Remote support for Azure Stack Hub

Article • 01/07/2022 • 9 minutes to read • 

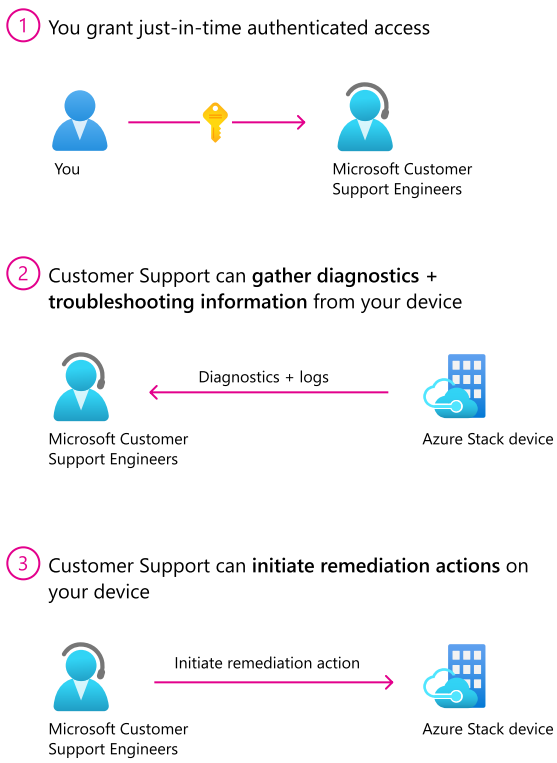
In this article

> **Important**
>
> Remote support is in public preview and only applies to version 2108.

Use remote support to allow a Microsoft support professional to solve your support case faster by permitting access to your device remotely and performing limited troubleshooting and repair. You can enable this feature by granting consent while controlling the access level and duration of access. Support can only access your device after a support request has been submitted.

Once enabled, Microsoft support gets just-in-time (JIT) limited time access to your device over a secure, audited, and compliant channel. Remote support uses protocol HTTPS over port 443. The traffic is encrypted with TLS 1.2. Operations performed are restricted based on the access level granted using just enough administration (JEA).

For more information about cmdlets that Microsoft support can execute during a remote support session, see the list of Microsoft Support operations section in this article.



Why use remote support?

Remote support gives you the ability to:

- Improve the speed to resolution as Microsoft Support no longer needs to arrange a meeting with you for troubleshooting.
- Reduce the number of privileged endpoint (PEP) session elevation to resolve issues.
- View the detailed transcript of all executed operations at any time.
- Grant just-in-time authenticated access on an incident-by-incident basis. You can define the access level and duration for each incident.
- You can revoke consent at any time which terminates the remote session. Access is automatically disabled once the consent duration expires.

Requirements

Remote support requires you to allow access to certain outbound ports and destination URLs. For more information on required endpoints, see Ports and URLs (outbound).

Consent

Before remote support is enabled, you must provide consent to authorize Microsoft Support to execute diagnostic or repair commands. The following text includes the data handling terms:

> By approving this request, the Microsoft support organization or the Azure engineering team supporting this feature ("Microsoft Support Engineer") will be given direct access to your device for troubleshooting purposes and/or resolving the technical issue described in the Microsoft support case.
>
> During a remote support session, a Microsoft Support Engineer may need to collect logs. By enabling remote support, you have agreed to a diagnostic logs collection by Microsoft Support Engineer to address a support case You also acknowledge and consent to the upload and retention of those logs in an Azure storage account managed and controlled by Microsoft. These logs may be accessed by Microsoft in the context of a support case and to improve the health of Azure Stack Hub.
>
> The data will be used only to troubleshoot failures that are subject to a support ticket, and will not be used for marketing, advertising, or any other commercial purposes without your consent. The data may be retained for up to ninety (90) days and will be handled following our standard privacy practices.
>
> Any data previously collected with your consent will not be affected by the revocation of your permission.

Remote support examples

In Azure Stack Hub, remote support can be managed using privileged endpoint (PEP). The following example scenarios show you how to perform various operations to enable remote support access for Microsoft support.

Enable remote support for diagnostics

In this example, you enable remote support access for diagnostic related operations only. The consent expires in 1,440 minutes (one day) after which remote access cannot be established.

PowerShell | Copy

```
Enable-RemoteSupport -AccessLevel Diagnostics -ExpireInMinutes 1440
```

Use **ExpireInMinutes** parameter to set the duration of the session. In the example, consent expires in 1,440 minutes (one day). After one day, remote access cannot be established.

You can set **ExpireInDay** a minimum duration of 60 minutes (one hour) and a maximum of 20,160 minutes (14 days).

If duration is not defined the remote session will expire in 480 (8 hours) by default.

Enable remote support for diagnostics and repair

In this example, you enable remote support access for diagnostic and repair related operations only. Because expiration was not explicitly provided, it expires in eight hours by default.

PowerShell Copy

```
Enable-RemoteSupport -AccessLevel DiagnosticsRepair
```

Retrieve existing consent grants

In this example, you retrieve any previously granted consent. The result includes expired consent in the last 30 days.

PowerShell Copy

```
Get-RemoteSupportAccess -IncludeExpired
```

Revoke remote access consent

In this example, you revoke remote access consent. Any existing sessions are terminated and new sessions can no longer be established.

PowerShell Copy

```
Disable-RemoteSupport
```

List existing remote sessions

In this example, you list all the remote sessions that were made to the device since *FromDate*.

PowerShell Copy

```
Get-RemoteSupportSessionHistory -FromDate <Date>
```

Get details on a specific remote session

In this example, you get the details for remote session with the ID *SessionID*.

PowerShell Copy

```
Get-RemoteSupportSessionHistory -SessionId <SessionId> -
IncludeSessionTranscript
```

> **Note**
>
> Session transcript details are retained for ninety days. You can retrieve detail for a remote session within ninety days after the session.

List of Microsoft support operations

The following sections list the allowed cmdlets that Microsoft support can execute during a remote support session.

Access level: Diagnostics

Name	Description
`Clear-AzsSupportParentWorkingDirectory`	Clears stale *Azs.Support* working directory contents across all infrastructure nodes.
`Clear-AzsSupportWorkingDirectory`	Clears the contents of the current working directory.

Name	Description
`Copy-AzsSupportFiles`	Copies files from the remote computer to the local working directory file path location (Get-AzsSupportWorkingDirectory).
`Debug-AzsSupportStorageSubsystem`	Runs Debug-StorageSubSystem against Storage Sub System *Clustered Windows Storage on **.
`Disable-AzsSupportNetshTrace`	Disables `netsh` tracing.
`Enable-AzsSupportNetshTrace`	Enables `netsh` tracing.
`Get-AzsSupportActionPlanInstance`	Lists ECE Action plans and provides options for filtering by name and status. This command has two behaviors: *Default:* Lists all action plan instances (backup plans filtered out by default), their IDs, status, and timestamps *ActionPlanInstanceId:* Drills into a specified action plan and lists the step, name, status, and timestamps
`Get-AzsSupportClusterLog`	Generates a failover cluster log for the specified nodes and returns the file path to the log. If no nodes are specified, generates cluster log from all nodes.
`Get-AzsSupportClusterResource`	Gets cluster resources, sorted by *state*.
`Get-AzsSupportClusterSharedVolume`	Returns a list of all the cluster shared volumes, sorted by *state*.
`Get-AzsSupportCodeIntegrityEnforcementStatus`	Gets the kernel and user mode Code Integrity status.
`Get-AzsSupportComputerInformation`	Collects computer information from the specified *ComputerName* such as *Uptime*, *Localtime*, *OSVersion*, etc. This is a wrapper for `Get-ComputerInfo`.
`Get-AzsSupportDiskSpace`	Get available disk space on target computers.

Name	Description
`Get-AzsSupportDscLogs`	Gets Desired State Configuration (DSC) text/event logs from the specified *ComputerName*.
`Get-AzsSupportECECloudDefinitionXml`	Retrieves the Azure Stack cloud definition from ECE and caches the data as an XmlDocument. If ECE is unavailable, attempts to load ECE from a well-known backup location.
`Get-AzsSupportECEComputerRole`	Retrieves a specified *ComputerName's* role from ECE.
`Get-AzsSupportECERoleDefinition`	Retrieves role-specific information from ECE.
`Get-AzsSupportECERoleNodes`	Retrieves nodes information from ECE for a given role.
`Get-AzsSupportECERoleProvisioningStatus`	Get the provisioning status for virtual machines and physical nodes.
`Get-AzsSupportFolderSize`	Get the size of folders and files found in the Path parameter on an infrastructure VM or physical node.
`Get-AzsSupportInfrastructureHost`	Gets physical host node information from *FailoverClustering*.
`Get-AzsSupportInfrastructureVM`	Gets Hyper-V VM objects for infrastructure VMs such as ACS or *SeedRingServices*.
`Get-AzsSupportInfrastructureVMHost`	Retrieves Hyper-V VM objects for infrastructure VMs such as ACS or *SeedRingServices*.
`Get-AzsSupportManagedDiskBlobUriAndFilePath`	Gets the blob uri of a managed disk.
`Get-AzsSupportPerformanceMetrics`	Calls `Test-AzureStack -Include AzsInfraPerformance -Debug` and returns all host and infrastructure VM performance metrics.

Name	Description
`Get-AzsSupportProcess`	Gets processes on a remote computer, and sorts them by *Name*, *ProcessID*. Supports WMI, WinRM, and Tasklist /SVC.
`Get-AzsSupportRoutingInformation`	Gets detailed information for failed action plans and provides guidance on which engineering team owns the component.
`Get-AzsSupportSClusterFileSize`	Gets file size in s-cluster from local file path.
`Get-AzsSupportS2SConnectionInformation`	Gets the connections associated with a tenant virtual network gateways.
`Get-AzsSupportService`	Gets services on a specified *ComputerName*, and sorts them by *State*, *Name*. Supports WMI, and WinRM.
`Get-AzsSupportServiceFabricClusterConfiguration`	Gets the Service Fabric cluster configuration for a given ring.
`Get-AzsSupportServiceFabricClusterHealth`	Gets the aggregated cluster health across a specified ring. If no ring is specified, it checks all Service Fabric rings.
`Get-AzsSupportServiceFabricClusterManifest`	Gets the Service Fabric cluster manifest for a given ring.
`Get-AzsSupportServiceFabricClusterUpgrade`	Gets the Service Fabric cluster upgrade status for a given ring.
`Get-AzsSupportServiceFabricNode`	Gets the Service Fabric cluster nodes for a given ring.
`Get-AzsSupportServiceFabricReplica`	Gets the replicas for a specified service fabric service.
`Get-AzsSupportServiceFabricRuntimeVersion`	Gets the Service Fabric runtime version across all fabric cluster nodes in a specified ring. If no ring is specified, it checks all Service Fabric rings.

Name	Description
`Get-AzsSupportServiceFabricService`	Gets service fabric services on the specified ring.
`Get-AzsSupportServiceFabricServiceDockerImageName`	Gets image name of a Service Fabric application.
`Get-AzsSupportServiceFabricServiceDockerImageTag`	Gets image tag of a Service Fabric application.
`Get-AzsSupportServiceFabricServiceManifestNames`	Gets Service Fabric service manifest names.
`Get-AzsSupportStampInformation`	Calls `Get-StampInformation` and caches the data to allow faster retrieval.
`Get-AzsSupportStampVersion`	Gets the minor version of the stamp version, or the full version of the stamp if the parameter is supplied.
`Get-AzsSupportStorageAccountProperties`	Get properties for a specified storage account.
`Get-AzsSupportStorageEventLogErrors`	Gets errors from event logs for a specified node. If no node is specified, lists errors from all nodes.
`Get-AzsSupportStorageNode`	Gets specified storage node or all nodes if none is provided.
`Get-AzsSupportTenantVM`	Gets tenant VM information from CRP.
`Get-AzsSupportTenantVMSS`	Gets tenant VMMS information from CRP.
`Get-AzsSupportTraceEvent`	Gets the trace events from `Get-AzsSupportTraceFilePath`.
`Get-AzsSupportTraceFilePath`	Gets the logfile path that was generated by `New-AzsSupportTraceFilePath`.
`Get-AzsSupportVirtualDisk`	Gets all virtual disks and their health states.

Name	Description
`Get-AzsSupportVirtualDiskStorageJob`	Gets all active storage jobs for any virtual disk.
`Get-AzsSupportVMReport`	Get Hyper-V VM objects for all VMs including infrastructure VMs and tenant VMs from infrastructure hosts.
`Get-AzsSupportVolumeUtilization`	Reports the utilization for all Object Stores.
`Get-AzsSupportWinEvent`	Gets a list of events from the specified *ComputerNames*.
`Get-AzsSupportWorkingDirectory`	Gets the file path used for the working directory/staging area.
`Get-AzsSupportWorkingDirectoryFiles`	Gets a list of all files that are present in the working directory.
`Invoke-AzsSupportGetNetView`	Invokes `Get-Netview` function on the specified *ComputerNames*.
`Invoke-AzsSupportProcDump`	Invokes *ProcDump* on the specified *ComputerName* against a specified process ID. Default arguments are `procdump.exe -ma <pid> "$(Get-AzsSupportWorkingDirectory)\dumps"`.
`Invoke-AzsSupportHandle`	Invokes `Handle.exe` on the specified *ComputerName*. Defaults to listing all open handles.
`Invoke-AzsSupportWmiTracing`	Enables `netsh` ETL tracing for a series of WMI providers on a specified computer name. Also supports a series of procdumps of winmgt and WmiPrvSE if specified.
`Save-AzsSupportObjectToFile`	Save an object to a file in a consistent format creating a file that contains the current time as a timestamp in the file name.

Name	Description
`Send-AzureStackDiagnosticLog`	Sends Azure Stack diagnostic logs to Microsoft.
`Start-AzsSupportClusterPerfAnalysis`	Analyzes key performance data such as cluster performance history and exports performance data.
`Start-AzsSupportRingManager`	Provides a simplified management experience for working with Service Fabric clusters.
`Start-AzsSupportSdnDiagnostic`	Automated network diagnostics and data collection/tracing script.
`Start-AzsSupportStorageDiagnostic`	Runs a series of storage specific diagnostic tests and generates a storage report.

Access level: Diagnostics and Repair

Name	Description
`Clear-AzSSupportDiskSpace`	Clear infra VM or host disk space.
`Invoke-AzsSupportNrpResourceRequest`	Allows a user to perform GET or PUT requests to NRP REST API endpoint.
`Invoke-AzsSupportSdnResourceRequest`	Invokes a web request to SDN API for the requested resource.
`Invoke-AzsSupportSpaceDB`	Invokes `spacedb.exe` on the specified host. If no host is provided, runs spacedb on the first node in the cluster.
`Invoke-AzsSupportSysinternalsDownload`	Downloads the Sysinternals suite from the internet, or checks for a well-known location for disconnected stamps.
`Move-AzsSupportClusterGroup`	Moves a clustered role from one node to another in a failover cluster.

Name	Description
`Move-AzsSupportClusterSharedVolume`	Moves a Cluster Shared Volume (CSV) to ownership by a different node in a failover cluster.
`Move-AzsSupportServiceFabricPrimaryReplica`	Moves the primary replica of the provided service to an available node.
`Move-AzsSupportVirtualMachine`	Moves a clustered Virtual Machine to a new scale unit host.
`Remove-AzsSupportItem`	Remove items from a specified path from an infra VM or host.
`Remove-AzsSupportItemByStopService`	Remove items from a specified path from an infra VM or host, stopping the specified service prior to removal.
`Restart-AzsSupportComputerByRole`	Restarts all Azure Stack Hub infrastructure computers in a given role using safe restart action plans. Only supports virtual machine roles.
`Restart-AzsSupportService`	Restart services on a specified *ComputerName*.
`Restart-AzsSupportServiceFabricPrimaryReplica`	Restarts the primary replica of the provided service. Only supports services that contain one primary replica.
`Start-AzsSupportContainerHotpatch`	Patches a docker image on fabric ring machines.
`Start-AzsSupportService`	Start services on a specified *ComputerName*.
`Stop-AzsSupportProcess`	Stops a process on a specified *ComputerName*.
`Stop-AzsSupportService`	Stops a service on a specified *ComputerName*.
`Test-AzsSupportKnownIssue`	Executes a suite of known issue and infrastructure health checks.
`Update-AzsSupportStorageHealthCache`	Refreshes the storage cache and health cluster resources.

Next steps

Learn about Azure Stack Hub help and support.

Recommended content

Emergency VM access in Azure Stack Hub - Azure Stack Hub

Learn how to request help from the operator in scenarios in which a user is locked out from the virtual machine.

Collect diagnostic logs via the privileged endpoint (PEP) - Azure Stack Hub

Learn how to collect diagnostic logs on demand in Azure Stack Hub by using the Administrator portal or a PowerShell script.

Publish Azure Stack Hub services in your datacenter - Azure Stack Hub

Learn how to publish Azure Stack Hub services in your datacenter.

Diagnostic log collection - Azure Stack Hub

Learn about diagnostic log collection.

Show more