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Quest[®] NetVault[®] Backup Plug-in *for MySQL* 12.2.1 Release Notes

June 2020

These release notes provide information about the Quest[®] NetVault[®] Backup Plug-in *for MySQL* release.

Topics:

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- Enhancements
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- Product licensing
- Upgrade and installation instructions
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About this release

Quest NetVault Backup (NetVault Backup) Plug-in *for MySQL* (Plug-in *for MySQL*) 12.2.1 is a minor release, with enhanced features and functionality designed specifically for users of MySQL 8.0 and later. For complete product documentation, visit https://support.quest.com/technical-documents.

NOTE: Plug-in *for MySQL* 12.2.1 is compatible only with MySQL 8.0 and later, and is available only for Linux servers.

NOTE: Plug-in *for MySQL* 12.2.1 is available only for 64-bit Linux distributions. For other platforms, use Plug-in *for MySQL* 12.2.

Enhancements

The following is a list of enhancements implemented in NetVault Backup Plug-in for MySQL 12.2.1.

Table 1. General enhancements

Enhancement	Issue ID
Added support for MySQL authentication plug-ins that implement the following SHA-256 hashing methods: sha256_password and caching_sha2_password.	DNMYSQL-418, DNMYSQL-434
Added support for MySQL Commercial Server 8.0.	DNMYSQL-431
Added supported for MySQL Enterprise Backup (MEB) 8.0.	DNMYSQL-432

Known issues

The following is a list of issues, including issues attributed to third-party products, known to exist at the time of release.

Table 2. General known issues

Known issue	Issue ID
Due to MySQL bug 69953, performing a restore to MySQL Server 5.5 or 5.6 fails to drop the existing slow_log table in the mysql database if MySQL logging is enabled. Therefore, the restore also fails to restore the same table. If the slow_log table is critical to your environment, re-create the slow_log table manually after the restore job completes. This issue is corrected in MySQL 5.7.	DNMYSQL-319 (30852)
Because backup data is streamed from the MySQL Server directly to the NetVault Backup Media Manager, use of special characters in database names might be interpreted as a sequence command, which affects the integrity of the backup data.	DNMYSQL-379
Workaround: To avoid potential issues, do not use the following characters in database names: $ = @ # % + $	
In MySQL replication environments, backup job fails if the master info log or relay info log are written to tables instead of files.	DNMYSQL-439
Workaround: To prevent a backup job failure, create empty master.info and relay-log.info files in the index log path directory. To create the empty logs, run the following commands under mysql user:	
<pre>\$ touch /var/lib/mysql/relay-log.info</pre>	
<pre>\$ touch /var/lib/mysql/master.info</pre>	
Due to a difference in required libraries, NetVault Backup Plug-in <i>for MySQL</i> may not run on Red Hat Enterprise Linux (RHEL) 8.0.	DNMYSQL-442
Workaround: If libnsl.so.1 does not exist, create a symbolic link to libnsl.so.2 using the following commands for 64-bit libnsl.so:	
To check if libnsl.so.1 exists, use:	
$\# l_{\alpha} = 2 l / u_{\alpha} r / l_{\beta} h_{\alpha} l_{\beta} h_{\alpha} = 1$	

- # ls -al /usr/lib64/libnsl.so.1
- To create a symbolic link, use:
 - # ln -s /usr/lib64/libnsl.so.2 /usr/lib64/libnsl.so.1

Table 3. MySQL Standard/Community known issues

Known issue	Issue ID
Default setting of lower_case_table_names system variable affects MySQL behavior on Mac OS X : The inconsistent behavior of case-sensitivity of MySQL on Mac OS X platforms affects the ability of the plug-in to restore backups. To ensure that you accommodate this inconsistency, be aware of the following when using the plug-in with Mac OS X:	DNMYSQL-133 (18430, MYG-235)
• If the lower_case_table_names system variable is set to 1 , Incremental Restores work correctly for databases that were created using lowercase, uppercase, or mixed-case names. Also, the database names are displayed in the NetVault Backup Console using lowercase letters regardless of how the actual names were created.	
• If the lower_case_table_names system variable is set to 2 , <i>the default setting on</i> <i>Mac OS X</i> , Incremental Restores only work correctly for databases that were created using lowercase names. Also, the database names are displayed in the NetVault Backup Console using the same format with which they were created.	
If you change the value of the lower_case_table_names system variable, stop and restart the MySQL Server to ensure that the change is implemented. For more information about this MySQL-related issue, see: http://dev.mysql.com/doc/refman/5.0/en/identifier-case-sensitivity.html	
Selecting Enable MySQL Replication but not configuring replication causes backups to fail: If you select the Enable MySQL Replication check box on the Configure dialog box but do not configure replication, backups fail. To correct this issue, either clear the Enable MySQL Replication check box on the Configure dialog box or set up replication and run the backup job again.	DNMYSQL-241 (21629)

Table 4. MySQL Enterprise Backup (MEB) known issues

Known issue	Issue ID
Under certain conditions, all InnoDB tables are backed up : All InnoDB tables in a MySQL instance are backed up if either of the following conditions is met:	DNMYSQL-275 (22383)
 Only tables are explicitly selected for backup, and none of the tables are of type or storage engine InnoDB. 	
Example: You have a MySQL Instance with two databases (DB1 and DB2). Each database contains two tables: DB1 has T1_InnoDB and T1_MyISAM and DB2 has T2_InnoDB and T2_MyISAM. If you back up T1_MyISAM and T2_MyISAM, T1_InnoDB and T2_InnoDB are also backed up. If you include one of the InnoDB tables, only that InnoDB table is backed up. If you select one of the databases, only the tables in the database are backed up.	
2 Some or all databases are selected for backup and all associated InnoDB tables are excluded from the backup.	
Example: You have a MySQL Instance with two databases (DB1 and DB2). Each database contains two tables: DB1 has T1_InnoDB and T1_MyISAM and DB2 has T2_InnoDB and T2_MyISAM. If you back up DB1 and DB2 and exclude T1_InnoDB and T2_InnoDB, T1_InnoDB and T2_InnoDB are also backed up. If you exclude only one of the two InnoDB tables, only the other InnoDB table is backed up.	
This behavior reflects current MEB (mysqlbackup utility) behavior, which might change in a future release (post-3.8.1).	
The plug-in does not support use of versions 3.12 and 4.0 of the MEB-based method in a clustered environment. You can only use these versions in a standalone environment.	DNMYSQL-363 (32199)

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System requirements

Before installing Plug-in *for MySQL* 12.2.1, ensure that your system meets the requirements outlined in the *Quest NetVault Backup Compatibility Guide* available at https://support.quest.com/technical-documents.

Upgrade and compatibility

- **CAUTION:** This release uses only version 8.0 of MySQL Enterprise Backup and MySQL Enterprise Server. If you upgrade to this release, it will not be compatible with previous versions of MySQL.
 - Plug-in for MySQL 12.2.1 requires NetVault Backup 11.4.5 or later. For complete supported-platform
 information, see the Quest NetVault Backup Compatibility Guide.
 - Upgrades and new installs of MySQL: As explained in bug 68807 for MySQL, mysql_install_db ignores /etc/my.cnf in MySQL 5.6. Because MySQL 5.6 creates InnoDB statistic tables (slave_master_info, mysql/slave_relay_log_info, innodb_index_stats, innodb_table_stats, and slave_worker_info) and adds them to the installation directory (basedir) of MySQL, you might encounter a conflict with the innodb_data_file_path = ibdata1:2000M;ibdata2:10M:autoextend option contained in the "my.cnf" file. The file_path option places the InnoDB files one directory level higher than the basedir, which can cause the following error to is displayed in the MySQL error log:

"[Warning] InnoDB: Cannot open table mysql/slave_master_info from the internal data dictionary of InnoDB though the .frm file for the table exists. See http://dev.mysql.com/doc/refman/5.6/en/innodb-troubleshooting.html for how you can resolve the problem."

Until you address this error, the plug-in cannot browse the main MySQL database, and the following error is displayed: "Failed to fetch row from query result: showtable status like 'innodb\ index\ stats'"

It can also cause backup jobs to stop responding.

Because this option originated from a recommended sample "**my.cnf**" file for an earlier version of MySQL, this issue usually occurs on upgrades or new installs that retained the earlier version of the "**my.cnf**" file. Quest recommends that you do not use the file_path option on new installations and that you move the ibdata files to basedir for upgrades. For assistance, contact MySQL Support. (22367)

• Upgrades from NetVault Backup Server from 9.2: If you upgrade your NetVault Backup Server from 9.2 to 11.4.5 or later, the settings you configured for error conditions encountered by the Plug-in *for MySQL* are returned to their defaults. If you modified the settings for error conditions encountered by the plug-in, Quest recommends that you reinstall the plug-in, reconfigure its settings, and re-create MySQL backup jobs.

Product licensing

To obtain the license key for your NetVault Backup Server environment, determine the NetVault Machine ID of your main NetVault Backup Server. Also identify the machine IDs of any clients running application plug-ins, such as Oracle, MySQL, PostgreSQL, SQL Server, and Exchange.

You can use the NetVault Configuration Wizard to install the product license keys. Alternatively, you can install the license keys from the Manage Clients page.

- Obtaining a machine ID
- · Installing a license key using the configuration wizard
- Installing a license key from the Manage Clients page

Obtaining a machine ID

- 1 Start the NetVault Backup WebUI.
- 2 In the Navigation pane, click Manage Clients.
- 3 In the NetVault Backup Clients list, select the applicable machine, and click Manage.
- 4 On the View Client page, note the machine ID exactly as it is displayed in the Client Summary table.

Installing a license key using the configuration wizard

- 1 In the Navigation pane, click Guided Configuration.
- 2 On the NetVault Configuration Wizard page, click Install Licenses.
- 3 In the NetVault Backup Clients list, select the applicable machine, and click Next.
- 4 In the **Enter the license key string** box, type or copy and paste the license key, and click **Apply**. After the key is applied successfully, a message is displayed.

Installing a license key from the Manage Clients page

- 1 In the Navigation pane, click Manage Clients.
- 2 In the NetVault Backup Clients list, select the applicable machine, and click Manage.
- 3 On the View Client page, click Install License.
- 4 In the **Install License** dialog box, type or copy and paste the license key, and click **Apply**. After the key is applied successfully, a message is displayed.
- 5 To dismiss the dialog box, click **Close**.

Upgrade and installation instructions

For upgrade and installation instructions, see the Quest NetVault Backup Plug-in for MySQL User's Guide.

i IMPORTANT: Due to the plug-in name change, *you must remove the existing plug-in before you install the new version if you are using a version before 4.4*. This process ensures that items with the previous plug-in name are removed before items with the new name are installed.

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More resources

Additional information is available from the following:

- Online product documentation
- NetVault community

Globalization

This section contains information about installing and operating this product in non-English configurations, such as those needed by customers outside of North America. This section does not replace the materials about supported platforms and configurations found elsewhere in the product documentation.

This release supports any single-byte or multi-byte character set. In this release, all product components should be configured to use the same or compatible character encodings and should be installed to use the same locale and regional options. This release is targeted to support operations in the following regions: North America, Western Europe and Latin America, Central and Eastern Europe, Far-East Asia, Japan. It supports bidirectional writing (Arabic and Hebrew).

The release is localized to the following languages: Chinese (Simplified), French, German, Japanese, Korean.

About us

Quest provides software solutions for the rapidly-changing world of enterprise IT. We help simplify the challenges caused by data explosion, cloud expansion, hybrid datacenters, security threats, and regulatory requirements. We are a global provider to 130,000 companies across 100 countries, including 95% of the Fortune 500 and 90% of the Global 1000. Since 1987, we have built a portfolio of solutions that now includes database management, data protection, identity and access management, Microsoft platform management, and unified endpoint management. With Quest, organizations spend less time on IT administration and more time on business innovation. For more information, visit www.quest.com.

Technical support resources

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The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. The Support Portal enables you to:

- · Submit and manage a Service Request.
- · View Knowledge Base articles.
- Sign up for product notifications.
- · Download software and technical documentation.
- View how-to-videos.
- · Engage in community discussions.
- Chat with support engineers online.
- · View services to assist you with your product.

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Legend

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- **CAUTION:** A CAUTION icon indicates potential damage to hardware or loss of data if instructions are not followed.

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