```
Lenovo System Update
for Microsoft Windows 7, Windows 10, and Windows 11
Version 5.07.0131
Installation Readme
```

Note: Microsoft .NET Framework version 4.5.2 or above is required for System Update to work correctly.

System Update downloads software, driver and BIOS updates from a Lenovo server directly over the Internet without requiring specific user knowledge of where the package is located or if it is needed by the target system.

The benifit to help you keep your system up to date and secure are:

- Provides a direct connection to Lenovo server and support
  for ThinkPad and ThinkCentre drivers, software and BIOS
  updates.
- Helps maximize your system performance and minimize security
  vulnerability.

Summary of Changes

```
   Where: <   >         Version number
          [Important]   Important update
          (New)         New function or enhancement
          (Fix)         Correction to existing function
```

```
<5.07.0131> 2021-09-22 release
=======================
(New)
1. Support Windows 11
2. Update CV library to 3.1.22
```

```
<5.07.0127> 2021-07-13 release
=======================
(New)
1. Support new capsule-based firmware updates
2. Update CV library to 3.1.20
```

```
(Fix)
1. Cannot get new updates from Network Sharing Repository
2. One firmware installation GUI was hidden by TVSU GUI when login as standard user
3. "Local Repository Logon" prompts when server is invalid or inaccessible
```

```
<5.07.0124> 2021-04-25 release
=======================
(New)
1. Support Windows 10 Auto Proxy Configuration
2. Add InstallDate to WMI updates history
3. Return codes for tvsukernel.exe
```

4. Honor existing scheduler settings after UTS
5. SchedulerAbility = NO disables default scheduled tasks
6. Expand filtering capabilities by command line
7. Limit runtime of external detection routines to 30 seconds
8. Display a restart warning dialog when SU launched by command line
9. If UTS fails, provide link to manually download

(Fix)
1. [DHCP] UTS fail when connected DHCP proxy
2. AllowProxyFailToDirect does not work for admin user
3. Always show package n22th10w with 121 version
4. Request HTTPS proxy server via port 80 instead of 443
5. Consuming high CPU utilization
6. SU service didn't exit after ran pending task
7. [win7] Temporary accounts that LSU creates being left behind if finish a UTS upgrade
with login standard user
8. failure with RC=0 from metrics data
9. TVSU should compare BIOS versions as a hex number
10. Notification shows "???" when set some language and install reboot type 1,4,5 updates
by cmd
11. Metrics record RepoType with different value between "CheckForUpdates" and
"InstallUpdate" when set cloud storage repository
12. Cannot resume the last session with special scenario
13. UTS with languageoverride set then there's no content on UTS UI page
14. AC required message does not pops up when install reboot type 5 with [-defaultupdate]
option in [-action download] cmd

<5.07.0118> 2021-02-22 release
======================
Update CV library to 3.1.18.

<5.07.0117> 2021-02-10 release
======================
Fix the CPU utilization issue introduced in 5.07.0113.

<5.07.0113> 2021-01-22 release
======================
-- Enhancement:
Fix some potential security issues.

<5.07.0110> 2020-09-08 release
======================
-- Enhancement:
1. Support the use of cloud storage for local repository.
2. Standard user can install all updates.
3. Provide option to ignore proxy configuration if connection fails.
4. Control package types by command line.
5. Internal method to detect Win10 build

-- Fix some issues.

```
<5.07.0106> 2020-07-20 release
========================
- Enhancement to address LEN-42151.
- Fix some issues.
```

```
<5.07.0097> 2020-06-19 release
========================
- Update Lenovo Certificate Validation to support update packages signed with new
certificate.
```

```
<5.07.0096> 2020-03-31 release
========================
- Support:
TLS 1.2 and later
```

```
<5.07.0095> 2020-03-09 release
========================
- Enhancement:

1. Fixed the issue that in some cases %TMP%(c:\windows\TempInst) can't be deleted.
2. Fixed the issue that some driver can't be installed.
```

```
<5.07.0093> 2020-02-11 release
========================
- Enhancement:

1. Fix 3rd-party open source licenses notice file issue in UTS.
2. Fix a potential security issue.
```

```
<5.07.0092> 2020-01-08 release
========================

- Enhancement:

1. Add link to 3rd-party open source licenses notice file.
2. Add warning texts to "Reboot now" dialog.
3. Fix potential security issues.
```

```
<5.07.0088> 2019-08-01 release
========================
- Enhancement:

Enhancement to address CVE-2019-6175

- Fixed:

User can't launch clean-installed TVSU when scheduler has been set by AD.
```

```
<5.07.0084> 2019-05-24 release
========================
- Enhancement:

Enhancement to address LEN-27348 (https://support.lenovo.com/product_security/home)

- Fixed:

TVSU-200 [LSU 5.07.0080]: Cause BSOD when check for updates on Win10 RS6

TVSU-197 PSIRT - service writes a log file to an unprotected folder

TVSU-193 Unexpected exception when saving history to SQLite - Remove unnecessary code
change

TVSU-192 Set the max length of package id/name to 30

TVSU-190 [LSU 5.07.0078]: Cannot save metrics setting when install delayed reboot update

Fix SSRB issue: Update CV library to the latest

Fix SSRB issue: Use full path of PowerShell

Fix SSRB issue: Update SQLite

Improve search progress display


<5.07.0078> 2019-01-25 release
========================
- Fix:
TVSU-186:[LSU 5.07.0077]: [NLS] The reboot message\no ac prompt\count down message have
not been translated in NL

TVSU-187:[LSU 5.07.0077]: [NLS] The title for count down box shows as "????" in JP

TVSU-188:[LSU 5.07.0077]: [NLS] Words truncation of "restart now" on count down box

TVSU-160: Supports new updates with "Deplayed" reboot type

TVSU-173: Record history of updates processed by TVSU in WMI

TVSU-174: [LSU 5.07.0075] Pop up reboot count down dialog if installed both RT 1 and 5
updates

TVSU-175: [LSU 5.07.0075] rt_0 coreq rt_5 and rt_0 installed before os restarted for rt_5

TVSU-176: [LSU 5.07.0075] Didn't generate detailed result when ignore to install RT_5
update for e-Service

TVSU-177: Adjust the installation sequence of reboot type=0, 3

TVSU-178: Differentiate the SU default return value-2147483638

TVSU-180: Tune the process bar to show the real-time process



<5.07.0074> 2018-10-22 release
========================
- Fix:
[LSU 5.07.0073] Couldn't save credential for UNC repository
```

```
<5.07.0072> 2018-03-26 release
========================
- Fix:
1.CET: TVSU ask for credential prompt when running under standard user
2.Mapdrv will crash in GUI mode if unc path is empty and user password input more than
300.
3. CVE-2017-3773
- Update:
1.Update CV library to the latest version - 3.0.9
2.Show Lenovo support website hyperlink when catalog exception
3.Copyright changed to 2018



<5.07.0070> 2017-12-12 release
========================
- (Fix) Fixed some issues,improve user experience.


<5.07.0059> 2017-06-09 release
========================
- (New) Integrate certificate needed by CV library
- (New) Apply InnoSetup instead of Installsheild
- (Fix) Fixed some issues


<5.07.0053> 2017-05-09 release
========================
- (New) support recommend driver auto-update feature (default setting: critical update and
recommend driver)
- (New) Online subscription file support
- (New) Support clound repository
- (Fix) Fixed some issues


<5.07.0045> 2017-01-18 release
========================
- [New] Updated Certificate Validation library
- [New] Updated Quality Statistics library


<5.07.0042> 2016-12-10 release
========================
- [New] Support TLS1.2
- [New] Integrate Certificate Validation library
- [New] Integrate Quality Statistics library
- [Important] Change Schedule Update from 1 per month to 1 per week

<5.07.0037> 2016-09-10 release
========================
- [New] Support 7 new certificates


<5.07.0032> 2016-07-07 release
========================
- [Important] Improve reliability of schedule task
- [New] Support command line
- (fix) Fix some issues


<5.07.0029> 2016-05-25 release
========================
```

- [Important] Support integration with eService for auto driver update.

<5.07.0027> 2016-04-25 release
========================
- [Important] Fixed some security vulnerabilities issues
- [Important] Fixed issue of getting wrong file version in Windows 10
- [Important] Disable Metrics collection feature

<5.07.0022> 2016-01-13 release
========================
- [Important] Forbid critical update without previous version
- [Important] Differentiate drivers installed by Windows Update
- [Important] Integrate new Metrics SDK

<5.07.0019> 2015-11-11 release
========================
- [Important] Implement some security enhancement
- [Important] Apply new Metrics SDK

<5.07.0013> 2015-09-29 release
========================
- [Important] Implement some security enhancement for standard user account.

<5.07.0008> 2015-09-10 release
========================
- [Important] Implement some security enhancement to secure the access to directory and
exectuable files.

<5.07.0007> 2015-08-27 release
========================
- (Fix) Fixed bug on TVSU 5.07.0003, which TVSU is unable to launch after splash screen
displayed.

<5.07.0003> 2015-07-01 release
========================
- (New) Support Windows 10 32bit/64bit

New in 2015-06-24 release
========================
- Fixed some issues.

New in 2015-03-27 release
========================
- Fixed some security issues

New in 2015-01-15 release
========================
- Implement new design to install none reboot critical update before packages request a
reboot.
- Change frequency of checking for critical update.
- Record return code in metrics.
- Fixed some issues

New in 2014-11-04 release
========================
- Support high DPI display.
- Remove SUP.

New in 2014-10-24 release
========================
- Fix some issues.

New in 2014-02-21 release
========================

```
- Add metrics collection feature.
- Add Lenovo offer feature.
- Fix some issues.

New in 2013-09-17 release
=========================
- Change default setting of Schedule Updates to "Automatically download and install
Critical updates"

New in 2013-09-09 release
=========================
- Support Windows 8.1

New in 2013-06-26 release
=========================
- Fix some issues.

New in 2013-02-04 release
=========================
- Fix Accessibility issue.
- Support 10-digit machine type model.

New in 2012-12-18 release
=========================
- Support Windows 8
- New GUI style
- Other improvements

New in 2012-05-11 release
=========================
- Support APS detection for Lenovo V/B/K/E Series

New in 2012-03-16 release
=========================
- Add TVSU Scheduler on windows 7

New in 2012-02-03 release
=========================
- Add Support to Lenovo V/B/K/E Series

New in 2011-07-25 release
=========================
- Fixed the problem that TVSU displays incorrect error message when Lenovo server is down.
- Fixed the problem that TVSU is not able to find, download and install the following
systems BIOS package:
E220s, E420s, E420, E520, L420, L421, L520, T420, T420i, T420s, T420si, T520, T520i, W520,
X1, X220, X220i, X220t, X220it.

New in 2011-02-18 release
=========================
- Add Support for Windows 7 SP1

New in 2009-9-4 release
=========================
- This version only supports Windows 7.
- TVSU scheduler is removed and Windows built-in Task Scheduler takes its place.


New in 2009-07-09 release
=========================
- Add TVSU back into system for preload users.

New in 2009-06-12 release
=========================
- Add the support to Vista (32-bit and 64-bit) with Service Pack 2
```

```
New in 2009-05-15 release
=========================
- Maintenance update for UTS


New in 2008-10-20 release
=========================
- In previous versions of System Update, When the user tried to get new
  updates, sometimes the message similar to "An error occurred while
  gathering user information." appeared. This problem is corrected in this
  release.
- An unexpected exception error, that was installed on Vista 64-bit system
  after the update is fixed.


New in 2008-8-22 release
========================
- System Update supports the ThinkVantage Gadget application.
- System Update supports Windows Vista Service Pack 1 and Windows XP
  Service Pack 3.
- System Update supports different clickable default billboards for the
  USA, Australia, Japan, and other countries and regions around the world.
  The billboard for registration, downloading, and installing is disabled.
- System Update will not automatically query the Lenovo Support Center
  servers if System Update is launched by the scheduler and the scheduler
  mode is set to "Notify."
- System Update supports a new database.xml format in Update Retriever 3.0.
- This release contains the following corrections:
      - System Update no longer prompts users to input their name and
        password when users searched for updates from share folder without
        credentials.
      - Corrected a potential security exposure that occurred when users
        opened Internet Explorer by clicking the System Update billboard.
      - Corrected a problem caused by a hard-coded System Type, which
        disabled Active Update and Factory Recovery in the Rescue and
        Recovery workspace.
      - Corrected a problem that occured on some ThinkPad models, where
        System Update incorrectly set the type to ThinkCentre.  This
        caused the ThinkCentre version of the Lenovo Welcome application
        to be displayed instead of the ThinkPad version.


New in 2008-5-15 release
========================
- System Update supports new animated billboard for America, Australia
  and other world-wide countries.


New in 2008-4-29 release
=================
- System Update is able to detect if a Service Pack is already installed
  for Vista, and will not list Microsoft updates that were already installed
  as part of that Service Pack.
- Automatically reorder packages in the installation list to reduce the
  number of restarts.
- In previous versions of System Update, at the start of each update
  search, if System Update updated itself, the user had to click
  "Get Updates" again to search for additional updates.  In this release,
  when System Update finishes updating itself, it automatically continues
  the search for other updates.
- System Update no longer creates a temporary folder under C:\ when it
  updates itself.
- In the 2008-1-7 and 2008-3-13 releases, the System Update icon status
```

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   message incorrectly stated that updates were not available if System
   Update was configured to get updates from a customer repository
   instead of Lenovo Support Center and was launched in schedule mode.  This
   problem is corrected in this release.


New in 2008-3-13 release
========================
- Resolves a System Update performance issue by resetting the scheduler
  to retrieve updates from Lenovo servers when requests for updates are
  not at their peak. If the scheduler is currently set to retrieve
  updates at 11A.M. on the 1st day of each month, this update uses an
  algorithm to set the scheduler on each computer to a different day and
  time.
- A defect in the scheduler is fixed.
- Corrects the following problems that were introduced in the 2008-1-7
  release:
        - Corrects a registry setting that prevents the user from accessing
          Active Update in the Rescue and Recovery(R) program, Client
          Security Solution program, System Migration Assistant program, and
          Access Connections program.
        - Corrects a registry setting that prevents the factory recovery
          feature from being displayed in the Rescue and Recovery workspace.


New in 2008-1-7 release
========================
- Scheduler supports policies that are deployed by Active Directory.
- A notification icon is displayed when System Update installs updates
  that will reboot or power off the client machine, from scheduler mode.
- System Update displays download file size and required amount of
  disk space for a package in the pick list.
- Active Update is available. Other ThinkVantage Technologies applications
  can update themselves using System Update.
- The User Access Control prompt dialog in Windows Vista is eliminated to
  improve the user experience.
- System Update supports manual installation when automatic installation
  fails.


Supported systems
=================
Lenovo System Update is supported on the following systems:
- All ThinkPad
- All ThinkCentre
- All ThinkStation
- All IdeaPad
- All IdeaCentre
- All Lenovo Yoga
- All Lenovo Legion
- All ThinkBook

Lenovo System Update supports future systems as content is created for them.


Software requirements
=====================
The following operating systems are supported:

- Microsoft Windows 7
- Microsoft Windows 10
- Microsoft Windows 11
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Downloading the package
=======================
1. Click the file links to download the files from the Web page.
2. When prompted, select a drive and directory in which to save the
   downloaded files.



Installing the package
======================
Under Windows 10, Windows 11
----------------------------
1. Open File Explorer.
2. Click "This PC" on the left panel.
3. Type systemupdate507-2021-09-22.exe in the search field on the upper right corner. This
will locate the file you just downloaded.
4. Double-click the executable icon. You might see a dialog stating "Do you want to allow
this app to make changes to your PC?". If you see this dialog, click Continue.
5. Follow the onscreen instructions to complete the installation.

Under Windows 7
----------------------------
1. Click Start, then click Start Search.
2. Type systemupdate507-2021-09-22.exe in the search field, then
   click Search Everywhere. This will locate the file you just
   downloaded.
3. Double-click the executable icon. You might see a dialog
   stating "A program needs your permission to continue". If
   you see this dialog, click Continue.
4. Follow the onscreen instructions to complete the installation.


Silent installation of System Update
====================================
System Update can be installed in an unattended (silent) mode,
which enables you to launch the installation using the default settings.
If you want to install System Update in an unattended mode,
follow the steps listed below:

1. Open a command prompt (DOS) session.
2. Using DOS commands go to the folder where you saved the file you
   downloaded from the System Update download page.
3. Launch the silent installation by adding the following parameters
   to the downloaded filename /verysilent. For example,

   systemupdate507-2021-09-22.exe  /verysilent /norestart

   Then, press Enter.
4. Wait for the installation to finish.
5. Close the command prompt session.


Considerations
==============
System Update is qualified and supported on Windows 7, Windows 10, and Windows 11. System
Update is not qualified and supported on Windows 8/8.1.
If End User decides to install System Update on Windows 8/8.1 it may work without issue
and may be used as is but Lenovo makes no representations about this and has not tested
such installation and such installation would not be supported. If having System Update is
important to End User Lenovo recommends changing to a Windows version where it is
qualified and supported.


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