

## CyberSnap Pre-Requisites

To ensure the correct operation of CyberSnap, certain pre-requisites must be set up before installation.

### Hardware and Software

CyberSnap Server	<ul style="list-style-type: none"> <li>- Windows 2019/2022</li> <li>- One server with 16 GB Ram, 4 CPUs, disk size of 250 GB.</li> <li>- The latest VMware VM tools need to be installed on the server.</li> <li>- The correct time zone should be set.</li> </ul>
Proxy server requirements for the CyberSnap ECE service	<ul style="list-style-type: none"> <li>- Windows 2022</li> <li>- The VMware SCSI Paravirtual controller must be used for OS setup.</li> <li>- Three additional VMware SCSI Paravirtual controllers must be added.</li> <li>- One server with 16 GB RAM, 4 CPUs, disk size of 250 GB.</li> <li>- The latest VMware VM tools needs to be installed on the server.</li> <li>The correct time zone should be set.</li> </ul>
Supported Virtual Environment	<ul style="list-style-type: none"> <li>- VMware vCenter version 7 or above.</li> <li>- VMware ESXi version 7 or above.</li> </ul>
Windows Credentials	<ul style="list-style-type: none"> <li>- The Cybersnap service should be configured to use the default Local System Account.</li> </ul>
VMWare Credentials	<ul style="list-style-type: none"> <li>- Dedicated VMware account that has full right in VMware vCenter.</li> </ul>
NetApp Credentials	<ul style="list-style-type: none"> <li>- Dedicated NetApp account that has full right in NetApp.</li> </ul>
Networking	<ul style="list-style-type: none"> <li>- Server must have a single NIC and assign a static IP.</li> </ul>
Supported Browser	<ul style="list-style-type: none"> <li>- Google Chrome, Microsoft Edge, and Mozilla Firefox.</li> </ul>
UAC	<ul style="list-style-type: none"> <li>- Our best practice is to disable Users Access Control if possible.</li> </ul>



## Firewall Setup

If your company enforces strict rules requiring all network segments to be configured with a firewall, the following ports will need to be enabled:

Source	Destination	Port	Type	Notes
CyberSnap	VMware VCenter	443	TCP	VMware default port
CyberSnap	ESXi(s)	443	TCP	ESXi default port
CyberSnap	NetApp	443	TCP	NetApp default port
CyberSnap	CyberSnap Proxy	5000	TCP	CyberSnap Proxy default port

## NetApp ONTAP

To access CyberSnap capabilities, specific NetApp pre-requisites must be fulfilled:

- Applied the FlexClone license.
- NFS volumes, create a new export policy or update the existing NetApp ONTAP Export Policy to include all specified VMware ESXi hosts in the CyberSnap Policy.
- Ensure that an initiator group (igroup) is created for each ESXi host or cluster. This step is necessary for establishing connections between the ESXi hosts and the NetApp LUNs. (iSCSI/FC only).
  - **Note: if INFRA scanning will be performed only using specific ESXi hosts, configure an igroup for each of those specific ESXi hosts.**
- Set up snapshot policies on volumes that will be configured in CyberSnap.



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## AD Service Account

CyberSnap does not require any dedicated Windows account.

Upon successful setup, a CyberSnap service will be created on the CyberSnap server, and the local system account will be configured for this service.

If your company policy restricts the use of the local system account, you will need to create a service account with local administrator privileges on the CyberSnap server and specify this account for the CyberSnap service.

This service account can be either local or domain-based, depending on your company's rules.

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## VMware vCenter – Resource Pool

As part of the best practices, we suggest creating a dedicated Resource Pool to which you can attach the policies. By implementing Resource Pools, you can limit the resources available to CyberSnap in the VMware vSphere environment while simultaneously allowing your production environment to utilize the maximum available resources.

To accommodate varying numbers of virtual machines with different RAM and CPU configurations, we suggest setting the following parameters for the CSI Resource Pool:

### Memory

- Reservations: 20% of the total RAM limit
- Limits: 50% of the total RAM

### CPU

- Reservation: 20% of the MAX Limit
- Limits: 50% of the MAX Limit

Be aware that not all versions of VMware vSphere support Resource Pool feature, here is brief overview of versions:

- vSphere Essentials: Does not include the ability to create Resource Pools.
- vSphere Essentials Plus: Includes the ability to create Resource Pools, along with features like vMotion and High Availability.
- vSphere Standard and above (including vSphere Enterprise and Enterprise Plus): Also allow you to create Resource Pools and include additional features like Distributed Resource Scheduling (DRS), Storage DRS, and more.

In cases where you cannot use the Resource Pool feature due to license limitations, you will still be able to select hosts from VMware vCenter.

We recommend upgrading your license to a level that supports the Resource Pool feature, as this will enable CyberSnap scans to run on a larger scale, with more servers simultaneously.

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*If you require further assistance, please feel free to submit a support ticket [here](#).*