

Troubleshoot PDD in Webex Calling with Premises Based PSTN

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Introduction

This document describes how to troubleshoot a call failure when PSTN provider takes more than 12 seconds to answer with the Ringing.

Prerequisites

Requirements

Cisco recommends that you have knowledge of these topics:

- Basic SIP.
- Access to a Cisco Local Gateway.

The information in this document was created from the devices in a specific lab environment. All of the devices used in this document started with a cleared (default) configuration. If your network is live, ensure that you understand the potential impact of any command.

Background Information

Post Dial Delay (PDD), which refers to the duration it takes for a caller to hear a ring back tone after the initiation of a call. This delay typically corresponds to the time it takes to receive either a 180 Ringing or 183 Session Progress response to a SIP Invite.

On occasions, users have reported experiences such as dead air or dropped calls, as the caller does not hear any response after dialing, confusion ensues.

In the context of Webex calling with Local Gateway, if the PSTN provider exceeds a Post Dial Delay of 12 seconds, the call is automatically canceled from the Webex Calling side.

Get the logs from LGW

The steps to get the logs from the Local Gateway are the next:

Step 1. Log in to Local Gateway using Putty.

Step 2. Enable debug in Local Gateway.

```
gw-wxc# conf t
```

```
lgw-wxc(config)# no logging console
```

```
lgw-wxc(config)# no logging monitor
```

```
lgw-wxc(config)# no logging rate-limit
```

```
lgw-wxc(config)# no logging queue-limit
```

```
lgw-wxc(config)# logging buffer 400000000 debug
```

```
lgw-wxc(config)# end
```

```
lgw-wxc# clear log
```

```
lgw-wxc# debug ccsip messages. ===>> SIP Call messages tracing is enabled
```

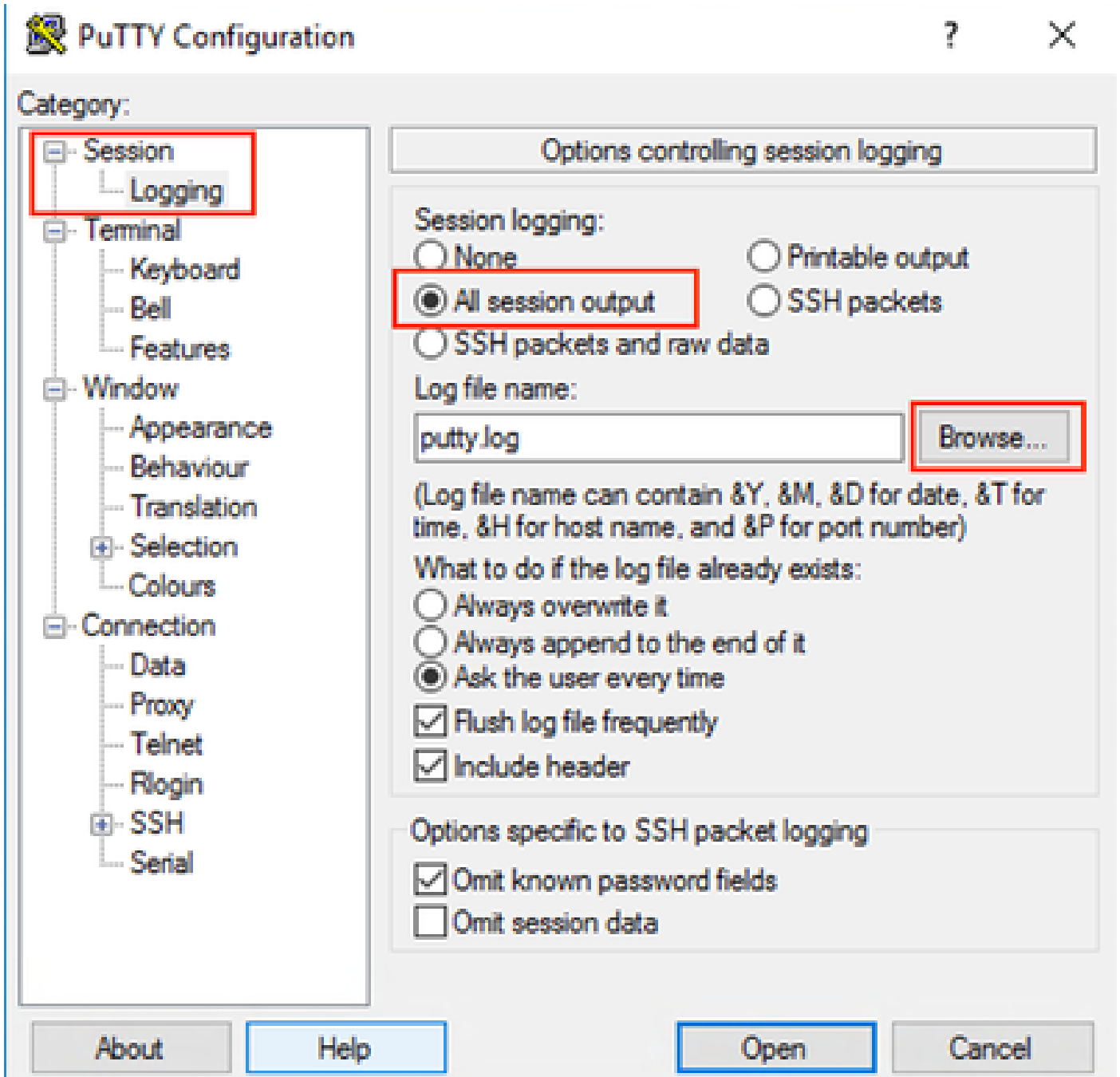
```
lgw-wxc# debug voice ccapi inout ===>> voip ccapi in/out debugging is on
```

Step 3. Start recording the Putty session.

Go to **Settings > Session > Logging** and set:

Session logging: Select **All session output**.

Log file Name: Select **Browse** and select the directory where you want to save the file and the name.



Start Recording

Step 4. Attempt to recreate or reproduce the outgoing call to PSTN.

Step 5. Get the output of the logs.

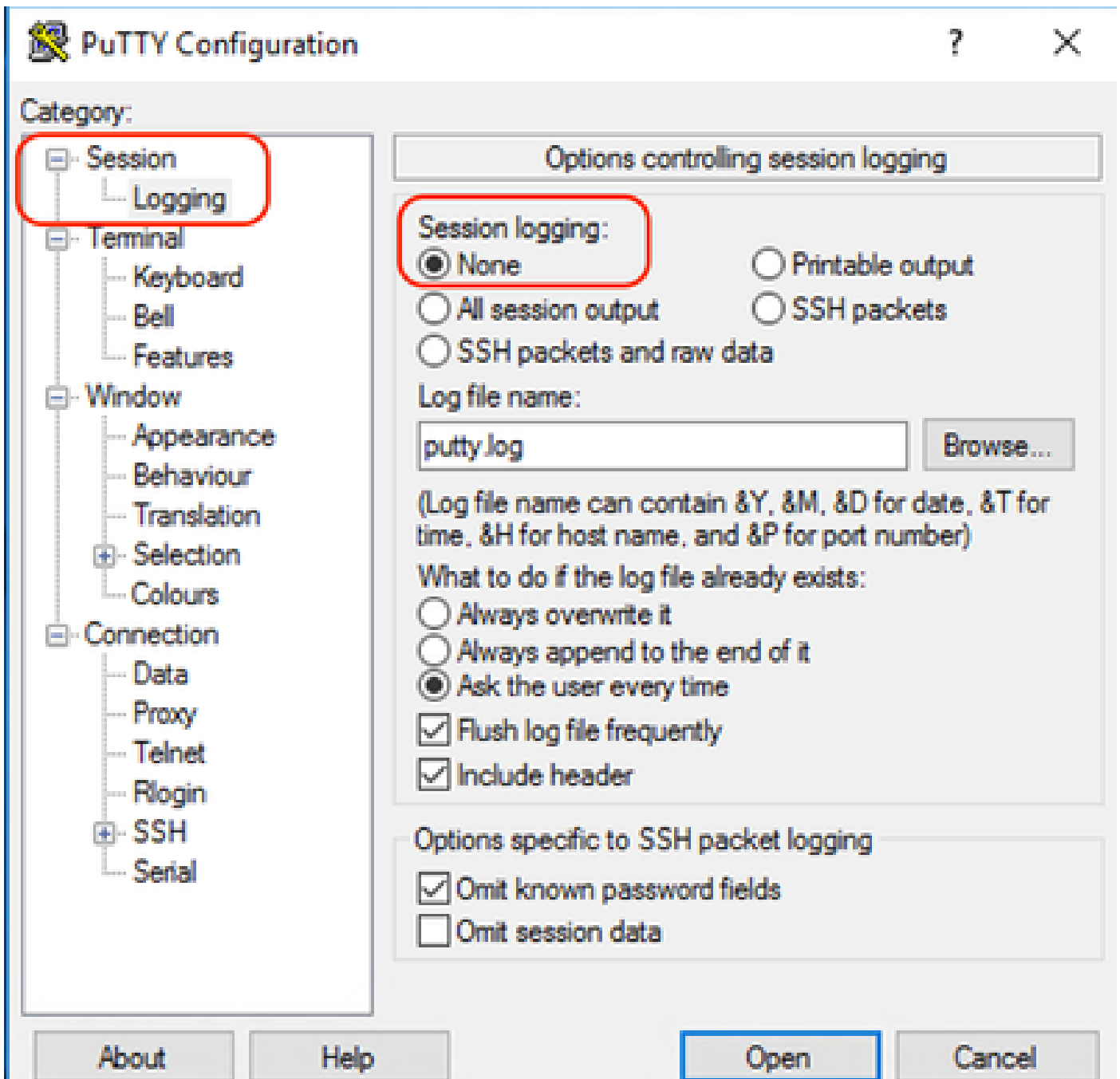
```
lgw-wxc# Terminal length 0
```

```
lgw-wxc# sh log
```

Step 6. Stop recording Putty session and Save the file.

Go to **Settings > Session > Logging** and Set:

Session logging: **None.**



Stop Recording

Step 7. Stop the debugs.

lgw-wxc# Undebug all

Troubleshoot the LGW Logs

Step 1. Open the log you took using a text plain program like Notepad.

Step 2. Look the Invite coming from Webex Calling, in the next example you can see the Invite arrives at 12:09:48.

```
<#root>
```

```
125670: *Jul 21
```

12:09:48.231

: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

INVITE sip:+1XXXXXXXXXX@XX.XX.XX.XX:5061;transport=tls;dtg=sbc_lgu SIP/2.0

Via:SIP/2.0/TLS XXX.XXX.XX.XX:8934;branch=z9hG4bKBroadworksSSE.-XXX.X.XXX.XXV40413-0-100-1704852021-168

From:<sip:+1XXXXXXXXXX0@XXX.XXX.XX.XX;user=phone>;tag=1704852021-1689966652299-

To:<sip:+1XXXXXXXXXX@XXXXXXXXX.cisco-bcld.com;user=phone>

Call-ID:SSE191052299210723-1072365917@XXX.XXX.XX.XX

CSeq:100 INVITE

Contact:<sip:XXX.XXX.XX.XX:8934;transport=tls>

P-Asserted-Identity:<sip:+1XXXXXXXXXX@XX.XX.XXX.XXX;user=phone>

Privacy:none

P-Access-Network-Info:6307694336

Allow:ACK,BYE,CANCEL,INFO,INVITE,OPTIONS,PRACK,REFER,NOTIFY,UPDATE

Recv-Info:x-broadworks-client-session-info,x-cisco-mute-status

X-BroadWorks-Correlation-Info:64b1f41c-5b24-4865-9b00-c5a9acd0c1d8

Accept:application/media_control+xml,application/sdp,multipart/mixed

Supported:

Max-Forwards:69

Session-ID:7202892d00105000a000ac7e8ab6b729;remote=00000000000000000000000000000000

Content-Type:application/sdp

Content-Length:2260

Step 3. Look the Invite is sent immediately to PSTN Provider at 12:09:48.

<#root>

125749: *Jul 21

12:09:48.238

: //2058481/FED4647C9552/SIP/Msg/ccsipDisplayMsg:

Sent:

INVITE sip:+1XXXXXXXXXX@XXX.X.XXX.XX:5060 SIP/2.0

Via: SIP/2.0/UDP XXX.X.XXX.XX:5060;branch=z9hG4bK11B7E01FDE

Remote-Party-ID: <sip:+1XXXXXXXXXX@XXX.X.XXX.XX>;party=calling;screen=yes;privacy=off

From: <sip:+1XXXXXXXXXX@XXX.X.XXX.XX>;tag=91790161-DA8

To: <sip:+1XXXXXXXXXX@XXX.X.XXX.XX>

Date: Fri, 21 Jul 2023 19:09:48 GMT

Call-ID: FED527FA-273011EE-9558C2C2-D591E4CC@XXX.X.XXX.XX

Supported: 100rel,timer,resource-priority,replaces,sdp-anat

Min-SE: 1800

Cisco-Guid: 4275332220-0657461742-2505228994-3583108300

User-Agent: Cisco-SIPGateway/Cisco IOS 16.12.5

Allow: INVITE, OPTIONS, BYE, CANCEL, ACK, PRACK, UPDATE, REFER, SUBSCRIBE, NOTIFY, INFO, REGISTER

CSeq: 101 INVITE

Timestamp: 1689966588

Contact: <sip:+1XXXXXXXXXX@XXX.X.XXX.XX:5060>

Expires: 180

Allow-Events: telephone-event

Max-Forwards: 68

Session-ID: 7202892d00105000a000ac7e8ab6b729;remote=00000000000000000000000000000000

Session-Expires: 1800

Content-Type: application/sdp

Content-Disposition: session;handling=required

Content-Length: 666

Step 4. After 12 seconds at 12:10:00 you can see Webex Calling send to Local Gateway a Cancel.

<#root>

125757: *Jul 21

12:10:00.218

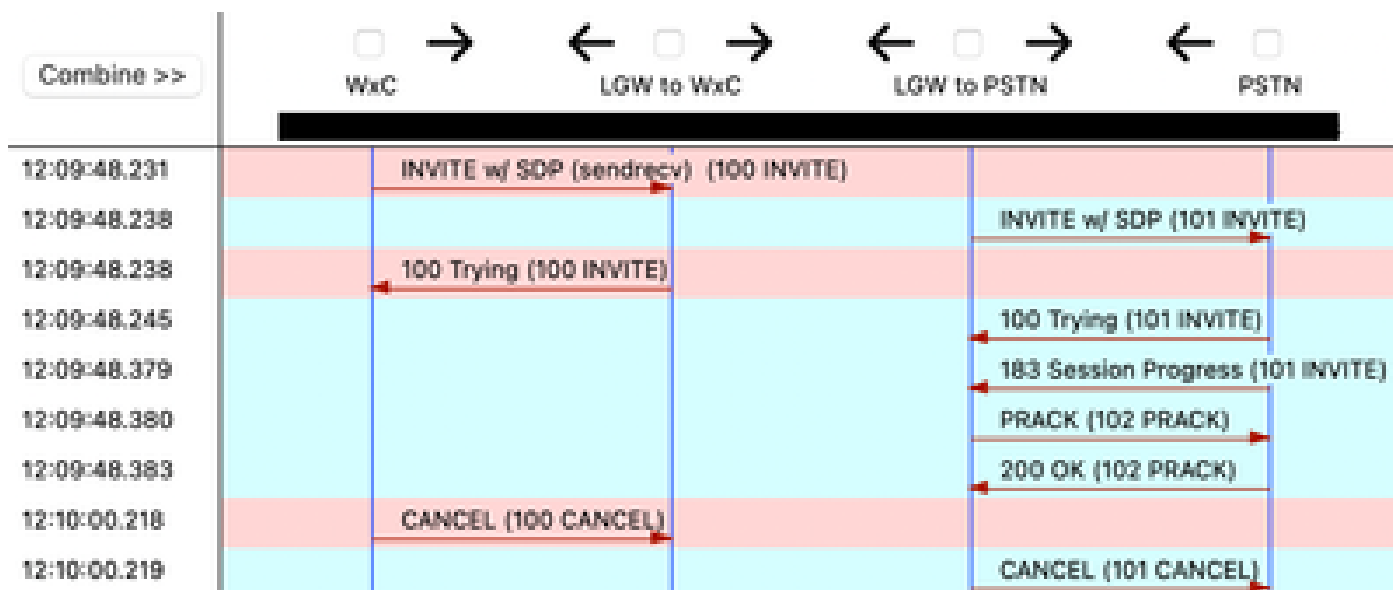
: //-1/xxxxxxxxxxxx/SIP/Msg/ccsipDisplayMsg:

Received:

```
CANCEL sip:+1XXXXXXXXXX@XXX.X.XXX.XX:5061;transport=tls;dtg=sbc_lgu SIP/2.0
Via:SIP/2.0/TLS XXX.XXX.XX.XX:8934;branch=z9hG4bKBroadworksSSE.-XXX.X.XXX.XXV40413-0-100-1704852021-168
From:<sip:+1XXXXXXXXXX@XXX.XXX.XX.XX;user=phone>;tag=1704852021-1689966652299-
To:<sip:+1XXXXXXXXXX@XXXXXX.cisco-bc1d.com;user=phone>
Call-ID:SSE191052299210723-1072365917@XXX.XXX.XX.XX
CSeq:100 CANCEL
X-BroadWorks-Correlation-Info:64b1f41c-5b24-4865-9b00-c5a9acd0c1d8
Max-Forwards:69
Session-ID:7202892d00105000a000ac7e8ab6b729;remote=00000000000000000000000000000000
Content-Length:0
```

Step 5. In this instance, it is crucial to open a Webex Calling case to extend the PDD beyond 12 seconds. Include the Local Gateway trace for further analysis.

Step 6. This is the graphics trace of the call.



Trace

Related Information

- [Technical Support & Documentation - Cisco Systems](#)