



# N-central

## Release Notes

Version: 2023.5 (Build: 2023.5.0.12)

Last Updated: Wednesday, July 19, 2023



# What's New in N-able N-central 2023.5

## Adjusted Default Branding

N-central 2023.5 has slightly adjusted the default branding colors for System, SO, Customer and Site levels to better meet accessibility standards.

## Device Management for Apple

N-central 2023.5 allows a preview of additional functionality within Device Management for Apple. In this release, we're looking for partners wanting to preview our Mac OS Update and Zero Touch Enrollment functionalities. If you're interested, please email us at [ncpreview@n-able.com](mailto:ncpreview@n-able.com)

## Automation Manager

Automation Manager 2.90 is included with N-central 2023.5. In this version, we've updated the Office 365 objects to accommodate the changes Microsoft made to the Basic Authentication method. This did result in deprecating the Office 365 Get User Logon Statistics object, as Microsoft had deprecated the cmdlet for it some time ago.

## Top Bug Fixes

N-central 2023.5 has several fixes for commonly encountered bugs, including the following, but please refer to the full-fixed issues list for further details:

- NCCF-93206 OpenId Connect sign-in not working when linking a user with SSO provider for DUO credentials
- NCCF-82944 Remote Control Status is Yellow instead of Grey on devices with no TC enabled
- NCCF-87940 Incorrect Invalid User Check for LDAP Accounts Imported to Azure SSO
- NCCF-65187 Locking SSO User Does Not Prevent User Log ins
- NCCF-30940 Add Custom Device and Custom Organization Properties to Export
- AM-3168 Veeam B&R v12 after upgrade Satellite processes hangs backup server by monitoring checks
- AM-3288 Office 365 object updates to accommodate changes to Basic Authentication

# Upgrade paths and notes

## Upgrade versions

To upgrade to N-able N-central 2023.5, your N-able N-central server must be running the following version:

- N-able N-central 2022.7.1.44
- N-able N-central 2023.4.0.32

Note the following when upgrading N-able N-central.

- Tasks may expire if the agent on an associated device is being upgraded when the task is scheduled to be completed. Agent upgrades are normally short in duration but may be delayed if a re-start of the device is pending.



# Available Ciphers for Non Agent/Probe Communication with N-central

N-central updated its cipher list in the 2022.5 release and removed support for older ciphers.

The change primarily affects third-party applications running on Windows Server 2012 R2 and earlier operating systems as the host operating system no longer meet the cipher requirements for communicating with N-central 2022.5 and later.

Affected on-premise applications include:

- Report Manager
- Helpdesk Manager
- ConnectWise (on Premise)
- Custom PSA Solutions
- SQL Servers configured using Data Export and LDAP or Active Directory (those running an ECDSA certificate may function normally)

The cipher change does not generally affect third-party applications running on Windows 2016 and later where the host operating system supports the below cyphers.

For further information, please refer to the article: [N-central is unable to communicate with third-party applications hosted on windows servers 2012 R2 and older after the upgrade to N-central 2022.5](#)

TLSv1.3:

- TLS\_AKE\_WITH\_AES\_128\_GCM\_SHA256
- TLS\_AKE\_WITH\_AES\_256\_GCM\_SHA384

TLS 1.2:

- TLS\_ECDHE\_ECDSA\_WITH\_AES\_256\_GCM\_SHA384
- TLS\_ECDHE\_ECDSA\_WITH\_AES\_128\_GCM\_SHA256
- TLS\_ECDHE\_RSA\_WITH\_AES\_256\_GCM\_SHA384
- TLS\_ECDHE\_RSA\_WITH\_AES\_128\_GCM\_SHA256



# Included updates in N-able N-central

## Release 2023.5

Category	Description	Item
Automation Manager	Automation Manager O365 List All User Information Not Working	AM-3035
Automation Manager	SentinelOne EDR flagged N-Able agent DLL	AM-3126
Automation Manager	Veeam B&R v12 after upgrade Satellite processes hangs backup server by monitoring checks	AM-3168
Automation Manager	Automation Manager application unstable	AM-3268
Automation Manager	Office 365 object updates to accommodate changes to Basic Authentication	AM-3288
Automation Manager	Automation Manager Designer error - Copy File Issue	AM-3299
Ecosystem Framework	Fixed an issue with data cleanup after integration was disabled	INT-1214
Ecosystem Framework	Added sort to Intune Profile Description	INTUNE-316
Ecosystem Framework	Intune Integration - App Registration Token not correct	INTUNE-471
Ecosystem Framework	Customer deletion is not happening on migration, as ecosystem tries to delete "REAL" ecosystem integrations from spun up copy	KUIP-4786
Ecosystem Framework	N-Central Licensing - Unable to add DNSF devices over commitment level	KUIP-5000
Core	[Usability] Allow Users to Edit A Cloned Rule Before Saving It	NCCF-13607
Core	Serial Number Incorrect on some Lenovo Laptops	NCCF-12410
Core	WMI service returns "103 Access denied when process matrix 0"	NCCF-15636
Core	Update level selector colours due to accessibility issues	NCCF-16242
Core	WMI service monitoring not starting after reboot	NCCF-16271
Core	HTTP service template saving incorrect changes	NCCF-17315
Core	TakeControl Not Installing on Some Devices	NCCF-22469

Core	Filters & Access Groups showing for Users Without Permission	NCCF-29588
Core	Add Custom Device and Custom Organization Properties to Export	NCCF-30940
Core	N-central Agent Crashing After Agent Upgrade	NCCF-36636
Core	Analytics Dashboard - Reset Data functionality is giving 404 error	NCCF-54861
Core	Locking SSO User Does Not Prevent User Log ins	NCCF-65187
Core	Analytics Dashboard taking long to open for newly created N-central server.	NCCF-68487
Core	Provide UI for users to select preferred OS Update mode	NCCF-68738
Core	vmware services show false alarm	NCCF-76405
Core	Remove Arcserve downloads from N-central	NCCF-78784
Core	NAUpdater log does not roll over	NCCF-79633
Core	Remote Control Status is Yellow instead of Grey on devices with no TC enabled	NCCF-82944
Core	Cannot save Custom (OpenID Connect) Configurations	NCCF-83942
Core	Malformed Data being submitted By MMS related to Monitoring Services: Authentication failed for user 'admin'.	NCCF-85382
Core	When multiple endpoints are configured the Ubuntu 16/18 agent may get caught in a SOAP error induced wait cycle	NCCF-87417
Core	System Error on "Backup Dashboard"	NCCF-87576
Core	Incorrect Invalid User Check for LDAP Accounts Imported to Azure SSO	NCCF-87940
Core	Probe Base Ubuntu 20.04 Agent Install And Uninstall - Agent service not shown in the UI with normal status	NCCF-88475
Core	Following a service restart, the Ubuntu 22 agent began reporting the wrong URL when making LoggedInUser submissions	NCCF-89304
Core	OpenId Connect sign-in not working when linking a user with SSO provider for DUO credentials	NCCF-93206
Core	System Error when Editing Filters	NCCF-109008
Core	Ignore Case Sensitivity when Capturing Username	NCCF-111726



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Core	DFM files are deleted causing missed records upon Data Export	NCCF-106807
Patch Management	[NC server] Stop the UI on Auto Patch Approvals screen reporting errors during drag and drop	PMCM-4609



## Known Issues

These items for the current version of the N-able N-central software is composed of material issues significantly impacting performance whose cause has been replicated by N-able and where a fix has not yet been released. The list is not exclusive and does not contain items that are under investigation. Any known limitations set forth herein may not impact every customer environment. The N-able N-central software is being provided as it operates today. Any potential modifications, including a specific bug fix or any potential delivery of the same, are not considered part of the current N-able N-central software and are not guaranteed.

## Agents & Probes

Description	Bug
Communication issues may be encountered for N-able N-central Probes installed on Windows servers that have multiple NICs. For more information, refer to "KBA20020:ConfiguringAServer WithMultipleNICs" in the online Help.	67778

## Automation Manager

Description	Bug
Running Automation Manager Policies created using Automation Manager 1.6 or earlier may result in Failed to create an EndDate ... errors if the Policies are run on a computer using a different date format. This issue does not affect Policies created using Automation Manager 1.7 or later.	65712

## Custom Services

Description	Bug
Custom services may appear as misconfigured when the system locale of the device is not set to English. For example, in Portuguese the default decimal in c# /.net is not a period, ".", it is a comma, ",". If you are having this issue, please contact N-able Technical Support.	65288

## Core Functionality

Description	Bug
Installing N-able N-central on Servers that have an Nvidia Video Card Due to a bug in CentOS 7 with Nvidia's "Nouveau" driver, installing N-able N-central on servers that have an Nvidia video card may result in the N-able N-central console showing	NCCF11842

a blank screen, or displaying an Anaconda Installer screen with an error message about the video card driver.	
HDM does not work with the "Last 5 Tickets" widget.	NCCF10855
Warranty information might be inaccurate when determining the warranty expiry dates of devices that are not located in the USA.	NCCF3649
An issue has been found in 2022.7+ versions where Direct Support functionality is not available for Mac agents, and cannot be turned on for certain Mac device classes. A fix is in progress and will be included in a future release.	NCCF43803

## Dashboards

Description	Bug
Modifying a Dashboard that is associated with a large number of services may cause performance issues when using the Firefox browser.	70326

## PSA Integration

Description	Bug
In some instances, tickets closed in PSAs are not being cleared in N-able N-central. This is likely because the ticketing recipient profile in N-able N-central has Do not change the Ticket Status selected (in order to manually configure tickets). Then, when the ticket is removed in the PSA, N-able N-central will not be able to update/resolve the ticket's status and new tickets cannot be created for the same issue. Until a solution is available through the UI for this situation, the work around is to set a Return to Normal status and set a non-used status in the 'updatable statuses' section or set the same status as the return to normal one. This will cause N-able N-central to add a note to the ticket on return to normal but will not alter the ticket's status. This will allow the stale ticket check to remove the ticket from the system.	65620

## UI

Description	Bug
After re-naming, the Names of files or Registry entries may not be displayed properly in the File System window and the Registry window of the Tools tab when using Internet Explorer.	68149

## User Access Management

Description	Bug
<p>Login window reappears when new tab is loaded.</p> <p>When already logged into N-central and a user opens a new tab and browses to N-central from this new tab, the login screen reappears yet the user is already logged in. The left hand navigation is functional.</p>	NCCF29648

## End of support

The following are being deprecated in a future release of N-able N-central:

Transport Layer Security (TLS)	N-able N-central now disallows traffic over TLS 1.0 and TLS 1.1. This causes any Windows Agents or Windows Probes that are running on Windows XP and Windows Server 2003, as well as pre-v12.1 versions of the MacOS agent, to lose the ability to communicate with your N-able N-central server. We strongly recommend using a Windows Probe to monitor those devices.
Linux Agent Support	Due to declining usage in the field, N-able N-central Linux agents no longer support CentOS 6, Ubuntu 14.04, and the 32bit version of Ubuntu 16.04.
Internet Explorer 11	Due to declining usage in the field, a future release of N-able N-central will drop support for the Internet Explorer 11 web browser.
AV Defender 5.x	As of next major release for those of you still utilizing the AV5 Bitdefender Antivirus be advised that monitoring from our AV5 agents will no longer continue. As a result this will leave your environments in a vulnerable state. We encourage you to review your agents to ensure you are now utilizing our latest AV6 agents. Reminder that our online help for Security Manager is available for your reference.

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ager is available for your reference.

## System requirements

The following requirements are for typical usage patterns, acknowledging that some patterns may require greater system resources for a N-able N-central server than others.

If you have any questions about how your needs affect the system requirements of your N-able N-central server, contact your Channel Sales Specialist or email [n-able-salesgroup@n-able.com](mailto:n-able-salesgroup@n-able.com).

<b>Processor</b>	Server class x86_64 CPUs manufactured by Intel or AMD (i.e. Xeon or EPYC). Please refer to the <a href="#">Red Hat Hardware Ecosystem</a> for further details.
<b>Operating System</b>	You do not need to install a separate Operating System to run N-able N-central. The N-able N-central ISO includes a modified version of CentOS 7, based on the upstream Red Hat Enterprise Linux 7.
<b>Physical Hardware</b>	<p>The physical server used to install N-able N-central in a bare metal environment must be certified to run Red Hat Enterprise Linux 7.9 (x64) by Red Hat, or the hardware vendor, without any additional drivers. Please check the <a href="#">Red Hat Hardware Ecosystem</a> for details.</p> <p>Server Grade hard drives connected to a RAID controller with a Battery/Capacitor Backed Cache are Required. Examples include 10K+ RPM SCSI or SAS drives, Enterprise Grade SSDs or NVMe for bare metal and virtualized hosts, or a Fibre Channel connected SAN with Enterprise Grade hard drives for virtualized hosts (<i>Fibre Channel cards can be used for bare metal if they are configured in the pre-boot environment and do NOT require vendor-provided drivers</i>).</p> <p>Although Desktop Hard Drives will work with the Operating System, they do not meet the minimum throughput required for the back-end Database of N-able N-central.</p>

For more details, please refer to the [Red Hat Hardware Ecosystem](#) to see if your current hardware will work with our customized version of CentOS 7.

## System requirements by number of devices managed

The table below lists the minimum specifications required to manage the number of devices indicated (based on average usage). Performance can be improved by exceeding these requirements. When determining your hardware requirements, consider any growth in managed device count that may occur over time.

**i** These requirements are only for on-premise deployments of N-able N-central.

Number of Devices	CPU Cores	Memory	Storage
Up to 1,000	2	4 GB RAM	80 GB RAID
Up to 3,000	4	8 GB RAM	150 GB RAID

Number of Devices	CPU Cores	Memory	Storage
Up to 6,000	8	16 GB RAM	300 GB RAID
Up to 9,000	12	24 GB RAM	450 GB RAID
Up to 12,000	16	32 GB RAM	600 GB RAID
Up to 16,000	22	48 GB RAM	800 GB RAID
Up to 20,000	28	64 GB RAM	1 TB RAID
Up to 24,000	34	80 GB RAM	1.2 TB RAID

## Notes

1. Server Grade hard drives connected to a RAID controller with a Battery/Capacitor Backed Cache, are **required** to ensure performance and unexpected power-loss data protection.
2. In a virtualized environment, hard drives for the N-able N-central server must not be shared with any other applications or VM guests that have significant I/O workloads. For example, Report Manager, SQL Databases, E-Mail Servers, Active Directory Domain Controllers, SharePoint, or similar should not be installed on the same physical hard drive as N-able N-central.
3. N-able recommends two or more hard drives be placed in a redundant RAID configuration. With two drives, RAID 1 must be used. With more than two drives, RAID 1+0 or RAID 5 are recommended. RAID 6 is an option on servers with less than 1,000 devices (the additional write latency of RAID 6 becomes an issue above 1,000 devices).
4. N-able recommends more, smaller disks in a RAID array, as opposed to fewer larger disks. Database-backed applications, like N-able N-central, have better write performance with an increased number of parallel writes (hard drives).
5. If using Solid State Drives (SSDs), N-able requires Enterprise Grade, SLC based (or better) SSDs with a SAS interface, or Enterprise Grade NVMe. SSD and NVMe drives must have an endurance rating of at least 0.2 DWPD (Drive Writes Per Day), and at least 2 physical disks in a redundant RAID array. On Bare Metal servers, the RAID array must appear to the operating system as a single Block or NVMe Device. Currently, many PCIe and NVMe drives do not meet this last requirement and would only work in a virtualized environment.
6. Configure the RAID controller to use the default stripe size and a Read/Write cache of 50%/50%.

The underlying customized version of CentOS 7 has certain hardware limits that are consistent with the upstream Red Hat Enterprise Linux 7 distribution. Of note are the following:

Subsystem	Limit
Minimum disk space	80GB
Maximum physical disk size (BIOS)	2TB

Subsystem	Limit
Maximum physical disk size (UEFI)	50TB
Required minimum memory	4GB for 4 or fewer logical CPUs
	1GB per logical CPU for more than 4 logical CPUs
Maximum memory	12TB
Maximum logical CPUs	768

### Examples of supported servers

Due to the ecosystem of different hardware, N-able does not certify specific hardware configurations. Instead we rely on the upstream Red Hat Enterprise Linux and hardware vendor testing and certification.

Examples of servers that have been Red Hat certified include [HPE ProLiant DL360 Gen10](#) and [Dell PowerEdge R620](#).

Please consult with your hardware vendor to ensure that any server to be used for a bare metal installation meets the above requirements and is Red Hat Enterprise Linux 7.9 certified, without the need for additional drivers.

N-able recommends that for any Bare Metal server, two or more SAS 10k or faster hard drives be placed in a RAID array to improve redundancy. RAID 1+0 or RAID 5 are supported (at the hardware RAID BIOS level). RAID 6 is an option on servers with less than 1,000 devices (the additional write latency of RAID 6 becomes an issue above 1,000 devices).

## Support for virtualized environments

N-able supports VMware ESX Server 6.0 or newer and Windows Server 2012 R2 Hyper-V or newer LTS versions. N-able recommends use of the latest stable versions of VMware or Hyper-V in order to ensure the best performance, feature set and compatibility with N-able N-central.

### Hyper-V on Windows Desktop Operating Systems is not Supported.

N-able N-central installed on a virtual machine running on a Desktop Operating System (such as Hyper-V on Windows 10/11, Virtual Box, Parallels, VMWare Fusion or similar) is not a supported configuration. If you are using Windows Hyper-V, it must be installed on a supported server class Windows Operating System.

### Windows Server Semi-Annual Releases are not Supported.

Only Long-Term Support (LTS) versions of the Windows Server Operating System are supported as a Hyper-V host for N-able N-central. Microsoft releases "Semi-Annual Release" versions of Windows Server as a technology preview for the next LTS version. Due to their technology preview status, these "Semi-Annual Release" versions of Windows Server are not supported as Hyper-V hosts for N-able N-central.

## About virtualization

Virtualization provides an abstraction layer between the hardware and the Operating System which permits the operation of multiple logical systems on one physical server unit. The table below includes considerations when using this deployment method.

<p><b>System Performance</b></p>	<p>It is impossible to guarantee the scalability or performance of a N-able N-central server deployed on a Virtual Machine due to:</p> <ul style="list-style-type: none"> <li>▪ variability in field environments resulting from host server configurations,</li> <li>▪ the number of virtual guests run on the host server, and</li> <li>▪ the performance of the underlying host hardware.</li> </ul>
<p><b>Supportability</b></p>	<p>N-able supports N-able N-central software deployed on VMWare ESX/ESXi 6.0 or newer, Windows Server 2016 Hyper-V or newer LTS releases, Microsoft Azure and Amazon AWS EC2 in the same way that we support N-able N-central deployed on Bare Metal. This support is limited to the components (Software and Operating System) shipped with N-able N-central and does not include the troubleshooting of virtualization systems nor of performance issues related to environmental factors.</p>

	<p>N-able recommends reaching out to your hardware or virtualization vendor for support on the underlying virtualization and hardware components. Any assistance provided by N-able Support for virtualization or hardware issues is on a best-effort basis only. In the event of serious performance problems, we might ask you to migrate a virtualized N-able N-central system to a physical hardware deployment.</p>
<p><b>Virtual Hardware Support</b></p>	<p>In Windows Server 2016 Hyper-V or newer deployments, it is recommended to create a new Generation 2 VM. When configuring the VM virtual hardware, if you choose to enable <b>Secure Boot</b>, please select the <b>Microsoft UEFI Certificate Authority</b> template.</p> <p>For VMWare ESX/ESXi deployments, it is recommended to select the <b>Red Hat Enterprise Linux 7</b> guest OS template, then under the <b>Boot Options</b>, select the <b>UEFI Firmware</b>.</p>
<p><b>Network Adapters</b></p>	<p>N-able recommends using the VMXNET3 network card in VMWare. When the VM is configured as Red Hat Enterprise Linux 7, it will use VMXNET3 by default.</p> <p>Unless you are using Network Interface Bonding, N-able N-central requires only one (1) network adapter added to the VM configuration. Multiple network adapters that are not used in a bonding configuration can cause connectivity and licensing issues.</p>
<p><b>MAC Addresses</b></p>	<p>By default, most virtualization environments use a dynamically assigned MAC address for each virtual network card. As your N-able N-central license is generated in part by using the MAC address of its network card, it is required to use a statically assigned MAC address in order to avoid becoming de-licensed.</p>

## Recommended configuration for the virtualized server

 Although provisioning virtual disks as "thin" or "thick" results in nearly-identical performance, thick provisioning is recommended, particularly when more than 1,000 devices will be connected to your N-able N-central server.

- Assign the highest resource access priority to N-able N-central, as compared to other guest VMs.
- Do not over-provision resources (Memory, CPU, Disk) on the virtualization host. Over-provisioning these resources can cause memory swapping to disk, and other bottlenecks that can impact guest system performance.
- Ensure that the system has enough RAM and hard drive space to provide permanently allocated resources to the N-able N-central guest.

## Supported Software

### Browsers

N-able N-central supports the latest desktop versions of:

- Microsoft Edge®
- Mozilla Firefox®
- Google Chrome®
- Apple Safari®
- Mobile phone browsers are not supported.

### Remote Control

Remote control connections require the following software on the computers that initiate connections:

- .NET Framework 4.5.2 on Windows devices
- Oracle Java 1.8 versions that include Java Web Start

### Report Manager

To use Report Manager with N-able N-central, ensure that you upgrade to the latest version of Report Manager.

### Automation Manager

- .NET Framework 4.6
- PowerShell version 5.x is the minimum PowerShell version required to run automation manager:
  - PowerShell 5.x is backwards compatible with previous versions of PowerShell
  - You can run both PowerShell 5.x and 7.x on your endpoints, however Automation manager objects will depend on PowerShell 5.x and its backwards compatibility with previous versions.
  - Currently to-date, we do not have any objects that call PowerShell version 7.x

### Microsoft Azure - Managed Disks

To deploy N-able N-central to Azure with Managed Disks using the deployment script, you require PowerShell 7.x. See [Deployment script for Microsoft Azure - Managed Disks](#) for details.

### SNMP Community String

On HPE ProLiant Generation 9 or older Physical Servers, when monitoring the N-able N-central server using SNMP, the community string used for SNMP queries to the server must use `N-central_SNMP`, not `public`. SNMP is only enabled on HPE ProLiant Generation 9 or older Physical Servers. All other installs do not enable SNMP on the N-able N-central server.

## Supported Operating Systems

This section describes the supported operating systems for N-able N-central.

### Windows Agents:

- Microsoft .NET Framework 4.5.2 (or later)

### Windows Server 2022

- Windows Server 2022 Standard
- Windows Server 2022 Datacenter
- Windows Server 2022 Datacenter: Azure

### Windows Server 2019

- Windows Server 2019 Datacenter
- Windows Server 2019 Standard

### Windows Server 2016

- Windows Server 2016 Datacenter
- Windows Server 2016 Standard
- Windows Server 2016 Essentials
- Windows Storage Server 2016
- Windows Server 2016 MultiPoint Premium Server
- Microsoft Hyper-V Server 2016

### Windows Server 2012

- R2 Datacenter
- R2 Essentials
- R2 Foundation
- R2 Standard

### Windows 11

- Microsoft Windows 11 Enterprise & Professional
- Microsoft Windows 11 Education editions
- Microsoft Windows 11 Pro for Workstations

## Windows 10

- Microsoft Windows 10 Enterprise & Professional
- Microsoft Windows 10 Education editions
- Windows 10 Pro for Workstations

## macOS Agents

- 13.x (Ventura)
- 12.x (Monterey)
- 11.x (Big Sur)
- 10.15 (Catalina)
- 10.14 (Mojave)

## Linux Agents

Independent Agents are required for 64-bit Linux OS installations.

 The probe performs an SSH connection to a Linux device. To discover a Linux OS device, the device must have openssh installed.

- Red Hat Enterprise Linux/CentOS 8 (64-bit)
- Red Hat Enterprise Linux/CentOS 7 (64-bit)
- Ubuntu 22.04 LTS (64-bit)
- Ubuntu 20.04 LTS (64-bit)

## AV Defender

### Workstation Operating Systems

- Microsoft Windows 11
- Microsoft Windows 10
- Microsoft Windows 8, 8.1

### Tablet And Embedded Operating Systems

- Windows 10 IoT Enterprise
- Windows Embedded 8.1 Industry
- Windows Embedded 8 Standard
- Windows Embedded Enterprise 7
- Windows Embedded POSReady 7

- Windows Embedded Standard 7
- Windows Embedded Compact 7

## Server Operating Systems

- Microsoft Windows Server 2022
- Microsoft Windows Server 2019 Core
- Microsoft Windows Server 2019
- Microsoft Windows Server 2016
- Microsoft Windows Server 2016 Core
- Microsoft Windows Server 2012 R2
- Microsoft Windows Server 2012

 For Microsoft Windows Embedded Standard 7, TCP/IP, Filter Manager, and Windows Installer must all be enabled.

## Patch Manager

### Workstation Operating Systems

- Microsoft Windows 11
- Microsoft Windows 10 version 1607 and later
- Microsoft Windows 8.1
- Microsoft Windows 8
- Microsoft Windows 7

### Server Operating Systems

- Microsoft Windows Server 2022
- Microsoft Windows Server 2019
- Microsoft Windows Server 2016
- Microsoft Windows Server 2012 R2
- Microsoft Windows Server 2012

The following operating systems are not supported with N-able N-central patch manager:

- Home Editions of Windows Desktop Operating Systems

## Windows Update Agent

The minimum version of the Windows Update Agent (WUA) needs to be greater than 7.6.7600.320. The base NT build version of Windows should be 6.1 or later. Older versions of the base NT build cannot upgrade past version 7.6.7600.256 of the Windows Update Agent.

## Automation Manager

### Workstation Operating Systems

- Microsoft Windows 11
- Microsoft Windows 10 (32/64-bit)
- Microsoft Windows 8.1 (32/64-bit)
- Microsoft Windows 8 (32/64-bit)
- Microsoft Windows 7 (32/64-bit)

### Server Operating Systems

- Microsoft Windows Server 2022
- Microsoft Windows Server 2019
- Microsoft Windows Server 2016 (32/64-bit)
- Microsoft Windows Server 2012 R2 (32/64-bit)
- Microsoft Windows Server 2012 (32/64-bit)

## Disk Encryption Manager

Hyper-V Server 2012 R2	Hyper-V Server 2016
Windows 7 Enterprise	Windows 7 Home Premium
Windows 7 Professional	Windows 7 Ultimate
Windows 8 Enterprise	Windows 8 Pro
Windows 8 Pro with Media Center	Windows 8.1 Enterprise
Windows 8.1 Pro	Windows 8.1 Pro with Media Center
Windows 10 Education	Windows 10 Enterprise
Windows 10 Enterprise 2015 LTSC	Windows 10 Enterprise 2016 LTSC
Windows 10 Enterprise for Virtual Desktops	Windows 10 Enterprise LTSC 2019
Windows 10 Pro	Windows 10 Pro Education
Windows 10 Pro for Workstations	

Windows Server 2008 R2 Enterprise	Windows Server 2008 R2 Datacenter
Windows Server 2008 R2 Standard	Windows Server 2008 R2 Foundation
Windows Server 2012 Datacenter	Windows Server 2012 Essentials
Windows Server 2012 Foundation	Windows Server 2012 R2 Datacenter
Windows Server 2012 R2 Essentials	Windows Server 2012 R2 Foundation
Windows Server 2012 R2 Standard	Windows Server 2012 R2 Standard Evaluation
Windows Server 2012 Standard	
Windows Server 2016 Datacenter	Windows Server 2016 Datacenter Evaluation
Windows Server 2016 Essentials	Windows Server 2016 Standard
Windows Server 2016 Standard Evaluation	
Windows Server 2019 Datacenter	Windows Server 2019 Essentials
Windows Server 2019 Standard	Windows Server 2019 Standard Evaluation
Windows Server Datacenter	
Windows Small Business Server 2011 Essentials	Windows Small Business Server 2011 Standard



## Supported operating systems for remote control

The availability of remote control connections will vary depending on the operating systems of both the client and target devices. The table below outlines the operating systems and their compatibility with various remote control types.

Remote Control Type	Windows		Linux		macOS	
	Remote System	Technician	Remote System	Technician	Remote System	Technician
Custom	✓	✓	✓	✓	✓	✓
Take Control	✓	✓	✗	✗	✓	✓
Remote Desktop	✓	✓	✗	✗	✗	✓
SSH	✓	✓	✓	✓	✓	✓
Telnet	✓	✓	✓	✓	✓	✓
Web	✓	✓	✓	✓	✓	✓



# Licensing and Customer Support

## Agent/Probe Installation Software

N-able N-central 2023.5 uses the 7-Zip file archiver for installing agents and probes. 7-Zip is free software redistributed under the terms of the GNU Lesser General Public License as published by the Free Software Foundation. For more information, see <http://www.7-zip.org>.

## Customer Support

Contact N-able to activate your N-able N-central server.

<b>Web Page:</b>	<a href="http://www.n-able.com">http://www.n-able.com</a>
<b>Technical Support Self-Service Portal:</b>	<a href="https://success.n-able.com/">https://success.n-able.com/</a>
<b>Phone:</b>	Toll Free (U.S./CAN): 1-866-302-4689
	International: +800-6225-3000
	Local: (613) 592-6676, select option 2 for support



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### **About N-able**

N-able empowers managed services providers (MSPs) to help small and medium enterprises navigate the digital evolution. With a flexible technology platform and powerful integrations, we make it easy for MSPs to monitor, manage, and protect their end customer systems, data, and networks. Our growing portfolio of security, automation, and backup and recovery solutions is built for IT services management professionals. N-able simplifies complex ecosystems and enables customers to solve their most pressing challenges. We provide extensive, proactive support—through enriching partner programs, hands-on training, and growth resources—to help MSPs deliver exceptional value and achieve success at scale. For more information, visit [www.n-able.com](http://www.n-able.com).