Troubleshooting the configuration for T1 CAS, T1 PRI, and E1 Cisco Unified MeetingPlace systems consists of the following procedures:

- To Troubleshoot T1 CAS, T1 PRI, and E1 Ports That Do Not Answer
- To Check the Port Group Protocol Table
- To Troubleshoot When You Cannot Outdial on T1 CAS, T1 PRI, or E1 Ports

To Troubleshoot T1 CAS, T1 PRI, and E1 Ports That Do Not Answer

1. Access the CLI. If you do not already have terminal logging turned on, turn it on. For information, see Logging Your HyperTerminal Session.
2. Verify that the span is up by using the **spanstat** command. If the trunks show no alarms, then the PBX or Telco routing may not be set up correctly or the trunks may be in a lockout state. This is an issue with the PBX or Telco and not with Cisco Unified MeetingPlace.

   Use **spanstat** *span_number* **-all** to verify that calls are being presented to the Cisco Unified MeetingPlace system. For T1 CAS, the AB bits change state when a caller dials into the system. For T1 PRI and E1, the call state changes when a caller dials into the system.

   A proper incoming call should follow this sequence:

   "ds" (incoming call) => "ii" (call active) => ".." (port idle)

   A proper outgoing call should follow this sequence:

   "sd" (outgoing call) => "oo" (call active) => ".." (port idle)

   Note: If a "ds" => ".." or "sd" => ".." transition occurs quickly, this indicates that the near-end or far-end, respectively, is rejecting the call. Verify that the port is active on the Cisco Unified MeetingPlace side (near-end) and that the ISDN service is activated on the far-end. Contact Cisco TAC for information on determining the ISDN cause code for the call rejection.

   Note: If a port stays in any of these states for more than ten seconds, this indicates a possible protocol problem where one side is not clearing down the telephone call all of the way ("do," "di," "od," or "id"). If this is the case, contact Cisco TAC to determine if ISDN messages are being lost.
3. Look for errors on the span by using the **spanstat -s** command.
4. Verify the correct cabling, as this is frequently reversed:
   - pin 1 - MP Receive (tip)
   - pin 2 - MP Receive (ring)
   - pin 4 - MP Send (tip)
   - pin 5 - MP Send (ring)

   Note: Use a loopback plug to show that the physical ports are serviceable. This lets you move beyond the Cisco Unified MeetingPlace Audio Server and into the carrier for problem analysis.
5. Verify the configuration with the **blade** command.
6. Check the framing (ESF or D4) and coding (B8ZS or jammed-bit).
7. Check the LEDs on the front of the Cisco Unified MeetingPlace Audio Server, as follows:
   - For Cisco Unified MeetingPlace 8112, ensure that the system in service LED light is green.

- For Cisco Unified MeetingPlace 8106 and Cisco Unified MeetingPlace 8112, ensure that the lights for all active T1 Smart Blades are green.
  For more information about the LEDs, see

LED Panels for the Cisco Unified MeetingPlace 8106 or Alarm Panels for the Cisco Unified MeetingPlace 8112, whichever applies.

To Check the Port Group Protocol Table

Verify that the port group, for any troubled port, references the correct protocol table for the ISDN protocol to which it is being interfaced.

1. Access the CLI. 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 **port** . The following **port** command 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: 4
```
3. View the port group record by entering **4** . The second line in the following example appears:
```
Enter command: 4
Enter port group record number [0..31, <cr> for all] : 0
------------ GROUP 0 ---------------
Activate the group?  : y
Card type  : E1
Signaling  : Euro ISDN
Protocol table  : 50
Number of DID digits  : 0
Human assistance?  : n
Flash transfer?  : n
Outdial?  : y
Enter command: x
```
4. Enter the appropriate port group number. In the preceding example, it is 0, so enter **0** . The rest of the preceding example appears.
5. Note the protocol table number. In this example, it is protocol table 50.
6. Exit the **port** command by entering **x** .
7. Enter **protparm** . The following example appears:
```
meetingplace:tech$ protparm
***** P R O T P A R M C O N F I G M E N U *****
1) View protocol parameter table(s)
2) Modify protocol parameter table
3) Copy protocol table
4) Delete protocol table(s)
x) Exit program
```

```
Enter command: 1
```

8. View the protocol parameter table by entering **1** . The second line in the following example appears:

```
Enter command: 1
Enter protocol table number [0..99, <cr> for all] : 50
***** V I E W M E N U *****
1) View entire table
2) View general information
3) View incoming called party number processing (DDI)
4) View incoming calling party number processing (CLI)
5) View outgoing calling party information
6) View outgoing called party type of number (TON)
7) View outgoing called party numbering plan (NPI)
8) View outgoing private number definition
9) View outgoing local number definition
a) View outgoing long distance number definition
b) View outgoing international number definition
c) View outgoing Network Specific Facilities (NSF) codes
d) View outgoing NSF Carrier Identification Code (CIC)
x) Exit to main menu
Enter list command [table 50]: 2
```

9. Enter the number of the appropriate protocol table (found in Step 5). In this example, it is 50, so enter **50** . The rest of the preceding example appears.
10. View the general information by entering **2** . A screen similar to the following appears:

```
Enter list command [table 50]: 2
----------------- PROTOCOL TABLE 50 ---------------
Activate the table?  : y
Description  : Euro-ISDN generic table for Europe
Protocol  : Euro ISDN
CAS signaling table filename  : (none)
Default clearing cause  : 16 (normal clearing)
B-channel negotiation  : exclusive
Protocol side  : user
Enter list command [table 50]: 0
```

11. Verify that the protocol table has the correct parameters set. If it does not, change it as necessary by going to the main **protparm** command menu (by entering **x**) and selecting the modify protocol parameter table option (by entering **2**).

    Note: You cannot modify protocol tables 0 to 49 because they are read-only. If you need to change these tables, copy one of the read-only tables and then modify your copy of the table.
12. Exit the **protparm** command by entering **x** .

To Troubleshoot When You Cannot Outdial on T1 CAS, T1 PRI, or E1 Ports

1. Verify that the port and port group are configured for outdial by using the **port** command. Follow these steps:
    1. Access the CLI. If you do not already have terminal logging turned on, turn it on. For information, see Logging Your HyperTerminal Session.
    2. Enter **port** .
    3. View the port records by entering **1** .
    4. Enter the number of the port whose records you want to see or press **Enter** to see the records for all the ports. In this example, you want to see the records for all the ports, so press **Enter** .

5. Look for the outdial parameter and ensure it is set to y for all ports.

2. Verify that the trunks on the phone system are configured to allow outdialing.
3. Schedule a meeting and use the #3 feature to hear if there is an error tone from the phone system.