NetSupport

NetSupport Manager

Manual – Version 14.00

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Welcome to NetSupport Manager

NetSupport Manager continues to lead the way with innovative features to aid in remote PC management. From a desktop, laptop, tablet or smartphone, monitor multiple systems in a single action, deliver hands-on remote support, collaborate and even record or play back sessions. When needed, gather real-time hardware and software inventory, monitor services and even view system config remotely to help resolve issues quickly.

Designed to operate over your LAN, WAN or the internet, securely and without the need for firewall configuration, NetSupport Manager provides a single, high speed solution for the remote management of multi-platform computers, without the need for a third-party service or ongoing subscription costs – making it the perfect tool of choice for any IT team.

NetSupport Manager offers comprehensive multi-platform support from Windows, Mac, iOS and Android to any Windows, Android, Mac, Linux (legacy) and Chrome OS devices.

This user manual contains instructions for installing and running NetSupport Manager.

Conventions used

The following logical and easy to understand conventions are used in this manual:

- Step-by-step instructions, which should be performed in sequence, are shown as numbered paragraphs beneath a clearly stated, 'How to Do' heading.
- As there is often more than one way of carrying out a task, you will find 'Or' options also included.
- Additional tips or explanatory notes regarding these instructions are enclosed in a border under the heading 'Note'.

Terminology used

Control	The 'Control' is the workstation or device that shows to or views/takes over the Client.
Client	The 'Client' is the workstation or device that is being shown to, viewed or taken over.
Available Client	When the NetSupport Client program has been installed on a workstation, it becomes available for connection by a Control. A Client must be available before a Control can connect to it.
Selected Client	When a connected Client is selected, a "one to one" session is established. A Control can then view, show or send a message etc. to that Client only. A Control can also watch, control or share the selected Client's screen, keyboard and mouse. A Control can switch between multiple Clients, making each of them, in turn, the selected Client.
Connected Client	All available Clients or groups of Clients can be chosen for simultaneous connection. A Control can only remote control a Client to which they are connected.
Known Clients	Having connected to Client machines, NetSupport stores a list of Clients in the **All Computers** folder in the Tree view. These are Known Clients.

About NetSupport Manager

In this chapter …

You will be introduced to the main features and benefits of NetSupport Manager.

Features

NetSupport Manager contains a wealth of features to assist you to train, support, monitor and manage Clients.

Environment

- Browse, locate and connect to all systems across your LAN, WAN or over the internet.
- Install on Client workstations without the need to visit the individual machines using NetSupport Manager's Remote Deployment utility.
- Connect over TCP/IP or HTTP protocols (legacy support provided for IPX and NetBIOS).

Remote control

Watch, Share or Control the screen, keyboard and mouse of a Client, irrespective of colour resolution, network protocol or operating system.

Monitor Mode

The Monitor Mode feature allows a user to display a thumbnail view of all connected Client workstations simultaneously. The size of these thumbnails can be adjusted to suit. In addition, the user can mouse over a specific thumbnail for an expanded view of each selected PC.

View

View more than one Client screen at the same time, or sit back and watch each connected Client screen in Scan mode. The ability to record the activity on a Client workstation while it is remotely controlled, capture a Client's print output and cut and paste between workstation applications comes as standard.

Scan

Scan multiple systems, cycle through one or multiple workstations displaying their screens on the Control workstation.

Auto-grouping of remote systems

The Control Tree view provides an instant overview of your IT infrastructure by grouping the remote systems based on pre-defined criteria such as platform and operating system. For example, you can easily identify machines running a particular Windows OS. This is particularly helpful when planning upgrades or the rollout of new technology. You can also create custom groups to reflect your company structure.

Geolocation
When a user connects to a remote PC, if enabled, the location of the device will be calculated based on its external details.

This information allows NetSupport Manager to provide an approximate location of each remote device, displaying the town, state and country (with supporting flag) within the Control application. Devices are automatically grouped by country for easier management. The feature can be enabled or disabled at both the Control and Client or simply managed via Group Policy.

Show
Show your screen, a selected monitor or just a selected application, video or replay file to any number of connected computers for real-time instruction.

Chat
Conduct a two-way chat session in real-time between the Control and one or more users. A 'Whiteboard' feature is also provided to aid training and the effectiveness of support.

Message
Send a message to one or more chosen Clients, or even broadcast to all Clients on the network.

Annotate tools
Annotate your screen with a range of drawing tools during a Remote Control session or Show session to highlight areas of focus for an end user or to aid in your presentation or training.

Screen capture
Capture screenshots during a session for future reference.

Screen recording
Record screen activity to a video "replay file" for training or security.

Support tools
Remote inventory and system information
A user can obtain a real-time view of the hardware and software installed on each remote PC workstation directly from within their NetSupport Control. NetSupport Manager collects a wealth of information, specifically about the hardware or environment of each PC. In addition, a full software inventory of current installed applications is provided as well as all installed OS hotfixes. To aid further in remote support and diagnostics, a user can also remotely

view and, security permitting, control applications in memory, all processes running and currently installed services.

Power management
Remotely power on/off, log on/off and reboot Client workstations to minimise power consumption.

Request help
Users can create help requests that can be directed to all or specific Control systems based on custom criteria.

Multimedia
NetSupport Manager provides full audio and video support.

Launch commands
A local command prompt and a PowerShell window can be launched allowing you to execute commands at Clients.

Registry edit
Remotely edit the registry of a remote system.

Scripting and scheduling
NetSupport Manager includes a powerful integrated Scripting Language and Scheduler that allows you to automate repetitive tasks from the NetSupport Manager Control and run them at a time when most convenient to you.

Move information
File transfer and distribution
Transfer files between workstations using a simple drag and drop interface. Directories can be automatically synchronised on two workstations and appropriate file types can be edited. NetSupport Manager utilises intelligent Delta File Transfer to reduce data transfer times when overwriting files that already exist, by checking individual blocks of data within a file and only transferring changed data.

Moving files from one PC to another may be useful, but the real benefits come with NetSupport Manager's ability to copy files from one PC to many in a single action – or "File Distribution".

NetSupport Manager also features live folders. When initiating a file transfer to a remote PC, the path to any open folders (Explorer windows) on its desktop is displayed at the top of the file transfer view to ease quick selection.

Launch applications
Remotely launch applications on remote computers.

Connectivity
- Dynamically find and list all Clients on the network.
- Define a range of subnets for extended network browsing capabilities locally.
- Connect directly to known computers by PC name, DNS name or network address.
- Connect via a database of known Clients.
- Discover and connect to any number of devices in real time across differing environments.
- Connect to machines that have Intel vPro capability.

Utilising the internet
Delivering seamless remote control between PCs that may be located behind different firewalls, the NetSupport Connectivity Server module provides a stable and secure method for NetSupport-enabled systems to locate and communicate via HTTP. The NetSupport Manager Gateway component needs to be installed on a PC allocated with a static IP and accessible to both Control and Client PCs, even though both the Control and Client systems will be securely located behind their respective firewalls. The Gateway will only allow connections from computers using the same Gateway security key.

PIN connect
Allows a technician to locate a user anywhere across the enterprise instantly, simply by both parties entering a matching and unique PIN code. Rather than browsing to discover the user's PC and needing to know their PC name, address details etc, the PIN process allows both parties to handshake seamlessly. The new PIN Server module can run alone or alongside the Gateway module and is included as standard with NetSupport Manager.

Security
NetSupport Manager provides an exceptional range of security options to meet all needs, including:

- Password protection of all systems.
- User acknowledgement (User must be present and authorise each inbound connection request).
- Data encryption – configurable from 56-bit DES to 256bit AES.
- Set unique security keys on both Control and Client.

- Limit connectivity by user account or originating IP address and control HTTP access based on the IP address (only allow connections from known locations).
- Record and replay remote control sessions to keep a history of all activity during a session.
- Dialback security for dial-up connections.
- Disable file transfer or specific files and directories.
- Allow a Control to Watch only.
- Auto logout of a remote system on disconnect (avoids a system being mistakenly left in a logged in state).
- User-defined Inactivity Timeout on open connections.
- Centrally deploy and manage security configurations from a single location.
- Integrates with existing NT user profiles and security.
- Integrate directly with Active Directory profiles for user validation.
- Supplied with Active Directory templates to enable system-wide compliance with pre-defined Client configurations.
- Profiled functionality – allow different functionality to be available depending on the authenticated user making a connection.
- Full event and history logs including integration with OS event logs.
- Smartcard support - any login performed on the Control PC is re-directed and applied on the Client PC.
- Smartcard authentication - user validation for connections supports authentication using a Smartcard PIN as well as the existing remote login support.

Installation

In this chapter …

How to install the required NetSupport Manager components on your Windows-based PCs.

Planning an installation

Installing NetSupport Manager is exceptionally easy and you should be up and running within a very short time.

Decide what functions to install

On the workstation from which you will remote control other PCs and devices, you will need to install the Control.

On every machine or device that you wish to connect to, you will need to install the Client.

Decide whether you need to customise your installation with advanced NetSupport Manager features, such as using Scripting and Deploy, or using the machine as a Gateway.

Also supplied with NetSupport Manager is the NetSupport School training tool. This provides trainers with the ability to instruct and visually/audibly monitor, as well as interact with their trainees, individually, as a pre-defined group or to the whole class.

Decide what network protocol to use

Decide what networking protocol you have available on the workstation. NetSupport Manager supports TCP/IP and HTTP and provides legacy support for IPX and NetBIOS.

While NetSupport is multi-protocol, which means that the same Control can connect to Clients running on different protocols, you must choose a default. You can change this later.

Note: By default, the Control will be configured to use TCP/IP. If you are using a different protocol, you must configure this the first time you start the Control.

You are now ready to install NetSupport Control and Client programs.

For details of how to install on:
Mac machines, refer to *Installing NetSupport Manager on a Mac-based system*.

Google Chrome, refer to *Installing a NetSupport Client on Google Chrome devices*.

Android devices, refer *to Installing a NetSupport Manager Android Client*.

Note: NetSupport Manager provides support for Windows 64 bit on Intel EM64 and AMD64 platforms. The NetSupport Manager Windows Installer can be used to install the NetSupport 64 bit Client. For further information, please visit www.netsupportsoftware.com/support

System requirements

Some areas of NetSupport's functionality rely on the presence of certain files/applications; please ensure these are available before installing NetSupport Manager:

PC requirements:

Windows 11, Windows 10, Windows 8/8.1 (32bit and 64 bit), Windows Server 2022, 2019 and 2012, Windows 7* (32bit and 64bit), 2008 (32bit, 64 bit and R2), Vista (32bit and 64 bit) and 2003 (Service Pack 1).

* For the NetSupport Manager Control to run on Windows 7, Aero needs to be enabled. Choose **Start** > **Control Panel**. In the Appearance and Personalization section, click **Customize Color**. Choose Windows Aero from the Color Scheme menu and then click **OK**.

TCP/IP, HTTP or legacy (IPX and NetBIOS).

NetSupport Manager offers full integration with thin and zero Client environments as well as compatibility with MultiPoint, MultiSeat and virtual desktop environments from WYSE Technologies, Microsoft, HP, NComputing (X-series and L-series), MiniFrame (SoftXpand) and many others.

Mac requirements:

The NetSupport Manager Client is compatible with macOS and carries Mac Universal certification.

The NetSupport Manager Mac Client supports macOS version 10.9 – 10.13 and later on Intel platforms.

To support the latest version of the macOS 10.14 – 11, there is a specific Client now available.

Mobile Control:

The NetSupport Manager Mobile Control for iOS and Android provides mobile remote control for existing NetSupport Manager remote control users from any iPad, iPhone, iPod, Android Tablet and smartphone or Kindle Fire.

The NetSupport Manager Mobile Control is available for free download from appropriate App Stores. Visit www.netsupportmanager.com/mobile.asp for more information.

Android Client app:

The NetSupport Manager Client for Android can be installed on each Android device (5 or later) and connected from the Windows Control (12.5 or above).

Chrome OS Client:

For use in an existing or new NetSupport-managed environment, the NetSupport Manager for Chrome Client extension can be installed on each Chrome OS device. From the Control, you can then connect to each system, enabling you to monitor the screens and interact with each Chrome OS device quickly and efficiently.

Legacy platform support

Legacy support is provided for the following platforms:

Windows NT4, Windows 2000, Windows XP and Windows 2003 (pre Service Pack 1).

Note: An earlier version of NetSupport Manager may be required on these platforms and can be downloaded from www.netsupportmanager.com/downloads.asp

Linux requirements:

At the time of release, the NetSupport Manager Linux Client supports: OpenSUSE 11.2 and later, SUSE Enterprise 11, SUSE Enterprise Server 11, Ubuntu/Edubuntu 9.04 and above, Debian 5 and 6, Red Hat Enterprise Linux 6, Linux Mint 9 and above and Fedora 12 and above.

Desktop Managers: GNOME, KDE, Unity 2D, Ubuntu Classic (No Effects Only), MATE and Cinnamon.

Pocket PC:

Operating system: Pocket PC 2003 or Windows Mobile 2003 and above.
Processor: Strong ARM processors.
ActiveSync / Wi-Fi wireless LAN capabilities.
Device RAM: 32Mb (64Mb recommended).
Storage: Minimum 2Mb, full installation 10Mb required.

Windows CE:

Operating System: Windows CE 4.2 or above.
Processor: Strong ARM processors, X86 Compatible.
ActiveSync capabilities.
Device RAM: 32Mb (64Mb recommended).
Storage: 5Mb free space required.

Starting the installation

Download your copy of NetSupport Manager from www.netsupportmanager.com/downloads.asp

Click the appropriate language from the menu and select the option to install NetSupport Manager.

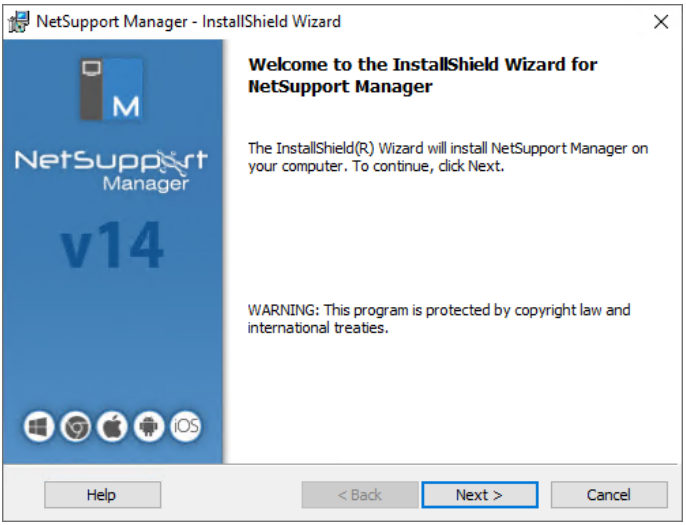
Select which installer to use: setup.exe or MSI file. If an Active Directory deployment is required, you will need to install using the MSI file.

Notes:

- If you are upgrading your Windows operating system, you must ensure that you uninstall NetSupport Manager prior to upgrading. NetSupport Manager can then be re-installed once the operating system upgrade has been completed.
- When installing, make sure that you are logged in as an Administrator.

NetSupport Manager setup program

The setup program Welcome screen will appear.



Click **Next** to continue.

NetSupport Licence Agreement

The NetSupport Licence Agreement will be displayed. Please read the Licence Agreement carefully and select "I accept the terms in the Licence Agreement" and click **Next** to continue.

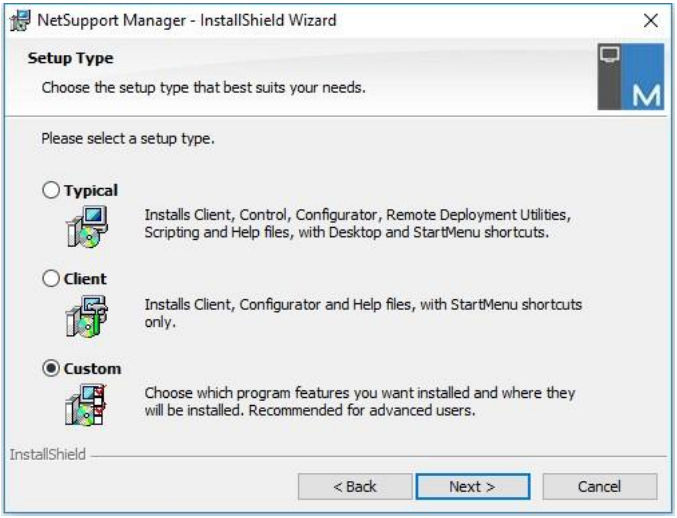
If you reject the Licence Agreement ("I do not accept the terms in the Licence Agreement"), click **Cancel**. NetSupport Manager will not be installed and you will be directed to exit from the install program.

Licence information

Select **Register** and enter the NetSupport Manager licence details you have been provided with.

If you are evaluating NetSupport Manager, select **30-day evaluation** and click **Next**.

Select Setup Type



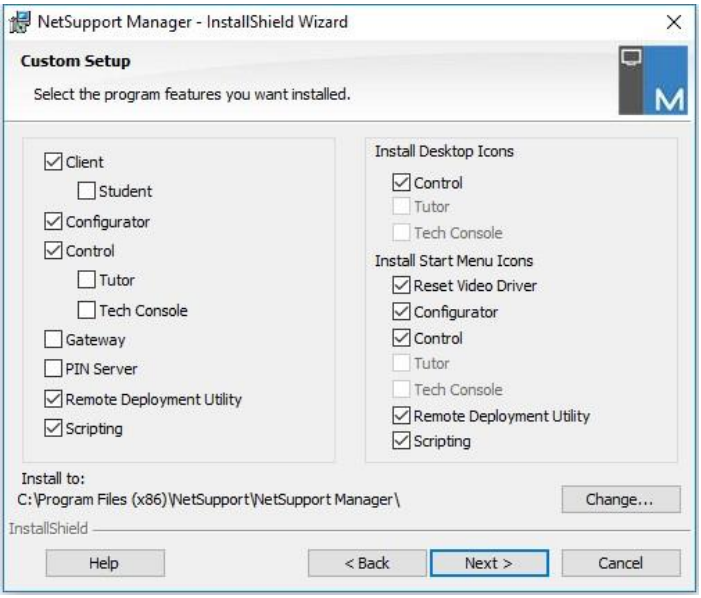
Choose the setup type to install on the workstation.

- **Typical**
  Installs all the components that a Control user would generally need. Excludes the Gateway and NetSupport School components. See below for a description of each NetSupport Manager component.
- **Client**
  Installs the Client software. This feature should be installed on workstations to be remote controlled.
- **Custom**
  Enables you to individually select the mix of components that are appropriate for the workstation.

Click **Next** to continue.

Custom Setup

If you have chosen to perform a Custom Setup, you will be able to select the required components individually to suit the requirements of each workstation.



Client
Install this component on workstations you want to remote control.

Student
Installs the Student component of NetSupport's training tool, NetSupport School.

Configurator
Client settings and security are established using the Client Configurator. Basic settings can be entered at the end of the installation process but to set more advanced options, install the Configurator component.

Control
Install this component on workstations that will be taking control of Client workstations. It is recommended that the Client component is also installed in order to use the full range of NetSupport Manager functions, for example, Show.

Tutor
Installs the Tutor component of NetSupport's training tool, NetSupport School.

Tech Console
Installs the Tech Console component of NetSupport School. This provides lab technicians and network managers with the main NetSupport School features.

Gateway
NetSupport Manager's Gateway feature provides a means of connecting Clients and Controls across the internet, thus delivering web-based remote control without the need for modifications to existing Firewall configurations. There is no direct connection between the Client and Control; all data is passed via the Gateway. The Gateway component can, therefore, be installed independently of the Control and Client. If you choose to install the Gateway component, the Gateway Configuration dialog will appear after the installation has finished.

Note: The Gateway can't be installed on a machine that has the NetSupport DNA Local (Server) Gateway installed on it.

PIN Server
Installs NetSupport Manager's PIN Server. The PIN Server provides the central point where a unique PIN code is created when using the PIN Connect feature.

Remote Deployment Utility (supported on Windows XP and above)
The NetSupport Manager Deploy utility enables you to perform multiple NetSupport Manager installations without the need to visit each individual workstation. See the NetSupport Manager Deploy section of this manual for more information.

Scripting
Install NetSupport Manager's integrated Scripting and Scheduling suite. Create scripts to automate manual tasks and schedule them to run at specific times. Ideal for overnight updates. See the NetSupport Manager Scripting section of this manual for more information.

Install Desktop Icons
Choose whether to create desktop icons, e.g. for the NetSupport Manager Control, the NetSupport School Tutor or the NetSupport School Tech Console, to allow easy access to the programs.

Install Start Menu Icons
Choose whether to create Start menu icons for the components you are installing.

Note: NetSupport Manager provides exceptional multimedia support. The NetSupport Manager Video Player enables you to run video files on Client workstations, enhancing training sessions and demonstrations. This is installed by default with the Tutor component.

Install to:
By default, NetSupport Manager will be installed in the folder C:\Program Files\NetSupport\NetSupport Manager. If you want to install in a different folder, click **Change**.

Click **Next** to continue.

Ready to install

To start the installation, click **Install**. To change any of the previous selections, click **Back**. To quit the installation, click **Cancel**.

Note: If you have elected to install a Client, setup will make the required amendments to your System.ini and/or registry to load the Client as Windows initialises. NetSupport Manager will not replace any of your existing drivers.

Installation complete

This final screen confirms that the installation has been successful.

Run Client Configurator
At the end of the installation process, you will have the opportunity to run the Client Configurator. This enables you to set basic Client information and security. If the Configurator is being installed as one of the selected components, you will be able to access more advanced configuration options.

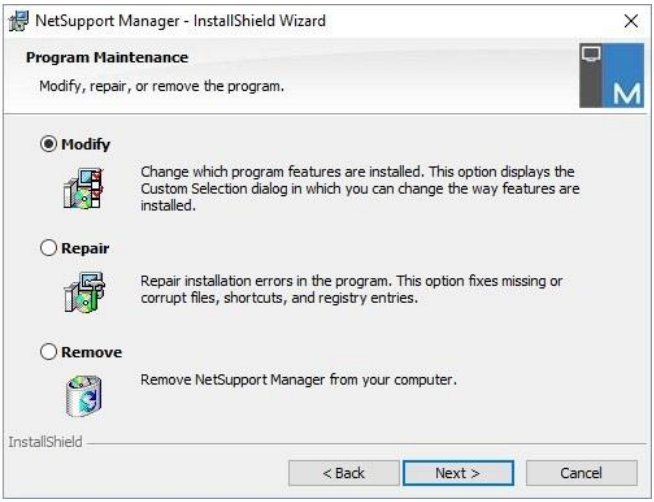
Run Remote Deploy
Selecting this option will run the NetSupport Manager Deploy utility after the installation process. This allows you remotely to install and configure NetSupport Manager on multiple workstations.

Click **Finish** to exit the Setup program.

Note: If you choose to install the Gateway component, the NetSupport Connectivity Server dialog will appear. This allows you to create a security key for the Gateway.

Existing installation detected

This screen will appear if a copy of NetSupport Manager is already installed on the workstation.



- **Modify**
  Change the program features that are installed.

- **Repair**
  Repair any installation errors in the program.

- **Remove**
  Remove NetSupport Manager from the computer.

Select the required option and click **Next**.

Uninstalling NetSupport Manager

The standard method for uninstalling NetSupport Manager is to select NetSupport Manager in Control Panel – Add/Remove Programs.

For Windows XP and above workstations, NetSupport Manager Deploy can be used to perform multiple uninstalls from a remote location. Refer to the NetSupport Manager Deploy section of this manual for more information.

Evaluation kit

NetSupport Manager is available as an Evaluation kit either from distributors or free as a downloaded copy from the internet. This allows you to trial NetSupport Manager before your purchase. The Evaluation Kit software is fully functional, apart from the following restrictions:

- A maximum of ten Clients can be active on the network simultaneously.
- The Client and the Control programs will not run after the expiry date has passed.

Upon purchase, these restrictions are removed once serialisation has been completed. This process upgrades the Evaluation Kit into a fully licensed copy.

To upgrade an evaluation kit to a fully licensed copy

1. Click **Help** ? on the caption bar and select **About**.
2. Select the License tab.
3. Click **Update License**.

Or

In the directory that you have installed the Program Manager group 'NetSupport Manager', open the file PCILIC.EXE.

The NetSupport Manager Licence dialog box will appear asking you to enter your licence details. Please note that all entries are case sensitive.

When you have entered the correct licence details, click **Generate**. You now have a fully licensed copy of NetSupport Manager.

Advanced installation

In this chapter…….

How to prepare and run 'silent' installations across a network.

Using the NetSupport Manager Deploy utility to perform multiple installations.

Installing NetSupport Manager on a Mac based system.

Installing a NetSupport Manager Client on Google Chrome.

Installing a NetSupport Manager Android Client.

NetSupport Manager Mobile Control for iOS and Android.

Creating an administrative (network) installation

An administrative installation (distribution copy) of NetSupport Manager is designed to assist Administrators to install NetSupport Manager on networked PCs where the installation media or licence details may not be readily available and it is anticipated that a number of installs will be performed either at once or over a period of time.

This type of installation can also be pre-configured to set up NetSupport Manager with certain options, therefore ensuring that all NetSupport Manager installations are configured in the same way.

Once created, the distribution copy can be used when performing a standard installation, a silent installation, or as part of a NetSupport Manager Deploy routine.

To set up a distribution copy of NetSupport Manager on a Server

1. Create a folder on the network that is accessible to all PCs that you may want to install on.
2. Copy, from your original source media, the file Setup.exe.
3. Create and copy a valid NSM.LIC file to this folder. If a licence file is not present in the folder when running the install, NetSupport Manager will be installed using the default Evaluation licence.
4. Create and copy a Client32u.ini file to this folder.

Note: You can make the network folder 'read only' to avoid the configuration being altered by unauthorised users.

To install NetSupport Manager from a server onto individual workstations

1. At the required workstation, navigate to the network folder containing the NetSupport Manager setup files.
2. Run Setup.exe.
3. Follow instructions in the Starting the Installation section.

Silent/unattended installations

A silent installation is one which that requires no input from the user, providing a convenient method for performing a set installation at several machines.

To perform a silent install

1. Create a distribution copy of NetSupport Manager containing the required NetSupport Manager installation files.
2. To determine the properties for the installation, run INSTCFG.EXE from the NetSupport Manager program folder. The Install Configuration Options dialog will appear. (See the Install Configuration Options dialog section below for a full description of this dialog). Your chosen properties are stored in a parameter file: default name NSM.ini.
3. Choose {File}{Save} and save the 'NSM.ini' file to the folder containing the distribution copy of NetSupport Manager.
4. To perform the silent install at the required workstation, from the folder containing created above, run:

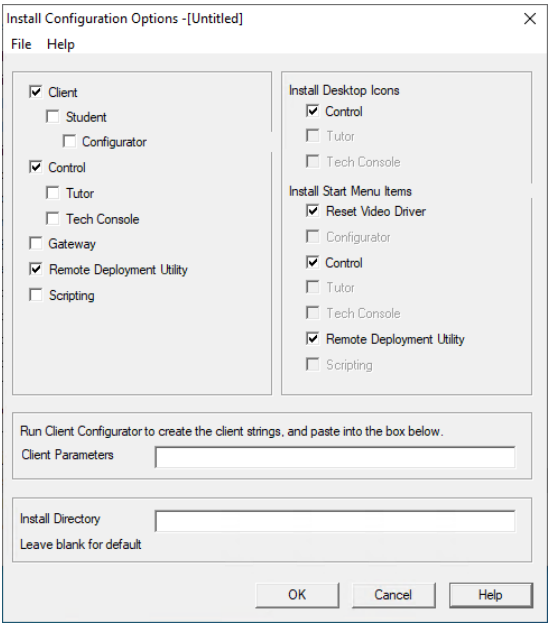
   msiexec /i "NetSupport Manager.msi" /qn (MSI installer)

   setup /S /v/qn (setup.exe installer)

Note: NetSupport Manager can be installed via Active Directory. The software installation group policy object (GPO) must be applied to organisational units (OUs) containing computer accounts rather than users. Please note that for software installation to take effect immediately, it is necessary to enable the "Always wait for the network at computer startup and logon" parameter in the Computer Configuration| Administrative Templates| System| Logon| leaf of the group policy controlling the computers that are subject to software installation. This change will affect login times for Windows XP machines that have this applied. Without this change, an additional log off / log on cycle is required to effect installation.

Install Configuration Options dialog

When performing a silent installation or using NetSupport Manager Deploy, you can customise the installation to suit individual requirements. This dialog, accessed by running INSTCFG.EXE from the NetSupport Manager program folder if performing a silent installation or, if using NetSupport Manager Deploy, via the Install Properties General tab, enables you to specify the properties for the installation. The information is stored in a parameter file, NSM.ini.



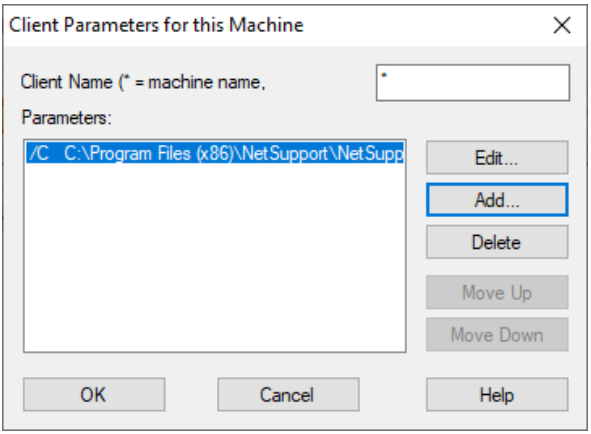
Select the relevant checkboxes to indicate which NetSupport Manager components will be installed. Choose whether to create a desktop icon for the Control, the School Tutor and the Tech Console and Start menu icons for the components you are installing.

Client Parameters (optional)
If you have created a particular Client configuration file for use after the installation, specify the path and file name here. Depending on the location of the file, you may need to provide a set of user credentials (name and password) to give Clients access to the file. In order to specify the parameters in the correct format, it is suggested that you create them in the NetSupport Manager Client Configurator and copy them to this field.

Leave the field blank if you are installing from your distribution copy or if you want to use the default configuration file contained in the NetSupport Manager setup package.

To specify Client parameters

1. Open your NetSupport Manager Program folder by choosing {Start}{Programs}{NetSupport Manager}{NetSupport Manager Configurator}.
2. Choose **Advanced**.
3. Select {Profiles}{Client Parameters} from the Configurator drop-down menu.
4. The Client Parameters dialog will appear.



5. Click **Add** to specify the parameters.

Notes:

- If user credentials are required, they must precede the configuration file name.
- Each set of parameters must be added separately.

6. If required, enter the user credentials (user name and password). Click **OK**. The appropriate strings will appear in the dialog.
7. Click **Add** to specify the location of the configuration file. Click **OK**.

When the Client Parameters dialog contains the required strings, copy them individually to the Install Configuration Options dialog (use Ctrl+C to copy, Ctrl+V to paste).

Install Directory
Specify the directory where NetSupport Manager will be installed. Leave blank to install in the default directory \Program Files\NetSupport\NetSupport Manager.

NetSupport Manager Deploy – NetSupport Manager's Remote Install Utility

The NetSupport Manager Deploy Utility provides network administrators with the facility to install and configure NetSupport Manager on multiple workstations without the need to visit the machines individually.

Within the NetSupport Manager Deploy utility, you have the ability to deploy using an IP address range (specified IP ranges or computers with an IP range local to the Control), Windows domain or, alternatively, you are provided with a view of your network. These methods allow you to pick and choose which computers you want to deploy to.

The NetSupport Manager Deploy utility can be used to deploy to computers running the following operating systems:

- Windows XP
- Windows 2003
- Windows Vista
- Windows Server 2008\2008r2
- Windows 7
- Windows Server 2012
- Windows 10
- Windows Server 2019
- Windows 11
- Windows Server 2022

Note: Due to operating system limitations, the NetSupport Manager Deploy utility does not work with Windows XP Home, Windows Vista Home Premium or Windows 7 Starter/Home edition.

With NetSupport Manager Deploy, you can:

- Remotely install a NetSupport Manager package on multiple workstations simultaneously.
- Create and download specific Client configurations to multiple workstations.
- Remotely update NetSupport Manager licence details on multiple workstations.
- Remotely uninstall a NetSupport Manager package from multiple workstations simultaneously.

Notes:

- When deploying to a Windows Vista (or later) PC within a domain, the console user must be either logged onto the domain or enter the user credentials (when prompted) of a domain account that has local administrator rights to the target PC.
- The Deploy Prompt User option is not supported on Windows Vista and above.

Installing the Deploy Utility

When installing NetSupport Manager, select **Typical Installation** to install the NetSupport Manager Deploy Utility automatically. Alternatively, you can also choose it as part of a custom installation.

Planning

NetSupport Manager Deploy is a powerful utility that makes installing NetSupport Manager packages on multiple workstations a quick and easy process. However, while we endeavour to ensure that there are no limitations or incompatibility issues in the use of the software, it is recommended that a trial deployment is performed on a small number of workstations to ensure there are no conflicts with other similar products such as remote control or desktop security packages. In addition, for added security and protection, you must have appropriate administrator rights for the machines you are deploying to.

Deploying on Windows XP and above

To deploy NetSupport Manager on Windows XP Professional and above, you need access to the Admin$ share on the remote machine in order to transfer the package to be deployed. By default, there is no access allowed to Admin$ share.

To enable network access:

1. In Administrative Tools, select **Local Security Policy**.
2. Select {Security Settings}{Local Policies}{Security Options}.
3. Select {Network access: Sharing and security model for local accounts}.
4. Alter the setting for this policy to {Classic – local users authenticate as themselves}.

The Admin$ share will now be available and you can deploy as normal.

If upgrading from Microsoft Windows XP Service Pack 1 to Service Pack 2, Windows Firewall will by default block all network activity produced by NetSupport Manager. To enable NetSupport Manager to function correctly, we have provided a utility that will configure Windows Firewall.

To enable NetSupport Manager in the Windows Firewall Configuration

1. Download the ICFCONFIG.EXE File (link at www.netsupportsoftware.com/support).
2. Run this utility on a machine with NetSupport Manager installed using the following command:

   ICFCONFIG -e NSM

3. This will create all the required entries in the Windows Firewall configuration to allow NetSupport Manager to function correctly.

The ICFCONFIG utility can also be used to remove a NetSupport Product from the Windows Firewall configuration. See our website www.netsupportsoftware.com/support/ for all the ICFCONFIG Command line options.

How does NetSupport Manager Deploy work?

Once the Deploy options have been configured, the NetSupport Manager Deploy Utility works by connecting to the target computer using File and Print Sharing.

This method requires access to the target computer's Admin$ and will need to connect as a user with local administrator access (user details may be requested).

Once authenticated, the NetSupport Manager package files are copied to the following folder on the remote PC using the connection to the Admin$ share:

C:\Windows\pcirdist.tmp\

Finally, once the files have been sent to the target PC, the installer file is executed using the Remote Procedure Calls (RPC) Service.

What are the requirements?

In order to successfully deploy NetSupport Manager components to your target PCs, the following items are required:

- File and Print Sharing must be enabled on the target PC.
- The Sharing and Security for local accounts policy must be set to {Classic} on the target PC.
- The user account used to connect to the target PC must have local administrator permissions on the target PC.
- Network discovery must be enabled on Windows Vista and Windows 7 target PCs.
- UAC Remote Restrictions must be disabled for target PCs running Windows Vista and Windows 7 in a workgroup environment.

Starting NetSupport Manager Deploy

1. Select **NetSupport Manager Deploy** from your NetSupport Manager Program group.
2. The NetSupport Manager Deploy main window will appear.

NetSupport Manager Deploy main window



The Deploy main window is divided into the following sections:

Menu bar

The menu bar contains a series of drop-down menus that can be used to access the various tools and configuration utilities for the deploy process.

Left-hand pane

Contains three tabs: Network, Log Files and Security.

Network and Security tabs

Lists, in a Tree view, the available networks, domains and workgroups that can be selected for a deploy routine.

Log Files tab

Lists, in a Tree view, a history of previous deployments.

Right-hand pane

With the Network tab selected, you are provided with a range of general information about the workstations located on the selected network/domain (machine name, Client address and MAC address).

The Log Files tab provides a breakdown of past deployments categorised by type.

The Security tab also lists information specific to each individual workstation located on the chosen network/domain. In addition to the machine name and IP address, you will be able to see the platform the machine is running on, determine if the machine already has a NetSupport Manager Client installed and which version is running,

whether the Client is password protected or has user acknowledgement set. With this information to hand, you can decide in advance which machines to include or exclude from the forthcoming deployment. For example, if a current NetSupport Manager Client is already installed at some of the workstations, you might choose to ignore it.

Preparing a deployment routine

Choosing who to deploy to

1. From the main window, select the Network or Security tab.
2. A list of available networks, domains and workgroups will appear in the left-hand pane. Expand or reduce the tree list by clicking on the arrows.

   Note: You can also deploy to specific IP ranges by adding the appropriate address range to the tree. Select {Tools}{Add IP Range} from the menu bar.

3. Highlight the required group.
4. The names of the workstations belonging to the selected group will appear in the right-hand pane. You can change the appearance of the list view by selecting {View} from the menu bar.
5. Select the workstations to include in the deploy routine. (You can use CTRL-Click or SHIFT-Click). Before deciding to include or exclude a workstation, you can view its properties by right-clicking on the machine name.

Note: A Wake on LAN can be sent to machines that are not turned on, ensuring deployments are sent to all required machines. Select the required machines and choose {View}{Wake Selected (WOL)} from the menu bar.

Choosing what to deploy

You can choose:

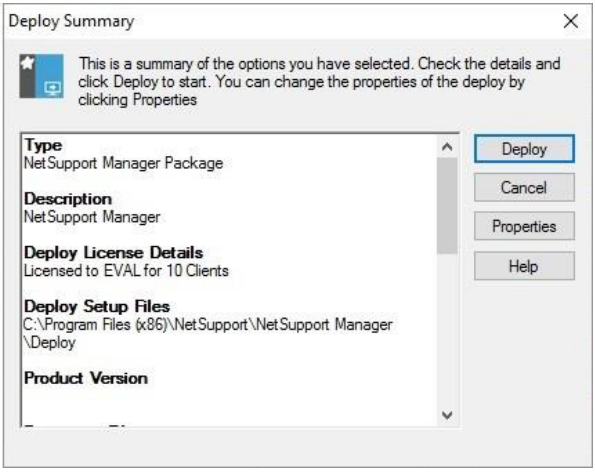
- NetSupport Manager package.
- Client configuration.
- NetSupport Manager licence file.
- Uninstall NetSupport Manager.

Note: The properties for each of the above can also be pre-defined if it is not convenient to deploy immediately. See pre-define settings for a future deployment.

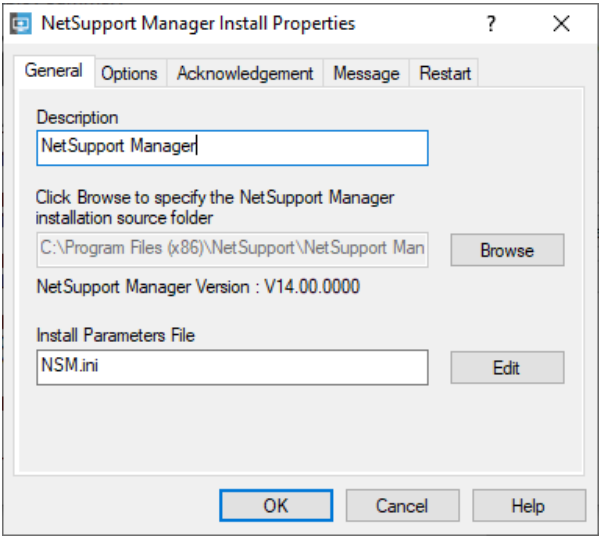
Deploy a NetSupport Manager package

A NetSupport Manager package is created as standard when the Deploy component is selected with the installation. To distribute the package, select the required workstations:

1. Choose {Deploy}{NetSupport Manager Package} from the Deploy main window drop-down menu.
   Or
   Right-click on the selected workstations and choose {Deploy-NetSupport Manager Package}.
2. The Deploy Summary dialog will appear.



   This dialog provides a summary of the options you have selected for the deployment. Click **Properties** to amend the information for the deployment.
3. The Install Properties dialog will appear.



4. To amend the properties for the deployment, select the relevant tab.

General tab
Used to specify the NetSupport Manager package to deploy and which components are to be installed.

The description for the package will be set to NetSupport Manager.

By default, the location of the package to be installed is set to the Deploy folder where the NetSupport Manager package has been created.

Click **Edit** to specify the components to install. The Install Configuration Options dialog will appear. (See the 'Install Configuration Options Dialog' section of this manual for a full description of this dialog.)

Note: Because of the way NetSupport Manager Deploy handles restarting workstations, leave the **Restart Machine** box un-checked. This is only relevant when performing a silent install where The Install Configuration Options dialog is also used for specifying the options to install.

When you have completed this dialog, choose{File}{Save} to save the NSM.ini file to the folder containing the distribution copy of NetSupport Manager.

Choose {File}{Exit} to return to the Install Properties dialog.

Options tab
Use the information supplied in the Network and Security tabs to identify which machines may already have NetSupport Manager installed. You can then choose to:

- Ignore them by checking the **Skip machines already running NetSupport Manager** box.
- Update the machines with the latest version by checking the Update new or older systems to current version box.
- After deploying the package, you can confirm that the Client is running by checking the **Verify Client running after restarting** box. Ensure that workstations are restarted automatically after the deploy for this option to work. See Restart tab.

Acknowledgement tab
Consider whether the workstations will be in use when commencing the deploy. You can choose to:

- Install NetSupport Manager Immediately. No prompt will be received at the workstations being deployed to.
- Warn user before installing NetSupport Manager. The user will receive a prompt and needs to click **OK** for the install to commence. Users cannot cancel this.
- User can postpone NetSupport Manager installation. You can specify the number of times a user can postpone the installation. If the user does choose to postpone, they will be re-prompted at hourly intervals or the next time they restart the workstation, whichever comes earlier.

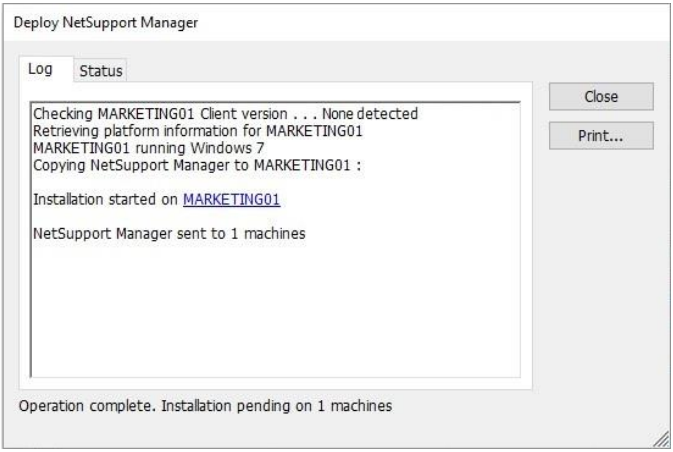
Message tab
You can specify a custom message to be displayed at each workstation while the installation is in progress.

Restart tab
These options are only applicable if the target PCs require a forced restart to complete the installation.

Note: If you have asked for verification that the Client is running (see Options tab), you must choose an option that will force the workstations to be restarted immediately.

- Advise user to restart machine. At the completion of the deployment, a message will be displayed at workstations asking the user to restart the PC at the next convenient opportunity. Do not choose if the above note applies.
- Insist user restarts machine. A message will be displayed at workstations advising the user to restart the PC to complete the installation.
- Force restart. At the end of the deployment, a message is displayed advising users that the workstation will be restarted. A time bar is displayed indicating how many seconds it is before the restart commences.
- Automatic restart if not logged on. If the workstation being deployed to is not logged on, a restart will commence automatically.

5. Click **OK** to return to the Deploy Summary dialog.
6. Click **Deploy** to commence the installation. A progress dialog will appear, enabling you to monitor the deployment as it installs on each workstation.



The dialog has two tabs:

Log tab enables you to monitor the deployment as it reaches each workstation.

Status tab lists the stage the deployment has reached on each workstation. For example, the installation may be complete on one machine but still in progress on another.

7. Click **Close** to return to the Deploy main window when the installation is complete.

Deploy a Client Configuration

Using NetSupport Manager Deploy, you can remotely deploy a Client configuration file containing specific Client settings. For more information on configuring Clients, see the Configuring the Client section of this manual.

1. Select the required workstations.
2. Choose {Deploy}{Client Configuration} from the Deploy main window drop-down menu.
   Or
   Right-click on the selected workstations and choose {Deploy}{Client Configuration}.
3. The Deploy Summary dialog will appear.
4. Click **Properties** to enter the details for the deployment.
5. Click **Browse** to specify the folder containing the Client configuration file that is to be deployed. The default configuration file is CLIENT32U.ini and is stored in the NetSupport Manager installation directory.

   Note: The default configuration file for Clients pre-v12.50 is called CLIENT32.ini.

6. Click **Edit** to access the Advanced Client Configurator in order to make changes to the configuration file. See the Advanced Client Configuration section of this manual for more information.
7. You can specify additional Client parameters if required. For example, this may be the location of an additional configuration file to which you want to add specific user credentials (name and password).
8. For the new settings to take effect immediately, the Client service will be automatically restarted after the deployment. If a restart is not required, uncheck the **Restart the Client service** box.
9. Click **OK** to return to the Summary dialog. You can view the contents of the configuration file by clicking on the file name.
10. Click **Deploy**. A progress dialog will appear, enabling you to monitor the status of the deployment.
11. Click **Close** when complete.

Deploy a NetSupport Manager licence file

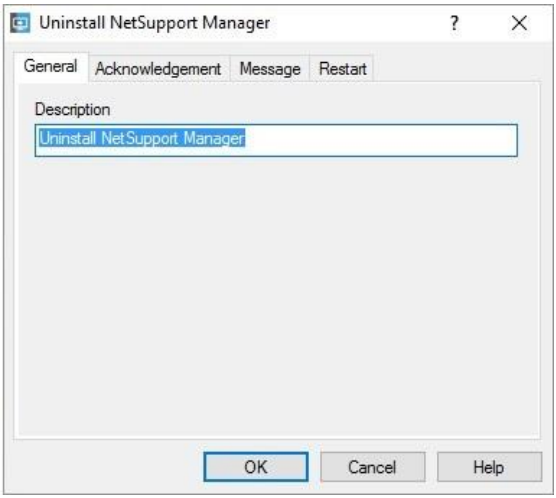
When installing a NetSupport Manager package, a licence file is sent to each workstation. However, there may be occasions when the licence information needs updating. For example, you have purchased additional licences and the licence file needs updating to reflect this. By using NetSupport Manager Deploy, you can remotely update the file on user workstations.

1. Select the required workstations.
2. Choose {Deploy}{NetSupport Manager Licence file} from the Deploy main window drop-down menu.
   Or
   Right-click on the selected workstations and choose {Deploy}{NetSupport Manager Licence file}.
3. The Deploy Summary dialog will appear.
4. Click **Properties** to enter the details for the deployment.
5. Click **Browse** to specify the folder containing the licence file that is to be deployed. The default file is NSM.LIC.
6. For the new settings to take effect immediately, the Client service will be automatically restarted after the deployment. If a restart is not required, uncheck the **Restart the Client service** box.
7. Click **OK** to return to the Summary dialog. You can view the contents of the licence file by clicking on the file name.
8. Click **Deploy**. A progress dialog will appear, enabling you to monitor the status of the deployment.
9. Click **Close** when complete.

Remote uninstall

Using NetSupport Manager Deploy, you can remotely uninstall a NetSupport Manager package.

1. Select the required workstations.
2. Choose {Deploy}{Uninstall NetSupport Manager} from the Deploy main window drop-down menu.
   Or
   Right-click on the selected workstations and choose {Deploy}{Uninstall NetSupport Manager}.
3. The Deploy Summary dialog will appear.
4. Click **Properties** to enter the details for the deployment. The Uninstall NetSupport dialog will appear.



5. Enter the properties for the deployment by selecting the four tabs in turn.

   General tab
   Provides a description of the package being uninstalled.

   Acknowledgement tab
   Consider whether the workstations will be in use when commencing the deploy. You can choose to:

   - Uninstall NetSupport Manager Immediately. No prompt will be received at the workstations being deployed to.

- Warn user before uninstalling NetSupport Manager. The user will receive a prompt and needs to click **OK** for the uninstall to commence. Users cannot cancel this.
- User can postpone uninstall of NetSupport Manager. You can specify the number of times a user can postpone the uninstall. If the user does choose to postpone, they will be prompted the next time they restart the workstation.

Message tab
You can specify a custom message to be displayed at each workstation while the uninstall is in progress.

Restart tab
To completely remove all NetSupport Manager files, the workstations must be restarted.

- Insist user restarts machine. A message will be displayed at workstations advising the user to restart the PC to complete the process.
- Force restart. At the end of the deployment, a message is displayed advising users that the workstation will be restarted. time bar is displayed indicating how many seconds it is before the restart commences.
- Automatic restart if not logged in. If the workstation being deployed to is not logged in, a restart will commence automatically.

6. When you have completed all four tabs, click **OK** to return to the Deploy Summary dialog. You can review your selections and edit if required.
7. Click **Deploy** to commence the uninstall. A progress dialog will appear, enabling you to monitor the deployment as it uninstalls each workstation.
8. Click **Close** when complete.

Pre-define settings for a future deployment

There may be occasions when you want to defer a deployment until a more convenient time of the day. With NetSupport Manager Deploy, you can prepare the settings in advance and choose when to perform the deployment.

Note: You select the workstations to deploy to when you are ready to run the deployment.

To prepare the settings for a future deployment

1. Choose {Deploy}{Configuration} from the Deploy main window drop-down menu.
2. The Deploy List dialog will appear. Select the required Deploy Option. (Package, Client Configuration, Licence File or Uninstall)
3. Click **Properties** and enter the required settings.
4. When all settings are entered, click **Close** to return to the Deploy main window.

To run the deployment

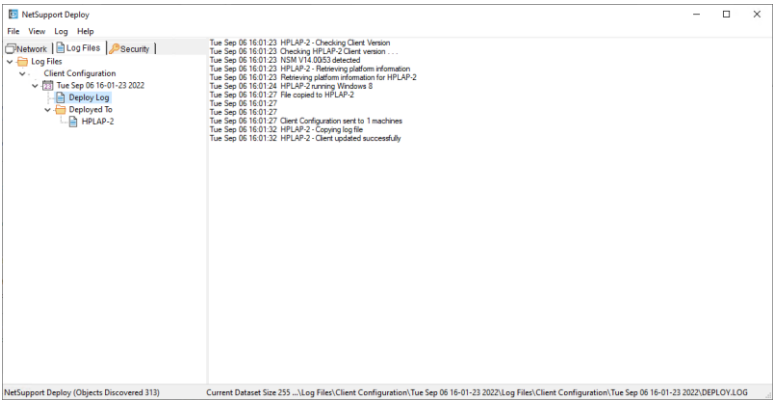
1. Select the workstations to Deploy to. See Preparing a Deployment.
2. Choose {Deploy} from the main window drop-down menu.
   Or
   Right-click on the selected workstations and choose **Deploy**.
3. Select the required Deploy option.
4. The Deploy Summary dialog will appear, showing your pre-defined selections. You can edit these if required.
5. Click **Deploy** to start the deployment.

Log files

When using NetSupport Manager Deploy, information about each deployment, whether a package install, licence update, configuration download or uninstall, is recorded. This provides a useful reminder each time you use the utility of what you have previously deployed. The information is stored in a log file.

To view log files

1. From the NetSupport Manager Deploy main window, select the Log Files tab.



2. In the left-hand pane of the main window, increase or decrease the Tree view to see a description of each type of deployment, the date and time the deployment took place and the workstations that were deployed to.
3. As you select an item from the left-hand pane, itemised information about that deployment will appear in the right-hand pane.

Printing a log file

1. Select the required Log File in the Tree view.
2. Choose {Log}{Print} from the Deploy main window drop-down menu.

Deleting a log file

1. Select the required Log File in the Tree view.
2. Choose {Log}{Delete} from the Deploy main window drop-down menu.

Installing NetSupport Manager on a Mac based system

A NetSupport Manager Control and Client can be installed on Mac systems, allowing you to remote control other workstations/devices from a Mac and also enabling a Control to connect, view the screen of the remote user and perform a variety of remote control tasks.

Notes:

- The NetSupport Manager Mac Control and Client supports macOS 10.5 and later on Intel platforms
- To support the latest version of macOS 10.14 – 11, there is a specific Client now available.

Installing NetSupport Manager

1. NetSupport Manager is provided as a standard macOS .pkg file, this is available from our downloads area at www.netsupportmanager.com/downloads.asp (full installation instructions will also be available here).
2. Download the .pkg file and double click it to run the package.
3. The installer will automatically run, follow the on-screen instructions.

For information on currently supported features, please visit www.netsupportmanager.com/mac.asp.

Installing and configuring NetSupport Manager on Google Chrome OS devices

NetSupport Manager provides remote control capabilities for any Google Chrome OS device running the NetSupport Manager Chrome OS Client extension.

The NetSupport Manager Client for Google Chrome extension can be installed on each Client machine running the Google Chrome OS. From the technician's desktop, you can then connect to each system, enabling you to monitor and interact with each client quickly and efficiently.

Planning an installation

For a NetSupport Manager Control to be able to connect and interact with Chrome OS devices, the NetSupport Connectivity Server must be installed on a Windows Server; the NetSupport Manager Control (Windows, Mac or Mobile) must be installed on the technician's computer, and the NetSupport Manager Chrome Client extension installed onto each Chrome device.

The NetSupport Manager Client for Chrome OS can be used with your existing NetSupport licences already purchased (as long as you have sufficient unused licences), or additional Chrome OS only Client licences can be purchased from your NetSupport reseller.

Installing and configuring the NetSupport Manager Client for Google Chrome extension

1. Download the NetSupport Manager for Google Chrome extension from the Google Chrome store. https://chrome.google.com/webstore
2. Enter the URL chrome://settings/extensions to access the 'Extensions' configuration page.
3. Locate the NetSupport Manager Client for Google Chrome extension and click **Options**.
4. Enter the Gateway address and port number of the Gateway.
5. Optionally, enter a name that identifies this Client.
6. Click **Save**.

Chrome Incognito Mode:

To ensure that you maintain full control of your Clients, it is recommended that you 'disallow' Incognito mode in the Chrome OS User Settings. This can be done centrally via the Google Management Console.

Key features when connecting to Chrome OS 'Client' systems include:

Environment

- A NetSupport Manager Control communicates, via HTTP, with Google Chrome OS devices that are running the NetSupport Manager for Chrome Client extension. For help installing and configuring the required components, please refer to the documents below.

Remote Control

- A crystal clear thumbnail of each Chrome OS Client screen can be viewed by the Control in a single view.
- The Client's screen can be discreetly monitored (Watch mode) or remote controlled in real-time (Share mode).
- For real-time instruction or demonstrations, the Chrome OS Client can be shown the Control (Windows or Mac) screen - in a browser tab or in full screen mode.
- The Client can also be shown an application running on the Control desktop.
- Multi-monitor support – monitor Chrome OS devices running multiple monitors.
- The Client's mouse and keyboard can be 'locked' remotely.
- Chrome OS Clients can join a text 'chat' session initiated by the Control.
- Chrome OS Clients can receive messages sent by the Control.

Support tools

- Remote Clipboard - the content of the Client's clipboard can be remotely retrieved by the Control during a view session. Clients can also be sent a copy of the Control's clipboard.
- Request Help facility - Clients can send a request for help to a Control.

Flexibility

- PIN Connect - the Client can initiate an instant connection with a Control simply by both parties entering a matching PIN code via a central PIN Server module.

Security

- User Acknowledgement – the Client can authorise each inbound connection request.

Installing and configuring the NetSupport Manager Android Client

The NetSupport Manager Android Client app gives an existing NetSupport Manager Control user the power to connect to Android tablets and smartphones in use across your enterprise, enabling real-time interaction and support.

The NetSupport Manager Android Client app works on Android v4.0 or later tablets and is available for free from the Google Play store.

Note: NetSupport Manager v12.50 or later Windows Control application required.

Set up and configure the NetSupport Manager Android Client

Launch the NetSupport Manager Client app, press  and select **Settings**.

General

Displays the name of the device. This can be customised to a name of your choosing.

Security

Security Key

This sets a security key that must be the same as that set at the Control before the Control will be allowed to connect. This setting is optional. If there is no security key set here, any Control may connect, regardless of the security key set at the Control.

TCP/IP

Default port

The default registered port for NetSupport Manager is 5405.

Multicast address

This is the IP multicast address that the Client is listening on.

HTTP

Use Gateway

Enable this option if you want the Client's current IP address to register with a designated 'Gateway' on start-up. Enter the IP address of the Gateway along with the matching Gateway key. A secondary Gateway address can be added.

PIN Server
Enter the IP address of the workstation where the PIN Server is installed to allow Clients to connect using PIN Connect.

To save the configuration settings, select .

Features supported on Android:

- **Connect by PIN**: NetSupport's quick and easy PIN Connect feature allows seamless and secure connectivity between Control and Client devices simply by sharing a matching code. (The PIN Server module, included as standard with NetSupport Manager, needs to be installed on a Windows PC).
- **Sending Messages**: The Control user can broadcast messages to one, selected, or all connected Client devices.
- **Chat**: Both the Client and Control can initiate a one-to-one text Chat session. The Client can also be invited to join a group discussion initiated by the Control.
- **File Transfer**: The Control user can transfer files to and from the Client device.
- **Screen Capture**: During a remote control session, the Control can capture screenshots from the Client device.
- **Wi-Fi/Battery Indicators**: The Control can view the current status of wireless networks and display battery strength for connected Client devices.

Additionally, for supported devices*:

- The Control can view thumbnails of all connected Android devices.
- Zoom in to view a larger thumbnail of any selected device.
- The Control can discreetly view (Watch mode) or remote control (Share mode) the screen of any connected Client device.

* Supported devices are from those vendors who have provided the additional access privileges needed for screen monitoring on their devices. Devices running Android 5 or later already have built-in screen capture capabilities.

NetSupport Manager Mobile Control for iOS and Android

The NetSupport Manager Mobile Control for iOS and Android provides mobile remote control for existing NetSupport Manager remote control users from any iPad, Android Tablet or Kindle Fire.

The Mobile Control allows a user to quickly search and connect to local computers by either IP address or PC name or to browse, connect and view remote computers using the free NetSupport Manager Internet Gateway component.

The NetSupport Manager Mobile Control provides full remote control of any remote PC running an existing NetSupport Manager Client (version 11.04 or later), as well as chat and message capabilities.

The NetSupport Manager Mobile App can be downloaded from Google Play, the Apple iTunes store or the Amazon app store.

Using the Control

In this chapter …

You will discover how to use the wealth of features available to a Control user. From how to initiate a remote control session to how you then monitor and manage activity at the end-user's desktop.

Starting the NetSupport Manager Control

To start the NetSupport Manager Control program

1. Double click on the **NetSupport Manager Control** icon in your NetSupport Manager Program group.
   Or
   Click the NetSupport Manager Control desktop icon (if you installed a desktop icon for the Control).
   Or
   Choose {Start}{Programs}{NetSupport Manager}{NetSupport Manager Control} from your operating system.

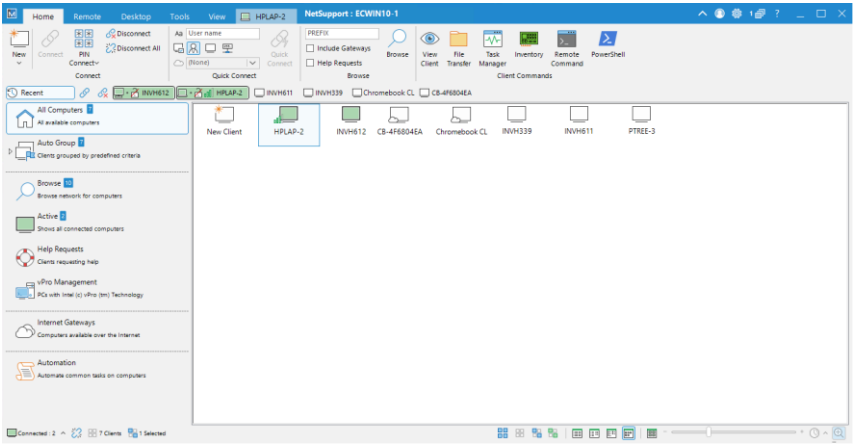
As NetSupport Manager initialises, you will see a window in the middle of your screen with the NetSupport Manager logo and version information. This only appears for a few seconds while NetSupport Manager loads, after which the Control window will be displayed and the Welcome wizard will appear. From here, you can configure the network protocol(s) to use, view the getting started guide and see what's new in this version of NetSupport Manager. To just start the Control program, click **Start**.

Note: By default, the Control is configured to support the TCP/IP protocol; however, it can support multiple protocols simultaneously. If you receive a protocol error message when starting the Control or want to configure it to support Clients running on different protocols, click **Configure** in the Welcome wizard or click the **Change the settings for the current Configuration** icon on the caption bar in the Control window and go to the Connectivity section.

The Control window

The Control window is the primary interface for:

- Configuring the Control
- Connecting to Clients
- Maintaining Client information
- Selecting which Clients to work with
- Selecting tasks to carry out.



The caption bar

The caption bar indicates that you are in the Control window and displays the name of the NetSupport Manager Control workstation. The following options are available:



Show or hide the ribbon.



NetSupport Manager allows you to set up multiple profiles for different Control users. Here, you can access the Configurations dialog, where you can create and manage profiles.



Access the settings for the current Control configuration (profile).



Shows how many windows are open. From here, you can access the Window menu.



Access the online help and version number, licensee, Technical Support and compression information.

The ribbon
The ribbon provides access to all the features, tools and settings. Positioning the cursor over an icon will display a brief description of its function. The ribbon is organised into the following tabs:

- **Home**
  Provides quick access to the tools needed for browsing, locating and connecting to Clients. You can also access some commonly used Client commands here.

- **Group**
  Provides access to the group functions within NetSupport Manager. From here, you can connect, organise and carry out tasks on groups of Clients.

Note: This tab will only appear when you have a group selected.

- **Remote**
  Here, you'll find the remote and manage features, such as view, file transfer, power on/off and scan. You can also communicate with Clients using the Chat , Message and Audio features.

- **Desktop**
  From here, you can show your screen and applications to Clients, record and playback replay files and send a message or announcement to Clients.

- **Tools**
  Provides access to additional tools such as File Manager, File Distribution and User-Defined Tools.

- **View**
  Allows you to customise the look of the List and Tree view and search for Clients and objects in the Tree view.

Note: If you have a Client selected, a tab will appear in the ribbon displaying the Client name. From here, you can access a range of tools and you can view and edit the details for the Client machine. If more than one Client is selected, a Selection tab appears, allowing you to perform functions to all selected Clients.

The quick access bar
The quick access bar allows you to view Clients/groups you have recently connected to. From here, you can perform a number of commonly used functions, including connecting to and viewing the Client.

Note: Clicking **Recent** will display a drop-down menu, allowing you to switch between recent connections and pre-defined groups.

The Tree view
The Tree view is where NetSupport objects such as Clients and groups are created, displayed and organised. Each set of objects is stored in its own folder and when the folder is selected, the contents are displayed in the adjacent List view.

The List view
The List view displays the contents of the currently selected folder in the Tree view. You can switch the display mode between large icons, small icons, details view or Thumbnail view. The information within the List view can be customised to show specific information relevant to you.

The status bar
The status bar is displayed at the bottom of the Control window. It shows the number of items in the folder selected in the Tree view, along with the number of connected Clients. You can also select which objects to work with, how they are displayed in the List view and access the thumbnail settings.

Quick access bar

The quick access bar allows you to view Clients/groups you have recently connected to. From here, you can see an overview of the Client details and perform a number of commonly used functions, including connecting to and viewing the Client.

Clicking **Recent** will display a drop-down menu, allowing you to switch the quick access bar between recent connections and pre-defined groups.

Clicking a Client name brings up a Remote Management pane, and from here, you can see details of the Client and perform a variety of functions.

By default, the Client name, wireless and battery indicators (if applicable) and security status (shows if TLS or encryption are enabled or not) are displayed alongside the Client on the quick access bar. You can customise what is displayed and choose to show the Client's logged-on user name, IP address, operating system, enclosure type and location by right-clicking on the quick access bar.

Note: Changing the Client display options here will also change them on the caption bar, connected Clients list on the status bar and when zooming into thumbnails.

Click  to connect to all Clients and  to disconnect from all Clients.

To hide the quick access bar

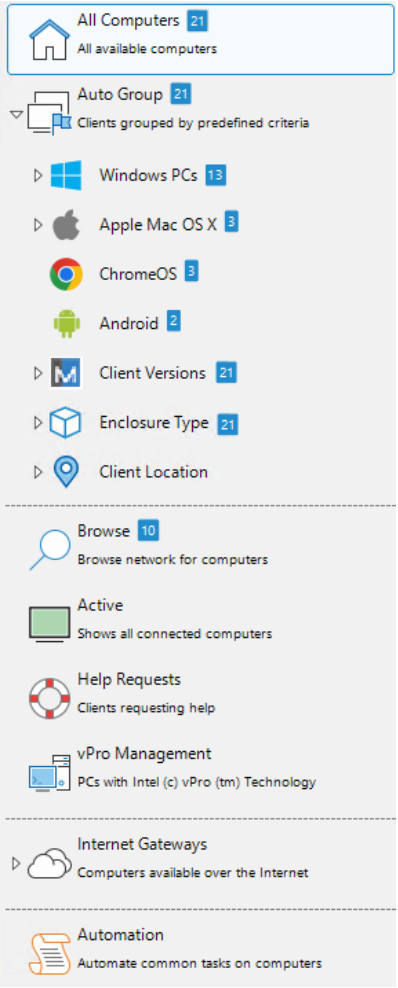
The quick access bar is displayed by default but can be hidden if required.

1. Select the View tab in the ribbon and click **Quick Access**.

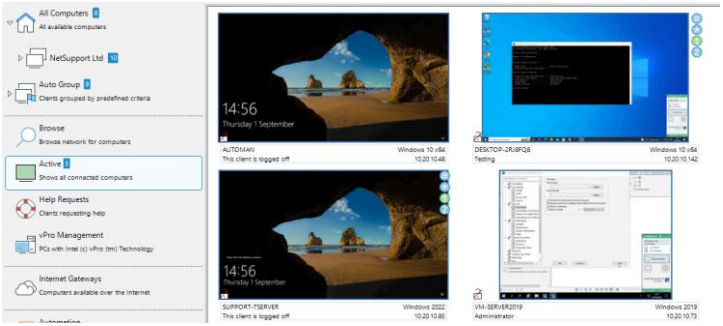
   Note: Click again to show the quick access bar.

Tree view

The Tree view is where you access the information about the various NetSupport Manager objects. An object may be an individual Client, a group or even a collection of help requests generated by Clients.



Each set of objects is stored in its own folder in the Tree view. The individual objects in a folder are displayed in the adjacent List view. So, for example, selecting the **Active** folder will result in the List view changing to display all currently connected Clients.



The Tree view can be expanded or contracted (depending on the detail you require) by clicking the  icon to the left of a folder.

Notes:

- The height of the items in the Tree view can be reduced if required. Select the View tab in the ribbon and click the **Compact Mode** icon.
- You can hide the Tree view, providing more space when working with objects in the List view. Select the View tab in the ribbon and click the **Show Tree** icon.

The available folders are:

All Computers

A list of all known Clients that have been connected either during the current or previous sessions. It is very quick and easy to connect to a Client from this folder as it removes the need to first perform a browse or know the network address of the Client.

You can organise individual Clients into groups. Once a Client is included in a group, the whole of that group can be connected to and worked on simultaneously without the need to connect and select them individually.

Clicking the  icon next to **All Computers** will show any groups that have been created.

Auto Group

Clients will be automatically grouped according to the predefined criteria, allowing you to quickly and easily see what operating system Clients are using, the NetSupport Manager Client version, the type of device and the Client location. These groups are fixed and cannot be amended, but you can create your own groups to reflect the company structure.

Browse
This is a list of Clients discovered by running a browse action in the current session. Connecting to a Client from this folder causes its details to be stored for later use in the **All Computers** folder.

Active
Any Client that is currently connected will be displayed in this folder.

Help Requests
NetSupport Manager includes a function at the Client that enables the Client user to send a request for help. If a Control is connected when a Client sends a help request, the Control will be immediately notified, as the **Help Requests** folder is highlighted. If the Control is not connected, its **Help Requests** folder will be highlighted the next time it connects to that Client.

vPro Management
NetSupport Manager can locate PCs that have vPro capability and perform a variety of functions. All PCs with vPro capability will be displayed in the List view. Select a vPro machine to access the available functions in the Home tab of the ribbon.

Search
You can search for Clients and objects in the Tree view and the results will be displayed here. This folder will only be displayed if you have performed a search.

Remote Networks
This refers to Clients that have to be connected over a dial-up link. They may be Clients on a LAN in another building or even standalone workstations. In either event, they are referred to as remote networks and the information concerning the telephone number to dial and the type of connection is stored in this folder.

This folder is hidden by default. To view this, click the **Change the settings for the current Configuration** icon  on the caption bar. Select **Control Interface** - **Settings** and clear the **Hide Dial Directory** checkbox.

Internet Gateways
The primary role of a NetSupport Manager Gateway is to facilitate seamless remote control between PCs that may be located behind different firewalls. The Gateway provides a stable and secure method for locating Clients via HTTP and delivers web-based remote control without the need for modifications to existing firewall configurations.

A list of your Gateways will appear here, and you can add, edit and browse a Gateway.

Automation
Scripts created using the NetSupport Manager Script Editor can be added to this folder. The List view shows the names of each script and enables you to add new scripts to the list. Select a script to access the available functions in the Home tab of the ribbon.

Note: You can hide folders that you don't need to see in the Tree view. Click the **Change the settings for the current Configuration** icon on the caption bar. Choose **Control Interface - Settings** and select the options you wish to hide.

List view

The List view displays the objects stored in the corresponding folder in the Tree view. For example, if you select the **Active** folder, then the List view will contain the details of the currently connected Clients. Similarly, if you perform a browse action, the results of that browse will be displayed.

You can expand the List view by hiding the Tree view, giving you more space to work in. Select the View tab in the ribbon and click the **Show Tree** icon. Click this again to show the Tree view.

You can easily select which objects to work with and how they are displayed in the List view by selecting the View tab in the ribbon and clicking the appropriate icon in the List section or clicking the appropriate icon on the status bar.

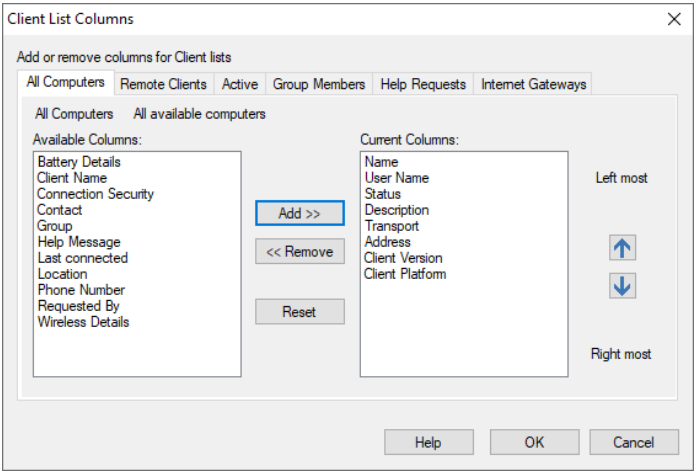
When viewing in large icons, the operating system, Wi-Fi and battery indicators and location flag (if enabled) will be displayed. Details view will also display the Wi-Fi and battery indicators next to the Client icon. Further information is available in Details view by customising the columns displayed.

By default, the Client location flags are enabled. To disable these, click the **Change the settings for the current Configuration** icon  on the caption bar. Select **Control Interface** - **Settings** and clear the **Show Client location** checkbox.

Note: By default, double-clicking a Client in the List view opens a View window. You can customise the action taken in the Control configuration - Control Interface Settings.

To customise the List view

1. Select the View tab in the ribbon and click **Columns**.
   Or
   Right-click in a blank area of the List view and select **Columns**.
2. The Client List Columns dialog will appear.



The tabs shown at the top of the List view relate to each of the Client List windows that are available for the Control.

Select the desired tab: the left-hand window highlights columns that are available for inclusion; the right-hand window shows those already included. Simply select the column name you require and then **Add** or **Remove**.

The arrows to the far right of the window are used to adjust the order in which each column is displayed; the higher up the list represents the position from the left of the List view.

Note: When viewing in details view, you can apply filters to the column headings, allowing you to easily search for specific Clients. Select the View tab in the ribbon and click the **Filter Bar** icon.

Status bar

The status bar is displayed at the bottom of the Control window. It shows the number of items in the folder selected in the Tree view along with the number of connected Clients. You can see a list of the connected Clients by clicking **Connected** (you can also disconnect a Client from here). By default, the Client name, wireless and battery indicators (if applicable) and security status (shows if TLS or encryption are enabled or not) are displayed. You can customise what is displayed and choose to show the Client's logged-on user name, IP address, operating system, enclosure type and location by right-clicking **Connected**.

Note: Changing the Client display options here will also change them on the quick access bar, caption bar and when zooming into thumbnails.

Note: If a Client disconnects, the **Connected** icon will turn red to notify you. You can see which Client has disconnected by opening the list and you can choose to reconnect or remove them from the list.

To disconnect all connected Clients, click .

You can easily select which objects to work with in the List view by clicking the appropriate icon:



Selects all objects.
Selects all connected Clients.
Reverses the current selection.
Clear the objects selected.

The appearance of displayed items in the List view can be switched between large icons, small icons, list, details and thumbnail view by clicking the appropriate icon:



Details view.
List view.
Small icons view.
Large icons view.
Thumbnail view.

If you are in thumbnail view, use the slider to adjust the thumbnail size. Click  to adjust the thumbnail update frequency. By default,

when you mouse over a thumbnail, you zoom into the Client's screen. Click  to turn this on or off.

Finding Clients

Before you can open a View window for remote control or to work with Clients, you must first connect to them.

Rather than having to know all the Client names and their network addresses in advance, NetSupport Manager provides a browse facility that enables you to auto-discover them.

When you run a browse action, the Control sends a message on all protocols for which it has been configured, asking all Clients to "sign in" with their name, network address and protocol.

The responses are added to the **Browse** folder in the Tree view and their details are displayed in the List view. You can then connect and work with these Clients directly or organise them into groups for later use.

Once you have connected to a Client discovered by the browse function, its details are automatically stored in the **All Computers** folder in the Tree view. These Clients then become known Clients and you can subsequently connect to them without the need to run a browse action first.

Note: You may be using NetSupport's Gateway facility to establish Client connections, in which case you can choose to include Gateway Clients when browsing. Although these will appear in the **Browse** folder along with any network Clients, they are not stored in the Known Client list.

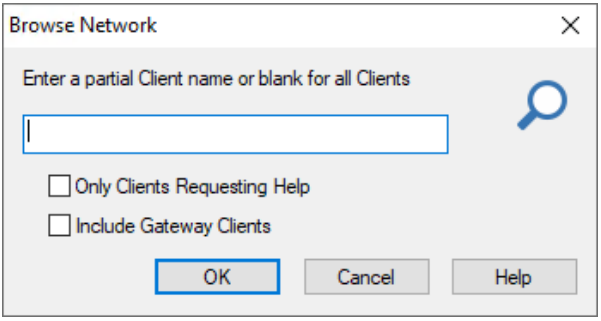
To find a Client on a network

1. Go to the Home tab on the ribbon.
2. In the **Prefix** field, enter the Client name (a partial name can be entered or leave blank to browse for all Clients).

   Note: Select the drop-down arrow to choose from a list of previous entries.
3. Optional criteria can be specified, such as only browsing for Clients who have requested help or including Gateway Clients in the search.
4. Click **Browse**.

Or

1. Select the **Browse** folder in the Tree view and double-click **Look for Clients** in the List view.
2. The Browse dialog will appear.

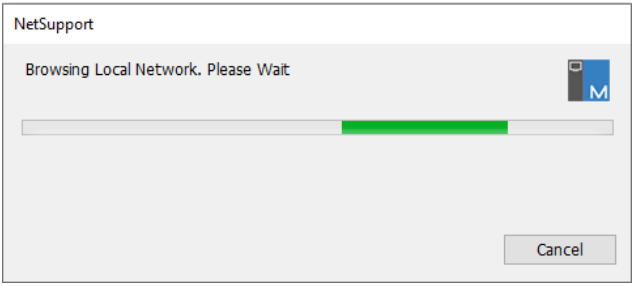


Enter a partial Client name or leave blank for all Clients
Type in the first part of a Client name here to narrow the search. If you have many Clients on your network, you may only be interested in those that begin with a certain word or letter. If you have Clients that begin with ADMIN, typing this in would return Clients such as ADMIN1, ADMIN_OFFICE and ADMINISTRATOR. To find all available Clients leave this field empty.

Only Clients Requesting Help
Select this checkbox to browse only for Clients that have requested help.

Include Gateway Clients
Select this checkbox to include Gateway Clients when browsing.

Click **OK** to begin the browse. A dialog will advise you that the Control is browsing for Clients.



Click **Cancel** to abort your browse for Clients. This will take a few seconds, after which a list of available Clients on the network meeting the criteria will be displayed in the **Browse** folder. You can then right-click on individual Clients to connect to them, display their properties or carry out tasks.

If the expected Clients are not found, it may be because NetSupport Manager has not been configured to browse the required networks. See 'Configuring the NetSupport Manager Control for subnet browsing' for more information.

If you only want to browse for Gateway Clients, selecting the Gateway from the **Internet Gateways** folder in the Tree view will change the Browse section in the ribbon to only search for Gateway Clients. Alternatively, double-click **Browse Gateway** in the List view. Clients browsed for in this way will not appear in the **Browse** folder.

Note: You can also search for existing Clients in the Tree view by entering the search criteria in the Search section of the View tab.

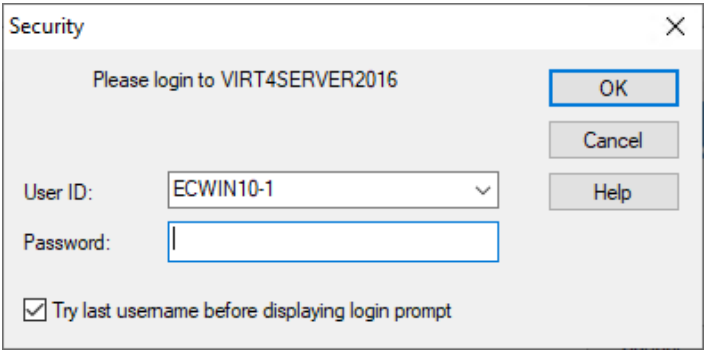
Connecting to Clients

Before you can remote control a Client, you must first connect to it.

To connect to Clients

1. Select the Client you want to connect to in the **All Computers** or **Browse** folder.
2. Select the Home tab in the ribbon and click **Connect**.
   Or
   Right-click on the Client icon and choose **Connect**.
   Or
   Double-click on the Client icon to connect and view it immediately.

   If the Client has been configured with security passwords, you will be prompted to enter a user ID and the correct password. This must be equal to the user ID and password that has been set in the Client's profile.



Note: NetSupport Manager provides a PIN Connect feature which allows you to quickly locate and connect to a Client anywhere across the enterprise without knowing the Client's computer name or IP address. A PIN Server generates a unique PIN code which both the Control and Client enter to establish a connection.

Connecting to Clients using PIN Connect

NetSupport Manager provides a quick and easy way to connect to Clients without having to know the PC name or IP address. A PIN Server generates a unique PIN code; this is then entered at both the Client and Control and the connection is created.

Note: A PIN Server must be installed and configured at both the Client and Control to use this feature.

Installing and configuring a PIN Server

The PIN Server can be installed as a standalone component on a machine or along with other NetSupport Manager components.

To install the PIN Server component, you must select **Custom** when choosing the type of NetSupport Manager installation to perform.

Client configuration

1. From the basic or advanced Client Configurator, select **Connectivity** - **PIN Server**.
2. Enter the IP address and port (default 443) for the PIN Server machine.
3. If you are using a proxy server to connect to the PIN Server, enter the server address and an appropriate port.

   Note: This only applies to Windows 8 machines and earlier. Windows 8.1 and above machines use automatic proxy configured in Windows Settings.
4. To use the same settings as the NetSupport Gateway, click **Copy**.
5. Click **OK**.

Control configuration

1. Click the **Change the settings for the current Configuration** icon  on the caption bar.
   Or
   To apply the setting to a specific profile, click the **Profiles** icon  on the caption bar. Select the required profile and choose **Connectivity and Startup Settings**.
   Or
   Select the Home tab in the ribbon, click **PIN Connect** and then click **PIN Server Settings** (you can skip step 2).
2. Select **Connectivity** – **PIN Server**.
3. Enter the IP address and port (default 443) for the PIN Server machine.

4. If you are using a proxy server to connect to the PIN Server, enter the server address and an appropriate port.
5. You can use the same settings as a NetSupport Gateway. Select the required Gateway and click **Copy**.
6. Click **OK**.

Generating a PIN from the Control

1. Select the Home tab in the ribbon and click **PIN Connect**.
2. Click **Create PIN**.
3. The PIN Server will generate a unique code. When advised, the Client enters the PIN and a connection is established.

Note: The PIN code can be emailed to the Client or copied to the clipboard by clicking the appropriate icon.

Entering a PIN at the Control

1. The Client will advise you of the PIN code.
2. Select the Home tab in the ribbon and click **PIN Connect**.
3. Click **Enter a PIN**.
4. A keypad will appear. Enter the PIN code and click **Connect**.

Generating a PIN from the Client

1. Double-click the NetSupport Manager Client icon in the system tray.
2. The Client Information window will appear.
3. Click **Create PIN**.
4. The PIN Server will generate a unique code. When advised, the Control enters the PIN and a connection is established.

Note: The PIN code can be emailed to the Control or copied to the clipboard by clicking the appropriate icon.

Entering a PIN at the Client

1. The Control advises the Client of the PIN code.
2. Double-click the NetSupport Manager Client icon in the system tray.
3. The Client Information window will appear.
4. Click **Enter a PIN**.
5. A keypad will appear. Enter the PIN code and click **Connect**.

Quick Connect

Quick Connect allows you to directly connect to a Known Client by Client name, logged-in user name, or by network address. This saves you from having to perform a network browse before selecting the desired Client from the List view.

Clients configured for HTTP/HTTPS connections through a NetSupport Gateway can also be selected.

To connect to Clients

1. Select the Home tab in the ribbon.
2. In the Quick Connect section, enter the Client machine name, logged-on user name or network address in the Text field (click the drop-down arrow to choose from a list of previous entries) and select the required **Connect By** icon:


Connect by logged-on user name.


Connect by machine name.
Connect by IP address.

Note: If the Client is configured for HTTP connections through a Gateway, in addition to the name or user name of the Client, you will need to choose the appropriate Gateway name from the list provided.

3. Click **Quick Connect**.
4. A dialog box will inform you that NetSupport Manager is trying to connect to the named Client.

If the connection attempt is successful, the Active folder will be opened and the Client details displayed in the Client status. You can then view the Client or conduct other one-to-one or group tasks.

Note: If connecting by user name and more than one Client machine matches this criteria, a list of Clients will appear for you to select from.

Connecting to Clients on different protocols

NetSupport Manager supports connecting to Clients on multiple transports. The supported transports are TCP/IP and HTTP with legacy support for IPX and NetBIOS (within NetBIOS, there are 8 logical adapters).

Transports can be configured and tested for Clients within the Connectivity section of the basic or advanced Client Configurator.

When the Control performs a browse, it looks over all configured transports. Once Clients have been found, you can connect to them by highlighting them and clicking **Connect** on the Home tab in the ribbon.

Connected Clients on different transports happily coexist within the Control. Operations such as File Distribution, Show and Scan work over different transports.

If you know that you only have Clients on one particular transport, then the Control will initialise slightly quicker if you only configure it for this transport.

Configuring the NetSupport Manager Control for subnet browsing

Most corporate networks are made up of a number of small networks that are connected together in order to provide end users with access to network resources. NetSupport Manager incorporates features that allow a NetSupport Manager installation on one network to be used to remotely manage computers on another interconnected network.

Using NetSupport Manager in its default configuration will enable you to remotely manage computers on a remote LAN if connectivity to that remote LAN is provided by a WAN.

However, there are some configuration changes that are required to allow a NetSupport Manager Control to browse for Clients on remote LAN's. The configuration changes required are dependent on the network transport that you will be using with NetSupport Manager. The two most common transports that are used over WAN's are TCP/IP and IPX.

Configuring the NetSupport Manager Control for IP subnet browsing

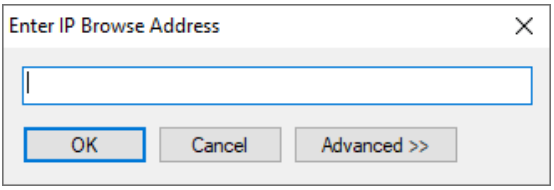
Before configuring NetSupport Manager to browse on a remote IP subnet, it is useful to understand how IP addresses are made up and, in particular, what an IP broadcast address is.

For further information, see 'Understanding IP Addresses' in the Technical Reference section of this manual.

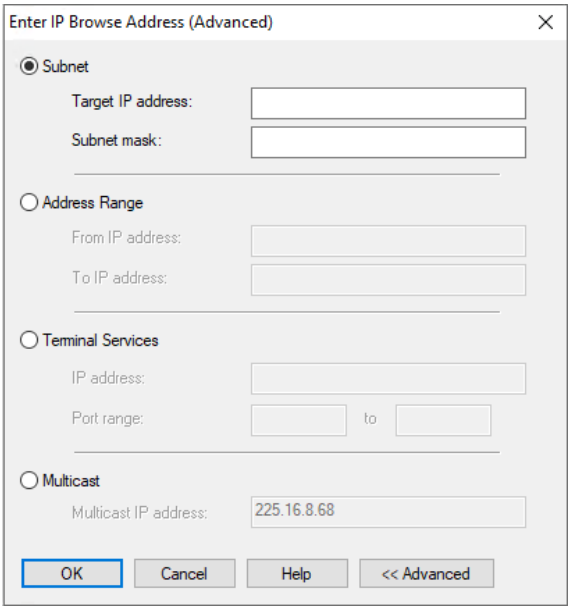
To configure the NetSupport Manager Control to browse IP subnets

1. Click the **Change the settings for the current Configuration** icon on the caption bar.
   Or
   To edit a named configuration file, click the **Profiles** icon on the caption bar. Select the required configuration and click **Connectivity and Startup Settings**.
2. Select **Connectivity** - **TCP/IP**. In the Browsing section, click **Settings**.
3. The Configure TCP/IP Client Browsing dialog will appear.

4. Click **Add** and enter the broadcast address of the network you wish to browse if known.



To enable NetSupport Manager to calculate the broadcast address, click **Advanced** and enter a target IP address followed by the subnet mask or enter the required address range.



5. Click **OK**.

Notes:

- When adding the address of a remote subnet, you must ensure that the broadcast address for the local subnet is also present. If not, the Control will not find any local Clients when you perform a browse.
- Some network routers will suppress broadcast packets from being transmitted across WAN links. If this is the case, then even if the Control is correctly configured, you will not be able to browse the remote subnet.

Configuring the NetSupport Manager Control to browse remote IPX networks

Before configuring a NetSupport Manager Control to browse a remote IPX network, it is useful to understand how IPX addresses are formatted. You will need to have the IPX network numbers for each IPX network that you wish NetSupport Manager to browse. This includes the IPX network number for the local network on which the NetSupport Manager Control is installed.

For further information, see 'Understanding IPX Addresses' in the Technical Reference section of this manual.

To configure the NetSupport Manager Control to browse remote IPX networks

1. Click the **Profiles** icon  on the caption bar.
2. Select the required configuration and click **Connectivity and Startup Settings**.
3. Select **Connectivity** - **IPX**.
4. Check the **Use IPX** and **Record Clients' Network Numbers** options.
5. In the **Use Networks** field, enter each of the IPX network numbers that you wish NetSupport Manager to browse. If multiple network numbers are required, separate each with a comma.

NetSupport Connectivity Server

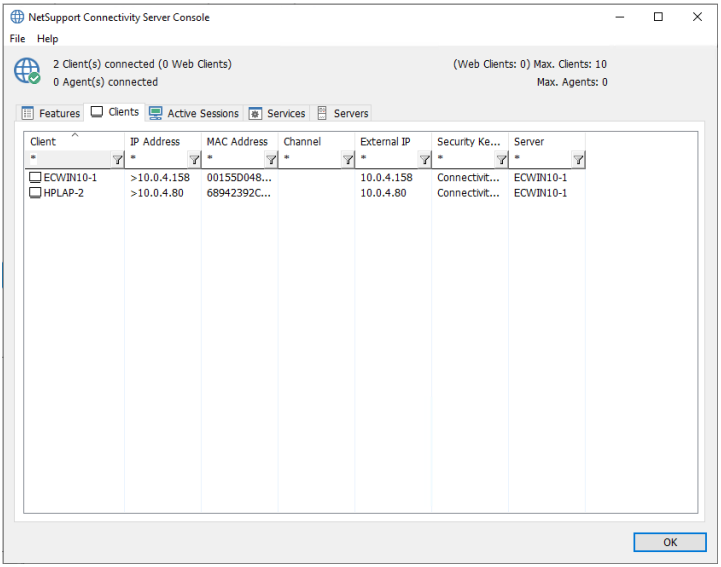
The key to a successful remote support solution is the ability to locate and connect to devices no matter where they are. NetSupport Manager provides a range of connectivity methods as standard.

The NetSupport Connectivity Server (Gateway) is a central hub for managing all your NetSupport connections across the internet. From the console, you can see what NetSupport Connectivity components are installed and in use.

NetSupport Connectivity Server Console

To open the NetSupport Connectivity Server, right-click the **NetSupport Connectivity Server** icon in the system tray and select **Open** or double-click the icon.

An overview of how many Clients are currently connected is displayed.



Further information can be found in each of the tabs:

- **Features**
  Shows you what components of the NetSupport Connectivity Server are installed.

- **Clients**
  Displays a list of all the NetSupport Clients currently connected to this NetSupport Connectivity Server and any Connectivity Servers known to this one. Details for the Clients are displayed along with the NetSupport Connectivity Server they are connected to.

  Note: A secure indicator will appear next to the Client if it's running over a secure SSL/TLS connection.

- **Active Sessions**
  Displays a list of current connections between a NetSupport Control and a NetSupport Client with the date and time that the connection started.

  Note: Only sessions on this NetSupport Connectivity Server are displayed.

- **Services (only applicable to the Name Server)**
  Displays a list of NetSupport School Tutors that are active in Room mode. This allows NetSupport School Clients to connect to the room through the Name Server.

- **Servers**
  Displays a list of Servers known to this NetSupport Connectivity Server. From here, you can see details of the servers, such as the status, number of Clients connected and any active sessions.

Note: You can filter the contents of the Clients, Active Sessions and Services tabs so that only items meeting certain criteria are displayed. Enter the search term in the Filter field under the required column heading and the matching items will be displayed. Click to clear the filter.

Exporting data
Data can be exported to a .CSV file, allowing further analysis. Select the tab you want to export data from and select {File}{Export} from the drop-down menu bar.

To configure the settings for the NetSupport Connectivity Server, select {File}{Configure Connectivity Server} from the drop-down menu bar.

Connecting to Clients/Controls via a NetSupport Gateway

The primary role of a NetSupport Gateway (NetSupport Connectivity Server) is to facilitate seamless remote control between PCs that may both be located behind different Firewalls. The Gateway provides a stable and secure method for locating and connecting Clients/Controls via HTTP, delivering web-based remote control without the need for modifications to existing Firewall configurations.

Typically, companies protect their internal network by using a Firewall, only allowing connections if specific TCP/IP ports have been opened. On occasions, you may find that a direct connection between a NetSupport Manager Control and Client is blocked because the Firewall's they are protected by are configured to prevent outgoing connections on all but the standard TCP/IP ports.

A NetSupport Gateway solves this problem by acting as a third party that sits between the Control and Client, the HTTP/HTTPS protocol, rather than TCP/IP, being used for communications.

Notes:

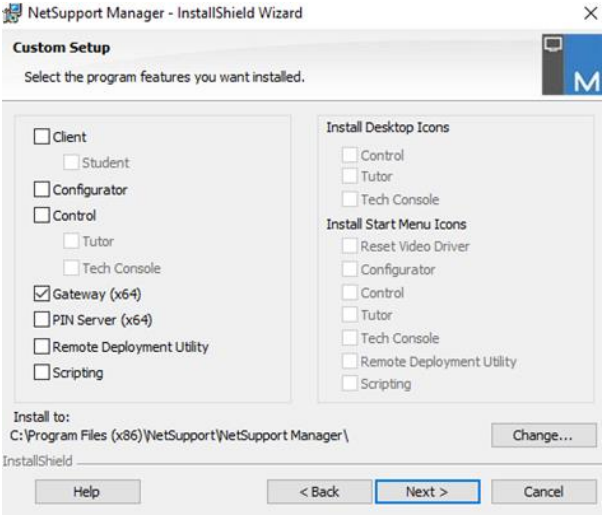
- Client and Control configurations can have both TCP/IP and HTTP/HTTPS enabled simultaneously, thus ensuring that local connections are still valid.
- In version 9.10, port 443 was introduced as the default for HTTP communications, 3085 being used previously. Gateway settings will be preserved for existing customers who subsequently upgrade, enabling 3085 to continue to be used, but there may be scenarios when upgraded Controls and Clients will need the HTTP port manually reconfiguring to ensure operability.

Gateway installation

The Gateway is designed to run on a machine that is accessible from both the Client and Control. It must, therefore, have a fixed or static IP address.

The Gateway can be installed as a standalone component on the machine you wish to use or along with other NetSupport Manager components.

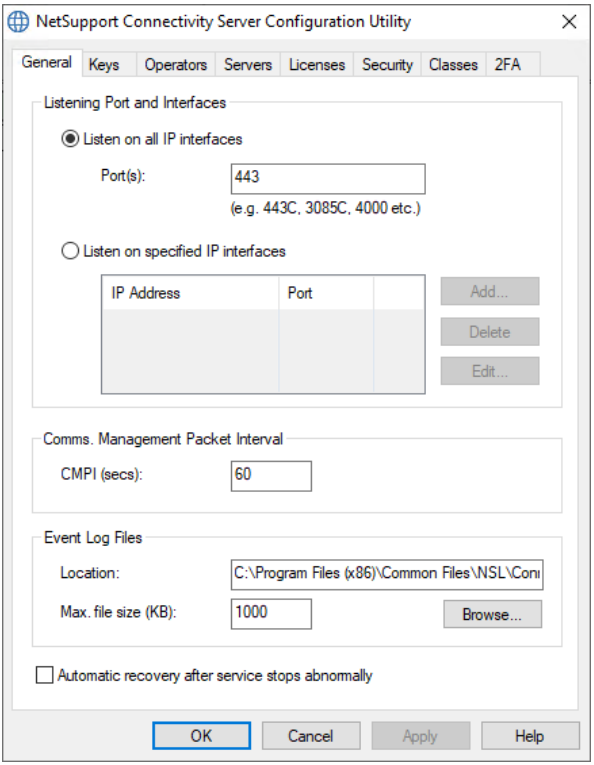
To install the Gateway component, you must select **Custom**when choosing the type of NetSupport Manager installation to perform and ensure the Gateway component is selected.



Gateway configuration

At the end of the installation, the NetSupport Connectivity Server Configuration utility will be displayed, allowing you to configure the properties for the Gateway. The following tabs are available:

- **General tab**



Listening Port and Interfaces

Listen on all IP interfaces

The NetSupport Connectivity Server uses HTTP port 443 by default. This can be changed to any open port to fit the environment.

Notes:

- Multiple ports can be configured. Separate ports with a comma, for example, '443,3085C'.
- Adding a capital 'C' to the end of the port number makes it 'Client only'. Only Client machines can report using this port.
- If the Control and/or Client are located behind a firewall, you will need to enable port 443, or the configured port(s), within the configuration of your firewall.
- In version 9.10, port 443 was introduced as the default for HTTP communications, 3085 being used previously. NetSupport Connectivity Server settings will be preserved for existing customers who subsequently upgrade, enabling 3085 to continue to be used, but there may be scenarios when upgraded Controls and Clients will need the HTTP port manually reconfiguring to ensure operability.

Listen on specified IP interfaces
You can add multiple IP addresses or enter a specific IP address, select **Add** and enter the IP address.

Comms. Management Packet Interval
CMPI (secs):
When configured for NetSupport Connectivity Server connections, the Client workstation confirms its availability by periodically polling the NetSupport Connectivity Server. By default, a network packet is sent every 60 seconds, but you can change this if required.

Event Log Files
Gateway activity during an active session is recorded in a text file, default GW001.LOG. This can be useful for checking which Clients and Controls have connected through the NetSupport Connectivity Server.

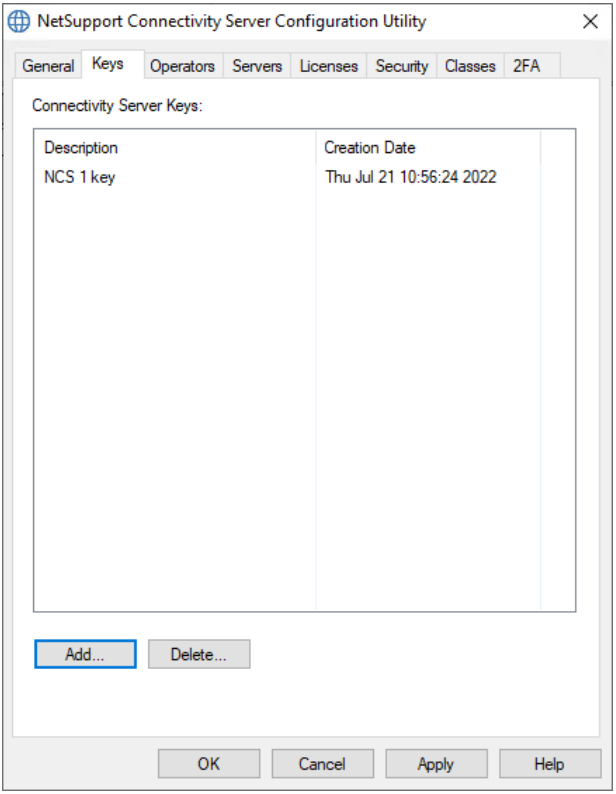
Location:
By default, the log file is stored in c:\program files\common files\nsl\ connectivity server\GW001.log. Select **Browse** to specify an alternative path.

Max File Size (KB):
Over a period of time, the log file could become quite large, you can manage this by specifying a maximum file size. When the limit is reached, the existing information in the file is overwritten by the new records.

Note: For changes to the log file settings to take effect, you will need to restart the Gateway32 service.

Automatic recovery after service stops abnormally
By default, the Gateway service will automatically recover if there is an abnormal shutdown.

- **Keys tab**

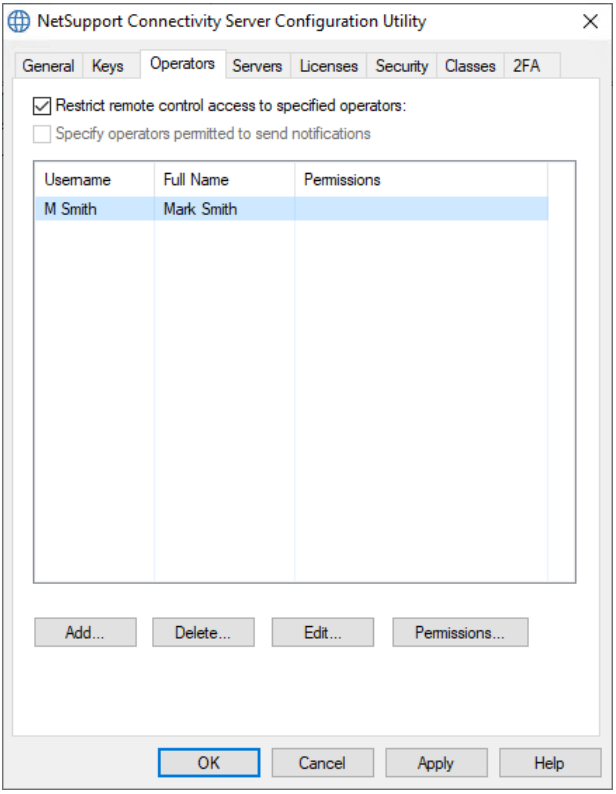


Connectivity Server Keys
This acts as a form of security key. The NetSupport Connectivity Server will not accept connections from a Control or Client unless a "Connectivity Server key" is specified, and that same key is also present at both the Control and Client end. The NetSupport Connectivity Server can support multiple keys. At least one key must be specified.

Connectivity Server key data is sent encrypted between Client/Control and the NetSupport Connectivity Server. Once connected to the NetSupport Connectivity Server, all Client/Control security such as user names and security keys will function normally.

Select **Add** to specify the key. The key must be at least 8 characters.

- **Operators tab**



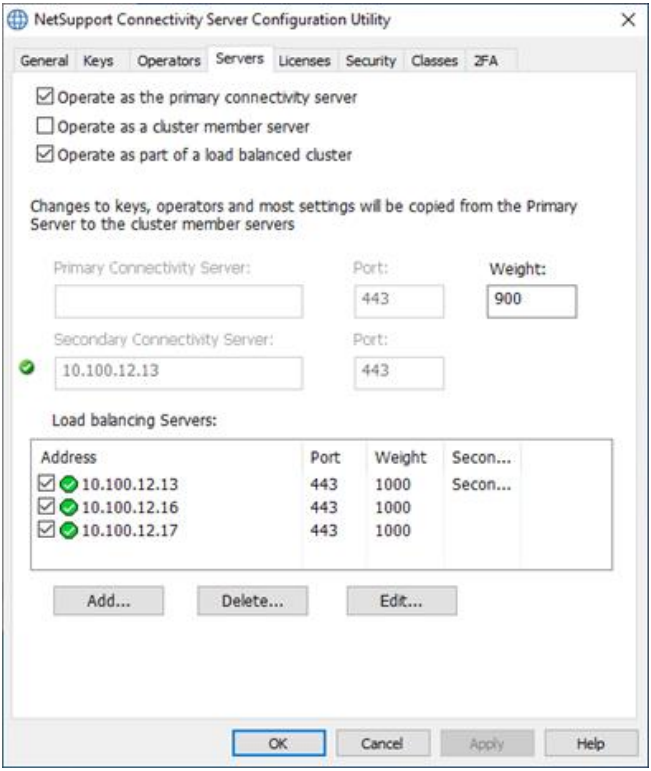
To enhance security, you can restrict remote control access to specified operators and also set the operator to verify themselves using two-factor authentication before they can connect to Clients on the Gateway.

Restrict remote control access to the following users:
Select this option to restrict access to specified operators. At the Control, a user will be required to configure a username/password in order to browse a NetSupport Connectivity Server and connect to Clients.

To enter the operator details and set a password, click **Add**. If two-factor authentication is required for this operator, select **Require 2FA**. If you're using Duo Push, you can link this operator to an existing enrolled Duo username.

Notes:
- For two-factor authentication to function, operators must only be associated with one user.
- Click **Reset Account/QR code** to reset the account and send a new QR code to the operator.

- **Servers tab**



By default, this Connectivity Server will be set to be a standalone Primary Connectivity Server. You can set this Connectivity Server as a standalone Secondary Connectivity which will act as a backup if the Primary Connectivity Server is unavailable. Load Balancing Connectivity Servers can also be set up to spread the load of Clients across multiple servers.

Operate as a standalone Primary connectivity server
Select this option if you want this Connectivity Server to operate as a standalone primary Connectivity Server (this option will be enabled by default).

Note: If **Operate as part of a load balanced cluster** is selected, this option will change to **Operate as the primary connectivity server**.

Operate as a standalone Secondary connectivity server (backup)
Select this option if you wish to use this Connectivity Server as a Secondary NetSupport Connectivity Server.

Note: It is recommended that your Secondary Connectivity Server is also configured to be a Load Balancing Connectivity Server so that configuration changes made at the Primary Connectivity server are automatically propagated to the Secondary and the Client load is shared. If you do not wish your Clients to load balance between the Primary and Secondary, set the weight of the Secondary Connectivity Server to 0. If this recommendation is not followed, any changes in configuration will have to be made separately to the Primary and Secondary Connectivity Servers.

Enter the fully qualified domain name (FQDN) and port (443 is used by default) of the Primary Connectivity Server.

Note: This changes to **Operate as a cluster member server** if **Operate as part of a load balanced cluster** is selected.

Operate as part of a load balanced cluster
Select this option if you are using load balancing.

If this Connectivity Server is going to be the Cluster Primary Connectivity Server, select **Operate as the primary connectivity server**. Set the weight of Clients this will take. By default, this is set to 1000 and is based on the network connection speed of the Connectivity Server machine.

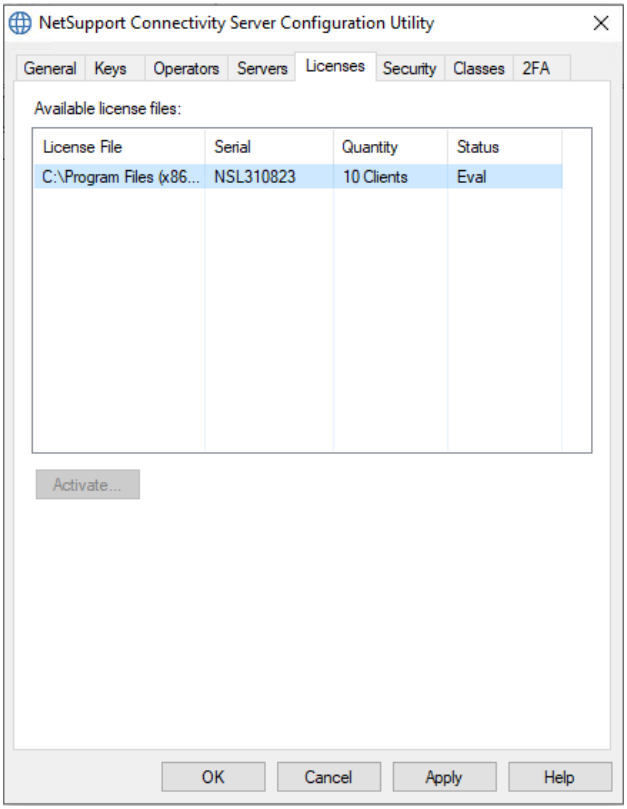
If this Connectivity Server is to be a Load Balancing Server, select **Operate as a cluster member server** and enter the fully qualified domain name (FQDN) and port of the Primary Connectivity Server.

Load Balancing Servers
This only appears if the Connectivity Server is a Cluster Primary Connectivity Server, and is where you add, edit or disable the Load Balancing Connectivity Servers.

Click **Add**. Enter the fully qualified domain name (FQDN), port and weight for the server and click **OK**. If you want the Load Balancing Connectivity Server to also act as a backup for the Cluster Primary Connectivity Server, click **Operate as Secondary Server for cluster**.

Notes:
- There is a limit of 20 Load Balancing Connectivity Servers.
- Any changes made here require the Gateway service to be manually restarted.

- **Licenses tab**

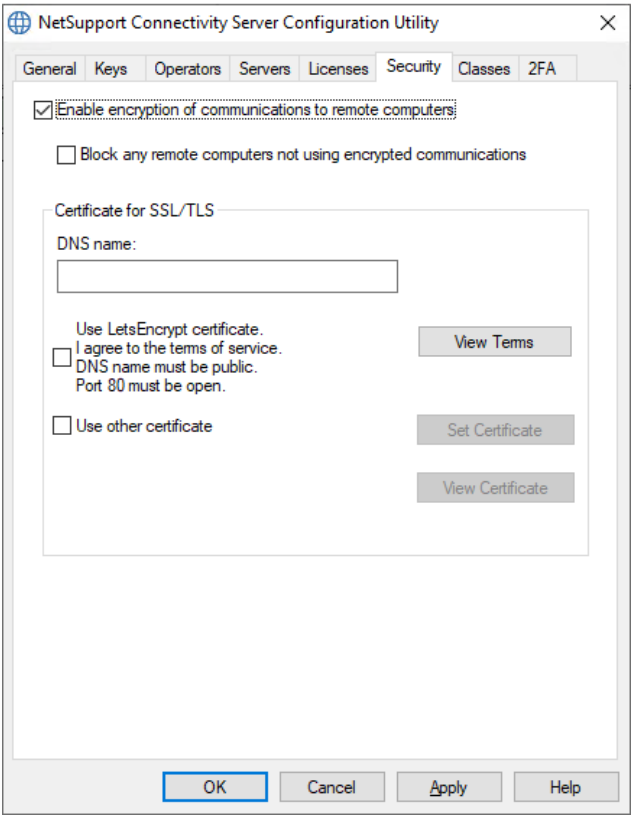


Displays all licences stored in the NetSupport Manager directory. If you do not have an internet connection, you can manually activate your NetSupport Manager licence here.

An activation code is required. Contact NetSupport or your reseller for this. Click **Activate** and enter the code. You will then need to restart the NetSupport Connectivity Server.

Note: If an internet connection is available, the licence will activate automatically and the NetSupport Connectivity Server does not need to be restarted.

- **Security tab**
  The NetSupport Connectivity Server provides support for an enhanced level of encryption to be used when initiating communications from remote computers.



Enable encryption of communications to remote computers
When enabled all communications in the connection process are encrypted.

Note: The remote computers (Controls and Clients) need to be running version 11.00.005 or later.

Block any remote computers not using encrypted communications
Earlier versions of the Control and Client programs do not support the enhanced level of encryption. Selecting this option will block

connections from remote computers running versions of the Control or Client software that does not support this.

Certificate for SSL/TLS
SSL or TLS certificates can be used to ensure that all data being sent across the Gateway is encrypted. If you already have an SSL/TLS certificate, you can enter it here or allow the Gateway to create and use a Let's Encrypt certificate.

Note: You can configure a Client to only connect to a Gateway if it has a valid SSL/TLS certificate. Select the **Require HTTPS** option in the Client configurator.

DNS name
Enter the DNS name for the Gateway.

Use Let's Encrypt Certificate
Select this option to use a Let's Encrypt certificate. The Gateway will automatically create a certificate that is valid for 90 days and renew it every 60 days.

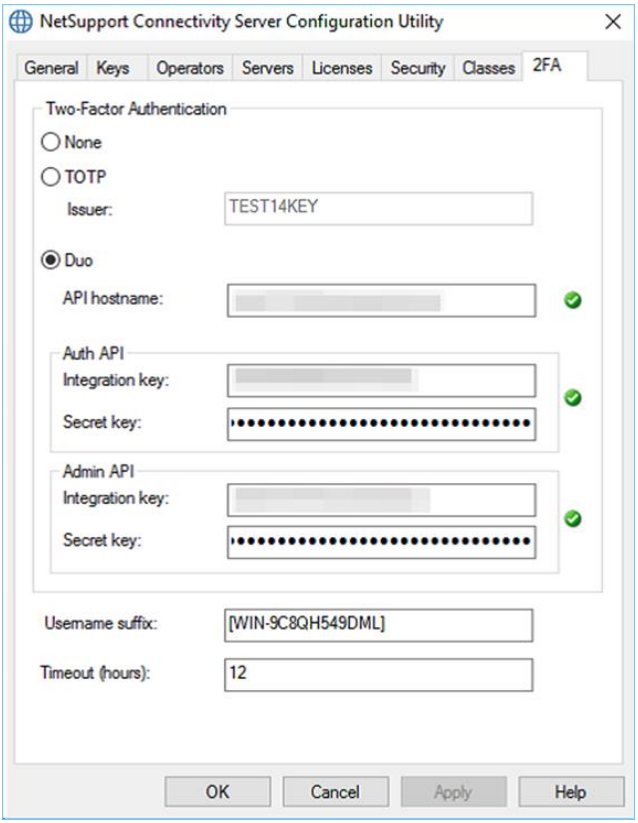
By selecting this option, you are agreeing to the terms of service. Click **View Terms** to read the Let's Encrypt Subscriber Agreement.

Notes:
- The Gateway must have a public DNS name.
- Port 80 must be open.

Use other certificate
If you already have an SSL/TLS certificate, you can add it here. Click **Set Certificate** and browse for the certificate.

View Certificate
Once a certificate has been applied, you can view it here.

- **2FA (two-factor authentication) tab**



Two-factor authentication provides an extra layer of security when Control users connect to Clients on a Gateway. NetSupport Manager supports time-based one-time password (TOTP) and Duo Push.

Note: You can enable two-factor authentication for individual operators in the Operators tab.

TOTP

Issuer

Enter an issuer name. This defaults to the licence name and is the account name that will be displayed in the authenticator app.

Duo

API hostname

Enter the API hostname.

Auth API
Integration key
Enter the integration key.

Secret key
Enter the secret key.

Admin API
Integration key
Enter the integration key.

Secret key
Enter the secret key.

Notes:
- This information can be copied from the Duo Admin Panel Dashboard.
- An 'owner' level Duo administrator's account is required to obtain the Admin API information.
- The Gateway must use port 443 for Duo Push.

Username suffix
You can enter an operator user name suffix (this ensures the username is unique to the Gateway).

Timeout
This is the time that the validation lasts before you need to re-authenticate (unless the Control is restarted). By default, this is set to 12 hours. If required, enter a different time here.

Notes:
- The primary Gateway and all devices running authenticating apps must be synchronised with UTC regardless of the time zone.
- If the timeout is set to 0, then two-factor authentication is required for every connection to a Gateway device.

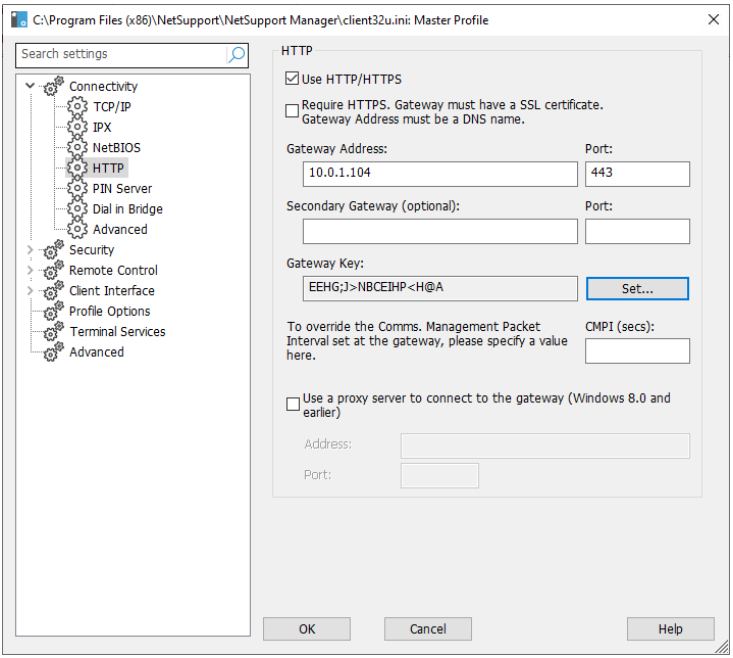
To display the **NetSupport Connectivity Server** icon  in the system tray, choose {Start}{Programs} {NetSupport Manager}{NetSupport Manager Connectivity Server Console}. Double-clicking this icon will display the NetSupport Connectivity Server Console, allowing you to manage your NetSupport connections across the internet. You can also access the NetSupport Connectivity Server Configuration utility by right-clicking the **NetSupport**

Connectivity Server icon and selecting **Configure Connectivity Server**.

Note: You will need to note the IP address of the NetSupport Connectivity Server machine as this will be required when configuring the Control and Client machines. In addition, you will also need the address of your proxy server if this is to be used for routing communications.

Client configuration

The Client machine needs to be configured to use the HTTP/HTTPS protocol and be given the appropriate Gateway access details.



1. From the Basic or Advanced Client Configurator, select **Connectivity** - **HTTP**.
2. Check **Use HTTP/HTTPS**. Port 443 will be configured by default.
3. To require a secure connection over HTTPS, select **Require HTTPS**.

   Note: An SSL/TLS certificate needs to be applied to the Gateway.
4. Confirm which Gateway to use by entering the IP address (or fully qualified domain name (FQDN) if you have selected **Require HTTPS**) of the Gateway machine. You can enter details for the

secondary Gateway, which will take over if the primary Gateway is unavailable.
5. Enter the appropriate Gateway key set at the Gateway machine.
6. You can override the Comms. Management Packet Interval that is set at the Gateway by entering a time here.
7. NetSupport Manager can be configured to route communications through a proxy server if required. Enter the server address and an appropriate port, 8080 recommended.
8. Click **OK**.

Control configuration

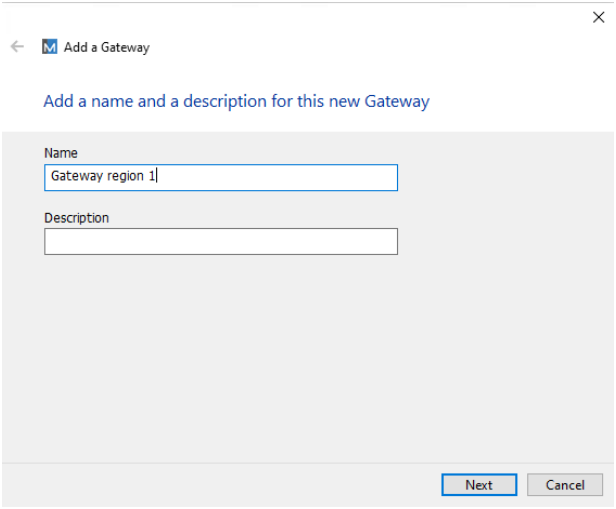
As with the Client, HTTP also needs to be enabled at the Control.

1. To apply to the current profile, click the **Change the settings for the current Configuration** icon on the caption bar and choose **Connectivity** - **HTTP**.
   Or
   To apply the setting to a specific profile, click the **Profiles** icon on the caption bar. Select the required profile, click **Connectivity and Startup Settings** and select **Connectivity** - **HTTP**.
2. Check the **Use HTTP** box. Port 443 is configured by default.
3. Click **OK**.

Add Gateways

The Control can communicate with multiple Gateways and the details of each need to be added at the Control end.

1. From the Control window Tree view, select the **Internet Gateways** folder and choose **Add a Gateway**.
   Or
   Select the Home tab in the ribbon, click **New** and select **Gateway**.
2. The Add a Gateway wizard will appear.



3. Enter a name and description for the Gateway. Click **Next**.
4. Enter the IP address (or fully qualified domain name (FQDN) if requiring HTTPS/TLS) of the machine where the Gateway is installed and confirm the port number to use – 443 will be specified by default. If required, enter a secondary Gateway to be used if the primary Gateway is unavailable.
5. To require a secure connection over HTTPS, select **Require HTTPS/TLS** (an SSL/TLS certificate needs to be applied to the Gateway). If this Gateway is to communicate through a proxy server (Windows 8.0 and earlier), enter the IP address and port to use.
6. Click **Next**.
7. Enter the Gateway key. This must match the key set at the Gateway and Client end.
8. If an operator username and password has been set up at the Gateway (this restricts the use of browsing and controlling remote Clients and decides if two-factor authentication is required for the operator), you will need to enter it here. Click **Finish**.
9. The new Gateway will be added to the list view.
10. Repeat the above process for any other Gateways that the Control needs to use.

Control – Gateway - Client communications

Now that all the elements are in place, you are ready to attempt connections through the Gateway. The Gateway serves three basic purposes:

To receive and store Client registrations

For a Client to be available to a Control, it must connect and stay connected to the Gateway. The Client indicates its readiness by periodically polling the Gateway that it has been configured to use. The Gateway stores the Client details in an internal table.

Respond to browse commands from the Control

Once the Control has added the required Gateways, it can browse them for Clients. The Gateway responds by scanning through its list of available Clients and returning those that match the browse criteria.

Note: Unlike a standard network browse, where known Client details are stored for future use, Gateway Client details are lost when the Control closes. This is because the details are maintained at the Gateway end. Although the Client is permanently connected to the Gateway, the Control is not and therefore needs to browse the Gateway each time it wants to find Clients.

1. From the **Internet Gateways** folder in the Control window Tree view, select the required Gateway and double-click **Browse Gateway**. The Browse Gateway dialog will appear. Enter a partial Client name or leave blank to search for all available Clients.
   Or
   Right-click on the Gateway name in the Tree view and select **Open**.
2. The Browse Gateway dialog will appear. Enter a partial Client name or leave blank to search for all available Clients. Click **OK**.
3. Found Clients will appear in the List view and you can now connect and remote control them in the usual way.
4. If you have enabled two-factor authentication, you will need to scan a QR code using an authenticator app on your mobile device (for first-time connection) and either enter a one-time password code (TOTP) or use the Duo Mobile app to validate the Client connection (this is only required for the first Client you connect to).

Note: You can ask for a combined network and Gateway browse. When browsing for Clients in the Home tab of the ribbon, select the **Include Gateways** option. All found Clients will appear in the Browse folder in the Tree view. The Gateway Clients will not be added to the **Internet Gateway**s folder.

Pass all data between connected Controls and Clients
Although data is transferred between the connected Control and Client via the Gateway, this will appear seamless and performance will not be affected.

Set up Load Balancing Connectivity Servers

The NetSupport Connectivity Server (Gateway) allows you to use load balancing to automatically spread Client connections across multiple cluster member servers. When connections occur, the Primary Connectivity Server will either accept them or automatically allocate them to one of the other Load Balancing Connectivity Servers using a round-robin method. You can specify the capacity of each of the Load Balancing Connectivity Servers and also set a Secondary Connectivity Server which will take over in the event the Primary Connectivity Server goes down.

Notes:

- You can set up a maximum of 20 Load Balancing Connectivity Servers.
- Load balancing is only available for version 14.00 Clients and above. Pre-version 14.00 Clients will still be able to connect to the Connectivity Server, but they will not be distributed between Load Balancing Connectivity Servers.
- Load balancing can't be enabled on a Connectivity Server if it is also a Notification Server for NetSupport Notify or if it has any classes defined in ClassLink One Roster or Google Classroom (this applies to NetSupport School).
- It is NOT intended that NetSupport School students are to be accessible using HTTP connections from anywhere other than the local TCP/IP network.

Step 1 - Set up a cluster Primary Connectivity Server

1. Open the NetSupport Connectivity Server Configuration Utility on the machine to be used as a Primary Connectivity Server.
2. Select the Servers tab.
3. Select **Operate as the primary connectivity server**.
4. Select **Operate as part of a load balanced cluster**.
5. Set the weight of Clients this server will take.

   Note: By default, this is set to 1000 and is based on the network connection speed of the Connectivity Server machine. We recommend that the Primary Connectivity Server is set to 90% to allow for the overhead of brokering connections. For example, if the Primary Connectivity Server has a 1Gb network, set the weight to 900.

6. Click **Apply**.

Step 2 - Set up the Load Balancing Connectivity Servers

1. Open the NetSupport Connectivity Server Configuration Utility on the machine to be used as a Load Balancing Connectivity Server.

2. Select the Servers tab.
3. Select **Operate as part of a load balanced cluster**.
4. Select **Operate as a cluster member server**.
5. Enter the fully qualified domain name (FQDN) and port (443 is used by default) of the Primary Connectivity Server.
6. Click **Apply**.

Notes:
- The Gateway service will manually need to be restarted.
- The Keys, Operators, Licenses, Classes and 2FA tabs in the NetSupport Connectivity Server Configuration Utility are disabled when the Connectivity Server is being used as a Load Balancing Connectivity Server.

Step 3 - Configure the Load Balancing Connectivity Server(s) at the Primary Connectivity Server

Once you have set up your load balancing server(s), you now need to configure these at the Primary Connectivity Server.

1. Open the NetSupport Connectivity Server Configuration Utility on the Primary Connectivity Server machine.
2. Select the Servers tab.
3. Click **Add**.
4. Enter the fully qualified domain name (FQDN) of the Load Balancing Connectivity Server and the weight of Clients it will take.
5. If this Connectivity Server is to be used as a Secondary Connectivity Server, click **Operate as Secondary Server for cluster**.
6. Click **OK**.
7. The Load Balancing Connectivity Server will be displayed in the list. An icon will indicate whether the Primary Connectivity Server can communicate with it.

   Note: You can disable a Load Balancing Connectivity Server by clearing the checkbox next to the server name.
8. Add any further Load Balancing Connectivity Servers and when done, click **Apply**.

Note: The Gateway service will manually need to be restarted.

For further information on setting up and configuring Load Balancing Servers, click here.

Setting up and using two-factor authentication

Two-factor authentication provides an extra layer of security when Control users connect to Clients on a Gateway. The Control user needs to be validated before the first Client connection can be made on a Gateway. This validation lasts for 12 hours (this can be customised) or until the Control is restarted. NetSupport Manager supports time-based one-time password (TOTP) or Duo Push.

You'll need an authenticator app to generate the required password codes on your mobile device. We support the following authenticator apps:

- Google Authenticator
- Microsoft Authenticator
- Duo Mobile

Note: The Primary Gateway and all devices running authenticating apps must be synchronised with UTC regardless of the time zone.

Setting up TOTP

1. Right-click the **NetSupport Connectivity Server** icon in the system tray and select **Configure Connectivity Server**.
2. Go to the 2FA tab.
3. Select **TOTP**.
4. If you want to apply the settings to existing operators, click **Yes**.

   Note: Operators can only be associated with one user.
5. Enter an issuer name. This defaults to the licence name and is the account name that will appear in the authenticator app.
6. If you need to add a new operator, go to the Operators tab.
7. If not already enabled, select **Restrict remote control access to specified operators**.
8. Click **Add**, enter the required details and ensure **Require 2FA (TOTP)** is selected.
9. Click **OK**.
10. Click **Apply**.

Using TOTP

1. Select the **Internet Gateways** folder in the Control window Tree view and choose the required Gateway.
2. Browse for the Gateway Clients.
3. Connect to a Client. A QR code is displayed the first time you connect using TOTP. Scan this with an authenticator app on your mobile device and click **OK**.

4. A dialog is displayed asking for a one-time password code.
5. Open your authenticator app to generate this code.
6. Enter the code and click **OK**. The Gateway will validate and allow the connection.

Notes:

- You only need to validate the first Client connection, and once you have entered the password code, no further codes need to be entered unless the Control is restarted. By default, the password code is valid for 12 hours (this can be customised in the NetSupport Connectivity Server Configuration Utility - 2FA tab).
- You can reset an operator's account and send a new QR code to them the next time they connect to a Client. In the NetSupport Connectivity Server Configuration Utility - Operators tab, select the required operator, click **Edit** and select **Reset Account/QR code**.

Setting up Duo Push

Note: To use Duo Push, you must have a paid Duo subscription.

1. Right-click the **NetSupport Connectivity Server** icon in the system tray and select **Configure Connectivity Server**.
2. Go to the 2FA tab.
3. Select **Duo**.
4. If you want to apply the settings to existing operators, click **Yes**.

   Note: Operators can only be associated with one user.
5. Enter the API hostname along with the Auth API and Admin API integration and secret keys.

   Notes:
   - This information can be copied from the Duo Admin Panel Dashboard.
   - An 'owner' level Duo administrator's account is required to obtain the Admin API information.
6. If you need to add a new operator, go to the Operators tab.
7. If not already enabled, select **Restrict remote control access to specified operators**.
8. Click **Add**, enter the required details and ensure **Require 2FA (Duo)** is selected. If you want to link this operator with an existing enrolled Duo username, enter the username here.
9. Click **OK**.
10. Click **Apply**.

Using Duo Push

1. Select the **Internet Gateways** folder in the Control window Tree view and choose the required Gateway.
2. Browse for the Gateway Clients.
3. Connect to a Client. A QR code is displayed the first time you connect using Duo. Scan this with the Duo Mobile app and click **OK**.
4. A push notification is received and you need to approve this in the Duo Mobile app.
5. The connection is made.
6. The Gateway will validate and allow the connection.

Notes:

- You only need to verify the first Client connection, and once Duo has validated this, no further verification is needed unless the Control is restarted. By default, the Duo validation lasts for 12 hours (this can be customised in the NetSupport Connectivity Server Configuration Utility - 2FA tab).
- You can reset an operator's account and send a new QR code to them the next time they connect to a Client. In the NetSupport Connectivity Server Configuration Utility - Operators tab, select the required operator, click **Edit** and select **Reset Account/QR code**.

For further information on enabling and configuring two-factor authentication via Duo, click here.

Connecting through firewalls and proxy servers

It is possible to have NetSupport Manager Clients/Controls running on the inside of a firewall/proxy server and still be available for connection to workstations on the outside without compromising the security of the network. Likewise, you are able to connect to Control and Client workstations running outside firewalls/proxy servers.

Note: While this section provides general guidance, NetSupport's Gateway feature is specifically designed to provide seamless remote control between PCs that may both be located behind different firewalls. The Gateway provides a stable and secure method for connecting Clients and Controls and delivers web-based remote control without the need for modifications to existing Firewall configurations. The HTTP protocol on port 443 is used for Gateway communications. You will need to ensure that this port is open within your firewall configuration.

Connecting to Controls and Clients INSIDE firewalls

For a Control on the external network of a firewall to connect to Clients on the firewalls internal network, you must enable some form of address translation. This process translates the address of a workstation on the internal network, which would otherwise be invisible, into an address that is accessible from the external network. You should (depending on the firewall) be able to specify which IP addresses can access the internal workstation and which port is open.

TCP/IP ports used by NetSupport Manager

Control to Client

The NetSupport Manager Control uses TCP/IP port 5405 to send IP requests to Clients, and the NetSupport Manager Client listens on port 5405 for incoming requests from the Control.

Client to Control

With the introduction of the Client Connect feature in NetSupport Manager 5.00, it was necessary for an additional port to be created to ensure that the two methods of connection (Control calling Client, Client calling Control) could run alongside each other without conflict. Port 5421 is registered for this purpose.

Connecting to Controls and Clients INSIDE proxy servers
This will not be possible with proxy servers, as they will not provide a means of address translation. A proxy server, by design, will not allow connections into a protected network.

Connecting from within a firewall or proxy server to a Client on the outside requires the following:

- Port 5405 enabled for outgoing connections on your firewall or proxy server.
- A Client on the other side listening on the same port number and visible to the Control on the inside of the firewall/proxy server.

Client calling a Control

1. Enable port 5421 for outgoing connections on your firewall or proxy server.
2. Right-click the NetSupport Manager Client icon in the system tray and select **Call Control**.
3. Enter either the hostname or IP address of the Control you wish to connect to.
4. The Control will then receive a message stating that a Client is attempting to make a connection. They can choose to accept or disconnect the attempt.

Note: Port 5421 is not configurable.

Control calling a Client

1. Select the Home tab in the ribbon.
2. In the Quick Connect section, enter the Client machine name, logged-on user name or network address in the Text field and select the required **Connect By** icon:


Connect by logged-on user name.


Connect by machine name.
Connect by IP address.

3. Click **Quick Connect**.

Note: NetSupport Manager will not communicate directly with a proxy server via SOCKS and will only work if a TCP/IP direct connection is available.

Implementing NetSupport Manager in a Terminal Server environment

A NetSupport Manager Control can connect to Clients within a Terminal Server environment.

NetSupport Manager provides a quick and easy method to install and use NetSupport Manager in a Terminal Server Environment. From version 11, the Client is no longer started as an application when each Terminal Server Session is started. Instead, the NetSupport Manager Client Service installed on the Microsoft Terminal Server will spawn a new Client process for each new Terminal Server Sessions started.

Note: The Client Terminal Server settings can be configured in the NetSupport Manager Client Configurator.

For further information regarding Terminal Server support, please visit our Knowledge Base and refer to product article **Setting Up NetSupport Manager to run in a Microsoft Terminal Server Environment**.

Intel vPro support

NetSupport Manager can connect to machines that have Intel® vPro™ technology. NetSupport Manager can browse and locate PCs that have vPro capability and perform a variety of functions. Connection can even be made to a machine before the operating system has loaded.

The Intel Setup and Configuration Service (SCS) provides tools to centrally set up and configure vPro machines. SCS is a server for vPro and is also called a provisioning server.

There are two modes vPro machines can be configured to use:

Basic mode
Scan for vPro machines on your network using an IP address range. Basic mode uses Digest authentication - a user name and password is required to establish a connection.

Advanced mode
Retrieve vPro machines from SCS. Advanced mode uses Kerberos authentication - a certificate is required to establish a connection.

Notes:
- To use Kerberos authentication, the Control must have Windows XP (service pack 3), Windows 2003 (service pack 2) or higher.
- You can switch between modes in the Control configuration.

To find vPro machines
1. Select the **vPro Management** folder in the Tree view.
2. Click the **Scan for vPro machines** icon.
3. If the Control is configured for 'small business mode', an IP range will need to be entered.
4. PCs that have vPro capability will be displayed in the List view.
5. Select a PC to access the available functions in the Home tab of the ribbon.

   Note: You can also right-click on a PC to access the available functions.
6. If connecting via basic mode, you will be required to enter a user name and password. If connecting via advanced mode, you will need to select a certificate to connect.

Functions provided are:

- Power on
- Power off
- Reset
- Boot to Bios
- Boot to media
- Web view (manage a machine using vPro through your browser).

Notes:

- A NetSupport Manager Client is not required to perform these functions.
- Power off, reset and boot to Bios or device is similar to pulling the power cord. There will be no attempt to close any open applications, so data could be lost.

Searching for Clients

You can easily find Clients and objects in the Tree view using the search feature. The search results will be displayed in the **Search** folder of the Tree view (this folder will only appear once you have performed a search).

1. Select the View tab in the ribbon and enter the search term in the **Search Text** field. You can search for Clients by logged-on user name, PC name or IP address by clicking the relevant icon:

    Search by logged-on user name.

    Search by PC name.
   Connect by IP address.

2. By default, you will only search for Clients. To search for all objects in the Tree, click .
3. To make the search case-sensitive, click .
4. Click **Search**.
5. The results will be displayed in the **Search** folder in the Tree view.

Note: When you have performed a search, you can remove the search results (and remove the **Search** folder from the Tree view) by clicking the **Close Search** icon on the ribbon.

Disconnecting a Client

When you have finished remote controlling connected Clients, you must disconnect from them before closing your NetSupport Manager session.

To disconnect a Client

1. Select the Client you want to disconnect in the List view.
2. Select the Home tab in the ribbon and click **Disconnect**.
   Or
   Right-click on the Client icon and choose **Disconnect**.
   Or
   Click **Connected** on the status bar, select the required Client in the list and click .

Disconnecting all Clients

Rather than disconnecting Clients individually, you can disconnect all connected Clients in a single action.

To disconnect all Clients

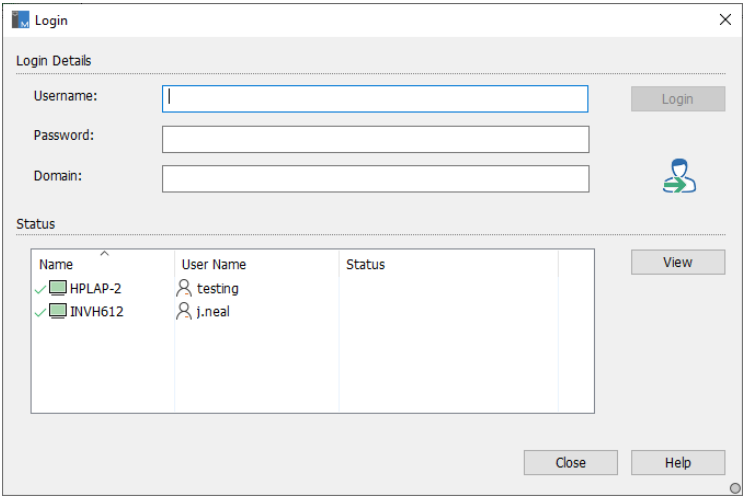
1. Select the Home tab in the ribbon and click **Disconnect All**.
   Or
   Click  on the status bar.

Client automatic login

If a generic naming convention is used for your PCs, you can automatically log the Clients in to save time.

To automatically login Client machines

1. Select the Client machine(s) you wish to login.
2. Select the Remote tab in the ribbon and click **Login**.
   Or
   Select the tab displaying the Client's name in the ribbon (or the Selection tab, if more than one Client has been selected) and click **Login**.
   Or
   Right-click and select **Login** .
   Or
   Select the required group from the Tree view, choose the Group tab in the ribbon (or right-click the group) and click **Login**.
3. The Login dialog will appear.



4. Enter the user name, password and domain and click **Login**. The user name will appear once the login has been successful.
5. You can also view Client screens from this dialog, select the required Client and click **View**.
6. When you have finished, click **Close** to exit.

Client automatic update

A quick and easy way to update Clients to the same version as the Control is to use the automatic update facility. Any NetSupport Manager components that are installed on the Client machine will be updated to the current Control version.

Note: Only available on Windows-based Clients.

To automatically update the Client

1. Select the Client(s) that you wish to update.
2. Select the tab displaying the Client's name in the ribbon (or the Selection tab, if more than one Client has been selected) and click **Update**.
3. The Clients will be updated to the same version as the Control.

Notes:

- The Clients must either be logged in with administrator rights or logged off for the updates to take place.
- The Remote Deployment Utilities must be installed on the Control machine to use this function.
- If **Disable File Transfer** and **Disable Execute** are selected in the Client Configurator, you will not be able to update the Client.

Power management – Power on/power off

Power consumption equates largely with heat generation and increased energy consumption. With millions of workstations in use and sometimes hundreds located in the same company, the desire to conserve energy has grown from a minor issue to a major issue.

Power management is a technique that enables hardware and software to reduce system power consumption. It works by shutting down portions of the hardware during periods of downtime, meaning that the workstation is ready to work when you are and conserve energy when you are not.

Client power on

To power on a NetSupport Manager Client, the workstation must have a Wake-on-LAN network adapter and a BIOS that will support it (consult your network adapter documentation for more information). The Client must also be known to the Control. The Control sends a Wake-on-LAN packet to the Client network adapter, which instructs the workstation to power on.

To power on a NetSupport Manager Client

1. Select the icon(s) of the Clients you wish to power on.
2. Select the Remote tab in the ribbon and click **Power On**.
3. Select the tab displaying the Client's name in the ribbon (or the Selection tab, if more than one Client has been selected) and click **Power On**.
   Or
   Right-click and choose **Power On**.
4. The Client workstations will now power on.

To power on a group of Clients

1. Open the **All Computers** folder in the Tree view and select the required group.
2. Select the Group tab in the ribbon and click **Power On**.
   Or
   Right-click on the group and click **Power On** .
3. The Client workstations will now power on.

Client power off

NetSupport Manager uses the Advanced Power Management (APM) features of the Windows operating system (where supported) to provide Client power down capabilities. APM relies on the Client workstation having an ATX motherboard and ATX power supply.

A Control can remotely power off a Client workstation using the NetSupport Manager Power Management function.

To power off a NetSupport Manager Client

1. Ensure all open applications at the Client workstations are closed.
2. Select the icon(s) of the Clients you wish to power off.
3. Select the Remote tab in the ribbon and click **Power Off**.
   Or
   Select the tab displaying the Client's name in the ribbon (or the Selection tab, if more than one Client has been selected) and click **Power Off**.
   Or
   Right-click and choose **Power Off**.
4. The Client workstations will now power off.

To power off a group of Clients

1. Ensure all open applications at the Client workstations are closed.
2. Open the **All Computers** folder in the Tree view and select the required group.
3. Select the Group tab in the ribbon and click **Power Off**.
   Or
   Right-click on the group and click **Power Off** .
4. The Client workstations will now power off.

Rebooting or logging out Clients

Enables a Control to remotely reboot or log off Client workstations either individually or by selected group.

To reboot or log out a Client

1. Select the Client in the Control window List view.
2. Select the Remote tab in the ribbon and click **Reboot** or **Logout**.
   Or
   Select the tab in the ribbon displaying the Client's name and click **Reboot** or **Logout**.
   Or
   Right-click on the Client icon and select **Reboot**  or **Logout** .
3. Click **Yes**, to confirm send reboot/logout.
4. You will be immediately disconnected from the Client.

Or

1. While viewing the Client, select the Home tab in the View window ribbon and click **Reboot** or **Logout**.
2. Click **Yes**, to confirm send reboot/logout.
3. You will be immediately disconnected from the Client.

To reboot or log out a group of Clients

1. Select the required group from the Tree view.
2. Select the Group tab in the ribbon and click **Reboot** or **Logout**.
   Or
   Right-click the group and select **Reboot**  or **Logout** .
3. Click **Yes**, to confirm send reboot/logout to the group.
4. You will be immediately disconnected from the members of the group.

Note: Make sure that all workstations within the group are available and not being used by other staff before you use this function.

Sending Ctrl+Alt+Delete

You can send Ctrl+Alt+Delete to a workstation that you are viewing or simply connected to.

To send Ctrl+Alt+Delete to a connected Client

1. Press the Ctrl+Alt+Esc keys simultaneously.

Or

1. Select the Remote tab in the ribbon and click **Send CAD**.
   Or
   Select the tab in the ribbon displaying the Client's name and click **Send CAD**.
   Or
   Right-click and select **Send Ctrl+Alt+Delete** .
2. Click **Yes**, to confirm send Ctrl+Alt+Delete.

To send Ctrl+Alt+Delete to a Client you are viewing

1. Press the Ctrl+Alt+Esc keys simultaneously.

Or

1. Select the Home tab on the View window ribbon and click **Ctrl+Alt+Delete**.
2. Click **Yes**, to confirm send Ctrl+Alt+Delete.

Viewing Clients

Having connected to a Client, you can now remotely control it. This is called Viewing. The Client's screen will be displayed in a window on the Control workstation. NetSupport Manager will allow you to view multiple Client screens, each in its own window, simultaneously.

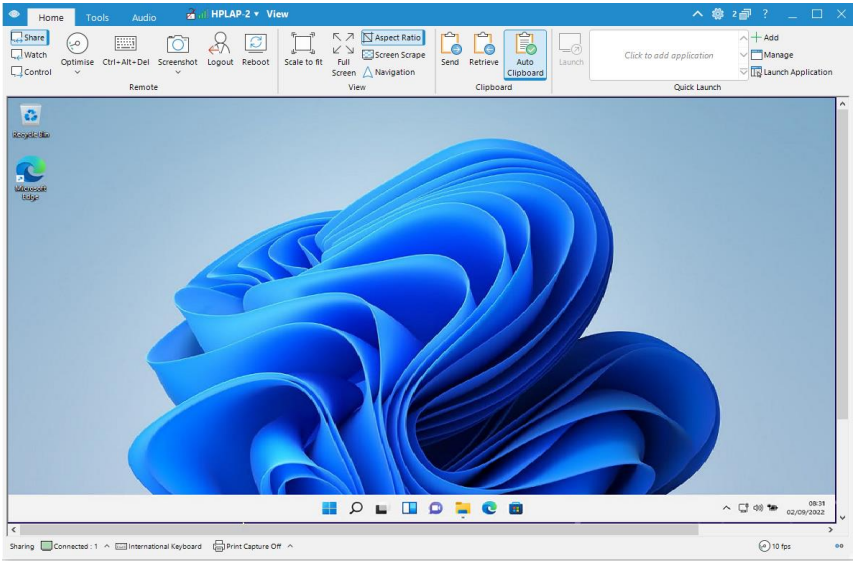
Note: While viewing a Client, you can drag and drop files from the Control Windows Explorer directly to the Client's desktop.

To view a Client

1. Select the required Client icon.
2. Select the Home or Remote tab in the ribbon and click **View Client**.
   Or
   Select the tab in the ribbon displaying the Client's name and click **View Client**.
   Or
   Double-click the Client icon in the List view.
   Or
   Right-click on the Client icon and choose **View**.
   Or
   Click the appropriate **Client** icon on the Quick Access bar and select the **View Client** icon.
3. The View window for that Client will now appear at the Control. To aid navigation of the Client screen, a thumbnail image of the screen is displayed, enabling you to scroll the Client desktop more easily. Click and drag inside the thumbnail to view specific areas. The navigation panel can be enabled or disabled by selecting **Navigation** from the View window ribbon.

The View Window

The View window is the primary interface for interacting with individual Client's. Each Client has its own View window. The Client View windows are used for displaying the screens of the Clients at the Control. You can have multiple Client View windows open and displayed simultaneously.



The View window is divided into the following sections:

The caption bar

The caption bar displays the name of the Client that you are currently viewing. Clicking the Client name brings up a Remote Management pane, and from here, you can see details of the Client and perform a variety of functions.

By default, the Client name, wireless and battery indicators (if applicable) and security status (shows if TLS or encryption are enabled or not) are displayed on the caption bar. You can customise what is displayed and choose to show the Client's logged-on user name, IP address, operating system, enclosure type and location by right-clicking the Client name.

Note: Changing the Client display options here will also change them on the quick access bar, connected Clients list on the status bar and when zooming into thumbnails.

The following options are available:

 Show or hide the ribbon.

 Access the View settings for the current configuration.

 Shows how many windows are open. From here, you can access the Window menu.

 Access the online help and version number, licensee, Technical Support and compression information.

The ribbon
The ribbon provides access to all features, tools and settings available to use at the Client you are currently viewing. Positioning the cursor over an icon will display a brief description of its function. The ribbon is organised into three main tabs:

1. **Home**
   Allows you to select the mode in which the Client will be remote controlled, customise how the View window is displayed, cut and paste between applications on the Client and the Control workstations and launch an application at the Client.

2. **Tools**
   Provides a selection of tools available to use at the Client you are currently viewing.

3. **Audio**
   Allows you to enable audio between a Control and a Client and configure the settings.

Note: A Monitor tab will appear in the ribbon when viewing a Client with multiple monitors. From here, you can choose to switch the view between monitors or view the whole desktop.

The Client screen area
This is used for displaying the screen of the Client.

Status bar
The status bar shows the current view mode, the number of connected Clients, the current keyboard layout (by default, this is set to international keyboard; click to change this), if print capture is on (click to enable) and the FPS counter.

You can see a list of all connected Clients by clicking **Connected** (clicking a Client name opens a View window for them). Right-click to choose how the Client is displayed in the list.

Notes:

- For acceptable performance while viewing, ensure that the Client's Active Desktop is turned off.
- If the Control and the Client are both using touch-enabled devices, the Control will be able to control the Client machine using touch commands.
- You can customise the action taken when double-clicking a Client icon in the List view (by default, this opens a View window) in the Control configuration - Control Interface Settings.

To return to the Control window

1. On the caption bar, click .

View Modes

You can view a Client in three modes:

Share

The Client's screen will be displayed at both the Control and the Client. Both the Control and the user at the Client will be able to enter keystrokes and mouse movements.

Watch

The Client's screen will be displayed at both the Control and the Client. Only the user at the Client will be able to enter keystrokes and mouse movements. The user at the Control will be locked out.

Control

The Client's screen will be displayed at both the Control and the Client. Only the user at the Control will be able to enter keystrokes and mouse movements. The user at the Client will be locked out.

To change the view mode

1. While viewing the Client, select **Share**, **Watch** or **Control** on the View window ribbon.

Viewing multiple Client screens simultaneously

NetSupport Manager enables you to view multiple Clients simultaneously, each in its own window. You can even scale their individual View windows to fit on the Control's screen.

To view multiple Client screens

1. View each Client you want to include.
2. On the caption bar of the Control window or any Client View window, click **Window Menu** , select **Tile** and choose which NetSupport Manager windows you want to display.

Your chosen windows will be tiled on the Control's screen. If you want to see the entire Client's screen, click the **Scale to fit** icon on the ribbon of each Client's View window.

Note: Scale to fit is on by default.

Blanking the Client's screen while viewing

For security reasons, you may require the Client screen to be blank while you are remotely controlling it.

Note: This feature is not available on Clients running Windows 8 and above.

1. Select the Home tab in the View window ribbon and click the **Blank screen** icon.
2. The Client's screen will be blanked.
3. To restore the screen, click the **Blank screen** icon again.

Viewing a Client full screen

Viewing a Client in Full Screen mode removes the caption bar and ribbon and maximises the View window. What you see is exactly what would be seen on the remote workstation.

To view a Client in full screen mode

1. Click the **Full Screen** icon in the Client's View window ribbon.
2. The Switch to Full Screen dialog will appear.
3. A floating toolbar will be displayed while in Full Screen mode, allowing access to frequently used features and tools. Click  to expand the toolbar and access the full range of tools. Click  to switch back to windowed mode.

Note: You can also return to windowed mode by using the hotkeys Ctrl+Left Shift+Right Shift.

Scale to Fit Mode

Scale to fit allows you to view a remote screen within the available size of the View window rather than providing you with a series of scroll bars so that you can pan around the screen.

This allows you view multiple screens simultaneously to maintain an overview of a number of selected workstations.

Note: Using scale to fit does impact on the quality and clarity of the view and is designed to allow you to monitor a screen as opposed to work on it. Try it for yourself and decide what level of scaling is acceptable for your purposes.

To view a View window to scale

1. Click the **Scale to fit** icon on the View window ribbon.

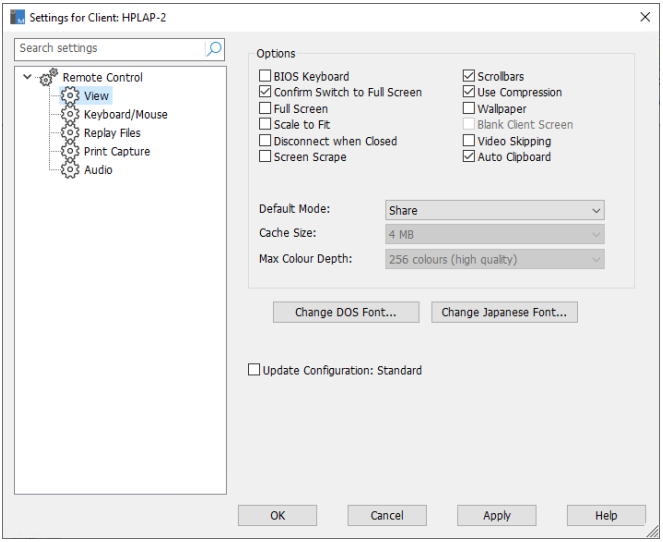
Displaying the View settings for a Client

During any control session where you may be working with more than one Client, you can tailor how each Client interacts with the Control. For example, on one Client, you may want to use compression because it is on a slow link, but on another, you may want to turn compression off. NetSupport Manager allows you to do this by modifying the default settings for the current Control profile.

To adjust View settings while viewing

1. Select the Client to view.
2. Click  on the View window caption bar.
3. The Settings dialog will appear.
4. Configure which options will be enabled when you start a View session. (Refer to the Control Configuration - Remote Control Settings section of this manual for detailed information about the available options)

Note: If you edit the Client settings, the changes you make only apply to that Client during the current Control session. If you want to change the settings permanently, check the **Update Configuration** box.



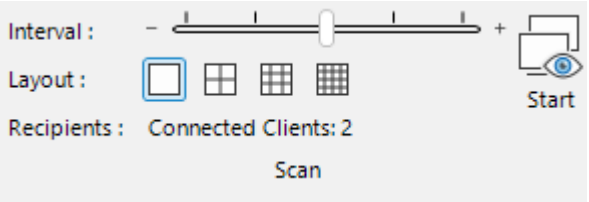
Scanning

The Scan function enables you to cycle through each connected Client in turn, displaying its screen on the Control. It is an alternative to viewing multiple Clients in scaled windows, which may cause their screens to be unreadable.

Multiple Client screens can also be scanned in one Scan window.

Scan one Client screen at a time

1. Select the Clients to include in the scan.
2. Click the Remote tab in the ribbon.



3. Select the **One Client at a time** icon ☐.
4. Use this slider control to specify the interval before the scan is advanced to the next Client. The scan period can be set anywhere between five seconds to two minutes.
5. Click **Start**.
6. The Scan window will appear and immediately show you the first Client in the sequence. It will cycle through the selected Clients, showing their screens on the Control until you end the scan.

Note: If you want to start scanning from a particular Client, select their name in the Scan dialog.

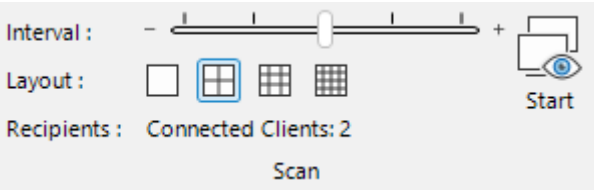
Scanning multiple Client screens

Multiple Client screens can be scanned simultaneously in one Scan window.

Note: You can display up to 16 Client screens in one Scan window at a time.

To scan multiple screens simultaneously

1. Select the Clients to include in the scan.
2. Click the Remote tab in the ribbon.



3. Select the number of Client screens to be displayed in the Scan window by clicking the relevant icon:



Clients will be arranged 2x2.
Clients will be arranged 3x3.
Clients will be arranged 4x4.

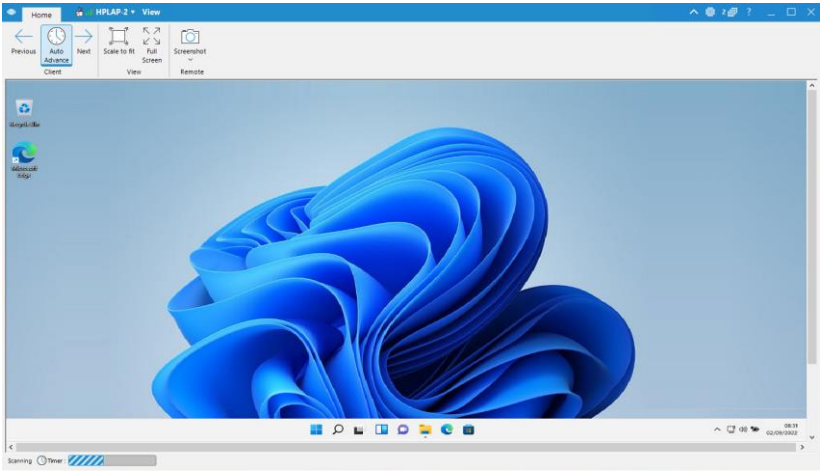
4. If you are scanning more than four Clients, you can select a scan interval by using the slider. The scan period can be set anywhere between five seconds to two minutes.
5. Click **Start**.
6. The Scan window will appear.

To end the scan

1. On the caption bar, click .

The Scan window

The Scan window will cycle through the selected Clients, showing their screens on the Control until you end the scan. If you want to start scanning from a particular Client, highlight their icon before you start the scan.



The Scan window is divided into the following sections:

The caption bar
The caption bar displays the name of the Client you are currently scanning (this will not appear when scanning multiple Clients simultaneously). Clicking the Client name brings up a Remote Management pane, and from here, you can see details of the Client and perform a variety of functions.

By default, the Client name, wireless and battery indicators (if applicable) and security status (shows if TLS or encryption are enabled or not) are displayed on the caption bar. You can customise what is displayed and choose to show the Client's logged-on user name, IP address, operating system, enclosure type and location by right-clicking the Client name.

Note: Changing the Client display options here will also change them on the quick access bar, connected Clients list on the status bar and when zooming into thumbnails.

The following options are available:

 Show or hide the ribbon.

 Access the settings for the current scan session.

 Shows how many windows are open. From here, you can access the Window menu.

 Access the online help and version number, licensee and Technical Support information.

The ribbon
The following icons are available for a single Client scan:

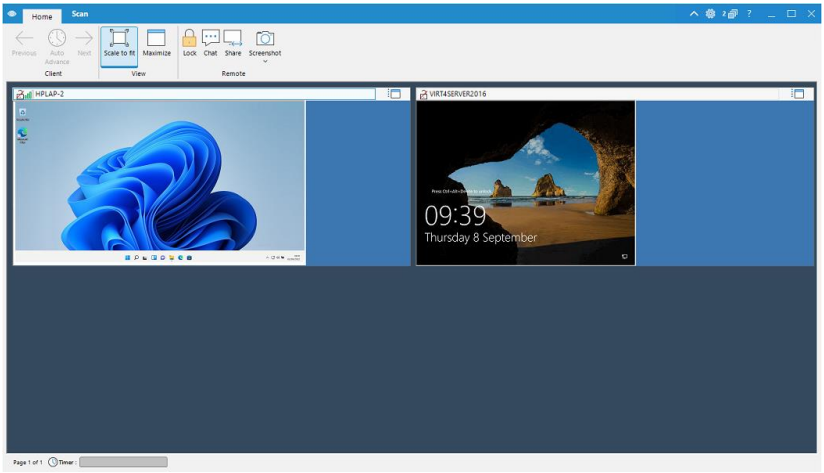
- **Previous, Auto Advance and Next**
  Allows you to turn auto timing on or off, or choose to move forwards or backwards between individual Clients. The **Previous** icon shows the previous Client screen scanned. The **Next** icon shows the next Client's screen in the scan cycle.

- **Scale to fit**
  It may be that the Client is running in a higher resolution than the Control. Selecting this option will resize its screen to fit the window in which it is displayed.

- **Full Screen**
  Allows you to scan in Full Screen mode. You can use the Scan Floating toolbar to control the operation.

- **Screenshot**
  A snapshot of the current Client window can be taken.

The following additional icons are available for a multiple Client scan:



- **Maximise**
  Maximises a selected Client's window. You can also click in the top right-hand corner of the Client window.

- **Lock**
  Locks a selected Client's keyboard and mouse.

- **Chat**
  Initiates a Chat session between a Client and the Control.

- **Share**
  To view a Client in Share mode.

The Client screen area
This is used for displaying the screen of the Client or multiple Client screens when performing a scan.

The Status bar
The status bar shows the scan timer, which indicates how far through the scan interval you are.

Screen Capture

Screen capture allows you to take a snapshot of the current Client screen whilst viewing or scanning and save this to a file. The Client name, date and time will be recorded when saved.

Capture a Client's screen

1. When viewing or scanning a Client, select the Home tab in the ribbon.
2. Click **Screenshot** .
3. The current Client screen will be captured and automatically saved as a .png to NetSupport Manager\Snapshots in your local Pictures folder.

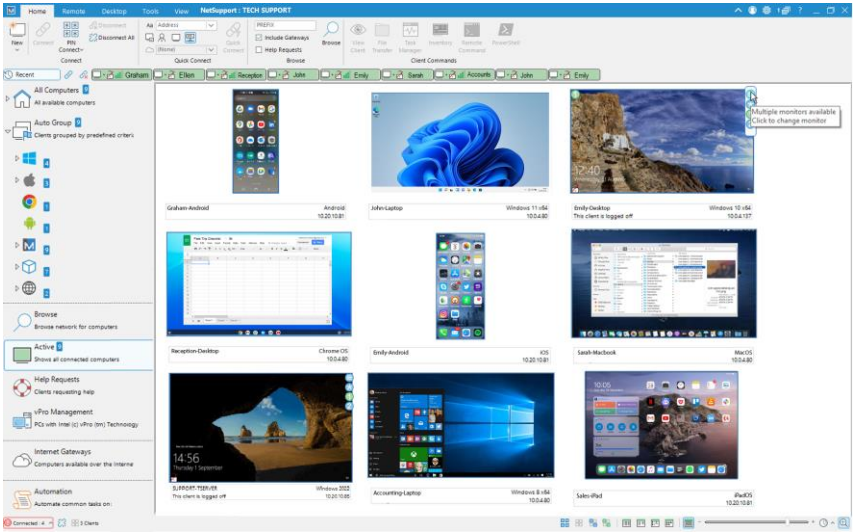
   Note: An indicator will appear on the **Screenshot** icon showing the number of screenshots that have been taken.

4. Clicking the **Screenshot** drop-down arrow lists the last nine screenshots taken (you can view or delete them as required) and you can open the folder where the images are stored.

Note: When scanning multiple Clients, a Client screen must be active (highlighted) for screen capture to become available.

Thumbnail View/Monitor Mode

Thumbnail view or Monitor mode allows a Control to display a thumbnail view of all connected Client workstations simultaneously, providing a quick and easy method for monitoring Client activity. While in Monitor mode, the Control still has access to the full range of NetSupport Manager features such as View, Chat and File Transfer.



To switch to thumbnail view

1. Display the required Client list by selecting the appropriate folder in the Control window Tree view. You would generally want to limit the number of displayed thumbnails to connected Clients only.
2. Select the View tab in the ribbon and click **Thumbnail**.
   Or
   Click on the status bar.
   Or
   Right-click on a clear area of the List view and select **Thumbnail**.

The List view will display each Client thumbnail. By mousing over a thumbnail, you can zoom in to that screen (this can be turned off by clicking on the status bar). Double-clicking a thumbnail will open a view session to that Client; right-click and you can select from the full range of available Client features. For example, by selecting multiple thumbnails, you can invite those Clients into a Chat session.

Note: You can change the action taken when double-clicking a Client in the Control configuration - Control Interface Settings.

Each thumbnail will show the computer name underneath and if the thumbnail width is 144 pixels or larger, the current logged-on user, operating system and IP address will also be displayed. By default, battery and Wi-Fi indicators (if relevant to the device type) and security status (shows if TLS or encryption are enabled or not) icons appear on the thumbnail. You can customise what icons are displayed on the thumbnail and choose to show the Client's logged-on user name, IP address, operating system, enclosure type and location by selecting the View tab in the ribbon and choosing the required options from the **Display Options** drop-down list.

You can adjust the frequency at which the thumbnails are refreshed by clicking  on the status bar and selecting the required time from the list.

If a Client is running multiple monitors, icons will be displayed on the thumbnail, allowing you to switch between each monitor or view the whole desktop. Click  to access the Dual Monitor menu and select what to view from the list. Click  to view the whole desktop. Click the number icon  to view that monitor. The icon will turn green to show which option is selected.

Note: When zooming into a Client screen, you can switch between single and multi-monitor by clicking .

Grouping Clients in the List view

Clients can be conveniently grouped into categories using a range of criteria, including the Client platform, connection type etc.

Organising Clients into categories

1. Select the View tab in the ribbon and click **Group By**.
2. Select the category you wish to organise your Clients by.
3. The Clients will now be grouped by the category in the List view.

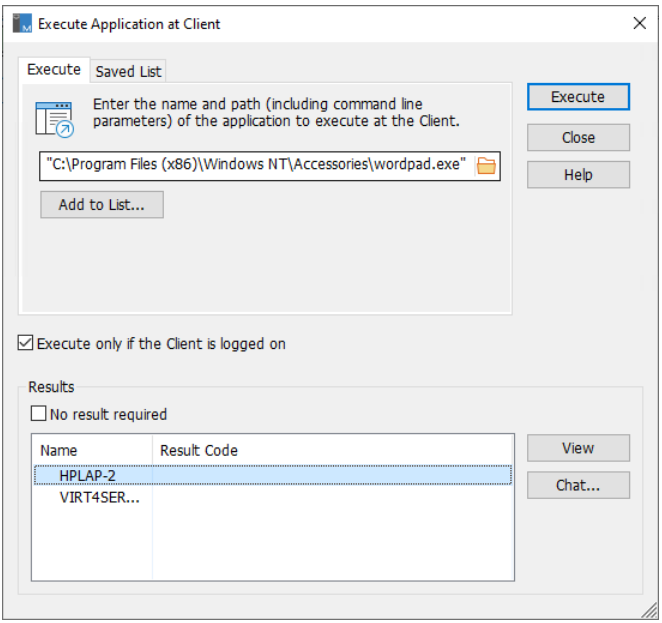
Launching applications

This feature allows you to launch (execute) an application on an individual Client workstation or a group of Client workstations without the need to remote control them.

Note: The application itself must be installed on or available to the Client workstations.

To launch an application at a Client

1. Select the required Client in the List view.
2. Select the Remote tab in the ribbon and click **Launch Application**.
   Or
   Right-click the Client in the List view and choose **Execute at Client**.
3. The Execute Application at Client dialog will appear.



4. Select the Execute tab.
5. Enter the name and path of the application to execute at the Client.
   Or
   Click to browse for the application on the Control workstation.

Note: Check that Client applications are stored in the same location as the Control to ensure successful execution.

6. Select **Add to List** to save it for future use in the Saved List tab. Confirm the description and path.

Note: The application will be added to the **Launch Application** drop-down list in the ribbon.

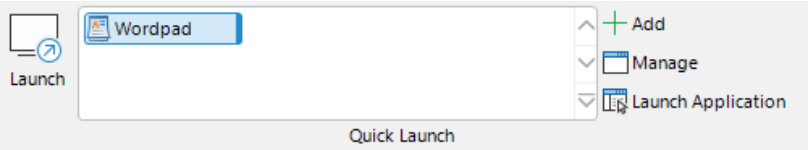
7. If you only want to execute applications to Clients that are logged on, select the option **Execute only if the Client is logged on**.
8. If you don't want to view the result of the operation, click **No result required**.
9. Click **Execute**.
10. The application will now be launched at the selected Client and the result of the operation is displayed in the Results pane.

Or

1. If you have saved a list of applications, select the required application from the **Launch Application** drop-down list .
2. Click **Client must be logged on** to launch the application at Clients that are logged on and if you don't want to see the results of the operation, click **No result required**.
3. The application will be launched at the Client and the Execute Application at Client dialog will appear, displaying any results.

Quick launching applications while viewing a Client
A list of applications can be saved in the View window, allowing you to quickly launch these at the Client.

1. Select the Home tab in the View window ribbon.
2. Click **Add**.
3. Enter the name and path of the application.
   Or
   Click  to browse for the application.
4. Click **OK**.
5. The application will be listed in the Quick Launch pane.



Note: Click **Manage** to edit or remove a listed application.

6. You can now launch the application at the Client. Select the application in the list and click **Launch** or double-click the application.
7. The application will run at the Client.

Note: You can also remotely launch an application that isn't listed by selecting **Launch Application**, entering the name and path of the application and clicking **Execute**.

To launch an application on a group of Clients

1. Open the **All Computers** folder in the Tree view.
2. Select the required group, go to the Group tab in the ribbon and click **Launch Application**.
   Or
   Right-click on the required group and choose **Execute at Client**.
3. The Execute Application at Client dialog will appear.
4. Select the Execute tab.
5. Enter the full path of the application you want to run.
   Or
   Click  to browse for the application on the Control workstation.

   Note: Check that Client applications are stored in the same location as the Control to ensure successful execution.
6. Select **Add to List** to save it for future use in the Saved List tab. Confirm the description and path.

   Note: The application will be added to the **Launch Application** drop-down list in the ribbon.
7. If you only want to execute applications to Clients that are logged on, select the option **Execute only if the Client is logged on**.
8. If you don't want to view the result of the operation, click **No result required**.
9. Click **Execute**.
10. The application will now be launched at all selected Clients in the group and the result of the operation displayed in the Results pane.

Or

1. If you have saved a list of applications, select the required application from the **Launch Application** drop-down list .
2. Click **Client must be logged on** to launch the application at Clients that are logged on and if you don't want to see the results of the operation, click **No result required**.

3. The application will be launched at the Clients in the group and the Execute Application at Client dialog will appear, displaying any results.

To save the details of your executed application for future use

1. Select the Remote tab in the ribbon and click **Launch Application**.
2. The Execute Application at Client dialog will appear.
3. Click **Add**.
4. The Add/Edit Application Details dialog will appear.
5. Enter the name and path of the executable application.
6. Click **OK**.
7. The application will appear in the Saved List tab.
8. Click **Close**.

Or

1. Select the Remote tab in the ribbon and click the **Launch Application** drop-down arrow.
2. Click **Add Application**.
3. The Add/Edit Application Details dialog will appear.
4. Enter the name and path of the executable application.
5. Click **OK**.
6. Click **Close**.

The application will now be available from the **Launch Application** drop-down list in the ribbon.

Note: A list of applications to launch can also be saved in the View window.

To edit a saved executable application

1. Select the Remote tab in the ribbon and click **Launch Application**.
2. The Execute Application at Client dialog will appear.
3. Select the Application to edit.
4. Click **Edit**.
5. The Add/Edit Application Details dialog will appear.
6. Make the required changes.
7. When finished, click **OK**.

To remove a saved executable application

1. Select the Remote tab in the ribbon and click **Launch Application**.
2. The Execute Application at Client dialog will appear.

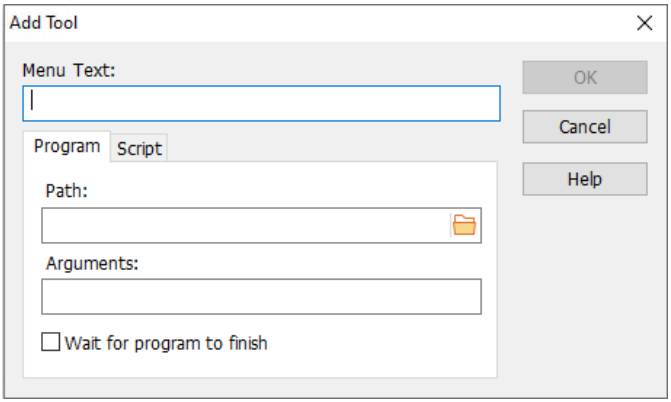
3. Select the application to remove.
4. Click **Remove**.
5. A confirmation dialog is displayed, click **Yes**.

User Defined Tools

As well as allowing a Control to launch applications on Client workstations, you can automatically run a task on a Control workstation using a defined tool. These tools can also be copied to other Control workstations for use.

To add a tool

1. Select the Tools tab in the ribbon and click **Add** in the **User Defined** section.
2. The Add Tool dialog will appear.



3. Choose to add a program or script tool by selecting the appropriate tab.
4. Enter the required information.
5. Click **OK**.
6. The tool will be listed.
7. Click **Edit** to change the properties of a listed tool or **Delete** to remove the tool.
8. Click **Close**.

To run a tool

1. Select the Tools tab in the ribbon.
2. Select the tool you wish to run from the **User Defined** pane and click **Run**.
   Or
   Double-click the tool in the **User Defined** pane.
3. The tool will automatically run.

To copy user defined tool settings to other Control machines

1. At the Control machine you want to copy the settings from, click the **Change the settings for current Configuration** icon  on the caption bar.
2. Select **File Locations**.
3. In the Tools file section, click **Change**.
4. Specify an alternate location or name for the tools file.
5. Make this file available to the Control machine that is going to adopt this tools file.
6. Open the Control Configurator at this Control machine and follow steps 2 and 3.
7. Select the new tools file, click **Open**.
8. The new tools file will be implemented.

Showing the Control screen to Clients

As well as enabling you to remote control Clients, NetSupport Manager allows you to show your screen to:

- A selected individual Client
- A pre-defined group of Clients
- An ad hoc selection of Clients.

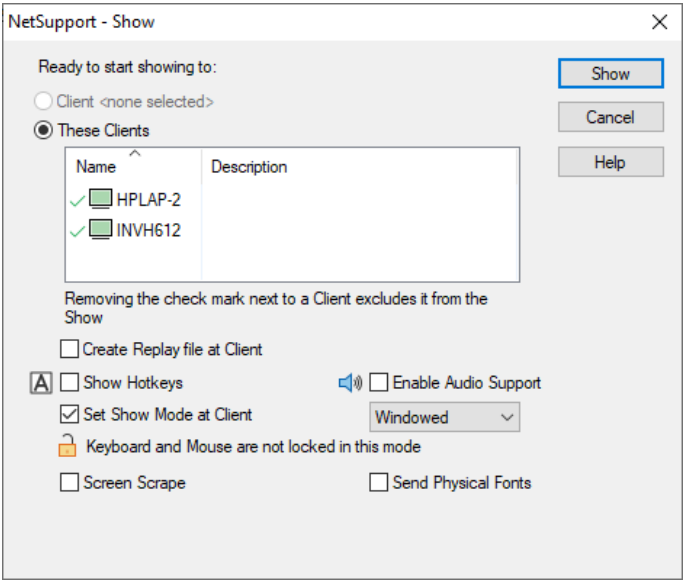
Replay Files can also be shown to Clients.

Notes:

- During a Show, NetSupport Manager displays in real-time all actions undertaken by the Control. In addition, the Control has the option to enable 'hotkeys', ensuring that any key combinations (e.g. CTRL+V) used by the Control during the show are also visible to the Clients. If using a mixture of key combinations (e.g. ALT+V+T), NetSupport Manager will only display two consecutive keystrokes at any one time. The key combinations will not appear if the Control taskbar is not active.
- To improve performance when showing to a large number of machines, NetSupport Manager's Broadcast Show facility is enabled by default. This results in the screen information being sent to all machines simultaneously, thus improving the speed of transfer. Turning this feature off results in the screen information being sent to each Client machine in turn. Whilst reducing overall network traffic generated by NetSupport Manager, using this feature will generate additional broadcast packets on your network. It is recommended that you consult your network administrator before using this feature. The Show can be sent to Clients using multicast. The broadcast will only be sent to machines included in the specified IP multicast address.

To show a Control screen

1. Select the Desktop tab in the ribbon and click **Show Desktop**.
   Or
   If showing your screen to a group of Clients, select the required group in the Tree view and click **Show Desktop** in the Group tab in the ribbon or right-click the group and select **Show Desktop**.
2. The Show dialog will appear.



In this dialog, you select the Client (or Clients) that you will show your screen to and set any associated properties.

Ready to start showing to:
Select the Client or Clients that you will show your screen to. You can exclude Clients from the show by clicking the green tick next to their name (a red cross will appear).

Create Replay File at Client
The Show session can be recorded and stored in a Replay File, giving Clients the opportunity to play back the session at a later date.

Show Hotkeys
To ensure that all actions performed by the Control are visible to the Clients during a Show, you can enable the use of hotkeys. Any key combinations that the Control uses, e.g. CTRL+V, will be displayed at both the Control and Client screens.

Note: If using a mixture of key combinations, e.g. ALT+V+T, NetSupport Manager will only display two consecutive keystrokes at any one time.

Enable Audio Support
This turns audio support on. If you are showing to only one Client, both the Control and Client can speak. If you are showing to many, only the Control can speak (announce). See Using Audio Support for details.

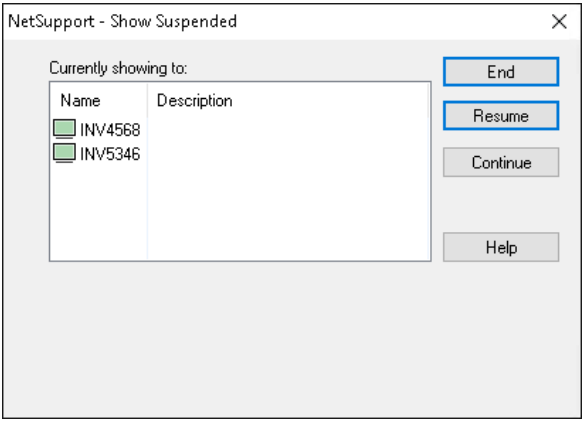
Set Show Mode at Client (Windowed, Full Screen or Maximise window)
This option allows you to show at the Client either in a small window, full screen or maximised window. When showing in windowed and maximised window size, the Client's mouse and keyboard are not locked.

Screen Scrape
NetSupport Manager's favoured (and the most efficient) method for capturing screen data is to hook into the Video Driver of the workstation being viewed. However, there may be occasions when this method will not work because certain applications bypass the driver. In these circumstances, you can enable 'screen scrape' mode in order to take a snapshot of the screen. Although this will have a greater impact on the network, it will at least provide an accurate representation of the Client's screen.

Send Physical Fonts
In order to reduce the volume of data being sent when sharing information of this nature, NetSupport Manager passes the font information by reference. The target workstation will refer to its own internal font mappings to find an appropriate match to the one that has been sent. In most cases, the same fonts will be available, but if there are instances where this isn't the case, you can send the full information. Check this box to enable.

Show Monitor:
NetSupport Manager will identify if the Control is running multiple monitors, giving you the option to choose which one to show from the drop-down list. If you are unsure which is the correct screen, click **Identify**. Alternatively, select **Whole Desktop** to show all.

To end the Show
1. Double click on the **Show** icon in the taskbar.
2. This will display the Showing dialog.



The buttons have the following purposes:
End
Ends the Show and releases the Clients' screens and keyboards.

Resume
Resumes the Show.

Continue
The Clients' screens and keyboards will remain locked while you prepare other work at the Control. They will not be able to see what you are doing. Effectively, the Show is suspended.

Show Application
The application being shown to Clients is displayed. To change the application, drag the icon to the required application on the Control's desktop and release (a pink border will appear around the selected application as you move the mouse around the desktop).

Note: This option will only appear when showing an application.

Or

1. Right-click on the **Show** icon on the taskbar.
2. Click **End Show**.

Showing a Client screen to Clients

With NetSupport Manager, it is possible to show the Control's screen to a number of connected Clients. It is also possible to show a Client's screen to a number of other connected Clients.

For example, it may be that workstation_1 has an application on it that you need to show to the Accounts department. Therefore, by viewing workstation_1 and then showing to all members of the Accounts department, they will now be able to see workstation_1's screen.

To show a Client's screen

1. Connect to the Clients you wish to show to and the Client you wish to view.
2. View the Client whose screen you wish to show.
3. Select the Desktop tab in the ribbon and click **Show**.
4. The Show dialog will appear.
5. Select the **These Clients** option.
6. Exclude the Client you are currently viewing from the Show by clicking the green tick next to their name (this will change to a red cross). If you don't do this, you will get an error saying that the Control cannot show to this Client while you are viewing it.
7. Click **Show**.

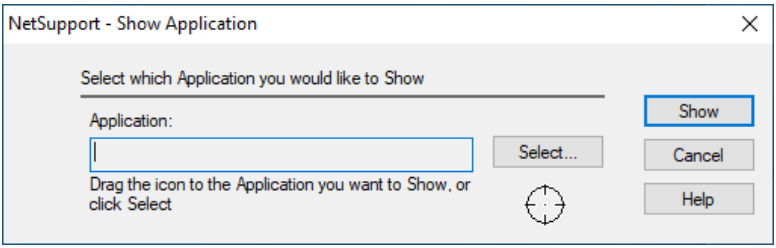
The Client's screen that is being viewed will be shown to the other Clients. You can use features such as Scale to Fit and Full Screen to Show more of the Client's screen.

Show Application

The Show feature enables you to display the Control screen to Clients. However, if a number of programs are open at the Control, there may be occasions when you want to show a single application in isolation.

To show an application

1. Select the Clients to include in the Show.
2. Select the Desktop tab in the ribbon and click **Show Application**.
   Or
   If showing the application to a group of Clients, select the required group in the Tree view and click **Show Application** in the Group tab in the ribbon or right-click the group and select **Show Application**.
3. The Show Application dialog will appear.



4. Drag the  icon to the required application on the Control's desktop and release (a pink border will appear around the selected application as you move the mouse around the desktop).
   Or
   Click **Select** and choose the application from the displayed list.

   Note: NetSupport Manager will identify if the Control is running multiple monitors, giving you the option to confirm which one the selected application is sited on. If you are unsure which is the correct screen, click **Identify**. If only one monitor is detected, select **Whole Desktop**.

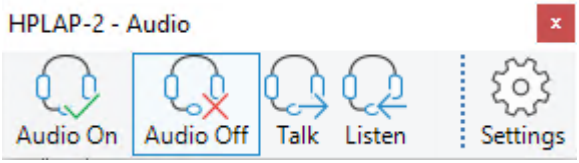
5. Click **Show**.

Audio support

NetSupport Manager allows you to use audible communications to connected Clients via microphones, headphones and speakers. The Control can also listen to microphone output and background sounds. This can be used while viewing a Clients screen, showing your screen to a Client on their workstation or outside of a remote control session by selecting the required Client. NetSupport Manager will only operate audio if the workstations have Audio Support installed.

Using audio support

1. Select the required Client in the List view.
2. Select the Remote tab in the ribbon and click **Audio**.
   Or
   Right-click the Client and select **Audio**.
3. Right-click the required Client in the List view and select **Audio**.
4. The Audio toolbar will be displayed.



From here, you can:

- Turn audio on or off.
- Enable only the Control or the Client to talk.
- Listen to the Client.
- Click **Settings** to set the microphone sensitivity and select the audio quality.

Minimising the Audio toolbar will disable the current audio session, this can be re-started by activating the toolbar. You can start more than one audio session, but only one session can be active at any one time.

To use audio support when viewing

1. The audio options are displayed in the Audio tab of the View window ribbon.
2. The Audio options will be displayed. These are the same options as on the Audio toolbar.

The **Mute** icon turns the speaker and microphone on and off.

To use audio support when showing

1. In the Show dialog box, select **Enable Audio Support**.
2. The Audio settings set in the Control Configurator - Audio settings will apply during these sessions.

Audio announcements

This feature sends an audible announcement to all selected Clients headphones or speakers. They will be able to hear the Control but will not be able to speak back.

Making an announcement

1. Select the Desktop tab in the ribbon and click **Announce**.
2. The Announce dialog will appear. Include (green tick) or exclude (red cross) Clients from the announcement and click **Announce**.
3. A dialog will appear, indicating that you can now announce.
4. Click **OK** when you have finished speaking.

Adjusting microphone and speaker volume

You can adjust the audio settings within NetSupport Manager to match the capabilities of your multimedia workstations or to fine tune performance. However, you should note that the higher the quality of sound you select, the greater the volume of data that needs to be sent. This can affect screen update performance on slower workstations.

To access the volume controls

1. Right-click on the speaker icon in the taskbar.

To change other options, such as sound quality, do one of the following:

Global method (changes default setting for all Clients):

1. Click the **Change the settings for the current Configuration** icon  on the caption bar.
2. Select **Remote Control** – **Audio**.

Individual Client method (while viewing):

1. Go to the Audio tab in the View window ribbon and click **Audio settings** .

In both cases, the Audio Setting dialog will be displayed. This allows you to set the following properties:

Volume settings adjustments

Threshold	Microphone sensitivity.
Microphone	Volume of microphone.
Speaker	Volume of speakers.

Enable options

On	Turn audio on.
Off	Turn audio off.
Talk	Set the Control audio to talk function only.
Listen	Set the Control audio to listen function only.

Video Player support

NetSupport Manager provides exceptional multimedia support with full audio, video and remote control capabilities. This section deals specifically with the use of the NetSupport Manager Video Player.

Note: The NetSupport Video Player is only available if you install the NetSupport School Tutor component during installation.

While the NetSupport Manager Video Player can be used for viewing a video file on an individual workstation, the combination of NetSupport Manager's remote control capabilities with full audio support allows you to use this tool to enhance training sessions and demonstrations. By running a Show, then launching the NetSupport Manager Video Player, all Clients will be able to watch video files from their own workstations, with full audio support.

The Video Player supports all standard video files, for example, avi and mpg. The Video Player runs locally on each Client workstation, while the video file can be accessed locally or on a network drive. If video files are stored locally, network traffic is restricted to video player controls and synchronisation and is therefore minimal, making it possible to control video sequences running on a larger number of workstations simultaneously.

If video files are stored on a network drive and Clients have to retrieve files across the network, there will be a greater impact on the network. For optimum performance, store the video files locally on each workstation, you may wish to use File Distribution to do this.

Other influencing factors will be:

- The number of Client workstations accessing the file
- The speed of the network, e.g. 10/100 MB
- The size of the video file
- Client workstation memory/performance specification
- Other traffic on the network.

Notes:

- If a Client workstation is required to retrieve files from a server for smooth operation, ensure that the Client workstation has sufficient access rights to the relevant drive and files.
- The video adapter of the workstation and how the screen resolution is configured will affect the quality of the display.

To play a video file on a workstation

1. Perform a Show to the Client workstations you want to watch the video file.
2. While performing the Show, launch NetSupport Manager Video Player by double-clicking on the **NetSupport Manager Video Player** icon in the NetSupport Manager Program folder.
3. The Video Player control panel will appear.
4. Choose {File}{Open} from the Video Player drop-down menus to select the correct video file.
5. The Video Player video screen will then appear below the toolbar with the selected file loaded, ready to be played.

   Note: NetSupport Manager's Video Player utilises the Audio Support software and hardware installed on your operating system, please adjust these to suit your needs.

6. Click on the **Play** button on the Video Player toolbar.
   Or
   Choose {Play}{Play} from the Video Player drop-down menus.

To pause or stop a video file and return to the beginning while it is playing

1. Click on the **Pause** or **Stop** button on the toolbar.
   Or
   Choose {Play}{Stop or Pause} from the Video Player drop-down menus.

Note: The pause command blanks any Clients video screens you may be Showing the Video file to.

To return to the beginning of the video file

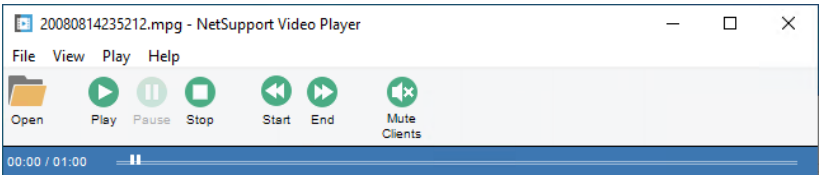
1. Click on the **Start** button on the toolbar to return to the beginning of the video file.
   Or
   Choose {Play}{Start} from the Video Player drop-down menus.

To fast forward to the end of the video file

1. Click on the **End** button on the toolbar to fast forward to the end of the video file.
   Or
   Choose {Play}{End} from the Video Player drop-down menus.

Video Player control panel

The Video Player control panel operates in a similar manner to standard audio and visual aids.



File menu

The File drop-down menu contains the following options:

Open

Allows you to select and load the appropriate video file.

Close

Closes the open video file.

Exit

Shuts down the Video Player.

View menu

The View drop-down menu contains the following options:

Toolbar

Hides and displays the Video Player toolbar.

Status Bar

Hides and displays the status bar of the Video Player.

Zoom

Resizes the video screen

Play menu

The Play drop-down menu contains the following options:

Play

Starts the loaded video file.

Stop

Returns to the beginning of the loaded video file.

Pause
Blanks the Client's video screen and pauses the video file at the Control workstation.

Repeat
The video file will be repeated until the Control stops this.

Start
Returns to the beginning of the video file.

End
Fast forward to the end of the video file.

Mute Clients
If Clients are not using headphones while they are watching a video, the sound coming from each workstation can be distracting. This option turns audio off at the Client workstations but leaves it on at the Control machine.

Help menu
Provides access to the online help and general version information.

Replay files

During a remote control session, the screen, keyboard and mouse activity at a Client or Control PC can be recorded, stored in a file and played back. If the PCs are configured for audio, any narration that takes place can also be recorded.

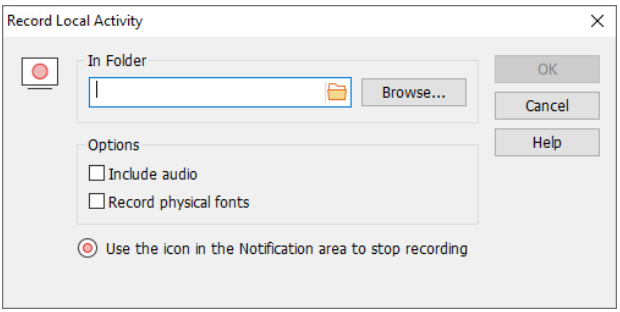
A Control can determine how and when recordings take place by enabling the appropriate configuration options:

- Local recording
- At individual or all Client PCs.

Recording local activity

Activity at the local machine can be recorded and played back. If required, the replay file can also be 'shown' to remote Clients.

1. Select the Desktop tab in the ribbon and click the **Record** icon.
2. The Record Local Activity dialog will appear.



3. **In Folder**
   Specify where you want the replay files stored. In order to identify each file, file names will be prefixed with 'Local' and the date and time of the recording.
4. **Include Audio**
   In addition to the screen, mouse and keyboard activity, if the workstation is configured for audio, you can record any narration that takes place. Check this box to enable.
5. **Record Physical Fonts**
   In order to reduce the volume of data being sent when sharing information of this nature, NetSupport Manager passes the font information by reference. The target workstation will refer to its own internal font mappings to find an appropriate match to the one that has been sent. In most cases, the same fonts will be

available, but if there are instances where this isn't the case, you can send the full information. Check this box to enable.

6. Click **OK** to start recording. The **Recording** icon will appear in the taskbar.
7. To stop recording, double click the **Recording** icon.

Recording replay files at Client PCs

Activity at remote PCs is recorded when a Control 'Views' a Client that is configured to record replay files. The option can be enabled at individual Client level or set globally.

Record replay files for all viewed Clients

This procedure enables the Control to create a replay file each time it 'views' a Client PC. The settings can be applied to the current control configuration or to a 'named' configuration.

1. To update a specific Control profile, click the **Profiles** icon on the caption bar, select the required profile and click **Settings**.
   Or
   Click the **Change the settings for the current Configuration** icon on the caption bar if updating the standard Control profile.
2. The Settings for Configuration dialog will appear.
3. Choose **Security** - **Replay Files** and enable the appropriate options.

Record replay files for individual Clients

This procedure enables replay files to be created at machines where the Client configuration has the **Record Replay Files** option enabled.

1. Run the Advanced Client Configurator at the required PCs.
2. Select the profile to amend.
3. Select **Security** - **Replay Files** and enable the appropriate options.

Watching recorded replay files

Replay files can be watched by a Control with appropriate access levels to the files. These, in turn, can be shown to Clients.

At a local level, the NetSupport Manager Client program also provides a Replay option enabling Clients to launch files.

At the Control

1. Select the Desktop tab in the ribbon and click **Playback**.
2. A list of the last 20 replay files is displayed. Select the required replay file from the list or click **Browse** to open the folder where the replay files are stored.

   Notes:
   - By default, the list will be empty. New recordings and replay files that have been played will be automatically added to the list. To add a replay file to the list without playing it, click **Browse**, select the required replay file, clear the **Playback now** option and click **Open**.
   - You can delete a replay file by selecting the required replay file and clicking **Delete File** . The replay file will be moved to the recycle bin.
3. The Replay window will appear. Use the Replay controls to start/stop the file.

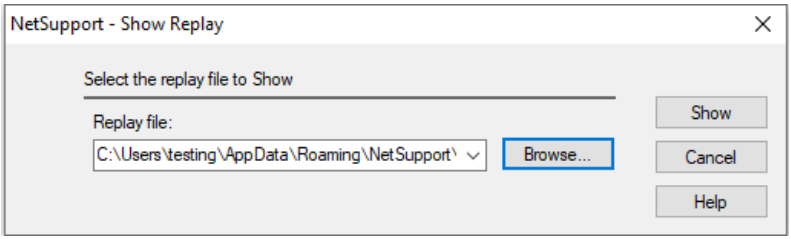
At the Client

1. Double-click the NetSupport Manager Client icon in the system tray.
2. The Client Information window will appear.
3. Click the **Replay** icon.
4. Navigate to the folder where the replay files are stored.
5. Select the file to replay.
6. Click **Open**. The Replay window will appear. Use the Replay controls to start/stop the file.

Showing replay files to Clients

Replay files can be watched by individual Control's and Client's. The Control also has the option of 'showing' a specific file to multiple Clients.

1. Select the Clients to show the replay file to.
2. Select the Desktop tab in the ribbon and click **Show Replay**.
   Or
   If showing the replay file to a group of Clients, select the required group in the Tree view and click **Show Replay** in the Group tab in the ribbon or right-click the group and select **Show Replay**.
3. The Show Replay dialog will appear.

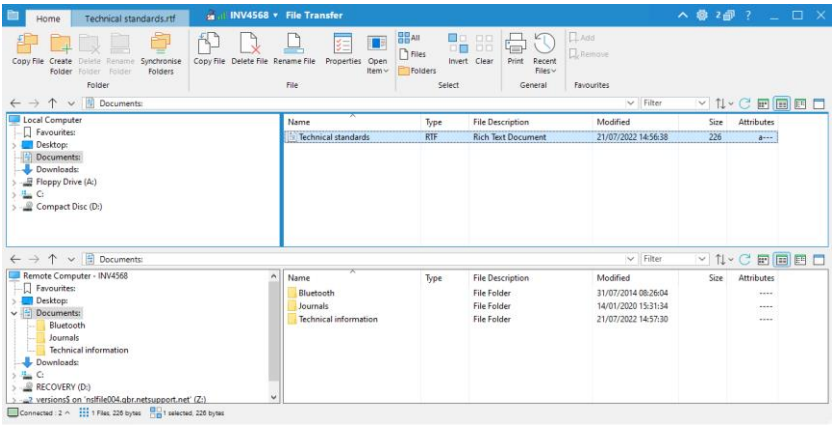


4. Browse for and select the required replay file.
5. Click **Show**.
6. The Replay window will open at the Control machine and start playing the replay file to the selected Clients.
7. Click on the Replay window caption bar to end the Show.

File Transfer

The File Transfer window

When you choose to perform a File Transfer operation on an individual Client, the File Transfer window is displayed. At its simplest, you transfer files by dragging them from one location to another.



The File Transfer window is divided into the following sections:

The caption bar

The caption bar shows which Client this File Transfer window is working with. Clicking the Client name brings up a Remote Management pane, and from here, you can see details of the Client and perform a variety of functions.

By default, the Client name, wireless and battery indicators (if applicable) and security status (shows if TLS or encryption are enabled or not) are displayed on the caption bar. You can customise what is displayed and choose to show the Client's logged-on user name, IP address, operating system, enclosure type and location by right-clicking the Client name.

Note: Changing the Client display options here will also change them on the quick access bar, connected Clients list on the status bar and when zooming into thumbnails.

The following options are available:

 Show or hide the ribbon.

 Access the File Transfer settings for the current configuration.

 Shows how many windows are open. From here, you can access the Window menu.

 Access the online help and version number, licensee, Technical Support and compression information.

The ribbon
The ribbon provides access to all the tasks and tools when working with a selected file or folder. Positioning the cursor over an icon will display a brief description of its function.

The following sections are available in the Home tab of the ribbon:

- **Folder**
  Provides access to the options for working with folders, such as copy, delete and rename. You must select a folder to work with before the options become available.

- **File**
  Provides access to the options for working with individual files, such as copy, delete and rename. This section will only appear when you have selected a file to work with.

- **Select**
  Allows you to select the files and folders in the List view that are to be transferred.

- **General**
  Enables you to print the content of a selected folder or file list and access a list of recent files to send to the Client.

- **Favourites**
  Add or remove the currently selected folder to the Favourites folder in the Tree view.

When a file or folder is selected, a new tab displaying its properties will appear. The following sections are available:

- **Attributes**
  View and set the attributes for the selected file or folder.

- **Information**
  Provides a summary of the selected file or folder.

- **Actions**
  From here, you can perform actions such as open, copy, delete or rename.

The local pane
The local pane displays a Tree view of the folders of the Control on the left-hand side and a List view of the contents of those directories on the right-hand side. Right-click on any item in one of the columns in the List view and a range of context-sensitive functions becomes available.

The remote pane
The remote pane displays a Tree view of the folders of the Client on the left-hand side and a List view of the contents of those directories on the right-hand side. Right-click on any item in one of the columns in the List view and a range of context-sensitive functions becomes available.

File information area
The file information area is displayed at the top of both the local and remote panes. Use the arrows to go to the previous, next or parent folder in the Tree view. Click to select from a list of previously selected folders. The current folder path will be displayed and you can enter a pathname here to go directly to a folder. You can filter, sort and choose how to view the contents of the List view. To provide more space when working with files and folders, you can maximise the local or remote pane by clicking **Window** .

Status bar
The status bar shows the number of connected Clients. You can see a list of all connected Clients by clicking **Connected** (clicking a Client name opens a File Transfer window for them). Right-click to choose how the Client is displayed in the list.

Arranging multiple File Transfer windows

Just as you can view to more than one Client at a time, you can have more than one File Transfer window open at a time. These File Transfer windows can be easily arranged using the Window menu.

To arrange multiple File Transfer windows

1. Make sure a File Transfer window or the Control window is active.
2. On the caption bar, click **Window Menu**  and select **Tile - File Transfer Windows**.
3. All open File Transfer windows will be arranged so that they proportionality fill the Control screen.

Notes:

- When working with multiple File Transfer windows, refer to the File Transfer window's caption bar to check which Client is being viewed in a particular File Transfer window.
- You can use the Tile windows function to similarly arrange all open View and Control windows.

Applying a filter to files in List view

You can apply a filter to the contents of a local or remote List view, so that only file names which meet certain criteria or certain file types will be displayed. You do this by using the **Filter** field in the file information area (located above both panes' List views).

Any filter settings applied to the local List view will not affect the display of the remote List view and vice versa.

Filter settings will remain applied until you reset them or close the File Transfer window.

To apply a filter to files in the List view

1. Click in the **Filter** field above the pane whose List view you wish to filter.
2. To filter by file name, enter the search term followed by *.*. For example, if you wanted to view all file names beginning with the letter MKT, then you would type MKT*.* in the Filter text box.
   Or
   To filter by file type, enter the file extension in the **Filter** field (enter *. before the extension type) or click  to select from a list of current file types.
3. Press **Enter** to apply the filter

To reset the filter to files in the List view

1. Click the cross in the **Filter** field 

above the pane whose List view you wish to reset.

Changing the View format in the File Transfer window

The contents of the List view of the local pane and remote pane can be displayed in different formats. You can also sort the contents of the List views in order to make them easier to navigate.

There are three types of view in which you can display the contents of the List view in a File Transfer window:

Icon view 
Displays the files and folders as icons.

Details view 
Displays the files and folders as icons.

Note: The column order can be changed by dragging and dropping the column headers.

Small icon view 
Displays the file and folder names only.

By default, the contents of the List view will be displayed in Details view. You can change the view by clicking the relevant icon in the File information above the local or remote pane.

Changing the sort orders in a File Transfer window

Typically, the contents of the List views in a File Transfer window can be sorted into the following orders:

Sort Order	Description
By Name	The contents will be sorted alphanumerically by file name.
By Type	The contents will be sorted alphanumerically by file extension. This is not applicable to drives and folders in the List view.
By File Description	The contents will be sorted according to the file description.
By Modified Date	The contents will be sorted according to the date they were last modified.
By Size	The contents will be sorted according to the size of the file. This is not applicable to drives and folders in the List view.

Note: You can also specify whether the contents are to be sorted in ascending or descending order.

To change the sort order

1. Select the appropriate pane (local or remote).
2. Click **Sort**  and select the required option from the list.

Notes:

- When the List view is displayed in Details view, you can click on the column headings, such as name and description, to sort the order by an appropriate column heading. Clicking on a column heading a second time will toggle the order direction. The current order direction will be indicated by a small arrow on the top of the column heading. For example, an arrow pointing up indicates the List is sorted in ascending order.
- The order of the columns can be changed by dragging and dropping the column headers.

Transferring files and folders

NetSupport Manager includes sophisticated File Transfer functionality that enables you to transfer files to and from a Control and Client workstation.

Notes:

- To help improve performance, NetSupport Manager uses Delta File Transfer technology, meaning that only the changed parts of a file that may already exist in the destination folder are transferred. This can prove most useful when updating database files between two locations where either bandwidth usage or availability is an issue.
- File Transfer functionality can be configured by clicking the **Change the settings for the current Configuration** icon on the caption bar and choosing **File Transfer**.
- While viewing a Client, you can drag and drop files from the Control Windows Explorer directly to the Client's desktop.

To transfer files between a Control and a Client

1. Select the required Client in the List view.
2. Select the Home or Remote tab in the ribbon and click **File Transfer**.
   Or
   Right-click on the Client icon in the list view and choose **File Transfer**.
   Or
   If you are viewing the Client, select the Tools tab in the View window ribbon and click the **File Transfer** icon.
3. The File Transfer window to that Client will open.
4. From the local or remote pane Tree view, select the destination drive or folder into which the items will be copied.

   Note: The path to any open folders (Explorer windows) on the Client desktop will be displayed at the top of the remote pane to enable quick selection.

5. From the local or remote List view, select the item(s) to be copied. To select all files, click the **Files** icon on the ribbon. To select all folders, click the **Folders** icon. If you want to transfer all files and folders, click the **All** icon.

   Note: NetSupport Manager provides a list of files that the Control has recently worked with, which can be sent to a Client. Click **Recent Files** (the last 20 files are displayed) and select a file from the list. The file will be copied to the current folder at the Client.

6. Click **Copy File**.

Note: The selected item(s) can also be 'dragged' from the List view and 'dropped' into the destination drive or folder.

7. A confirmation dialog will be displayed. Click **Yes**.
8. The Copy Progress dialog will appear, showing the progress. From here, you can choose to ignore any error messages and overwrite prompts until completion. These will then be displayed in a summary window at the end of the operation.

To transfer files between Clients

1. Display the File Transfer window for each Client.
2. Arrange the File Transfer windows so you can see both Clients and simply drag files/folders from one to the other.

Note: You can see more of a Client's files and folders by clicking **Window** , located above the remote pane.

Managing files and folders

You can easily manage the file and folders you wish to work with during a File Transfer operation.

To create folders

New folders can be created at the Control or the Client.

1. Select the local or remote Tree view.
2. Select the drive or folder in which the folder you want to create will appear.
3. Click the **Create Folder** icon on the ribbon.
4. The Create Folder dialog will be displayed.
5. Enter a name for the folder and click **OK.**

Add a folder to Favourites

Folders that need to be accessed regularly can be added to the Favourites folder in the Tree view.

1. Select the required folder in the local or remote pane.
2. Click the **Add** icon on the ribbon.
3. The folder will appear under Favourites in the Tree view.

To rename a file

1. Select either the local or remote pane List view.
2. Select the file to be renamed.
3. Click the **Rename File** icon on the ribbon or press **F2**.

4. Enter the new name for the file.
5. Press **Enter**.

Changing file attributes
You may want to change the attributes of a file, for example, to read-only.

1. Select the file whose attributes you want to view or change.
2. Click the **Properties** icon on the ribbon.
   Or
   Right-click and choose **Properties**.
   Or
   Select the tab displaying the file name in the ribbon and click **Modify**.
3. The File Properties dialog will appear.
4. Check or clear the attributes you wish to set.

Editing a remote file
You can edit a file on the Client machine at the Control machine and send the updated version back to the Client.

Note: You can quickly edit a file using NetSupport Manager's internal text editor by right-clicking the required file and selecting **Quick Edit**.

1. Double click the required file in the remote pane.
   Or
   Select the required file in the remote pane. Click the **Open Item** icon on the ribbon to open the file using the default application or click the drop-down arrow to select an application to open the file with.

   Note: The **Open Item** icon is not available for certain file types such as .exe, .cmd and .bat files. You can choose an application to open these with by right-clicking the file, selecting **Open With** and clicking **Choose Application**.
2. A dialog will appear asking you to confirm that you wish to upload the file and open it. Click **Open**.

   Note: This dialog won't appear for .bmp, .png, .jpg, .gif, .txt and .doc file types. You can add to and edit the list of safe file types in the File Transfer settings (even if .exe, .cmd and .bat file types are added to the list, you will still be prompted before you can choose an application to open these).
3. Make the relevant changes to the file and save and close it.

4. A prompt will appear. Click **Yes** to send the updated file to the Client. You can change the name of the file by entering a new name in the **Save As** field. If you click **No**, the file won't be copied to the Client and any changes you made will be lost.

Note: You will be advised if the file has changed while you were editing it. You can choose to save your copy of the file with a different name, overwrite the remote file at the Client or cancel and lose any changes you made.

Deleting files and folders

You can delete files and folders from either a Control or Client machine.

To delete a file

1. Select the file you wish to delete.
2. Click the **Delete File** icon on the ribbon.
3. A confirmation dialog will be displayed. Click **Yes**.

To delete a folder

1. Select the folder you wish to delete.
2. Click the **Delete Folder** icon on the ribbon.
3. The Remove Folder dialog will be displayed.
4. Select the **Include Contents** checkbox.
5. Click **Yes**.

Notes:

- You cannot remove more than one folder at a time. If you have several folders selected in the List view when performing the delete operation, only the last selected folder will be removed.
- By default, all files deleted from the local pane will be sent to the Recycle bin. This can be changed in the File Transfer settings.

Print File Transfer list

The File Transfer window provides an option to print a list of files from either the local or remote pane. This can be useful if a record of file transfer operations is required.

You can print a complete folder tree or file list or a selected area.

To print a folder or file list

1. In either the local or remote pane, select the folder tree or individual file list to be printed.
2. Select the **Print** icon on the ribbon. The Print Options dialog will appear.
3. Confirm whether you are printing a folder tree or file list and if it is the full list or selected area. You can also choose to include the application icon appropriate to each file by checking the **Print Images** box.
4. Click **OK** to print.

Synchronising folders

You can synchronise the contents of selected folders on the Control and Client. When you synchronise two folders, any new or updated files in either folder will be automatically copied to the other folder.

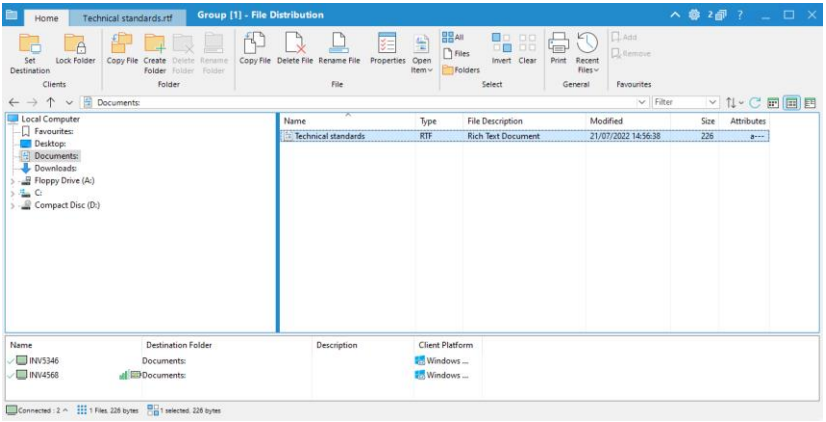
To synchronise folders

1. Select the folder from the local pane Tree view to be synchronised with the Client.
2. Select the folder from the remote pane Tree view to be synchronised with the Control.
3. Click the **Synchronise Folders** icon on the ribbon.
4. The Synchronise Folders dialog will be displayed.
5. Check the displayed paths of the two selected folders.
6. Choose to include the subfolders by selecting **Include Subfolders**.
7. To automatically overwrite newer versions of existing files, select **Overwrite All**.
8. Choose **OK**.
9. A confirmation dialog will be displayed, click **Yes**.
10. The Folder Synchronisation Progress dialog will be displayed.
11. When completed, the result will be displayed in the Folder Synchronisation Results dialog.
12. Click **OK**.

File Distribution

The File Distribution window

The File Distribution window is used for distributing files to multiple Clients simultaneously.



The File Distribution window is divided into the following sections:

The caption bar

The caption bar shows which group of Clients this particular File Distribution window is working with. The following options are available:

	Show or hide the ribbon.
	Access the settings for the current configuration.
2	Shows how many windows are open. From here, you can access the Window menu.
?	Access the online help and version number, licensee and Technical Support information.

The ribbon

The ribbon provides access to all the tasks and tools when working with a selected file or folder. Positioning the cursor over an icon will display a brief description of its function.

The following sections are available in the Home tab of the ribbon:

- **Clients**
  Enables you to choose a destination folder on the selected Client to where the files will be sent and prevent the Client folders from being automatically updated when you change the local folder.

- **Folder**
  Provides access to the options for working with folders, such as copy, delete and rename. You must select a folder to work with before the options become available.

- **File**
  Provides access to the options for working with individual files, such as copy, delete and rename. This section will only appear when you have selected a file to work with.

- **Select**
  Allows you to select the files and folders in the List view that are to be transferred.

- **General**
  Enables you to print the content of a selected folder or file list and access a list of recent files to send to the Clients.

- **Favourites**
  Add or remove the currently selected folder to the Favourites folder in the Tree view.

When a file or folder is selected, a new tab displaying its properties will appear. The following sections are available:

- **Attributes**
  View and set the attributes for the selected file or folder.

- **Information**
  Provides a summary of the selected file or folder.

- **Actions**
  From here, you can perform actions such as open, copy, delete or rename.

The local pane
The local pane displays a Tree view of the folders of the Control on the left-hand side and a List view of the contents of those folders on the right-hand side. Right-click on any item in one of the columns in the list view and a range of context-sensitive functions become available.

File information area
The file information area is displayed at the top of the local pane. Use the arrows to go to the previous, next or parent folder in the Tree view. Click to select from a list of previously selected folders. The current folder path will be displayed and you can enter a pathname here to go directly to a folder. You can filter, sort and choose how to view the contents of the List view.

The remote pane
The remote pane shows the Clients to whom the files will be distributed. Right-click on any item in one of the columns in the list view and a range of context-sensitive functions become available.

Status bar
The status bar shows the number of connected Clients. You can see a list of all connected Clients by clicking **Connected**. Right-click to choose how the Client is displayed in the list.

Distributing files

You can distribute files to

- All connected Clients.
- Selected Clients.
- A pre-defined group of Clients.

Note: To improve performance when distributing files, NetSupport Manager's Broadcast File Distribution facility is enabled by default. This results in the files being sent to all machines simultaneously, thus improving the speed of transfer. If this feature is turned off, the files are sent to each Client machine in turn.

Whilst reducing overall network traffic generated by NetSupport Manager, using this feature will generate additional broadcast packets on your network. It is recommended that you consult your network administrator before using this feature.

File Distribution can be sent to Clients using multicast. The broadcast will only be sent to machines included in the specified IP multicast address.

To distribute files to a defined group of Clients

1. Select the group of Clients you wish to distribute files to from the **All Computers** folder in the Tree view.
2. Select the Group tab in the ribbon and click **File Distribution**.
3. The File Distribution window will appear.
4. From the Tree view, select the item(s) to be copied to the Clients.
5. The location on the Client workstations where the files/folders are copied to is called the destination folder. Unless otherwise specified, the Client destination folder will be the same as the item(s) location on the Control workstation. If the Client does not have the same folder available, the item(s) will be copied to the C Drive by default and the folders automatically created.
   Or
   To set a specific destination folder on the Client workstation, right-click on the Client icon in the remote pane and choose **Set Destination**. Specify a destination, click **OK**.

   Note: To set the destination folder for all Clients in the group, click the **Set Destination** icon on the ribbon. You can lock the destination folder at Clients by clicking **Lock Folder**.
6. Click **Copy File**.

To distribute files to a selected number of Clients

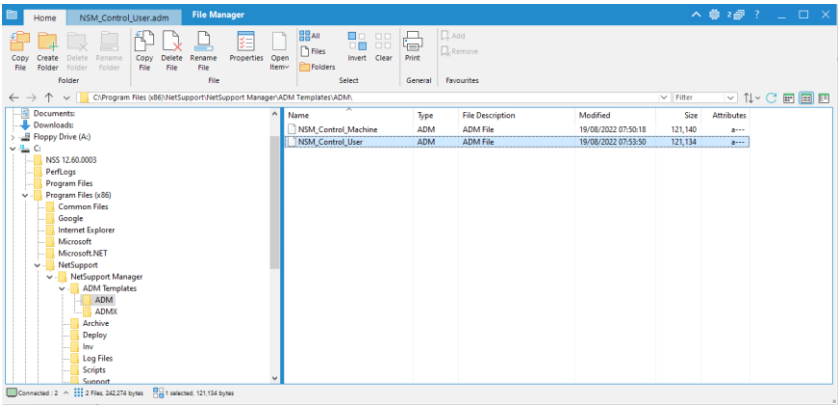
1. Open the **All Computers**, **Browse** or **Active** folder in the Tree view.
2. Select the Tools tab in the ribbon and click **File Distribution**.
3. The File Distribution window will appear.
4. In the remote pane, indicate which Clients you wish to copy files to by ensuring a green tick appears beside the Client name (click this to remove the Client from the file distribution).
5. From the Tree view, select the item(s) to be copied to the Clients.
6. The location on the Client workstations where the files/folders are copied to is called the destination folder. Unless otherwise specified, the Client destination folder will be the same as the item(s) location on the Control workstation. If the Client does not have the same folder available, the item(s) will be copied to the C Drive by default and the folders automatically created.
   Or
   To set a specific destination folder on the Client workstation, right-click on the Client icon in the remote Pane and choose **Set Destination**. Specify a destination, click **OK**.

   Note: To set the destination folder for all Clients in the group, click the **Set Destination** icon on the ribbon. You can lock the destination folder at Clients by clicking **Lock Folder**.
7. Click **Copy File**.

File Manager

The File Manager window

The NetSupport Manager File Manager serves the same purpose as Microsoft Explorer. Rather than exiting the NetSupport Manager program and editing the Control workstation, do it from within NetSupport Manager.



The File Manager window is divided into the following sections:

The caption bar

The caption bar shows that you are in the File Manager window. The following options are available:

	Show or hide the ribbon.
	Access the settings for the current configuration.
	Shows how many windows are open. From here, you can access the Window menu.
	Access the online help and version number, licensee and Technical Support information.

The ribbon

The ribbon provides access to all the tasks and tools when working with a selected file or folder. Positioning the cursor over an icon will display a brief description of its function.

The following sections are available in the Home tab of the ribbon:

- **Folder**
  Provides access to the options for working with folders, such as copy, delete and rename. You must select a folder to work with before the options become available.

- **File**
  Provides access to the options for working with individual files, such as copy, delete and rename. This section will only appear when you have selected a file to work with.

- **Select**
  Allows you to select the files and folders in the List view.

- **General**
  Enables you to print the content of a selected folder or file list.

- **Favourites**
  Add or remove the currently selected folder to the Favourites folder in the Tree view.

When a file or folder is selected, a new tab displaying its properties will appear. The following sections are available:

- **Attributes**
  View and set the file attributes for the selected file or folder.

- **Information**
  Provides a summary of the selected file or folder.

- **Actions**
  From here, you can perform actions such as, open, copy, delete or rename.

The local pane
The local pane displays a Tree view of the folders of the Control on the left-hand side and a List view of the contents of those folders on the right-hand side. Right-click on any item in one of the columns in the list view and a range of context-sensitive functions becomes available.

File information area
The file information area is displayed at the top of the local pane. Use the arrows to go to the previous, next or parent folder in the Tree

view. Click to select from a list of previously selected folders. The current folder path will be displayed and you can enter a pathname here to go directly to a folder. You can filter, sort and choose how to view the contents of the List view.

Status bar
The status bar shows the number of connected Clients. You can see a list of all connected Clients by clicking **Connected** (clicking a Client name opens a File Transfer window for them). Right-click to choose how the Client is displayed in the list.

Managing files on the Control workstation

You can manage files on a Control workstation using the File Manager window. This is similar to the File Transfer window but only displays the contents of the Control workstation.

To display the File Manager window, select the Tools tab in the ribbon and click **File Manager**.

The Tree view
- To select a drive or folder in the Tree view, simply click on it. The contents of the selected item will then be displayed in the List view (on the right).
- If the selected drive or folder contains subfolders that are not displayed, the following icon will be displayed to the left of the item.
- To expand the contents of a drive or folder so that its subfolders are visible in the Tree view, either double click on the drive or on the folder, or click on the icon to the left of the drive or folder you wish to expand.

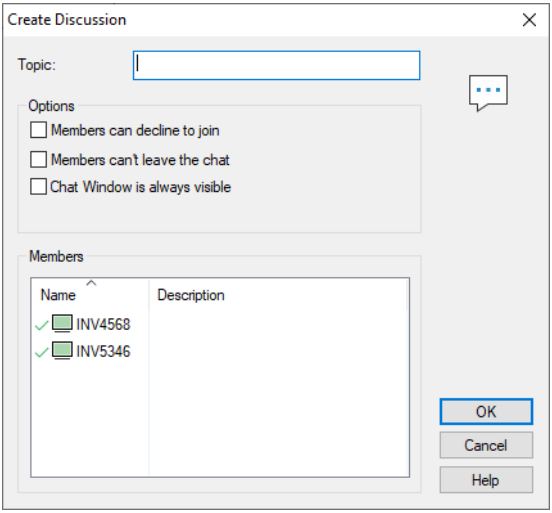
The List view
- To select an item in the List view, simply click on it.
- To select multiple items in the List view:
  - If the items are adjacent to one another, select the first item, hold down the Shift key and then select the last item.
  - If the items are not adjacent to one another, then select the first item, then hold down the Control key and select each of the other items.
  - If all files and/or folders are required, click **All** in the ribbon. To select all files, click **Files** and to select all folders, click **Folders**.

When a file or folder has been selected, the icons on the ribbon will become active, allowing you to perform actions such as open, copy, delete or rename. A new tab will also appear in the ribbon displaying its properties, and from here, you can view and edit the attributes and work with the file or folder.

Control/Client Chat sessions

NetSupport Manager allows you to 'Chat' to any number of connected Clients simultaneously via a scrolling text window. A 'Whiteboard' facility can also be introduced during the Chat session, enabling a range of screen annotation tools to be used.

1. Select the Clients or group of Clients you want to chat to in the List view. If you do not select a Client icon, all connected Clients will be included.
2. Select the Remote tab in the ribbon and click **Chat**.
   Or
   Right-click on an individual Client and choose **Chat**.
   Or
   If you want to chat to a group of Clients, select the required group in the Tree view and click **Chat** in the Group tab in the ribbon or right-click the group and select **Chat**.
3. The Create Discussion dialog will appear.



The dialog has the following options:

Topic

If required, enter a title or description for the subject to be discussed in the Chat session. This will appear in the Title bar of the Chat window that is displayed at the Client machines. If left blank, the Control name will appear.

Options

Members can decline to join

If checked, a message will appear at the Clients machine inviting them to join the Chat session. They can choose to join or decline.

Members can't leave the chat

If checked, the option for Clients to leave the Chat session will be removed.

Chat Window is always visible

If checked, the Chat window remains on the Clients desktop for the duration of the Chat session. Members cannot minimise the window.

Members

To exclude a Client from the Chat session, remove the green tick next to the Client's name.

Click **OK** to start the Chat session.

4. The Chat window will appear on the Control and Client workstations.

The Chat window

This window is displayed at each participating member's machine and lists the progress of the Chat session.

Unless the option is disabled in the Create Discussion dialog, Clients can choose to leave the session.

The following options are available from the Chat window:

Chat Menu

The content of a Chat session can be stored for future reference. Choose **Save** to create a file containing the text or choose **Copy** to be able to paste the Chat content into another application or file.

Should the Chat members not respond, you can send an audible beep to each workstation by selecting **Send Beep**. (The Client can also do this from their Chat window.) You can configure the Client and Control workstations to play the beep through either the PCs internal speaker, the default, or via the installed sound card to speakers attached to the PC. Select Client Configuration - Client Settings or Control Configuration - Settings.

Window Menu
Only the Control's Chat window will have a window drop-down menu. This menu enables you to swap between opened screens or Tile them.

Chat Progress
The main body of the Chat window is used to record the progress of a Chat session. It holds details of members who have joined or left the discussion, as well as the messages that have been sent by each member.

Message
This is where you type your comments. Type the message and hit Enter or click **Send**.

Auto Send
Each message is restricted to 128 characters. Check this box to automatically send the message when the limit is reached.

Close
Ends the Chat session.

Members
Members currently included in the Chat session are listed here. The Control can add or remove Clients from the Chat session as required. Unless disabled, Clients have the option to leave the session of their own accord.

Invite
The Chat Properties dialog is initially used to select the Clients to include/exclude from the Chat session. To add Clients when the Chat session is in progress, click **Invite**. The Add Members dialog will appear, select the required Clients and click **Add**. You can send a copy of the Chat progress to new members by checking the **Send discussion history** box.

Note: Clients that have been removed or have decided to leave the Chat session can be invited back.

Eject
To remove Clients from the Chat session, select the Client in the Members list and click **Eject**. Ejected Clients can be invited back into the session if required.

Whiteboard
If required, you can introduce a 'whiteboard' into the Chat session. This provides a range of tools enabling you to annotate the screen and display graphics.

Whiteboard Leader
If enabled, one of the participating Clients can be nominated to take control of the whiteboard.

Note: Clients can initiate Chat sessions with the Control by opening the Client information window and clicking the **Chat** icon.

Disable Chat sessions

The Chat feature can be disabled in a Client's configuration, preventing either the Client or Control from initiating a Chat session.

To prevent the Control from initiating a Chat session
1. At the required Client workstation(s), choose **NetSupport Manager Configurator** from the NetSupport Manager Program group. The NetSupport Client Configurator will appear.
2. Select **Advanced** and choose the profile to amend.
3. Select **Security** - **Access Privileges**.
4. Check the **Disable Chat** option.
5. Click **OK**.
6. Save the profile and restart the Client.

If the Control attempts to open a Chat session, they will be advised that they do not have access rights to perform the task at that Client.

Note: To prevent the Control from chatting to **all** Clients, disable the feature in the Control configuration. Click the **Profiles** icon on the caption bar, select the required configuration and select **Settings**. In the Settings for Configuration dialog, select **Control Interface** - **Functions** and check the **Disable Chat** option.

To prevent the Client from initiating a Chat session
1. At the required Client workstation(s), choose **NetSupport Manager Configurator** from the NetSupport Manager Program group. The NetSupport Client Configurator will appear.
2. Select **Advanced** and choose the profile to amend.
3. Select **Client Interface** - **Client Settings**.
4. Check the **Disable Chat** option.
5. Click **OK**.

6. Save the profile and restart the Client.

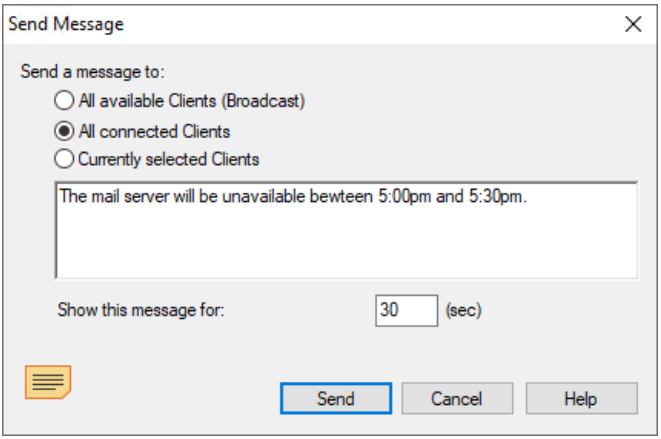
The Chat option will be unavailable at the Client.

Sending messages to Clients

With NetSupport Manager, you can send a message to an individual Client, a group of Clients or all Clients on the network.

To send a message

1. Select the required Client in the List view.
2. Select the Remote tab and click **Send a message**.
   Or
   Select the Desktop tab in the ribbon and click **Broadcast Message**.
   Or
   Select the tab in the ribbon displaying the Client's name and click **Send a message**.
   Or
   Right-click and choose **Message**.
3. The Message dialog will appear. Choose whether to send the message to all available Clients, all connected Clients or only the currently selected Client(s). Enter the message and decide whether to show it at Client PCs for a specified time.
4. Click **Send**.



The message will be displayed in a dialog at the Client screens and will remain until the user closes the dialog or the specified time limit expires. In addition to the message itself, a customised title can be included. This is set in the Control configuration. Click the **Change the settings for the current Configuration** icon on the caption bar and select **General**.

Dealing with help requests

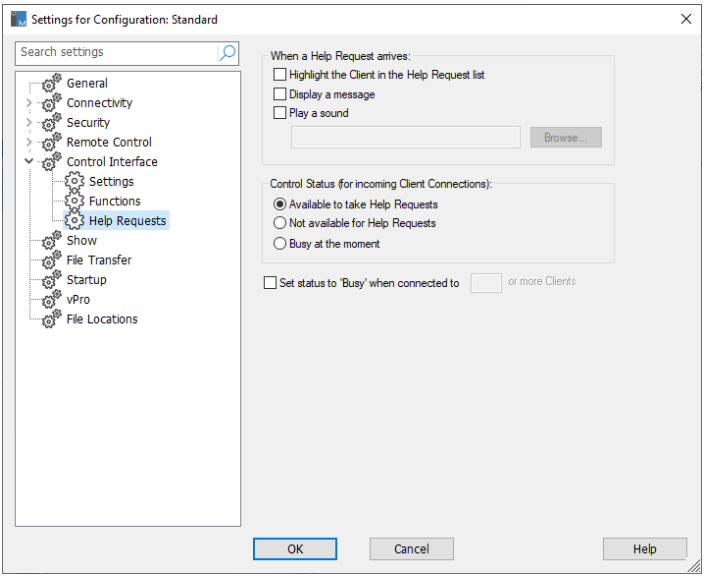
NetSupport Manager allows a user at a Client workstation to request help from a specified Control workstation.

If a Control's List view has been set to Details view and customised to display help messages, a Client's help request message will be immediately displayed in the List view. The **Help Requests** folder in the Tree view will also be highlighted.

NetSupport Manager also allows you to configure a Control's help request warning settings and availability.

To adjust a Control's help request warning settings

1. Click the **Change the settings for the current Configuration** icon on the caption bar.
2. Select **Control Interface** - **Help Requests**.
3. In the 'When a Help Request Arrives' section, there are three additional warnings that a Control can choose to receive when a Client sends a help request:
   - Have the Client selected in the List view.
   - Display an independent help request message on the Control's screen.
   - Play a sound when a help request message arrives.



To adjust a Control's help request availability
A Control can also choose to be in one of three states of availability to receive Clients' help requests.

1. Click the **Change the settings for the current Configuration** icon  on the caption bar.
2. Select **Control Interface** - **Help Requests**.
3. In the 'Control Status' section, a Control can choose from the following three settings:
   - Available to take all help requests.
   - Unavailable to take any help requests.
   - Busy at the moment (ensure that you specify the number of Clients you wish to be connected to, in order to be considered busy).

Note: When browsing for Clients, Controls have the option to browse only for Clients who have requested help.

To clear a help request
Once a help request has been dealt with, you can clear this. A Client can also clear previous help requests from the Request Help dialog.

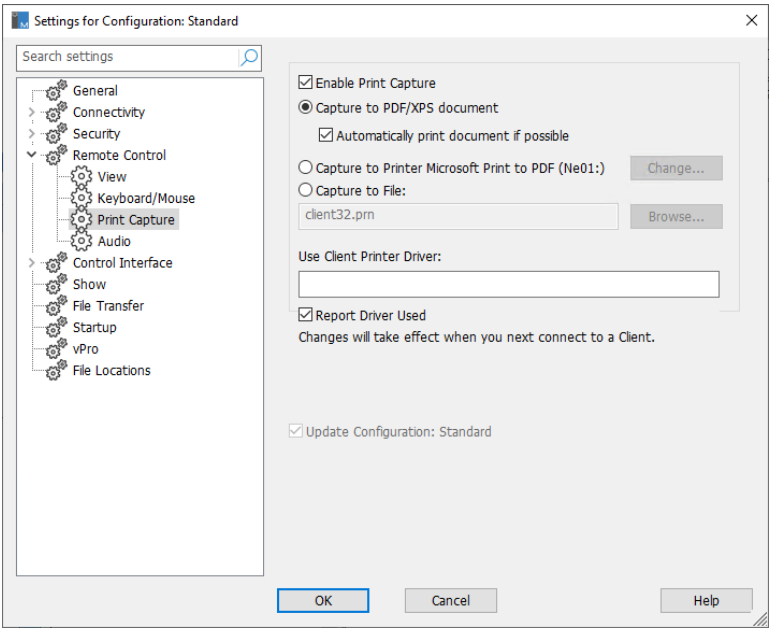
1. Select the **Help Requests** folder in the Tree view.
2. Right-click on the required Client's request and select **Clear Help**.

Capturing a Client's printed output

Print capture redirects printer output from a local printer at the Client to the printer, PDF/XPS document or file at the Control. You would use this when running an application on a Client but want any printed output redirected to the printer that is local to you.

To redirect a Client's print output

1. Click the **Profiles** icon on the caption bar.
2. Select appropriate configuration.
3. Click **Settings**.
4. Select **Remote Control** – **Print Capture**.



5. Check the **Enable Print Capture** checkbox.
6. Choose to send the Client's printer output to a PDF/XPS document and whether to automatically print this.
   Or
   Select a printer to redirect the Client's output to. The default printer will be displayed. Click **Change** to select another printer.
   Or
   Select a file to capture the print file to.

Note: In addition to enabling this option at the Control, you also need to ensure that print capture is enabled in the Client's configuration. The privileges are enabled by default.

Remote clipboard

During a View session, you can copy the content of the clipboard between Control and Client PCs.

The Clipboard section on the Home tab of the View window ribbon provides the following options:

Send
Used when copying from the Control to a Client and using the {Edit}{Cut/Copy} menu option.

Retrieve
Used when copying from the Client to the Control and using the {Edit}{Cut/Copy} menu option.

Auto Clipboard
When enabled, provides the quickest method for copying data. Use the shortcut keys (Ctrl+C and Ctrl+V) to automatically copy to and from the clipboard at both the Control and Client machines.

Sending the content of the clipboard from a Control to a Client workstation

1. View the required Client.
2. Open appropriate applications on the Client and Control workstations.
3. Select and copy the required data from the application at the Control.
   If **Auto Clipboard** is enabled using Ctrl+C copies the data directly to the clipboard.
   Or
   If you have used {Edit}{Cut/Copy}, return to the Client's View window and click the **Send** icon on the ribbon.
4. To paste the data at the Client application, choose {Edit} from the Client Application drop-down menu, select **Paste**.
   Or
   Use the shortcut keys (Ctrl+V) to paste the data.

Sending the content of the clipboard from a Client to a Control workstation

1. View the required Client.

2. Open appropriate applications on the Client and Control workstations.
3. Copy the required data from the application at the Client as above but, if using menu options rather than the shortcut keys, click the **Retrieve** icon on the ribbon.
4. Return to the Control application and paste the data using the appropriate menu options or the shortcut keys (Ctrl+V).

Integration with Explorer

NetSupport Manager integrates directly with Windows Explorer, allowing you to launch key functionality directly from your system without needing to first start the NetSupport Manager Control.

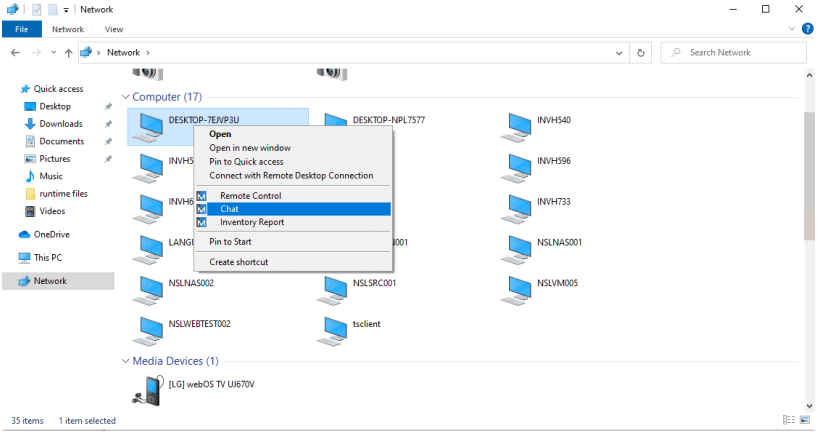
By selecting a PC icon from within Network Places/Neighbourhood, you can establish a remote session and perform a range of common tasks.

Notes:

- The functionality is only available if the NetSupport Manager Control component is installed.
- A remote control session will only be established if the target machine is running a NetSupport Manager Client and the Client name is set to the default machine name.

To use NetSupport Manager functionality from within Explorer

1. Open Explorer from your desktop and navigate to Network Places/Neighbourhood to find the list of available PCs.
2. Right-click on the required PC.



3. Select the appropriate NetSupport Manager function. You can choose:

Remote Control	To view the selected Client screen.
Chat	To open a Chat session with the selected Client.
Inventory	To retrieve a full hardware/software inventory of the selected PC.

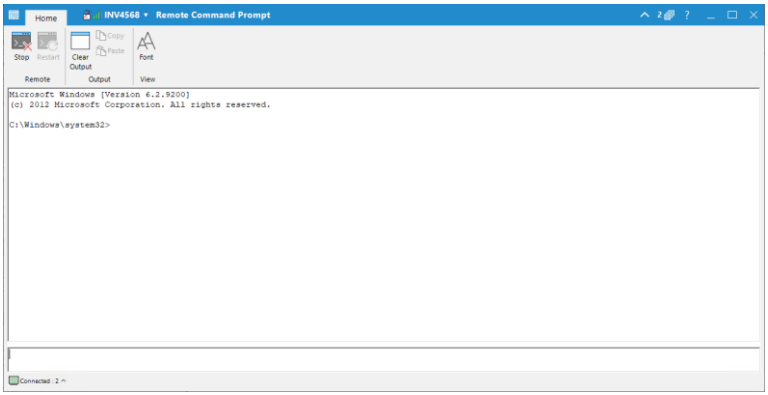
To disable NetSupport Manager functionality
If required, NetSupport Manager Explorer functionality can be disabled in the Control Configurator.

1. Click the **Profiles** icon  on the caption bar.
2. Select the Control profile to apply the changes to.
3. Choose **Settings**.
4. In the Settings for Configuration dialog, select **Control Interface – Settings**.
5. Select the **Disable Shell Extension** option.

Remote Command Prompt

By launching the Command Prompt window, a Control can remotely execute command line instructions at a connected Client.

1. Connect to the required Client.
2. Select the Home or Remote tab in the ribbon and click **Remote Command**.
   Or
   Right-click on the Client icon and select **Remote Command Prompt**.
   Or
   Select the tab displaying the Client's name in the ribbon and click **Remote Command**.
3. The Remote Command Prompt window will appear.



The window is divided into the following sections:

The caption bar
The caption bar shows the name of the Client the Remote Command Prompt window is open for. Clicking the Client name brings up a Remote Management pane, and from here, you can see details of the Client and perform a variety of functions.

By default, the Client name, wireless and battery indicators (if applicable) and security status (shows if TLS or encryption are enabled or not) are displayed on the caption bar. You can customise what is displayed and choose to show the Client's logged-on user name, IP address, operating system, enclosure type and location by right-clicking the Client name.

Note: Changing the Client display options here will also change them on the quick access bar, connected Clients list on the status bar and when zooming into thumbnails.

The following options are available:



Show or hide the ribbon.



Shows how many windows are open. From here, you can access the Window menu.



Access the online help and version number, licensee, Technical Support and compression information.

The ribbon
A range of tools is available via the ribbon, enabling you, for example, to clear the output window and change the displayed font.

Output/results pane
Shows the results of the command that has been run at the Client.

Input pane
This is where you enter the commands to run at the Client and can be resized if required. While the window is open, each command is stored by the Control -enabling you to recall previous instructions that you may wish to run again. Either scroll through the entries using the up and down arrow keys and press **Enter** when the required command is displayed or press **F7** to show all commands in a window. Click on the required command and press **Enter**.

A maximum of 50 commands is stored. To clear the history, press **F8**. Once the Control closes the Remote Command window the history is cleared automatically.

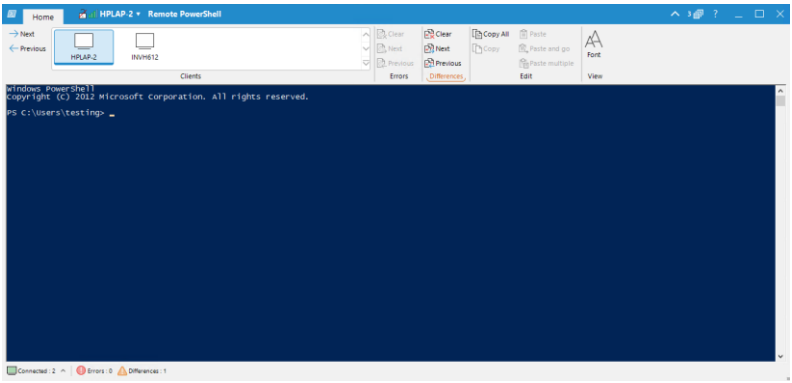
Status bar
The status bar shows the number of connected Clients. You can see a list of all connected Clients by clicking **Connected** (clicking a Client name opens a Remote Command Prompt window for them). Right-click to choose how the Client is displayed in the list.

PowerShell window

A PowerShell window can be launched, allowing a Control to execute PowerShell commands at Clients.

Note: PowerShell will not be available for Clients running versions prior to NetSupport Manager 12.50.

1. Connect to the required Clients.
2. Select the Home or Remote tab in the ribbon and click **PowerShell**.
   Or
   If launching a PowerShell at an individual Client, right-click the Client icon and select **PowerShell** or select the tab displaying the Client's name in the ribbon and click **PowerShell**.
   Or
   If launching a PowerShell at a group of Clients, select the required group in the Tree view and click **PowerShell** in the Group tab in the ribbon or right-click the group and select **PowerShell**.
3. The PowerShell window will appear.



The window is divided into the following sections:

The caption bar
The caption bar shows the name of the Client the PowerShell window is open for (or the currently selected Client if the PowerShell is for multiple Clients). Clicking the Client name brings up a Remote Management pane, and from here, you can see details of the Client and perform a variety of functions.

By default, the Client name, wireless and battery indicators (if applicable) and security status (shows if TLS or encryption are enabled or not) are displayed on the caption bar. You can customise what is displayed and choose to show the Client's logged-on user name, IP address, operating system, enclosure type and location by right-clicking the Client name.

Note: Changing the Client display options here will also change them on the quick access bar, connected Clients list on the status bar and when zooming into thumbnails.

The following options are available:



Show or hide the ribbon.



Shows how many windows are open. From here, you can access the Window menu.



Access the online help and version number, licensee, Technical Support and compression information.

The ribbon
A range of tools is available via the ribbon, enabling you, for example, to change the displayed font. If the PowerShell is launched at multiple Clients, they will be listed in the Clients pane, allowing you to easily access the required Client session.

When a PowerShell is launched at multiple Clients, if any sessions report an error or there are any differences between them, you will be notified in the Errors and Differences sections in the ribbon. An indicator will appear advising how many errors or differences there are and you can scroll through these and clear them when required.

Input/output pane
This is where you enter the commands to run at the Client(s) and the results are displayed.

While the window is open, each command is stored by the Control - enabling you to recall previous instructions that you may wish to run again. Either scroll through the entries using the up and down arrow keys and press **Enter** when the required command is displayed or press **F7** to show all commands in a window. Click on the required command and press **Enter**.

Status bar
The status bar shows the number of connected Clients and any errors or differences between multiple Client sessions. You can see a list of all connected Clients by clicking **Connected** (clicking a Client name opens a PowerShell window for them). Right-click to choose how the Client is displayed in the list.

Using the Client

In this chapter …

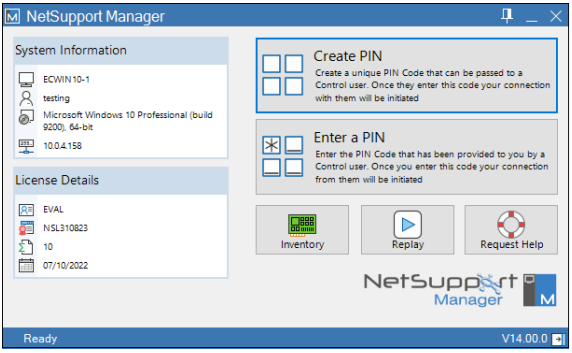
How the remote user can interact with a connected Control.

The Client Information window

When a Client double clicks the NetSupport Manager Client icon in their system tray, the Client Information window appears.

The Client Information window has three modes: full screen, small screen and connected.

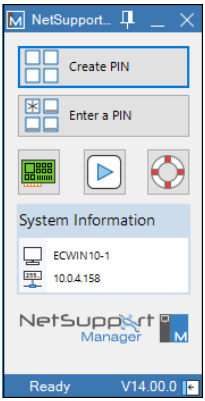
Full screen



The Client is provided with an overview of their system and user details and the NetSupport Manager licence details. From here, the Client can:

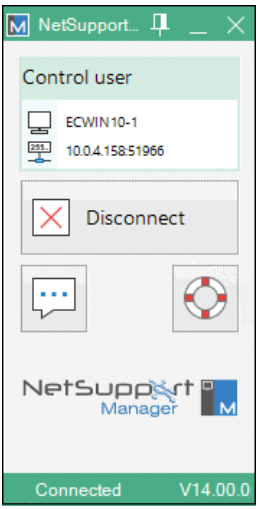
- Create or enter a PIN code
- View Replay Files that are stored on the Client computer
- View an inventory of the Client
- Request help from the Control.

Small screen



If the Client does not wish to view all their system information and licence details, they can click the icon at the bottom of the window to switch to small screen mode. The Client will still be able to create and enter a PIN code, view Replay Files and inventory and request help from the Control. Click the icon to switch back to full screen mode.

Connected



This mode will be displayed when a Control is connected to a Client. From here, the Client can see details of the Control that is connected to them. They also have the option to disconnect from the Control or chat with the Control.

Note: You can configure the items that are displayed in the Client Information window in the Client settings section of the NetSupport Manager Client Configurator.

Disconnecting from a Control

When a Control is connected to a Client, the Client can choose to disconnect.

Note: This option can be disabled at the Client in the Client settings section of the NetSupport Manager Client Configurator.

To disconnect from a Control

1. Double-click the NetSupport Manager Client icon in the system tray.
2. The Client Information window will appear.
3. Click the **Disconnect** icon.
4. A dialog box will appear, listing the Controls to which you are currently connected.
5. Select the Control(s) from which you want to disconnect.
6. Choose **OK** to disconnect from the selected Control.

Raising a help request

NetSupport Manager allows a user at a Client workstation to request help from a designated Control workstation.

To request help at the Client

1. Double-click the NetSupport Manager Client icon in the system tray and click **Request Help**.
   Or
   Press the hotkeys, usually ALT+LSHIFT+RSHIFT.
2. This opens the Request Help dialog into which Clients type their name and help request message.
3. Clients can also choose to cancel their previous help request by clicking **Cancel Previous Request**.
4. Clients then click **OK**.

If a Control is connected when a Client sends a help request, the Help Request folder will be highlighted, notifying the Control. If the Control is not connected, its Help Request folder will be highlighted the next time it connects to that Client.

Chatting to a Control workstation

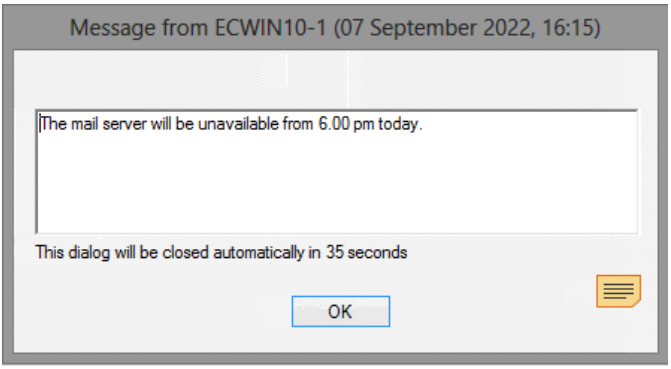
When a Client is connected to a Control, they can initiate a chat session.

To initiate a Chat session

1. Double-click the NetSupport Manager Client icon in the system tray.
2. The Client Information window will appear.
3. Click the **Chat** icon.
4. The Chat window will appear.
5. Type the message and press **Enter** or click **Send**.
6. If you need to alert the Control user that you have initiated a Chat session, choose {Chat}{Send Beep} from the Chat window drop-down menu.

Receiving messages from a Control workstation

Client workstations can receive messages from Control workstations. These messages are automatically displayed on a Client's screen in a message box.



The message box's title bar includes the name of the Control that has sent the message, along with the date and time the message was sent.

Having read the message sent by a Control, click **OK** to remove the message.

Configuring the Client

In this chapter …

How to use the Client Configurator.

Whether you want to secure the Client against unwanted connections or prevent Control users from performing certain tasks at selected Clients, NetSupport Manager provides a vast range of configuration options that can be set at individual Client level.

Configuring the Client

NetSupport Manager Clients are configured using the NetSupport Configurator. This makes all the required changes to and sets up the initialisation commands.

The configurator is started from the NetSupport Configurator icon in the NetSupport Manager Program group. This will display the initial Client Configuration dialog.

You can also load the configurator from the command line by entering the appropriate parameters. For example, "c:\program files\netsupport\netsupport manager\pcicfgui.exe. If NetSupport School components have been installed, you can load the NetSupport School Client Configurator by entering, "c:\program files\netsupport\ netsupport manager\pcicfgui.exe" /s.

Note: When performing a custom installation, the Configurator component must have been selected for this option to be available.

The Client Configurator enables you to set all the possible options for the Client. It also enables you to test the network to ensure that the network stack that you are attaching the Client to is installed and operating correctly.

You can run the configurator in two modes, basic or advanced. Some of the options are accessible in both modes.

Basic Client configuration
Basic configuration is used for standard settings such as the Client name, the transports that it will use and simple security such as a password before a Control will be allowed to connect to the Client.

Note: Basic Client configurations can also be set as part of the NetSupport Manager installation process.

Choose this option if:

- You are using the Client Configurator for the first time.
- You only wish to set simple security and configuration options.
- You do not need to create multiple profiles for different Control users who might connect to this workstation.

Note: Do not use the **Basic** option if you have set up multiple profiles using the **Advanced** option, as this will also change the master profile in the Advanced Configuration.

Advanced Client configuration

The **Advanced** option provides access to NetSupport Manager's wealth of configuration and security options. It lets you tailor the response of the Client to different Control users who may access the workstation and provides links to areas such as NT Security.

Note: When performing a custom installation, the Configurator component must have been selected for this option to be available.

Choose this option if:

- You are an experienced user.
- You need the Client to react differently depending on which Control user is connecting.
- You wish to enable/disable individual features.
- You want to link to NT Security.
- You want to restrict a Control user's access to specific drives, folders or files.

Note: Any changes you make to the master profile in the **Advanced** option will overwrite any setting that you have made using the **Basic** option.

Editing or creating configuration files

Choosing the **Advanced** option from the Client Configurator creates configuration files. This will display the Advanced Configuration window.

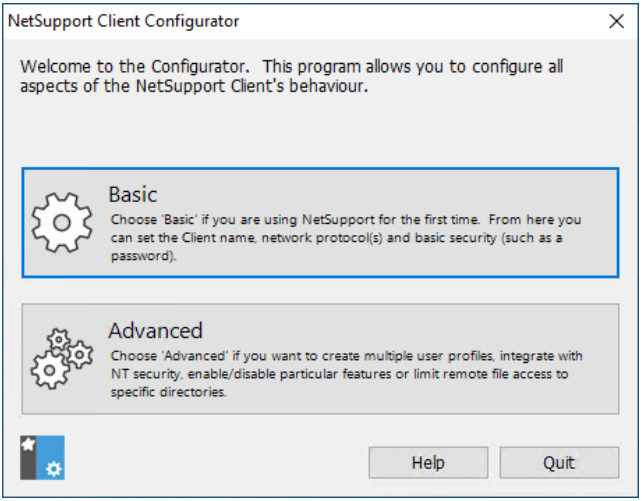
The default configuration file is called Client32u.ini and is stored in the NetSupport Manager installation directory of the Client workstation. You can use either this file or a different file on a server to which the Client has access.

Notes:

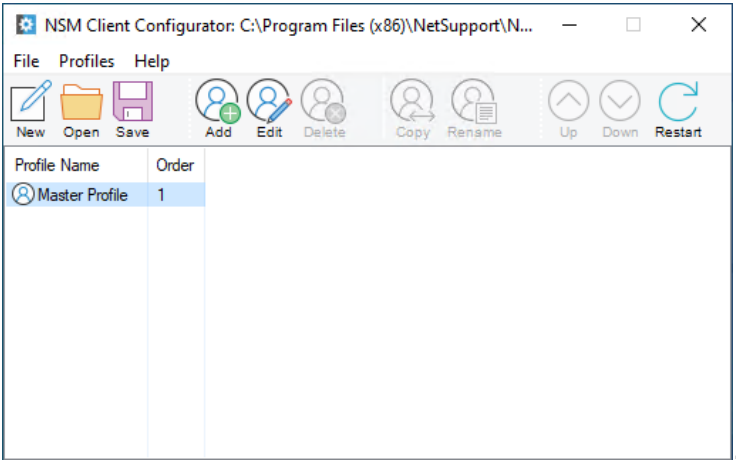
- The default configuration file for Clients pre-v12.50 is called Client32.ini.
- Once created, a configuration file can also be remotely deployed to multiple Client machines simultaneously using the NetSupport Manager Deploy utility.

To create a new configuration file

1. Choose **NetSupport Manager Configurator** from the NetSupport Manager Program group. The NetSupport Manager Client Configurator will appear.



2. Choose **Advanced**. The NetSupport Manager Client Configurator will appear.



3. Choose {File}{New} from the Advanced Configuration window drop-down menu.
4. A new file will be created with a default master profile.

To open the default or an existing configuration file

1. Choose {File}{Open} from the Advanced Configuration window drop-down menu.
2. Select the configuration file you want and click **Open**.

To set the configuration file the Client will use

The configuration file that the Client uses when it initialises can be on the same workstation or on another workstation or server to which that workstation has access. Multiple Clients can share the same configuration file for ease of administration. The configuration file to use is set by choosing {Profiles}{Client Parameters} from the Advanced Configuration drop-down menu.

To set the Client name

1. Choose {Profiles}{Client Parameters} and insert a Client name.

Note: The Client name is separate from the configuration file and is stored on the local workstation. Make sure that you do not choose the same Client name as is used on another workstation. Setting the Client name to be an asterisk is a useful strategy, as the Client name will then be set to be the same as the computer name. The computer name should always be unique.

To create a new profile

1. Open or create the configuration file you want to use.
2. Choose {Profile}{Add} from the Advanced Configuration window drop-down menu.
3. Enter the name for the profile.

Note: You can combine profiles from other configuration files by choosing the **Include File** option. This is useful where you are using configuration files on the local workstation but want to include information stored on a central configuration file or vice versa. For example, if the local workstation was using a different NetBIOS adapter number. Each profile contains a number of property sheets where the actual parameters are set.

To edit an existing profile

1. Open or create the configuration file you want the Client to use.
2. Select the profile you want to edit.
3. Choose {Profile}{Edit} from the Advanced Configuration window drop-down menu.
4. Edit the profile.

Note: If you leave the checkboxes greyed, the settings from the master profile will be used.

Basic Client configuration

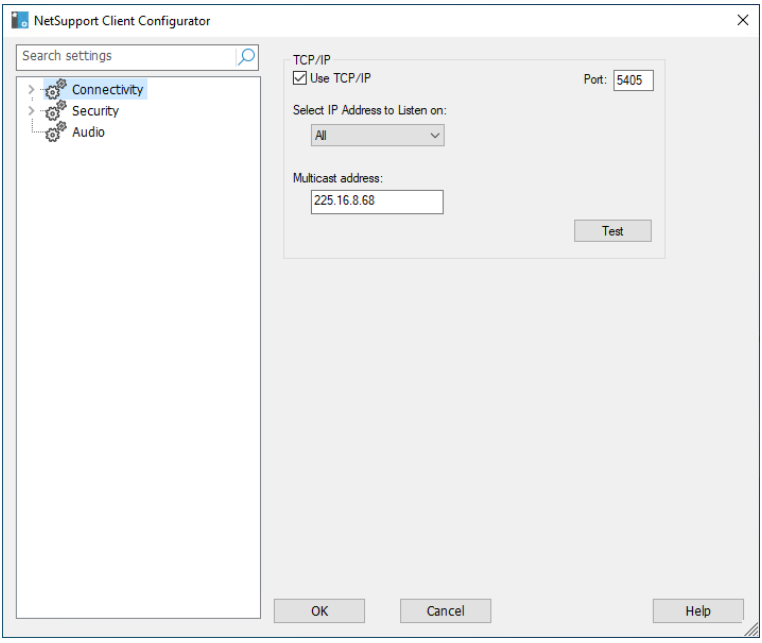
For use in a simple environment where you do not require the Client to react differently according to the Control user connecting to it and do not need to enable/disable individual functions.

To open the Basic Client Configurator

1. Open your NetSupport Manager Program folder by choosing {Start}{Programs}{NetSupport Manager}{NetSupport Manager Configurator}.

   Or

   Double click the **Configurator** icon in the NetSupport Manager group.
2. Select **Basic**. The Basic Client Configurator covers three areas:
   - Connectivity
   - Security
   - Audio



Advanced Client configuration

The NetSupport Manager Client is exceptionally configurable and supports the ability to set differing levels of security and response according to the identity of the Control user that is connecting. This is achieved by the use of configuration files at the Client, which determine the appropriate level of access for each Control user by means of a profile.

Configuration file
A configuration file is a text file consisting of sections called profiles.

You can specify the configuration file that the Client will use when it initialises. The configuration files themselves are stored in a check-summed file, normally Client32u.ini.

Note: Clients pre-v12.50 will use a configuration file called Client32.ini.

This file can be either on the Client workstation or on another workstation (such as a server) to which the Client workstation has access. You can even set the Client to use a fallback configuration file if the server is unavailable.

Profile
A profile is a set of parameters that determines how the Client will respond to a particular Control user and what functionality it will allow that Control user to have.

For example, one Control user may be allowed to view the Client in watch-only mode, while another may be allowed full functionality, including File Transfer. You can even set up the profile to pre-determine exactly what file access a Control user will have.

A profile set at the Client overrides a profile set at the Control. Security is, therefore, always ensured.

When connecting to a profiled Client, the Control user will be prompted for a user ID and a password. The NetSupport Manager Client will then interrogate the first matching profile in its current configuration file to determine what level of functionality has been assigned to that Control user.

Master profile
Each configuration file must contain a master profile. This is the standard profile and is the one used if you only set a basic configuration. Whatever is set here will, by default, apply to all other profiles you create.

However, you can then amend those profiles to enable or disable particular features for Control users whose user ID and password match those set in the profile.

As the master profile is the first one that the Client checks, you should always set maximum security features here to avoid leaving a security back door open.

The master profile is also used for setting a number of global parameters that apply across all individual profiles.

Individual profile
An individual profile allows you to enable or disable individual features for a particular Control user or group of Control users. When they connect, the Client will prompt them for a user name and password. It will then search its internal profiles until it finds a match and then apply the settings to the subsequent Control session.

Note: For further information on creating and applying profiles, click here.

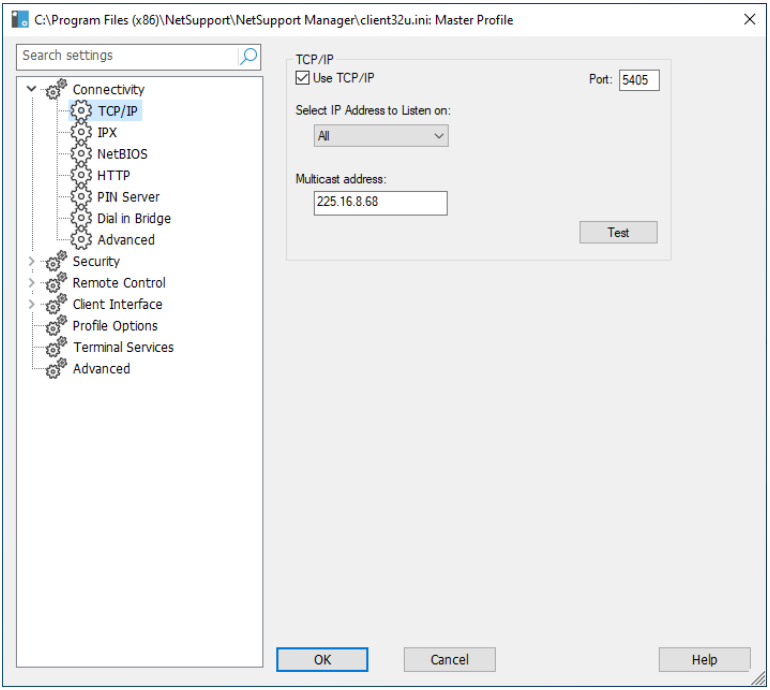
The advanced Client Configurator covers seven areas:

- Connectivity
- Security
- Remote Control
- Client Interface
- Profile Options
- Terminal Services
- Advanced

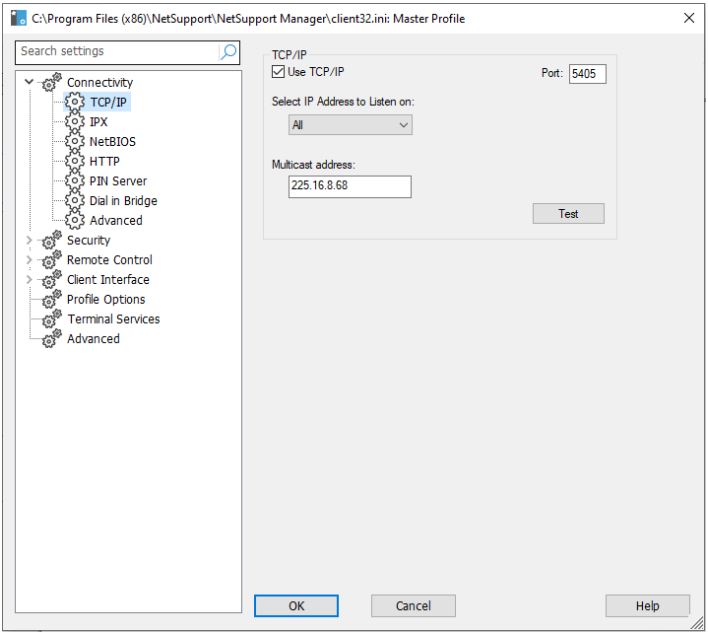
Note: A search bar is provided at the top of the window, allowing you to locate the settings you're looking for. Type in the search bar (you can enter a full or partial term) and click . Any sections containing the search term will be highlighted. Click  to close the search.

Connectivity options

The Connectivity options are used to set which protocols the transport will allow a Control to connect to it by. The NetSupport Manager Client supports multiple protocols meaning that you can set it to respond to NetSupport Manager Controls whether they are talking over TCP/IP, IPX or NetBIOS. You can also configure the Client for remote communication via a modem or establish a connection through a NetSupport Gateway. The Gateway provides a method for connecting via HTTP and delivers web-based remote control without the need for modifications to existing Firewall configurations. You can also configure the Client to use the PIN Server, enabling you to connect to Clients using the PIN Connect feature.



Set TCP/IP connection



Use TCP/IP
Check this option if you wish the Client to be able to communicate over TCP/IP.

Port
The TCP/IP protocol requires that a port number be allocated for applications to communicate through. To enable the Control to communicate with a Client and for the Client to receive the incoming request, the default registered port for NetSupport Manager is 5405.

Select IP Address to Listen on:
This option can prove useful for preventing unwanted connections when the Client has multiple network cards installed, for example, when both a public and private network are used. You can force connections on the required network by specifying the IP address that the Client uses to listen for incoming Control connections.

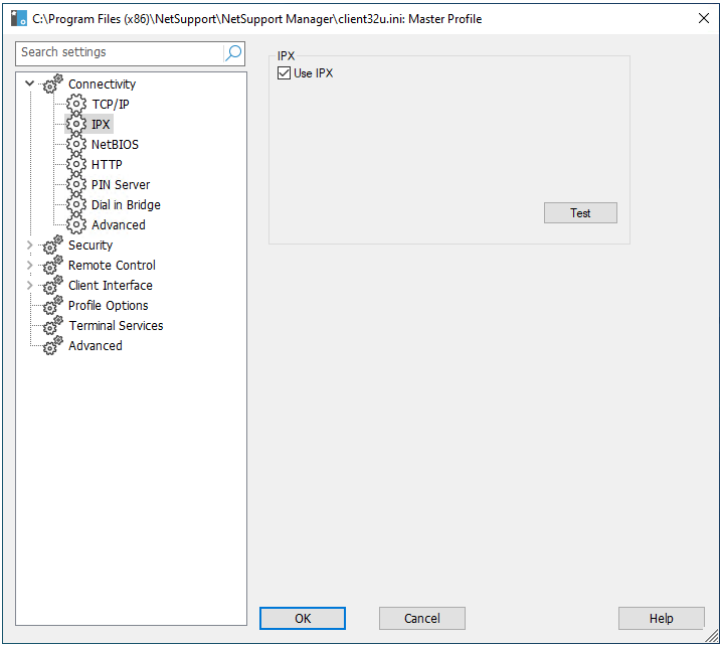
Multicast address:
This is the IP multicast address that the Client is listening on.

Click **Test** to check that the protocol is correctly installed on this workstation.

Notes:

- Changing the port could interfere with other TCP/IP applications.
- If you are using routers, you must ensure that they are configured to pass through data using this port.
- To enable Clients to initiate a connection to the Control, the default registered port is 5421.

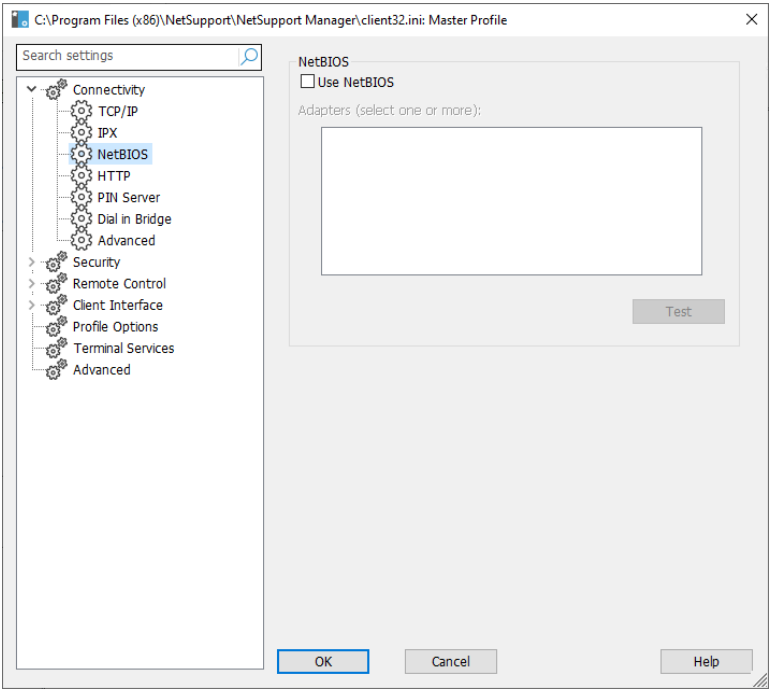
Set IPX connection



Use IPX
Check this option if you wish the Client to be able to communicate over IPX/SPX.

Click **Test** to check that the protocol is correctly installed on this workstation.

Set NetBIOS connection



Use NetBIOS
Select this option if you wish the Client to be able to communicate over NetBIOS/NetBEUI. If you are using NetBIOS, you must also select a NetBIOS adapter number.

Click **Test** to check that the protocol is correctly installed on this workstation.

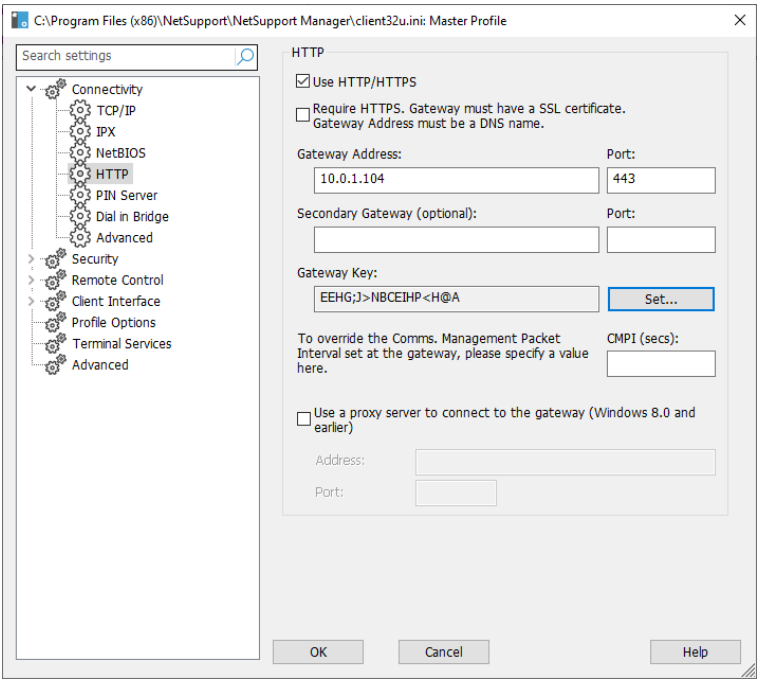
Adapters (select one or more)
As you can have more than one NetBIOS stack loaded, Windows uses the concept of adapter numbers. Each stack is allocated an adapter number by the operating system. So, for example, NetBEUI may be allocated adapter 1, NetBIOS over TCP, adapter 2 and so on.

By default, the Client uses adapter number 0. Depending on how your network is configured, this may not be the correct adapter number for your workstation. To overcome this, you must select the required stack from the list.

Note: NetSupport Manager allows you to select multiple NetBIOS adapters. Make sure only the ones you want are selected. If changing the selected adapter, you must first deselect the existing or default adapter number.

Set HTTP connection

This option enables you to configure the Client to accept connections via a NetSupport Gateway. (For more information see, Connecting to Clients/Controls via a NetSupport Gateway)



Use HTTP/HTTPS:
Check this option to enable the Client to communicate over HTTP.

Require HTTPS
Select this option to require a secure connection over HTTPS. The Gateway must have an SSL/TLS certificate and a public DNS name.

Note: You can apply an SSL/TLS certificate at the Gateway in the NetSupport Connectivity Server utility - Security tab.

Gateway Address:
Enter the IP address of the workstation where the NetSupport Gateway component is installed.

Secondary Gateway (optional):
If required, enter the IP address of the secondary Gateway.

Port:
NetSupport Manager's default port for HTTP communications is 443.

Note: In version 9.10, port 443 was introduced as the default for HTTP communications, 3085 being used previously. Gateway settings will be preserved for existing customers who subsequently upgrade, enabling 3085 to continue to be used, but there may be scenarios when upgraded Controls and Clients will need the HTTP port manually reconfiguring to ensure operability.

Gateway Key:
The key set here **must** also be set at the Control and match the key that has been configured in the Gateway itself. This provides additional security that enables Control users to connect only if they have specified the same key as at the Client.

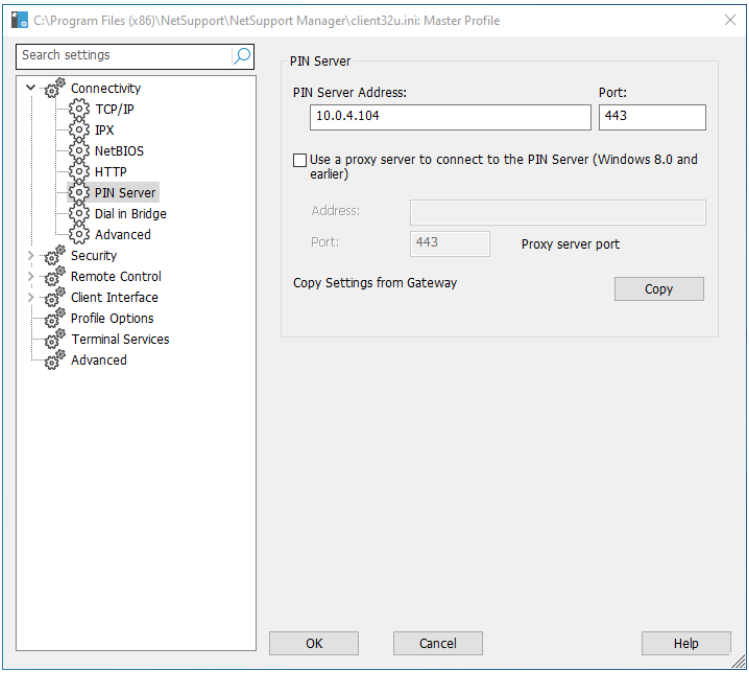
CMPI (secs):
You can override the CMPI that is set at a Gateway by entering a value here. By default, the CMPI is set to 60 secs at the Gateway.

Use a proxy server to connect to the Gateway
NetSupport Manager can be configured to route communications through a proxy server if required. Enter the server address and an appropriate port, 8080 recommended.

Note: This option only applies to Windows 8 machines and earlier. Windows 8.1 and above machines use automatic proxy configured in Windows Settings.

PIN Server

Configure the PIN Server so Clients can connect using the PIN Connect feature.



PIN Server

PIN Server Address

Enter the IP address of the workstation where the PIN Server is installed.

Port

The default port number for the PIN Server is 443.

Use a proxy server to connect to the PIN Server (Windows 8.0 and earlier)

Select this option if you are using a proxy server to connect to the PIN Server. Enter the server address and port number for the proxy server.

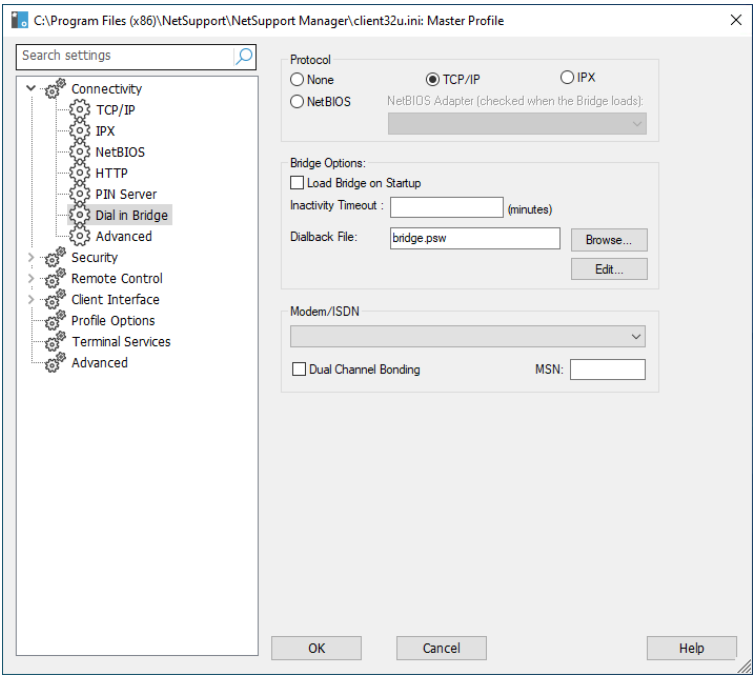
Note: This option only applies to Windows 8 machines and earlier. Windows 8.1 and above machines use automatic proxy configured in Windows Settings.

Copy settings from Gateway

If you are using a NetSupport Gateway, you can use the same settings for the PIN Server. Select **Copy** and the Gateway address and port will be used.

Dial in Bridge settings

This option is used to set up dial-in NetSupport Manager links either to this workstation or to any NetSupport Manager Client on the same LAN as this one.



Protocol

By default, NetSupport Manager is set to have no transport for the Bridge selected. Choose to use NetBIOS, IPX or TCP/IP protocols for NetSupport Manager Bridge.

Bridge Options

Load Bridge on Startup

Setting this option will cause the NetSupport Manager Bridge to initialise when the Client loads. If you do not set it, then the user at the Client must load it manually from the menu on the NetSupport Manager Client before dial-in access will be available.

Inactivity Timeout
Specify, in minutes, a maximum time span of inactivity at the Bridge before the Control disconnects.

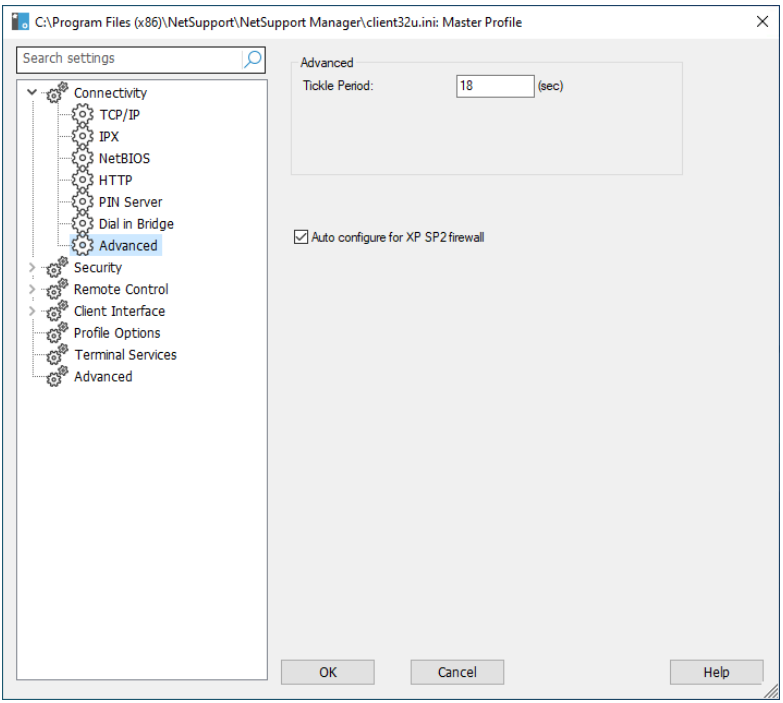
Dialback File
You can set up the Bridge to support both passwords and dial-back with the additional functionality of dialling back different telephone numbers according to the password.

Modem/ISDN
You must select a modem from the list of modems installed in the Control Panel of the workstation for the Bridge to use.

Dual Channel Bonding
If enabled, both channels of your ISDN line are combined, thus increasing the amount of available bandwidth to 128k. However, in increasing the speed of transmission, you are, in effect, making two calls.

MSN (Multiple Subscriber Number)
Specify a number that you want the Bridge to accept incoming connections from. Depending on the channels in use, you need only specify the trailing digit(s). For example, if the ISDN lines in use are 0181 123456 and 0181 123457, specify 6 or 7.

Advanced setting



Tickle period
While a Control is connected, the Client sends tickle packets to the Control to verify that it is still "alive". You can disable tickle packets for ISDN links but be aware that the Client may not detect that the Control has disconnected unexpectedly.

The normal period between tickle packets is 18 seconds but you can increase or decrease this value. Setting this to zero disables tickle packets entirely.

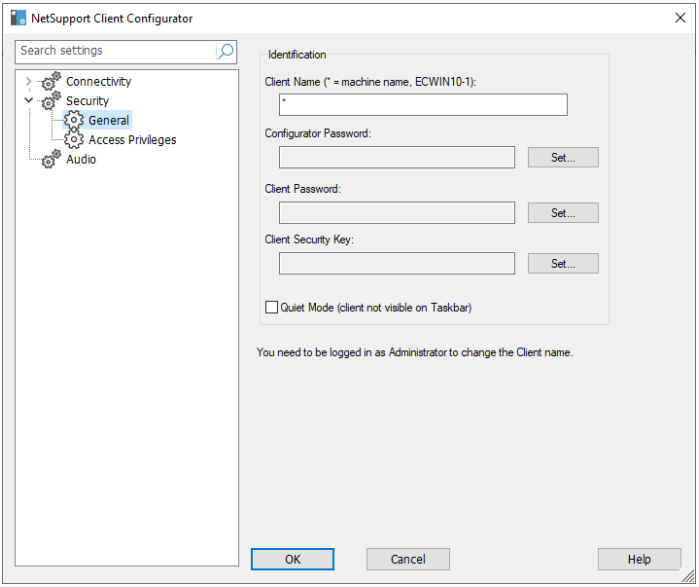
Auto configure for XP SP2 firewall
Enabled by default, this ensures that the NetSupport Manager Control and Client continue to function for those users who are using XP Service Pack 2.

Security options

These options are used to set security at the Client.

General settings

These are used to set passwords to protect the Client configuration and to prevent unauthorised access to the Client.



Identification

Client Name

Each NetSupport Manager Client on the network requires a unique name. You can either set a name of your own choosing or use an asterisk to default the Client name to be the same as the workstation name.

You need to be logged in as an administrator to change the Client name.

Notes:

- If setting the Client name in Advanced Configuration, choose {Profiles}{Client Parameters} from the Advanced Configuration window drop-down menu.
- For NetSupport Manager's Integration with Explorer feature to work, the Client name must remain set to the default machine name.

Configurator Password
As an extra level of security, you can associate a password with a configuration file. This prevents unauthorised amendment of this Client's configuration. When the Configurator is next started, the user must enter the required password before being able to change any Client parameters in this configuration file. Choose **Set** to set your password.

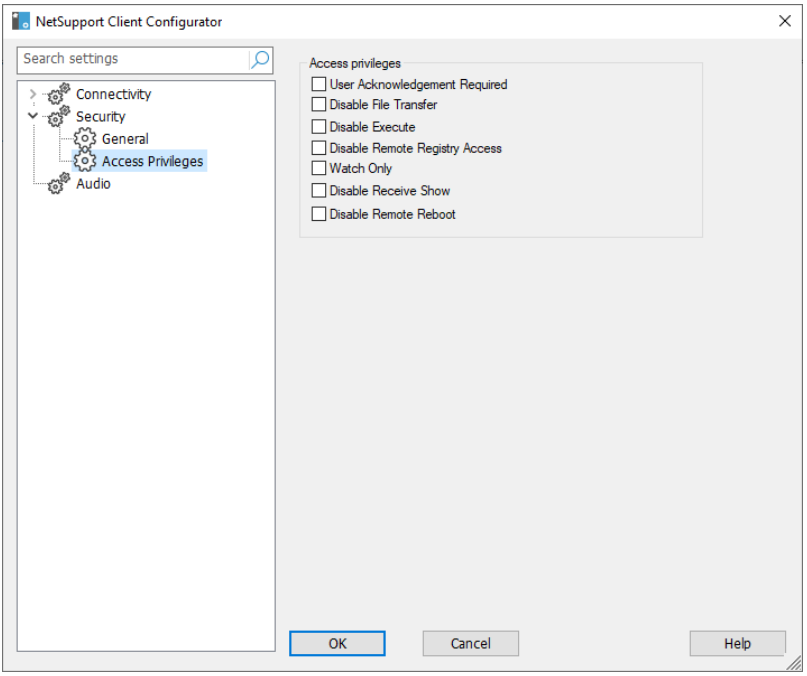
Client Password
This helps to protect the Client from unauthorised access from a NetSupport Manager Control. The Control user will be required to enter the password before obtaining access to the Client.

Client Security Key
Provides additional security that enables Control users to connect only if the Control has the same security key as the Client. Optionally, this can be set as the serial number. You must set the security key at both the Client and the Control.

Quiet Mode (Client not visible on taskbar)
Hides the Client icon on the taskbar.

Access Privileges (basic)

This option can be used to limit the range of remote control options that are available to the Control user.



User Acknowledgement Required
Prevents access to the Client unless a user is present. The user at the Client will have to accept the request to connect before access is granted.

Disable File Transfer
This prevents a Control user from being able to transfer files to and from the Client. The Control user will not be able to copy, view or otherwise manipulate files on the Client using the NetSupport Manager Control File Transfer options.

Disable Execute
This prevents a Control user from remotely executing applications at the Client from within the Control program. They can still start applications on the Client while remote controlling the workstation.

Disable Remote Registry Access
Stops a Control user from remotely managing and editing the registry of Clients.

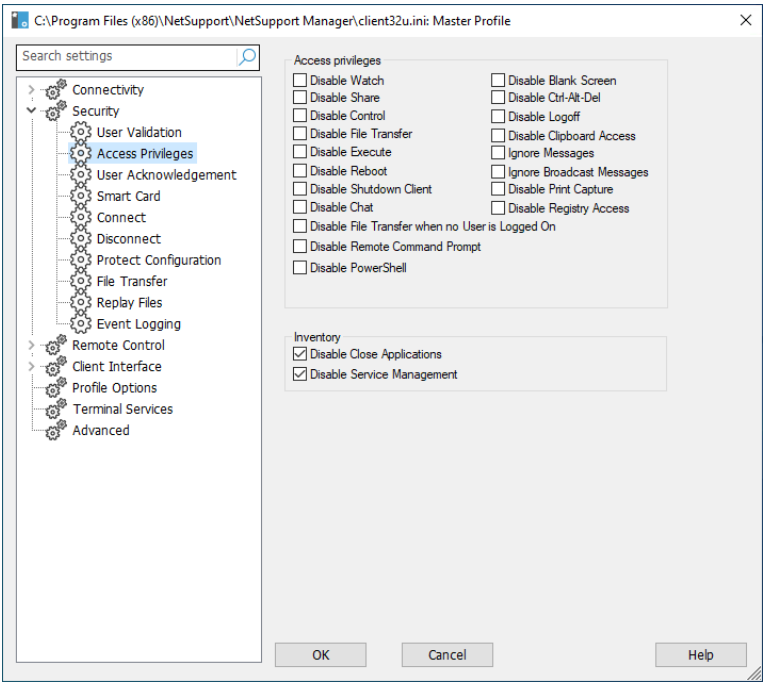
Watch Only
Enables the Control user to be able to view the screen of the Client workstation but prevents them from being able to enter keystrokes or mouse movements.

Disable Receive Show
Prevents the Client workstation from being able to display a Show sent by a NetSupport Manager Control.

Disable Remote Reboot
This prevents a Control user from being able to reboot the Client remotely.

Access Privileges (advanced)

This option can be used to limit the range of remote control options that is available to the Control user.



Disable Watch
Prevents a Control from viewing the Client. File Transfer, scripting and other functions are still available.

Disable Share
Allows a Control to view a Client in Watch-only mode.

Disable Control
Prevents a Control from being able to lock out the Client's keyboard and mouse.

Disable File Transfer
Disables File Transfer to and from the Client in all circumstances.

Disable Execute
This prevents a Control user from remotely executing applications at the Client from within the Control program. They can still start applications using the standard remote control functions.

Disable Reboot
Disables the ability of the Control user to reboot the Client workstation from within the Control window. You can still reboot while remote controlling.

Disable Shutdown Client
Prevents the user at the Control from being able to shut down the Client program from a script.

Disable Chat
Prevents the Control from initiating a Chat session with the Client. However, Clients can still open a Chat session with the Control via the Client.

Disable File Transfer when no User is Logged on
Disables File Transfer when no user is logged on. This means that the Control user would have to log on with their own user ID if they have a valid user ID and password for this workstation to use File Transfer.

Disable Remote Command Prompt
Prevents the Control from being able to run command line instructions at the Client.

Disable PowerShell
Prevents the Control from being able to open a PowerShell session at the Client.

Disable Blank Screen
Prevents the Control user from being able to blank the Client screen.

Note: This feature is not available on Clients running Windows 8 and above.

Disable Ctl+Alt+Del
Ignore Ctrl+Alt+Delete sent from the menu option in the Control interface.

Disable Logoff
Prevents the Control user from being able to log off from the Client workstation via the **Logout** option in the Control window. You can still log off while remote controlling.

Disable Clipboard Access
Prevents the Control user from being able to use the remote clipboard.

Ignore Messages
Ignores messages sent by connected Controls.

Ignore Broadcast Messages
Ignores broadcast messages from a Control, whether connected or not.

Disable Print Capture
Prevents the Control user from being able to use NetSupport Manager's printer re-direction function.

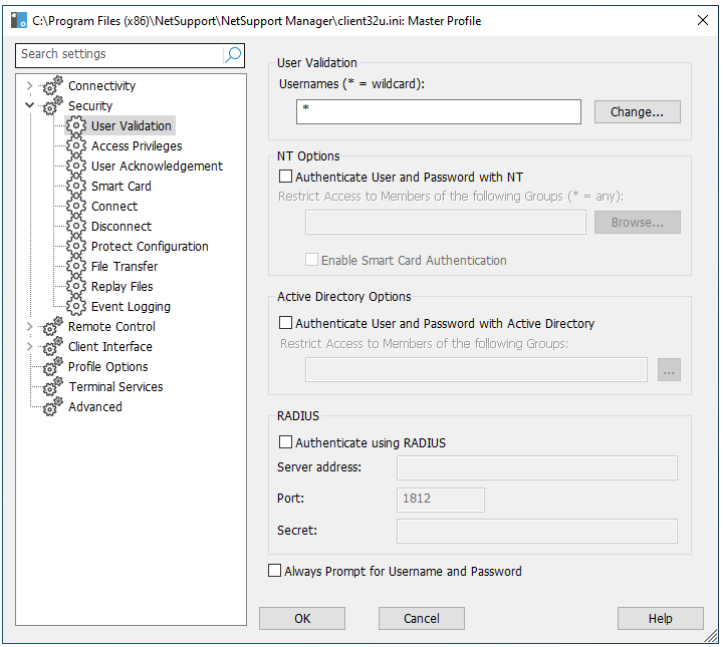
Disable Registry Access
The Script function and later versions of NetSupport Manager include a function to enable a Control user to remotely manage and edit the Registry on NetSupport Manager Clients. Setting this option will disable that function.

Task Manager
These options are disabled by default; clear the checkboxes to enable them. If enabled, the following tasks can be performed when the Task Manager is open for a selected Client.

Disable Close Applications
If checked, prevents the Control from being able to close a currently running application or process.

Disable Service Management
If checked, prevents the Control from being able to stop or start a service at the Client machine.

User Validation



Usernames
User names are used for setting the valid user ID and password for Control users when they connect to the Client. The user ID is also used to determine which Client profile will be applied.

You can enter multiple user names, each with its own password. You do this by clicking on **Change** and adding the individual user names and passwords.

By entering specific user names and passwords, the Client will restrict access to Controls entering a matching user name and password when connecting.

Notes:

- If this is an NT workstation and you have elected to use the NT Security option to validate the Control user's ID and password, then you do not need to specify the user name and password. However, you may still wish to set this option to provide an additional filter when using NT security validation to restrict access to particular NT users and determine which Client profile they will use.

- Rather than continually prompt the Control user for a user name, a default ID can be set in the Control Configuration - General settings.

NT Options

Authenticate User and Password with NT

This only applies to NT Clients. If this option is set, then the user ID and password entered at the Control must be a valid NT ID on the Client workstation or its default domain.

Restrict Access to members of the following groups

You can further restrict access by specifying groups. Click on **Browse** to select a group(s).

Enable Smartcard Authentication

If this option is selected, then the Control will be required to enter a user ID and password as well as the smartcard and pin to connect to the Client.

Active Directory Options

Authenticate user and password with Active Directory

If in use, you can configure the Client to validate a user connection against members of the groups defined within Active Directory. A connecting Control will be prompted for their user ID and password, which will be validated against the Active Directory.

Restrict Access to Members of the following Groups:

As an additional level of security, you can restrict access to members of specified groups.

RADIUS

You can configure the Client to validate a user connection with RADIUS. Once enabled, when a Control connects to the Client, the connection will be validated using the method set in RADIUS.

Note: RADIUS authentication can be used over TCP/IP and HTTP/HTTPS communications.

Authenticate using RADIUS

Enable RADIUS authentication.

Server address

Enter the fully qualified domain name (FQDN) or IP address for your RADIUS server.

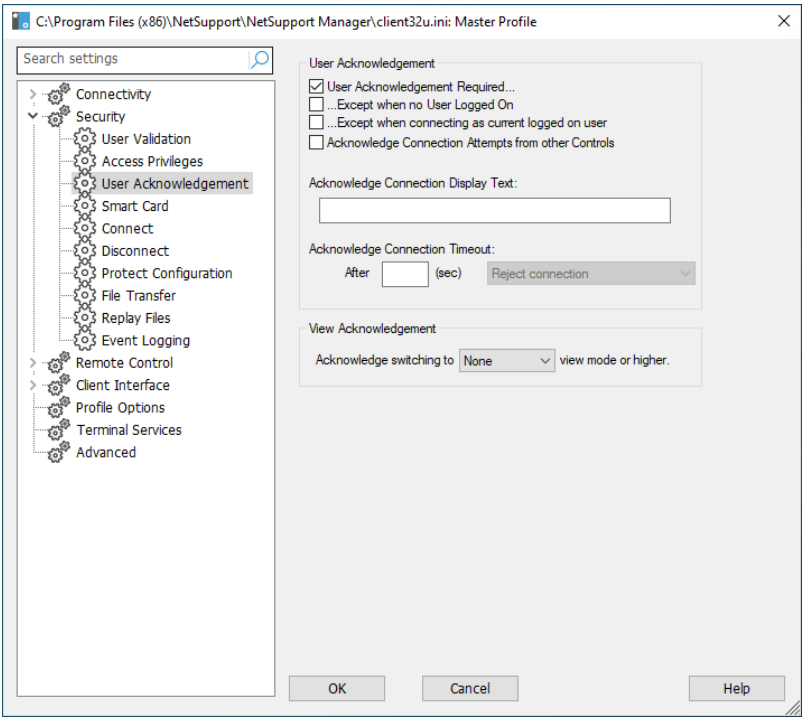
Port
The default port for RADIUS is 1812.

Secret
Enter your RADIUS secret key.

Always Prompt for Username and Password
If checked, the Control will be prompted for a user name and password each time it attempts to connect to the Client.

User Acknowledgement options

These security options, when enabled, display a prompt at the Client machine advising that a Control user is attempting a remote connection. The Client must acknowledge the message before a remote control session can be instigated.



User Acknowledgement

User Acknowledgement Required

When a Control user attempts to connect, a message will be displayed at the Client. Unless the user at the Client explicitly accepts the request, the connection will be refused.

Except when no User Logged On

Only applies when user acknowledgement has been set. This means that the Client can be configured to allow remote control when the workstation is at the login screen. The Control user would have to have a valid ID and password to be able to log in.

Except when connecting as current logged on user
This enables you to bypass user acknowledgement if the remote connection is being made using the user name/password of the currently logged-on user. For example, if a user locks his office workstation at the end of the day, they can then connect to it from home without having to physically accept the connection at the remote machine. User validation must be set to allow connection.

Acknowledge Connection Attempts from other Controls
The Client receives a message that another Control is attempting to connect.

Note: For the message to be displayed at the Client, the **Allow more than one Control to Connect at a time** option must be enabled in Client Configuration – Security Connect.

Acknowledge Connection Display Text:
Specify a customised acknowledgement message to be displayed at the Client workstation. The text can also incorporate a choice of default settings should you wish the Client to know, for example, the name of the Control user. There are four available syntaxes:

$loginname$	Returns the logged-on user name of the user at the Control.
$fullname$	Returns the full name of the logged-on user at the Control.
$computername$	Returns the machine name of the Control.
$userdomain$	Returns the domain of the logged-on user at the Control machine.

Note: The standard NetSupport Manager graphic in the User Acknowledgement dialog can be replaced with a customised graphic by placing an icon file with the name helpdesk.ico in the installed directory for the product on the Client machine.

Acknowledge Connection Timeout:
Specify a time limit, between 0-255 seconds, for the user acknowledgement prompt to be displayed and decide what action to take if the user has not acknowledged the connection after the specified time. You can choose **Reject Connection** to cancel the connection attempt or **Accept Connection** to allow the Control to connect.

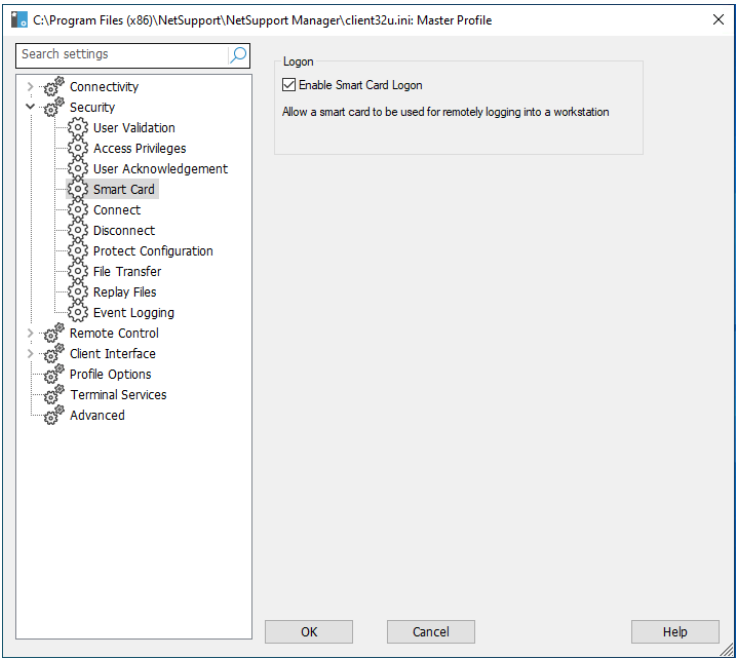
This can be useful if there is an urgent need for the Control to connect, but they want to allow the remote user a few seconds to complete a task or close down files.

View Acknowledgement

Acknowledge switching to *xxxxx* view mode or higher.
Displays a prompt at the Client machine if, while being viewed, the Control user wishes to switch to a higher View mode. For example, if the level is set to **Control**, the prompt will appear if the mode is changed from **Share** or **Watch**. The Client can choose to accept or reject the change.

Enable Smartcard logon

Enabling this option at the Client allows a Control to log on to Client machines that use smartcard authentication.



Smartcard support is automatic and no additional installation is required. Support is dynamically loaded at the Client when a Control connection is made. When loaded, an additional hardware device will be available called **NSL Pseudo Smartcard Reader**.

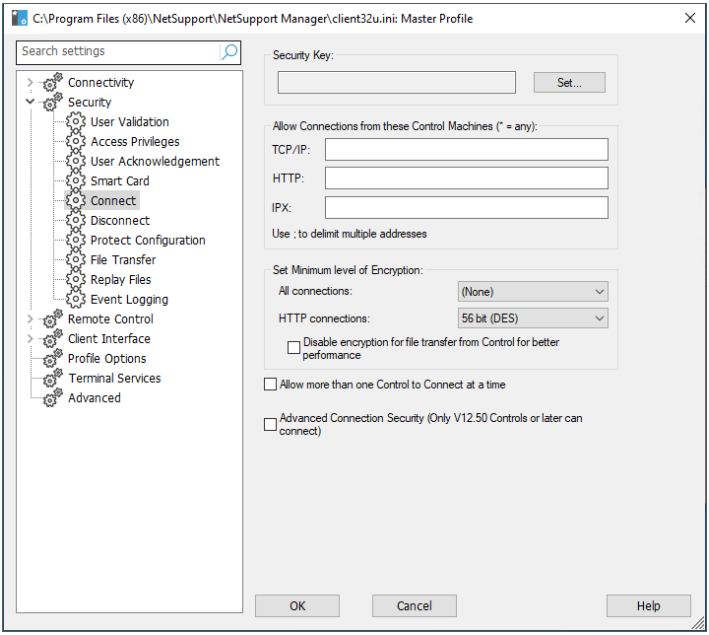
When the Control opens a window to the connected Client, they will need to insert their own smartcard into the reader attached at the Control and enter the Client's PIN to log on to the remote user's machine.

If multiple Client View windows are open at the Control, smartcard insertion and removal events are sent to the Client currently in focus.

Note: In an Active Directory environment, it is possible to enable smartcard support using the NetSupport Manager ADM Template.

Connect options

This option is used to administer which Control users or Control workstations can connect to this Client. You can also set the level of encryption to be used.



Security Key

Provides additional security that enables Control users to connect only if the Control has the same security key as the Client. Optionally, this can be set as the serial number in your NetSupport Manager Licence file. You must set the security key at both the Control and Client.

Allow Connections from these Control Machines
This enables you to restrict access to Controls running on IPX, TCP/IP networks or over HTTP. This feature can also be used to limit access to Control workstations with specific addresses. Wildcards can be used in the address field.

For example:
194.182.*.* all workstations on TCP/IP subnet 194, 182
00000001-* all workstations on IPX network 1

Note: Access can also be limited to a specific IP range, e.g. 10.0.0.1-24 would allow access from 10.0.0.1 up to 10.0.0.24.

Set Minimum level of Encryption
With encryption turned on, all the information that is sent between the Control and Client is very difficult for others to read. NetSupport Manager offers a range of encryption options, ranging from 56 bit DES to 256 bit AES, enabling you to find the necessary balance between security and performance. The higher the level of encryption, the higher the potential for decreased performance.

Choose the level of encryption to be used while a Control is connected. By default, encryption is set to none for all connections and 56 bit DES for HTTP connections.

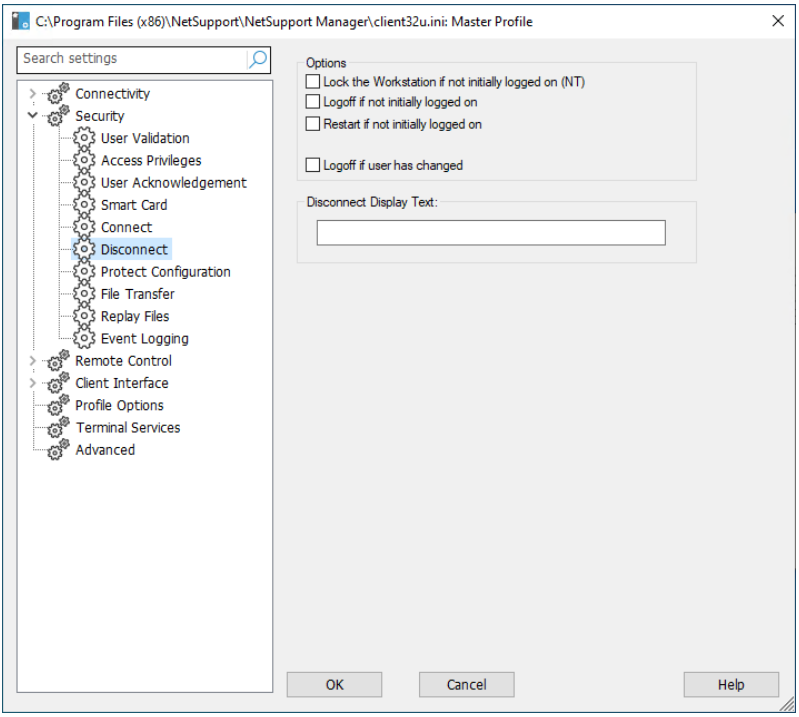
Disable encryption for file transfer from Control for better performance
By default, NetSupport Manager encrypts file transfers from the Control to the Client. Selecting this option disables encryption and improves performance.

Allow more than one Control to connect at a time
NetSupport Manager allows multiple Controls to connect and view the Client simultaneously. This is useful for group working. Checking this option enables the function.

Advanced Connection Security (Only v12.50 Controls or later can connect)
As an added security measure from version 12.50, Clients can challenge Controls that make a connection attempt and only Controls running version 12.50 and above will be able to connect. Selecting this option will reject connections from Controls running earlier versions of NetSupport Manager.

Disconnect options

The options here provide additional security when a Control user disconnects from the Client machine. This is useful if the connection to the Client is unexpectedly lost.



Lock the Workstation if not initially logged on – NT only
When the Control user disconnects, the workstation will be locked. The Control user will be able to reconnect and unlock the workstation. This option is useful if the Control unexpectedly loses the connection. It prevents a user at the workstation inheriting the Control user's rights (assuming they have logged in as an Administrator, for example). This only applies if the workstation was logged off when the Control was connected.

Logoff if not initially logged on
When the Control user disconnects, the workstation will be automatically logged off. This only applies if the workstation was logged off when the Control connected.

Restart if not initially logged on
When the Control user disconnects, the workstation will be automatically restarted. This only applies if the workstation was logged off when the Control connected.

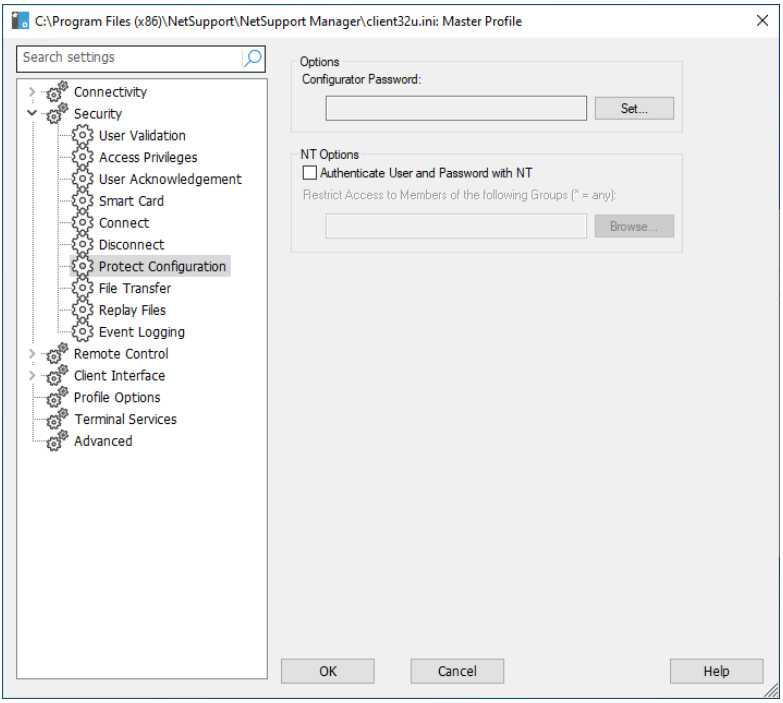
Logoff if user has changed
If a Control needs to log on to a Client workstation under a different name to the user, for example, as an Administrator, it prevents the user from inheriting the Control user's rights should the connection be unexpectedly lost.

Disconnect Display Text
Specify a customised message to be displayed at the Client workstation when a Control disconnects. The text can also incorporate a choice of default parameters should you wish the Client to know, for example, the name of the Control user. The available options are:

$loginname$	Returns the logged-on user name of the user at the Control.
$fullname$	Returns the full name of the logged-on user at the Control.
$computername$	Returns the machine name of the Control.
$userdomain$	Returns the domain of the logged-on user at the Control machine.

Protect Configuration settings

This option allows you to protect the Client configurations.



Configurator Password
Nominate a security password for the Client profile.

Authenticate User and Password with NT
This only applies to NT Clients and therefore only protects Client Configurators on NT workstations. If this option is set, the user ID and password entered at the Control must be a valid "Act as part of the Operating System" NT ID on the Client workstation or its default domain. This user right is not granted by NT as default.

To grant this user right
1. Run {Programs}{Administrative Tools}{User Manager}.
2. Select {Policies}{User Rights} from the drop-down menu.
3. Check the **Show Advanced User Rights** checkbox.
4. Select the right.
5. Click **Add**.
6. Select which users and/or groups this right should be granted.
7. Click **OK**.

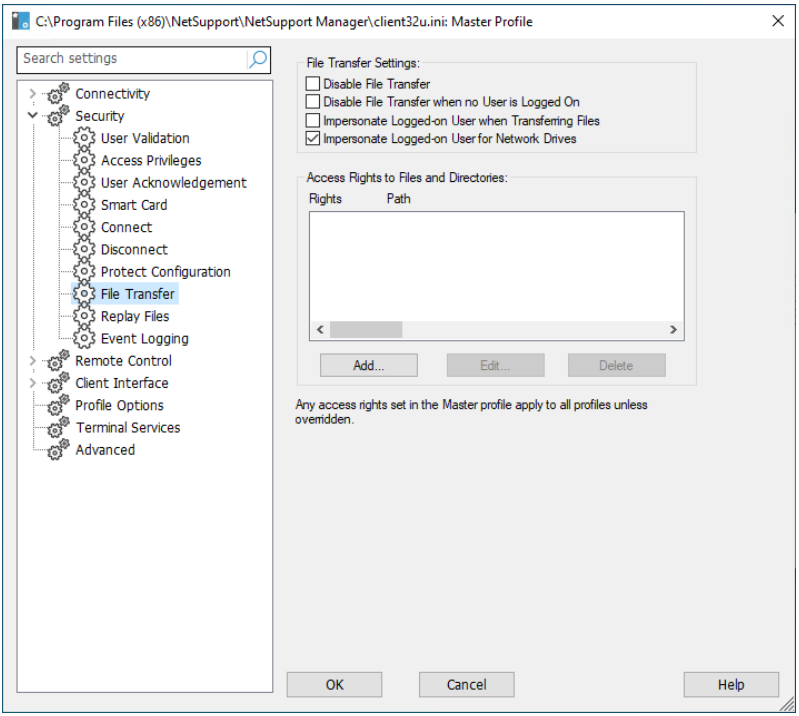
8. For this user right to be recognised, you must re-log into your workstation.

Note: You can also point the Client to validate the ID in another domain.

Restrict Access to Members of the following Groups
You can further restrict access by specifying groups. Click **Browse** to select a group(s).

File Transfer settings

This option is used to control file access.



Disable File Transfer
Disables File Transfer to and from the Client in all circumstances.

Disable File Transfer when no User is Logged On
Disables File Transfer only if no user is logged on. This means that the Control user could log on as themselves if they have a valid user ID and password for this workstation.

Impersonate Logged on User when Transferring Files
When using NetSupport Manager File Transfer, the Control user will have the same file access as the logged-on user.

Impersonate Logged on User for Network Drives
The Control user will have the same access to network drives as the logged-on user.

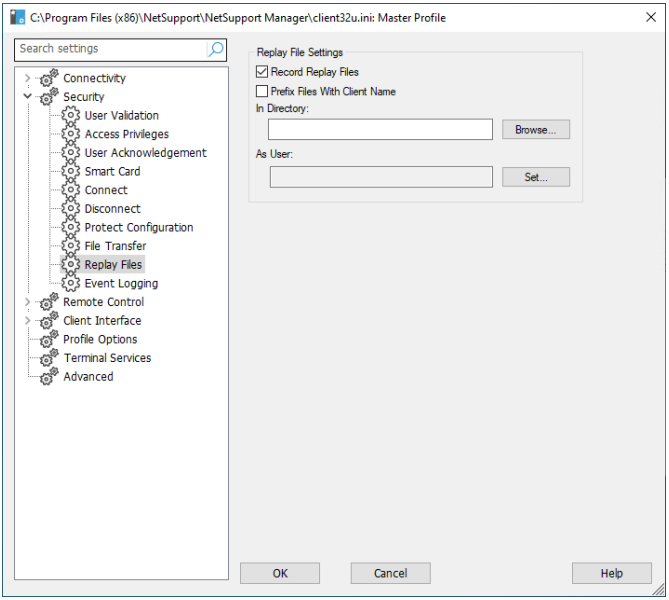
Access Rights to Files and Directories
This is used to explicitly allow or deny access to individual drives, directories and files. This only applies to File Transfer within NetSupport Manager.

It is hierarchical, so you could, for example, disable access to drive C:\ in general but explicitly grant access to sub-folders.

Note: Any access rights set in the master profile apply to all profiles unless overridden.

Replay Files settings

Replay files enable the Control to record and playback the screen activity that takes place at a Client workstation while it is being remote controlled/viewed.



Record Replay Files
Check this option to enable the recording of replay files. A replay file will be created each time the Control views a Client PC with the option enabled.

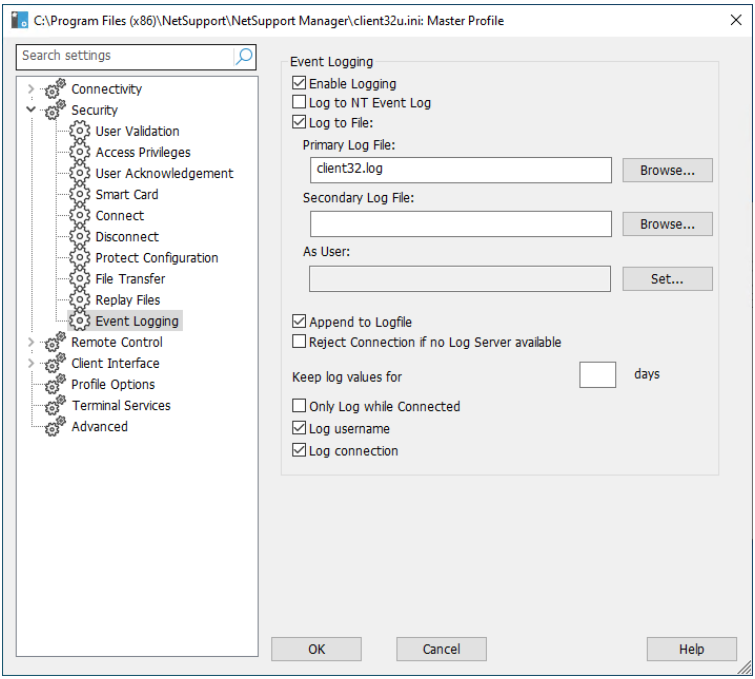
Prefix Files With Client Name
In order to identify each replay file, file names can be prefixed with the Client name and the date/time of the recording. Alternatively, with the option unchecked, the files will be named sequentially in the format 00000001.rpf etc.

In Folder
Specify where the replay files should be stored. If saving to a network share, this allows you to store each Clients files in individual folders.

As User
The user name and password used to write to the log file.

Event Logging

Log files record the activity that takes place at a Client machine while it is being remote controlled. Information such as the name of the Control that initiated the connection, and the date and time that the session started and ended, can be recorded if required. The text files that are created provide a useful audit trail but you can also enhance Client security using this feature.



Enable Logging
Select this check box to enable logging.

Log to NT Event Log
Sets the log to be maintained within the NT Event Log.

Log to File
Sets the log to be maintained within a text file. This file can be on the local workstation or on a server. Multiple Clients can write to the same log file.

Primary Log File
Specify the path, and file name (*.log), where the log file will be stored.

Secondary Log File
Specify the path for a secondary log file. In the event that the primary path cannot be found, for example, the server is down, the file will be stored here.

Notes:

- To make the tracking of log files easier, particularly if multiple Client log files are stored on the same server, the file names specified above can include the Clients computer name and the date that the log was created. For example: \\Logserver1\logfiles\$computername$$dd$$mm$$yy$.log. In this instance, you would be able to build up a daily record of activity on a particular Client machine.

  Acceptable formats for the date are:
  $d$$m$$y$ which for 7th December 2021 returns 171221.
  $dd$$mm$$yy$ returns 1071221.
  $ddd$$mmm$$yyy$ returns 1TueDec2021.
  $ddd$$dd$$mmm$$yyy$ returns 1Tue07Dec2021.
  $dddd$$dd$$mmmm$$yyyy$ returns 1Tuesday07December2021.

- For Windows XP and above, this file must be a UNC path name as a mapped drive is not available until you log in.

As User
Log File user is the user name and password used to be able to write to the log file when the path specified is a UNC path.

Append to log file
By checking this box, NetSupport Manager will continually add to the existing entries in the log file. If unchecked, existing items get overwritten.

Reject connection if no log server available
By enabling this option, you can apply additional security. With logging enabled, if a Control attempts a connection and neither of the log files can be found, the connection request is rejected. This ensures that any audit checks that you may have in place will not be compromised due to the activity not being logged while the servers are down.

Keep log values for
Specify the number of days to keep the entries in the log file for. Any older entries will be cleared after the specified number of days (once a new log entry is received). Leave this blank to keep all entries indefinitely.

Only log while Connected
This option ensures that activity is only logged during the period that the Control is physically connected. When logging is enabled, some additional information is recorded that you may prefer to ignore, Client configuration data, for example.

Note: Another useful item of information that can be recorded is the reason why a Control is connected to the Client. This comes into effect when 'User Acknowledgement ' is enabled at the Client machine and the Control Security settings option is configured to 'Prompt for additional information when connecting'.

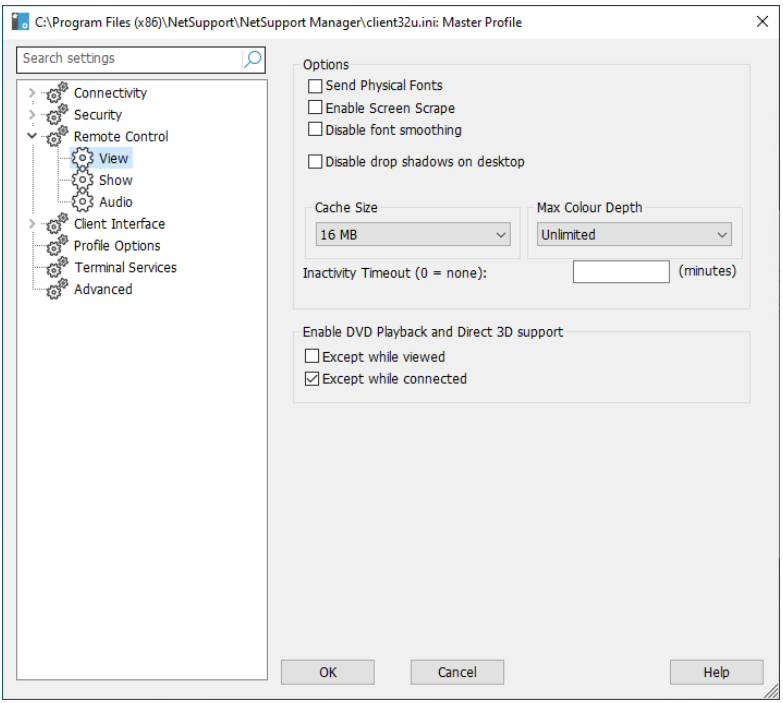
Log username
By default, the user name of the Control user who initiated the connection is recorded in the log file. If you don't want to record this information, clear this checkbox.

Log connection
By default, connect and disconnect entries are recorded in the log file. If you don't want to record this information, clear this checkbox.

Remote Control options

The following remote control attributes can be adjusted:

View settings



Options

Send Physical Fonts

When a Windows Client is sending its screen to a Control, it passes the font information by reference to reduce the volume of data sent.

The Control refers to its own internal font mappings and uses the closest matching that it has to the one being displayed at the Client. In most cases, the same fonts will be available at both the Client and the Control and so what is displayed on the screen will appear identical.

However, there may be occasions when a close match cannot be found. In these cases, it is desirable that the Client sends the Control the full information that it requires to display the data in the same font.

Setting this option forces *TrueType* text to be sent as glyphs (i.e. character shapes) rather than character codes. This guarantees that they will be displayed correctly at the Control.

This will, however, impact on performance, especially on dial-up lines, and is not usually required.

Enable Screen Scrape
NetSupport Manager's favoured and the most efficient method for capturing screen data is to hook into the Video Driver of the workstation being viewed.

However, there may be occasions when this method will not work because certain applications bypass the driver. In these circumstances, you can enable 'screen scrape' mode in order to take a snapshot of the screen. Although this will have a greater impact on the network, it will at least provide an accurate representation of the Client's screen.

Disable font smoothing
This option disables font smoothing when viewing a Client.

Disable drop shadows on desktop
This option disables drop shadows on applications when viewing a Client.

Cache Size
Screen data that has been recently sent to the Control by the Client is cached to improve performance. A larger cache improves performance at the expense of using more memory at both the Client and the Control.

Setting this option enables you to tailor the cache size used for maximum performance. The lower of the cache size set at the Client and Control will be used so you must set at both ends for this to be effective.

You can determine how efficiently the cache is working by clicking  on the caption bar and selecting **About** - **Cache** from the Client View window at the Control. This will display statistics of hits etc.

Max Colour Depth
The higher the colour depth at the Client the greater the volume of data that needs to be sent to the Control for each screen update.

Restricting the Colour depth will improve performance on slower links.

Note: The settings here will override the colour depth setting in the Control Configuration.

Inactivity Timeout

When a Control connects to a Client, it can prevent other Controls from connecting to that same Client unless the **Allow Multiple Connections** option has been set.

If the operator at the Control forgets to terminate the connection, then a case might arise where other Control users who need access are locked out.

Setting this option means that if a connected Control has not carried out any mouse, keyboard or file transfer activity for the specified period, the Client will assume that the connection is no longer required and disconnect automatically. It will then be available to other Controls.

Enable DVD Playback and Direct 3D support

NetSupport Manager uses the Microsoft Mirror Driver to capture screen data for view sessions. However, while hooked into the Mirror Driver, it is not possible to play DVDs. Therefore, if you do need the capability to play DVD's, NetSupport Manager provides options which load and unload the Mirror Driver as required.

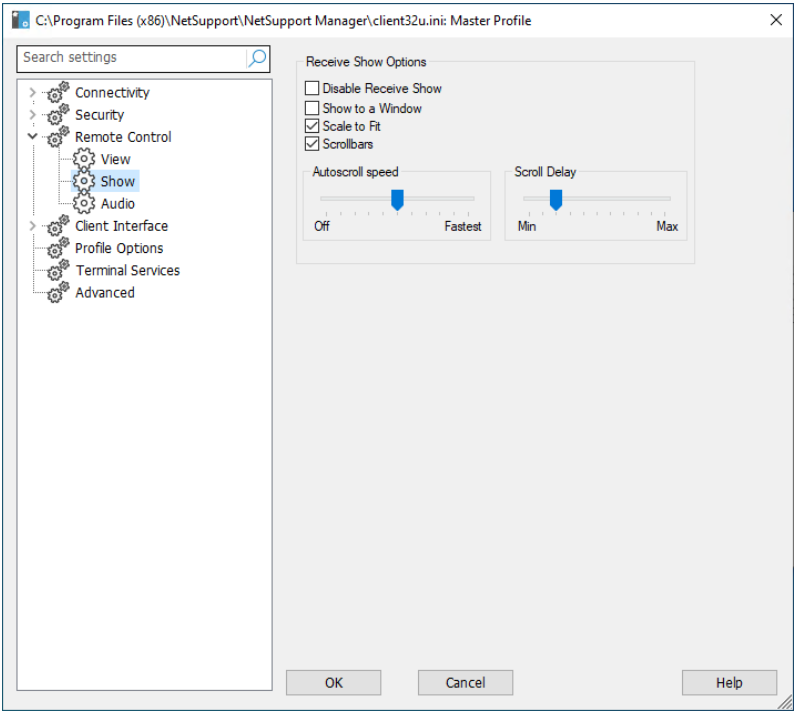
Except While Viewed

If checked, DVD support is enabled but will be disabled for the duration of a view session while the Mirror Driver is loaded.

Except While Connected

If checked, DVD support is suspended while a connection to the Client is in place.

Show settings



Receive Show Options

Disable Receive Show

Prevents the Control from being able to show to the Client.

Show to a Window

Enables the Client to receive a Show in a window rather than in full screen mode.

Scale to Fit

Automatically scales the Receive Show window to resize the displayed screen in the available area.

Scrollbars

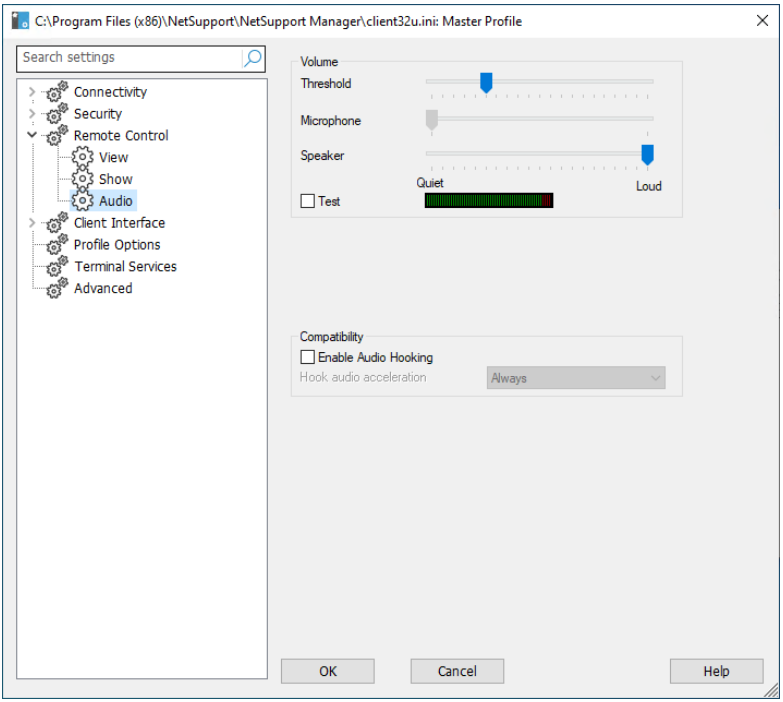
Determines if scrollbars will be displayed with the Receive Show window for navigation.

Auto-Scroll Speed
When you are viewing a Show in a window on the Client's screen, the Client can automatically scroll the contents when the mouse moves close to the edges of the window. Adjusting the sliding control sets the speed at which the view scrolls, from not at all to very fast.

Scroll Delay
When auto-scroll is enabled, you can change the delay before the scroll is activated. If you want the view to scroll as soon as the mouse is at the edge of the screen, move the slider towards **Min**. If you prefer a longer delay before the AutoScroll takes effect, move the slider towards **Max**.

Audio settings

This option provides configuration options for using Audio Support at the Client.



Volume
Threshold – microphone sensitivity
Microphone – volume of the microphone

Speaker – volume of the speakers

Test
Check this option to test all of the above settings.

Compatibility
Enable Audio Hooking
Enable or disable audio hooking.

Note: A reboot is required for the settings to take effect.

Hook audio acceleration
Sets the hardware acceleration level for the Clients.

Never
Leaves the acceleration level at full.

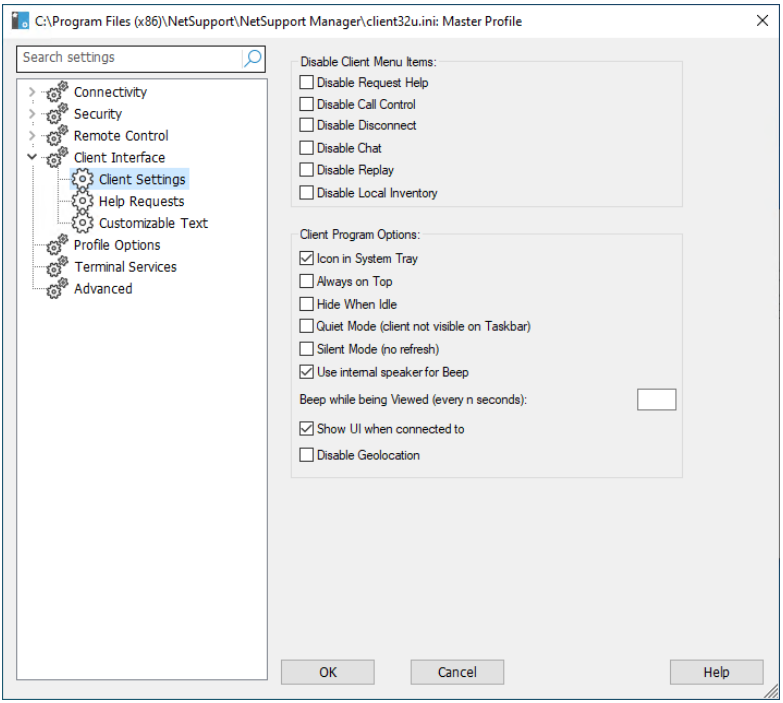
While Connected
The acceleration level will be moved to basic while connected.

Always
The acceleration level will be moved to basic.

Client Interface options

The Client Interface settings are used for customising the interface between the Client and the Control.

Client settings



Disable Client Menu items

Disable Request Help

Prevents the Client user from being able to use the Request Help function.

Disable Call Control

Disables the **Call Control** option at the Client.

Disable Disconnect

Prevents the Client user from being able to force the Control user to disconnect.

Disable Chat
Prevents the Client from initiating a Chat session with a Control. However, the Control can still open a Chat session with the Client.

Disable Replay
Prevents the Client from being able to open Replay files.

Disable Local Inventory
Prevents the Client from being able to perform a local inventory.

Client program options
Icon in System Tray
The NetSupport Manager Client icon will be displayed in the system tray (clicking this opens the Client information window) rather than as an active application on the taskbar (clicking this opens a window with drop-down menus providing access to the Client features).

Always on Top
The NetSupport Manager Client window can become obscured behind other windows. Setting this option means that it is always visible and the user at the Client will always know when someone is viewing them.

Hide when Idle
The NetSupport Manager Client icon will not be displayed unless a Control is connected or viewing the Client.

Quiet Mode (Client not visible on taskbar)
Select this option to hide the Client icon in the system tray.

Silent Mode (no refresh)
Allows the Control to connect and view a Client without the Client's knowledge. If silent mode is not selected, the Client's screen and mouse icon will flicker, notifying the Client that a connection has been made and their screen is being viewed.

Use internal speaker for beep
By default, the audible warning beep, which can be sent between machines in functions such as Chat and View, comes from the PC's internal speaker. There may be occasions when it is more appropriate to use the workstations soundcard to generate the beep through speakers, in which case uncheck this box.

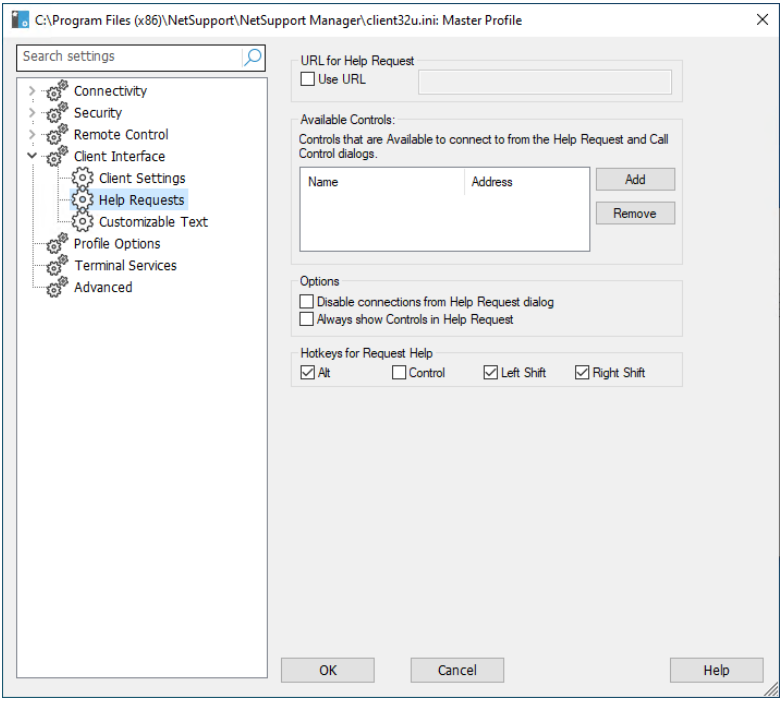
Beep while being Viewed (every n seconds)
While a Control is viewing the Client, an audible beep will be sounded.

Show UI when connected to
When the Control connects to the Client, the Client Information window will be displayed. This allows the Client to see details of the Control that is connected to them. They also have the option to disconnect from the Control or chat with the Control.

Disable Geolocation
The location of a Client can be displayed in the Control. Selecting this option disables the Geolocation feature at the Client.

Help Request settings

This option is used for configuring the Client's help request access. You can specify the NetSupport Manager Controls that the Client can forward help requests to or even link to a third-party web-based helpdesk system.



URL for Help Request

If you use a third-party web-based helpdesk application, you can direct Clients to this rather than have them use NetSupport Manager's help request feature. To enable, select **Use URL** and enter the appropriate URL.

Available Controls

Lists the Controls that are available to connect to from the Help Request and Call Control dialogs.

Options

Disable connections from Help Request dialog

Check this box to disallow the options in the Help Request dialog for the Client to choose which Control they wish to send a help request to.

Always show Controls in Help Request

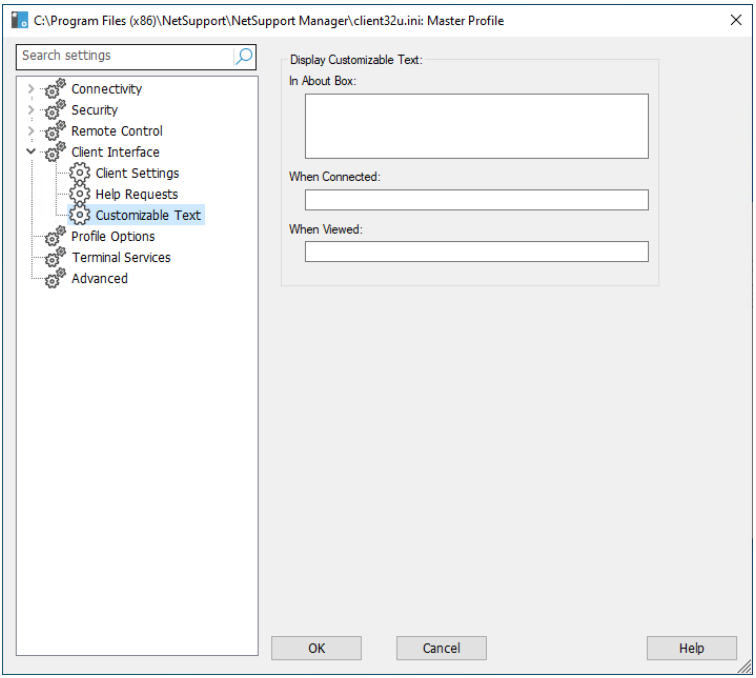
Check this box to ensure that the Client Help Request dialog shows all Controls available for the Client to send their help request to.

Hotkeys for Request Help

This sets the hotkeys that the user at the Client can press to raise an alert for help. The alert will normally be displayed when a Control connects to the Client. If you are using a keyboard that does not support three scan codes, configure your Client to use only two hotkeys.

Customisable Text

This option enables you to add customisable messages which are displayed at the Client machine.



Display Customisable Text

In About Box

Sets the message that will be displayed in the Client's About Box.

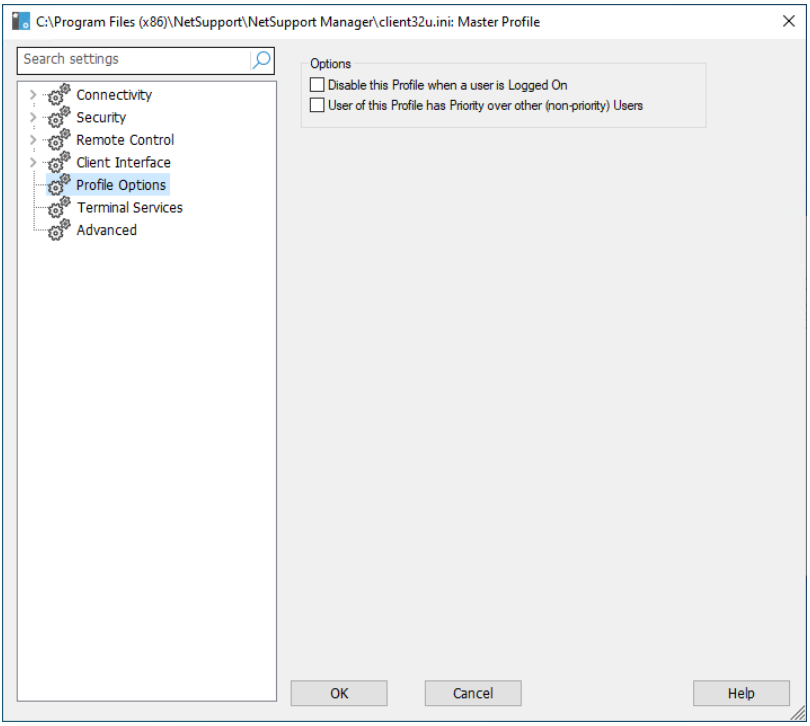
When Connected

Sets the message that will be displayed at the Client when a Control connects. Leave blank if you do not want any message displayed.

When Viewed

Sets the message that will be displayed at the Client when it is being viewed by a Control. Leave blank if you do not want any message displayed.

Profile Options



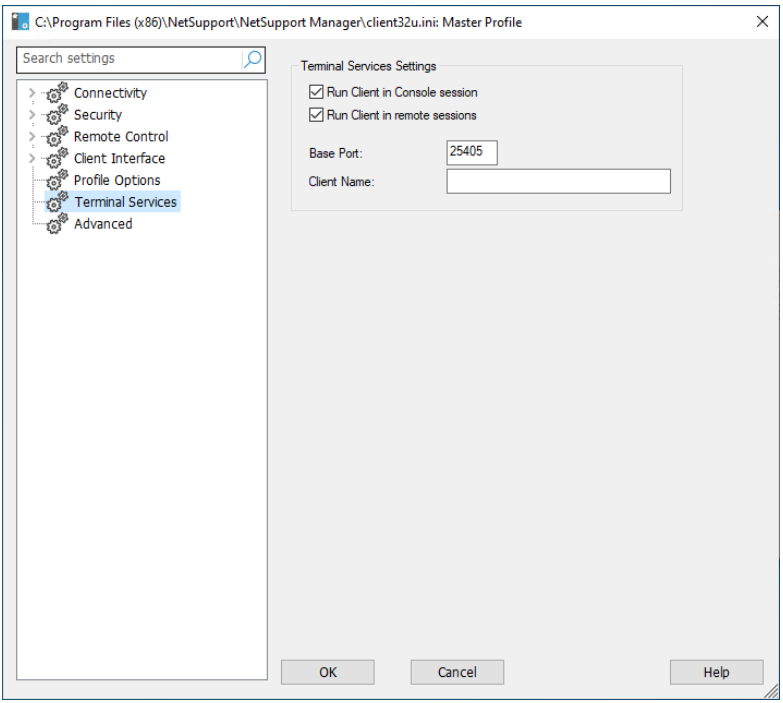
Disable this Profile when a user is logged on
If someone is logged in at the Client, then this profile will be deactivated and therefore not available to a Control user. The value of this is that it prevents a Control user from inheriting rights on the workstation that they would not otherwise have.

Note: You can have two profiles with the same user ID but with different rights, depending on whether the Client user is logged on at the time the Control connects. In this event, make sure that the profile with this setting is the first in the list, as it will then move on and use the second profile if the Client user is logged in.

User of this Profile has Priority over other (non-priority) Users
This works in conjunction with the option to allow more than one Control to connect simultaneously. If one profile has this set while the other does not, the latter will be automatically disconnected.

Terminal Services settings

You can configure the settings for the Client Terminal Server here.



Note: Terminal Server and other thin clients may not be configured to use the NetSupport Gateway.

Terminal Services Settings

Run Client in Console session

Unchecking this option will stop the Client from running in a Console session.

Run Client in remote sessions

Unchecking this option will stop the Client from running in remote sessions.

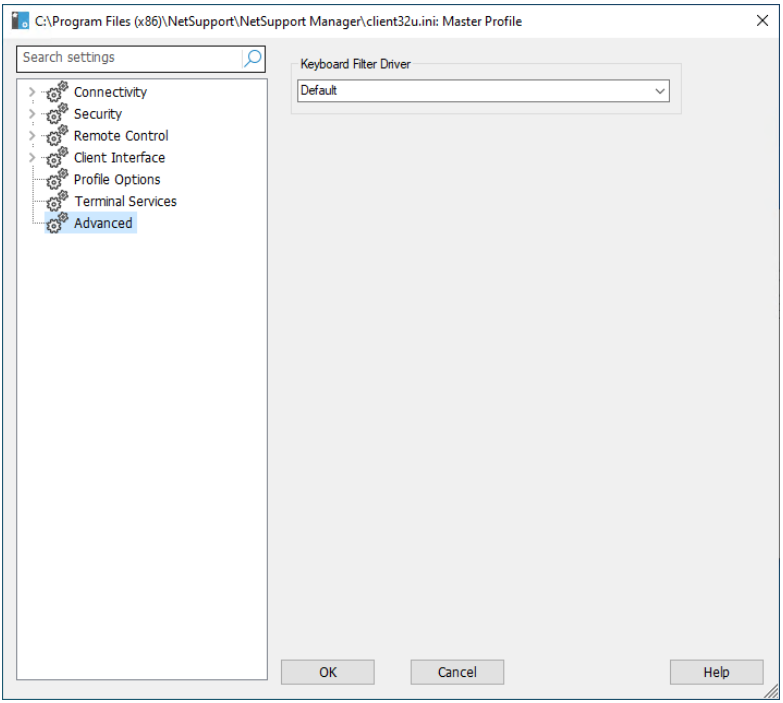
Base Port

Enter the required base port number. The default value is 25405.

Client Name
Enter the required name for the Client. If left blank, a unique ID will be displayed (defaults to %CLIENTNAME%). When entering a Client name, you must include at least one environment variable, e.g. %computername%.

Note: For further information regarding Terminal Server support, please visit our Knowledge Base and refer to product article **Setting Up NetSupport Manager to run in a Microsoft Terminal Server Environment**.

Advanced options



Keyboard Filter Driver
Should you encounter any issues with your keyboard filter driver, we provide a choice of drivers to switch between. Select the required driver from the drop-down menu.

Configuring the Control

In this chapter …

How to configure the Control.

Create individual profiles ensuring each Control user can only perform certain tasks at Client PCs.

Configuring the Control

NetSupport Manager allows you to fully configure how the Control Program will operate. To provide maximum flexibility, NetSupport Manager also allows you to set up multiple profiles for different Control users, each with their own access and functionality levels.

To access the Control Configurator

1. Click the **Change the settings for the current Configuration** icon  on the caption bar.
2. The Setting for Configurations dialog for the current profile will appear.

Note: If you want to change the settings for a different Control profile, click the **Profiles** icon  on the caption bar, choose the profile you want to configure and click **Settings**.

The Control Configuration options are categorised as follows:

General
Enables you to set the identification details for the Control.

Connectivity
Enables you to specify which transport protocols the Control will operate over.

Security
NetSupport Manager offers a wealth of security features that can be applied to each Control profile.

Remote Control
Enables you to adjust the Remote Control features that apply to each Control profile.

Control Interface
Enables you to configure the various components available to the Control from the Control window interface.

Show
Allows you to configure the settings for a Show.

File Transfer
These options configure the File Transfer settings in NetSupport Manager. They allow you to alter the way in which information is displayed and enable you to set safety features such as confirmation before performing a damaging operation.

Startup
Allows you to configure the options that affect NetSupport Manager at startup.

vPro
Enables you to configure the settings for vPro management.

File Locations
Allows you to specify where to store this named configuration, Client, group, remote networks, tools and scripting files.

Note: A search bar is provided at the top of the window, allowing you to locate the settings you're looking for. Type in the search bar (you can enter a full or partial term) and click . Any sections containing the search term will be highlighted. Click to close the search.

Multiple Control profiles

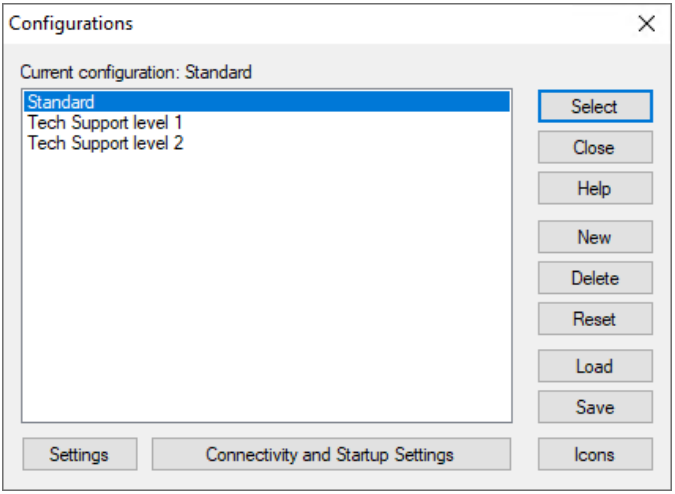
NetSupport Manager allows you to set up multiple profiles (configurations) for different Control users, each with their own access and functionality levels.

Each configuration can be protected by a password and an icon can be created on the desktop to load the Control with a particular named configuration.

You must have NetSupport Manager Administrator rights to profile or change a Control's configuration.

To create a profile

1. Click the **Profiles** icon on the caption bar.
2. The Configurations dialog will be displayed.



3. Select the configuration you want to change.
   Or
   Choose **New** to create a new one. By default, NetSupport Manager is installed with a single profile called Standard. This is set up for full functionality.
4. Click **Settings** to tailor the global functionality of this profile.
   Or
   Click **Connectivity and Startup Settings** to tailor the basic functionality.

To create desktop icons
Having saved the profile, you can create a desktop icon containing the parameters required to load the configuration.

1. From the Configurations dialog, click **Icons**.
2. The Icon Maintenance dialog will be displayed.
3. Click anywhere in the dialog and drag to the desktop.
4. The Create or Edit Icon dialog will appear.
5. Enter the required configuration details and click **OK** to create the icon.

Adjusting Client settings for a Control session

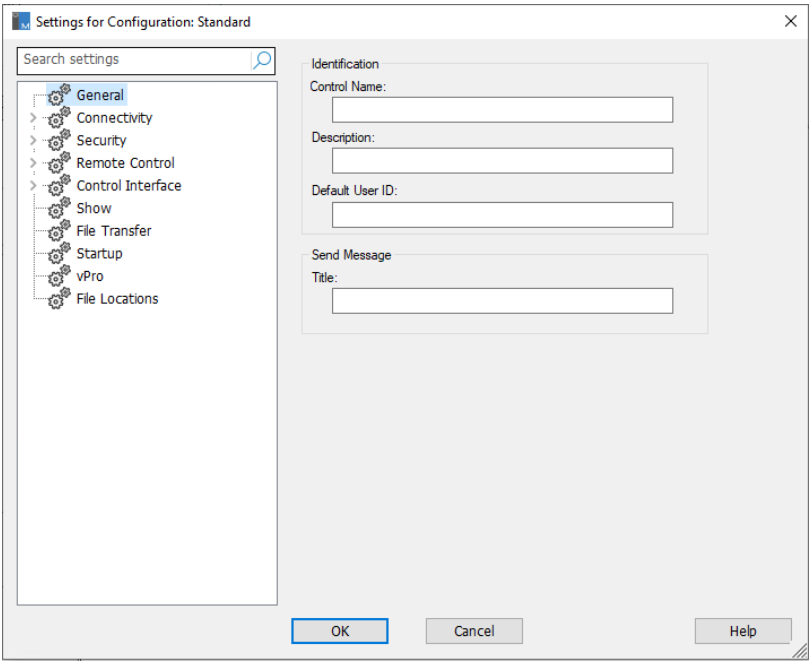
During any Control session where you may be working with more than one Client, you can tailor how each Client interacts with the Control. For example, on one Client, you may want to use compression because it is on a slow link, but on another, you may want to turn compression off. NetSupport Manager allows you to do this by modifying the default settings for the current Control profile.

To adjust View settings
1. View the required Client.
2. Click **Settings**  on the View window caption bar.
3. The Remote Control Settings will appear.
4. Configure which options will be enabled when you start a View session.

Note: If you edit the Client settings, the changes you make only apply to that Client during the current Control session. If you want to change the settings permanently, select **Update Configuration**.

General settings

This option allows you to give the Control a specific name. If left blank, the machine name is used.



Identification

Control Name

The name which the NetSupport Manager Control program uses when connecting to Clients to identify itself. Under NetBIOS, this name is registered in the NetBIOS transport.

Description

Enter a description for this Control configuration.

Default User ID

If user validation is required before a Client connection can be made, Control users will need to log on with a valid user name and password. Rather than continually prompt for the user name, a default ID can be set here. The following variables can be used in order to default to the currently connected username: %userdomain%\%username%.

Send Message

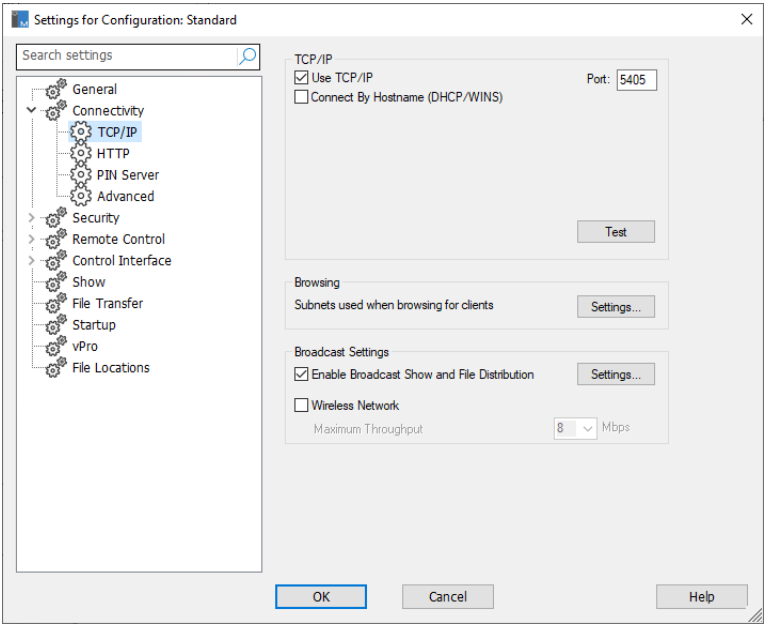
Title

Enables you to add a customised title to the Send Message dialog.

Connectivity options

Before you can connect to Clients on your network, you must select and configure the transports to use. The transport protocols must be configured in the operating system before attempting to use them.

Set TCP/IP connection



TCP/IP

Use TCP/IP

Check this button to enable the Control to use the TCP/IP protocol. This protocol is used with the internet, local and wide area networks. In order to connect to TCP/IP Clients, you need to specify the port number that the Client is listening on.

Port

This value is used for all interactions with TCP/IP Clients. The default registered port for NetSupport Manager is 5405. You can configure Clients on your network to run on a different port number if required.

This is useful to provide additional security, as other NetSupport Manager Control users would need to know on which port your Clients are configured. You can also specify a port number when creating or connecting to a Client.

Note: To enable Clients to initiate a connection to the Control, the default registered port is 5421.

Connect by Hostname (DHCP/WINS)
Normally, the Control connects to a Client by IP address rather than by name. In an environment that uses DHCP (Dynamic Host Configuration Protocol), this may be undesirable as the address may change when the Client workstation is restarted. Checking this option forces the Control to connect by hostname.

Test
Select this option to check the configuration and version of the TCP/IP stack installed. The version of Winsock is returned along with its current state.

Browsing

Subnets used when browsing for clients
When you are running on a network with multiple subnets or addresses, you need to configure the broadcast addresses for each effective network. When a browse is performed, the broadcast messages are sent to these addresses.

Broadcast Settings

Enable Broadcast Show and File Distribution
When performing a show or distributing files to Clients, the screen information/files are sent to each Client machine in turn. Enabling Broadcast Show and File Distribution results in the screen information and files being sent to all machines simultaneously. In some network environments, where there is limited network bandwidth available or when broadcasting to larger numbers of machines, this will provide significant performance benefits.

Whilst reducing overall network traffic generated by NetSupport Manager, using this feature will generate additional broadcast packets on your network. It is recommended that you consult your network administrator before using this feature.

Note: Show and File Distribution can be sent using multicast instead of UDP/broadcast. This means that the multicast packet will only be sent to machines included in the specified IP multicast address.

Settings
If the **Broadcast Show and File Distribution** option is enabled, select this option to set the multicast or broadcast address. The Broadcast Settings dialog will appear. If multiple Controls are attempting to use UDP/Broadcast Show simultaneously on the same subnet, it is recommended that each uses a unique port to avoid conflict.

Wireless Network
Check this option in order to optimise show performance across a wireless network.

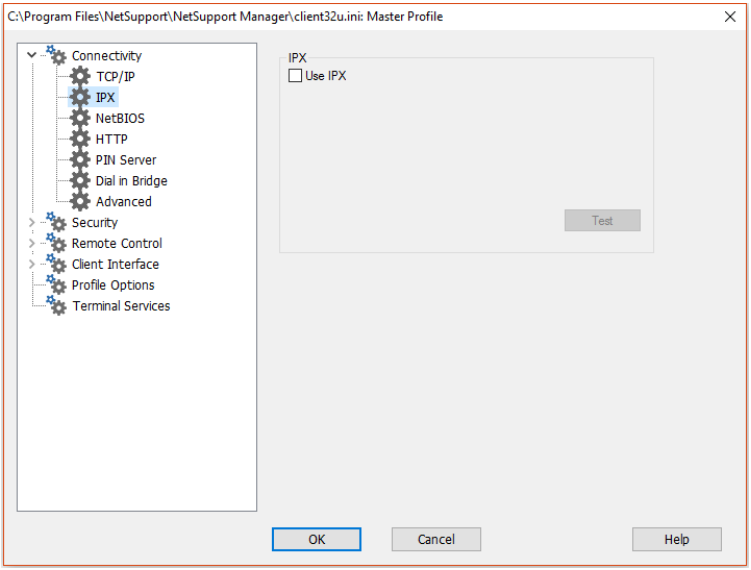
Note: NetSupport Manager will automatically detect any wireless Clients and enable this option to improve performance.

Maximum throughput
Controls the level of data sent across the network to your wireless access point. The default data rate is 8 Mbps. If required, this can be altered to reflect the speed of the router.

Note: When a Control detects wireless Clients or is itself wirelessly connected, it will automatically reduce the maximum data output to whatever has been configured in the maximum throughput settings, regardless of whether the wireless network checkbox has been selected. This behaviour cannot be turned off.

Set IPX connection

Note: This option is only available in the Control Configurator if you open it from the Control configurations dialog. Click the **Profiles** icon on the caption bar, select the required configuration and click **Connectivity and Startup Settings**.



IPX

Use IPX

Check this box to enable the IPX transport protocol. This protocol is used on local and wide area networks.

Record Clients' Network Numbers

When IPX addresses are recorded for a client, the network number is normally set to 0 if the Clients are on the same IPX network as the Control (this prevents subsequent problems when a file server is down). This setting forces network numbers to be recorded and used when establishing a connection.

Use Networks

The Control normally obtains a list of network numbers from the nearest NetWare server or bridge. On some networks, there is no NetWare server to ask, or the list generated is unreliable. Enter one or more network numbers to use, which replaces the normal discovery mechanism. The numbers can be decimal or hexadecimal and must be separated by a comma. Such as "0x1, 0x2,

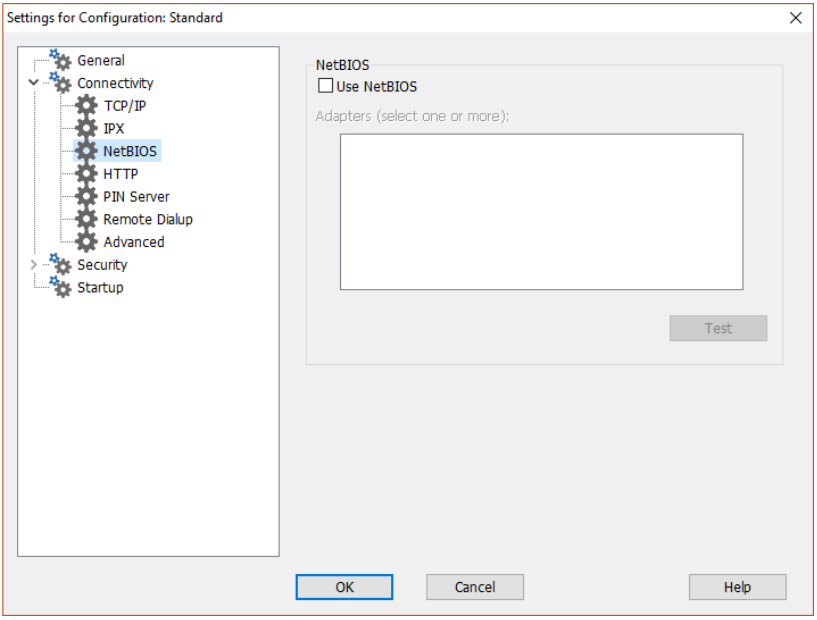
0x34db1d69". You can also use the **Test** function to determine these values automatically.

Ignore Networks
This list of network numbers is generated in the same way as for **Use Networks**, except that when browsing, these network numbers are ignored. You can also use the **Test** function to determine these values automatically.

Test
Select this option to check the IPX network configuration. This determines if the IPX network stack is available and configured correctly. You can also scan the network for network numbers that do and do not respond.

Set NetBIOS connection

Note: This option is only available in the Control Configurator if you open it from the Control configurations dialog. Click the **Profiles** icon on the caption bar, select the required configuration and click **Connectivity and Startup Settings**.



NetBIOS

Use NetBIOS

Check this box to enable the use of the NetBIOS transport. NetBIOS is a non-routed protocol and is only used on Local Area Networks (LAN). Using NetBIOS requires that you select one or more adapters to use. See adapters below.

Adapters

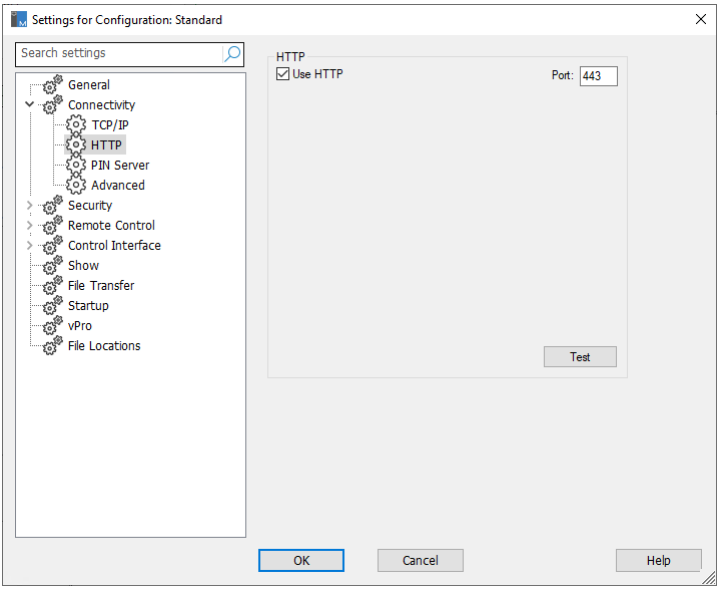
Contains the NetBIOS adapters that have been detected in your workstation. Select one or more of these adapters for use in the control. NetBEUI is the most common adapter used here, as it is used primarily by Windows systems. The adapter numbers will vary from workstation to workstation, but the names will remain constant.

Test

Allows you to test the NetBIOS stack and determine the adapters available. You can also display detailed information about each adapter found.

Set HTTP connection

This option enables you to configure the Control to communicate via HTTP. For more information, see Connecting Clients/Controls via a NetSupport Gateway.

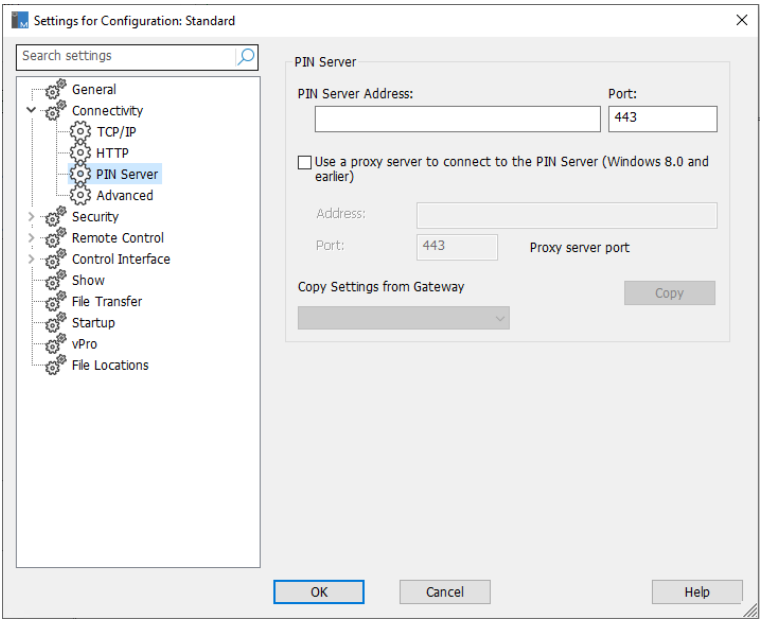


Use HTTP:
Check this box to enable the Client to communicate over HTTP.

Port:
NetSupport Manager's default port for HTTP communications is 443.

Note: In version 9.10, port 443 was introduced as the default for HTTP communications, 3085 being used previously. Gateway settings will be preserved for existing customers who subsequently upgrade, enabling 3085 to continue to be used, but there may be scenarios when upgraded Controls and Clients will need the HTTP port manually reconfiguring to ensure compatibility.

PIN Server



PIN Server
PIN Server Address
Enter the IP address of the workstation where the PIN Server is installed.

Port
The default port number for the PIN Server is 443.

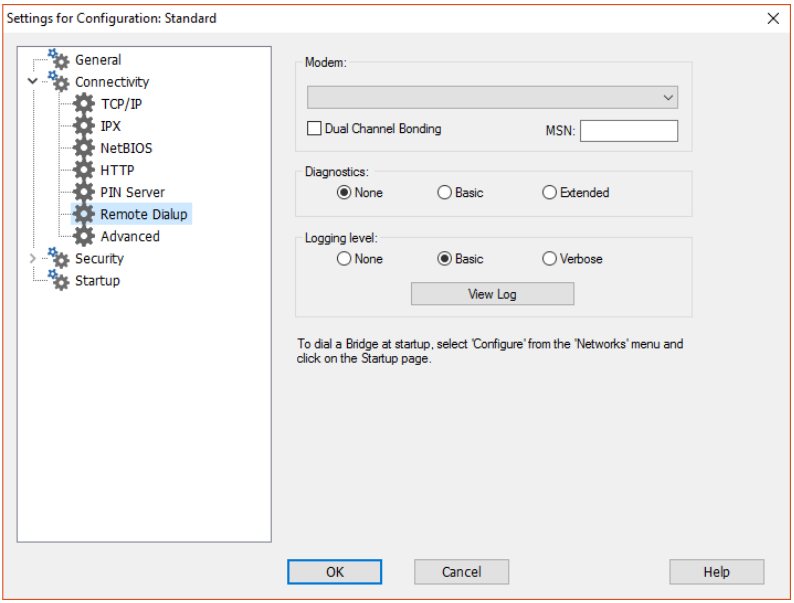
Use a proxy server to connect to the PIN Server
Select this option if you are using a proxy server to connect to the PIN Server. Enter the server address and port number for the proxy server.

Copy Settings from Gateway
If you have set up a NetSupport Gateway, you can use the same settings for the PIN Server. Select the Gateway to copy the settings from using the drop-down list and select **Copy**. The Gateway address and port from the selected Gateway will be used.

Remote Dialup settings

This option provides configuration options for the dial-up settings for remote networking. Before you can dial remote networks, you must enter information about your modem hardware. To dial a remote network at startup, click the **Change the settings for the current Configuration** icon on the caption bar and choose **Startup**.

Note: This option is hidden by default. To view this, click the **Change the settings for the current Configuration** icon on the caption bar. Select **Control Interface** - **Settings** and clear the **Hide Dial Directory** checkbox.



Modem
NetSupport Manager displays all available modems here. Simply select which modem you wish to use.

Dual Channel Bonding
If enabled, both channels of your ISDN line are combined, thus increasing the amount of available bandwidth to 128k. However, in increasing the speed of transmission, you are, in effect, making two calls.

MSN (Multiple Subscriber Number)
Specify a number that you want the Control to answer an incoming dial-back from a Client Bridge.

Diagnostics
None
Select this option to perform no diagnostics on your modem.

Basic
When the modems connect, the Control checks the following:

Flow control is correctly set (XON/OFF is disabled, etc).
There is a NetSupport Bridge at the remote number.
There are not excessive delays in transferring data.

Extended
The extended setting performs the same checks as for basic and includes:

Line reliability
Throughput.

Logging Level
None
Select this option to display the progress messages on the screen only.

Basic
Logs the following information to MODEM.LOG:

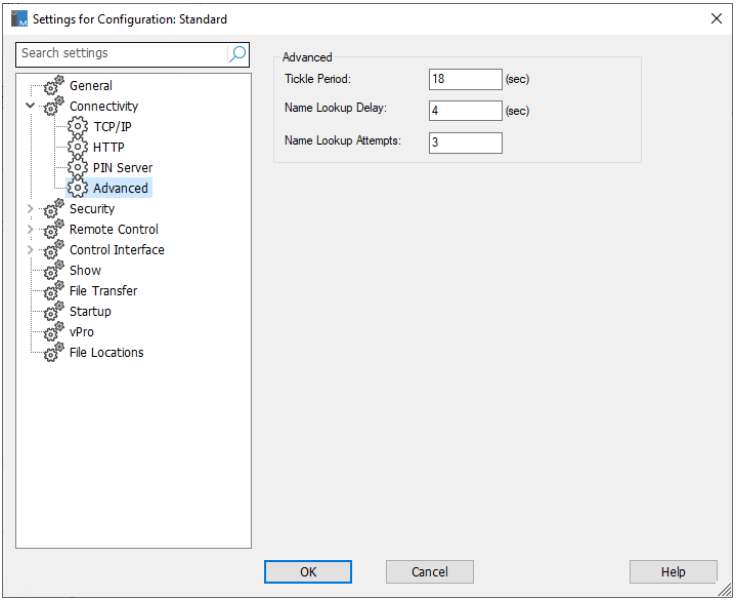
The name of the modem used
The number dialled
Results of diagnostic tests
Connection speed.

Verbose
This records the same information as Basic but includes timestamps.

Use this option is you are having problems establishing dial-up links.

View Log
Opens a window that displays the MODEM.LOG file generated by **Extended** and **Verbose** Diagnostic and Logging settings.

Advanced settings



Tickle Period
Specify the period in seconds between tickle packets that are sent to the Client. These packets check to make sure that a connected Client is still active. If the Client fails to respond, the Control assumes that it is no longer present and will close down the connection.

Name Lookup Delay
Specify the delay in seconds between broadcast packets. Use this value in conjunction with **Name Lookup Attempts** to reduce the amount of time spent performing browses. The browse is more likely to miss Clients if this value is too small. You should not specify a value that, when multiplied by the **Name Lookup Attempts** value, is less than 4 seconds.

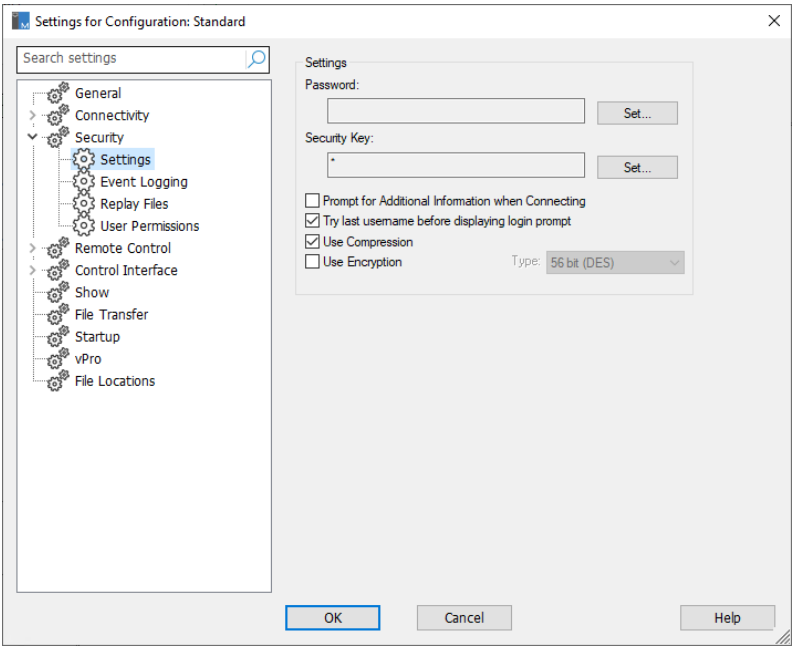
Name Lookup Attempts
Specify the number of name lookup packets the Control broadcasts during a browse. The fewer broadcasts that are sent, the lower the network traffic and the quicker the browse will complete.

Security options

The Control Configurator provides a wealth of security features categorised as follows:

Settings
Event Logging
Replay Files
User Permissions

Security settings



Password
Enter the security password, which you will be prompted for when starting the Control using this configuration. You must click on the **Set** button next to this Control to set the password.

Security Key
The security key is used whenever you connect to a Client. Unless the key entered here matches the security key on the Client, you will be denied access to the Client workstation. Press the **Set** button to change the key. Optionally, this can be set as the serial number in your NetSupport Manager Licence file.

Prompt for Additional Information when connecting
If this box is checked, you will be required to supply a reason for connecting to a Client workstation. This is sent to and displayed at the Client so that the user knows why you are connecting when the Client has user acknowledgement enabled.

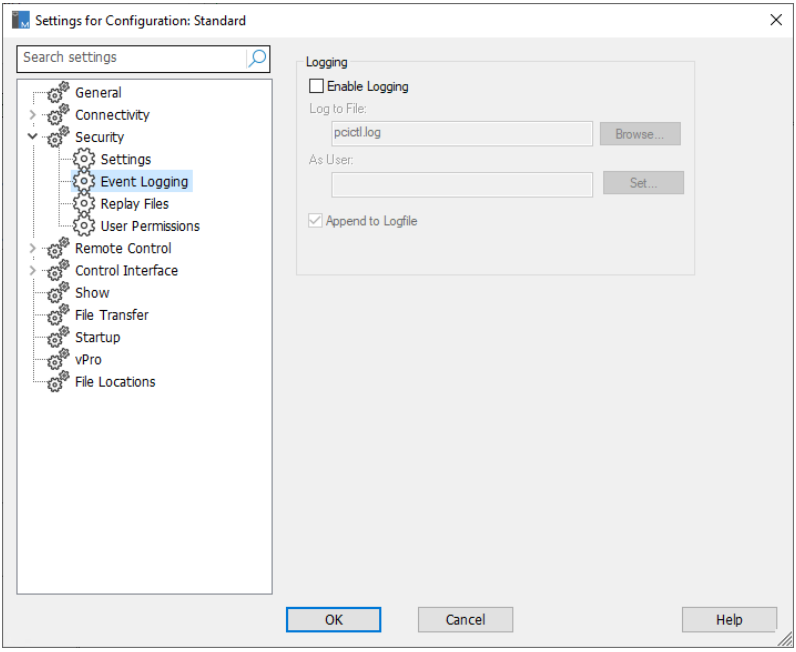
Try Last Username before displaying login Prompt
Remembers the user name and password attached to a named configuration and will attempt to log in using this information.

Use Compression
Check this box to enable the use of compression. When you are communicating with a Client, whether it is a File Transfer, View or Chat session, the data being sent and reviewed will be compressed. This also provides a means of security, as the data will also be encrypted.

Use Encryption
With encryption turned on, all the information that is sent between the Control and Client is very difficult for others to read. NetSupport Manager offers a range of encryption options, ranging from 56 bit DES to 256 bit AES, enabling you to find the necessary balance between security and performance. The higher the level of encryption, the higher the potential for decreased performance.

Event Logging

Event logging enables a NetSupport Manager Control to record, in a text file, the actions it has performed while remote controlling a Client. This may be useful for maintaining a history of how often a particular Client was connected to and for what purpose.



Enable Logging
Check this box to enable the **Log to File** option. Once enabled, each time the Control subsequently connects to a Client(s), the activity for that session will be recorded.

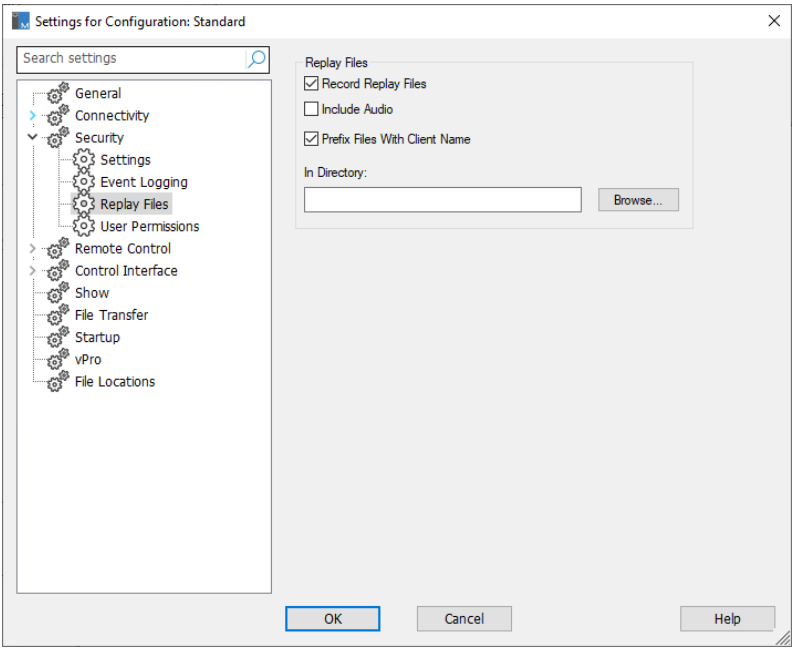
Log to File
Specify the path and file name for the log file. The NetSupport Manager default is PCICTL.log. This file can be stored on the local workstation or on a Server. Multiple Controls can write to the same log file.

As User
Log File user is the user name and password used to be able to write to the log file when the path specified is a UNC Path.

Append to Logfile
By checking this box, NetSupport Manager will continually add to the existing entries in the log file. If unchecked, existing items get overwritten.

Replay Files

Replay files enable the Control to record and playback the screen activity that takes place at a Client workstation while it is being remote controlled/viewed.



Record Replay Files
Check this option to enable the recording of replay files. A replay file will be created each time the Control views a Client PC.

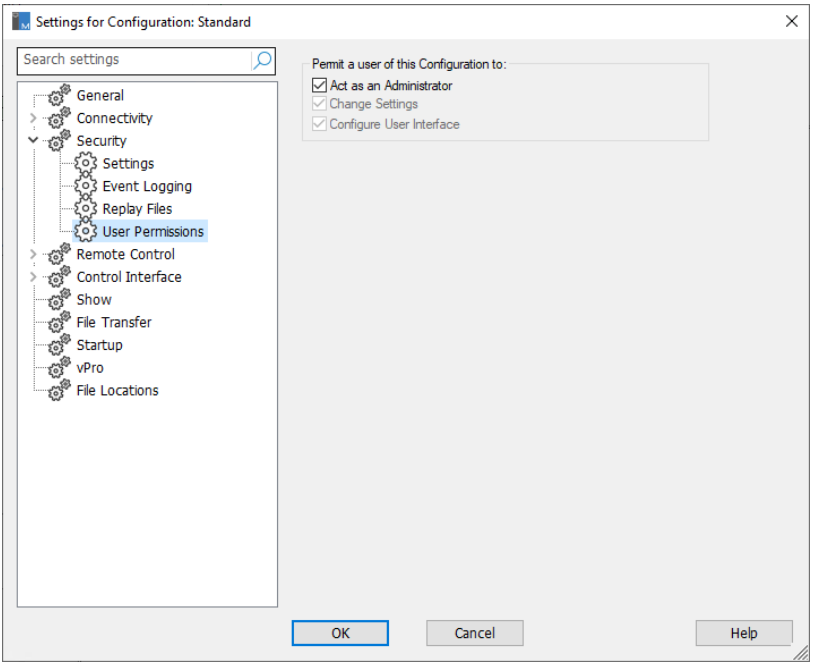
Include Audio
In addition to recording the screen, mouse and keyboard activity, if Client machines are configured for audio, you can include any narration that takes place.

Prefix Files With Client Name
In order to identify each replay file, file names are prefixed with the Client name and the date/time of the recording. Alternatively, by unchecking this box, the files will be named sequentially in the format 00000001.rpf etc.

In Folder
Specify where the replay files should be stored.

User Permissions

These settings restrict the items that a user running a configuration can modify. Only if this configuration is running as a NetSupport Manager Administrator can you restrict the privileges of other users.



Permit a user of this Configuration to
Act as an Administrator
When this box is checked, there are no restrictions applied to the user of this configuration. This should be enabled for at least one account to allow you to alter other configurations.

Change Settings
This box is only available when the configuration is not running as an Administrator. Check this box to prevent the user running this configuration from changing any settings from within the user interface.

Configure User Interface
This check box is only available when the configuration is not running as an Administrator, and **Change Settings** is checked. Check this box to prevent the user of the configuration from altering any settings that affect the user interface.

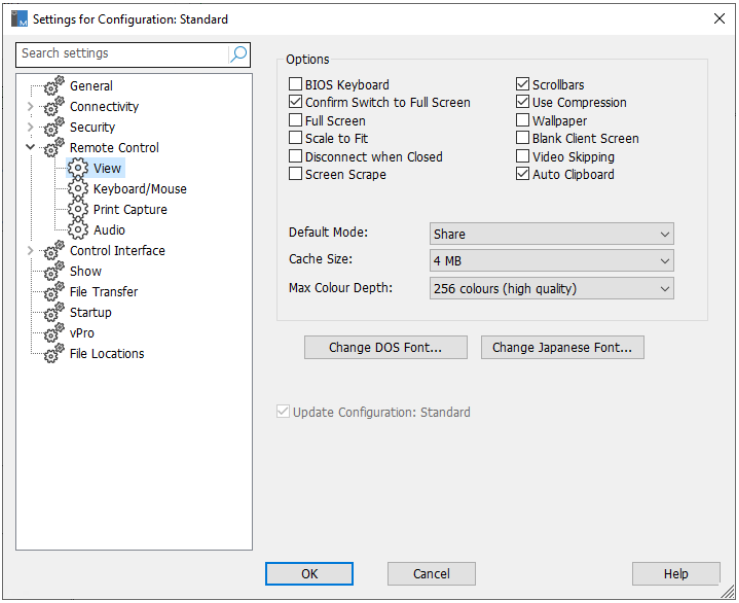
Remote Control settings

The following settings enable you to configure the behaviour of the remote control options when viewing Client workstations.

View
Keyboard/Mouse
Print Capture
Audio

View Settings

This option provides the configuration options for viewing Client workstations. When editing the Client settings, all changes you make will only apply while you are connected to that Client. If you wish to make your changes to the Control default, check **Update Configuration**.



Options

BIOS Keyboard

Checking this option causes the Control to emulate keystrokes on the Client at the BIOS level rather than the hardware level. Use this if an application at the Client does not appear to be correctly accepting keystrokes from the Control. Only use this option if you are experiencing problems with the default low-level keyboard option.

Confirm Switch to Full Screen
When this box is checked, you will be prompted to confirm switching to Full Screen mode.

Full Screen
Checking this option will force the Control to view a Client in Full Screen mode rather than in a window.

Scale to Fit
Check this option if you want the contents of the View window to be automatically shrunk to fit the sizeable frame.

Disconnect when Closed
Check this option to disconnect from a Client when a View window is closed.

Screen Scrape
NetSupport Manager's favoured, and the most efficient method for capturing screen data is to hook into the Video Driver of the workstation being viewed. However, there may be occasions when this method will not work because certain applications bypass the driver. In these circumstances, you can enable Screen Scrape mode in order to take a snapshot of the screen. Although this will have a greater impact on the network, it will at least provide an accurate representation of the Client's screen.

Scrollbars
You can turn off scrollbars on the View windows by unchecking this option. This is useful when using auto-scroll, as you gain a little extra workspace.

Use Compression
Check this box to enable compression when viewing a Client's screen. The state of this checkbox is also reflected in the General settings.

Wallpaper
Check this box if you want the Client's wallpaper to be visible when viewing. Normally this is turned off to improve performance, so expect the screen update speed to be impacted by selecting this option.

Blank Client Screen
This enables the Control user to blank the Client screen in any of the View modes.

Notes:

- This feature is not available on Clients running Windows 8 and above.
- If another Control, with the Blank Client Screen setting checked, attempts to connect to a Client being controlled in Blank Client Screen mode, the original Control will be disconnected. This is to prevent less privileged users from 'surfing in' on the back of a more privileged user.

Video Skipping
NetSupport Manager Controls can be configured for viewing performance. The Control program will not display Client screen updates if a subsequent update to the area of the screen is made. Unticking the box will result in all Client screen updates being displayed at the Control.

Auto Clipboard
When enabled, it provides the quickest method for copying data. Use shortcut keys to automatically copy from (Ctrl+C) and paste to (Ctrl+V) the clipboard at both the Control and Client machines.

Default Mode
By default, when you view a Client, you start viewing in Share mode. If you prefer to start viewing in a different way, change the mode from the list provided.

Cache Size
The NetSupport Manager Control contains a cache to help improve overall performance. The cache sizes range from 256k to 16Mb and a separate cache is allocated to each Client connection. If you are running applications on the Client that use lots of or large bitmaps, increase the cache size to improve the performance.

Max Colour Depth
When you connect to a Client, you can restrict the colour depth that is sent. This is done to reduce the amount of traffic between the Client and Control. Reduce the colour depth to **16 colours** if you are using applications that do not rely on anything other than the standard 16-colour palette.

Note: The colour depth set here will be overridden by the settings in the Client's Configuration, preventing you from setting the colour depth at a higher level. To alter these settings at the Client, load the Advanced Configurator and select {Remote Control – View} and amend the **Max Colour Depth** to the required level.

Change DOS Font

Use this dialog to select the font to use when displaying DOS screens. This will be either from DOS Clients or Windows Clients running Full Screen DOS boxes. Windows uses a graphic character set for displaying DOS screens. The higher the resolution that you are running Windows in, the larger the font size you will need to set to get an accurate representation of a DOS screen.

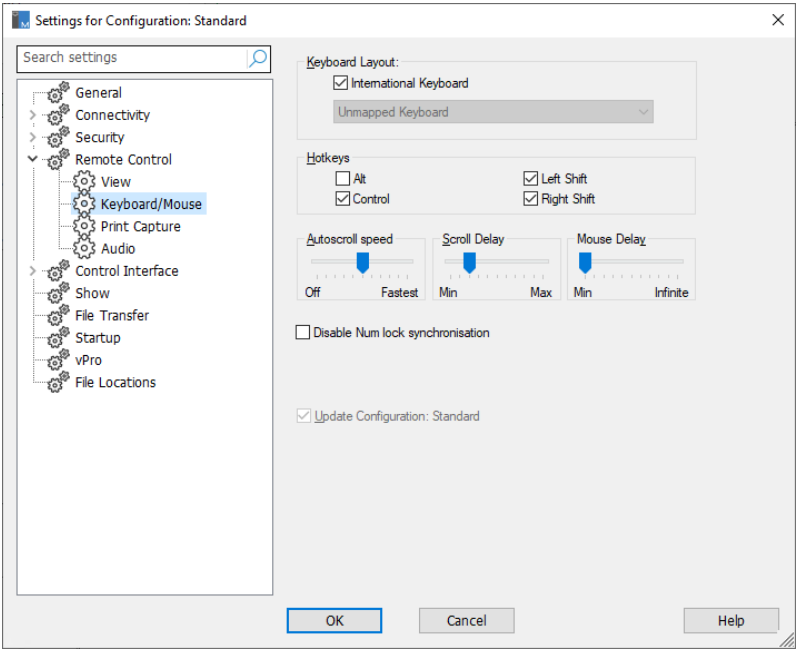
Change Japanese Font

Use this dialog to select the font to use when displaying Japanese DOS screens.

Update Configuration Standard

Check this box to update the currently selected configuration.

Keyboard/Mouse settings



Keyboard Layout

International keyboard

An international keyboard layout will be used at the Control during a view session.

To specify a different keyboard layout to be used at the Control during viewing, select the required layout from the drop-down list. These layouts map keys on the Control to keys on the Client workstation. If both Client and Control are using the same keyboard layout, you should select **Unmapped Keyboard** from the list.

Hotkeys

When you are viewing a Client in Full Screen mode, hotkeys provide a way of returning to the (possibly hidden) user interface. If the screen resolution at the Client is smaller than the resolution of the Control, you can simply click your mouse button outside the View window to stop viewing and display the View window again. Check the boxes in this group to determine the keys that are used as hotkeys.

If you are using a keyboard that does not support three scan codes, choose only two options as your hotkeys.

AutoScroll Speed
When you are viewing a Client's screen, the Control can automatically scroll the contents when the mouse moves close to the edges of the window. Adjusting the sliding control sets the speed at which the view scrolls, from not at all to very fast.

Scroll Delay
When auto-scroll is enabled, you can change the delay before the scroll is activated. If you want the view to scroll as soon as the mouse is at the edge of the screen, move the slider towards **Min**. If you prefer a longer delay before the auto-scroll takes effect, move the slider towards **Max**.

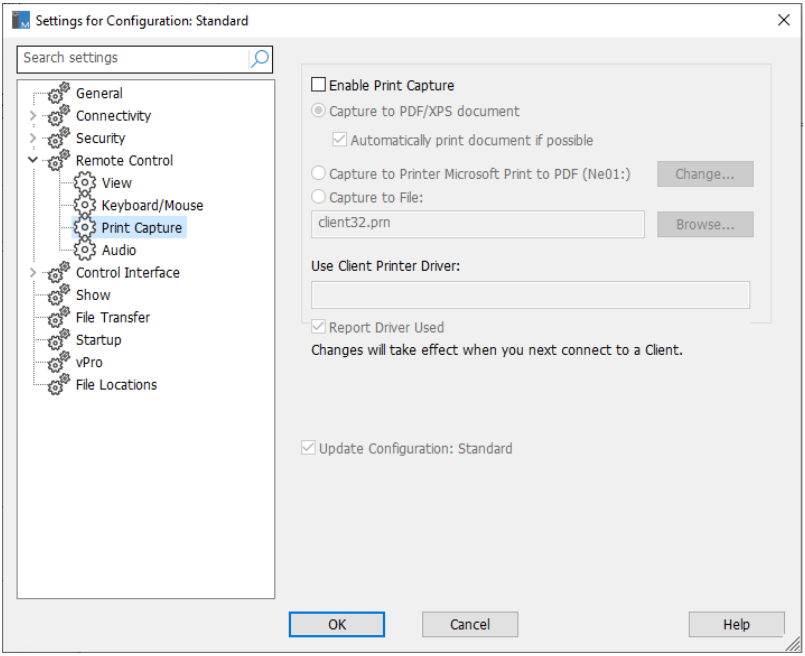
Mouse Delay
Adjusting the mouse delay allows you to reduce the rate at which mouse updates are sent from the Control to the Client when controlling or sharing. Move the slider control towards **Infinite** to reduce the rate and conserve bandwidth or towards **Min** for the best mouse response. This is useful on dial-up or very slow networks.

Disable Num Lock Synchronisation
If using a laptop as the Control machine, check this option to ensure that the keyboard's behaviour corresponds with that of a standard desktop machine.

Update Configuration Standard
Check this box to update the currently selected configuration.

Print Capture settings

Print Capture redirects printer output from a local printer at the Client to the printer or file at this Control. You would use this when running an application on a Client but want any printed output redirected to the printer that is local to you.



Enable Print Capture
Select this option to enable the Print Capture feature. If this option is unchecked, the output will be printed at the Client.

Notes:

- This option can also be enabled whilst viewing a Client. Click **Print Capture** on the View window status bar and select **Enable**. Alternatively, select **Options** to configure all print settings.
- In addition to enabling this option at the Control, you also need to ensure that Print Capture is enabled in the Client's Configuration. The privileges are enabled by default.

These options specify where the printed output will be redirected to on the Control. This can be a local or networked printer, a PDF/XPS document, or a file.

Capture to PDF/XPS document
Allows you to redirect the Client printing to a PDF/XPS document. If an XPS driver or a PDF printer is installed, this will be used as the default printer. If both are available, the PDF printer takes preference.

> **Automatically print document if possible**
> If printing is available, this option allows the document to be printed automatically at the Control.

Capture to Printer xxx
Select this option to redirect the Client printing to a local or network printer. The name of the default printer that is currently set up is displayed.

Change
Select this option to display a window containing all of the printers configured on your local workstation.

Capture to File
Allows you to redirect the Client printing to a file that can be printed later. This file can be on a local or network path.

Browse
A file browse window will appear when you select this option, allowing you to find a location for the capture file.

Use Client Printer Driver
When you enable Print Capture and connect to a Client, a printer matching the Control's local printer will be automatically created at the Client. In some cases, say where the Control and Client have different operating systems, the print driver may not install automatically. In this case, you will need to manually install the print driver at the Client.

Please contact our Support team for further information.

Report Driver used
When you connect to a Client, a dialog box will appear informing you of the printer driver that has been used. If no matching drivers are found, you will be informed whether you select this option or not.

Note: Print output is captured only from the port to which the default printer is attached. Note that the Client may change this when Print Capture is enabled.

If you experience problems with the Windows Client, try:

- Disabling 'fast printing direct to port' at the Client.
- Removing any connection to a network printer at the Client.
- Changing the printing priority at the Client to **Low** in **Print Manager, Options, Background printing**.

Update Configuration Standard

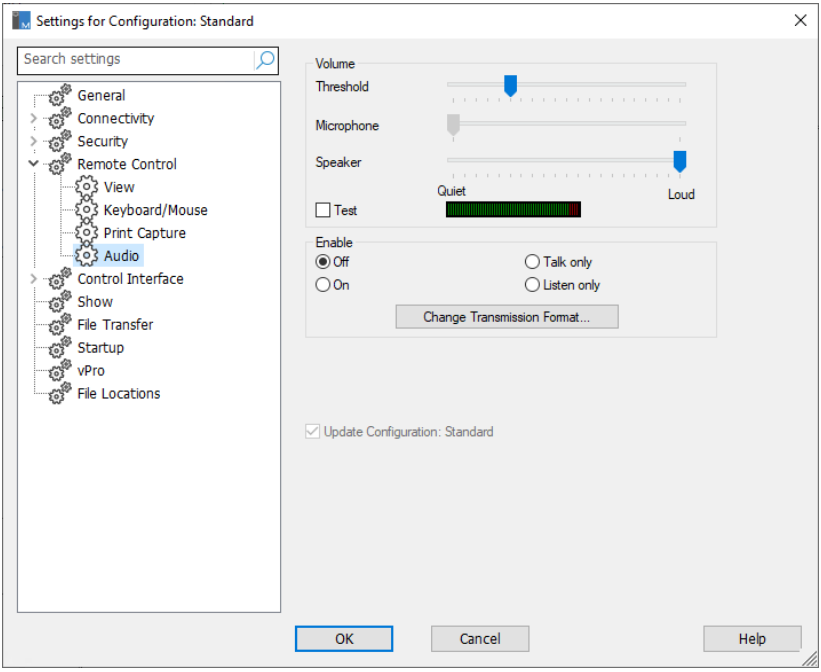
Check this box to update the currently selected configuration.

Note: If you are editing the Client Settings, any changes you make here will only apply while you are connected to that Client. If you wish to make your changes to the Control default, check the **Update Configuration** option.

Audio settings

This option provides configuration options for using Audio Support.

If you are editing the Client settings, all changes you make will only apply while you are connected to that Client. If you wish to make your changes to the Control default, check the **Update Configuration** box.



Volume

Threshold – microphone sensitivity.
Microphone – volume of microphone.
Speaker – volume of speakers.
Test – Click **Test**, to test the volume settings as you adjust.

Enable

On – turn audio on.
Off – turn audio off.
Talk – turn the Control audio to talk function only.
Listen – turn the Control audio to listen function only.

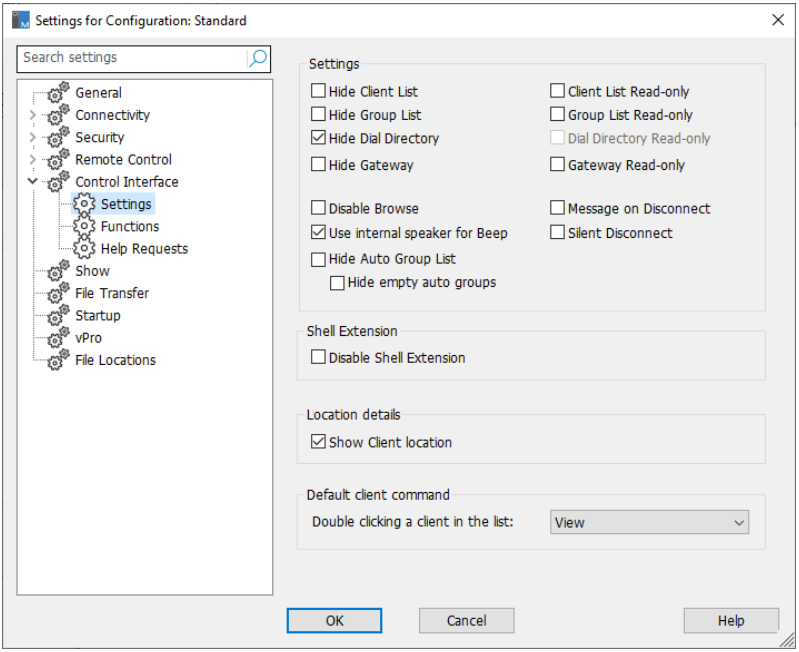
Selecting the **Change Transmission Format** button allows you to change the transmission format. Use only the level you need for acceptable quality. High quality settings can affect screen update performance. Over remote communication links, we recommend you use a transmission format of less than 2 kb/sec.

Control Interface settings

These options enable you to configure the different components available to the named configuration.

Interface settings

This option enables you to configure the different components available to the named configuration.



Settings

Hide Client List

Check this option to disable the display of known Clients for security reasons. The **All Computers** folder is hidden in the Tree view.

Hide Group List
Check this box to disable all the display of groups for security reasons. Any groups that have been created in the **All Computers** folder will be hidden.

Hide Dial Directory
Check this box to disable all remote network functions. The **Remote Networks** folder is hidden in the Tree view.

Note: This option is enabled by default.

Hide Gateway
Check this box to disable the Gateway function. The **Internet Gateways** folder is hidden in the Tree view.

Disable Browse
Check this box to disable the browse function. The **Browse** folder is hidden in the Tree view.

Use internal speaker for Beep
By default, the audible warning beep, which sounds between machines in functions such as Chat and View, comes from the PC's internal speaker. There may be occasions when it is more appropriate to use the workstation's sound card to generate the beep through speakers, in which case uncheck this box.

Hide Auto Group List
Allows you to remove the Auto Group function from the Tree view.

> **Hide empty auto groups**
> Allows you to hide any auto groups that don't have any Clients associated to them.

Client List Read-only
Check this box to remove the ability to alter the Known Client list. Clients are still available in the Tree view, but you cannot modify or create new Clients.

Group List read-only
Check this box to remove the ability to alter the Groups list. Groups are still available in the Tree view, but you cannot modify or create new groups.

Dial Directory Read-only
Check this box to remove the ability to alter the Remote Networks list. The **Remote Networks** folder is still available in the Tree view, but you cannot modify or create new items.

Gateway Read-only
Check this box to remove the ability to alter the Gateway list. The **Internet Gateways** folder is still available in the Tree view, but you cannot modify or create new items.

Message on Disconnect
When checked, the Control user will be prompted to send a message to the Client when disconnecting. This may be useful to notify the user on the Client workstation that the Control user has finished using the workstation and advise what action has been taken.

Silent Disconnect
Should a Client inadvertently disconnect during a session, a prompt appears at the Control machine. Check this option to disable the warning.

Shell Extension
NetSupport Manager integrates directly with Windows Explorer, allowing you to launch key functionality directly from your system without needing to first start NetSupport Manager.

Disable Shell Extension
Check this option to remove NetSupport Manager functionality from the Explorer shell.

Location details (Geolocation)
Show Client location
This option will display the location of the Client in the Control. NetSupport Manager will display the approximate location of each Client (the town, state and country - with supporting flag). Clients can be grouped by country/location in the Auto Group feature.

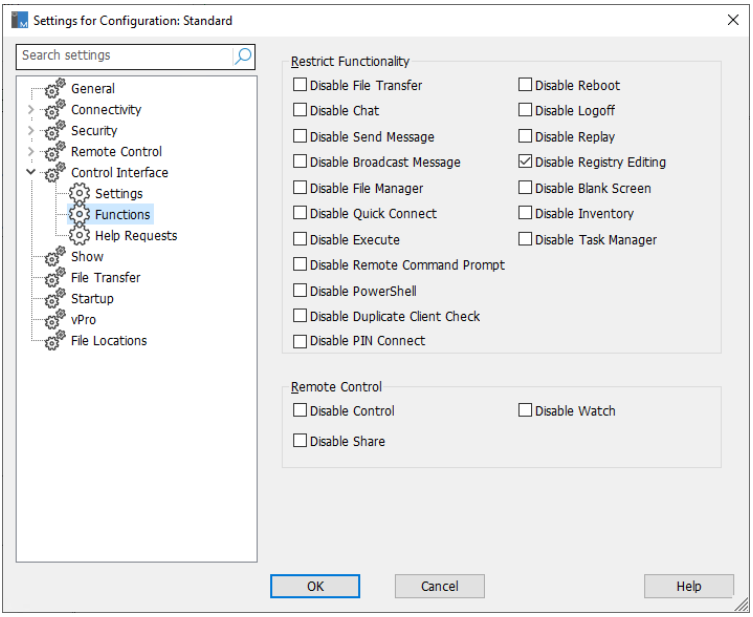
Default Client command
By default, double-clicking a Client in the List view opens a View window. Here, you can change the action that is performed.

Double-clicking a Client in the list
Select what happens when a Client is double-clicked from the drop-down list. You can choose to open a View, File Transfer, Edit Registry,

Inventory, Task Manager, Remote Command Prompt or Remote PowerShell window.

Functions

This option enables you to restrict the functionality that is available to the Control.



Restrict Functionality

You can prevent the following features from appearing in the Control profile by checking the appropriate boxes:

- Disable File Transfer
- Disable Chat
- Disable Send Message
- Disable Broadcast Message
- Disable File Manager
- Disable Duplicate Client Check*
- Disable PIN Connect
- Disable Quick Connect
- Disable Execute
- Disable Remote Command Prompt
- Disable PowerShell
- Disable Reboot
- Disable Logoff

- Disable Replay
- Disable Registry Editing (this option is disabled by default)
- Disable Blank Screen
- Disable Inventory
- Disable Task Manager

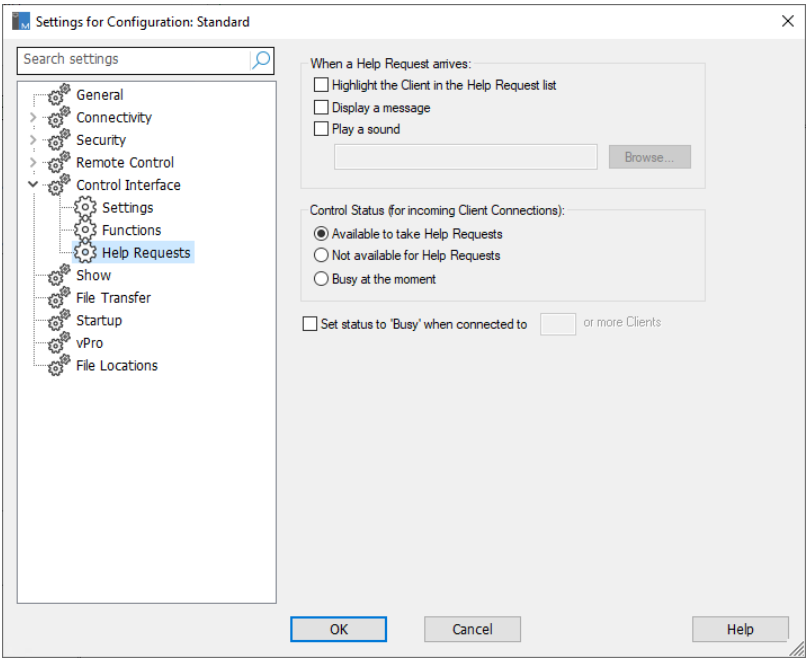
* When browsing for Clients, NetSupport Manager checks for duplicate Client details, only connecting to the first occurrence of a particular address. Depending on the set-up of your network infrastructure, there may be instances where duplicate IDs are in use. You can disable the check using this option.

Remote Control
The following items disable the different view functions within the NetSupport Manager Control:

- Disable Control
- Disable Share
- Disable Watch

Help Request settings

This option provides configuration options for receiving help requests from Clients.



When a Help Request arrives:

Highlight the Client in the Help Request list

Check this box to highlight the Client icon in the List view when a help request is sent.

Display a message

Check this box to have help request messages displayed on the Control screen.

Play a sound

Check this box to play a sound when a Client sends a help request. Select **Browse** to specify the sound.

Control Status (for incoming Client Connections)

Available to take Help Requests

Check this box to be available to receive all incoming help messages.

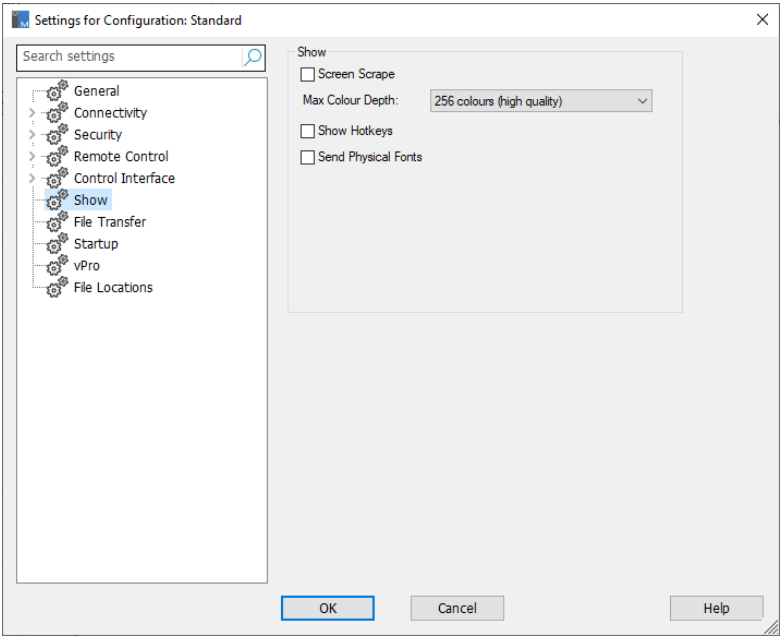
Not available to take Help Requests
Check this box to not receive any help messages.

Busy at the moment
Check this box to be available to receive all incoming help messages, but not when connected to xxx number of Clients. Ensure that you specify the number of Clients you need to be connected to in order to be considered busy.

Set Status to 'Busy' when connected to xxx or more Clients
Specify the number of Clients you need to be connected to in order to be considered busy.

Show settings

The Show feature allows you to display the Control screen on all, some or one of the Client's screens. From here, you can configure the settings for a Show.



Screen Scrape
NetSupport's favoured, and the most efficient method for capturing screen data is to hook into the Video Driver of the workstation being viewed. However, there may be occasions when this method will not

work because certain applications bypass the driver. In these circumstances, you can enable screen scrape mode in order to take a snapshot of the screen. Although this will have a greater impact on the network, it will at least provide an accurate representation of the Client's screen.

Max Colour Depth
Allows you to select the maximum colour depth when showing to Clients. By default, this will be set to 256 (high) colours.

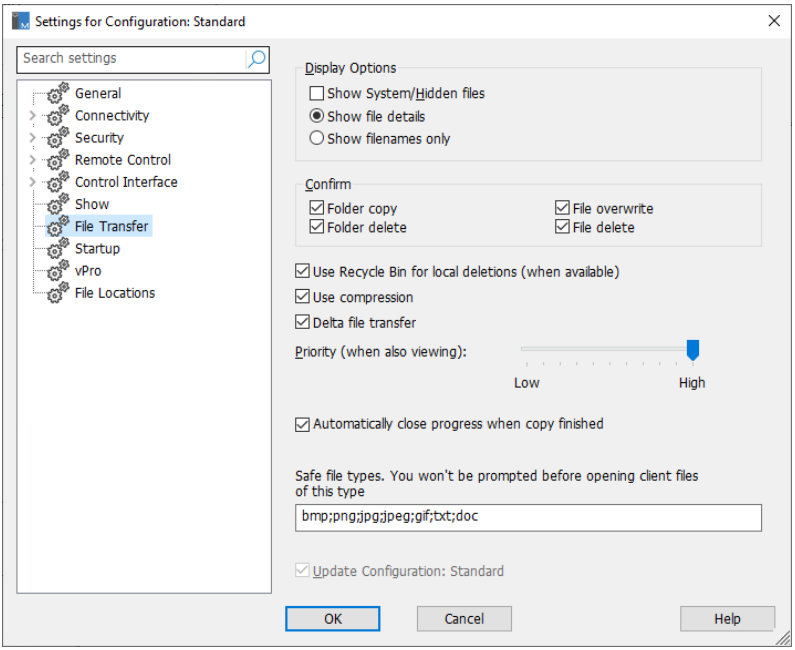
Show Hotkeys
To ensure that all actions performed by the Control are visible to Clients during a Show, you can enable the use of hotkeys. Any key combinations that the Control uses, e.g. CTRL+V, will be displayed in a balloon at both the Control and Client screens.

Send Physical Fonts
In order to reduce the volume of data being sent when sharing information of this nature, NetSupport Manager passes the font information by reference. The target workstation will refer to its own internal font mappings to find an appropriate match to the one that has been sent. In most cases, the same fonts will be available, but if there are instances where this isn't the case, you can send the full information. Check this box to enable.

File Transfer settings

This option provides configuration options for transferring files. They allow you to alter the way in which information is displayed and enables you to set safety features such as confirmation before performing a damaging operation.

If you are editing the Client settings, all changes you make will only apply while you are connected to that Client. If you wish to make your changes to the Control default, check the **Update Configuration** box.



Display Options

Show System/Hidden files

Check this box to display all files with system and hidden attributes. By default, this option is unchecked.

Show file details

Select this option to display multiple columns of information for each file in the list. These show the file size, modified date, attributes and short file name. You can toggle between this state and the file names only state by using the list style buttons in the File Transfer user interface.

Show filenames only
Select this option to only display file names in the file lists. This allows you to display more files at the same time than with file details. You can toggle between this state and the details state by using the list style buttons in the File Transfer user interface.

Confirm
When you perform potentially dangerous file operations, such as deleting a directory or file, you can make the Control display a Confirmation dialog box. This helps prevent accidental loss of data. If you are familiar with the user interface, you can turn these options off as required. By default, all the confirmation settings are turned on.

Folder copy
Make the user confirm before copying a directory structure.

Folder delete
Make the user confirm before deleting a directory structure.

File overwrite
If checked, displays a confirmation dialog before overwriting an existing file. However, if unchecked, the confirmation message will still appear if system/hidden files are about to be overwritten.

File delete
Display a confirmation dialog before deleting one or more files.

Use Recycle Bin for local deletions (when available)
All files deleted from the Local pane will be sent to the recycle bin. This is enabled by default.

Use Compression
Check this box to enable the use of compression. When you are communicating with a Client, whether it is a File Transfer, View or Chat session, the data being sent and received will be compressed. This also provides a means of security, as the data will also be encrypted.

Delta File Transfer
Delta File Transfer improves performance by skipping the transfer of information that is unchanged. If the file being transferred already exists in the destination directory, only the changed parts of the file will be updated.

Delta File Transfer is enabled by default.

Priority (when also Viewing)
When you are transferring files and viewing a Client's screen at the same time, each operation impacts the performance of the other. You can reduce the priority of a file transfer operation to make the viewing more responsive and vice-versa. Slide the control to the left to give the file transfer higher priority or to the right to give Client views higher priority. If you are not viewing a Client, this setting is ignored.

Automatically close progress when copy finished
Closes the File Transfer Progress dialog automatically on completion. Untick this option if you want to see the File Transfer results.

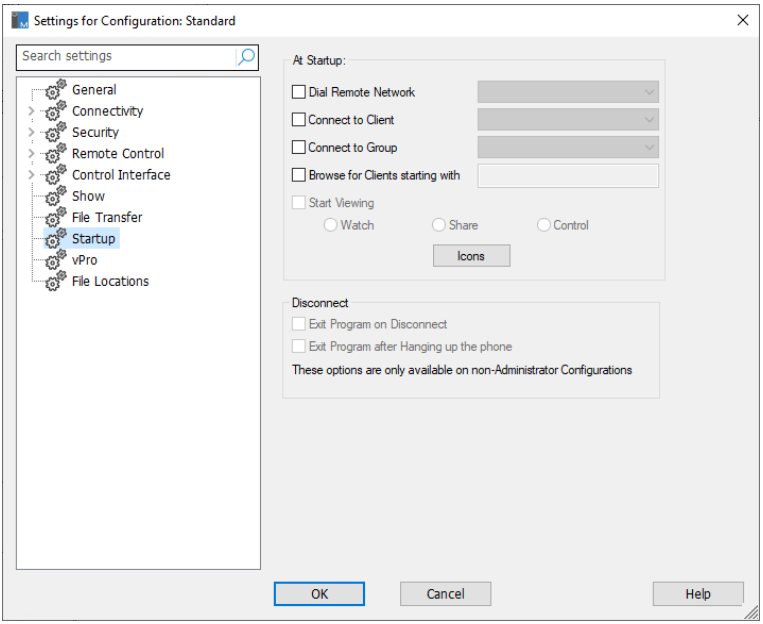
Safe file types
When opening a remote Client file, a warning appears asking you to confirm before continuing in case the file is unsafe. A list of safe file types is provided and you won't be prompted before opening these file types. By default, .bmp, .png, .jpg, .txt and .doc file types are included in the list. You can edit or add additional file types to the list (separate each file type with a semi-colon) as required.

Note: Certain file types such as .exe, .cmd and .bat files will still receive a prompt even if they have been added to the list.

Update Configuration Standard
Check this box to update the currently selected configuration.

Startup settings

This section configures the options that affect NetSupport Manager at startup. You can connect to a Client, group, remote network or even perform a browse. This enables you to perform a repetitive task that you would normally do every time you start the Control.



At Startup

Dial Remote Network

Select this checkbox if you want to dial a remote network when the Control starts. When this item is checked, the list of remote networks configured is enabled. Select one of these networks to continue.

Connect to Client

Select this checkbox to connect to a Client when the Control starts. All of the Clients in your Known Clients List will be displayed here, with the transport appended to the name, for example, TEST1<TCP>.

Connect to Group

Select this checkbox to connect to a group of Clients when the Control starts. All of the groups created will be displayed in this list.

Browse for Clients starting with ...
When the Control starts, it can perform a browse using the information supplied. Enter a partial Client name or leave this blank to find all available Clients. The Clients found will appear in the **Browse** folder in the Tree view.

Start Viewing
When you have selected one of the checkboxes above, you have the option to view the Client when the control starts. Select this checkbox to enable the three options below. This allows you to choose how the Client is viewed.

Watch
Start watching the Client or Clients when the Control starts.

Share
Start sharing the Client or Clients when the Control starts.

Control
Start controlling the Client or Clients when the Control starts.

Icons
This utility allows you to create icons on your desktop that load a NetSupport Manager Control with a specific named configuration. This means that you can have several shortcuts that automatically connect to one or more Clients when run.

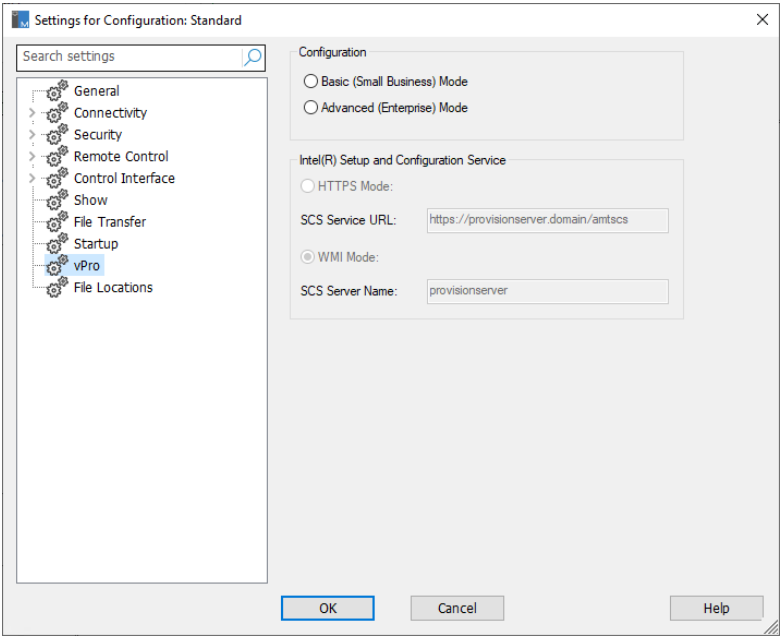
Disconnect
The following options are only available on non-administrative configurations.

Exit Program on Disconnect
Select this checkbox to force the Control to shut down when you disconnect from a Client. This option is very useful when used in conjunction with the option above and connecting to a Client at startup.

Exit Program after Hanging up the phone
Select this checkbox to force the Control to shut down once a dial-up session has been completed. This is most useful when used with dialling a remote network at startup.

vPro

Allows you to choose which mode to use when looking for and connecting to Intel vPro machines.



Configuration

Basic (Small Business) Mode

Select this option to scan for vPro machines on your network using an IP address range. You will be required to enter a user name and password to establish a connection.

Advanced (Enterprise) Mode

Select this option to retrieve vPro machines from the SCS server. A certificate will be required to establish a connection.

Intel® Setup and Configuration Service

These options will only be available when using Advanced mode.

HTTPS Mode:

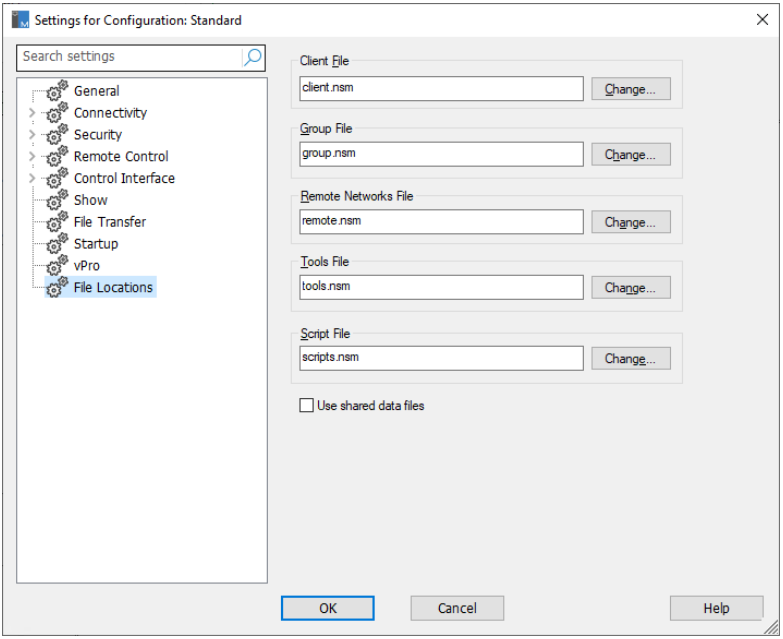
SCS Service URL

Enter the URL for the SCS service.

WMI mode:
SCS Server Name
Enter the name of the SCS server.

File Location settings

This option provides configuration options for Client, group, remote networks, tools and scripting file locations. This facility allows a Control user to have unique Control files, enabling a Control user to access their Control files from any Control workstation.



Client File
Click **Change** to specify an alternative location for all Control's, Client details. To make files read-only, check the **Client List Read Only** checkbox in the Control Configuration User Interface settings.

Group File
Click **Change** to specify an alternative location for all profiled Control's, group details. To make files read-only, check the **Group List Read Only** checkbox in the Control Configuration User Interface settings.

Remote Networks File
Click **Change** to specify an alternative location for all profiled Control's, remote network details. To make files read-only, check the **Dial Directory Folder Read Only** checkbox in the Control Configuration User Interface settings.

Tools File
Click **Change** to specify an alternative location for all profiled Control's tool details. There is no facility to make these files read-only.

Scripts File
Click **Change** to specify an alternative location for all profiled Control's, script details.

Use shared data files
Checking this option allows you to share data with other users.

Managing and organising Clients

In this chapter …

You will find out how to better manage your database of Client PCs. Group Clients by department or geographic location and customise the properties of each Client.

Add a new Client

NetSupport Manager maintains a database of all Known Clients. This is stored in the **All Computers** folder in the Tree view and provides a fast way to connect to those Clients without having to perform a browse.

You can also see additional information about the Client, such as names, contact numbers etc.

To populate the known Clients database

1. Use the browse function to look up available Clients and connect to them. All required information about that Client will then be stored in the **All Computers** folder.
   Or
   Select the Home tab in the ribbon and click **New**.
   Or
   Select the **All Computers** folder and double-click **New Client**.
2. You will then be prompted for the following information:
   - The name of the Client.
   - The network address of the Client.
   - The network transport it is running under.

   Note: Select **I'll choose the name from a Browse list** to perform a browse and select a Client from the Browse list.
3. Click **Next**.
4. To enter additional information to be stored with the Client's details, select **Yes, enter more information**. To finish adding the Client, select **No**. The information you can additionally store is:
   - An alternative name to be displayed at the Control for that Client.
   - A text description about that Client.
   - A contact name.
   - A contact telephone number.
5. Click **Finish**. The newly created Client will now appear in the **All Computers** folder and be displayed in the List view.

Delete a Client

As part of maintaining a database of known Clients, good housekeeping requires deleting unused previously saved Clients from the **All Computers** folder in the Control Tree view.

To delete a known Client from the database

1. Select the **All Computers** folder in the Tree view and select the required Client.
2. Right-click the Client and click **Delete** .
3. A prompt will appear asking for confirmation.

Renaming a Client

Instead of displaying the Client's physical name, NetSupport Manager allows you to set a different name that will be displayed at the Control.

For example, a workstation running a Client may have a description allocated by you, such as Sales 2. This workstation may move to the Accounts department, and as such, you wish to rename it to Accounts 3.

To rename a Client

1. Select the **All Computers** folder in the Tree view and select the required Client.
2. Select the tab in the ribbon displaying the Client's name and click **Properties**.
   Or
   Right-click the Client and click **Properties** .
3. The Client Properties dialog will appear.
4. Select the Details tab.

   This is where you can store background information about the Client workstation. The following options are available:

   Display name
   Use the display name to provide a friendlier name for the Client to be displayed at the Control. By default, the physical Client name is used.

   Description
   Here, you can enter any useful information about the Client.

Contact and Phone number
Store the name of the workstation user and a relevant telephone number for the workstation.

Mac/Ethernet address
Store the Mac/Ethernet address of the Client workstation.

Note: This only changes the stored name on the Control. It does not affect the physical name of the Client that will be displayed at another Control or if you do a browse.

Setting Client properties

You can store additional information about a Client workstation and its user. This information can then be viewed in the detailed List view. You choose which columns are displayed in the List view by selecting the View tab in the ribbon and clicking **Columns**.

To adjust Client properties

1. Select the **All Computers** folder in the Tree view and select the required Client.
2. Select the tab in the ribbon displaying the Client's name and click **Properties**.
   Or
   Right-click the Client and click **Properties** .
3. The Client Properties dialog will be displayed. The following tabs are available:

   General
   This tab displays the physical Client name and location, the transport the Client is using and the Client's network address. You can also decide if the Client is included in shows/scans.

   Details
   This tab allows you to store background information about the Client, such as the name you want displayed at the Control for this Client, the description you want to associate with this Client, the contact name and phone number, and the Mac/Ethernet address.

System Information

This tab will only be displayed once you have connected to the Client. It displays the following system information about the Client:

- The machine and logged on user name
- The IP address of the Client
- The last connection date and time
- The operating system the Client is running on
- The location of the Client
- The type of device the Client is using
- What version of NetSupport Manager the Client is running.

vPro

This tab will only be displayed if the Client is running on a vPro machine. It shows the vPro version.

Creating a new group

NetSupport Manager allows you to organise Clients into groups for easier access and management. For example, you might group all the Clients in the Accounts department into a single group called Accounts. You can also create sub-groups which are attached to a group, this may be useful if the Accounts department has different offices, you can then have a sub-group for the London office and one for the Cambridge office.

Note: Clients are also grouped by pre-defined criteria, platform and Client version in the **Auto Group** folder in the Tree view. These groups are fixed and are unable to be changed.

To create a group

1. Make sure the required Clients have previously been connected as this will store them in the **All Computers** folder and make them available for grouping.
2. Select the Home tab in the ribbon, click the **New** icon drop-down arrow and select **Group**.
3. This will display the Add a group wizard, which will guide you through the process of adding or removing Clients in your new group.
4. Click **Finish**.

To create a sub-group

1. Select the group that you wish to attach the sub-group to.
2. Select the Group tab in the ribbon and click **New**.
3. This will display the Add a group wizard, which will guide you through the process of adding or removing Clients in your new group.
4. Click **Finish**.

Note: Clients specified in a sub-group will also appear in the group above it.

Adding/removing Clients in a group

NetSupport Manager allows you to group selected Clients together to allow easier management.

For example, you may have a number of workstations all associated with the Sales department. By placing each of the individual Clients in a predefined group, you can then perform operations in a single action to all members within that group.

To add Clients to a group

1. Open the **All Computers** folder and select the group you want to add the Client to.
2. Right-click and select **Properties** .
   Or
   Select the Group tab in the ribbon and click **Properties**.
3. Choose the Members tab
4. Select which Client you wish to add to the group.
5. Click **Add**.

Or

1. Select the Clients in the List view.
2. Right-click and choose **Add to Group** .
   Or
   Select the Selection tab that appears in the ribbon and click **Add to Group**.

   Note: This tab will only appear if multiple Clients are selected.
3. Select the required group and click **Add**.

Or

1. Select the Client in the List view.
2. Left-click and drag and drop the Client into the relevant group.

To remove Clients from a group

1. Open the **All Computers** folder and select the group you want to remove Clients from.
2. Right-click and select **Properties** .
   Or
   Select the Group tab in the ribbon and click **Properties**.
3. Choose the Members tab
4. Select the Client(s) you wish to remove from the group and click **Remove**.

5. When you have finished adjusting the members of your group, click **OK**.

Or

1. Open the **All Computers** folder and select the group you want to remove Clients from.
2. Select the Client(s) you want to remove from the group in the List view.
3. Select the Group tab in the ribbon and click **Remove from group**.

Note: To move a Client to a different group, select the Client icon and drag and drop to the new group. This will remove the Client from all levels in the previous group.

Setting group properties

Having created a group, you may be required to review or change its name, description or members.

To adjust a group's properties

1. Highlight the required group from the Tree view.
2. Select the Group tab in the ribbon and click **Properties**.
   Or
   Right-click the group and click **Properties** .
3. The Group Properties dialog will be displayed. This has two tabs:

   General
   Shows the name and a description of the group, you can also customise the appearance of the client icons.

   Members
   Lists the Clients in the group. From here, you can add or remove Clients in the group.

NetSupport Scripting

In this chapter …

Learn about NetSupport's powerful scripting language and how it can be used to automate repetitive tasks.

NetSupport Scripting overview

NetSupport includes a powerful Scripting Language and Scheduler that allows you to automate the tasks you would normally perform repetitively in the NetSupport Manager Control.

For example, you might set up a script that runs unattended overnight to connect to a number of remote NetSupport Manager Clients and upload or download files to them.

This is a simple case, but NetSupport Scripting also contains a wealth of desktop management functions such as the ability to interrogate Clients and retrieve information such as their free disk space, what operating system they are running, etc.

You could even use NetSupport Scripting to distribute applications by using a combination of File Transfer, Remotely Execute applications and edit the Registry.

Anything that you do manually with NetSupport Manager, you can do automatically with NetSupport Scripting.

The following are just a few of the highlights:

- A powerful, structured language.
- A wide range of text manipulation functions.
- The ability to work with multiple connected Clients.
- Local and remote operations are supported.
- Full logging of activities.
- The ability to supplement the system log with your own log messages.
- All of the security features associated with the 32-bit control are available.
- Your scripts will not contain visible human-readable passwords to develop your scripts.

A full description of the Script Editor can be found in the online help.

Starting the Script Editor

The Scripting Editor allows you to edit and create automated NetSupport Manager scripts.

To start the Script Editor

1. Choose {Start}{Programs}{NetSupport Manager}{NetSupport Manager Script Editor}.
2. The Script Editor main window will appear.

The Script Editor is divided into four main sections:

- The menu bar and toolbar
- The Command window
- Edit dialog window
- Script Output Frame.

Creating a simple script

NetSupport Scripting contains so many functions that it is not possible to cover them all. Instead, we will take you systematically through creating, testing and running a simple script. You can then explore the full functionality yourself.

To create a script

1. Choose {File}{New} from the Scripting drop-down menu bar.
2. A new Script dialog window will appear.
3. Double click on the Functions folder and then again on the Client sub-folder. A list of functions relating to the Client will be displayed.
4. Select a function and drag and drop it into the Script dialog window.
5. A dialog box will appear, prompting you for the variables you need to enter.
6. Select a transport for the script to run on by selecting the SetTransport function, drag and drop it into the Script dialog window.
7. A dialog box will appear, select which transports you wish to use and click **OK**. The correct syntax will automatically be inserted in the script.
8. Select the Connect function, drag and drop it into the Script dialog window.
9. Enter the Client(s) workstation to connect to and run your script over.
10. Continue in this manner until you have completed your script.

Notes :

- To access help for a function, select the required function, right-click and choose **Display Help On xxx**.
- It is advisable to regularly check the syntax of your script, choose {Run}{Check Syntax} from the drop-down menu. The script will then be checked and the results displayed in the output frame at the bottom of the screen.

Scheduling and running a script

You schedule a script to run using the NetSupport Manager Scripting Agent. Start this from the NetSupport Manager program group.

The Scripting Agent contains many functions for tailoring the schedule to your exact needs. You create a schedule by choosing {Script}{Add} and selecting or adding the details you want in the Schedule dialog.

You can set many scripts to run in the same schedule. You can even set the running of one script to depend on the results from another.

NetSupport Scripting is an exceptionally powerful tool and there are an almost unlimited number of ways on which it can be used. Here are just a few ideas for you to consider:

- Connect to Clients at remote sites overnight via a dial-up link and retrieve their day's sales.
- Connect to every Client on the Local LAN and retrieve its free disk space. Raise an alert if it is less than a certain limit.
- Send a command to every Client to log in to the File Server and download a database.
- Send a message to all Clients to be read by the users first thing in the morning.
- Download an application overnight and use the Execute Command to run its set-up.
- Update your NetSupport Manager Clients to the latest version.

The list is endless.

Technical reference

In this chapter …

Additional technical information is provided, which will further enhance your understanding of NetSupport Manager features.

Unloading a NetSupport Manager Client

This allows you to stop the NetSupport Manager Client program from running.

1. Use Net Stop Client32 from the command line.

Restarting a Client

In order to save any changes made to a profile, the file Client32U.ini must be saved. Once saved, the Client should be restarted for these changes to take effect. You can stop/start the Client from the Client Configurator dialog box.

To save changes made to a profile

1. Choose {File}{Save} from the Client Configurator drop-down menu.
   Or
   Click the **Save** icon on the toolbar.

To restart the Client from the Client Configurator dialog box

1. Click the **Restart** icon on the toolbar. A dialog with the Client information and licence details will appear.

Or

1. Choose {File}{Restart Client} from the Client Configurator drop-down menu.
2. A dialog box will appear informing you that the Client32 service is being started.
3. A dialog with the Client information and licence details will appear.

Using compression effectively

Compression can be configured to three different settings, on, off or always. When compression is turned on, screen data and file transfer operations are compressed. However, if a file is transferred that is already stored compressed (such as a zipped file or certain graphic files), NetSupport Manager will stop trying to compress it further after 64KBytes. If **Use Compression** is turned on, the file is compressed no matter what its internal structure is. This can be useful for encrypting the file.

The compressing and decompressing of the information takes time. On a dial-up link, the overhead of compressing and decompressing is minimal compared to the transfer speed of the modems. However, on a local LAN, if either the Control and/or Client are low specification workstations, the time taken to compress, transfer the data and then decompress can be greater than just sending the information directly. In this case, it is probably better to turn compression off.

You can use the Compression tab in the About box to determine if file and screen information is being compressed efficiently. Time copying files of known sizes to determine if compression is speeding up your connection to the Client.

Using cache effectively

NetSupport Manager can store areas of the Client screen in local memory. This enables the Control to determine whether it needs to get the area from the Client (relatively slow) or from local memory (fast). This is commonly referred to as a cache.

The Client and Control use the same size cache. The size of the cache for the Client is set via the Configurator and the size of the Control cache is set in the View settings. The lower of the Control and Client values is used.

Use the Cache tab of the About box to determine how efficiently the cache is currently working. If the hit rate is low, then not many items have been requested from the cache (or your remote control session has not been very intensive). You could save memory by reducing the size of the cache. If the hit rate is high, then the cache is being used heavily. In this case, you may like to increase the size of the cache to speed up the remote control session.

The cache on the Control is created for each Client when it is viewed, bear this in mind if you regularly view multiple Client's screens. If each Client has a 4Mbyte cache and you view 6 of them, the Control will allocate 24Mb of memory. If the total size of all the caches exceeds your physical memory size, then the operating system will start paging memory to disk, this will affect the performance of the cache.

If you have Clients with different cache sizes set, configure the Controls to be as big as the largest Client setting. That way, the Control will always allocate the largest cache the Client can support.

Remote inventory and system information

For many support teams, an important part of the problem resolution process is knowing not only what platform the workstation is running but its hardware specifications and the applications installed on the workstation. NetSupport Manager provides a real-time view of the hardware and software inventory of the remote PC.

In addition to its sophisticated hardware/software reporting, where a wealth of information is collected specifically about the hardware or environment of the Client PC, you can obtain details of installed hotfixes and use the Task Manager to view and manage applications, processes and services that are currently running.

As well as the real-time reporting, NetSupport Manager also provides the tools, security permitting, to allow you to remotely stop and start services, end applications and processes.

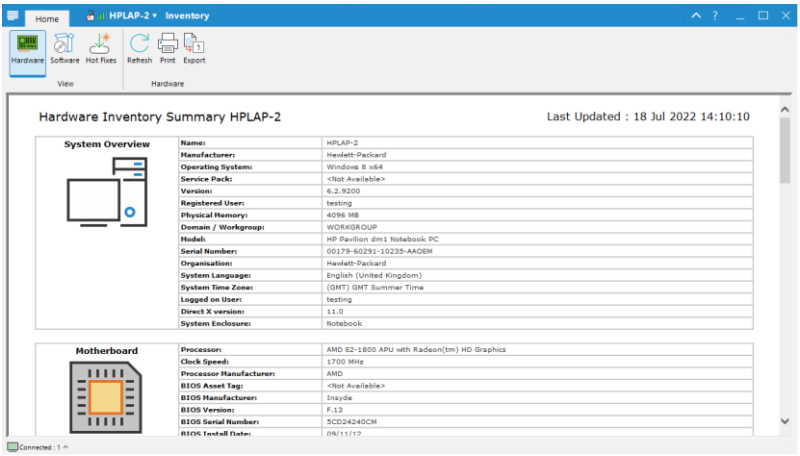
Display the inventory for the selected Client

1. Select the required Client icon in the Control window List view.
2. Select the Home or Remote tab in the ribbon and click **Inventory**.
   Or
   Select the tab displaying the Client's name in the ribbon and click **Inventory**.
   Or
   Right-click and select **Inventory**.
3. The Inventory window for the selected Client will appear.

Note: Once collected, the various Client inventories are stored locally in the NetSupport Manager program folder, meaning that you do not need to be connected to the target PC to be able to view the information at a later date. Simply select the required Client from the List view and choose the Inventory option. However, if you subsequently want to refresh the inventory, you do need to connect to the target PC.

The Inventory window

The Inventory window is the primary interface for accessing the wealth of information that NetSupport Manager's inventory feature provides.



The caption bar

The caption bar displays the name of the remote Client PC whose system inventory is being viewed. Clicking the Client name brings up a Remote Management pane, and from here, you can see details of the Client and perform a variety of functions.

By default, the Client name, wireless and battery indicators (if applicable) and security status (shows if TLS or encryption are enabled or not) are displayed on the caption bar. You can customise what is displayed and choose to show the Client's logged-on user name, IP address, operating system, enclosure type and location by right-clicking the Client name.

Note: Changing the Client display options here will also change them on the quick access bar, connected Clients list on the status bar and when zooming into thumbnails.

The following options are available:



Show or hide the ribbon.



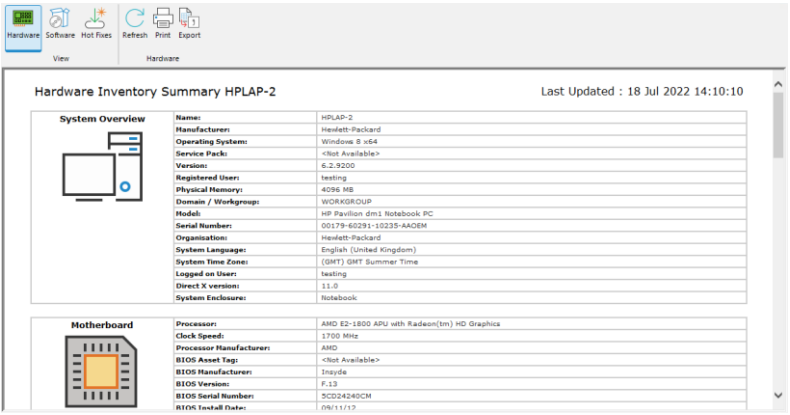
Shows how many windows are open. From here, you can access the Window menu.

Access the online help and version number, licensee and Technical Support information.

The ribbon
The ribbon provides access to the inventory components and you can refresh, print and export the current view.

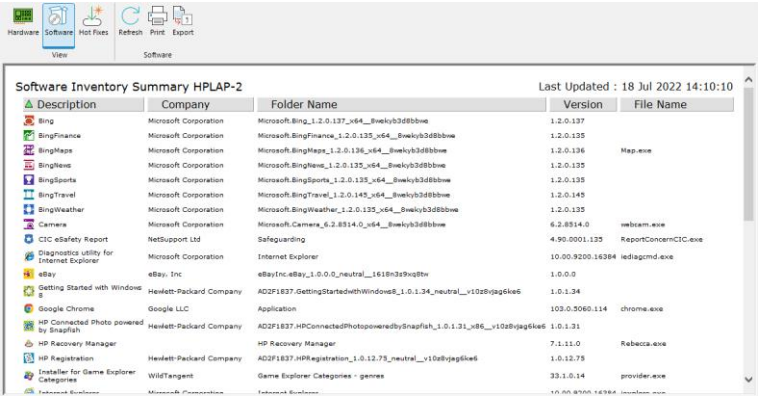
The following inventory views are available:

- **Hardware**
  NetSupport Manager collects a range of information specifically about the hardware or environment of the Client PC, providing all the key information needed to assist in speedy problem resolution.

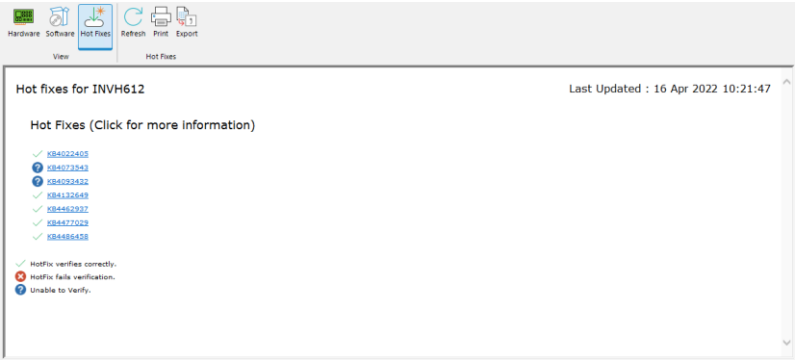


Note: The inventory functions included with NetSupport Manager are designed to run over TCP/IP. The Network adapter details will not be displayed if TCP/IP is not installed.

- **Software**
  Provides a full software inventory report for any selected Client PC. Includes the name of each installed product, the manufacturer, product icon, version number and even the associated exe file.



- **Hot Fixes**
  NetSupport Manager scans for and checks the status of any 'hot fixes' that have been installed on the selected Client workstation. The hot fix ID is listed along with its status. The hot fix ID links to the appropriate Microsoft support page, where details of the fix can be found.



When verifying the status of each fix, NetSupport Manager returns one of three indicators:

✓	Verifies that the fix is present on the target PC and is current.
✗	An expected file may not be present or is not the correct version. It would be advisable to install the fix again.
?	NetSupport Manager was unable to gather the required information for it to be able to verify the status.

Status bar

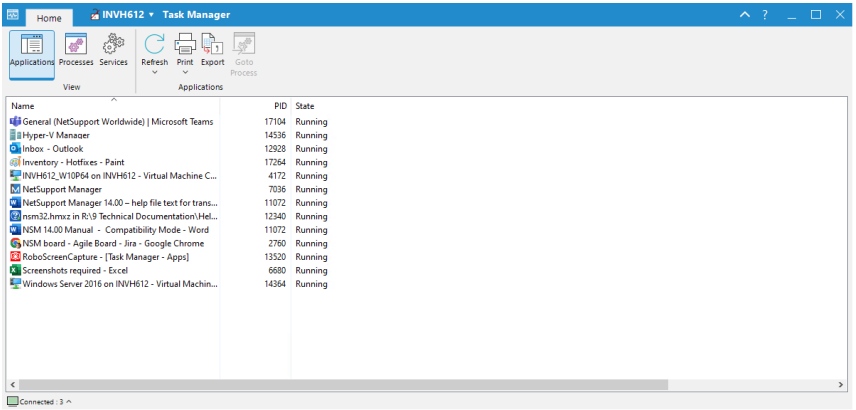
The status bar shows the number of connected Clients. You can see a list of all connected Clients by clicking **Connected** (clicking a Client name opens an Inventory window for them). Right-click to choose how the Client is displayed in the list.

Running the Task Manager

1. Select the required Client icon in the List view.
2. Select the Home or Remote tab in the ribbon and click **Task Manager**.
   Or
   Select the tab displaying the Client's name in the ribbon and click **Task Manager**.
   Or
   Right-click and select **Task Manager**.
   Or
   While viewing the Client screen, select the Tools tab in the View window ribbon and click the **Task Manager** icon.
3. The Task Manager window for the selected Client will appear.

The Task Manager window

NetSupport Manager allows you to remotely open the Task Manager and manage applications, processes and services on the Client.



The caption bar

The caption bar displays the name of the Client you are running the Task Manager for. Clicking the Client name brings up a Remote Management pane, and from here, you can see details of the Client and perform a variety of functions.

By default, the Client name, wireless and battery indicators (if applicable) and security status (shows if TLS or encryption are enabled or not) are displayed on the caption bar. You can customise what is displayed and choose to show the Client's logged-on user name, IP address, operating system, enclosure type and location by right-clicking the Client name.

Note: Changing the Client display options here will also change them on the quick access bar, connected Clients list on the status bar and when zooming into thumbnails.

The following options are available:



Show or hide the ribbon.



Shows how many windows are open. From here, you can access the Window menu.

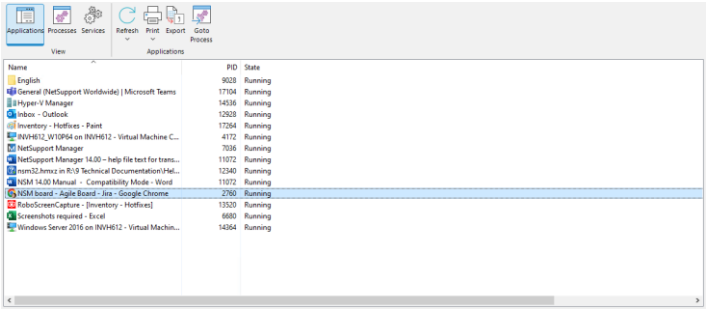


Access the online help and version number, licensee and Technical Support information.

The ribbon
The ribbon provides access to the Task Manager tasks and tools. The available options change depending on what view is selected. You can refresh, print and export the data from all views.

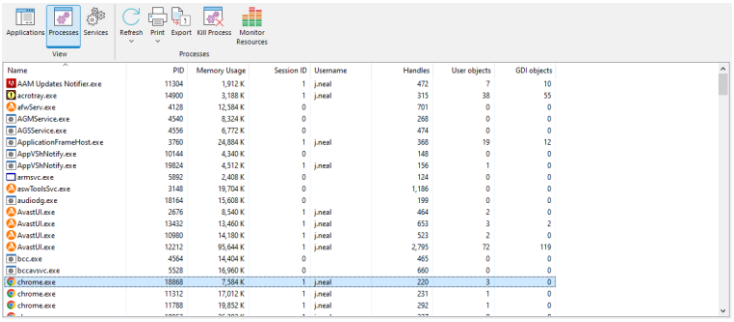
The following views are available:

- **Applications**
  Shows a list of applications currently running on the Client machine. You can close a selected application from the list by clicking the **Close Application** icon.

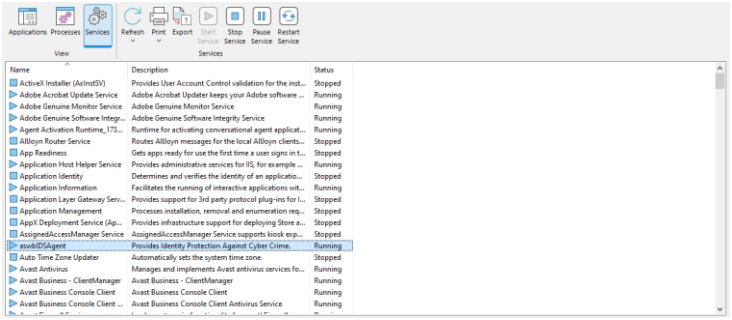


- **Processes**
  Provides a list of processes currently running on the Client machine. You can close a selected process from the list by clicking the **Kill Process** icon.

Note: Click **Monitor Resources** to see the usage differences (+/-) for the running processes.



- **Services**
  Provides a list of services currently running on the Client machine. The Control can stop, start, pause and restart services by clicking the required Services icon.



Note: By default, the close process/application and start/stop services features are disabled. You can enable these in the Advanced Client Configurator – Access Privileges settings.

Status bar
The status bar shows the number of connected Clients. You can see a list of all connected Clients by clicking **Connected** (clicking a Client name opens a Task Manager window for them). Right-click to choose how the Client is displayed in the list.

Edit Registry window

Within the Edit Registry window, you are able to edit the registry of a Client or Control workstation.

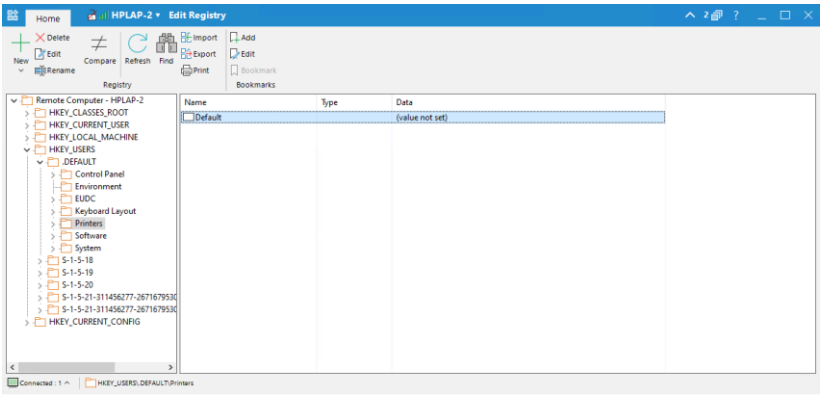
Note: The ability to edit the registry of a Control or Client workstation is off by default. This can be turned on in the Client Configuration – Access Privileges (Advanced) or Control Configuration – Functions settings.

To edit the registry of a Client workstation

1. Select the required Client in the List view.
2. Select the Remote tab in the ribbon and click the **Edit Registry** icon.
   Or
   Right-click the Client and select **Edit Registry**.

To edit the registry of the Control machine

1. Select the Tools tab in the ribbon and click the **Edit Local Registry** icon.



The Edit Registry window is divided into the following sections:

The caption bar

The caption bar shows which Client you are editing the registry of (this does not appear when you edit the registry of the Control machine). Clicking the Client name brings up a Remote Management pane, and from here, you can see details of the Client and perform a variety of functions.

By default, the Client name, wireless and battery indicators (if applicable) and security status (shows if TLS or encryption are enabled or not) are displayed on the caption bar. You can customise what is displayed and choose to show the Client's logged-on user name, IP address, operating system, enclosure type and location by right-clicking the Client name.

Note: Changing the Client display options here will also change them on the quick access bar, connected Clients list on the status bar and when zooming into thumbnails.

The following options are available:



Show or hide the ribbon.



Shows how many windows are open. From here, you can access the Window menu.



Access the online help and version number, licensee and Technical Support information.

The ribbon
The ribbon provides access to all the tasks and tools required for editing the registry. Positioning the cursor over an icon will display a brief description of its function.

The following sections are available in the Home tab of the ribbon:

- **Registry**
  Allows you to create new, delete, compare and edit values, rename keys or find specific data. You can also import and export a key or value and print the registry tree or values.

- **Bookmarks**
  Allows you to add, edit, remove or move up and down your list, previously nominated bookmarks.

Left-hand pane
Displays a Tree view of the registry data.

Right-hand pane
When an item has been selected in the Tree view, it will be displayed here. Select the item and use the icons in the ribbon (or right-click) to edit it.

Status bar
The status bar shows the number of connected Clients and the current registry path (this can be copied by clicking ).

You can see a list of all connected Clients by clicking **Connected** (clicking a Client name opens an Edit Registry window for them). Right-click to choose how the Client is displayed in the list.

WARNING: The registry contains vital information on the workstation. Editing any section of a registry should be done with EXTREME care.

Using NetSupport Manager's Security features effectively

NetSupport Manager has a large number of security features that can be used to restrict access to the Control and Client. Knowing how these work together and their limitations is useful when planning your security policy.

Firstly, we recommend that if you want to restrict access to or protect a Client, you do it at the Client, not at the Control.

There are a number of reasons for this. If the workstation contains sensitive information that you want to protect, it is likely that the workstation will have some physical security measures. Perhaps it is located in a locked room, a restricted area or maybe it has some local security measures. For example, it runs NT using NTFS.

It doesn't matter how good the NetSupport Manager Client's security is if people can just walk up to the workstation and access the information.

We recommend that the following measures are used to secure a NetSupport Manager Client. They are ranked from most secure to least secure. See the help in the Client Configurator for more information.

- Physically protect access to the workstation.
- Use a secure operating system such as NT and use its security to protect the workstation locally. i.e. use NTFS and user profiles for NT.
- Store the Client configuration files in a secure area such as NT Server.
- Set Client profiles that restrict the access rights that individual Control users or groups of users have to what they actually need.
- Set a security key at the Control and Client. This only allows Controls to connect to the Client only if they have the same security key. For example, you can use this function to provide someone in a department with access to their departments' workstations only.
- Use the audit log/event log so you can determine who has connected and when.
- Disable features at the Client that you know the Control user will not need. For example, disable File Transfer or set to Watch only if you don't want people to manipulate the screen.

- For NT Client workstations, use the NT security features such as validate user ID.
- Set a password on the Configurator and restrict access to who can run it.
- Password protect the Control workstation and set Control profiles for individual users.
- Set restrictions in the Control profile for accessing certain features like File Transfer, Viewing, Show etc.

Understanding IP addresses

An IP address is made up of 4 bytes, each byte being made up of eight bits, which can have a value of 1 or 0. This gives possible IP addresses of 0.0.0.0 to 255.255.255.255.

Each IP address is also split into two portions, a network portion, which identifies the network the device is on, and the local or host portion, which identifies a particular device.

The subnet mask defines the position of this split between the network and host portions of the address, which is associated with the address. The subnet mask is also a four-byte number. Each bit in the subnet mask that is set to 1 denotes that the corresponding bit in the IP address is part of the network portion.

For example, if we have an IP address of 10.10.2.21 and a subnet mask of 255.255.255.0

IP Address	10	.10	.2	.21
Subnet Mask	255	.255	.255	.0
IP Address In Binary	00001010.00001010.00000010.00010101			
Subnet Mask in Binary	11111111.11111111.11111111.00000000			
Network Portion of IP Address	00001010.00001010.00000010.00000000			
Host Portion of IP Address	00000000.00000000.00000000.00010101			
Network Portion of IP Address	10	.10	.2	.0
Host Portion of IP Address	0	.0	.0	21

Therefore, when we send an IP packet to 10.10.2.21, we are actually sending a packet to device 21 on network 10.10.2.0

In the example above, the network 10.10.2.0 can have 256 host addresses, 0 to 255. However, two of the host addresses, the first and last, on each IP network are reserved. The reserved host address with all bits set to 0 is the Network Address, and the one with bits set to 1 is the broadcast address.

In our example network of 10.10.2.0

10.10.2.0 is the network address
10.10.2.255 is the broadcast address.

When an IP packet is sent to a network's broadcast address, each device on the IP network will receive this packet.

It is this IP network broadcast address, which is used when configuring NetSupport Manager Control to browse on an IP subnet other than its own.

Using command line instructions

The NetSupport Manager Control program, PCICTLUI.EXE, can be called from the command line. A range of parameters is available, enabling you to create shortcuts to many commonly used tasks.

Using these parameters, you can, for example, create different Control profiles, set up a connection to specific Clients, and then create a desktop icon to automatically execute the commands when required.

NetSupport Manager Command Line Options
At the command line run, 'PCICTLUI.exe', from the NetSupport Manager Program folder, followed by the appropriate parameters:

1. **/N** Loads a specific Control configuration. (Created in the Control Configurator. Click the **Profiles** icon  on the caption bar.)

   Note: When using control configuration profiles, it is advisable to password protect the configuration and keep the standard configuration unchanged to avoid locking yourself out of the Control.

   Syntax
   PCICTLUI /N*PROFILE NAME* (where *profile name* = the stored configuration name)

/F Used with /N, restricts the control to only use the specified profile. By including this parameter, you prevent the Control user from being able to alter or add configurations.

Syntax
PCICTLUI /N/F*PROFILE NAME*

/C Connect to a specific Client by name or address.

Syntax
If connecting by IP address:

PCICTLUI /C">*NN.NN.NN.NN*" (where "NN.NN.NN.NN" = the IP address)

If connecting by name:
PCICTLUI /C*NNNNNN* (where NNNNNN = client name)

/V Used in conjunction with /C, opens the View window (in share mode) of the connected Client.

Syntax
PCICTLUI.EXE /C"*>NN.NN.NN.NN"* /V

/VC Opens a View window to the connected Client in Control mode.

Syntax
PCICTLUI.EXE /C"*>NN.NN.NN.NN"* /VC

/VW Opens a View window to the connected Client in Watch mode.
Syntax
PCICTLUI.EXE /C"*>NN.NN.NN.NN"* /VW

/VS Opens a View window to the connected Client in Share mode.

Syntax
PCICTLUI.EXE /C"*>NN.NN.NN.NN"* /VS

/E Used in conjunction with the /V options, opens the View window without loading the Control. When the View window is closed, the remote control session ends.

Syntax
PCICTLUI.EXE /C"*>NN.NN.NN.NN"* /V /E
PCICTLUI.EXE /C"*>NN.NN.NN.NN"* /VC /E
PCICTLUI.EXE /C"*>NN.NN.NN.NN"* /VW /E
PCICTLUI.EXE /C"*>NN.NN.NN.NN* "/VS /E

/G Connect to a defined group of Clients on start-up.

Syntax
PCICTLUI.EXE /G*NNNNN* (where *NNNNN* = the group name)

/D Dial into a remote network. Can be used in conjunction with /C.

Syntax
PCICTLUI.EXE /D*NNNNN* /C*xxxxx* (where *NNNNN* = the name of the remote network and *xxxxx* = the name of the Client to connect to)

/U Specify the protocol to use. Use IP for IPX/SPX, TC for TCP/IP, and NB*n* for NETBIOS where *n* = the stack 0-7.

Syntax
PCICTLUI.EXE /U*nb1* (where *nb1* = netbios stack 1)

/R Display a NetSupport Manager Replay File.

Syntax
PCICTLUI.EXE /R*NNNNN.rpf* (where *NNNNN.rpf* = the file name)

/A Open a Chat session with a selected Client.

Syntax
PCICTLUI.EXE /C*NN.NN.NN.NN* /A

/I Retrieves a hardware/software inventory from the selected Client machine.

Syntax
PCICTLUI.EXE /C*NN.NN.NN.NN* /I

/S Connect to the Client using its PIN. Can be used in conjunction with /V, /VC, /VW and /V /EV.

Syntax
PCICTLUI.EXE /S*NNNNN* (where *NNNNN* is the Client's PIN)

/X Opens a File Transfer window at the selected Client.

Syntax
PCICTLUI.EXE /C*NN.NN.NN.NN* /X

/K Opens a PowerShell or Registry session at the selected Client.

Syntax
PCICTLUI.EXE /C*NN.NN.NN.NN* /Kpowershell
PCICTLUI.EXE /C*NN.NN.NN.NN* /Kregistry

Integration with Active Directory

NetSupport Manager integrates with Microsoft's Active Directory structure, enabling you to centrally manage Client and Control configurations. By creating an appropriate Group Policy, you can apply standardised Client configurations to Client machines without the need to visit individual desktops.

To make the task a little easier, NetSupport Manager supplies ready-made Administrative Templates containing the configurable options. When you install NetSupport Manager, the Template files are copied to the NetSupport Manager program folder.

To apply configuration changes via Active Directory

1. At the domain controller, run Group Policy Management.
2. Select the desired policy to apply the NetSupport settings to or create a new policy.
3. Right-click the policy and select **Edit**.
4. The NetSupport Manager templates will be located under:
   Computer Policies – Computer Configuration > Policies > Administrative Templates
   User Policies – User Configuration > Policies > Administrative Templates
5. The templates are called NetSupport Client Settings and NetSupport Manager Control Settings.
6. Within these templates, you will find the relevant NetSupport Manager settings that can be applied via Group Policy.

By default, each NetSupport policy option is set to not configured.

Each time you make a change to an option, the Group Policy refresh interval will determine when it is applied to Client machines. If a remote control session is not currently active, the Client will detect any changes to its own Administrative Template and restart, applying the new settings. If a remote control session is open, the Client will restart at the next available opportunity.

For an explanation of the configuration options that are available, refer to the Configuring the Client section.

Note: Please refer to the Support area on our website www.netsupportsoftware.com/support for the latest information on Active directory policy files, instructions on upgrading from previous versions and applying NetSupport Manager Client profiles within Active Directory.

The NetSupport Manager Client can be configured to validate user connections against members of Active Directory groups. See Configuring the Client - User Validation.

Smartcard support

NetSupport Manager allows the Control to log on to Client machines that use Smartcard authentication. Smartcard support is automatic and no additional installation is required. Support is dynamically loaded at the Client when a Control connection is made. When loaded, an additional hardware device will be available called **NSL Pseudo Smartcard Reader**.

When the Control opens a View window to the connected Client, they will need to insert their own smartcard into the reader attached at the Control and enter the Clients PIN to log on to the remote user's machine.

If multiple Client View windows are open at the Control, smartcard insertion and removal events are sent to the Client currently in focus.

Notes:

- Smartcard authentication for remote control sessions is only available if the Client is running Windows XP or later, the smartcard authentication option is enabled at the Client and the Client was able to successfully create the pseudo smartcard device.
- In an Active Directory environment, it is possible to enable smartcard support using the NetSupport Manager ADM Template.

Enabling smartcard logon

1. Open the NetSupport Manager Program folder by choosing {Start}{Programs}{NetSupport Manager}{NetSupport Manager Configurator}.
2. Choose the **Advanced Configurator** option and select the profile to amend.
3. From the list of configuration options, select **Security**-**Smartcard**.
4. Check the **Enable Smartcard** option.
5. Click **OK**.

Using NetSupport Manager over the internet

NetSupport Manager works across the internet in much the same way as it does across dial-up networking. It can be done to workstations with a static connection across a LAN or to a dial-up account with ISP.

If your workstation can "see" a workstation running NetSupport Manager, you can connect to it, whether this is on the internet, via remote communications, a RAS dialup link or on your local LAN/WAN.

Note: While the following procedure can be used, NetSupport Manager also provides a convenient Internet Gateway feature delivering web-based remote control without the need for modifications to existing Firewall configurations.

To remote control a Client over the internet

1. Connect both the Control and the Client to the internet.
2. Select the Home tab in the ribbon.
3. In the Quick Connect section, type in the IP address of the Client you wish to connect to.
4. Select the **By IP address** icon .
5. Click **Quick Connect**.

Finding an IP address

The easiest way to find the IP address of the Client is to use the command line ipconfig.

DHCP

Workstations connecting via a modem link to an ISP will normally have a different IP address assigned to them each time they connect. You will therefore need to find out their address each time you wish to connect. This is done using the command line ipconfig.

Contacting NetSupport

If you have any comments regarding the design, installation, configuration, or operation of NetSupport Manager, please contact us.

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