



# N-central

## Release Notes

Version: 2023.6 (Build: 2023.6.0.9)

Last Updated: Wednesday, September 20, 2023



## What's New in N-able N-central 2023.6

N-central 2023.6 is focused on usability fixes. We've added a new notification template variable for including your customized UI port in notifications, the agent/probe overview report now properly shows the correct version of Mac agents, and we've added filtering for DNSFilter Standalone. Plus, we've added a copy button next to the device name when you've drilled into a device, to make getting the name into your clipboard as simple as possible!

### New Automation Manager version!

Automation Manager 2.91 is included in N-central 2023.6. In this version, Automation Manager has added in Pendo. N-central has been using Pendo since version 2022.2 to provide telemetry and some User Interface enhancements. In Automation Manager, Pendo is used to gather telemetry from every Windows agent that is running an AMP-based monitoring service or scheduled task. This telemetry is sent once per day to <https://app.pendo.io> for aggregation. If you do not wish to provide this telemetry, please contact Support, and they will provide an AMP that can be run against the devices to stop the data submission.

The data gathered via Pendo will help us identify the most commonly used objects, so that we can improve their performance. The first phase of these performance gains will be realized by converting some objects to execute using GO rather than Powershell. In Automation Manager 2.91, the Get OS Architecture object has been converted to GO. This object is executed by the am-runner binary now included when your Windows agents are installed.

Other changes in AM 2.91:

- Automation Manager's certificate handling is now fully OCSP compliant.
- Automation Manager Designer logs will rotate properly now.

### Device Management for Apple Improvements!

As N-central continues adding capabilities to help you manage Macs in your environments, 2023.6 comes with a great new feature. Apple Remote Command Line + File Transfer! Use this to connect to your apple workstations and send commands to the Terminal or transfer files from your local device to the target device. This feature looks similar to the command prompt and file transfer tools for our Windows agents, but leverages Take Control to create the connection and provide the user interface.

### And even more!

**DNSF Integrated:** Messaging has been added to DNSF Integrated as a reminder to point networks back to a public resolver when deactivating DNSF so end users do not lose their Internet access.

**Intune:** Site level support has been added. Devices can now be imported at the Site or Customer level. Once imported, moving devices from Customer to Site level is also now supported.

## Upgrade paths and notes

- IMPORTANT:** For those that have a Custom (OpenID Connect) SSO configuration, a change was made in 2023.6 that requires a modification to the configuration when you upgrade. This change could impact your user's ability to log into N-central! For more information, please read the following [KB article](#).

## Upgrade versions

To upgrade to N-able N-central 2023.6, 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
- N-able N-central 2023.5.0.12
- N-able N-central 2023.6.0.9

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

- i** 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 2023.6 GA

| Category           | Description  | Item    |
|--------------------|--|---------|
| Automation Manager | PendoLog - Scheduled Task on hosts without Engine pointing to C:\Program Files (x86)\N-able Technologies\AutomationManager\X.XX.X.X\AutomationManager.PendoLogUploader.exe | AM-3716 |
| Automation Manager | PendoLog exception - Could not find a part of the path 'C:\ProgramData\N-Able Technologies\AutomationManager\Logs'   | AM-3715 |
| Automation Manager | PendoLog exception - Pendo next schedule check exception. The system cannot find the file specified.   | AM-3714 |
| Automation Manager | Update ActivityObject.tt   | AM-3698 |
| Automation Manager | PolicyExecutionEngine.dll.config log rotation - 0kb log files presence issue   | AM-3686 |
| Automation Manager | am-runner first release 0.0.1  | AM-3685 |
| Automation Manager | Pendo amend upload procedure   | AM-3684 |
| Automation Manager | Update AM Assembly List On Jenkins And Test NC/RMM Updates   | AM-3469 |
| Automation Manager | Integrate "PendoManager" Into The Existing AM Architecture   | AM-3468 |
| Automation Manager | Create Console Application "PendoManager" To Filter And Upload Logs To Pendo   | AM-3467 |
| Automation Manager | Create Special Module Name "PendoLog" Into The Existing AM Logs  | AM-3466 |
| Automation Manager | AM policy is crashed   | AM-3385 |
| Automation Manager | Revise the devices' Get Capabilities method by removing or adding new PS module installation checks  | AM-3384 |
| Automation Manager | PolicyExecutionEngine.dll.config log rotation needed   | AM-3365 |
| Automation Manager | Copy File Object revision - new behavior introduced under 2.90.0.1   | AM-3364 |
| Automation Manager | Run Policy Object Policy Name:* window opens as many times it was clicked  | AM-3310 |



|                    |  |             |
|--------------------|--|-------------|
| Automation Manager | Run Policy Object generates a System.ArgumentNullException   | AM-3309     |
| Automation Manager | Error 201 Failed to stop execution of automation policy  | AM-3297     |
| Automation Manager | TLS Certificate OCSP and CRL validation required   | AM-3270     |
| Automation Manager | Automation Manager   | AM-3268     |
| Automation Manager | Update Links to training videos  | AM-3161     |
| Automation Manager | AM Object - SetRegistryValue should not display incorrect reason for an error  | AM-3069     |
| Automation Manager | Prompts not working from RMM under admin account   | AM-3043     |
| Automation Manager | Get Windows Events for Security should show audit success/ failure as entry type   | AM-2978     |
| Automation Manager | Add reset functionality to branding settings   | AM-2977     |
| Automation Manager | DNS Zones List / Set DNS Scavenging - Shows Result 1 with no error /explanation message                                      | AM-2693     |
| Automation Manager | AM - Potential ReDos - remove unnecessary regex-like string from log   | AM-2570     |
| Core               | CSR Generation Mixes up "Organization Unit" and "Email"  | NCCF-126316 |
| Core               | Cloud Commander Role Permissions Options are Disabled  | NCCF-108107 |
| Core               | DFM files are deleted causing missed records upon Data Export  | NCCF-106807 |
| Core               | "Backup Windows Event Log" Automation Policy generates a System Error  | NCCF-94381  |
| Core               | Linux agent installation script stops to go through address list defined in activation key when alien n-central FQDN is met. | NCCF-94197  |
| Core               | New Friendly Password Reset Message Does Not Match Password Complexity   | NCCF-92397  |
| Core               | New Notification Template Tag: Custom UI Port  | NCCF-83792  |
| Core               | Update filtering to include DNSFilter Standalone   | NCCF-82415  |

|                     |  |            |
|---------------------|--|------------|
| Core                | 'envoy_proxy_UI.log' Not Configured For Log Rotation   | NCCF-81833 |
| Core                | Agent Probe Overview Report Showing Wrong Agent Version For Mac  | NCCF-73595 |
| Core                | UI Doubling AMP UID JSP Pointers   | NCCF-72129 |
| Core                | Deprecated Feature 'Network' Still Listed in the UI  | NCCF-68485 |
| Core                | Hide Custom Services from use on a Mac   | NCCF-66230 |
| Core                | Failed Agent installation on 2 Linux servers   | NCCF-32511 |
| Core                | Take Control role permission does not limit the use of Take Control  | NCCF-22910 |
| Core                | N-central Backup download request are killed after 5 minutes   | NCCF-17591 |
| Core                | Custom Service monitoring evaluation is incorrect  | NCCF-17319 |
| Core                | The TTL and RTT Values in the Connectivity Service Are Affected When There Is Packet Loss                  | NCCF-17318 |
| Core                | Navigation Scroll bar is not visible on Firefox 87.0 on new N-central theme                                | NCCF-16148 |
| Core                | Allow The Device Name To Be Copied From The Device-Level Header  | NCCF-15072 |
| Core                | Attention alert for agent is shown in install wizard for probe   | NCCF-13246 |
| Core                | Services can be added to Service Template with empty 'Scan Interval' field                                 | NCCF-9794  |
| Ecosystem Framework | Add Messaging to Avoid Internet Loss when Deactivating DNSF  | INT-1250   |
| Ecosystem Framework | When a profile is assigned to a device, in Intune there's no indication that it is assigned to that device | INTUNE-313 |
| Ecosystem Framework | Intune should check for setup completed task for the parent, instead of site level setup-completed.        | INTUNE-213 |
| Ecosystem Framework | Dnsf sync job does not work properly if any other integrations are activated                               | INT-1259   |
| Ecosystem Framework | Dnsf cleanup job does not work properly if any other integrations are activated                            | INT-1258   |

|                     |  |           |
|---------------------|--|-----------|
| Ecosystem Framework | ECO_DNSFILTER_SEC missing sometimes from "configtype" table          | INT-1166  |
| Ecosystem Framework | NC agent to uninstall Eco agent based on device UUID (not Publisher) | KUIP-4263 |
| Ecosystem Framework | Update N-central Ecosystem Grpc Service to latest version            | KUIP-5020 |
| Ecosystem Framework | Incorrect logging usage, causes excessive logging to journalctl      | KUIP-3453 |





## 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<br><br>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 a blank screen, or displaying an Anaconda Installer screen with an error message about the video card driver. | NCCF11842 |
| HDM does not work with the "Last 5 Tickets" widget.  | NCCF10855 |

### 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       |
|---|-----------|
| Login window reappears when new tab is loaded.<br><br>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. | NCCF29648 |

## End of support

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

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 32-bit 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 Bit-defender 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 <a href="#">online help for Security Manager</a> 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.

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 |
| 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 NVMeS. 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   |
| Maximum physical disk size (UEFI) | 50TB  |
| Required minimum memory           | 4GB for 4 or fewer logical CPUs<br>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.



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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.

|                                 |   |
|---------------------------------|---|
| <b>System Performance</b>       | <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>   |
| <b>Supportability</b>           | <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> |
| <b>Virtual Hardware Support</b> | <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>  |

|                         |  |
|-------------------------|--|
|                         | 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> .   |
| <b>Network Adapters</b> | <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> |
| <b>MAC Addresses</b>    | 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.   |

## 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)
- Debian 11 (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 2023.6 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://me.n-able.com/">https://me.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).