Troubleshoot Wx4Bwks Error Message "Phone Services Not Connected"

Contents

Introduction

This document describes some scenarios and troubleshooting steps when Webex for Broadworks client fails to connect to partner phone services.

Prerequisites

Requirements

Cisco recommends that you have knowledge of these topics:

- Webex Error Codes
- Session Initiation Protocol (SIP)
- Session Border Controller (SBC)
- Fully Qualified Domain Name (FQDN)

Components Used

This document is not restricted to specific software and hardware versions.

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

Even with successful sign-ins, phone service registration can fail. Client logs usually hint at the cause. This

guide covers common errors and solutions when connecting to the BWKS phone services fails.

This guide addresses only a selection of the more frequently encountered errors. It suggests ways to investigate Broadworks phone service connection issues for Webex. This guide also highlights the importance of consulting specific logs or documentation for a comprehensive understanding of all potential errors.
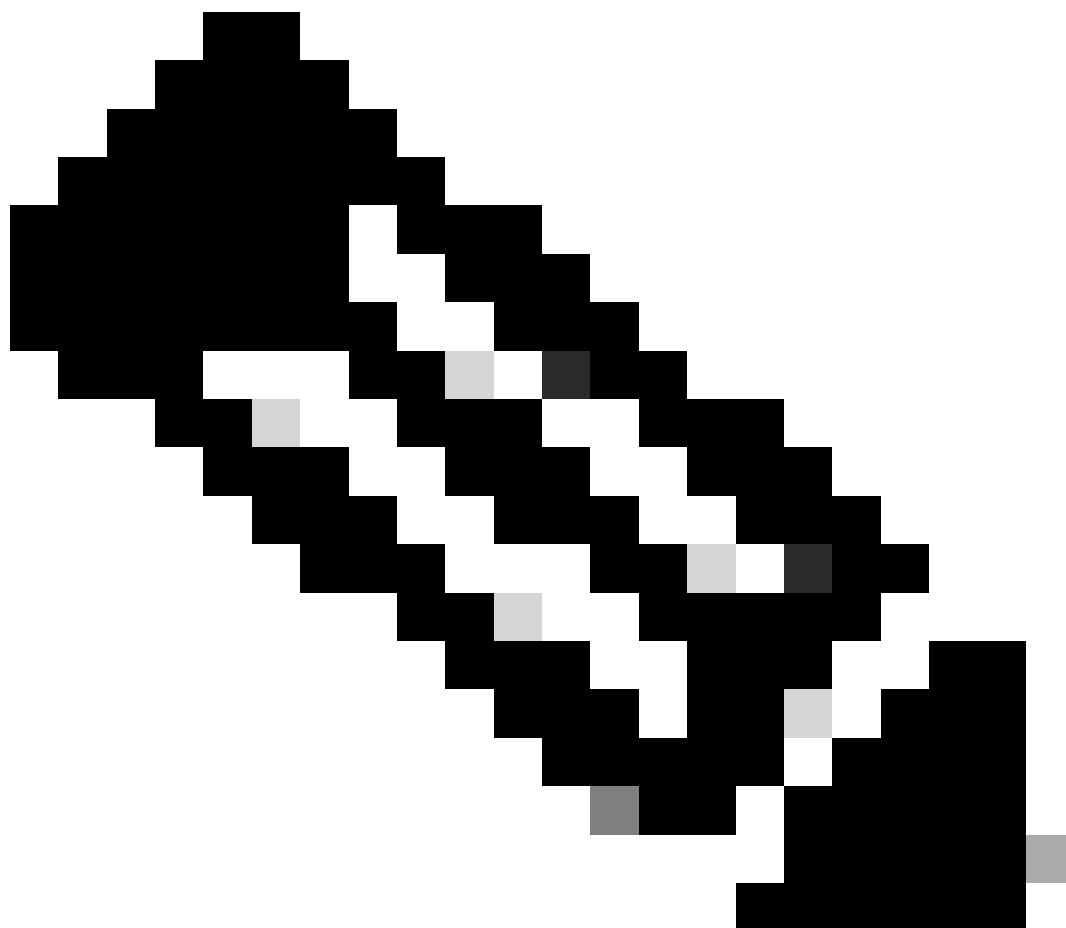
> **Note**: The desktop client establishes a SIP session when you log in, while the mobile device sets up a SIP session on demand (during a call). Apart from these differences in session initiation, the desktop and mobile clients are otherwise the same and troubleshooting procedures apply equally to both.

Phone Services Not Connected Error

Phone services can be disconnected under certain conditions such as:

1. BroadWorks scope is not configured.
2. BroadWorks token cannot be downloaded.
3. Failed config-wxt.xml download sequence.

4. The config-wxt.xml cannot be read or parsed.
5. Service discovery issues after successful config-wxt.xml retrieval.
6. Client fails to establish a SIP connection towards any discovered SBC.

Broadworks Token Cannot Download

Errors seen in logs:

```
Error: errorCode=1502
Error 1000:1502
Http error when trying to get BWC Token from Broad Cloud, httpStatusCode:
HTTP request failed
```

This indicates that there there is an issue with obtaining the BroadWorks token.

This can happen for a number of reasons. Here are some points to begin investigations:

- The issue could be due to incorrect content received from the HTTP request or because the HTTP request itself was unsuccessful.

- If there is an issue with AuthService configuration.
- WAN/LAN issues
- Authentication issues

Here are example log extracts when Broadworks AuthService does not issue the token due to misconfiguration.

```
--- Try to retrieve the BWC token using the teams token
2024-02-02 12:02:22.498 9619 9771 D WBX_TEAMS-ucf: tid[0x261f] BroadWorksTokenManager.cpp::130 operator

--- The /bwtoken/fetch has been sent
2024-02-02 12:02:22.501 9619 9771 D WBX_TEAMS-ucf: tid[0x261f] BroadWorksTokenManager.cpp::158 operator
...
...

2024-02-02 12:02:22.503 9619 9771 D WBX_TEAMS-ucf: tid[0x2622] HttpRequestManagerEx.cpp::1112 makeHttpR
...
...
2024-02-02 12:02:22.503 9619 9771 I WBX_TEAMS-ucf: tid[0x2622] HttpRequestManagerEx.cpp::1914 logRequest

--- This request fails with 401
2024-02-02 12:02:24.183 9619 9771 D WBX_TEAMS-ucf: tid[0x26de] HttpRequestManagerEx.cpp::186 operator()
2024-02-02 12:02:24.183 9619 9950 I WBX_TEAMS: [[Redacted]] OkHttpEventListener.kt::215 logMetrics:{"ca
2024-02-02 12:02:24.184 9619 9771 D WBX_TEAMS-ucf: tid[0x26de] HttpRequestManagerEx.cpp::260 operator()
2024-02-02 12:02:24.184 9619 9771 D WBX_TEAMS-ucf: tid[0x26de] HttpRequestManagerEx.cpp::304 operator()
2024-02-02 12:02:24.184 9619 9771 W WBX_TEAMS-ucf: tid[0x26de] HttpRequestManagerEx.cpp::1512 convertNo
...
...
2024-02-02 12:02:24.184 9619 9771 D WBX_TEAMS-ucf: tid[0x26de] BroadWorksTokenManager.cpp::176 handleGet
2024-02-02 12:02:24.184 9619 9771 E WBX_TEAMS-ucf: tid[0x26de] BroadWorksTokenManager.cpp::206 handleGet
2024-02-02 12:02:24.184 9619 9771 E WBX_TEAMS-ucf: tid[0x26de] BroadWorksTokenManager.cpp::58 operator()
```

In this example, AuthService returned 401 response. Other HTTP errors cause the same problem.

Failed Config-wxt.xml Download Sequence

Errors seen in logs:

```
errorCode=1505
error code: 1511
errorCode=1504
ConfigDownload - failed with error code:
ConfigDownload - the device profile 'Business Communicator - PC' is not found.
```

This indicates the confit-wxt.xml file is not retrievable by the client.

This can be caused by multiple issues. Here are some points to begin investigations:

- Confirm that the correct Identity/Profile Type exists and is applied for the user under **User > Call Control > Shared Call Appearance**:
    - For Desktop: Business Communicator - PC.
    - For Mobile: Connect - Mobile.
    - For Tablet: Connect - Tablet.
- Ensure you use the relevant Device Type Archive File (DTAF) with each new Webex release.
- Confirm the user has primary profile flag enabled.

You can also check the primary line port:

1. Navigate to **Group > Resources > Identify/Device Profile > Search**.
2. Select an Identify/Device profile Name.
3. Select **User** tab.
4. Select **Search**.
5. Check **Primary Line/Port**.

Here are example log extracts:

```
2024-01-17T08:03:53.711Z <Error> [0xd678] BroadWorksConfigDownloader.cpp:169 BroadWorksConfigDownloader
```

Config-wxt.xml Cannot be Read or Parsed

Errors seen in logs:

```
errorCode=1507
failed to parse the configuration
failed to register client.
```

This indicates the client successfully downloaded the config-wxt.xml but could not read it. This is usually due to encoding issues. To investigate, you can review **defaultDeviceEncoding** for the relevant client

profile.

Here are example log extracts:

```
2024-01-30T07:01:25.213Z <Info> [0x390] parser.rl:232 TP::Xml::Parser::parse:BWC:INTERNAL: Incomplete
2024-01-30T07:01:25.213Z <Info> [0x390] BroadWorksCallControl.cpp:493 BroadWorksCallControl::createConf
...
...
2024-01-30T07:19:10.077Z <Error> [0x45c] BroadWorksManager.cpp:781 BroadWorksManager::registerClient::<
2024-01-30T07:19:10.078Z <Error> [0x45c] BroadWorksLoginAdapter.cpp:452 BroadWorksLoginAdapter::handleL
```

Service Discovery Issues After Successful Config-wxt.xml Retrieval

Errors seen in logs:

```
onServiceDiscoveryCompleted:BWC:INTERNAL: ConnectManager: Filtered addresses (0)
```

This indicates no SBC was discovered during service discovery.

Here are some points to begin investigations:

- Review logs closely to see if service discovery is returning anything relevant.
- Look for errors that are seen in service discovery process.
- Check the response to the register.

Here are example log extracts.

Good service discovery:

```
--- 2 SBC's were discovered, SBC details logged immediately after
2024-02-01T01:53:33.975Z <Info> [0x5840][]connect_manager_impl.cpp:1462 bwc::ConnectManagerImpl::onServ
2024-02-01T01:53:33.975Z <Info> [0x5840][]connect_manager_impl.cpp:1466 bwc::ConnectManagerImpl::onServ
2024-02-01T01:53:33.975Z <Info> [0x5840][]connect_manager_impl.cpp:1466 bwc::ConnectManagerImpl::onServ
```

Bad Service discovery:

```
--- 0 SBC's were discovered
2024-02-01T01:57:38.387Z <Info> [0x5840][]connect_manager_impl.cpp:1462 bwc::ConnectManagerImpl::onServ
```

Client Fails to Establish a SIP Connection Towards any Discovered SBCs

Errors seen in logs:

```
SIP disconnected due to timeout or socket error
No more SBC addresses to try. Going offline
ConnectManager: SIP connect failed
```

This indicates the client was unable to establish a connection with the SBC.

This can be due to timeouts or refusal of the connection requests.

Here are some points to begin investigations.

- Review logs closely to see if there are any meaningful errors returned from attempts to connect to the SCC.
- Look for any errors that are seen in when connecting.
- Check the response to the register request.

Here are example log extracts.

This example shows timeouts trying to connect to both of the SBCs in sequence:

```
--- 2 SBC's were discovered
2024-02-01T01:53:33.975Z <Info> [0x5840][]connect_manager_impl.cpp:1462 bwc::ConnectManagerImpl::onServ
2024-02-01T01:53:33.975Z <Info> [0x5840][]connect_manager_impl.cpp:1466 bwc::ConnectManagerImpl::onServ
2024-02-01T01:53:33.975Z <Info> [0x5840][]connect_manager_impl.cpp:1466 bwc::ConnectManagerImpl::onServ

--- Tries to register SIP with 1st SBC
2024-02-01T01:53:33.976Z <Info> [0x5840][]connect_manager_impl.cpp:1055 bwc::ConnectManagerImpl::connec

--- SIP registration fails
2024-02-01T01:53:34.159Z <Debug> [0x5840][]sip_session.cpp:889 bwc::SipSession::disconnected:BWC:INTERNA
2024-02-01T01:53:34.159Z <Debug> [0x5840][]sip_registrations.cpp:30 TP::Sip::Utils::RegistrationPtr::~R
2024-02-01T01:53:34.159Z <Info> [0x5840][]connect_manager_impl.cpp:1827 bwc::ConnectManagerImpl::onSipD
2024-02-01T01:53:34.159Z <Info> [0x5840][]connect_manager_impl.cpp:1856 bwc::ConnectManagerImpl::onSipD
2024-02-01T01:53:34.159Z <Info> [0x5840][]connect_manager_impl.cpp:1875 bwc::ConnectManagerImpl::onSipD

--- Fail over to 2nd SBC (
2024-02-01T01:53:35.421Z <Info> [0x5840][]connect_manager_impl.cpp:1055 bwc::ConnectManagerImpl::connec

--- 2nd SIP registration fails
2024-02-01T01:53:35.635Z <Debug> [0x5840][]sip_session.cpp:889 bwc::SipSession::disconnected:BWC:INTERNA
2024-02-01T01:53:35.635Z <Debug> [0x5840][]sip_registrations.cpp:30 TP::Sip::Utils::RegistrationPtr::~R
2024-02-01T01:53:35.635Z <Info> [0x5840][]connect_manager_impl.cpp:1827 bwc::ConnectManagerImpl::onSipD
2024-02-01T01:53:35.635Z <Info> [0x5840][]connect_manager_impl.cpp:1856 bwc::ConnectManagerImpl::onSipD
2024-02-01T01:53:35.635Z <Info> [0x5840][]connect_manager_impl.cpp:1875 bwc::ConnectManagerImpl::onSipD
2024-02-01T01:53:35.635Z <Info> [0x5840][]BroadWorksCallControl.cpp:4624 BroadWorksCallControl::onOffli

--- No more SBC's to try, SIP connect failed, client shows Phone services disconnected error
2024-02-01T01:53:36.672Z <Info> [0x5840][]connect_manager_impl.cpp:1148 bwc::ConnectManagerImpl::failOv
2024-02-01T01:53:36.672Z <Info> [0x5840][]connect_manager_impl.cpp:2003 bwc::ConnectManagerImpl::onConn
```

Related Information

- Cisco Technical Support & Downloads