

Microsoft EEAP Release Notes

Key information	Build validation and feedback	Bug fixes	Known issues	Breaking changes
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Windows Server LTSC and SAC, preview build 17698.1000

These release notes describe the new features, bug fixes, known issues, and breaking changes introduced since build 17692.1000 of Windows Server 2019 Long-Term Servicing Channel (LTSC).

This build includes the following:

Long-Term Servicing Channel (LTSC) preview

- Windows Server 2019 Datacenter Edition and Standard Edition with Desktop Experience and Server Core installation options (ISO and VHDX)

Semi-Annual Channel (SAC) preview

- Windows Server Datacenter Edition and Standard Edition with Core installation options (ISO and VHDX)

Additional content (LTSC and SAC)

- Nano Server Container
- Server Core Container
- Microsoft Hyper-V Server preview

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 border="1" data-bbox="467 472 1403 638"><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 border="1" data-bbox="467 1409 1403 1843"><thead><tr><th>HLK VERSION</th><th>WINDOWS 10 VERSIONS SUPPORTED</th><th>DEVICE/COMPONENT SUBMISSIONS ACCEPTED</th><th>SYSTEM SUBMISSIONS ACCEPTED</th></tr></thead><tbody><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></tbody></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										

HLK VERSION	WINDOWS 10 VERSIONS SUPPORTED	DEVICE/COMPONENT SUBMISSIONS ACCEPTED	SYSTEM SUBMISSIONS ACCEPTED
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—a technical account manager or a 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.

Symbols for debugging

If you need symbols, you can obtain them from the public symbol server. For details, see [Using the Microsoft Symbol Server](#).

<p>Installing kits on released operating systems</p>	<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">1. From the controller computer, right-click the certificate.2. Click Install Certificate.3. Click Next.4. Accept the default for the certificate store, and click Next.5. 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">1. From the controller computer, right-click the registry key.2. Click Merge.3. Click Run.4. Click Yes.
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Build validation and feedback

In each preview release, there are two major areas that we would like you to try out:

- **In-place OS Upgrade** (from Windows Server 2012 R2, Windows Server 2016 or a previous preview build).
- **Application compatibility** – please let us know if any server roles or applications stops working or fails to function as it used to.

Please report any issues you find.

In addition, please also validate functionality that was introduced in previous preview releases. For a list of new features introduced in earlier releases, see aka.ms/ServerInsider-WhatsNew.

As always, we welcome your feedback.

Bug fixes

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

WORK ITEM	DESCRIPTION OF BUG FIX
17417841, 16923175	We fixed an issue affecting the Remote Desktop Configuration service (SessEnv.dll), which could experience an unhandled exception during reboot testing when Driver Verifier and kernel debugging are active.
17473156, 17887652	We fixed an issue that prevented Windows Push Notifications (WPN) from being displayed on recent preview releases of the operating system.
17618496	We found the following issue to not be reproducible: Docker commands may fail when run on a Windows Server container. After a Docker command has failed on an affected system, subsequent Docker commands will also fail.
17712242	We fixed the following issue: Event Viewer (eventmgr.msc) becomes unresponsive when a user attempts to view the details of an event if App Compatibility, a Feature on Demand (FoD), is installed on the system. To recover, the process (Microsoft Management Console) must be terminated.
17879197, 17849726	We fixed the following issue: If a system is upgraded to a recent preview release by using in-place OS upgrade, administrator credentials do not work. Administrator accounts are not accessible, and administrator credentials do not work for elevation of privilege. This issue affects systems that were running build 17655 or earlier before being upgraded. This issue does <i>not</i> affect clean installations of the OS.

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
17951668	[NEW] The Settings app may crash when a system that is running a recent preview release displays System settings if the system is displaying a localized language, not American English (en-us).
17033455	[Updated] Creating or modifying environment variables by using setx on a system running Nano Server fails. On an affected system, setx requires a specific path in the registry, HKCU\Environment\, to exist by default. You can work around this issue by changing where the variable is stored in the registry, or you can add the expected registry path before executing setx commands. To specify that the variable be set for system-wide use in HKLM rather than in HKCU, the default, add the /M switch to a setx command. To instead add the expected registry path, run reg add HKCU\Environment before executing setx commands.
14972457	The Virtual Machine Management Service (VMMS) may experience an error, APPLICATION_FAULT_INVALID_POINTER_READ, in Cluster Manager.
17152814	A virtual machine that uses a Microsoft Virtual BIOS may fail to start and report an error: "Failed to restore with Error 'Indicates two revision levels are incompatible.' (0x8007051A)"
12139737	Editing or creating policies for AppLocker can cause the MMC snap-in to crash when generated rules for a packaged app.

Breaking changes

No breaking changes are included in this build.