



# System Requirements

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## Microsoft Hyper-V Deployments

### Supported Microsoft Hyper-V and host operating systems

AsynOS Version	Hyper-V
AsynOS 11.8 (Web) and later	Hyper-V version 5.0

### Hardware Requirements for Microsoft Hyper-V Deployments

Cisco UCS servers blade M3, M4 servers and later are the only supported hardware platforms.

## KVM Deployments

The following are the qualified environments for KVM deployments. All deployments use thin provisioning for disk storage.

### Red Hat Enterprise Linux Server

Host OS:

- Red Hat Enterprise Linux Server 7.5 (Maipo)  
(Red Hat Enterprise Virtualization and Red Hat OpenStack platform are NOT supported.)

Version Info:

- Linux: 3.10.0-1127.el7.x86\_64

- libvirt/QEMU:  
Compiled against library: libvirt 4.5.0  
Using library: libvirt 4.5.0  
Using API: QEMU 4.5.0  
Running hypervisor: QEMU 1.5.3

#### Hardware:

- Supported on: Cisco UCS C Series 220/240 M5
- Cisco Secure Email Virtual performance test labs use as minimum the following: Cisco Unified Computing System™ (Cisco UCS®) C series M5 server with the Intel® Xeon® Gold 6126 CPU @ 2.60GHz processor running at 2.6GHz

## KVM Drivers

#### Supported KVM drivers:

- CDROM: IDE CDROM
- Network: E1000, Virtio
- Disk: VirtIO

## KVM Packages

#### Required/related KVM packages to be installed on the host:

- qemu-kvm
- qemu-img
- libvirt
- libvirt-python
- libvirt-client
- virt-manager (requires X-windows)
- virt-install

## VMWare ESXi Deployments

### Supported VMWare ESXi Hypervisors

AsyncOS Version	VMWare ESXi Version
AsyncOS (Email)	

<b>AsyncOS Version</b>	<b>VMWare ESXi Version</b>
AsyncOS 15.0.x	6.7 and 7.0
AsyncOS 14.2.x	6.7 and 7.0
AsyncOS 14.0.x	6.7 and 7.0
AsyncOS 13.7.x	6.5 and 6.7
AsyncOS 13.5.x	6.5 and 6.7
AsyncOS 13.0. x	6.5 and 6.7
AsyncOS 12.0	6.5 and 6.7
<b>AsyncOS (Management)</b>	
AsyncOS 15.0.x	6.7 and 7.0
AsyncOS 14.2.x	6.7 and 7.0
AsyncOS 14.1.x	6.7 and 7.0
AsyncOS 14.0.x	6.7
AsyncOS 13.8.x	6.7
AsyncOS 13.6.2	6.7
AsyncOS 13.5.x	6.5
AsyncOS 13.x	6.5
AsyncOS 12.x	6.5
<b>AsyncOS (Web)</b>	
AsyncOS 15.0.x	7.0
AsyncOS 14.5.x	7.0
AsyncOS 14.0.x	7.0
AsyncOS 12.7.x	7.0
AsyncOS 12.5.x	7.0
AsyncOS 12.0.x	7.0
AsyncOS 11.8.1 and later	7.0
AsyncOS 11.8.0	6.5

Other VMware hypervisors are supported on a “Best Effort” basis: Cisco will try to help you, but it may not be possible to reproduce all problems, and Cisco cannot guarantee a solution.

## Hardware Requirements for VMWare ESXi Deployments

Cisco UCS servers (blade or rack-mounted) are the only supported hardware platform.

Minimum requirements for the server hosting your virtual appliances:

Hypervisor Details:

- VMware ESXi 6.7/7.0 (for more information, refer to [Supported VMWare ESXi Hypervisors](#))

Hardware:

- Supported on: Cisco UCS C Series 220/240 M5

Other hardware platforms are supported on a “Best Effort” basis: we will try to help you, but it may not be possible to reproduce all problems, and we cannot guarantee a solution.



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**Note** Except as explicitly stated in the documentation, Cisco does not support the alteration of the Cisco Content Security virtual appliance’s hardware configuration, such as removing IP interfaces or changing the appliance’s CPU cores or RAM size. The appliance may send alerts if such changes are made.

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**Note** VMWare ESXi 6.7 deployment is supported on Cisco UCS M4 and M5 chassis servers with AsyncOS 11.8.1-023 and later (for Web Security appliances).

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**Note** VMWare ESXi 7.0 deployment is supported on Cisco UCS M4 and M5 chassis servers with AsyncOS 14.0.1-053 and later (for Cisco Secure Web Appliances).

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## ESXi Drivers

Supported ESXi drivers:

- Network Adapter Type: E1000

## (Hosted Email Security Only) Deployment in FlexPod Solutions

For AsyncOS for Email release 8.5 and later:

For more information about deploying a Cisco Secure Email Virtual Gateway as part of a FlexPod solution, see

<http://www.cisco.com/c/dam/en/us/products/collateral/security/email-security-appliance/white-paper-c11-731731.pdf>.

Your CCO login determines whether you have access to this document.

For general information about FlexPod, see <http://www.cisco.com/en/US/netsol/ns1137/index.html>.

FlexPod does not apply to virtual Cisco Secure Web Appliance or virtual Cisco Secure Email and Web appliance deployments.