Trend Micro Apex One™

Service Pack 1

System Requirements

For Enterprise and Medium Business

Endpoint Security   **Protected Cloud**   **Web Security**

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Network™

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Fresh Installations on Windows Server 2012 Platforms

> ⚠️ **Important**
>
> - If you install the Apex One server on computers running Windows Server 2012, Trend Micro recommends you enable TLS 1.2 in Windows Server 2012 for secure network communication.
>
> - Windows 2012 R2 requires updates KB2919442 and KB2919355 before installing the Apex One server

Operating System	Edition	Service Pack	Processor	RAM	Available Disk Space	SQL Server	Others
Windows Server 2012	64-bit	Standard	None	At least 1.86 GHz Intel™ Core™2 Duo AMD™ 64 processor Intel 64 processor	• 3GB minimum (exclusively for Apex One) Apex One with Endpoint Sensor: • 8GB minimum (exclusively for Apex One)	• 7.0GB minimum Apex One with Endpoint Sensor: • 8.0GB minimum	Apex One only officially supports the specified SQL Server editions. • SQL Server 2012 Express or later • SQL Server 2012 (Enterprise/Standard) or later Apex One with Endpoint Sensor: • SQL Server 2016 SP1 (Enterprise/Standard) or later (SQL Server Express not supported)	Gigabit Network Interface Card (NIC) Monitor that supports 1366 x 768 resolution at 256 colors or higher
		Datacenter						
Windows Server 2012 R2		Standard	None					
		Datacenter						

Fresh Installations on Windows Server 2016 Platforms

Operating System		Edition	Service Pack	Processor	RAM	Available Disk Space	SQL Server	Others
Windows Server 2016	64-bit	Standard Datacenter	None	At least 1.86 GHz Intel™ Core™2 Duo AMD™ 64 processor Intel 64 processor	• 3GB minimum (exclusively for Apex One) Apex One with Endpoint Sensor: • 8GB minimum (exclusively for Apex One)	• 7.0GB minimum Apex One with Endpoint Sensor: • 8.0GB minimum	Apex One only officially supports the specified SQL Server editions. • SQL Server 2012 Express or later • SQL Server 2012 (Enterprise/ Standard) or later Apex One with Endpoint Sensor: • SQL Server 2016 SP1 (Enterprise/ Standard) or later (SQL Server Express not supported)	Gigabit Network Interface Card (NIC) Monitor that supports 1366 x 768 resolution at 256 colors or higher

Fresh Installations on Windows Server 2019 Platforms

Operating System		Edition	Service Pack	Processor	RAM	Available Disk Space	SQL Server	Others
Windows Server 2019 (Desktop Experience GUI mode)	64-bit	Standard Datacenter	None	At least 1.86 GHz Intel™ Core™2 Duo AMD™ 64 processor Intel 64 processor	• 3GB minimum (exclusively for Apex One) Apex One with Endpoint Sensor: • 8GB minimum (exclusively for Apex One)	• 7.0GB minimum Apex One with Endpoint Sensor: • 8.0GB minimum	Apex One only officially supports the specified SQL Server editions. • SQL Server 2012 Express or later • SQL Server 2012 (Enterprise/ Standard) or later Apex One with Endpoint Sensor: • SQL Server 2016 SP1 (Enterprise/ Standard) or later (SQL Server Express not supported)	Gigabit Network Interface Card (NIC) Monitor that supports 1366 x 768 resolution at 256 colors or higher

Fresh Installations on Windows Server 2022 Platforms

Operating System		Edition	Service Pack	Processor	RAM	Available Disk Space	SQL Server	Others
Windows Server 2022	64-bit	Standard Datacenter	None	At least 1.86 GHz Intel™ Core™2 Duo AMD™ 64 processor Intel 64 processor	• 3GB minimum (exclusively for Apex One) Apex One with Endpoint Sensor: • 8GB minimum (exclusively for Apex One)	• 7.0GB minimum Apex One with Endpoint Sensor: • 8.0GB minimum	Apex One only officially supports the specified SQL Server editions. • SQL Server 2012 Express or later • SQL Server 2012 (Enterprise/Standard) or later Apex One with Endpoint Sensor: • SQL Server 2016 SP1 (Enterprise/Standard) or later (SQL Server Express not supported)	Gigabit Network Interface Card (NIC) Monitor that supports 1366 x 768 resolution at 256 colors or higher

Fresh Installations on Windows MultiPoint Server Platforms

Operating System		Edition	Service Pack	Processor	RAM	Available Disk Space	SQL Server	Others
Windows MultiPoint Server 2012	64-bit	Standard Premium	None	At least 1.86 GHz Intel™ Core™2 Duo AMD™ 64 processor Intel 64 processor	• 3GB minimum (exclusively for Apex One) Apex One with Endpoint Sensor: • 8GB minimum (exclusively for Apex One)	• 7.0GB minimum Apex One with Endpoint Sensor: • 8.0GB minimum	Apex One only officially supports the specified SQL Server editions. • SQL Server 2012 Express or later • SQL Server 2012 (Enterprise/ Standard) or later Apex One with Endpoint Sensor: • SQL Server 2016 SP1 (Enterprise/ Standard) or later (SQL Server Express not supported)	Gigabit Network Interface Card (NIC) Monitor that supports 1366 x 768 resolution at 256 colors or higher

Trend Micro Apex One Edge Relay Server Installations

This section outlines the Trend Micro Apex One Edge Relay Server system requirements on supported Windows Server platforms.

- *Edge Relay Server System Requirements on page 2-2*

Edge Relay Server System Requirements

Before installing the Edge Relay Server, ensure that the target server computer meets the minimum system requirements.

Resource	Requirements
Processor	2 GHz dual core
Memory	1 GB (exclusively for the Edge Relay Server)
Disk space	60 GB
Operating system	• Windows Server 2022 • Windows Server 2019 • Windows Server 2016 • Windows Server 2012 R2

Network card	• 2 network cards
	  • One for intranet connection to the Apex One server
	  • One for external connection to off-premises Security Agents
	• 1 network card configured to use different ports for intranet and Internet connections

Chapter 3

Apex One Security Agent System Requirements

This section outlines the Apex One Security Agent system requirements for fresh installations on supported Windows platforms.

> **Important**
>
> Resource spikes may occur if a large number of applications are running simultaneously on an endpoint. If the target endpoint is already running low on memory or disk space, Trend Micro recommends upgrading the necessary hardware components prior to Apex One Security Agent installation or upgrade.
>
> Trend Micro recommends allocating the minimum system requirements listed as dedicated resources for the Security Agent program to ensure adequate performance during extensive scanning operations.

Note

All Trend Micro testing on Windows Embedded platforms and Storage Servers is performed in a virtualized environment. Because these operating systems are typically run on custom hardware (for example, on point-of-sale terminals), customers must plan to thoroughly test on their target hardware platform prior to deployment in a production environment. In addition, before raising support cases, customers should attempt to reproduce problems in a virtualized environment because this is the environment the Trend Micro support team has available. If the issue is specific to deployments on custom hardware, Trend Micro may require the customer to provide us with remote access to a suitable environment before we can fully respond to support cases.

Trend Micro does not support Apex One Security Agent installation on Windows platforms with the Unified Write Filter (UWF) feature enabled.

Fresh Installations on Windows Endpoint Platforms

Important

Resource spikes may occur if a large number of applications are running simultaneously on an endpoint. If the target endpoint is already running low on memory or disk space, Trend Micro recommends upgrading the necessary hardware components prior to Apex One Security Agent installation or upgrade.

Trend Micro recommends allocating the minimum system requirements listed as dedicated resources for the Security Agent program to ensure adequate performance during extensive scanning operations.

Note

All Trend Micro testing on Windows Embedded platforms and Storage Servers is performed in a virtualized environment. Because these operating systems are typically run on custom hardware (for example, on point-of-sale terminals), customers must plan to thoroughly test on their target hardware platform prior to deployment in a production environment. In addition, before raising support cases, customers should attempt to reproduce problems in a virtualized environment because this is the environment the Trend Micro support team has available. If the issue is specific to deployments on custom hardware, Trend Micro may require the customer to provide us with remote access to a suitable environment before we can fully respond to support cases.

Trend Micro does not support Apex One Security Agent installation on Windows platforms with the Unified Write Filter (UWF) feature enabled.

OPERATING SYSTEM		EDITION	SERVICE PACK	PROCESSOR	RAM	AVAILABLE DISK SPACE	OTHERS
Windows 7 (with Extended Security Updates (ESU))	32-bit / 64-bit	Home Basic	SP1	Minimum 1GHz (32-bit) / 2GHz (64-bit) Intel Pentium or equivalent (2GHz recommended) AMD™ 64 processor Intel 64 processor	• 2GB minimum (exclusively for Apex One) Apex One with Endpoint Sensor: • 2GB minimum (exclusively for Apex One)	• 1.5GB minimum • 2.0GB recommended Apex One with Endpoint Sensor: • 2.0GB minimum • 3.0GB recommended	Monitor that supports 1024 x 768 resolution at 256 colors or higher Simple File Sharing disabled Enable Remote Registry Allow printer/file sharing in the Windows firewall (if enabled) Enable default local admin
		Home Premium					
		Ultimate					
		Professional					
		Enterprise					
		Professional for Embedded Systems					
		Ultimate for Embedded Systems					
		Thin PC					
Windows 8.1	32-bit / 64-bit	Standard	None	Minimum 1GHz (32-bit) / 2GHz (64-bit) Intel Pentium or equivalent (2GHz recommended) AMD™ 64 processor Intel 64 processor	• 2GB minimum (exclusively for Apex One) Apex One with Endpoint Sensor: • 2GB minimum (exclusively for Apex One)	• 1.5GB minimum • 2.0GB recommended Apex One with Endpoint Sensor: • 2.0GB minimum • 3.0GB recommended	Monitor that supports 1024 x 768 resolution at 256 colors or higher Enable Remote Registry Allow printer/file sharing in the Windows firewall (if enabled) Enable default local admin **Note** Windows UI is not supported.
		Pro					
		Enterprise					

Operating System		Edition	Service Pack	Processor	RAM	Available Disk Space	Others
Windows 10 (version 22H2 and earlier)	32-bit / 64-bit	Home Pro Pro for Workstations Education Enterprise	None	Minimum 1GHz (32-bit) / 2GHz (64-bit) Intel Pentium or equivalent (2GHz recommended) AMD™ 64 processor Intel 64 processor	• 2GB minimum (exclusively for Apex One) Apex One with Endpoint Sensor: • 2GB minimum (exclusively for Apex One)	• 1.5GB minimum • 2.0GB recommended Apex One with Endpoint Sensor: • 2.0GB minimum • 3.0GB recommended	Monitor that supports 1024 x 768 resolution at 256 colors or higher Enable Remote Registry Allow printer/file sharing in the Windows firewall (if enabled) Enable default local admin **Note** Windows UI is not supported.
Windows 11 (version 22H2 and earlier)	64-bit	Home Pro Education Enterprise	None	Minimum 2GHz (64-bit) Intel Pentium or equivalent AMD™ 64 processor Intel 64 processor	• 2GB minimum (exclusively for Apex One) Apex One with Endpoint Sensor: • 2GB minimum (exclusively for Apex One)	• 1.5GB minimum • 2.0GB recommended Apex One with Endpoint Sensor: • 2.0GB minimum • 3.0GB recommended	Monitor that supports 1024 x 768 resolution at 256 colors or higher Enable Remote Registry Allow printer/file sharing in the Windows firewall (if enabled) Enable default local admin **Note** Windows UI is not supported.

Fresh Installations on Windows Embedded System Platforms

Important

Resource spikes may occur if a large number of applications are running simultaneously on an endpoint. If the target endpoint is already running low on memory or disk space, Trend Micro recommends upgrading the necessary hardware components prior to Apex One Security Agent installation or upgrade.

Trend Micro recommends allocating the minimum system requirements listed as dedicated resources for the Security Agent program to ensure adequate performance during extensive scanning operations.

Note

All Trend Micro testing on Windows Embedded platforms and Storage Servers is performed in a virtualized environment. Because these operating systems are typically run on custom hardware (for example, on point-of-sale terminals), customers must plan to thoroughly test on their target hardware platform prior to deployment in a production environment. In addition, before raising support cases, customers should attempt to reproduce problems in a virtualized environment because this is the environment the Trend Micro support team has available. If the issue is specific to deployments on custom hardware, Trend Micro may require the customer to provide us with remote access to a suitable environment before we can fully respond to support cases.

Trend Micro does not support Apex One Security Agent installation on Windows platforms with the Unified Write Filter (UWF) feature enabled.

Operating System		Edition	Service Pack	Processor	RAM	Available Disk Space	Others
Windows Embedded POSReady 7 (with Extended Security Updates (ESU))	32-bit / 64-bit	N/A	None	Minimum 1GHz (32-bit) / 2GHz (64-bit) Intel Pentium or equivalent (2GHz recommended) AMD™ 64 processor Intel 64 processor	• 2GB minimum (exclusively for Apex One)	• 1.5GB minimum • 2.0GB recommended	Monitor that supports 1024 x 768 resolution at 256 colors or higher Microsoft Internet Explorer 8.0 or 9.0 if performing web setup Simple File Sharing disabled Enable Remote Registry Allow printer/file sharing in the Windows firewall (if enabled) Enable default local admin
Windows 7 Embedded (with Extended Security Updates (ESU))	32-bit / 64-bit	Standard	SP1				
		Professional					
		Ultimate					
Windows 8.1 Embedded	32-bit / 64-bit	Pro	None				
		Industry Enterprise					
		Industry Pro					
Windows 10 IoT	32-bit / 64-bit	Enterprise	None				
Windows 11 IoT	64-bit	Home	None	Minimum 2GHz (64-bit) Intel Pentium or equivalent AMD™ 64 processor Intel 64 processor	• 2GB minimum (exclusively for Apex One) Apex One with Endpoint Sensor: • 2GB minimum (exclusively for Apex One)	• 1.5GB minimum • 2.0GB recommended Apex One with Endpoint Sensor: • 2.0GB minimum • 3.0GB recommended	Monitor that supports 1024 x 768 resolution at 256 colors or higher Enable Remote Registry Allow printer/file sharing in the Windows firewall (if enabled) Enable default local admin 📝 **Note** Windows UI is not supported.
		Pro					
		Education					
		Enterprise					

> **Note**
>
> - The Security Agent supports Windows Embedded systems when installed with specific core components. For detailed information regarding Windows Embedded system required components, see the Trend Micro Knowledge Base (https://success.trendmicro.com/solution/1105117).
>
> - Due to the complexity of Windows Embedded systems, Apex One may not be able to support all optional Windows components. Contact your technical support team if you encounter incompatibilities when using a combination of optional components.

Fresh Installations on Windows Server Platforms

> **Important**
>
> Resource spikes may occur if a large number of applications are running simultaneously on an endpoint. If the target endpoint is already running low on memory or disk space, Trend Micro recommends upgrading the necessary hardware components prior to Apex One Security Agent installation or upgrade.
>
> Trend Micro recommends allocating the minimum system requirements listed as dedicated resources for the Security Agent program to ensure adequate performance during extensive scanning operations.

> **Note**
>
> All Trend Micro testing on Windows Embedded platforms and Storage Servers is performed in a virtualized environment. Because these operating systems are typically run on custom hardware (for example, on point-of-sale terminals), customers must plan to thoroughly test on their target hardware platform prior to deployment in a production environment. In addition, before raising support cases, customers should attempt to reproduce problems in a virtualized environment because this is the environment the Trend Micro support team has available. If the issue is specific to deployments on custom hardware, Trend Micro may require the customer to provide us with remote access to a suitable environment before we can fully respond to support cases.
>
> Trend Micro does not support Apex One Security Agent installation on Windows platforms with the Unified Write Filter (UWF) feature enabled.

Operating System		Edition	Service Pack	Processor	RAM	Available Disk Space	Others
Windows Server 2008 R2 (with Extended Security Updates (ESU))	64-bit	Standard	SP1	Minimum 2GHz (64-bit) Intel Pentium or equivalent AMD™ 64 processor Intel 64 processor	• 2GB minimum (exclusively for Apex One)	• 1.5GB minimum • 2.0GB recommended	Monitor that supports 1024 x 768 resolution at 256 colors or higher Simple File Sharing disabled Enable Remote Registry Allow printer/file sharing in the Windows firewall (if enabled)
		Enterprise					
		Datacenter					
		Web					
		Server Core					
Windows Storage Server 2008 R2 (with Extended Security Updates (ESU))	64-bit	Basic	SP1				
		Standard					
		Enterprise					
		Workgroup					
Windows HPC Server 2008 R2 (with Extended Security Updates (ESU))	64-bit	N/A	None				
Windows MultiPoint Server 2011	64-bit	Standard	None	Minimum 2GHz (64-bit) Intel Pentium or equivalent AMD™ 64 processor Intel 64 processor	• 2GB minimum (exclusively for Apex One)	• 1.5GB minimum • 2.0GB recommended	Monitor that supports 1024 x 768 resolution at 256 colors or higher Enable Remote Registry Allow printer/file sharing in the Windows firewall (if enabled) Enable default local admin
		Premium					

Operating System		Edition	Service Pack	Processor	RAM	Available Disk Space	Others
Windows Server 2012	64-bit	Standard	None	Minimum 2GHz (64-bit) Intel Pentium or equivalent AMD™ 64 processor Intel 64 processor	• 2GB minimum (exclusively for Apex One)	• 1.5GB minimum • 2.0GB recommended	Monitor that supports 1024 x 768 resolution at 256 colors or higher Enable Remote Registry Allow printer/file sharing in the Windows firewall (if enabled) Enable default local admin **Note** Windows UI is not supported.
		Datacenter					
		Server Core					
Windows Server 2012 R2		Standard	None				
		Datacenter					
		Server Core					
Windows Storage Server 2012		Standard	None				
		Workgroup					
Windows Storage Server 2012 R2		Standard	None				
		Workgroup					
Windows MultiPoint Server 2012		Standard	None				
		Premium					
Windows Server 2012 Failover Clusters		N/A	None				
Windows Server 2012 R2 Failover Clusters		N/A	None		• 2GB minimum (exclusively for Apex One)		

Operating System		Edition	Service Pack	Processor	RAM	Available Disk Space	Others
Windows Server 2016	64-bit	Standard	None	Minimum 2GHz (64-bit) Intel Pentium or equivalent AMD™ 64 processor Intel 64 processor	• 2GB minimum (exclusively for Apex One)	• 1.5GB minimum • 2.0GB recommended	Monitor that supports 1024 x 768 resolution at 256 colors or higher Enable Remote Registry Allow printer/file sharing in the Windows firewall (if enabled) Enable default local admin --- 📝 **Note** Windows UI is not supported.
		Datacenter					
		Server Core					
Windows Server 2016 Failover Clusters		N/A	None				
Windows Storage Server 2016	64-bit	Standard	None				
		Workgroup					
Windows Server 2019	64-bit	Standard	None	Minimum 2GHz (64-bit) Intel Pentium or equivalent AMD™ 64 processor Intel 64 processor	• 2GB minimum (exclusively for Apex One)	• 1.5GB minimum • 2.0GB recommended	Monitor that supports 1024 x 768 resolution at 256 colors or higher Enable Remote Registry Allow printer/file sharing in the Windows firewall (if enabled) Enable default local admin --- 📝 **Note** Windows UI is not supported.
		Datacenter					
		Server Core					

Operating System		Edition	Service Pack	Processor	RAM	Available Disk Space	Others
Windows Server 2022	64-bit	Standard Datacenter Server Core	None	Minimum 2GHz (64-bit) Intel Pentium or equivalent AMD™ 64 processor Intel 64 processor	• 2GB minimum (exclusively for Apex One)	• 1.5GB minimum • 2.0GB recommended	Monitor that supports 1024 x 768 resolution at 256 colors or higher Enable Remote Registry Allow printer/file sharing in the Windows firewall (if enabled) Enable default local admin **Note** Windows UI is not supported.

Note

For processor and RAM requirements for a specific platform, refer to the Microsoft system requirements for that platform.

Update Agents

Important

Resource spikes may occur if a large number of applications are running simultaneously on an endpoint. If the target endpoint is already running low on memory or disk space, Trend Micro recommends upgrading the necessary hardware components prior to Apex One Security Agent installation or upgrade.

Trend Micro recommends allocating the minimum system requirements listed as dedicated resources for the Security Agent program to ensure adequate performance during extensive scanning operations.

Resource	Requirements
Processor	Minimum 1GHz (32-bit) / 2GHz (64-bit) Intel Pentium or equivalent (2GHz recommended)
RAM	2GB minimum (exclusively for Apex One)

Resource	Requirements
Available disk space	• 1.8GB minimum • 2.3GB recommended
Display	Monitor that supports 1024 x 768 resolution at 256 colors or higher

Upgrades and Virtualization Support

This section outlines the system requirements for upgrading the server and agent programs, and supported virtualization platforms.

Apex One Server Upgrade Requirements

This version of Apex One supports upgrading from the following version:

• Apex One

Before upgrading, ensure that the server meets the necessary hardware requirements for your version of Windows.

For more information, see *Apex One Server Installations on page 1-1*.

Security Agent Upgrade Requirements

Apex One Service Pack 1 supports upgrading from the following version:

• Apex One

Keep your older Apex One servers if you have agents running Windows XP (or earlier), Windows 8.0, or Windows Server 2008 (or earlier) and you want to continue managing these agents. For details on managing these agents, see the topic *Unsupported Operating Systems* in the *Installation and Upgrade Guide*.

> **Important**
>
> Resource spikes may occur if a large number of applications are running simultaneously on an endpoint. If the target endpoint is already running low on memory or disk space, Trend Micro recommends upgrading the necessary hardware components prior to Apex One Security Agent installation or upgrade.
>
> Trend Micro recommends allocating the minimum system requirements listed as dedicated resources for the Security Agent program to ensure adequate performance during extensive scanning operations.

Apex One Server Web Console Requirements

RESOURCE	REQUIREMENTS
Processor	300MHz Intel Pentium processor or equivalent
RAM	128MB minimum

Resource	Requirements
Available disk space	30MB minimum
Display	Monitor that supports 1366 x 768 resolution at 256 colors or higher
Browser	• Microsoft Internet Explorer 10.0 (or later) • Chrome • Microsoft Edge (Legacy and Chromium editions) **Note** Windows UI is not supported.

Virtual Desktop Support System Requirements

The following table lists the virtual platforms supported by Virtual Desktop Support.

Virtualization Provider	Supported Platforms
VMware	• VMware vCenter: 5.x, 6.x, 7.x • VMware View: 4.x, 5.x, 6.x • VMware Horizon View: 6.x, 7.x, 8.x
Citrix	• Citrix XenServer: 6.x, 7.x

Virtualization Provider	Supported Platforms
HyperV	Hyper-V Server: • Microsoft Hyper-V Server 2008/2008 R2 (64-bit) • Microsoft Hyper-V Server 2012/2012 R2 (64-bit) • Microsoft Hyper-V Server 2016 (64-bit) • Microsoft Hyper-V Server 2019 (64-bit) Windows Server Hyper-V: • Windows Server 2008/2008 R2 (64-bit) Hyper-V • Windows Server 2012/2012 R2 (64-bit) Hyper-V • Windows Server 2016 (64-bit) Hyper-V • Windows Server 2019 (64-bit) Hyper-V • Windows Server 2022 (64-bit) Hyper-V Windows Hyper-V: • Windows 8/8.1 Pro/Enterprise (64-bit) Hyper-V • Windows 10 Pro/Pro for Workstation/Enterprise (64-bit) Hyper-V • Windows 11 Pro/Pro for Workstation/Enterprise (64-bit) Hyper-V

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