

Azure Stack 1905 release notes | Microsoft Docs

Azure Stack 1905 update

Applies to: Azure Stack integrated systems

This article describes the contents of the 1905 update package. The update includes what's new improvements, and fixes for this release of Azure Stack. This article contains the following information:

- [Description of what's new, improvements, fixes, and security updates](#)
- [Update planning](#)

[!IMPORTANT]

This update package is only for Azure Stack integrated systems. Do not apply this update package to the Azure Stack Development Kit.

Build reference

The Azure Stack 1905 update build number is **1.1905.0.40**.

Update type

The Azure Stack 1905 update build type is **Full**. As a result, the 1905 update has a longer runtime than express updates like 1903 and 1904. Exact runtimes for full updates typically depend on the number of nodes that your Azure Stack instance contains, the capacity used on your system by tenant workloads, your system's network connectivity (if connected to the internet), and your system hardware configuration. The 1905 update has had the following expected runtimes in our internal testing: 4 nodes - 35 hours, 8 nodes - 45 hours, 12 nodes - 55 hours, 16 nodes - 70 hours. 1905 runtimes lasting longer than these expected values are not uncommon and do not require action by Azure Stack operators unless the update fails. For more information about update build types, see [Manage updates in Azure Stack](#).

What's in this update

- With this update, the update engine in Azure Stack can update the firmware of scale unit nodes. This requires a compliant update package from the hardware partners. Reach out to your hardware partner for details about availability.
- Windows Server 2019 is now supported and available to syndicate through the Azure Stack Marketplace. With this update, Windows Server 2019 can now be successfully activated on a 2016 host.
- A new [Azure Account Visual Studio Code extension](#) allows developers to target Azure Stack by logging in and viewing subscriptions, as well as a number of other services.

The Azure Account extension works on both Azure Active Directory (Azure AD) and AD FS environments, and only requires a small change in Visual Studio Code user settings. Visual Studio Code requires a service principal to be given permission in order to run on this environment. To do so, import the identity script and run the cmdlets specified in [Multi-tenancy in Azure Stack](#). This requires an update to the home directory, and registration of the Guest tenant directory for each directory. An alert is displayed after updating to 1905 or later, to update the home directory tenant for which the Visual Studio Code service principal is included.

Improvements

- As a part of enforcing TLS 1.2 on Azure Stack, the following extensions have been updated to these versions:

- microsoft.customscriptextension-arm-1.9.3
- microsoft.iaasdiagnostics-1.12.2.2
- microsoft.antimalware-windows-arm-1.5.5.9
- microsoft.dsc-arm-2.77.0.0
- microsoft.vmacessforlinux-1.5.2

Please download these versions of the extensions immediately, so that new deployments of the extension do not fail when TLS 1.2 is enforced in a future release. Always set **autoUpgradeMinorVersion=true** so that minor version updates to extensions (for example, 1.8 to 1.9) are automatically performed.

- A new **Help and Support Overview** in the Azure Stack portal makes it easier for operators to check their support options, get expert help, and learn more about Azure Stack. On integrated systems, creating a support request will preselect Azure Stack service. We highly recommend that customers use this experience to submit tickets rather than using the global Azure portal. For more information, see [Azure Stack Help and Support](#).
- When multiple Azure Active Directories are onboarded (through [this process](#)), it is possible to neglect rerunning the script when certain updates occur, or when changes to the Azure AD Service Principal authorization cause rights to be missing. This can cause various issues, from blocked access for certain features, to more discrete failures which are hard to trace back to the original issue. To prevent this, 1905 introduces a new feature that checks for these permissions and creates an alert when certain configuration issues are found. This validation runs every hour, and displays the remediation actions required to fix the issue. The alert closes once all the tenants are in a healthy state.
- Improved reliability of infrastructure backup operations during service failover.
- A new version of the [Azure Stack Nagios plugin](#) is available that uses the [Azure Active Directory authentication libraries](#) (ADAL) for authentication. The plugin now also supports Azure AD and Active Directory Federation Services (AD FS) deployments of Azure Stack. For more information, see the [Nagios plugin exchange](#) site.

- A new hybrid profile **2019-03-01-Hybrid** was released that supports all the latest features in Azure Stack. Both Azure PowerShell and Azure CLI support the **2019-03-01-Hybrid** profile. The .NET, Ruby, Node.js, Go, and Python SDKs have published packages that support the **2019-03-01-Hybrid** profile. The respective documentation and some samples have been updated to reflect the changes.
- The [Node.js SDK](#) now supports API profiles. Packages that support the **2019-03-01-Hybrid** profile are published.
- The 1905 Azure Stack update adds two new infrastructure roles to improve platform reliability and supportability:
 - **Infrastructure ring:** In the future, the infrastructure ring will host containerized versions of existing infrastructure roles – for example, xrp - that currently require their own designated infrastructure VMs. This will improve platform reliability and reduce the number of infrastructure VMs that Azure Stack requires. This subsequently reduces the overall resource consumption of Azure Stack’s infrastructure roles in the future.
 - **Support ring:** In the future, the support ring will be used to handle enhanced support scenarios for customers.

In addition, we added an extra instance of the domain controller VM for improved availability of this role.

These changes will increase the resource consumption of Azure Stack infrastructure in the following ways:

| Azure Stack SKU | Increase in Compute Consumption | Increase in Memory Consumption |
|-----------------|---------------------------------|--------------------------------|
| 4 Nodes | 22 vCPU | 28 GB |
| 8 Nodes | 38 vCPU | 44 GB |
| 12 Nodes | 54 vCPU | 60 GB |
| 16 Nodes | 70 vCPU | 76 GB |

Changes

- To increase reliability and availability during planned and unplanned maintenance scenarios, Azure Stack adds an additional infrastructure role instance for domain services.
- With this update, during repair and add node operations, the hardware is validated to ensure homogenous scale unit nodes within a scale unit.
- If scheduled backups are failing to complete and the defined retention period is exceeded, the infrastructure backup controller will ensure at least one successful backup is retained.

Fixes

- Fixed an issue in which a **Compute host agent** warning appeared after restarting a node in the scale unit.
- Fixed issues in marketplace management in the administrator portal which showed incorrect results when filters were applied, and showed duplicate publisher names in the publisher filter. Also made performance improvements to display results faster.
- Fixed issue in the available backup blade that listed a new available backup before it completed upload to the external storage location. Now the available backup will show in the list after it is successfully uploaded to the storage location.
- Fixed issue with retrieving recovery keys during backup operation.
- Fixed issue with OEM update displaying version as 'undefined' in operator portal.

Security updates

For information about security updates in this update of Azure Stack, see [Azure Stack security updates](#).

Update planning

Before applying the update, make sure to review the following information:

- [Known issues](#)
- [Security updates](#)
- [Checklist of activities before and after applying the update](#)

Download the update

You can download the Azure Stack 1905 update package from [the Azure Stack download page](#). When using the downloader tool, be sure to use the latest version and not a cached copy from your downloads directory.

Hotfixes

Azure Stack releases hotfixes on a regular basis. Be sure to install the latest Azure Stack hotfix for 1904 before updating Azure Stack to 1905.

Azure Stack hotfixes are only applicable to Azure Stack integrated systems; do not attempt to install hotfixes on the ASDK.

Before applying the 1905 update

The 1905 release of Azure Stack must be applied on the 1904 release with the following hotfixes:

- [Azure Stack hotfix 1.1904.4.45](#)

After successfully applying the 1905 update

After the installation of this update, install any applicable hotfixes. For more information, see our [servicing policy](#).

- [Azure Stack hotfix 1.1905.3.48](#)

Automatic update notifications

Customers with systems that can access the internet from the infrastructure network will see the **Update available** message in the operator portal. Systems without internet access can download and import the .zip file with the corresponding .xml.

[!TIP]

Subscribe to the following *RSS* or *Atom* feeds to keep up with Azure Stack hotfixes:

- [RSS](#)
- [Atom](#)

Archived release notes

You can see [older versions of Azure Stack release notes on the TechNet Gallery](#). These archived release notes are provided for reference purposes only and do not imply support for these versions. For information about Azure Stack support, see [Azure Stack servicing policy](#). For further assistance, contact Microsoft Customer Support Services.

Next steps

- For an overview of the update management in Azure Stack, see [Manage updates in Azure Stack overview](#).
- For more information about how to apply updates with Azure Stack, see [Apply updates in Azure Stack](#).
- To review the servicing policy for Azure Stack integrated systems, and what you must do to keep your system in a supported state, see [Azure Stack servicing policy](#).
- To use the Privileged End Point (PEP) to monitor and resume updates, see [Monitor updates in Azure Stack using the privileged endpoint](#).