

# Azure Stack 1906 release notes | Microsoft Docs

## Azure Stack 1906 update

*Applies to: Azure Stack integrated systems*

This article describes the contents of Azure Stack update packages. The update includes what's new improvements, and fixes for this release of Azure Stack.

### 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](#)

For help with troubleshooting updates and the update process, see [Troubleshoot patch and update issues for Azure Stack](#).

The Azure Stack 1910 update build number is **1.1910.0.58**.

### Update type

Starting with 1908, the underlying operating system on which Azure Stack runs was updated to Windows Server 2019. This enables core fundamental enhancements, as well as the ability to bring additional capabilities to Azure Stack in the near future.

The Azure Stack 1910 update build type is **Express**. For more information about update build types, see the [Manage updates in Azure Stack](#) article. The update will be in the **Preparing** state for a long time, and the expected time it takes for the 1910 update to complete is approximately 10 hours, regardless of the number of physical nodes in your Azure Stack environment. Exact update runtimes will typically depend on the capacity used on your system by tenant workloads, your system network connectivity (if connected to the internet), and your system hardware specifications. Runtimes lasting longer than the expected value are not uncommon and do not require action by Azure Stack operators unless the update fails. This runtime approximation is specific to the 1910 update and should not be compared to other Azure Stack updates.

For more information about update build types, see [Manage updates in Azure Stack](#).

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### What's new

- The administrator portal now shows the privileged endpoint IP addresses in the region properties menu for easier discovery. In addition, it shows the current configured time server and DNS forwarders.
- The Azure Stack health and monitoring system can now raise alerts for various hardware components if an error happens. This requires additional configuration. For more information, see [Monitor Azure Stack hardware components](#).
- [Cloud-init support for Azure Stack](#): Cloud-init is a widely used approach to customize a Linux VM as it boots for the first time. You can use cloud-init to install packages and write files, or to configure users and security. Because cloud-init is called during the initial boot process, there are no additional steps or required agents to apply your configuration. The Ubuntu images on the marketplace have been updated to support cloud-init for provisioning.
- Azure Stack now supports all Windows Azure Linux Agent versions as Azure.
- A new version of Azure Stack Admin PowerShell modules is available.
- Added the **Set-AzSDDefenderManualUpdate** cmdlet in the privileged endpoint (PEP) to configure the manual update for Windows Defender definitions in the Azure Stack infrastructure. For more information, see [Update Windows Defender Antivirus on Azure Stack](#).
- Added the **Get-AzSDDefenderManualUpdate** cmdlet in the privileged endpoint (PEP) to retrieve the configuration of the manual update for Windows Defender definitions in the Azure Stack infrastructure. For more information, see [Update Windows Defender Antivirus on Azure Stack](#).
- Added the **Set-AzSDnsForwarder** cmdlet in the privileged endpoint (PEP) to change the forwarder settings of the DNS servers in Azure Stack. For more information about DNS configuration, see [Azure Stack datacenter DNS integration](#).
- Added the **Get-AzSDnsForwarder** cmdlet in the privileged endpoint (PEP) to retrieve the forwarder settings of the DNS servers in Azure Stack. For more information about DNS configuration, see [Azure Stack datacenter DNS integration](#).

### Improvements

- Added auditing rule to report when an external device (for example, a USB key) is mounted to a node of the Azure Stack infrastructure. The audit log is emitted via syslog and will be displayed as **Microsoft-Windows-Security-Auditing: 6416|Plug and**

**Play Events.** For more information about how to configure the syslog client, see [Syslog forwarding](#).

- Azure Stack is moving to 4096 bit RSA keys for the internal certificates. Running internal secret rotation will replace old 2048 bit certificates with 4096 bit long certificates. For more information about secret rotation in Azure Stack, see [Rotate secrets in Azure Stack](#).
- Upgrades to the complexity of cryptographic algorithms and key strength for several internal components to comply with the Committee on National Security Systems - Policy 15 (CNSSP-15), which provides best practices for the use of public standards for secure information sharing. Among the improvements, there is AES256 for Kerberos authentication, and SHA384 for VPN encryption. For more information about CNSSP-15, see the [Committee on National Security Systems, Policies page](#).
- As a result of the above upgrade, Azure Stack now has new default values for IPsec/IKEv2 configurations. The new default values used on the Azure Stack side are as follows:

#### **IKE Phase 1 (Main Mode) parameters**

Property	Value
IKE Version	IKEv2
Diffie-Hellman Group	ECP384
Authentication method	Pre-shared key
Encryption & Hashing Algorithms	AES256, SHA384
SA Lifetime (Time)	28,800 seconds

#### **IKE Phase 2 (Quick Mode) parameters**

Property	Value
IKE Version	IKEv2
Encryption & Hashing Algorithms (Encryption)	GCMAES256
Encryption & Hashing Algorithms (Authentication)	GCMAES256
SA Lifetime (Time)	27,000 seconds
SA Lifetime (Kilobytes)	33,553,408
Perfect Forward Secrecy (PFS)	ECP384
Dead Peer Detection	Supported

These changes are reflected in the [default IPsec/IKE proposal](#) documentation as well.

#### **Changes**

- When downloading marketplace items from Azure to Azure Stack, there is a new user interface that enables you to specify a version of the item, when multiple versions exist. The new UI is available in both connected and disconnected scenarios. For more information, see [Download marketplace items from Azure to Azure Stack](#).

- Starting in 1910, the Azure Stack system requires an additional /20 private internal IP space. This network is private to the Azure Stack system and can be re-used on multiple Azure Stack systems within your datacenter. While the network is private to Azure Stack, it must not overlap with a network in your datacenter. The /20 private IP space is divided into multiple networks that enable running the Azure Stack infrastructure on containers (as previously mentioned in the [1905 release notes](#)). The goal of running the Azure Stack infrastructure in containers is to optimize utilization and enhance performance. In addition, the /20 private IP space is also used to enable ongoing efforts that will reduce required routable IP space prior to deployment.
  - Please note that the /20 input serves as a pre-requisite to the next Azure Stack update. When the next Azure Stack update is released and an attempt is made to install it, the update will fail if you have not completed the /20 input as described below in remediation steps. An alert will be present in the admin portal until the above remediation steps have been completed. Please see the [Datacenter network integration](#) article to understand how this new private space will be consumed.
  - Remediation steps: To remediate, follow the instructions to [open a PEP Session](#). Prepare a [private internal IP range](#) of size /20, and run the following cmdlet in the PEP session using the format: `Set-AzsInternalNetwork -UserSubnet 100.87.0.0/20`. If the operation is performed successfully, you will receive the message **Azs Internal Network range added to the config**. If successfully completed, the alert will close in the admin portal. The Azure Stack system will now be able to update to the next version.

#### Fixes

- Fixed an issue that prevented enforcing TLS 1.2 policy on environments deployed prior to the Azure Stack 1904 release.
- Fixed an issue where an Ubuntu 18.04 VM created with SSH authorization enabled does not allow you to use the SSH keys to sign in.
- Removed **Reset Password** from the Virtual Machine Scale Set UI.
- Fixed an issue where deleting the load balancer from the portal did not result in the deletion of the object in the infrastructure layer.
- Fixed an issue that showed an inaccurate percentage of the Gateway Pool utilization alert on the admin portal.
- Fixed an issue where adding more than one public IP on the same NIC on a Virtual Machine resulted in internet connectivity issues. Now, a NIC with two public IPs should work as expected.

## 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](#)
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## Download the update

You can download the Azure Stack 1910 update package from [the Azure Stack download page](#).

## Hotfixes

Azure Stack releases hotfixes on a regular basis. Be sure to install the latest Azure Stack hotfix for 1908 before updating Azure Stack to 1910.

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

### Prerequisites: Before applying the 1910 update

The 1910 release of Azure Stack must be applied on the 1908 release with the following hotfixes:

- [Azure Stack hotfix 1.1908.9.43](#)

### After successfully applying the 1910 update

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

- No hotfix available for 1910.