Cisco Unity and CallManager IP Integration: Unity Voice Mail Port Not Reachable

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Contents

Introduction

This document describes how to troubleshoot a problem that can cause a failure when a call from Cisco CallManager is directed to a Cisco Unity voice mail port and the port does not pickup the call.

This document also mentions how to troubleshoot the issue of calls that come from an ISDN PRI through Cisco CallManager that fail to connect to Cisco Unity.

There are several other reasons why a Cisco Unity voice mail port might fail to pickup a call from Cisco CallManager. If the problem described in this document is not the problem that your system experiences, refer to the Related Information section at the end of this document.

Prerequisites

Requirements

If your Cisco CallManager configuration uses Partitions and Calling Search Spaces, this document assumes that you already understand how to configure and troubleshoot them. If you would like to learn more about Partitions and Calling Search Spaces, refer to Understanding and Using Partitions and Calling Search Spaces With Cisco CallManager.

This document also assumes that you understand the basic tasks required to integrate a Cisco Unity server with a Cisco CallManager server.

Components Used

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

- Cisco Unity versions 3.1 and 4.0
- Cisco CallManager 3.1, 3.2, 3.3, 4.x, and 5.x

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.

Conventions

Refer to Cisco Technical Tips Conventions for more information on document conventions.

Problem 1

Conflict Between the CallManager CMI Configuration and the CallManager Side of a Unity Integration

One reason that a Cisco Unity voice mail port does not pick up a call is due to a conflict in the configuration of the Cisco Messaging Interface (CMI) feature and the voice mail port feature used by Cisco Unity. In this situation the server administrator has configured the same directory number (DN) in the same partition for both the CMI and Cisco Unity. This is not a supported configuration. In this case, Cisco Unity never receives the call because Cisco CallManager cannot determine how to resolve the conflict between the two devices (the Cisco Unity voice mail ports and the CMI voice mail DN).

It is also possible to have some Cisco Unity voice mail ports that work and others that fail. This typically happens when the conflict between the Cisco Unity voice mail port DNs and the CMI DN occurs later in the chain of Cisco Unity voice mail port DNs. For instance, if you have DNs 5000 through 5011 configured as Cisco Unity voice mail ports and DNs and 5000 through 5009 work while 5010 fails, this might be because 5010 was assigned as the DN for CMI within the same partition.

If you experience a reachability problem with Cisco Unity voice mail ports and you do not have CMI configured, this document does not help you fix your problem.

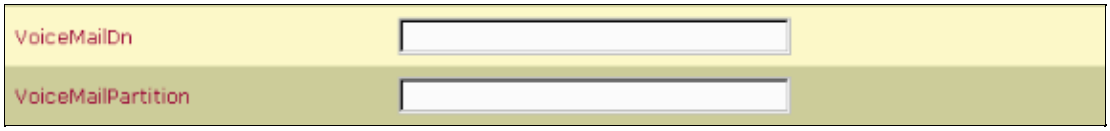
Note: Also make sure that the voice mail port DN does not conflict with any other DN on the cluster.

Solution 1

Verify the CMI Configuration Does Not Conflict with Cisco Unity Voice Mail Port DNs

You cannot use the same DN for Cisco Unity voice mail and the CMI in the same partition. This task verifies that these two features do not have the same DN in the same partition.

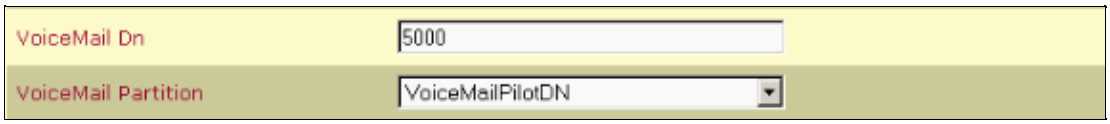
1. Access the Cisco CallManager administration web page.
2. Navigate to the CMI configuration page by selecting **Service** > **Cisco Messaging Interface**.
3. Locate the **VoiceMailDN** parameter and the **VoiceMailPartition** parameters.
4. The VoiceMailDN and VoiceMailPartition parameters are blank.



If these parameters are not blank, proceed to step 5.

If these parameters are blank on your server, a conflict between the CMI configuration and the Cisco CallManager Cisco Unity voice mail port configuration should not be the cause of your problem. You can try to restart the CMI service in case somebody else changed the values to blank and did not restart the service to force the changes to take effect. If the values on your system are blank and restarting the CMI service did not solve the problem, this document cannot help you solve this issue. See the Related Information section of this document for more resources on troubleshooting Cisco Unity and Cisco CallManager issues.

5. The VoiceMailDN and VoiceMailPartition parameters have values in them as shown here.



If your server needs to have CMI configured, make a note of the values. Then proceed to step 6.

Note: The Cisco Unity voice mail system does not require the CMI service.

If you server does not need CMI configured, change the values in these two parameters to blank and update the page.

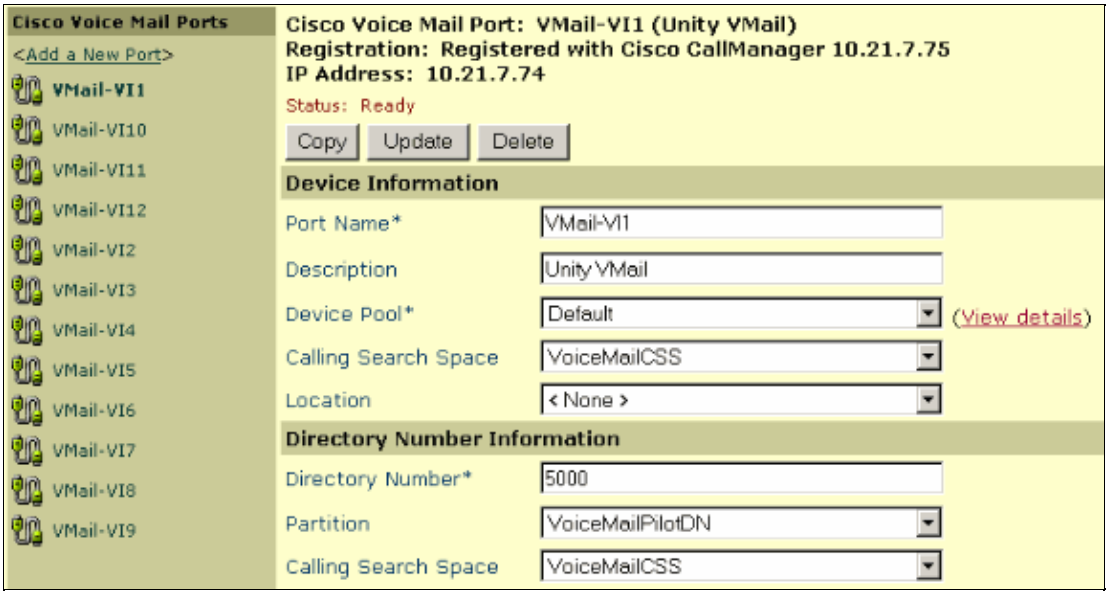
Note: You can also disable the CMI service if you do not want it to run. For Cisco CallManager 3.3 and 4.x this is done on the Application Cisco CallManager Serviceability page in the **Tools** > **Service Activation** page. For Cisco CallManager 3.1 and 3.2 this is done by selecting **Start** > **Programs** > **CallManager 3.1** > **CallManager Services** menu.

6. Navigate to the Cisco CallManager voice mail port page.
7. Click on the first voice mail port.

In this case, it is **VMail−VI1**. Also, there is a conflict because the DN and the partition are the same as the values for CMI (5000 and VMPilot respectively).

8. Compare the values for the DN and Partition that you noted in step 5 to the values on the Directory Numbers on this page.

If you have a conflict, resolve it by either changing your CMI configuration or your Cisco Unity voice mail port configuration. In most cases it is easier to change the CMI configuration.



9. If you are using Cisco CallManager 3.2, 3.3, or 4.x, verify the Voice Mail Pilot DN on the **Feature > Voice Mail > Voice Mail Pilot** page since it can also have a conflict.

   In this case, there is a conflict because the DN is the same as the value for CMI (5000). If you decide to change your Cisco Unity voice mail configuration instead of changing your CMI configuration, change the Voice Mail Pilot DN as well.

   If you do not have a conflict between the CMI configuration and the Cisco CallManager Cisco Unity voice mail port configuration, this is not the cause of your problem. See the Related Information section for more resources on troubleshooting Cisco Unity and Cisco CallManager issues.

Problem 2

Calls that come from ISDN PRI Through Cisco CallManager Fail to Connect to Cisco Unity

This can happen when Cisco CallManager is connected to certain ISDN networks. When Cisco CallManager is the user side of the PRI, it might send a *Progress Indicator IE* in the **ALERTING** message sent. This is invalid in some PRI protocols. In a situation where Cisco CallManager immediately connects the call to Cisco Unity, the *Alerting Progress Indicator* might come after the **CONNECT** message is sent. This causes a protocol violation, and Cisco CallManager disconnects the call.

Solution 2

In order to resolve this issue, set the Disable Alerting Progress Indicator service parameter to **True** in the Cisco CallManager. You can do this when you log into the Cisco CallManager Admin page and complete these steps:

1. Choose **Service** > **Service Parameters** and click **CallManager**.
2. Scroll down to Disable Alerting Progress Indicator and set this parameter to **True**.
3. Click **Update**.

Problem 3

Configure the Unity Server to Avoid Loops with Cisco CallManager

If a user turns on message notification and Cisco Unity sends message notification calls to a device which then automatically forwards to Cisco Unity when calls are not answered, an endless loop is created between Cisco Unity and Cisco CallManager. This can also fill up the subscriber voicemail.

Solution 3

Cisco Unity detects that the forwarded call was originally sent by Cisco Unity as a message notification and does not answer it. Cisco Unity detects message notification calls that are forwarded back by using the 4th−column DTMF tone because the caller ID of the original notification call might be lost.

Complete these steps in order to enable Cisco Unity rejection of forwarded message notification announcements:

1. On the Cisco Unity desktop, double−click the **Cisco Unity Tools Depot** icon.
2. In the left pane of the Tools Depot window, under Diagnostic Tools, click **Administration Tools**.
3. Double−click **Advanced Settings Tool**.
4. In the Unity Settings box, click **System Reject Forwarded Notification DTMF Tone**.
5. In the New Value field, enter **A**.

   Note: Avoid the value of C because it might conflict with AMIS calls.
6. When prompted that the value has been set, click **OK** and **Exit**.

   You can now avoid the endless loop between CallManager and Unity that is triggered by message notification calls.

Related Information

- **Troubleshooting Port Lock Ups in Cisco Unity**
- **Cisco Unity Technical Support Pages**
- **Cisco CallManager Technical Support Pages**
- **Voice Technology Support**
- **Voice and Unified Communications Product Support**
- **Troubleshooting Cisco IP Telephony**
- **Technical Support & Documentation − Cisco Systems**

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