



LiteSpeed™ for SQL Server® 8.5

Release Notes

November 2016

These release notes provide information about the LiteSpeed™ for SQL Server® 8.5 release.

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About LiteSpeed™ for SQL Server® 8.5

LiteSpeed for SQL Server 8.5 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 8.5.

SQL Server 2016 support

- Support of Sql Server 2016 has been added.

Object Level Recovery performance

- Object Level Recovery has been enhanced by adding multi-threading support which results in a significant (marked) improvement of Object Level Recovery speed.
- Note that on the Recover Table Wizard | Advanced Options | Direct Mode is selected by default and performs faster than the Bulk Insert alternative.

Transaction Log Reader scalability

- The Log Reader has been enhanced by adding multi-threading support which results in a significant (marked) improvement of Transaction Log Reader scalability.

Restore from a different SQL Server instance


- In the Restore Wizard you can now select the SQL Server instance and database to restore from.

Automated Restore

- **Restore Verify Only** option has been added. This allows you to verify backups in Automated Restore without real database restoring.
- New option **Verify the latest full or differential backup** has been added. Use this to check only the latest backup without needing to check the full restore chain of backups.

Restore to Different Instance reporting

- A new report **Restore by Source** has been added to the LiteSpeed activity reports.
- The report shows restore activities performed on different SQL Server instances for backups created on the selected SQL Server instance in the tree.

 **NOTE:** Central repository is required.

Backup

- The default backup name and description can now include the AlwaysOn Availability Group name by using the variable %AG%. This allows you to group databases into folders based on the AlwaysOn Availability Group name. It is ignored for databases that are not in an AlwaysOn Availability Group.

Backup Templates

- The location for Transaction Log backups can now be set independent of the Fast Compression / Full backups location. The path can be modified for each instance at deployment time.
- You can now use the Backup Template to **exclude individual databases** within the selected categories of all databases, system databases, user databases and databases matching a wildcard or regular expression. Further to this, individual databases can be excluded at deployment. The path to the Transaction Log backup is visible from the LiteSpeed Console.

Multi-Database Backup

- There is a new **Exclude Databases** step to the Backup Wizard. If you selected to include all databases, system databases or user databases then you can use the Exclude Databases step to select those databases you do not want backed up.

Backup folder creation now has automatic retry logic

- LiteSpeed now makes 3 attempts for folder creation at 0.5 second intervals.

Database Properties

- The Database Properties dialog from the Backup Manager now indicates whether FileStream is enabled. A new Stretch Database property is also included for SQL Server 2016 Stretch Databases.

Support for IAM Roles on Amazon EC2

- LiteSpeed now supports IAM Roles authentication on Amazon EC2 virtual machines connecting to S3 storage.

Regions added to Amazon S3 Cloud

- US East (Ohio) is added to the Amazon S3 Cloud region selection list.
- Mumbai India is added to the Amazon S3 Cloud region selection list.

Azure Cold Storage

- LiteSpeed has been tested with Azure Cold Storage. It is fully compatible.

Enhancements

The following is a list of enhancements implemented in LiteSpeed for SQL Server 8.5.

Table 1: Backup and restore enhancements

Enhancement	Issue ID
"Dryrun" option added to all backup procedures including FC	116151
"Keep original data file names" option added for restore to new database	119669
Multi-Database Backup and Backup Templates supports exclude database function	116591

Table 2: OLR enhancements

Enhancement	Issue ID
OLR performance was significantly improved and can with files more than 1,5 TB in size	119576
Memory usage of the xp_objectrecovery_viewcontents procedure significantly decreased	117439

Table 3: Log Shipping enhancements

Enhancement	Issue ID
Log Shipping file naming logic was re-built to avoid path string size limitations in the Operating System.	116700

Table 4: Common enhancements

Enhancement	Issue ID
LiteSpeed fully supports custom fields in connection strings, like Encrypt=yes and applicationintent=readonly	114407 114598

Resolved Issues

In LiteSpeed 8.5

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

Table 5: 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 6: 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 7: Remote Deploy resolved issues

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

Table 8: OLR resolved issues

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

Table 9: 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 10: Instance Configuration Wizard resolved issues

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

In LiteSpeed 8.2

The following is a list of issues addressed in release 8.2.

Table 11: Backup template resolved issues

Resolved Issue	Issue ID
Fast Compression templates, that use the “Create a subdirectory” option, and are deployed as Maintenance Plans, no longer deploy with a duplicate backup path name.	118797

Table 12: LiteSpeed Activity resolved issues

Resolved Issue	Issue ID
Improved performance when collecting native backup statistics.	118737

Table 13: Log Reader resolved issues

Resolved Issue	Issue ID
The Transaction Log Reader now uses a longer timeout to avoid issues when reading large log files.	118501

Table 14: Log Shipping resolved issues

Resolved Issue	Issue ID
Log Shipping now automatically adjusts filename length to meet any OS file/pathname length maximums.	116700
LiteSpeed 8.2 now allows editing of Log Shipping plans created with LiteSpeed 8.0.	119344

Table 15: Maintenance Plans resolved issues

Resolved Issue	Issue ID
Maintenance Plan “Run as” settings (as set in Management Studio) are now preserved after editing a maintenance plan in LiteSpeed.	118502
Maintenance Plans no longer fail to send reports using Database Mail.	119476

Table 16: OLR resolved issues

Resolved Issue	Issue ID
OLR now supports tail log processing for objects with page compression.	118299

Resolved Issue	Issue ID
OLR is now able to properly restore tables that were configured with page compression.	119099

Table 17: Restore resolved issues

Resolved Issue	Issue ID
When restoring transaction logs using the Restore Wizard, LiteSpeed now properly defaults file paths to the new database instead of the original paths from the backup.	118296

In LiteSpeed 8.1

The following is a list of issues addressed in release 8.1.

Table 18: OLR resolved issues

Resolved Issue	Issue ID
Reading backups that contain page compression are supported.	118154
OLR performance is now improved for backups with attached files.	116073
OLR running "generate DDL script" on a stored procedure with a large number of rows has been resolved.	116575

Table 19: LogReader resolved issues

Resolved Issue	Issue ID
User information has been added to the LogReader.	106600

Table 20: Log Shipping resolved issues

Resolved Issue	Issue ID
A network resiliency parameter has been added to the Log Shipping Wizard. This should help users specify network resiliency on restore performed by the Log Shipping plan in the Log Shipping Wizard.	113019
The ability to have more than one subscriber on one instance has been added to Log Shipping. This gives users the ability to have more than one subscriber database per SQL instance per Log Shipping plan. Clarification: 1 subscriber host 2 databases, that happen to be subscribers, with 1 publisher on the same instance.	100767

Table 21: Maintenance Plans resolved issues

Resolved Issue	Issue ID
The ability to format the Subject Line in Maintenance Plan "notify operator task" with LiteSpeed %vars has been added to UI.	112775
Shrink Database, Update Statistics, Rebuild Index, and Reorganize Index activity now can be tracked on the LiteSpeed Activity view.	117035

Table 22: Restore resolved issues

Resolved Issue	Issue ID
Restore of large Tlog files with many threads has been resolved.	117190
LiteSpeed successfully runs while restoring attached files.	115440
LiteSpeed now supports direct restore of master database.	114110

Table 23: Cloud resolved issues

Resolved Issue	Issue ID
Backing up large database to the S3 Cloud has been resolved.	116149 116121 116120

Table 24: DCR resolved issues

Resolved Issue	Issue ID
Double Click Restore now works properly for a backup with loader being made on a network share.	115962

Table 25: Backup resolved issues

Resolved Issue	Issue ID
Backup jobs that were getting hung due to in use attached files are now running successfully.	116627
Mirror backup details now go into msdb..backupmediafamily for LiteSpeed backups.	73991

Table 26: Other resolved issues

Resolved Issue	Issue ID
Backup File Browser fix - now shows the Modified Date instead of the Create Date.	--

In LiteSpeed 8.0.4

The following is a list of issues addressed in release 8.0.4.

Table 27: Backup/Restore resolved issues

Resolved Issue	Issue ID
Improved Amazon S3 backup algorithm which reduces memory usage while improving backup speed.	117053
Fast Compression fix to prevent accidental reuse of an existing differential backup name which caused backup escalations to occur.	117393
LiteSpeed fix to avoid a possible restore issue with large transaction log backups (>1GB).	117190

In LiteSpeed 8.0.3

The following is a list of issues addressed in release 8.0.3.

Table 28: Backup/Restore resolved issues

Resolved Issue	Issue ID
Amazon S3 cloud backup and restore are now optimized to better support large databases.	116121, 116120, 116326, 116149
Amazon S3 backup / restore now supports EU (Frankfurt) region.	116322
LiteSpeed backups with mirroring now avoid a possible incorrectly formed header error when using the @mirror option to a network path.	116545
LiteSpeed backups now properly support appending 8.0+ backups to pre-8.0 backup files and no longer report failures on restore.	116549
Multiple backup jobs that are running in parallel may not complete.	116627

Table 29: Maintenance Plans resolved issues

Resolved Issue	Issue ID
LiteSpeed maintenance plans no longer fail when backing up to TSM with the “Stripe on TSM object” option.	116528
LiteSpeed maintenance plans to TSM no longer fail when backing up multiple databases as a result of an incorrect value for the TSM object exists check option.	116648

Table 30: OLR resolved issues

Resolved Issue	Issue ID
LiteSpeed Object-Level Recovery could throw an exception when generating DDL scripts for large stored procedures.	116575

In LiteSpeed 8.0.2

The following is a list of issues addressed in release 8.0.2.

Table 31: Backup resolved issues

Resolved Issue	Issue ID
Small backup files no longer increase in size to 32 MB when running LiteSpeed in some environments.	116333

Table 32: Log Shipping resolved issues

Resolved Issue	Issue ID
Existing Log Shipping advanced options are now properly displayed when editing Log Shipping plans.	116329
Log Shipping backups now use a .TRN extension instead of a temporary backup file extension of .WRK when backup is in progress.	116439

Table 33: Log Reader resolved issues

Resolved Issue	Issue ID
The LiteSpeed Options dialog for the Log Reader now properly allows users to change the “Check log file every X seconds” option.	116346
The tab control in the LiteSpeed user-interface for the Log Reader now properly responds to mouse clicks.	116345

Table 34: Other resolved issues

Resolved Issue	Issue ID
The LiteSpeed About screen now displays the full LiteSpeed version.	116094

In LiteSpeed 8.0.1

The following is a list of issues addressed in release 8.0.1.

Table 35: Restore resolved issues

Resolved Issue	Issue ID
In rare cases, LiteSpeed could hang on an Attached File restore.	115440
When using the OLRMAP=1 option when backing up, the Object Level Recovery operation can be slow.	115440

Table 36: Log Shipping resolved issue

Resolved Issue	Issue ID
Log Shipping cleanup could not properly remove transaction log backup files due to the read-only attribute. Now, cleanup works properly because the read only attribute is removed before deleting the backup files.	115925
Log Shipping transaction log backup files could be copied before they are completed by the	115895

Resolved Issue	Issue ID
subscribers. Now, LiteSpeed prevents any in-progress backups from being copied until they are complete.	

Table 37: Drive detection resolved issues

Resolved Issue	Issue ID
A backup drive type detection regression issue in LiteSpeed 8.0 has been resolved to ensure that backups properly detect the destination drive type in order to optimize for best performance.	115928

Table 38: Double Click Restore resolved issues

Resolved Issue	Issue ID
A Double Click Restore regression issue in LiteSpeed 8.0 has been resolved to properly handle backups larger than 4 GB.	115410

In LiteSpeed 8.0

The following is a list of issues addressed in release 8.0.

Table 39: Fast Compression resolved issues

Resolved Issue	Issue ID
Fast Compression reuses file names of prior backups once they have been deleted by SmartCleanup.	115014
Ability to use the same path for striping backup in Maintenance Plans and Backup Wizards	113519, 113520

Table 40: Log Reader resolved issues

Resolved Issue	Issue ID
Removing columns from Summary tab caused exception.	113265

Table 41: Log Shipping resolved issues

Resolved Issue	Issue ID
Create plan may fail with "The INSERT statement conflicted with the FOREIGN KEY constraint "FK_LogShippingPublisher_LiteSpeedDatabase" on case-sensitive SQL Server.	111900

Table 42: Maintenance Plans resolved issues

Resolved Issue	Issue ID
Clean Up History task does not remove history from central repository if LiteSpeed is not installed there.	112947
Ability to not delete empty subfolders within “Delete files older than” in Clean Up Maintenance Plans task.	112386
No backup file on main destination made when the network path for mirror backup was not found.	111936
The %A variable does not work to name a file or folder “Sunday.”	115008
Maintenance Plans may generate duplicated report files.	115122

Table 43: Restore resolved issues

Resolved Issue	Issue ID
Describe Transaction log backup options to make it clear that NO_TRUNCATE will cause database to be in restoring state.	114745
Automated restore may fail with “Failed extract LSN number value from XML” for pre-7.x LiteSpeed backups.	113935
Ability to restore attached files to new directories that do not exist at the moment of a restore.	112048
Failed to restore tape backup.	115420

Table 44: Automated Restore resolved issues

Resolved Issue	Issue ID
Ability to exclude databases that are part of a replication plan.	107675

Table 45: Other resolved issues

Resolved Issue	Issue ID
Information on other resolved issues may be found in the Dell Knowledge Base under Knowledge Base Article 127199 . These resolved issues include the following change requests: 112365, 112362, 112320, 112213, 111035, and 111027.	n/a

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 46: 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 47: 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
The console needs .Net 3.5 installed to set license information.	119888

Table 48: 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

Table 49: Activity logging known issues

Known Issue	Issue ID
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: <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.	104669

Otherwise, the local instance will not report to the central repository.

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.

Table 50: Backup Analyzer known issues

Known Issue	Issue ID
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.	79697

Table 51: Log shipping known issues

Known Issue	Issue ID
The publisher and subscriber servers must have the same version of LiteSpeed.	52230
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.	98644

Table 52: Maintenance plans known issues

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

Table 53: 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 54: 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 8.5, ensure that your system meets the following minimum hardware and software requirements.

Hardware Requirements

Table 55: List of hardware requirements

Requirements	Details
Processor	Follow the recommendations for the SQL Server version used.

Requirements	Details
Disk Space	250 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 56: List of software requirements

Requirements	Details
Operating System	Microsoft Windows Server 2003 32-bit and 64-bit (x64) (All Service Packs) Microsoft Windows Server 2003 R2 32-bit and 64-bit (x64) (All Service Packs) 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 XP 32-bit and 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 2000 32-bit and 64-bit (All Service Packs) 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 4.0 and .Net Framework 3.5.1 installed before you install the LiteSpeed

Requirements	Details
	<p>UI Console.</p> <p>.Net Framework 4.0 installed before you install LiteSpeed Core Cloud Components.</p> <p>If using Tivoli Storage Manager (TSM), the TSM API and Backup/Archive Client version 5.3 or later should be installed.</p> <p>Microsoft Internet Explorer 6.0 or later.</p> <p>Adobe Reader 8 or later to view PDF guides.</p>

Supported Cluster Requirements

- Microsoft Cluster Service 2003
- Windows Server 2008 Failover Cluster
- Windows Server 2008 R2 Failover Cluster
- Windows Server 2012 Failover Cluster
- Windows Server 2012 R2 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*.

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
2000	•				•	•	•	•
2005	•	•		•	•	•	•	•
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://www.dell.com/support/licensing> and request your upgrade.
- If you have any other licensing questions related to your purchase, please go to <https://www.dell.com/support/licensing>.

For trial customers:

- If you want to purchase LiteSpeed or require a trial extension, please contact your sales representative or send an email to info@software.dell.com.

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 Dell Support Portal.

Additional Resources

Get the latest product information, find helpful resources, and join a discussion with the LiteSpeed Dell team and other community members. Join the LiteSpeed community at:
<http://en.community.dell.com/techcenter/data-protection/>.

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 4.84 has been localized in Japanese. LiteSpeed for SQL Server 5.0 and more recent releases are English only versions.

About Dell

Dell listens to customers and delivers worldwide innovative technology, business solutions and services they trust and value. For more information, visit www.software.dell.com.

Contacting Dell

Technical support:

[Online support](#)

Product questions and sales:

(800) 306-9329

Email:

info@software.dell.com

Technical Support Resources

Technical support is available to customers who have purchased Dell software with a valid maintenance contract and to customers who have trial versions. To access the Support Portal, go to

<http://software.dell.com/support/>.

The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. In addition, the portal provides direct access to product support engineers through an online Service Request system.

The site enables you to:

- Create, update, and manage Service Requests (cases)
- View Knowledge Base articles
- Obtain product notifications
- Download software. For trial software, go to [Trial Downloads](#).
- View how-to videos
- Engage in community discussions
- Chat with a support engineer

Third-Party Contributions

This product contains the third-party components listed below. For third-party license information, go to <http://software.dell.com/legal/license-agreements.aspx>. Source code for components marked with an asterisk (*) is available at <http://opensource.dell.com>.

Table 57: List of third-party contributions

Component	License or acknowledgement
ActiPro Syntax Editor (for Windows Forms) 4.0	ActiPro Syntax Editor (for Windows Forms) 4.0 license
Active Directory Common Dialogs .NET 2.5.0	Ms-PL
AWS SDK for .NET 3.3.2	AWS SDK for .NET Copyright 2009-2013 Amazon.com, Inc. or its affiliates. All Rights Reserved. ***** THIRD PARTY COMPONENTS *****

Component	License or acknowledgement
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This software includes third party software subject to the following copyrights: -

Json processing from LitJson -

All the source code and related files distributed with this software have been dedicated to the public domain by the authors.

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- Parsing PEM files from Bouncy Castle -

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