



# VMware hypervisor and hardware considerations

## ONTAP Select

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# VMware hypervisor and hardware considerations

There are several hardware requirements and planning issues you should consider related to the VMware environment.

## Hypervisor requirements

There are several requirements related to the hypervisor where ONTAP Select runs.



You should refer to the current release notes to review any additional known restrictions or limitations.

### VMware licensing

To deploy an ONTAP Select cluster, your organization must have a valid VMware vSphere license for the hypervisor hosts where ONTAP Select runs. You should use the licenses that are appropriate for your deployment.

### Software compatibility

ONTAP Select can be deployed on the following hypervisors:

- VMware ESXi 6.5 U2 (build 8294253 or greater)
- VMware ESXi 6.7 GA (build 8169922 or greater) including 6.7 U1, U2, and U3
- VMware ESXi 7.0 GA (build 15843807 or greater)



NetApp supports ONTAP Select on these versions of ESXi as long as VMware also continues to support the same versions.

### Upgrading to VMware ESXi 6.5 U2 or later

If you currently have ONTAP Select deployed on VMware ESXi 6.5 U1, you should upgrade to ESXi 6.5 U2 or later as soon as possible. Using ESXi 6.5 U1 can expose you to a virtual machine failure due to a known VMware bug.

### VMware vCenter and standalone ESXi hosts

If an ESXi hypervisor host is managed by a vCenter server, you must register the host to the Deploy administration utility using the vCenter credentials. You cannot register the host as a standalone host using the ESXi credentials.

# Core hardware requirements

The physical hypervisor host where you deploy ONTAP Select must meet several hardware requirements. You can choose any platform for the hypervisor host, as long as it meets the minimum hardware requirements. The following vendors provide supported hardware platforms: Cisco, Dell, HP, Fujitsu, Lenovo, and Supermicro.

Refer to the [NetApp Interoperability Matrix Tool](#) for more information.

## Basic hardware requirements

There are several common hardware requirements that apply to all platforms regardless of the node instance type or license offering.

- Processor
  - Intel Xeon processors for Server (see [Intel Xeon Processors](#) for more information)
- Ethernet network ports
  - 4 x 10GbE (recommended)
  - 2 x 10GbE
  - 1 x 10GbE
  - 4 x 1GbE (only for a two-node ROBO cluster)
  - 2 x 1GbE (only for a single-node cluster)

## Additional hardware requirements based on the instance type

There are several additional hardware requirements based on the node instance type.

Refer to [Understanding the platform license offerings](#) for more information.

### Small

- CPU cores  
Six physical cores or greater, with four reserved for ONTAP Select.
- Memory  
24GB or greater with 16GB reserved for ONTAP Select.
- Required platform license offering  
Standard, premium, or premium XL

### Medium

- CPU cores  
Ten physical cores or greater, with eight reserved for ONTAP Select.
- Memory  
72GB or greater with 64GB reserved for ONTAP Select

- Required platform license offering  
Premium or premium XL

## Large

- CPU cores  
Eighteen physical cores or greater, with sixteen reserved for ONTAP Select.
- Memory  
136GB or greater with 128GB reserved for ONTAP Select
- Required platform license offering  
Premium XL



There are additional disk requirements based on the platform license. See [Storage and RAID](#) for more information.

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