CallManager BARS Troubleshooting

Document ID: 77804

Contents

Introduction

The Cisco IP Telephony Backup and Restore System (BARS) utility provides a reliable and convenient way to perform regularly scheduled automatic or user−invoked backups of data for a variety of Cisco IP Telephony products.

This document discusses some common issues that occur when you use BARS and how to troubleshoot these issues.

Prerequisites

Requirements

There are no specific requirements for this document.

Components Used

The information in this document is based on Cisco CallManager 3.x and 4.x, and does not apply to versions 5.0 and 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.

Note: For Cisco CallManager 3.3 or later, you need to use the supported Cisco BARS utility. If you use an earlier version of Cisco CallManager, use the Cisco IP Telephony Applications Backup Utility (3.5). On Cisco CallManager 5.0 and later, the BARS utility is replaced by the Disaster Recovery System. Refer to the Disaster Recovery System Administration Guide for more information.

Note: If you back up the IPCC server with BARS, the version of BARS must be the same on both the Cisco CallManager and IPCC server. Refer to these compatibility matrix documents to know more about the supported BARS versions:

- Cisco Customer Response Solutions (CRS) Software and Hardware Compatibility Guide
- Cisco Unified Communications Manager Software Compatibility Matrix − Backup and Restore System

Conventions

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

Cisco CallManager User Cannot Upgrade, Install, or Uninstall BARS

Problem

The Cisco CallManager user cannot upgrade, install or uninstall BARS. The user receives this error message:

```
BARS can not be upgraded/uninstalled because it is
in the middle of a BACKUP/RESTORE operation
```

Note: In order to install BARS, it is mandatory that you log in as Administrator.

Solution

This problem can occur due to a failed backup, or there can actually be a backup in progress.The changes in registry key values can also cause this issue.

If you are certain there is not a backup in progress and the system is still stuck, use this workaround:

Complete these steps on the Cisco CallManager server:

1. Make a backup of the registry. Ensure that Cisco Security Agent (CSA) and all antivirus software is disabled; also, ensure that the BARS scheduler service, IIS Services, are stopped on the box..
2. Change the **\HKEY_LOCAL_MACHINE\SOFTWARE\Cisco Systems\BARS\information\AppStatus** registry key value to **IDLE**.
3. Reboot the system, and attempt to install or uninstall BARS again.
4. If this procedure does not stop the BARS activity, remove the registry entry **\HKEY_LOCAL_MACHINE\SOFTWARE\Cisco Systems\BARS\Information\Appversion = X.0.X000**. Reboot the Cisco CallManager only after you have removed this registry value (if it is not present in Add/Remove Programs) and then attempt again to install or uninstall BARS.

BARS Install Fails with the Error "Unknown error from pCat–>InstallComponent()"

Problem

You are unable to install BARS, and the install logs show this message:

```
InstallUtils.cpp: AddMTSCom: SUCCESS:  Created new COM instance
InstallUtils.cpp: AddMTSCom: Unknown error from pCat->InstallComponent()
```

Solution

Complete these steps in order to resolve the issue:

1. In the Start menu, choose to **Programs > Administrative Tools > Component Services**.
2. In the left–hand pane, expand **Component Services > Computers > My Computer > COM+**

Applications.

3. Delete the **BARS** folder.
4. Stop and restart the **COM + Component Service**.

After you complete these steps, re−install the BARS.

After a BARS Upgrade, the SQL Server Scheduled Job "Monitor Disk Space" Fails

Problem

With Cisco CallManager, the SQL server scheduled job "Monitor Disk Space" fails and this error message is received in the application event log:

```
SQL Server Scheduled Job 'Monitor Disk Space' (0x07CFC697B9F
C82439332CD45726BE6B1) − Status: Failed − Invoked on: 2005−11−03
18:00:00 − Message: The job failed. The Job was invoked by Schedule
13 (Schedule 1). The last step to run was step 2 (TruncateCCMLog).
```

An upgrade to BARS version 4.0.8 from 4.0.7 causes the Cisco CallManager and Call Detail Record (CDR) database owner to be changed to unknown. This causes the SQL server scheduled job " Monitor Disk space" to fail. This issue is documented by Cisco bug IDs CSCsc55053 (registered customers only) and CSCsg32819 (registered customers only) .

Solution

Perform this workaround in order to resolve this issue:

- In SQL analyzer, run these commands to change the database owner:

```
use <latest ccm database>

sp_changedbowner '<hostname>\Administrator'
```

and

```
SELECT name FROM master..sysdatabases WHERE SUSER_SNAME(sid) IS NULL
```

After the command is executed, complete these steps:

1. Choose **Enterprise Manager > Security**, and right−click **Logins**.
2. Choose **New Login**, and add **\SQLSvc** as a user.
3. Under the *\SQLSvc* properties on the Database Access tab, add these values:

   ♦ Current Cisco CallManager database (for example, **CCM0302**)
   ♦ CDR
   ♦ art
4. Under the properties of each value, choose **db_owner**.
5. Choose **Management > Jobs > Monitor Disk Space**, and choose **\SQLSvc** as the owner.
6. Restart the SQLServerAgent and MSSQLServer services.
7. If the Monitor Disk space turns blue, it indicates that the Replication Job failed. In this case, it is recommended to create a new subscription.

The issue could also be that the job runs on the wrong database. In this case, perform this workaround.

1. Open Enterprise Manager from **Start > Programs > Microsoft SQL Server**.
2. Expand **Microsoft SQL Servers > SQL Server Group > Local > Management > SQL Server Agent > Jobs**.
3. Right–click the **Monitor Disk Space** job on the right, and choose **Properties**.
4. Click the **Steps** tab.
5. Click **Step 2 (TruncateCCMLog)**, and then click **Edit**.
6. Copy the contents of the command window into a text editor, such as Notepad.
7. Do a search and replace; replace all instances of **CCM0300** with the current Cisco CallManager database (for example, **CCM0302**).
8. Copy all the corrected text to the clipboard, then paste it back into the command window and overwrite the old, incorrect text.

Alternative Procedure

If these steps did not resolve the issue, try this procedure:

1. Go to the **SQL Enterprise Manager**.
2. Navigate to **Subscriber > Management > SQL server agent**.
3. Delete any job that tries to replicate MLADB.

BARS Does Not Work with the Tape Drive

Problem

The Removable Storage Devices service is not enabled by default on all Cisco CallManager installations.

Removable Storage Service

BARS does not control the Tape Drive device, it only writes or reads to it if it is accessible. There is no need to have the Tape Drive setup as a Drive Letter. But if you want to investigate further you should be able to perform these steps.

1. Go to **Start > Run**.
2. Type **compmgmt.msc**.
3. Choose **Storage > Removable Storage > Physical Locations**.
4. Find the tape drive device in the list, and right–click so that you are able to view or change the properties.
5. Sometimes, the Removable Storage Services does not run.
6. Complete these steps in order to enable the service:

   a. Choose **Start > Run**.
   b. Type **Services.msc**.
   c. Locate the Removable Storage Service, set this service to **Automatic**, and start the service.

Solution

You can back up the required file or folder to the local hard disk drive and then to tape using the NTbackup utility.

In order to find the backup utility, choose **Start > Program Files >Accessories > System Tools > Backup**.

Installer Does not Have Sufficient Rights to Access Folder C:\CiscoWebs\BARS Error Message Displays During BARS Upgrade

Problem

When a user attempts to upgrade BARS, the `Error 1303 "Installer does not sufficient rights to access folder C:\CiscoWebs\BARS"` error message displays even though the user is logged in with Administrative privileges.

Solution

Complete these steps in order to resolve this issue:

1. Choose **Start > Programs > Administrative Tools > Local Security Policy** in order to open the Local Security Policy.
2. Choose **Security Settings > Local Policies > User Rights Assignment**, and choose **User Rights Assignment**.
3. Double−click **Deny access to this computer from the network**, deselect **Guest**, and click **OK**.
4. Double−click on **Deny logon locally**, deselect **Guest**, and click **OK**.
5. Close the Local Security Policy, and reboot the server.

   This procedure helps you when you upgrade the BARS on the server.

BARS Scheduler Status Does Not Change to Enabled

Problem

After you upgrade the Cisco CallManager from 4.0 to 4.2, it is not possible to schedule the backup task through the BARS Scheduler.

Solution

This problem occurs when the Cisco BARS Scheduler service is stopped or stuck.

In order to resolve this problem, choose **Start > Programs > Adminstrative Tools > Services** on the Cisco CallManager server, and verify that the Cisco BARS Scheduler service is up and running. Start the service if it is stopped or restart the service if it is already started.

Event Log Error: The Description for Event ID (1003) in Source (Cisco BARS) Cannot be Found

Problem

This BARS error message is received on the Cisco CallManager event log:

```
Event Type:     Error
Event Source:   Cisco BARS
Event Category: None
Event ID:       1003
```

```
Date:           10/6/2007
Time:           2:17:02 AM
User:           N/A
Computer:       CCM1
Description:
The description for Event ID ( 1003 ) in Source ( Cisco BARS ) cannot be found. The local
computer may not have the necessary registry information or message DLL files to display
messages from a remote computer. The following information is part of the event: A
critical error occured during backup.
Data:
0000: 40 9b 0f 00 38 ee da 00    @:..8îÚ.
0008: d6 60 00 11 dc ea da 00    Ö`..ÜêÚ.
0010: 78 36 00 11 58 ee da 00    x6..XîÚ.
0018: 01 7a 0e 11 50 ed da 00    .z..PíÚ.
0020: 3c ec da 00 38 ec da 00    <ìÚ.8ìÚ.
```

Solution

In order to resolve the issue, follow these steps:

1. Verify that there is no duplex mismatch between the Cisco CallManager and the switchport. If there is a mismatch, you need to reconfigure the duplex settings on the switchport.
2. Verify that the location where you try to back up has enough space. It must have more than the staging directory size as indicated in the BARS log.
3. Check if the destination folder (where the backup is created) has the permission of the administrator group, and make sure it inherits the permissions from the parent folder.
4. Use BARS at off−peak hours or when the transfer is expected to be faster.

BARS Fails to Backup Cisco CallManager Registry

Problem

If BARS fails with the error message that says it was not able to backup the CCM registry

Solution

Complete these steps in order to resolve the issue:

1. On the Cisco CallManager Publisher server, go to **Start > Programs > Administrative Tools > Services**, and verify that the **Remote Registry Service** has not stopped.
2. If `Remote Registry Service` has stopped, change its `Startup Type` to **Automatic** and restart the BARS backup. If `Remote Registry Service` is running, restart the BARS backup.

Error: Failed to Copy URL Services Page from Remote Machine

Problem

The Cisco CallManager backup log traces show this error message after the backup is performed:

```
Failed to copy URL Services page from remote machine <machine-name.company.com>.
Files can be backed up only from backing up server.
Backup URL Services page manually.
```

If the Services URL under enterprise parameters is configured with an IP address, BARS attempts a reverse DNS lookup of this IP to obtain a name and compares that name to the local hostname. BARS uses the equivalent of 'nslookup,' so DNS resolution is required. BARS does not use default Windows name resolution. If the reverse DNS lookup returns a fully qualified domain name, the BARS comparison fails.

If the Services URL under enterprise parameters is configured as a fully qualified domain name, this warning generates if the hostname that is specified in the Services URL is a fully qualified machine name. The BARS application uses only the local host name when it determines whether the local host is the location of the Services URL. The backup completes successfully after this warning.

This issue is documented in the Cisco Bug ID CSCsd39789 (registered customers only) . Refer to the bug for a possible fix.

Solution

These are the possible workarounds to resolve this issue:

1. Configure the DNS server to perform reverse resolution and only return the hostname.
2. Change the Services URL from a fully qualified host name to the hostname of the server.

BARS Backup Fails with the Error "Could not build archive successfully"

Problem

With Cisco CallManager, BARS backup fails with the `Could not build archive successfully` error message. The message occurs for one of these reasons:

- If the the location where you take the backup does not have enough disk space, the backup fails.
- If the backup is taken at a network destination, accessing the network destination machine can take more time, and BARS times out.
- If a single file for backup has a size greater than 2 GB, the backup fails. This usually is the Call Detail Records (CDR) database.

This issue is documented in Cisco bug ID CSCee43938 (registered customers only) .

Solution

Verify that the location where you try to back up has enough space. It must have more than the staging directory size as indicated in the BARS log. In that case, this is a valid message, which indicates that the storage destination location does not have enough space to host the archive file.

If the network is slow, and if the backup data size increases, it can be less than 4 hours. In this case, it is better to perform the back up locally (tape drive) or to take the backup on a network destination that is easily accessible.

When you use the network location, make sure that the user ID used to logon to the remote location has enough disk space in the Disk Quota if the Quota Management feature is used.

If the above procedure did not resolve the issue, perform one of these procedures:

- Purge old CDR records or deselect the CDR database backup during the BARS configuration to avoid this situation.
- Check if the destination folder (where the backup is created) has the permission of the administrator group, and make sure it inherits the permissions from the parent folder.
- Use BARS during off–peak hours or when the transfer is expected to be faster.

BARS Version 4.0.12 Backup Fails with the Error: Failed to copy URL Services page. Couldn't find IIS Root Directory for CCMCIP

Problem

In Cisco Unified Communications Manager 4.x, with BARS Version 4.0.12, this error displays when a backup is performed.

```
Failed to copy URL Services page. Couldn't find IIS Root Directory for
CCMCIP
```

Solution

In order to overcome this problem, perform one of these procedures:

1. Upgrade to BARS 4.0.13.

   Note: BARS 4.0.13 is compatible with Cisco Unified Communications Manager Versions 4.2(3), 4.2(1), 4.1(3), 4.1(2), 4.0(2a), and 4.0(1).

   OR
2. Under **System > Enterprise Parameters**, change the **URL services** service parameter from the IP address to the hostname of the server in the CCMAdmin page.

Failed to Drop Database CCM0300

Problem

When you try to restore with the BARS tool, the restore fails with either of these error messages:

```
BARS Restore – Failed to drop database CCM0300
```

OR

```
Cannot drop the database 'Ccm0300' because it is currently in use.
```

Solution

In order to resolve this issue, check these:

1. Make sure that the LMHOSTS file is configured properly and populated to the subscribers.
2. Make sure that the BARS tool points to the server name instead of the IP address.

BARS Intermittently Fails with COM+ Error

Problem

The BARS process becomes stuck in progress, and these events are logged to the application event viewer:

```
AMCisco BARS SchedulerNoneNone1N/AXXXXX
The description for Event ID ( 1 ) in Source ( Cisco BARS Scheduler ) cannot be found.
The local computer may not have the necessary registry information or message DLL files to
messages from a remote computer.
The following information is part of the event:
 [-2147023170] Automation error
 The remote procedure call failed.


AMCOM+ErrorSVC4097N/A
XXXXXXThe run-time environment has detected an inconsistency in
its internal state.


AMCOM+ErrorSVC4194N/A
XXXXXXThe system has called a custom component and that component
has failed and generated an exception.
```

Solution

When you perform a backup/restore with an IP address, a proper mapping between the IP and DNS is required to correctly access the system. An omitted configuration leads to this issue.

In order to resolve this issue, check these:

1. Make sure that the LMHOSTS file is configured properly and populated to the subscribers.
2. Make sure that the BARS tool points to the server name instead of the IP address.

Error: Could Not Find Cisco Unified CallManager Database on This Server

Problem

The BARS backup fails with this error message:

```
Could not find Cisco Unified CallManager database on this server.
```

The backup failure occurs with this error:

```
Could not determine the path for CDR flat files from database. Backing up from default loca
```

Solution

In order to resolve this issue, make sure that you use the account "Administrator" to back up.

Note: "A" must be in CAPS since this is case sensitive.

Unable to Open BARS Web Page

Scheduled backups for the publisher, primary IPCC servers, and secondary IPCC servers never execute when you run BARS on a CM 4.1(3)sr7 publisher. Manual backups run fine.

Solution

In order to resolve this issue, you need to reinstall BARS. Complete these steps in order to reinstall BARS:

1. Click the **Start** menu.
2. Click **Run**.
3. Type **regedit**, and click **OK**.
4. Navigate to **HKEY_LOCAL_MACHINE\SYSTEM\CurrentControlSet\Control\SessionManager**.
5. Delete the **PendingFileRenameOperations** key.
6. Refresh the registry.
7. Start again the BARS installation.

Backup with BARS Fails

Backup with BARS for CRS fails with this message:

```
[02:38:51 AM]   Backup is 74% complete.
[02:45:30 AM]   [Error] Error: unable to process archive component:
com.cisco.wf.spanlinkBackupRestore.SLRcrdgArchiveComponent; nested exception is:
        com.cisco.archive.ArchiveException: Unable to process backup request; nested except
is:
        com.cisco.archive.ArchiveException: CDBRTool failed to backup Spanlink recordings
[02:45:36 AM]   Session closed successfully
[02:45:37 AM]   [Error] Could not backup Cisco Customer Response Solutions successfully on
Ctelpti003.
```

Solution

In order to resolve this issue, shut down BARS on the BARS server as described in this procedure:

1. Close all Internet Explorer browsers in all TS sessions and console.
2. Go to **Start > Programs > Administrative Tools > Component Services**.
3. In the Component Services dialog box, expand **Component Services > Computers > My computer > COM+ Applications > BARS**, and choose **Shut down**.
4. Rerun the restore/backup that failed.

Complete these steps in order to resolve the issue in an Active Directory (AD) environment:

1. On the AD server, you can browse your directory schema by opening the Active Directory Services Interface (ADSI) edit utility. Drill down to, for example, dc=xxxxx, dc=cisco, dc=com, ou=Cisco, ou=CCNApps, ou=clusters, ou= <profilename>, ou=Cluster Specific.XXXXXXX.
2. Check that the entries are named as this list shows:

   ```
   CN=archiveID?empty
   CN=archiveRequest?empty
   CN=archiveTimestamp?empty
   CN=archiveUserInfo?empty
   ```
3. If any of these entries are missing the *?empty* suffix in their name, rename them to exactly match the list. With AD, it is not necessary to edit the value, but it is enough to append *?empty*.

4. Restart the CRS Node Manager from Windows services.

Related Information

- **Cisco IP Telephony Backup and Restore System (BARS) Administration Guide, Version 4.0(2)**
- **Voice Technology Support**
- **Voice and Unified Communications Product Support**
- **Troubleshooting Cisco IP Telephony**
- **Technical Support & Documentation – Cisco Systems**