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LiteSpeed[®] for SQL Server[®] 8.9.7

Release Notes

February 2023

These release notes provide information about the LiteSpeed for SQL Server release. Topics:

About this release Key Benefits New features Enhancements Deprecated features Resolved Issues Known Issues System Requirements Product licensing Installation instructions More resources Globalization

About this release

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.

• LiteSpeed 8.9.7 is a minor release,

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• with new features and functionality. See New features and Enhancements.

Key Benefits

- Store database backups directly into the following cloud platforms: Microsoft Azure Blob storage, Amazon S3, Google Storage and S3 Compatible Storage.
- 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
- · Easily configure backups cleanup rules with Smart Cleanup Policies
- 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 features

New features in LiteSpeed 8.9.7:

"Select all" check box is added in the Backup Template Deployment Wizard when excluding databases
under the Backup Option. While deploying a backup template, on the Backup Options step there is an option
to exclude databases in the drop-down menu. Since the user can have large numbers of databases, "Select
all" check box is added as an option to select all databases either to exclude all databases or deselect only
the smaller number which is not needed. By default, the option is deselected.

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- Add Backup Directory option now can be used through to the Backup Location browse dialogs not just from
 Backup Browse tab
- Search bar for SQL Server Groups, SQL Servers and SQL databases is added under the SQL Server tree in the Backup Manager window. To avoid the manual searching/scrolling of Server Groups, SQL Servers or SQL databases, the search bar is added above the SQL Server tree. It is visible in the Backup manager, Log shipping and Maintenance plans.

NOTE: Search is not searching any created Log Shipping or Maintenance Plans. If an item name contains queried phrase it will be listed as a result. Search is case insensitive. Refresh does not affect the input. There is an option button to clear the input.

- The Exclude Copy Only check box is now added under the Backup Content step in the Object Level Recovery Wizard window. Copy only backup is a backup that is independent from regular backup, meaning that it will not break the chain of backups and the purpose is to avoid affecting the overall backup and restore procedures for the database.
- Force a full backup if one has not been created is now added to under the Diff Schedule and T-Log Schedule steps in the Backup Template Wizard window
 NOTE: Select this option to run a force full backup if one has not been created. This is a useful option for differential and transaction log backups that require an initial full backup at first.
- Load databases from all instances at once option is added under the Backup Manager section. Initialize loading databases for all SQL Servers that are registered.
 NOTE: This action may be time consuming depending on the number of SQL Servers
- The CloudProxyBufferSize parameter which can be inserted into the .ini file, adjusts the buffer size during the cloud restore process which can enhance the restore performance of the database from the cloud storage.

NOTE:This feature is included in version starting from 8.9.7.79 (value for CloudProxyBufferSize should be set between **10** and **2000**) - (10 is the **default** value)

For more details please visit the following links:

- Enhancements
- Resolved issues

Enhancements

The following is a list of enhancements implemented in LiteSpeed 8.9.7.

Table 1: General enhancements

| Enhancement | Issue ID |
|--|----------|
| "Select all" checkbox is added in the Backup Template Deployment Wizard when excluding databases under the Backup Options | LS-2357 |
| The Exclude Copy Only backups option is added in the Object Level Recovery Wizard | LS-2353 |
| Add Backup Directory button is added in the backup file location browse dialogs | LS-2360 |
| Search bar for SQL Server Groups, SQL Server and SQL databases is added under the SQL Server tree in the Backup Manager window | LS-2344 |
| "Force a full backup if one has not been created" is added in the Backup Template Wizard window | LS-2364 |

| Enhancement | Issue ID |
|---|----------|
| Logging for Cloud Proxy while using Amazon S3 Cloud Storage is implemented | LS-2432 |
| Load databases from all instances at once option is added under the Backup Manager section | LS-2434 |
| Parameter CloudProxyBufferSize is added in LiteSpeedSettings.ini file under the [litespeed] section | LS-2449 |

Deprecated features

The following is a list of features that are no longer supported starting with LiteSpeed 8.9.7.

Table 2: Features that are no longer supported

| Features | Issue ID |
|---|---------------------|
| The QuestKey is deprecated in newer versions of LiteSpeed. Visit https://support.quest.com/contact-us/licensing to acquire a new license key | LS-2427 |
| Extended stored procedure xp_memory_size marked as deprecated. It will be removed from the product with version 9.0. | LS-1406, LS-1762 |

Resolved Issues

In LiteSpeed 8.9.7

The following is a list of issues addressed in release 8.9.7

| Resolved Issue | Issue ID |
|--|----------|
| SQL Server activities between LiteSpeedCentral and LiteSpeedLocal SQL databases across all imported SQL Servers are not synchronized | LS-2348 |
| "List of Objects in cloud exception: The remote name could not be resolved: 'blob.core.windows.net'" error is encountered when GovCloud (US) Region is checked under the Amazon S3 storage and the backup process is run | LS-2428 |
| The automated job is failing when the database is in the exclusive mode | LS-2338 |
| "Invalid parameter detected" error is encountered when '%' character is used in an extended stored procedure parameter | LS-2332 |
| The Object level recovery feature restores only partial data from the cloud Amazon S3 for tables over 1 GB in size using the direct mode or bulk insert option | LS-2335 |
| "Transaction (Process ID) was deadlocked on lock resources with another process and has been chosen as the deadlock victim" error is encountered when parallel backups are performed | LS-2339 |
| Reduced console freezes when working with a large number of activity statistic events | LS-2345 |
| Enterprise Console is reverting display Instance name changes when synchronizing activities | LS-2330 |

| Resolved Issue | Issue ID |
|---|----------|
| "Error code 1205: Transaction (Process ID 782) was deadlocked on lock communication buffer resources with another process and has been chosen as the deadlock victim" error is encountered when the deadlock occurs on the msdb database entry during the backup process | LS-2350 |
| "Not enough space for ending backup" error is encountered when backing up to Nimble storage resulting in the incorrect termination of backup | LS-2351 |
| Smart Cleanup fails to delete the backups from the location if the variable $\% TYPE\%$ is used in the @Locations parameter | LS-2297 |
| "Header info is empty. Check SQL Server works properly." error is encountered when SLSRecast is run via CLI | LS-2346 |
| The stored procedure for reverting display Instance name changes in the Enterprise Console when synchronizing activities is not being installed during remote deployment | LS-2349 |
| "Cannot assign a default value to a local variable" error is encountered when configuring the instances in the LiteSpeed Configuration Instance Wizard window while using SQL Server 2005 | LS-2365 |
| "Target database is dropped" error is encountered when the xp_restore_automated procedure is run to restore a database from an older SQL Server version to a newer one | LS-2363 |
| "SELECT" statements on the msdb databases are now performed with "WITH (NO LOCK)" hint during the backup process | LS-2375 |
| "Error code 1205: Transaction (Process ID) was deadlocked on lock communication buffer resources with another process and has been chosen as the deadlock victim" error is encountered when the deadlock occurs on the LiteSpeedLocal, LiteSpeedCentral and msdb databases entry during the backup process | LS-2381 |
| The warning message "Optimization for OLR is skipped" is now is shown in the LiteSpeed Activity tab when the backup process is successfully finished while the OLR map is skipped due to insufficient storage space | LS-2374 |
| "Specified backup should be a Full Database backup type" error is encountered when using Object Level Recovery with 100 and more data files in the SQL backup database | LS-2377 |
| Performance is decreased when using LiteSpeed GUI Console with the Search feature implemented | LS-2433 |

In LiteSpeed 8.9.5

The following is a list of issues addressed in release 8.9.5

| Resolved Issue | Issue ID |
|--|----------|
| LiteSpeed does not crash when requests notification operators list in the deployment wizard. | LS-1795 |
| Fast compression does not reset FC sequence to "F0" after any normal full backup if database name has "/". | LS-2127 |
| Maintenance plans do not report formatting is incorrect anymore. | LS-2141 |
| Help files now include the minimum AWS permissions requirements. | LS-2151 |
| MSDB updated when a verify fails at the end of a backup. | LS-2155 |
| Automated striping options takes to account a filestream size. | LS-2163 |

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| Resolved Issue | Issue ID |
|---|----------|
| Maintenance plans do not report "Invalid pointer operation" anymore. | LS-2167 |
| Cloud parameters partsize and parallel uploads are now supported in the backup maintenance plan. | LS-2262 |
| LiteSpeed deletes record about backup in msdb database in case of a failed write to disk operation. | LS-2283 |

In LiteSpeed 8.9.1

The following is a list of issues addressed in release 8.9.1

| Resolved Issue | Issue ID |
|---|---------------------|
| Tlog backups do not hang sporadically anymore. | LS-1983 |
| Smart Cleanup resources usage significantly decreased. | LS-1980, LS-1981 |
| Backup Analyzer now shows a warning message if the data sample size too low. | LS-1083 |
| Console now may recognize AlwaysOn Group Listener used as a central repository. | LS-1643 |
| Backup to cloud performance has been optimized. | LS-1892 |
| Tlog backups do not fail with the error "The connection is no longer usable" anymore. | LS-1893 |
| Restore_headeronly stored procedure performance has been optimized for Cloud storage. | LS-1896 |
| Maintenance plans do not hang anymore in case of Cloud storage. | LS-1932 |
| Core correctly handle Access denied error in case of IAM authentication. | LS-1960 |
| Smart Cleanup now correctly handles non-immediate deletions of Cloud storages. | LS-2001, LS-2028 |
| LiteSpeed now correctly calculates CloudPartSize and CloudParallelUpload parameters for large and very large databases. | LS-2009 |
| LiteSpeed does not leave a database in restoring state after restore anymore. | LS-2029 |
| LiteSpeed now uses nolock option for queries to TempDB tables. | LS-1978 |
| Auto-filters disabled for the LiteSpeed Activity tab. | LS-1927 |
| Restore process now able to use LSM file from the backup file. | LS-1712 |

In LiteSpeed 8.9

The following is a list of issues addressed in release 8.9

| Resolved Issue | Issue ID |
|--|----------|
| Log Shipping restore job now fails in case of the first tlog backup was not found. | LS-1401 |
| The AG-related SELECT statement now runs only once. | LS-1033 |

| Resolved Issue | Issue ID |
|---|---------------------|
| The updating license key procedure described in the help file. | LS-1232 |
| Fast Compression now takes into account Sql Server native differential backups. | LS-1416 |
| A cluster uninstall script now deletes empty Quest Software folder in Program Files. | LS-1450 |
| Automated restore now takes into account t-log backups created during a full backup. | LS-1452 |
| Maintenance plans now correctly apply the "Order selected databases" option. | LS-1522 |
| Automated restore now correctly sorts backup files | LS-1533 |
| Maintenance plans do not fail now with "session expired" | LS-1569 |
| TDE compressed backups now supports starting SQL Server 2016 SP2 CU8, SQL Server 2017 CU16 and SQL Server 2019 RTM versions | LS-1584, LS-1585 |
| Log reader now does not hang on large backups. | LS-1592 |
| LiteSpeed now works with Amazon Web Services IAM Roles as expected. | LS-1603 |
| LiteSpeed now correctly calculates the cloud automatic stripping option. | LS-1628 |
| LiteSpeed now supports the pound symbol in Sql Server passwords where allowed. | LS-1630 |
| LiteSpeed now supports the creation of subfolders for encrypted objects in the Amazon Web Services cloud. | LS-1651 |

In LiteSpeed 8.8

The following is a list of issues addressed in release 8.8

| Resolved Issue | Issue ID |
|--|----------|
| Corrected a problem on restoring on old backup to source database. Automated restore used to incorrectly choose older backups with a higher LSN number that newer backups created after the restore. | LS-514 |
| Corrected a problem where DCR backup files larger than 4GB with Verify option turned on failed. | LS-924 |
| Corrected a problem behind error on upgrade of server during upgrade of LiteSpeed Local 'Latin1_ General_100_CS_AS_KS_WS_SC' | LS-982 |
| Cloud browsing performance has been improved in maintenance plans. This is specifically related to the time taken to complete backup jobs when cleanup is enabled. | LS-1000 |
| Corrected a display problem, when a backup or restore verify ran for a longer period of time it showed up in the console as failed but was still running in the background The central repository is now updated in real time with progress percentage of restore. | LS-1027 |
| Corrected a problem where OLR failed to start when processing more than 200 TLOG backups. | LS-1030 |
| TSM Issue "Error in conversion TSMEstimatedSize" has been fixed. | LS-1035 |
| Issue related to TSM server generates too many TSM database transactions has been fixed. | LS-1036 |
| Issue "Template was not deployed. Installed LiteSpeed version (8.6.1.36) does not support Azure Blob Storage." when deploying the template has been fixed. | LS-1037 |

| Resolved Issue | Issue ID |
|---|----------|
| The help files have been updated to include always on group support in SQL Server 2014 and SQL Server 2016. | LS-1123 |
| Log shipping jobs do not check contiguous memory before executing any more. | LS-1127 |
| The option to "Force a full backup if one has not been created" is now applied in the case where a database name does not match the logical name of the MDF file. | LS-1150 |
| xp_restore_verifyonly now reports compression level or adaptive compression mode | LS-1187 |
| Overlapped write has been disabled by default for network storage since it generates too many issues with non-compatible windows storage. | LS-1197 |
| The ability to add / hide copy-only full backups from a selection has been added to Intellirestore | LS-1207 |
| Fast compression template job now records failed backups to Litespeed activity. | LS-1220 |
| Fast compression maintenance plans now support variable "%TYPE%". | LS-1246 |
| Litepseed now sets maximum striping/CloudPartSize values for backups to cloud databases that cannot be read. | LS-1262 |
| Improve stability of a backup transfer process to Amazon cloud. | LS-1289 |
| Disable OLRMAP option for TLOGS in Backup Templates. | LS-1296 |
| Backup wizard no longer ignores "Use SSL" setting for Microsoft Azure. | LS-1340 |

In LiteSpeed 8.7.1

The following is a list of issues addressed in release 8.7.1 Table 3: Core issues

| Resolved Issue | Issue ID |
|---|---------------------------|
| Corrected a problem where Log shipping calls to check memory should not crash server or consume up server resources. | LS-1127 |
| Corrected a problem behind a Delete File error on backup to Google Storage for files containing special symbols, slashes or spaces including files in subfolders. | LS-1320 |
| With tlog backups, changed the default setting for the option "Optimize Object Level Recovery speed" to off as in some cases there is more difficulty with its usage than profit. | LS-1222 |
| Corrected a display problem, when a backup or restore verify ran for a longer period of time it showed up in the console as failed but was still running in the background. | LS-1027 |
| Litepseed now sets maximum striping/CloudPartSize values for backups to cloud databases that cannot be read. | LS-1262 |
| The LiteSpeed activity page now records successful and failed fast compression backups. | LS-1220 |
| Fast Compression now shows all messages in the logs, not just messages from the last database. | LS-1218 |
| Fast Compression backups no longer backup databases in STANDBY mode. | LS-1236 |
| OLR is now able to execute requests to process more than 200 TLOG bakcups. | LS-1030 CSR 4369943 |

| Resolved Issue | Issue ID | |
|---|----------|--|
| LiteSpeed now locks backup files during regular backup full / differential / TLOG / fast compression. | LS-1194 | |
| LiteSpeed now includes logging and retries into the CloudProxy where it checks for bucket existence and requests a bucket's region | LS-1161 | |

In LiteSpeed 8.7

The following is a list of issues addressed in release 8.7 Table 4: Core issues

| Resolved Issue | Issue ID |
|--|--------------------------------------|
| The Instance configuration wizard now allows you to edit the instance name at the SQL Instances step. Ctrl+Left Click on an empty place near the "use the same login" check box. | LS-552 |
| When the console is setup to use "central" view, refresh now correctly updates the list of registered SQL Servers. | LS-570 |
| Automated restore now reports the correct message for a dropped database | LS-576 |
| The Database tab at the instance level now shows the last backup for all databases. | LS-580 |
| LiteSpeed Core is now able to correctly read files with non-standard sector sizes from storage. | LS-643 |
| LiteSpeed now handles license information from old license types (License types used by LiteSpeed versions prior to 8.6). | LS-646 LS-647 LS-649 LS-780 |
| Instance configuration now allows the SQL name to include a port number. | LS-656 |
| Multi-database Fast Compression now correctly works with the %DATABASENAME% parameter. | LS-708 |
| Maintenance Plans can now run backups without an additional call to xp_restore_headeronly | LS-721 |
| On upgrade LiteSpeed is now able to correctly handle the old license type (License types used by LiteSpeed versions prior to 8.6). | LS-780 |
| Corrected an issue where Automated Restore ran with no results. | LS-819 |
| Symbol "]" is now allowed in the database name in backup Maintenance Plans. | LS-823 |
| Symbol "{" is now allowed in OLR scripts | LS-845 |
| "Always on availability group" options are now disabled when "System Databases" is selected in Maintenance Plans. | LS-854 |
| Remote Deploy now supports TLS 1.2 automated provider selection. | LS-855 |
| Backup Template jobs now produce an error when the backup path option is selected and not used. | LS-871 |
| LiteSpeed Core now works correctly on receipt of unexpected errors from the SQL Server. | LS-890 |
| Browsing for a backup location on windows 2016 no longer results the error "Arithmetic operation | LS-904 |

| Resolved Issue | Issue ID |
|---|------------------|
| resulted in an overflow." | |
| The LiteSpeed Console now reports the server as registered when the native Log Shipping plan includes a server port number in "name". | LS-186 |
| The Log Shipping wizard now uses the port number of a registered SQL Server instance. | LS-897 |
| Fast Compression smart cleanup tasks are now able to delete files in the case of locked files. | LS-903 LS-820 |

In LiteSpeed 8.6.1

The following is a list of issues addressed in release 8.6.1.

Table 5: Core issues

| Resolved Issue | Issue ID |
|--|-------------------|
| Handling of the error "The process cannot access the file because it is being used by another process" in maintenance plans has been improved. | LS-721 |
| Fast Compression backup for multiple databases now supports the %DATABASENAME% variable. | LS-708 |
| LiteSpeed core work with different drive sector sizes has been improved. | LS-643, LS-649 |
| Smart cleanup is able to work with a larger number of files now. | LS-644 |
| License verification is now optimized for old format keys (prior to version 8.6). | LS-646, LS-647 |
| The Instance Configuration Wizard now allows you to set a port number for SQL Server instances on non-standard ports. | LS-656 |

In LiteSpeed 8.6.0

The following is a list of issues addressed in release 8.6.0.

Table 6: 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 |

| Resolved Issue | Issue ID |
|--|------------------------------|
| 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 7: 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 8: OLR issues | |
| Resolved Issue | Issue ID |
| OLR should support sparse columns | LS-258 |
| Table 9: Job Manager issues Resolved Issue | leeve ID |
| | Issue ID |
| Job Manager may raise an error in case of adding job step to a job. | LS-446 |
| Table 10: Backup Template issues | |
| | |
| Resolved Issue | Issue ID |
| Resolved Issue Template deployment may move registered instances to the "unregistered instances" category | Issue ID LS-448 |
| Template deployment may move registered instances to the "unregistered instances" category | |
| Template deployment may move registered instances to the "unregistered instances" category | |
| Template deployment may move registered instances to the "unregistered instances" category Table 11: Console issues | LS-448 |
| Template deployment may move registered instances to the "unregistered instances" category Table 11: Console issues Resolved Issue The user interface console displays an incorrect message if the central repository instance is setup with a port number | LS-448 |
| Template deployment may move registered instances to the "unregistered instances" category Table 11: Console issues Resolved Issue The user interface console displays an incorrect message if the central repository instance is setup with a port number | LS-448 |
| Template deployment may move registered instances to the "unregistered instances" category Table 11: Console issues Resolved Issue The user interface console displays an incorrect message if the central repository instance is setup with a port number Table 12: Maintenance Plan issues | LS-448 Issue ID LS-503 |

execution in some cases.

In LiteSpeed 8.5

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

Table 13: 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 |
| LiteSpeed install on windows 2012/2016 servers does not need NET 3.5 any more | 119868 |
| "Provider" parameter added to LS Core ini file | 119658 |

Table 14: 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 15: Remote Deploy resolved issues

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

Table 16: OLR resolved issues

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

Table 17: 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 18: 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 19: 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 can be restored with LiteSpeed 8.2. | N/A |
| Table 20: Installation known issues | |
| Known Issue | Issue ID |
| LiteSpeed Console is installed, even if it not selected with the 32-bit installer. | LS-1841 |
| Table 21: Console known issues | |
| Known Issue | Issue ID |
| | 110510 |

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

Table 22: 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, automated restore chooses older backups with a higher LSN number in preference to newer backups created after the restore. | LS-514 |
| Workaround: Remove all the backups from old the database (created before the restore) from the backup folders scanned by Automated Restore. | |

Table 23: 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: | 104669 |
| 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.

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 24: Backup Analyzer known issues

| Known Issue | Issue ID |
|--|----------|
| The LiteSpeed 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 |
| Backup Analyzer shows success empty results in case of failed connection to a cloud. | LS-2012 |
| Table 25: 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 |
| On uninstall of LiteSpeed 8.1 followed by install of a modern LiteSpeed, logshipping jobs do not point to the new executable path. | LS-1286 |
| Workaround: At the logshipping module, select the plan and right-click on its name. Click convert to LiteSpeed plan. | |

Table 26: 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 |
| .Net Framework 4.5 has an UI issue: editable fields may show incorrect values. It applies to Maintenance Plans. Solution: upgrade .Net Framework to 4.5.2 version. | LS-1844 |
| Table 27: 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 |

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Table 28: 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 8.9.7, ensure that your system meets the following minimum hardware and software requirements.

Hardware Requirements

Table 29: 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: 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 | Monitor with a minimum resolution of 1600 x 1024 | | |

Software Requirements

Table 30: 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 Core 2008 R2 |

| Requirements | Details |
|------------------------|---|
| | Microsoft Windows Server 2012 64-bit (x64) (All Service Packs) |
| | Microsoft Windows Server Core 2012 |
| | Microsoft Windows Server 2012 R2 64-bit (x64) (All Service Packs) |
| | Microsoft Windows Server Core 2012 R2 |
| | Microsoft Windows Server 2016 64-bit (x64) (All Service Packs) |
| | Microsoft Windows Server Core 2016 |
| | Microsoft Windows Server 2019 64-bit (x64) (All Service Packs) |
| | Microsoft Windows Server 2022 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) |
| | Microsoft Windows 11 64-bit (x64) (All Service Packs) |
| Database | SQL Server 2005 32-bit and 64-bit (x64) (All Service Packs) |
| Software | 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) |
| | SQL Server 2017 64-bit (x64) (All Service Packs) when hosted on a Windows operating system. |
| | SQL Server 2019 64-bit (x64) (All Service Packs) when hosted on a Windows operating system. |
| | NOTE: Compressed backups for TDE databases supported starting following versions: SQL Server 2016 SP2 CU8, SQL Server 2017 CU16, SQL Server 2019 |
| Additional Software | .Net Framework 4.5.2 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 IBM Spectrum Protect™ (Tivoli Storage Manager - TSM), the TSM API and |
| | Backup/Archive Client version 5.3 or later should be installed. |
| | Microsoft Edge or equivalent internet browser program. (The latest versions of internet browsers are recommended to use) |
| | Adobe Reader or any equivalent program that can open/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

- Windows Server 2017 Failover Cluster
- Windows Server 2019 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, EMC ECS, PureStorage, 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.

Log Shipping

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

| SQL Server | 7.x | 8.0-8.6.0 | 8.6.1-8.8 | 8.9-8.9.7 |
|------------|-----|-----------|-----------|-----------|
| 2005 | • | • | • | • |
| 2008 / R2 | • | • | • | • |
| 2012 | • | • | • | • |
| 2014 | • | • | • | • |
| 2016 | | • | • | • |
| 2017 | | | • | • |
| 2019 | | | | • |

Product licensing

For existing customers:

- If you purchased LiteSpeed and received your new license, enter the License Key during the installation or register LiteSpeed later. The license is updated per server not per instance.
- · 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.guest.com/contact-support.

Installation instructions

Double-click on the appropriate installer (.msi file) and follow the on-screen directions.

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

See the LiteSpeedInstallation 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.

More resources

Additional information is available from the following:

- Online product documentation
- Database Performance Monitoring 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 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.

About us

We are more than just a name

We are on a quest to make your information technology work harder for you. That is why we build community-driven software solutions that help you spend less time on IT administration and more time on business innovation. We help you modernize your data center, get you to the cloud quicker and provide the expertise, security and accessibility you need to grow your data-driven business. Combined with Quest's invitation to the global community to be a part of its innovation, and our firm commitment to ensuring customer satisfaction, we continue to deliver solutions that have a real impact on our customers today and leave a legacy we are proud of. We are challenging the status quo by transforming into a new software company. And as your partner, we work tirelessly to make sure your information technology is designed for you and by you. This is our mission, and we are in this together. Welcome to a new Quest. You are invited to Join the Innovation[™].

Our brand, our vision. Together.

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.

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For sales or other inquiries, visit www.quest.com/contact.

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

Third-party contributions

This product contains the following third-party components. For third-party license information, go to https://www.quest.com/legal/license-agreements.aspx. Source code for components marked with an asterisk (*) is available at https://opensource.quest.com.

Table 31: List of Third-Party Contributions

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| | - MD5 checks in the Windows Phone 8 variant of the SDK from Microso Corporation | | | |

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Legend

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

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