This section describes how to configure the blades of a Cisco Unified MeetingPlace 8100 series. There are four types of blades:

- T1 Smart Blade
- Multi Access Blade (MP-MA-16)
- Multi Access Blade (MP-MA-4)
- Smart Blade

See Table: Blade Types for an explanation of each blade type.

Contents

Table: Blade Types

Blade Type	Explanation
T1 Smart Blade	Provides both PRC and MSC functionality along with necessary trunk interface functionality for digital T1 CAS phone lines.
Multi Access Blade (MP-MA-16 and MP-MA-4)	Provides the necessary trunk interface card functionality for E1 digital telephony, T1 PRI functionality, and IP-based telephony. The Multi Access Blade supports both Euro ISDN and QSIG telephony protocols, T1 PRI support for North America (U.S. and Canada), and G.711 and G.729a audio encoding for IP. MP-MA-16: Supports up to 16 spans. MP-MA-4: Supports up to 4 spans.
Smart Blade	Provides both PRC and MSC functionality in a single card.

Note: Mixing protocols is not supported except in combination with IP ports. For example, a Cisco Unified MeetingPlace system cannot have both T1 and E1 ports configured but it can have T1 (either PRI or CAS) and IP ports or E1 and IP ports. Also, a Cisco Unified MeetingPlace system cannot have both T1 CAS and T1 PRI ports configured. See Table: Allowed Blade Configurations.

Table: Allowed Blade Configurations

Not Allowed	Allowed
T1 CAS and E1	T1 PRI and IP
T1 PRI and E1	E1 and IP

T1 PRI and T1 CAS	T1 CAS and IP

The following procedures describe how to configure a Cisco Unified MeetingPlace Audio Server:

- Configuring a T1 CAS Cisco Unified MeetingPlace System
- Configuring a T1 PRI Cisco Unified MeetingPlace System
- Configuring an E1 Cisco Unified MeetingPlace System
- Configuring a Pure IP Cisco Unified MeetingPlace System
- Mixed Cisco Unified MeetingPlace System Configuration Examples

Configuring a T1 CAS Cisco Unified MeetingPlace System

Note: The necessary cables should already be attached to the transition modules on the back of your Cisco Unified MeetingPlace Audio Server. If they are not, see Connecting the Cables to the Cisco Unified MeetingPlace 8100 Series.

To Configure a T1 CAS Cisco Unified MeetingPlace System

1. If you do not already have terminal logging turned on, turn it on. For information on logging, see Logging Your HyperTerminal Session.
2. At the tech$ prompt, enter **blade -t** *number_of_T1_ports* for a pure T1 CAS Cisco Unified MeetingPlace system without any IP configuration.
3. Confirm the **blade** command by entering **y** .
   The Cisco Unified MeetingPlace system tells you what it is configuring. The tech$ prompt appears when the configuration is complete. See the following example:
   ```
   meetingplace:tech$ blade -t <# T1 ports>
   This will reset many DB tables, are you sure? (y/n): y
   Configuring "X" T1 ports
   Restart the system for changes to take effect
   meetingplace:tech$
   ```
4. Verify your configuration by entering **blade** . See the example in step 5 of the Configuring 1152 T1 CAS Ports (Cisco Unified MeetingPlace 8112 Only) Example.
5. Confirm the screen output is correct for your configuration.
6. Exit the **blade** command by entering **x** .

Configuring 576 T1 CAS Ports (Cisco Unified MeetingPlace 8106 Only) Example

Note: Although a Cisco Unified MeetingPlace 8112 can be configured with 576 T1 CAS ports, this example is for a Cisco Unified MeetingPlace 8106 only.

To Configure 575 T1 CAS Ports Example

1. If you do not already have terminal logging turned on, turn it on. For information, see Logging Your HyperTerminal Session.
2. At the tech$ prompt, enter **blade -t 576** .
3. Confirm the blade command by entering **y** .

The Cisco Unified MeetingPlace system responds by telling you how many ports it is configuring. When the tech$ prompt appears, it is complete. See the following example:

```
meetingplace:tech$ blade -t 576
This will reset many DB tables, are you sure? (y/n): y
Configuring 576 T1 ports
Restart the system for changes to take effect
meetingplace:tech$
```

4. Verify your configuration by entering **blade** .
5. Confirm that the screen output is similar to the following example:

```
meetingplace:tech$ blade
Slot Card Type CardId Ports
1 CG6000C T1 0 0-23, 24-47, 48-71, 72-95
2 CG6000C T1 1 96-119, 120-143, 144-167, 168-191
3 CG6000C T1 2 192-215, 216-239, 240-263, 264-287
4 CG6000C T1 3 288-311, 312-335, 336-359, 360-383
5 CG6000C T1 4 384-407, 408-431, 432-455, 456-479
6 CG6000C T1 5 480-503, 504-527, 528-552, 552-575
***** B L A D E C O N F I G M E N U *****
1) View blade details
2) Modify blade
x) Exit program
Enter command:
```

6. Exit the blade command by entering **x** .

Configuring 1152 T1 CAS Ports (Cisco Unified MeetingPlace 8112 Only) Example

To Configure 1152 T1 CAS Ports Example

1. If you do not already have terminal logging turned on, turn it on. For information, see Logging Your HyperTerminal Session.
2. Confirm the blade command by entering **y** .

   The Cisco Unified MeetingPlace system responds by telling you how many ports it is configuring. When the tech$ prompt appears, it is complete. See the following example:

```
meetingplace:tech$ blade -t 1152
This will reset many DB tables, are you sure? (y/n): y
Configuring 1152 T1 ports
Restart the system for changes to take effect
meetingplace:tech$
```

3. Verify your configuration by entering **blade** .
4. Confirm that the screen output is similar to the following example:

```
meetingplace:tech$ blade
Slot Card Type CardId Ports
1 CG6000C T1 0 0-23, 24-47, 48-71, 72-95
2 CG6000C T1 1 96-119, 120-143, 144-167, 168-191
3 CG6000C T1 2 192-215, 216-239, 240-263, 264-287
4 CG6000C T1 3 288-311, 312-335, 336-359, 360-383
5 CG6000C T1 4 384-407, 408-431, 432-455, 456-479
6 CG6000C T1 5 480-503, 504-527, 528-552, 552-575
11 CG6000C T1 6 576-599, 600-623, 624-647, 648-671
12 CG6000C T1 7 672-695, 696-719, 720-743, 744-767
13 CG6000C T1 8 768-791, 792-815, 816-839, 840-863
```

```
14 CG6000C T1 9 864-887, 888-911, 912-935, 936-959
15 CG6000C T1 10 960-983, 984-1007, 1008-1031, 1032-1055
16 CG6000C T1 11 1056-1079, 1080-1103, 1104-1127, 1128-1151
***** B L A D E C O N F I G M E N U *****
1) View blade details
2) Modify blade
x) Exit program
Enter command:
```

5. Exit the blade command by entering **x** .

Configuring Spans for a T1 CAS Cisco Unified MeetingPlace System

T1 spans connect to the T1 Smart Blade transition modules in the back of the Cisco Unified MeetingPlace Audio Server. The T1 spans are automatically activated and configured with default settings when the blade command is run. Table: Default T1 CAS Span Configuration lists the default span configuration.

Check the worksheets in Planning Your Audio Server Installation to see if your Cisco Unified MeetingPlace system is configured this way. If these default settings are accurate for your installation, you do not need to complete this section.

Table: Default T1 CAS Span Configuration

Parameter	Default	Explanation	Possible Values
Activate the DTI span?	y	Specifies if the span is active.	• y = active • n = inactive
Framing	ESF	Specifies the framing protocol used on this span. Determined by the service provider. *We recommend using ESF only .*	• D4 • ESF
Zero code suppression	B8ZS	Specifies the zero code suppression for the span. Determined by the service provider. *We recommend using B8ZS only.*	• none • B8ZS* jammed-bit
Timing	external	Specifies if the Cisco Unified MeetingPlace Audio Server should get clock timing from the PBX or the central office or if timing is generated by Cisco Unified MeetingPlace. All spans should be configured as external. The internal setting is for diagnostic purposes.	• internal • external (the span is connected to the public network or a trusted system, such as the PBX)
External sync	none.	Specifies the priority of the spans that are set for	

priority	The T1 span connected to the T1 Smart Blade in slot 1, line A gets sync priority 1, line B gets 2, etc.	external timing. The Cisco Unified MeetingPlace system always tries to synchronize from the highest priority span. If the synchronization span goes down, the Cisco Unified MeetingPlace system automatically switches synchronization to the next highest span. If a higher priority span comes up, the Cisco Unified MeetingPlace system automatically synchronizes off of it.	• 1-255 (1 is the highest, 255 is the lowest) • never
Trunk [x]	Numbering is done in order (1, 2, 3, etc.). For example, Trunk [1]:port 0 Trunk [2]:port 1 Trunk [3]:port 2	Specifies which port in the database is assigned to the specific hardware trunk on the card.	• number
Remote loopback to network	n	Specifies if the span should be put into a loopback mode for testing from the remote end.	• y = yes • n = no (normal operation)
Internal data loopback	n	Specifies if the span should loop back locally for running diagnostics.	• y = yes • n = no (normal operation)
Port group	0	Specifies the number of the port group.	• 0 (T1 CAS) • 1 (IP)* 2 (E1) • 3 (T1 PRI)
Active?	y (if you use a blade to configure T1)	Specifies if the port group is active.	• y = yes • n = no
Card type	T1	Specifies the type of card.	• none • T1* analog • E1 • IP
Signaling protocol	wink start	Specifies the signaling protocol.	• loop start • wink start* ground start • clear channel • E1 • IP • protocol table
Protocol table	0		

Table: Default T1 CAS Span Configuration

		Specifies the number of the protocol table to copy from.	• number from 0 to 99
Number of DID digits expected	0	Specifies the number of DID digits.	• number from 0 to 6
Default access type	combined access	Specifies the access type	• Combined access • DID meeting* Profile • MeetingNotes • loop through transfer • EBSApp1004 • EBSApp1005 • EBSApp1007 • EBS Xfer test • NewApp1011 • Choose music • Spanish samples • Goto123123_1015
Language	English (US)	Specifies which language to use.	• English (US) • English (UK)* no language
Human assistance?	n	Specifies if human assistance is allowed.	• y = yes • n = no
Flash transfer?	n	Specifies if this can be flash transferred.	• y = yes • n = no
Outdial?	y	Specifies if this can be outdialed on.	• y = yes • n = no

To Configure Spans for a T1 CAS Cisco Unified MeetingPlace System

1. If you do not already have terminal logging turned on, turn it on. For information, see Logging Your HyperTerminal Session.
2. At the tech$ prompt, enter **blade** . One of the following examples appears:

   Cisco Unified MeetingPlace 8106 :

```
meetingplace:tech$ blade
***** B L A D E C O N F I G M E N U *****
1) View blade details
2) Modify blade
x) Exit program
Enter command: 2
Enter blade slot [1..6]: 1
Type [T1]:
Number of spans [ 1]:
Line A
```

```
Span [ 0]:
Framing [ESF]:
Line Coding [B8ZS]:
Timing [external]:
Sync Priority [never]:
Port Group [ 0]:
1st Port [ 0]:
Span Flags [0x00000000]:
Slot Card Type CardId Ports
1 CG6000C T1 0 0-23, none, none, none
2 CG6000C
3 CG6000C
4 no card
5 no card
6 TP1610-4 IP 0 24-83 (172.27.6.140)
***** B L A D E C O N F I G M E N U *****
1) View blade details
2) Modify blade
x) Exit program
Enter command:
```

Cisco Unified MeetingPlace 8112 :

```
meetingplace:tech$ blade
***** B L A D E C O N F I G M E N U *****
1) View blade details
2) Modify blade
x) Exit program
Enter command: 2
Enter blade slot [1..16]: 1
Type [T1]:
Number of spans [ 1]:
Line A
Span [ 0]:
Framing [ESF]:
Line Coding [B8ZS]:
Timing [external]:
Sync Priority [never]:
Port Group [ 0]:
1st Port [ 0]:
Span Flags [0x00000000]:
Slot Card Type CardId Ports
1 TP1610 T1 0 0-22, 23-45, 46-68, 69-91
92-114, 115-137, 138-160, 161-183
184-206, 207-229, 230-252, 253-275
276-298, 299-321, 322-344, 345-367
2 TP1610 T1 1 368-390, 391-413, 414-436, 437-459
460-482, 483-505, 506-528, 529-551
552-574, 575-597, 598-620, 621-643
644-666, 667-689, 690-712, 713-735
3 CG6000C SB 2
4 CG6000C SB 3
5 CG6000C SB 4
6 CG6000C SB 5
11 CG6000C SB 6
```

```
12 CG6000C SB 7
13 CG6000C SB 8
14 CG6000C SB 9
15 no card
16 no card
***** B L A D E C O N F I G M E N U *****
1) View blade details
2) Modify blade
x) Exit program
Enter command:
```

3. Enter the values from Table: Default T1 CAS Span Configuration. Press **Enter** after you enter each value and the next line appears. If you receive an error stating that you have exceeded the number of available ports, check your MeetingTime settings.

   Note: Do not change the **Span Flags** field unless a Cisco TAC representative instructs you to.
4. (Optional) Enter **2** to configure another span.
5. Exit the blade command by entering **x** .

Configuring a T1 PRI Cisco Unified MeetingPlace System

Note: The necessary cables should already be attached to the transition modules on the back of your Cisco Unified MeetingPlace Audio Server. If they are not, see Connecting the Cables to the Cisco Unified MeetingPlace 8100 Series.

Cisco Unified MeetingPlace 8106: In a T1 PRI configuration, the maximum number of ports per span is 23. The maximum number of T1 PRI ports for a Cisco Unified MeetingPlace 8106 is 368 because each MP-MA-16-PRI can support up to 16 spans and it can have only one Multi Access Blade (either MP-MA-4-PRI or MP-MA-16-PRI). 16 spans x 23 ports each = 368 total ports.

Cisco Unified MeetingPlace 8112: In a T1 PRI configuration, the maximum number of ports per span is 23. The maximum number of T1 PRI ports for a Cisco Unified MeetingPlace 8112 is 736 because each Multi Access Blade can support up to 16 spans. A Cisco Unified MeetingPlace 8112 can have 2 MP-MA-16-PRIs for a total of 32 spans. 32 spans x 23 ports each = 736 total ports.

To Configure a T1 PRI Cisco Unified MeetingPlace System

1. If you do not already have terminal logging turned on, turn it on. For information, see Logging Your HyperTerminal Session.
2. At the tech$ prompt, enter **blade -p** *number_of_T1_PRI_ports* for a pure T1 PRI Cisco Unified MeetingPlace system without any IP configuration.
3. Confirm the blade command by entering **y** .

   The Cisco Unified MeetingPlace system tells you what it is configuring. The tech$ prompt appears when the configuration is complete. See the following example:

```
meetingplace:tech$ blade -p <# T1 PRI ports>
This will reset many DB tables, are you sure? (y/n): y
Configuring "X" T1 PRI ports
Restart the system for changes to take effect
meetingplace:tech$
```

4. Verify your configuration by entering **blade** .

5. Confirm the screen output is correct for your configuration.
6. Exit the blade command by entering **x** .

Configuring 368 T1 PRI Ports Example

To Configure 368 T1 PRI Ports Example

1. If you do not already have terminal logging turned on, turn it on. For information, see Logging Your HyperTerminal Session.
2. At the tech$ prompt, enter **blade -p 368** and press **Enter** .
3. Confirm the **blade** command by entering **y** .

   The Cisco Unified MeetingPlace system responds by telling you how many ports it is configuring. When the tech$ prompt appears, it is complete. See the following example:

```
meetingplace:tech$ blade -p 368
This will reset many DB tables, are you sure? (y/n): y
Configuring 368 T1 PRI ports
Restart the system for changes to take effect
meetingplace:tech$
```

4. Verify your configuration by entering **blade** .
5. Confirm the screen output is similar to the following example:

```
meetingplace:tech$ blade
Slot Card Type CardId Ports
1 TP1610 T1 0 0-22, 23-45, 46-68, 69-91
92-114, 115-137, 138-160, 161-183
184-206, 207-229, 230-252, 253-275
276-298, 299-321, 322-344, 345-367
2 CG6000C SB 1
3 CG6000C SB 2
4 CG6000C SB 3
5 CG6000C SB 4
6 no card
11 no card
12 no card
13 no card
14 no card
15 no card
16 no card
***** B L A D E C O N F I G M E N U *****
1) View blade details
2) Modify blade
x) Exit program
Enter command:
```

   Note: A Cisco Unified MeetingPlace 8106 has 6 slots only, so the slots labeled 11 to 16 (the highlighted lines) in the preceding example are for a Cisco Unified MeetingPlace 8112 only.
6. Exit the **blade** command by entering **x** .

Configuring 736 T1 PRI Ports (Cisco Unified MeetingPlace 8112 Only) Example

To Configure 736 T1 PRI Ports Example

1. If you do not already have terminal logging turned on, turn it on. For information, see Logging Your HyperTerminal Session.
2. At the tech$ prompt, enter **blade -p 736** and press **Enter** .
3. Confirm the **blade** command by entering **y** .

   The Cisco Unified MeetingPlace system responds by telling you how many ports it is configuring. When the tech$ prompt appears, it is complete. See the following example:

```
meetingplace:tech$ blade -p 736
This will reset many DB tables, are you sure? (y/n): y
Configuring 736 T1 PRI ports
Restart the system for changes to take effect
meetingplace:tech$
```

4. Verify your configuration by typing **blade** and pressing **Enter** .
5. Confirm the screen output is similar to the example below.

```
meetingplace:tech$ blade
Slot Card Type CardId Ports
1 TP1610 T1 0 0-22, 23-45, 46-68, 69-91
92-114, 115-137, 138-160, 161-183
184-206, 207-229, 230-252, 253-275
276-298, 299-321, 322-344, 345-367
2 TP1610 T1 1 368-390, 391-413, 414-436, 437-459
460-482, 483-505, 506-528, 529-551
552-574, 575-597, 598-620, 621-643
644-666, 667-689, 690-712, 713-735
3 CG6000C SB 2
4 CG6000C SB 3
5 CG6000C SB 4
6 CG6000C SB 5
11 CG6000C SB 6
12 CG6000C SB 7
13 CG6000C SB 8
14 CG6000C SB 9
15 no card
16 no card
***** B L A D E C O N F I G M E N U *****
1) View blade details
2) Modify blade
x) Exit program
Enter command:
```

6. Exit the **blade** command by entering **x** .

Configuring Port Groups

You can create port groups so that a group of ports can be configured with the same parameters. You use port groups to separate Cisco Unified MeetingPlace Audio Server functions, such as outdial versus no outdial and T1 CAS versus IP.

Note: If this installation requires NSF codes or if you are unsure if they are required, see Configuring Network-Specific Facility Codes.

To Configure Port Groups

1. At the tech$ prompt, enter **port** . The following menu appears:

```
meetingplace:tech$ port
***** 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. Modify the group record by entering **5** . The second line in the following example appears:

```
Enter command: 5
Enter port group record number [0..31, <cr> for all] : 0
------------ GROUP 0 --------------
--- To skip over a field, just press <cr> ---
Activate the group? [y] : y
Card type [ T1] : T1
Signaling [ ] : protocol table
Protocol table [0] : 2
Number of DID digits [0] :
Human assistance? [n] :
Flash transfer? [n] :
Outdial? [y] :
Enter command: x
```

3. Enter the appropriate port group record number. In the preceding example, it is port group 0, so enter **0** . The rest of the preceding example appears.
4. Activate the port group by entering **y** .
5. Select the card type by entering **T1** .
6. Select signaling by entering **protocol table** .
7. Select the appropriate protocol table number. In this example, it is protocol table 2, so enter **2** . See Table: Default Protocol Table Settings-T1 PRI for a list of default protocol tables.

Table: Default Protocol Table Settings-T1 PRI

Protocol Table Number	Default Protocol
2	AT&T PRI
3	Nortel PRI
4	Bell PRI

Note: The protocol table contains the configuration information for the type of signaling used. All T1 PRI Cisco Unified MeetingPlace systems are shipped from the factory with protocol table 2 set to use the default setting of AT&T PRI protocol, protocol table 3 to use Nortel PRI, and table 4 to use

Bell PRI. If this is not correct for your Cisco Unified MeetingPlace system, change it by using the **protparm** command.

8. (Optional) Repeat this procedure if you need more than one port group.

9. To exit the **port** command, enter **x** .

Assigning Ports to Port Groups

You can assign specific ports to port groups so that all ports in that group have the same parameters.

To Assign Ports to Port Groups

1. At the tech$ prompt, enter **port** . See the example in step 1 of the Configuring Port Groups.
2. Enter **2** to modify a port record. The first line in the following example appears:
   ```
   Enter port record number [0..735] : 0
   -------------- UNIT 0 PORT 0 -------------
   --- To skip over a field, just press <cr> ---
   Uses port group [ 2] :
   ```
   Note: The preceding example is for a Cisco Unified MeetingPlace 8112. For a Cisco Unified MeetingPlace 8106, the ports number from 0 to 368.
3. Enter the port number. In this example, it is port 0, so enter **0** . The rest of the preceding example appears.
4. Enter the number of the port group. In this example, it is port group 0, so enter **0** .
   Note: If you would like to copy this port record to other ports, see the Copying Port Records.
5. Exit the **port** command by entering **x** .

Copying Port Records

Copying port records provides an easy way to copy the port record for one port to as many ports as desired.

To Copy Port Records

1. If you are not already accessing the **port** command, at the tech$ prompt, enter **port** . See the following example:
   ```
   meetingplace:tech$ port
   ***** 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: 3
   Enter port record number to copy from [0.. 735 ] : 0
   Enter port(s) to copy to [0-735] : 1- 735
   Copied to port record(s) 1-735.
   Enter command: x
   ```

Note: The preceding example is for a Cisco Unified MeetingPlace 8112. For a Cisco Unified MeetingPlace 8106, the ports number from 0 to 368. These are the maximum number of ports allowed. Depending on your configuration, you may have fewer ports.

2. Copy the port records by entering **3** .
3. Enter the port number from which you want to copy, as shown in line 13 of the preceding example. In this example, it is port 0, so enter **0** .
4. Enter the port numbers to which you want to copy, as shown in line 14 of the preceding example. In this example, all ports are being configured with the same parameters as port 0, so enter **1-735** for a Cisco Unified MeetingPlace 8112 or **1-368** for a Cisco Unified MeetingPlace 8106.
5. The Cisco Unified MeetingPlace system tells you which ports were copied to, as shown in line 15 of the preceding example.
6. Exit the **port** command by entering **x** .

Configuring T1 Spans for a T1 PRI Cisco Unified MeetingPlace System

T1 spans connect to the Multi Access Blade transition modules in the back of your Cisco Unified MeetingPlace Audio Server.

Note: The T1 spans are automatically activated and configured with default settings when the **blade** command is run. Table: Default T1 PRI Span Configuration lists the default span configuration.

Check the worksheets in Planning Your Audio Server Installation to see if your Cisco Unified MeetingPlace system is configured this way. If these default settings are accurate for your installation, you do not need to complete this section. If the default settings are not accurate for your installation, complete the steps that follow.

Table: Default T1 PRI Span Configuration

Parameter	Default	Explanation	Possible Values
Activate the DTI span?	y	Specifies if the span is active.	• y = active • n = inactive
Framing	ESF	Specifies the framing protocol used on this span. Determined by the service provider. *We recommend using ESF only.*	• D4 • ESF
Zero code suppression	B8ZS	Specifies the zero code suppression for the span. Determined by the service provider. *We recommend using B8ZS only.*	• none • B8ZS* jammed-bit
Timing	external	Specifies if the Cisco Unified MeetingPlace Audio Server should get clock timing from the PBX or central office or if timing is generated by Cisco Unified MeetingPlace.	• internal • external (the span is

		All spans should be configured as external. The internal setting is for diagnostic purposes.	connected to the public network or a trusted system, such as the PBX)
External sync priority	none. The T1 span connected to the T1 Smart Blade in slot 1, line A gets sync priority 1, line B gets 2, etc.	Specifies the priority of the spans that are set for external timing. The Cisco Unified MeetingPlace system always tries to synchronize from the highest priority span. If the synchronization span goes down, the Cisco Unified MeetingPlace system automatically switches synchronization to the next highest span. If a higher priority span comes up, the Cisco Unified MeetingPlace system automatically synchronizes off of it.	• 1-255 (1 is the highest, 255 is the lowest) • never
Trunk [x]	Numbering is done in order (1, 2, 3, etc.). For example, Trunk [1]:port 0 Trunk [2]:port 1 Trunk [3]:port 2	Specifies which port in the database is assigned to the specific hardware trunk on the card.	• number
Remote loopback to network	n	Specifies if the span should be put into a loopback mode for testing from the remote end.	• y = yes • n = no (normal operation)
Internal data loopback	n	Specifies if the span should loop back locally for running diagnostics.	• y = yes • n = no (normal operation)
Port group	3	Specifies the number of the port group.	• 0 (T1 CAS) • 1 (IP)* 2 (E1) • 3 (T1 PRI)
Active?	y (if you use a blade to configure T1)	Specifies if the port group is active.	• y = yes • n = no
Card type	T1	Specifies the type of card.	• none • T1* analog • E1 • IP
Signaling protocol	wink start	Specifies the signaling protocol.	• loop start

Table: Default T1 PRI Span Configuration

			• wink start* ground start • clear channel • E1 • IP • protocol table
Protocol table	0	Specifies the number of the protocol table to copy from.	• number from 0 to 99
Number of DID digits expected	0	Specifies the number of DID digits.	• number from 0 to 6
Default access type	combined access	Specifies the access type	• Combined access • DID meeting* Profile • MeetingNotes • loop through transfer • EBSApp1004 • EBSApp1005 • EBSApp1007 • EBS Xfer test • NewApp1011 • Choose music • Spanish samples • Goto123123_1015
Language	English (US)	Specifies which language to use.	• English (US) • English (UK)* no language
Human assistance?	n	Specifies if human assistance is allowed.	• y = yes • n = no
Flash transfer?	n	Specifies if this can be flash transferred.	• y = yes • n = no
Outdial?	y	Specifies if this can be outdialed on.	• y = yes • n = no

To Configure T1 Spans for a T1 PRI Cisco Unified MeetingPlace System

1. If you do not already have terminal logging turned on, turn it on. For information, see Logging Your HyperTerminal Session.
2. At the tech$ prompt, enter **blade** . One of the following examples appears:

   Cisco Unified MeetingPlace 8106 :

   ```
   meetingplace:tech$ blade
   ***** B L A D E C O N F I G M E N U *****
   ```

```
1) View blade details
2) Modify blade
x) Exit program
Enter command: 2
Enter blade slot [1..6]: 1
Type [T1]:
Number of spans [ 1]:
Line A
Span [ 0]:
Framing [ESF]:
Line Coding [B8ZS]:
Timing [external]:
Sync Priority [never]:
Port Group [ 0]:
1st Port [ 0]:
Span Flags [0x00000000]:
Slot Card Type CardId Ports
1 CG6000C T1 0 0-23, none, none, none
2 CG6000C
3 CG6000C
4 no card
5 no card
6 TP1610-4 IP 0 24-83 (172.27.6.140)
***** B L A D E C O N F I G M E N U *****
1) View blade details
2) Modify blade
x) Exit program
Enter command:
```

Cisco Unified MeetingPlace 8112:

```
meetingplace:tech$ blade
***** B L A D E C O N F I G M E N U *****
1) View blade details
2) Modify blade
x) Exit program
Enter command: 2
Enter blade slot [1..16]: 1
Type [T1]:
Number of spans [ 1]:
Line A
Span [ 0]:
Framing [ESF]:
Line Coding [B8ZS]:
Timing [external]:
Sync Priority [never]:
Port Group [ 0]:
1st Port [ 0]:
Span Flags [0x00000000]:
Slot Card Type CardId Ports
1 TP1610 T1 0 0-22, 23-45, 46-68, 69-91
92-114, 115-137, 138-160, 161-183
184-206, 207-229, 230-252, 253-275
276-298, 299-321, 322-344, 345-367
2 TP1610 T1 1 368-390, 391-413, 414-436, 437-459
```

```
460-482, 483-505, 506-528, 529-551
552-574, 575-597, 598-620, 621-643
644-666, 667-689, 690-712, 713-735
3 CG6000C SB 2
4 CG6000C SB 3
5 CG6000C SB 4
6 CG6000C SB 5
11 CG6000C SB 6
12 CG6000C SB 7
13 CG6000C SB 8
14 CG6000C SB 9
15 no card
16 no card
***** B L A D E C O N F I G M E N U *****
1) View blade details
2) Modify blade
x) Exit program
Enter command:
```

3. Enter the values from Table: Default T1 PRI Span Configuration. Press **Enter** after you enter each value and the next line appears. If you receive an error stating that you have exceeded the number of available ports, check your MeetingTime settings.

   Note: Do not change the **Span Flags** field unless a Cisco TAC representative instructs you to.
4. (Optional) Enter **2** to configure another span.
5. Exit the **blade** command by entering **x** .

Configuring an E1 Cisco Unified MeetingPlace System

Note: The necessary cables should already be attached to the transition modules on the back of your Cisco Unified MeetingPlace Audio Server. If they are not, see Connecting the Cables to the Cisco Unified MeetingPlace 8100 Series.

To Configure an E1 Cisco Unified MeetingPlace System

1. If you do not already have terminal logging turned on, turn it on. For information, see Logging Your HyperTerminal Session.
2. At the tech$ prompt, enter **blade -e** *number_of_E1_ports* for a pure E1 Cisco Unified MeetingPlace system without any IP configuration. See the following example:

   ```
   meetingplace:tech$ blade -e <# E1 ports>
   This will reset many DB tables, are you sure? (y/n): y
   Configuring "X" E1 ports
   Restart the system for changes to take effect
   meetingplace:tech$
   ```
3. Confirm the **blade** command by entering **y** .

   The Cisco Unified MeetingPlace system tells you what it is configuring. The tech$ prompt appears when the configuration is complete.
4. Verify your configuration by entering **blade** .
5. Confirm the screen output is correct for your configuration.
6. Exit the **blade** command by entering **x** .

   Note: You can reserve slots for later use by using the **blade** command with the -r option.

Configuring 240 E1 Ports Example

To Configure 240 E1 Ports Example

1. If you do not already have terminal logging turned on, turn it on. For information, see Logging Your HyperTerminal Session.
2. At the tech$ prompt, enter **blade -e 240** .
3. Confirm the **blade** command by entering **y** .

   The Cisco Unified MeetingPlace system responds by telling you how many ports it is configuring. When the tech$ prompt appears, it is complete. See the following example:

   ```
   meetingplace:tech$ blade -e 240
   This will reset many DB tables, are you sure? (y/n): y
   Configuring 240 E1 ports
   Restart the system for changes to take effect
   meetingplace:tech$
   ```
4. Verify your configuration by entering **blade** .
5. Confirm the screen output is similar to one of the following examples:

   Cisco Unified MeetingPlace 8106:

   ```
   meetingplace:tech$ blade
   Slot Card Type CardId Ports
   1 TP1610-4 E1 0 0-29, 30-59, 60-89, 90-119
   2 TP1610-4 E1 1 120-149, 150-179, 180-209, 210-239
   3 CG6000C SB 0
   4 CG6000C SB 1
   5 no card SB 2
   6 no card
   ***** B L A D E C O N F I G M E N U *****
   1) View blade details
   2) Modify blade
   x) Exit program
   Enter command:
   ```

   Cisco Unified MeetingPlace 8112:

   ```
   meetingplace:tech$ blade
   Slot Card Type CardId Ports
   1 TP1610 E1 0 0-29, 30-59, 60-89, 90-119
   120-149, 150-179, 180-209, 210-239
   2 CG6000C SB 0
   3 CG6000C SB 1
   4 CG6000C SB 2
   5 no card
   6 no card
   11 no card
   12 no card
   13 no card
   14 no card
   15 no card
   16 no card
   ***** B L A D E C O N F I G M E N U *****
   1) View blade details
   2) Modify blade
   x) Exit program
   ```

```
Enter command:
```

6. Exit the **blade** command by entering **x** .

Configuring 720 E1 Ports (Cisco Unified MeetingPlace 8112 Only) Example

To Configure 720 E1 Ports Example

1. If you do not already have terminal logging turned on, turn it on. For information, see Logging Your HyperTerminal Session.
2. At the tech$ prompt, enter **blade -e 720** .
3. Confirm the **blade** command you entered by entering **y** .

   The Cisco Unified MeetingPlace system responds by telling you how many ports it is configuring. When the tech$ prompt appears, it is complete. See the following example:

```
meetingplace:tech$ blade -e 720
This will reset many DB tables, are you sure? (y/n): y
Configuring 720 E1 ports
Restart the system for changes to take effect
meetingplace:tech$
```

4. Verify your configuration by entering **blade** .
5. Confirm the screen output is similar to the following example:

```
Meetingplace:tech$ blade
Slot Card Type CardId Ports
1 TP1610 E1 0 0-29, 30-59, 60-89, 90-119
120-149, 150-179, 180-209, 210-239
240-269, 270-299, 300-329, 330-359
360-389, 390-419, 420-449, 450-479
2 TP1610 E1 1 480-509, 510-539, 540-569, 570-599
600-629, 630-659, 660-689, 690-719
3 CG6000C SB 0
4 CG6000C SB 1
5 CG6000C SB 2
6 CG6000C SB 3
11 CG6000C SB 4
12 CG6000C SB 5
13 CG6000C SB 6
14 CG6000C SB 7
15 no card
16 no card
***** B L A D E C O N F I G M E N U *****
1) View blade details
2) Modify blade
x) Exit program
Enter command:
```

6. Exit the **blade** command by entering **x** .

Configuring 960 E1 Ports (Cisco Unified MeetingPlace 8112 Only) Example

To Configure 960 E1 Ports Example

1. If you do not already have terminal logging turned on, turn it on. For information, see Logging Your HyperTerminal Session.
2. At the tech$ prompt, enter **blade -e 960** .
3. Confirm the **blade** command by entering **y** .

   The Cisco Unified MeetingPlace system responds by telling you how many ports it is configuring. When the tech$ prompt appears, it is complete. See the following example:

   ```
   meetingplace:tech$ blade -e 960
   This will reset many DB tables, are you sure? (y/n): y
   Configuring 960 E1 ports
   Restart the system for changes to take effect
   meetingplace:tech$
   ```
4. Verify your configuration by entering **blade** .
5. Confirm the screen output is similar to the following example:

   ```
   Meetingplace:tech$ blade
   Slot Card Type CardId Ports
   1 TP1610 E1 0 0-29, 30-59, 60-89, 90-119
   120-149, 150-179, 180-209, 210-239
   240-269, 270-299, 300-329, 330-359
   360-389, 390-419, 420-449, 450-479
   2 TP1610 E1 1 480-509, 510-539, 540-569, 570-599
   600-629, 630-659, 660-689, 690-719
   720-749, 750-779, 780-809, 810-839
   840-869, 870-899, 900-929, 930-959
   3 CG6000C SB 0
   4 CG6000C SB 1
   5 CG6000C SB 2
   6 CG6000C SB 3
   11 CG6000C SB 4
   12 CG6000C SB 5
   13 CG6000C SB 6
   14 CG6000C SB 7
   15 CG6000C SB 8
   16 CG6000C SB 9
   ***** B L A D E C O N F I G M E N U *****
   1) View blade details
   2) Modify blade
   x) Exit program
   Enter command:
   ```
6. Exit the **blade** command by entering **x** .

Configuring Port Groups

You can create port groups so that a group of ports can be configured with the same parameters. Below are the instructions for creating and configuring port groups.

To Configure Port Groups

1. At the tech$ prompt, enter **port** . The following menu appears:

   ```
   meetingplace:tech$ port
   ```

```
***** 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: 3
```

2. Modify the group record by entering **5** . The second line in the following example appears:

```
Enter command: 5
Enter port group record number [0..31, <cr> for all] : 0
------------ GROUP 0 --------------
--- To skip over a field, just press <cr> ---
Activate the group? [y] : y
Card type [ T1] : E1
Signaling [ ] : protocol table
Protocol table [0] : 0
Number of DID digits [0] : 0
Human assistance? [n] : n
Flash transfer? [n] : n
Outdial? [y] : y
Enter command: x
```

3. Enter the appropriate port group record number. In this example, it is port group 0, so enter **0** . The rest of the preceding example appears.
4. Activate the port group by entering **y** .
5. Select the card type by entering **E1** .
6. Select signaling by entering **protocol table** .
7. Select the appropriate protocol table number. In the preceding example, it is protocol table 0, so enter **0** . See Table: Default Protocol Table Settings-E1 for a list of default protocol tables.

   Note: The protocol table contains the configuration information for the type of signaling used. Cisco Systems ships all E1 Cisco Unified MeetingPlace systems with protocol table 0 set to use the default setting of Euro ISDN protocol and protocol table 1 to use the QSIG protocol. If this is not correct for your Cisco Unified MeetingPlace system, change it with the **protparm** command.

Table: Default Protocol Table Settings-E1

Protocol Table Number	Default Protocol
0	Euro ISDN
1	QSIG ECMA
5	QSIG ETSI

Note: There are two QSIG variants: QSIG ECMA and QSIG ETSI. Use the same variant that your PBX is set up to use.

8. (Optional) Repeat this procedure if more than one port group is needed.

9. Exit the **port** command by entering **x** .

Assigning Ports to Port Groups

You can assign specific ports to port groups so that all ports in that group have the same parameters.

To Assign Ports to Port Groups

1. At the tech$ prompt, enter **port** . The menu in step 1 of the Configuring Port Groups appears.
2. Modify a port record by entering **2** . The first line in the following example appears:
```
Enter port record number [0..7] : 0
--------------UNIT 0 PORT 0 -------------
--- To skip over a field, just press <cr> ---
Uses port group [ 0] : 0
```
3. Enter the port number. In the preceding example, it is port 0, so enter **0** . The rest of the preceding example appears.
4. Enter the number of the port group. In the preceding example, it is port group 0, so enter **0** .
   Note: If you want to copy this port record to other ports, see the Copying Port Records.
5. Exit the **port** command by entering **x** .

Copying Port Records

Copying port records provides an easy way to copy the port record for one port to as many ports as desired.

To Copy Port Records

1. If you are not already accessing the **port** command, at the tech$ prompt, enter **port** . See the following example:
```
meetingplace:tech$ port
***** 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: 3
Enter port record number to copy from [0..959] : 0
Enter port(s) to copy to [0-959] : 1-959
Copied to port record(s) 1-959.
Enter command: x
```
   Note: The preceding example is for a Cisco Unified MeetingPlace 8112. For a Cisco Unified MeetingPlace 8106, the ports number from 0 to 479. These are the maximum number of ports allowed. Depending on your configuration, you may have fewer ports.
2. Copy port records by entering **3** .
3. Enter the port number from which you want to copy, as shown in line 13 of the preceding example. In the preceding example, it is port 0, so enter **0** .
4. Enter the port numbers to which you want to copy, as shown in line 14 of the preceding example. In the preceding example, all ports are being configured with the same parameters as port 0, so enter **1-959** for the Cisco Unified MeetingPlace 8112 or enter **1-479** for the Cisco Unified MeetingPlace

8106. The Cisco Unified MeetingPlace system tells you which ports were copied to, as shown in line 15 of the preceding example.

5. Exit the **port** command by entering **x** .

Configuring Spans for an E1 Cisco Unified MeetingPlace System

E1 spans connect to the Multi Access Blade transition modules in the back of the Cisco Unified MeetingPlace Audio Server.

Note: The E1 spans are automatically activated and configured with default settings when you enter the **blade** command. Table: Default E1 Span Configuration lists the default span configuration.

Check the worksheets in Planning Your Audio Server Installation to see if your Cisco Unified MeetingPlace system is configured this way. If these default settings are accurate for your installation, you do not need to complete this section. If the default settings are not accurate for your installation, complete the steps that follow.

Table: Default E1 Span Configuration

Parameter	Default	Explanation	Possible Values
Activate the ACTI span?	y	Specifies if the span is active.	• y = active • n = inactive
Framing	CRC4	Specifies the framing protocol used on this span. Determined by the service provider. *We recommend using CRC4 only.*	• CRC4 • non-CRC4
Zero code suppression	HDB3	Specifies the zero code suppression for the span. Determined by the service provider. *We recommend using HDB3 only.*	• HDB3
Timing	external	Specifies if the Cisco Unified MeetingPlace Audio Server should get clock timing from the PBX or central office or if timing is generated by Cisco Unified MeetingPlace. All spans should be configured as external. The internal setting is for diagnostic purposes.	• internal • external (the span is connected to the public network or a trusted system, such as the PBX)
External sync priority	none.	Specifies the priority of the spans that are set for external timing. The Cisco Unified MeetingPlace system always tries to	• 1-255 (1 is the highest, 255 is

	The T1 span connected to the T1 Smart Blade in slot 1, line A gets sync priority 1, line B gets 2, etc.	synchronize from the highest priority span. If the synchronization span goes down, the Cisco Unified MeetingPlace system automatically switches synchronization to the next highest span. If a higher priority span comes up, the Cisco Unified MeetingPlace system automatically synchronizes off of it.	the lowest) • never
Trunk [x]	Numbering is done in order (1, 2, 3, etc.). For example, Trunk [1]:port 0 Trunk [2]:port 1 Trunk [3]:port 2	Specifies which port in the database is assigned to the specific hardware trunk on the card.	• number
Remote loopback to network	n	Specifies if the span should be put into a loopback mode for testing from the remote end.	• y = yes • n = no (normal operation)
Internal data loopback	n	Specifies if the span should loop back locally for running diagnostics.	• y = yes • n = no (normal operation)
Port group	2	Specifies the number of the port group.	• 0 (T1 CAS) • 1 (IP)* 2 (E1) • 3 (T1 PRI)
Active?	n	Specifies if the port group is active.	• y = yes • n = no
Card type	E1	Specifies the type of card.	• none • T1* analog • E1 • IP
Signaling protocol	E1	Specifies the signaling protocol.	• loop start • wink start* ground start • clear channel • E1 • IP • protocol table
Protocol table	0	Specifies the number of the protocol table to copy from.	• number from 0 to 99

Number of DID digits expected	0	Specifies the number of DID digits.	• number from 0 to 6
Default access type	combined access	Specifies the access type	• Combined access • DID meeting* Profile • MeetingNotes • loop through transfer • EBSApp1004 • EBSApp1005 • EBSApp1007 • EBS Xfer test • NewApp1011 • Choose music • Spanish samples • Goto123123_1015
Language	English (US)	Specifies which language to use.	• English (US) • English (UK)* no language
Human assistance?	n	Specifies if human assistance is allowed.	• y = yes • n = no
Flash transfer?	n	Specifies if this can be flash transferred.	• y = yes • n = no
Outdial?	y	Specifies if this can be outdialed on.	• y = yes • n = no

To Configure Spans for an E1 Cisco Unified MeetingPlace System

1. If you do not already have terminal logging turned on, turn it on. For information, see Logging Your HyperTerminal Session.
2. At the tech$ prompt, enter **blade** . One of the following examples appears:

Cisco Unified MeetingPlace 8106:

```
meetingplace:tech$ blade
***** B L A D E C O N F I G M E N U *****
1) View blade details
2) Modify blade
x) Exit program
Enter command: 2
Enter blade slot [1..6]: 1
Type [T1]:
Number of spans [ 1]:
Line A
Span [ 0]:
Framing [ESF]:
```

```
Line Coding [B8ZS]:
Timing [external]:
Sync Priority [never]:
Port Group [ 0]:
1st Port [ 0]:
Span Flags [0x00000000]:
Slot Card Type CardId Ports
1 CG6000C T1 0 0-23, none, none, none
2 CG6000C
3 CG6000C
4 no card
5 no card
6 TP1610-4 IP 0 24-83 (172.27.6.140)
***** B L A D E C O N F I G M E N U *****
1) View blade details
2) Modify blade
x) Exit program
Enter command:
```

Cisco Unified MeetingPlace 8112:

```
meetingplace:tech$ blade
***** B L A D E C O N F I G M E N U *****
1) View blade details
2) Modify blade
x) Exit program
Enter command: 2
Enter blade slot [1..16]: 1
Type [E1]:
Number of spans [ 1]:
Line A
Span [ 0]:
Framing [CRC4]:
Line Coding [HDB3]:
Timing [external]:
Sync Priority [never]:
Port Group [ 0]:
1st Port [ 0]:
Span Flags [0x00000000]:
Slot Card Type CardId Ports
1 TP1610 T1 0 0-22, 23-45, 46-68, 69-91
92-114, 115-137, 138-160, 161-183
184-206, 207-229, 230-252, 253-275
276-298, 299-321, 322-344, 345-367
2 TP1610 T1 1 368-390, 391-413, 414-436, 437-459
460-482, 483-505, 506-528, 529-551
552-574, 575-597, 598-620, 621-643
644-666, 667-689, 690-712, 713-735
3 CG6000C SB 2
4 CG6000C SB 3
5 CG6000C SB 4
6 CG6000C SB 5
11 CG6000C SB 6
12 CG6000C SB 7
13 CG6000C SB 8
```

```
14 CG6000C SB 9
15 no card
16 no card
***** B L A D E C O N F I G M E N U *****
1) View blade details
2) Modify blade
x) Exit program
Enter command:
```

3. Enter the values from Table: Default E1 Span Configuration. Press **Enter** after you enter each value and the next line appears. If you receive an error stating that you have exceeded the number of available ports, check your MeetingTime settings.

   Note: Do not change the **Span Flags** field unless a Cisco TAC representative instructs you to.
4. (Optional) Enter **2** to configure another span.
5. Exit the **blade** command by entering **x** .