N-ABLE™

N-central

Release Notes

Version 2021.2 Build: 2021.2.0.146

Last Updated: Wednesday, November 17, 2021

What's New in N-able N-central 2021.2

Enhanced Windows OS Support

Windows 11 and Windows Server 2022 are the latest versions of Microsoft's consumer and server-class operating systems, and N-central 2021.2 offers full support for both. Whether you are using the Tools menu, applying monitoring, or deploying an agent, N-central 2021.2 has your back!

Updates to N-central's Security Profiles

Changes to the Modern Security Profile

As part of our continued efforts to secure N-central's default security posture, the Modern security profile now only supports the TLS_RSA_WITH_AES_256_GCM_SHA384 and TLS_RSA_WITH_AES_128_GCM_SHA256 ciphers - it no longer supports the TLS_DHE_RSA_WITH_AES_256_GCM_SHA384 and TLS_DHE_RSA_WITH_AES_128_GCM_SHA256 ciphers. This means that agents on older versions of the Windows operating system, such as Windows Server 2012 R2, will no longer be able to communicate with an N-central server that is configured to use the Modern security profile. If you are using N-central to manage Windows devices with those operating systems, please plan to switch your N-central server to use the Compatibility profile so that the agents on those devices can continue to communicate with your N-central server.

Introducing The Compatibility Security Profile

Earlier versions of N-central offered you two choices of security profiles - the Legacy profile, which allows you to support older operating systems, but does so by allowing older versions of TLS and ciphers, and the Modern Profile, which supports a much tighter list of TLS versions and ciphers. N-central 2021.2 introduces a new "Compatibility" security profile that sits between those two existing options - allowing you to still support older operating systems, such as Windows Server 2012 R2, but without allowing TLS 1.1 or 1.0. The Compatibility security profile supports the following ciphers:

- TLS_ECDHE_RSA_WITH_AES_256_GCM_SHA384
- TLS_ECDHE_RSA_WITH_AES_128_GCM_SHA256
- TLS_RSA_WITH_AES_256_GCM_SHA384
- TLS_RSA_WITH_AES_128_GCM_SHA256

N-able strongly recommends that you choose between either the Compatibility or Modern security profile; in a future release of N-central the Legacy security profile will be deprecated.

Changes to the Legacy Security Profile

The Legacy security profile has also been updated; support for the following list of ciphers has been removed:

TLS 1.2

- TLS_DHE_RSA_WITH_AES_256_GCM_SHA384
- TLS_DHE_RSA_WITH_AES_128_GCM_SHA256

- TLS_ECDHE_RSA_WITH_AES_256_CBC_SHA384
- TLS_DHE_RSA_WITH_AES_256_CBC_SHA256
- TLS_DHE_RSA_WITH_AES_256_CBC_SHA
- TLS_ECDHE_RSA_WITH_AES_128_CBC_SHA256
- TLS_DHE_RSA_WITH_AES_128_CBC_SHA256
- TLS_DHE_RSA_WITH_AES_128_CBC_SHA
- TLS_RSA_WITH_AES_256_CBC_SHA256
- TLS_RSA_WITH_AES_128_CBC_SHA256

TLS 1.1

- TLS_DHE_RSA_WITH_AES_256_CBC_SHA
- TLS_DHE_RSA_WITH_AES_128_CBC_SHA

TLS 1.0

- TLS_DHE_RSA_WITH_AES_256_CBC_SHA
- TLS_DHE_RSA_WITH_AES_128_CBC_SHA

Security Improvements To User and Role Creation

- The ability to manage Access Groups and Roles are now controlled with separate permissions. The Default Administrator role has been updated to have both of those new permissions set to Manage.
- User accounts that can create other users accounts are now restricted to only add permissions to other accounts that match their own permissions or lower level of permissions. When a user in that scenario edits or creates a role, they will only be able to modify the permissions that they have been granted. When that user creates another user account, they will only be able to assign roles to that user account that are equal to or lesser permissions.

But Wait, There's More!

- The workflow around a user changing their own password has been optimized:
  - N-central now asks the user to put in their current password as well as their new password.
  - If that user has MFA enabled on their account, they will also need to enter their MFA code in order to change their password.
  - The user will receive a "Password Reset Notification" e-mail to confirm that the change was made.
- N-able no longer provides VHD images for N-central, starting with 2021.2 - we recommend that you use our PowerShell deployment script to install N-central in your Azure environment

Upgrade paths and notes

To upgrade to 2021.2, your N-able N-central server must be running one of the following versions:

- N-able N-central 12.3.0.241 – 850
- N-able N-central 2020.1.0.202
- N-able N-central 2020.1.1.273
- N-able N-central 2020.1.2.326
- N-able N-central 2020.1.3.381
- N-able N-central 2020.1.4.402
- N-able N-central 2020.1.5.411+
- N-able N-central 2020.1.6.478
- N-able N-central 2020.1.7.533
- N-able N-central 2020.2.0.140+
- 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+

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

> ℹ 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 re-start of the device is pending.

Fixed Issues in N-able N-central

Release 2021.2

Category	Description	Bug
Core	Load Times for Dashboards Negatively Affected When Multiple Filters Are Applied	NCCF-15010
Core	The "Restart Windows Service By Name" Self-Healing Action Shows That No Windows Services Are Available	NCCF-14912
Core	Notification Profiles Are Creating Tickets For A Service That Isn't Targeted By The Notification Trigger	NCCF-14750
Core	Weak Input Validation In Dashboard URLs	NCCF-14739
Core	A User's 2FA Secret Could Be Exposed In Some System Error Server Responses. For more information, please refer to https://success.n-able.com/forum-post/X0D51T000092LOGjSAO/	NCCF-14736
Monitoring	The "Windows UAC Status" Service Incorrectly Shows That UAC Is Still Enabled	AM-2653
Monitoring	The "F-Secure AV Scan Results" Service Doesn't Work With Newer Versions of F-Secure	AM-2651

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 *"KBA20020: Configuring A Server With Multiple NICs"* 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

AV Defender and Backup Manager – D2D

Description	Bug
Custom Settings option no longer available in 10 for backup profiles.	NSBM-709
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 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 a blank screen, or displaying an Anaconda Installer screen with an error message about the video card driver.	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
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. To resolve this issue, perform the following: 1. In the Chrome address bar, type `chrome://flags/`. 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

Intune

Description	Bug
The Intune module will fail to install the N-central Windows Agent if N-central, under the **Administration** › **Agent and Probe Settings** menu, has been configured with multiple Server Address values.	KUIP-2876

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

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.
End Of Life: Arcserve Integration And Support	As we continually look to improve our offerings to you, we have decided to discontinue N-central integration and support for Arcserve products, effective March 31, 2021. This will allow us to better focus our resources on continuing to offer the highest quality products and services across the rest of our portfolio.
Azure VHD Images	With the release of N-central support for Azure Managed Disks, we have streamlined the deployment process, including removing the requirement of uploading a full-sized VHD image to Azure. As a result, we are no longer providing 100 GB, 200 GB, 500 GB and 1TB VHD images. You can migrate to the newer "Azure Managed Disk"-based N-central by deploying a new N-central server in Azure using the cross Platform PowerShell 7 deployment script (available on the Download page of the Customer Success Center), and restoring the backup of your existing server (of the same N-central version), to the new server. The existing VHD images will remain available for older versions of N-central through the Customer Success Center, in case you need to rebuild and older version of N-central, but we recommend using the newer deployment method for all new releases of N-central.
Windows 8.1/Windows Server	As older Windows Server and Desktop Operating Systems

2012 R2	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. 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 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 *should* 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).
32-bit versions of the Windows, Linux and macOS operating systems	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.

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	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. 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 NVMes for bare metal and virtualized hosts, or a Fibre Channel connected SAN with Enterprise Grade hard drives for virtualized hosts *(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)*. 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.

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 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
	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	It is impossible to guarantee the scalability or performance of a N-able N-central server deployed on a Virtual Machine due to: ■ 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	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. 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.

Virtual Hardware Support	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. 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**.
Network Adapters	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. 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.
MAC Addresses	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 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

- 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 8.1
- Microsoft Windows 7 SP1

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
- 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

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:

<table>
<tr><th rowspan="3">Port Number</th><th colspan="4">Port Location</th><th rowspan="3">Description</th></tr>
<tr><th colspan="2">N-able N-central Server</th><th colspan="2">Managed Device</th></tr>
<tr><th>Inbound</th><th>Outbound</th><th>Inbound</th><th>Outbound</th></tr>
<tr><td>20</td><td></td><td>√</td><td></td><td></td><td>Used for FTP connections, particularly when configured for backups.</td></tr>
<tr><td>21</td><td></td><td>√</td><td></td><td></td><td>Used for FTP connections, particularly when configured for backups.</td></tr>
<tr><td>22</td><td>√</td><td></td><td></td><td>√</td><td>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.</td></tr>
<tr><td>25</td><td></td><td>√</td><td></td><td></td><td>SMTP - used for sending mail.</td></tr>
<tr><td>53</td><td></td><td>√</td><td></td><td></td><td>Used for DNS.</td></tr>
<tr><td rowspan="2">80</td><td>√</td><td>√</td><td></td><td>√</td><td>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.
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.</td></tr>
<tr><td colspan="5">ⓘ 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.</td></tr>
<tr><td>123</td><td></td><td>√</td><td></td><td></td><td>Used by the NTP Date service which keeps the server clock synchronized. Normally using UDP (although some servers can use TCP).</td></tr>
</table>

Port Number	Port Location				Description
	N-able N-central Server		Managed Device		
	Inbound	Outbound	Inbound	Outbound	
135			√		Used by Agents and Probes for WMI queries to monitor various services. ⓘ Inbound from the Windows Probe to the Windows Agent.
139			√		Used by Agents and Probes for WMI queries to monitor various services. ⓘ Inbound from the Windows Probe to the Windows Agent.
443	√	√		√	HTTPS - used for communication between the N-able N-central UI and Agents or Probes (including MSP Connect and MSP Anywhere). 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. 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. 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. Used by Agents and Probes for XMPP traffic. Outbound access to port 443 for Managed Devices is recommended but not required. To activate EDR the N-able N-central server needs outbound HTTPS access to port 443 and the following domains: ▪ *.sentinelone.net ▪ sis.n-able.com

Port Number	Port Location				Description
	N-able N-central Server		Managed Device		
	Inbound	Outbound	Inbound	Outbound	
					■ 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		*	*	*	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 (out- bound) to monitor Backup Exec jobs. ℹ Inbound from the local LAN and not the Internet.
	* 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.				
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. ℹ Inbound from the local LAN and not the Internet.

Port Number	Port Location				Description
	N-able N-central Server		Managed Device		
	Inbound	Outbound	Inbound	Outbound	
8800		√			The Feature Flag System in N-able N-central needs to talk to mtls.api.featureflags.prd.sharedsvcs.system-monitor.com. Used by N-able – generally during Early Access Preview and Release Candidate testing – to enable and disable features within N-able N-central.
10000	√				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. N-able recommends excluding all other inbound traffic to port 10000 except from N-able Ports for Support section below.
10004			√	√	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. Inbound from the local LAN and not the Internet.
15000			√	√	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. Inbound from the local LAN and not the Internet.

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	✓	✓	✓	✓	✓	✓
TeamViewer	✓	✓	✗	✗	✓	✓
Telnet	✓	✓	✓	✓	✓	✓
Web	✓	✓	✓	✓	✓	✓

Licensing and Customer Support

Agent/Probe Installation Software

N-able N-central 2021.2 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

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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.