Upgrading to BAMS Release 3.20

Introduction

Caution Before upgrading to a new BAMS release, ensure that you have backed up the latest configuration and data files. For more information, see the "System Backup and Recovery" section on page 1-3.

Note Before beginning this upgrade procedure, read the entire appendix to familiarize yourself with the prerequisites and major steps of the upgrade process, as well as the differences between the two releases.

The upgrade procedure automatically converts configuration and data files from previous releases to Release 3.20 format.

Upgrade Procedure

Use the following procedure (on both units for redundant systems) to upgrade to BAMS Release 3.20.

Caution When you upgrade to Release 3.20, measurement data is zeroed out and measurement data that was in progress at the time of the upgrade is not retained.

Step 1 As the BAMS user, perform a **stop_system** to shut down the BAMS application.

Step 2 Log in as root user.

Step 3 Run the BAMS uninstall script. (See the "Uninstalling BAMS" section on page 2-3.)

Step 4 In response to the following question, enter Yes:

```
Would you like the current active configuration to be saved as the restore configuration?
[y,n] y
```

Step 5 In response to the following question, answer No:

```
Would you like to remove the data directories? [y,n] n
```

Step 6 In response to the following question, answer No:

```
Would you like to remove the archive directories? [y,n] n
```

Step 7 Enter the command **pkgrm CSCOcaBAM**

Step 8 Reboot the system.

Step 9 Login as root user.

Step 10 Enter the command **pkgadd -d** on the base BAMS 3.20 package (CSCOcaBAM).

Step 11 Run the BAMS install script:

```
cd /opt/install
./bams install
```

Step 12 Login as bams and perform a **start_system** to restart the BAMS application.

BAMS 3.20 Configuration Changes

The Nailed Connection (SIGPATH) table has been modified in BAMS 3.20. For nailed configurations (signaling mode), BAMS uses the Nailed Connection table to map the sigpath to logical trunk groups. For Release 3.20, BAMS uses only the sigpath value to map to the trunk group. The bearchan and trunknum columns from previous releases have been removed. With these columns deleted, the Nailed Connection table has been transformed to a one-to-one mapping between the sigpath and trunkgrp columns (that is, for any value of sigpath there is only one trunkgrp value and vice versa).

When BAMS 3.20 is installed and the configuration of the previous version is restored, the Nailed Connection table is automatically converted so that the bearchan and trunknum columns are deleted. In this conversion, any resulting records that violate the one-to-one mapping are deleted from the table. Because of this change in which the Nailed Connection table has been transformed to a one-to-one mapping, the circuits column from the Trunk Group (TRUNKGRP) table may need to be modified to reflect the changes.

When BAMS 3.20 is installed, the default value for PGW_DYNAMIC_UPDATE is FALSE, and the structure of the Trunk Group table is the same as in pre-3.20 releases. In this mode, the circuits column from the Trunk Group table exists and is used in measurements calculations. When the set-pgw-mode utility is executed and PGW_DYNAMIC_UPDATE is set to TRUE (see the "Setting the PGW Dynamic Update Mode" section on page 2-16), the circuits column is deleted from the Trunk Group table. In this mode, the value for the number of circuits per trunk group is taken from the 1071 CDBs as received from the PGW.

The convert_all_nodes_mml_NailedConn.sh utility described below is useful for converting any MML batch scripts to match the new configuration structures in BAMS 3.20.

BAMS 3.20 MML Script Conversion Utility

BAMS 3.20 includes a utility you can use to convert any pre-3.20 MML provisioning scripts to the 3.20 format. The convert_all_nodes_mml_NailedConn.sh utility is stored in the /opt/CiscoBAMS/bin directory. This program converts any SIGPATH and TRUNKGRP provisioning entries so that they are compatible with the 3.20 provisioning structures.

The convert_all_nodes_mml_NailedConn.sh script is executed during the installation of BAMS 3.20 if you choose to restore the configuration of the previous installation. In this case, the utility is executed on the file /usr/tmp/bams_phase3.sav, which is the MML provisioning script created when BAMS is uninstalled. This script can also be executed manually on any user MML scripts.

When the convert_all_nodes_mml_NailedConn.sh utility is executed, the bearchan and trunknum parameters of SIGPATH provisioning entries are deleted. Also deleted are the duplicate records resulting from the deletion of these columns. The convert_all_nodes_mml_NailedConn.sh utility can be executed on MML provisioning scripts that include multi-node entries. For these scripts, the duplicate SIGPATH entries are identified and filtered for each set of provisioning commands delimited by the **set-node** command.

The TRUNKGRP entries are modified if the BAMS system configuration setting of PGW_DYNAMIC_UPDATE is TRUE. If this is the case, the circuits field is deleted from the TRUNKGRP provisioning entries.

Here are the steps for using the convert_all_nodes_mml_NailedConn.sh utility:

Step 1 Log in as the bams user.

Step 2 Go to the directory where the MML provisioning script is stored.

Step 3 Execute the utility with the MML provisioning script as an argument. For example:

```
$ convert_all_nodes_mml_NailedConn.sh <name of mml batch script>
```

After execution, the specified file is transformed to be compatible with the BAMS 3.20 structures. A copy of the original MML provisioning script is created. For example:

```
$ cd /opt/CiscoBAMS/files/s01/mml/bams_system

$ ls -l *mml
-rw-rw-r--   1 bams     bams       29202 Oct 14 18:23 bams_system.mml
$ convert_all_nodes_mml_NailedConn.sh bams_system.mml
moving bams_system.mml to bams_system.mml.20041014182549.old

"PGW_DYNAMIC_UPDATE" is 0.
The "circuits" column will not be removed.

Converting bams_system.mml node:sys
Converting bams_system.mml node:1
WARNING: SIGPATH: sigpath=0x00140003 TRUNK GRP: trunkgrp=4001 lost
WARNING: SIGPATH: sigpath=0x00140004 TRUNK GRP: trunkgrp=4001 lost
WARNING: SIGPATH: sigpath=0x00140008 TRUNK GRP: trunkgrp=4004 lost
Converting bams_system.mml node:2
Converting bams_system.mml node:3
Converting bams_system.mml node:4
Converting bams_system.mml node:5
Converting bams_system.mml node:6
Converting bams_system.mml node:7
WARNING: SIGPATH: sigpath=0x00150002 TRUNK GRP: trunkgrp=4001 lost
WARNING: SIGPATH: sigpath=0x00150003 TRUNK GRP: trunkgrp=4001 lost
WARNING: SIGPATH: sigpath=0x00150004 TRUNK GRP: trunkgrp=4001 lost
WARNING: SIGPATH: sigpath=0x00150008 TRUNK GRP: trunkgrp=4004 lost
Converting bams_system.mml node:8
$ ls -l bams_system*
-rw-rw-r--   1 bams     bams       16620 Oct 14 18:25 bams_system.mml
-rw-rw-r--   1 bams     bams       29202 Oct 14 18:25 bams_system.mml.20041014182549.old
$
```