Cisco Expressway B2BUA Drops RTCP Multistreaming Refresh Packets During Decryption in Cisco WebEx Calls

Contents

Introduction

Prerequisites

Requirements

Components Used

Background Information

Calls Affected

Recommendation - Upgrade X8.7.x Systems

Related Information

Introduction

This document describes an issue that affects certain TelePresence configurations with Cisco Expressway or Cisco VCS software versions X8.7*x*.

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Prerequisites

Requirements

There are no specific requirements for this document.

Components Used

The information in this document is based on these software and hardware versions:

- Cisco TelePresence IX5000 Series immersive endpoint (all versions)
- Cisco TelePresence Video Communication Server (Cisco VCS) or Cisco Expressway version X8.7.x and earlier
- Cisco TelePresence Server versions 4.3, 4.4(1.9), 4.2 or earlier
- Cisco TelePresence Server versions 4.4(1.16) or later

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, make sure that you understand the potential impact of any command.

Background Information

The mechanism for session state maintenance in X8.7.*x* is susceptible to issues when a high number of SSRC IDs are present in encrypted calls. These include calls from immersive endpoints that use TIP, or from endpoints that operate in multistream mode. This issue was resolved by VCS / Expressway X8.8.*x* and later. However, this issue can affect encrypted calls where one of the VCS / Expressways at either end of the call leg is still on X8.7.*x* while the other is on X8.8.*x* or later.

Related Products

This document can also be used with these hardware and software versions:

- Cisco TelePresence TX9000 Series
- Cisco TelePresence System (CTS)
- Other video endpoints

Calls Affected

Calls from immersive TelePresence systems that operate in TIP/MUX mode, or other TelePresence systems that operate in multistreaming mode.

When encrypted/decrypted by Cisco VCS or Cisco Expressway X8.7.x.

The symptoms are pixelated video which gets progressively worse. Then the endpoint terminates the call (because problems with decoding received media lead to perceived packet loss). Other video and quality issues might also occur.

With the Cisco TelePresence Server, this behavior might trigger the issue:

- Versions 4.3 or 4.4(1.9): sharing for more than the session refresh.
- Versions 4.2 or earlier, or 4.4(1.16) or later: starting and stopping sharing multiple times.

Note: This issue does not occur if any of these cases apply: 1. Encryption to / from the Cisco VCS / Cisco Expressway is disabled. 2. TIP/MUX is disabled (immersive systems). 3. Multistream is disabled. 4. If Cisco WebEx is involved, and WebEx video callback (Call My Video System) is used.

Recommendation - Upgrade X8.7.x Systems

The CMR Cloud infrastructure (Cisco WebEx) was upgraded from X8.7 to resolve the issue for customers that have Cisco VCS or Cisco Expressway X8.8.x on-premises. This means that other customers using CMR Hybrid, who have Cisco VCS / Expressway X8.7.x on-premises, could now see this issue. We strongly recommend that you upgrade your Cisco VCS / Expressway X8.7.x if you are using multistream/immersive endpoints for encrypted calls with other Cisco infrastructure, like CMR Cloud or third-party partners.

Related Information

CSCvc47502

- CSCvc34689
- Technical Support & Documentation Cisco Systems