Unity Connection TIMG Does Not Route Calls Correctly

Contents

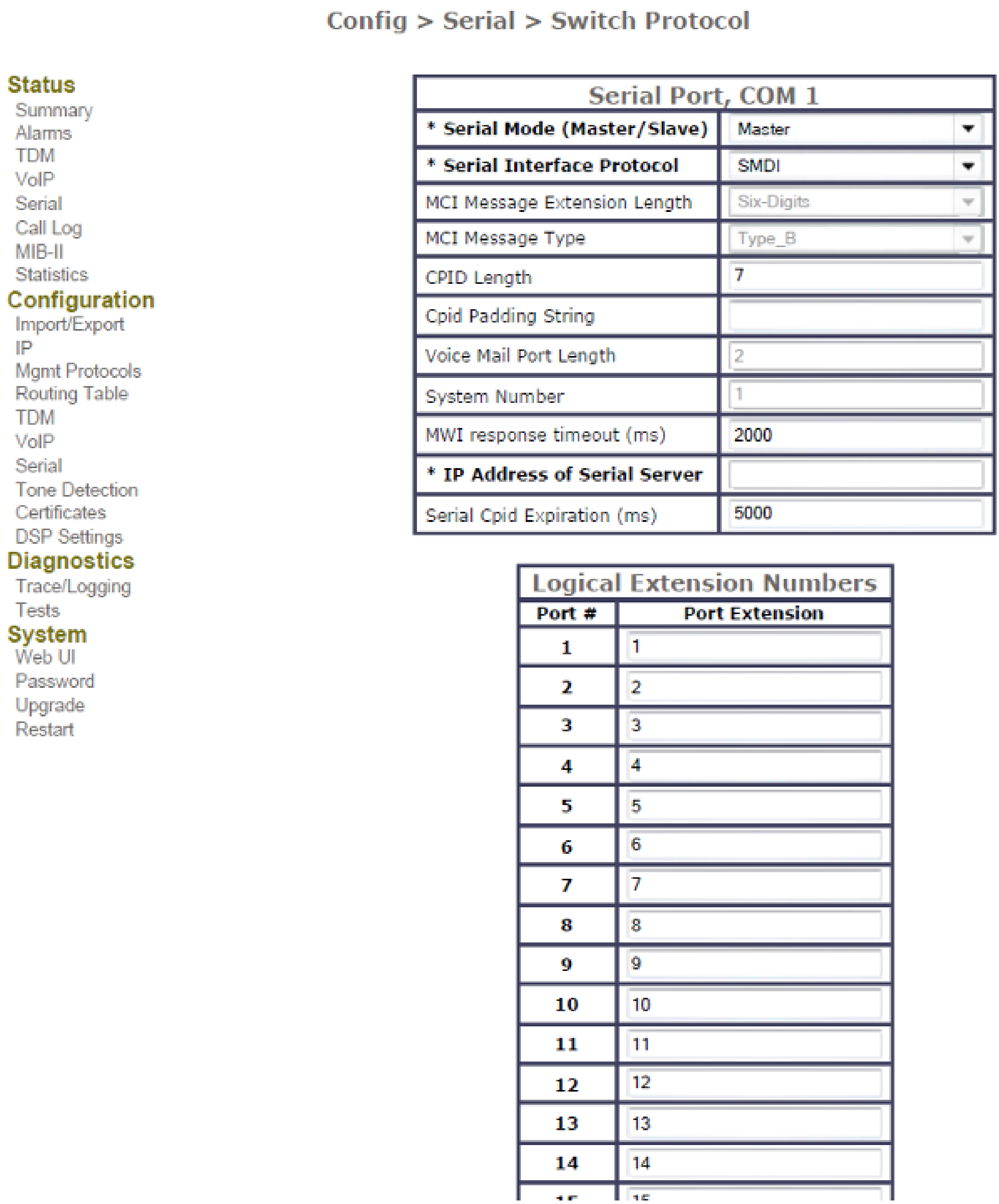
Introduction

This document describes the issue when calls that come in to Slave T1 IP Media Gateway (TIMG) or PBX IP Media Gateway (PIMG) are not routed correctly. TIMGs and PIMGs make it possible for PBXs to integrate to Unity Connection for voicemail access. Some PBXs require that this integration be via Simplified Message Desk Interface (SMDI), MCI, or MD-110. This means that calling information will be passed via a serial port connection from the PBX to the TIMG or PIMG. The TIMG or PIMG that the serial cable connects to will be configured as a Master. If there are other TIMGs or PIMGs required, these will be configured as Slaves and will look to the Master for calling information.

Problem

There are two or more TIMGs/PIMGs with a Master and Slave configuration. When a call comes into the Master, the call is forwarded to the proper Unity Connection voicemail box greeting.

Here is an example screenshot of the page from a Master PIMG:



However, when the call comes into the Slave TIMG the call is answered by the Opening Greeting. The call rolls to the Opening Greeting because the invite sent to Unity Connection from TIMG does not have a 'Diversion:' line within to say which mailbox extension the call should go to.

Here is an example of calling information seen on the Master:

```
08-28 17:54:28.078 [Si        ] Prot     0D
08-28 17:54:28.078 [Si        ] Prot     0A
08-28 17:54:28.078 [Si        ] Prot     4D
08-28 17:54:28.078 [Si        ] Prot     44
08-28 17:54:28.078 [Si        ] Prot     30
```

```
08-28 17:54:28.078 [Si        ] Prot     30
08-28 17:54:28.078 [Si        ] Prot     30
08-28 17:54:28.078 [Si        ] Prot     30
08-28 17:54:28.078 [Si        ] Prot     30
08-28 17:54:28.078 [Si        ] Prot     30
08-28 17:54:28.078 [Si        ] Prot     31
08-28 17:54:28.078 [Si        ] Prot     4E
08-28 17:54:28.078 [Si        ] Prot     31
08-28 17:54:28.078 [Si        ] Prot     39
08-28 17:54:28.078 [Si        ] Prot     31
08-28 17:54:28.078 [Si        ] Prot     38
08-28 17:54:28.078 [Si        ] Prot     20
08-28 17:54:28.078 [Si        ] Prot     39
08-28 17:54:28.078 [Si        ] Prot     31
08-28 17:54:28.078 [Si        ] Prot     39
08-28 17:54:28.078 [Si        ] Prot     33
08-28 17:54:28.078 [Si        ] Prot     33
08-28 17:54:28.078 [Si        ] Prot     33
08-28 17:54:28.078 [Si        ] Prot     33
08-28 17:54:28.078 [Si        ] Prot     34
08-28 17:54:28.078 [Si        ] Prot     38
08-28 17:54:28.078 [Si        ] Prot     35
08-28 17:54:28.078 [Si        ] Prot     20
08-28 17:54:28.078 [Si        ] Prot     0D
08-28 17:54:28.078 [Si        ] Prot     0A
08-28 17:54:28.078 [Si        ] Code     siSrvSerialInputEvent
08-28 17:54:28.078 [Si        ] Prot     From Serial: 0D 0A 4D 44 30 30 30 30 30 30 31
4E 31 39 31 38 20 39 31 39 33 33 33 33 34 38 35 20 0D 0A 19 00
08-28 17:54:28.078 [Si        ] Prot     19
08-28 17:54:28.078 [Si        ] Code     siSrvPrcCpidFromSwitch ltn = 1,
src=9133333485, Dst = <NULL>, Redir = 1918, Reason = NoAns
08-28 17:54:28.078 [SiIp      ] Code     sertrans_ServerLocateClient 1
08-28 17:54:28.078 [SiIp      ] Code     sertrans_ServerLocateClient 1=client1
08-28 17:54:28.078 [SiIp      ] Code     _TaskMainClientReceive received data 516
08-28 17:54:28.078 [Si        ] Code     serial_client_cb
08-28 17:54:28.078 [Si        ] Code         SI_TYPE_CPID 1:NoAns (9193333485->->1918)
08-28 17:54:28.078 [Tel-1     ] Code     GetChannelFromLogicalChannelNum
LogicalChanNum 0 span 0 channel 1
08-28 17:54:28.078 [Tel-1     ] Code     t1casReportNewCpid
08-28 17:54:28.078 [Tel-1     ] Event    Cpid (9193333485,->,->1918,) (NoAns)
08-28 17:54:28.078 [Tel-1     ] Warn     t1casReportNewCpid err: no call for cpid
08-28 17:54:28.078 [Tel-1     ] Code     t1casReportNewCpid saving pre-call cpid for
serial
08-28 17:54:29.195 [SiIp      ] Code     _TaskMainServerReceive(4) received 516 bytes
08-28 17:54:29.195 [SiIp      ] Code     _TaskMainServerReceive(4) keep-alive 1
received
08-28 17:54:29.195 [SiIp      ] Code     _TaskMainServerReceive(4) sending keep-alive
response
```

Here is an example of a problem invite seen on the Slave:

```
08-28 17:54:30.453 [VoIP      ] Prot     <----INVITE sip:Anonymous@14.48.4.88:5060 SIP/2.0
08-28 17:54:30.453 [VoIP      ] Prot     From:"Anonymous"<sip:Anonymous@14.48.4.92:5060;
user=phone>;vnd.pimg.port=1;tag=133B324631353641000BCF02
08-28 17:54:30.453 [VoIP      ] Prot     To:"Anonymous"<sip:Anonymous@14.48.4.88:5060>
08-28 17:54:30.453 [VoIP      ] Prot     Contact:<sip:14.48.4.92:5060>
08-28 17:54:30.453 [VoIP      ] Prot     Content-Type:application/sdp
08-28 17:54:30.453 [VoIP      ] Prot     Supported:replaces,early-session,100rel
08-28 17:54:30.453 [VoIP      ] Prot     Allow:INVITE,BYE,CANCEL,REFER,NOTIFY,OPTIONS,
REGISTER,INFO,ACK,PRACK
08-28 17:54:30.453 [VoIP      ] Prot     Expires:120
08-28 17:54:30.453 [VoIP      ] Prot     Call-ID:02061555D6F5009A000012BC@test.local
08-28 17:54:30.453 [VoIP      ] Prot     CSeq:1 INVITE
```

```
08-28 17:54:30.453 [VoIP      ] Prot     Max-Forwards:70
08-28 17:54:30.453 [VoIP      ] Prot     User-Agent:PBX-IP Media Gateway
08-28 17:54:30.453 [VoIP      ] Prot     Via:SIP/2.0/UDP 14.48.4.92:5060;
branch=z9hG4bKDC0A05314DD4ED48CEEEA72BD196FC38
08-28 17:54:30.453 [VoIP      ] Prot     Content-Length:245
```

This happens because the calling information is forwarded across the serial cable to the Master TIMG/PIMG, but the Logical Terminal Number (LTN) information does not match up to the port on the T1 Central Authentication Service (CAS) the physical call came in on.

Solution

On TIMG, select **Configuration > Serial > Switch Protocol** in order to configure the Logical Extension Numbers for each port.

Match the TIMG LTN and the port number from the PBX setting. The PBX has a table that shows you which channel on which T1 CAS line uses which LTN. Determine this information from the PBX first and set it accordingly in the TIMG. It is possible to use LTN 1-24 for Master channel 1-24 and LTN 25-48 for Slave channel 1-24.

Related Information

- **TIMG Integration Guide for Cisco Unity Connection Release 9.x**
- **PIMG Integration Guide for Cisco Unity Connection Release 9.x**
- **TIMG Integration Guide for Cisco Unity Connection Release 10.x**
- **PIMG Integration Guide for Cisco Unity Connection Release 10.x**
- **Technical Support & Documentation - Cisco Systems**