

Operations Alert Bulletin Working with Cisco Services to Recover From a DBDS System Failure

Background

When a Digital Broadband Delivery System (DBDS) failure occurs, your Informix database may be at risk of becoming corrupted, even if your facility uses a standby Digital Network Control System (DNCS). This Operations Alert Bulletin explains the steps you should take after a DBDS system failure.

Recommendation

If you experience a DBDS system failure involving a Solaris panic or an Informix assertion failure, you should contact Cisco Services for assistance. Cisco engineers will defragment your tables and rebuild your indexes using the dncsDbData and formatDbSpace.sh utilities. If these recovery steps are not performed, you may experience other database failures in the future.

Solaris panics are logged in the /var/adm/messages file, and Informix assertion failures are logged in the export/home/informix/online.log. To determine whether you should contact Cisco Services, look for messages in the /export/home/informix/online.log stating that Informix performed work during fast recovery.

Example: Defrag not necessary

The following example indicates that your tables do not need to be defragmented. Messages indicate that no work was needed or performed during the recovery. This example shows what you will see upon startup after a graceful shutdown.

15:16:36 Physical Recovery Started. 15:16:36 Physical Recovery Complete: 0 Pages Restored. 15:16:36 Logical Recovery Started. 15:16:36 20 recovery worker threads will be started. 15:16:39 Logical Recovery Complete. 0 Committed, 0 Rolled Back, 0 Open, 0 Bad Locks

In this case, you should restart the system and verify that there are no other problems, then check the log files once again for errors.

Example: Defrag necessary

The following example indicates that you should contact Cisco Services. Messages indicate that 1776 pages were restored, 2995 records were committed, and 14 records were rolled back. This example shows what you will see upon startup after an uncontrolled shutdown.

12:09:11 Physical Recovery Started. 12:09:12 Physical Recovery Complete: 1776 Pages Restored. 12:09:12 Logical Recovery Started. 12:09:12 20 recovery worker threads will be started. 12:09:17 Logical Recovery Complete. 2995 Committed, 14 Rolled Back, 0 Open, 0 Bad Locks

In cases like this, you should contact Cisco Services to defragment your tables and rebuild your indexes.

For more information on the dncsDbData utility, refer to the DBDS Utilities guide for your system release:

- DBDS Utilities Version 5.1 Installation Instructions and DNCS Utilities User's Guide (part number 740020)
- DBDS Utilities Version 6.1 Installation Instructions and DNCS Utilities User Guide (part number 4020695)

About This Bulletin

Audience

This document was written for Digital Network Control System (DNCS) operators. Field service engineers and Cisco Services engineers may also find the information in this document helpful.

Related Publications

You may find the following publications useful as resources when you implement the procedures in this document.

- Backing Up and Restoring the Informix Database (part number 740236)
- DBDS Backup and Restore Procedures For SR 2.2 Through 4.2 (part number 4013779 Revision A)
- DBDS Utilities Version 5.1 Installation Instructions and DNCS Utilities User's Guide (part number 740020)
- DBDS Utilities Version 6.1 Installation Instructions and DNCS Utilities User Guide (part number 4020695)

Document Version

This is the second release of this document.

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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