

LiteSpeed[®] for SQL Server 8.6

Release Notes

September 2017

These release notes provide information about the LiteSpeed[®] for SQL Server 8.6 release.

[About LiteSpeed[®] for SQL Server 8.6](#)

[Key Benefits](#)

[New and Updated Features](#)

[Enhancements](#)

[Deprecated features](#)

[Resolved Issues](#)

[Known Issues](#)

[System Requirements](#)

[Product Licensing](#)

[Getting Started](#)

[Globalization](#)

About LiteSpeed[®] for SQL Server 8.6

LiteSpeed for SQL Server 8.6 is a major release, with new features and functionality. See [New and Updated Features](#). LiteSpeed for SQL Server, or LiteSpeed, is a fast and flexible backup and recovery solution that allows DBAs to easily maintain complete control over the backup and recovery process. Its low-impact, high-performance compression and encryption technology enables users to reduce storage costs and protect data, while improving both backup and disaster recovery times. With the improved compression and LiteSpeed's Fast Compression technology, LiteSpeed for SQL Server can further reduce disk space and backup time up to another 85% over traditional, compressed full backup solutions. The result is a unique backup and recovery approach, unmatched in flexibility, that greatly reduces backup times, creates a significantly smaller storage footprint, and maintains a high level of recoverability.

Key Benefits

- Cloud backup for Microsoft Azure Blob storage and Amazon S3
- Reduce storage requirements to save valuable disk space with Fast Compression (reduce storage and improve backup times up to 85% over traditional full backup solutions)
- Optimize use of available server resources with LiteSpeed's Adaptive Compression
- Reduce backup times to improve maintenance windows
- Reduce restore times to avoid excessive downtime
- Automate backup testing and running database consistency checks using Automated Restore
- Easily configure backup jobs and maintenance plans on multiple instances by deploying LiteSpeed Backup Templates
- Easily configure and monitor Log Shipping using the Create LiteSpeed Log Shipping Plan Wizard and Monitoring tab in the LiteSpeed UI Console
- Recover data and schema from backups using LiteSpeed's Object Level Recovery
- Undo critical transactions using LiteSpeed's Transaction Log Reader
- View backup performance across the enterprise using LiteSpeed's centralized reporting repository
- Easily manage SQL Agent jobs across multiple servers using LiteSpeed's Job Manager
- Easily configure maintenance plans across the enterprise using LiteSpeed's Maintenance Plan Designer
- Leverage LiteSpeed's advanced engine tuning, including CPU Affinity, CPU Throttling, and Threading options
- Analyze your environment for best backup performance and identify bottlenecks using LiteSpeed's Backup Analyzer
- Eight highly optimized levels of compression
- Secure data using backup encryption up to AES-256

New and Updated Features

New and updated features in LiteSpeed for SQL Server Version 8.6.

Mirroring backups to cloud storage

LiteSpeed now supports mirroring backups to the Cloud.

Mirroring backups in Backup Templates to local and cloud storage

LiteSpeed now supports mirroring backups in conjunction with Backup Templates. This new feature applies to local backups and backups to cloud storage.

OLR (Object Level Recovery) reads backups from cloud storage

LiteSpeed OLR (Object Level Recovery) can now be used to restore particular database objects (like tables with data) direct from cloud storage.

Log Reader reads backup files direct from cloud storage

Log Reader can now read backup files direct from cloud storage.

Enhancements

The following is a list of enhancements implemented in LiteSpeed for SQL Server 8.6.

Table 1: Common enhancements

Enhancement	Issue ID
LiteSpeed supports the Microsoft Azure large Blob Block type (up to 4.77GB).	
Log Reader can now load more objects from logs into memory as the LiteSpeed user interface now runs in 64 bit mode.	
Log Reader now supports striped files. File selection is now in two steps: select backup files then select backup sets from selected files. Implementation of this feature allows you to select individual stripe files and combine stripe files as required.	
LiteSpeed supports Amazon S3 Transfer Acceleration Speed in Backup Wizards, Templates, and Maintenance Plans. Using S3 Transfer Acceleration you may notice up to 200% increase in upload speeds.	
The LiteSpeed Automated Restore feature has a new - "No Recovery" option. Automated Restore finds the latest backup for a database, restores it, and checks the restored database for consistency. The "No Recovery" option leaves the database in a non recoverable state which may be useful in the case of preparing a database to setup availability groups on it.	

Deprecated features

The following is a list of features that are no longer supported.

- Windows XP, Windows Server 2003 and Windows Server 2003 R2 are no longer supported.
- SQL Server 2000 is no longer supported.

Resolved Issues

In LiteSpeed 8.6

The following is a list of issues addressed in release 8.6.

Table 2: Core issues

Resolved Issue	Issue ID
Errors "Database 'name' is invalid: not found" may occur during smart cleanup process on fast computers	LS-293
Cloud buckets browsing may fail with error "List of Objects in cloud exception: The remote server returned an error: (404) Not Found" in case of a lot of cloud objects	LS-369
Automated restore does not show error in case of drop database operation fail	LS-207
Automated restore may fail drop database if the database in use by other connection	LS-214
Backups executed with depreciating @LSECompatible=1 parameter can't be restored.	LS-323
Backup performance slow due to the running of unneeded T SQL statement.	LS-384
Automated restore changes file names and extension for secondary data files	LS-483
Backup of AG secondary replica fails if the replica is not set to be readable.	LS-498

Table 3: Log Reader issues

Resolved Issue	Issue ID
Log reader may fail when reading large log files because it could not use all available RAM on the machine	LS-6

Table 4: OLR issues

Resolved Issue	Issue ID
OLR should support sparse columns	LS-258

Table 5: Job Manager issues

Resolved Issue	Issue ID
Job Manager may raise an error in case of adding job step to a job.	LS-446

Table 6: Backup Template issues

Resolved Issue	Issue ID
Template deployment may move registered instances to the "unregistered instances" category	LS-448

Table 7: Console issues

Resolved Issue	Issue ID
The user interface console displays an incorrect message if the central repository instance is setup with a port number	LS-503

Table 8: Maintenance Plan issues

Resolved Issue	Issue ID
Maintenance plans create but do not drop temp tables.	LS-516
Maintenance plans may fail with error "Access violation at address 00511475 in module 'slssqlmaint.exe'. Read of address 7FFD5DF6" during fast compression with smart cleanup plan execution in some cases.	LS-521

In LiteSpeed 8.5

The following is a list of issues addressed in release 8.5.

Table 9: Backup and Restore resolved issues

Resolved Issue	Issue ID
Performance issue related to mirrored backups resolved	115926
Issue with hanging backups on high load systems resolved	119546 119800
"Provider" parameter added to LS Core ini file	119658

Table 10: Fast Compression resolved issues

Resolved Issue	Issue ID
Number of threads from LiteSpeed defaults correctly applied in Fast Compression	119711
Escalation events do not raise error status for backup	119780
Fast Compression can figure out special cases caused by SmartCleanup	119735

Table 11: Remote Deploy resolved issues

Resolved Issue	Issue ID
Remote deploy wizard opens normally on all systems	119799

Table 12: OLR resolved issues

Resolved Issue	Issue ID
Filtered Index is supported	119598
NTEXT,TEXT, IMAGE types can be restored via Direct Mode	119724

Table 13: Maintenance plans resolved issues

Resolved Issue	Issue ID
Maintenance plan reports can be emailed in all cases	119476
Striped backups can be deleted from cloud with “delete files older then” option	119689

Table 14: Instance Configuration Wizard resolved issues

Resolved Issue	Issue ID
AlwaysOn Group listener can be used for the central repository connection	119600 119596

Known Issues

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

Table 15: Version compatibility known issues

Known Issue	Issue ID
Database backups created with LiteSpeed Version 8.x cannot be restored using older versions of LiteSpeed. However, backups created with previous versions of LiteSpeed for SQL Server can be restored with LiteSpeed 8.2.	N/A

Table 16: Console known issues

Known Issue	Issue ID
On Windows 8.1, console logging cannot be enabled when UAC is enabled. The workaround is to run LiteSpeed with the “Run as Administrator” option to enable console logging.	113540

Table 17: Backup and restore known issues

Known Issue	Issue ID
Mirroring is not supported for TSM backups.	49305
LiteSpeed incorrectly writes successful backup details to the SQL Server error log or event viewer if DBCC TRACEON (3226) is run with the backup. These details are not written for a native backup.	38972
On using LiteSpeed Automated Restore to restore an old backup to the source database,	LS-514

Known Issue	Issue ID
<p>automated restore chooses older backups with a higher LSN number in preference to newer backups created after the restore.</p> <p>Workaround: Remove all the backups from old the database (created before the restore) from the backup folders scanned by Automated Restore.</p>	

Table 18: Activity logging known issues

Known Issue	Issue ID
<p>NT AUTHORITY\SYSTEM account must be added to the sysadmin server role on the local instances of SQL Server 2012 or higher in this very rare scenario:</p> <ul style="list-style-type: none"> • The central repository is on the same server as the Local repository and • You selected Local System on the Service Account wizard page of the Instance Configuration Wizard and • You selected to use Windows authentication for the repositories. <p>Otherwise, the local instance will not report to the central repository.</p> <p>Workaround: Instead of adding NT AUTHORITY\SYSTEM account to the sysadmin server role, you can either provide a Windows domain account on the Service Account wizard page or use SQL Server Authentication for the local and central repositories.</p>	104669

Table 19: Backup Analyzer known issues

Known Issue	Issue ID
<p>The LiteSpeed for SQL Server Backup Analyzer backs up the requested amount of data for analysis and then automatically aborts the backup process. This generates VDI error messages in the LiteSpeed SQL Server error log. Please ignore them.</p>	79697

Table 20: Log shipping known issues

Known Issue	Issue ID
<p>The publisher and subscriber servers must have the same version of LiteSpeed.</p>	52230
<p>In the native SQL Server 2000 log shipping plans, if the monitoring server is not the same as the subscriber server, information about the restore time is based on the restore job history and may be different from the actual restore time.</p>	98644

Table 21: Maintenance plans known issues

Known Issue	Issue ID
<p>Legacy native plans on SQL Server 2008 may fail due to Microsoft backward compatibility issue. See http://support.microsoft.com/kb/955626.</p>	60281
<p>LiteSpeed does not support regular expressions with the IgnoreCase option. To ignore case, use ([Aa][Bb][Cc]) instead of (?i:abc).</p>	94513

Table 22: Log Reader known issues

Known Issue	Issue ID
User information displays only for operations in sessions that are currently active. The online log and backups do not contain user information and only contain the SPID for the transaction.	37112
Log Reader does not support row-level and page-level compression.	N/A

Table 23: Object Level Recovery known issues

Known Issue	Issue ID
Restore of a table with default values after adding a NOT NULL column to the existing table will result in an error in the case of using Direct Mode (the issue is related to SQL Server 2012 and higher). Workaround: use Bulk Insert recovery mode.	119733
If there is data of variant type with size > 7991 in the table data, recovery using Bulk Insert will result in a BCP internal error: " The column is too long in the data file for...". Workaround: use Direct Mode for data recovery.	119732

System Requirements

Before installing LiteSpeed for SQL Server 8.6, ensure that your system meets the following minimum hardware and software requirements.

Hardware Requirements

Table 24: List of hardware requirements

Requirements	Details
Processor	Follow the recommendations for the SQL Server version used.
Disk Space	500 MB of disk space for installation NOTE: The disk space required may vary based on options selected during installation.
Memory	Follow the recommendations for the SQL Server version used. NOTE: The memory required may vary based on the following: <ul style="list-style-type: none">• Applications that are running on your system• Size and complexity of the database• Amount of database activity• Number of concurrent users accessing the database
Monitor	SVGA with a minimum resolution of 1024x768

Software Requirements

Table 25: List of software requirements

Requirements	Details
Operating System	Microsoft Windows Server 2008 32-bit and 64-bit (x64) (All Service Packs)
	Microsoft Windows Server 2008 R2 64-bit (x64) (All Service Packs)
	Microsoft Windows Server 2012 64-bit (x64) (All Service Packs)
	Microsoft Windows Server 2012 R2 64-bit (x64) (All Service Packs)
	Microsoft Windows Server 2016 64-bit (x64) (All Service Packs)
	Microsoft Windows Vista 32-bit and 64-bit (x64) (All Service Packs)
	Microsoft Windows 7 32-bit and 64-bit (x64) (All Service Packs)
	Microsoft Windows 8 32-bit and 64-bit (x64) (All Service Packs)
	Microsoft Windows 8.1 32-bit and 64-bit (x64) (All Service Packs)
Microsoft Windows 10 32-bit and 64-bit (x64) (All Service Packs)	
Database Software	SQL Server 2005 32-bit and 64-bit (x64) (All Service Packs)
	SQL Server 2008 32-bit and 64-bit (x64) (All Service Packs)
	SQL Server 2008 R2 32-bit and 64-bit (x64) (All Service Packs)
	SQL Server 2012 32-bit and 64-bit (x64) (All Service Packs)
	SQL Server 2014 32-bit and 64-bit (x64) (All Service Packs)
	SQL Server 2016 64-bit (x64) (All Service Packs)
Additional Software	.Net Framework 4.5 installed before you install the LiteSpeed UI Console and LiteSpeed Core Cloud Components.
	.Net Framework 3.5 required with SQL Server 2005, 2008 and 2008R2.
	If using Tivoli Storage Manager (TSM), the TSM API and Backup/Archive Client version 5.3 or later should be installed.
	Microsoft Internet Explorer 6.0 or later.
	Adobe Reader 8 or later to view PDF guides.

Supported Cluster Requirements

- Windows Server 2008 Failover Cluster
- Windows Server 2008 R2 Failover Cluster
- Windows Server 2012 Failover Cluster
- Windows Server 2012 R2 Failover Cluster
- Windows Server 2016 Failover Cluster
- HP PolyServe Matrix Sever 3.6.1
- Veritas Storage Foundation HA for Windows 5.0

Supported Deduplication Storage Appliances

LiteSpeed has been tested on Dell DR, EMC Data Domain, and ExaGrid storage appliances.

VMware and Hyper-V Environments

LiteSpeed has been tested and is certified to work under VMware and Hyper-V environments.

Upgrade and Compatibility

For information about registering LiteSpeed and for upgrade instructions, please see the LiteSpeed *Installation Guide*.

Note that from LiteSpeed 8.5 the default install file path has changed. On upgrade the install file path will not change automatically. You can change the file path during the upgrade process: Browse "Folder name".

Repository Compatibility

If receiving the message "The version of the <RepositoryDatabaseName> on server <ServerName> is greater than the version of this release of LiteSpeed for SQL Server", please see the online Help topic "Upgrade Repositories". The message is an indication that the statistics agent on the older server does not match the newer version of LiteSpeed and must be upgraded.

In addition, there are special considerations if you are upgrading from LiteSpeed 4.x. Review the following before upgrading from LiteSpeed 4.x to LiteSpeed 5.0 or later.

Maintenance Plans

LiteSpeed 5.x and later do not support SSMS plug-in functionality. However, the LiteSpeed UI Console allows you to read SSMS plug-in maintenance plans and upgrade them to SSIS LiteSpeed maintenance plans.

There are two ways to remove old backup files for maintenance plans: the 'Clean up maintenance plans' task and the 'Remove files older than' option in the 'Back Up Database' task. The 'Remove files older than' option removes both LiteSpeed 4.8 and LiteSpeed 5.x/6.x backup files for legacy plans. However, for SSIS maintenance plans it only removes LiteSpeed 5.x/6.x backup files. The 'Clean up maintenance plans' task removes LiteSpeed 4.8 and LiteSpeed 5.x/6.x backup files.

Log Shipping

Versions 5.1 and later of LiteSpeed do not support LiteSpeed 4.x log shipping plans. If you are upgrading and have LiteSpeed 4.x log shipping plans, you must follow [Solution 45391](#) on SupportLink to update your log shipping plans. If you do not follow these instructions, your log shipping plans will fail after the upgrade is complete.

The SQL Server versions supported for log shipping depend upon the LiteSpeed release:

SQL Server	4.8	5.0	5.0.1	5.0.2	5.1.0–6.5.1	6.5.2	7.x	8.x
2005	•	•		•	•	•	•	•

SQL Server	4.8	5.0	5.0.1	5.0.2	5.1.0–6.5.1	6.5.2	7.x	8.x
2008 / R2		•	•	•	•	•	•	•
2012						•	•	•
2014							•	•
2016								•

Product Licensing

For existing customers:

- If you purchased LiteSpeed and received your new license, enter the License Key and Site Message value during the installation or register LiteSpeed later.
- If you purchased LiteSpeed but have not received your new LiteSpeed license, please go to <https://support.quest.com/contact-support> and request your upgrade.
- If you have any other licensing questions related to your purchase, please go to <https://support.quest.com/contact-support>.

For trial customers:

- If you want to purchase LiteSpeed or require a trial extension, please contact your sales representative or open <https://support.quest.com/contact-support>.

Getting Started

Contents of the Release Package

The LiteSpeed for SQL Server release package contains the following products:

- LiteSpeed.msi—32-bit installer
- LiteSpeed-x64.msi—64-bit installer

Installation Instructions

Double-click on the appropriate installer (.msi file) and follow the on-screen directions. See the LiteSpeed *Installation Guide* for full details on installing LiteSpeed. The *Installation Guide* is located on the product web site and the Quest Support Portal.

Note: It is required that .Net 4.5 is installed before installing LiteSpeed Console and LiteSpeed Core Cloud Components.

Additional Resources

Get the latest product information, find helpful resources, and join a discussion with the LiteSpeed team and other community members. Join the LiteSpeed community at:

<https://www.quest.com/community/products/litespeed/>.

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 is Unicode-enabled and supports any character set. It supports simultaneous operation with multilingual data. 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.

This release has the following known capabilities or limitations: Note: Litespeed for SQL Server 4.8.4 has been localized in Japanese. 5.0 & more recent releases are English only versions.

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Our logo reflects our story: innovation, community and support. An important part of this story begins with the letter Q. It is a perfect circle, representing our commitment to technological precision and strength. The space in the Q itself symbolizes our need to add the missing piece — you — to the community, to the new Quest.

Contacting Quest

For sales or other inquiries, visit www.quest.com/company/contact-us.aspx or call +1 949 754-8000.

Technical support resources

Technical support is available to Quest customers with a valid maintenance contract and customers who have trial versions. You can access the Quest Support Portal at <https://support.quest.com>.

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

 **WARNING:** A WARNING icon indicates a potential for property damage, personal injury, or death.

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

 **IMPORTANT, NOTE, TIP, MOBILE, or VIDEO:** An information icon indicates supporting information.

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