



RELEASE NOTES

**EMC[®] NetWorker[®]
Module for Sybase**
Release 3.0 UNIX Version

Release Notes

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These release notes contain supplemental information about EMC[®] NetWorker[®] Module for Sybase (NMS) release 3.0. Topics include:

- ◆ Product description 2
- ◆ New features and changes 2
- ◆ Fixed problems 6
- ◆ Environment and system requirements 6
- ◆ Known problems and limitations 6
- ◆ Technical notes 12
- ◆ Documentation 12
- ◆ Software media, organization, and files 13
- ◆ Installation 13
- ◆ Troubleshooting and getting help 14

Before installing NMS release 3.0, and then periodically after the installation, refer to the latest release of this document on the Powerlink website at <http://Powerlink.EMC.com>.

Product description

The NMS software enhances the NetWorker software and provides the following services:

- ◆ Integration of database and file system backups
- ◆ Restore of Sybase databases
- ◆ Backup to a centralized backup server
- ◆ Integrated backup and restore for Sybase databases
- ◆ Automated management of backup media
- ◆ Manual and scheduled Sybase database backups
- ◆ Storage management through automated scheduling, autochanger support, electronic tape labeling, and tracking
- ◆ Secure restore of data to alternate database instances (on original computer or different one)
- ◆ Database exclusion and selection
- ◆ Multistripe backup and recovery
- ◆ Multiple backup sessions
- ◆ Full browse and retention policies
- ◆ Full and incremental backups
- ◆ Multiple, concurrent high-speed devices, such as DLT drives

New features and changes

NMS Release 3.0 provides the following support and new features:

- ◆ [“Internationalization support” on page 3](#)
- ◆ [“Password-protected database backup and restore” on page 3](#)
- ◆ [“Database backup and restore verification” on page 3](#)
- ◆ [“Exclusion of multiple user-defined temporary databases from backup” on page 3](#)
- ◆ [“Dynamic loading of OCS library” on page 4](#)
- ◆ [“Reporting of scheduled backups” on page 4](#)
- ◆ [“Reporting of Sybase database save sets” on page 5](#)

- ◆ “Solaris zones support” on page 5
- ◆ “Certification of NMS with VMWare” on page 5

Internationalization support

The internationalization support available in this release of NMS allows it to operate in non-ASCII environments. You can:

- ◆ Create non-ASCII databases on ASE server and do backup and restore operations.
- ◆ Specify non-ASCII characters for **nsrsybsv**, **nsrsybrc**, and **nsrsybcc** commands options.
- ◆ Specify non-ASCII characters for the environment variables in the **nsrsyb** script.
- ◆ Type the inputs to the NMS software in non-ASCII language.
- ◆ View operational messages in non-ASCII format.

Password-protected database backup and restore

NMS software provides full support for password-protected database backup and recover. If a password is used when backing up database data, then the same password must be provided at the time of recovering the backed up data.

The *EMC NetWorker Module for Sybase Release 3.0 UNIX Version Administration Guide* provides detailed information.

Database backup and restore verification

NMS provides support for database backup and restore verification.

The *EMC NetWorker Module for Sybase Release 3.0 UNIX Version Administration Guide* provides detailed information.

Exclusion of multiple user-defined temporary databases from backup

In addition to the system-defined temporary database *tempdb*, you can create user-defined temporary databases. These temporary databases are attached with a specific user login or a database. Creating temporary databases enhances the performance of a database where a large number of transactions are taking place at a

time. Also, creating temporary databases prevents the critical applications from failing when the system defined database fails. NMS Release 3.0 excludes all the temporary databases (both system defined and user-defined) in the ASE server from the backup, because the ASE server does not support restoration of temporary databases.

The *EMC NetWorker Module for Sybase Release 3.0 UNIX Version Administration Guide* provides detailed information.

Dynamic loading of OCS library

NMS Release 3.0 uses the Open Client Server (OCS) library present on the user's machine and dynamically loads the OCS to connect to the Sybase server. The dynamic loading of OCS takes place during the installation of Sybase server. This eliminates the need for manual installation of a particular version of OCS.

The *EMC NetWorker Module for Sybase Release 3.0 UNIX Version Administration Guide* provides detailed information.

Reporting of scheduled backups

NMS binaries register sessions with the NetWorker jobs framework during scheduled backups, and these sessions are displayed in the Session tab of the NMC.

During multistripe scheduled backup, the Group Details window of NMC displays:

- ◆ Progress messages that advise why a backup or restore operation cannot proceed
- ◆ Completion messages that advise when a backup or restore operation is complete.

In this release of NMS, the database name and the save set name passed by an administrator are differentiated. This differentiation in save set names applies to single, multiple, full, incremental, and instance-level type of backups done by NMS. This differentiation does not apply to the meta-data save set backup by NMS.

Reporting of Sybase database save sets

Use the **mminfo** command to view Sybase database save sets:

- ◆ Manual backup without multistripe

The **mminfo** command displays all the save sets and one for metadata save set.

- ◆ Manual backup with multistripe option

The **mminfo** command displays all the save sets, one for the metadata save set, and one for the metadata save set for striping.

- ◆ Scheduled backup without multistripe

The **mminfo** command displays all the save sets and one for the metadata save set.

- ◆ Scheduled backup with multistripe

The **mminfo** command displays all the save sets and one for the metadata save set, and one for metadata of striping.

For manual backups, there is one metadata save set for each backup, whereas for scheduled backup, there is one metadata save set for each save set defined in the Client resource. Also in backup with multistripe, for each save set one additional metadata save set is displayed.

The *EMC NetWorker Module for Sybase Release 3.0 UNIX Version Administration Guide* provides detailed information.

Solaris zones support

This release of NMS provides Solaris zones support. The NMS software must be installed in the same zone as the NetWorker client. The NMS software can run in both global and whole root zones, and no additional steps are required when installing the NMS software in a global or whole root zone.

The *EMC NetWorker Module for Sybase Release 3.0 UNIX Version Installation Guide* provides detailed information.

Certification of NMS with VMWare

NMS can be used on any of the supported operating systems running in the VMWare environment.

Fixed problems

This section identifies problems fixed in the product software release also detailed online in EMC Issue Tracker. EMC Issue Tracker offers online access for up-to-date product issue information. Product issues can be searched online in EMC Issue Tracker using a keyword, issue number, product feature, or product version.

The Issue Tracker can be accessed on the EMC Powerlink website at:

<http://Powerlink.EMC.com>

Set browse and retention time using options with the `nsrsybsv` command (LGTpa64841)

You can explicitly set the browse and retention time with the `nsrsybsv` backup command to override settings in the Client resource. Use the command line options, `-w` and `-y` with the `nsrsybsv` command to specify the browse and retention time respectively.

Backup of read-only databases (LGTpa75778)

NMS Release 3.0 backs up read-only databases without truncating the logs. The `-T` option is not a valid option for read-only databases.

Environment and system requirements

Consult the *EMC Information Protection Software Compatibility Guide* for the most up-to-date information on the environment and system requirements for different operating systems.

Known problems and limitations

This section lists all the known problems and limitations in this release of NMS.

For shared zone, install NMS in both local and global zones (LGTsc02376)

Make sure to install NMS in both local and global zones when configuring NMS in a shared zone.

The -N option only changes the instance name and not the database name (LGTsc02156)

When the -N option is used to specify a save set name and overwrite the existing one, only the instance name changes and not the database name.

Do not use the -N option to overwrite existing save set names.

All save sets are not listed in Group Details window in NetWorker Management Console reporting (LGTsc03560)

NMS creates one session channel for every NMS process. In multistripe backups, there are two metadata save sets: one that is normal and the other that pertains to the stripe information. Both the save sets have the same name and are written by NMS. NetWorker Management Console (NMC) is not able to differentiate between the two save sets.

Backup fails for an instance when SYBASE:/instance/ is used (LGTsc03563)

Backup should be successful if *SYBASE:/instance/* or *SYBASE:/instance* is used. However, backup fails when "/" is used after the instance name.

Do not use "/" after the instance name when backing up data.

Levels are not displayed for all the save sets in NMC reporting (LGTsc03565)

NMC does not display levels for all save sets after multistripe scheduled backup.

Use **mminfo** to view levels for all save sets.

Multistripe option is not working on ASE, version 12.5.4 (LGTsc03701)

Manual and scheduled backups with multistripe option fail when using NMS with ASE, version 12.5.4.

Do not use the multistripe option when using NMS with ASE, version 12.5.4 during manual and scheduled backups.

All messages are not displayed in the Group Details window when schedule backup fails (LGTsc03968)

When scheduled backup fails, all the messages are not displayed in the Group Details window in NMC.

-t option is not supported in non-English format (LGTsc04095)

The -t option is not supported in non-English format.

Unable to view current date and time (LGTsc04133)

Backup is successful but restore fails, and the following error message appears: "Unable to get current date and time."

Visit the Sybase website for a workaround.

In a shared Solaris zone, run the pkgrm command twice to uninstall NMS (LGTsc04140)

On a shared Solaris zone, run the **pkgrm** command twice to remove NMS successfully. The first time the **pkgrm** command is run, the uninstallation is unsuccessful.

Data mismatch of Group Details window display and mminfo command (LGTsc04193)

During schedule backup of database, the data displayed in the Group Details window is different from that displayed by **mminfo** command. This happens because of error in rounding off of values.

Use the **mminfo** command.

with verify clause is not supported in ASE, version 15.0 (LGTsc04626)

ASE, version 15.0 does not support the *with verify* clause for backup and restore.

In schedule backup, the error message does not distinguish between PRECMD and POSTCMD commands (LGTsc05212)

View the error message after taking scheduled backup with invalid post script command. The message does not mention whether script is pre or post.

Check manually if PRECMD or POSTCMD command is used.

NMS core files are created in home directory of the user (LGTsc05213)

During scheduled backup, when NMS backs up the core, the core file is created in the home directory of the user. The core file should be created in the current working directory. During ad hoc or manual backup, the core file is created in the current working directory.

Consolidate backup failure should show nsrsybsv usage (LGTsc05214)

When consolidated backup fails, the NMC displays the group as *interrupted* and not as *failed*. The **nsrsybsv** usage is displayed in *daemon.raw*, but NMC is not able to capture the same.

Error message displayed during incremental backup with -G option (LGTsc05216)

NMS Release 3.0 does not support incremental backup with -G option.

Backup for read-only database should change behavior for incremental backup (LGTsc05217)

- ◆ For databases other than read-only, the -T option when used with incremental backup — The -T option is ignored and only incremental backup is performed.
- ◆ For read-only database, the -T option when used with incremental backup — Because the -T is a fatal option, incremental backup is not preformed. The option -T signifies truncation of logs, which is not possible for read-only databases. Thus, the check for -T is always precede by other checks in case of read-only databases.

Error message displayed with -T option in incremental backup is confusing (LGTsc05218)

NMS does not support the **-T** option for incremental backups. The following error message appears if **-T** and **-I incr** are used for a database that has data and log on separate device: "Error: the '**-T**' option is not valid for an incremental backup where the log is on a separate device. It will be ignored. To truncate the transaction log, use the same command with a level of full instead of incremental."

Incorrect NMC reporting but backup is successful (LGTsc05427)

In Solaris (SPARC and AMD64), even though scheduled backup is successful, NMC incorrectly reports failure in backup. This is a limitation with Solaris Bourne shell.

Use *ksh* in *nsrsyb* script.

Show proper error message when decryption key not available (LGTsc05486)

An error message appears, when AES encryption is set to TRUE and scheduled backup is successful, and then the backed up data is restored without using passphrase or invalid passphrase.

Sybase issue with multiple incremental backups for read-only database (LGTsc06337)

For read-only database, you must take one incremental backup. For multiple incremental backups, every incremental backups must be followed with the one full backup.

Backup fails on HP-UX PA-RISC if LD_PRELOAD is not set (LGTsc24202)

On HP-UX PA-RISC, if the LD_PRELOAD environment variable is not properly set in the shell where the Sybase backup server is started, an NMS backup (either manual or scheduled) fails with the following type of error message:

```
# nsrsybsv -U sa -P "" SYBASE:/VENUS/model
Backing up database model.
24146:nsrsybsv: Error from server VENUS_BS: Msg 412402,
      Level 2, State 1
      Backup Server: 4.124.2.1: Archive API error for
```

```

device='bms::venus.VENUS.model../nsr/tmp/sy000001::00':
  Vendor application
name=<UNINIT>, Library version=0, API routine=<UNINIT>,
  Message=Unable to
open API library for device
  'bms::venus.VENUS.model../nsr/tmp/sy000001'.
Library path is '/space/sybase/ASE-15_0/lib/libbms.sl'.
shl_load() returned:
Code=8, Message=Exec format error
24146:nsrsybsv: Error from server VENUS: Msg 8009, Level
  16, State 1
      Error encountered by Backup Server. Please refer
      to Backup Server
messages for details.
24115:nsrsybsv: Error: unable to dump database model in
  instance VENUS.

```

Prior to an NMS backup on HP-UX PA-RISC, set the LD_PRELOAD environment variable as the Sybase user in the shell where the Sybase backup server will be started:

1. Set LD_PRELOAD to *either* of the following:

- Set the variable to the complete pathname of the libbms.sl library. For example:

```
# export
LD_PRELOAD=/space/sybase/ASE-15_0/lib/libbms.sl
```

- Set the variable to the complete pathname of the libpthread.sl library. For example:

```
# export LD_PRELOAD=/usr/lib/libpthread.sl
```

2. Reboot the Sybase backup server for the NMS backup in the same shell where the LD_PRELOAD variable was set in [step 1](#).

Connections to NMC fail due to shell used by nsrsyb script (NW110373)

On Solaris, when the NMS **nsrsybsv** process attempts to connect to the NMC jobs daemon, it might fail and print the following error:

```
Bad file number.
```

This failure is caused when the **nsrsyb** script uses the default shell `/bin/sh`, which fails to pass the file descriptors that the jobs daemon creates for the **nsrsybsv** process.

As a workaround, edit the **nsrsyb** script on the Solaris client, and change the following line in the script:

```
#!/bin/sh
```

Change the line to the following:

```
#!/sbin/ksh
```

Technical notes

There are no technical notes in this release of NetWorker Module for Sybase.

Documentation

This section describes related documentation and any corrections or additions to the NetWorker module documentation:

- ◆ [“Documentation Errata” on page 12](#)
- ◆ [“Related documentation” on page 13](#)

Documentation Errata

This section contains corrections or updates to the NetWorker Module documentation.

Where to find the most recent supported operating system and version information

The *EMC NetWorker Module for Sybase Release 3.0 UNIX Version Installation Guide* and *Administration Guide* do not contain the most recent supported operating system and version information. Consult the *EMC Information Protection Software Compatibility Guide* for the most up-to-date information on supported operating systems and versions.

Related documentation

The following manuals, available on Powerlink at <http://powerlink.EMC.com>, provide further information about the NetWorker software and the NetWorker Module for Sybase software:

- ◆ Sybase backup and recovery documentation
- ◆ *EMC NetWorker Module for Sybase Release 3.0 UNIX Version Installation Guide*
- ◆ *EMC NetWorker Module for Sybase Release 3.0 UNIX Version Administration Guide*
- ◆ *EMC NetWorker Administration Guide*
- ◆ *EMC NetWorker Release Notes*
- ◆ UNIX man pages
- ◆ *EMC Command Reference Guide*
- ◆ *EMC Information Protection Software Compatibility Guide*
- ◆ *EMC NetWorker Disaster Recovery Guide*

Software media, organization, and files

Make sure you have:

- ◆ The CD-ROM from the Media Kit
- ◆ Access to EMC PowerLink (<http://Powerlink.EMC.com>) to download the media kit and documentation

The *EMC NetWorker Module for Sybase Release 3.0 UNIX Version Installation Guide* provides details about files that are installed and their location.

Installation

The *EMC NetWorker Module for Sybase Release 3.0 UNIX Version Installation Guide* provides information about installation of NMS in different environments.

Troubleshooting and getting 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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