

**Release Notes**P/N 300-004-742  
Rev A10

March 19, 2009

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These release notes contain supplemental information about EMC<sup>®</sup> NetWorker<sup>®</sup> Module for DB2, Multiplatform Version, Release 2.1. Sections include:

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## Revision history

The following table presents the revision history of this document.

Revision	Date	Description
A10	March 19, 2009	<ul style="list-style-type: none"> <li>Added section: <a href="#">“Where to find the most recent supported operating system and version information”</a> on page 9.</li> </ul>
A09	January 19, 2009	<ul style="list-style-type: none"> <li>Added a note that the backup configuration wizard is not supported with NetWorker releases 7.4 or later, <a href="#">page 3</a> and changed known problem <a href="#">“Backup configuration wizard not supported with NetWorker releases 7.4 or later”</a> on page 6.</li> <li>Added known problem: <a href="#">“Scheduled backup not supported with multiple DB2 installations on the same host”</a> on page 5.</li> </ul>
A08	November 13, 2008	Added known problem: <a href="#">“Support of 32-bit and 64-bit coexistence on the same host”</a> on page 5.
A07	March 19, 2008	Added feature: <a href="#">“LPAR on pSeries AIX operating systems supported”</a> on page 3
A06	December 12, 2007	<ul style="list-style-type: none"> <li><a href="#">“Limited support for DB2 Versions 9.1 and 9.5 on supported platforms.”</a> on page 3 was added to New Features and Changes.</li> <li><a href="#">“Scheduled backup fails for a DB2 Version 9.5 database”</a> on page 6 was added as a known problem.</li> </ul>
A05	September 21, 2007	Added Issue Tracker note to <a href="#">“Fixed problems”</a> on page 4.
A04	July 31, 2007	<a href="#">“Backup configuration wizard not supported with NetWorker releases 7.4 or later”</a> on page 6, added as a known problem.
A03	July 5, 2007	<ul style="list-style-type: none"> <li><a href="#">“New features and changes”</a> on page 3, added item: Support for 64-bit DB2 UDB 8.1, 8.2, and 9.1 on Microsoft Windows 2003 operating systems with AMD64/EM64T architecture.</li> <li><a href="#">“Installation”</a> on page 9, added Powerlink software download note.</li> <li><a href="#">“Installation of 64-bit NMDB2 software on Windows”</a> on page 9</li> </ul>

## Product description

The EMC<sup>®</sup> NetWorker<sup>®</sup> Module for DB2 (NMDB2) enhances the NetWorker software and provides the following:

- ◆ Automated management of backup media.
- ◆ Manual (ad hoc) and scheduled DB2 Universal Database (UDB) backups.
- ◆ Ability to restore DB2 Universal Database databases or tablespaces.
- ◆ Ability to integrate both database and file system backups.
- ◆ Storage management through automated scheduling, autochanger support, electronic tape labeling, and tracking.
- ◆ Tape encryption support.
- ◆ Ability to back up to a centralized backup server.
- ◆ Support for multiple, concurrent high-speed devices, such as DLT drives.
- ◆ Support for DB2 Universal Database Enterprise Server Edition (ESE), and ESE with the Database Partitioning Feature (DPF).

- ◆ Support for Workgroup Server Edition (WSE), and Workgroup Server Unlimited Edition (WSUE).
- ◆ Secure restore of data to alternate database instances (on original machine or different one).
- ◆ Full browse and retention policy support.

## New features and changes

NetWorker Module for DB2 (NMDB2), Release 2.1 includes the following new features and changes:

- ◆ LPAR on pSeries AIX operating systems supported

IBM Dynamic Logical Partitioning (LPAR) and micro-partitioning with multiple LPAR partitions is supported on pSeries AIX operating systems.

LPAR allows the dynamic division of a single server into several completely independent virtual servers or logical partitions without restarting the partitions. Micro-partitioning allows multiple logical partitions to automatically share the system's processing power. These features provide more efficient resource allocations, more logical partitions, and higher resource utilization.

**Note:** NMDB2 must be installed on each LPAR partition on pSeries AIX systems.

- ◆ Limited support for DB2 Versions 9.1 and 9.5 on supported platforms.

The *EMC Information Protection Software Compatibility Guide* provides complete information on all supported platforms. "[Documentation](#)" on [page 8](#) provides a link for this guide.

**Note:** "[Some NMDB2 2.1 features are not supported for DB2 Versions 9.1 or 9.5](#)" on [page 7](#) provides details of these support limitations.

- ◆ Full support for DB2 Version 8.2.
- ◆ Support for the db cfg parameter **logarchmeth1** that can be set to the nmdb2 library.
- ◆ Support for the db cfg parameter **vendoropt** that can be set to an options file, such as the DB2\_CFG\_FILE.
- ◆ Support for the NetWorker Scheduled Backup Configuration Wizard, which can be used on Solaris or Windows to configure scheduled DB2 backups of the NMDB2 client.

**Note:** The NMDB2 scheduled backup configuration wizard is not supported with NetWorker release 7.4 or later. In this case, a scheduled backup must be manually configured according to the instructions in the *NetWorker Module for DB2, Release 2.1, Administration Guide*.

- ◆ Support for the restore of backups performed with NMDB2 version 1.5 and NMDB2 version 1.6.
- ◆ Improved behavior during scheduled NMDB2 backups.

- ◆ Improved error logging, and a detailed reference chart to assist with error message diagnosis. For more information on SQL error messages, see Appendix B in the *NetWorker Module for DB2, Release 2.1, Administration Guide*.
- ◆ Implementation of many key bug fixes and requests for enhancement. For more information, see “Fixed problems” on page 4.
- ◆ Added 64-bit NMDB2 installation package for Windows to support 64-bit DB2 software versions 8.1, 8.2, and 9.1 on Microsoft Windows 2003 operating systems with AMD64 or EM64T architecture. “Installation” on page 9 describes the installation requirements and package names.

## Fixed problems

The following table lists the problems fixed in this release.

Number	Description
LGTpa54880	Certify NMDB2 backups and restores using the DB2 Control Centre.
LGTpa54882	Include DB2 version and fixpack information in the debug file.
LGTpa54883	If an NMDB2 scheduled backup fails to start, log the error in the debug file.
LGTpa54887	Improve NMDB2 error reporting in the daemon.log.
LGTpa58774	Add option to disable multiplexing.
LGTpa69173	Add flexible browse and retention policies.
LGTpa77455	NMDB2 backup does not display the correct level and does not save to the specified pool.
LGTsc05745	Port NMDB2 2.1 to Windows 2003 on AMD64/EM64T, for 64-bit DB2 UDB 8.1, 8.2 and 9.1.

**Note:** The most up-to-date product issues for NMDB2 are detailed online in the EMC Issue Tracker available on the EMC Powerlink website: <http://Powerlink.EMC.com>.

## Environment and system requirements

There are no special environment and system requirements for this release.

## Known problems and limitations

Table 1 on page 5 lists problems and limitations that were found to occur under certain circumstances and continue to be applicable to this release of the NMDB2 software.

**Note:** Some of the issues, which are not identified by a defect number, may be dependant on the functionality of other products that are used with the NMDB2 software. The most up-to-date product issues for NMDB2 are detailed online in the EMC Issue Tracker available on the EMC Powerlink website: <http://Powerlink.EMC.com>

**Table 1 Known problems and limitations that continue to be applicable**

Defect number	Description	Operating system
"LGTsc25647" on page 5	Scheduled backup not supported with multiple DB2 installations on the same host	Any supported
"LGTsc23097" on page 5	Support of 32-bit and 64-bit coexistence on the same host	Any supported
"LGTsc11486" on page 6	Scheduled backup fails for a DB2 Version 9.5 database	Any supported
"LGTsc07574" on page 6	Backup configuration wizard does not work with NetWorker release 7.4	Microsoft Windows Solaris
"LGTsc01031" on page 6	Manual backups fail on DB2 Version 9.1 on HP-UX 11i Version 2	HP-UX
"LGTsc00810" on page 7	Scheduled backups fail on DB2 Version 9.1 on AIX and Linux	AIX, Linux
"LGTpa91317" on page 7	Some NMDB2 2.1 features are not supported for DB2 Versions 9.1 or 9.5	Any supported
"LGTpa83637" on page 7	System information backup fails if nsrinfo is used in pre- or post- commands	Microsoft Windows
"LGTpa81114" on page 8	Configuration wizard does not provide an error for invalid paths	Microsoft Windows

### Scheduled backup not supported with multiple DB2 installations on the same host

**LGTsc25647** The NMDB2 software does not support scheduled backups of hosts that have more than one installation of DB2 software.

**Workaround** Perform manual backups or use a third-party independent scheduling program.

### Support of 32-bit and 64-bit coexistence on the same host

**LGTsc23097** There are no options or instructions to install and operate both the 32-bit and the 64-bit packages of NMDB2 release 2.1 software on the same host.

**Workaround** The following procedure allows both 32- and 64-bit versions of NMDB2 release 2.1 software to coexist and run on the same 64-bit system:

**Note:** This bitness coexistence supports only manual backup and restore. Scheduled backups and the wizard are not supported.

1. Install one of either the 32-bit or 64-bit package of NMDB2 release 2.1 software.
2. Copy the installed software binary to a new name, as follows:
  - If the 32-bit binary is installed:
 

```
# cp libnsrdb2.xx libnsrdb2.32.xx
```
  - If the 64-bit binary is installed:
 

```
# cp libnsrdb2.xx libnsrdb2.64.xx
```

where `.xx` is the appropriate platform extension, specifically:

- `.so` for Solaris or Linux
- `.sl` for HP-UX
- `.o` for AIX

3. Remove the installed 32-bit or 64-bit binary.
4. Install the other package and repeat Step 2 to copy the binary to a new name.

When executing commands described in the NMDB2 Administration Guide, substitute the appropriate binary for the bitness of the database to be backed up or restored.

For example, to backup and restore a 32-bit database on a Solaris system, use the following commands, including any additional options:

```
$ db2 backup database sample LOAD /usr/lib/libnsrdb2.32.so ...
$ db2 restore database sample LOAD /usr/lib/libnsrdb2.32.so ...
```

Similarly, to backup and restore a 64-bit database on a Solaris system, use the following commands:

```
$ db2 backup database sample LOAD /usr/lib/libnsrdb2.64.so ...
$ db2 restore database sample LOAD /usr/lib/libnsrdb2.64.so ...
```

---

### Scheduled backup fails for a DB2 Version 9.5 database

**LGTsc11486** A scheduled backup for a DB2 version 9.5 database fails with the error message "libdb2.so.1 not found."

**Workaround** Create a soft link as follows.

1. `mkdir /opt/IBM/db2/V8.1`
2. `ln -s /opt/ibm/db2/V9.5/lib64 /opt/IBM/db2/V8.1/lib64`

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### Backup configuration wizard not supported with NetWorker releases 7.4 or later

**LGTsc07574** The NMDB2, release 2.1, scheduled backup configuration wizard is not supported with NetWorker releases 7.4 or later. The wizard fails and an error results.

**Workaround** Create a backup configuration file manually. The *NetWorker Module for DB2, Release 2.1, Administration Guide* provides details.

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### Manual backups fail for DB2 Version 9.1 on HP-UX 11i Version 2

**LGTsc01031** An NMDB2 backup fails on DB2 Version 9 on HP-UX 11i Version 2.

**Workaround** To perform a manual backup, perform either of these steps:

- ◆ Rename the `/usr/sbin/cmviewcl` file to:  
`/usr/sbin/cmviewcl_old`
- ◆ Download and install the latest NMDB2 (LGTpa91317) hotfix at:  
`ftp://ftp.legato.com/pub/NetWorker/Updates/NMDB2/2.1`

## Scheduled backups fail for DB2 Version 9.1 on AIX and Linux

**LGTsc00810** An NMDB2 scheduled backup fails on DB2 Version 9.1 on AIX and Linux. Unlike manual backups, scheduled backups have an additional dependency on the DB2 API. The **nsrdb2sv** binary must be able to resolve the location of the IBM libraries to run correctly. These locations are hard coded in the binary and the default locations have changed from DB2 Version 8.x to DB2 Version 9.1 and should be changed to perform a scheduled backup.

**Workaround** To perform a scheduled backup, perform either of these steps:

- ◆ Create a symbolic link to directories already embedded in the binaries.
  - For aix51w, required for a 64-bit database:  
# `ln -s /opt/IBM/db2/V9.1/lib64 /usr/opt/db2_08_01/lib64`
  - For aix51n, required for a 32-bit database:  
# `ln -s /opt/IBM/db2/V9.1/lib /usr/opt/db2_08_01/lib`
  - For linux86w and linuxia64, required for a 64-bit database:  
# `ln -s /opt/ibm/db2/V9.1/lib64 /opt/IBM/db2/V9.1/lib64`
  - For linux86, required for a 32-bit database:  
# `ln -s /opt/ibm/db2/V9.1/lib /opt/IBM/db2/V9.1/lib`
- ◆ Down load and install the latest NMDB2 (LGTpa91317) hotfix at:  
<ftp://ftp.legato.com/pub/NetWorker/Updates/NMDB2/2.1>

## Some NMDB2 2.1 features are not supported for DB2 Versions 9.1 or 9.5

**LGTpa91317** The NMDB2 2.1 software support for DB2 versions 9.1 and 9.5 does *not* include the following new features and functionality:

- ◆ Automated recovery object removal of backup images (prune option)
- ◆ The **backup database** command simultaneously backs up multiple partitions
- ◆ Snapshot backup (PowerSnap)
- ◆ Command line options to rebuild databases from table space backups
- ◆ Command line options to restart a failed recovery operation

**Note:** NMDB2 2.1 continues to support the backup and recovery functionality available in DB2 Version 8.x.

**Workaround** None.

## System information backup fails if nsrinfo is used in pre-or post- commands

**LGTpa83637** If the **nsrinfo** command is used in any pre- or post-backup operation specified in the NMDB2 configuration file, then the back up of other recovery information (system information) fails.

**Workaround** To back up other recovery information, use the NSR\_DB2\_BACKUP\_INFO NMDB2 backup parameter.

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### Configuration wizard does not provide an error for invalid paths

**LG7pa81114** On Microsoft Windows systems, error messages do not appear in the scheduled backup configuration wizard to warn when the NMDB2 configuration file (DB2\_CFG) is being saved to an invalid path, for example drive A:\, which may not contain a writable disk. If the configuration file is not saved, scheduled backups fail.

**Workaround** None.

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## Technical notes

There are no technical notes for this release.

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## Documentation

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

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### Related documentation

The *EMC Information Protection Software Compatibility Guide* provides the latest information on operating systems and versions supported by the NMDB2 software. It is available at: <http://Powerlink.EMC.com>, Support > Interoperability and Product Lifecycle Information > Compatibility Guides.

The following guides provide information related to the NetWorker Module for DB2 software.

- ◆ *EMC NetWorker Module for DB2, Release 2.1, Installation Guide*
- ◆ *EMC NetWorker Module for DB2, Release 2.1, Administration Guide*
- ◆ *EMC NetWorker, Administration Guide*, or *EMC NetWorker, Administrator's Guide* Release 7.3 or 7.2, appropriate for your platform
- ◆ *EMC NetWorker Installation Guide*, Release 7.3, or 7.2, appropriate for your platform
- ◆ *EMC NetWorker Command Reference Guide*

These guides are available at: <http://Powerlink.EMC.com>, Support > Technical Documentation and Advisories.

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### 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 DB2, Release 2.1 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.

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## Software media, organization, and files

There are no software media, organization, and files notes for this release.

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## Installation

This section provides information on the installation of the NMDB2 software.

For the procedures to install, update, uninstall, and reinstall the NMDB2 software, as well as those to obtain and install the required license enablers, refer to the *NetWorker Module for DB2, Release 2.1, Installation Guide*.

**Note:** The software download website, given in the installation guide as [www.legato.com](http://www.legato.com), has been changed to <http://Powerlink.EMC.com>, Support > Downloads and Patches menu.

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## Installation of 64-bit NMDB2 software on Windows

To install the 64-bit NMDB2 software on Microsoft Windows operating systems, follow the steps described in the *NetWorker Module for DB2, Release 2.1, Installation Guide*, chapter 3, Installation on Windows, with the following changes to identify the necessary requirements and installation packages.

**Installation requirements** — The NMDB2 requirements section should include the following requirements for 64-bit NMDB2 software installation:

- ◆ A 64-bit Windows 2003 operating system (AMD64 or EM64T) with Service Pack 2 or later.
- ◆ A 64-bit DB2 software version 8.x or 9.x.

**Access the installation from a local CD-ROM** — Step 4 should include: "Change to `db2\win_x64\networkr` directory."

**Install the NMDB2 software on Windows** — Step 1 should include: "If installing from a file downloaded from the EMC website, run `nmdb221_win_x64.exe`."

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## 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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