Enterprise Remote Control 5.6 Manual

Solutions for Network Administrators

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What is Enterprise Remote Control?

IntelliAdmin Enterprise Server allows you to quickly and securely control computers across your network, and across the world.

The enterprise server automatically negotiates connections across firewalls and behind NAT devices - making it easy to support users behind on any network.

Unlike other remote control services, *you* get to control the entire process. The server is run by you, and the network traffic is only sent through your enterprise server. No monthly fees, and no external service to depend on to get the job done.

Hardware and Software Requirements

Operating System:

Windows XP, Vista, 7, or 8 if you have less than 20 computers

Windows 2003, 2008, or 2012 if you have 20 or more computers

Hard disk space:

500 MB Free

1 GB for every 50 computers registered with the server

Network Ports:

Port 443, and 80 are used by default. These ports can be changed, but it is not recommended since it reduces the server's ability to connect to computers behind some firewalls.

Memory:

500 MB of RAM for every 50 computers you will register with the enterprise server

Upgrading from previous versions

This section is for you if you already have a previous version of the Enterprise server installed.

Please follow these instructions carefully so your upgrade is as smooth as possible.

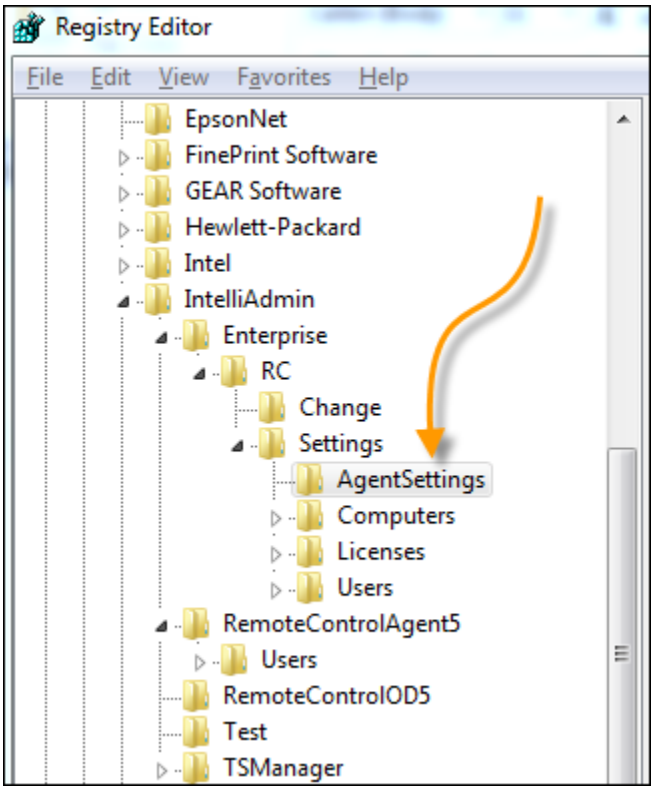
Step 1- Upgrade all agents.

It is very important that all of your agents are upgraded to at least version 5.545. If older agents are present, they will not connect to the new enterprise server and will be prevented from updating.

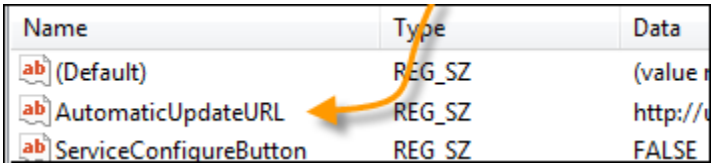
We have setup a special automatic update server for this purpose. To get your agents to see it, you will need to make a registry change on the Enterprise server.

Open up regedit and go to this registry key:

HKLM\Software\IntelliAdmin\Enterprise\RC\Settings\AgentSettings



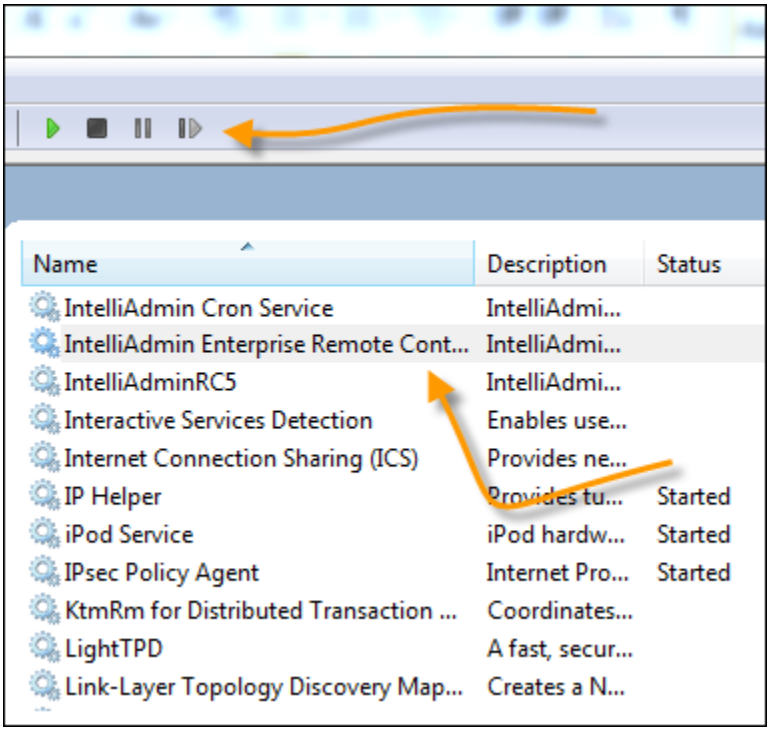
If you look on the right side you will see a string value named "AutomaticUpdateURL"



Change it to: **http://upgrade.intelliadmin.com**

Note: The old value is http://update.intelliadmin.com - It is easy to confuse the two, so please carefully check and make sure it has the proper URL.

Restart the Enterprise service in the service manager:



Wait for all the agents to update to the latest build number.

It will usually take around 24 hours to complete.

Agents need to have build number 5.545 or higher.

You can check the agent status by going into the Enterprise server settings application and looking at the computers tab:

Step 2- Backup current version

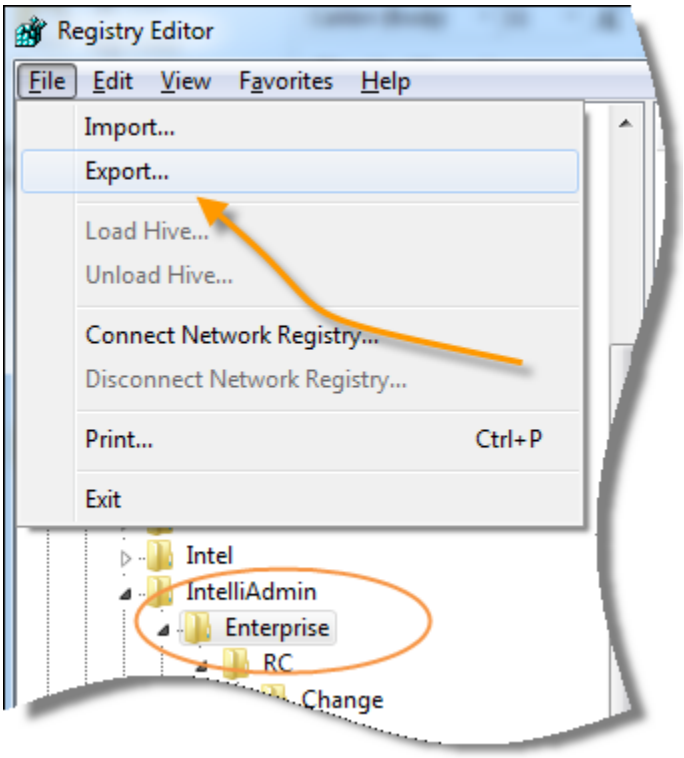
The next step is backing up all settings, and files for the Enterprise server. This is an important step, since it will allow you to reverse the changes if something goes wrong.

All of the settings in the older version are stored in the registry. To back them up, you need to export the registry key.

Open regedit, and drill down to this key:

HKLM\Software\IntelliAdmin\Enterprise

When it is selected, go to file and export:



Next, you need to backup the files used for the Enterprise server service.

Stop the IntelliAdminRC service, and copy this folder to your backup location:

C:\Program Files (x86)\IntelliAdmin\Enterprise (On 64 bit versions of windows)

C:\Program Files\IntelliAdmin\Enterprise (On 32 bit versions of windows)

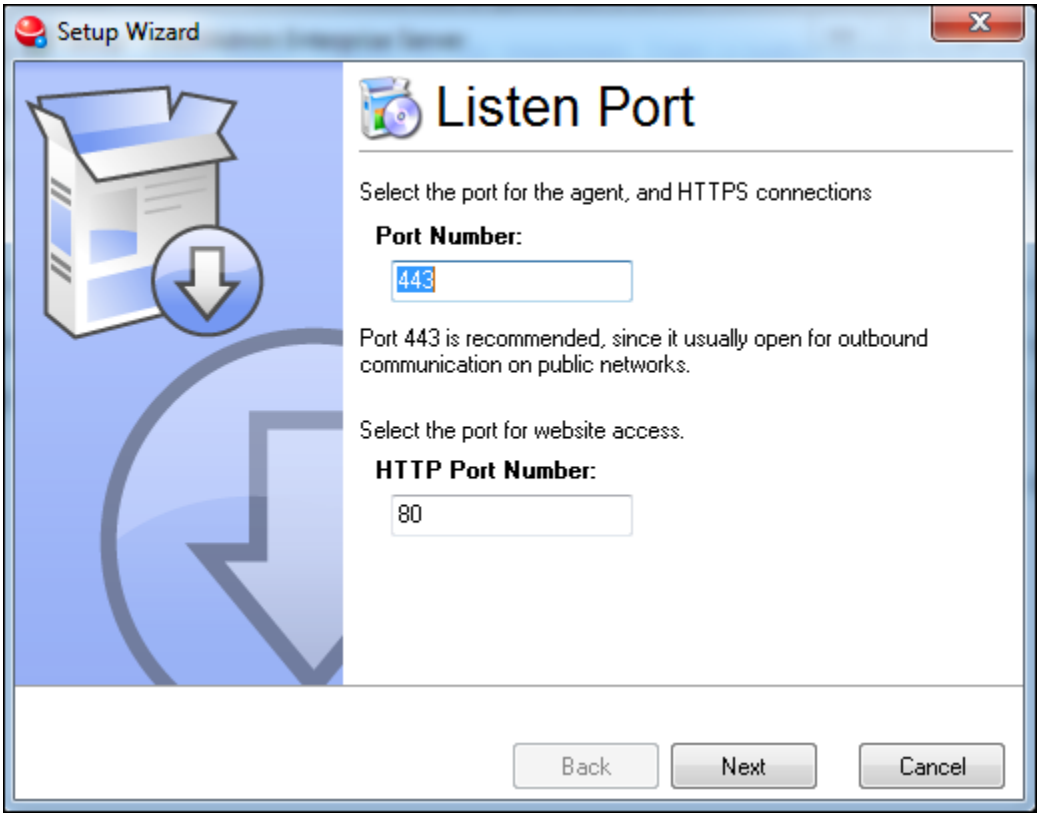
Once you have this folder, and the registry export in a safe place you are ready for the upgrade.

Installation

Download the latest version from our website:

http://www.intelliadmin.com/EServerSetup.exe

Once the download is complete, run it and the setup wizard will ask you for two ports to use for the Enterprise service:



These two ports are used for website access, and agent communication. You will need to make sure no other service is using them (Such as IIS) or the server will not be able to accept connections.

Alternative ports numbers can be used, but it is not recommended. Port 80 is the default port used for web browsers/servers. Port 443 is an ideal port for getting through firewalls and routers – since it is left open for secure web pages.

The next step in the wizard will ask you to setup the master account for the system. If it is a windows account, you can type in a windows username, or even a windows group name (Such as Administrators). Any windows account that matches, can access the system.

If you don't want to use windows accounts, you can also setup a stand alone username and password combination. This is called a "Standard User Account"

Click next, and the system will complete the installation process.

The installation is finished, and you can now login to the web based administration.

The administration website is located at:

https://host

Where 'host' is the IP Address or hostname of the server where you installed the Enterprise server.

Logging in

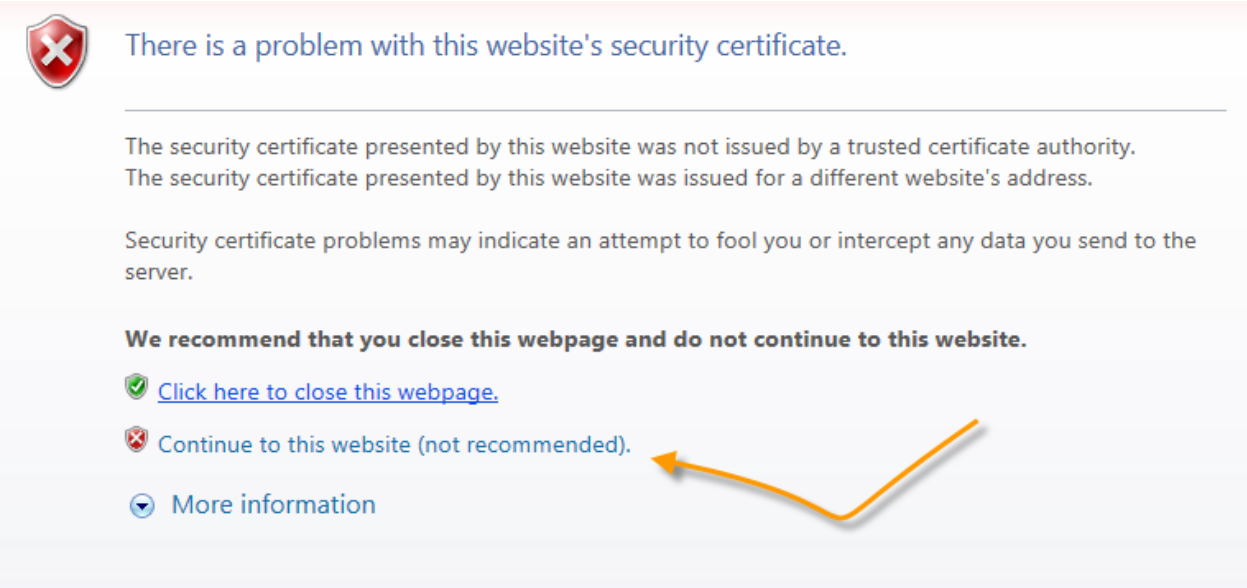
When you have finished setting up the Enterprise server software, you can login using a web browser. The address of the site is:

https://host

Where 'host' is the IP address or host name of the computer where you installed it.

When you visit the page, you will get a security warning from your browser.

On Internet Explorer, it looks like this:

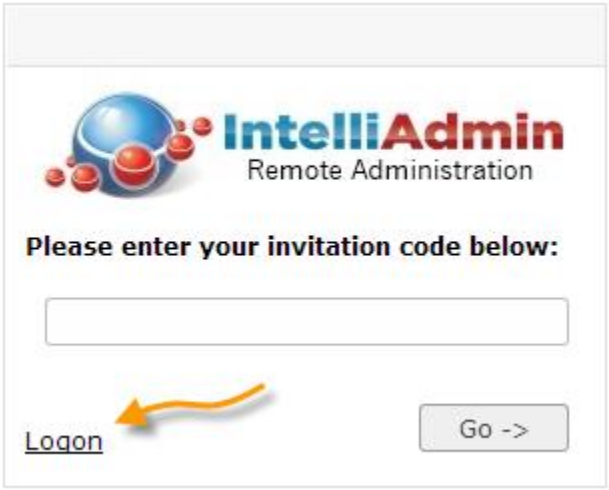


Click on the "Continue to this website…" link to get to complete the logon

The server uses a self-signed certificate, so this is normal. A self-signed certificate still allows the connection to be encrypted, but you cannot guarantee the identity of the server.

If you want avoid this warning message and have a valid certificate that matches your Enterprise server domain name, see the "Certificate Setup" section.

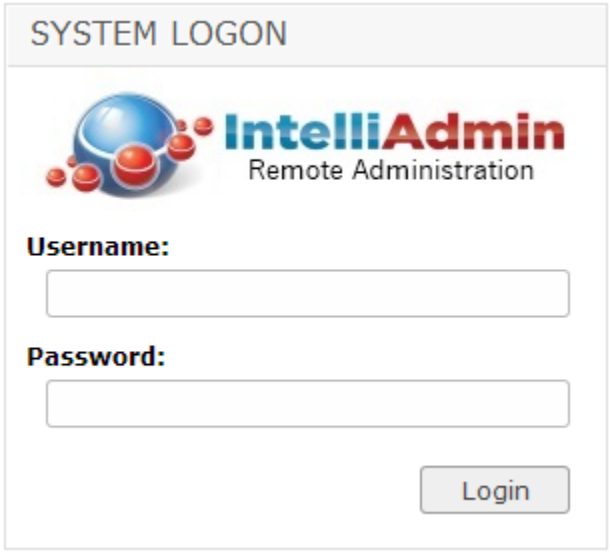
The initial page will ask for an invitation code:



This invitation code is not for logging in, but for your customers or users when they call for support.

To login, click the link on the bottom left that says 'Logon'.

This will lead you to the system logon:



Type in the username and password you selected during the install.

Installing the Viewer Plugin

A plugin is needed to connect and view remote computers. This viewer plugin works with Firefox, Internet Explorer, and Chrome. Windows XP, 2003, 2008, 2012, Vista, 7, and 8 are supported.

To install the viewer go the viewer download section of the website to download and install:

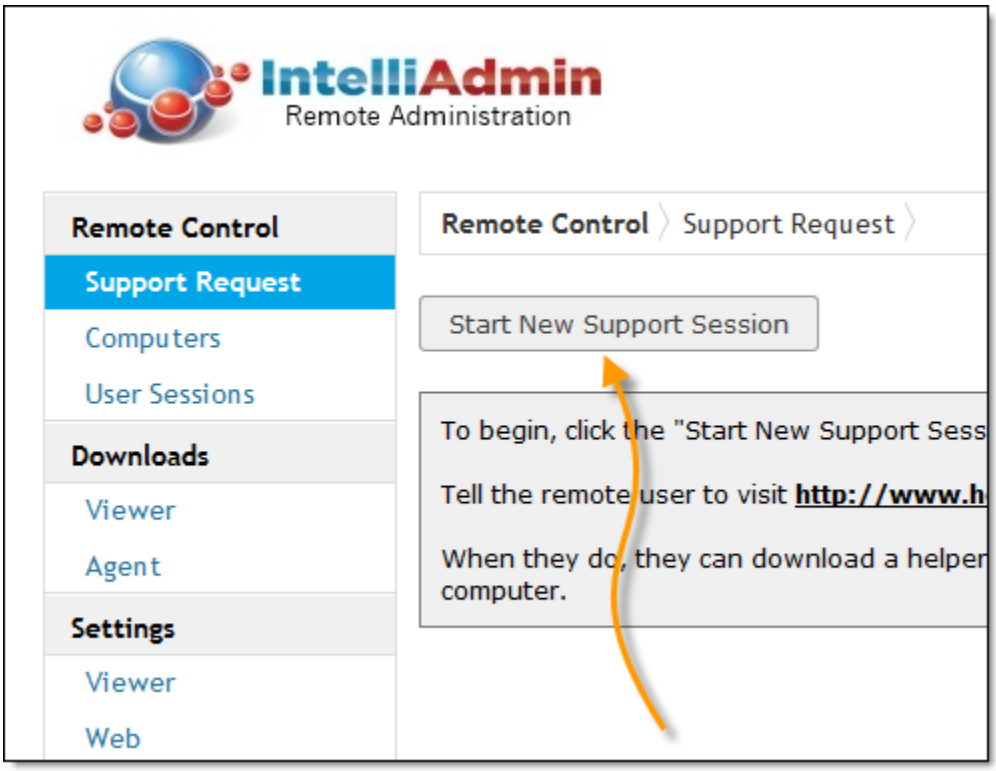
Depending on your browser, you may need to exit all browser windows during the install. Once the installation is complete, you will be able to click on computers to connect to them.

Support Requests

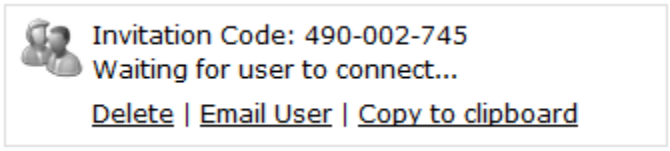
Support requests are designed to be temporary connections that are removed when you disconnect. This type of connection is ideal when the remote user does not have any remote control software installed, and you are unable to install something for them.

If you need a more permanent connection to a computer, then adding it to the computer section is a better way (See the "Adding Computers" section for more details)

To help someone using a support request, start out by clicking on the "Start new support session" button:



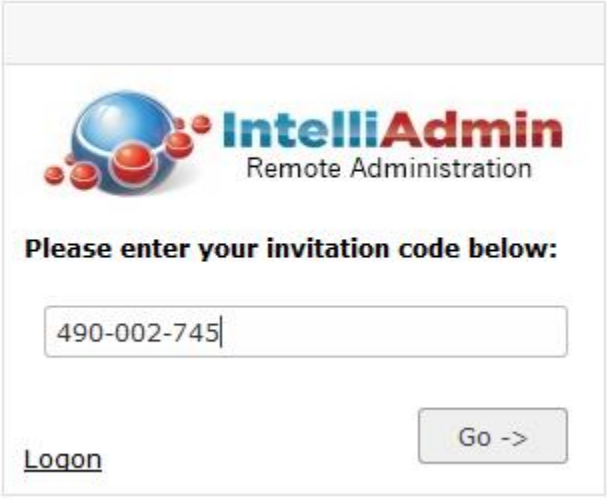
This will generate a new support request:



You can tell the user to visit the Enterprise server's website and enter that 9 digit code.

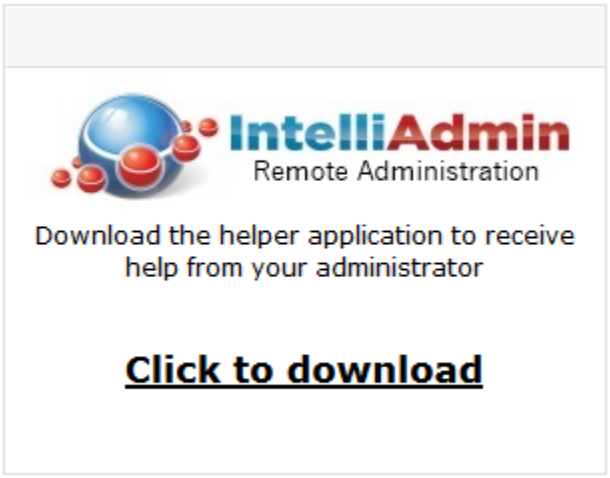
The website URL is **http://host** where 'host' is the host name or IP address of your enterprise server.

When the user visits the site, they will need to enter the invitation code:

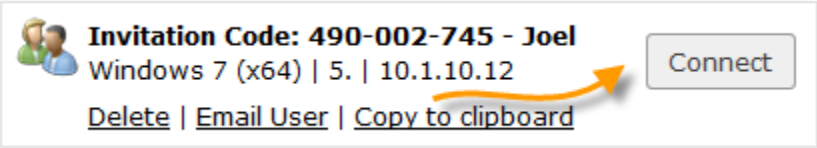


The system is designed to take the invitation code any way the user types it – even if they don't type in the dashes, or add extra spaces, it will still work.

Clicking on the "go" button will automatically generate a helper application that the remote user can download and run.

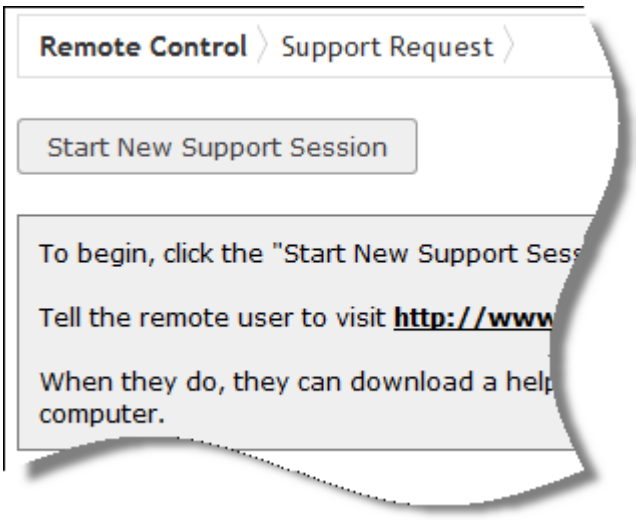


After a few seconds of negotiation with the Enterprise server the connection is established. The request will now have a connect button next to it:



To control their computer, simply press the connect button

Since support requests are temporary, when you disconnect the support software is removed from the remote machine, and the request is deleted from the interface:

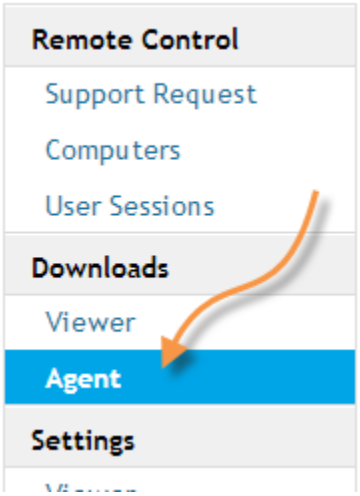


Adding Computers

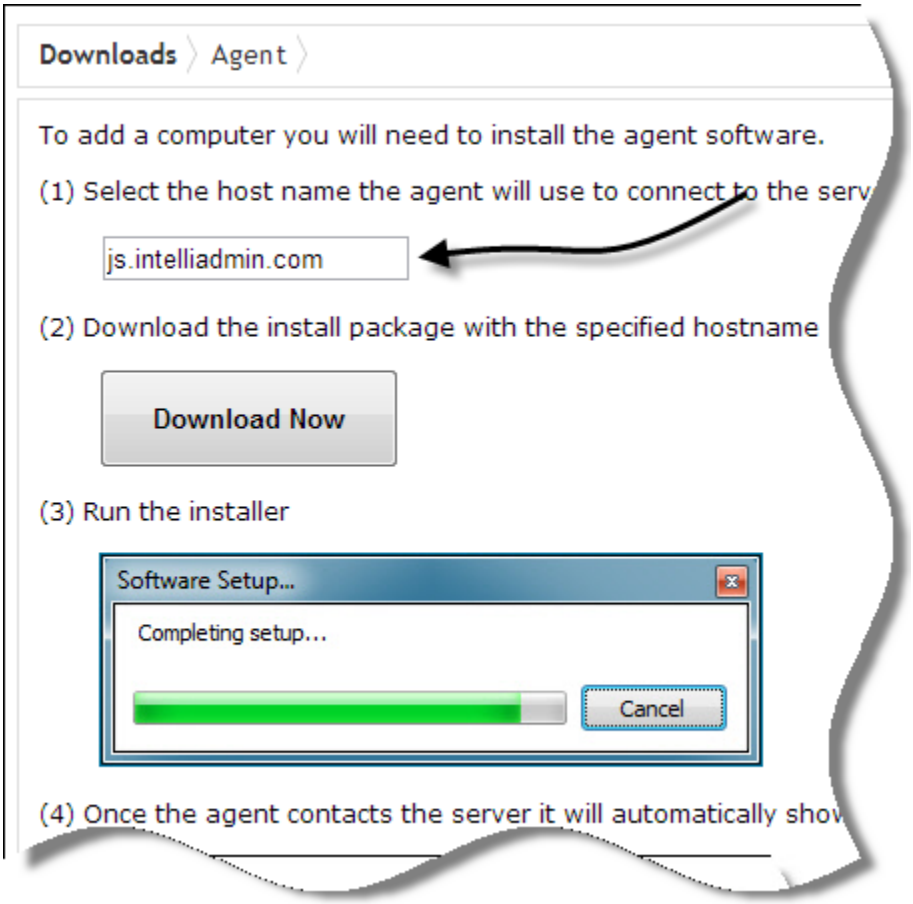
Adding a computer allows you to access it without asking the user to enter a code. At any time you can connect to the remote machine and control it.

The agent will run while the computer is powered on, and will constantly keep itself registered with the Enterprise server.

Adding a computer is simple, just go to the agent download page:



Once you are on the agent download page, take note of the host name that the agent will use to connect to the Enterprise server:

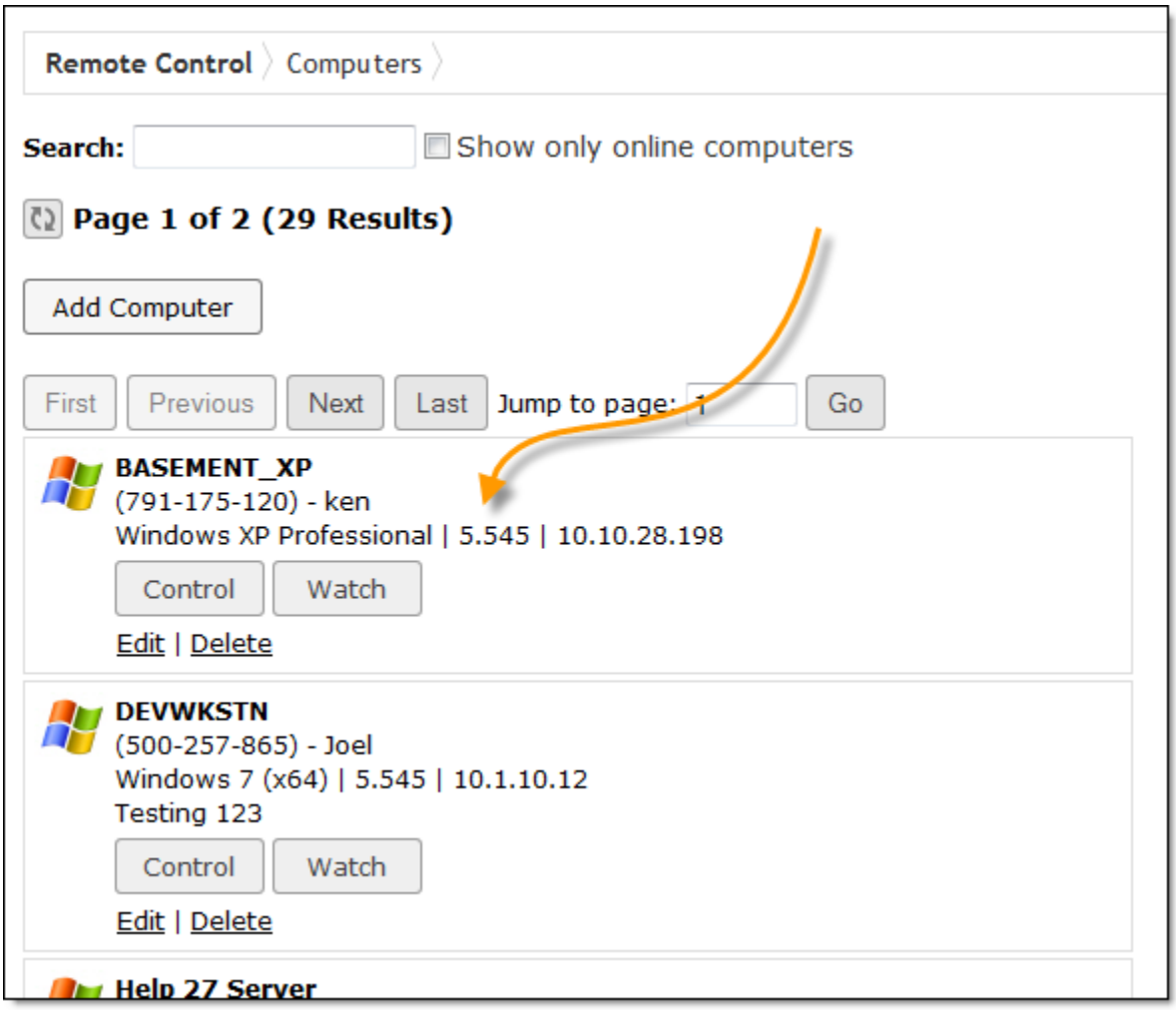


This value will be embedded into the download, and is automatically filled.

Make sure this hostname can be reached from the computer you will install the agent on. If not, change the value before you download and it will be automatically built into the package.

Click the download button, and the website will generate a setup package you can use to add new computers to the system.

After a few moments of negotiation with the server, a new entry will show up in the "computers" section of the website:



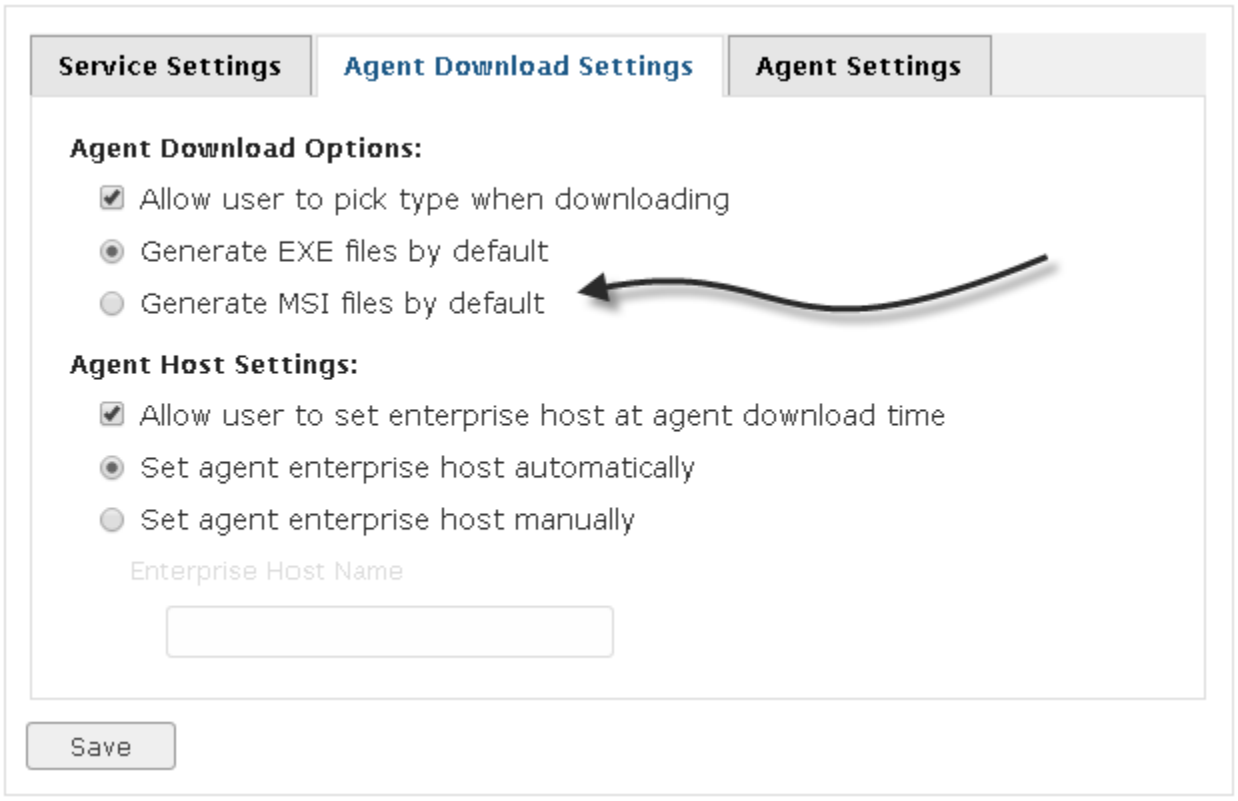
The software package can be re-used on as many computers as needed. You don't need to download a new package each time you want to add a new computer.

The name and description of the computer will be pulled from the operating system at install time, but can be changed by editing it.

The Enterprise server was also designed to handle system cloning. Feel free to install the agent on a clone source, and when a clone is brought online it will automatically re-register itself so it has its own system ID.

MSI Based Agent Install

If you need your agent install package to be in an MSI instead of an exe, you can enable this in the settings:



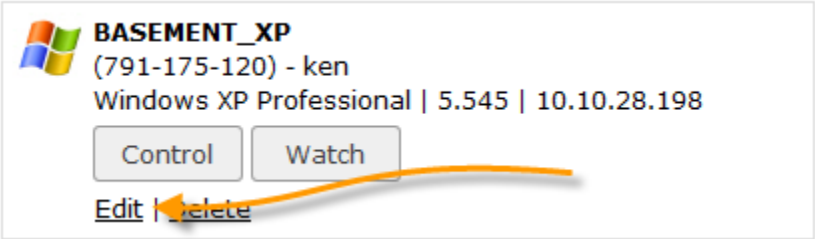
The MSI generated can be distributed using group policy.

Editing Computers

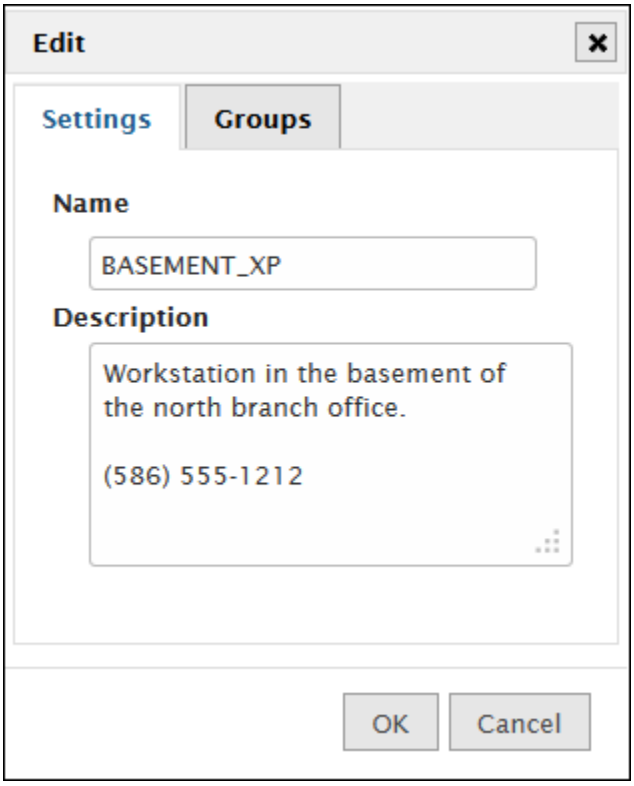
You can change the name or description of a computer by editing it.

This can be useful if you want to search by phone number, or another piece of identifying information.

To edit, click the edit button on the computer entry:



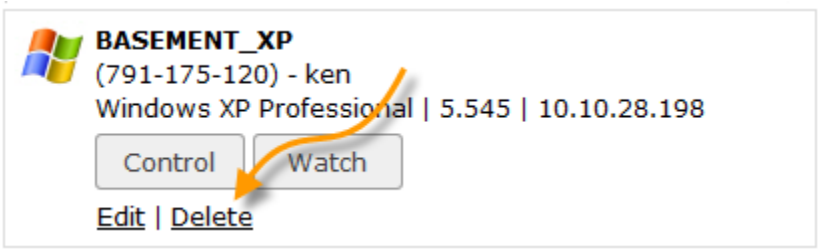
When you click on it, a dialog will pop up and allow you to edit it:



Click OK to save your changes, and the computer is updated instantly.

Deleting Computers

If you want to remove a computer, you simply click on the delete button in the administrative interface:



One important point to note is that if the agent is online, the delete operation will tell it to uninstall. If the agent is offline, the agent will not uninstall. The next time it comes online, it will re-add itself to the system.

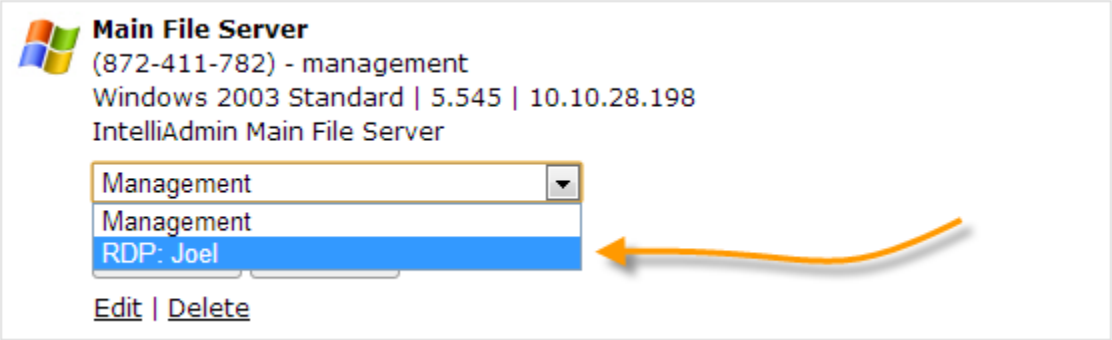
The reason for this behavior is that it allows you to cleanup your agent list without worrying about losing access to computers that are hard to reach (For example, a laptop that is on the road).

Accessing Remote Desktop Sessions

Remote desktop sessions are automatically tracked by the Enterprise server.

This allows you to 'jump' in and shadow active sessions.

Controlling a remote desktop session is easy. When one is active, it will show up on a list under the computer name:



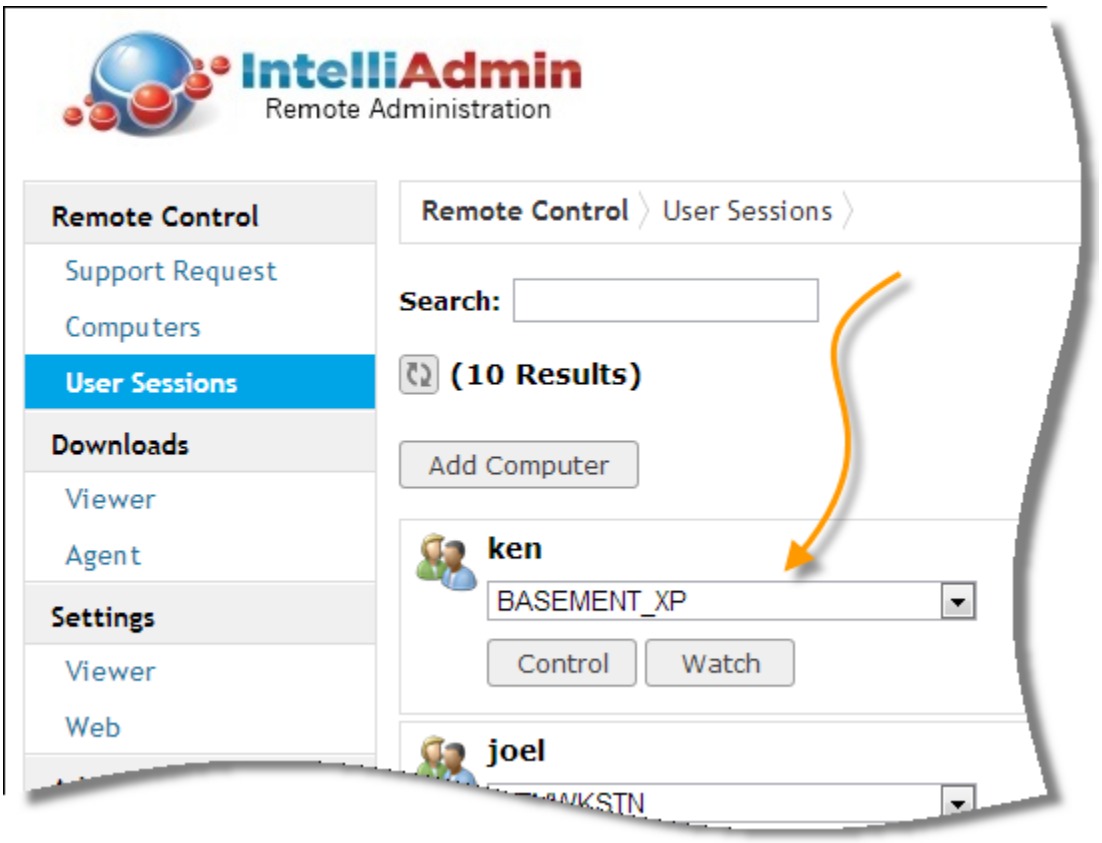
Just select the RDP session from the list, and you can control or watch the session.

Finding users across terminal servers and desktops

If you have multiple terminal servers, or have users logging into more than one desktop – there is an easy way to find and remote into their desktop (Or RDP Session)

Go to the "User Sessions" page, and you will see a list of all logged in users.

Under the user's name is a list of the computers they are logged into:



This allows you to easily control a user session without digging around and trying to find what computer, or terminal server that they are logged into.

Multi-Monitor support

When connecting to a computer with more than one monitor you can show the entire desktop, or focus in on just one monitor.

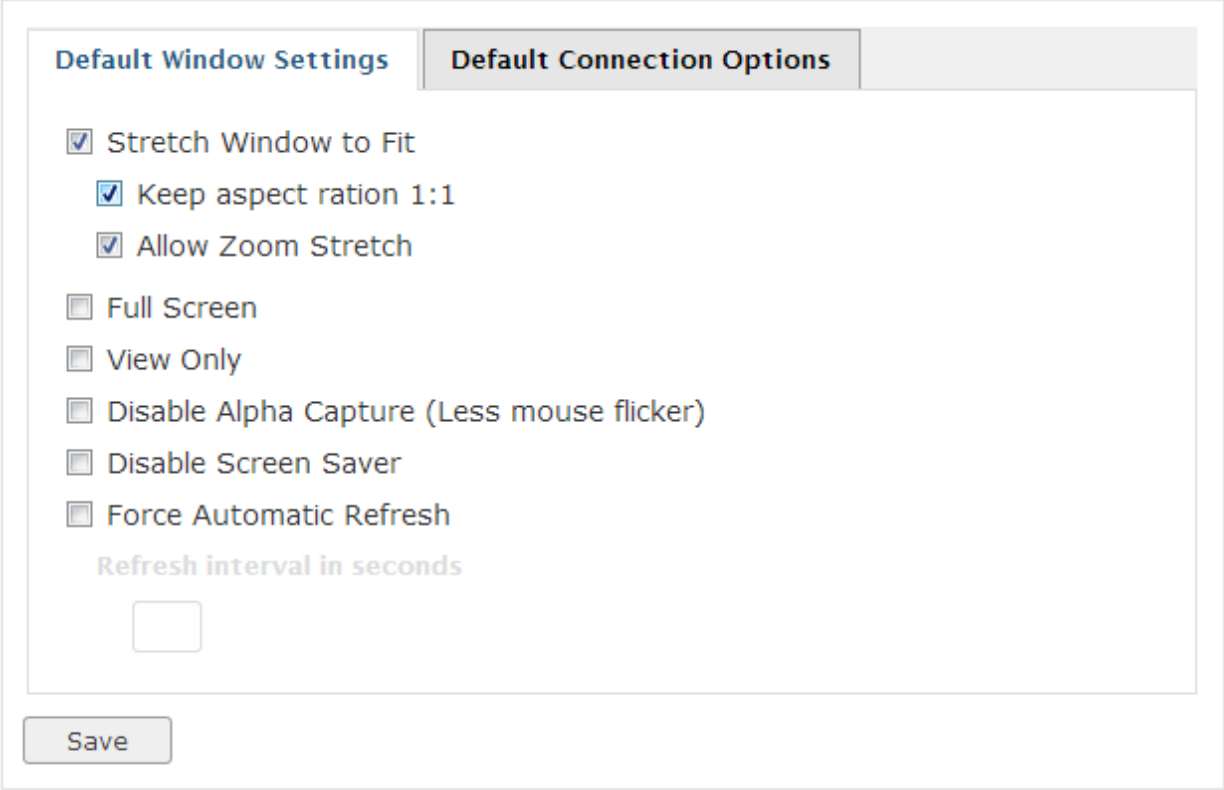
This is easily accomplished by selecting from the top of the viewer:

Windows 7 and higher now have multi-monitor remote desktop sessions. You can also connect to these even if you only have one monitor.

One note about multi monitor RDP sessions - Windows does not report the monitor dimensions in these sessions so the two screens are combined into one for you to control.

Default Viewer Settings

You can pick the default settings for the viewer when connecting to a remote computer.

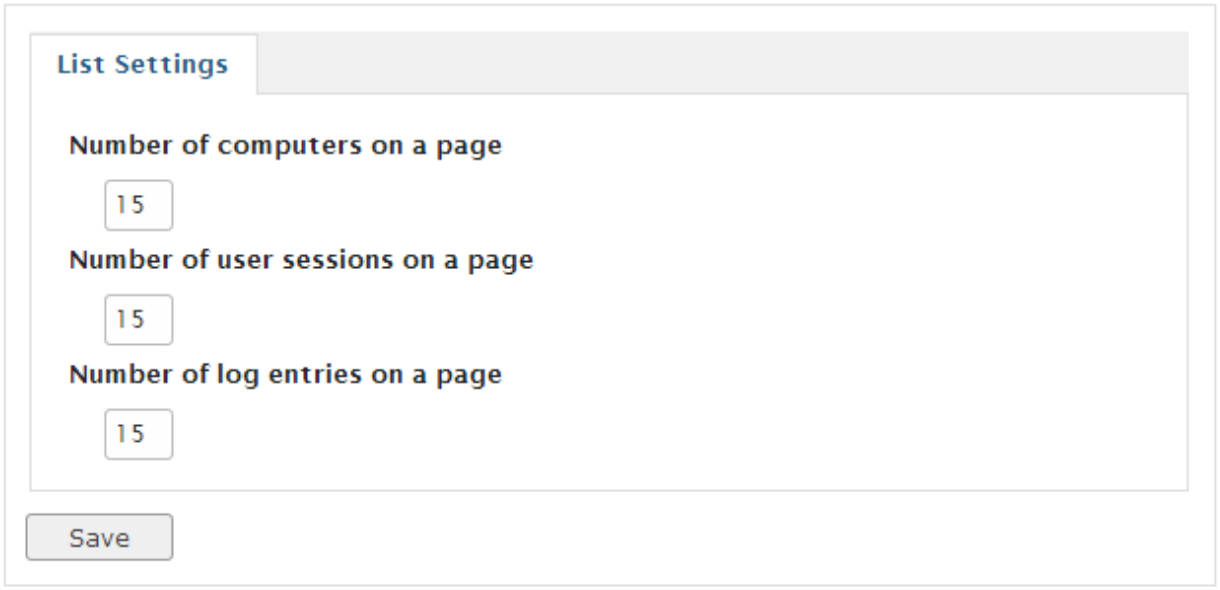


These settings will be saved for only the current user. This way each user can have their own defaults that will follow them to any computer they connect from.

Note: These are *not* a way to secure settings. If you want to set polices that force users to ask permission, or show the status window – see the user accounts section.

Website Preferences

If a user wants to see more or less of the items shown, they can change it in list settings under the web settings section:

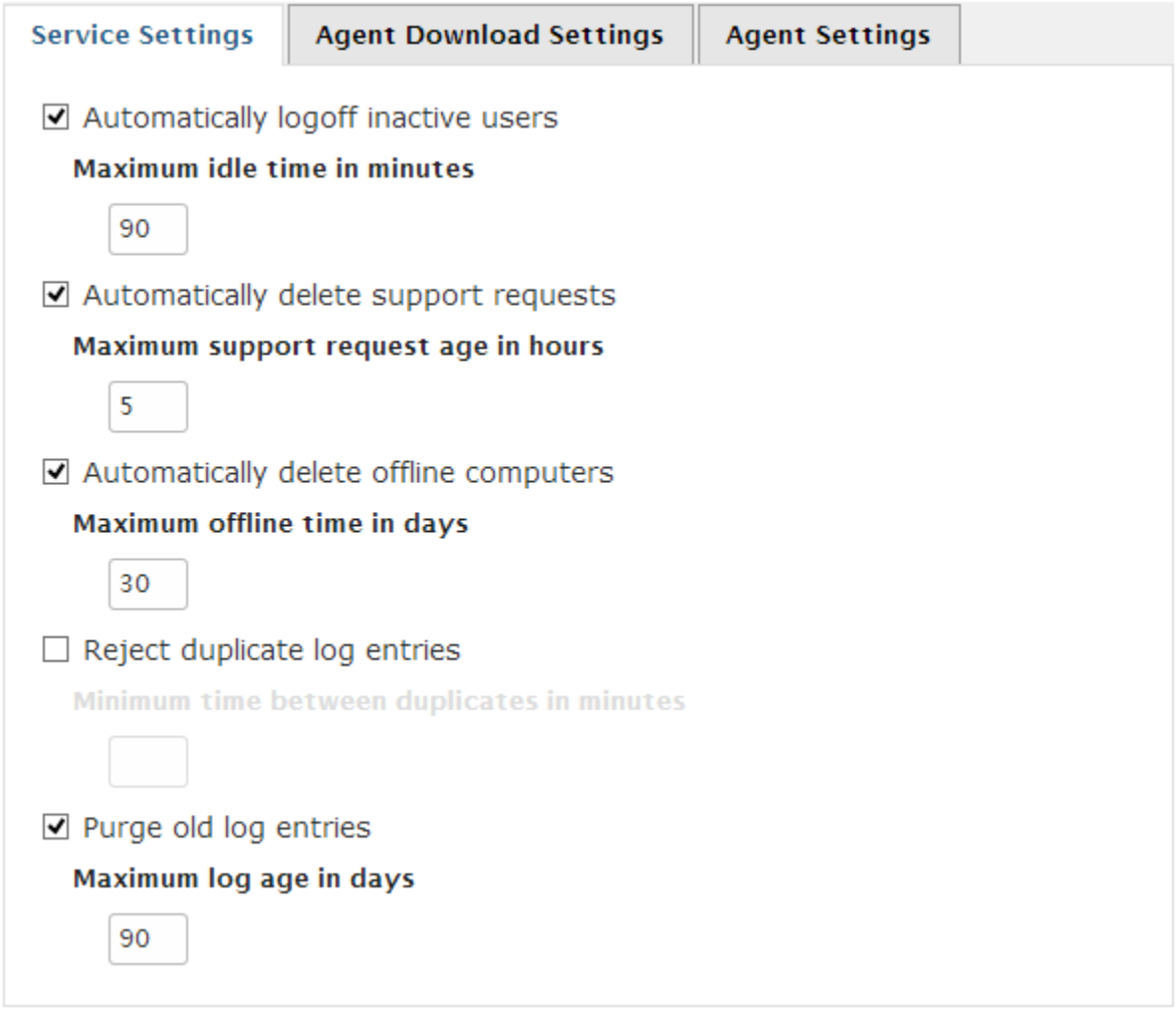


Server Preferences

Server preferences are system wide, and are under Administration->Server

Here is a list of the settings, and what they do:

Service Settings:



Automatically Logoff Inactive Users

This option will automatically logoff users after a specified amount of time

Automatically Delete Support Requests

This option will automatically remove a support request after the specified amount of time.

Automatically Delete Offline Computers

This option will purge computers that have been offline for more than the specified amount of time. If the computer does come back online after the deletion, it will automatically be added to the list. This is a great way to keep your computer list clean and free of decommissioned computers.

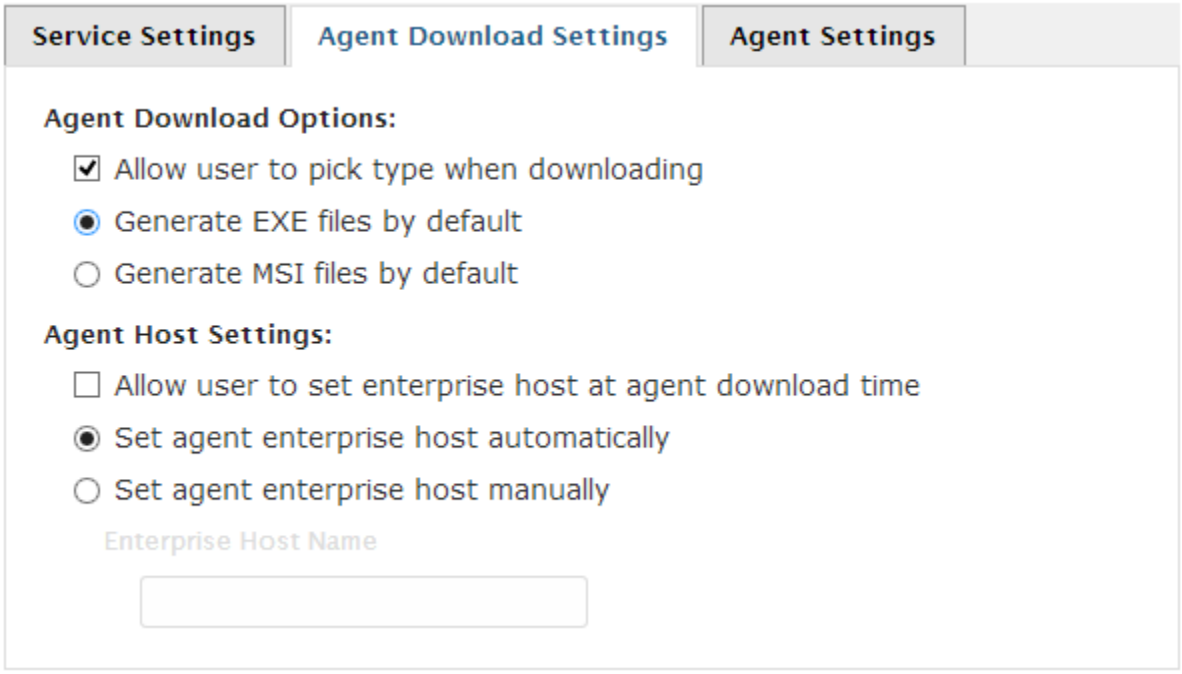
Reject Duplicate Log Entries

Sometimes you will get a log entry that is repeating at a regular Interval. This could be an agent that has improper setup information, or a viewer with the wrong credentials. When this is enabled, a log entry that is an exact duplicate will not be added until the specified amount of time has passed.

Purge Old Log Entries

This option tells the server to automatically delete old log entries. After the specified time they are permanently removed from the system.

Agent Download Settings:



Allow user to pick type when downloading

The agent setup package can be downloaded as an MSI file, or as an EXE. This option allows the user to pick at download time.

Generate EXE files by default

This option will pick the EXE option by default for downloading

Generate MSI files by default

This option will pick the MSI option by default for downloading

Allow user to set enterprise host at agent download time

This allows the user to set the hostname that will be embedded into the agent setup package. If this option is not checked, then it will follow the options below.

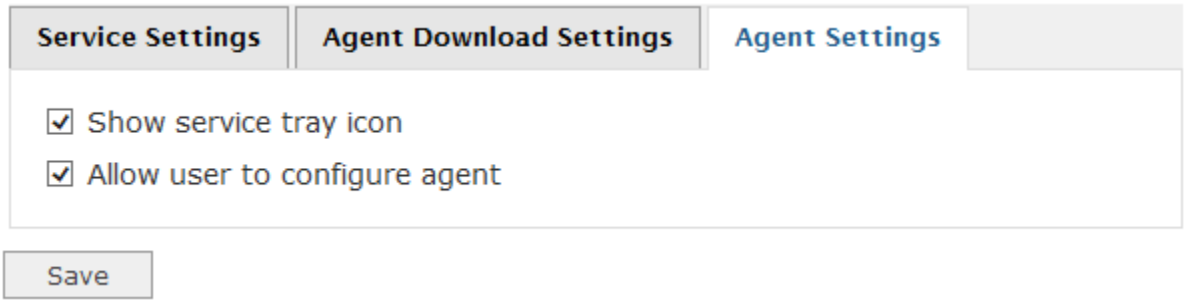
Set agent enterprise host automatically

This tells the server to automatically fill the host field with the same address used in the browser.

Set agent enterprise host manually

Tells the server to fill the host field with a specific host name.

Agent Download Settings:



Show service tray icon

This tells the agent software to always show a tray icon while the service is started.

Allow user to configure agent

This enables the 'configure' button on the agent settings window. It will allow a user (If they are a local administrator) to view and change the agent's configuration.

User Accounts

The user management system is very flexible and provides a high level of access control.

Account Administrator

There is always a core user account that has full access to every page, computer and feature. This is called the 'Account Administrator'

This account cannot be restricted or disabled, and it is always listed at the top of the users section:

It also is processed first when authenticating a user. This is something to keep in mind if you pick a Windows group for the account. If a user matches the group, they will be authenticated as an Account Administrator and not under a user account you may have added.

Account Types

There are two types of accounts: Windows accounts and Standalone accounts.

Windows Accounts

-Use the windows authentication system to authorize the user.

-The account name can be a username, or a windows group.

-It can be a local account (On the Enterprise Server), or a domain account.

-The account is always authorized at the Enterprise server, not the remote computer

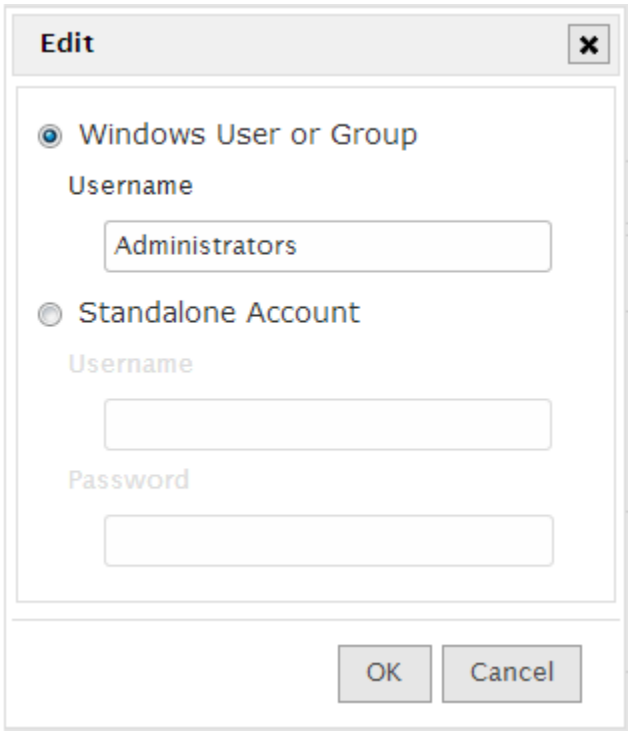
-The remote computer's domain status (Joined or not) has no effect on authentication

Standalone Accounts

-They are not tied to Windows at all

-You pick the username and password

Account type can be changed at any time in the user edit window:



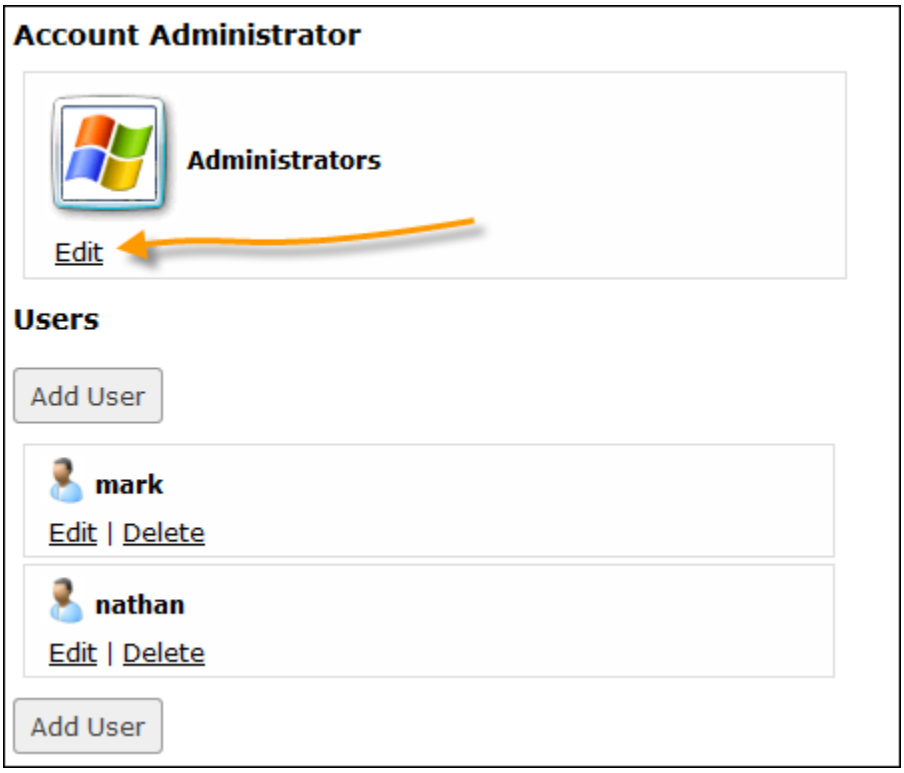
Adding new accounts

Adding additional accounts is easy. Click on the 'add' button in the users section:

An important point to note is you can add as many accounts as needed. You are not limited by your license. **The license only limits the number of concurrent administrators.** This means you can add all the necessary accounts, even if a user is only going to access the system once in a while – it won't take away from any license count.

Editing Accounts

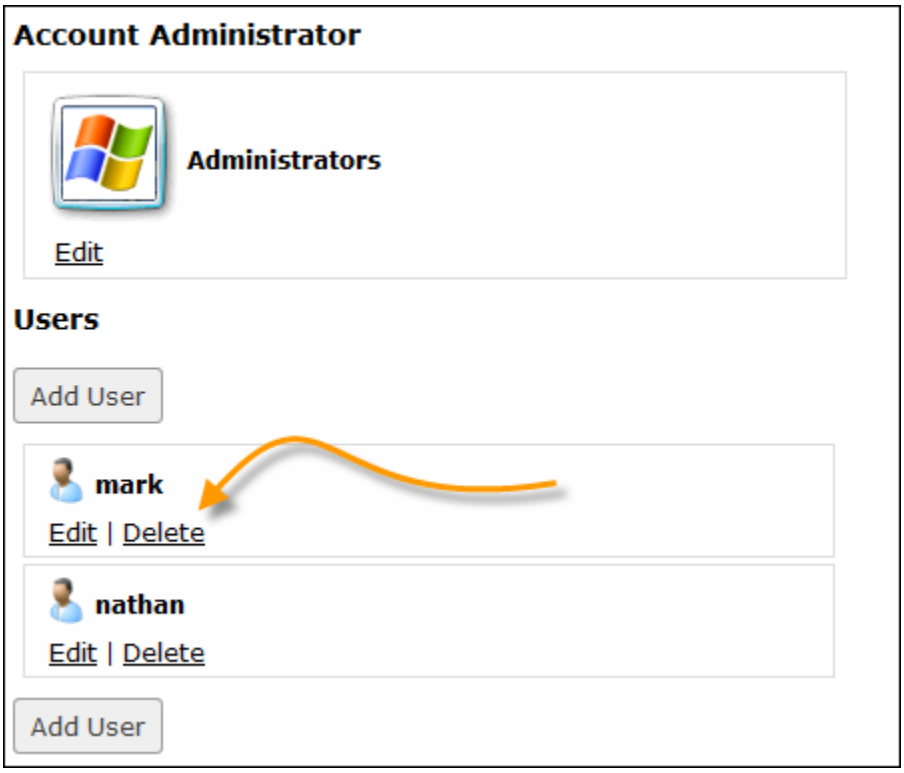
Any user account can be modified by clicking on the edit link below its name:



If an account is renamed, the system will automatically change the name in group membership, and other areas of the system

Deleting Accounts

A user account can be deleted by clicking the delete link below its name:



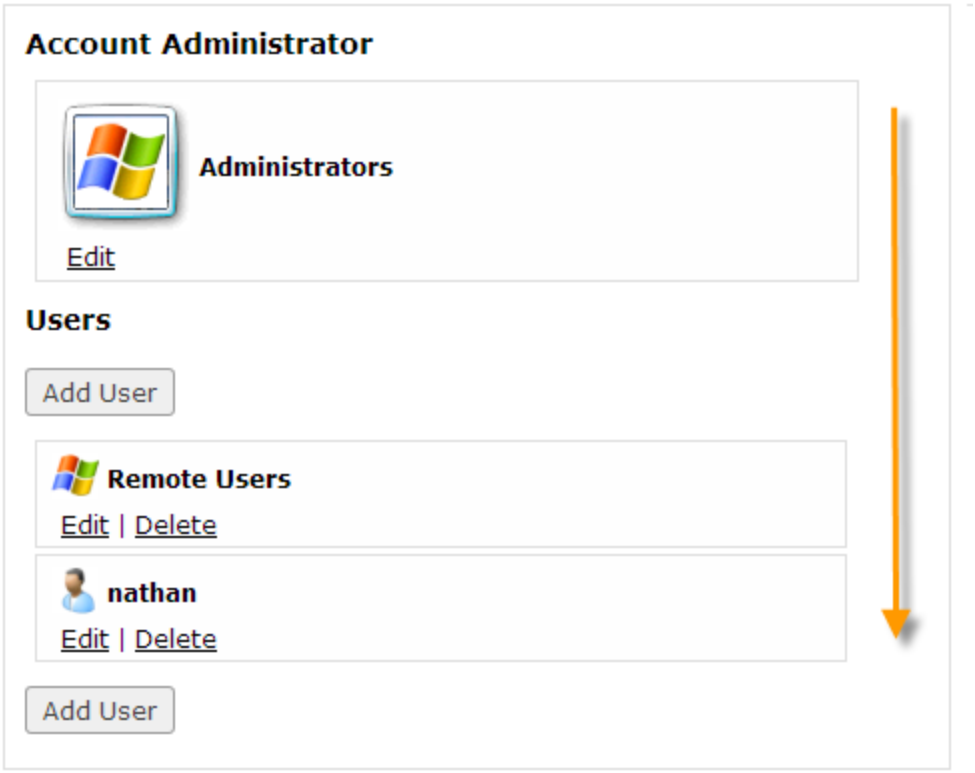
Note that the account administrator can never be deleted, that is why it has no delete option.

When an account is deleted, all of the preferences are deleted along with it. This includes support request numbers, settings, and group membership.

It is a permanent operation that cannot be reversed.

Account matching

When the Enterprise server authenticates a username, it processes it from top to bottom in the user list. When it gets a match, it stops and grants the user the permissions for that account:



You can drag and drop to change the order.

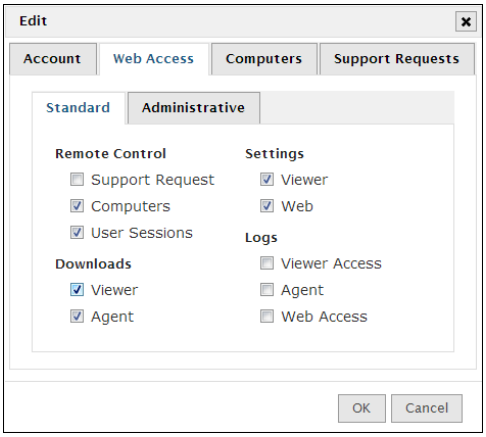
For example, if a user named Nathan logs in, and a user account named Nathan is a member of administrators – he will be granted full Account Administrator access, not the permissions set under the 'Nathan' account.

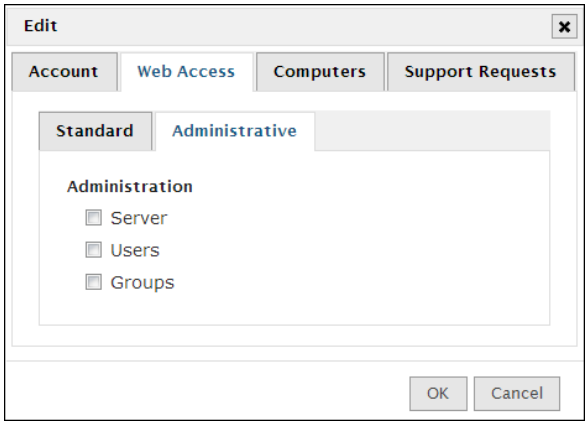
If a user named Elizabeth is a member of the Windows group 'Administrators' and 'Remote Users' she too will be granted Account Administrator access.

The system will always stop at the first match.

Limiting website access

If you want users to only have access to certain parts of the web interface, you can do this by changing their website access settings:





Website access is divided into two sections:

Standard, and Administrative

They are separated to make it clear that granting any access to the Administrative pages potentially allows the user full control.

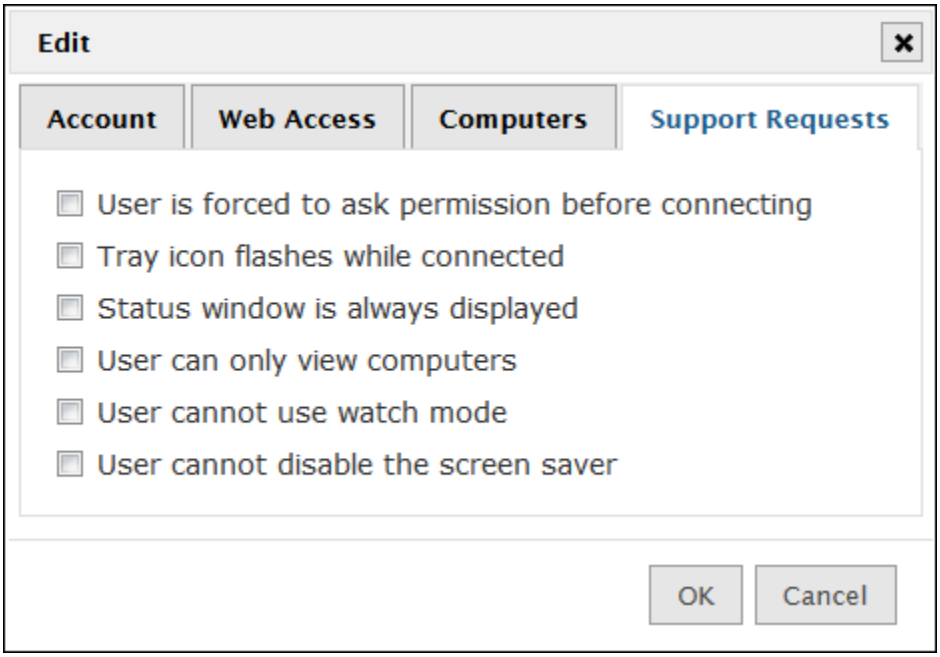
If you want to limit the user in any way, and don't want them to have the power to change it – make sure they do not have access to any of the Administrative pages

An example that explains why:

Imagine that you force a user to ask permission before connecting. If they have access to the administrative 'Users' page, they could simply go in and change their own permissions – and then switch it back when they were finished.

Support Request Policies

You can enforce policies for all support requests for each user. This allows you to force the status window to be displayed, only allow the user to view a remote session and much more:



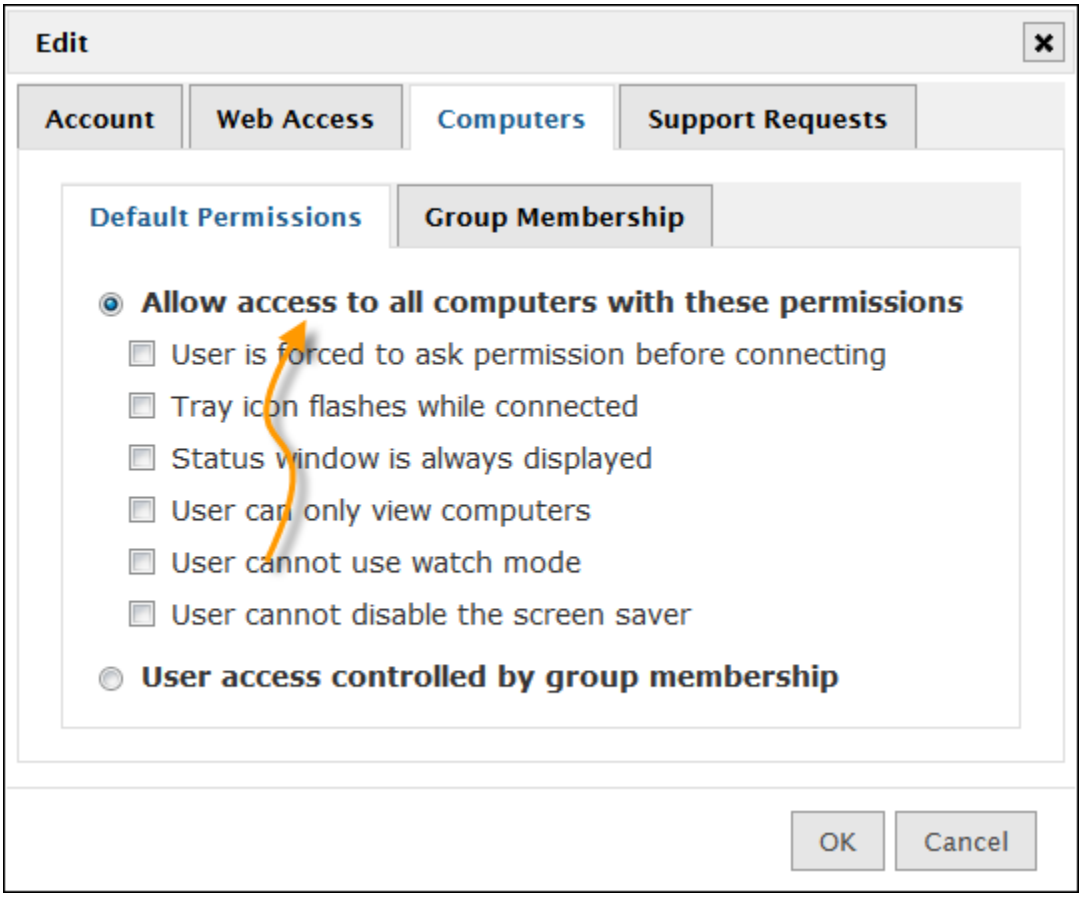
These settings are only for support requests, and have no effect on connections to permanent computer entries.

Limiting Computer Access

By default, new users are granted access to all computers.

Just like support sessions you can set policies that limit that access.

The 'Allow access to all…' option allows a user to access all computers. This option still allows you to restrict that access by setting global policies:

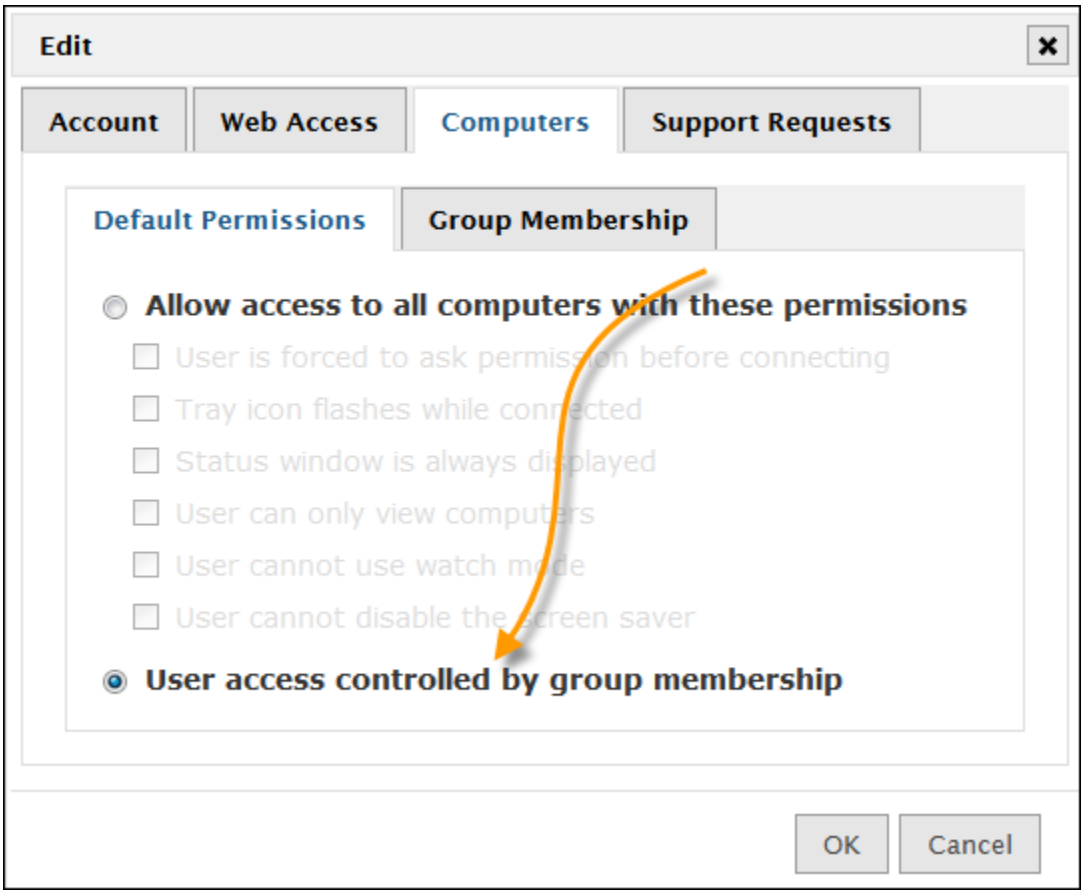


This allows you to enforce settings when a user connects to any system in the 'Computers' section.

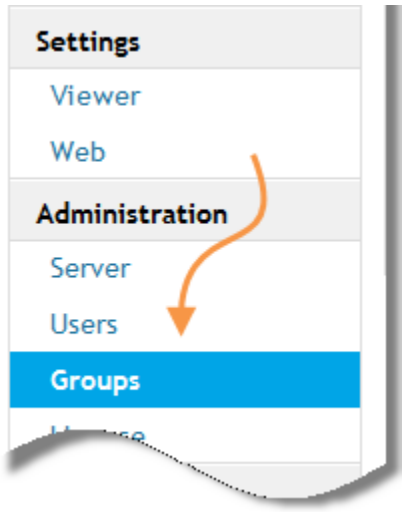
Limiting access to specific computers

Many times you may find it necessary to only allow access to a specific list of computers, or have different permissions for certain groups of computers. This can be accomplished through the use of groups.

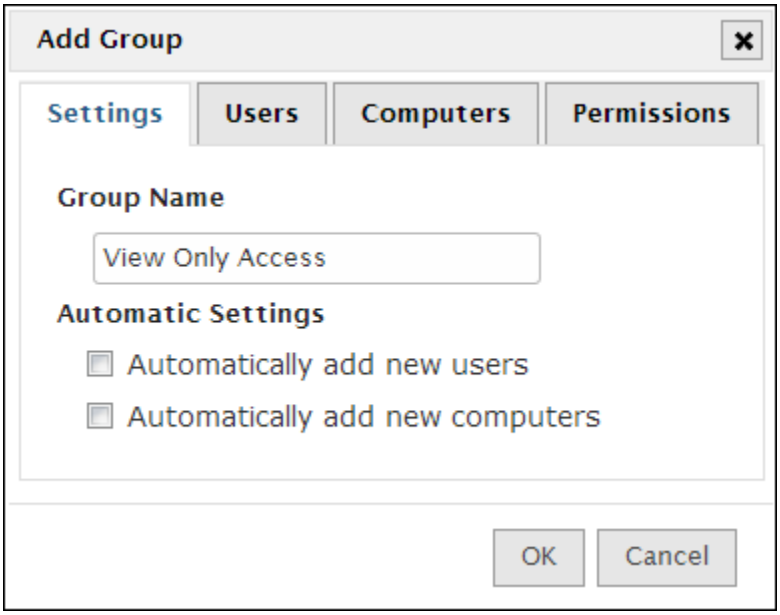
To use groups, change the setting to "User access controlled by group membership":



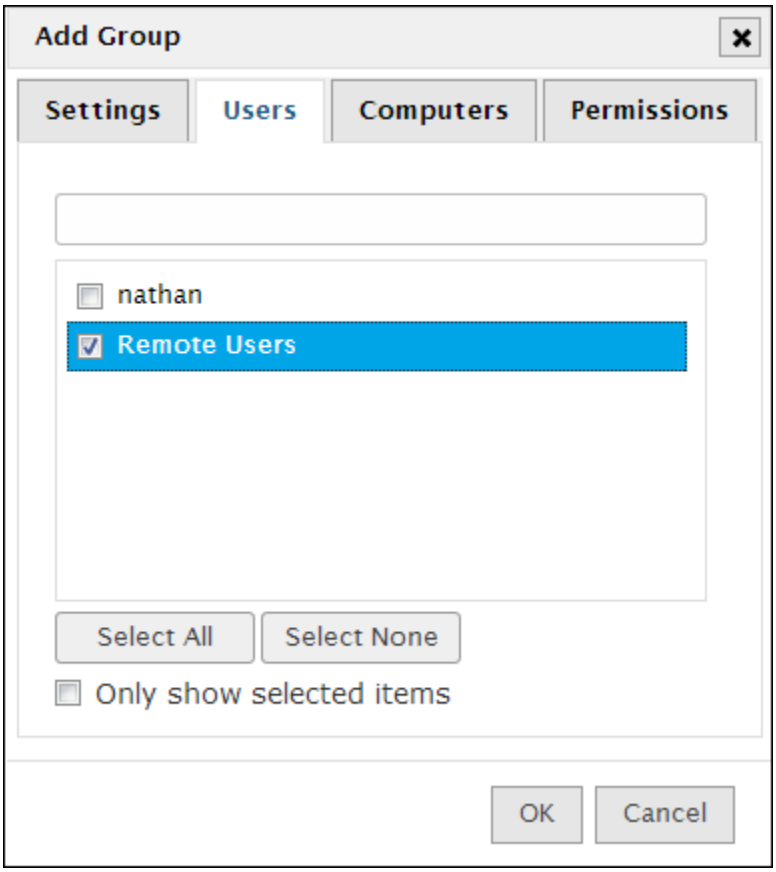
Next, we need to setup a group that will control the users' access. Go into the groups section:



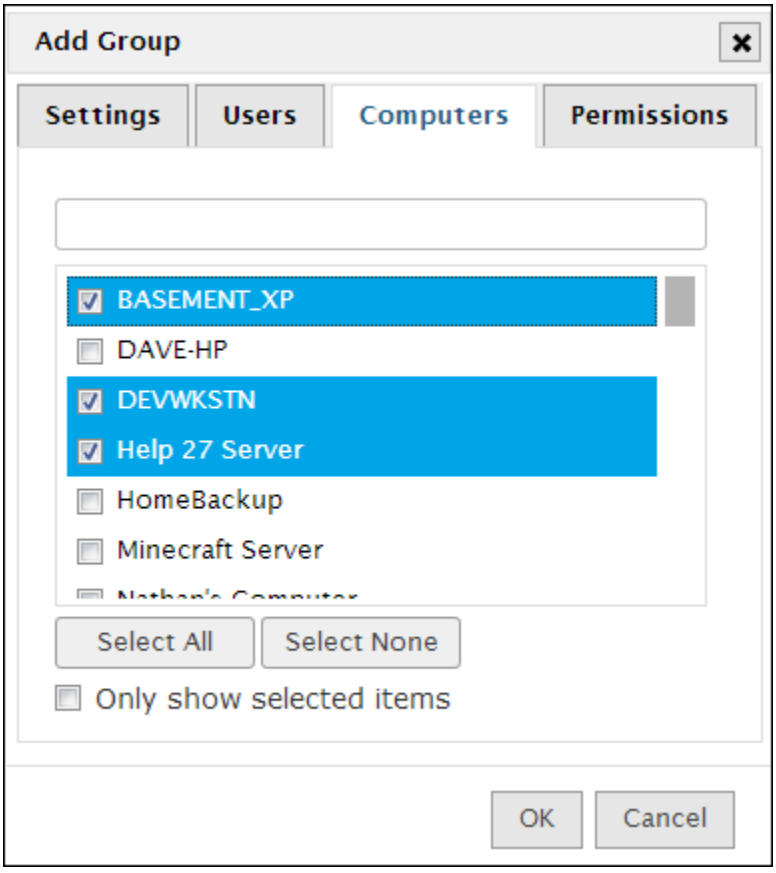
Click the "Add Group" button to add a new group, and pick a descriptive name for your group. In our example here we are going to setup a group for view only access:



Now that you have setup the group name, you want to pick the users that will have access to it:

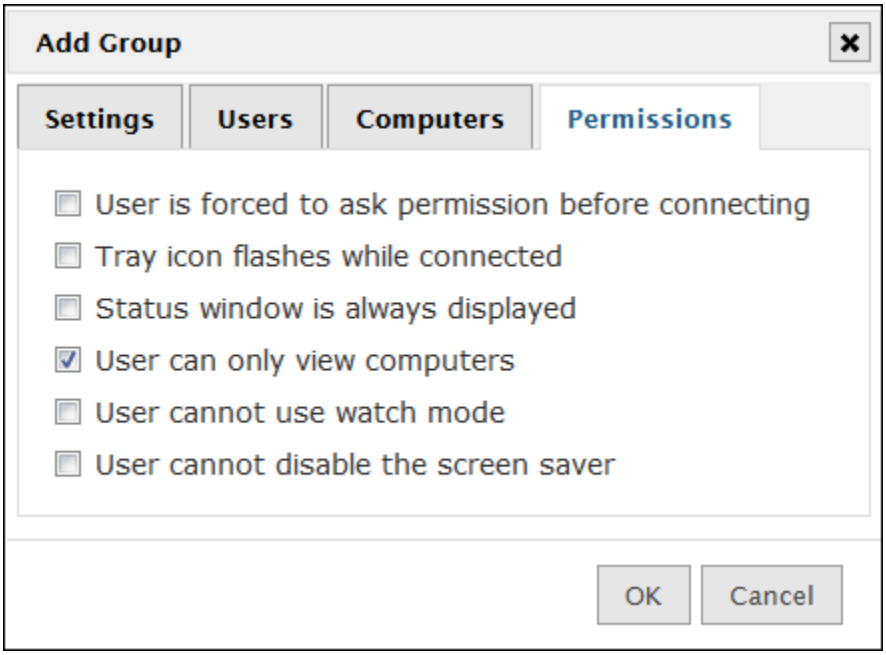


Next, you need to pick the computers that are a member of this group:



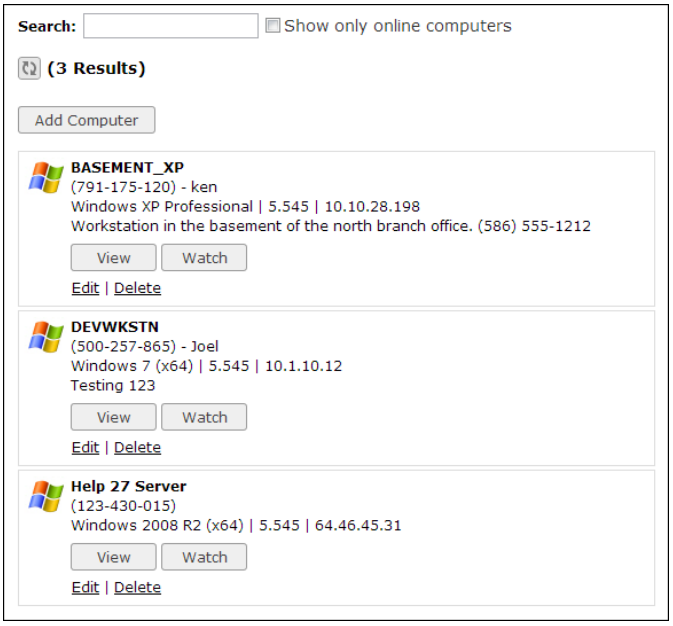
An important point here is that a computer can be a member of more than one group. This allows you to create different access level groups for the same computers. For example one level could be 'view only'; another could be 'ask for permission before connecting'.

Finally, you will need to set the permissions for the group:



In our example case, we are creating a group named 'view only' so we will set the policy to only allow users to view the remote computer.

Now when this user logs in, they can only see and view the computers listed in their group:



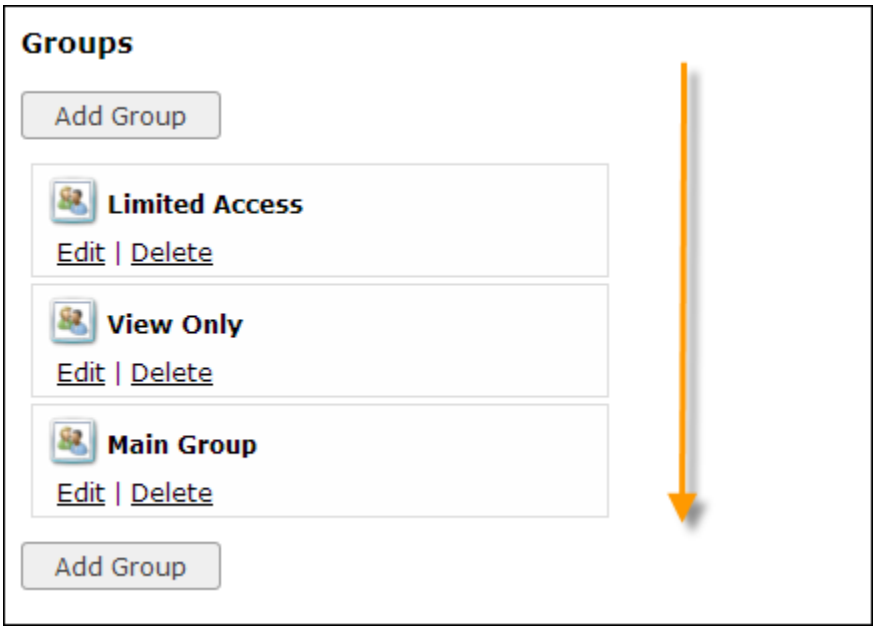
The system will also change the "Control" button to "View" when the user only has view permissions.

Multiple groups

More than likely users will become members of more than one group. Sometimes groups will overlap in their permissions.

For example, group1 has some of the same computers that group 2 has. If a user is a member of both, then what permissions will they get?

They will get the first match going from top to bottom:



Just like the user accounts, you can drag and drop the groups to position them.

Spying on computers without the user knowing

It is possible to watch a computer without the remote user knowing. This is called 'Watch mode'.

When you are in watch mode:

-The viewer will turn red to indicate this

-Mouse, keyboard and clipboard events will not be sent to the remote host

-The mirror driver will not be used (This causes flashing that the user could identify)

-No status window is displayed

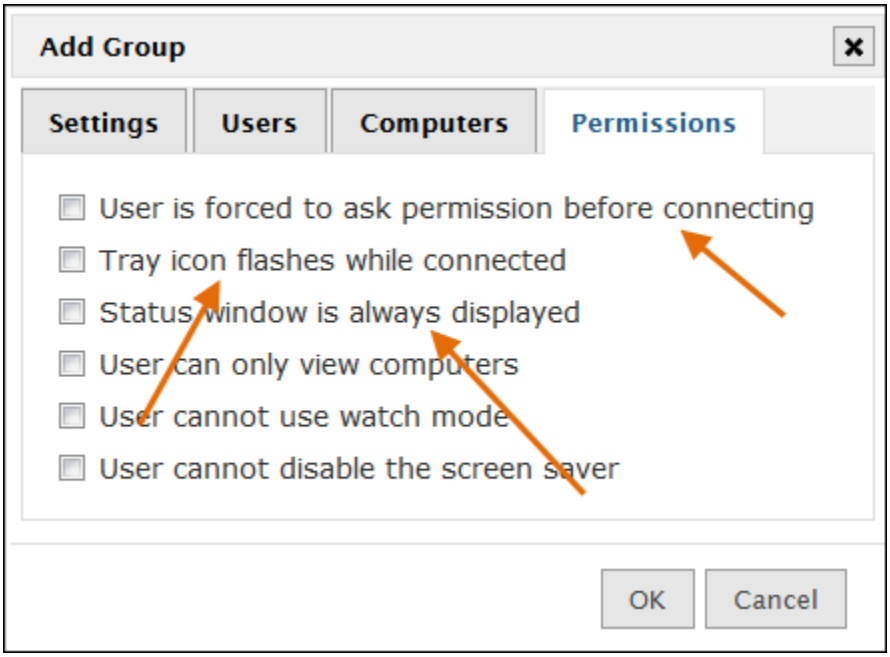
-No tray icon blinks

Everything is done to keep the user from knowing that you are connected. With that said, **watch mode will automatically be disabled if the user is forced to:**

-Flash the tray icon while connected

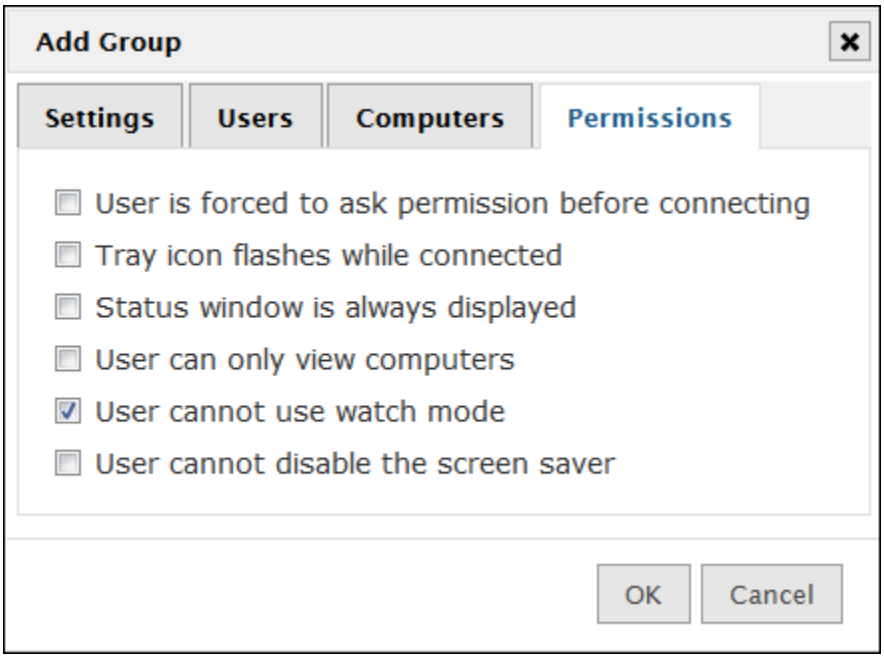
-Ask permission before connecting

-Show the status window.



Disabling Watch Mode

Watch mode can be explicitly disabled in the group or user policy:



This will cause the watch button to be removed from the viewer, and the web interface:

Difference between Watch Mode and View Only

You may be wondering what the differences are between “Watch Mode” and “View Only”. The differences are:

-View only will not automatically disable the status window, tray icon, or request access features. If these are set the user will still know you are connected

-View only refreshes faster, and can use the mirror driver. This means using view only will have a quicker and more accurate display

-Watch Mode puts stealth as its highest priority to the detriment of screen updates.

Backup and Restore

Backing up your data

The Enterprise server stores all log, computer, and settings in a database. This database is automatically backed up once a day. 7 Days of backups are kept by the system.

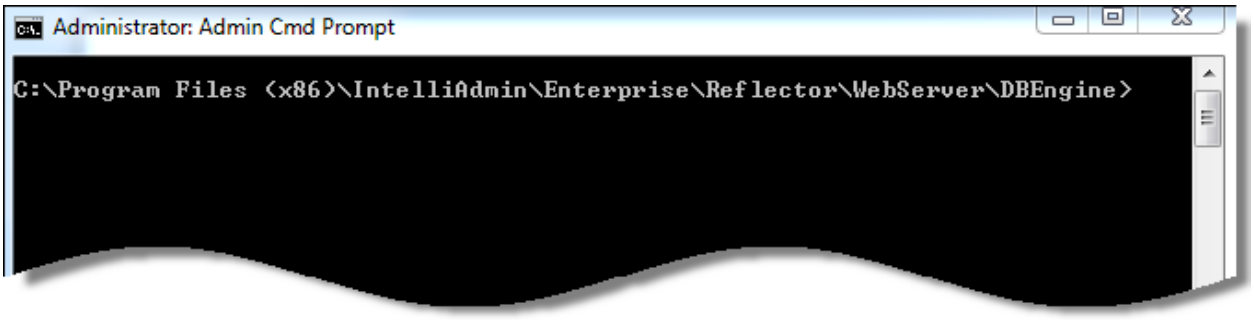
These backups are stored under:

{INSTALL_FOLDER}\Enterprise\Reflector\WebServer\DBEngine\Backups

If you want to backup manually, you can use the backup.bat script in the folder:

{INSTALL_FOLDER}\Enterprise\Reflector\WebServer\DBEngine\

To run the backup manually get to a command line in that folder:



Then type:

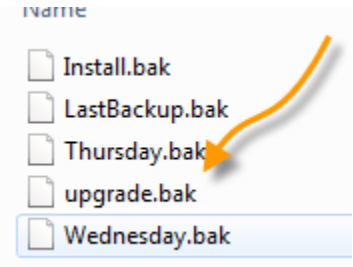
backup.bat NAME_OF_BACKUP_FILE

To create a backup named, upgrade.bak you would call it like this:

backup.bat upgrade.bak

The backup file would then be in the folder:

{INSTALL_FOLDER}\Enterprise\Reflector\WebServer\DBEngine\Backups



Restoring your data

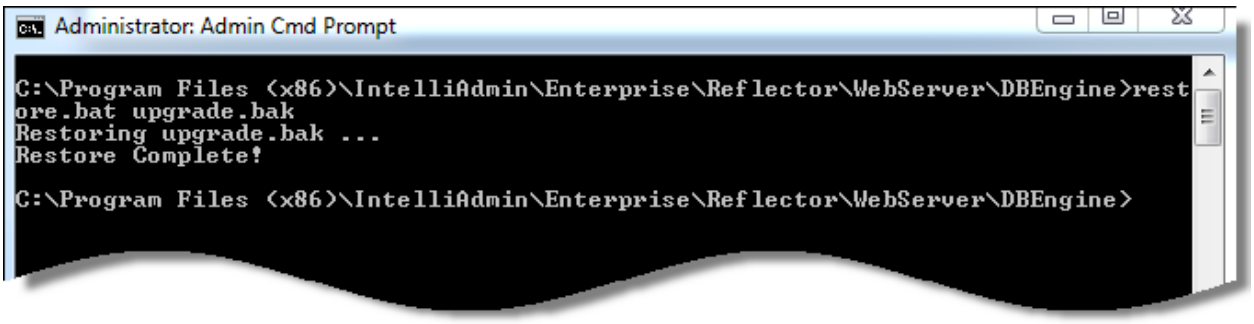
To restore a backup, you simply need to call the script named restore.bat located in this folder:

{INSTALL_FOLDER}\Enterprise\Reflector\WebServer\DBEngine\

You call it with the name of the file that is in the backup folder.

For the previous backup, we could use this command line to restore:

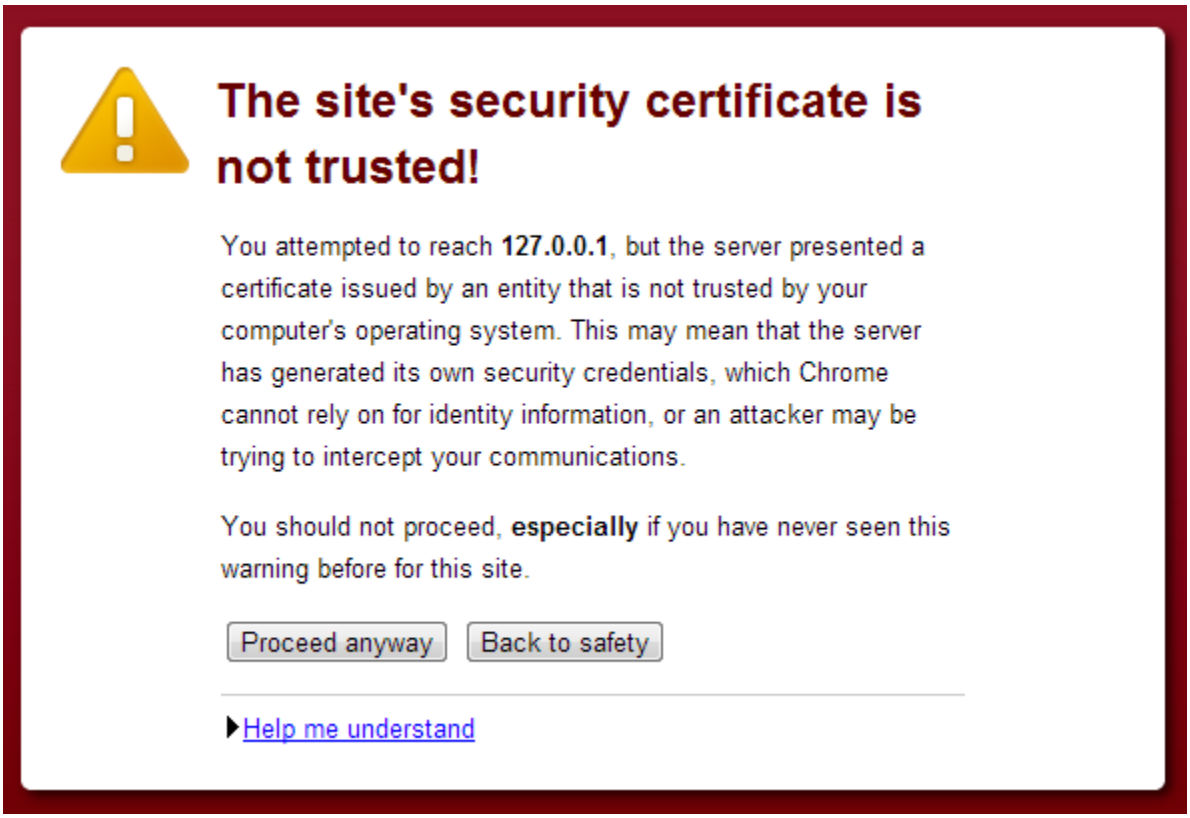
restore.bat upgrade.bak



After the restore, all of the settings, logs, and computer lists are updated to the backup image.

Website certificates

Getting a valid website certificate will prevent users, and customers from seeing this message when going to the Enterprise server website:



This message is shown when the default self signed certificate is used. It is important to note that your connection is still encrypted, but the reason for the error is that the identity of your server cannot be verified.

To get a certificate, first you must generate a request on the server. Start by getting to a command line in this folder:

{INSTALL_FOLDER}\Enterprise\Reflector\OpenSSL

Once you are there, run the script named request.bat. It will ask you for a list of options for the certificate request:

Country Name – A two letter code for the country where your organization is located

State or Province Name – State or province where your country is located

Locality Name – The city where your organization is located.

Organization Name – Your company name

Organizational Unit Name – The name of the section within your company (IT Dept)

Common Name – This is the domain name for the certificate (Ex: remote.example.com)

Email Address – Email address that will be listed on the certificate

You will be asked for a challenge password, and an optional company name. You can just hit enter for each of those options.

When the script completes, two files will be in that folder:

private.key – A text file containing the private key. This file is important. Keep it secure, and make sure it is backed up.

request.csr – The file you will send to a certificate provider to purchase your certificate.

Next, you need to visit a certificate provider and provide the request.csr when purchasing. Some providers that we have used successfully are:

GoGetSSL.com (http://www.gogetssl.com)

Comodo (http://www.comodo.com)

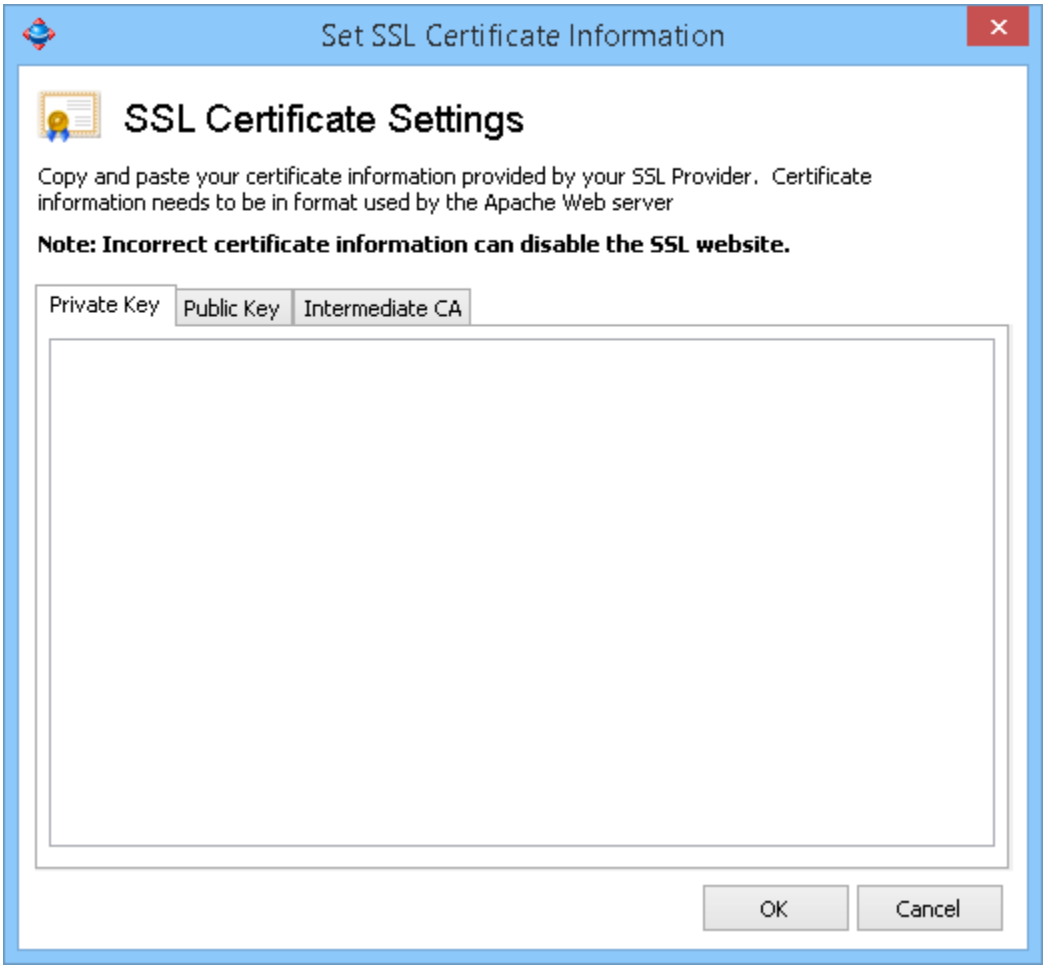
Verisign (http://www.verisign.com)

Once your certificate is approved by the provider, they will send you the public side of your key.

You will need this plus the private key you generated earlier. To register the certificate, get on the Enterprise server itself, and launch the settings application.

Go to the settings tab:

Click the ‘set’ button to enter your certificate information:

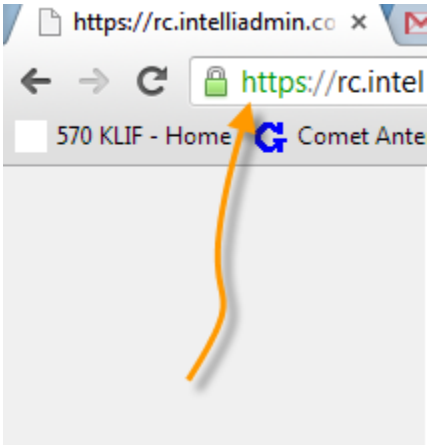


Open the private key file, and paste the contents into the private key section. Do the same with the public key you got from your certificate provider.

Some certificates require an addition “Intermediate CA” certificate. If your certificate provider has one, you will want to paste it under this tab for maximum browser compatibility with your certificate.

Once you are finished, restart the IntelliAdminERC service.

Close all browsers that were open to the website before, and try the secure site to verify that the certificate is functioning:



If you cannot reach the website, it means that the certificate was not valid. Check to make sure there is no extra text in either the public or private key.

If you are still having trouble getting the certificate to work, please send us an email at support@intelliadmin.com and we will be happy to help out.