EMC® NetWorker®
Module for DB2
Version 4.0

Command Reference Guide

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As part of an effort to improve and enhance the performance and capabilities of its product lines, EMC periodically releases revisions of its hardware and software. Therefore, some functions described in this document may not be supported by all versions of the software or hardware currently in use. For the most up-to-date information on product features, refer to your product release notes.

If a product does not function properly or does not function as described in this document, please contact your EMC representative.

Audience   This document is part of the EMC NetWorker® Module for DB2 with (NMDB2) documentation set, and is intended for use by system administrators during installation and system configuration of the NMDB2 software.

Readers of this document are expected to be familiar with the following topics:

◆ DB2 terminology and concepts, especially those related to database backup and recovery
◆ Backup and recovery procedures
◆ Disaster recovery procedures

Related documentation   Documentation related to the use of this product can be found at the EMC website, http://Powerlink.EMC.com, including:

◆ The NetWorker Module for DB2 release 4.0 documentation set:
  • Administration guide
  • Installation guide
  • Release notes
◆ The NetWorker documentation set:
  • Administration guide
  • Installation guide
  • Release notes
  • Command reference guide
  • Disaster recovery guide
◆ Other EMC documentation:
  • NetWorker PowerSnap Module documentation
  • Software compatibility guide
  • UNIX man pages

Where to get help   EMC support, product, and licensing information can be obtained as follows.

Product information — For documentation, release notes, software updates, or for information about EMC products, licensing, and service, go to the EMC Powerlink website (registration required) at:

http://Powerlink.EMC.com

Technical support — For technical support, go to EMC Customer Service on Powerlink. To open a service request through Powerlink, you must have a valid support agreement. Please contact your EMC sales representative for details about obtaining a valid support agreement or to answer any questions about your account.

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Your suggestions will help us continue to improve the accuracy, organization, and overall quality of the user publications. Please send your opinion of this document to:

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If you have issues, comments, or questions about specific information or procedures, please include the title and, if available, the part number, the revision (for example, A01), the page numbers, and any other details that will help us locate the subject you are addressing.

NAME   nsrdb2admin − NetWorker Module for DB2 (NMDB2) administrative program.

SYNOPSIS   **nsrdb2admin [-M] -s** *server* [**query**]

nsrdb2admin [-P] -s *server* [**query**]

nsrdb2admin [-X] -s *server* **-f** *config_file* [**query**]

< **query** >**:** [**-c** *client*] [**-g** *group*] [**-N** *save_set*]

DESCRIPTION   **nsrdb2admin** is a configuration migration utility used to upgrade existing NMDB2 2.1 scheduled backup configuration to NMDB2 4.0, as well as to migrate existing NMBD2 4.0 scheduled backup configuration to NMDB2 2.1.

An NMDB2 2.1 scheduled back configuration is a manually-created NMB2 Client resource where the Save Set field is: **DB2:/DATABASE_NAME/NODE0000** and the Backup Command field is **nsrdb2sv -f config_file** where config_file is a client-side configuration file that contains X=Y parameters to control backup settings and options.

NMDB2 4.0 scheduled backup configurations have no configuration file. Instead, all of the configuration settings are stored on the NetWorker server.

The print option lists all of the NMDB2 Client resources on a given NetWorker server. This list includes: client name, group name, backup type, save set name, and backup command.

Client, group and save set command line options should be used to uniquely identify a Client resource when the utility is run in either upgrade or extract mode. If more than one Client resource is matches the options that have been set then the migration will not proceed.

Because nsrdb2admin updates the NetWorker Client resource during a migration, a user who runs the command requires either Configure NetWorker or Change Application Setting NetWorker privileges.

Use of the nsrdb2admin utility requires the NetWorker client and server versions be 7.4 or later.

OPTIONS   -f   Required option when -X is specified. This option points to a location where the extracted configuration file is to be saved. Note: if a given file path name already exists, that file will be overwritten.

-M   Run the configuration migration in upgrade mode. This option upgrades the NMDB2 Client resource from NMDB2 2.1 to NMDB2 4.0. The backup command must contain the **-f** flag and proceeded by using a valid configuration file. The save set name will be replaced with **nsrdb2sv -F**

Note: The configuration file reference by the -f flag must reside on the host that runs the nsrdb2admin utility.

-P   Run the configuration migration in print mode. This option outputs all NMDB2 Client resources and valid information located on the specified NetWorker server.

-s Specifies the NetWorker server on which the configuration migration will be run. This option is required for all modes.

-X Run the configuration migration in extract mode. This option extracts NMDB2 information from the NetWorker server and stores it in the configuration file specified by −**f.** It enables the migration from NMDB2 4.0 to NMDB2 2.1 and use of the configuration file for manual backups, restores, etc...

< **query** >**:**

-c Specifies the NetWorker client name. This option uniquely identifies an NMDB2 Client resource.

-g Specifies the group name of the NMDB2 Client resource . This option uniquely identifies an NMDB2 Client resource.

-N Specifies the save set name of the NMDB2 Client resource. This option uniquely identifies an NMDB2 Client Resource.

EXAMPLES The following command lists all the NMDB2 Client resources on a given NetWorker server:

    nsrdb2admin -P -s example.server.com

The following command upgrades an NMDB2 Client resource:

    nsrdb2admin -M -s example.server.com -N DB2:/SAMPLE/NODE0000

The following command extracts the configuration from the NetWorker server and creates a configuration file that can be used for backups and restores with NMDB2 2.1.

    nsrdb2admin -X -s example.server.com -N DB2:/SAMPLE/NODE0000 -f /home/db2inst1/nmdb2.cfg

SEE ALSO **nsrdb2sv**(1m)

NAME   nsrdb2cat – Synchronizes the DB2 history for NMDB2 advance copy service backups
                with the NetWorker indexes.

SYNOPSIS   nsrdb2cat -s server -c client sstime1 [sstime2]...

DESCRIPTION   The **nsrdb2cat** command synchronizes the DB2 history for NMDB2 advanced copy ser-
                vice backups with with the NetWorker indexes during pruning operations. It removes
                snapshot backup entries from the DB2 history as NetWorker prunes entries for expired
                snapshots from its index.

                This command should never be run manually.

                The **nsrdb2cat** command is configured by the following parameters in the NMDB2
                resource file /nsr/res/nmdb2.res:
                DB2PATH

                        Specifies the location of the DB2 binary directory. Mandatory when
                        NSR_DB2CAT_MODE is set to enabled

                NSR_DB2CAT_MODE

                enabled
                        Advanced copy service backups will be performed and catalog synchronization
                        will be performed.

                disabled (default setting)
                        Advanced copy service backups will be performed and catalog synchronization
                        will not be performed.
                NSR_REMOVE_ON_FAILURE

                        FALSE (default setting)
                                NetWorker index entries will not be removed if synchronization of
                                backup records are unsuccessful.

                        TRUE
                                NetWorker index entries will be removed even if the synchronization
                                of backup records are unsuccessful.
                NSR_DEBUG_FILE
                        Specifies the location of the operations log file. If this option is not set, then
                        operational messages are written in the default log file
                        /nsr/applogs/nmdb2/nsrdb2cat.log

                NSR_DEBUG_LEVEL

                        Designates the debug level of the operations log file. The default level is 0.

FILES   **/nsr/applogs/nmdb2/nsrdb2cat.log**

SEE ALSO   **nsrsnapck (1m)**

NAME   nsrdb2probe − Probe based backup utility

SYNOPSIS   **nsrdb2probe -s** *server* **-c** *client* **-g** *group* [**-t** *state*] [**-o** *cmd_options*] *saveset*

< **cmd_options** >**: LOG_THRESHOLD=X**

DESCRIPTION The nsrdb2probe utility is used to automatically start an NMDB2 backup when a
specified number of logs have been generated since the previous probe-based backup.
The nsrdb2probe command should not be manually invoked, but should be executed
as part of a probe-based group in NMC.

When nsrdb2probe is first invoked, a backup is triggered and savegrp launches the
NMDB2 Client resource that is associated with the probe-based backup group. Once
the backup has successfully completed, its transaction log becomes the current check
point log stored in the NSR Probe state on the NetWorker server. When nsrdb2probe
is subsequently invoked, a comparison is made to determine whether the currently
active log will be greater than or equal to the check point log plus the user-specified
log interval, LOG_THRESHOLD=X, in which case the backup would proceed.

Use of the nsrdb2probe utility requires the NetWorker client and server versions to be
7.5 or later.

OPTIONS   -c   Specifies the NetWorker Client resource.

-g   Specifies the Group resource to which the NMDB2 Client resource belongs.

-o   Specifies the command options to be set in the NSR Probe resource. For
nsrdb2probe, the log interval must be declared in the command options as
LOG_THRESHOLD=X, where X is an integer that specifies the number of logs
that must be generated before a probe-based backup is started.

-s   Specifies the NetWorker Server resource.

-t   Specifies the state of the nsrdb2probe command. The state refers to the log
name of the last successfully completed backup the state is updated to the
current active log.

EXAMPLES   The following is an example of nsrdb2probe and arguments that a probe-based
savegrp can call:

nsrdb2probe -s example.server.com -c example.client.com -g probegroup -o
"LOG_THRESHOLD=1000" -t S0004574.LOG DB2:/SAMPLE/NODE0000

SEE ALSO   **s**savegrp**(1m), nsrdb2sv**(8m)

NAME   nsrdb2ra – NetWorker Module for DB2 Backup Configuration Wizard Remote Agent.

SYNOPSIS   **nsrdb2ra** [−**i**] [−**u**]

DESCRIPTION   *nsrdb2ra* is part of the NMDB2 Scheduled Backup Configuration Wizard, available with NMDB2 release 4.0. The primary function of the nsrdb2ra command is to marshall database requests between the wizard and the IBM DB2 application, which runs on a remote host. The secondary function is to register (-i) or unregister (-u) the NMDB2 Wizard as a plug-in on the client host during installation.

The nsrdb2ra command is invoked only by:

(1) the NetWorker Management Console (NMC) during the creation or modification of an NMDB2 scheduled backup configuration,

(2) the packaging subsystem during NMDB2 installation or uninstallation.

The nsrdb2ra command should not be run on the command line without instructions from NetWorker Customer Support.

NAME   nsrdb2rlog − recover DB2 database logs from storage to disk with NetWorker

SYNOPSIS   **nsrdb2rlog**
                    [−**s** *server*] [−**a** *database*] [−**d** *destination dir*] [−**C** *chain id*] [−**S** *starting log*]
                    [−**E** *ending log*] [−**N** *node number*] [−**F**]

DESCRIPTION   *nsrdb2rlog* is a utility used to exercise EMC operations without the presence of a data-
                    base. Any computer with this utility can retrieve logs from a remote server and
                    recover them to a file instead of tape.

                    This utility allows the user to explicitly enter the log numbers they want to retrieve. It
                    gives the freedom to pick any existing logs available on the server. **nsrinfo** can be used
                    to find which logs reside on a server.

                    Example: nsrdb2rlog -s serverA -a sample -C 0 -d /db2/home/logs -S 10 -E 53

                    The above example recovers the logs numbered 10 to 53 with the chain id 0 from the
                    database named "sample" on the server named "serverA".

OPTIONS   −**a** *database*
                            Specifies the name of the database which the logs belong to.

                    −**C** *chain id*
                            Specifies the chain ID of the logs to be used.

                            The number entered can range from 0 to 9999999.

                            Example: If the logs list in **nsrinfo** are in the form \C0000007_S0000004.LOG.
                            Then the chain id would be 7 to retrieve this chain of logs.

                    −**d** *destination dir*
                            Specifies the directory that the log files should be recovered to. If the directory
                            does not exist then nsrdb2rlog will try and create it. If it is unable to create the
                            directory, nsrdb2rlog will exit without recovering the logs.

                    −**E** *ending log*
                            Specifies the last log number to retrieve.

                            The number entered can range from 0 to 9999999.

                            Example: If the last log listed from **nsrinfo** is \C0000000_S0000150.LOG. Then
                            150 would be used as the last log value in order to retrieve all logs from the
                            starting log value to here.

                    −**N** *node number*
                            The unique node number which identifies the database partition server. For
                            example, if the node was NODE0012, this value should be 12.

                            The default value is 0.

                    −**S** *starting log*
                            Specifies the first log number to retrieve.

                            The number entered can range from 0 to 9999999.

                            Example: If the first log listed from **nsrinfo** is \C0000000_S0000004.LOG. Then
                            4 would be used as the last log value in order to retrieve all logs from here to

the ending log value.

−**s** *server*

Specifies the computer name on which the databases resides.

−**F**   Forces overwrite if the recovery file already exists.

nsrinfo(1m)

NAME   nsrdb2sv − save DB2 databases to long term storage with NetWorker

SYNOPSIS   **nsrdb2sv** <**save options**>

DESCRIPTION   **nsrdb2sv** saves DB2 databases to the NetWorker server (see **nsr**(1m)). The progress of
a nsrdb2sv can be monitored using the Java based **NetWorker Management Console**
or the **curses**(3X) based **nsrwatch**(1m) program for other terminal types.

nsrdb2sv should not be evoked manually. **nsrdb2sv** executes as part of a scheduled
DB2 database backup and is called by **nsrdb2** script with appropriate arguments.
Environment variables in **nsrdb2** script and for DB2 instance must be set correctly. For
more information refer to the latest version of the NetWorker Module for DB2
Administrator's Guide or Release Supplement.

OPTIONS   Refer to the the **save**(1m) man page for a description of options supported by
nsrdb2sv.

SEE ALSO   **nsrwatch**(1m), **save**(1m), **savegrp**(1m), **savefs**(1m), **nsrdb2**(1m), **nsr**(5), **nsr**(1m),
nsr_client(5), **nsr_device**(5), **nsr_group**(5), **nsr_service**(5), **nsr_pool**(5), **nsrd**(1m),
nsrim(1m), **nsrindexd**(1m), **nsrmm**(1m), **nsrmmd**(1m)