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July 2003

Operations Alert Bulletin

Replace MQAM v1.3.2 With MQAM v1.3.3

Purpose

This alert bulletin notifies cable service providers that MQAMs operating with software version 1.3.2 can accumulate excessive pending "responder messages" for the Digital Network Control System (DNCS), which results in a buffer overflow that can eventually interrupt two-way communication between the MQAM and the DNCS.

The new MQAM software version 1.3.3 (MQAM 1.3.3) prevents the accumulation of responder messages and the subsequent loss of communication.

Audience and Sites Affected

This alert bulletin is written for Digital Network Control System (DNCS) operators currently operating System Release (SR) 1.5.1 Service Pack 1 or SR 1.5.1 Service Pack 2 releases and Cisco Services engineers.

Note: Customers upgrading to SR 2.1 or SR 3.0 will not retain MQAM software version 1.3.2 (MQAM 1.3.2) during the upgrade, and therefore do not require MQAM 1.3.3.

Background

An MQAM running 1.3.2 software can eventually over fill its buffer with responder messages from the DNCS during normal system operations.

For example, when building a significant amount of xOD (*anything-*On-Demand) transactions a large number of two-way messages are exchanged between the MQAM and DNCS. If the number of messages sent from the MQAM exceeds approximately 65,000, the MQAM will enter a "non-responding" state. At this point, messages sent from the DNCS will begin to accumulate in the MQAM buffers. Eventually the buffers become filled, which causes the MQAM to lose communication with the DNCS.

An MQAM that is set up for a continuous feed session, rather than building xOD sessions, may not over fill its buffers for several months. Also, an MQAM that is rebooted periodically, which clears out all messages from the buffer, may never enter the non-responding state. No precise tools are available for predicting when an MQAM 1.3.2 may overflow its buffer.

Recommendation

Cisco recommends upgrading all MQAMs that are currently running software version 1.3.2 to MQAM 1.3.3. This upgrade prevents the MQAM from overfilling its buffer with responder messages.

Select one of the following options for obtaining the MQAM 1.3.3 software:

- For sites currently running SR 1.5.1 Service Pack 1, upgrade to SR 1.5.1 Service Pack 2, which now contains the MQAM 1.3.3 Upgrade Kit as part of the bill of material.
- For sites currently running SR 1.5.1 Service Pack 2, order the stand-alone MQAM 1.3.3 Upgrade Kit, part number 4004442. You can choose two methods to install the Upgrade Kit:
 - 1) Self-install by completing a single, remote download from the DNCS
 - 2) Contact Cisco Services to install the software by using VPN

Important: Only sites with VPN connectivity to Cisco Services can receive the remote installation. In the absence of a network service agreement with Cisco Services, pricing for software installation services is determined on a case-by-case basis. Please contact Cisco Services.

To order an upgrade to SR 1.5.1 Service Pack 2 (part number 4002207) or the standalone MQAM 1.3.3 Upgrade Kit (part number 4004442) for systems currently running SR 1.5.1 Service Pack 2, contact Cisco Services.

For More Information

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



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