



N-central

Release Notes

Version: 2022.1 Build: 2022.1.0.51

Last Updated: Tuesday, January 25, 2022





What's New in N-able N-central 2022.1

Automation Manager 2.19 - making Automation Better!

N-central 2022.1 includes v2.19 of Automation Manager, and there are a lot of really great changes in this release!

- Several new objects, for interacting with files in Microsoft Azure environments, have been added. All of the objects can be found under the new MS Azure category:
 - Install Azure PowerShell Module
 - Create Blob Storage Container
 - Upload File To Blob Storage
 - Download File From Blob Storage
- A new **Get File Name and Path Info** object has been added, and can be found under the File Management category
- The **Input Prompt** object now allows the Body field to be linked to the output of other objects.
- The **If/Else** object can now check for NULL values.
- Error handling within the **Run PowerShell** object has been improved to mirror how PowerShell error handling works on Windows.
- When uploading a new version of an existing AMP to N-central, you're now able to choose whether the existing AMP should be overwritten, or if a new AMP should be created.
- v2.19 of Automation Manager also addresses several bugs; please see the Fixed Bugs list for details.

Component Updates

N-central is built on several 3rd-party components, and as part of our ongoing maintenance of the product, we've updated a number of those components to take advantage of the latest bug fixes and security updates:

Component	Version
APCUPSd	3.14.14-18
CentOS	7-9.2009.1.el7
Envoy	1.15.0.p0.g50ef094-1p67.g2aa564b
HP-Health	10.93-307.7
HyperV-Tools	0-0.34.20180415git
Jetty	9.4.44.v20210927-40
Linux Kernel	3.10.0-1160.45.1
NATS Streaming Server	0.17.0-1




NodeJS	6.17.1-1
Openfire	4.2.4-2
OpenJDK	1.8.0.312.b07-1
OpenSSH	7.4p1-21
OpenSSL	1.0.2k-22
Open-VM-Tools	11.0.5-3
PostgreSQL	10.19
WALinuxAgent	2.2.46-2

Upgrade paths and notes

To upgrade to N-able N-central 2022.1, your N-able N-central server must be running one of the following versions:

- N-able N-central 2021.1.0.32+
- N-able N-central 2021.1.1.305
- N-able N-central 2021.1.2.391
- N-able N-central 2021.1.3.428
- N-able N-central 2021.1.4.467+
- N-able N-central 2021.1.5.526+
- N-able N-central 2021.1.6.727+
- N-able N-central 2021.1.7.830+
- N-able N-central 2021.1.8.881
- N-able N-central 2021.2.0.140+
- N-able N-central 2021.2.0.146+
- N-able N-central 2021.3.0.79+
- N-able N-central 2022.1.0.47+
- N-able N-central 2022.1.0.49+

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

 Scheduled 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 restart of the device is pending.



Fixed Issues in N-able N-central

Release 2022.1 RC2

Category	Description	Bug
Core	Modifying The NTP Server Used By N-central Isn't Saved In The 2022.1 RC1 Build	NCCF-20683
Core	The 2022.1 RC1 Build Includes The Wrong Version Of the Automation Manager Designer	NCCF-20682

Release 2022.1 RC1

Category	Description	Bug
Automation Manager	AMP Based Monitoring timing out	AM-2778
Automation Manager	The AutomationManager.ScriptRunner64.exe process Isn't Killed After Timing Out	AM-2660
Automation Manager	The "Get Guest Tools Status VMWare VM" Object Outputs The Error "An Invalid cast has occurred: Object must implement IConvertible"	AM-2658
Automation Manager	The "Windows UAC Status" Service Incorrectly Shows That UAC Is Still Enabled	AM-2653
Automation Manager	Prompt dialog with options on EditIUpload policy to NC	AM-2644
Automation Manager	The "Remove Local Profiles" Object Throws A "Could not load file or assembly" Error Message	AM-2562
Automation Manager	The "Get Logged On Users" Object Returns An Empty String	AM-2558
Automation Manager	The Values Of Password Fields Are Shown In The Windows Event Log When Script Block Logging Is Enabled	AM-2528
Automation Manager	The "Download File From URL" Object Fails To Download Content From Sharepoint	AM-2634
Automation Manager	Automation Manager password handling	AM-2567
Automation Manager	Office 365 Get Mailbox Folder Statistics does not return any output	AM-2561
Automation Manager	Misconfigured custom service after update	AM-2553
Automation Manager	Result of "Get OS Architecture" shows different result	AM-2552



Category	Description	Bug
Automation Manager	The "Format String" Object Prefixes Its Output With An Unknown Character	AM-2546
Automation Manager	Enable/Disable UAC amp not working	AM-2535
Automation Manager	The "Top Half" of the AM Window Buttons (Minimize/Maximize/Close) Aren't Clickable	AM-2385
Automation Manager	After Resizing The "Run Powershell Script" Object The OK/Cancel Button Are Not Visible	AM-2454
Automation Manager	The Hyper-V "Get All Snapshot Information" Object Throws An Unhandled Exception	AM-2498
Automation Manager	The "Get VM Storage Paths" Throws An "Unable to cast object of type" Error	AM-2501
Automation Manager	Unable To Edit Saved Global Variables	AM-2613
Core	Deadlock on appliancetask table around runModifyLogic with RuleModify	NCCF-18030
Core	Backup process failing to wait on FTP transfer due to reduced timeout	NCCF-17827
Core	System Error When Creating A Service Template From The Monitoring Tab Of A Device	NCCF-17310
Core	PSA Export Profiles: The "Last Export Result" Isn't Updating When The Device Export Criteria Is Changed	NCCF-14913
Core	Unable Create or Edit Service Templates That Have The Same Windows Service Instance Name	NCCF-14567
Core	The Domain User Management Page Takes A Long Time To Load Large Domains	NCCF-13591
Core	The macOS Agent Crashes Due To Improper Thread Management When Modifying The Agent's Configuration Settings	NCCF-18745
Ecosystem	If N-central does not have external internet access, UI doesn't load beacuse sis.n-able.com cannot be reached	KUIP-2269



Known Limitations

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.

Active Issues

Description	Bug
When exporting a large list of Active Issues items to PDF format at either the System or Service Organization level, the server may fail. Exporting to CSV format does not cause this problem.	62860

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 " <i>KBA20020: Configuring A Server With Multiple NICs</i> " in the online Help.	67778

Automation Manager

Description	Bug
Running Automation Manager Policies created using Automation Manager 1.6 or earlier may result in <code>Failed to create an EndDate ... errors</code> 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

AV Defender and Backup Manager – D2D

Description	Bug
The About Backup Manager dialog box no longer indicates if the Backup Manager software is licensed.	68226

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 <code>c#/.</code> 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
<p>Installing N-able N-central on Servers that have an Nvidia Video Card</p> <p>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.</p>	NCCF-11842
HDM doesn't not work with the "Last 5 Tickets" widget.	NCCF-10855
Warranty information might be inaccurate when determining the warranty expiry dates of devices that are not located in the USA.	NCCF-3649
URL with embedded username and password prompts for Java upgrade, logging in manually does not prompt.	NCCF-2415
<p>Chrome 42.x does not support NPAPI plugins which means that Java and Direct Connect will not function with that browser version. When attempting to open remote control connections in Chrome 42.x, users will be repeatedly prompted to install either Java or the NTRglobal plugin with no successful connections made.</p> <p>To resolve this issue, perform the following:</p> <ol style="list-style-type: none"> 1. In the Chrome address bar, type <code>chrome://flags/</code>. 2. Under Enable NPAPI, click Enable. 3. Restart Chrome. 	73359

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
<p>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.</p>	65620

UI

Description	Bug
<p>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.</p>	68149
<p>Some N-central user accounts, who are associated with the Default Administrator Role may be unable to edit other, custom Roles in the system. This is a known issue introduced in the 2021.2 release, and will be addressed in an upcoming version of N-central.</p>	NCCF-18910
<p>The main N-central login page will fail to load when accessed from the Safari web browser. To work around this issue, please use a supported browser, such as Chrome, Edge or Firefox, or access N-central via <code>https://<yourNCserver.com>/login</code>.</p>	NCCF-19768

End of support

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

Linux Agent Support	Due to declining usage in the field, the N-able N-central Linux agents will stop supporting CentOS 6, Ubuntu 14.04 and the 32-bit version of Ubuntu 16.04, in a future release.
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.
Windows 8.1/Windows Server 2012 R2	<p>As older Windows Server and Desktop Operating Systems transition into Microsoft's Extended Support Phase and beyond, they are no longer receiving OS level TLS version and cipher updates (SCHANNEL). As the .NET Framework relies on SCHANNEL for TLS based communications, and as newer vulnerabilities are discovered in the ciphers available to these older Operating Systems, the available Strong Cipher list for these devices continues to shrink. We continually review the ciphers used by N-central's Modern Security Profile, to ensure we offer only secure ciphers. At this time, there are only two (2) secure RSA key based ciphers available to Windows Server 2012 R2/Windows 8.1 and older. N-central will endeavor to support these two ciphers in our Modern Security profile for as long as they remain secure, but there may come a time where we will need to drop Official support for these Windows versions before the end of their Extended Support Phase. If/when this does occur, they will still be able to connect if you switch to the Legacy Security Profile, but this will reduce the security of all devices connecting to your N-central server.</p> <p>If you monitor Windows Server 2003/2008/Windows XP/Vista devices, we would like to advise you that we will be dropping support for the "TLS_RSA_WITH_3DES_EDE_CBC_SHA" cipher</p>

	<p>in a future release. Coming changes to the web front end that will support TLS 1.3, have been identified as also disabling "TLS_RSA_WITH_3DES_EDE_CBC_SHA" due to the required version of OpenSSL. Fully patched Windows Server 2008/Vista devices <i>should</i> be able to connect to N-central on the Legacy Security profile, using one of the newer, but still weak ciphers. Windows Server 2003/XP will no longer be able to communicate over TLS/HTTPS at that time (using a site-to-site VPN between your firewall devices, and connecting over HTTP may still work).</p>
32-bit versions of the Windows, Linux and macOS operating systems	<p>The number of 32-bit Operating Systems monitored by N-central has continued to drop over the past few years. Windows Agents/Probes have historically been 32-bit, with some 64-bit specific components. In a future release, we intend to convert the Agent and Probe code base to be a native 64-bit application; this will mean a hard deprecation of support for 32-bit Windows versions. N-central's Linux and macOS agents will follow a similar path.</p>



N-able N-central 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.

Processor	Server class x86_64 CPUs manufactured by Intel or AMD (i.e. Xeon or EPYC). Please refer to the Red Hat Hardware Ecosystem for further details.
Operating System	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.
Physical Hardware	<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 7.7 (x64) by Red Hat, or the hardware vendor, without any additional drivers. Please check the Red Hat Hardware Ecosystem 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's 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.

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



Number of Devices	CPU Cores	Memory	Storage
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
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



Subsystem	Limit
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 7.7 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 not Supported.

N-able N-central installed on a virtual machine running on a Desktop Operating System (such as Hyper-V on Windows 10, 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 currently 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.

System Performance	<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"> ▪ variability in field environments resulting from host server configurations, ▪ the number of virtual guests run on the host server, and ▪ the performance of the underlying host hardware.
Supportability	<p>N-able supports N-able N-central software deployed on VMWare ESX/ESXi 6.0 or newer, Windows Server 2012 R2 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>

Virtual Hardware Support	<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 Secure Boot, please select the Microsoft UEFI Certificate Authority template.</p> <p>For VMWare ESX/ESXi deployments, it is recommended to select the Red Hat Enterprise Linux 7 guest OS template, then under the Boot Options, select the UEFI Firmware.</p>
Network Adapters	<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>
MAC Addresses	<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 causes 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 versions of:

- Internet Explorer®
- Microsoft Edge®
- Mozilla Firefox®
- Desktop versions Google Chrome®. Mobile phone browsers are not supported.

N-able N-central is not supported on Internet Explorer in Compatibility View mode.



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 the you upgrade to the latest version of Report Manager.

Automation Manager

Automation Manager requires .NET Framework 4.5.2 and PowerShell 3.0 to run AMP-based services with N-able N-central.

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
- Datacenter 64-bit Edition
- Essentials 64-bit Edition
- Foundation 64-bit Edition
- Standard 64-bit Edition
- Microsoft Hyper-V Server 2012
- Microsoft Hyper-V Server 2012 R2
- Storage Server 2012 Enterprise 64-bit Edition
- Storage Server 2012 Express 64-bit Edition
- Storage Server 2012 Standard 64-bit Edition
- Storage Server 2012 Workgroup 64-bit Edition

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

Windows 8 and 8.1

- 8.1 Enterprise
- 8.1 Professional
- 8 Enterprise
- 8 Professional

Windows 7

- Microsoft Windows 7 Enterprise & Professional
- Microsoft Windows 7 Ultimate

macOS Agents

- 12.0 (Monterey)
- 11.0 (Big Sur)
- 10.15 (Catalina)
- 10.14 (Mojave)
- 10.13 (High Sierra)
- 10.12 (Sierra)

Linux Agents

Independent Agents are required for 32-bit and 64-bit Linux OS installations.

💡 The probe performs an SSH connection a Linux device. To discover a Ubuntu/Debian OS device, the device must have openssh installed.

- Red Hat Enterprise Linux/CentOS 8 (64-bit)
- Red Hat Enterprise Linux/CentOS 7 (x86_64 and i686)
- Red Hat Enterprise Linux/CentOS 6 (x86_64 and i686)
- Ubuntu 18.04 "Bionic Beaver" (x86_64)
- Ubuntu 16.04 "Xenial Xerus" (x86_64 and i686)
- Debian 8.7/Ubuntu 14.04 "Trusty Tahr" (x86_64 and i686)

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 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 2012

Server Operating Systems

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

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

- Microsoft Windows XP
- Microsoft Windows Vista
- Microsoft Windows 10 Home Edition
- Microsoft Windows Server 2003
- Microsoft Windows Server 2008
- Microsoft Windows 11 Home Edition (Monitoring status is supported)



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 LTSB	Windows 10 Enterprise 2016 LTSB
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

Port access requirements

N-central Server

Access must be permitted to the following ports:

Port Number	Port Location				Description
	N-able N-central Server		Managed Device		
	Inbound	Outbound	Inbound	Outbound	
20		√			Used for FTP connections, particularly when configured for backups.
21		√			Used for FTP connections, particularly when configured for backups.
22	√			√	SSH - used for remote control sessions. The firewall must be configured to allow access from the Internet to this port on the N-able N-central server.
25		√			SMTP - used for sending mail.
53		√			Used for DNS.
80	√	√		√	HTTP - used for communication between the N-able N-central UI and agents or probes (including MSP Connect and MSP Anywhere). The firewall must be configured to allow access from the Internet to this port on the N-able N-central server.

Port Number	Port Location				Description
	N-able N-central Server		Managed Device		
	Inbound	Outbound	Inbound	Outbound	
					<p>This port must also be open for outbound traffic if the N-able N-central server is monitoring the HTTP service on a managed device.</p> <div style="border: 1px solid #0070C0; padding: 5px; margin-top: 10px;"> <p>i Inbound access to port 80 on the N-able N-central server can be blocked provided that all Agents are configured to use HTTPS and the N-able N-central server is accessed over port 443 using HTTPS.</p> </div>
123		√			<p>Used by the NTP Date service which keeps the server clock synchronized. Normally using UDP (although some servers can use TCP).</p>
135			√		<p>Used by Agents and Probes for WMI queries to monitor various services.</p> <div style="border: 1px solid #0070C0; padding: 5px; margin-top: 10px;"> <p>i Inbound from the Windows Probe to the Windows Agent.</p> </div>
139			√		<p>Used by Agents and Probes for WMI queries to monitor various services.</p> <div style="border: 1px solid #0070C0; padding: 5px; margin-top: 10px;"> <p>i Inbound from the Windows Probe to the Windows Agent.</p> </div>

Port Number	Port Location				Description
	N-able N-central Server		Managed Device		
	Inbound	Outbound	Inbound	Outbound	
443	√	√		√	<p>HTTPS - used for communication between the N-able N-central UI and Agents or Probes (including MSP Connect and MSP Anywhere).</p> <p>Port 443 is the TCP port needed for SSL (HTTPS) connections. The firewall must be configured to allow access from the Internet to this port on the N-able N-central server.</p> <p>This port must also be open for outbound traffic if the N-able N-central server is monitoring the HTTPS service on a managed device.</p> <p>Backup Manager relies on Port 443 TCP outbound. It is almost always open on workstations but may be closed on servers. This port must be open for outbound traffic on the N-able N-central server.</p> <p>Used by Agents and Probes for XMPP traffic. Outbound access to port 443 for Managed Devices is recommended but not required.</p>

Port Number	Port Location				Description
	N-able N-central Server		Managed Device		
	Inbound	Outbound	Inbound	Outbound	
					<p>To activate EDR the N-able N-central server needs outbound HTTPS access to port 443 and the following domains:</p> <ul style="list-style-type: none"> ▪ *.sentinelone.net ▪ sis.n-able.com ▪ keybox.solarwindsmsp.com
445			√		Used by Agents and Probes for WMI queries to monitor various services.
1234		√			Used by MSP Connect in UDP mode.
1235		√			
1433		*	*		<p>Outbound on the N-able N-central server, port 1433 is used by Report Manager for data export. On managed devices, it is also used by Agents (inbound) and Probes (outbound) to monitor Backup Exec jobs.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>i Inbound from the local LAN and not the Internet.</p> </div>
<p>* Port access is only required if you have installed the corresponding product. For example, access to port 1433 is only required if you have installed Report Manager or if you are managing Backup Exec jobs.</p>					

Port Number	Port Location				Description
	N-able N-central Server		Managed Device		
	Inbound	Outbound	Inbound	Outbound	
5000		√			Backup Manager will use local port 5000. If this port is unavailable, Backup Manager will detect a free port automatically (starting from 5001, 5002 and up).
5280	√			√	Used by Agents and Probes for XMPP traffic. Outbound access to port 5280 for Managed Devices is recommended but not required.
8014			√		Backup Manager requires access to port 8014. This value cannot be modified. <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p>i Inbound from the local LAN and not the Internet.</p> </div>

Table Cell Outside Table: 8800

	√			<p>The Feature Flag System in N-able N-central needs to talk to <code>mtls.api.featureflags.prd.sharedsvcs.system-monitor.com</code>.</p> <p>Used by N-able – generally during Early Access Preview and Release Candidate testing – to enable and disable features within N-able N-central.</p>
--	---	--	--	---

Port Number	Port Location				Description
	N-able N-central Server		Managed Device		
	Inbound	Outbound	Inbound	Outbound	
10000	√				<p>HTTPS - used for access to the N-able N-central Administration Console (NAC). The firewall must be configured to allow access from the Internet to this port on the N-able N-central server.</p> <p>N-able recommends excluding all other inbound traffic to port 10000 except from N-able Ports for Support section below.</p>
10004			√	√	<p>N-able N-central Agents must be able to communicate with a Probe on the network over port 10004 in order for Probe caching of software updates to function properly.</p> <div style="border: 1px solid #0070C0; padding: 5px; margin-top: 10px;"> <p>i Inbound from the local LAN and not the Internet.</p> </div>
15000			√	√	<p>For downloading software patches, port 15000 must be accessible for inbound traffic on the Probe device while it must be accessible for outbound traffic on devices with Agents.</p>

Port Number	Port Location				Description
	N-able N-central Server		Managed Device		
	Inbound	Outbound	Inbound	Outbound	
					<div style="border: 1px solid #0070C0; padding: 5px;"> <p>i Inbound from the local LAN and not the Internet.</p> </div>

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 2022.1 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.

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



© 2022 N-able Solutions ULC and N-able Technologies Ltd. All rights reserved.

This document may not be reproduced by any means nor modified, decompiled, disassembled, published or distributed, in whole or in part, or translated to any electronic medium or other means without the prior written consent of N-able. All right, title, and interest in and to the software, services, and documentation are and shall remain the exclusive property of N-able, its affiliates, and/or its respective licensors.

N-ABLE DISCLAIMS ALL WARRANTIES, CONDITIONS, OR OTHER TERMS, EXPRESS OR IMPLIED, STATUTORY OR OTHERWISE, ON THE DOCUMENTATION, INCLUDING WITHOUT LIMITATION NONINFRINGEMENT, ACCURACY, COMPLETENESS, OR USEFULNESS OF ANY INFORMATION CONTAINED HEREIN. IN NO EVENT SHALL N-ABLE, ITS SUPPLIERS, NOR ITS LICENSORS BE LIABLE FOR ANY DAMAGES, WHETHER ARISING IN TORT, CONTRACT OR ANY OTHER LEGAL THEORY, EVEN IF N-ABLE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

The N-ABLE, N-CENTRAL, and other N-able trademarks and logos are the exclusive property of N-able Solutions ULC and N-able Technologies Ltd. and may be common law marks, are registered, or are pending registration with the U.S. Patent and Trademark Office and with other countries. All other trademarks mentioned herein are used for identification purposes only and are trademarks (and may be registered trademarks) of their respective companies.

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.