Field Notice: Preventing Failures of the SRM Processes

Background

Our engineers are aware of a condition that may corrupt the memory of the System Resource Management (SRM) processes of the Digital Network Control System (DNCS). This condition can occur under all system releases of the Digital Broadband Delivery System (DBDS) software. Memory of the SRM processes may sometimes become corrupted if the processes are not stopped and restarted in a specific order.

Note: The dsm, drm, qamManager, pkeManager, camEx, and camPsm processes together make up the SRM processes.

The SRM processes are dependent upon one another. The SRM processes risk corrupting system memory should any SRM process be stopped and restarted without a stop and restart of the other SRM processes, as well. System operators will know that an SRM process has failed when the indicator light on the DNCS Control window changes from green to red for any of the individual SRM processes. New sessions will not start during the time the SRM processes are down.

Recommendation

If system operators notice that any of the SRM processes are stopped, they should ideally stop and restart *all* DNCS processes.

However, if a stop and a restart of all DNCS processes is not desirable, then a stop and restart of the aforementioned SRM processes ought to be conducted in the specific order set forth in the following sections. Furthermore, the stopping and restarting of the SRM processes should be done while within a maintenance window. No new sessions can be set up while the SRM processes are down.

Stop Remaining SRM Processes

System operators should stop any remaining SRM process that is still running in the following order:

1 dsm
2 drm

3 qamManager

4 pkeManager

5 camEx

6 camPsm

Verify That SRM Processes are Stopped

Type the following commands and press **Enter** after each to verify that these processes have stopped.

```
ps -ef | grep dsm
ps -ef | grep drm
ps -ef | grep qamManager
ps -ef | grep pkeManager
ps -ef | grep camEx
ps -ef | grep camPsm
```

Result: You should see only the grep process in the output of these commands.

Clear Completed Sessions

Type the following command and press **Enter** to clear any completed sessions.

```
clearDbSessions -c
```

Restart the SRM Processes

System operators should then restart the SRM processes in the following order:

1 camPsm

2 camEx

3 pkeManager

4 qamManager

5 drm

6 dsm

Note: You do not have to wait for the indicator light on the DNCS Control window to display green before restarting the next process.

Confirm Ability to Order VOD

After the indicator lights on the DNCS Control window display green for the SRM processes, use a test DHCT in the headend to confirm that you can order a video-on-demand (VOD) event.

About This Bulletin

Audience

This document is intended for system operators of the DBDS. Support engineers who help system operators troubleshoot and maintain their systems will also find this document useful.

Document Version

This is the third release (Rev C) of this document. The following changes constitute Rev C:

- The overall recommendation was modified such that system operators are urged to stop and restart all DNCS processes when a stop and a restart of an SRM process is needed.

- Two additional processes (camEx and camPsm) were added to the list of processes that together constitute the SRM processes.

- The scope of this field notice was expanded to include all system releases of the DBDS.

For Information

If You Have Questions

If you have technical questions, call Cisco Services for assistance. Follow the menu options to speak with a service engineer.