each conference server must have a different access phone number

MeetingPlace networked systems can be deployed at a single site or at multiple sites located on your corporate network.

Scheduling a Meeting

To schedule a meeting, a user must have a profile with the appropriate scheduling privileges. A profile uniquely identifies a user, and contains the user's privileges and preferences for setting up meetings. Table 2-1 describes the various scheduling methods.

Table 2-1. Scheduling Methods

| Schedule from | Features |
|----------------------|--|
| Touch-tone phone | Users can schedule immediate or future meetings by dialing in and following voice prompts. |
| PC using MeetingTime | MeetingTime users can schedule meetings from their Windows or Macintosh computers. |
| E-mail | Can send an e-mail request form to schedule meetings (requires MeetingPlace SMTP Gateway). |
| The web | Users can schedule meetings using a schedule form via the web (requires MeetingPlace Web). |
| Outlook | Users can send calendar notifications (requires Outlook gateway) |
| Lotus Notes | Users can send calendar notifications (requires Notes gateway) |

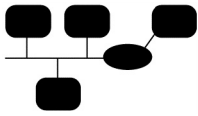
When scheduling a meeting with MeetingTime, Outlook, Notes, e-mail, or MeetingPlace Web, users can:

- Specify a list of invited individuals or teams
- Attach files to the meeting for distribution to attendees

Teams

MeetingPlace allows the invitation to meetings of predefined user groups called teams. Users can also outdial entire teams. Teams are available for use by all MeetingPlace users. However, only certain types of MeetingPlace users can create or modify teams. MeetingPlace System Manager's control who can create or modify teams and set the limit on the number of teams any user creates.

Scheduling on a Networked System



Users can schedule meetings on a networked system using the same mechanisms available on a standalone system. When scheduling meetings on a networked system:

- From a touch-tone phone—Users setup immediate or future meetings by dialing any conference server on the network for which they have scheduling permission and following voice prompts.
- From MeetingTime—MeetingTime users connect to the network server to schedule meetings from their Windows or Macintosh computers.
- From e-mail—E-mail users on a networked system all send their e-mail requests to the same address to schedule meetings (requires MeetingPlace e-mail Gateway).
- From the web—Users on a networked system can schedule meetings using a schedule form via the web (requires MeetingPlace Web).
- From Outlook—Users can use all the Outlook calendar features to schedule a MeetingPlace meeting (requires Outlook gateway).
- From Lotus Notes—Users can use all the Notes calendar features to schedule a MeetingPlace meeting (requires Notes gateway).

MeetingPlace networked systems require meetings to be assigned to a specific conference server. Configuration options allow users to schedule meetings:

- On any conference server
- On conference servers co-located at a specific site
- On one specific conference server

MeetingPlace networked system features include:

- A unique number and name to identify each conference server location
- User assignment to a specific scheduling home server and home site – the location of the user's scheduling home server.

The system first tries to schedule a user's meeting on the user's assigned conference server – scheduling home server. This minimizes the need for users to deal with multiple phone numbers. When scheduling from a touch-tone phone, if resources are not available to schedule a meeting on the user's scheduling home server the system plays a prompt which includes the server phone number where the meeting was scheduled. When scheduling from MeetingPlace Web a notice pops-up containing the meeting phone number. The system may be configured to include the MeetingPlace phone number for all meetings.

Notifying Meeting Participants

With Notification (optional), MeetingPlace proactively sends notifications to all invited participants whenever users schedule, reschedule, or cancel meetings. Notifications distribute via fax or e-mail depending on the gateway product purchased.

Even *without* the MeetingPlace Notification Option, users can:

- Request the schedule of meetings to which they have been invited
- Dial in using a touch-tone telephone and request a spoken list of meetings.
- Request that schedules be sent out via fax or e-mail, depending on the gateway product purchased

Inviting Participants

Most meeting types have two methods for connecting participants to a meeting:

- Meet me—Participants call into the meeting
- Get me—A participant in the meeting calls out to invite other participants to the meeting

Joining a Meeting

To join a meeting or get other participants to join, users can:

- Dial into MeetingPlace and use a Meeting ID to attend a particular meeting
- Dial out from a meeting to bring another user into the meeting or leave a message with information that allows the desired user to dial into the meeting
- Meeting schedulers can configure the automated outdial function to automatically dial out to participants at the time of the meeting and can page mobile users at the same time to give them the MeetingPlace telephone number and Meeting ID

During a Meeting

The functions in Table 2-2 are available to all meeting participants unless otherwise indicated. Functions that require an option are also indicated.

Table 2-2. During a Meeting Functions

| Meeting Function | Features |
|--|--|
| Roll call (only heard by the requester) | <p>Press #21 to listen to the recorded user names of people at the meeting. Roll call operates:</p> <ul style="list-style-type: none"> • Before entering a meeting • During a meeting • Gives the names of people in the breakout session and the number of people in the main meeting |
| Entry/departure announcement | <p>MeetingPlace can announce a new arrival by playing the recorded user name, a beep and the recorded user name, or a beep only to those already on the call. This minimizes disruption to the meeting and offers added security.</p> |
| Breakout | <p>Talk privately with a subgroup, and rejoin the meeting. There can be up to nine breakout sessions per meeting. All nine can occur simultaneously. Any participant can broadcast a meeting message to the main meeting and all breakout sessions.</p> |
| Recording | <p>The MeetingNotes option supports meeting recording and makes the recording available to other users. Users who missed the meeting can dial into MeetingNotes, enter the date and meeting ID of the meeting and access the recording.</p> |
| Outdial | <p>During a meeting, any participant who has outdial privileges can choose to outdial:</p> <ul style="list-style-type: none"> • All the other invitees of that meeting • Predefined teams • Missing invitees if enough free ports are available regardless of participant notification preferences • Any user, this outdial allows override of the user's profile telephone number • Any telephone number <p>Access the outdial function from a touch-tone telephone or from MeetingTime.</p> |
| Screened outdial | <p>MeetingPlace connects the participant who dialed out with the dialed person, allowing the two parties to speak before entering the meeting.</p> <p>To initiate a screened outdial you must be attending the meeting by telephone. If the participant initiating the outdial is not attending the meeting from the phone, selecting screened outdial will result in the system outdialing the user.</p> |

Using Meeting Attachments

With the MeetingNotes Data Option, users can submit meeting attachments using:

- MeetingTime
- MeetingPlace e-mail gateway
- MeetingPlace Web

After submitting meeting attachments, MeetingPlace provides the following access methods:

- MeetingTime
- MeetingPlace e-mail gateway
- MeetingPlace Web

Users who could not attend the meeting can access all of the related meeting materials and comments associated with the meeting.

MeetingTime enables LAN or WAN connected users to download meeting attachments to their own computers to follow along during a meeting.

Users without MeetingTime access can dial in using the touch-tone phone and request fax or e-mail copies of the associated attachments on demand, depending on appropriate gateways.

With the MeetingPlace Notification Option, MeetingPlace can automatically send copies of the documents, via e-mail or fax, to meeting participants as the attachments are submitted.

With MeetingPlace Web, users with access to the Internet or their company's intranet can click on meeting attachment icons, or hypertext links to the documents that are posted with the associated MeetingPlace meeting.

Contributing to Meetings Offline

If users cannot attend a meeting, MeetingNotes allows the submission of attachments or voice comments prior to a meeting without ever attending the meeting. Users can submit voice comments from any touch-tone phone.

If MeetingPlace Web is installed, users can connect to the Meeting Details pages, which provide:

- The meeting recording by clicking on icons that start WAV or RealAudio files
- Voice comments
- Attached documents

Types of Users

People outside your organization can attend meetings as guests. Guests have restricted privileges and typically cannot schedule meetings, start recording, or initiate outdials.

In order to schedule meetings, users should obtain a profile from the System Manager. User profiles contain a user's privileges for scheduling, recording, and outdialing as well as their user levels. Each user level denotes a class of user as described in Table 2-3.

Table 2-3. Types of Users

| Type of User | Description |
|---|--|
| End users, schedulers, meeting participants | Most users are end users. These users typically attend meetings, access MeetingNotes, and schedule meetings. An end user is the scheduler if he or she scheduled the meeting. See Table 2-4 for a description of the roles (listener, speaker, and moderator) that users perform during various types of meetings. |
| Contacts | Contacts are administrators who may support the system or the user community at a departmental level. Contacts can schedule and manage meetings on behalf of their specific set of users. |
| Attendants | Attendants are administrators who support all users in the system. Attendants can schedule, control, and manage meetings on behalf of all users. Attendants are typically company operators or help desk employees. Callers can reach the attendant by pressing 0 at the MeetingPlace main menu. Participants in a meeting can reach the attendant by pressing #0. |
| System Manager | The system manager sets up and maintains MeetingPlace. As system manager, you need access to all of the information in the MeetingPlace database, including system configuration information and information about the user community. |

Each user type has its own set of needs. As you use this guide, think about how your organization should deploy MeetingPlace.

Types of Meetings

Table 2-4 describes the five types of meetings.

Table 2-4. Types of Meetings

| Meeting Type | Features |
|---------------|---|
| All Speaker | At a pre-specified time and date participants dial a given telephone number and a meeting ID number. Each of the participants can speak and listen. MeetingPlace provides meeting features such as breakout sessions, roll call, outdial, lock, mute, and MeetingNotes (optional) for use in conducting and organizing all speaker meetings. |
| Lecture style | There are one or more <i>speakers</i> , but the remaining participants are <i>listeners</i> and must be granted speaking ability by a meeting moderator. Moderators can open the floor for general discussion or allow one listener to ask a question. |
| Q&A | An enhancement to the lecture style meeting. Moderators can temporarily grant listeners “the floor” to ask a question. MeetingTime provides full feature control and the MeetingPlace touch-tone interface provides capabilities for both listeners and moderators. |
| Waiting room | Another enhancement to the lecture style meeting. Moderators can send listeners into a waiting room where they only hear music on hold. Speakers however, remain in the main meeting and can confer privately without the listeners. Meeting moderators can send all participants into the waiting room automatically at the start time of a meeting. When the moderators are ready to start the meeting they can call the meeting to order by bringing all the waiting room participants into the meeting. |
| Multiserver | Allows participants on different MeetingPlace servers to communicate with each other as if they were in the same meeting. Multiserver meetings are ideal for: <ul style="list-style-type: none"> • Minimizing long distance calls between major corporate locations. Users in a particular region connect to their local conference servers, and the conference servers automatically call each other over standard phone lines to form a multiserver meeting. This reduces the number of long distance calls required to connect the users. • Large conference calls (over 120 participants) that require more than one MeetingPlace server. |

Meeting Security

MeetingPlace lets you securely discuss confidential information by protecting meetings at several different levels:

- Meetings can be restricted to invited participants or to users with MeetingPlace user profiles.
- Meeting participants must provide the correct meeting ID before they enter a meeting
- Schedulers may require that meeting participants provide a password in addition to the meeting ID
- MeetingPlace announces the name of each participant as they enter the meeting. If someone enters who shouldn't, that person can be dropped from the meeting
- When sensitive information is discussed, users can lock the meeting to prevent anyone from entering without explicit permission

Tracking

The MeetingPlace conference server accumulates historical information about meetings and associated resource usage. The system tracks:

- Details on meeting schedulers
- Schedules including participants of each meeting
- Outdialing activity

This information is retained in the MeetingPlace database and can be included in printed report.

3 Architecture

This chapter describes:

- Hardware configurations and components
- Software components
- Interconnections to other business systems

Hardware Configurations

MeetingPlace hardware was designed upon proven technology and utilizes a telephony grade power supply and ruggedized components to provide a reliable hardware platform. From a performance standpoint, the system has been architected as a multi-bus, distributed processor system. An open architecture allows:

- Incorporation of technological developments as they become available
- Leveraging of exiting hardware when possible.

The system uses several standards-based components to enable rapid system improvements:

- PCI and MVIP buses
- TCP/IP networking
- SCSI storage architecture

MeetingPlace allows the following two system configurations:

- Standalone conference server system where the single conference server is a call-processing/voice-processing hardware platform that connects to the telephone network and to a compatible LAN
- Networked conference server system where the hardware platform is divided into two types of servers:
 - Network server which controls the software and database information and additional shadow network server can expand the capability of the system
 - Conference server that connects to the telephone network

Standalone System

In the standalone conference server configuration, the server acts as the hardware and software platform for all telephony and LAN communication, see Figure 3-1 and Figure 3-2.

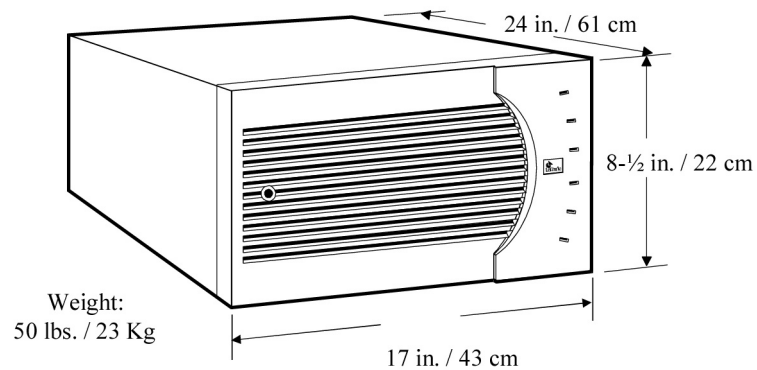


Figure 3-1. Desk-mounting Conference Server Physical Characteristics

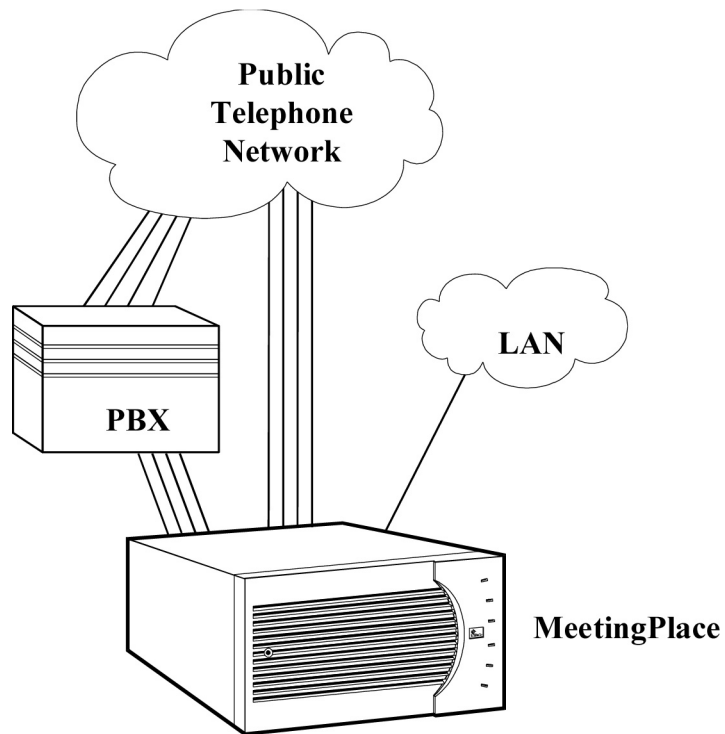


Figure 3-2. A Standalone System Interface to Other Business Systems

The conference server contains three basic subsystems:

- Common control
- Switching control
- Telephony

Common Control Subsystem

This subsystem contains the ten components in the list below. A description of each component follows the list.

- CPU card
- DAT Drive
- LAN card
- Floppy Drive
- Modem card

- PCI/EISA backplane
- SCSI backplane
- System Database disk
- System Integrity card (SIC)
- Voice/attachment expansion disks

The above components are described in the following subsections.

CPU Card

The CPU card plugs into the shared PCI/EISA and contains:

- 166 MHz Pentium Processor
- 64 MB of RAM
- NVRAM
- Push button reset
- SCSI disk controller
- Floppy disk controller
- PCI/EISA bus control
- Two serial port connections

DAT Drive

The 4mm tape DAT drive is an optional component of the common control subsystem. The drive backs up database and software upgrades. The conference server in networked systems does not contain a DAT drive.

LAN Card

The LAN card supports an RJ-45 connector for twisted pair Ethernet. The card currently supports 10Base-T and 100Base-TX.

Floppy Drive

This 3.5 inch floppy connects directly to the CPU card and is used primarily for software updates.

Modem Card

The modem is an EISA card that allows remote access for maintenance purposes. The 33.6K modem card has an RJ-11 interface. The conference server in networked conference server systems does not contain a modem.

PCI/EISA Backplane

The PCI/EISA backplane provides:

- 6 EISA slots
- 7 PCI slots

SCSI Backplane

The SCSI backplane allows easy installation and removal of disk drives, automatically sets the disks' SCSI ID, and supports up to 4 disk drives plus one DAT drive.



The SCSI disk drives are NOT hot pluggable. System power must be turned off before installing or removing a disk drive.

System Database Disk

The system database disk is a 2.0 GB or 4.0 GB disk drive that stores:

- The operating system
- System configuration.
- Profiles and meeting records
- Approximately 60 or 120 hours of voice recording depending on disk drive

System Integrity Card

The system integrity card (SIC) acts as the watchdog timer by initiating a hardware restart of the system should the software stop responding to the periodic queries. Additionally, the SIC measures the temperature inside the box and triggers an alarm should the temperature get too high.

Voice/attachment Expansion Disks

Voice/attachment expansion disks are available in 60 and 110 hour versions to store recordings and meeting attachments.

Switching Control Subsystem

The switching control subsystem only has one component.

Master Switch controller (MSC)—The MSC card acts as the controller for the Multi-vender Integration Protocol (MVIP) bus and performs the bridging of timeslots. It is responsible for all conference related functions such as conference set up, tear down, conference recording, and conference prompt playback. There is only one MSC per conference server system. However MSC cards and DSP cards are identical circuit cards. The card slot location determines the function of the card.

Telephony Subsystem

The telephony subsystem contains a least one of the following cards to interface with telephony trunks:

- Analog Trunk Interface (ATI) card, maximum of 4 cards
- Digital Trunk Interface (DTI) card, maximum of three cards
- E1 Trunk Interface (ETI) card, maximum of two cards

Trunk interface cards use port resource cards (PRC) to communicate to the MSC.

Analog Trunk Interface (ATI) Card—Sometimes referred to as ATI-12 are only used in US and Canada. They can interface up to 12 loop start analog lines. ATI cards interface to an analog trunk via a single 50-pair Amphenol connector.



The analog loop start lines *must* provide a form of positive far-end disconnect supervision. The PBX or central office must provide either battery reversal or loop current disconnect supervision to properly disconnect an analog loop start line.

DTI Card—Has two RJ-48 connectors and supports:

- Up to two digital T1 spans (one per connector) for up to 48 ports
- Signaling: E&M wink, ground start, loop start, and clear channel.
- Physical interfaces to the span via an RJ-48

E1 Trunk Interface (ETI) Card—The E1 card interfaces to up to two E1 digital trunks. Each of the 2 possible ETI cards can be assigned 60 ports. The card comes in two configurations:

- 120 ohm configuration that interfaces to the span via an RJ-45 connector called the ETI/RJ-45 (two ETI/RJ-45 per ETI card)
- 75 ohm configuration that interfaces to the span via a BNC connector called the ETI/BNC (four ETI/BNC connectors per card since each span requires a transmit and a receive connector)

MeetingPlace currently supports the E1 protocols listed under section E1 Digital Trunks, page 4-18.

Port Resource Card (PRC)—Responsible for managing all port related functions including:

- Dual-tone multi frequency (DTMF) detection
- DTMF suppression
- Echo cancellation
- Speech detection
- Voice recording and recording for individual ports

For T1 configurations and analog configurations, each PRC supports up to 48 ports per card. For E1 configurations, each PRC supports up to 60 ports per card. The PRC card acts as the interface between the trunk interface cards and the MSC. MSC cards and PRC cards are identical circuit cards. The card slot location determines the function of the card.

Networked System

Networked systems contain one or two network servers and one or more conference servers, see Figure 3-3.

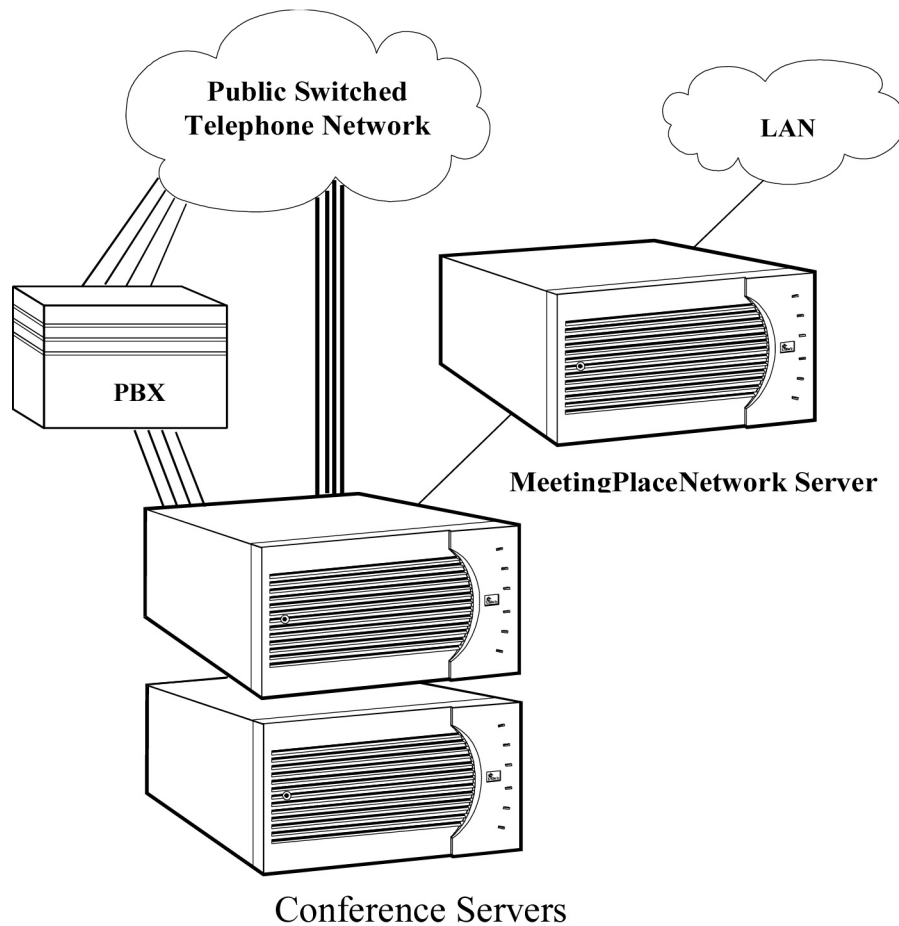


Figure 3-3. A Networked System Interface to Other Business Systems

Conference Servers in Networked Systems

The conference server in a networked system has the same components as a standalone conference server system except networked conference servers do not have a DAT drive. Conference servers in a networked system:

- Provide telephony connections
- Stores voice recordings and attachments

Introduced in MeetingPlace 99, conference servers contain a subset of the database stored on the network server. The database subset on each conference server contains information on conferences scheduled for that conference server.

Network Server

Network servers are required when more than two conference servers are needed to interface with a larger number of lines. Only networked systems have a network server. A network server has the same components as a conference server except network servers:

- Do not have a telephony subsystem
- Have two disk drives:
 - *System disk*—containing the operating system and system software
 - *Database disk*—containing profiles and meeting records

Shadow Server

Shadow servers are complete network servers that maintain a duplicate database that allows it to immediately take over for the network server if the network server fails.

Software

MeetingPlace uses a client-server architecture that divides computing tasks between the server and clients.

Server Resident Software

The software that resides on the system database disk consists of:

- A real-time UNIX/POSIX compatible operating system designed specifically for real-time intensive applications and uses a SQL relational database for storing all conference and profile information.
- The system software which contains:
 - MeetingPlace application software
 - Relational SQL database
 - The MeetingPlace options

Table 3-1 describes optional software packages that can be purchased with the system or activated anytime after installation with the use of a license key.

Table 3-1. MeetingPlace Software Options

| Option | Features |
|----------------------------------|---|
| MeetingNotes Voice Option | Enables users to record and manage voice information related to conferences, such as comments, agendas, messages, and the meeting recordings. |
| MeetingNotes Data Option | Enables users to submit, manage, and retrieve data files related to conferences, such as word processor documents, spreadsheets, and presentations. Requires MeetingNotes Voice Option. |
| MeetingPlace Notification Option | Enables MeetingPlace to automatically queue notifications to meeting participants when users schedule, reschedule, or cancel meetings. The MeetingPlace Notification Option can also monitor MeetingNotes activity and specify that meeting materials be sent with notifications. |
| MeetingPlace SNMP Option | Allows system managers to remotely monitor MeetingPlace from any standard SNMP management station. |
| MeetingPlace Flex Menu Option | Enables system managers to modify their top-level menu trees to create custom menus that automatically attend or access MeetingNotes for specific meetings or meetings of a particular category. |

Client Software

MeetingTime desktop clients enable users to interactively access MeetingPlace functions customer-provided Windows or Macintosh computers. MeetingTime for Windows is a 32-bit application that runs under Windows NT, Windows 95, Windows 98, or Windows 2000. MeetingTime for Macintosh provides MeetingTime capabilities for the Macintosh environment.

Gateways

Latitude's optional gateways provide interfaces to a customers' other business systems and enable users to access MeetingPlace through existing business systems.

MeetingPlace E-mail Gateway/MAPI/SMTP

This software installs on a customer-provided Windows NT PC to fulfill queued requests for notifications and distribution of meeting materials to conference call participants via e-mail. Users can also schedule conference calls via e-mail.

MeetingPlace for Outlook

This software integrates MeetingPlace with an Exchange server, enabling users to schedule and attend MeetingPlace meetings using their Outlook client as well as receive e-mail notifications for meetings to which they have been invited. Users can choose to accept notifications and have the meeting automatically appear in their Outlook calendar or decline them if they cannot attend the meeting.

MeetingPlace for Notes

This software integrates MeetingPlace with a Lotus Domino server, enabling users to schedule and attend MeetingPlace meetings using their Lotus Notes client as well as receive e-mail notifications for meetings to which they have been invited. Users can choose to accept notifications and have the meeting automatically appear in their Notes calendar or decline them if they cannot attend the meeting.

MeetingPlace Fax Gateway

This software installs on a customer-provided Windows NT PC to fulfill queued requests for notifications and distribution of meeting materials to conference call participants via fax. It requires Optus FACSys for Windows NT and associated fax hardware.

MeetingPlace Web

This software allows users to:

- Schedule conferences
- Share meeting materials
- Listen to recorded meetings and voice comments from a web browser
- Link to meeting list pages for current, past, and future meetings

MeetingPlace Data Conferencing

This optional software allows participants of a voice conference to view data portions of the conference using their web browser. Participants do not need any additional endpoint software other than MeetingTime. This software requires MeetingPlace Web.

4 Installing MeetingPlace

This chapter describes server physical installation consisting of the following steps:

- Evaluating the site to ensure that all necessary facilities are available before beginning the installation process
- Unpacking the system
- Installing the system by physically mounting the server
- Connecting the components of the server to the various communications interfaces

Important Safety Instructions

Save These Instructions and Requirements



- Never install telephone wiring during a lightning storm
- Never install a telephone jack in a wet location unless the jack is specifically designed for wet locations
- Never touch uninsulated telephone wires or terminals unless the telephone line has been disconnected at the network interface
- Use caution when installing or modifying telephone lines
- High leakage current—earth connection essential before connecting supply
- Supplemental earth grounding is required for MeetingPlace systems that utilize analog trunking

Tools

Refer to Appendix I, page I-1, for a list of tools needed for installation.








Evaluating the Site

Before installing MeetingPlace, make sure that the MeetingPlace System Manager has provided the name of a site contact who can answer relevant questions regarding the site.

Environmental and Power Requirements

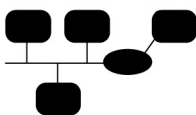
Refer to Table 4-1 for environmental and power requirements by country.

Table 4-1. Environmental and Power Requirements by Country

| Country | Clearance | Power | Socket |
|---|--|--|--|
|  US  Canada | 24 inches of clearance in back of unit | 115VAC | NEMA 5-15R socket-outlet installed within 8 feet of equipment |
|  UK  Hong Kong  Singapore | 60 cm of clearance in the back of the unit | 230VAC | BS-1363 socket-outlet installed within 2 meters of the equipment |
|  Australia | 60 cm of clearance in back of the unit | 240VAC | AS 3112 socket-outlet installed within 2 meters of the equipment |
|  Japan | 60 cm of clearance in back of the unit | 100VAC (50 Hz for East Japan; 60Hz for West Japan) | NEMA 5-15R socket-outlet installed within 2 meters of equipment |

If the power in your area is susceptible to fluctuations or interruptions, consider installing surge suppressors or connecting the servers to an uninterruptible power supply (UPS). MeetingPlace does not maintain telephony connections should the system lose power.

In addition to a dedicated power outlet for the server, the site should have additional power outlets for test and maintenance equipment.







The operating requirements of a MeetingPlace network server are identical to those of the shadow network server and the conference server.

The site must provide power and cooling as required in Table 4-1 for *each* network server, shadow network server, and conference server.

Location of System Connections

Verify that system connections agree with the specifications of Table 4-2.

Table 4-2. Cable Lengths and Connectors

| Country | Connection Type | Max. Distance | Socket |
|---|------------------------------|---------------|--|
|  US Canada | Digital Telephony (T1) | 25 feet | USOC RJ-48X (female) socket supplied by customer |
| | Analog Telephony | 6 feet | USOC RJ-21x (female) socket |
| | Maintenance Modem Connection | 6 feet | USOC RJ-11C jack |
| | Power (115VAC) | 8 feet | NEMA 5-15R socket-outlet |
|  UK | Digital Telephony (E1) | 15 meters | RJ-45 socket or BNC (female) connector |
| | Maintenance Modem Connection | 2.5 meters | Six position UK telephone socket, 431A plug |
| | Power (230VAC) | 2 meters | BS-1363 socket-outlet |
|  Hong Kong | Digital Telephony (T1) | 15 meters | RJ-45 socket |
| | Maintenance Modem | 2.5 meters | USOC RJ-11C jack |
| | Power (230VAC) | 2 meters | BS-1363 socket-outlet |
|  Singapore | Digital Telephony (E1) | 15 meters | RJ-45 socket |
| | Maintenance Modem | 2.5 meters | USOC RJ-11C Jack |
| | Power (230VAC) | 2 meters | BS-1363 socket-outlet |

Worksheets

Configuration worksheets are supplied in the *Installation Planning Guide* to ensure that the MeetingPlace configuration integrates within the customer's environment.

Unpacking the System

Unpacking MeetingPlace consists of the following activities:

- Removing the shipping material
- Inspecting for damage
- Checking the box contents

Removing the Shipping Material

See Figure 4-1 and remove the shipping material as follows:

1. Remove the strapping tape that holds the container together.
2. Remove the packing list from the top container.

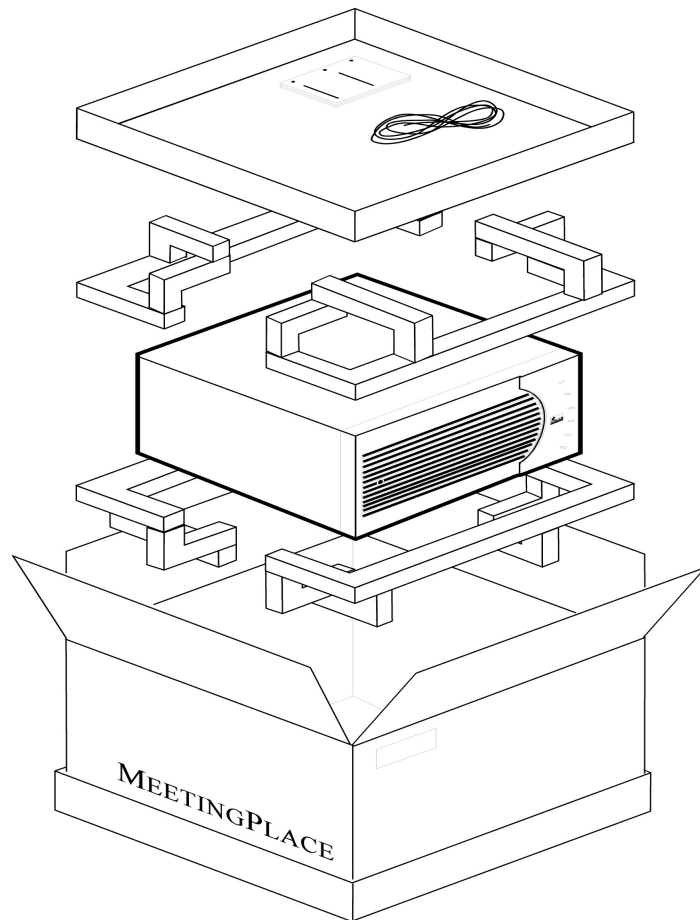


Figure 4-1. MeetingPlace Packaging

3. Lift off the cardboard top of the container, and set it aside.

Inside the container is a cardboard tray that contains the user documentation, the cables, mounting hardware, and miscellaneous components. The MeetingPlace Application Engineer reviews this documentation and software media kits with the site contact.

4. Lift the walls of the cardboard container up and out of the bottom of the box. This will allow easy access to the server.
5. Remove the plastic packing material from both ends of the server.



The server weighs 50 pounds. Lift it only from the sides, not from the front and rear.

6. Take hold of the server from the sides, and lift it.
7. Set the server on a convenient work surface, and remove the remaining packing material.
8. Put all the packing material aside.

Inspecting for Damage

Visually inspect the server for damage. If the server is damaged or scratched, call the Customer Support Center for instructions.

Checking the Box Contents

Examine the server to verify correct configuration: tower, desktop, or rackmount. Both closed and open rackmount configurations must have rails for mounting. Desktop and tower configurations have rubber feet, and no rails are included. The other components are common to all configurations and are listed in the shipping documents. Figure 4-2 through Figure 4-5 show the four types of configurations. Configuration should correspond to shipping documents.

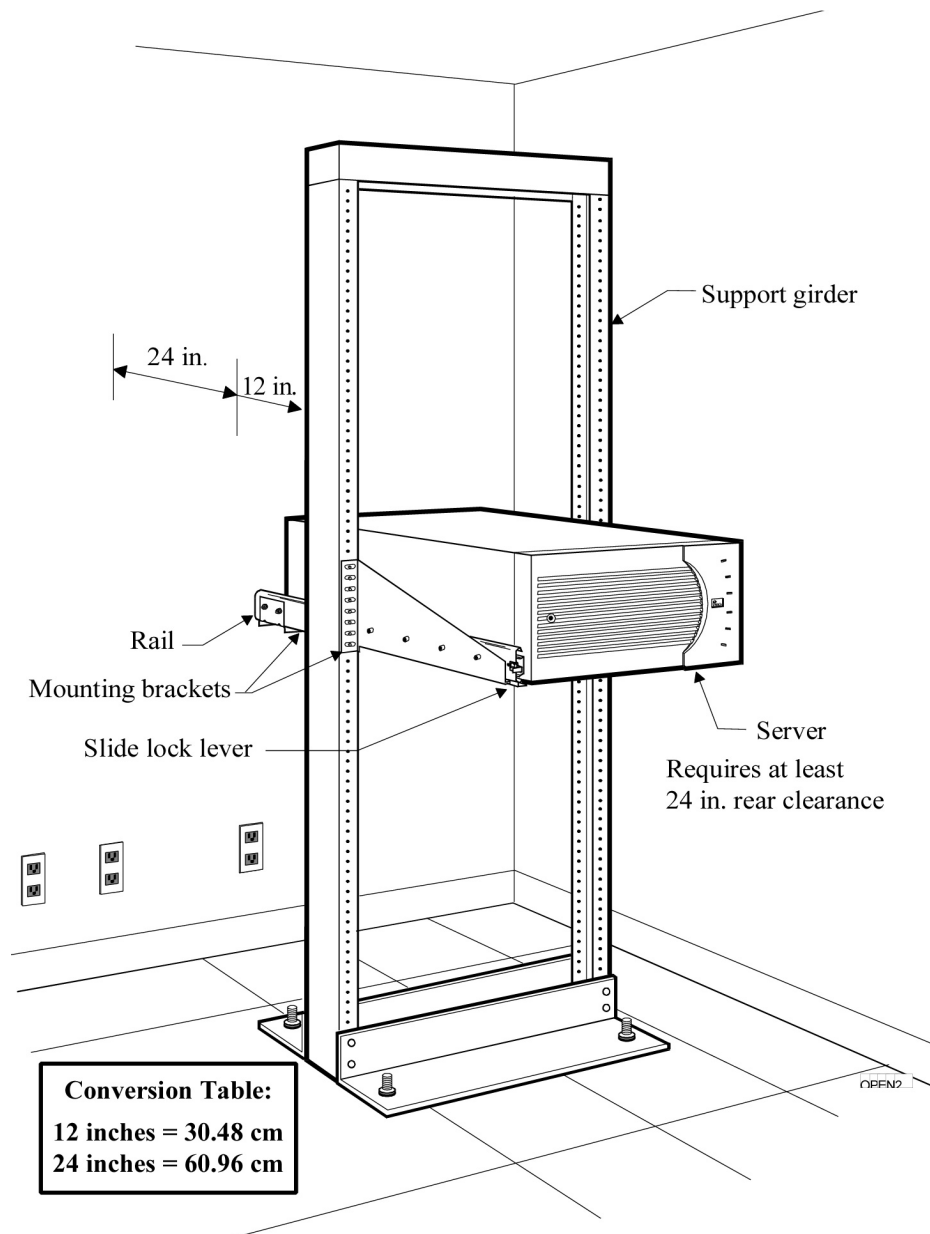


Figure 4-2. Mounting a Server into an Open Rack

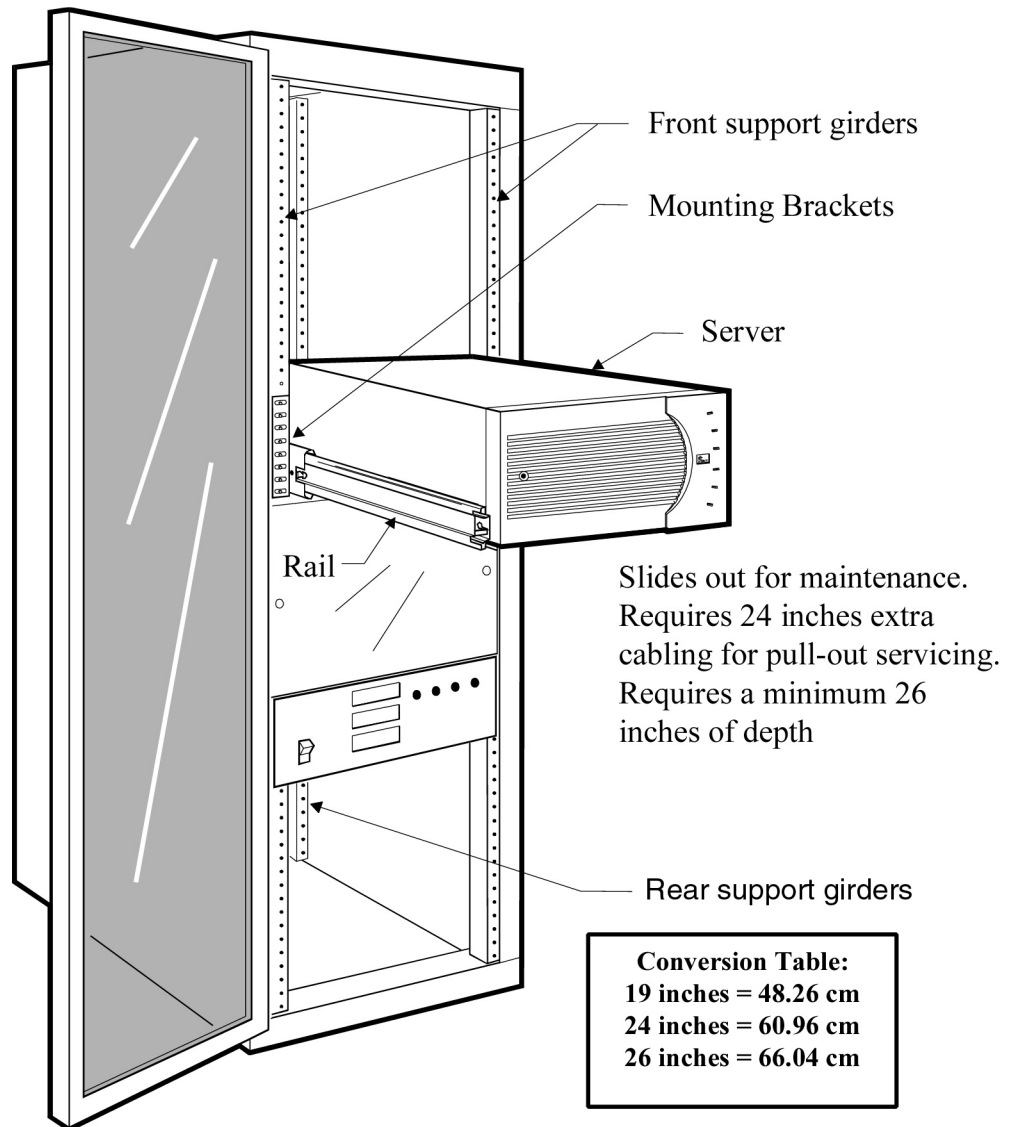


Figure 4-3. Mounting a Server into a Closed Rack

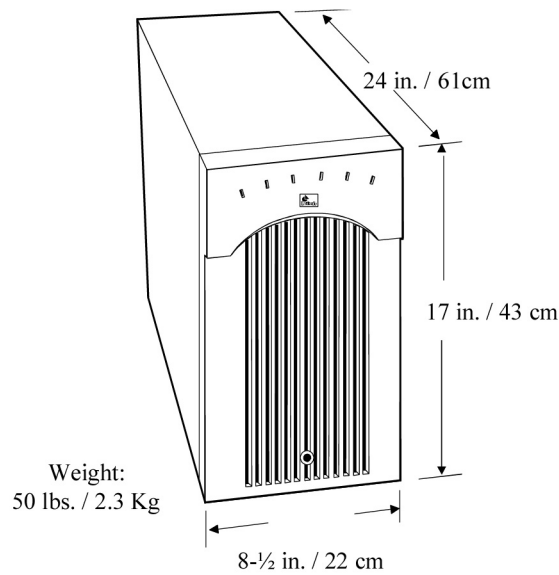


Figure 4-4. Tower-Mounting MeetingPlace

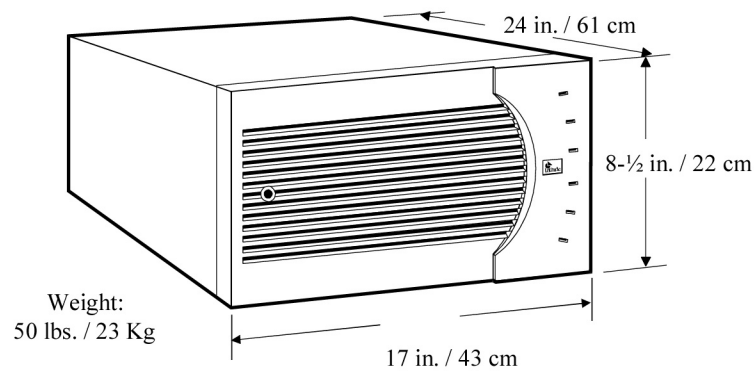


Figure 4-5. Desk-Mounting MeetingPlace

Checking the Card Seating

If the server front panel is already off, proceed to step 8. If not, see Figure 4-6, and remove the front panel as follows:

1. Set the server in a horizontal position with the key lock to the left.
2. Using a straight-blade screwdriver, turn the silver latch in the middle of the grill on the front panel one-quarter turn clockwise.
3. Holding the lower right corner of the panel with your right hand, swing the panel open with your left hand and lift it off the hinges as in Figure 4-6.
4. Put the front panel aside in a safe place. Do not place the front panel face-down. Doing so could scratch its surface.

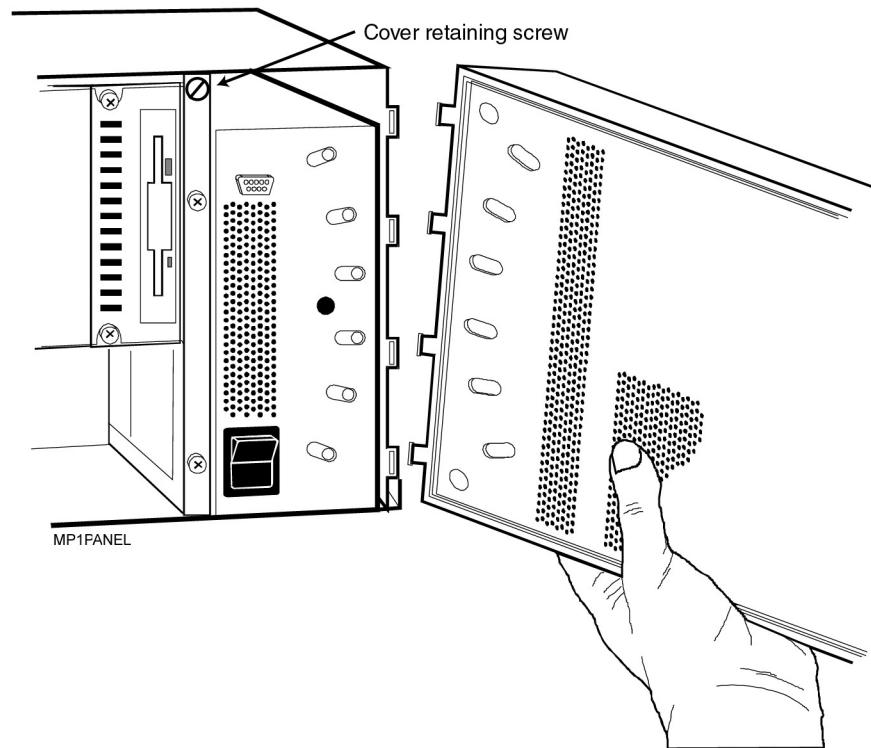


Figure 4-6. MeetingPlace Front Panel Removal

5. Unscrew the captive retaining screw located near the floppy disk drive.
6. Placing your hands on the top right and left sides of the cover, slide the cover approximately ½ inch forward.
7. Remove the cover, by lifting it straight up.
8. Attach your static strap to the server.
9. Without removing the bar across the top of the cards, push each of the cards firmly towards the backplane to ensure proper seated. It is not necessary to remove and reseal the cards.
10. Verify the integrity of all easily accessible connections through visual or physical inspection.
11. Place the cover on the server with a gap of approximately ½ inch between the back of the cover and the back of the system.
12. Push back on the cover till it seats, and tighten the captive retaining screw. For open or closed rack mounting systems, leave the front panel off.

Installing the System

This section describes mounting hardware attachment and server installation for the following three types of configurations:

- Tower or desktop
- Open rack
- Closed rack

Before proceeding with the installation, verify that the server front panel is off. This panel is designed to protect the components and LEDs on the inside, but is not strong enough to be used as a handle.

Installing a Tower or Desktop Server

Place the server near power and network sources and proceed to the section Connecting the System, page 4-14. Tower and Desktop configurations are illustrated in Figure 4-4 and Figure 4-5.

Installing an Open Rack Server

The following procedure describes server installation into an open rack as shown in Figure 4-2. Before proceeding verify:

- That the rack is bolted securely to the floor
- At least 24 inches/61 cm of clearance from the rear of the server
- At least 1 inch clearance can exist on the top and bottom of the server for heat dissipation. The server is 8 ½ inches/ 22cm high.
- Enough clearance can be gained below the server to use your Phillips screwdriver to screw the server to the rails. Since the rails extend the server all the way forward, clearance is between the floor and the bottom of the server.

Install the server into the open rack as follows:

1. Locate:
 - Two rails
 - Stabilizer bar
 - Two mounting brackets and their hardware

There is a right rail and a left rail. The orientation of each rail is determined by the slide lock lever. This lever protrudes from the front of the rail and should point out and away from the server.

A rail with a mounting bracket attached to it becomes a rail assembly.

2. Attach a mounting bracket to each rail, as shown in Figure 4-7, and tighten the screws.

The screw heads are on the inside of the rail. Use the slide lock lever to unlock the slide and access the screw holes by sliding the rail back and forth.

3. Select positions on the vertical girder for the rails that allow:
 - At least 1 inch clearance on the top and bottom of the server for heat dissipation. The server is 8 ½ inches/ 22cm high.
 - Enough clearance can be gained below the server to use your Phillips screwdriver to screw the server to the rails in six places. The server can be slid forward and back to facilitate access to these screw holes.
4. Attach the rail assemblies to each support girder as in Figure 4-7 such that the rail assemblies are level with each other and that the slide lock lever face forward and point away from the server.

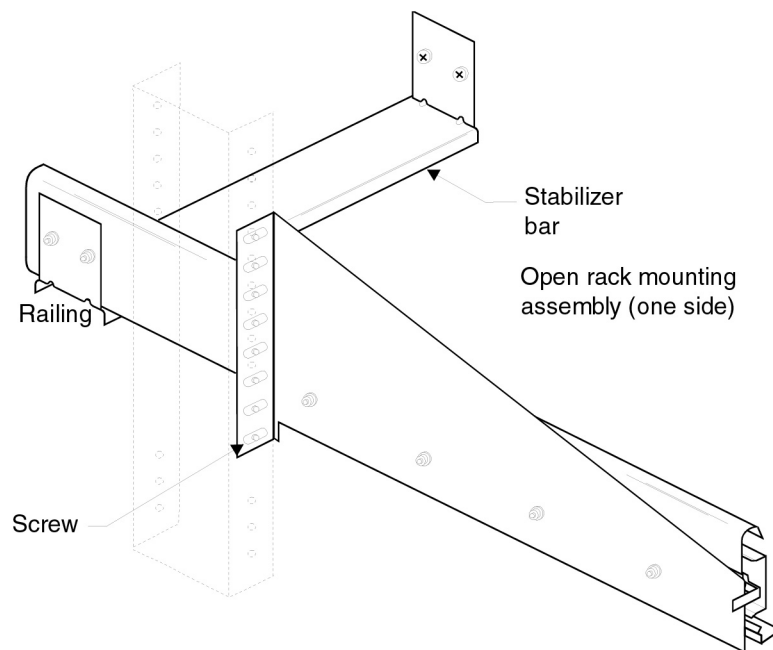


Figure 4-7. Open Rack Mounting Assembly

5. Connect the stabilizer bar to the rear of the rails with the four #8-32 by 5/16-inch screws, as shown in Figure 4-7. The dotted lines in this illustration show the location of the support girder in the rack.
6. Unlock the rails, and pull them completely forward. The rails only lock when slid all the way back.
7. Lift the server into place upon the rails.



The server is heavy. It weighs 80 pounds. Lift it only from the sides so important components on the front and rear are not damaged. When you position it on the rails, the rails have a tendency to move aside. Do not allow this to occur; otherwise, the system will fall.

8. Attach the bottom of the server to the rail assemblies with the six #6-32 by 3/16-inch machine screws. Attach the middle screw to each side first to stabilize it. The last hole on each rail is not used. Before tightening these screws, make sure that the rails are separated as far as possible. This allows the slide locks to work correctly.
9. Slide the server in and out to make sure that it slides smoothly.
10. Make sure the slide locks work correctly. If they lock correctly, the system is aligned; if they do not, the rails need to be realigned. Loosen the six mounting screws on the bottom of the server for realignment.

Installing a Closed Rack Server

The following procedure describes server installation into a closed rack as shown in Figure 4-3. Before proceeding verify:

- At least 1 inch clearance should exist on the top and bottom of the server for heat dissipation. The server is 8 ½ inches/ 22cm high.
- Enough clearance should be gained below the server to use your Phillips screwdriver to screw the server to the rails.

Install the server into a closed rack as follows:

1. Locate:
 - Two rails
 - Stabilizer bar
 - Two mounting brackets and their hardware

There is a right rail and a left rail. The orientation of each rail is determined by the slide lock lever. This lever protrudes from the front of the rail and should point out and away from the server.

A rail with a mounting bracket attached to it becomes a rail assembly.

2. Attach a mounting bracket to each rail as shown in Figure 4-8, and tighten the screws.

The screw heads are on the inside of the rail. Use the slide lock lever to unlock the slide and access the screw holes by sliding the rail back and forth.

3. Select positions in the girder for the rails that allow:
 - At least 1 inch clearance on the top and bottom of the server for heat dissipation. The server is 8 ½ inches/ 22cm high.
 - Enough clearance can be gained below the server to use your Phillips screwdriver to screw the server to the rails in six places. The server can be slid forward and back to facilitate access to these screw holes.

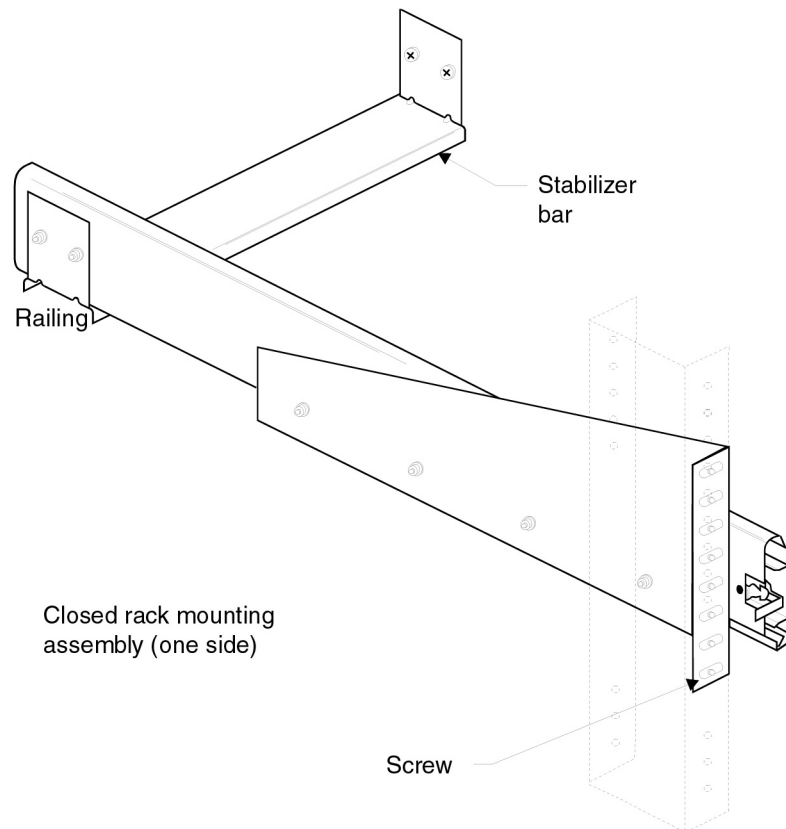


Figure 4-8. Closed Rack Mounting Assembly

4. Attach the rail assemblies to each support girder as in Figure 4-8 such that the rail assemblies are level with each other and that the slide lock lever face forward and point away from the server.

5. Connect the stabilizer bar to the rear of the rails with the four #8-32 by 5/16-inch screws, as shown in Figure 4-8. The dotted lines in this illustration show the location of the support girder in the rack.
6. Unlock the rails, and pull them completely forward.
7. Lift the MeetingPlace system into place upon the rails.



The server is heavy. It weighs 80 pounds. Lift it only from the sides so important components on the front and rear are not damaged. When you position it on the rails, the rails have a tendency to move aside. Do not allow this to occur; otherwise, the system will fall.

8. Attach the bottom of the server to the rail assemblies with the six #6-32 by 3/16-inch machine screws. Attach the middle screw to each side first to stabilize it. The last hole on each rail is not used. Before tightening these screws, make sure that the rails are separated as far as possible. This allows the slide locks to work correctly.
9. Slide the server in and out to make sure that it slides smoothly.
10. Make sure the slide locks work correctly. If they lock correctly, the system is aligned; if they do not, the rails need to be realigned. Loosen the six mounting screws on the bottom of the server for realignment.

Connecting the System

This section describes how to connect the following to a MeetingPlace system:

- Digital trunks
- Analog trunks
- LAN
- Service Modem
- Power cable

Digital Trunks

MeetingPlace supports the following digital trunks:

- T1 used in the US and Canada which require DTI cards
- E1 used in Europe which require one of the two styles of the ETI card

MeetingPlace servers for digital trunks are shipped with some of the following digital interface cards, all of which have connectors for two trunk lines:

- DTI cards whose two connectors are located next to each other, see Figure 4-10
- ETI/RJ-45 cards (up to two per server) whose connectors are located near the edge of the card, see Figure 4-11
- ETI/BNC cards (up to two per server) that have four coax connectors, see Figure 4-14

Each DTI or ETI card requires at least one PRC card.

T1 Digital Trunks

DTI cards support digital connections to a PBX system or to a PSTN. See Figure 4-9. The framing for the digital lines can be either extended superframe ESF or D4. The digital lines can use either an access message interface AMI or B8ZS coding. ESF framing and B8ZS coding is recommended.



Using AMI framing and AMI coding may produce unsatisfactory service.

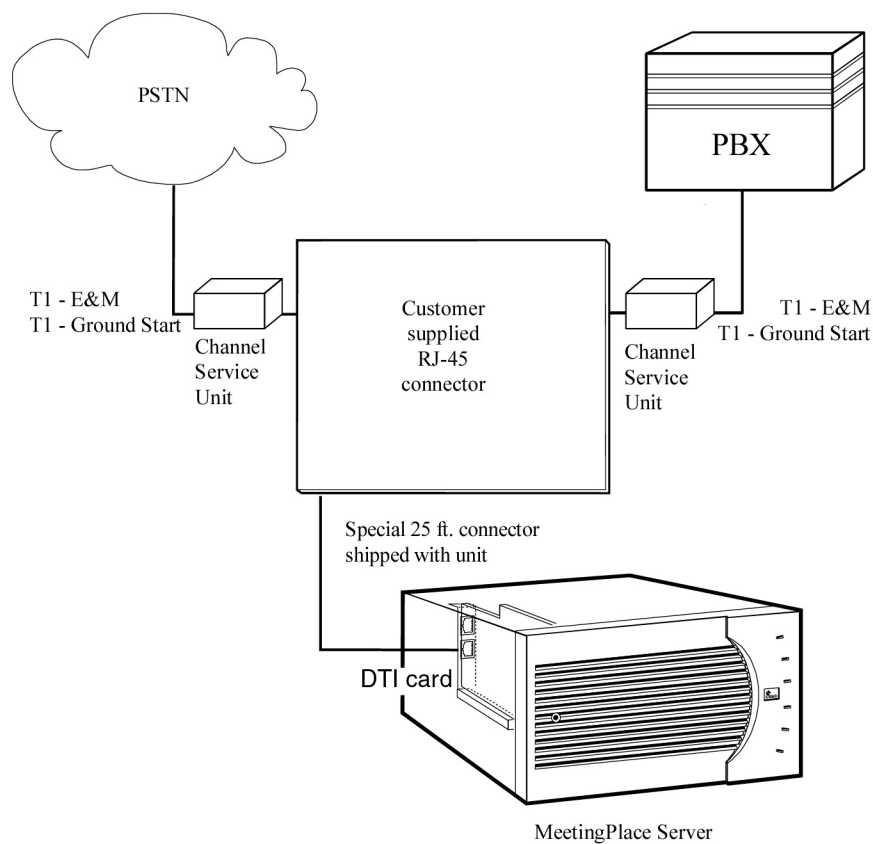


Figure 4-9. MeetingPlace Digital Connections

MeetingPlace also supports fractional T1 services and has complete flexibility to activate any or all ports on a span.

Digital connections usually provide either E&M, ground start, or loop start signaling.

On T1 circuits configured for E&M signaling, MeetingPlace can receive dialed number information—Direct Inward Dial (DID/DDI) or dialed number identification service (DNIS). MeetingPlace can use dialed number information to connect the caller directly to a meeting or to determine the MeetingPlace services to which the caller has access.

MeetingPlace can be configured to support devices where the T1 trunk does not provide any signaling, and is always offhook. This is used in applications where a Clear Channel connection is required.



MeetingPlace supports the following T1 capabilities:

- Digital connection to the Public Telephone Network or into the PBX
- E&M, ground start, loop start, or clear channel signaling
- D4 or ESF framing (ESF strongly recommended)
- AMI or B8ZS coding (B8ZS strongly recommended)
- USOC (male) RJ-48X jack supplied by customer
- 25 foot shielded cable provided by Latitude
- Channel Service Unit required—FCC and UL listed (US only)
- Channel service unit required for connections over 600 feet. MeetingPlace comes with a 25-foot shielded cable for each T1 span. The cable terminates in an RJ-48X connector. You need to order a male USOC jack connector type RJ-48X. Listed CSU is provided for over voltage protection for T1 card.

Table 4-3 describes wiring of customer-supplied RJ-48X connectors.

Table 4-3. Wiring of RJ-48X Connectors

| Pin | Name | Description |
|-----|------|-----------------------------------|
| 1 | T1 | MeetingPlace received signal—tip |
| 2 | R1 | MeetingPlace received signal—ring |
| 4 | T | MeetingPlace outgoing signal—tip |
| 5 | R | MeetingPlace outgoing signal—ring |

To identify pins, hold the RJ-48X connectors as if to plug it in, with the tab down. Pin 1 is on the left.

If transmit and receive need to be reversed, the pins needs to be reversed also. See Table 4-4.

Table 4-4. Wiring of RJ-48X Connectors - Transmit and Receive Reversed

| Pin | Name | Description |
|-----|------|-----------------------------------|
| 4 | T1 | MeetingPlace received signal—tip |
| 5 | R1 | MeetingPlace received signal—ring |
| 1 | T | MeetingPlace outgoing signal—tip |
| 2 | R | MeetingPlace outgoing signal—ring |

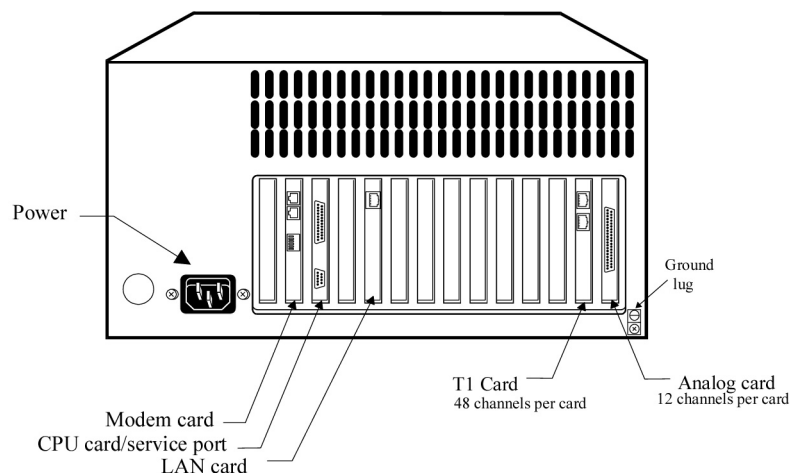


Figure 4-10. DTI Card Connections on the Back of the Server

Connecting T1 Trunks

To connect the server to a customer's digital trunk RJ-48 connector:

1. Locate the Latitude supplied cable, 3300-0040-01 with two RJ-48 connectors.
2. Plug the end of the cable without the Fair-Rite bead into the customer-provided socket.
3. Plug the other end of the cable into the Digital Trunk Interface (DTI) card on the rear of the server as shown in Figure 4-10.
4. For rackmount configurations:
 - a. Install cables with a service loop of at least 24 inches/61 cm to allow the server to slide all the way forward
 - b. Install tie wraps
 - c. Test that the server can slide all the way forward



The FCC registration number is 2AHCAN-65489-XD-N and the load number is 100. Be sure to use only FCC and UL-listed channel service units (CSUs).

E1 Digital Trunks

MeetingPlace uses one of the two styles of ETI card to interface with E1 digital trunks. See Figure 4-11 for a typical location of an ETI card.

MeetingPlace currently supports the following E1 protocols: DPNSS (used in the UK), Euro_ISDN, MFC R2, FETEX 150, QSIG, or CAS.

For other E1 protocols, consult your customer support representative regarding availability in your area.

Dialed number information is available with all of these protocols. Each E1 protocol also allows software configuration of the signaling options.

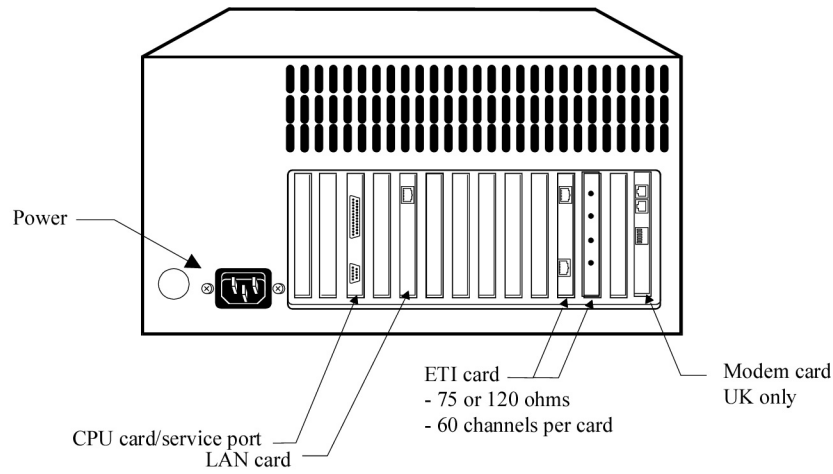


Figure 4-11. ETI/RJ-45 Card on the Back of the Server



UK



Hong Kong



Singapore

MeetingPlace supports the following E1 capabilities:

- E1 connection to Public Telephone Network or PBX
- Protocols: DPNSS, Euro_ISDN, MFC R2, FETEX 150, QSIG, or CAS
- Supplied 15 meter shielded cable (male-male) one per E1 span. Customer should provide RJ-45 socket.
- Supplied 15 meter coax cable (male-male) two for each E1 span. Customer should provide Coax BNC (female) connector.

Latitude Cables to the ETI Card

Latitude supplies the following cables to connect the E1 trunk to the ETI card on the server:

- For DPNSS, a 75 ohm coax cable with a BNC connector is supplied
- For Euro-ISDN, a 120 ohm cable with RJ-45 connector is supplied



UK

U.K. Only – The 120 Ω Network approval number is AA1605126 CE168X. The 75 Ω BABT Network connection approval number is NS/3941/15/N/603327

For the ETI card, the connection from the network interface to the network may be either of the following types:

- RJ-45 connector
- SMB coaxial connectors with SMB/BNC adapters.

RJ-45 Connectors to ETI cards

Figure 4-12, Figure 4-13, and Table 4-5 describe the RJ-45 connector pinouts and the E1 interface. The cable and plug must be shielded types to ensure electromagnetic compatibility (EMC) compliance.

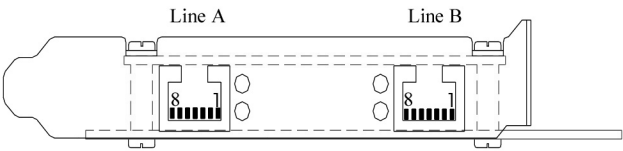


Figure 4-12. ETI/RJ-45 Card Socket Pinout

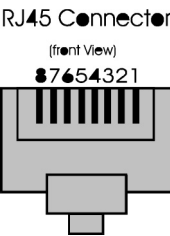


Figure 4-13. ETI/RJ-45 Connector Pinout

Table 4-5. RJ-45 Pinout Diagram

| Pin | Signal | Function | Direction |
|-----|--------|---------------------|-----------|
| 1 | LRT | Receive +ve (tip) | input |
| 2 | LRR | Receive -ve (ring) | input |
| 4 | LTT | Transmit +ve (tip) | output |
| 5 | LRT | Transmit -ve (ring) | output |

Coax Connections to ETI Cards

Figure 4-14, Figure 4-15, and Table 4-6 describe the E1 pinouts. The SMB/BNC line interface should be used with the SMB/BNC adapter (Radiall R19125000) which comes installed on the ETI card.

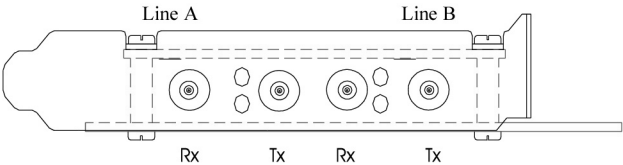


Figure 4-14. E1 Line Interface SMB/BNC Pinout

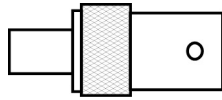


Figure 4-15. SMB/BNC Adapter

Table 4-6. SMB/BNC Pinout Diagram

| Pin | Description |
|-------|---------------|
| inner | tip (signal) |
| outer | ring (shield) |

Connecting E1 Trunks

To connect the server to a customer's E1 digital trunk:

1. Locate the Latitude supplied cable and verify that the connectors fit the customer's E1 trunk socket and the ETI card at the rear of the server.
2. Plug the cable into the customer-provided socket.
3. Plug the other end of the cable into the ETI card on the rear of the server.
4. For rackmount configurations:
 - a. Install cables with a service loop of at least 24 inches/61 cm to allow the server to slide all the way forward
 - b. Install tie wraps
 - c. Test that the server can slide all the way forward

Analog Trunks

Analog trunks are only used in the U.S. and Canada. MeetingPlace uses the ATI card to interface analog trunks to a PBX system or to the PSTN.

For testing purposes, it is possible to dial each line individually. Any analog line connected to MeetingPlace must use the loop start protocol.

End-to-end positive disconnect supervision is essential. Without it, MeetingPlace cannot reliably tell when a caller hangs up. Many PBX and central office systems can provide disconnect signaling on loop start lines. However, the person taking an order for lines may not understand. Consider escalating the request to someone with a more technical background.

The following is essential for proper analog connections to MeetingPlace:

- A USOC jack connector type RJ-21X (female)

- A 5-foot trunking cable for connection to each RJ-21X jack. Supplied with MeetingPlace
- The ringer equivalence number (REN) 0.7A
- The FCC registration number EMCUSA-65188-VM



WARNING: Supplemental earth grounding is required when analog trunks are used with the MeetingPlace system. This supplemental grounding consists of a grounding cable attached to one end of the MeetingPlace system and permanently connected to an earth ground point at the other end. Additionally, all of the power outlets in the vicinity of the MeetingPlace system must be of the grounding type, and they must be properly grounded.

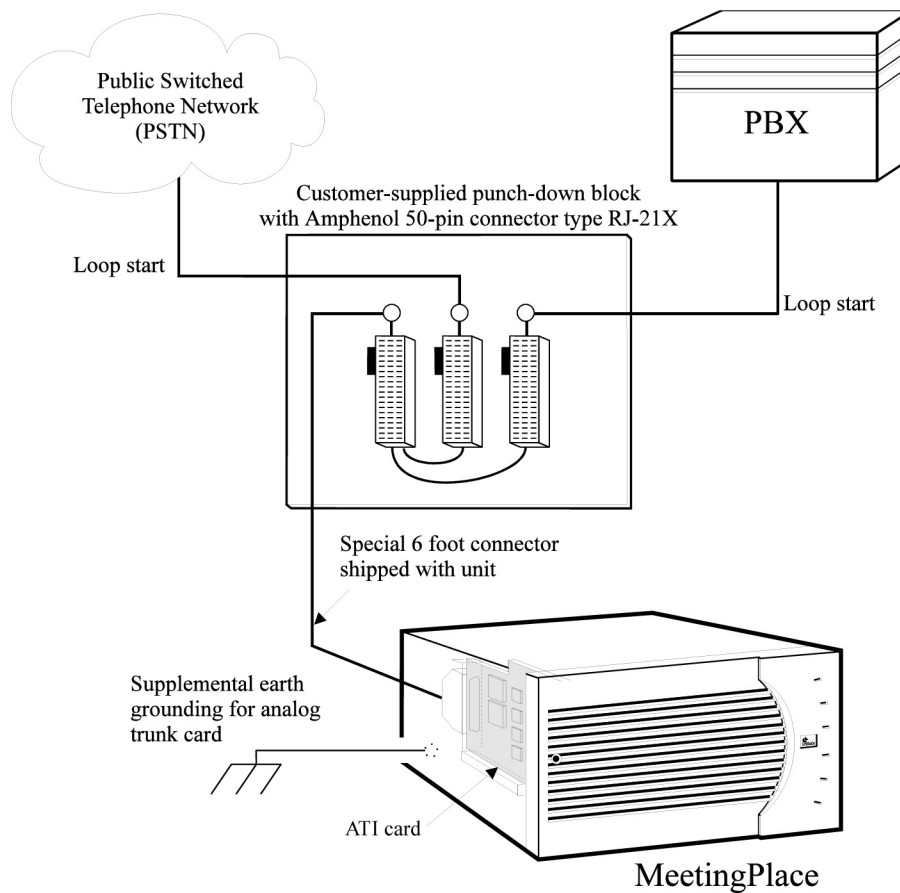


Figure 4-16. Analog Trunk Connections

Connecting Analog Trunks

To connect the server to an analog trunk:

1. Locate the Latitude supplied cable with the RJ-21X connector.

2. Plug the RJ-21X connector end of the cable into the customer-provided socket.
3. Plug the other end of the cable into the ATI card on the rear of the server.
4. Refer to the section Supplemental Grounding for grounding cable requirements and use the following two steps to install the a grounding cable to each server connected to an analog trunk:
 - a. Secure the lug of the grounding cable to the copper grounding screw on the right side of the rear of the server. See Figure 4-10.
 - b. Permanently connect the other end of each grounding cable to an earth ground as specified in the Supplemental Grounding section, page 4-24.
5. Assure that all the power outlets in the vicinity of the MeetingPlace system are the grounding type power outlet, and are properly grounded.
6. For rackmount configurations:
 - a. Install cables with a service loop of at least 24 inches/61 cm to allow the server to slide all the way forward
 - b. Install tie wraps
 - c. Test that the server can slide all the way forward



Table 4-7 describes wiring of the customer-supplied RJ-21X connector.

Table 4-7. Wiring of Customer Supplied RJ-21X Connector

| Pin | Name | Description |
|-----|------|----------------------|
| 26 | T1 | Tip lead channel 1 |
| 1 | R1 | Ring lead channel 1 |
| 28 | T2 | Tip lead channel 2 |
| 3 | R2 | Ring lead channel 2 |
| 30 | T3 | Tip lead channel 3 |
| 5 | R3 | Ring lead channel 3 |
| 32 | T4 | Tip lead channel 4 |
| 7 | R4 | Ring lead channel 4 |
| 34 | T5 | Tip lead channel 5 |
| 9 | R5 | Ring lead channel 5 |
| 36 | T6 | Tip lead channel 6 |
| 11 | R6 | Ring lead channel 6 |
| 38 | T7 | Tip lead channel 7 |
| 13 | R7 | Ring lead channel 7 |
| 40 | T8 | Tip lead channel 8 |
| 15 | R8 | Ring lead channel 8 |
| 42 | T9 | Tip lead channel 9 |
| 17 | R9 | Ring lead channel 9 |
| 44 | T10 | Tip lead channel 10 |
| 19 | R10 | Ring lead channel 10 |
| 46 | T11 | Tip lead channel 11 |
| 21 | R11 | Ring lead channel 11 |
| 48 | T12 | Tip lead channel 12 |
| 23 | R12 | Ring lead channel 12 |

Supplemental Grounding Requirements

The grounding conductor must be as large as or larger than the conductors in the branch circuit carrying power to the MeetingPlace system. The grounding lug used on the server can accommodate conductors from AWG #14 to AWG #6.

The grounding conductor may be bare, covered, or insulated. If the conductor is covered or insulated, the conductor has a continuous outer finish that is either green or green with one or more yellow stripes.

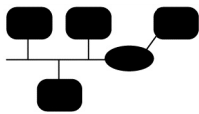
It is permissible to terminate the supplementary grounding conductor to:

- Building steel
- A metal electrical raceway system
- To any grounded item that is permanently and reliably connected to the electrical service equipment ground

The method of attachment must comply with the rules for terminating bonding jumpers in Part K of Article 250 of the National Electrical Code.







LAN Cable

All MeetingPlace servers attach to an Ethernet LAN.



For networked systems, both the network server and conference servers attach to the Ethernet LAN.

Table 4-8. LAN Requirements by Country

| Country | | LAN Requirements |
|---|---|---|
|  | US | Network Server —For twisted-pair Ethernet, 10BaseT, or provide an RJ-45 connector. |
|  | Canada | |
|  |  | Network Server and Conference Server(s) —For 10BaseT or 100-BaseTX UTP Latitude provides a 7.5 meter cable with a Fair-Rite snap-on bead with one turn to ensure EMC compliance. If the cable is changed, move the snap-on to the new cable. |
|  |  | |
| Japan | Singapore | |

Connecting the LAN Cable

To connect a MeetingPlace server to a customer's LAN:

1. Locate the Latitude provided network cable.
2. Refer to Table 4-8 to verify the correct LAN cable and connector.
3. Plug one end of the cable into the customer-provided LAN socket.

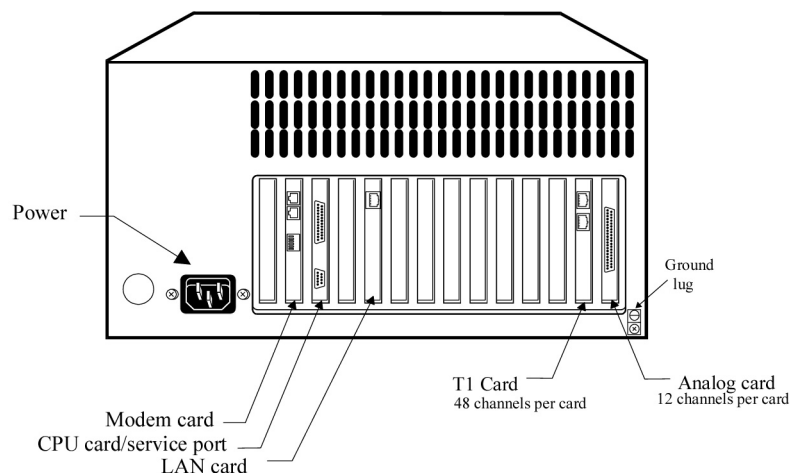


Figure 4-17. LAN Connection to the Server

4. Plug the other end of the cable into the LAN card on the rear of the server. See Figure 4-17.
5. Repeat for each MeetingPlace server.
6. For rackmount configurations:
 - a. Install cables with a service loop of at least 24 inches/61 cm to allow the server to slide all the way forward
 - b. Install tie wraps
 - c. Test that the server can slide all the way forward

Server Room PC - Optional

If a permanent connection to the MeetingPlace system is desired in the server room for using MeetingTime, connect a customer-supplied PC to the LAN via the network card in the PC. This PC is sometimes referred to as the system manager's PC although a system manager can use any PC on the LAN to administer MeetingPlace.

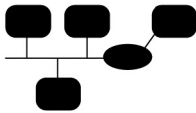
Table 4-9 contains the minimum configuration for three different PC operating systems.

Table 4-9. Minimum PC Configuration for MeetingTime

| Windows 95 and Windows NT | Macintosh |
|--|--|
| 80486 25MHz PC IBM Compatible | Power PC with MacOS System 7 (or later) |
| 15MB available disk space | 15MB available disk space |
| 16 MB RAM Windows 95 24 MB RAM Windows NT | 16 MB RAM |
| CD ROM drive | CD ROM drive |
| Network Interface Card | Network Interface Card |
| TCP/IP installed and working | MacTCP 2.04 or later or Open Transport |

Service Modem

Each MeetingPlace server has an internal modem for remote service. The modem connects to a standard analog telephone line, or a PBX.



On a MeetingPlace networked system the network server and the shadow network server (if present) contain an internal modem. The customer must provide analog telephone lines for these servers. The conference servers can be accessed remotely via the local area network.

The line to the service modem must be directly accessible from the outside, with no intervention required. If you need to order a line, refer to describing service modem requirements by country. See Table 4-11.

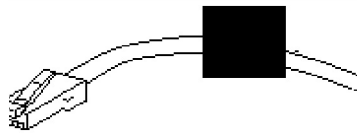


Table 4-10 describes wiring of the 431A plug. Customer must provide UK 431A Telephone Socket within 2.5 meters of MeetingPlace.

Table 4-10. UK Telephone Socket Wiring Pinout

| Pin | Description |
|-----|-------------|
| 1 | |
| 2 | B |
| 3 | |
| 4 | |
| 5 | A |
| 6 | |

Latitude ships a 2.5 meter long RJ-11 to 431A plug patch cable with Fair-Rite Bead 0443164151 installed with three (3) turns to ensure EMC compliance. If a different cable is used, install the bead on the new cable to ensure EMC compliance. See Figure 4-18.

*Figure 4-18. RJ-11 to 431 Cable*

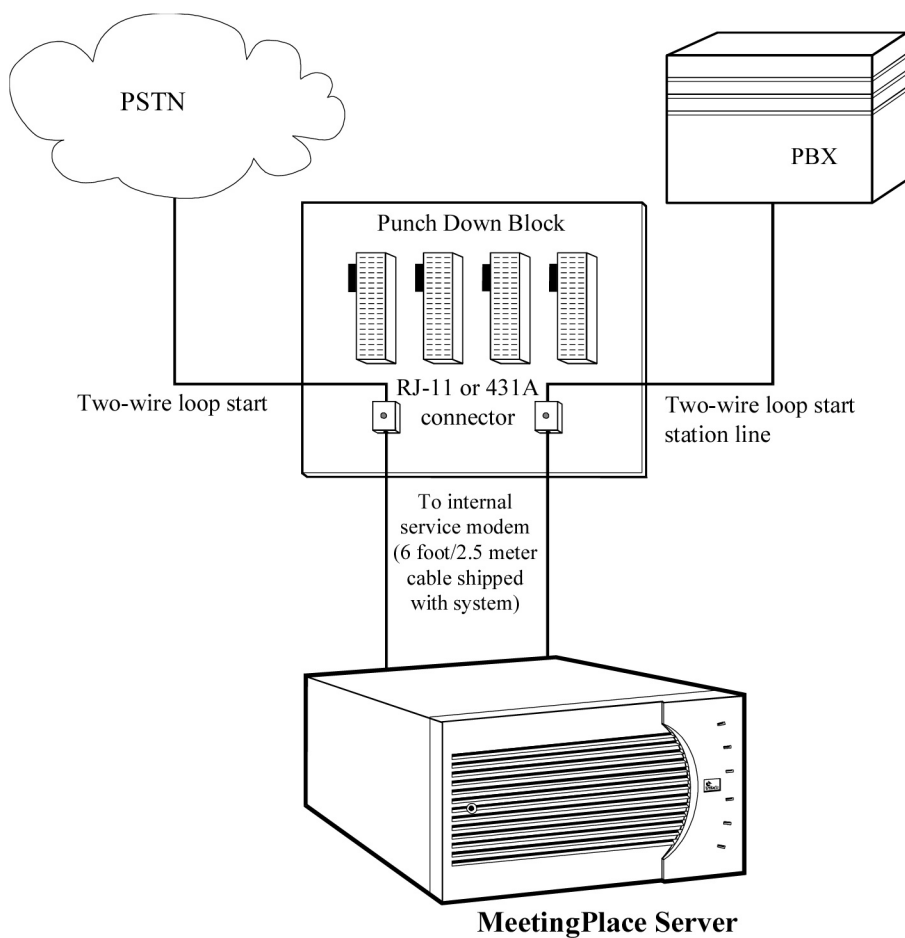









Figure 4-19. Service Modem Connection for a PSTN and a PBX

Table 4-11. Service Modem Requirements by Country

| Country | Modem Requirements |
|--|--|
|  US  Canada | <ul style="list-style-type: none"> • USOC jack connector type RJ-11C standard pinout (pin 3 = ring, pin 4 = tip) • Latitude supplied US modem, 6 foot modem cable |
|  UK | <ul style="list-style-type: none"> • Six position UK telephone socket that accepts 431A plug standard pinout (pin 2 = B, pin 5 = A) • Latitude supplied UK modem, 2.5 meter modem cable with ferrite bead with three turns |
|  Singapore  Australia | <ul style="list-style-type: none"> • USOC jack connector type RJ-11C standard pinout (pin 3 = ring, pin 4 = tip) • Latitude supplied CE modem, 2.5 meter modem cable with ferrite bead with three turns |
|  Japan | <ul style="list-style-type: none"> • USOC jack connector type RJ-11C standard pinout (pin 3 = ring, pin 4 = tip) • Latitude supplied CE modem, 2.5 meter modem cable with ferrite bead with three turns |
|  Hong Kong | <ul style="list-style-type: none"> • USOC jack connector type RJ-11C • Latitude supplied US modem, 2.5 meter modem cable with ferrite bead |

Connecting the Service Modem

To connect the supplied service modem:

1. Locate the provided RJ-11 to 431A plug patch cable.
2. See Figure 4-17 and Figure 4-19 to connect the connector marked Telco of the service modem to the customer's telephony system. Note that Figure 4-19 shows two methods of connecting the modem; one to a PSTN and one to a PBX. Only one method is needed to connect the modem.
3. For rackmount configurations:
 - a. Install cables with a service loop of at least 24 inches/61 cm to allow the server to slide all the way forward
 - b. Install tie wraps
 - c. Test that the server can slide all the way forward

Connecting the Power Cable

To connect a MeetingPlace server to AC power:

1. Locate the Latitude supplied power cord.
2. Verify that the MeetingPlace power switch is in the Off, “0”, position.
3. Insert the female end of the power cord into the back of the server. See Figure 4-17.
4. Insert the male end of the power cord into the wall AC outlet.
5. Use a tie wrap to secure the power cord to the metal loop on the back of the cabinet to prevent accidental disconnect.

5

Configuring MeetingPlace

This chapter explains how to configure and test a newly installed system. It consists of the following activities:

- Connecting a laptop to the front service port of a MeetingPlace server
- Using the command line interface (CLI) to configure each server with a laptop computer and information from the worksheets in the *Installation Planning Guide*
- Verifying configuration and installation

MeetingTime is also used to configure the system. MeetingTime software provides a Windows-based graphical user interface to enter information into MeetingPlace.

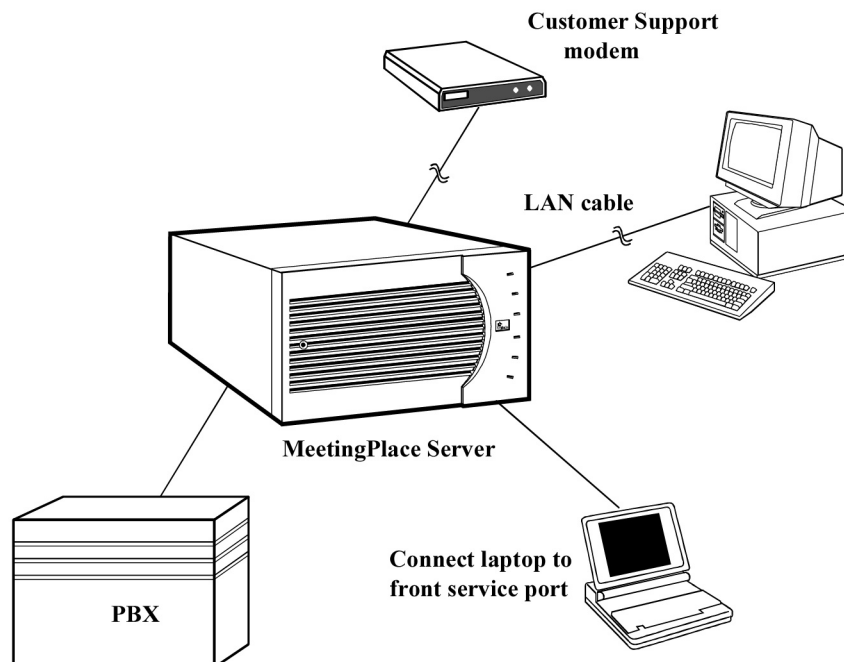


Figure 5-1. Configuring and Testing MeetingPlace

Connecting Your Laptop

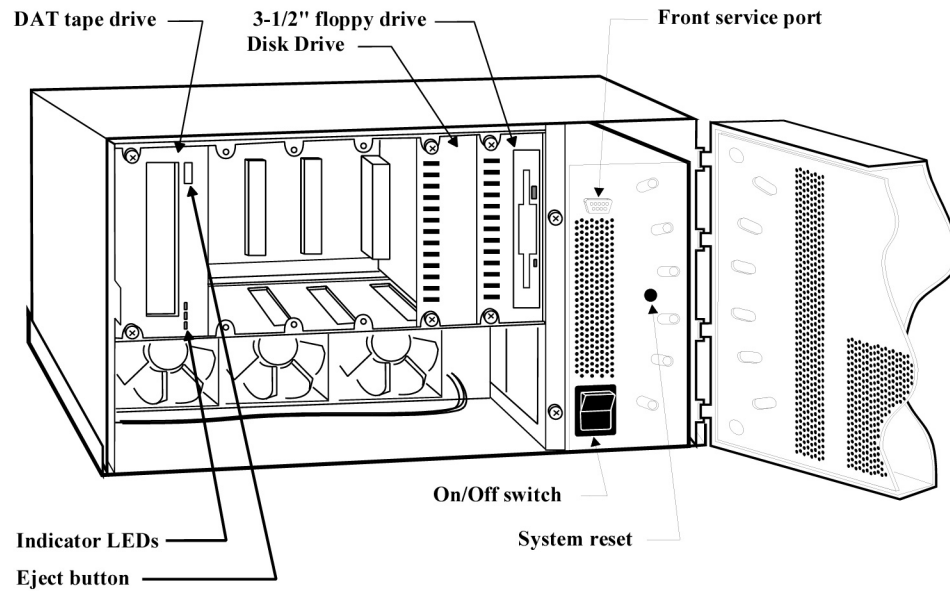


Figure 5-2. Server Front Panel with Cover Open

To connect the laptop:

1. To remove the front panel, refer to the Checking the Card Seating procedure on page 4-8.
2. Locate the DB-9 null modem female to female cable (part of the required toolkit). See Figure 5-3 for cable pinouts if needed.
3. Connect one end of the null modem cable to the front service port on the front of the server that requires CLI access. See Figure 5-2.
4. Connect the other end of the cable to COM port of the laptop.

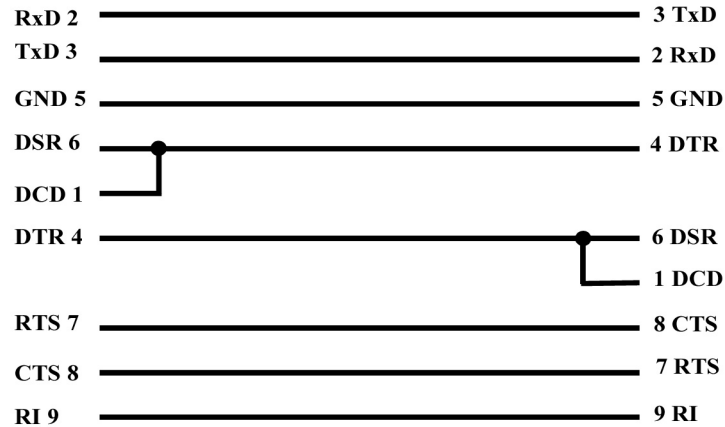


Figure 5-3. Null Modem Female to Female Cable Pinouts

Setting up Your Laptop

The CLI command screen can be accessed by running terminal emulation software, such as the ProComm, Windows Terminal, or HyperTerminal. Perform these two steps:

1. Configure the laptop communication (COM) port with the following parameters:

- Baud rate 19200
- Data length 8 bits
- Parity None
- Stop bits 1

No phone number or area code is needed for direct connections to a COM port. Depending on the configuration of the laptop, the direct connection (9 pin connector) may be any of the COM ports, but most likely COM 1.

2. Set up the terminal emulation software to emulate a VT100 terminal. If the laptop is connected to a server and the OS is running, the login prompt appears. It is sometimes necessary to press Enter once or twice.

Powering-up the System

To power up and initialize MeetingPlace:

1. On the front panel of the server, move the power switch to the On, “1” position. The LEDs on the front of MeetingPlace blink on and off.
2. Allow up to 10 minutes for the server to initialize. The server has initialized when the laptop displays the lines in Figure 5-4.

```
MeetingPlace by Latitude Communications

Fri Mar 5 12:28:43 PST 1999
Startup flags = a
SCSI adapter is Adaptec 2740 (EISA).
Disk 1 is mounted.
Unit class is standalone conference server
(SINGLE).
Bus architecture is EISA.
Ethernet device is "wd3e0".
IP forwarding DISABLED (0).
Initializing the back panel serial port...done
Initializing the modem.../lat/bin/initmodem ...

/lat/bin/initmodem: type is `Intel 144i'

/lat/bin/initmodem: modem initialized

Installing Latitude drivers...
MSC #0 (Rev B4) in slot 4
PRC #0 (Rev B2) in slot 10
Making nodes...done.
Kernel WDT autostrobe disabled
add net default: gateway 198.207.208.65
*** System activation is disabled.
*** Type "restart enable" to activate.
MeetingPlace 4.0.0, Mar 5, 1999
user name:
```

Figure 5-4. Power Up Confirmation Display



If the above information does not appear on the laptop screen:

Turn the power switch to the Off, “0” position.

Check all connections to make sure they are secure.

Open the top of the server by unscrewing the captive screw at the front on the top of the cabinet and lifting the cover forward and up.

Make sure that all cards are seated tightly.

Replace the top of the server in the reverse fashion, making sure that the flanges on the cover are aligned correctly with the chassis.

After verifying that all components are tight, repeat the power up and initialization procedure. If MeetingPlace does not initialize on the second try, call your support representative.

3. Wait for this message to appear: The MeetingPlace software is UP
4. Press Enter. A prompt appears requesting your user name and password.

CLI commands are case sensitive. For CLI command information refer to Appendix A, page A-1.

5. Enter your user name and password. Correct information causes Figure 5-5 to appear which allows CLI command input.

```
*****
*
*           MeetingPlace(tm)
*       by Latitude Communications
*
* Copyright (c) 1993,1994 Latitude Communications, Inc.*
*   All rights reserved.
*****

Release x.x.x      S/N: xxxxxxxx
Tue Aug  2 07:50:52 PDT 1998
mtgplace:tech$
```

Figure 5-5. CLI Display after Correct Login

Configuring the System

This section contains details for using the laptop to configure the following:

- Server type via the setup command on page 5-6
- LAN parameters via the net command starting on page 5-18
- Time zone via the timezone command on page 5-21
- Date and time via the date command on page 5-33
- Analog ports and ATI cards, if present, via acard command on page 5-23
- T1 spans and DTI cards, if present, via the dcard command on page 5-24
- E1 spans and ETI cards, if present, via elspan command on page 5-28
- Telephony ports via the port command on page 5-31

For CLI command information refer to Appendix A, page A-1.

The next subsections are arranged in the order of the above list, which is the recommended order of configuration.

Selecting the Server Type

Use the setup command for multiple server configurations only. Standalone servers are shipped with the correct server type pre-configured.

For networked systems there are two different deployment options:

- Locate all of the conference servers at the same site as the network server. These servers are called conference servers, home site.
- Locate one or more conference servers at a different site called conference servers, remote site.

For example, see Figure 5-6, a network server and two conference servers reside at site 0, while another conference server resides at site 1. This allows local access for callers at site 1 and provides single point database management.

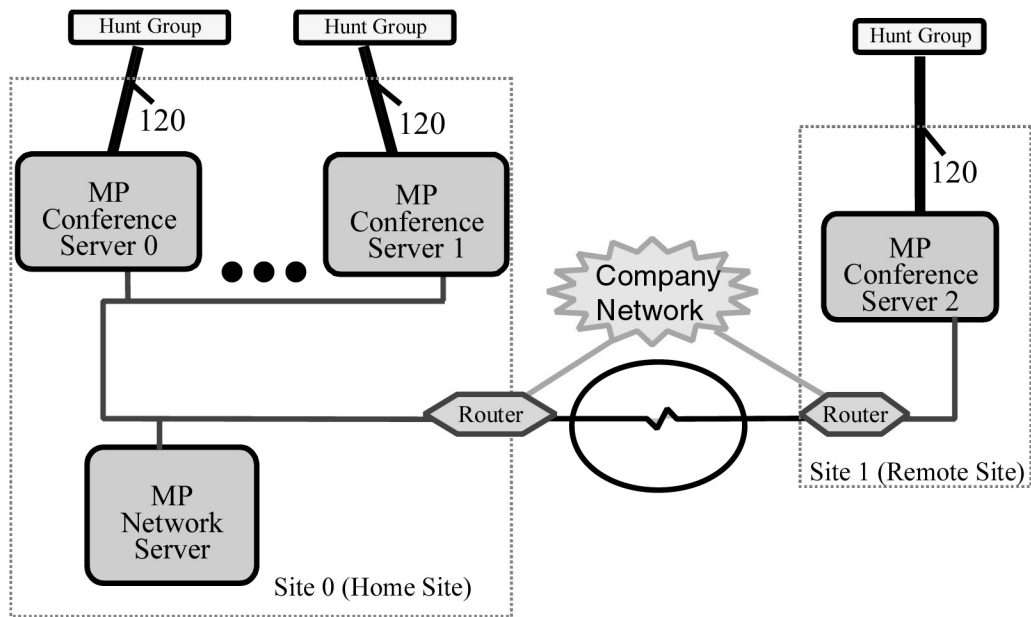


Figure 5-6. Multi-site Configuration

Selecting the Unit Class

The first parameter requested during setup is the unit class. There are five unit classes:

MeetingPlace--Standalone—A single server. This is the most common system configuration. Select unit class 1.

MeetingPlace--Networked, home site—A networked conference server that is collocated with the network server as in server 0 in Figure 5-7. Select unit class 2.

MeetingPlace--Networked, remote site—A networked conference server that is located at a different site than the network server as in server 2 in Figure 5-10. Select unit class 3.

Network Server—To configure the system as a Network Server select unit class 4.

Shadow Network Server—To configure the server as a backup Network Server. Select unit class 5.

A conference server at a remote site and a shadow server need additional IP information for routing messages to the Network Server.

Setup Command Overview

Use the following order to run the setup command on each server in a networked system:

1. Identify which servers are conference servers (all conference servers have telephony connecting cards visible on the rear of the server):
 - To view DTI card connectors see Figure 4-17 on page 4-26
 - To view ETI card connectors see Figure 4-12 and Figure 4-14 on page 4-20
2. Connect the laptop to any conference server as described in Connecting Your Laptop, page 5-2 and press Enter. A prompt appears requesting your user name and password.
3. Login as a technician. The tech\$ prompt appears.
4. Run the setup procedure on:
 - Page 5-9 for conference servers at the home site
 - Page 5-11 for conference servers at the a remote site
5. Enter **exit**. Logout appears.
6. Repeat the setup procedure on each conference server.
7. If a shadow network server is present, run the Shadow Server Setup procedure on page 5-14.
8. Run the Network Server Setup procedure on page 5-16.
9. Run all applicable configuration procedures that follow the Network Server Setup procedure, page 5-16, using the network server for the CLI connection.

Networked Conference Server, Home Site Setup

A networked conference server, home site is a conference server that is collocated with the network server. See Figure 5-7.

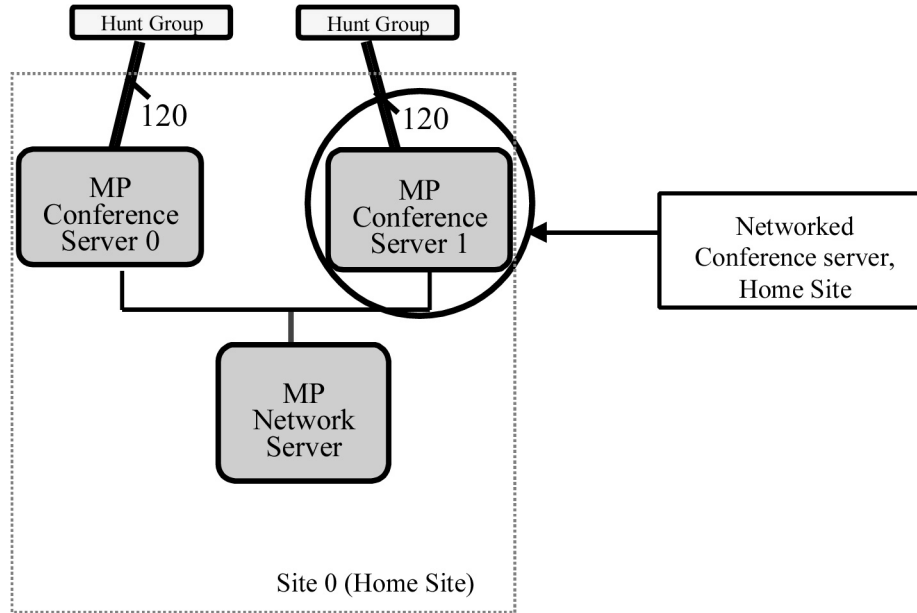


Figure 5-7. Networked Conference Server, Home Site

To configure a conference server that is located at the same site as the network server:

1. Access the CLI, through the front panel of the conference server by following the procedures in the Connecting Your Laptop, page 5-2, and press Enter. A prompt appears requesting your user name and password.
2. At the tech\$ prompt enter **setup**. The first dozen lines of Figure 5-8 appear.
3. Select the unit class 2 for MeetingPlace – Networked, home site. The timezone list appears.
4. Specify the time zone for the server location.
5. Confirm the time zone. The setup command exits.

```

meetingplace:tech$ setup
This program determines the basic personality of this
unit.
Current unit class = SINGLE
Current site class = LOCAL

Select the unit class:
  1) MeetingPlace -- Standalone (SINGLE).
  2) MeetingPlace -- Networked, home site (VP/LOCAL).
  3) MeetingPlace -- Networked, remote site (VP/REMOTE).
  4) Network Server (DB).
  5) Shadow Network Server (SHADOW).
  99) Quit.
Select: 2
Please select the time zone for this server.

The following timezones are available:
  1) America/Anchorage
  2) America/Chicago
  3) America/Denver
  4) America/Edmonton
  5) America/Halifax
  6) America/Indianapolis
  7) America/Los_Angeles
  8) America/Montreal
  9) America/New_York
 10) America/Phoenix
 11) America/Vancouver
 12) America/Winnipeg
 13) Pacific/Honolulu
 99) no action
Select: 7

The local time zone (PST) is 480 minutes west of GMT
Daylight savings time policy: US/Canada

Please confirm (y/n): y
DONE
You have selected a new configuration for this unit.
Unit class = VP
Site class = LOCAL
Update the initialization file (y/[n])? y
DONE
NOTE: Changes take effect with the next restart of the
unit.
Unit class = VP/LOCAL

```

Figure 5-8. Networked Conference Server, Home Site Setup Display

6. Enter **getether**. The Ethernet address of the conference server appears as in Figure 5-9.
7. Record the Ethernet address for later use.

```
courage_vp1:tech$ getether
0000c0fe669a
```

Figure 5-9. The Ethernet Address Display

8. Restart the server to effect the changes by entering **restart enable**. After a confirmation request the display scrolls through initialization and loading notices. When restart is complete the last line reads The MeetingPlace software is UP.
9. Return to the Setup Command Overview, page 5-8.

Networked Conference Server, Remote Site

A networked conference server, remote site is a conference server that is not located on the same LAN segment as the Network Server. Usually, the server is located at a different geographical location allowing users at another site to have local access to a Conference Server.

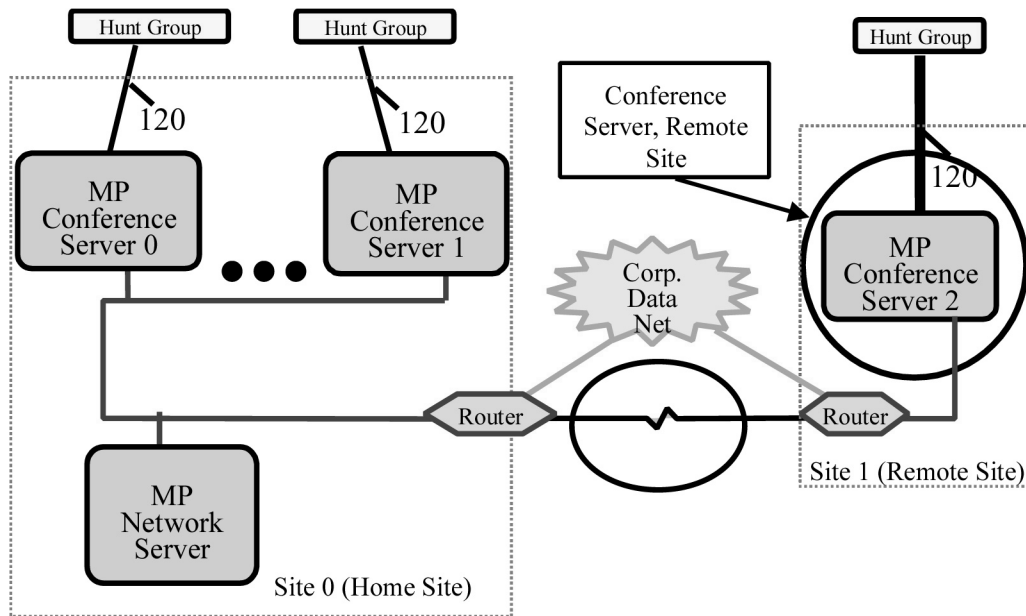


Figure 5-10. Networked Conference Server, Remote Site

To configure a conference server located at a remote site:

1. Access the CLI, through the front panel of the conference server by following the procedures in Connecting Your Laptop, page 5-2, and press Enter. A prompt appears requesting your user name and password.
2. At the tech\$ prompt enter **setup**. The first dozen lines of Figure 5-11 appear.
3. Select unit class 3 for MeetingPlace – Networked, remote site.

4. Enter the host name for the server, provided by the customer.
5. Enter the IP address for the server, provided by the customer.
6. Enter the subnet mask and broadcast address for the server, provided by the customer.
7. Enter the broadcast address for the server.
8. Enter the default gateway for the server.
9. Enter the host name of the network server.
10. Enter the IP address of the network server.
11. Enter the name of the Network Server. The timezone list appears.
12. Specify the time zone for the server location.
13. Restart the server to effect the changes by entering **restart enable**. After a confirmation request the display scrolls through initialization and loading notices. When restart is complete the last line reads The MeetingPlace software is UP.
14. Return to the Setup Command Overview, page 5-8.

```

meetingplace:tech$ setup
This program determines the basic personality of this
unit.
Current unit class = VP
Current site class = LOCAL

Select the unit class:
  1) MeetingPlace -- Standalone (SINGLE).
  2) MeetingPlace -- Networked, home site (VP/LOCAL).
  3) MeetingPlace -- Networked, remote site (VP/REMOTE).
  4) Network Server (DB).
  5) Shadow Network Server (SHADOW).
99) Quit.
Select: 3
For remote units it is necessary to manually enter
various network parameters. These will be used to
establish the initial communication with the network
server for this system.

Host name for this unit [Apollo]:
IP address for this unit [172.17.3.17]:
Subnet mask [255.255.0.0]:
Broadcast address [172.17.255.255]:
Default gateway IP address [172.17.1.1]:
Host name of the network server []:
IP address of the network server []:
Please select the time zone for this server.

The following timezones are available:
  1) America/Anchorage
  2) America/Chicago
  3) America/Denver
  4) America/Edmonton
  5) America/Halifax
  6) America/Indianapolis
  7) America/Los_Angeles
  8) America/Montreal
  9) America/New_York
 10) America/Phoenix
 11) America/Vancouver
 12) America/Winnipeg
 13) Pacific/Honolulu
 99) no action
Select: 7

The local time zone (PST) is 480 minutes west of GMT
Daylight savings time policy: US/Canada

Please confirm (y/n): y

DONE
NOTE: Changes take effect with the next restart if the
unit.
Unit class = VP/REMOTE

```

Figure 5-11. Networked Conference Server, Remote Site Setup Display

Shadow Server Setup

To setup a shadow server:

1. Access the CLI, through the front panel of the shadow network server by following the procedures in Connecting Your Laptop, page 5-2, and press Enter. A prompt appears requesting your user name and password.
2. Login as a technician. The tech\$ prompt appears.
3. Enter **setup**. The first dozen lines of Figure 5-12 appear.
4. Select option 5, Shadow Server. The timezone list appears.
5. Specify the time zone for the server location.
6. Confirm the time zone. The setup command exits.
7. Enter **getether**. The Ethernet address of the conference server appears.
8. Write down the Ethernet address for later use.
9. Restart the system to effect the changes by entering **restart enable**. After a confirmation request the display scrolls through initialization and loading notices. When restart is complete the last line reads The MeetingPlace software is UP.
10. Enter **exit**.
11. Disconnect the laptop from the conference server, and connect it to the network server.


```

meetingplace:tech$ setup
This program determines the basic personality of this
unit.
Current unit class = DB
Current site class = LOCAL

Select the unit class:
  1) MeetingPlace -- Standalone (SINGLE).
  2) MeetingPlace -- Networked, home site (VP/LOCAL).
  3) MeetingPlace -- Networked, remote site (VP/REMOTE).
  4) Network Server (DB).
  5) Shadow Network Server (SHADOW).
99) Quit.
Select: 5
Please select the time zone for this server.

The following timezones are available:
  1) America/Anchorage
  2) America/Chicago
  3) America/Denver
  4) America/Edmonton
  5) America/Halifax
  6) America/Indianapolis
  7) America/Los_Angeles
  8) America/Montreal
  9) America/New_York
 10) America/Phoenix
 11) America/Vancouver
 12) America/Winnipeg
 13) Pacific/Honolulu
 99) no action
Select: 7

The local time zone (PST) is 480 minutes west of GMT
Daylight savings time policy: US/Canada

Please confirm (y/n): y
DONE
You have selected a new configuration for this unit.
Unit class = SHADOW
Site class = LOCAL
Update the initialization file (y/[n])? y
DONE
NOTE: Changes take effect with the next restart if the
unit.
Unit class = SHADOW/LOCAL
meetingplace:tech$

```

Figure 5-12. Shadow Server Setup Display

Network Server Setup

To configure a network server:

1. Access the CLI, through the front panel of the network server by following the procedures in Connecting Your Laptop, page 5-2, and press Enter. A prompt appears requesting your user name and password.
2. Login as a technician. The tech\$ prompt appears.
3. Enter setup. The first dozen lines of Figure 5-13 appear on the screen.
4. Select the unit class 4 for network server. The timezone list appears. Enter the time zone for the server location.
5. Confirm the time zone. The setup command exits.
6. Restart the server to effect the changes by entering **restart enable**. After a confirmation request the display scrolls through initialization and loading notices. When restart is complete the last line reads The MeetingPlace software is UP.

```

meetingplace:tech$ setup
This program determines the basic personality of this
unit.
Current unit class = SINGLE
Current site class = LOCAL

Select the unit class:
  1) MeetingPlace -- Standalone (SINGLE).
  2) MeetingPlace -- Networked, home site (VP/LOCAL).
  3) MeetingPlace -- Networked, remote site (VP/REMOTE).
  4) Network Server (DB).
  5) Shadow Network Server (SHADOW).
  99) Quit.
Please select the time zone for this server.

The following timezones are available:
  1) America/Anchorage
  2) America/Chicago
  3) America/Denver
  4) America/Edmonton
  5) America/Halifax
  6) America/Indianapolis
  7) America/Los_Angeles
  8) America/Montreal
  9) America/New_York
 10) America/Phoenix
 11) America/Vancouver
 12) America/Winnipeg
 13) Pacific/Honolulu
 99) no action
Select: 7

The local time zone (PST) is 480 minutes west of GMT
Daylight savings time policy: US/Canada

Please confirm (y/n): y
DONE
You have selected a new configuration for this unit.
Unit class = VP
Site class = LOCAL
Update the initialization file (y/[n])? y
DONE
NOTE: Changes take effect with the next restart if the
unit.
Unit class = VP/LOCAL
meetingplace:tech$

```

Figure 5-13. Network Server Setup Display

Configuring LAN Parameters on a Standalone System

LAN parameters identify the MeetingPlace system and each of its servers on the customer's TCP/IP network. The site contact supplies LAN parameters via the *Installation Planning Guide* Worksheet 3-3. To configure the LAN parameters for a standalone system:

1. Enter **getether**. The Ethernet address of the conference server appears as in Figure 5-14.
2. Record the Ethernet address for later use.

```
courage_vp1:tech$ getether
0000c0fe669a
```

Figure 5-14. The Ethernet Address Display

3. At the tech\$ prompt, enter **net**. Figure 5-15 appears.

```
mtgplace:tech$ net
1) View the server & site configuration
2) Modify the server configuration
99) Quit
Select:
```

Figure 5-15. Select View or Modify Configuration

4. To configure LAN parameters, enter **2**. Figure 5-16 appears.

```
Select: 2

1) View the current configuration
2) Select a different site for this server
3) Change the host and site names
4) Change server IP address and Ethernet address
5) Change site subnet mask or broadcast addr
6) Change site routing information
7) Change network time protocol servers
99) Return to the main menu
Select:
```

Figure 5-16. LAN Configuration Parameter Change Selections

5. Select 3, 4, 5, 6, and 7 in order and follow the prompts to enter values using the *Installation Planning Guide*, Worksheet 3-3. See Table 5-1 for details of each parameter.
6. Select 1 from the net command menu to view the new configuration.

Table 5-1. Server Configuration Parameters

| Parameter | Explanation |
|------------------------|--|
| Unit | Numeric value, 0 to 9. For standalone systems the unit number must be 0. The network server is always unit #0 and the shadow server, if present, is always unit #9. Number conference servers arbitrarily from 1 to 8. Gateway servers are 10 to 15. |
| Active | System status, non-editable. |
| Description | Designates three names: <ul style="list-style-type: none"> • <i>Host name</i>— The DNS name tied to the IP address of the server • <i>Host description</i>—the name of the server as seen in MeetingTime and the MeetingPlace Web. It is helpful to use MeetingPlace in this name since it can be different from the TCP/IP name. • <i>Site name</i>— arbitrary name for the location of the server |
| IP Address | Must correspond to the customer's network requirements. See <i>Installation Planning Guide</i> , Worksheet 3-3. |
| Ethernet Address | The Media Access Control (MAC) address of the server. It corresponds to the MAC hardware address that uniquely identifies each node of a network. During setup, the getether command produced this value. For stand alone servers, run the getether command prior to running setup or LAN configuration. |
| NTP Server | This IP address designates the Network Time protocol server on the customer's local area network. It allows MeetingPlace to synchronize its clock with the network time server. |
| Site | A number from 0 to 8 which determines the server location for networked multi-site server deployment. For standalone servers, site should be set to 0. |
| Site subnet mask | A bit mask used to determine what subnet an IP address belongs to. This should be specified by the customer's network administrator. See <i>Installation Planning Guide</i> , Worksheet 3-3. |
| Site broadcast address | Address used to broadcast packs on the local LAN segment. See <i>Installation Planning Guide</i> , Worksheet 3-3. |
| Site default gateway | Address of the gateway that accepts and routes information to other networks. See <i>Installation Planning Guide</i> , Worksheet 3-3. |
| Route daemon | Yes or no. Specifies if the MeetingPlace route daemon should be enabled or disabled. |

Configuring LAN Parameters on a Networked System

For networked systems, each server is configured through the network server. The net command is used to configure the LAN parameters for each server separately and assigns unit numbers to each MeetingPlace server at the same time. There are two parts to LAN configuration:

- Network and shadow server LAN parameters
- Setting LAN parameters for the conference servers

LAN Parameters on a Network and shadow server

LAN parameters identify the MeetingPlace system and each of its servers on the customer's TCP/IP network. The site contact supplies LAN parameters via *Installation Planning Guide* Worksheet 3-3.

1. At the tech\$ prompt, enter **net**. Figure 5-17 appears.

```
meetingplace:tech$ net
  1) View the server & site configuration
  2) Modify the server configuration
  3) Select another server (current unit = #0)
  99) Quit
```

Figure 5-17. LAN Configuration Server Selection for a Networked System

2. To enter LAN parameters for the network server, verify that the current unit = #0 and enter **2**. Figure 5-18 appears.

```
Select: 2

  1) View the current configuration
  2) Select a different site for this server
  3) Change the host and site names
  4) Change server IP address and Ethernet address
  5) Change site subnet mask or broadcast addr
  6) Change site routing information
  7) Change network time protocol servers
  99) Return to the main menu
Select:
```

Figure 5-18. LAN Configuration Parameter Change Selections

3. Select 3, 4, 5, 6, and 7 in order and follow the prompts to enter values using the *Installation Planning Guide*, Worksheet 3-3 and the Ethernet address recorded during setup. See Table 5-1 for details.
4. After entering all necessary parameters, enter **99** to return to the main menu. Figure 5-17 appears.
5. Enter **1** to verify the entered parameters.

- Repeat the above procedure for any shadow network server (unit #9).

Configuring LAN Parameters for a Conference Server in a Networked System

When configuring networked systems, it is critical to enter the Ethernet MAC address for each of the conference servers correctly. If the values are not correct the conference server will not be able to communicate with the network server.

- At the main menu of the net command (Figure 5-17) enter **3**. A prompt appears requesting the unit number.
- Decide which conference server to configure, the unit number to assign it, and enter that number. This action actually starts the process that assigns the unit number to the conference server. Figure 5-17 appears again.

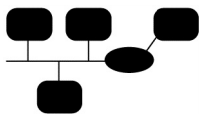


It is good practice to write the unit number on the serial number sticker on the back of each conference server.

- To continue the conference server configuration Enter **2**. Figure 5-18 appears.
- Select 3, 4, 5, 6, and 7 in order and follow the prompts to make the changes. Use Worksheet 3-3 from *Installation Planning Guide*. See Table 5-1 for details of each parameter.
- After entering parameters for one conference server, enter **99** to return to the main menu. Figure 5-17 appears.
- Enter **1** to verify the entered parameters.
- If this configuration is for a newly added conference server (upgrade) return to the section Configuring a Conference Server, page 6-29. Otherwise, repeat the above procedure for each conference server.

Configuring the Server Time Zone

This procedure is for standalone systems only.



For networked systems, the **timezone** command always runs after selecting the server type. Therefore, skip this procedure.

If the time zone is not correctly set, meetings will occur at the wrong time.

- At the tech\$ prompt, type **timezone**. Figure 5-19 appears.

```
mtgplace:tech$ timezone
Please select the time zone for this server.

The following timezones are available:
 1) America/Anchorage
 2) America/Chicago
 3) America/Denver
 4) America/Edmonton
 5) America/Halifax
 6) America/Indianapolis
 7) America/Los_Angeles
 8) America/Montreal
 9) America/New_York
10) America/Phoenix
11) America/Vancouver
12) America/Winnipeg
13) Pacific/Honolulu
99) no action
Select:
```

Figure 5-19. Timezone Configuration

2. Enter the number that applies to the server location. Figure 5-20 appears.

```
Select: 5

The local time zone (PST) is 8 hours west of GMT
Daylight savings time policy: US/Canada

Please confirm (y/n):
```

Figure 5-20. Timezone Configuration Confirmation

3. Type **y** to confirm your selection, or **n** to abort your selection.

Configuring Analog Spans – ATI Cards

If this configuration is part of an upgrade, first update license information by following the Adding New Licenses for Additional Ports procedure, page 6-11.

To configure ATI cards:

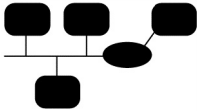
1. At the tech\$ prompt, enter **acard**. Figure 5-21 appears.

```
tech$ acard
MeetingPlace is up

*****  ATI CONFIG MENU  *****
        1)  View ATI card record (s)
        2)  Modify ATI card record
        x)  Exit Program
Enter command:
```

Figure 5-21. ATI Card Configuration Menu

2. Enter **2**. Figure 5-22 appears.



In a networked system, the acard command has an additional option for selecting the server to configure.

```
Enter command: 2
Enter ATI card number [0..4, ,<cr> for all] : 0
```

Figure 5-22. ATI Card Selection



Note:

The default value appears between the square brackets, []. To select the default, press Enter. <cr> stands for carriage return and is the same as pressing Enter.

To correct a mistake, press Enter until the command is completed. The initial menu appears. Then, repeat the command.

3. Enter a card number. This number corresponds to the dip switch settings on the card. Refer to Appendix D, page D-1 for dip switch configuration. The first two lines of Figure 5-23 appear.
4. Enter **y** to activate the card. The next line of Figure 5-23 appears.
5. Enter values as indicated by Table 5-2. When finished, the display looks similar to Figure 5-23 except the number of port assignment lines varies based on the number of trunks you entered.

Table 5-2. ATI Card Port Assignment

| Parameter | Explanation |
|------------------------|--|
| Activate the ATI Card? | y to active a card, n to deactivate |
| Number of trunks | The total number of trunks available on the ATI card. Older systems support 6 ports, PCI systems 12 ports. |
| Trunk [x] | Port number. Specifies which port in the database is assigned to the specific hardware trunk on the card. |

```

Enter command: 2
Enter ATI card number [0..4, ,<cr> for all] : 0
-----ATI 0 -----
Activate the ATI card? : y
Number of trunks : 6
Trunk [ 1] : port 0
Trunk [ 2] : port 1
Trunk [ 3] : port 2
Trunk [ 4] : port 3
Trunk [ 5] : port 4
Trunk [ 6] : port 5

```

Figure 5-23. ATI Card Port Assignment

6. After the last trunk is assigned a port, press Enter. The ATI Config menu appears.
7. If this configuration is for a newly added conference server (upgrade) stop here. Otherwise, select **2** to repeat this procedure for each ATI card in each conference server.

Configuring T1 Spans – DTI Cards

If this configuration is part of an upgrade, first update license information by following the Adding New Licenses for Additional Ports procedure, page 6-11.

T1 spans connect to DTI cards on the back of conference servers. DTI card configuration consists of two parts:

- DTI card activation and span assignment
- Span configuration including span activation and port assignment

For ease of tracking progress, activate all the DTI cards to be used and assign spans to DTI cards before proceeding to span configuration.

Activating DTI Cards

Activate each DTI card and assign spans as following:

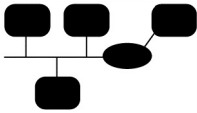
1. At the tech\$ prompt, enter **dcard**

```
tech$ dcard
MeetingPlace is up

*****      DTI CONFIG MENU      *****
          1) View DTI card record (s)
          2) Modify DTI card record
          x) Exit Program

Enter command:
```

Figure 5-24. DTI Card Configuration Selection



In networked systems, the dcard command has an option for selecting a specific conference server.

2. Enter 2. The display requests a DTI card selection.
3. Select a card number. Refer to Appendix D, page D-1, for card location and numbers. The first three lines of Figure 5-25 appear.



The default value appears between the square brackets, []. To select the default, press Enter. <cr> stands for carriage return and is the same as pressing Enter.

To correct a mistake, press Enter until the command is completed. The initial menu appears. Then, repeat the command.

4. To activate the card enter **y**. The next line in Figure 5-25 appears.
5. Enter the letters for the spans connected to the card. This assignment can be arbitrary. When completed, the display appears similar to Figure 5-25.

```
----- Unit 0 DTI 0 -----
--- To skip over a field, just press <cr> ---
  Activate the DTI card? [y] :
  Number of spans           :      2
  Line [A]      [span 0]   :      0
  Line [B]      [span 1]   :      1
```

Figure 5-25. Completed DTI Card Activation and Span Assignment

6. Repeat for the above procedure for each DTI card in the server.

Table 5-3 describes the default span assignments.

Table 5-3. DTI Card Span Assignment, Default

| DTI Card | DTI Card Line | Span No. |
|----------|---------------|----------|
| 0 | A | 0 |
| 0 | B | 1 |
| 1 | A | 2 |
| 1 | B | 3 |
| 2* | A | 4 |

Up to five T1 spans can be handled by each conference server. Therefore, the third DTI card only connects to one span.

Configuring DTI Card Span

If this configuration is part of an upgrade, first update license information by following the Adding New Licenses for Additional Ports procedure, page 6-11.

Configure each span connected to the server as follows:

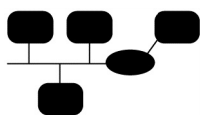
1. At the tech\$ prompt, Enter **span**. Figure 5-26 appears.

```
tech$ span
MeetingPlace is up

*****  SPAN CONFIG MENU  *****
      1) View DTI span record(s)
      2) Modify DTI span record
      x) Exit Program

Enter command:
```

Figure 5-26. Initial DTI Span Configuration Display



For networked systems, the span command has an additional option for selecting a specific conference server. For tracking, configure each span connected to a server before starting on another server.

2. Enter **2**. Figure 5-27 appears.

```
Enter command: 2
Enter DTI span number [0..4, ,<cr> for all] : 0
```

Figure 5-27. DTI Span Selection

3. Select a span number. Spans were assigned to DTI cards in the previous procedure. Table 5-3 describes default span assignments. The first four lines of Figure 5-28 appear.
4. Enter values as indicated by Table 5-4. When finished the display appears similar to Figure 5-28. If you exceed the number of ports configured by the factory, an error message appears.

Table 5-4. DTI Card Span Configuration

| Parameter | Definition |
|----------------------------|---|
| Activate the DTI span? | 'y' specifies the span is active. |
| Framing | 'D4' or 'ESF'. Refer to <i>Installation Planning Guide</i> Worksheet 3-2. |
| Zero Code Suppression | 'Jammed Bit' or 'B8ZS'. Specify the zero code suppression for the span. |
| Timing | 'internal' or 'external'. Specify if MeetingPlace should get clock timing from the PBX/Central Office, or whether timing will be generated by MeetingPlace. |
| External Synch Priority | 1-255 or 'never'. Specifies the synchronization preference relative to other spans. '1' is the highest synchronization priority whereas '255' is the lowest. The system will always try to synchronize from the highest priority span. If the synchronization span goes down, the system will automatically switch synchronization to the next highest span. If a higher priority span comes up, the system will automatically synchronize off of it. |
| Trunk[x] | Specifies which port in the database is assigned to the specific hardware trunk on the card. |
| Remote loopback to network | y or n. If yes, this puts the span into a loopback mode for testing from the remote end. For normal operation, set to n. |
| Internal data loopback | y or n. If yes, this causes the span to loop back locally for running diagnostics. For normal operation, set to n. |

```

Enter command: 2
Enter DTI span record number [0..4, <cr> for all]: 0
-----SPAN 0 -----
  Activate the DTI span?      :    Y
    Framing                   :    D4
  Zero code suppression      :   None (AMI)
    Timing                    :   External
  External sync priority    :     2
  Trunk  [ 1]                :   port 24
  Trunk  [ 2]                :   port 25
  Trunk  [ 3]                :   port 26
  Trunk  [24]                :   port 46
  Trunk  [20]                :   port 47
  Remote loopback to network :    n
  Internal data loopback    :    n

```

Figure 5-28. DTI Span Configuration

5. Press Enter. The Span Config Menu appears.
6. Press **2** to configure another span or **x** when all the T1 spans connected to the server are configured.
7. If this configuration is for a newly added conference server (upgrade), return to the section *Configuring a Conference Server*, page 6-29. Otherwise, repeat the procedures in this section (*Configuring T1 Spans – DTI Cards*) starting at page 5-24 for all servers that contain DTI cards.

Configuring E1 Spans – ETI Cards

If this configuration is part of an upgrade, first update license information by following the *Adding New Licenses for Additional Ports* procedure, page 6-11.



DTI and ETI cards cannot operate on the same conference server.

ETI card configuration consists of two parts:

- ETI card activation and span assignment
- Span configuration including span activation and port assignment

For ease of tracking progress, activate all the ETI cards to be used and assign spans to ETI cards before proceeding to *Configuring E1 Spans – ETI Cards*.

Activating ETI Cards

To activate an ETI card and assign spans:

1. At the tech\$ prompt, enter **e1card**. Figure 5-29 appears.

```

tech$ elcard

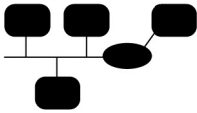
*****  E T I   C O N F I G   M E N U   *****

          1)  View ETI card record(s)
          2)  Modify ETI card record
          x)  Exit program

Enter command:

```

Figure 5-29. ETI Configuration Menu



In networked systems, the elcard command has an option for selecting a specific conference server.

2. Enter **2**. The display requests an ETI card selection.



The default value appears between the square brackets, []. To select the default, press Enter. <cr> stands for carriage return and is the same as pressing Enter.

To correct a mistake, press Enter until the command is completed. The initial menu appears. Then, repeat the command.

3. Select a card number. Refer to Appendix D, page D-1, for card location and numbers. The first three lines of Figure 5-30 appear.
4. To activate the card, enter **y**. The next line appears.
5. Enter values as indicated in Table 5-5 and Table 5-6. As each line appears fill in the values as they appear. When completed the screen should look similar to Figure 5-30.

Table 5-5. ETI Card Activation and Span Assignment

| Parameter | Definition |
|------------------------|---|
| Activate the ETI card? | Specifies if the card is active |
| Number of spans? | The number of spans, up to two, supported by the ETI card. |
| Signaling | Specify the appropriate E1 signaling protocol using lowercase: dpnss, euro_isdn, mfc r2, fetex 150, qsig, or cas. |
| Configuration string | String. Specifies any special configuration strings that must be downloaded to the E1 card for proper function. |
| Line [x] | Numeric. Specifies the span number to be associated with given line on the card. |

Table 5-6. ETI Card Span Assignment, Typical

| ETI Card | ETI Card Line | Span No. |
|----------|---------------|----------|
| 0 | A | 0 |
| 0 | B | 1 |
| 1 | A | 2 |
| 1 | B | 3 |

```

----- Unit 0 ETI 0 -----
--- To skip over a field, just press <cr> ---
Activate the ETI card? [n] : y
Number of spans      [ 2] :
Signaling      [    dpnss] : cas
Configuration string  [] :
Line [A]          [no span] : 0
Line [B]          [no span] :

```

Figure 5-30. ETI Card Activation and Span Assignment

- Repeat for the above procedure (Configuring E1 Spans – ETI Cards) starting on page 5-28 for each ETI card in the server.

Configuring ETI Card Span

To activate the spans and assign ports:

- Enter **e1span**. Figure 5-31 appears.

```

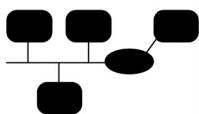
tech$ e1span
*****  E 1  S P A N    C O N F I G    M E N U
*****

      1)  View ETI span record(s)
      2)  Modify ETI span record
      x)  Exit program

Enter command:

```

Figure 5-31. E1 Span Configuration Menu



For networked systems, the span command has an additional option for selecting a specific conference server. For tracking, configure each span connected to a server before starting on another server.

- Enter **2**. A prompt appears requesting the span number.
- Enter the span number. Consult Table 5-6 for typical span assignments. The first three lines of Figure 5-32 appear.
- Enter **y** to activate the card. The next line appears.

5. Fill in the values line by line as they appear, and press Enter after each line. When finished, the display appears similar to Figure 5-32.

```

----- UNIT 0  E1SPAN 0 -----
--- To skip over a field, just press <cr> ---
Activate the ETI span?           [n] :  y
Timing                          [internal] :  external
External sync priority          [never] :  1
Trunk [ 1]                      [ no port] :  0
Trunk [ 2]                      [ no port] :  1
Trunk [ 3]                      [ no port] :  2
.
.
.

Trunk [28]                      [ no port] : 27
Trunk [29]                      [ no port] : 28
Trunk [30]                      [ no port] : 29

```

Figure 5-32. E1 Span Activation and Port Assignment

6. Press **2** to configure any remaining E1 spans or **x** when all E1 spans connected to the server are configured.
7. If this configuration is for a newly added conference server (upgrade) return to the section Configuring a Conference Server, page 6-29. Otherwise, repeat the entire Configuring E1 Spans – ETI Cards procedure starting on page 5-28, for conference servers that contain ETI cards.

Configuring Ports

For ease of configuration, ports can be arranged into groups. All ports in a port group have the same configuration parameters. Most configurations put all ports into port group 0.

To configure ports:

1. At the tech\$ prompt, enter **port**. Figure 5-33 appears.

```

meetingplace:tech$ port
MeetingPlace is up

**** P O R T / G R O U P   C O N F I G   M E N U   ****
      1)  View port record(s)
      2)  Modify port record
      3)  Copy port records
      4)  View group record(s)
      5)  Modify group record
      x)  Exit program

Enter command:

```

Figure 5-33. Port/group Configuration Menu

2. Enter **5**. The first two lines of Figure 5-34 appear.
3. Use the *MeetingPlace Installation Planning Guide* worksheet 4-6 for port configuration information.
4. Enter the group number to modify. The next three lines of Figure 5-34 appear.



To see a list of the options for a particular parameter, enter **?**.

```

Enter command: 5
Enter port group record number [0..31] : 0

-----          GROUP 0          -----
--- To skip over a field, just press <cr> ---
  Activate the group?                [y] :
  Card type                    [    T1] :
  Signaling                    [  wink start] :
  Number of DID digits          [  0] :
  Human assistance?              [n] :
  Flash transfer?                [n] :
  Outdial?                      [y] :

Enter command:

```

Figure 5-34. Port Group Modification

5. To assign a port to a port group, use option 2.

```

Enter command: 2
Enter port record number [0..119] : 0

----- UNIT 0  PORT 0 -----
--- To skip over a field, just press <cr> ---
    Uses port group           [  0] :

Enter command:

```

Figure 5-35. Port Group Assignment

6. To copy the parameters from a specific port to other ports, use option 3. You must specify the source port configuration and the destination port configurations. To copy to a range of ports, separate the start and end port numbers with a dash.

```

Enter command: 3
Enter port record number to copy from [0..71] : 0
Enter port(s) to copy to [0-71] : 1-71
Copied to port record(s) 1, 2, 3, 4, 5, 6, 7, 8, 9, 10,
11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24,
25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38,
39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52,
53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66,
67, 68, 69, 70, 71.

Enter command:

```

Figure 5-36. Copy Port Parameters to other Ports

Configuring Date and Time

To configure system date and time, the application software must be down. The date command is used to set any portion of the date and time without specifying the higher parameters. For example, you can set the hour without setting the day of the month, but you must specify the minutes when setting the hour.

To set system date and time:

1. Shut down system software by entering **down**. After verifying your command, the third and fourth lines in Figure 5-37 appear.
2. Wait about one minute the fifth and sixth lines in Figure 5-37 appear.

```

meetingplace:tech$ down
Are you sure (y/n)? y
Checking to see if the system is loaded...OK
System DOWN procedure has been initiated.
The system is DOWN.
meetingplace:tech$

```

Figure 5-37. Down Command Response

3. Enter **date**. The display shows the current date, time and abbreviated time zone.
4. Enter **date** followed by a space and a date or time in any of the following formats:
 - `yyyymmddhhmm` Year, month, day, hour, minute.
 - `mmddhhmm` Month, day, hour, minute.
 - `ddhhmm` Day, hour, minute.
 - `hhmm` Hour, minute.

Each year, month, day, hour or minute value is two digits, with a zero prefix for values less than 10. For the year, only the last two digits are used (98, 99, 00). The hour is 24-hour format (00..23).

To the date & time argument, the seconds may be appended with a period as `.ss`.

The display shows the new date and time.

5. Finalize the configuration by entering **restart enable**. A confirmation request the display scrolls through initialization and loading notices. When restart is complete the last line reads The MeetingPlace software is UP.

Checking the CLI Configuration

Use Table 5-7 to verify a complete configuration.

Table 5-7. CLI Configuration Checklist

| ✓ | Command | Description |
|---|--------------------------|---|
| | setup | Set the system type. Systems ship as stand alone conference server by default. |
| | net | Set the network parameters for the server. |
| | timezone | Set the time zone for the server. |
| | acard dcard elcard | Configure telephony cards present in the system. |
| | span elspan | For digital trunks configure the spans. This step is not necessary for analog trunks. |
| | port | Configure the ports in the system. Used to specify the signaling type and characteristics of the ports. |
| | date | Set the date and time of the server. |

Configuring Ports via MeetingTime

After the system restarts the LAN connection becomes active. Locate the MeetingTime media kit that was included in the system box. Install MeetingTime on the System Manager's PC. To install MeetingTime, follow the directions associated with the media kit.

This section contains procedures for configuring MeetingPlace by using the System Manager's PC and the MeetingTime software. The *MeetingPlace System Manager's Guide* contains complete information about MeetingTime. For these procedures you will need the *Installation Planning Guide* Worksheets 2, 3, and 4. These procedures consist of transferring information from the worksheets to the MeetingTime software screens.

1. Double-click the MeetingTime icon. Figure 5-38 appears.
2. Enter the case sensitive user ID (technician), password, and address or host name. If you do not know your password, contact the Customer Support Center.
3. Click the door key icon. The MeetingTime lobby appears.
4. Click the register book on the receptionist's desk.
5. Click the Configure tab. Figure 5-39 appears.



Figure 5-38. MeetingTime Login Display

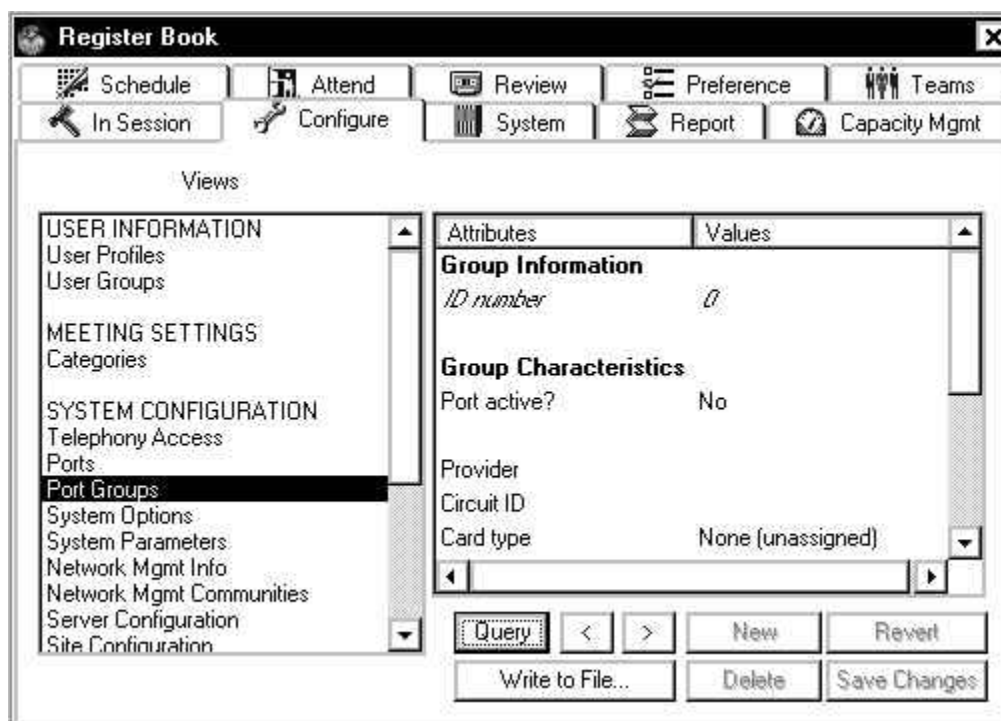


Figure 5-39. MeetingTime Register Book

6. Under Views on the left side, select Port Groups. The attributes for Port Group 0 (ID number 0) appear without values.
7. Click Query. The values for Port Group 0 appear.
8. To change an attribute:

- a. Click the *value*. An editable field appears containing the current value just clicked.



Figure 5-40. MeetingTime Editable Field for Attribute Modification

- b. Enter a new value or select one from the drop-down menu.
 - c. Click OK. The field disappears and the new value appears.
9. Make changes to the attributes for Port Group 0 by using the information from *Installation Planning Guide* Worksheet 4-7.
 10. Under Views, select Telephony Access. Attributes for Telephone Access appear on the right.
 11. Click Query. Values appear.

12. Make changes to the Telephony Access attributes using *Installation Planning Guide* Worksheet 3.
13. Under Views, select Ports. Attributes for Ports appear on the right.
14. Click Query. Values appear.
15. Make changes to the Ports attributes using *Installation Planning Guide* Worksheet 4-6.
16. Check the Alarm Table by selecting the System tab, Alarm Tables, Execute.
17. Clear the Alarm Table by selecting Clear Alarm.
18. Under the System tab use the Restart (Immediate) command to reboot MeetingPlace.

Verifying MeetingPlace Configuration

After MeetingPlace has restarted (about two minutes), use the following procedure to verify MeetingPlace configuration:

1. Use a telephone to dial the MeetingPlace phone number provided by the site contact.
2. If you hear the MeetingPlace greeting “Welcome to MeetingPlace” and can access its functions, MeetingPlace telephony lines are installed correctly.
3. If you do not get the MeetingPlace greeting or the functions do not work:
 - Check that the worksheet information was entered correctly
 - Check all the physical connections to the system
 - Check that no red LEDs on the front of the MeetingPlace cabinet are lit

If these actions do not correct the problem, call the Customer Support Center.

4. If you hear the MeetingPlace greeting and can access functions, hang up and go to the next step.
5. Exit MeetingTime by selecting File and then Exit MeetingTime.

Verifying Installation

To verify system function use the following procedures to:

- Verify integration with the customer's phone system.
- Verify integration with the customer's local area network.

Testing Telephony

To test telephony connectivity test both inbound and outbound calls.

Testing Inbound Calls

To verify inbound calls to the system, you must have a means for directly selecting each of the trunks connected to MeetingPlace. Most PBXs and central office trunks allow each trunk to be selected with a special dialing sequence or use circular hunting which accesses each port in turn.

1. If the PBX uses circular hunting: dial the system access number
 - a. Use the **spanstat –all** command to monitor which port receives the call.
 - b. Dial the system access number. The system pick up and announces "Welcome to MeetingPlace."
 - c. Press **2**. The system replies with "Enter your profile number" prompt. This ensures a full two way connection between the PBX/central office.
 - d. Repeatedly dial the system access number until each port is tested.
2. If the PBX does not use circular hunting, ask the PBX administrators for the dialing sequence that controls which port picks up the call.
3. For each port, press **2** and listen for the "Enter your profile number" prompt. This ensures a full two way connection between the PBX/central office.

Testing Outbound Calls

If MeetingPlace is connected to a PBX, it is necessary to test outbound calls placed to extensions on the PBX as well as calls place to the public network. A call should be made on each port.

To test outbound calls:

1. Connect your laptop to the front maintenance panel of the system

2. Log in as a technician. The tech\$ prompt appears.
3. Enter **activity**. Figure 5-41 appears.

```

***      VUI INTERNAL STATUS  UTILITY      ***

DebugMenu:
  1) Quick Status of all Ports           4) Make Test Call
  2) Verbose Status of Port Range       5) Show All Confs
  3) Display complete Port Information   0) Quit

Enter the Command    (0 -- 100):

```

Figure 5-41. VUI Internal Status Utility Menu

4. To make a test call, enter **4**. A prompt appears as in Figure 5-42 requesting a destination telephone number.
5. Enter the extension of a nearby telephone as the destination phone number to be dialed (a 9 may be needed along with the seven digits). A prompt asks if you want to specify a port.

```

You entered 4.
Enter destination for your call: 2302
The Telephone Number is 2302. Len is 4
Do you want specific ports? (t -- f): t
You entered t.
Do you want to specify a range of ports? (t -- f): t
You entered t.

The valid range is from 0 to 119
Enter the starting Port Number:    (0 -- 119): 0
You entered 0.

Enter the ending Port Number:    (0 -- 119): 9
You entered 9.
Will test port range 0 through 9 inclusive.

How much delay between calls do you want:  (0 -- 20): 2

```

Figure 5-42. Outbound Call Testing of the First Ten Ports

6. Enter **t** for true. A prompt asks for a range of ports.
7. Enter **t** for true. A prompt asks for the starting port number.
8. Enter the lowest number. A prompt asks for the ending port number.
9. Enter a port number 10 or 24 ports above the starting port number. A prompt asks for the delay between calls.
10. Enter the desired delay. If all is correct, the nearby telephone rings.

11. Unhook the phone, press 1, and hang up. The display reports the testing of that port is OK. The nearby telephone is called from the next port.
12. Repeat the last step until all the ports in the specified group are tested.
13. Repeat this procedure using the seven digit number for the nearby phone.

Testing Scheduling

Beyond basic telephony functionality, verify that users can schedule new meetings. When testing the scheduling capability of the system, use the technician profile that shipped with the system.

Testing Voice Interface

Verify that users can schedule immediate meetings via the phone interface.

Verify that users can schedule meetings in the future via the phone interface.

Testing MeetingTime

Verify that users can schedule meetings via the workstation interface with the MeetingTime client.

Testing MeetingPlace Web

If the MeetingPlace Web has been installed, verify that meetings can be scheduled via this interface.

Testing Outlook/Notes Gateway

If the MeetingPlace for Outlook or the MeetingPlace for Notes gateways have been installed, verify that meetings can be scheduled using this interface.

Testing Notifications

If the MeetingPlace Notification Option is enabled, verify that users receive notifications when meetings are scheduled.

Testing Conferencing

Verify conferencing functionality by scheduling and attending meetings.

Testing Recorded Meetings

Schedule a recorded meeting and verify that the meeting is indeed recorded and retrievable after the meeting (if the system is configured for recording capabilities).

Testing Non-recorded, ad hoc recording

Schedule a meeting without recording and during the course of the meeting, activate ad hoc recording via #61.

Testing Data Conferencing

Refer to the *Data Conferencing System Managers Guide* to perform a functional check on this optional feature.

Testing Network Latency

For MeetingPlace server version 4.1.3 and earlier, use the command **ping <ip address> 1000**. Verify there is 0% packet loss. See Figure 5-43.

```
Meetingplace:tech$ ping 38.246.124.20 1000
--- Type <CTRL-C> to stop ---
PING 38.246.124.20: 1000 data bytes
1008 bytes from 38.246.124.20: icmp_seq=0. time=1. ms
1008 bytes from 38.246.124.20: icmp_seq=1. time=1. ms
1008 bytes from 38.246.124.20: icmp_seq=2. time=1. ms
1008 bytes from 38.246.124.20: icmp_seq=3. time=1. ms
1008 bytes from 38.246.124.20: icmp_seq=4. time=1. ms
----38.246.124.20 PING Statistics----
5 packets transmitted, 5 packets received, 0% packet
loss
round-trip (ms)   min/avg/max = 1/1/1
```

Figure 5-43. Latency Test – 4.1.3 and earlier

For MeetingPlace server version 4.2 and later, use the command **ping -s 1000 <ip address>**. Verify there is 0% packet loss. See Figure 5-44.

```
Meetingplace:tech$ ping -s 1000 38.246.124.20
--- Type <CTRL-C> to stop ---
PING 38.246.124.20 (38.246.124.20): 1000 data bytes
1008 bytes from 38.246.124.20: icmp_seq=0 ttl=255
time=0.366 ms
1008 bytes from 38.246.124.20: icmp_seq=1 ttl=255
time=0.348 ms
1008 bytes from 38.246.124.20: icmp_seq=2 ttl=255
time=0.345 ms
1008 bytes from 38.246.124.20: icmp_seq=3 ttl=255
time=0.334 ms
1008 bytes from 38.246.124.20: icmp_seq=4 ttl=255
time=0.364 ms
--- 38.246.124.20 ping statistics ---
5 packets transmitted, 5 packets received, 0% packet
loss
round-trip min/avg/max = 0.334/0.351/0.366 ms
```

Figure 5-44. Latency Test – 4.2 and later

6 Upgrading MeetingPlace

There are three types of upgrades:

- *Feature activation*—Performed by the Customer Support Engineer. This includes enabling additional ports when no hardware changes are required.
- *Software version upgrade*—Performed on-site by the Customer Support Engineer from a Latitude-supplied tape.
- *Hardware upgrade*—Performed on-site by the Customer Support Engineer for additions such as hard drives, conference servers, or circuit cards.

The upgrades in this chapter apply to PCI and EISA systems unless otherwise stated. If a procedure does not apply to EISA systems, a reference points to the page for the EISA procedure. The specific EISA procedures and additional EISA information reside in the EISA chapter. For information on upgrading from an EISA to a PCI platform, refer to Appendix H, page H-1.

Preparing for the Upgrade

Before leaving to Latitude to upgrade a MeetingPlace system:

- Arrange with the customer site contact for a no-meeting period during the time the upgrade requires. Have the System Manager *and* the Customer Support Center perform this scheduling.
- Check toolkit contents for the tools required by the upgrade procedure. Refer to Appendix I, page I-1.

After arriving at the site, proceed to the upgrade procedure as indicated in Table 6-1 and perform the preparations called for by the procedure.

Table 6-1. Upgrade Location and Equipment Requirements

| Upgrade | Page | Required Equipment |
|-------------------|------|--|
| Port cards | 6-8 | ATI, DTI, or ETI cards |
| Disk drives | 6-16 | Hard drive and/or floppy drive |
| Software | 6-25 | Distribution floppy and/or DAT tape |
| Conference Server | 6-29 | Server containing appropriate port cards |

Backing Up the Database

To perform a database backup:

1. If not already connected, access the CLI, by following the procedures in the Connecting Your Laptop and Setting Up Your Laptop sections starting on page 5-2 and press Enter. The login prompt appears.

CLI commands are case sensitive. For CLI command information refer to Appendix A, page A-1.

2. Login as a technician. The tech\$ prompt appears.
3. Make sure the DAT tape is not write protected:

DAT tapes have a small white tab that can slide over a write protection opening. To remove the write protection, slide the tab over the opening.

4. If the system does not have a DAT drive, temporarily install one from the spares kit. Refer to the section Replacing the DAT Drive, page 10-2.
5. Insert the tape into the DAT drive, and wait for the LED on the tape drive to stop blinking.
6. At the tech\$ prompt, enter **backup**. Figure 6-1 appears.

```
tech$ backup
backup: started Mon Nov 21 13:59:12 PST 1994
/lat/db ~
backup: backing up 62.1 megabytes
~
Total bytes written: 64337920
you may remove the tape now
backup: backup complete Mon Nov 21 14:05:45 PST 1994
```

Figure 6-1. CLI Backup Command and Response

7. Once the backup is complete, eject the DAT tape and put it in a safe place.
8. After the upgrade or repair, put the DAT tape back into the DAT drive.

Verifying No Activity

Use this procedure to verify that no one is using MeetingPlace:

1. At the tech\$ prompt, enter **activity**. Figure 6-2 appears.

```

tech$ activity
***      VUI INTERNAL STATUS  UTILITY      ***
DebugMenu:
1) Quick Status of all Ports          4) Make Test Call
2) Verbose Status of Port Range      5) Show All Confs
3) Display complete Port Information
0) Quit
Enter the Command    (0 - 100)

```

Figure 6-2. Internal Status Utility Display

2. Enter **1**. Figure 6-3 appears. Dashes indicate an inactive port, CO indicates the port is in a conference, PR indicates the port is in a user profile.

```

You entered 1.
Prt Ap : Prt Ap : Prt Ap : ... Prt Ap : Prt Ap :
0 -- : 18 -- : 36 -- : ... 90 -- : 108 -- :
1 -- : 19 -- : 37 -- : ... 91 -- : 109 -- :
2 -- : 20 -- : 38 -- : ... 92 -- : 110 -- :
3 -- : 21 -- : 39 -- : ... 93 -- : 111 -- :
.
.
.
15 -- : 33 -- : 51 -- : 69 -- : 87 -- : 105 -- :
16 -- : 34 -- : 52 -- : 70 -- : 88 -- : 106 -- :
17 -- : 35 -- : 53 -- : 71 -- : 89 -- : 107 -- :

DebugMenu:
1) Quick Status of all Ports          4) Make Test Call
2) Verbose Status of Port Range      5) Show All Confs
3) Display complete Port Information
0) Quit
Enter the Command    (0 -- 100):

```

Figure 6-3. Quick Status of All Ports

3. Scan the list of ports. If there is anything other than dashes next to any of the ports, call the Customer Support Center and exit the activity utility.

Even though the site contact scheduled meetings for all the ports during upgrade preparation, users may still be dialing into the system to schedule meetings or listen to meeting recordings.

4. To exit the Internal Status utility, enter **0**. The tech\$ prompt appears.
5. Use MeetingTime to verify that the only meetings scheduled for the time required to perform the upgrade belong to the site contact.

Powering Down the System

Perform the power-down procedure as follows:

1. If not already accomplished, run the Verifying No Activity procedure, page 6-2.



Do not power-down while conferences are in session or without the consent of the customer system manager.

2. Access the CLI, by following the procedures in the Connecting Your Laptop and Setting Up Your Laptop sections starting on page 5-2 and press Enter. The login prompt appears

CLI commands are case sensitive. For CLI command information refer to Appendix A, page A-1.

3. Login as a technician. The tech\$ prompt appears.
4. If not already accomplished, run the Backing Up the Database procedure, page 6-2.
5. Enter **alarm**. A list of alarms appears similar to Figure 6-4.

| REFNO | SEV CODE | COUNT | FIRST | LAST | UNIT |
|---------|---|-------|--------------|--------------|---------------|
| 657525) | MAJ 070073 | 1 | Jan 31 23:07 | Jan 31 23:07 | 0 SW MODULE=2 |
| | Memory parity error | | | | |
| 657507) | MAJ 0b0078 | 1 | Jan 31 21:45 | Jan 31 21:45 | 0 T1 NETWORK |
| | ID=0 PORT=0 | | | | |
| | Red Alarm detected on this T1 span ([14], card 0, [-1], | | | | |
| | span 0) | | | | |
| | (END) | | | | |

Figure 6-4. Alarm Display

6. If any errors are listed, note the number of the last alarm on the screen. You will need this for the Customer Support Center later on.
7. Use the **clearalarm all** command to clear the alarm table.
8. To halt the system in an orderly manner, enter **halt disable**. After a confirmation the system starts to display the rest of Figure 6-5.



The halt enable CLI command halts the system and allows the system software to come online after a system reboot or AC power removal. The halt disable command halts the system and prevents the system from loading MeetingPlace software after the system reboots or AC power is removed. This allows faster access to the CLI, because MeetingPlace software does not load. To load MeetingPlace software, enter **restart enable**.


```

meetingplace:tech$ halt disable
Are you sure (y/n)? y*** NOTE: System activation has been
disabled
*** NOTE: Type "restart enable" to bring MeetingPlace up again.
Checking to see if the system is loaded...OK
System DOWN procedure has been initiated.
System HALT sequence has been initiated.
Please do not kill power until you see the "LynxOS is down"
message.
meetingplace:tech$ The MeetingPlace software is DOWN
---> Halting the system

**** LynxOS is down ****

```

Figure 6-5. Power Down Display

9. When **** LynxOS is down **** appears, remove AC power from the system by turning the power switch on the front of the server to the Off, “0” position.

Powering Up the System

Power up the system as follows:

1. Turn the front panel power switch to the On, “1” position. The LEDs on the front of the server blink as the system initializes. Allow up to 20 minutes for MeetingPlace to initialize.

If the laptop is not connected, run the Connecting your Laptop and Setting Up Your Laptop procedures starting on page 5-2 at this time.

2. When initialization is complete, Figure 6-6 appears. If Figure 6-6 does not appear on the laptop screen, turn off the power and check all connections to make sure they are secure. Repeat step 1. If MeetingPlace does not initialize, call the Customer Support Center.
3. Enter your user name and password. If you do not know this information, contact the Customer Support Center. Figure 6-7 appears.



If the system was halted using the halt disable command, you must restart the system with the restart enable command to activate the MeetingPlace application software.

```

MeetingPlace by Latitude Communications

Fri Mar 5 12:28:43 PST 1999
Startup flags = a
SCSI adapter is Adaptec 2740 (EISA).
Disk 1 is mounted.
Unit class is standalone conference server
(SINGLE).
Bus architecture is EISA.
Ethernet device is "wd3e0".
IP forwarding DISABLED (0).
Initializing the back panel serial port...done
Initializing the modem.../lat/bin/initmodem ...

/lat/bin/initmodem: type is `Intel 144i'

/lat/bin/initmodem: modem initialized

Installing Latitude drivers...
MSC #0 (Rev B4) in slot 4
PRC #0 (Rev B2) in slot 10
Making nodes...done.
Kernel WDT autostrobe disabled
add net default: gateway 198.207.208.65
*** System activation is disabled.
*** Type "restart enable" to activate.
MeetingPlace 4.0.0, Mar 5, 1999
user name:

```

Figure 6-6. Power Up Initialization Display

```

*****
*                               MeetingPlace(tm)                               *
*                               by Latitude Communications                       *
*                               *                                               *
*   Copyright (c) 1993,1994 Latitude Communications, Inc. *
*                               All rights reserved. *
*****

Release x.x.x      S/N: xxxxxxxx00000x
Tue Aug  2 07:50:52 PDT 1994
tech$

```

Figure 6-7. Initial CLI Display

Shutting Down the Software

MeetingPlace software shutdown allows the operating system to continue running and execute various utilities with the CLI. There are several utilities, such as disk partitioning that require software shutdown. If the system is halted, no software runs including the operating system. If MeetingPlace software has been shut down, the system must still be halted before removing AC power.

1. Run the Verifying No Activity procedure, page 6-2.



Do not shutdown software while conferences are in session or without the consent of the customer system manager.

2. Enter **alarm**. A list of alarms appears similar to Figure 6-4.
3. If any errors appear, note the number of the last alarm on the screen. You will need this for the Customer Support Center later on.
4. Use the **clearalarm all** command to clear the alarm table.



The down enable command brings down MeetingPlace software and allows MeetingPlace software to come online after a restart or power-down. The down disable brings down MeetingPlace software and prevents MeetingPlace software from coming back online after a restart or power-down. This is necessary for some maintenance procedures. Use the restart or restart enable command to load MeetingPlace software.

5. Use the **down enable** or **down disable** command to bring down MeetingPlace software depending on the upgrade or repair. Use **down enable** as the default. The system first checks to see if it is loaded. Then initiates the down process, which takes about two minutes.
6. When The System is DOWN appears, proceed with the upgrade or repair.

Restarting the System

There are two restart commands:

restart enable—restarts the OS, and cancels the effect of a previous down, halt, or restart disable commands by allowing MeetingPlace software to load.

restart disable—prevents the MeetingPlace application software from loading after a restart. This is necessary for some maintenance procedures. With restart enable, it is necessary to log back into the CLI.

Perform the restart procedure as follows:

1. Run the Verifying No Activity procedure, page 6-2.
2. Type **alarm**. A list of alarms appears similar to Figure 6-4.
3. If any errors are listed, note the number of the last alarm on the screen. You will need this for the Customer Support Center later on.
4. Use the **clearalarm all** command to clear the alarm table.
5. Use the **restart enable** or **restart disable**. After a confirmation request the display scrolls through initialization notices. With restart disable, the tech\$ prompt appears. With the restart enable the final display reads: The MeetingPlace software is UP, followed by a login prompt.

Upgrading Port Cards

This procedure explains how to add any of the following cards:

- ATI
- DTI
- PRC

This procedure consists of the following parts:

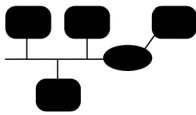
- Preparing to add port cards
- Adding port cards
- Adding ports
 - Entering new license keys
 - Configuring port cards
- Testing port cards

Preparing to Upgrade Port Cards

Prepare to add port cards by following these steps:

1. Verify that the new port cards were not damaged during transit.
2. Verify the operation of new PBX lines with a test set or phone (analog lines).

3. If this is a rackmount, check the rear cabling to ensure that the MeetingPlace cabinet can slide completely forward without stretching the cables.
4. To remove the front panel and cover, refer to the section Checking the Card Seating, page 4-8.
5. Access the CLI through the standalone server by running the Connecting your Laptop and Setting Up your Laptop procedures starting on page 5-2 and press Enter. The login prompt appears.



For networked systems, connect the laptop to the network server to access the CLI.

CLI commands are case sensitive. For CLI command information refer to Appendix A, page A-1.

6. Login as a technician. The tech\$ prompt appears.
7. Run the Verifying No Activity procedure, page 6-2.
8. Run the Backing Up the Database procedure, page 6-2.
9. Run the Powering Down the System procedure, page 6-4.



Make sure that all power to the MeetingPlace cabinet is off before removing or replacing port cards. Failure to do so may damage the system, the technician, or the component.

When installing drives or circuit cards, wear a electrostatic discharge (ESD) wrist strap and attach the other end to the chassis. Failure to be properly grounded may result in damage to the device. This damage cannot be readily detected.

Adding Port Cards

To install any port card after performing the above preparation procedure:

1. Remove the card retaining bar by unscrewing captive screws on each end. See Figure 6-8.
2. Note which cards had the MVIP cable connected. See Figure 6-8. This cable must be attached to header pin connectors located on the top edge of all MSC, ATI, ETI and DTI cards. For card location and outlines refer to Appendix D - PCI Card Identification and Location, page D-1 or Appendix E - EISA Card Location, page E-1.

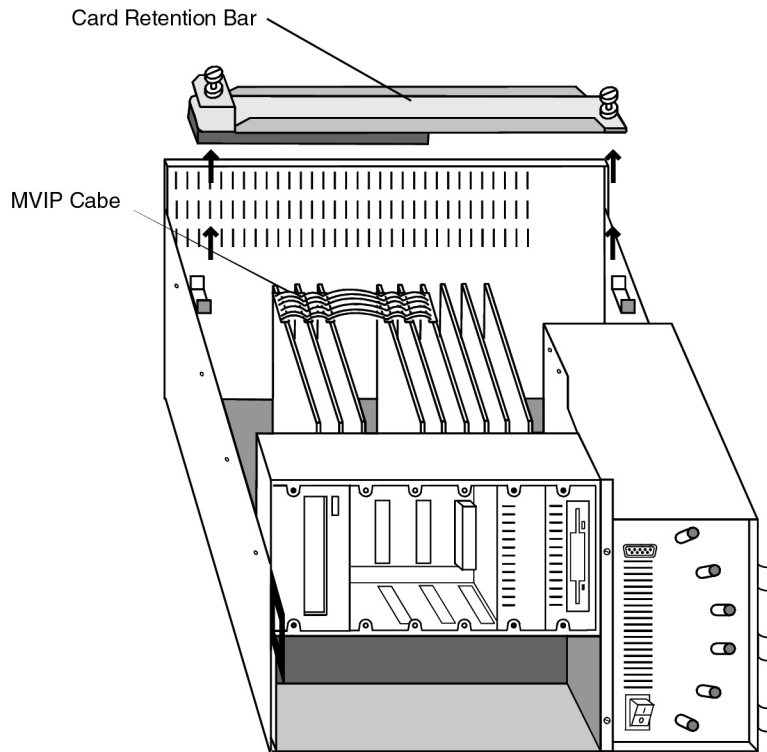


Figure 6-8. MVIP Cable and Card Retaining Bar

3. Remove the MVIP cable from the cards.
4. Examine all the cards being installed and refer to Appendix D - PCI Card Identification and Location, page D-1, to verify the jumper and DIP switch settings corresponding to the intended card location.
5. Securely insert the card required by the new configuration.
6. Secure each card to the chassis with its screw.
7. Attach the MVIP cable to the cards to which it was attached before the upgrade, and to the new cards.



Do not stretch the MVIP cable. Arrange plenty of slack in the cable between the cards it connects.

8. Replace the card retaining bar and top cover of the server.
9. For rackmounted systems, slide the MeetingPlace cabinet back into the rack and make sure the slide latches lock securely.
10. For tower configurations, set the server back to its vertical position.

11. Connect the telephony cabling for the new ports.
12. Run the Powering Up the System procedure, page 6-5.
13. Proceed to the section below, Adding Ports.

Adding Ports

For the following upgrades:

- adding new ports via license keys alone
- adding a new span
- adding new port cards

Perform the following procedures:

- Adding New Licenses for Additional Ports directly below
- Configuring Spans, page 6-16
- Testing Port Cards, page 6-16

Adding New Licenses for Additional Ports

Besides changes to port licenses, other licenses may need to be changed. To verify this need, each license on the Software License Agreement must be checked. See Table 6-2 for a cross reference between engineering and marketing names for licenses. At least the following two licenses need to be changed:

- *Access ports*—the number of users and enter the new license key
- *Conference ports*—the number of users and enter the new license key

The license upgrade procedure consists of four parts:

1. Preparation.
2. Use MeetingTime to access System options to change number of licenses and license key. Access ports is used as an example.
3. Check other number of licenses on the license agreement to be changed in System options.
4. Under the Configure Tab, access Server Configuration to change the number of access ports and conference ports.

Table 6-2. License Names used by Marketing and Engineering

| Engineering License Name | Marketing License Name |
|--------------------------|---|
| accessports | MeetingPlace Access Ports |
| confports | MeetingPlace Voice Conference Ports |
| multiunit | MeetingPlace network server software |
| shadow | MeetingPlace shadow network software |
| dataconf | MeetingPlace Data Conference Ports |
| workstations | MeetingTime Named User or MeetingTime Concurrent User |
| netmgt | MeetingPlace SNMP option |
| notification | MeetingPlace Notification option |
| flexmenus | MeetingPlace Flex Menu License |
| msmail | MeetingPlace E-mail Gateway/MAPI |
| calendar | MeetingPlace Exchange-Outlook Gateway |
| recording | MeetingNotes Voice option |
| mndata | MeetingNotes Data option |
| fax | MeetingPlace FAX Gateway |
| web | MeetingPlace Web |
| dataconf | MeetingPlace Data Conferencing Gateway |
| languages | MeetingPlace Languages option |
| notes calendar | MeetingPlace for Notes Gateway |
| sametime | Sametime Interface option |

Preparing to Add Licenses

To prepare to change licenses:

1. If system power is off due to the addition of port cards, power up the system by turning the front panel power switch to the On, “1” position. The LEDs on the front of the server blink as the system initializes. Allow up to 20 minutes for MeetingPlace to initialize. When initialization is complete, Figure 6-6 on page 6-6 appears.
2. If a message appears indicating that the system did not load the MeetingPlace application software, enter **restart enable**. After a confirmation request the display scrolls through initialization and loading notices. When restart is complete the last line reads The MeetingPlace software is UP.

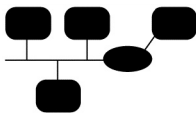
3. If new hardware was added, the following procedures should have already been run:

- Verifying No Activity, page 6-2
- Backing Up the Database, page 6-2

If this is the case, proceed to the next procedure, Using MeetingTime to Access System Options.

4. If the upgrade is for new ports without the addition of any hardware:
 - a. Access the CLI through the standalone server by running the Connecting Your Laptop and Setting Up Your Laptop procedures starting on page 5-2 and press Enter. The login prompt appears.

CLI commands are case sensitive. For CLI command information refer to Appendix A, page A-1.



For networked systems, connect the laptop to the network server to access the CLI.

- b. Login as a technician. The tech\$ prompt appears.
- c. Run the Verifying No Activity procedure on page 6-2.
- d. Consider backing up the database as described in Backing Up the Database, page 6-2. This is considered good practice, but not necessary.

Using MeetingTime to Access System Options

To change licenses:

1. Locate a PC with MeetingTime loaded and with LAN access.
2. Start MeetingTime. The MeetingTime Login Display appears.
3. Log-in as a system manager. The MeetingPlace lobby appears.
4. Click the register book. The Register appears.
5. Click the Configure tab. A list of parameters appears in the Views field.
6. In the Views field, select System Options. A list of attributes appears.
7. Click Query. Attribute values appear including the Number of licenses and the Option key. These values are for access ports only.

8. Click the *value* for number of licenses. An editable field appears containing the current number of licenses. See Figure 6-9.



Figure 6-9. MeetingTime Editable Field for Attribute Modification

9. Enter the new number of licenses for access ports. This equals the number of access ports printed on the Software License agreement. See Figure 6-10.

| | | | |
|---|---|--|-------------------------------------|
|  Latitude Communications, Inc. SOFTWARE LICENSE AGREEMENT | | | |
| Your Company Name | MeetingPlace Data Conference Ports | MeetingPlace Notification option | MeetingPlace WebPublisher |
| System serial number: 002542 | No. of Licenses: 720 | No. of Licenses: 720 | No. of Licenses: 1 |
| System Key: 0004b5687f3 | Key: 5010F051572BB5DE9320 | Key: 80D000F1F3520E7BF5A7 | Key: 30405021349176740774 |
| MeetingPlace System Software 4.0 | MeetingPlace E-mail Gateway/MAPI | MeetingPlace Outlook Interface | MeetingTime Concurrent User |
| MeetingNotes Data option | No. of Licenses: 1 | No. of Licenses: 1 | No. of Licenses: 200 |
| No. of Licenses: 720 | Key: D0C070A18A51DB981A68 | Key: 20805061CF9C5C5B1D27 | Key: A03030D1BD833F893BCB |
| Key: E0A040C17845351DDC2D | MeetingPlace FAX Gateway | MeetingPlace Shadow Network server | neT.120 Server |
| MeetingNotes Voice option | No. of Licenses: 1 | No. of Licenses: 1 | No. of Licenses: 720 S/N: 100000596 |
| No. of Licenses: 720 | Key: 4050B061297E045D0D74 | Key: 70B04011FA567D992C8A | Key: 51 95 DD 55 C7 BF CO 50 7F |
| Key: 30B0D0A1436473A6A27F | MeetingPlace Network Server software | MeetingPlace Voice Conference Ports | EE E8 6C 3D A1 C0 52 C5 |
| MeetingPlace Access Ports | No. of Licenses: 1 | No. of Licenses: 720 | |
| No. of Licenses: 720 | Key: 104020D1C89EF783053C | Key: 2010A0816D604D869C81 | |
| Key: 50A09081890AE2A3E408 | | | |

Figure 6-10. Portion of the Latitude License Containing Keys

10. Click OK. The field disappears and the new number of licenses for access ports appears.
11. Click the *value* for the option key. An editable field appears containing the current option key for access ports.
12. Enter the new license key for access ports printed on the Software License agreement that accompanied the hardware for the upgrade. See Figure 6-10.
13. Click OK. The editable field disappears and the new option key for access ports appears.
14. Verify the license key with the Software License agreement.

Checking Other Licenses

Adding ports can effect the number of users for other licenses and require new license keys.

1. Click the > button just to the right of the Query button and check the number of licenses for each license listed on the Software License agreement.
2. For any System option license that differences from the Software License agreement, use the above steps to change the number of licenses and the license key.
3. To store the new license key information, after all the new license information is entered, click Save Changes.

Configuring Access and Conference Ports Using MeetingTime

Use MeetingTime to continue the configuration:

1. In the Views field, select Server Configuration.
2. Click the Query button. Attribute values appear.
3. Under Attributes, select Access ports.
4. Click the Access ports value. An editable field appears.
5. Enter the new number of access ports from the Software License agreement.
6. Click OK. The editable field disappears and the new number of access ports appears.
7. Click the Conference ports value. An editable field appears.
8. Enter the new number of Conference ports from the Software License agreement.
9. Click OK. The editable field disappears and the new number of conference ports appears.
10. Click Save Changes.
11. For the license changes to take effect enter **restart** at the CLI. MeetingTime logs out and the system restarts.
12. Monitor the system for errors as it comes back up.

Configuring Spans

Run the procedure in one of the following sections depending on the type of new port cards or type of additional ports:

- Configuring Analog Spans - ATI Cards, page 5-23
- Configuring T1 Spans - DTI Cards, page 5-24
- Configuring E1 Spans - ETI Cards, page 5-28

Testing Port Cards

To verify the functionality of the new ports, coordinate with the site contact to make sure that the correct lines are tested.

1. Run the Testing Inbound Calls procedure, page 5-39 for each added port.
2. Run the Testing Outbound Calls procedure, page 5-39 for each added port.
3. Check the Alarm Table by entering **alarm**. If there are any error conditions, call the Customer Support Center.
4. Enter **exit**. Logout appears.
5. Remove the laptop RS-232 cable from the front service port.
6. Replace the front cover of the server.

Upgrading Disk Drives

This procedure consists of:

- Preparing to add drives
- Adding the drives
- Testing the drives



All hard drives are shipped from the factory as system disks. Hard drives intended as additional voice/attachment disk must be transformed from a system disk to a voice/attachment disk by shutting down the software and using the `newdisk` command described in Adding Disk Drive, page 6-18.

See Figure 6-11 for the location of drives in a server.

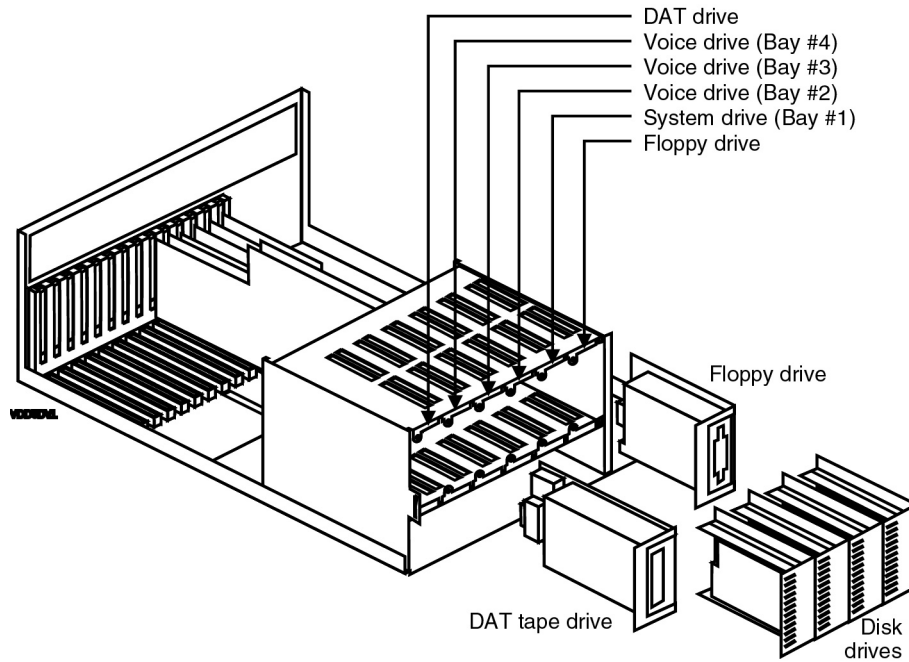
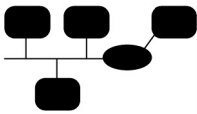


Figure 6-11. Disk and DAT Drive Locations

Preparing to Add Disk Drives

To prepare for adding any drive:

1. Inspect the drives to verify no damage occurred during transit.
2. To remove the front panel and top cover, refer to the Checking the Card Seating procedure, page 4-8.



To install and configure new disk drives in a networked environment, log in to the conference server by one of these methods:

- Directly connect to the service panel of the desired conference server.
 - While connected to the Network Server, use the **rlogin vp#** command where '#' is the number of the conference server.
3. Access the CLI, by following the procedures in the Connecting Your Laptop and Setting Up Your Laptop sections starting on page 5-2 and press Enter. The login prompt appears.

CLI commands are case sensitive. For CLI command information refer to Appendix A, page A-1.

4. Login as a technician. The tech\$ prompt appears.

5. Run the Verifying No Activity procedure on page 6-2. Before logging out of MeetingTime at the end of that procedure perform the following steps if an increase in disk storage space is anticipated:
 - a. From the Register, click the System tab. A list of actions appears in the left column.
 - b. Click View Disk Usage Statistics. No Info Needed appears in the right column.
 - c. To view information click Execute.
 - d. Record the remaining free disk space (min) for comparison after disk installation and configuration.
 - e. Log out of MeetingTime.
6. Run the Backing Up the Database procedure, page 6-2.
7. If the upgrade is to a rackmount server, check the rear cabling to ensure that the server can slide completely forward without stretching the cables.



When installing drives, wear an electrostatic discharge (ESD) wrist strap and attach the other end to the chassis. Failure to be properly grounded may result in damage to the device. This damage cannot be readily detected.

Adding Disk Drives

To add disk drives and convert a system disk to a voice/attachment disk:

1. Run the Powering Down the System procedure, page 6-4.
2. Install hard drives into the slots from right to left, beginning with Bay #2. See Figure 6-11.
3. Run the Powering Up the System procedure, page 6-5. The login prompt appears.
4. Log in as a technician. The tech\$ prompt appears.
5. For voice/attachment disks only:
 - a. Run the Shutting Down the Software procedure, page 6-6.
 - b. To identify and partition the disk as a voice/attachment disk, enter **newdisk**. Figure 6-12 appears.
 - c. Enter the number of the drive to setup as a voice/attachment disk. See Figure 6-11 for the drive bay number.

```
tech$ newdisk
Disk (2-4)? 2
```

Figure 6-12. Newdisk Command Display

6. Use the **restart disable** command to restart the system. It is not necessary to check for system activity.

Configuring Disk Drives

For the following procedure, it is assumed that the laptop is connected and logged in as technician. The procedure is the same for a conference server or a standalone system.

1. Check the Alarm Table by entering **alarm** and proceed only if there are no disk diagnostic errors. If errors appear, call the Customer Support Center.
2. To add a new SCSI device to the System Hardware Configuration table, enter **diskoptions**. Figure 6-13 appears.

```
tech$ diskoptions
1) View disk status
2) Install a new disk
3) Remove a disk
99) Quit
Select:
```

Figure 6-13. Diskoptions Command Display

3. Enter **2**. The first two lines in Figure 6-14 appear.
4. As each line appears, enter the requested information.

The disk number is the bay number in which the drive is located. See Figure 6-11 for the drive bay number. Displayed information about the disk is taken from the disk itself. When finished, the screen should appear similar to Figure 6-14.

```
Select: 2
Disk number [1-4]? 1
Disk #1 (SCSI id = 0)
  Vendor   = QUANTUM
  Product  = LPS340S
  Revision = 020B12/21/93
  Serial # = 193407565342
  Capacity = 327 Megabytes
The disk is configured
1) View disk status
2) Install a new disk
3) Remove a disk
99) Quit
```

Figure 6-14. Diskoptions Display

5. To exit diskoptions, enter **99**.
6. To restart the system, enter **restart enable**. After a confirmation request the display scrolls through initialization and loading notices. When restart is complete the last line reads The MeetingPlace software is UP.
7. Use MeetingTime to complete the configuration.

Verifying and Recording New Maximum Disk Verification

Use MeetingTime to verify the increase in the available recording space and record this value for other configuration tasks:

1. Log in to MeetingTime as a system manager.
2. Click the Register book. The Register book appears.
3. Click the System tab. The Configuration screen appears as in Figure 6-15.

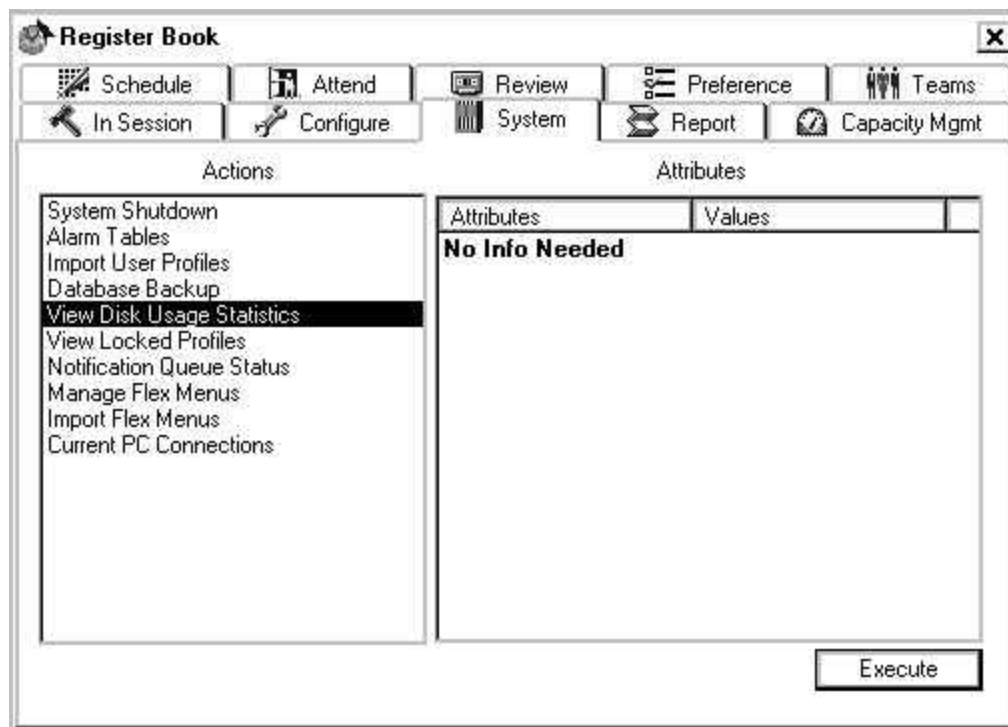


Figure 6-15. Disk Usage via the System Tab

4. Under the actions column select View Disk Usage. No Info Needed appears under attributes.
5. To get a report of the available disk space on the system click Execute. Figure 6-16 appears which shows the total disk space in minutes for each server. Servers are distinguished by unit numbers in parentheses. For example, Figure 6-16 shows that unit 2 has a total recording capacity of 4267 minutes.
6. Record the total recording capacity of the unit that received the new disk for use in the next procedure.
7. Compare the Total available disk capacity (min) to the value recorded during drive upgrade preparation. The current value should be greater than the previously recorded value.

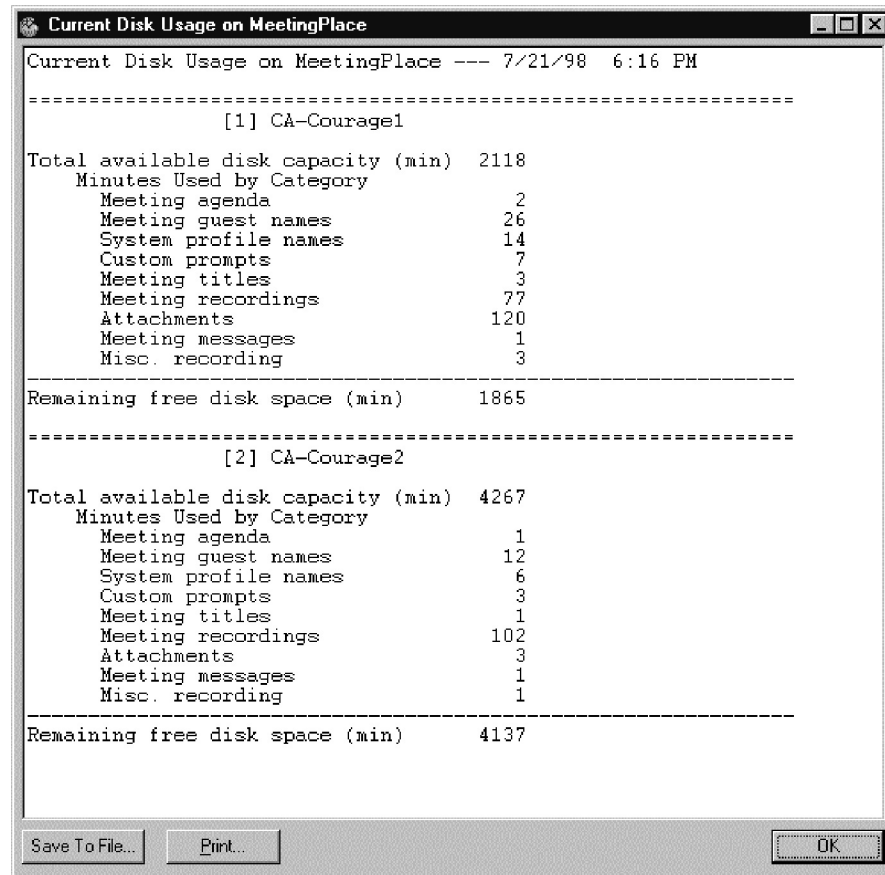


Figure 6-16. Disk Usage Display

Completing Configuration with MeetingTime

Modify the server configuration database to allow the system to take advantage of the new disk capacity:

1. Log in to MeetingTime as a system manager.
2. Click the Register book. The Register Book appears as in Figure 5-39, page 5-37.
3. Click the Configure tab. A list appears under views.
4. Click Server Configuration. Parameters appear under Attributes as in Figure 6-17.

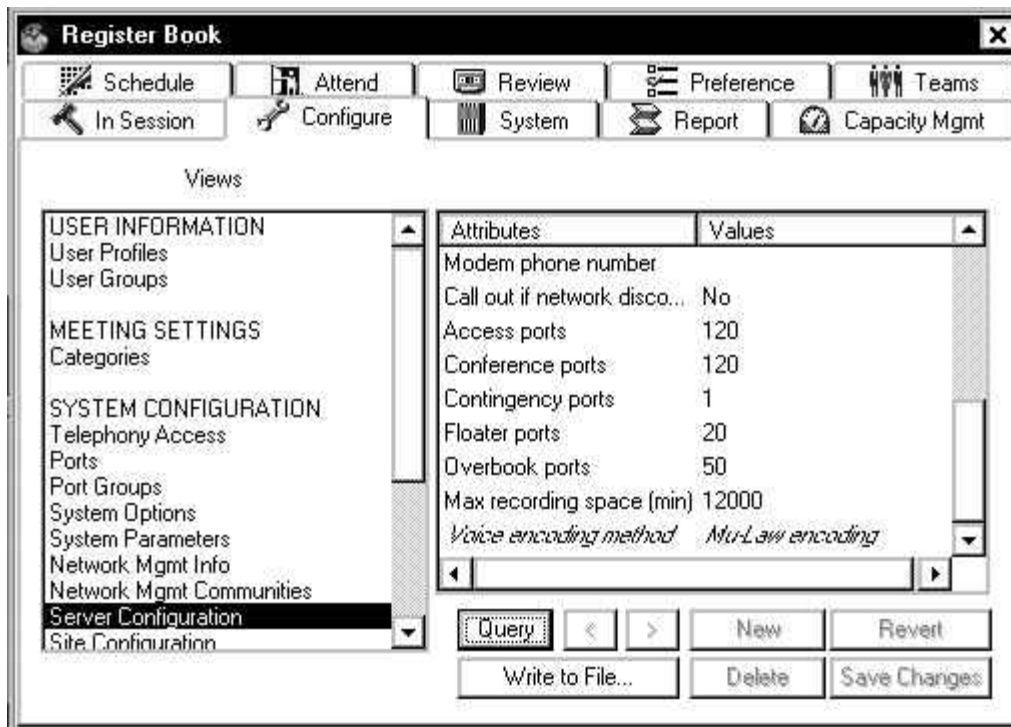
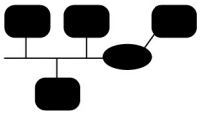


Figure 6-17. Register Book, Max Recording Space



For networked systems:

- a. Click one of the arrows to the right of Query button while observing the first attribute, Server number.
- b. Continue clicking till the attributes for the appropriate conference server appears.
5. Select Max Recording Space (min).
6. Click Query. A value for the maximum total recording space for the server appears expressed in minutes.
7. Consult with the System Manager and determine the new amount of disk storage to be used for meeting recordings. For the maximum disk space available on the server, use the number obtained from running the Verifying and Recording New Maximum Disk Verification procedure, page 6-20. Approximately 90% of that space should be used for meeting recording. The remaining space is for:
 - Profile name and guest name recordings.
 - Meeting names and agendas.
8. Click the *value* for maximum recording space. An editable field appears containing the current maximum recording space.
9. Enter the new amount of disk storage to be used for meeting recordings.

10. Click OK. The field disappears and the new amount of disk storage to be used for meeting recordings appears.
11. To store the new value in the database, click Save Changes. The system accepts this change without a restart.

Verifying Disk Drive Upgrade

To verify configuration of the new drives it is assumed that the laptop is connected and logged in as technician.

1. Check the Alarm Table by entering **alarm** and proceed only if there are no disk diagnostic errors. If errors appear, call the Customer Support Center.
2. Enter **diskoptions**, the first six lines of Figure 6-18 appear.
3. To view disk statistics enter **1**. If the server has more than one disk, a prompt appears requesting a disk selection.
4. Select the appropriate disk. The rest of Figure 6-18 appears.
5. If the screen indicates that the disk is configured, select 99 to exit the command. If it does not indicated an installed state, call the Customer Support Center.

```
meetingplace:tech$ diskoptions
1) View disk status
2) Install a new disk
3) Remove a disk
99) Quit
Select: 1
Disk number [1-4]? 1
Disk #1 (SCSI id = 0)
  Vendor   = WDIGTL
  Product  = ENTERPRISE
  Revision = 1.80122B
  Serial # = WS7000112965
  Capacity = 2077 Megabytes
The disk is configured

1) View disk status
2) Install a new disk
3) Remove a disk
99) Quit
Select:
```

Figure 6-18. Disk Statistics

6. Check the Alarm Table once again for fault conditions. If there are any alarms, call the Customer Support Center.

7. Enter **exit**. Logout appears.
8. Remove the RS-232 cable from the front service port connected to the laptop.
9. Replace the front panel of the MeetingPlace cabinet.

Upgrading Software

This section describes how to upgrade MeetingPlace software. The procedure can be used for:

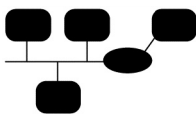
- A new software release
- Single executable file shipped to solve a specific problem

Preparing to Upgrade Software

A software upgrade may require upgrading gateways or MeetingTime clients. Prior to performing the upgrade, read the release notes and installation instructions included with the upgrade.

Software upgrades may use DAT tapes or floppy disks or both. If a DAT tape is needed for the upgrade and the customer does not have a DAT drive, verify that the toolkit contains a spare DAT drive.

1. To remove the front panel, refer to the Checking the Card Seating procedure on page 4-8.
2. For standalone systems access the CLI by running the Connecting Your Laptop and Setting Up Your Laptop procedures starting on page 5-2 and press Enter. The login prompt appears.



For networked systems, connect the laptop to the network server to access the CLI.

CLI commands are case sensitive. For CLI command information refer to Appendix A, page A-1.

3. Login as a technician. The tech\$ prompt appears.
4. Run the Verifying No Activity procedure, page 6-2.
5. Run the Backing Up the Database procedure, page 6-2 .
6. Stop the MeetingPlace software with the CLI **down enable** command.

Loading New Software

To load the new software:

1. Insert the DAT tape or floppy from the Software Upgrade Kit into the appropriate drive.




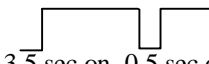
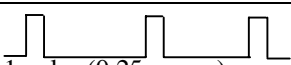

If a DAT tape is needed for the upgrade and the customer does not have a one, temporarily install the DAT drive from your toolkit. Refer to the Replacing the DAT Drive procedure, page 10-2.

2. If a DAT tape was inserted, wait for the LEDs to stop blinking. There are three DAT LEDs: Busy, Tape, and Status. Refer to Table 6-3 to translate the state of the three LED into DAT drive status. Refer to Table 6-4 for an explanation of the LED states.

Table 6-3. DAT Drive Status

| Appearance of Each LED | | | States Indicated by LED Appearance | | |
|------------------------|--------------|--------------|------------------------------------|-------------------|----------------------|
| Busy LED | Tape LED | Status LED | Activity | Cartridge | Other |
| Off | Off | Off | None | None | None |
| On | Off | Off | SCSI | None | None |
| Flash 1 | Flash 1 | Off | Drive | Loading/Unloading | None |
| Flash 1 | Flash 1 | On | Drive | Loading/Unloading | Write Protected |
| Off | On | Off | None | Loading | None |
| On | On | Off | SCISI | Loading | None |
| Flash 1 | On | Off | SCSI/Drive | Loading | None |
| Independent | On | On | N/A | Loading | Write Protected |
| Off | On | Flash 1 | None | Loading | Cleaning tape at EOM |
| Independent | Flash 2 | Independent | N/A | Loading | Error rate warning |
| Flash 2 | Independent | Independent | N/A | N/A | Humidity warning |
| N/A | N/A | Flash 2 | N/A | N/A | Cleaning request |
| N/A | N/A | Flash Code 1 | N/A | N/A | Drive mechanism fail |
| N/A | N/A | Flash Code 2 | N/A | N/A | Drive circuitry fail |
| Flash Code 1 | N/A | N/A | N/A | N/A | Waiting for reset |
| N/A | Flash Code 1 | N/A | N/A | N/A | Waiting for eject |

Table 6-4. DAT Drive LED State Names

| LED State Name | LED Pattern |
|----------------|---|
| Off | off |
| On | on |
| Flash 1 |  0.25 sec on, 0.25 sec off |
| Flash 2 |  3.5 sec on, 0.5 sec off |
| Flash Code 1 |  1 pulse (0.25 sec on) |
| Flash Code 2 |  2 pulses (0.25 sec on, 0.5 sec off) |

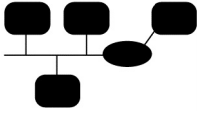
3. Enter **update**. Figure 6-19 appears.

Please insert the update diskette in the drive.
Press <ENTER> to continue or <CONTROL>-C to abort.

Figure 6-19. Update Display

4. Review the Installation Instructions on how to monitor the progress of the upgrade and what information should scroll by during the upgrade.
5. Press Enter. Monitor the display per the Installation Instructions..
6. Remove the floppy disk or DAT tape.
7. If you temporarily installed a DAT drive:
 - a. Run the Powering Down the System procedure, page 6-4.
 - b. Remove the DAT drive.
 - c. Run the Powering Up the System procedure, page 6-5. The login prompt appears.
 - d. Log in as a technician.
8. Enter **alarm**. If there are any alarms, call the Customer Support Center.
9. Reboot the system by entering **restart enable**. After a confirmation request the display scrolls through initialization and loading notices. When restart is complete the last line reads The MeetingPlace software is UP.

10. Run the Verifying Software Upgrade procedure below.



For networked systems, the upgrade is performed on the Network Server. When the upgrade is complete, the new software is copied to the conference servers and the shadow server.

Verifying Software Upgrade

Upgrade verification consists of testing:

- Telephone port functionality
- LAN connectivity
- Gateway operation
- Meeting functionality

Proceed as follows:

1. Verify that all of the telephony ports are back on line by running the Testing Inbound Calls procedure on page 5-39 for each port.
2. Verify connectivity with the local area network by logging into the system from the System Manager's PC through MeetingTime.
3. Verify that whatever gateways are present have resumed operation.
4. Manually end one of the meetings that are consuming the ports:
 - a. Log into MeetingTime as a system manager.
 - b. Click the register on the receptionist's desk. The Register Book appears as in Figure 5-39.
 - c. Click the In Session tab.
 - d. Select a meeting that has busied ports.
 - e. Record the busied ports.
 - f. Click End Meeting.
5. Schedule a meeting into the recently cleared ports and verify that you can call into it.

Upgrading a Conference Server

Conference server upgrade involves:

- Physical installation
- Configuration

Installing a Conference Server

To physically install the conference server, perform these procedures:

1. Unpacking the System starting on page 4-4.
2. Installing the System starting on page 4-10.
3. Powering Down the System procedure on page 6-4.
4. Connecting the System starting on page 4-14.
5. Powering Up the System on page 6-5.

Configuring a Conference Server

Configuration on the newly connected conference server takes place on:

- The new conference server to run the setup and getether commands.
 - A PC running MeetingTime with LAN access.
 - The network server to establish communication.
1. Connect the laptop to the newly installed conference server by running the Connecting Your Laptop and Setting Up Your Laptop procedures starting on page 5-2 and press Enter. The login prompt appears.

CLI commands are case sensitive. For CLI command information refer to Appendix A on page A-1.

2. Run the Powering Up the System procedure, page 6-5. The login prompt appears on the laptop.
3. Login as a technician. The tech\$ prompt appears.
4. Run the setup procedure on:
 - Page 5-10 for conference servers at the home site
 - Page 5-13 for conference servers at the a remote site

5. Type **getether**. Figure 6-20 appears.

```
mtgplace:tech$ getether
0000c0e40ee5
mtgplace:tech$
```

Figure 6-20. Getether Command Display

6. Record the displayed Ethernet address.
7. Enter **exit**. Logout appears.
8. Disconnect the laptop from the Conference Server.

Updating MeetingTime License

Use MeetingTime to change all affected licenses by running the Adding New Licenses for Additional Ports procedure on page 6-11.

Network Server

Continue the new conference server configuration on the network server:

1. To remove the front panel from the network server, refer to the Checking the Card Seating procedure on page 4-8.
2. Access the CLI, by following the procedures in the Connecting You Laptop and Setting Up Your Laptop sections starting on page 5-2 and press Enter. The login prompt appears.
3. Login as a technician. The tech\$ prompt appears.
4. To configure the TCP/IP addresses for the new Conference Server run the Configuring LAN Parameters for a Conference Server in a Networked System on page 5-21.
5. Run the procedure in one of the following sections depending on the type of port cards in the new conference server:
 - Configuring Analog Spans - ATI Cards, page 5-23
 - Configuring T1 Spans - DTI Cards, page 5-24
 - Configuring E1 Spans - ETI Cards, page 5-28
6. Run the Configuring Ports procedure on page 5-31.
7. Restart the newly attached Conference Server for the telephony changes to take effect.

Verifying Conference Server Upgrade

To verify the operation of the newly installed conference server:

1. Verify that all of the telephony ports are back on line by running the Testing Telephony procedure on page 5-39.
2. Verify connectivity with the local area network by logging into the system from the System Manager's PC through MeetingTime.
3. Verify that the gateways have resumed operation.
4. Schedule a meeting and verify that you can call into it.
5. Check the alarm table for any unusual errors.

The information in other chapters of this document usually refer to PCI and the older EISA systems. This chapter contains the exceptions to this rule.

EISA Product Differences From PCI

The following items are different between the EISA and PCI platforms:

- Backplane
- CPU: 486-66MHz or Pentium-60MHz
- EISA MSC and PRC cards
- Physically size, PCI is larger
- EISA PRC cards support 24 ports, PCI PRC cards support 48 ports
- EISA do not have a SIC card. SIC functions were on EISA MSC card
- Power supplies are not compatible
- Server cabinet
- Ethernet cards
- System drives

EISA Product Similarities to PCI

The following items are the same for EISA and PCI platforms:

- Trunk cards
- Software utilities
- Modem card same
- Voice drives same
- DAT drive same

- Fan assembly
- Floppy drive

EISA Servers in Networked Configurations

For networked systems:

- In Networked situations it is possible to mix PCI and EISA based conference servers
- No functional difference PCI and EISA conference servers

Specification Differences

The following system abilities exist:

- EISA systems supported a maximum of 60 analog ports vs. 48 for PCI based systems
- EISA Ethernet card supported BNC and AUI connectors, but only 10Mbit Ethernet

Replacing the Power Supply for EISA Systems

This section contains the following procedures related to replacing the power supply:

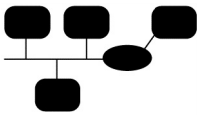
- Preparing
- Removing
- Installing
- Testing

Preparing

To prepare to remove a failed power supply:

1. Verify that the new power supply was not damaged during transport.

2. Verify that your toolkit contains the tools required to perform this procedure.
3. Access the CLI of the faulty server, by following the procedures in the Connecting Your Laptop and Setting Up Your Laptop sections starting on page 5-2, and press Enter. The login prompt appears
4. Login as a technician. The tech\$ prompt appears.
5. Run the Backing Up the Database procedure on page 6-2.
6. If the failed power supply is on a network server, enter **halt local disable** or **down local disable**.



halt local disable – to replace a power supply on a network server in a system with a shadow server it is simpler to prevent switchover by using the halt local disable.

If it is essential to force switchover to a shadow server such that it becomes the network server before changing the power supply on a network server, refer to *Installation/Upgrade Procedure MeetingPlace Shadow Network Server* (LPN 0520-0016-01).

7. If the server is a conference server, enter **halt disable**. After a confirmation the system starts to display the rest of Figure 7-1.

```
meetingplace:tech$ halt disable
Are you sure (y/n)? y*** NOTE:  System activation has been
disabled
*** NOTE:  Type "restart enable" to bring MeetingPlace up again.
Checking to see if the system is loaded...OK
System DOWN procedure has been initiated.

System HALT sequence has been initiated.
Please do not kill power until you see the "LynxOS is down"
message.
meetingplace:tech$ The MeetingPlace software is DOWN
---> Halting the system

**** LynxOS is down ****
```

Figure 7-1. Power Down Display

8. When **** LynxOS is down **** appears, remove AC power from the system by throwing the power switch on the front of the server to the Off, “0” position.

Conference servers on networked systems can continue to operate in the continuous service mode without a network server. However, database functions are inaccessible.

9. From the rear of the server, detach the power cord.



Verify that all AC power to the server is off before removing or replacing components. Failure to do so may damage the system, the technician, or the component.

Removing Power Supply

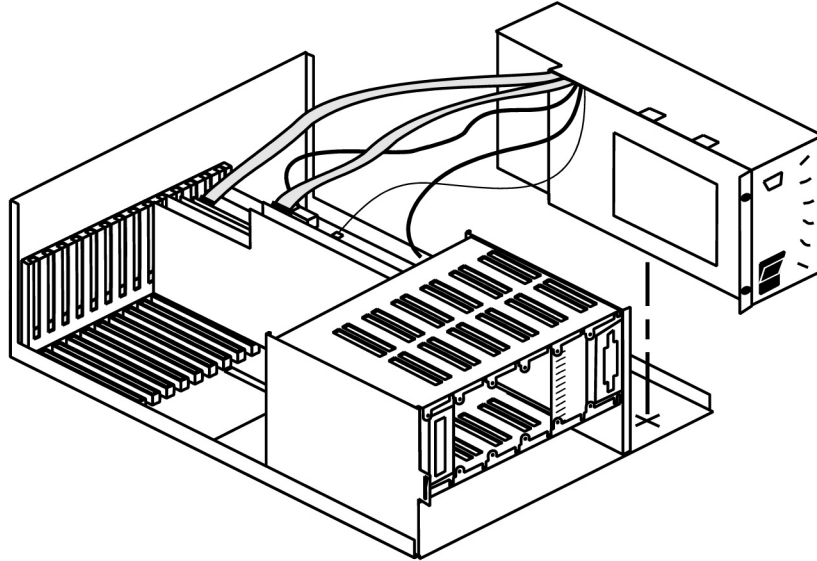


Figure 7-2. EISA Power Supply Connections

1. If the server is rackmounted:
 - a. Check the cabling at the rear of the server to verify that it can be slide completely forward.
 - b. Slide the server all the way forward.
2. If the server is in tower configuration, place it in the horizontal position.
3. Remove the server cover.
4. Put on an ESD wrist strap.
5. Disconnect all the cables coming out of the power supply. See Figure 7-4.
6. Loosen the captive screws on the front of the power supply.
7. Slide the power supply assembly forward to disengage the securing tabs under the power supply.
8. Lift the power supply up and out of the server.

9. Proceed to the Installing Power Supply procedure below.

Installing Power Supply

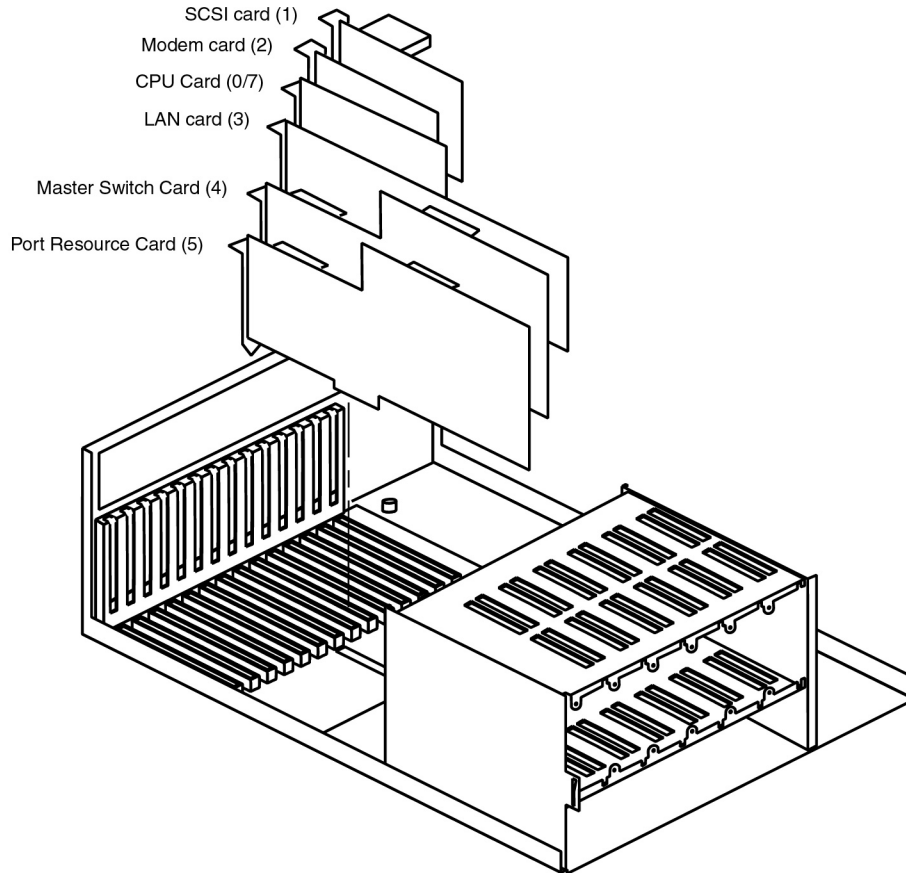


Figure 7-3. EISA Card Locations

1. Place the new power supply into the cabinet, and slide it back to engage the securing tabs underneath the power supply.
2. Hand tighten the captive screws on the front of the power supply.
3. Connect the following using Figure 7-3 and Figure 7-4 as references:
 - a. The wider of the two ribbon cables to the CPU card such that the red stripe is *closest* to the back of the server.
 - b. The red and black wire twisted pair to the P9 jack on the corner of the motherboard closest to the power supply such that the red wire is *closest* to the back of the server.
 - c. The power harness coming out the side of the power supply going to the SCSI backplane.

- d. The power harness consisting of three white connectors to motherboard jacks P1 and P2 as shown in Figure 7-4.

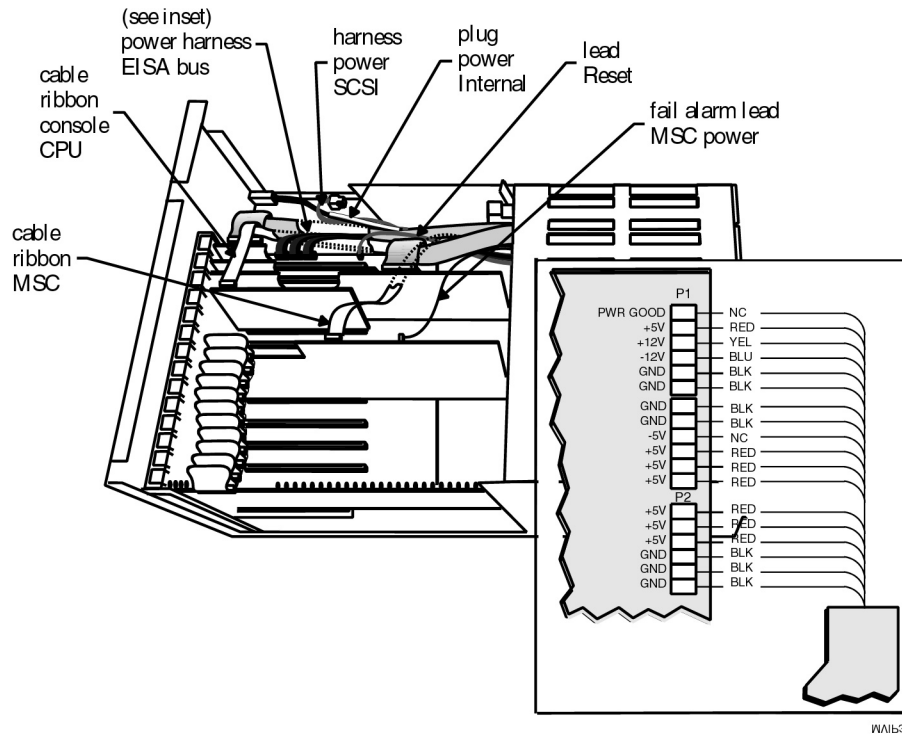


Figure 7-4. EISA Power Harness Connections

- e. The single orange wire to the top of the CPU card.
 - f. The narrower ribbon cable to the read most connector on the SCSI card.
 - g. Internal AC power plug.
4. Tighten the captive screws on the front of the power supply.
 5. Replace the top cover.
 6. If the server is rackmounted:
 - a. Slide the server back until it locks it into place.
 - b. Check the cables at the rear of the server to verify that none were loosened or disturbed.
 7. If the server is a tower, return it to its horizontal position.
 8. Plug the AC power cord back into the MeetingPlace cabinet.

Testing Power Supply

1. Run the Powering Up the System procedure on page 5-4.
2. Access the CLI, by following the procedures in the Connecting Your Laptop and Setting Up Your Laptop sections starting on page 5-2 and press Enter. The login prompt appears.
3. Log in as a technician. The tech\$ prompt appears.
4. Enter **alarm** and look for any new fault conditions. If there are any errors, call the Customer Support Center.



The absence of alarms on the alarm table confirms that the installation has been successful.

5. If the failed server was originally the network server for the system and the shadow server was converted to the network server, refer to *Installation/Upgrade Procedure MeetingPlace Shadow Network Server* (LPN 0520-0016-01) if switching back is desired.
6. To logout enter **exit**. Logout appears.
7. Disconnect the laptop.

8 MeetingPlace Single Number Access

MeetingPlace Single Number Access (SNA) makes it possible for networked systems to transfer callers from one conference server to another using a “flash” transfer. If a participant in a meeting calls into a server where the meeting is not located, the system will initiate a flash transfer with the PBX or CO to transfer the call to the proper conference server. This capability also allows users accessing MeetingNotes to be transferred to the correct conference server should they call the wrong server. By utilizing a “flash” transfer, the system optimizes usage of telephony ports between MeetingPlace and the CO or PBX.

When an incoming call lands on a conference server, the conference server first checks to see if the meeting is local. If the meeting is not local, it checks with the Network Server to see which server to transfer the call to. At that point, it will “flash” and signal a sequence of DTMF tones for the transfer. The PBX then “screen” transfers the call to the new number. This means that the transferor is still connected to the caller until it decides to hang up. A series of communications take place between the two conference servers. This communication allows the caller to attend the meeting and causes the original conference server to hang up. This transfer typically takes between 6-8 seconds, during which the caller will be asked to hold and will hear on hold music provided by the PBX during that time.

MeetingPlace Server Requirements

Listed below are the MeetingPlace server requirements for using MeetingPlace Single Number Access.

- Server version 4.1.3 or higher. SNA is not supported with EISA servers.
- Co-located servers
- T-1s configured as ESF/B8ZS. Refer to Configuring T1 Spans - DTI Cards, page 5-24.
- Flash must be allowed in port group. Refer to the Configuring Ports section on page 5-31, and the example in the Port Group Settings section of this chapter, page 8-2.
- MeetingTime | Configure Tab | Telephony Access – Must contain full 10 digit pilot number that will be used to dial into server

- A translation table needs to be set up to only outpulse the pilot number of the target server after the flash is executed. The section below describes this in more detail.

Translation Table

The translation table settings will depend on the number of digits in the pilot number. If the pilot number is 3 digits, 3 dots need to be in the parenthesis in the translation table. If the pilot number is 4 digits, 4 dots need to be in the parenthesis in the translation table and so on. See the examples below.



The translation table settings for the Rolm 9005 PBX are different. Refer to the Rolm 9005 MeetingPlace Translation Table section of this chapter, page 8-25.

- If pilot number is 3 digits, translation table entry would be:

!,.....\(...\) !,\1 ANYGROUP Generic

- If pilot number is 4 digits, translation table entry would be:

!,.....\(...\) !,\1 ANYGROUP Generic

- If pilot number is 5 digits, translation table entry would be:

!,.....\(...\) !,\1 ANYGROUP Generic

Port Group Settings

In the MeetingPlace server, the ports used for SNA need to be associated with a port group that allows the following configuration. See Figure 8-1.

```
Enter command: 4
Enter port group record number [0..31, <cr> for all] : 1
----- GROUP 1 -----
Activate the group?      : y
Card type                : T1
Signaling                : loop start
Numr of DID digits      : 0
Human assistance?       : n
Flash transfer?         : y
Outdial?                : y
```

Figure 8-1. MeetingPlace SNA Port Group Configuration Display

Refer to the Configuring Ports section on page 5-31, for more details on port group settings.

Continuous Service Mode and SNA

If the conference servers go into continuous service mode (i.e. lose their connection to the network server), SNA will stop working. The conference server will have no way of determining which conference server the meeting is scheduled on without being able to communicate with the network server.

PBX Requirements

The following are general PBX requirements. Please refer to individual sections for specific information on various PBX models.

- One of the models covered in this chapter. They are:
 - Fujitsu F9600
 - Intecom
 - Lucent 5ESS
 - Lucent G3R
 - Nortel Option 81C
 - Rolm 9005
- Perform line side T-1 flash screen transfer
- T-1's configured as ESF/B8ZS
- Provide positive disconnect supervision
- Co-located; all conference servers' T-1s must be supplied by the same PBX
- T-1 support only, no E-1 support

Deployment Options

There are two ways of deploying MeetingPlace SNA. They are:

- All incoming calls are routed to one conference server. That conference server communicates with the network server and transfers the call to the appropriate conference server.
- All conference servers take incoming calls in a round robin fashion. The conference server answering the call communicates with the network server and transfers the call to the appropriate conference server.

PBX Configuration Examples

This section provides configuration examples for each of the supported PBXs. If you have a PBX other than the ones listed, please contact the Customer Support Center before going further.

Fujitsu F9600

This section explains the required steps for using MeetingPlace SNA with a Fujitsu F9600 PBX.

1. Install the OPS T-1 BDTKBA card.
2. Configure the OPS T-1 BDTKBA card as loop start (line side T1).
3. Configure MP as loop start in port for the group the T1 is on.
4. Restart MP
5. Set up the 24 channels on that card to have their own extensions.
6. Set up a pilot number for those 24 channels that use them as a hunt group. The pilot number will cycle through the 24 channels when it is dialed. Pilot number has to be listed in the Hook Flash Originating Call list.
7. Lower the pad levels on the card by changing the 3 pad-level jumpers to middle. This is because the OPS card is set up for long-distance signaling, and the pad levels will be too high to signal properly to a local MeetingPlace Conference Server.

Intecom

See Figure 8-2 for an example of an Intecom Configuration.

```

> TCM...TRAVELING CLASSMARK.....NO
> RETURN CONTINUES DISPLAY..... =>
> FTH...FAILURE THRESHOLD.....3
> RDT...RESEIZE DELAY TIME.....MSEC:700
> CHT...TRUNK MONITOR MINIMUM HOLD TIME....0
> DET...DISTANT END RELEASE TIME.....SEC:60
> DCT...DATA CALLS ALLOWED.....NO
> SWM...SEIZE WHEN MOS.....NO
> TCH...TRUNK CALL HANDLING.....EXTERNAL
> NDS...DISCONNECT SUPERVISION.....YES
> IGG...IGNORE GLARE.....NO
> GDT...GLARE DETECT TIME.....MSEC:100
> XFT...DISTANT IBX ALLOWS FEATURE TRANSP..NO
> DPT...DTMF PASSTHROUGH TIMING INDEX.....NONE
> CRO...CPN/ANI ROUTING.....NO
> .....TRUNK DIRECTION.....BOTH WAYS
> *** INCOMING PARAMETERS
> STY...INCOMING CALL ORIGINATION TYPE.....T1 OFF
PREM.....OPX (OFF PREMISE)
> TYP...INCOMING TRUNK TYPE.....DIALED
> ICM...INCOMING CALL MESSAGE #.....NONE
> DCC...ROUTING TYPE.....NORMAL
ROUTING ONLY
> IDS...INCOMING DIGIT SEQUENCE.....DESTINATION
NUMBER ONLY
> IRD...RESPONSE TO DESTINATION NUMBER.....NONE
> IRC...RESPONSE TO CALLING PARTY NUMBER...NONE
> IIT...INCOMING INFO DIGIT TYPE/LENGTH...NONE
> RETURN CONTINUES DISPLAY..... =>
> BGP...ANNOUNCEMENT BROADCAST TRUNK GROUP.NONE
> APA...TRUNK GROUP AUTHORIZATION TYPE.....NONE
> PVA...PRE-VALIDATE AUTHORIZATION CODE....NO
> RSC...RESET COUNT.....1
> LVL...PREDEFINED LEVEL CODE.....NONE
> TNE...TONE TABLE ENTRY NUMBER.....NONE
> MOD...INCOMING DIAL MODE.....DTMF
> RGF...DTMF RECEIVER GROUP.....252
> TOO...TIMEOUT TO ATTENDANT.....NO
> MCL...MULTIPLE CALLING ALLOWED.....NO
> RAC...REUSE AUTH FOR MULT. CALLS.....NO
> GAC...GROUP AUTH REQUIRED FOR TRUNKS.....NO
> SAC...SYSTEM ACCESS CODE.....NONE
> CWR...CALLWAIT RINGBACK.....NO
> UCT...TRUNK UPDATE CDR ON TRANSFER.....ALL
> CPT...CALL PROGRESSING TONES:.....IBX PROVIDED
> RIO...RESPONSE TO INCOMING ORIGINATION...NONE
> IUG...InteMail LAMP MESSAGE USER GROUPS..OWN
> NUG...INTER-USER GROUP NNP USER GROUPS...OWN
> TCT...STATION CALL RESTRICTION ENABLED...NO
> 8NC...800 TO 4D SPEED NUMBER CONVERSION..NO

```

```

> *** OUTGOING PARAMETERS
> MSG...MODEM SIGNALLING.....YES
> RETURN CONTINUES DISPLAY..... =>
> TXA...DIRECT TGRP SELECT ALLOWED.....YES
> ATG...ANNOUNCEMENT TRUNK GROUP.....NO
> SLC...TRUNK SELECTION.....TOP DOWN
> ICA...INTER-LATA CARRIER.....101XXXX
> CPN...CALLING PARTY NUMBER.....DO NOT SEND
> DIAGNOSTIC PARAMETERS: Y or N.....N =>
> PORT ASSIGNMENT REPORT
> 5.3.05.01      5.3.05.02      5.3.05.03      5.3.05.04
> 5.3.05.05      5.3.05.06      5.3.05.07      5.3.05.08
> 5.3.05.09      5.3.05.10      5.3.05.11      5.3.05.12
> 5.3.05.13      5.3.05.14      5.3.05.15      5.3.05.16
> 5.3.05.17      5.3.05.18      5.3.05.19      5.3.05.20
> 5.3.05.21      5.3.05.22      5.3.05.23      5.3.05.24
> END OF DISPLAY
> SPECIFY GROUP NUMBER or - ..... => @
> SELECT COMMAND => pdt
> SELECT MODE:  PRINT, DISPLAY, UPDATE, TITLES, SEARCH
=> d
> PREFIX DIGIT TABLE NUMBER or ?..... => 2
>     EMPTY PDT - NO DIGITS SENT
> *** OFF-NET    PREFIX DIGIT TABLE # 2          06/27/00
11:08:37
> 1) DESTINATION NUMBER:
>     PLAN:      UNKNOWN
>     TYPE:      UNKNOWN
>     OUTPUTPULSE NUMBER TYPE: UNKNOWN
>     NUMBER: NO PREFIX DIGITS
> PREFIX DIGIT TABLE NUMBER or ?..... => @
> SELECT COMMAND => rout
> SELECT MODE:  PRINT, DISPLAY, UPDATE, TITLES, SEARCH
=> d
> ROUTE GUIDE # or ?..... => 32
>     Test Grp for Mike OG
> *** ROUTE GUIDE # 32          06/27/00    11:08:43
> 1 TRUNK GROUP 32    -- FRL: 0 -- PREFIX DIGIT STRING
# 2
> 2 BUSYOUT

```

Figure 8-2. Intecom Configuration Example for SNA

Lucent 5ESS

See Figure 8-3 for an example of a Lucent 5ESS configuration.

View 5v1

(*)1. TGN399

(*)2. TRUNK CHAR

(*)3. FEND CLLI

4. TRK CHAR

5. FAR CLLI

6. RMK

#7. TRK DIR

#8. HUNT TYPE

9. SCR

10. GLARE ACTION

13. CARRIER ID

14. FEAT GRP

15. INC TND WNK

16. ATTTN

17. TERA RCVY

18. IAPT

19. CALLMON INH

20. INPLS

21. OUTPLS

22. FAR END NPA

25. BRCS

26. FREE ANS

27. PRIVACY

28. INSEP

29. MODULE

Y

ONLY

25

24

214

SATELLITE N

11. DAS3

23. GL ANN TGN0

TERM SFG N

#12. TRK CLASS

PFLASH

24. PBX/CPE ID

0

View 5v11

(*)1. TGN399

(*)2. MEM1

(*)3. OE

6. FEATURE LIST (FEATLIST)

ROW

FEATURE

A

P

AC

ROW

FEATURE

A

P

AC

1

0555

Y

_

N

15

2

/MWCTIA1

Y

_

N

ROW

FEATURE

A

P

AC

8

Figure 8-3. Lucent 5ESS Configuration Example for SNA

Lucent G3R**T1 Station Layout**

See Figure 8-4 for an example of a Lucent G3R T1 station layout.

```

DS1 CIRCUIT PACK

    Location: 02E18                Name: LATITUDE 1
    Bit Rate: 1.544                Line Coding: b8zs
    Line Compensation: 1           Framing Mode: esf
    Signaling Mode: robbed-bit

    Idle Code: 11111111

    Slip Detection? n              Near-end CSU Type: other

DS1 CIRCUIT PACK

ESF DATA LINK OPTIONS

    Network Management Protocol: tabs
    Send ANSI-T1.403 One-Second Performance Reports? n
    Far-end CSU Address: b
  
```

Figure 8-4. Lucent G3R T1 Station Layout Example for SNA

Master Hunt Group

See Figure 8-5 for an example of a Lucent G3R master hunt group configuration.

```

                                HUNT GROUP

    Group Number: 110                ACD? n
    Group Name: LATITUDE MEETINGPLACE Queue? n
    Group Extension: 4444            Vector? n
    Group Type: ddc                  Coverage Path:
    TN: 1                            Night Service Destination:
    COR: 83                          MM Early Answer? n
    Security Code:
    ISDN Caller Display:

                                HUNT GROUP

                                Message Center: none

                                LWC Reception: none
                                AUDIX Name:
                                Messaging Server Name:

                                HUNT GROUP
    Group Number: 110                Group Extension: 4444
    Group Type: ddc
  
```

```

Voice Mail Number:
Administered Members(min/max):1 /168
  Total Administered Members: 168
GROUP MEMBER ASSIGNMENTS
  Ext      Name
1: 4801  LATITUDE PORT 0
2: 4802  LATITUDE PORT 1
3: 4803  LATITUDE PORT 2
4: 4804  LATITUDE PORT 3
5: 4805  LATITUDE PORT 4
6: 4806  LATITUDE PORT 5
7: 4807  LATITUDE PORT 6
8: 4808  LATITUDE PORT 7
9: 4809  LATITUDE PORT 8
10: 4810  LATITUDE PORT 9
11: 4811  LATITUDE PORT 10
12: 4812  LATITUDE PORT 11
13: 4813  LATITUDE PORT 12
14: 4814  LATITUDE PORT 13
15: 4815  LATITUDE PORT 14
16: 4816  LATITUDE PORT 15
17: 4817  LATITUDE PORT 16
18: 4818  LATITUDE PORT 17
19: 4819  LATITUDE PORT 18
20: 4820  LATITUDE PORT 19
21: 4821  LATITUDE PORT 20
22: 4822  LATITUDE PORT 21
23: 4823  LATITUDE PORT 22
24: 4824  LATITUDE PORT 23
25: 4825  LATITUDE PORT 24
26: 4826  LATITUDE PORT 25
More Members Exist

                                HUNT GROUP
Group Number: 110      Group Extension: 4444
Group Type: ddc
Voice Mail Number:
Administered Members(min/max): 1 /168
  Total Administered Members: 168
GROUP MEMBER ASSIGNMENTS
  Ext      Name
27: 4827  LATITUDE PORT 26
28: 4828  LATITUDE PORT 27
29: 4829  LATITUDE PORT 28
30: 4830  LATITUDE PORT 29
31: 4831  LATITUDE PORT 30
32: 4832  LATITUDE PORT 31
33: 4833  LATITUDE PORT 32
34: 4834  LATITUDE PORT 33
35: 4835  LATITUDE PORT 34
36: 4836  LATITUDE PORT 35
37: 4837  LATITUDE PORT 36
38: 4838  LATITUDE PORT 37
39: 4839  LATITUDE PORT 38
40: 4840  LATITUDE PORT 39
41: 4841  LATITUDE PORT 40
42: 4842  LATITUDE PORT 41
43: 4843  LATITUDE PORT 42
44: 4844  LATITUDE PORT 43
45: 4845  LATITUDE PORT 44
46: 4846  LATITUDE PORT 45
47: 4847  LATITUDE PORT 46
48: 4848  LATITUDE PORT 47
49: 4849  LATITUDE PORT 48
50: 4850  LATITUDE PORT 49
51: 4851  LATITUDE PORT 50
52: 4852  LATITUDE PORT 51
More Members Exist

                                HUNT GROUP
Group Number: 110      Group Extension: 4444
Group Type: ddc
Voice Mail Number:
Administered Members (min/max): 1 /168
  Total Administered Members: 168
GROUP MEMBER ASSIGNMENTS
  Ext      Name
53: 4853  LATITUDE PORT 52
54: 4854  LATITUDE PORT 53
55: 4855  LATITUDE PORT 54
56: 4856  LATITUDE PORT 55
66: 4866  LATITUDE PORT 65
67: 4867  LATITUDE PORT 66
68: 4868  LATITUDE PORT 67
69: 4869  LATITUDE PORT 68

```

```

57: 4857 LATITUDE PORT 56    70: 4870 LATITUDE PORT 69
58: 4858 LATITUDE PORT 57    71: 4871 LATITUDE PORT 70
59: 4859 LATITUDE PORT 58    72: 4872 LATITUDE PORT 71
60: 4860 LATITUDE PORT 59    73: 4873 LATITUDE PORT 72
61: 4861 LATITUDE PORT 60    74: 4874 LATITUDE PORT 73
62: 4862 LATITUDE PORT 61    75: 4875 LATITUDE PORT 74
63: 4863 LATITUDE PORT 62    76: 4876 LATITUDE PORT 75
64: 4864 LATITUDE PORT 63    77: 4877 LATITUDE PORT 76
65: 4865 LATITUDE PORT 64    78: 4878 LATITUDE PORT 77
More Members Exist

```

HUNT GROUP

```

Group Number: 110      Group Extension: 4444
Group Type: ddc
Voice Mail Number:
Administered Members (min/max): 1 /168
Total Administered Members: 168

```

GROUP MEMBER ASSIGNMENTS

| Ext | Name | Ext | Name |
|----------|------------------|-----------|-------------------|
| 79: 4879 | LATITUDE PORT 78 | 92: 4892 | LATITUDE PORT 91 |
| 80: 4880 | LATITUDE PORT 79 | 93: 4893 | LATITUDE PORT 92 |
| 81: 4881 | LATITUDE PORT 80 | 94: 4894 | LATITUDE PORT 93 |
| 82: 4882 | LATITUDE PORT 81 | 95: 4895 | LATITUDE PORT 94 |
| 83: 4883 | LATITUDE PORT 82 | 96: 4896 | LATITUDE PORT 95 |
| 84: 4884 | LATITUDE PORT 83 | 97: 4897 | LATITUDE PORT 96 |
| 85: 4885 | LATITUDE PORT 84 | 98: 4898 | LATITUDE PORT 97 |
| 86: 4886 | LATITUDE PORT 85 | 99: 4899 | LATITUDE PORT 98 |
| 87: 4887 | LATITUDE PORT 86 | 100: 4900 | LATITUDE PORT 99 |
| 88: 4888 | LATITUDE PORT 87 | 101: 4901 | LATITUDE PORT 100 |
| 89: 4889 | LATITUDE PORT 88 | 102: 4902 | LATITUDE PORT 101 |
| 90: 4890 | LATITUDE PORT 89 | 103: 4903 | LATITUDE PORT 102 |
| 91: 4891 | LATITUDE PORT 90 | 104: 4904 | LATITUDE PORT 103 |

More Members Exist

HUNT GROUP

```

Group Number: 110      Group Extension: 4444
Group Type: ddc
Voice Mail Number:
Administered Members (min/max): 1 /168
Total Administered Members: 168

```

GROUP MEMBER ASSIGNMENTS

| Ext | Name | Ext | Name |
|-----------|-------------------|-----------|-------------------|
| 105: 4905 | LATITUDE PORT 104 | 118: 4918 | LATITUDE PORT 117 |
| 106: 4906 | LATITUDE PORT 105 | 119: 4919 | LATITUDE PORT 118 |
| 107: 4907 | LATITUDE PORT 106 | 120: 4920 | LATITUDE PORT 119 |
| 108: 4908 | LATITUDE PORT 107 | 121: 2301 | LATITUDE PORT 120 |
| 109: 4909 | LATITUDE PORT 108 | 122: 2302 | LATITUDE PORT 121 |
| 110: 4910 | LATITUDE PORT 109 | 123: 2303 | LATITUDE PORT 122 |
| 111: 4911 | LATITUDE PORT 110 | 124: 2304 | LATITUDE PORT 123 |
| 112: 4912 | LATITUDE PORT 111 | 125: 2305 | LATITUDE PORT 124 |
| 113: 4913 | LATITUDE PORT 112 | 126: 2306 | LATITUDE PORT 125 |
| 114: 4914 | LATITUDE PORT 113 | 127: 2307 | LATITUDE PORT 126 |
| 115: 4915 | LATITUDE PORT 114 | 128: 2308 | LATITUDE PORT 127 |
| 116: 4916 | LATITUDE PORT 115 | 129: 2309 | LATITUDE PORT 128 |
| 117: 4917 | LATITUDE PORT 116 | 130: 2310 | LATITUDE PORT 129 |

```

More Members Exist

                                HUNT GROUP
Group Number: 110             Group Extension: 4444
Group Type: ddc
Voice Mail Number:
Administered Members (min/max): 1 /168
    Total Administered Members: 168
GROUP MEMBER ASSIGNMENTS
    Ext    Name
131: 2311 LATITUDE PORT 130  144: 2324 LATITUDE PORT 143
132: 2312 LATITUDE PORT 131  145: 2325 LATITUDE PORT 144
133: 2313 LATITUDE PORT 132  146: 2326 LATITUDE PORT 145
134: 2314 LATITUDE PORT 133  147: 2327 LATITUDE PORT 146
135: 2315 LATITUDE PORT 134  148: 2328 LATITUDE PORT 147
136: 2316 LATITUDE PORT 135  149: 2329 LATITUDE PORT 148
137: 2317 LATITUDE PORT 136  150: 2330 LATITUDE PORT 149
138: 2318 LATITUDE PORT 137  151: 2331 LATITUDE PORT 150
139: 2319 LATITUDE PORT 138  152: 2332 LATITUDE PORT 151
140: 2320 LATITUDE PORT 139  153: 2333 LATITUDE PORT 152
141: 2321 LATITUDE PORT 140  154: 2334 LATITUDE PORT 153
142: 2322 LATITUDE PORT 141  155: 2335 LATITUDE PORT 154
143: 2323 LATITUDE PORT 142  156: 2336 LATITUDE PORT 155
More Members Exist

                                HUNT GROUP
Group Number: 110             Group Extension: 4444
Group Type: ddc
Voice Mail Number:
Administered Members (min/max): 1 /168
    Total Administered Members: 168
GROUP MEMBER ASSIGNMENTS
    Ext    Name
157: 2337 LATITUDE PORT 156  170:
158: 2338 LATITUDE PORT 157  171:
159: 2339 LATITUDE PORT 158  172:
160: 2340 LATITUDE PORT 159  173:
161: 2341 LATITUDE PORT 160  174:
162: 2342 LATITUDE PORT 161  175:
163: 2343 LATITUDE PORT 162  176:
164: 2344 LATITUDE PORT 163  177:
165: 2345 LATITUDE PORT 164  178:
166: 2346 LATITUDE PORT 165  179:
167: 2347 LATITUDE PORT 166  180:
168: 2348 LATITUDE PORT 167  181:
169:                               182:
At End of Member List

```

Figure 8-5. Lucent G3R Master Hunt Group Configuration Example for SNA

Server 1 Hunt Group

See Figure 8-6 for an example of a Lucent G3R server 1 hunt group configuration.

```

HUNT GROUP

Group Number: 111                      ACD? n
Group Name: LATITUDE SERVER 1          Queue? n
Group Extension: 4800                  Vector? n
Group Type: ucd-mia                    Coverage Path:
    TN: 1                               Night Service Destination:
    COR: 83                             MM Early Answer? n
Security Code:
ISDN Caller Display:

HUNT GROUP

Message Center: none

LWC Reception: none
AUDIX Name:
Messaging Server Name:

HUNT GROUP
Group Number: 111 Group Extension: 4800
Group Type: ucd-mia
Voice Mail Number:
Administered Members (min/max): 1 /120
    Total Administered Members: 120
GROUP MEMBER ASSIGNMENTS
    Ext    Name
1: 4801    LATITUDE PORT 0
2: 4802    LATITUDE PORT 1
3: 4803    LATITUDE PORT 2
4: 4804    LATITUDE PORT 3
5: 4805    LATITUDE PORT 4
6: 4806    LATITUDE PORT 5
7: 4807    LATITUDE PORT 6
8: 4808    LATITUDE PORT 7
9: 4809    LATITUDE PORT 8
10: 4810   LATITUDE PORT 9
11: 4811   LATITUDE PORT 10
12: 4812   LATITUDE PORT 11
13: 4813   LATITUDE PORT 12
14: 4814   LATITUDE PORT 13
15: 4815   LATITUDE PORT 14
16: 4816   LATITUDE PORT 15
17: 4817   LATITUDE PORT 16
18: 4818   LATITUDE PORT 17
19: 4819   LATITUDE PORT 18
20: 4820   LATITUDE PORT 19
21: 4821   LATITUDE PORT 20
22: 4822   LATITUDE PORT 21
23: 4823   LATITUDE PORT 22
24: 4824   LATITUDE PORT 23
25: 4825   LATITUDE PORT 24
26: 4826   LATITUDE PORT 25
More Members Exist

HUNT GROUP
Group Number: 111    Group Extension: 4800
Group Type: ucd-mia
Voice Mail Number:
Administered Members (min/max): 1 /120
    Total Administered Members: 120
GROUP MEMBER ASSIGNMENTS

```


| Ext | Name | Ext | Name |
|----------|------------------|----------|------------------|
| 27: 4827 | LATITUDE PORT 26 | 40: 4840 | LATITUDE PORT 39 |
| 28: 4828 | LATITUDE PORT 27 | 41: 4841 | LATITUDE PORT 40 |
| 29: 4829 | LATITUDE PORT 28 | 42: 4842 | LATITUDE PORT 41 |
| 30: 4830 | LATITUDE PORT 29 | 43: 4843 | LATITUDE PORT 42 |
| 31: 4831 | LATITUDE PORT 30 | 44: 4844 | LATITUDE PORT 43 |
| 32: 4832 | LATITUDE PORT 31 | 45: 4845 | LATITUDE PORT 44 |
| 33: 4833 | LATITUDE PORT 32 | 46: 4846 | LATITUDE PORT 45 |
| 34: 4834 | LATITUDE PORT 33 | 47: 4847 | LATITUDE PORT 46 |
| 35: 4835 | LATITUDE PORT 34 | 48: 4848 | LATITUDE PORT 47 |
| 36: 4836 | LATITUDE PORT 35 | 49: 4849 | LATITUDE PORT 48 |
| 37: 4837 | LATITUDE PORT 36 | 50: 4850 | LATITUDE PORT 49 |
| 38: 4838 | LATITUDE PORT 37 | 51: 4851 | LATITUDE PORT 50 |
| 39: 4839 | LATITUDE PORT 38 | 52: 4852 | LATITUDE PORT 51 |

More Members Exist

HUNT GROUP

Group Number: 111 Group Extension: 4800
 Group Type: ucd-mia
 Voice Mail Number:
 Administered Members (min/max): 1 /120
 Total Administered Members: 120
 GROUP MEMBER ASSIGNMENTS

| Ext | Name | Ext | Name |
|----------|------------------|----------|------------------|
| 53: 4853 | LATITUDE PORT 52 | 66: 4866 | LATITUDE PORT 65 |
| 54: 4854 | LATITUDE PORT 53 | 67: 4867 | LATITUDE PORT 66 |
| 55: 4855 | LATITUDE PORT 54 | 68: 4868 | LATITUDE PORT 67 |
| 56: 4856 | LATITUDE PORT 55 | 69: 4869 | LATITUDE PORT 68 |
| 57: 4857 | LATITUDE PORT 56 | 70: 4870 | LATITUDE PORT 69 |
| 58: 4858 | LATITUDE PORT 57 | 71: 4871 | LATITUDE PORT 70 |
| 59: 4859 | LATITUDE PORT 58 | 72: 4872 | LATITUDE PORT 71 |
| 60: 4860 | LATITUDE PORT 59 | 73: 4873 | LATITUDE PORT 72 |
| 61: 4861 | LATITUDE PORT 60 | 74: 4874 | LATITUDE PORT 73 |
| 62: 4862 | LATITUDE PORT 61 | 75: 4875 | LATITUDE PORT 74 |
| 63: 4863 | LATITUDE PORT 62 | 76: 4876 | LATITUDE PORT 75 |
| 64: 4864 | LATITUDE PORT 63 | 77: 4877 | LATITUDE PORT 76 |
| 65: 4865 | LATITUDE PORT 64 | 78: 4878 | LATITUDE PORT 77 |

More Members Exist

HUNT GROUP

Group Number: 111 Group Extension: 4800
 Group Type: ucd-mia
 Voice Mail Number:
 Administered Members (min/max): 1 /120
 Total Administered Members: 120
 GROUP MEMBER ASSIGNMENTS

| Ext | Name | Ext | Name |
|----------|------------------|----------|------------------|
| 79: 4879 | LATITUDE PORT 78 | 92: 4892 | LATITUDE PORT 91 |
| 80: 4880 | LATITUDE PORT 79 | 93: 4893 | LATITUDE PORT 92 |
| 81: 4881 | LATITUDE PORT 80 | 94: 4894 | LATITUDE PORT 93 |
| 82: 4882 | LATITUDE PORT 81 | 95: 4895 | LATITUDE PORT 94 |
| 83: 4883 | LATITUDE PORT 82 | 96: 4896 | LATITUDE PORT 95 |
| 84: 4884 | LATITUDE PORT 83 | 97: 4897 | LATITUDE PORT 96 |
| 85: 4885 | LATITUDE PORT 84 | 98: 4898 | LATITUDE PORT 97 |
| 86: 4886 | LATITUDE PORT 85 | 99: 4899 | LATITUDE PORT 98 |

```

87: 4887 LATITUDE PORT 86 100: 4900 LATITUDE PORT 99
88: 4888 LATITUDE PORT 87 101: 4901 LATITUDE PORT 100
89: 4889 LATITUDE PORT 88 102: 4902 LATITUDE PORT 101
90: 4890 LATITUDE PORT 89 103: 4903 LATITUDE PORT 102
91: 4891 LATITUDE PORT 90 104: 4904 LATITUDE PORT 103
More Members Exist

                                HUNT GROUP
Group Number: 111      Group Extension: 4800
Group Type: ucd-mia
Voice Mail Number:
Administered Members (min/max): 1 /120
      Total Administered Members: 120
GROUP MEMBER ASSIGNMENTS
      Ext  Name                                Ext  Name
105: 4905 LATITUDE PORT 104 118: 4918 LATITUDE PORT 117
106: 4906 LATITUDE PORT 105 119: 4919 LATITUDE PORT 118
107: 4907 LATITUDE PORT 106 120: 4920 LATITUDE PORT 119
108: 4908 LATITUDE PORT 107 121:
109: 4909 LATITUDE PORT 108 122:
110: 4910 LATITUDE PORT 109 123:
111: 4911 LATITUDE PORT 110 124:
112: 4912 LATITUDE PORT 111 125:
113: 4913 LATITUDE PORT 112 126:
114: 4914 LATITUDE PORT 113 127:
115: 4915 LATITUDE PORT 114 128:
116: 4916 LATITUDE PORT 115 129:
117: 4917 LATITUDE PORT 116 130:
At End of Member List

```

Figure 8-6. Lucent G3R Server 1 Hunt Group Configuration Example for SNA

Server 2 Hunt Group

See Figure 8-7 for an example of a Lucent G3R server 2 hunt group configuration.

```

HUNT GROUP

Group Number: 112                ACD? n
Group Name: LATITUDE SERVER 2    Queue? n
Group Extension: 2300            Vector? n
Group Type: ucd-mia              Coverage Path:
    TN: 1                        Night Service Destination:
    COR: 83                      MM Early Answer? n
Security Code:
ISDN Caller Display:

HUNT GROUP

Message Center: none

LWC Reception: none
AUDIX Name:
Messaging Server Name:

HUNT GROUP
Group Number: 112    Group Extension: 2300
Group Type: ucd-mia
Voice Mail Number:
Administered Members (min/max): 1    /48
    Total Administered Members: 48
GROUP MEMBER ASSIGNMENTS
    Ext    Name
1: 2301    LATITUDE PORT 120
2: 2302    LATITUDE PORT 121
3: 2303    LATITUDE PORT 122
4: 2304    LATITUDE PORT 123
5: 2305    LATITUDE PORT 124
6: 2306    LATITUDE PORT 125
7: 2307    LATITUDE PORT 126
8: 2308    LATITUDE PORT 127
9: 2309    LATITUDE PORT 128
10: 2310    LATITUDE PORT 129
11: 2311    LATITUDE PORT 130
12: 2312    LATITUDE PORT 131
13: 2313    LATITUDE PORT 132
14: 2314    LATITUDE PORT 133
15: 2315    LATITUDE PORT 134
16: 2316    LATITUDE PORT 135
17: 2317    LATITUDE PORT 136
18: 2318    LATITUDE PORT 137
19: 2319    LATITUDE PORT 138
20: 2320    LATITUDE PORT 139
21: 2321    LATITUDE PORT 140
22: 2322    LATITUDE PORT 141
23: 2323    LATITUDE PORT 142
24: 2324    LATITUDE PORT 143
25: 2325    LATITUDE PORT 144
26: 2326    LATITUDE PORT 145
More Members Exist

HUNT GROUP
Group Number: 112    Group Extension: 2300
Group Type: ucd-mia
Voice Mail Number:
Administered Members (min/max): 1    /48
    Total Administered Members: 48
GROUP MEMBER ASSIGNMENTS
    Ext    Name
    Ext    Name

```

```

27: 2327 LATITUDE PORT 146 40: 2340 LATITUDE PORT 159
28: 2328 LATITUDE PORT 147 41: 2341 LATITUDE PORT 160
29: 2329 LATITUDE PORT 148 42: 2342 LATITUDE PORT 161
30: 2330 LATITUDE PORT 149 43: 2343 LATITUDE PORT 162
31: 2331 LATITUDE PORT 150 44: 2344 LATITUDE PORT 163
32: 2332 LATITUDE PORT 151 45: 2345 LATITUDE PORT 164
33: 2333 LATITUDE PORT 152 46: 2346 LATITUDE PORT 165
34: 2334 LATITUDE PORT 153 47: 2347 LATITUDE PORT 166
35: 2335 LATITUDE PORT 154 48: 2348 LATITUDE PORT 167
36: 2336 LATITUDE PORT 155 49:
37: 2337 LATITUDE PORT 156 50:
38: 2338 LATITUDE PORT 157 51:
39: 2339 LATITUDE PORT 158 52:

```

At End of Member List

HUNT GROUP

Group Number: 112 Group Extension: 2300

Group Type: ucd-mia

Voice Mail Number:

Administered Members (min/max): 1 /48

Total Administered Members: 48

GROUP MEMBER ASSIGNMENTS

| Ext | Name | Ext | Name |
|-----|------|-----|------|
| 53: | | 66: | |
| 54: | | 67: | |
| 55: | | 68: | |
| 56: | | 69: | |
| 57: | | 70: | |
| 58: | | 71: | |
| 59: | | 72: | |
| 60: | | 73: | |
| 61: | | 74: | |
| 62: | | 75: | |
| 63: | | 76: | |
| 64: | | 77: | |
| 65: | | 78: | |

At End of Member List

HUNT GROUP

Group Number: 112 Group Extension: 2300

Group Type: ucd-mia

Voice Mail Number:

Administered Members (min/max): 1 /48

Total Administered Members: 48

GROUP MEMBER ASSIGNMENTS

| Ext | Name | Ext | Name |
|-----|------|------|------|
| 79: | | 92: | |
| 80: | | 93: | |
| 81: | | 94: | |
| 82: | | 95: | |
| 83: | | 96: | |
| 84: | | 97: | |
| 85: | | 98: | |
| 86: | | 99: | |
| 87: | | 100: | |

```

88:                                     101:
89:                                     102:
90:                                     103:
91:                                     104:
At End of Member List

                                HUNT GROUP
Group Number: 112      Group Extension: 2300
Group Type: ucd-mia
Voice Mail Number:
Administered Members (min/max): 1    /48
    Total Administered Members: 48
GROUP MEMBER ASSIGNMENTS
    Ext    Name                                Ext    Name
105:                                     118:
106:                                     119:
107:                                     120:
108:                                     121:
109:                                     122:
110:                                     123:
111:                                     124:
112:                                     125:
113:                                     126:
114:                                     127:
115:                                     128:
116:                                     129:
117:                                     130:

```

Figure 8-7. Lucent G3R Server 2 Hunt Group Configuration Example for SNA

DS1 Configuration

See Figure 8-8 for an example of a Lucent G3R DS1 configuration.

```

                                STATION
Extension: 4801      Lock Messages? n      BCC: 0
    Type: DS1FD      Security Code:      TN: 1
    Port: 02E1801    Coverage Path 1:      COR: 82
    Name: LATITUDE PORT 0    Coverage Path 2:      COS: 1
        Hunt-to Station:      Tests? n

STATION OPTIONS
Loss Group: 4
Off Premises Station? y
R Balance Network? n

                                STATION
FEATURE OPTIONS
    LWC Reception: none
    LWC Activation? n      Coverage Msg Retrieval? y
    CDR Privacy? n      Auto Answer: none
    Redirect Notification? y    Data Restriction? n
    Per Button Ring Control? n    Call Waiting Indication? n

```

```

Att. Call Waiting Indication? n
Switchhook Flash? y          Distinctive Audible Alert? y
Ignore Rotary Digits? n      Adjunct Supervision? y
H.320 Conversion? n
Per Station CPN - Send Calling Number?

Audible Message Waiting? n

AUDIX Name:
Messaging Server Name:      Coverage After Forwarding? s

                                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

```

Figure 8-8. Lucent G3R DSI Configuration Example for SNA

Nortel Option 81C

When using the Nortel Option 81C, the following additional requirements must be met.

- T-1's set up as line-side T-1's, with DN's assigned on each channel
- Pilot number of each server must hunt through all DN's associated with the T-1's connected to that particular server
- Each server must have a unique pilot number
- The CLS must have HTA (hunting allowed) and XFA (transfer allowed)
- The FTR must be ISP 75 – This sets the flash disconnect supervision for Nortel and must be set on every line/channel. The 75 refers to 75 units of 10ms, for a total disconnect time of 750 ms. This can be adjusted by entering the number of units needed to extend or shorten the disconnect supervision timer. 750 ms is a guideline and suggested starting point.

Example of Nortel Option 81C Configuration

The example in Figure 8-9 and Figure 8-10 assumes the following:

- The pilot number for Server 1 is 69901
- The pilot number for Server 2 is 69902

See Figure 8-9 for an example of a Nortel Option 81C Server 1 configuration.

```
REQ: PR
REQ PRT
TYPE: TN
TYPE TNB
TN 148 0 0 0
SPWD
DATE
PAGE
DES
DES WMDC
TN 148 0 00 00
TYPE 500
CDEN 4D
CUST 0
WRLS NO
DN 69901 0 MARP
CPND
NAME LATITUDE UPGRADE TEST
XPLN 26
DISPLAY FMT FIRST, LAST
```

```

AST NO
IAPG 0
HUNT 71700
TGAR 8
LDN NO
NCOS 7
SGRP 0
RNPG 0
XLST
SCI 0
SCPW
CLS UNR DTN FBD XFA WTA THFD FND HTA ONS
    LPR XRD CWD SWD MWD LPD XHD CCSD LND TVD
    CFTD SFD C6D CNID CLBD AUTU
    ICDD CDMD EHTD MCTD
    GPUD DPUD CFXD ARHD OVDD AGTD CLTD LDTD ASCD
    MBXD CPFA CPTA DDGA NAMA
    MCRD SHL ABDD CFHD
    USRD BNRD OCBD RTDD FAXD PGND
PLEV 02
AACS NO
FTR ISP 75
DATE 20 DEC 2000

```

Figure 8-9. Nortel Option 81C Server 1 Configuration Example for SNA

See Figure 8-10 for an example of a Nortel Option 81C Server 2 configuration.

```

NACT
REQ:
REQ PRT
TYPE:
TYPE TNB
TN 148 0 2 0
SPWD
DATE
PAGE
DES

DES WMDC
TN 148 0 02 00
TYPE 500
CDEN 4D
CUST 0
WRLS NO
DN 69902 0 MARP
    CPND
        NAME LATITUDE UPGRADE TEST
        XPLN 26
        DISPLAY_FMT FIRST, LAST
AST NO
IAPG 0

```



```

HUNT 71724
TGAR 8
LDN NO
NCOS 7
SGRP 0
RNPG 0
XLST
SCI 0
SCPW
CLS UNR DTN FBD XFA WTA THFD FND HTA ONS
    LPR XRD CWD SWD MWD LPD XHD CCSD LND TVD
    CFTD SFD C6D CNID CLBD AUTU
    ICDD CDMD EHTD MCTD
    GPUD DPUD CFXD ARHD OVDD AGTD CLTD LDTD ASCD
    MBXD CPFA CPTA DDGA NAMA
    MCRD SHL ABDD CFHD
    USRD BNRD OCBF RTDD FAXD PGND
PLEV 02
AACS NO
FTR ISP 75
DATE 20 DEC 2000

```

Figure 8-10. Nortel Option 81C Server 2 Configuration Example for SNA

Rolm 9005

When using the Rolm 9005, the following additional requirements must be met.

- T-1's set up to be OPX with a class of service (COS) unique to the group of extensions on each channel of the T-1s. If COS does not have WNK flagged for Y, the port will not hang up on the MeetingPlace server.
- If outdial is going to be used, the COS must be a value that allows the call to be routed through Route Optimization in the PBX.
- A hunt group or each MeetingPlace server must be created.
- If there are more than 96 ports, ACD is a requirement.
- If there are more than 50 extensions in any one hunt group, PBX forwarding is necessary.

See Figure 8-11 for an example of a Rolm 9005 T1 Channels and COS configuration.

```

COMMAND: LI TRUNK T1 011301..011303
          H/W      TRNK  TKGP  REF
          PAD      TYPE  USE   NO   NAME  NO      UP DIR TEST DISA
-----
DS 01/011301  T1      OPX
OPX
DIAL      OPX      WINK      VRU
TYPE TEST  EXTN    OFF      PROTOCOL
- - - - -
DS  D      N      7501      Y      NONE

          H/W      TRNK  TKGP  REF
          PAD      TYPE  USE   NO   NAME  NO      UP DIR TEST DISA
-----
          DS 01/011302  T1      OPX
OPX
DIAL      OPX      WINK      VRU
TYPE TEST  EXTN    OFF      PROTOCOL
- - - - -
DS  D      N      7502      Y      NONE

          H/W      TRNK  TKGP  REF
          PAD      TYPE  USE   NO   NAME  NO      UP DIR TEST DISA
-----
DS 01/011303  T1      OPX
OPX
DIAL      OPX      WINK      VRU
TYPE TEST  EXTN    OFF      PROTOCOL

```

```

- - - - -
DS D N 7503 Y NONE

COMMAND: LI EXTEN 7501..7506

                                FORWARD ON
                                SYSTEM      FORWARDING      BSY RNA DND
EXTN TYPE COS TARGET 1 TARGET 2 TARGET 3 TARGET 4 I E
I E I E RINGDOWN
- - - - -
- - - - -
DS 7501 EXT 1 - - - - -
ACD NAME
- - - - -
DS N TRUNK 1

                                FORWARD ON
                                SYSTEM      FORWARDING      BSY RNA DND
EXTN TYPE COS TARGET 1 TARGET 2 TARGET 3 TARGET 4 I E
I E I E RINGDOWN
- - - - -
- - - - -
DS 7502 EXT 1 - - - - -
ACD NAME
- - - - -
DS N TRUNK 2

                                FORWARD ON
                                SYSTEM      FORWARDING      BSY RNA DND
EXTN TYPE COS TARGET 1 TARGET 2 TARGET 3 TARGET 4 I E
I E I E RINGDOWN
- - - - -
- - - - -
DS 7503 EXT 1 - - - - -
ACD NAME
- - - - -
DS N TRUNK 3
COMMAND: LI COS_N 1

FEATURES ASSIGNED TO COS 1
A A C C C C C D D D E I N N P S S S S T T V C W E
C P F F M O S C N T O N F O R A P S Y R T D A N P
B V E I P F F P D S V T L H V V D O C M T C D K L
- - - - -
DS N N N N N N N N N N N N N Y N N N N N N Y N N Y N

```

Figure 8-11. Rolm 9005 T1Channel and COS Configuration Example for SNA

Hunt Group

All extensions that are associated with T-1 channels must be put into the hunt group of the correct server. A different hunt group must be built for each server. There is a limitation in the Rolm 9005, which only allows 50 extensions to be members of a hunt group. For this reason, a second hunt group of 50 members can be built. In that case, the first hunt group must be set up to forward to the second hunt group. This makes forwarding a requirement.

See Figure 8-12 for an example of a Rolm 9005 hunt group configuration.

| COMMAND: LI HD ALL | | | | | | |
|--------------------|--------------|---------------|-------|---------------|--------|------------------------|
| PILOT NO. | GROUP NO. | GROUP TYPE | COS | FWD/BUSY C | NUMBER | COMMENTS |
| ----- | ---- | - | --- | - | ----- | ----- |
| DS 7100 | 1 | H | 0 | B | 7200 | ADD 50 PORTS TO CS1 |
| EXTN | EXTN | EXTN | EXTN | EXTN | EXTN | EXTN |
| EXTN | | | | | | |
| ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| -- | | | | | | |
| DS | 7501 | 7502 | 7503 | | | |
| PILOT NO. | GROUP NO. | GROUP TYPE | COS | FWD/BUSY C | NUMBER | COMMENTS |
| ----- | ---- | - | --- | - | ----- | ----- |
| DS 7200 | 2 | H | 0 | N | | |
| EXTN | EXTN | EXTN | EXTN | EXTN | EXTN | EXTN |
| EXTN | | | | | | |
| ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| ---- | | | | | | |
| DS | 7504 | 7505 | 7506 | | | |

Figure 8-12. Rolm 9005 Hunt Group Configuration Example for SNA

If more than 96 ports, ACD is a requirement

If there are more than 96 ports on any of the servers in the network using SNA, then ACD becomes a requirement of the Rolm 9005 PBX software. Since you can only forward a hunt group to another hunt group one time, the maximum number of ports in that configuration is 100. On a 120 port server, there would be 20 ports that could not have incoming access. They would only have outdial capability. By using ACD and setting all the OPX extensions to be ACD agents, the PBX software will allow more than the 100 limitation put on the hunt group configuration.

See Figure 8-13 for an example of how to set up the ACD Group so the group is initially available.

| | | | | | | | |
|-----------------------|-------|-----------|---------------------|------------|-----------|----------|-------|
| COMMAND: LI ACD_G ALL | | | | | | | |
| ACDGROUP | NODE | | | DELAYED | CONNECT | MSG SUPV | |
| NAME | NO | PILOT | COS | T/R/N | TIME/REC# | EXTN | |
| ----- | -- | ----- | --- | - | ----- | ----- | |
| DS | MEET | 1 | 7700 | 63 | N | | |
| CALL CALL WTG LEVELS | | | | | | | |
| WTG | ON | FLASH | WINK | | | | |
| - | -- | -- | -- | | | | |
| | N | | | | | | |
| AGENT ID | SVC | SVC LVL | ANSWER | INITIALLY | DNIS/DID | | |
| REQD | LVL | SAMPLES | PROFILE | AVAILABLE? | REPORT ? | | |
| - | -- | --- | --- | - | - | | |
| DS | N | 20 | 128 | 10 | Y | N | |
| SHIFT | --- | S H I F T | S T A T I S T I C S | --- | | | |
| #'s | START | END | START | END | START | END | |
| ----- | ----- | ----- | ----- | ----- | ----- | ----- | |
| DS | 1..3 | 00:00 | 23:59 | | | | |
| STATUS SUPERVISOR | | | | | | | |
| EXTN | EXTN | EXTN | EXTN | EXTN | EXTN | EXTN | EXTN |
| ----- | ----- | ----- | ----- | ----- | ----- | ----- | ----- |
| DS | | | | | | | |

Figure 8-13. Rolm 9005 ACD Group Setting

Rolm 9005 MeetingPlace Translation Table

In the MeetingPlace server, a translation table needs to be setup to insert a *7. See Figure 8-14 for an example of the Rolm 9005 translation table requirements.

| | | | | |
|---------|--------|----------|---------|----------------------------------|
| !\(.*\) | !,*7\1 | ANYGROUP | Generic | To add a *7 for the xfer code |
|---------|--------|----------|---------|----------------------------------|

Figure 8-14. MeetingPlace SNA Translation Table Setting for the Rolm 9005

Testing MeetingPlace SNA

Perform the following steps to ensure MeetingPlace SNA is installed and working correctly.

1. In MeetingTime, schedule a meeting on each of the conference servers.
2. Test the SNA by calling into a conference server and entering the meeting ID of a meeting that exists on a different server. If you are successfully transferred to the meeting, SNA is working properly.
3. Make sure the ports are hanging up when idle by running the **spanstat –all** command from the cli in a telnet session. Do this on all conference servers.



It may be best to schedule a continuous meeting for testing purposes so that your meeting will not end while you are testing/making configuration changes. However, be sure to *end* the continuous meeting once testing is complete.

4. Perform the steps in the section Verifying Installation, starting on page 5-39.

9 MeetingPlace IP

Overview

MeetingPlace IP is designed to allow callers using IP phones to attend MeetingPlace conferences. The purpose of this chapter is to aid in the process of setting up a MeetingPlace Server to handle VoIP (Voice over IP) calls. This chapter covers how to setup MeetingPlace IP in conjunction with Cisco's Call Manager, release 3. It will not cover detailed configuration instructions for CallManager 3. For information specific to the configuration of CallManager 3 and the voice-enabled router as it pertains to MeetingPlace, please contact the Customer Support Center. For more information regarding Cisco's voice products, please go to <http://www.cisco.com/univercd/cc/td/doc/product/voice/index.htm>.

The main difference between MeetingPlace and MeetingPlace IP is that MeetingPlace IP has an IRC (Internet Resource Card) and second LAN (Local Area Network) card. The IRC uses this second LAN card to make/receive VoIP (Voice over IP) calls. This LAN card is "controlled" by the IRC. Therefore, the IP address assigned to the IRC refers to the second LAN card.

In addition to the 2 cards added to the MeetingPlace server, the MeetingPlace IP Gateway software is loaded on an NT machine. The MeetingPlace IP Gateway uses the gateway SIM to "register" with MeetingPlace IP. Refer to the *MeetingPlace IP System Manager's Guide* for specific details on installing the MeetingPlace IP Gateway.

MeetingPlace IP uses the IRC, second LAN card, the MeetingPlace IP gateway, CallManager 3, and a voice-enabled router to handle both PSTN and VoIP callers. The voice-enabled router is only necessary when routing between PSTN and IP networks is required (e.g. When using a PSTN phone to call MeetingPlace IP).

CallManager sets up calls between IP phones and voice-enable routers to provide PSTN access. Therefore, in order for an IP phone to connect to a PSTN phone, CallManager will have to route the IP phone to a voice-enabled router. Likewise, if a PSTN phone needs to connect to an IP phone, a voice-enabled router will have to route the PSTN phone to CallManager. In CallManager, a gateway needs to be added to route calls to the MeetingPlace IP Gateway.

Installing and Configuring MeetingPlace IP

This section describes how to set up and configure MeetingPlace IP. Configuration of the translation table in MeetingPlace will not be described because this will change greatly depending on implementation. The choice will have to be made if and when to route out dials to IP ports or to PSTN ports. Based on these decisions, the translation table should be configured accordingly. For assistance with this, contact your Application Engineer or the Customer Support Center.

PSTN Ports vs. IP Ports

The maximum number of combined (PSTN and IP) ports MeetingPlace IP can have is 96. The maximum number of IP ports per system (standalone or networked) is 24. If a system is being upgraded to MeetingPlace IP and there are 96 or more PSTN conference ports, hardware will need to be removed.

Here are some examples to better explain this. Refer to Appendix F - MeetingPlace IP Card Identification and Location, page F-1, for card location diagrams.

- An existing all PSTN conference server has 96 ports. It is upgraded to MeetingPlace IP. 24 of the PSTN ports will have to be reconfigured as IP ports. Thus, 72 PSTN ports will remain. This is the limit for 1 conference server.
- An existing all PSTN conference server has 120 ports. It is upgraded to MeetingPlace IP. 24 of the PSTN ports will have to be reconfigured as IP ports, and 24 ports will have to be disabled. One T-1 card and one PRC card will have to be removed.
- A networked system has 2 conference servers with 96 PSTN ports each. On one conference server, 24 ports will have to be reconfigured as IP ports. This will leave a total of 168 PSTN ports.

Pre-installation Requirements

The requirements will be listed for each of the following:

- MeetingPlace Server
- Network
- Cisco CallManager
- Voice-enabled router
- IP phone

MeetingPlace Server Requirements

- 4.2 or above
- PCI based
- 2 available PCI slots
- IRC (Internet Resource Card), Latitude part number 5500-0011-01
- Second LAN card, Latitude part number 6500-0022-01

Network Requirements

- 3 static IP addresses
 - 1 for each of the 2 LAN cards
 - 1 for the MeetingPlace IP Gateway

Cisco CallManager Requirements

- CallManager 3 on an MCS 7800 server family
- For configuration details as it pertains to MeetingPlace IP, contact the Customer Support Center.

Voice-enabled Router Requirements

- A voice-enabled router is only necessary when a mixture of IP and PSTN devices are present. It must be:
 - Running Cisco IOS version 12 or above
 - Configured with at least one network module that contains at least one digital voice packet T1 controller
 - For configuration details as it pertains to MeetingPlace IP, contact the Customer Support Center.

IP Phone Requirements

- IP phone supported by Cisco CallManager 3

Installing IRC and second LAN card

1. MeetingPlace will need to be down and powered off before installing the IRC and second LAN card. Refer to Powering Down the System, page 6-4. MeetingPlace IP is not hot-swappable.
2. Log into to a telnet session as a super user and follow the procedure in Figure 9-1. If you do not have the super user password, contact the Customer Support Center.

```
meetingplace:csc$ down
Are you sure (y/n)? y
Checking to see if the system is loaded...OK
System DOWN procedure has been initiated.
The system is DOWN.
meetingplace:csc$ halt
Are you sure (y/n)? y
Checking to see if the system is loaded...
The System Integrity Manager is not running.
```

Figure 9-1. Down and Halt Command Display

3. Once the halt is complete, power off the MeetingPlace server.
4. Insert the IRC and NIC in the appropriate PCI slots. See Appendix F - MeetingPlace IP Card Identification and Location, page F-1. This assumes that the original configuration of MeetingPlace has not been reconfigured. The placement of these 2 cards depends on how many PRC cards are present in the server.
 - The IRC should be placed in the first empty PCI slot, after the last PRC card. (Standing behind the server, this would be the slot to the right of the last PRC card.)
 - The second LAN card should be placed in the next slot. (Standing behind the server, this would be the slot to the right of the IRC.)
 - There are no dip switch setting changes needed.
5. After adding the cards, power up MeetingPlace, see the Powering Up the System procedure, page 5-4. MeetingPlace will start to reload its software.
6. If it appears as though the server does not reload all software modules, type **restart enable** at the command line. See Figure 9-2.

```
meetingplace:tech$ restart enable
Are you sure (y/n)? y
Enabling system activation.
Checking to see if the system is loaded...OK
System DOWN procedure has been initiated.
System RESTART sequence has been initiated.
```

Figure 9-2. Restart Enable Command Display

Disabling T-1 Span, when necessary

Only proceed with this step if you are taking active PSTN ports and converting them to IP ports. Otherwise, proceed to the section Configuring IRC, page 9-6.

Figure 9-3 shows how to configure span 0 for IP use. If different ports are being used for IP use, the appropriate T1 span and port numbers need to be configured in this way. Configure the necessary span/ports by following Figure 9-3.

```
meetingplace:tech$ span
MeetingPlace-IP is up
***** S P A N   C O N F I G   M E N U   *****
      1) View DTI span record(s)
      2) Modify DTI span record
      x) Exit program
Enter command: 2
Enter DTI span record number [0..4, <cr> for all] : 0

----- UNIT 0   SPAN 0 -----
  Activate the DTI span?      : n ← select n
  Framing                     : ESF
  Zero code suppression       : B8ZS
  Timing                      : external
  External sync priority      : 1
  Trunk [ 1]                  : port 0 ←enter "no port"
  Trunk [ 2]                  : port 1
  Trunk [ 3]                  : port 2
  Trunk [ 4]                  : no port
  Trunk [ 5]                  : no port
  Trunk [ 6]                  : no port
  Trunk [ 7]                  : no port
  Trunk [ 8]                  : no port
  Trunk [ 9]                  : no port
  Trunk [10]                  : no port
  Trunk [11]                  : no port
  Trunk [12]                  : no port
  Trunk [13]                  : no port
  Trunk [14]                  : no port
  Trunk [15]                  : no port
  Trunk [16]                  : no port
  Trunk [17]                  : no port
```

```

Trunk [18]           : no port
Trunk [19]           : no port
Trunk [20]           : no port
Trunk [21]           : no port
Trunk [22]           : no port
Trunk [23]           : no port
Trunk [24]           : no port
Remote loopback to network?: n ←select n
Internal data loopback? : n
Enter command: x

```

Figure 9-3. MeetingPlace IP Span Configuration

Configuring IRC

The IRC should be configured first if it is a new card. Steps to configure T1 spans were given before this step simply because a MeetingPlace server that was upgraded to MeetingPlace IP would be pre-configured for T1 cards. Therefore, the T1 would have to be disabled so that the IRC could be configured. If MeetingPlace has not been setup yet, the net command must be used to configure MeetingPlace before configuring the IRC. For more details on the net command, refer to the section Configuring LAN Parameters, starting on page 5-18 .

Figure 9-4 shows how to configure the IRC. Follow the steps in Figure 9-4.

```

meetingplace:tech$ Icard

*****  I R C   C O N F I G   M E N U   *****

      1)  View IRC card record(s)
      2)  Modify IRC card record
      x)  Exit program

Enter command: 2
Enter IRC card number [0..0] : 0

----- Unit 0   IRC 0  -----
--- To skip over a field, just press <cr> ---
Activate the IRC card?      [y] : y
IP address      [10.9.1.201] : ← IP address of 2nd NIC
Subnet Mask     [255.255.255.0] :
Default Gateway [10.9.1.1] :
Codec type [none (G.711)] : ← must be G.711
Base receive TSAP port[ 5000] : ←starting port to receive
Msec per packet [ 20] : ← time per packet, make sure
this corresponds with Call Manager and MeetingPlace IP
setting
Frames per packet          [ 0] :
Trunk [ 1]      [port  0] : ← sets port to use for IP
voice traffic
Trunk [ 2]      [port  1] :
Trunk [ 3]      [port  2] :
Trunk [ 4]      [port  3] :

```

```

Trunk [ 5]           [port  4] :
Trunk [ 6]           [port  5] :
Trunk [ 7]           [port  6] :
Trunk [ 8]           [port  7] :
Trunk [ 9]           [port  8] :
Trunk [10]           [port  9] :
Trunk [11]           [port 10] :
Trunk [12]           [port 11] :
Trunk [13]           [port 12] :
Trunk [14]           [port 13] :
Trunk [15]           [port 14] :
Trunk [16]           [port 15] :
Trunk [17]           [port 16] :
Trunk [18]           [port 17] :
Trunk [19]           [port 18] :
Trunk [20]           [port 19] :
Trunk [21]           [port 20] :
Trunk [22]           [port 21] :
Trunk [23]           [port 22] :
Trunk [24]           [port 23] :

Enter command:

*****  I R C   C O N F I G   M E N U   *****

          1)  View IRC card record(s)
          2)  Modify IRC card record
          x)  Exit program

Enter command: x ←exit the icard command

```

Figure 9-4. Icard Command Display used for Configuring the IRC

Configuring Ports and Port Groups

The ports need to be configured for IP voice traffic. Configuring port groups is an easier way to configure a group of ports at one time. For general port and port group configuration, refer to *Configuring Ports*, page 5-31. For IP port and port group configuration, refer to the following sections.

Configuring IP Ports

All ports that will be used for IP traffic should be configured as shown in Figure 9-5.

```
meetingplace:tech$ port
MeetingPlace-IP is up
***** P O R T / G R O U P   C O N F I G   M E N U *****
      1) View port record(s)
      2) Modify port record
      3) Copy port records
      4) View group record(s)
      5) Modify group record
      x) Exit program
Enter command: 2
Enter port record number [0..47, <cr> for all] : 0..23
----- UNIT 0   PORT 0 -----
Uses port group                : 0
Activate the port?             : (group) y
Signaling                      : (group) IP
Number of DID digits          : (group) 0
Human assistance?              : (group) n
Flash transfer?                : (group) n
Outdial?                       : (group) y
```

Figure 9-5. MeetingPlace IP Port Configuration

Configuring Port Groups

For instructions on adding a specific port to a port group, refer to *Configuring Ports*, page 5-31. All port groups used for IP traffic should be configured as shown in Figure 9-6.

```
meetingplace:tech$ port
MeetingPlace-IP is up
*****  P O R T / G R O U P   C O N F I G   M E N U
*****
          1)  View port record(s)
          2)  Modify port record
          3)  Copy port records
          4)  View group record(s)
          5)  Modify group record
          x)  Exit program
Enter command: 5
Enter port group record number [0..31, <cr> for all] : 0

-----          GROUP  0          -----
Activate the group?          :  Y
Card type                    :  IP
Signaling                    :  IP
Number of DID digits        :  0
Human assistance?           :  n
Flash transfer?             :  n
Outdial?                    :  Y
```

Figure 9-6. MeetingPlace IP Port Group Configuration

Installing MeetingPlace IP Gateway

Much like MeetingPlace IP, MeetingPlace Data Conferencing uses the H.323 protocol to communicate between devices. There is potential conflict associated with having both gateways installed on the same Windows NT server.

If you installed the MeetingPlace IP Gateway on the same system, you should configure the server's IP address to include both a primary and secondary address. Make certain you apply the primary address to the MeetingPlace IP Gateway and the secondary address to MeetingPlace Data Conference.

In addition, you will have to modify settings in the MeetingPlace Gateway Systems Instance Manager. Refer to the *MeetingPlace IP System Manager's Guide* for additional information.

Example of MeetingPlace IP gwstatus

Similar to other MeetingPlace gateways, the MeetingPlace IP gateway can be monitored via the gwstatus command. See Figure 9-7 for an example.

Under Remote Units, Unit 10 represents the MeetingPlace IP gateway machine. Under Gateways, Unit 10 VoIP:CCAgent represents the agent that interacts with CallManager.

```
meetingplace:tech$ gwstatus
Gateway SIM Status
-----
Remote Units:
Unit 10 mpccagent v4.1.3.13 Ok 05/08/00 13:46:57

Gateways:
Unit 10 WebPub:DataSvc v4.1.3.14 Ok 05/08/00 13:47:09
Unit 10 WebPub:MPAgent v4.1.3.14 Ok 05/08/00 12:43:27
Unit 10 VoIP:CCAgent v4.1.3.0 Ok 05/08/00 12:43:18
```

Figure 9-7. MeetingPlace IP gwstatus example

Testing MeetingPlace IP

After completing the configuration, follow these steps to test functionality.

1. Make sure to power cycle the MeetingPlace IP server and restart the MeetingPlace IP Gateway.
2. Make sure that everything comes up properly and start the mpccagent service in Windows NT services.
3. Schedule a meeting that will allow out dials. Two extra client PCs will be required if Data Conferencing is going to be tested.
4. Join the meeting using an IP phone.
5. Once in the meeting, use the out dial feature to verify configuration by placing calls from the MeetingPlace IP to an IP phone, from MeetingPlace IP to a PSTN phone, from MeetingPlace PSTN to an IP phone, and from MeetingPlace PSTN to a PSTN phone.



To be able to outdial, confirm that your MeetingPlace profile has outdialing privileges and that the meeting was scheduled to allow outdials. If client PCs with MeetingTime are available, you can view the status of the outdial

10 Repairing MeetingPlace

This chapter contains procedures for replacing the following field-replaceable units (FRU):

- System or voice/attachment disk drive
- DAT drive
- Floppy drive
- Power supply
- LAN card
- Circuit card assemblies including the CPU card
- Fan assembly

The scheduling of these procedures should be coordinated in advance with the customer and the Customer Support Center. All repair procedures require the following sequence of activities:

1. Schedule the repair.
2. Back up the database.
3. Verify no user activity.
4. Power down MeetingPlace.
5. Perform the repair.
6. Power up MeetingPlace.
7. This chapter contains step-by-step procedures for replacing.

Before replacing and FRU, verify the toolkit contains everything needed for a successful replacement. Before upgrading MeetingPlace, check toolkit contents. Refer to Appendix I - Required Toolkit, page I-1, for a list of recommended tools and materials. In addition to these tools prepare to transport the appropriate field-replaceable units (FRUs).

Scheduling the Repair

Before going to the customer site, arrange with the customer site contact for a no-meeting period during the time the upgrade requires. Have the System Manager *and* the Customer Support Center perform this scheduling.

Replacing DAT Drive

To replace or install a DAT drive:

1. Follow the Preparing to Add Disk Drives procedure on page 6-17.
2. Run the Powering Down the System procedure on page 6-4.
3. Remove the old DAT drive from the left-most drive bay by unscrewing the captive screws that secure it to the server and pull the drive straight out. See Figure 10-1.
4. Install the DAT drive in the left-most drive bay. It is specifically designed to only fit in that drive bay. See Figure 10-1.
5. Replace the top cover.
6. Run the Powering Up the System procedure on page 6-5. The login prompt appears.
7. Proceed to the Testing DAT Drive procedure, page 10-3.

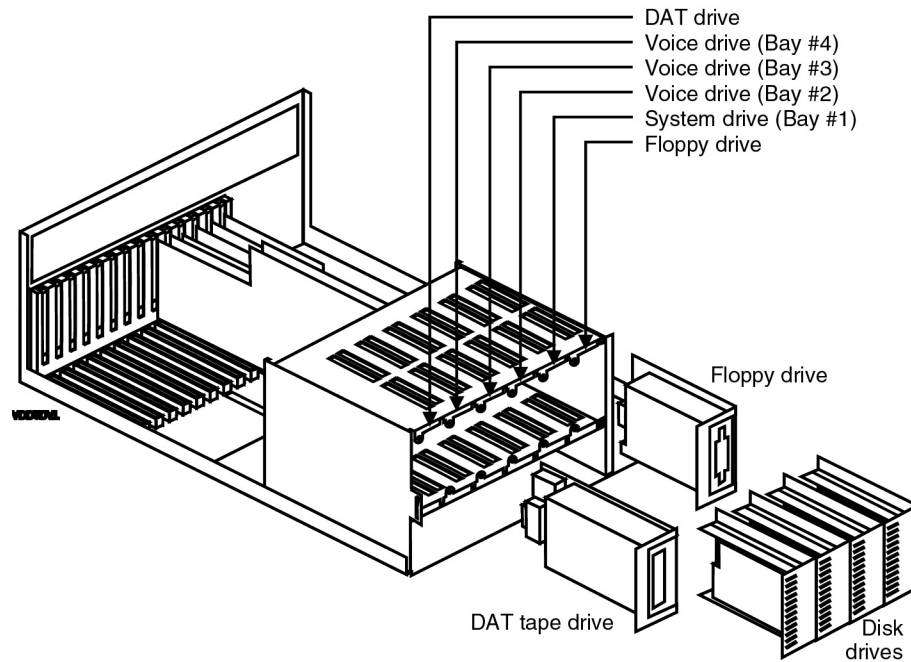


Figure 10-1. Disk and DAT Drive Location

Testing DAT Drive

1. Log into the CLI as a technician. The tech\$ prompt appears.
2. Check the error log and alarm table for any important entries.
3. Perform a system backup by entering **backup**. The first lines of Figure 10-2 appear.
4. Verify that the database backup successfully completes as stated in the next-to-last line of Figure 10-2.

```
meetingplace:tech$ backup
backup: started Tue Jul 21 18:28:36 PDT 1998
backup: forcing rewind...
backup: writing the tape...
Total bytes written: 135464960
you may remove the tape now
backup: backup complete Tue Jul 21 18:35:23 PDT
meetingplace:tech$
```

Figure 10-2. Database Backup Verification

Replacing System Disk

This section contains procedures to:

- Replace a system disk
- Configure a system disk

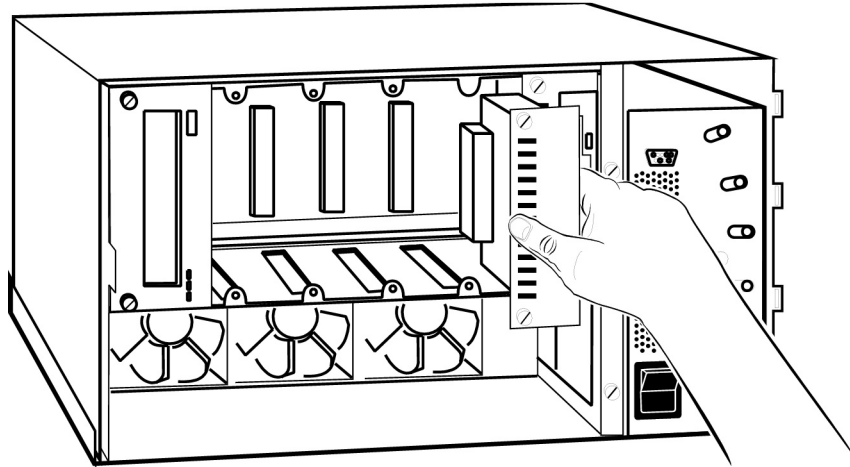


Figure 10-3. Replacing a Hard Disk Drive

To replace a system disk:

1. Verify that the new drive was not damaged during transport.
2. Verify that your toolkit contains the tools required to perform this procedure.



When installing disk drives, wear an electrostatic discharge (ESD) wrist strap, and attach the other end to the chassis. Failure to be properly grounded may result in damage to the device. This damage cannot be readily detected.

3. Follow the Preparing to Add Disk Drives procedure on page 6-17.
4. Run the Powering Down the System procedure on page 6-4.
5. Wait 30 seconds for the disk drives to stop spinning.



Verify that all power to the MeetingPlace cabinet is off before removing or replacing disks or circuit cards. Failure to do so may damage the system, the technician, or the component.

6. Remove the failed disk drive by unscrewing the captive screws that secure it to the server and pull the drive straight out. See Figure 10-3.

7. Plug in the new drive into the same slot that held the old drive and tighten the captive screws.
8. Replace the top cover.
9. Run the Powering Up the System procedure on page 6-5.
10. Proceed to the Configuring System Disk procedure, page 10-5.

Configuring System Disk

If the system disk was replaced and the system contains voice disks, the voice disks must be configured before configuring the new system disk.

Configuring Voice Disk

If the system does not contain any voice disks, skip this procedure.

Use the following procedure to put the new disk drive serial number in the database:

1. Add the first voice disk as a new SCSI device to the System Hardware Configuration table by entering **diskoptions**. Figure 10-4 appears.

```
tech$ diskoptions
1) View disk status
2) Install a new disk
3) Remove a disk
99) Quit
Select:
```

Figure 10-4. Diskoptions Initial Display

2. Enter **2**. The first two lines of Figure 10-5 appear.

```
Select: 2
Disk number [1-4]? 1
Do you wish to install disk #1 (y/n)? y
Disk #1 (SCSI id = 0)
  Vendor   = WDIGTL
  Product  = ENTERPRISE
  Revision = 1.80122B
  Serial # = WS7000095984
  Capacity = 2077 Megabytes
The disk is configured
Install is complete.
NOTE: You will need to restart the system for this to
take effect.
```

Figure 10-5. Diskoptions Display for Specifying a New Disk

3. Enter the appropriate disk number for the first voice disk. The disk number is the bay number in which the drive is located, see Figure 10-1. Information about the disk is taken from the disk itself and displayed on the screen as in Figure 10-5.
4. Repeat steps the above steps for each voice disk.
5. To exit diskoptions, enter **99**.
6. For the changes to take effect, enter **restart disable**.

Configuring System Disk

System disk configuration consists of:

- Running the database restore command, which overwrites some system disk configuration information.
 - Running the diskoptions command for the system disk to replace the overwritten information.
1. To restore the database from the backup DAT tape, enter **restore**. The system restores database integrity by automatically running the database repair utility.
 2. Run the Configuring Voice Disk procedure, page 10-5, except enter 1 (the system disk bay number) as the disk number.
 3. Restart the system by entering **restart enable**. After a confirmation request the display scrolls through initialization and loading notices. When restart is complete the last line reads The MeetingPlace software is UP.
 4. Remove the RS-232 cable from the front service port, and replace the front panel.

Replacing Voice/attachment Disk

This section contains procedures to:

- Replace a disk drive
- Convert a system disk to a voice/attachment disk
- Configure a voice/attachment disk

To replace a disk drive:

1. Verify that the new disk was not damaged during transport.
2. Verify that your toolkit contains the tools required to perform this procedure.



When installing drives, wear an electrostatic discharge (ESD) wrist strap, and attach the other end to the chassis. Failure to be properly grounded may result in damage to the device. This damage cannot be readily detected.

3. Follow the Preparing to Add Disk Drives procedure on page 6-17.
4. Run the Powering Down the System procedure on page 6-4.
5. Wait 30 seconds for the disk drives to stop spinning.



Verify that all power to the MeetingPlace cabinet is off before removing or replacing drives or circuit cards. Failure to do so may damage the system, the technician, or the component.

6. Remove the failed disk drive by unscrewing the captive screws that secure it and pulling it straight out.
7. Plug in the new drive into the same slot that held the old drive and tighten the captive screws.
8. Replace the top cover.
9. Run the Powering Up the System procedure on page 6-5.
10. Convert the disk to a voice/attachment disk by following the Converting Disk procedure below.

Converting Disk

All disk drives are shipped from the factory as system disks. The **newdisk** command converts the a system disk to a voice/attachment disk:

1. Enter **newdisk**. Figure 10-6 appears.

```
tech$ newdisk
Disk (2-4)? 2
```

Figure 10-6. Newdisk Command Initial Display

2. Enter the number of the drive to be changed from a system disk to a voice/attachment disk. See Figure 10-1 for the drive bay number.

Configuring Voice/attachment Disk

To configure a voice/attachment disk:

1. To add a new SCSI device to the System Hardware Configuration table enter **diskoptions**. Figure 10-7 appears.

```
tech$ diskoptions
1) View disk status
2) Install a new disk
3) Remove a disk
99) Quit
Select:
```

Figure 10-7. Diskoptions Initial Display

2. Enter **2**. The first five lines of Figure 10-8 appear.
3. As each line appears on the screen, enter the requested information. Some information about the disk is taken from the disk itself and displayed on the screen. When finished, the screen should appear similar to Figure 10-8.

```
tech$ diskoptions
1) View disk status
2) Install a new disk
3) Remove a disk
99) Quit
Select: 2
Disk number [1-4]? 1
WARNING: This disk is already configured in the
database.
Do you wish to reinstall disk #1 (y/n)? y
Disk #1 (SCSI id = 0)
  Vendor   = WDIGTL
  Product  = ENTERPRISE
  Revision = 1.80122B
  Serial # = WS7000095984
  Capacity = 2077 Megabytes
The disk is configured
Install is complete.
NOTE: You will need to restart the system for this to
take effect.
```

Figure 10-8. Diskoptions Command Display

4. To exit diskoptions, enter **99**.
5. To restart the system, enter **restart enable**. After a confirmation request the display scrolls through initialization and loading notices. When restart is complete the last line reads The MeetingPlace software is UP.

6. Remove the RS-232 cable from the front service port, and replace the front panel.

Replacing Floppy Drive

This section contains the following procedures for the floppy drive:

- Remove
- Installation
- Test

Removing Floppy Drive

1. Verify that the new disk was not damaged during transport.
2. Verify that your toolkit contains the tools required to perform this procedure.



When installing drives, wear an electrostatic discharge (ESD) wrist strap, and attach the other end to the chassis. Failure to be properly grounded may result in damage to the device. This damage cannot be readily detected.

3. Follow the Preparing to Add Disk Drives procedure on page 6-17.
4. To gain access to the floppy drive cables, remove any drives in the two drive slots to the left of the floppy drive:
 - a. Note the slot location of each drive before removal
 - b. Unscrew the captive screws and slide out the drive.
 - c. Place each drive in a safe place with a note that records the drives original location.
5. Loosen the captive screws on the floppy drive, and slide it part way out of the server. See Figure 10-9.

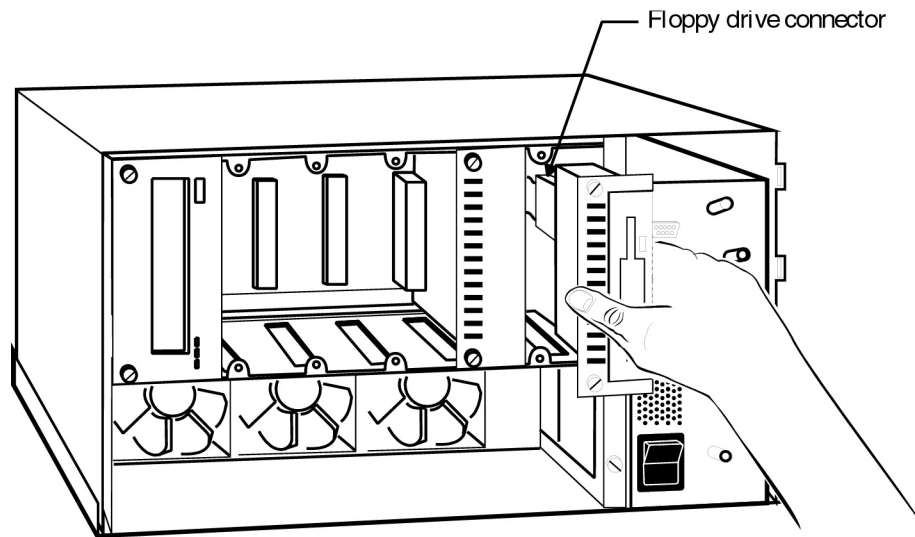


Figure 10-9. Floppy Drive Removal

6. Reach inside the drive bay and unplug the floppy power cable from the SCSI backplane.
7. To obtain sufficient slack, unplug the floppy drive ribbon cable from the center-top of the CPU card. Moving the floppy drive back and forth can help trace the ribbon cable to the CPU card.
8. Slide the floppy all the way out, but do not pull the ribbon cable out of the server.
9. Unplug the power cable and ribbon cable from the failed floppy drive.
10. Connect the power cable and ribbon cable to the new floppy drive.
11. Perform the Installing Floppy Drive procedure below.

Installing Floppy Drive

To install the new floppy drive:

1. Plug the floppy power cable into the new floppy disk drive.
2. With the red side up, plug the ribbon cable into the floppy drive. Visually check that the connector pins match with all of the pins on the drive.
3. Plug the floppy power cable into the SCSI backplane.
4. Slide the floppy drive into the drive bay.
5. Secure the floppy assembly with the captive screws.

6. Reinstall any drives that you removed to gain access to the floppy drive cables. The drives must be reinstalled in the same slots from which they were removed.
7. Replace the top cover.
8. Run the Powering Up the System procedure on page 6-5.
9. Perform the Testing Floppy Drive procedure below.

Testing Floppy Drive

To test the new floppy drive:

1. Enter **hwconfig**. Figure 10-10 appears.

```
meetingplace:tech$ hwconfig
Processor:           Pentium, Stepping 12
Bus architecture:    PCI
Memory:              64MB
SCSI Adapter:        NCR 810
    DISK 1:           2000MB (WDIGTL ENTERPRISE REV=1.80122B)
    DISK 2:           2000MB (WDIGTL ENTERPRISE REV=1.80122B)
    DISK 3:           1080MB (SEAGATE ST31055N REV=0532)
    TAPE:             DAT (SONY SDT-5200 REV=3.30)
Diskette drive:      Present
Ethernet:            SMC 9332 PCI 10/100 (00e02900bcb8)
Modem:               Present (USR Sportster 28.8)
DSP cards:           MSC (PCI slot=1/07, rev=B1a)
                    PRC#0 (PCI slot=1/06, rev=B1a)
                    PRC#1 (PCI slot=1/05, rev=B1a)
                    PRC#2 (PCI slot=1/04, rev=B3)
Telephony line cards: DTI#0 DTI#1 DTI#2
System Integrity Card: Present
meetingplace:tech$
```

Figure 10-10. Result of hwconfig Command to Verify Floppy

2. Verify that the Diskette drive entry shows that a floppy is present.
3. To logout enter **exit**. Logout appears.
4. Remove the RS-232 cable from the front service port, and replace the front panel.

Replacing Power Supply for PCI Systems

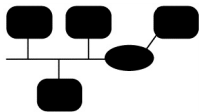
To replace a power supply in an EISA system, run the Replacing Power Supply for EISA Systems procedure, page 7-. This section contains the following procedures related to replacing the power supply:

- Preparation
- Removal
- Installation
- Testing

Preparing to Replace Power Supply for PCI Systems

To prepare to remove a failed power supply:

1. Verify that the new power supply was not damaged during transport.
2. Verify that your toolkit contains the tools required to perform this procedure.
3. Access the CLI of the faulty server, by following the procedures in the Connecting Your Laptop and Setting Up Your Laptop sections starting on page 5-2, and press Enter. The login prompt appears
4. Login as a technician. The tech\$ prompt appears.
5. Run the Backing Up the Database procedure on page 6-2.
6. If the failed power supply is on a network server, enter **halt local disable**.



On networked systems with a shadow network server, the halt local disable command prevents switchover to the shadow network server. Allowing the shadow network server to switchover is not recommended due to the short duration of the replacement procedure. However, if switchover is required, refer to *Installation/Upgrade Procedure MeetingPlace Shadow Network Server* (LPN 0520-0016-01)

7. If the server is a conference server, run the Powering Down the System procedure on page 6-4.

Conference servers on networked systems can continue to operate in the continuous service mode without a network server. However, database functions are inaccessible.

8. From the rear of the server, detach the power cord.



Verify that all AC power to the server is off before removing or replacing components. Failure to do so may damage the system, the technician, or the component.

Removing Power Supply

1. If the server is rackmounted:
 - a. Check the cabling at the rear of the server to verify that it can be slide completely forward.
 - b. Slide the server all the way forward.
2. If the server is in tower configuration, place it in the horizontal position.
3. Remove the server cover.
4. Put on an ESD wrist strap.
5. Disconnect the following using Figure 10-11 as a reference.
 - a. Internal AC power plug.
 - b. The ribbon cable to the CPU card.
 - c. The red and black twisted pair to the CPU card.
 - d. The power harness coming out the side of the power supply going to the SCSI backplane (not shown in Figure 10-11).
 - e. The connector to PW4 on the mother board.
 - f. The connector to PW1 on the mother board.
 - g. The connector to PW2 on the mother board.
 - h. The single orange wire to JP1 on the SIC card.
 - i. The multi-pin connector to J1 on the SIC card.
6. Loosen the captive screws on the front of the power supply.
7. Slide the power supply assembly forward to disengage the securing tabs under the power supply.
8. Lift the power supply up and out of the server.
9. Proceed to the Installing Power Supply procedure, page 10-14.

Installing Power Supply

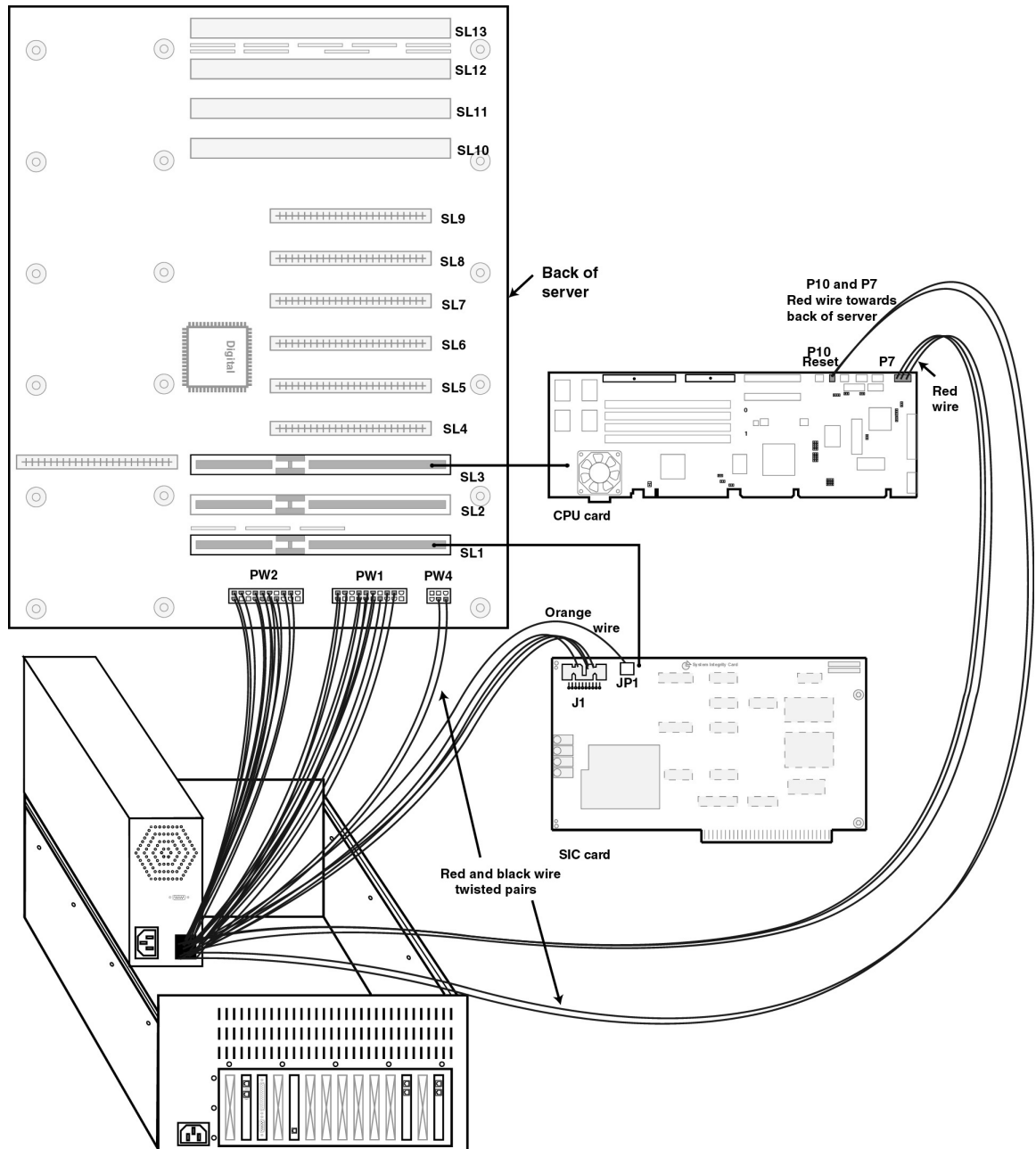


Figure 10-11. PCI Power Supply Connections

Place the new power supply into the cabinet, and slide it back to engage the securing tabs underneath the power supply.

1. Hand tighten the captive screws on the front of the power supply.
2. Connect the following using Figure 10-11 as a reference:

- a. The ribbon cable to the CPU card such that the red stripe is *closest* to the back of the server.
- b. The red and black wire twisted pair to the CPU card such that the red wire is *closest* to the back of the server.

There are two red and black wire twisted pairs, the one for the CPU has a much smaller connector and thinner wire.

- c. The power harness coming out the side of the power supply going to the SCSI backplane (not shown in Figure 10-11).
 - d. The red and black twisted pair to PW4 on the mother board.
 - e. The power harness labeled PW1 to the PW1 jack on the mother board (this harness is the longer of the two identical harnesses going to the mother board).
 - f. The power harness labeled PW2 to the PW2 jack on the mother board. The connectors to PW1 and PW2 are interchangeable, but should be connected correctly for proper cable routing.
 - g. The single orange wire to JP1 on the SIC card.
 - h. The power harness to J1 on the SIC card.
 - i. Internal AC power plug.
3. Tighten the captive screws on the front of the power supply.
 4. Replace the top cover.
 5. If the server is rackmounted:
 - a. Slide the server back until it locks it into place.
 - b. Check the cables at the rear of the server to verify that none were loosened or disturbed.
 6. If the server is a tower, return it to its horizontal position.
 7. Plug the AC power cord back into the MeetingPlace cabinet.

Testing Power Supply

1. Run the Powering Up the System procedure on page 6-5.
2. Access the CLI, by following the procedures in the Connecting Your Laptop and Setting Up Your Laptop sections starting on page 5-2 and press Enter. The login prompt appears.
3. Log in as a technician. The tech\$ prompt appears.
4. Enter **alarm** and look for any new fault conditions. If there are any errors, call the Customer Support Center.



The absence of alarms on the alarm table confirms that the installation has been successful.

5. If the failed server was originally the network server for the system and the down local disable command was used to force switchover, refer to *Installation/Upgrade Procedure MeetingPlace Shadow Network Server* (LPN 0520-0016-01) if switching back is desired.
6. Enter **logout**. The system displays logout.
7. Disconnect the laptop.

Replacing LAN Card

LAN card replacement procedures are divided into:

- Preparation
- Removal
- Installation
- Configuration and testing

Preparing to Replace LAN Card

1. Obtain the system serial number, customer name, and modem access number from the site contact or Customer Support Center.
2. Verify that the new LAN card was not damaged during transport.
3. Verify that your toolkit contains the tools required to perform this procedure.

4. Access the CLI by following the procedures in the Connecting Your Laptop and Setting Up Your Laptop sections starting on page 5-2. The login prompt appears.
5. Login as a technician. The tech\$ prompt appears.
6. Run the Backing Up the Database procedure on page 6-2.
7. Enter **alarm**. A list of alarms appears similar to Figure 10-12.

| REFNO | SEV CODE | COUNT | FIRST | LAST | UNIT |
|---------|---|-------|--------------|--------------|---------------|
| 657525) | MAJ 070073 | 1 | Jan 31 23:07 | Jan 31 23:07 | 0 SW MODULE=2 |
| | Memory parity error | | | | |
| 657507) | MAJ 0b0078 | 1 | Jan 31 21:45 | Jan 31 21:45 | 0 T1 NETWORK |
| | ID=0 PORT=0 | | | | |
| | Red Alarm detected on this T1 span ([14], card 0, [-1], span 0) | | | | |
| | (END) | | | | |

Figure 10-12. Alarm Display

8. If any errors are listed, note the number of the last alarm on the screen. You will need this for the Customer Support Center later on.
9. Use the **clearalarm all** command to clear the alarm table.
10. Run the Powering Down the System procedure on page 6-4.



Make sure that all power to the MeetingPlace cabinet is off before removing or replacing adapter cards. Failure to do so may damage the system or the component. When installing adapter cards, wear an ESD wrist strap and attach the other end to the chassis. Failure to be properly grounded may result in damage to the device. This damage cannot be readily detected.

Removing LAN Card

1. From the rear of the MeetingPlace cabinet, detach the LAN cable.
2. If the server is rackmounted:
 - a. Check the rear cabling to verify that the server can slide completely forward.
 - b. Slide the server completely forward.
3. If the server is a tower, place it in a horizontal position.
4. Remove the top cover of the server.
5. Put on an ESD wrist strap.
6. Unscrew the old LAN card's backplate retaining screw.

7. Remove the card. For PCI card locations and outlines see Appendix D, page D-1. For EISA card locations and outlines see Appendix E, page E-1.

Installing LAN Card

To install a LAN card into a server:

1. Place the failed card next to the new replacement card.



Card DIP switches are set at the factory for the server configuration into which they are installed.

2. Verify that the settings on the new card match those on the old card.
3. Place the old card into an antistatic bag.
4. Place the new LAN card into the slot from the failed card was removed.
5. Securely seat the new card.
6. Screw in the back plate retaining screw.
7. Replace the top cover.
8. For rackmounted configurations, slide the server into the rack until it locks into place.
9. For tower configurations, return it to its vertical position.
10. Reconnect the LAN cable to the rear of the server.

Configuring and Testing LAN Card

The LAN card for EISA systems requires extensive configuration using the `ecard` command, but the LAN card for the PCI system only requires new licenses.

1. Contact the Customer Support Center for the new option key license. There are 2 ways to load these licenses onto the system.
 - The Customer Support Center downloads this file. The file contains network information needed for proper configuration.
 - The Customer Support Center sends the licenses on a floppy disk to the site. The onsite Field Engineer inserts the floppy disk and types **update** at the cli.
2. Clear the previous alarms with the **clearalarm all** command.

3. When the Customer Support Center is done, perform a system restart by entering **restart enable**. After a confirmation request the display scrolls through initialization and loading notices. When restart is complete the last line reads The MeetingPlace software is UP.

For CLI command information refer to Appendix A - CLI Reference on page A-1.

4. Enter **alarm** and check for any fault conditions. If there are any alarms, contact the Customer Support Center. If there are no errors, the card was installed successfully.
5. Check LAN connectivity by logging on to MeetingPlace from a workstation connected to the LAN.



The combination of LAN connectivity and the absence of alarms on the alarm table verify that installation was successful.

6. Enter **exit**. Logout appears.
7. Remove the RS-232 cable from the front service port, and replace the front panel.

Replacing Circuit Card

This section explains how to replace faulty circuit cards, other than LAN cards, install, and test new ones. Circuit card replacement is divided into:

- Preparation
- Removal
- Installation of the replacement card
- Testing

Preparing to Replace Circuit Card

Before removing a faulty circuit card:

1. Verify that the replacement card was not damaged during transport.
2. Verify that your toolkit contains the tools required to perform this procedure.

3. Access the CLI, by following the procedures in the Connecting Your Laptop and Setting Up Your Laptop sections starting on page 5-2. The login prompt appears.
4. Login as a technician. The tech\$ prompt appears.
5. Run the Backing Up the Database procedure on page 6-2.
6. Enter **alarm**. A list of alarms appears similar to Figure 10-12.
7. If any errors are listed, note the number of the last alarm on the screen. You will need this for the Customer Support Center later on.
8. Use the **clearalarm all** command to clear the alarm table.
9. Run the Powering Down the System procedure on page 6-4.

Removing Circuit Card

To remove a faulty circuit card:

1. Remove AC power by throwing the power switch on the front of the server to the Off. "0" position.
2. If the server is rackmounted:
 - a. Check the rear cabling to verify that the server can slide completely forward.
 - b. Slide the server completely forward.
3. If the server is a tower, place it in a horizontal position.
4. Remove the top cover of the server.
5. Put on an ESD wrist strap.
6. Locate the card. For PCI card locations and outlines see Appendix D, page D-1. For EISA card locations and outlines see Appendix E, page E-1.
7. From the rear of the MeetingPlace cabinet, detach any cables connected to the failed card.
8. Disconnect any interior cables connected to the failed card.
9. Unscrew the retaining screw.
10. Place the failed card next to the new replacement card.
11. Proceed to Installing Circuit Card procedure below.

Installing Circuit Card

After removing the faulty card:

1. Verify that the settings on the new card match those on the old card.



Card DIP switches are set at the factory for the server configuration into which they are installed.

2. Place the old card into an antistatic bag.
3. Place the new card into the slot from the failed card was removed.
4. Securely seat the new card.
5. Install the retaining screw.
6. Attach any interior cables.
7. Replace the top cover.
8. Attach any exterior cables that went to the original card.
9. For rackmounted configurations, slide the server into the rack until it locks into place.
10. For tower configurations, return it to its vertical position.

Testing Circuit Card

To test the newly installed card:

1. Run the Powering Up the System procedure on page 6-5.
2. Enter **alarm**. A list of alarms appears similar to Figure 10-12.



The absence of alarms confirms a successful installation.

3. Enter **exit**. Logout appears.
4. Remove the RS-232 cable from the front service port, and replace the front panel.

Replacing Fan Assembly

This section explains how to replace faulty fan assembly. Fan assembly replacement is divided into:

- Preparation
- Removal
- Installation of the replacement card
- Testing

Preparing to Replace Fan Assembly

To prepare for fan assembly replacement:

1. Verify that the replacement fan assembly was not damaged during transport.
2. Verify that your toolkit contains the tools required to perform this procedure.
3. Access the CLI, by following the procedures in the Connecting Your Laptop and Setting Up Your Laptop sections starting on page 5-2. The login prompt appears.
4. Login as a technician. The tech\$ prompt appears.
5. Run the Backing Up the Database procedure on page 6-2.

Enter **alarm**. A list of alarms appears similar to Figure 10-12.

6. If any errors are listed, note the number of the last alarm on the screen. You will need this for the Customer Support Center later on.
7. Use the **clearalarm all** command to clear the alarm table.
8. Run the Powering Down the System procedure on page 6-4.

Removing Fan Assembly

To remove a faulty fan assembly:

1. Remove AC power by throwing the power switch on the front of the server to the Off. “0” position.
2. If the server is rackmounted:

- a. Check the rear cabling to verify that the server can slide completely forward.
 - b. Slide the server completely forward.
3. If the server is a tower, place it in a horizontal position.
4. Put on an ESD wrist strap.
5. Using a straight-blade screwdriver, turn the silver latch in the middle of the grill on the front panel one-quarter turn clockwise.
6. Holding the lower right corner of the panel with your right hand, swing the panel open with your left hand and lift it off the hinges as in Figure 10-13.
7. Put the front panel aside in a safe place. Do not place the front panel face-down. Doing so could scratch its surface.

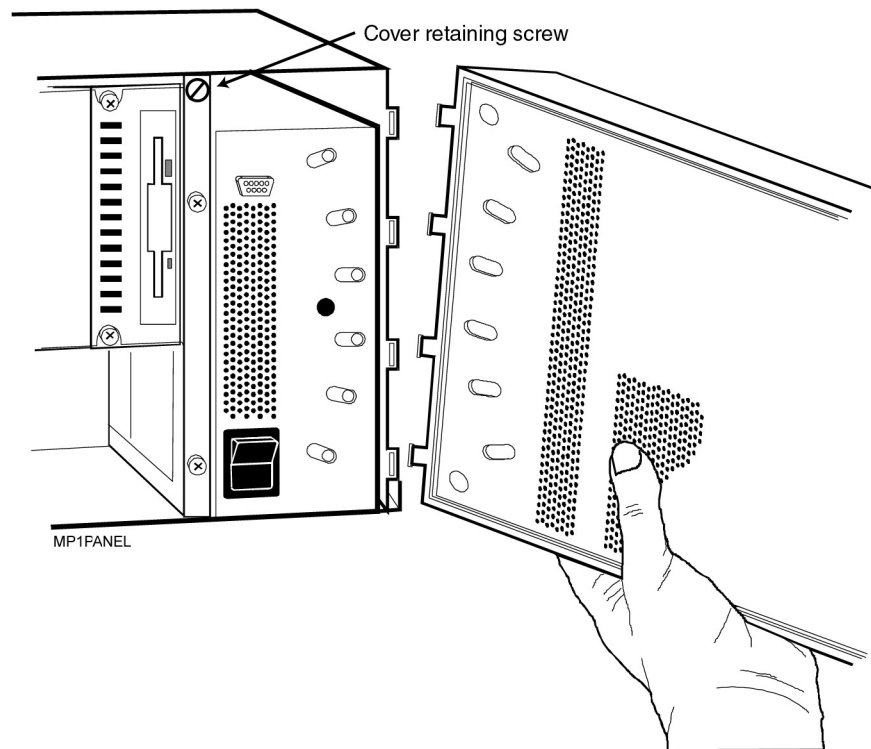


Figure 10-13. MeetingPlace Front Panel Removal

8. Loosen the three captive screws on the fan assembly front plate. See Figure 10-14.
9. Slide out the fan assembly. The captive power connector disconnects when the fan assembly is removed.

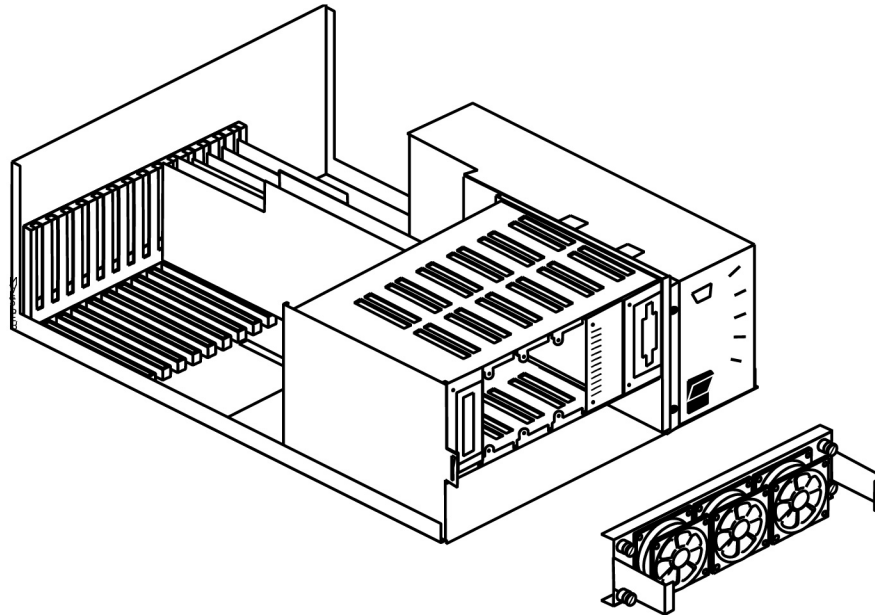


Figure 10-14. Fan Assembly Replacement



Verify that all power to the MeetingPlace cabinet is off before removing or replacing components. Failure to do so may damage the system or the component.

Installing and Testing Fan Assembly

After removing the faulty fan assembly:

1. Slide in the new fan assembly.
2. Fasten the three captive screws on the fan assembly front plate.
3. Run the Powering Up the System procedure on page 6-5.
4. If all three fans spin, installation is correct. If they do not spin, repeat the installation procedure.

11 Troubleshooting

This chapter contains the following troubleshooting topics:

- General
- System Does Not Answer
- Ring-No-Answer or Error Tone
- Cannot Outdial
- LAN Connectivity
- MeetingTime communication

General

If the above list of troubleshooting topics do not apply to the problem follow these steps:

1. Make sure all cards are seated properly.
2. Check all cables and connections.
3. Verify card configuration with `acard`, `dcard`, `e1card`, `span`, `e1span` command.
4. Verify port configuration with `port` command.
5. Check the error log with the `errorlog` command.

System Does Not Answer

Troubleshooting this problem differs for:

- Analog systems
- Digital systems

Analog System

For analog systems that do not answer:

1. Check lines with a test set or standard analog telephone.
2. Verify cabling of every other pair on 66-block.
3. Verify PBX is configured for loop start signaling, not ground start signaling.
4. Use the atistat command (MeetingPlace 3.3.0 or later) to verify calls are being received by MeetingPlace.

Digital System

For digital systems that do not answer:

1. Verify that the span is up using the spanstat command. If T-1 the trunks show synchronization:
 - a. Use spanstat -ab to verify that calls are being presented to system. The ab bits change state when a caller dials into the system.
 - b. The PBX routing may not be setup correctly or trunks may be in lockout state
2. Look for errors on the span using the spanstat -s command.
3. Verify correct cabling (frequently reversed):

Pin 1 - MP Receive (tip), Pin 2 - MP Receive (ring)

Pin 4 - MP Send (tip), Pin 5 - MP Send (ring)
4. Verify the configuration with the span command.
5. Check the framing and coding, ESF vs. D4, B8ZS vs AMI.

Cannot Outdial

1. Verify that the port/port group is configured for outdial using the port command
2. Verify that the trunks on the PBX are configured to allow outdial
3. Schedule a meeting and use the #3 feature to hear what if there is an error tone from the PBX

LAN Connectivity

If users cannot connect to the system from MeetingTime

1. Use the ping command to determine if the network can access the server
2. Use the ping command to ping a known good IP address on the network
3. Verify with the Network Administrator that MeetingPlace has been set up in the local host file or is set up on the Domain Name Server (DNS).
4. Try connecting with IP address rather than hostname

If the above steps did not uncover the problem:

1. Check network cabling
2. If possible, use a PC to check LAN connectivity
3. Verify the network configuration with the net command
4. Verify the IP address, subnet mask, and default gateway values

A CLI Reference

This section contains information on using the CLI interface.

Online Help

Once logged into MeetingPlace, the information in this appendix is available by entering **help** followed by the command name. The command description is presented one screen at a time. To see the next line, type 2 and press Enter (larger numbers cause more lines to appear). To see the next screen, press the space bar. If the amount of text displayed has a problem, use the resize command. At the end of the file, END appears. To return to the tech\$ prompt, press Q.

Upon entering the CLI command **help**, the contents of Table A-1 appear containing a list of all commands and a short description.

Table A-1. Short Descriptions of CLI Commands

| Command | Short Description |
|------------------------|---|
| acard | View or modify an analog line card record. (SCS/NS) |
| activity | port activity. (CS) |
| alarm | List the alarm table. |
| alarmtest | Generate a test alarm condition. |
| atistat | View the current status of ATI cards. (CS) |
| backup | Back up the database to tape. (SCS/NS) |
| clear | Clear the screen. |
| clearalarm <ref #> all | Clear the indicated alarm or all alarms. (SCS/NS) |
| cptrace | List the call processing trace log. |
| date [<new date>] | Show or set the date & time. |
| dbsize | Show the number of database records. (SCS/NS) |
| dcard | View or modify a T1 line card record. (SCS/NS) |
| diskcopy | Copy drive #4 from specified disk (sys or voice). |
| diskoptions | View, install or remove a hard drive. |
| down | Shut down MeetingPlace; leave the CLI active. |
| download | Initiate a software update from network or modem. |
| elcard | View or modify an E1 line card record. (SCS/NS) |
| elspan | View or modify an E1 span record. (SCS/NS) |

| Command | Short Description |
|----------------------|--|
| ecard | Configure the Ethernet adapter. (EISA) |
| errorlog | List the exception log. |
| exc <exception code> | Print information about an exception code. |
| exit | Log out from the system. |
| genericboot | Set a system disk to boot on either EISA or PCI. |
| getether | Show the server's Ethernet address. |
| halt | Shut down and halt MeetingPlace. |
| help [command] | Print help information. |
| license | Show copyright and license information. |
| net | View or modify the network configuration. (SCS/NS) |
| newdisk | Set up a drive as a new voice disk. |
| ntpstatus | Status of Network Time Protocol |
| passwd | Change the technician password. |
| ping <IP address> | Check connectivity with specified system. |
| port | Administer telephony port records. (SCS/NS) |
| recover | Fix corrupted database structures. (SCS/NS) |
| release | Show the software release number. |
| resize | Reset the terminal settings to your screen size. |
| restart | Shut down and reboot MeetingPlace. |
| restore | Restore the database from tape. (SCS/NS) |
| rlogin <server name> | Log into another server. (NS) |
| savelicense | Save the software license keys to a floppy. (SCS/NS) |
| setsn [<serial #>] | View or set the system serial number. (SCS/NS) |
| setup | Set the basic server configuration. |
| span | View or modify a T1 span record. (SCS/NS) |
| spanstat | View the current status of T1 spans. (CS) |
| swcheck | Verify the software file checksums. |
| swstatus | Show software status. |
| sysdatacopy | Copy user data from drive #4 onto system disk. (CS) |
| timeadjust <secs> | Adjust system by number of seconds. (SCS/NS) |
| timezone | Set the system default timezone. |
| tset | Initialize the software settings for your terminal. |
| update | Initiate a software update from floppy. |
| updatedbsize | Pre-allocate space for the database. (SCS/NS) |
| wswwho | List of workstation logins. (SCS/NS) |

The following aberrations are used in the online help system:

- CS – Conference server, standalone or networked
- SCS – Standalone conference server
- NS – Network server
- EISA – EISA-bus conference server

Command Description

ACARD

ACARD

NAME

acard - view or modify an Analog Trunk Interface record

SYNOPSIS

acard

DESCRIPTION

The acard command is used to configure an Analog Trunk Interface (ATI) card in the database. This determines whether the ATI card should be active, how many trunks are attached to the card, and the correspondence between trunk numbers on the card and port numbers in the system. On entry of the command, the technician is presented with a menu:

- 1) View an ATI card record(s). The user is prompted to select a specific card or all cards. The system prints whether the card is active, the number of trunks, and the port number for each trunk.
- 2) Modify ATI card record. The user is prompted to select a specific card. The user is then prompted for whether the card should be activated, how many trunks are attached, and port number for each trunk.
- 3) Select a voice processing unit. The user is prompted to enter the current voice processing unit. The ATI card records are specific to that unit.
- x) Exit command.

NOTES

This command runs only on a standalone conference server or a network server. It will not run on a networked conference server.

Trunks are numbered from 1 to 12 on an ATI card. On each voice processor unit, ports are numbered from 0 to 119 (or one less than the licensed number of access ports).

The individual port records are configured through the port command or through the MeetingTime configure tab. In MeetingTime, note that the port record references the card record for that port. It is important that the card and port records be consistent within the database, cross-referencing accurately.

ACARD

ACARD

Changes made by acard take effect after the next system restart.

SEE ALSO

port, dcard, span, restart

ACTIVITY

ACTIVITY

NAME

activity - show a summary of port activity.

SYNOPSIS

activity

DESCRIPTION

The activity command shows the current status of each port and active conference on the system. It can also be used to generate calls for testing trunk interfaces. On entry, the activity command prints a menu:

- 1) Quick Status of all Ports. This lists all the ports in summary form, with a two character "application" abbreviated code for each. A "--" code means the port is not in use. The other codes can be interpreted by using the verbose status.
- 2) Verbose Status of Port Range. This prompts for a range of port numbers and prints one line for each, showing the session number (which has internal significance only), the port number, the application running on that port ("IDLE" if not in use), the name of the user (if known), and the conference number if the caller is in a meeting. The conference number can be used as input to the cptrace command (with the -C option) if trace information is desired.
- 3) Display complete Port Information. This prompts for a port number and dumps out a bunch of information about the status of that port. This intended is for engineering use only.
- 4) Make Test Call. This function allows a technician to test a port or range of ports by placing outgoing calls. You will be prompted for a phone number, which should normally be a phone you can answer. You will then be asked if you want to specify a particular port or range of ports. For questions ending with "(t -- f)" enter "t" for yes and "f" for no. The system will place a call on the indicated ports. If successful, the phone will ring and you will be prompted to enter "1". The system then prints out what it sees.
- 5) Show All Confs. This dumps out a lot of information about the active conferences in the system.
- 0) Quit

ACTIVITY

ACTIVITY

NOTES

This command runs on a conference server. It can also run on a network server with the syntax "activity <hostname>". However, when run on a network server the functionality is restricted; only option "0" is expected to work properly.

The acronym "VUI" stands for "Voice User Interface." This refers to the software module that manages the voice interface at a high level. The activity command prints out some of the internal tables kept by the VUI module.

When the activity command is executed, it first prints out the system configuration, indicating how many "sessions" and "conferences" are configured. The session count refers to the number of access ports. The conference count is always 120.

The activity command deals with ports rather than trunks. To understand the correspondence between trunks and ports you need to use the acard, dcard, and span commands.

SEE ALSO

acard, dcard, cptrace, spanstat

ALARM

ALARM

NAME

alarm - list the contents of the system alarm table.

SYNOPSIS

Alarm

DESCRIPTION

The alarm command lists the contents of the system alarm table on the screen. Each entry gets two lines. The second line is a (sometimes cryptic) text description. The first has several columns:

REFNO

A reference number which is used when clearing the alarm. See the clearalarm command.

SEV

The severity of the alarm. "MIN" is minor and "MAJ" is major.

CODE

The exception code. When reporting an alarm, be sure to include this code.

COUNT

A count of occurrences of this condition since the alarm table was last cleared.

FIRST

The time and date of the first occurrence since the alarm table was last cleared.

LAST

The time and date of the most recent occurrence.

Following the "LAST" field, there is either a "SW MODULE=number" field for software faults, or "DEV=number UNIT=number PORT=number" for hardware faults.

SEE ALSO

clearalarm, errorlog, swstatus

ALARMTEST

ALARMTEST

NAME

alarmtest - generate a test alarm condition

SYNOPSIS

alarmtest

DESCRIPTION

The alarmtest command generates a false minor alarm for the purpose of testing the alarm table, lights and/or alarm outdial.

NOTES

When testing the alarm outdial, be aware that the system will not generate an outdial until at least 30 minutes has passed since the previous alarm outdial. This is true even if the alarm table is cleared between alarms.

SEE ALSO

alarm, clearalarm

BACKUP

BACKUP

NAME

backup - back up the MeetingPlace database to tape

SYNOPSIS

backup

DESCRIPTION

The backup command copies the contents of the system database to DAT tape. This should be done on a regular basis and prior to any maintenance procedures.

NOTES

This command copies only the database files on the system disk. It does not copy any voice recordings, including recorded user names. Neither does it copy any of the system software files. If it is important to back up any of these files, please contact the Latitude Customer Service Center.

The system is not required to be down to back up the database. However, when a backup is performed while the system is active, there is potential for generating some inconsistencies in the backup copy. This will result in small losses of customer data when the database is restored. Shutting down the system prior to backing up the database will guarantee a greater level of consistency.

To save time and insure greater consistency, the backup copies only the base data files to tape, not the indices.

Thus, the restore will need to reconstruct the index files, which adds significantly to the time required.

The time required to backup a conference server database (2GB system disk) using a Sony DAT drive is about 30 minutes (about an hour for an Exabyte drive). For a network server it takes about two hours.

This command runs on a standalone conference server or a network server. It is meaningless on a networked conference server.

SEE ALSO

restore

CLEAR

CLEAR

NAME

clear - clear the screen

SYNOPSIS

clear

DESCRIPTION

The clear command clears the screen of your terminal.

SEE ALSO

resize

CLEARALARM

CLEARALARM

NAME

clearalarm - clear the contents of the alarm table

SYNOPSIS

clearalarm <reference number>

clearalarm all

DESCRIPTION

This command clears the alarm table. The reference number is listed by the alarm command. The "all" option clears the entire table.

SEE ALSO

alarm

CPTRACE

CPTRACE

NAME

cptrace - list the call processing trace

SYNOPSIS

cptrace [options]

DESCRIPTION

The cptrace command lists selected portions of the call processing trace log. Generally it is used to find out what was going on when some anomalous condition occurred. Information in the log includes every input (incoming calls, DTMF tones, call progress tones, disconnect indications, etc) and every high-level action taken for each voice call into the system.

By default, cptrace lists events associated with the voice user interface module, which is concerned with ordinary call and voice processing events. However, if the -C option flag is specified, the cptrace command will list events associated with the conference scheduler module, which is concerned with scheduling plus events associated with a conference.

For each event listed, the output shows the date and time, accurate to 10 milliseconds, plus the port or conference number (if assigned), the class of event, and some event-specific tag showing what happened. Event classes include:

| | |
|----------|---|
| Action | An action taken by the system. The tag is the name of the action. |
| Applicat | The caller has entered a new application area. The tag is the name of the application. |
| Input | Some input (tone or other event) has been detected. |
| Timeout | There has been no activity for some period of time. After a few timeouts, the system will disconnect the call. |
| Outdial | The system is dialing out on a port. The tag indicates the numeric user ID associated with the call, a return code indicating success or failure, plus the phone numbers dialed before and after being processed through the digit translation table. |

CPTRACE

CPTRACE

The following apply if the "-C" option is specified:

- Blast OD An automated outdial, where the system dials out to bring participants into the system.
- Delete Shows deletion of the specified conference from the active conference list.
- Purged The conference record has been purged from the system.
- ReSched A meeting has been rescheduled.
- Schedule Scheduling of a new meeting.

At the end of each screen page, cptrace will pause and display a colon. Press Enter to see one more line or the space bar to see a new page. Type "q" to stop the command.

OPTIONS

- b time Beginning time. Restrict output to events occurring after the specified time & date. The time parameter is in the same format as accepted by the date command.
- c conf Conference number. List only events associated with the specified conference number. This is applicable only when used with the -C option.
- C Conference mode. List information from the conference scheduler log rather than the voice user interface log. This is the default when run on a network server.
- e time Ending time. Restrict output to events occurring before the specified time & date. The time parameter is in the same format as accepted by the date command.
- f Forward List events in forward time order.
- h Help List the syntax for the command.
- p port Filter on port. List only the events associated with the specified port number (0-119).
- r Reverse List the events in reverse time order. This is the default unless the -f, -t, or -b options are used.

CPTRACE

CPTRACE

- t Tail List the most recent events in the log and continue listing new events as they are entered into the log. Use <CTRL><C> to stop the command.
- v Verbose List more information than the default. This is primarily of use in engineering.
- V Version List the link date and software release number from when the command was built.

NOTES

Port numbers are visible using the activity command or through the in-session screens on MeetingTime. Conference numbers are unique identifiers, not the same as the meeting identifiers shown in MeetingTime. They are visible during the meeting by use of the activity command. The call processing log takes up 5MB on the system disk. This is enough space for approximately a million events, or approximately 10,000 calls.

Events are flushed to the log files in batches. On an idle system it is possible for the last log entries to remain in memory, and not available for display, indefinitely. To force the last entries to disk, place a new call into the system.

SEE ALSO

errorlog, date, activity

DATE

DATE

NAME

date - list or set the current date and time.

SYNOPSIS

date [-u] [<new date>]

DESCRIPTION

Entered with no new date, date displays the current date, time and abbreviated time zone. With a new date as a parameter, the date command sets the date and time in the system.

A new date is a numeric value in one of the following formats:

yyyymmddhhmm Year (4 digits), month, day, hour minute.

yymmddhhmm Year (last 2 digits), month, day, hour, minute.

mmddhhmmMonth, day, hour, minute.

ddhhmm Day, hour, minute.

hhmmHour, minute.

Each month, day, hour or minute value is two digits, with a zero prefix for values less than 10. For the year either all four digits or the last two digits are used. Year 99 is the same as 1999; 00 is the same as 2000. The hour is expected to be in 24-hour (military, 00..23) format.

To the date & time argument, the seconds may be appended with a period as ".ss".

OPTIONS

Recognized options are:

-u Use GMT instead of the local time.

EXAMPLES

date 0102271501.36

This would set the date to February 27, 2001 at 3:01:36 PM.

date 9602270001

DATE

DATE

This would set the date to February 27, 1996 at 12:01 AM.

date 1501

This would set the time to 3:01 PM today.

RESTRICTIONS

The system must be shut down prior to setting the date or time. To shut the system down, use the down command. When finished, restart the system with the restart command.

NOTE

It is vital that the time zone of the system be set correctly prior to using the date command to set the time. Prior to setting the time, use the date command to list the current time and time zone. If the time zone is not correct, use the timezone command before setting the time. Warning: Setting the time incorrectly will result in undesired system behavior. All meeting scheduling will be off. If the time is set ahead of the current time, meetings scheduled to occur in the mean time will be lost. The date and time is set in the factory before the system is shipped. Normally, the time will not drift more than a few minutes a month, so any correction should be only a few minutes. If the time is off by more than 10 minutes, please consult with the Customer Support Center prior to adjusting the time.

SEE ALSO

down, restart, timezone

DCARD

DCARD

NAME

dcard - view or modify a Digital Trunk Interface record

SYNOPSIS

dcard

DESCRIPTION

The dcard command is used to configure a Digital Trunk Interface (DTI) card in the database. This command allows a technician to view or set whether the card is supposed to be active, how many T1 spans are attached, and the record number of each span.

On entry of the command, the technician is presented with a menu:

- 1) View DTI card records(s). The user is prompted to select a specific card or all cards. The system then prints whether the card is active, the number of spans, and the record number of each span.
- 2) Modify DTI card record. The user is prompted to select a specific card. The user is then prompted for whether the card should be activated, how many spans are attached, and record number for each span.
- 3) Select a voice processing unit. The user is prompted to enter the current voice processing unit. The DTI card records are specific to that unit.
- x) Exit command.

RESTRICTIONS

This command runs only on a standalone conference server or network server. It will not run on a networked conference server.

NOTES

For each voice processor unit, DTI cards are numbered 0..2. Spans are numbered 0..4. Each DTI can handle two spans, labeled A and B.

The assignment of ports to trunks within a span is performed using the span command. The individual port records are configured through the port command or through the MeetingTime configure tab. In MeetingTime, note that the port record references the DTI card and span records for that port. It is important that the card, span, and port records be consistent within the database, cross-referencing accurately.

Changes made by dcard take effect only after the next system restart.

DCARD

DCARD

SEE ALSO

port, acard, span, restart

DISKCOPY

DISKCOPY

NAME

diskcopy - copy the contents of one disk to another

SYNOPSIS

diskcopy <disk type> [<source disk>]

Where:

<disk type> = sys, nsdb, or voice

| | |
|-------|---|
| sys | Represents LynxOS and MeetingPlace server modules on the Network Server or on a Conference Server (standalone or networked) |
| nsdb | Represents database files containing meetings and profile information |
| voice | Represents meeting recordings and attached files |

<source disk> = drive bay number of the disk to be copied (1, 2 or 3). If you leave this off, the command will prompt you for it.

DESCRIPTION

The diskcopy command copies the entire contents of a specified system or voice drive to a new disk in drive bay 4. It is intended for use when replacing or upgrading a drive. The basic procedure is as follows:

1. Enter halt disable command. When you see the “**** Lynx OS is down ****” message, power off MeetingPlace server.
2. Place the new hard drive into slot 4, (the left-most hard drive slot). All contents on this drive will be erased.
3. Power up the MeetingPlace server. The halt disable command you issued in step 1 prevents server modules from loading. Wait for the power-up sequence to complete.
4. Refer to Table A-2, Table A-3, and Table A-4 . Based on the type of MeetingPlace server and the hard drive number you want to replace, determine the appropriate **diskcopy** command to use. Enter the appropriate **diskcopy** command. For example, type **diskcopy sys 1** to begin copying files from slot 1 to slot 4.

DISKCOPY

DISKCOPY

Table A-2. Diskcopy Commands For a Network Server

| | Slot 3 | Slot 2 | Slot 1 |
|-------------------------|--------|-----------------|----------------|
| File Type | n/a | database | system |
| diskcopy command | n/a | diskcopy nsdb 2 | diskcopy sys 1 |

Table A-3. Diskcopy Commands for a Conference Server

| | Slot 3 | Slot 2 | Slot 1 |
|-------------------------|------------------|------------------|-----------------|
| File Type | recordings | recordings | system+database |
| diskcopy command | diskcopy voice 3 | diskcopy voice 2 | diskcopy sys 1 |

Table A-4. Diskcopy Commands for a Standalone Server

| | Slot 3 | Slot 2 | Slot 1 |
|-------------------------|------------------|------------------|-----------------|
| File Type | recordings | recordings | system+database |
| diskcopy command | diskcopy voice 3 | diskcopy voice 2 | diskcopy sys 1 |

5. When the diskcopy operation is completed, enter halt disable command.
6. When you see the “*** Lynx OS is down ***”, switch the system power off.
7. Remove the hard drive that you want to replace (in this example, from slot 1) and move the new hard drive from slot 4 to slot 1.
8. Power up the system.

DISKCOPY

DISKCOPY

9. The system comes up to a state with LynxOS loaded and MeetingPlace modules unloaded. To load the MeetingPlace modules, enter `restart enable` command. The server restarts.
10. The system comes up to a state with both LynxOS and MeetingPlace modules loaded.
11. Dial into the system to verify that the disk copied correctly.
12. Type **swcheck**. If any errors are reported contact Customer Support.
13. Look for errors in the error log. If there are errors in the error log, contact Customer Support.

For the special case of replacing the drive in bay 4, move the old drive into bay 2 or 3 prior to this procedure. Be sure not to bring the system on line in this condition.

When copying from a system disk with a small database to a "large" disk, **diskcopy** will automatically expand the database to the large size.

When copying to a larger disk, any extra space is automatically assigned to voice storage.



Any pre-existing contents of the new drive will be lost. This command will set flags which cause `recover` to be executed on the system automatically when the new disk is installed.

RESTRICTIONS

The system must be down to perform this procedure. Use the `down` command to shut down the system. The new disk must be equal in size to the old disk or larger. You cannot copy to a smaller disk. The new disk must already have a valid Latitude key.

SEE ALSO

`newdisk`, `down`, `halt`, `restart`

DISKOPTIONS

NAME

diskoptions - configure a drive in the database.

SYNOPSIS

diskoptions

DESCRIPTION

The diskoptions command is used to configure the database and mount table for the drives installed in the system. When a new drive is added to the system, it is necessary to run diskoptions to make database and mount table entries; otherwise, the disk will not be recognized by the system. Likewise, if a disk is removed, diskoptions should be used to remove the database and mount table entries. This command can also be used to examine the disk drive to determine the manufacturer and model number. On entry, the technician is presented with a menu:

- 1) View disk status. The command will prompt for a drive number (1..4). It then displays information about the drive, including the SCSI id, the vendor (manufacturer), vendor's product name, firmware revision level, serial number, and capacity. It also checks to see if the drive has a proper Latitude key and whether it is configured in the database.
- 2) Install a new disk. The command will prompt for a drive number (1..4). It checks to make sure the disk has a valid Latitude key and is not already installed. It then adds the drive to the database and mount table. This takes effect when the system is restarted.
- 3) Remove a disk. The command will prompt for a drive number (1..4). It then removes the disk from the database and mount table. This takes effect when the system is restarted.

RESTRICTIONS

The install procedure will not operate if the drive does not have a proper Latitude key.

SEE ALSO

newdisk, restart

DISKOPTIONS

DOWN

DOWN

NAME

down - shut down MeetingPlace for maintenance

SYNOPSIS

down [options]

DESCRIPTION

The down command performs an orderly shut down of the MeetingPlace application, logging everyone off of the system except technicians using the CLI interface. This is necessary prior to performing some maintenance operations. To return the system to the normal state, use the restart command.

OPTIONS

courtesy

Allow users up to 5 minutes to quit before the system shuts down.

disable

Prevent the system from coming back on line after a restart. This allows a technician to reboot the system multiple times during a maintenance procedure. Note: to bring the system back on line, you must use the restart or halt command with the enable option.

SEE ALSO

halt, restart

DOWNLOAD

DOWNLOAD

NAME

download - download an update file

SYNOPSIS

download [-h <host>] [<file>]

DESCRIPTION

The download command is used to load and install a software update or patch from a network host, which is typically a PC connected through the service modem. The optional <host> argument is the name or IP address of a network host. The default is "pcslip-modem" (198.207.208.242), which is the PC connected through the modem.

The optional <file> argument is the name of a file which is to be downloaded. The default name is "update.tz". This command uses the FTP protocol for the download. The download host must have an FTP server running, with an account named "tech" and a password of "Latitude". For security, this account should permit access only to one directory on the host system. The file to be downloaded is expected to be in the initial or default directory for this FTP account.

The downloaded file is expected to be in compressed tar format and contain an executable file called "UPDATE". The download command will unpack the archive and run the UPDATE command contained within.

In concept, the download command is very similar to the update command. In fact, the same updates can be loaded using either mechanism with the same result. The one consideration is the image loaded using download is expected to be compressed, using the UNIX compress utility, whereas the image on a diskette used by update is expected not to be compressed.

SEE ALSO

update

E1CARD

E1CARD

NAME

e1card - view or modify a E1 Trunk Interface record

SYNOPSIS

e1card

DESCRIPTION

The e1card command is used to configure an E1 Trunk Inter-face (ETI) card in the database. This command allows a technician to view or set whether the card is supposed to be active, the type of signaling used on the card and the configuration specifics, the number of E1 spans attached to the card, and which E1 span attaches to each line on the card.

On entry of the command, the technician is presented with a menu:

- 1) View ETI card records(s). The user is prompted to select a specific card or all cards. The system then prints whether the card is active, the number of E1 spans attached to the card, the signaling type, the configuration specifics for that signaling type, and the record number of each E1 span connected to a line on the card.
 - 2) Modify ETI card record. The user is prompted to select a specific card. The user is then prompted for whether the card should be activated, how many E1 spans are attached to the card, the signaling type and its corresponding configuration string, and the record number for each E1 span connected to each line on the card.
 - 3) Select a voice processing unit. The user is prompted to enter the current voice processing unit. The ETI card records are specific to that unit.
- x) Exit command.

RESTRICTIONS

This command runs only on a standalone conference server or network server. It will not run on a networked conference server. For each voice processor unit, ETI cards are numbered 0..1. E1 spans are numbered 0..3. Each ETI can handle two spans, labeled A and B.

E1CARD

E1CARD

NOTES

The assignment of ports to trunks within an E1 span is pre-formed using the `e1span` command. The individual port records are configured through the `port` command or through the MeetingTime configure tab. In MeetingTime, note that the port record references the ETI card and E1 span records for that port. It is important that the card, span, and port records be consistent within the database, cross-referencing accurately.

Changes made by `e1card` take effect only after the next system restart.

SEE ALSO

`port`, `e1span`, `restart`, and MeetingPlace Customer Engineering Guide, Chapter 5 and Appendix D, for a discussion of configuring MeetingPlace.

E1SPAN

E1SPAN

NAME

e1span - view or modify an E1 span record

SYNOPSIS

e1span

DESCRIPTION

The e1span command is used to view or modify an E1 span record in the database. This tells the system whether the span should be active, various characteristics of the span, and the mapping between trunks and internal port numbers.

On entry, the e1span command presents a menu:

- 1) View ETI span record(s). The user is prompted to select a specific E1 span or all E1 spans. The system then prints whether the card is active, the characteristics of the span, and the port number for each trunk.
- 2) Modify ETI span record. The user is prompted to select a specific E1 span. The user is then prompted for whether the span should be activated, the characteristics of the span, and the port number assignment for each trunk.
- 3) Select a voice processing unit. The user is prompted to enter the current voice processing unit. The E1 span records are specific to that unit.
- x) Exit command.

The following characteristics are set by the e1span command:

Timing external or internal. This determines whether the E1 span is permitted to supply trunk timing for the system. Specify external if the span is connected to the public network or a trusted system. At least one span should always be designated external.

External sync priority

A number (1..255) or never. This controls the priority (1 is highest, 255 is lowest) of the spans which are set for external timing. The system picks the highest priority operational span to provide the timing. If two spans have the same priority, the lower numbered span wins.

RESTRICTIONS

This command runs only on a standalone conference server or a network server.

E1SPAN

E1SPAN

NOTES

For each voice processor unit, E1 spans are numbered 0..3. Trunks on a span are numbered 1..30. Ports are numbered 0..119 (or the number of licensed access ports minus 1). There are up to two E1 span records for each ETI card. The E1 span record is referenced by both an ETI record (see `e1card`) and each port record (configured from the `port` command or `MeetingTime`). It is important to be sure that these references are consistent. If a port is referenced in a span record, the corresponding port record must reference that span.

If an ETI card is not active, then the two E1 spans will not operate even if they are set active in the span record.

Changes to an E1 span record take effect after the next system restart.

SEE ALSO

`port`, `e1card`, `spanstat`, `restart`, and MeetingPlace Customer Engineering Guide, Chapter 5 and Appendix D, for a discussion of configuring MeetingPlace.

ECARD

ECARD

NAME

ecard - configure the Ethernet adapter card

SYNOPSIS

ecard

DESCRIPTION

The ecard command allows the technician to set the soft configuration in the MeetingPlace Ethernet adapter. In particular, ecard allows the technician to select between the BNC and AUI connectors.

The SMC Ethernet adapter used by MeetingPlace has three connectors: twisted pair, BNC, and AUI. The factory setting activates the twisted pair and BNC connectors. The ecard command allows the technician to turn on the AUI connector instead of the BNC connector.

On entry, the configuration of the adapter is displayed. This information includes the manufacturer's model number, the node or Ethernet address, and a variety of card settings. Of the settings, the only one a technician should modify is the Network Connection field, which controls which connectors are active. To change the network connection field, type "y" in response to the question, "Do you want to change the setup ?" Press Enter in response to each question except for Network Connection. To this question, enter a number 1..3:

1= BNC or 10BaseT. This is the default; the BNC and twisted pair (10BaseT) connectors are active.

2= AUI or 10BaseT. Turn on the AUI and twisted pair connectors.

3= Twisted Pair - No Link Integrity. Only the twisted pair connector is active, with link integrity turned off. This is an unusual setting.

To the question, Save the new setup ? (y) -> answer "y" to change the network connection.

NOTES

You may need to power cycle the system for changes to take effect. Use the halt command to shut the system down prior to cycling the power.

Jumper settings on the card prevent the I/O Base Address, IRQ, and RAM Base Address, settings from being changed in software (you can change the soft settings but they have no effect).

ECARD

ECARD

SEE ALSO

net

ERRORLOG

ERRORLOG

NAME

errorlog - list the system exception log

SYNOPSIS

errorlog [<options>]

DESCRIPTION

The errorlog command lists the contents of the system exception log. By default, entries are listed in reverse chronological order, from the present. The output lists the date and time of the exception (accurate to the nearest second), the exception code, and a text description of the exception. Additional information is provided if the -l option is selected.

At the end of each screen page, cptrace will pause and display a colon. Type <ENTER> to see one more line or <SPACE> to see a new page. Type "q" to stop the command.

OPTIONS

-b time

Beginning time. Restrict output to exceptions occurring after the specified time & date. The time parameter is in the same format as accepted by the date command.

-e time

Ending time. Restrict output to exceptions occurring before the specified time & date. The time parameter is in the same format as accepted by the date command.

-f Forward

List the log in forward time order.

-h Help

Show the syntax of the command.

-l Long form

ERRORLOG

ERRORLOG

List the log in a more verbose manner. The output will switch to a two-line format for each entry, with the text string on the second line and more information on the first line. This information includes the numeric code of the reporting software module, the name of the software source file where the exception was reported, the line number within that source file, and the four supplementary arguments passed to the exception logger. Normally this is of interest only to Latitude factory personnel.

-r Reverse

List the log in reverse time order. This is the default except when the **-f**, **-t**, or **-b** flags are used.

-s sev Severity

Specify the minimum severity level of exceptions to be listed. The severity levels are info, warning, minor, and major. Use info to see everything in the log. At a minimum, you need to specify the first two letters of the severity desired ("in" for "info"). By default, only minor and major exceptions are listed. Normally, "info" and "warning" messages are of interest only to Latitude factory personnel.

-t Tail

List the most recent entries in the log and continue listing new entries as they are entered into the log. Use <CTRL><C> to stop the command.

-V Version

List the link date and software release number from when the command was built.

NOTES

The system exception log has room for 16384 entries, after which it wraps around.

RESTRICTIONS

Only one person at a time can be using the errorlog command. The second user will get an error.

SEE ALSO

alarm, cptrace

EXC

EXC

NAME

exc - show the meaning of an exception code

SYNOPSIS

exc <exception code>

DESCRIPTION

The exc command lists the meaning of an exception code as listed in the errorlog output. Be sure to include the "0x" prefix if you are looking up a hexadecimal number.

EXAMPLE

exc 0x10001

SEE ALSO

errorlog, alarm

EXIT

EXIT

NAME

exit - log out of the system

SYNOPSIS

exit

DESCRIPTION

The exit command logs the user out of the system.

HALT

HALT

NAME

halt - shut down MeetingPlace and halt the processor

SYNOPSIS

halt [options]

DESCRIPTION

The halt command performs an orderly shut down of the MeetingPlace application, logging everyone off the system, then halting the processor. This is necessary prior to powering off the system.

OPTIONS

courtesy

Allow users up to 5 minutes to quit before the system shuts down.

disable

Prevent the system from coming back on line after a restart. This allows a technician to reboot the system multiple times during a maintenance procedure. Note: to bring the system back on line, you must use the restart or halt command with the enable option.

enable

Cancel the effect of a previous use of down or halt with the disable option. This will allow the system to come back on line when power is restored.

NOTES

It is important to allow the system long enough to actually halt before shutting off power. If in doubt, use the down command first, then type halt, then wait 10 seconds before powering off. If you are connected to the console, you should see a signoff message from the operating system ("LynxOS is down" with some asterisks) right before the processor halts.

NOTES

When run on a network server, halt causes the network server and all of the connected conference servers to halt.

HALT

HALT

The watchdog timer is not shut off when the system is halted. Thus, a conference server will automatically restart approximately six minutes after a halt. A network server will restart approximately eight minutes after a halt. You may get a watchdog timeout alarm after the system comes up if the system reboots in this fashion. If you wish to keep the system down, you should power the system off within a few minutes of halting.

SEE ALSO

down, restart

NET

NET

NAME

net - configure the MeetingPlace network interface

SYNOPSIS

net

DESCRIPTION

The net command is used to view or change the network configuration for MeetingPlace. This is the information required to set up and maintain TCP/IP connections between a MeetingPlace server and various other entities on the network.

On entry, net presents a menu giving the option of viewing the current configuration or modifying the configuration. When run on a network server, net will also give the option of selecting the specific MeetingPlace server to configure.

When you select the "modify" option, net presents a menu allowing the technician to modify various attributes of the configuration. These include:

Select a different site for this server

This applies primarily to network configurations, where a conference server may be located at a remote site. This option allows the technician to specify which site record applies to this server. The site record determines the subnet mask, broadcast address, and routing information.

Change the host and site names

This sets the host name for the server, a description for the server, and the name of the site. Note that the host name must start with a letter and cannot contain spaces. Any character string may be used for the description and site name.

Change server IP address and Ethernet address

Set the Internet Protocol and Ethernet addresses for the server.

Change site subnet mask or broadcast addr

The subnet mask determines which part of the IP address is a network address and which part is the host address. The broadcast address is the IP address used for broadcasting packets on the local network. Normally, the default broadcast address offered by net is the correct one, assuming the IP address and subnet mask have been entered correctly.

NET

NET

Change site routing information.

This allows the technician to specify the default gateway and whether or not to run the route daemon. The default gateway is the IP address of a gateway machine on the local network. This is the address where packets with non-local addresses will be sent if no other route is known. Normally this the address of a router. The route daemon allows the system to use Router Information Protocol packets broadcast by various routers on the network. Normally the route daemon is not required.

Change network time protocol servers

This allows the server to synchronize its internal clock with up to three Network Time Protocol (RFC 1305) servers. This should be done if NTP servers are available on the network.

Return to the main menu

At this point the technician is offered the option of saving the information or not. If yes, the network configuration will be updated.

NOTES

This runs only on standalone conference servers and network servers. Most of the configuration set with this command does not take effect until the system is restarted. Exception: on network systems, information about units other than the network server will take effect when those systems are restarted; it is not necessary to restart the network server.

On network systems, it is necessary to set the network parameters for each conference server in the database on the network server. In particular, the IP address and Ethernet addresses must be accurate. For remote servers, it is also necessary to use the setup command to set the host name, IP address, and other information on the remote unit.

Most of this same information can be set using MeetingTime.

SEE ALSO

restart, setup

NEWDISK

NEWDISK

NAME

newdisk - initialize a new disk as a voice disk

SYNOPSIS

newdisk <disk number>

DESCRIPTION

The newdisk command initializes a drive as a MeetingPlace voice drive. The amount of voice recording space is determined by the size of the drive. The disk number is the drive bay number (2..4). Note that you cannot use newdisk on drive #1. If you do not specify the drive number on the command line, newdisk will prompt for it.

Warning: This command will destroy any pre-existing data on the target disk.

NOTES

Use the diskoptions command to configure the new drive into the database and mount tables after using newdisk.

RESTRICTIONS

The system must be down prior to executing this command.

Use the down command to shut down the system.

The newdisk command will refuse to operate on a drive that is already mounted on the system. This prevents accidental loss of data. It may be necessary to use diskoptions to remove the drive from the mount table, then reboot, if the drive is already mounted.

The target disk must have a valid Latitude key or newdisk will refuse to operate on it.

SEE ALSO

diskoptions, down, restart

PASSWD

PASSWD

NAME

passwd - change the technician password

SYNOPSIS

passwd

DESCRIPTION

The passwd command is used to change the password for the tech login account. You will be prompted for the old password, and then twice for the new password for verification.

NOTES

Only the first 8 characters of a password are used.

PING

PING

NAME

ping - test network connectivity

SYNOPSIS

ping [-r] [-v] <host> [<packetsize> [<count>]]

DESCRIPTION

The Internet is a large and complex aggregation of network hardware, connected together by gateways. Tracking a single-point hardware or software failure can often be difficult. The ping command utilizes the ICMP protocol's mandatory ECHO_REQUEST datagram to elicit an ICMP ECHO_RESPONSE from a host or gateway. ECHO_REQUEST datagrams ("pings") have an IP and ICMP header, followed by a struct timeval, and then an arbitrary number of "pad" bytes used to fill out the packet. Default datagram length is 64 bytes, but this may be changed using the command-line option.

The <host> argument is either a host name or IP address.

MeetingPlace has no host name lookup mechanism, so normally an IP address should be used.

OPTIONS

-r

Bypass the normal routing tables and send directly to a host on an attached network. If the host is not on a directly-attached network, an error is returned. This option can be used to ping a local host through an interface that has no route through it (e.g., after the interface was dropped by routed).

-v

Verbose output. ICMP packets other than ECHO_RESPONSE that are received are listed.

PING

PING

NOTES

When using ping for fault isolation, it should first be run on the local host, to verify that the local network interface is up and running. Then, hosts and gateways further and further away should be "pinged". The ping command sends one datagram per second, and prints one line of output for every ECHO_RESPONSE returned. No output is produced if there is no response. If an optional count is given, only that number of requests is sent. Round-trip times and packet loss statistics are computed. When all responses have been received or the program times out (with a count specified), or if the program is terminated with a SIGINT, a brief summary is displayed.

This program is intended for use in network testing, measurement and management. It should be used primarily for manual fault isolation. Because of the load it could impose on the network, it is unwise to use ping during normal operations or from automated scripts.

PORT

PORT

NAME

port - view or modify a Port or Port Group record

SYNOPSIS

port

DESCRIPTION

The port command is used to configure Port and Port Group records in the database. It is very similar to the capability offered through the MeetingTime configure tab. For a port, this determines which group this port belongs to, if any. If the port does not belong to a group, the port itself can be configured whether it should be active, the type of trunk signaling, the number of DID digits, whether there is human assistance, whether it can be flash transferred, and whether it can be outdialed on. For a port group, this determines whether all ports belonging to this group are active, the type of trunk signaling, the type of card, the number of DID digits, whether there is human assistance, whether it can be flash transferred, and whether it can be outdialed on.

On entry of the command, the technician is presented with a menu:

- 1) View port record(s). The user is prompted to select a specific port or all ports. If the port belongs to a group, the system prints which group the port belongs to, and shows the port characteristics as defined by the group record. If the port does not belong to a group, the port characters for that port are shown.
- 2) Modify port record. The user is prompted to select a specific port. If the user specifies that the port belongs to a group, then no additional modification is necessary. All of the port characteristics will be taken from the group. If the user specifies that the port does not belong to a group, then the user is then prompted for all of the port characteristics.
- 3) Copy port records. The user is prompted to select a specific port to copy from and a range of ports to copy to. The user can also choose to copy to a single port. All of the port characteristics will be copied from the source port to all of the destination(s).
- 4) View group record(s). The user is prompted to select a specific port group or all port groups. The characters for each of the selected groups is shown.
- 5) Modify group record. The user is prompted to select a specific port group. The user is then prompted to enter all of the group characteristics.

PORT

PORT

6) Select a voice processing unit. The user is prompted to enter the current voice processing unit. The port records are specific to that unit. The port group records are available to ports on any unit.

x) Exit command.

NOTES

On each voice processor unit, ports are numbered from 0 to 119 (or one less than the licensed number of access ports). Before configuring the ports, each individual port needs to have been assigned to a hardware trunk in either the `acard` or `span` command. A port of one hardware type cannot be assigned to a group of a different hardware type.

The individual port and port group records can also be reconfigured through the MeetingTime configure tab. Note that the port record references the card record for that port. It is important that the card and port records be consistent within the database, cross-referencing accurately.

Changes made by port take effect after the next system restart.

SEE ALSO

`acard`, `dcard`, `span`, `restart`

See MeetingPlace Customer Engineering Guide, for a discussion of configuring MeetingPlace.

RECOVER

RECOVER

NAME

recover - force database and voice file system consistency.

SYNOPSIS

recover

DESCRIPTION

The recover command examines all the linkages and structures of the database and voice file system and forces consistency between all the records. On successful completion, the database should be fully consistent, although some inconsistent data may have been discarded. This command is useful in cases where portions of the database have been corrupted due to power failures or other problems.

Warning: the recover command should only be run on systems with fully functional and trusted hardware. This command can cause severe and irreparable damage to a system that is not operating properly at the hardware level. Do not use this command as a substitute for replacing failing components. Do not run this command on a system that does not have all of its disk drives installed and operating correctly. If in doubt, please consult with the Latitude Customer Service Center.

RESTRICTIONS

This command is meaningful only on a standalone conference server or network server. The time required for this command to run is proportional to the number of records in the database and the amount of voice storage. On a system with a large database and lots of voice storage this may take many hours.

It is a very good idea to run backup before running recover.

MeetingPlace must be down before running recover. Use the down command to shut down MeetingPlace.

SEE ALSO

down, restart, backup

RELEASE

RELEASE

NAME

release - show the MeetingPlace software release number

SYNOPSIS

release [-r] [-l]

DESCRIPTION

The release command prints the MeetingPlace software release number.

OPTIONS

-r

Release number. Print the release number. This is the default if no arguments are specified.

-l

Date. Print the build date (the date when the release command was linked) and the version control tag.

NOTES

Release numbers consist of three integers connected by dots. The first integer is the major release, the second is the minor release, and the third is the patch level.

SEE ALSO

swstatus

RESTART

RESTART

NAME

restart - restart MeetingPlace

SYNOPSIS

restart [options]

DESCRIPTION

The restart command performs an orderly shut down of the MeetingPlace application, logging everyone off the system, then restarting the system. This is necessary to bring back up a system that has been shut down using the down command.

OPTIONS

courtesy

Allow users up to 5 minutes to quit before the system shuts down.

disable

Prevent the system from coming back on line after the restart. This allows a technician to reboot the system multiple times during a maintenance procedure. Note: to bring the system back on line, you must use the restart or halt command with the enable option.

enable

Cancel the effect of a previous use of down, halt, or restart with the disable option. This will allow the system to come back on line when power is restored.

SEE ALSO

down, halt

RESTORE

RESTORE

NAME

restore - restore the MeetingPlace database from tape

SYNOPSIS

The restore is used to copy the contents of a backup tape back onto the system disk. It also makes sure that the restored database is self-consistent. This procedure is appropriate only if the database is missing (as in where the system disk has failed and been replaced) or irreparably corrupted in some manner.

Please consult with the Latitude Customer Support Center before using this command.

NOTES

Because the backup tape contains only database information, with no voice files, linkages between a restored database and the voice file system will have many inconsistencies. Any voice recordings created or modified since the time of the backup will be lost and cannot be recovered.

To assure consistency between the database and voice file systems, restore will execute the recover command automatically. Because recover can be destructive if not all disks are fully accessible, the restore command should not be executed if any disk is not mounted or not working properly.

The recovery portion of this operation takes time proportional to the number of database records and the amount of voice storage in the system. On a system with a large database and lots of voice storage it can take many hours.

RESTRICTIONS

The system must be down prior to executing restore. Use the down command to shut down the system if required.

SEE ALSO

backup, diskcopy, down, recover, restart

SAVELICENSE

SAVELICENSE

NAME

savelicense – Save the software license keys to a floppy.

SYNOPSIS

savelicense

DESCRIPTION

The savelicense command allows the software license keys to be saved to a floppy disk.

NOTES

If the Ethernet card is being replaced and the new license keys are going to be loaded using a floppy disk, insert the floppy and type **update**. This will update the server with the new license keys associated with the new Ethernet card.

SEE ALSO

update

SETSN

SETSN

NAME

setsn - set or display the system serial number

SYNOPSIS

setsn [<serial number>]

DESCRIPTION

The setsn command is used to either view or set the system serial number in the database. With no arguments, setsn displays the system serial number and customer name. With the system serial number as an argument, setsn sets the serial number in the database.

NOTES

Setting the serial number is normally a factory procedure. However, if the original database is lost or corrupted, it may be necessary to set the serial number in the field. The serial number in the database should match the label on the back of the machine. Setting the serial number incorrectly may result in future service difficulties.

This command runs only on a standalone conference server or a network server. It is not available on a networked conference server.

SETUP

SETUP

NAME

setup - set the basic MeetingPlace server configuration

SYNOPSIS

setup

DESCRIPTION

The setup command selects base configuration for a MeetingPlace server. Options are:

Standalone

MeetingPlace conference server not connected to a MeetingPlace network server. This is the default configuration.

Networked, home site

MeetingPlace conference server connected to a network server. The server is on the same LAN segment as the network server.

Networked, remote site

MeetingPlace conference server connected to a network server. The server is not on the same LAN segment as the network server. When this option is selected, setup will also ask for configuration information required for communicating with the network server. This includes the host name, IP address, subnet mask, broadcast address, network server host name, and network server IP address.

Network Server

This is a MeetingPlace network server.

Shadow Network Server

This is a redundant network server operating in a "shadow" mode.

After selecting the configuration, setup will ask for a time zone selection.

SETUP

SETUP

NOTES

WARNING: An incorrect choice on this menu will prevent the server from operating correctly. Restarting a system when it is not configured correctly may result in damage that can only be corrected by reloading the system software off an update tape.

SEE ALSO

net, update

SPAN

SPAN

NAME

span - view or modify a T1 span record

SYNOPSIS

span

DESCRIPTION

The span command is used to view or modify a T1 span record in the database. This tells the system whether the span should be active, various characteristics of the span, and the mapping between trunks and internal port numbers.

On entry, the span command presents a menu:

- 1) View DTI span record(s). The user is prompted to select a specific span or all spans. The system then prints whether the card is active, the characteristics of the span, and the port number for each trunk.
- 2) Modify DTI span record. The user is prompted to select a specific span. The user is then prompted for whether the span should be activate, the characteristics of the span, and the port number assignment for each trunk.
- 3) Select a voice processing unit. The user is prompted to enter the current voice processing unit. The DTI span records are specific to that unit.
- x) Exit command.

The following characteristics are set by the span command:

Framing

D4 or ESF. The framing protocol used on this span. This is determined by the service provider. Latitude recommends use of ESF only.

Zero code suppression

none, B8ZS, or jammed bit. This protocol is determined by the service provider. Latitude recommends use of B8ZS only.

Timing External or internal.

This determines whether the span is permitted to supply trunk timing for the system. Specify external if the span is connected to the public network or a trusted system. At least one span should always be designated external.

SETUP

SETUP

External sync priority

A number (1..255) or never. This controls the priority (1 is highest, 255 is lowest) of the spans which are set for external timing. The system picks the highest priority operational span to provide the timing. If two spans have the same priority, the lower numbered span wins.

Remote loopback to network?

y or n. If yes, this puts the span into a loopback mode for testing from the remote end. For normal operation, set to n.

Internal data loopback?

y or n. If yes, this causes the span to loop back locally for running diagnostics. For normal operation, set to n.

NOTES

This command runs only on a standalone conference server or a network server.

For each voice processor unit, spans are numbered 0..4. Trunks on a span are numbered 1..24. Ports are numbered 0..119 (or the number of licensed access ports minus 1). There are up to two span records for each DTI card.

The span record is referenced by both a DTI record (see dcard) and each port record (configured from the port command or MeetingTime). It is important to be sure that these references are consistent. If a port is referenced in a span record, the corresponding port record must reference that span.

If a DTI card is not active, then the two spans will not operate even if they are set active in the span record.

Changes to a span record take effect after the next system restart.

SEE ALSO

port, dcard, spanstat, restart, and MeetingPlace Customer Engineering Guide, Chapter 5 and Appendix D, for a discussion of configuring MeetingPlace.

SPANSTAT

SPANSTAT

NAME

spanstat - show the status of T1 spans

SYNOPSIS

spanstat [] [<options>]

DESCRIPTION

The spanstat command is used to show the status of the T1 spans in the system. Entered with no options, it displays a line for each of the span records, indicating which DTI and line the span is attached to, and whether the span is up. If a span number is specified, only information about that span is displayed.

This runs only on a conference server, not on a network server.

OPTIONS

-abMonitor the AB bits. For the indicated span, show the values of the AB bits for Transmit and Receive on each trunk. This is refreshed continuously until you stop the command. Enter "q" to quit (or go to the next span). Enter <CTRL><C> to immediately stop the command.

-s

Show statistics. This lists various exception counts associated with the span.

-c

Clear statistics. This clears the exception counts for the span.

SEE ALSO

activity, span, errorlog, cptrace

SWCHECK

SWCHECK

NAME

swcheck - verify the software file checksums

SYNOPSIS

swcheck

DESCRIPTION

The swcheck command generates a 32-bit CRC checksum on each of the application software files in the system and then compares the generated sums against known good values. Any discrepancies are displayed.

NOTES

Some software patches may not update the checksum file. This will result in discrepancies when swcheck is run. In this particular case, discrepancies are expected and should not be a cause for alarm.

The swcheck command is useful for diagnosing certain system integrity problems. Unexplained discrepancies can result from file corruption or a failure to correctly transfer data from the system disk. In the latter case, running this command again will yield a different result.

SEE ALSO

release

SYSDATACOPY

SYSDATACOPY

NAME

sysdatacopy - copy data from drive #4 to the system drive

SYNOPSIS

sysdatacopy

DESCRIPTION

The sysdatacopy command is used to copy the database and voice from the drive in slot #4 onto the system disk, overwriting any existing data on the system disk. This is useful when replacing a system disk when the system software is more up to date on the new drive than on the old. The replacement procedure is as follows. Power the system off; place the new drive in slot #1 and the old system disk in slot #4; power on and then make sure the system is down; run sysdatacopy; halt and power off; remove the old system disk from slot #4. When you next power on, the system will automatically run through a database revision if necessary.

SEE ALSO

diskcopy, newdisk

TIMEZONE

TIMEZONE

NAME

timezone - set the local time zone for the system

SYNOPSIS

timezone

DESCRIPTION

The timezone command sets the time zone used for CLI commands. It also sets the meaning of the localtime zone for end users. On entry, the technician is presented with a list of available time zones. These are listed by "continent/city." The technician should pick the city that uses the same time rules as the local site.

NOTES

Fort Wayne, Indiana, and Phoenix, Arizona, are listed as zone options because their states do not conform to the normal US/Canada daylight savings time rules. Do not choose these options for sites outside of their respective areas.

RESTRICTIONS

Only United States, UK, Hong Kong, and Singapore time zones are listed.

SEE ALSO

date

UPDATE

UPDATE

NAME

update - software update

SYNOPSIS

update

DESCRIPTION

The update command is used to start a software update procedure. This command looks on the diskette drive for an update diskette containing a batch file that it should execute. The batch file typically installs software from the diskette, or looks for a tape to load.

NOTES

Before performing an update, it is a good idea to back up the database. An alternative to using the update CLI command is to log in as the user update. The effect is the same.

RESTRICTIONS

The update command will run if the system is up or down, but the batch file loaded from the diskette will often refuse to execute if the system isn't down. Normally you should down the system before running update.

SEE ALSO

backup, down

UPDATEDBSIZE

UPDATEDBSIZE

NAME

updatedbsize - update the database size

SYNOPSIS

updatedbsize

DESCRIPTION

The updatedbsize command determines the database configuration appropriate to the size of the disk and then allocates space on the disk according to that configuration.

SEE ALSO

recover, backup, restore

B LED Reference

This appendix explains the LEDs on:

- The server front panel
- The mother board

Server Front Panel LEDs

LED color indicates the status of the system. When all LEDs are green, the server is functioning properly. If a problem is detected, the LEDs turn red.

During start-up, LEDs cycle between red and green. Within three to five minutes, all system LEDs should be green indicating a complete startup.

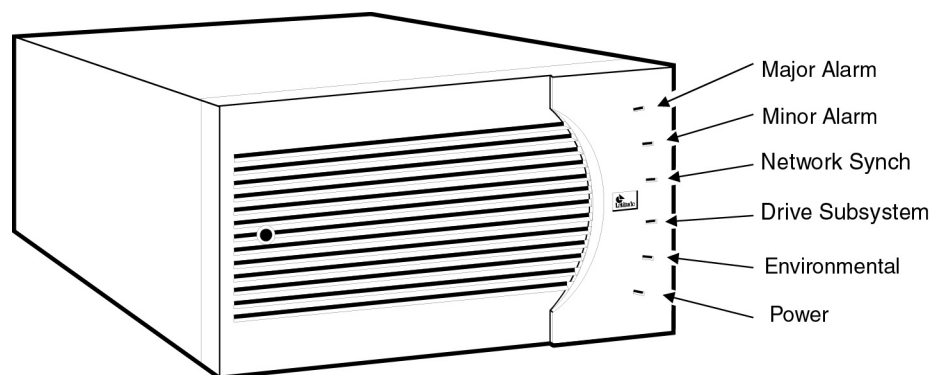


Figure B-1. Server Front Panel LEDs

The LED indicators represent the following conditions, see Figure B-1:

- Major Alarm: Red when a serious problem exists. This generally interrupts system operation.
- Minor Alarm: Red in the event of a problem that does not currently impact the functioning of the system. This kind of condition does not affect immediate operation but should be corrected quickly.
- Network Synch: Red if a digital (T1) line has lost synchronization.
- Drive Subsystem: Red when there is a problem with one of the drive subsystems (hard drive, DAT drive, or floppy disk drive).

- **Environmental:** Red when the temperature of the room exceeds system specifications.
- **Power:** Green when there is power to the system; unlit when there is no power.

For troubleshooting, use Table B-1.

Table B-1. Front Panel LEDs

| Condition | Action |
|-----------------------|---|
| Major (red) | Look at the Alarm Table to find more information about the problem; then call the Customer Support Center. |
| Minor (red) | Look at the Alarm Table to find more information about the problem; then call the Customer Support Center. |
| Network synch (red) | Check the T1 line; then call the Customer Support Center. |
| Drive subsystem (red) | Look at the Alarm Table to find more information about the problem; then call the Customer Support Center. |
| Environmental (red) | Adjust the temperature of the room. Check for any obstruction that would restrict air flow around the MeetingPlace cabinet. Check fans. |
| Power (unlit) | Connect power to the system. |

Remote Alarm Detection

The 9-pin DIN connector at the back of the server power supply allows remote detection of a major alarm. See Table B-2 for pinouts.

Table B-2. Alarm Connector Pinouts

| Pin | Description |
|-----|-----------------|
| 1 | Normally closed |
| 2 | Normally open |
| 6 | Common |
| 3,7 | Test loop |
| 4,8 | Ground |

Use the follow information for connection considerations:

- When the major alarm light is green, or when the power is off, pin 6 is connected through the relay to pin 1. When the major alarm light is red or yellow, pin 6 is connected to pin 2.
- In series with pin 6 is a 1A 125V fuse. This can only be replaced by removing the power supply.
- Pins 3 and 7 are connected only to each other for system test.
- The diagram on the back of older system power supplies may be incorrect. Table B-2 is correct for old and new systems.

To connect to an alarm device outside the server, remove the cover from an unused card slot and run a cable through the opening. Alternately, a thin cable such as a ribbon cable can be run between the back panel and the top cover.

Motherboard LEDs

The motherboard has five LEDs that indicate the presence of all the voltages from the power supply. The +3.3 V is not used. See Figure B-2.

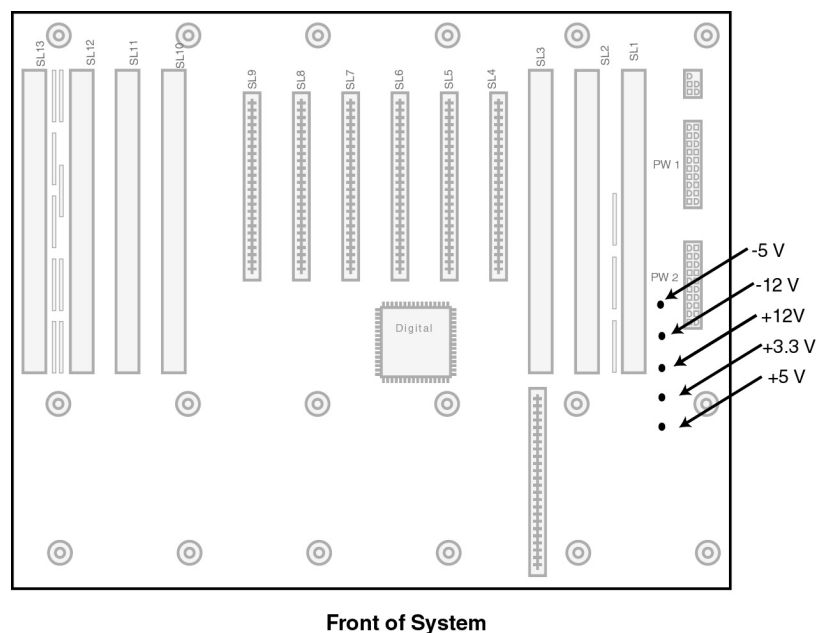


Figure B-2. LEDs for Power Supply Voltages on the Motherboard

C Part Numbers

Use Table C-1 for parts identification and ordering.

Table C-1. Parts List

| PART IDENTIFIER | DESCRIPTION | PLAN T | | BOM E | | PROD DATE | OBSL DATE | COMMODITY CODE |
|-----------------|---------------------------|--------|------|-------|----|-----------|-----------|----------------|
| | | ID | C LL | UOM | S | | | |
| 9900-6400-01 | FRU ASSY FAN | 000 | A | 0 | EA | 2 950130 | 000000 | 66 |
| 9900-6401-01 | FRU ASSY FLOPPY DRIVE | 000 | A | 0 | EA | 2 950130 | 000000 | 66 |
| 9900-6402-01 | FRU ASSY PSA - 120 VAC/NA | 000 | A | 0 | EA | 2 950130 | 000000 | 66 |
| 9900-6403-01 | FRU ASSY CPU W/24MB DRAM | 000 | A | 0 | EA | 2 950227 | 000000 | 66 |
| 9900-6404-01 | FRU ASSY CPU W/32MB DRAM | 000 | A | 0 | EA | 2 950130 | 000000 | 66 |
| 9900-6405-01 | FRU STD SYS DATABASE DISK | 000 | A | 0 | EA | 2 950130 | 000000 | 66 |
| 9900-6406-01 | FRU EXP SYS DATABASE DISK | 000 | A | 0 | EA | 2 950130 | 000000 | 66 |
| 9900-6407-01 | FRU 20 HOUR VOICE DISK | 000 | A | 0 | EA | 2 950130 | 000000 | 66 |
| 9900-6408-01 | FRU 60 HOUR VOICE DISK | 000 | A | 0 | EA | 2 950130 | 000000 | 66 |
| 9900-6409-01 | FRU ASSY DAT DRIVE | 000 | A | 0 | EA | 2 950130 | 000000 | 66 |
| 9900-6410-01 | FRU EXP SYS DATABASE DISK | 000 | A | 0 | EA | 2 950911 | 000000 | 66 |
| 9900-6411-01 | FRU 110 HOUR VOICE DISK | 000 | A | 0 | EA | 2 950911 | 000000 | 66 |
| 9900-6412-01 | FRU STD SYS DATABASE DISK | 000 | A | 0 | EA | 2 960419 | 000000 | 66 |
| 9900-6413-01 | FRU PNTM CPU/24MB | 000 | A | 0 | EA | 2 960531 | 000000 | 66 |
| 9900-6414-01 | FRU ASSY PNTM CPU W/32MB | 000 | A | 0 | EA | 2 960614 | 000000 | 66 |
| 9900-6415-01 | FRU NTWK SRVR DB DISK | 000 | A | 0 | EA | 2 961021 | 000000 | 66 |
| 9900-6416-01 | FRU NTWK SRVR SYS DISK | 000 | A | 0 | EA | 2 961021 | 000000 | 66 |
| 9900-6417-01 | FRU ASSY PCI 166 CPU 64M | 000 | A | 0 | EA | 2 961107 | 000000 | 66 |
| 9900-6418-01 | FRU ASSY PSA/230V | 000 | A | 0 | EA | 2 970407 | 000000 | 66 |
| 9900-6419-01 | FRU STD SYS DATABASE DISK | 000 | A | 0 | EA | 2 970602 | 000000 | 66 |
| 9900-6420-01 | FRU PENT CPU W/TERM UPGRD | 000 | A | 0 | EA | 2 980119 | 000000 | 66 |
| 9900-6421-01 | FRU ASSY MMX CPU W/64MB | 000 | A | 0 | EA | 2 980109 | 000000 | 66 |
| 9900-6422-01 | FRU ASSY FAN (GENERIC) | 000 | A | 0 | EA | 2 980109 | 000000 | 66 |
| 9900-6423-01 | FRU ASSY PCI POWER SUPPLY | 000 | A | 0 | EA | 2 980608 | 000000 | 66 |
| 9900-6500-01 | FRU CABLE MVIP 10-POS | 000 | A | 0 | EA | 2 950130 | 000000 | 66 |
| 9900-6501-01 | FRU CABLE SCSI BACKPLANE | 000 | A | 0 | EA | 2 950130 | 000000 | 66 |
| 9900-6502-01 | FRU CABLE ATI | 000 | A | 0 | EA | 2 950130 | 000000 | 66 |
| 9900-6503-01 | FRU CABLE DTI | 000 | A | 0 | EA | 2 950130 | 000000 | 66 |
| 9900-6504-01 | FRU CABLE MODEM | 000 | A | 0 | EA | 2 950323 | 000000 | 66 |
| 9900-6506-01 | FRU CABLE E1/75 OHM | 000 | A | 0 | EA | 2 970407 | 000000 | 66 |
| 9900-6507-01 | FRU CABLE E1/120 OHM | 000 | A | 0 | EA | 2 970407 | 000000 | 66 |

D PCI Card Identification and Location

Use this appendix to determine:

- ATI, DTI, ETI and modem card location for PCI systems
- Card DIP switch and jumper settings for card locations

Card location diagrams present the inside of the server as viewed with the *front* of the server against your chest. This is the normal service position for rack mounted servers. Slot numbers on the location diagrams correspond to the SL numbers printed in the back plane.

ATI Cards

See Figure D-1 for card locations for servers using ATI cards. The slot numbers refer to the SL numbers printed in the back plane.

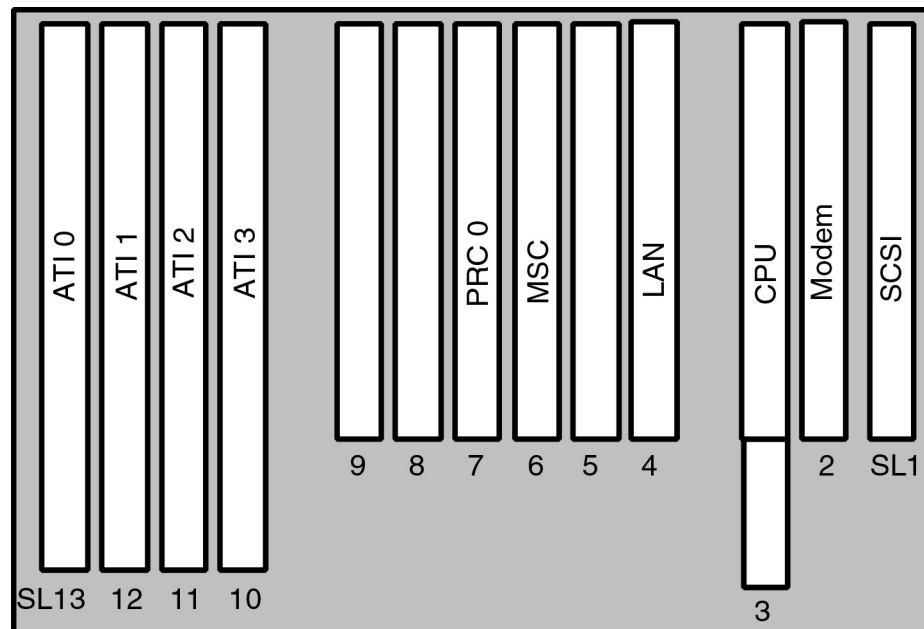


Figure D-1. ATI Card Slot Locations

To configure ATI cards for different slots, use jumpers SW1 to SW4. Jumpers W1 and W2 remain in their default position as shown in Figure D-2.

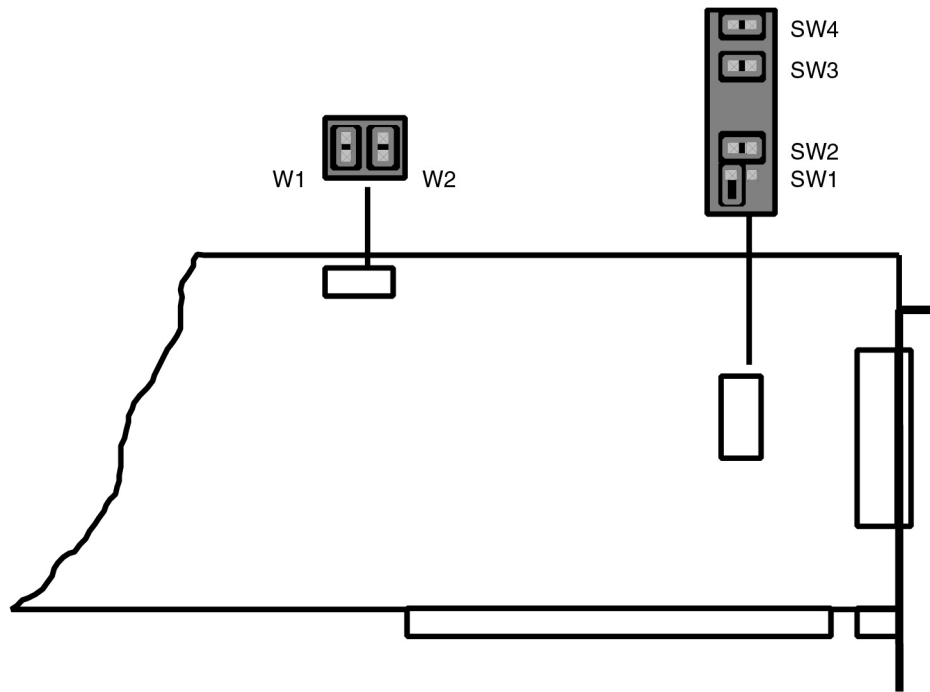


Figure D-2. ATI Card With Jumper Settings for Slot 13

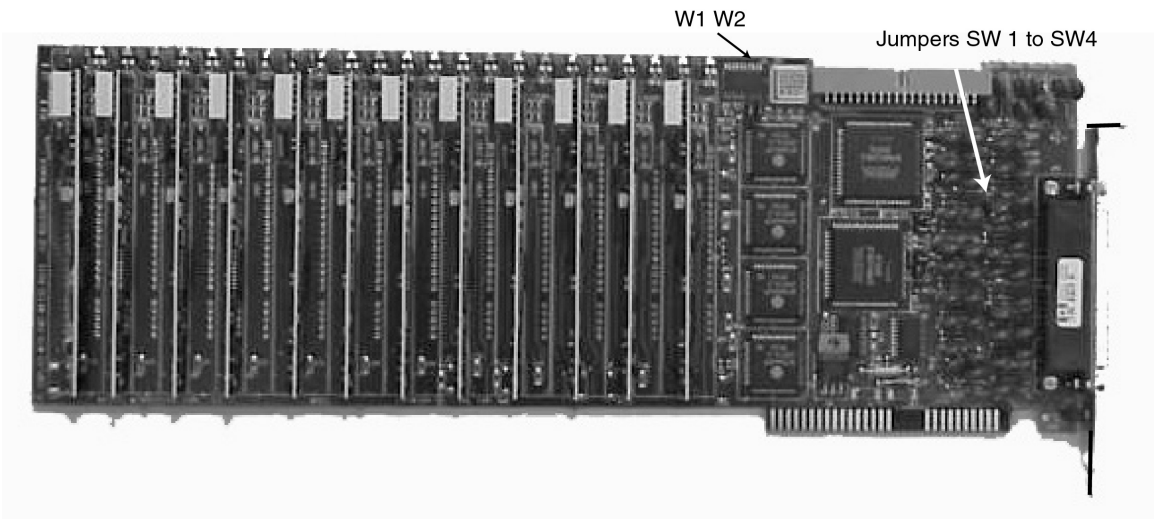


Figure D-3. ATI Photo With Jumper Location

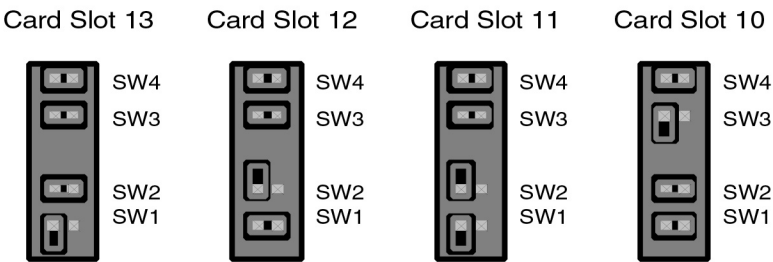


Figure D-4. ATI Jumper Positions for Slots 10, 11, 12, and 13

DTI Cards

For PCI systems, see Figure D-5 for card locations. DTI cards are installed into slot numbers 10 to 12 starting with the higher number slot first. For example, if there were only one DTI card, it would inhabit slot 12. Slot numbers on the location diagrams correspond to the SL numbers printed in the back plane.

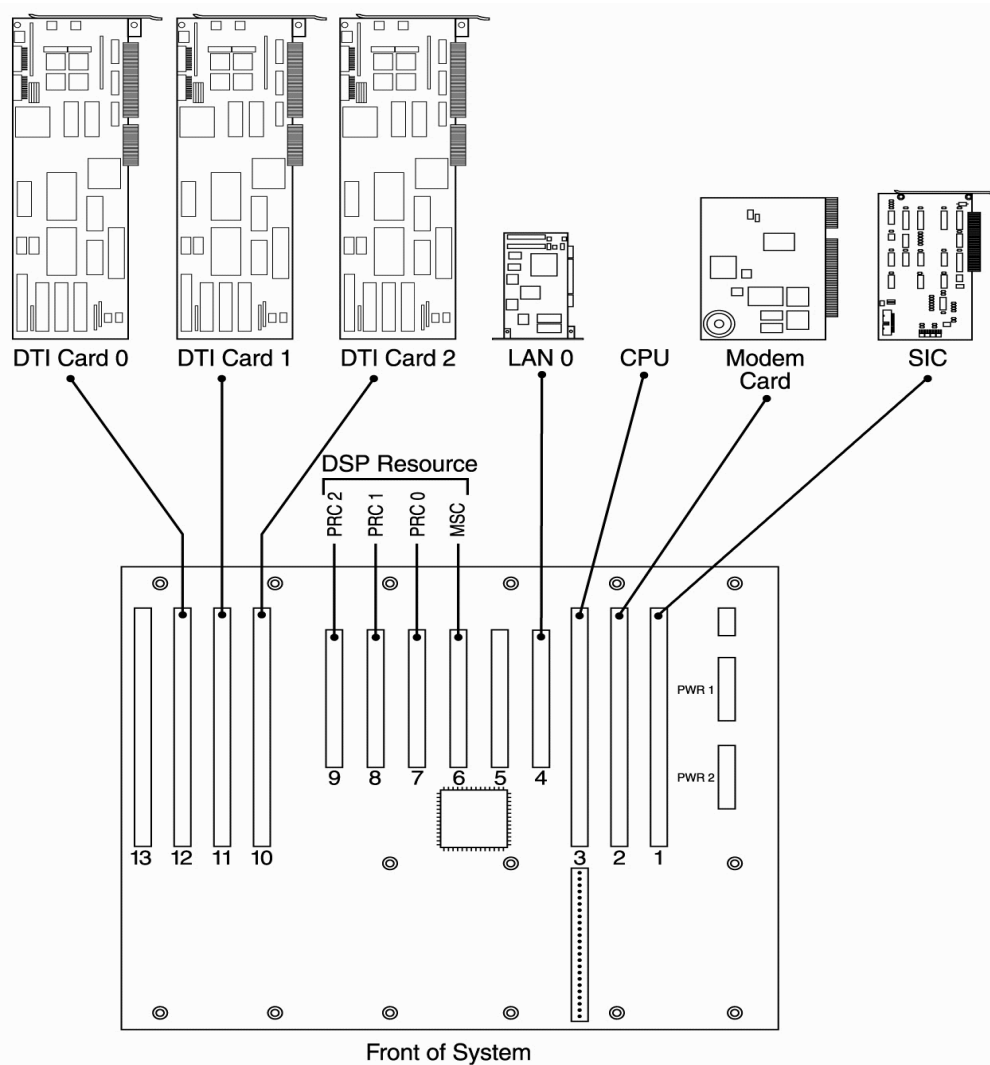


Figure D-5. PCI Card Slot Locations

See Figure D-6 for DTI card DIP switch settings for slot 12. The more detailed view of switch S4 is seen from the edge of the board. See Figure D-8 for DIP Switch and Jumper Settings for Slots 10, 11, and 12. The white boxes represent the switch position.



The white boxes represent the position of the switch.

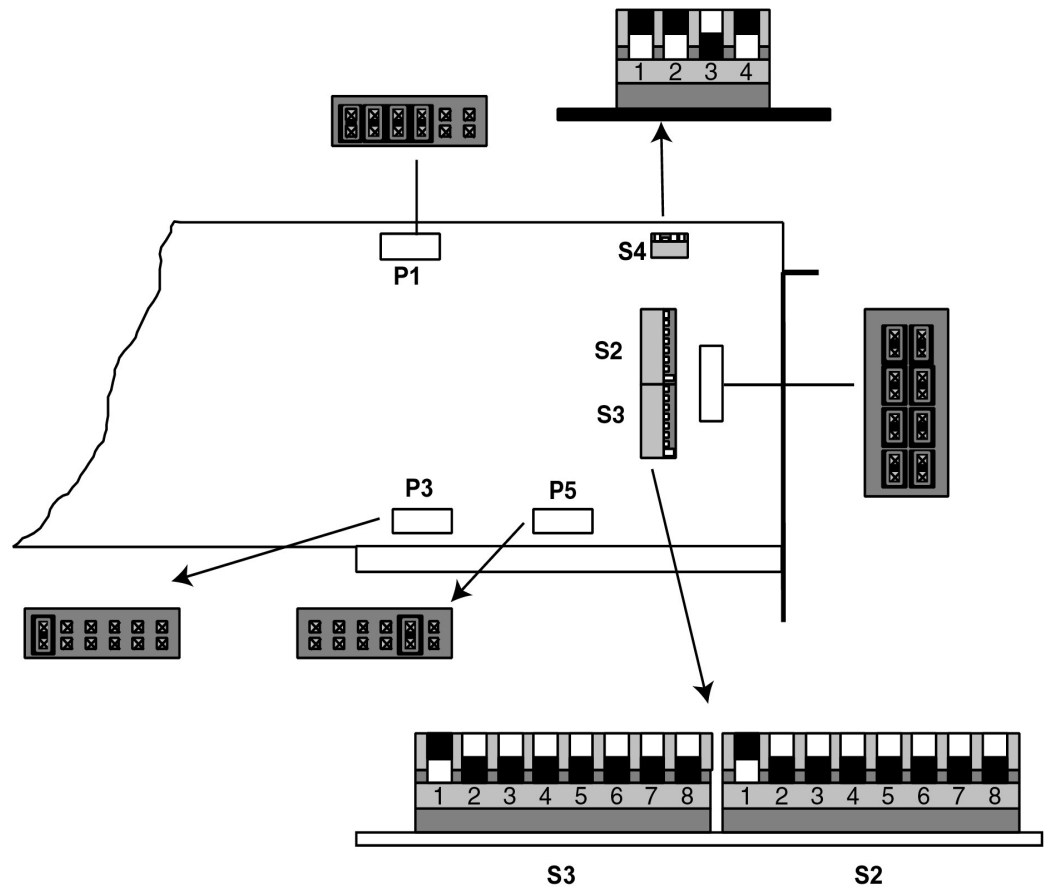


Figure D-6. DTI Card DIP Switch Location and Slot 12 Settings

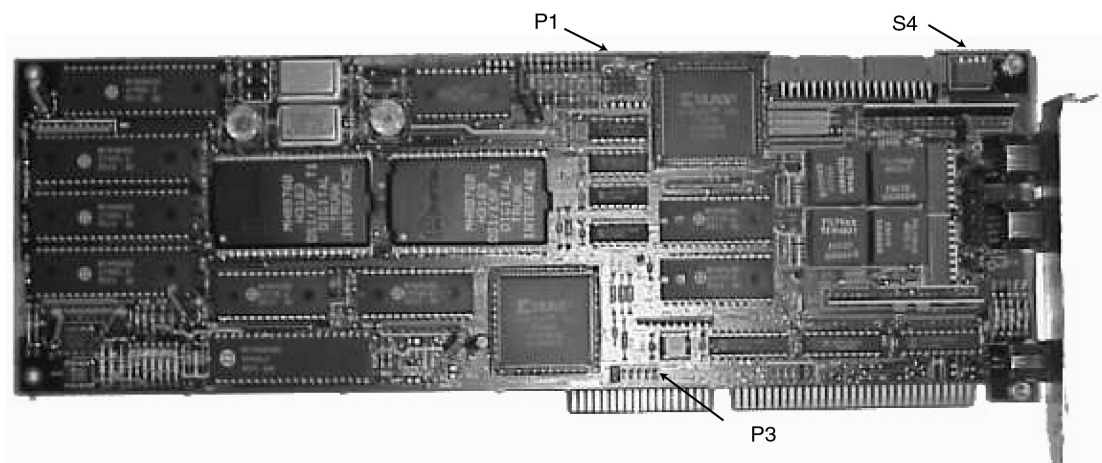


Figure D-7. DTI Card Photo With DIP Switch and Jumper Locations



The white boxes represent the position of the switch.

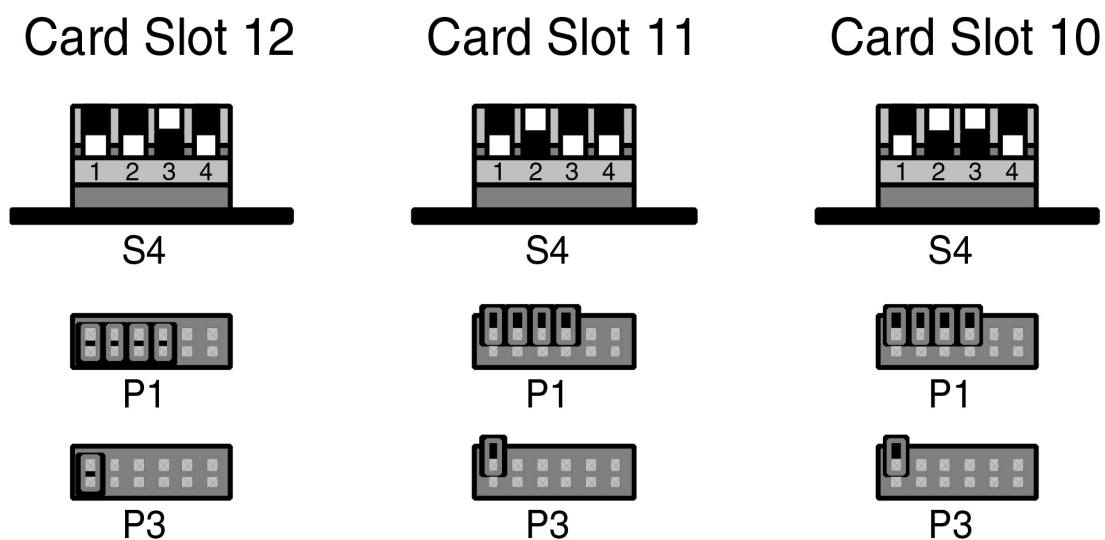


Figure D-8. DTI DIP Switch and Jumper Settings for Slots 10, 11, 12

ETI Cards

See Figure D-9 for card locations for PCI servers using ETI cards. The slot numbers refer to the SL numbers printed in the back plane.

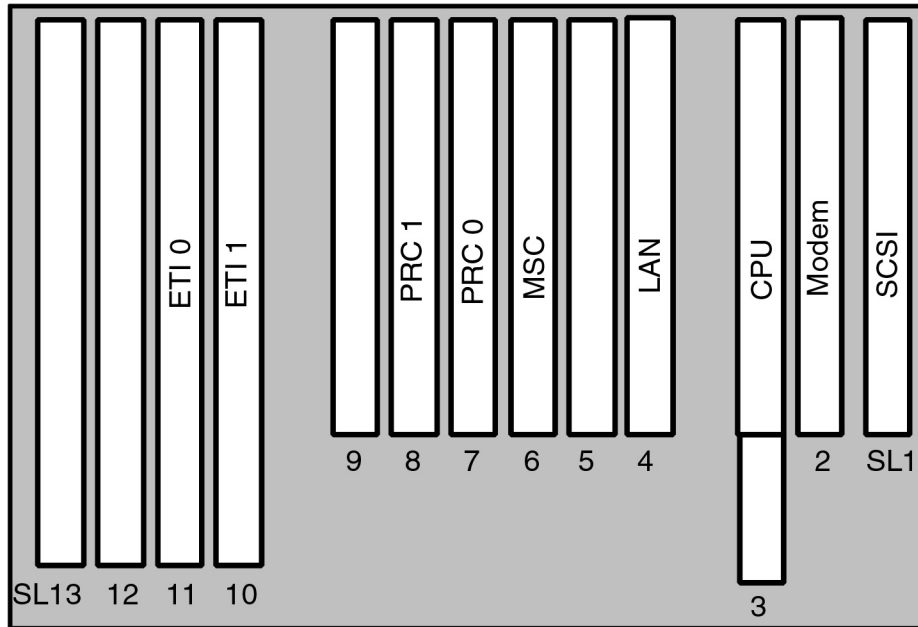


Figure D-9. ETI Card Locations

See Figure D-10 and Figure D-12 for ETI jumpers that specify card location and 75 or 120 ohm configuration.

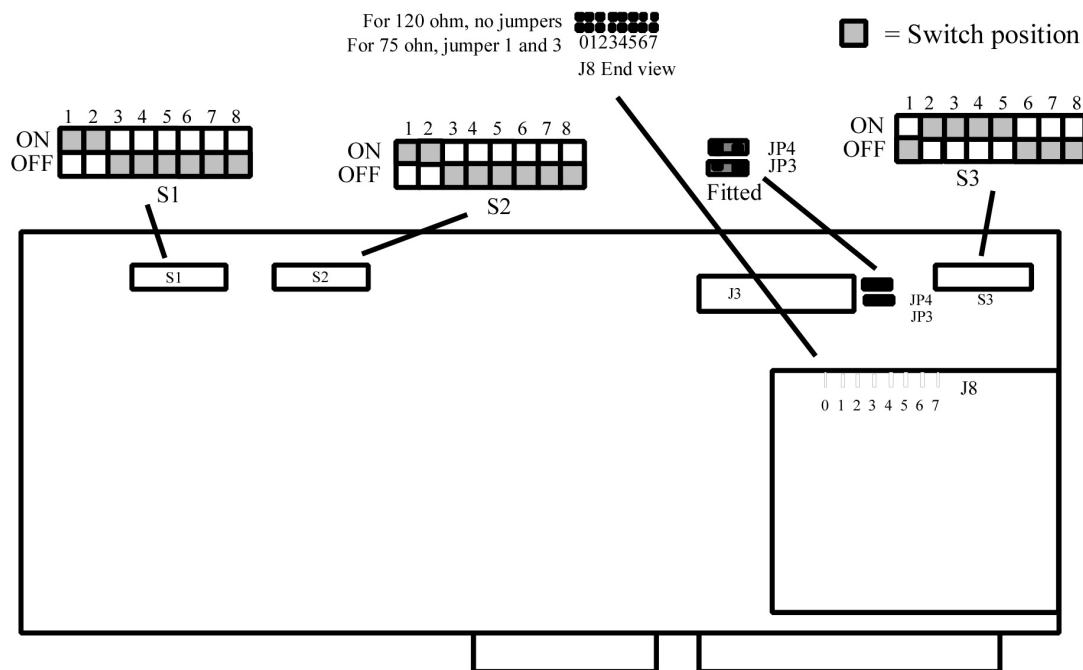


Figure D-10. ETI Card DIP Switch and Jumper Settings for Card Slot 11

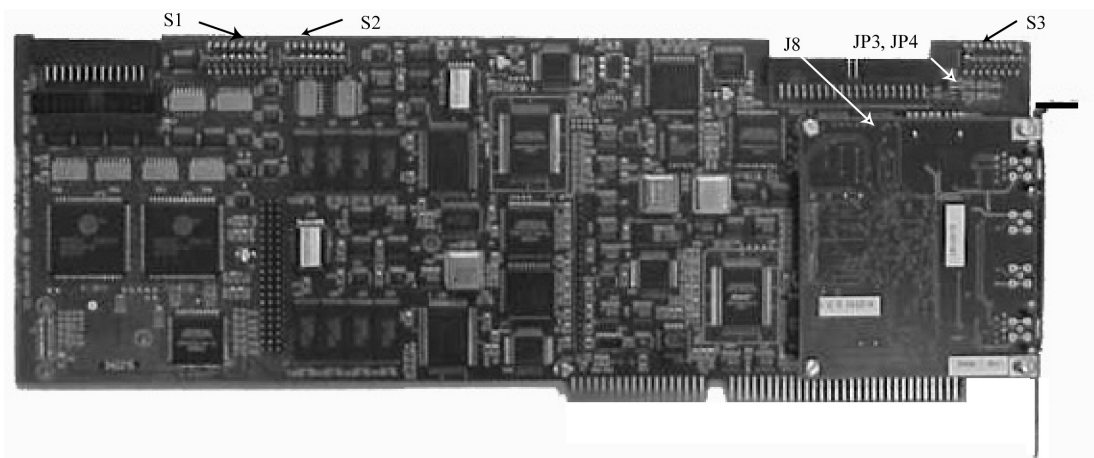


Figure D-11. ETI Card Photo With DIP Switch and Jumper Locations

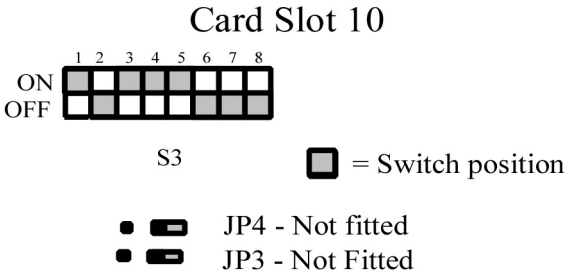


Figure D-12. ETI Card Switch S3 Settings for Card Slot 10




75 ohm/120ohm

For 120 ohm cards J8 has jumpers on the 1 and 3 positions. See Figure D-10.

Modems

There are two slots where modems are placed depending on country. See Table D-1.

Table D-1. Modem Card Slot Locations

| Country | | Card Slot |
|---|---|-----------|
|  | UK | SL13 |
|  |  | SL2 |
| US | Hong Kong | |

Additional Documentation

Refer to the following documents for additional card configuration information:

- Receiving Inspection/Upgrade Procedure T1 Card (6500-0008-01)
- Receiving Inspection/Upgrade Procedure E1 Card/120 OHM (6500-0017-01)
- Receiving Inspection/Upgrade Procedure E1 Card/75 OHM (6500-0016-01)
- Receiving Inspection/Upgrade Procedure 12 Port Analog Trunk Interface Card (6500-0007-01)
- MeetingPlace System Configuration (9530-0001-01)

E EISA Card Location

Refer to Figure E-1 for card locations in the older EISA systems.

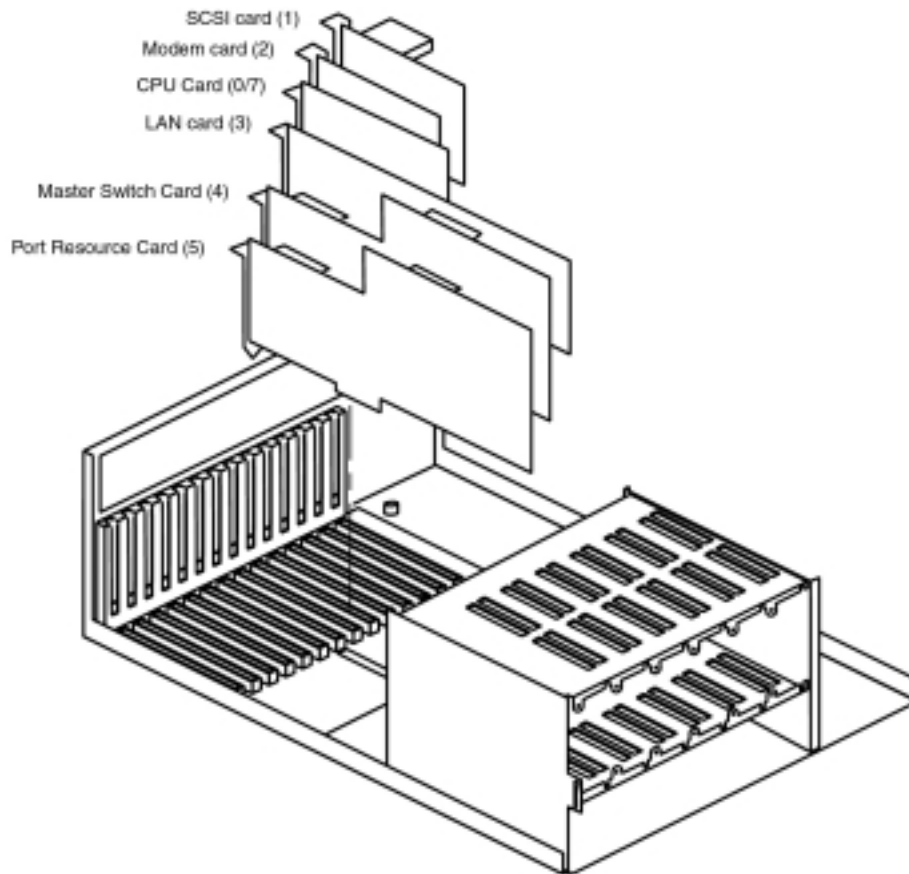


Figure E-1. EISA Card Location

F MeetingPlace IP Card Identification and Location

Use this appendix to determine:

- IRC card identification
- IRC, 2nd LAN card location

Card location diagrams present the inside of the server as viewed with the *front* of the server against your chest. This is the normal service position for rack mounted servers. Slot numbers on the location diagrams correspond to the SL numbers printed in the back plane. LAN 0 represents the original LAN card. LAN 1 represents the LAN card used for IP. See Figure F-1.

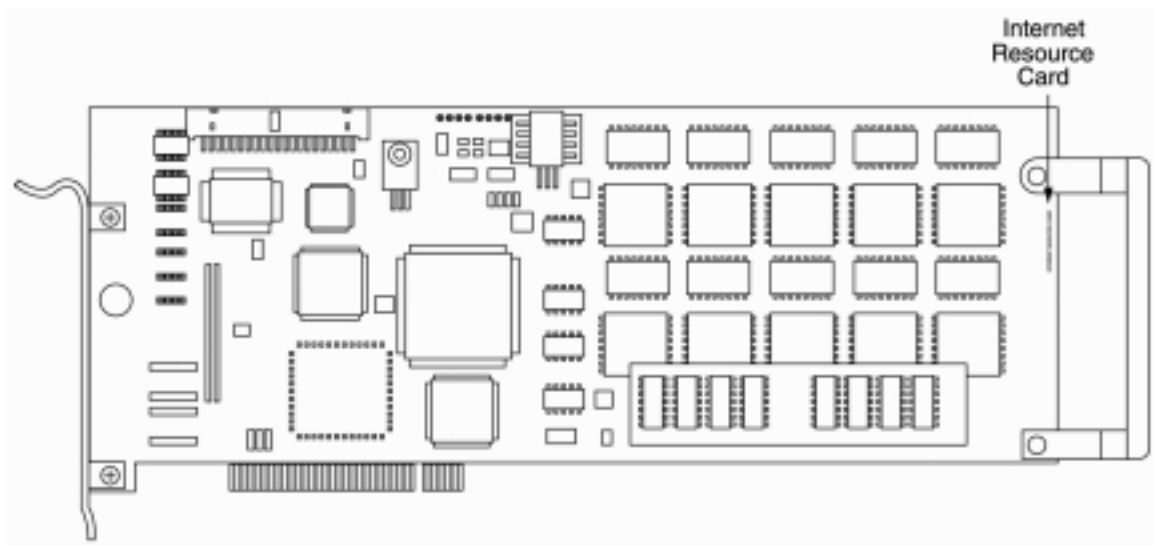


Figure F-1. IRC picture

The IRC looks the same as the DSP Resource/PRC with a different label.

IRC and 2nd LAN Card Location

This section will provide 4 examples of various IP/PSTN environments.

- 24 IP ports, 0 PSTN ports
- 24 IP ports, 24 PSTN ports

- 24 IP ports, 48 PSTN ports
- 24 IP ports, 72 PSTN ports

24 IP Ports, 0 PSTN Ports

See Figure F-2 for card locations. The SIC, modem card, CPU, LAN 0, MSC, and PRC 0 are in the same slots as in a non-IP environment. The IRC needs to be in slot 7. The 2nd LAN card (LAN 1) needs to be in slot 8. There is no DTI card needed for an all IP environment.

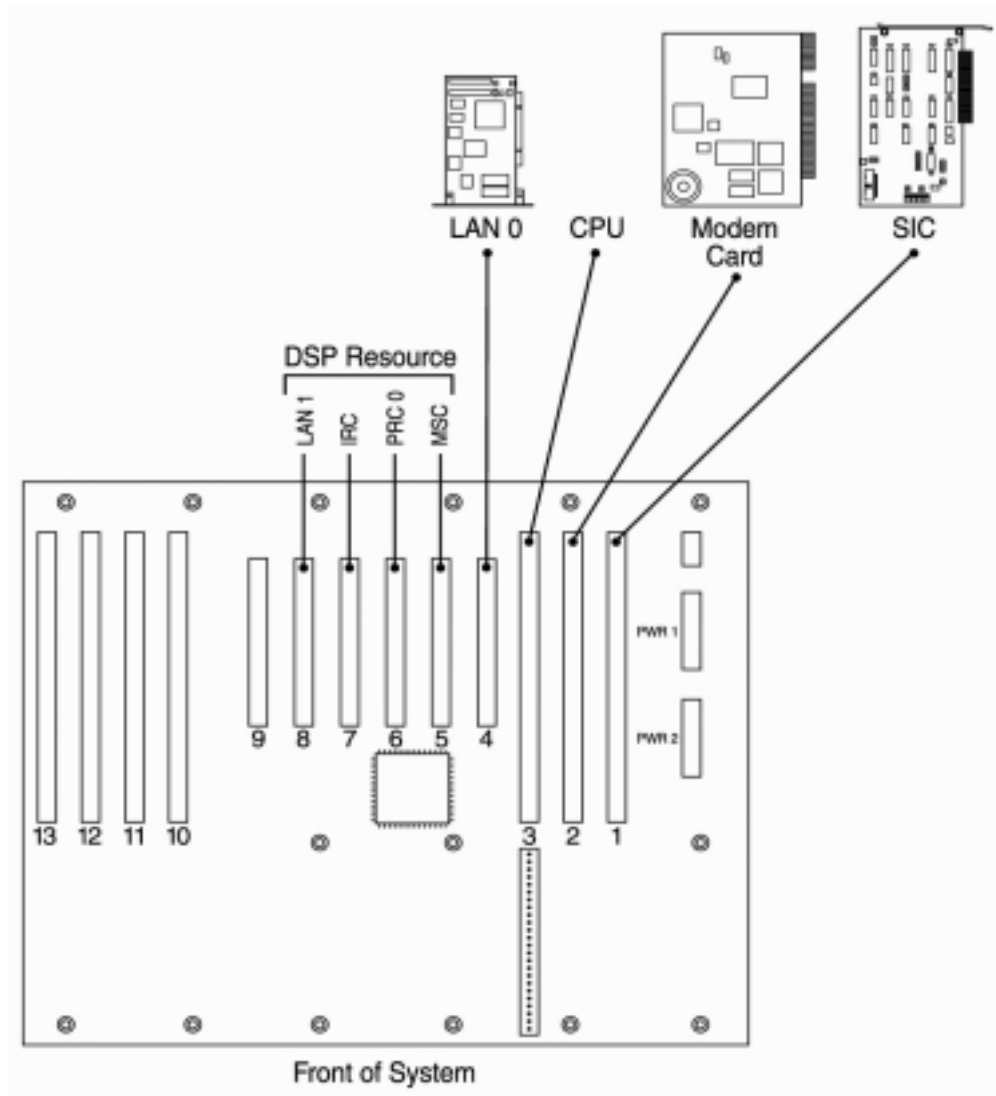


Figure F-2. Card Location for 24 IP Ports, 0 PSTN Ports

24 IP Ports, 24 PSTN Ports

See Figure F-3 for card locations. The SIC, modem card, CPU, LAN 0, MSC, and PRC 0 are in the same slots as a non-IP environment. The IRC needs to be in slot 7. The 2nd LAN card (LAN 1) needs to be in slot 8. DTI card 0 needs to be in slot 12.

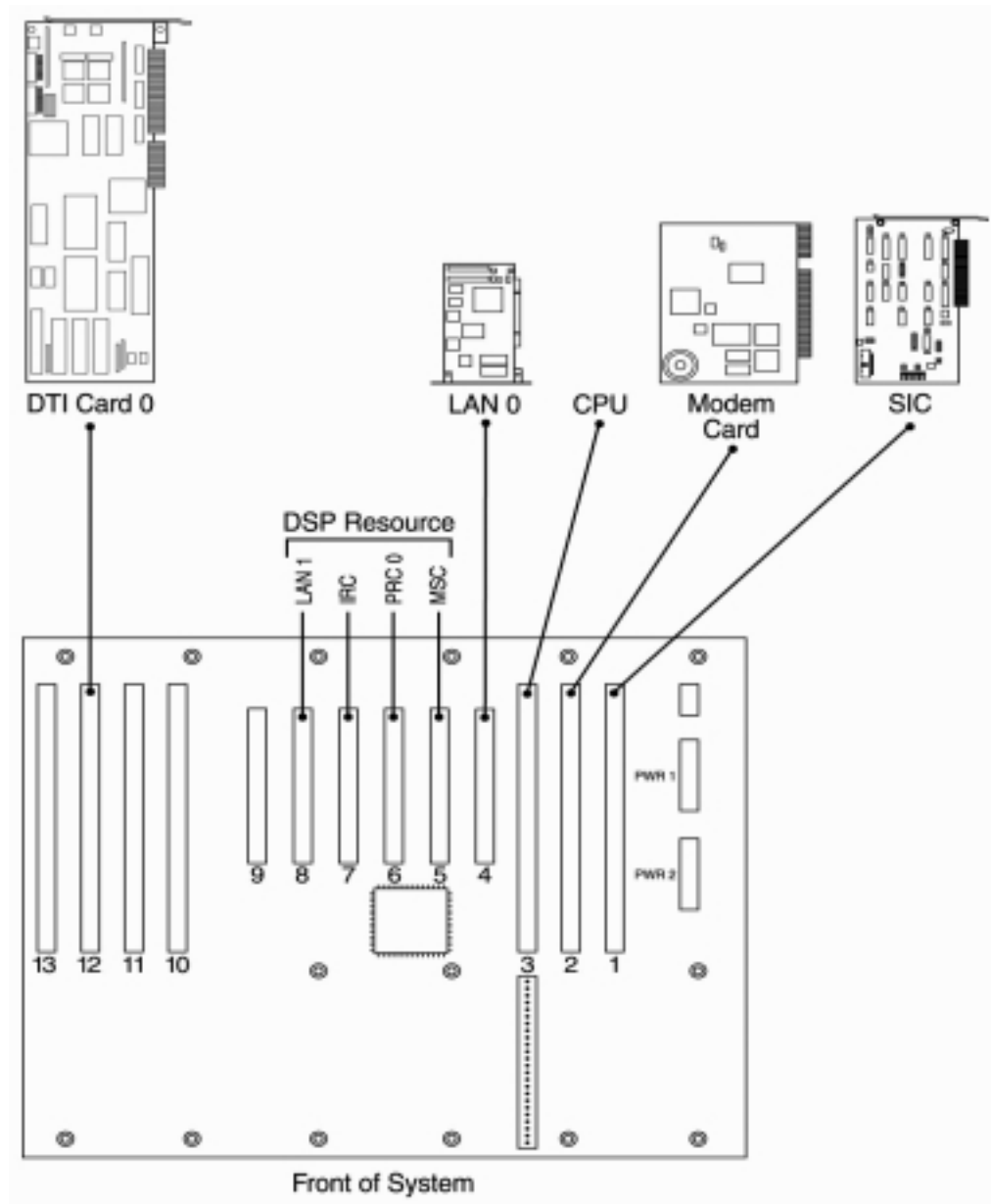


Figure F-3. Card Location for 24 IP Ports, 24 PSTN Ports

24 IP Ports, 48 PSTN Ports

See Figure F-4 for card locations. The SIC, modem card, CPU, LAN 0, MSC, PRC 0, and PRC 1 are in the same slots as in a non-IP environment. The IRC needs to be in slot 8. The 2nd LAN card (LAN 1) needs to be in slot 9. DTI Card 0 needs to be in slot 12.

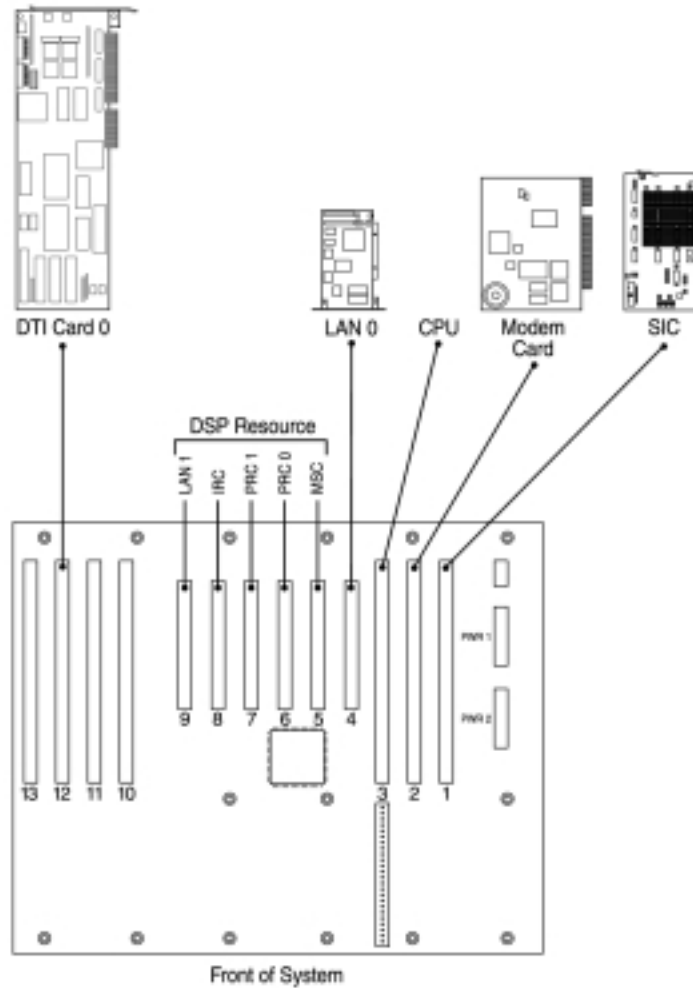


Figure F-4. Card Location for 24 IP ports, 48 PSTN ports

24 IP Ports, 72 PSTN Ports

This is the maximum number of PSTN ports an IP system can have. See Figure F-5 for card locations. The SIC, modem card, CPU, LAN 0, MSC, PRC 0, and PRC 1 are in the same slots as a non-IP environment. The IRC needs to be in slot 8. The 2nd LAN card (LAN 1) needs to be in slot 9. DTI card 0 needs to be in slot 12. DTI card 1 needs to be in slot 11.

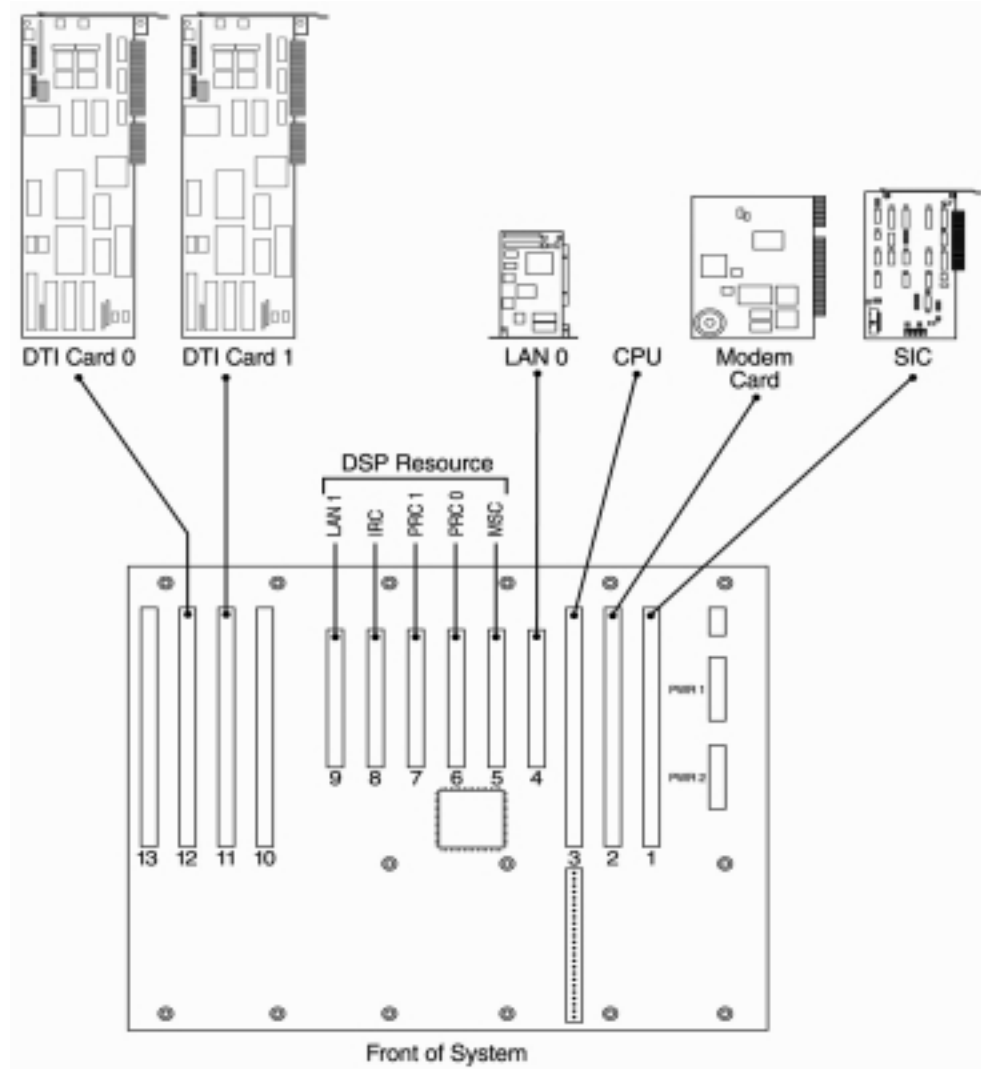


Figure F-5. Card Location for 24 IP ports, 72 PSTN ports

G Merge Procedure

Introduction

This section will detail all necessary actions required to merge a standalone MeetingPlace server database to a networked MeetingPlace server, converting the standalone server to a networked conference server.

The steps covered are listed below.

- Requirements
- Pre-merge checklists
- Timing for the merge process
- Post-merge checklists
- Step by step merge procedure

Requirements

Software Release Requirements

- Network server and all merging standalone servers running at server release 99 (4.0.x) or above
- Network server is running at the same release as the standalone servers.



If the standalone server is running at a lower release, you will need to upgrade your standalone server to the same release of network server.

Bandwidth Requirements

Refer to Table G-1 for merge bandwidth requirements.

- Network server, shadow server, and the lowest numbered conference server (in most cases, it's conference server 1) must be deployed on the same network segment

- 250ms round trip latency, with no more than 1% packet loss in a 30-second period
- 384Kb/s peak available bandwidth per remote conference server

Table G-1. Merge Bandwidth Requirements

| Ports | Bandwidth (kbits/sec) |
|------------|-----------------------|
| 72 or less | 256 |
| 96 | 320 |
| 120 | 384 |
| 240 | 384*2 |

System up/down Requirements

- During the merge process, the network server does not need to be down. It will continue to operate and function as normal.
- During the merge process, the “to be merged” standalone server needs to be down at all times.

Network Server Pre-merge

After the above requirements are met, verify the following based on your MeetingPlace applications.

Licenses

Be sure to obtain the new network server licenses to support the additional merged conference servers. It is important that the customer might have switched over the shadow server, so you need to provide MFG the current network server as a base to generate the licenses (i.e. based on the Ethernet address).

Network / Shadow Server Synchronization

It is important that both the databases on the network server and shadow servers are synchronized. The following steps are required to synchronize the shadow server with the network server.

1. Before the merge, run a back up on the network server. At the CLI, type **backup**.

2. After the back up is complete, save the license of the shadow server. At the CLI, type **savelicense**.
3. Take the shadow server off line (disconnect the Ethernet connection).
4. At the CLI, type **restore**.
5. After restore is complete, update the shadow license. At the CLI, type **update**.
6. Run **setup** to reconfigure the shadow server to be a shadow server again (because after the restore, it becomes a network server).
7. Make sure the shadow server is attached to the network server before you proceed with the merge process.

Standalone Server Pre-merge

Verifying the Server Release Level

- The standalone server must be the same software version as the network server. To verify, type **swstatus** at the cli.
- If the standalone server and network server are on different software versions, you must upgrade the standalone server before proceeding with merge process.

Telephony Configuration

- Take note of the **dcard**, **span**, and **port** configurations. You will need these after the merge because this information is not copied over during the merge process in the 4.0.X releases.
- Make sure there is no port group conflict with the network server. The port group setting is a system wide setting.

LAN Configuration

- Take note of the server and site configuration (i.e. server IP, subnet mask IP, broadcast IP, default gateway IP, etc.). At the CLI, type **net**.

Communicate the Possibility of Meeting ID Conflicts

If there are meetings on the merged server that have the same meeting id as any existing server, those meeting ids will co-exist in the system after the merge. The merge process is the only scenario where 2 of the same meeting ids can exist within the same networked system.

This design can cause confusion to users if a user calls into the wrong server, enters the meeting id, and is placed into the wrong meeting. Furthermore, if the same meeting id is scheduled on 2 servers at the same time and a user calls into a third server, that server will play the prompt, “Please call another server....”. However, this prompt is played arbitrarily because it only depends on which conference server returns the request first.

It is important to communicate this design to the customer before merge activity has taken place. If there is any objection or confusion, it is recommended to run the Raw Meeting Details report to check if there are any meeting id conflicts between servers.

Profile Replication/duplication

If the same profile (same user id and profile number) exists in both the network server and the merging standalone server, the system will change the profile to the default setting of the network server profile. The most significant impact in such a matter will be the “scheduling home server” setting.

It is recommended that you run the raw profile report after the merge, update the changes, then import them back to the system.

If there are partially similar profiles existing in both the network server and the merging standalone server (either the same user id or the same profile number), the system will create a new user profile. This new profile will have either a different user id or a different profile number. The new user id or profile number will have the merging unit number appended to it. For example, a standalone server is merged to a networked conference server 5. Both servers have a user id of “latitude”, but the profile numbers are different. After the merge, a new profile will be created with a user id of “latitude5”.

MeetingTime Telephony Access Parameters

The Telephony Access parameter settings (i.e. server phone number, DID range number settings, etc.) for the standalone server will not be propagated over to the network server during the merge process.

It is recommended that you save those settings before the merge, then manually re-enter them into the corresponding conference server settings after the merge.

Translation Tables

The translation tables for the standalone server will not be propagated over to the network server during the merge process.

It is recommended that you save the translation tables before the merge. Then recreate them after the merge. To find out if there is a translation table on the standalone server, follow the steps in Figure G-1. You must be logged in as a super user to do this. If you cannot log in as a super user, please contact the Customer Support Center.

```
Meetingplace:csc$ cd /lat/etc
Meetingplace:csc$ ls -l
-rw-rw-rw- 1 csc 311 Mar 16 2000 xtable.0
```

Figure G-1. Checking for a Translation Table

If it lists xtable.x or xtable.current.x (where x is between 0 to 15), a translation table does exist and needs to be copied before proceeding with the merge.

Teams

The Team records from the standalone server will not be propagated over to the network server.

It is recommended that you save the Team information (e.g. run the Team Info report) before the merge, then recreate them after the merge.

Estimated Time of Merge Process

Brand New Server (empty database) Merge

It is estimated to take no more than 30 minutes to complete the merge of a new standalone server from manufacturing, or a server with an empty database.

Existing Server (non empty database) Merge

This estimate is based on the two data points that have been collected from actual customer database merges. It is based on a network round trip latency of 40 ~ 50 ms or less.

The factors used for this estimate are:

- Database size of both servers
- LAN/WAN latency between the network server and merging server

The two merging phases are:

1. Database files are copied to the network server. This will take approximately 60 minutes.
2. Local merge. This will take approximately 10 minutes per every 1000 conference records in the standalone server. For example, if the network round trip latency is < 50 ms and the standalone servers conference record is 6000, the estimated time will be 2 hours (60 min.+60 min.).

Network Server Post-merge

The following are important facts about the system behavior after a merge.

Existing Conference Records Remain Intact

The conference record database, past or future, will continue to exist in the corresponding conference server and can be retrieved via various reports or trace utilities.

Meeting ID Conflicts Update

A follow up should be done based on the information in the Standalone Server Pre-merge section, page G-3.

Reconfigure Telephony Settings for the Conference Server after Merge.

After the merge, the telephony configurations for the new conference server (such as dcad, span, port, etc.) will all be wiped out. You need to manually reconfigure those settings.

Profiles Update

Make sure you understand how duplicate profiles are affected. Refer to the Standalone Server Pre-merge section, page G-3.

Telephony Access Parameters Update

You need to manually update the parameter values into the corresponding merged conference server via MeetingTime.

Translation Table Update

You need to manually create the translation table to be used for the corresponding merged conference server. Keep in mind that translation tables are a system wide parameter.

Teams Update

You need to manually create the Teams for the network server (keep in mind that the Team info is system wide parameter).

Conference Server Post-merge

At the CLI, run **diskoptions** to install the system disk. This information is wiped out during the merge process in 4.0.X releases. You then need to restart the conference server to make it effect. For more information on **diskoptions**, see Configuring Disk Drives, page 6-19.

Merge Procedure

After all requirements have been met and the pre-merge steps have been confirmed, follow the step by step procedure below.

1. Bring up the network server. Telnet in as tech and run the **net** command to select the unit that you want to merge the server into. For more information on the **net** command, refer to the section Configuring LAN Parameters, starting on page 5-18.
2. Select 2 to modify the server configuration
3. Type in y when prompted “Would you like to activate this server and site (y/[n])?”
4. If the server to be merged is a remote site, then select 2 to “Select a different site for this server” - **This is an important step before you enter all the IP information to this site.
5. Type in the site number when prompted “Enter new site number (0-8):”
6. Enter IP, broadcast IP, subnet IP, Ethernet address, default gateway IP, etc.
7. Log into the standalone server by connecting to the front console. See the Connecting Your Laptop section, page 5-2, for instructions.
8. Run the **net** command to display the merging server configuration. Make sure the server and site configuration match those on the network server (from the steps 1-7). In most cases, the site is 0. **You need to change it if this server is going to be a remote site after the merge.

9. From the standalone server, run the **setup** command to select the unit class. There will be a total of 5 selections:

- 1) standalone
- 2) networked, home site (VP/LOCAL)
- 3) networked, remote site (VP/REMOTE)
- 4) network server
- 5) shadow network server

Specific to the merge, you will either select 2) or 3), depending on whether the merging server is local or remote.

10. If the selection is 2) networked, home site (VP/LOCAL), perform steps 5 and 6.
11. If the selection is 3) networked, home site (VP/REMOTE), you will be prompted to manually enter the network parameters (IP address for the unit, IP for the network server, etc.). Enter the appropriate information.
12. You will be given 3 selections to merge the server. It is important to know exactly which type of server you are merging:

You have 3 choices on how to treat the current database on this server.

- 1) It is new from the factory or contains no useful data. Wipe it clean.
- 2) It is a valid standalone server database that needs to be merged with the network server database.
- 3) It is a valid database, already merged. Leave it alone.

13. Follow the instructions to select the server region, server time zone.
14. At the CLI, type **restart enable**. The system will go through 3 reboots before it starts the database merge for this unit. This step must be taken in order for the changes to take place.

Sample of Remote Server Merge Output

See Figure G-2 for an example of a remote server merge output.

```
ftwr-conf-1:tech$ net
  1) View the server & site configuration
  2) Modify the server configuration
  3) Select another server (current unit = #0)
99) Quit
Select: 1
Current server configuration:
  Unit:                #0 (ftwr-conf-1)
  Active:              YES
  Description:         FTWR LATITUDE CONF SERVER
  Kind:                Conference server
  IP Address:          38.246.125.252
  Ethernet address:    0000c0db95e1
  NTP servers:         none
  Site:                #0 (FTWR)
  Site subnet mask:    255.255.254.0
  Site broadcast addr: 38.246.125.255
  Site default gateway: 38.246.124.1
  Route daemon:        disabled
  1) View the server & site configuration
  2) Modify the server configuration
  3) Select another server (current unit = #0)
99) Quit
Select: 99
Unit class = SINGLE/LOCAL
ftwr-conf-1:tech$ swstatus
Conference server 4.0.0   S/N: 100357   Customer Name
System status: Operating
System mode: Up
Temperature: Unknown
Power supply: OK

MODULE NAME    STATUS    VERSION
SIM            UP        "02/11/99 12:05 MPBUILD-rel400n"
LSH            UP        "02/11/99 09:47 MPBUILD-rel400n"
SNMPD          UP        "02/11/99 13:18 MPBUILD-rel400n"
DBSERVER       UP        "02/16/99 15:18 UPDATE-rel400n"
DBQSERVER      UP        "02/16/99 15:18 UPDATE-rel400n"
POSERVER       UP        "02/11/99 11:06 MPBUILD-rel400n"
CPSERVER       UP        "02/11/99 11:01 MPBUILD-rel400n"
CONFSCHED      UP        "03/02/99 13:39 UPDATE-rel400n"
WSSERVER       UP        "02/11/99 12:09 MPBUILD-rel400n"
VOICESERVER    UP        "02/17/99 16:14 UPDATE-rel400n"
GWSIMMGR       UP        "03/02/99 13:37 UPDATE-rel400n"

UNIT SITE    STATUS    RUN LEVEL    UNIT KIND    LAST ATTACH

ftwr-conf-1:tech$ down
Are you sure (y/n)? y
Checking to see if the system is loaded...OK
System DOWN procedure has been initiated.
```

```

The MeetingPlace software is DOWN
The system is DOWN.
ftwr-conf-1:tech$ setup
This program determines the basic personality of this
unit.
Current unit class = SINGLE
Current site class = LOCAL

Select the unit class:
  1) MeetingPlace -- Standalone (SINGLE).
  2) MeetingPlace -- Networked, home site (VP/LOCAL).
  3) MeetingPlace -- Networked, remote site (VP/REMOTE).
  4) Network Server (DB).
  5) Shadow Network Server (SHADOW).
99) Quit.
Select: 3
For remote units it is necessary to manually enter
various network parameters. These will be used to
establish the initial communication with the network
server for this system.

Host name for this unit [ftwr-conf-1]: uprrfw1
IP address for this unit [38.246.125.252]:
Subnet mask [255.255.254.0]:
Broadcast address [38.246.125.255]:
Default gateway IP address [38.246.124.1]:
Host name of the network server []: pyramid
IP address of the network server []: 172.20.5.0
IP address of shadow network server, if any []:
171.68.222.57
Current database label information:
  Revision:      4.0.0
  Kind:          standalone conference server
  DB serial #:   922837649

You have 3 choices on how to treat the current database
on this server:
  1) It is new from the factory or contains no useful
data. Wipe it clean.
  2) It is a valid standalone server database that needs
to be merged with the network server database.
  3) It is a valid database, already merged. Leave it
alone.
99) Cancel setup.
Select:2

This selection will cause the database on this server to
be merged with the database on the network server. This
is appropriate if this server was operating in a
standalone mode and you are now attaching it to a
network server.
Proceed (y/[n])? Y
Please select the region where this server is installed:
  1) Europe
  2) Far East
  3) North America
99) quit
Select: 3
Please select the time zone for this server.

```

The following timezones are available:

- 1) America/Anchorage
- 2) America/Chicago
- 3) America/Denver
- 4) America/Edmonton
- 5) America/Halifax
- 6) America/Indianapolis
- 7) America/Los_Angeles
- 8) America/Montreal
- 9) America/New_York
- 10) America/Phoenix
- 11) America/Vancouver
- 12) America/Winnipeg
- 13) Pacific/Honolulu
- 99) no action

Select: 7

The local time zone (PST) is 480 minutes west of GMT
Daylight savings time policy: US/Canada

Please confirm (y/n): y

DONE

You have selected a new configuration for this unit.

Unit class = VP

Site class = REMOTE

Update the initialization file (y/[n])? y

DONE

NOTE: Changes take effect with the next restart if the unit.

Unit class = VP/REMOTE

ftwr-conf-1:tech\$

ftwr-conf-1:tech\$ restart

Are you sure (y/n)? y

Checking to see if the system is loaded...

The System Integrity Manager is not running.

Restarting the system...

**** LynxOS is down ****

LynxOS 386/486/Pentium PC-AT Version 2.4.0

Copyright 1987-1996 Lynx Real-Time Systems Inc.

All rights reserved.

LynxOS (x86) created Mon Dec 7 13:58:43 1998

MeetingPlace by Latitude Communications

Fri Apr 23 10:34:49 PDT 1999

Startup flags = a

SCSI adapter is Adaptec 2740 (EISA).

Disk 1 is mounted.

Disk 2 is mounted.

Unit class is networked conference server (VP/REMOTE).

Bus architecture is EISA.

Ethernet device is "wd3e0".

Resetting system file ownerships:

Removing set-uid permissions:

```

Updating files and setting permissions:
Replacing /lat/bin/viewexlog with /lat/etc/viewexlog.vp
Replacing /lat/techbin/alarm with /lat/etc/alarm.vp
Replacing /lat/techbin/clearalarm with
/lat/etc/clearalarm.vp
Replacing /lat/techbin/exc with /lat/etc/exc.vp
Replacing /lat/techbin/help with /lat/etc/help.vp
Replacing /lat/techbin/diskoptions with
/lat/etc/diskoptions.vp
Replacing /lat/techbin/setsn with /lat/etc/setsn.vp
Removing junk files:
./tmp/gwsimgr/core
lat/db/vista.taf
/usr/users/csc/lynx.os.ns
/usr/users/csc/lynx.os.vp
/usr/users/csc/nodetab.ns
/usr/users/csc/nodetab.vp
/usr/users/csc/om-kiran
/usr/users/csc/gen.os
/usr/users/csc/logit
/usr/users/csc/syslogd
/tmp/dbtasklocks/SETSN
Links:
Recreating the file system table:
Network setup:
Unit class = VP/REMOTE
Done.
Restarting...

**** LynxOS is down ****

LynxOS 386/486/Pentium PC-AT Version 2.4.0
Copyright 1987-1996 Lynx Real-Time Systems Inc.
All rights reserved.

LynxOS (x86) created Mon Dec 7 13:58:43 1998

MeetingPlace by Latitude Communications

Fri Apr 23 10:36:43 PDT 1999
Startup flags = a
SCSI adapter is Adaptec 2740 (EISA).
Disk 1 is mounted.
Disk 2 is mounted.
Unit class is networked conference server (VP/REMOTE).
Bus architecture is EISA.
Ethernet device is "wd3e0".
IP forwarding DISABLED (0).
Initializing the back panel serial port...done
Initializing the modem.../lat/bin/initmodem ...

/lat/bin/initmodem: type is `USR Sportster 28.8'

/lat/bin/initmodem: modem initialized

Installing Latitude drivers...
MSC #0 (Rev B4) in slot 4
PRC #0 (Rev B2) in slot 5

```



```

PRC #1 (Rev B2) in slot 6
PRC #2 (Rev B2) in slot 7
Making nodes...done.
Kernel WDT autostrobe disabled
add net default: gateway 38.246.124.1
23 Apr 10:39:02 ntpdate[25]: step time server 172.20.5.0
offset 121.527054
/bin/mv: rename: File or directory doesn't exist
Waiting for network server "pyramid" to be ready...OK
Checking for software updates.
    6 files differ.
Downloading updated files from pyramid.
Updating /lat/bin/cs-db...OK
Updating /lat/bin/ConfSchd...OK
Updating /lat/bin/db...OK
Updating /lat/techbin/release...OK
Updating /lat/etc/db.tar.Z...OK
Updating /lat/man/gwsim.1...OK
The MeetingPlace software now is up to date (updated).
The system will now reboot.

```

**** LynxOS is down ****

```

LynxOS 386/486/Pentium PC-AT Version 2.4.0
Copyright 1987-1996 Lynx Real-Time Systems Inc.
All rights reserved.

```

LynxOS (x86) created Mon Dec 7 13:58:43 1998

MeetingPlace by Latitude Communications

```

Fri Apr 23 10:41:57 PDT 1999
Startup flags = a
SCSI adapter is Adaptec 2740 (EISA).
Disk 1 is mounted.
Disk 2 is mounted.
Unit class is networked conference server (VP/REMOTE).
Bus architecture is EISA.
Ethernet device is "wd3e0".
Resetting system file ownerships:
Removing set-uid permissions:
Updating files and setting permissions:
Removing junk files:
Links:
Recreating the file system table:
Network setup:
Unit class = VP/REMOTE
Done.
Restarting...

```

**** LynxOS is down ****

```

LynxOS 386/486/Pentium PC-AT Version 2.4.0
Copyright 1987-1996 Lynx Real-Time Systems Inc.
All rights reserved.

```

```

LynxOS (x86) created Mon Dec  7 13:58:43 1998

MeetingPlace by Latitude Communications

Fri Apr 23 10:43:46 PDT 1999
Startup flags = a
SCSI adapter is Adaptec 2740 (EISA).
Disk 1 is mounted.
Disk 2 is mounted.
Unit class is networked conference server (VP/REMOTE).
Bus architecture is EISA.
Ethernet device is "wd3e0".
IP forwarding DISABLED (0).
Initializing the back panel serial port...done
Initializing the modem.../lat/bin/initmodem ...

/lat/bin/initmodem: type is `USR Sportster 28.8'

/lat/bin/initmodem: modem initialized

Installing Latitude drivers...
MSC #0 (Rev B4) in slot 4
PRC #0 (Rev B2) in slot 5
PRC #1 (Rev B2) in slot 6
PRC #2 (Rev B2) in slot 7
Making nodes...done.
Kernel WDT autostrobe disabled
add net default: gateway 38.246.124.1
23 Apr 10:44:04 ntpdate[25]: step time server 172.20.5.0
offset 0.559013
Waiting for network server "pyramid" to be ready...OK
Checking for software updates.
The MeetingPlace software is up to date (time stamp
match).

☐Ready to load the MeetingPlace application software
modules.
Hit ^C now to interrupt system
activation...54321...activating

Loading the System Integrity Manager...OK
Checking for out of date database files
Setting the database serial number
Starting the database merge for unit 6
Copying database files to the network server:
    user      (this will take approximately 20-30 minutes)
    group
    gentmp1
    gentmp2
    gentmp3
    flexfield
    gen.dbd
    billinginfo
    companyinfo
    filestats
    hwconfig
    hwstats
    option
    outdialtrans

```

```

netmgtinfo
netmgtcomm
unit
site
promptstats
scsi
swconfig
swstats
systemconfig
timezone
mtgcategory
remoteserver
didcnfgconfig
schedparamsconfig
config.dbd
analogcard
masterswcard
portrescard
tlcard
tlspan
trunk
trunkgroup
elcard
elspan
tcnfg.dbd
userlist (this will take approximately 10 minutes)
userlistmem
userlist.dbd
prompt
prompt.dbd
FMAppRec
FMStateTable
CustAppPrompt
FMPlayPrompt
FMGotoApp
FMOptionMenu
FMHangUp
FMFindMtg
FMReviewMtgMat
FMGetProfile
flexmenu.dbd
alarmentry
exlogentry
hwstatus
swstatus
exlogformat
apps
outdial
notification(this will take approximately 3 minutes)
schedfail
gwstatus
status.dbd

```

Starting the database merge on the network server (phase 1)

Copying the map file from the network server

Starting the local merge (phase 2) (timing for this depends on the size of conference records. ~10 minutes / 1000 records)

```

Merge is complete!
The log file is /usr/adm/nsmerge.log
Restarting the server.
Checking to see if the system is loaded...OK
System DOWN procedure has been initiated.
MeetingPlace 4.0.0, Apr 23, 1999
user name: The MeetingPlace software is DOWN
---> Restarting the system

**** LynxOS is down ****

LynxOS 386/486/Pentium PC-AT Version 2.4.0
Copyright 1987-1996 Lynx Real-Time Systems Inc.
All rights reserved.

LynxOS (x86) created Mon Dec  7 13:58:43 1998

                MeetingPlace by Latitude Communications

Fri Apr 23 11:29:51 PDT 1999
Startup flags = a
SCSI adapter is Adaptec 2740 (EISA).
Disk 1 is mounted.
Disk 2 is mounted.
Unit class is networked conference server (VP/REMOTE).
Bus architecture is EISA.
Ethernet device is "wd3e0".
IP forwarding DISABLED (0).
Initializing the back panel serial port...done
Initializing the modem.../lat/bin/initmodem ...

/lat/bin/initmodem: type is `USR Sportster 28.8'

/lat/bin/initmodem: modem initialized

Installing Latitude drivers...
MSC #0 (Rev B4) in slot 4
PRC #0 (Rev B2) in slot 5
PRC #1 (Rev B2) in slot 6
PRC #2 (Rev B2) in slot 7
Making nodes...done.
Kernel WDT autostrobe disabled
add net default: gateway 38.246.124.1
23 Apr 11:30:08 ntpdate[29]: adjust time server
172.20.5.0 offset -0.391368
Waiting for network server "pyramid" to be ready...OK
Checking for software updates.
The MeetingPlace software is up to date (time stamp
match).

☐Ready to load the MeetingPlace application software
modules.
Hit ^C now to interrupt system
activation...54321...activating

Loading the System Integrity Manager...OK
*** Running the Voice File System rebuild.
Copying SCSI database down from network server...

```

```

/lat/db/scsi
/lat/db/scsi.unitid

Running vfptrfix on unit 6...
Establishing communication with the SIM...
Initializing the file system...
Getting the disk configuration status...
FSGetDiskConfigStatus failed, ret = a005e
Disk configuration inconsistency!
Disk 3 configured but no directories configured
Disk 4 configured but no directories configured
*** Restarting system after Voice File System rebuild.
Checking to see if the system is loaded...OK
System DOWN procedure has been initiated.
MeetingPlace 4.0.0, Apr 23, 1999
user name: The MeetingPlace software is DOWN
---> Restarting the system

**** LynxOS is down ****

LynxOS 386/486/Pentium PC-AT Version 2.4.0
Copyright 1987-1996 Lynx Real-Time Systems Inc.
All rights reserved.

LynxOS (x86) created Mon Dec 7 13:58:43 1998

MeetingPlace by Latitude Communications

Fri Apr 23 11:31:29 PDT 1999
Startup flags = a
SCSI adapter is Adaptec 2740 (EISA).
Disk 1 is mounted.
Disk 2 is mounted.
Unit class is networked conference server (VP/REMOTE).
Bus architecture is EISA.
Ethernet device is "wd3e0".
IP forwarding DISABLED (0).
Initializing the back panel serial port...done
Initializing the modem.../lat/bin/initmodem ...

/lat/bin/initmodem: type is `USR Sportster 28.8'

/lat/bin/initmodem: modem initialized

Installing Latitude drivers...
MSC #0 (Rev B4) in slot 4
PRC #0 (Rev B2) in slot 5
PRC #1 (Rev B2) in slot 6
PRC #2 (Rev B2) in slot 7
Making nodes...done.
Kernel WDT autostrobe disabled
add net default: gateway 38.246.124.1
23 Apr 11:31:46 ntpdate[29]: adjust time server
172.20.5.0 offset -0.397139
Waiting for network server "pyramid" to be ready...OK
Checking for software updates.
The MeetingPlace software is up to date (time stamp

```

```

match).

□Ready to load the MeetingPlace application software
modules.
Hit ^C now to interrupt system
activation...54321...activating

Loading the System Integrity Manager...OK
Loading the Command Shell...OK
Loading the Network Management Server...OK
Loading the Database Server...OK
Loading the Call Processing Module...OK
Loading the Conference Scheduler...OK
Loading the Voice User Interface ...OK
MeetingPlace 4.0.0, Apr 23, 1999
user name:
Downloading to MSC.....OK
Downloading to PRC 0...OK
Downloading to PRC 1...OK
Downloading to PRC 2...OK
The MeetingPlace software is UP

user name: tech
Password:
Last login: Fri Apr 23 11:47:21 from pyramid
*****
                MeetingPlace(tm)
                by Latitude Communications

Copyright (c) 1993-1998 Latitude Communications, Inc.
                All rights reserved.
*****

Networked conference server 4.0.0
Fri Apr 23 12:20:30 PDT 1999
uprrfwtl1:tech$ swstatus
Networked conference server 4.0.0
System status: Operating
System mode: Up
Temperature: 33
Power supply: OK

MODULE NAME      STATUS   VERSION
SIM              UP      "02/11/99 12:05 MPBUILD-rel400n"
LSH              UP      "02/11/99 09:47 MPBUILD-rel400n"
SNMPD            UP      "02/11/99 13:18 MPBUILD-rel400n"
DBQSERVER        UP      "03/16/99 00:19 MPBUILD-HEAD"
CPSERVER         UP      "02/11/99 11:01 MPBUILD-rel400n"
CONFSCHEDED      UP      "02/16/99 15:20 UPDATE-rel400n"
VOICESERVER      UP      "02/17/99 16:14 UPDATE-rel400n"

UNIT SITE  STATUS  RUN LEVEL    UNIT KIND    LAST ATTACH
   0    0  OK      UP          NETSERV      04/23/99
11:32:00

```

Figure G-2. Remote Server Merge Output

H EISA to PCI Upgrade Procedure

This appendix will review the steps required to upgrade an EISA architecture MeetingPlace Conference Server to a PCI architecture Conference Server.

This is a hardware upgrade. The estimated time for completion can vary from 30 minutes to 5 hours, depending on the size of the system and the particular configuration.

Before going out to the customer site, it is important to verify that all required tools, hardware, and software will be available at the customer site. It is important to read this section thoroughly before performing the upgrade.

This appendix is broken into 3 sections:

- Requirements
- Upgrade Process
- Testing the Upgrade

EISA to PCI Upgrade Requirements

Tools

The standard technician toolkit will be required, refer to Appendix I - Required Toolkit, page I-1. At a minimum, the technician should be equipped with the following tools:

- Flat head screw driver (medium)
- Flat head screw driver (small)
- Phillips head screw driver (small)

Server Hardware

To replace an EISA based system, manufacturing will ship an entire new PCI system. This will be a complete system with the exception that it will only have a system disk drive installed. The voice disk drives from the EISA based system will be reused in the PCI based system. The PCI based system shipped from manufacturing will have the same hardware configuration as the EISA based system being replaced.

Server Software

The software required from a server perspective must be installed as MeetingPlace release 97.3 or later. In order to complete the second phase of the software upgrade, please refer to the installation/upgrade documentation of the corresponding release.

Upgrade Process

When scheduling the upgrade with the customer, make sure that the customer or the Customer Support Center schedules a meeting for the entire duration of the upgrade for all available conference ports. This will ensure that no end users are using the system during the upgrade process.

Ensuring the EISA system is Idle

1. Connect to the system through the front maintenance port, refer to Connecting Your Laptop, page 5-2.
2. Log into the system using terminal emulation software. For laptop configuration and details on this procedure, refer to Setting Up Your Laptop, page 5-3.
3. Verify that there are no ports in use by using option 1 of the **activity** command. If a port is not active it will show "--" next to the port number. Refer to Verifying No Activity, page 6-2.

Preparing EISA system

1. While the system is powered off, put the EISA system drive into slot 4 on the PCI system.

2. Power the system up, refer to the Powering Up the System procedure, page 6-5.
3. Type **down** to bring the system software down, refer to the Powering Down the System section, page 6-4.
4. To preserve the license keys, place a floppy disk in the floppy drive, and enter the command **savelicense**. If this server is to be *connected to a network server*, the license keys are irrelevant so you can skip this step and go to step 5.
5. Type **sysdatacopy** to copy the database and voice storage off the old system disk, in slot #4, to the new system disk.
6. To restore the saved license keys, put the diskette you wrote to in step 4 back into the drive and type **update**.
7. Type **timezone** to set the base time zone for the server, refer to the Configuring Server Time Zone section, page 5-21.
8. Type **getether** and write down the Ethernet address.
9. Type **net** to update the correct Ethernet address. Note, if this server is to be *connected to a network server*, you need to issue this command from the network server and select the appropriate unit number. For details on the **net** command, refer to Configuring LAN Parameters, starting on page 5-18.
10. Type **halt**.
11. Once the **halt** is complete, power off the server.
12. Remove the old system disk from drive slot #4.
13. If there are any voice drives in the EISA system (in drive slots 2-4), remove them from the EISA system and place them in the same exact drive slot on the PCI system. Be careful not to confuse which drive went into which slot; doing so will cause you to lose voice recordings.
14. Detach the various cables, including the modem, LAN, and telephony cables from the EISA system and connect them to the PCI system in the same positions.
15. Power the PCI system on. When you get the “user name:” prompt, log in as tech and type **restart enable** to bring the server up. Refer to the Powering Up the System section, page 6-5.

16. Type **alarm**. Take note of any alarms and report them to the Customer Support Center.
17. If there are alarms, type **clearalarm all**.
18. Check the date and time of the system by typing **date**.
19. Ask the customer if they would like to adjust the time on the system. This provides a good opportunity to resynchronize MeetingPlace, if needed. If the customer does want to modify the time of the system, bring down the software by referring to the Powering Down the System section, page 6-4. Use the **date** command to modify the date and/or time, refer to the Configuring Date and Time section, page 5-33.
20. Report the system upgrade down time to the Customer Support Center.

Testing the Upgrade

Testing Telephony

The first step in verifying the success of the upgrade is to test basic telephony functionality.

- Inbound calls

Verify inbound calls to the system by calling all possible MeetingPlace telephone numbers. If DID is configured, verify the various DID accesses.

- Outbound calls

Verify outbound calls from the system by scheduling an immediate meeting and use #31 to outdial out of the system.

Testing Scheduling

Beyond basic telephony functionality, verify that users can schedule new meetings.

- Voice Interface
 - Verify that users can schedule immediate meetings via the phone interface.
 - Verify that users can schedule future meetings via the phone interface.

- Workstation
 - Verify that users can schedule meetings via the workstation interface with a compatible version of MeetingTime.

Testing Conferencing

Verify conferencing functionality by scheduling and attending meetings.

- Recorded Meeting
 - Schedule a recorded meeting and verify that the meeting is indeed recorded and retrievable after the meeting (if the system is configured for recording capabilities).
- Non-recorded Meeting, adhoc recording
 - Schedule a meeting without recording. During the course of the meeting, activate adhoc recording.

Verifying Database

Verify a few of the key database items.

- Verify name headers
 - Do a random spot check of some profiles that are known to have recorded names to verify that the names have been retained.
- Verify meetings in schedule tab
 - Do a random spot check to verify that meetings that were scheduled before the conversion are preserved after the conversion.

Testing Gateways

All existing gateways should be functioning as they were before the upgrade.

- Verify Fax Gateway functionality by MeetingPlace Notification
 - Schedule a meeting with both sending and receiving notification enabled. Select Fax as preferred delivery method. Verify the meeting notification is sent via fax.
- Verify E-mail Gateway functionality by MeetingPlace Notification

- Schedule a meeting with both sending and receiving notification enabled. Select E-mail as preferred delivery method. Verify the meeting notification is sent via e-mail.
- Verify E-mail Gateway functionality by scheduling forms
 - Schedule a meeting using the scheduling form and send it to a mailbox monitored by MeetingPlace E-mail Gateway. Verify a confirmation message is sent back to the meeting scheduler, indicating that the meeting scheduling operations succeeded.
- Verify MeetingPlace Web functionality by scheduling meetings
 - Schedule a meeting using the MeetingPlace Web scheduling page. Verify the scheduled meeting is posted via telephony and MeetingTime client.
- Verify MeetingPlace Web posts meeting scheduled by MeetingTime
 - Schedule a meeting using the MeetingTime client. Verify the scheduled meeting is posted in MeetingPlace Web.

/ Required Toolkit

Before installing MeetingPlace, verify that you have the tools necessary for a successful installation:

- Laptop computer
- Null modem serial cable DB9 female to DB9 female, for pinouts see Figure 5-3 on page 5-3
- Screwdriver blade type #2
- Screwdriver Phillips #1
- Screwdriver Phillips #2
- Crossover cable for RJ-48 connectors. See Figure I-1.

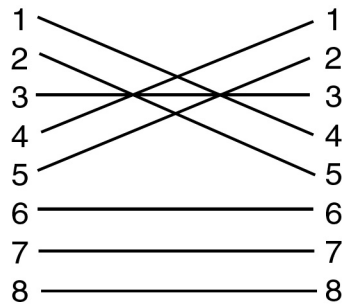


Figure I-1. RJ-48 Crossover Cable Pinouts

Acronyms

| | |
|-----------------|---|
| ATI | Analog Trunk Interface Card |
| AMI | Access Message Interface |
| B8ZS | Binary 8 Zero Substitution |
| CAS | Channel Associated Signaling, also referred to as CT1 or CE |
| CLI | Command Line Interface |
| CPU | Central Processing Unit |
| cr | Carriage Return. Same as pressing Enter. Refers to typewriter carriages that hold the paper and moves to the right while typing. At the end of the line, the typist “returns” the carriage to the far left to start another line. |
| CSE | Customer Support Engineer, one of two types of Latitude engineers that perform support and installation (the other type of engineer is an Application Engineer or AE). |
| CSUs | Channel Service Units. Often specified as FCC and UL-listed CSUs |
| D4 | The forth generation channel bank (the interface between the T-1 and a analog premises device such as an analog PBX) |
| DNIS | Dialed Number Identification Service |
| DPNSS | Digital Private Network Signaling System |
| DSP | Digital Signaling Processor of which the MSC is an example |
| DTI card | Digital Trunk Interface card also called T1. See ETI for the other type of digital trunk interface card. |
| DTMF | Dual-tone Multi-frequency |
| E1 | The European equivalent of the T1 except that it has a 25% percent larger bandwidth |
| E&M | A trunking arrangement for two way switch-to-switch or switch-to-network connections |
| EMC | Electromagnetic Compatibility |

| | |
|-------------------------------|---|
| ESF | Extended Superframe |
| ETI/BNC ETI/RJ45 cards | E-1 trunk interface cards with different connectors. E-1 trunks are a type of digital trunk. See DTI. |
| ETS300 | An E1 protocol also known as EuroISDN |
| EuroISDN | An E1 protocol also known as ETS300 |
| FRU | Field-replaceable Unit |
| IRC | Internet Resource Card |
| IPG | Installation Planing Guide |
| ISA | Industry Standard Architecture |
| ISDN | Integrated Services Digital Network |
| MVIP | Multi-vender Integration Protocol |
| NVRAM | Nonvolatile Random Access Memory |
| PCI | Peripheral Component Interconnect |
| PBX | Private Branch Exchange |
| PRC | Port Resource Card |
| PSTN | Public Switch Telephone Network |
| SCSI | Small Computer System Interface |
| MSC | Master Switch Controller |
| SIC | System Integrity Card |
| T1 | A digital transmission link with a capacity of 1,544 Mbps |

Glossary

See Chapter 3 for descriptions of MeetingPlace server components such as circuit cards and disk drives.

The following definitions apply to terms used in Latitude Communications documentation. Refer to the Latitude Communications acronym list for definitions of acronyms.

Application Engineer One of two types of Latitude engineers that perform support and installation. See Customer Support Engineer and MeetingPlace Support Representative

automated outdial The outdialing to specified telephone numbers at a specified time to invite users to a meeting. MeetingPlace supports automated outdial to pagers. Access this feature under the find me attendance option.

contact See site contact

CSE See Customer Support Engineer

Customer Support Engineer One of two types of Latitude engineers that perform support and installation. See Application Engineer and MeetingPlace support representative

IPG Installation Planning Guide (9900-74-01)

LAN See local area network

local area network (LAN) A digital network that operates in a limited geographical area usually limited to a single company location or campus. Communication within a LAN is not usually subjected to external regulations.

MAN See metropolitan area network

Meeting ID A unique number used by users and the Conference server to identify specific meetings.

MeetingMessage A recording that is played when anyone enters a meeting if a participant records a MeetingMessage before the meeting. If a participant records a MeetingMessage during the meeting it immediately plays to all participants and to anyone who enters the meeting thereafter.

meeting password A numeric string of numbers required to enter a meeting if the meeting was scheduled with the password option as an additional level of security.

MeetingPlace Support Representative Either a Latitude or distributor support engineer. See also Application Engineer and Customer Support Engineer

MeetingPlace system All the servers at one site regardless of number.

MeetingNotes Optional server software consisting of two parts: the primary option MeetingNotes Voice Option and the secondary option MeetingNotes Data Option.

MeetingNotes Data Option Optional server software that allows the sharing of meeting materials.

MeetingNotes Voice Option Optional server software that supports: recording and playback of meetings; submitting messages to other attendees; posting a recorded agenda; collaborating outside of meetings using comments.

MeetingTime Client software that runs on Windows or Macintosh computers which allows access to the Conference server for managing meetings, and issuing other commands such as a roll call.

metropolitan area network (MAN) A digital network that connects multiple networks and may use multiple access methods

multiserver meetings Allows participants at different locations to meet with each other over reduced phone lines via a single connection between MeetingPlace servers.

networked system A MeetingPlace system that installs into an enterprise network and consists of a network server which contains no telephony hardware and at least one conference server. A shadow network server can be added to act as a backup to the network server.

Notification Option Server software that proactively sends out notifications to all invited participants whenever users schedule, reschedule, or cancel meetings. Notifications distribute via fax or e-mail depending on the gateway.

organizer DO NOT USE. See scheduler.

passwords See meeting password or system password.

PCI Peripheral component interconnect.

port cards See trunk interface cards

profile A collection of information that uniquely identifies a MeetingPlace user, it contains such information as the user's ID, privileges, and preferences for setting up meetings.

profile number A numeric number—up to 17 digits—used to identify users over the telephone. Profile number is different from user ID. Typically, the profile number is the same as a user's telephone number, extension, or voice mailbox. Profile numbers have corresponding numeric passwords that are independent of the alphanumeric passwords associated with the user ID for local or wide area network access.

profile user A user who had a profile created by a system manager. During profile creation, a user can receive different levels of service for billing and security considerations.

scheduler Any user who is scheduling or has scheduled a meeting.

shadow network server An additional network server which takes over if the network server fails.

site contact Customer personnel who sufficient information to support MeetingPlace installation and respond to future calls relating to MeetingPlace maintenance. This person is often the MeetingPlace manager.

span A multiple signal transmission line which typically runs between telephony switching systems. For example T1 span which handles 24 signals or an E1 span that handles 30 signals.

system password A password to access MeetingPlace over a LAN or WAN usually via Telnet.

standalone system A single server MeetingPlace system.

trunk 1) A signal transmission line which typically runs between telephony switching systems. One span contains 24 trunks. 2) One of the numbered, functional assets on a Latitude trunk interface cards which the application engineer configures to a single database port. For example, trunk 9 of DTI card 0 could be configured to port 36 using the CLI.

trunk interface cards MeetingPlace server cards that connect to telephony trunks. These include three cards: ATI, DTI, and ETI cards. Port cards is an old name for trunk interface cards.

user ID A unique alphanumeric string of up to 17 characters given to all profile users. MeetingTime references users by their user IDs in all of its screens and reports. See profile number and password.

WAN See wide area network.

wide area network (WAN) A digital network that operates over a larger geographical area than a LAN or a MAN, usually connecting all or most geographical locations of an enterprise.

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Refer to the Glossary preceding this Index for short definitions of many MeetingPlace terms. Refer to Appendix A for all CLI command explanations.

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