

Microsoft EEAP Release Notes

Key information	What's new	Bug fixes	Known issues	Breaking changes
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This is the first preview release of Windows Server vNext Long-Term Servicing Channel (LTSC). It includes both Windows Server with Desktop Experience, as well as Server Core. We ask that you use this preview to make sure that all your applications work on this new release, and that you can use In-place OS Upgrade to upgrade systems to the new release.

For more information, please review [What's new](#).

Windows Server vNext Long-Term Servicing Channel Preview, build 17093.1000

This pre-release of Windows Server vNext Long-Term Servicing Channel (LTSC) includes the configurations listed in the following table.

COMPONENT	BUILD NUMBER
Windows Server vNext LTSC Preview	17093.1000.180202-1400
Windows Server Core	17093.1000.180202-1400
Windows Server Core and Nano Server Containers	17093.1000.180202-1400

Key information

This section has key information required for testing the latest build.

Windows Server activation keys	<p>This build and all future builds will require use of activation keys during setup. The following keys allow for unlimited activations.</p> <table><tr><td>Datacenter</td><td>6XBNX-4JQGW-QX6QG-74P76-72V67</td></tr><tr><td>Standard</td><td>MFY9F-XBN2F-TYFMP-CCV49-RMYVH</td></tr></table> <p>This Server Insider pre-release build will expire on July 2, 2018.</p>	Datacenter	6XBNX-4JQGW-QX6QG-74P76-72V67	Standard	MFY9F-XBN2F-TYFMP-CCV49-RMYVH								
Datacenter	6XBNX-4JQGW-QX6QG-74P76-72V67												
Standard	MFY9F-XBN2F-TYFMP-CCV49-RMYVH												
Symbols for debugging	<p>If you need symbols, you can obtain them from the public symbol server. For details, see Using the Microsoft Symbol Server.</p>												
HLK and Certification Guidance	<p>The Windows Hardware Lab Kit (HLK) will be updated to support Windows 10 vNext and Windows Server LTSC vNext.</p> <p>The HLK is updated each week and available for download on Microsoft Collaborate, you will see the download locations with your weekly build notifications.</p> <p>The HLK for Windows 10 and Windows Server LTSC vNext will enforce the Windows 10 hardware requirements and policies, which will be posted on MSDN in March, and is designed for testing Windows 10 vNext and Windows Server LTSC vNext (codename RS5).</p> <p>The support scenarios identified in the following table will be accepted.</p> <table><tr><th>HLK VERSION</th><th>WINDOWS 10 VERSIONS SUPPORTED</th><th>DEVICE/COMPONENT SUBMISSIONS ACCEPTED</th><th>SYSTEM SUBMISSIONS ACCEPTED</th></tr><tr><td>"RS5</td><td>Code named "RS5"</td><td>"RS5" client device/component "vNext" Server device/component</td><td>"vNext" Server systems</td></tr><tr><td>1709</td><td>1709 - client</td><td>1709 client device/component</td><td>1709 client systems</td></tr></table>	HLK VERSION	WINDOWS 10 VERSIONS SUPPORTED	DEVICE/COMPONENT SUBMISSIONS ACCEPTED	SYSTEM SUBMISSIONS ACCEPTED	"RS5	Code named "RS5"	"RS5" client device/component "vNext" Server device/component	"vNext" Server systems	1709	1709 - client	1709 client device/component	1709 client systems
HLK VERSION	WINDOWS 10 VERSIONS SUPPORTED	DEVICE/COMPONENT SUBMISSIONS ACCEPTED	SYSTEM SUBMISSIONS ACCEPTED										
"RS5	Code named "RS5"	"RS5" client device/component "vNext" Server device/component	"vNext" Server systems										
1709	1709 - client	1709 client device/component	1709 client systems										

1703	1703 - client 1607 - client	1703 client device/component 1607 client device/component	1703 client systems
1607	1607 - client 1607 - Server, Azure Stack, SDDC 1511 - client	1607 client device/component 1607 Server device/component 1511 client device/component	1607 Server systems

When submitting a Windows 10 RS5 and Windows Server LTSC vNext HLK package for validation, you must use Windows 10 vNext and Windows Server LTSC vNext, version build TBD or newer on the test device. The submission will otherwise be rejected.

You must continue to use the Windows Hardware Certification Kit (HCK) version 2.1 to certify for following operating systems:

- Windows 7
- Windows 8
- Windows 8.1
- Windows Server 2012
- Windows Server 2012 R2

You must continue to use the Windows Logo Kit (WLK) version 1.6 to certify for following operating systems:

- Windows Server 2008 R2 (x64 and ia64)
- Windows Server 2008 (x86, x64 and ia64)

Certification for Windows Server 2016, Azure Stack and SDDC must meet the Windows Hardware Compatibility Requirements as stated in version 1607 of the documentation, use the 1607 version of the Windows Server 2016 operating system and use HLK version 1607 build 14393 with matching playlist and supplemental content to generate logs and following the policies stated in the Windows Server Policy. Questions about the Azure Stack or SDDC program or how to submit the results for solution validation should be directed to the appropriate Microsoft contact – technical account manager or partner management contact.

Playlists to support the incremental Windows releases

With the change in the policy regarding which versions of Windows 10 the HLK will validate, it becomes important to note which tests are required with each kit. Playlists must match the HLK version used, not the Windows 10 version under test. You can download all playlists (CompatPlaylists.zip) from <http://aka.ms/HLKPlaylist>.

The follow table lists the required playlist pairings.

HLK VERSION	ARCHITECTURE	PLAYLIST
"RS5"	x86 or x64	HLK Version 1709 CompatPlaylist x86_x64
"RS5"	ARM64 desktop	HLK Version 1709 CompatPlaylist ARM64 HLK Version 1709 CompatPlaylist ARM64_x86 on ARM64
1709	x86 or x64	HLK Version 1709 CompatPlaylist x86_x64
1709	ARM64 desktop *	HLK Version 1709 CompatPlaylist ARM64 HLK Version 1709 CompatPlaylist ARM64_x86 on ARM64
1703	x86 or x64	HLK Version 1703 CompatPlaylist
1607	x86 or x64	HLK Version 1607 CompatPlaylist

Testing ARM64 Desktop requires two playlists. For additional information, see the setup instructions in [Step 1: Install Controller and Studio on the test server](#) on Hardware Dev Center.

Installing kits on released operating systems	<p>If you are installing the Windows 10 kits on a publicly released OS such as Windows 10, version 1703, Windows 10, version 1607, Windows 10, version 1511, Windows 10, Windows 8.1, Windows 8, or Windows 7, you must disable strong name-signing and manually install two additional test certificates. To do this, perform the following installation procedure once for each test computer, using an account with administrator privileges on the controller computer:</p> <ul style="list-style-type: none"> From the KitPreinstall folder, install the TestRoot.cer and TestRoot-SHA2.cer test certificates using the following steps: <ol style="list-style-type: none"> From the controller computer, right-click the certificate. Click Install Certificate. Click Next. Accept the default for the certificate store, and click Next. Click Finish. From the same folder, disable strong name signing by installing the StrongNameBypass.reg and WOW64StrongNameBypass.reg registry keys, as follows: <ol style="list-style-type: none"> From the controller computer, right-click the registry key. Click Merge. Click Run. Click Yes.
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What's new

In future builds and release notes, we will have more documentation on new features. For this first LTSC Preview release, the main focus is that we again have a desktop.

We also ask you to take a look at and verify for this release the following major functionality areas.

Application compatibility	Please verify that current applications and tools run on the preview release.
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Roles and workloads	Please verify that all the roles and workloads that you have used in previous Windows Server LTSC releases work properly.
In-place OS Upgrade	Please verify that In-place OS Upgrade works for Server 2012 R2 and Server 2016. You will notice that there is text that warns that upgrading is not recommended; this is no longer the case, and the warning will be removed in the future.

Bug fixes

The bug fixes described in the following table are new in this build.

WORK ITEM	DESCRIPTION OF BUG FIX
9242132	We fixed an issue that caused the driver of a specific family of iSCSI adapters to have a driver version of "None" in SIGVERIF.txt, the inventory of drivers on the system generated by the File Signature Verification utility (SigVerif.exe).
13580205	We fixed an issue that could cause Num Lock to be active when a system starts up. This change addresses the scenario of a system's configuration requiring a user to enter a BitLocker PIN to successfully start the system.
13009240	We updated the transitional C-state mechanism on systems that do not use the platform extension plug-in (PEP) for processor idle states to use the lightest available LPI processor state when in the transitional period. This change addresses the issues encountered with processors appearing to be active when some cores do not have idle states enumerated: while the cores still will not use all available idle states, the transitional idle state they do use will otherwise behave correctly.
12313961	We fixed an issue that could result in more cores than necessary being unparked when an odd number of threads are required, and granularity is set to GRANULARITY_CORE_PER_THREAD.

WORK ITEM	DESCRIPTION OF BUG FIX
14867841, 15477632	We fixed an issue that caused upgrading to a recent preview build to fail with error 0x80004005 - 0x50014 (WinRE backup fails). On an affected system, upgrading failed around 59% and could affect builds as old as 17040.1000.
15426641, 15598564	We fixed an issue that prevented DiInstallDriver from installing drivers. When opening an INF file, Windows would display an affirmative message: "The operation completed successfully." However, the driver was not installed.

Known issues

The following known issues are new in this build, or they were not resolved in the last build.

WORK ITEM	DESCRIPTION OF KNOWN ISSUE
15685027	[NEW] After installing the operating system, the system prompts the administrator to enter a password. After the password is entered, the system displays an error message: "The remote procedure call failed." However, the password is accepted as expected.
15488106	[NEW] When the administrator enters the product key for Windows Server, Datacenter Edition, the administrator is not given an option to choose either Server Datacenter (Full Experience) or Server Datacenter (Core Experience).
15675396	[NEW] Upgrading a system to a preview build, starting with build 17088, may stall at 88% for 45 or more minutes before eventually being completed due to loading registry hives for each driver.
14668563	When BitLocker is enabled and a system is started, the system prompts the user for the BitLocker PIN. Upon providing the correct PIN the first time, the system says the PIN is incorrect; however, if the user presses Enter a second time, the PIN is accepted.

WORK ITEM	DESCRIPTION OF KNOWN ISSUE
15514871	In-place OS upgrade: BitLocker. Before performing an in-place OS upgrade, suspend (disable) BitLocker protection on any drives on the system. After the upgrade is complete, resume (re-enable) BitLocker protection.
00000000	In-place OS upgrade: Domain Controllers. During an in-place OS upgrade, Active Directory (AD) Domain Controllers (DC) might not be upgraded correctly. So, back up any AD DCs before performing an in-place OS upgrade.
15375837	Using container images from Windows Insider Program on a Windows Server Core host will fail, and may crash the host. As a workaround, you can add - isolation=hyperv when running or building the containers; for example: docker run -isolation=hyperv microsoft/nanoserver-insider .
15061691	When Hypervisor Code Integrity (HVCI) is enabled, a system may fail to start. On affected systems, firmware locates UEFI runtime services in memory described as Memory-Mapped I/O (MMIO).
13551533	Testing of the Windows core may fail because of a timeout while attempting to load the test libraries.

Breaking changes

No breaking changes are included in this build.

Providing feedback for new issues

SysDev feedback functionality has moved to Microsoft Collaborate. For new issues you encounter, it's very important that we hear from you in the form of a bug filed in your company's General Feedback engagement at: <https://developer.microsoft.com/en-us/dashboard/collaborate>.

The window for getting your bug reports addressed starts now — do not wait until the last minute to report them! If you have any questions about the Windows Server LTSC timeline, please contact your Microsoft Partner PM directly.