
Sysgem Access Gateway

Remote Connector User's Guide

Sysgem AG



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Contents

Welcome	1
Introduction	1
About This Manual	1
About the Access Gateway Remote Connector	3
What Does the Remote Connector Do?	3
The SysMan Remote Control Engine	3
What Do I Need to Get Started?	4
Do I Always Have to Install the Remote Connector?	4
What Types of Sessions Can I Create?	4
Installation and Configuration	5
Prerequisites and Installation	5
Initial Registration	7
Providing Details Manually	8
Using a Gateway Registration File	11
Configuring the Remote Control Engine	13
General Options	14
Connection Control	15
Session Passwords	15
Windows Authentication	15
Basic Remote Connector Features	17
The Remote Connector Window	17
Creating a Session	18
Allowing Multiple Viewers	19
Monitoring Session Status	20
Informational Messages	20
Persistent Sessions	21
About Persistent Sessions	21
Types of Persistent Session	21
When are Persistent Sessions Available?	22
Creating a Persistent Session	22
Managing Existing Persistent Sessions	25
Checking the Status of a Persistent Session	26
Enabling and Disabling Persistent Sessions	26
Renaming a Persistent Session	27
Deleting a Persistent Session	27
Access Gateway Registrations	29
About Access Gateway Registrations	29
Working with Multiple Access Gateways	29
Managing Access Gateway Registrations	30
Registering with a New Access Gateway	31

Deleting an Access Gateway Registration.....	31
Changing an Access Gateway Registration.....	31

The One-Click Connector 33

What is the One-Click Connector?	33
Using the One-Click Connector.....	33
Privileged Applications and the One-Click Connector	33
Installing Support Files to Allow Interaction	34
Upgrading the Support Files.....	35
Uninstalling the Support Files	35

Glossary of Terms 37

A	37
B	38
C	38
M.....	38
N.....	38
O.....	39
P.....	39
R.....	39
S.....	39
W	40

Welcome

Introduction

Welcome to the Sysgem Access Gateway – an easy-to-use remote access solution which leaves you in control of your data.

This User's Guide describes the features of the Access Gateway Remote Connector – the part of the Access Gateway software that runs on a computer and shares its screen with viewers connecting via the Access Gateway. Other parts of the Access Gateway documentation cover the features of the Access Gateway itself and the Access Gateway client software. For more details, please see the About This Manual section.

About This Manual

This is the third of four volumes of documentation provided with the Access Gateway; the complete documentation set consists of:

- Volume 1: Getting Started
- Volume 2: Configuration and Administration Guide
- Volume 3: Remote Connector User's Guide
- Volume 4: Access Gateway Client User's Guide

The other three volumes should be available from the same location as this one or from your distributor or the Sysgem website.

➤ When additional information is available on a particular topic, a note like this one will let you know in which volume it can be found.

This User's Guide covers the features and options available to users of the Remote Connector, which is used to create Access Gateway sessions for others to connect to. It is broken into sections, initially covering the basic functionality of setting up a session before going on to look at additional features you may wish to use depending on your environment and requirements.

① As you work through the guide, you'll find occasional side comments (like this one) that include useful hints that aren't part of the main workflow. Alternatively they might indicate that certain features are advanced features that will be covered elsewhere.

Some terms used in this guide may be introduced *in italics*; we hope their meaning will be explained by the surrounding text, but they are also described in the Glossary section at the back of the guide.

Throughout this guide, screenshots and example configurations are shown to help illustrate the principles being discussed. Whilst representative, there might be slight variations between the example shown in the guide and what you see on your screen; in some cases this may be due to differences between Windows environments, but in others it could be because of minor changes to the Access Gateway software. Sysgem makes every effort to ensure that such changes do not impact upon the functionality being described, but if you encounter difficulty please contact us at support@sysgem.eu for assistance.

About the Access Gateway Remote Connector

What Does the Remote Connector Do?

The Access Gateway Remote Connector is a small software component that allows you to create an Access Gateway *session*, so that remote users can view and control your desktop session securely.

The session is created by connecting to an Access Gateway, which is a central server that relays remote control connections whilst still allowing your Access Gateway administrator to retain control over network security.

Using the Remote Connector, you can start and stop remote control sessions easily, using short access codes to allow viewers to connect to your session directly without any inconvenience or changes to your network configuration.

The SysMan Remote Control Engine

The actual remote control functionality in an Access Gateway session is provided by the same remote control engine that powers the SysMan Remote Control Server – we call this the SysMan Remote Control Engine, and it is included as part of the Remote Connector.

This engine and its configuration are shared between both the Remote Connector and the SysMan Remote Control Server package, which is used independently of the Access Gateway. The engine configuration options that are available through the Remote Connector (see *Configuring the Remote Control Engine* later in this guide) also affect the SysMan Remote Control Server, if installed.

- For more details on installing and configuring the SysMan Remote Control Server, please see the documentation supplied with SysMan.

What Do I Need to Get Started?

To get started with the Access Gateway Remote Connector, you simply need a suitable installation kit (as described in the Installation section) and the details required to register with your Access Gateway. These consist of the Access Gateway's *address* (either an internet address such as gateway.sysgem.com, or an IP address such as 10.0.1.2), and usually an *account name* and corresponding password. These details should be provided to you by the administrator of your Access Gateway.

① Your administrator may instead provide you with a Gateway Registration File; this contains all the details required to register with the Access Gateway without needing to enter them individually.

Do I Always Have to Install the Remote Connector?

No – if your Access Gateway administrator has provided you with a One-Click Connector package, then you do not need to install anything in order to create a session. Running the One-Click package will automatically create a session for you, without installing any of the Remote Connector components on your computer permanently.

① Some features of the Remote Connector are not available in the One-Click Connector package; please see the section on The One-Click Connector later in this guide for more details.

What Types of Sessions Can I Create?

The Access Gateway allows you to create two main types of session – these are called *persistent* and *non-persistent* sessions.

A *non-persistent session* is the 'basic' type of session that can be quickly created directly from the main Remote Connector window, and has a temporary access code that will be valid only until you close the session. Once a non-persistent session has been closed, it cannot be re-opened; the access code becomes invalid, and if the remote user wishes to view your screen again you will need to open a new session and provide them with the new access code.

On the other hand, a *persistent session* is one that can be closed and re-opened as many times as required, and is usually configured to be available whenever the Remote Connector is running. These sessions retain their access codes until they are explicitly deleted and are useful when you may need to use a session frequently or will not be able to request a new access code each time (for instance, a session that runs on an unattended computer).

Installation and Configuration

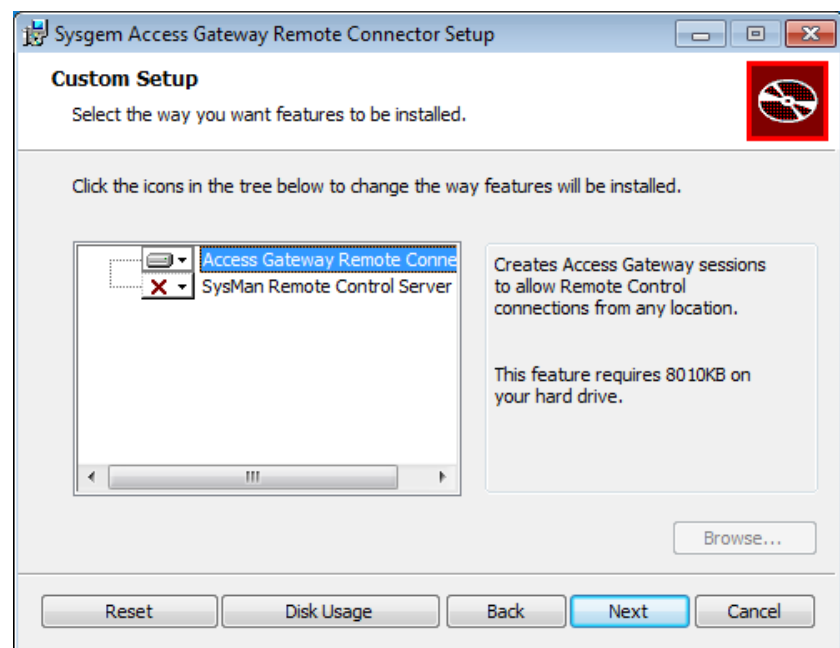
Prerequisites and Installation

The Remote Connector is available in two installation kits – the main Access Gateway installation kit, which includes the other Access Gateway components too, and a standalone Remote Connector kit. The standalone kit is the one that we recommend using for installations on computers that will primarily be used to create sessions – e.g. end-user computers where the Access Gateway is being used to request remote assistance from helpdesk staff, etc.

The Remote Connector itself has no prerequisites – the installation kits contain everything required to get started – but if you use the full Access Gateway kit, it will check for the .NET Framework (required by other Access Gateway components) and install it if missing. Since the Remote Connector does not use the .NET Framework, this overhead may be undesirable; in this case, we again recommend using the standalone installation kit.

i If you only have the main Access Gateway kit, you can obtain the standalone installation kit from your distributor or from Sysgem.

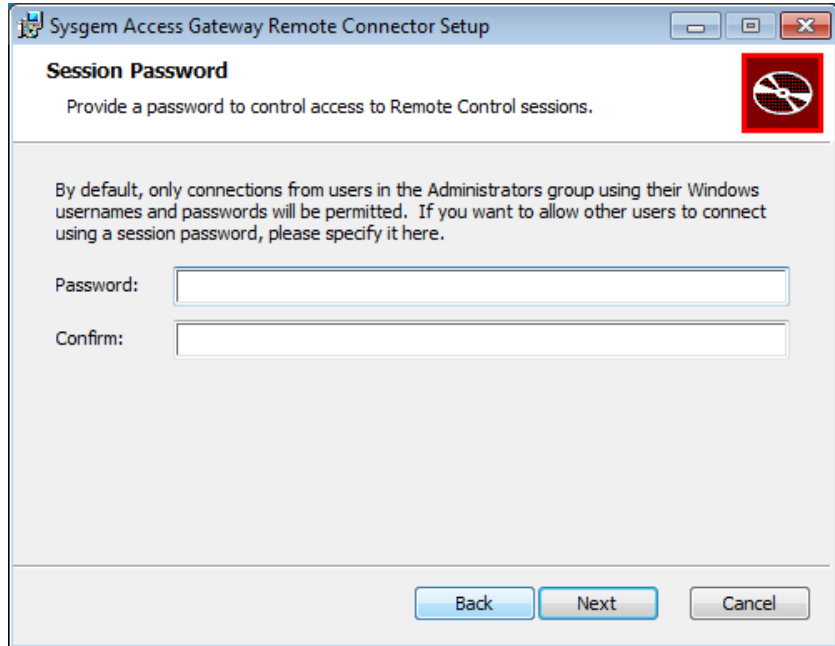
Installation should be straightforward; when prompted to select the components to install, make sure that the Remote Connector is selected:



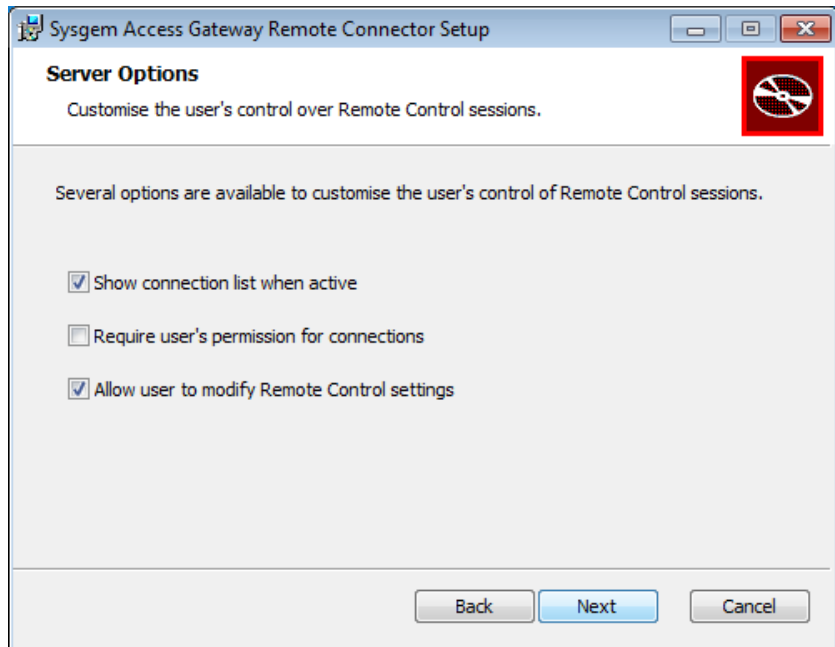
Depending on the installation kit you are using, you may see the SysMan Remote Control Server listed as a separate component; selecting this component

installs the standalone Remote Control Server, used for direct (not involving the Access Gateway) connections between computers in a LAN environment. If you are only intending to use the Access Gateway and the Remote Connector for your remote control sessions, you can safely deselect this option.

After clicking Next on this page, you will be prompted for security settings for the SysMan Remote Control Engine:



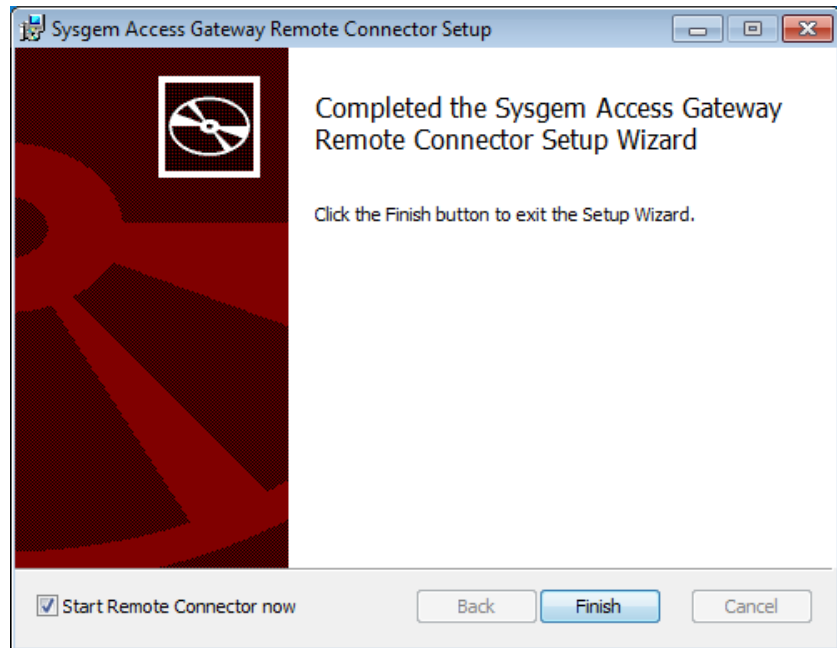
The screenshot shows a window titled "Sysgem Access Gateway Remote Connector Setup". The main heading is "Session Password". Below the heading, it says "Provide a password to control access to Remote Control sessions." There is a red square icon with a white circle and a diagonal slash. Below this, a paragraph explains: "By default, only connections from users in the Administrators group using their Windows usernames and passwords will be permitted. If you want to allow other users to connect using a session password, please specify it here." There are two text input fields: "Password:" and "Confirm:". At the bottom, there are three buttons: "Back", "Next", and "Cancel".



The screenshot shows a window titled "Sysgem Access Gateway Remote Connector Setup". The main heading is "Server Options". Below the heading, it says "Customise the user's control over Remote Control sessions." There is a red square icon with a white circle and a diagonal slash. Below this, a paragraph explains: "Several options are available to customise the user's control of Remote Control sessions." There are three checked checkboxes: "Show connection list when active", "Require user's permission for connections", and "Allow user to modify Remote Control settings". At the bottom, there are three buttons: "Back", "Next", and "Cancel".

The options on these pages of the installation wizard allow you to control the feedback and options the SysMan Remote Control Engine provides to the user. Click Next to accept the defaults, or make any changes you require first.

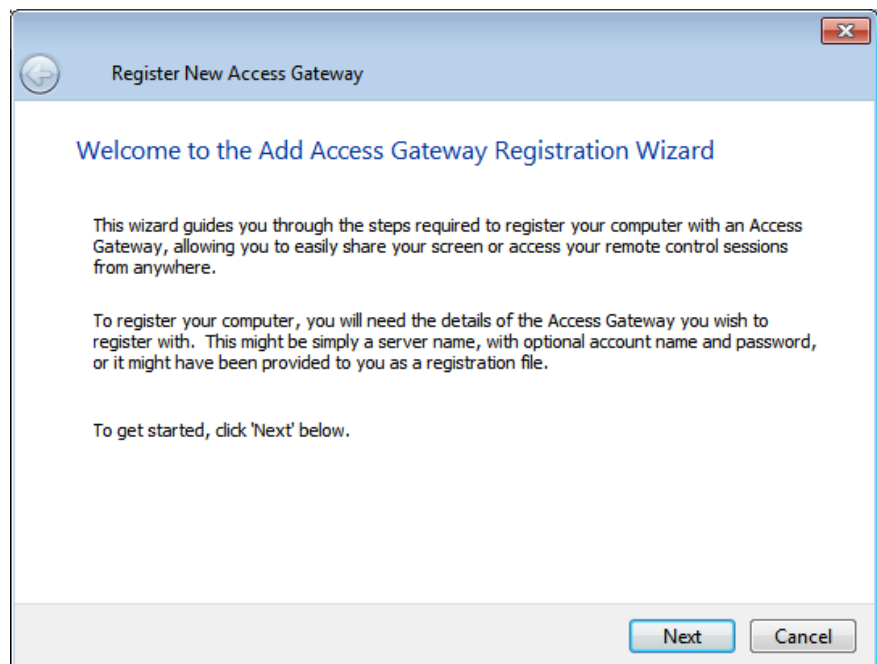
Once installation completes, you will be given the option to start the Remote Connector:



Tick the box if you want to start the Connector immediately, then click OK.

Initial Registration

When the Remote Connector is started for the first time it will automatically launch the Add Access Gateway Registration wizard:



This wizard allows you to configure the Remote Connector with all the details required to connect to the correct Access Gateway and create new sessions.

i Your Access Gateway administrator should have provided you with all the details you require, either as individual settings or bundled together in a single Gateway Registration File.

Click Next on the introductory page to display the Select Access Gateway page:

Register New Access Gateway

Select Access Gateway

Please enter the address of the Access Gateway you wish to register with below. This could be an IP address or a public internet address (for instance, 'helpdesk.example.com').

Alternatively, if you were provided with an Access Gateway Registration file, you can register automatically by browsing for it or typing its full path.

Register using Access Gateway address

Address:

Register using Access Gateway Registration file

File:

You have two options here – either to register with your Access Gateway by specifying details manually, or (if you have one) to use a Gateway Registration File to provide all the details automatically.

Providing Details Manually

To register with the Access Gateway by specifying details manually, you will need to type the address of your Access Gateway server in the Address field – this can be either a hostname or internet address such as gateway.sysgem.com, or an IP address such as 10.0.1.2:

Register New Access Gateway

Select Access Gateway

Please enter the address of the Access Gateway you wish to register with below. This could be an IP address or a public internet address (for instance, 'helpdesk.example.com').

Alternatively, if you were provided with an Access Gateway Registration file, you can register automatically by browsing for it or typing its full path.

Register using Access Gateway address

Address:

Register using Access Gateway Registration file

File:

Once you have entered the Gateway address, click Next; the wizard attempts to connect to your Access Gateway and displays the Access Gateway Credentials page:


The screenshot shows a window titled "Register New Access Gateway" with a back arrow icon on the left and a close button on the right. The main heading is "Access Gateway Credentials". Below the heading is a paragraph: "Please enter the Access Gateway account name and password you wish to use for this registration below, or select the anonymous option (if the Access Gateway allows it.)". There are three radio button options: "Contact" (with a button next to it), "Connect to Access Gateway anonymously", and "Connect using an Access Gateway account name and password" (which is selected). Below the selected option are two text input fields: "Account name:" containing "System" and "Password:" containing seven dots. At the bottom right are "Next" and "Cancel" buttons.

❗ If an error message appears, make sure you typed the address of the Gateway correctly and try again; if the test connection still fails, please check the address you are using with your Access Gateway administrator.

Because the default Access Gateway configuration does not allow anonymous users to connect using the Remote Connector, you will probably need to provide an Access Gateway account name and password at this point (again, these details should have been provided to you by your Access Gateway administrator). However, if your Access Gateway allows anonymous connections from Remote Connectors, or the Access Gateway's default account has not had its password changed, the wizard will pre-select appropriate details for you. If you do not wish to use these default details, you can change them as required.

❗ If the Access Gateway administrator has provided additional information for use during registration, a 'Contact' button will appear as shown above. Clicking this button will display this additional information.

Click Next to continue; the wizard will verify that the provided credentials are correct, and then display the Save Access Gateway Registration page:



Register New Access Gateway

Save Access Gateway Registration

Your new Access Gateway registration is ready to be saved. Please provide a display name for this registration, and select whether it should be made available to all users, then click Finish.

Display name:

Available to: Just me
 All users

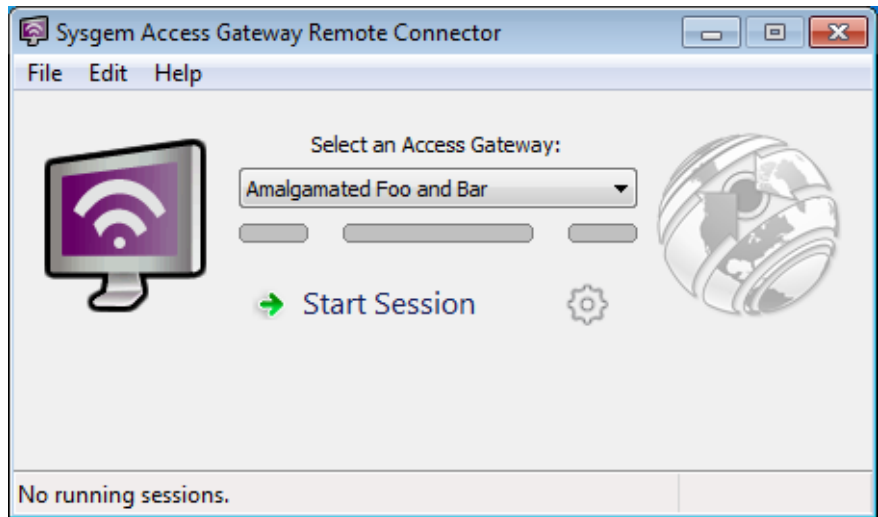
On this page you have the opportunity to change the name of the registration from the default name provided by the Access Gateway. You can also specify whether this registration should be available to just yourself, or to all users on the computer where you have installed the Remote Connector.

Each user of the computer has their own personal set of Access Gateway registrations, in addition to any registrations that are shared by all users; if there are no shared registrations, each user will have to register with the Access Gateway individually the first time they start the Remote Connector. Furthermore, if you wish to make use of certain types of persistent sessions, you will need to have at least one registration available to all users.

➤ Please see the Persistent Sessions section of this guide for more details on the different types of persistent sessions and their requirements.

ⓘ If you elect to make the registration available to all users, you may receive a UAC prompt to provide Administrator-level details so that the registration can be saved.

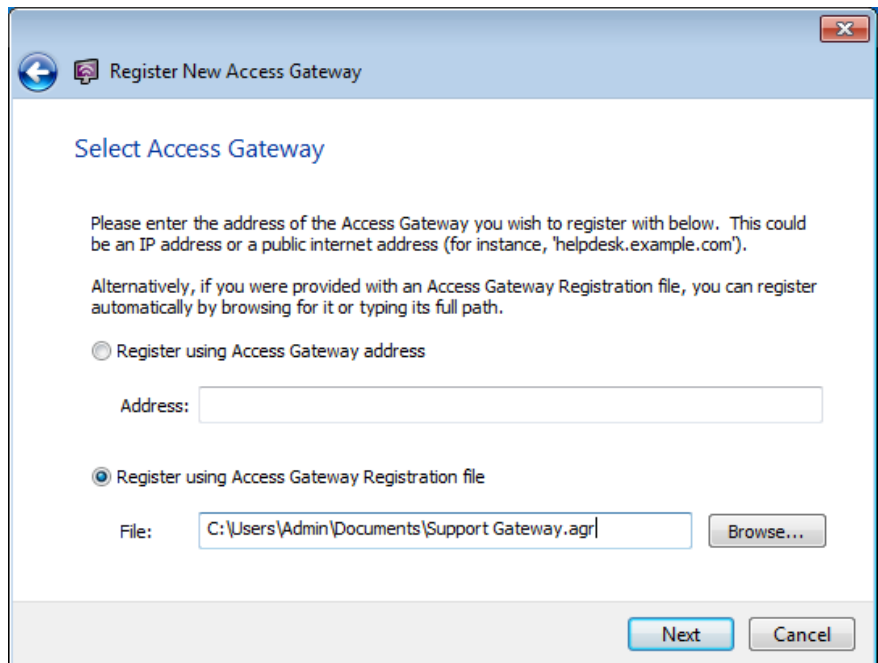
Finally, click Finish; the Add Access Gateway Registration Wizard closes, and you should see the Remote Connector window:



① Your Gateway registration is now saved for future use; you will not be prompted to register again.

Using a Gateway Registration File

To register with the Access Gateway using a registration file, you will need to provide the path of the file – either by typing it or using the Browse... button to locate it:



Click Next to continue; the wizard will use the details in the file to connect to the Access Gateway server and verify the provided information before displaying the Save Access Gateway Registration page:

The screenshot shows a window titled "Register New Access Gateway" with a back arrow icon on the left and a close button on the right. The main heading is "Save Access Gateway Registration". Below this, a message reads: "Your new Access Gateway registration is ready to be saved. Please provide a display name for this registration, and select whether it should be made available to all users, then click Finish." There is a text input field labeled "Display name:" containing the text "Amalgamated Foo and Bar". Below the input field, there are two radio button options under the heading "Available to:": "Just me" (which is unselected) and "All users" (which is selected). At the bottom right of the window, there are two buttons: "Finish" (with a shield icon) and "Cancel".

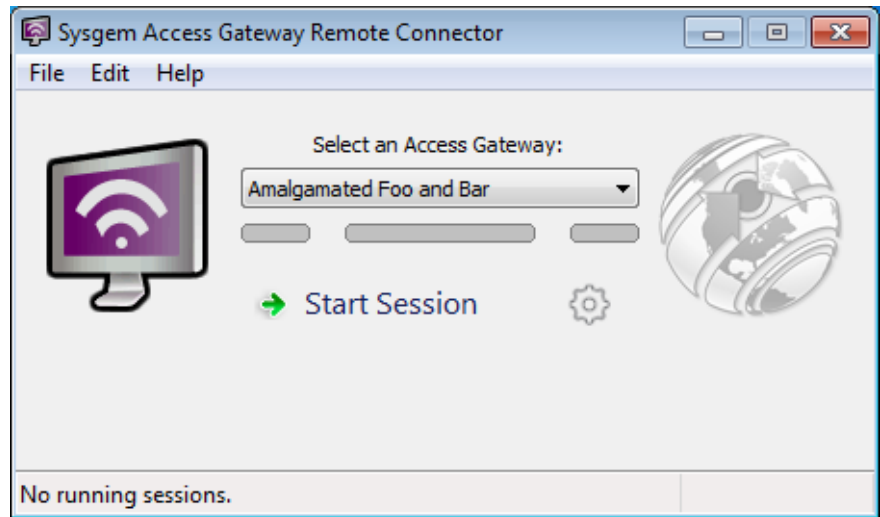
On this page you have the opportunity to change the name of the registration from the default name provided by the Access Gateway. You can also specify whether this registration should be available to just yourself, or to all users on the computer where you have installed the Remote Connector.

Each user of the computer has their own personal set of Access Gateway registrations, in addition to any registrations that are shared by all users; if there are no shared registrations, each user will have to register with the Access Gateway individually the first time they start the Remote Connector. Furthermore, if you wish to make use of certain types of persistent sessions, you will need to have at least one registration available to all users.

➤ Please see the Persistent Sessions section of this guide for more details on the different types of persistent sessions and their requirements.

ⓘ If you elect to make the registration available to all users, you may receive a UAC prompt to provide Administrator-level details so that the registration can be saved.

Finally, click Finish; the Add Access Gateway Registration Wizard closes, and you should see the Remote Connector window:



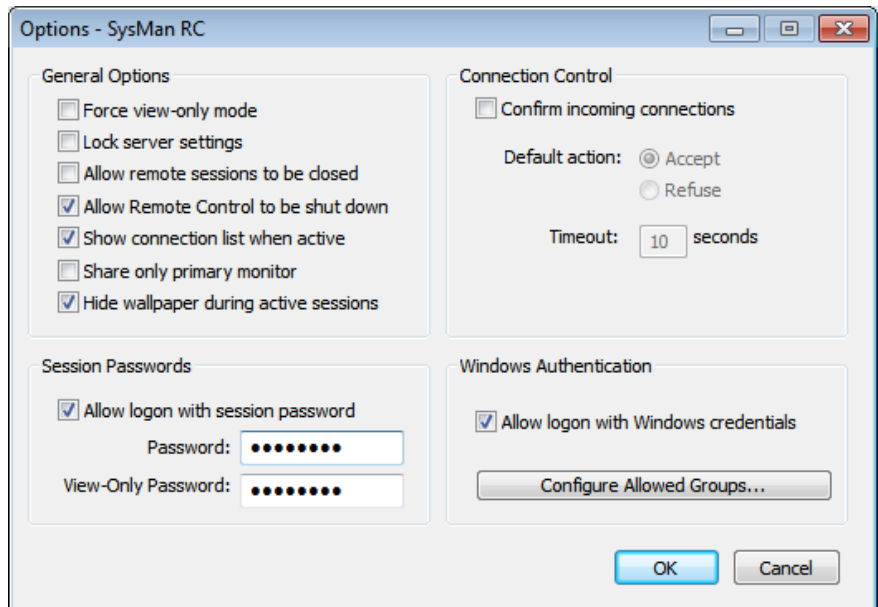
① Your Gateway registration is now saved for future use; you will not be prompted to register again.

Configuring the Remote Control Engine

The installation wizard prompts you to provide some basic configuration details for the SysMan Remote Control Engine; these are the session password (which allows remote users to connect using a single password instead of needing a valid Windows username and password for your computer), whether you will be prompted to accept incoming connections individually, and whether a list of current connections appears when remote users are connected to your session.

① In addition, the option to prevent changes to the Remote Control Engine settings is available; if this was selected during installation, the settings can only be changed remotely using SysMan or by reinstalling.

To configure additional options for the Remote Control Engine, including which Windows users are allowed to connect and whether remote users can interact with your session or just view it, you will need to use the Remote Control Options dialog box. This can be reached through the RC Engine Configuration option from the Remote Connector's Edit menu, and also (if you have the SysMan Remote Control Server installed) by right-clicking the Remote Control icon in the Windows notification area and selecting the Settings... option:



The available options are broken down into a number of groups.

General Options

These options control basic functionality of the Remote Control Engine:

- **Force view-only mode:** if this option is selected, the remote user can only observe your session and will not have the ability to control the keyboard and mouse.
- **Lock server settings:** this option will prevent any users of this computer (including yourself!) from changing the Remote Control Engine configuration; changes will need to be made remotely or by reinstalling.
- **Allow remote sessions to be closed:** if this option is selected, you will be able to disconnect remote users from your session, either individually or all at once.
- **Allow Remote Control to be shut down:** this option allows the Remote Control Server service to be shut down by the current user of the computer, by right-clicking the server icon in the notification area
- **Show connection list when active:** a small window listing the currently-connected remote users will be displayed whenever a Remote Control session is active.
- **Share only primary monitor:** if set, only the primary monitor (if you have several) will be shared with remote users.
- **Hide wallpaper during active sessions:** if set, the Windows desktop wallpaper will be temporarily hidden whenever there is an active Remote Control session, to improve connection performance.

i Please note that some of these options, such as 'Allow Remote Control to be shut down', apply mainly to the Remote Control Server and are less useful when using Access Gateway connections.

Connection Control

These options give the user control over incoming connections to their session:

- **Confirm incoming connections:** you will be prompted before any remote user is allowed to connect to your session. You can accept or reject the connection request.
- **Default action:** if no response is made to the prompt requesting permission to connect, then the default action (after the timeout period has elapsed) will be to accept or reject the connection, depending on this setting.
- **Timeout:** this defines the number of seconds before the session request is automatically accepted or rejected.

ⓘ If you set the default action to reject incoming connections, you may not be able to connect to persistent sessions unless someone is present to accept the connection! For more details, please see [When are Persistent Sessions Available?](#)

Session Passwords

These options control whether remote users can authenticate using a single password instead of providing valid Windows credentials for the computer:

- **Allow logon with session password:** if selected, the remote user can use the session password defined here to connect to the session without providing a Windows username and password.
- **Password:** this defines the session password.
- **View-Only Password:** if this alternate password is used to establish the connection, the Remote Control session will be in read-only mode.

ⓘ The View-Only Password can only be used if Windows Authentication is also enabled.

Windows Authentication

These options control whether remote users can authenticate using valid Windows credentials instead of a session password:

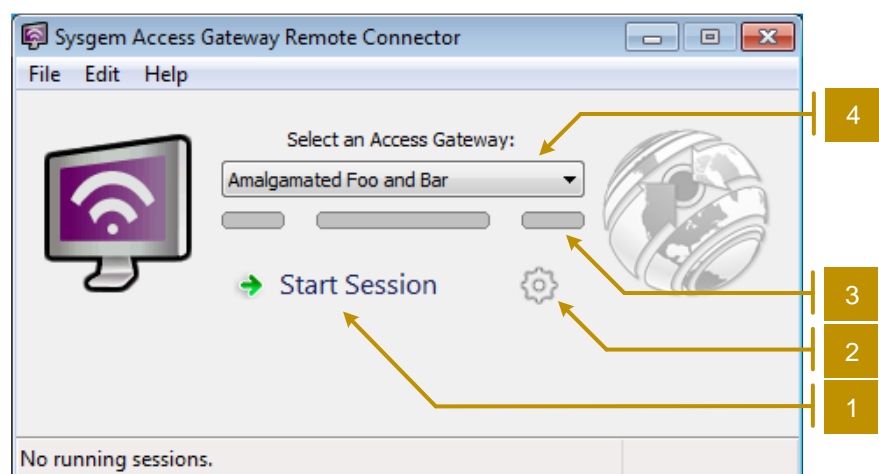
- **Allow logon with Windows Credentials:** this allows the remote user to connect to a session using a privileged user's Windows credentials.
- **Configure Allowed Groups:** assign connection privileges to Windows groups, or specific users. By default members of the built-in local Administrators group will be assigned full access.

Notes:

Basic Remote Connector Features

The Remote Connector Window

After starting the Remote Connector, the main window appears:

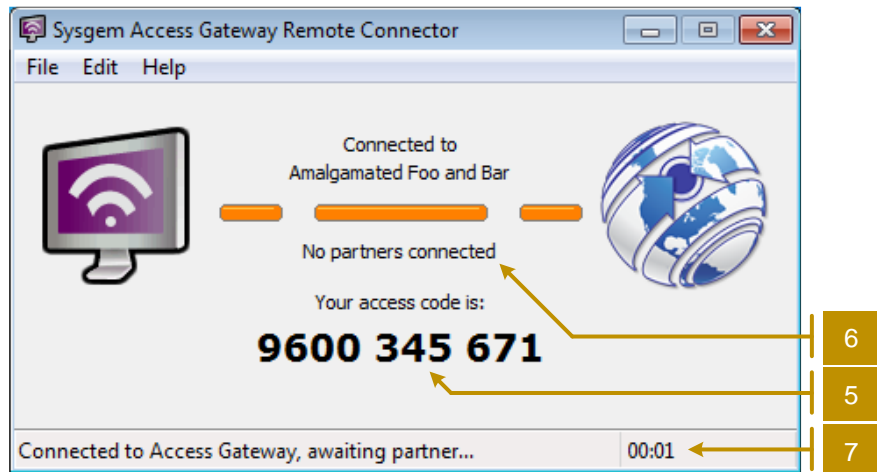


The main features of this window are as follows:

1. The Start Session button
2. The Options button, used to specify additional options before creating a session
3. The connection status indicators, which light up in turn as the connection to the Access Gateway is made; the globe at the right lights up when the connection is complete and your session has been created, whereas the large SysMan RC icon at the left indicates when a remote viewer has connected
4. The list of available Access Gateways

In addition, the window has a standard Windows menu bar and a status bar, providing any relevant informational messages about the Remote Connector.

After creating a session, as described in the following section, the window will change to reflect the current status of the active session:



5. The session's *access code* is displayed in place of the Start Session and Options buttons
6. A status message letting you know how many viewers are connected appears underneath the connection status indicators
7. The status bar changes to include a session information panel, showing a session timer or various other pieces of information at your preference

Creating a Session

To create a new session, make sure the correct Access Gateway is selected in the list above the connection status indicators (so far we have only registered with one Access Gateway, so this should be fine!), and then click the Start Session button.

i If you have registered with several Access Gateways, you can change which one is selected by default when starting the Remote Connector; please see the Working with Multiple Access Gateways section later in this guide for further details.

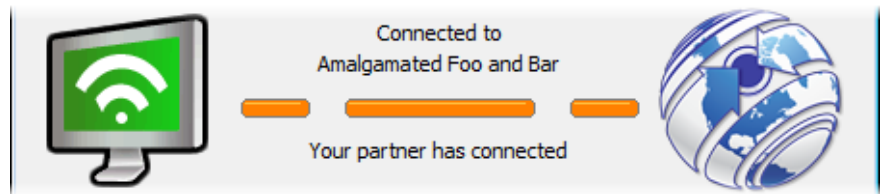
The Remote Connector will establish a connection to the selected Access Gateway and request a new session. Once the session is available, the globe icon at the right-hand side of the connection status indicators will light up and the access code for the session will be displayed.

You can now give this access code to the user of the Access Gateway client, so that they can connect to your session remotely. In addition, depending on how your Access Gateway is configured, users such as helpdesk staff may be able to connect to your session without you providing them with an access code directly.

i You can press CTRL+C or use the Copy Access Code option on the Edit menu to copy the access code to your clipboard if desired.

Once a remote user connects to your session, the SysMan Remote Control icon at the left-hand side of the connection status indicators will turn green to indicate that your session has at least one active viewer.

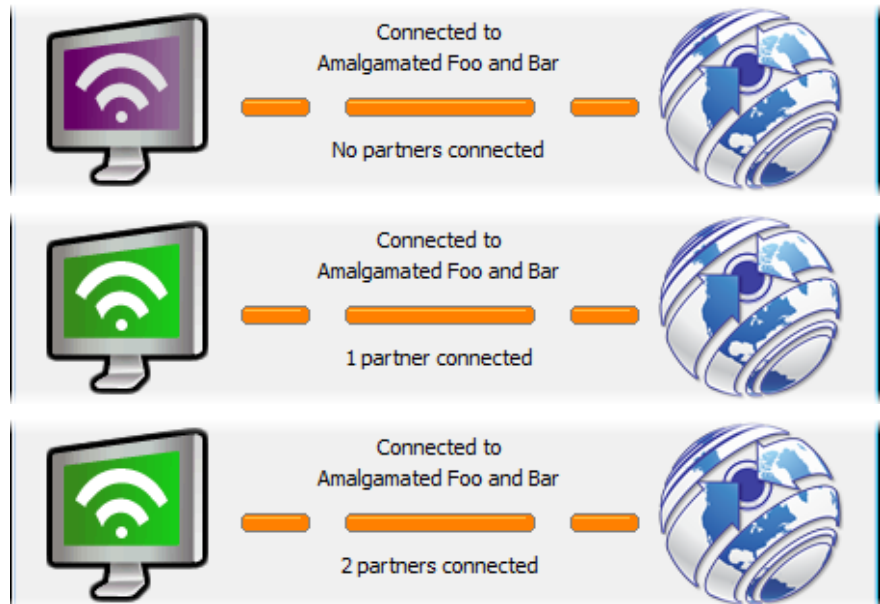
In addition, the text underneath the connection status indicators will change to reflect that the viewer has connected:



Allowing Multiple Viewers

When creating a new session, you have the choice of allowing multiple viewers to connect to it, or of restricting it to a single-use session. The access code of a single-use session is only valid for one viewer connection; as soon as that viewer connects, the code can no longer be used and the session will automatically close once the viewer disconnects.

However, when multiple viewers are permitted, a session will remain active until you explicitly close it, either by closing the Remote Connector window or by selecting Close Session from the File menu. When the session is active, viewers are free to connect to and disconnect from the session at will; your Remote Connector window will indicate how many viewers are connected at any time:

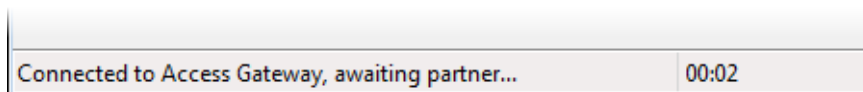


To create a session that supports multiple viewers, click the Options button in the main window (next to the Start Session button) before you start the session. Select the Allow Multiple Viewers menu option – you should find it ticked if you click the Options button a second time – and then start the session as before, by clicking the Start Session button.

① By default, this menu option will be deselected – creating single-use sessions – every time you start the Remote Connector. However, you can change this default setting on the Preferences tab of the Options dialog, which can be opened by selecting Options from the Edit menu.

Monitoring Session Status

As already described, the connection status indicator shows you whether a viewer has connected to your session, and (if appropriate) how many viewers are connected at any given time. However, additional status information is available and can be shown at the right-hand side of the status bar during a session.



By default this information pane shows a session timer, but it can be configured to show you any of the following information:

- Session timer
- Number of connected viewers
- Total data traffic used for the session so far
- Current bandwidth usage

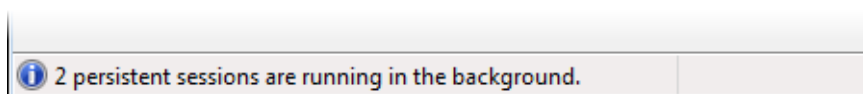
In addition, the pane can be configured to cycle through these options automatically at various speeds.

The data to show in this pane is selected via the Preferences tab of the Options dialog, which can be opened using the Options item on the Edit menu.

Informational Messages

The Remote Connector will also, if appropriate, provide general information in its status bar that is not specific to any session that may be running in the Remote Connector window itself.

For instance, if persistent sessions have been configured (see the Persistent Sessions section later in the guide), the status bar may display an informational message telling you that they are running in the background:



Double-clicking on such an informational message will open an appropriate dialog box to show further details, as required.

The Remote Connector will also ask for confirmation if you close the session or the window when there are still viewers connected to the running session, or if closing the Remote Connector will disrupt any running persistent sessions.

Persistent Sessions

About Persistent Sessions

The sessions we have looked at so far have required you to create them by hand by opening the Remote Connector window and clicking the Start Session button. This is fine when you are creating a session for someone else to use right away, for instance to show them something on your screen or ask for assistance, but what if you need to create a session that can be accessed when you aren't there to click the Start Session button?

The answer comes in the form of a *persistent session* – we use this term to distinguish such sessions from the normal, or *non-persistent*, sessions we have already seen. A persistent session is one that is created ahead of time, and then available to be used without any further interaction; it can be temporarily disabled and re-enabled, and the Remote Connector (or even the computer!) can be shut down and restarted, without the session's access code changing.

Persistent sessions are created and managed in a different fashion from non-persistent sessions, and there are some additional considerations to be borne in mind when using them; we shall explore these differences in this section.

Types of Persistent Session

There are two types of persistent session, and which one you select will depend on how exactly you intend the persistent session to be used. The two types are:

- *All-user* (or *console*) persistent sessions, which as the names suggest are available regardless of which user is logged into the computer where the session was created; a remote user connecting to the session will see whichever user is currently logged in locally to the computer (on its console), or the logon prompt if nobody is using the console.
- *Per-user* persistent sessions, which are associated with the Windows user who created them and so are only available when that user has logged into the computer, either at the console or via Remote Desktop.

① A per-user persistent session can also follow a user around different computers, if your network is configured to allow roaming profiles and they log into another computer with the Remote Connector installed.

Since most users probably prefer to connect to a computer's console regardless of whether someone is logged in – for instance, so that they can log in themselves after rebooting the computer remotely – we have made all-user persistent sessions the default type. To configure an all-user persistent session, you must be able to provide Administrator (or equivalent) credentials on the computer where the session is created; this ensures only authorized users can create these sessions, to prevent intrusion into other users' Windows sessions.

As well as the two fundamental types of persistent session, you can also choose whether each session allows multiple viewers or not, in much the same way as we have already seen for non-persistent sessions. A persistent session that allows multiple viewers works in exactly the same way as a similarly-configured non-persistent session – viewers can join or leave the session freely at any time. However, if multiple viewers are not allowed for a persistent session, there is a slight difference in behavior: although only one viewer is allowed to connect to the session at a time, once that viewer disconnects the session is automatically restarted to allow it to be used again. This can be useful for system administrators, for instance, who may not wish their remote control sessions to be interrupted or observed.

When are Persistent Sessions Available?

As described in Types of Persistent Session above, the two types of persistent session differ in terms of when they become available for connections.

An all-users persistent session is available whenever the Sysgem Access Gateway Remote Connector service is installed and running on the computer where the persistent session was connected; when the system boots, the Remote Connector will start as a background service and ensure that the persistent session is kept available regardless of which user is logged in on the console. This allows a system administrator, for instance, to always connect to the machine for remote maintenance purposes.

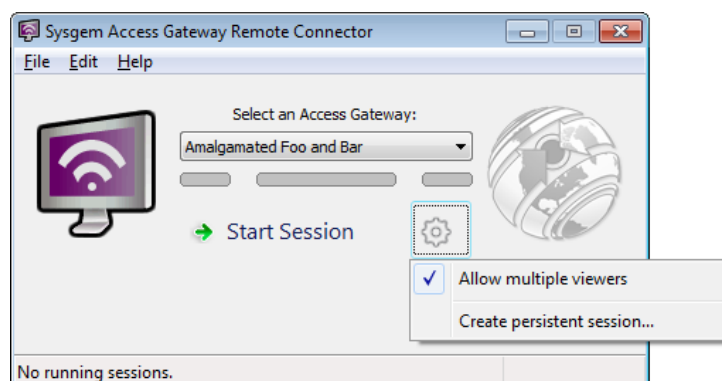
A per-user persistent session is only available when the Windows user who created it has logged in and the Remote Connector has been started in the background. When the Remote Connector is installed, it registers itself to run automatically in the background for every user who logs in, so that any per-user persistent sessions they create can be made available. However, a user can close the background Remote Connector using the popup menu available by right-clicking the Remote Connector's icon in the notification area; in this case, their per-user persistent sessions will not be available until the Remote Connector is restarted manually.

i A per-user persistent session works whether the user has logged in on the computer's console or via Remote Desktop or Terminal Services.

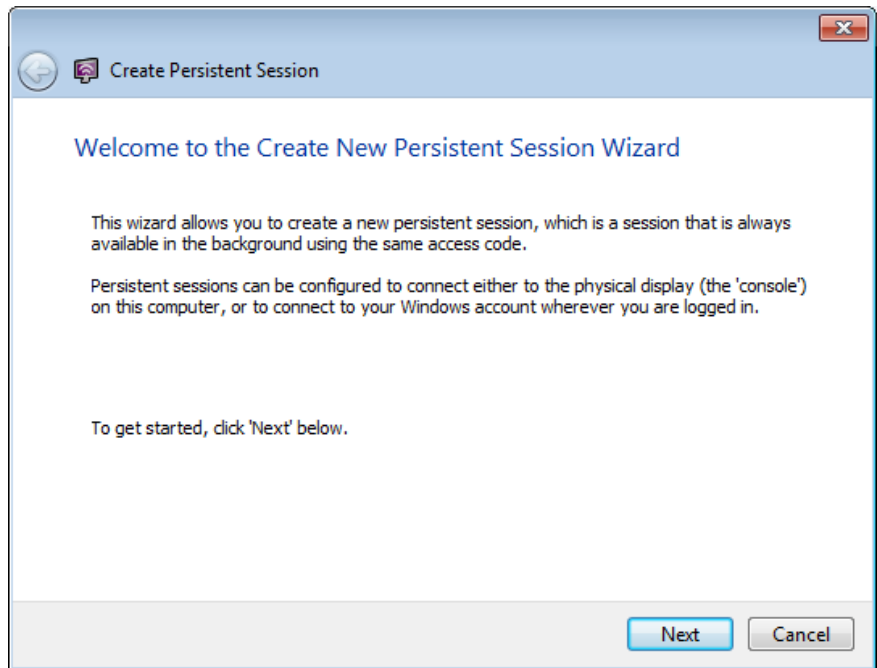
Both types of persistent session can also be temporarily disabled (as described in Enabling and Disabling Persistent Sessions later), although to disable an all-users persistent session you will need to log in to Windows as an Administrator or equivalent user.

Creating a Persistent Session

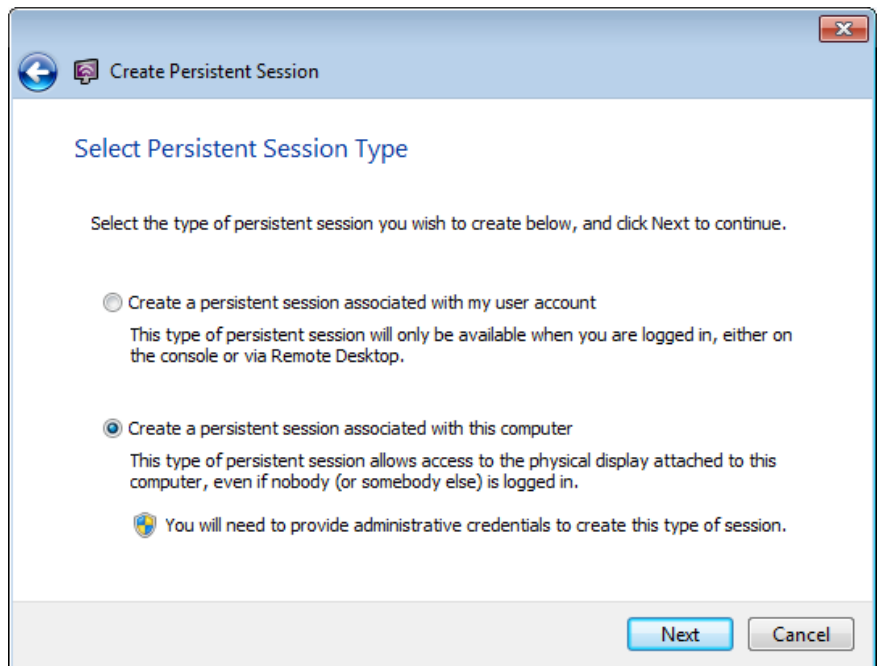
To create a persistent session, start the Remote Connector and click on the Options button (next to the Start Session button). From the menu that appears, select the Create Persistent Session option:



The Create New Persistent Session Wizard will appear, showing some introductory text:



Click Next to continue; the wizard will ask you which type of persistent session you would like to create:



The wizard warns you if you will be required to provide Administrator (or equivalent) credentials to create an all-users persistent session; if you do not have these credentials, you can only successfully create a per-user session.

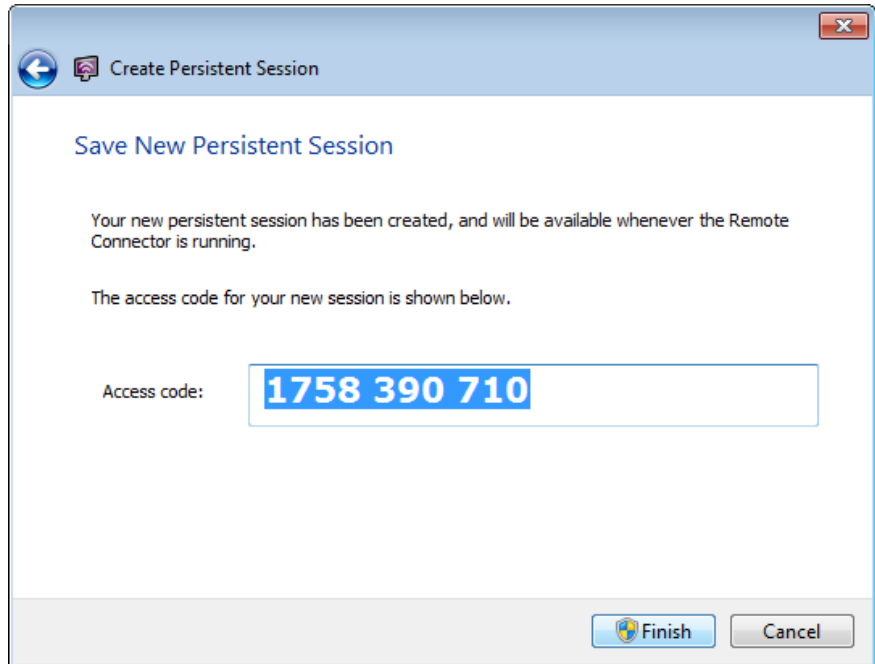
Select the type of session to create, and click Next; the wizard asks you to specify the details of the new session:

Here you can specify a descriptive name for the session, to allow you (or the Access Gateway administrator) to identify it in the list of persistent sessions; you can also choose whether the session should allow multiple users at once, as described in Types of Persistent Session above.

You also need to choose through which Access Gateway this session should be made available. If you have only registered with one Access Gateway you can just click Next, but otherwise you should ensure the correct Access Gateway is selected before proceeding.

i If you are creating an all-users persistent session, you can only select from Access Gateway registrations that are also available to all users. This is because the session needs to be made available via an Access Gateway even when no particular user is logged in.

When you are happy with the settings on this page, click Next to create the session. The Remote Connector will connect to the selected Access Gateway and create the new persistent session, then give you the associated access code:



Click Finish to save the persistent session; it will be made available immediately, unless the Remote Connector warns you otherwise (for instance, if the required service is not running when you have created an all-users persistent session).

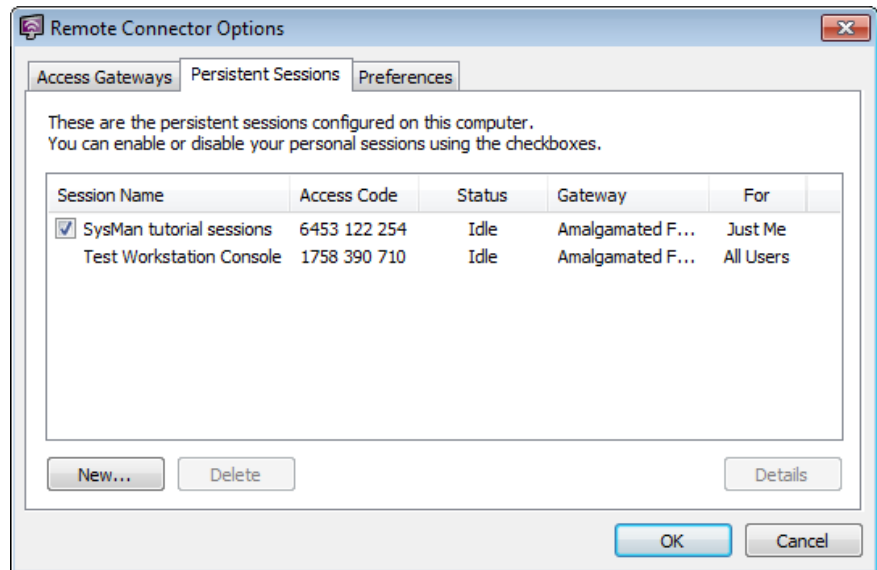
Managing Existing Persistent Sessions

Once a persistent session has been created, it can be managed using the Persistent Sessions tab of the Remote Connector's Options dialog. This dialog, available through the Edit menu, allows you to check on the status of your persistent sessions, as well as enable, disable, rename or delete them as required.

i You will need Administrator (or equivalent) permissions to manage all-users persistent sessions.

Checking the Status of a Persistent Session

After opening the Options dialog and selecting the Persistent Sessions tab, a list of current persistent sessions is displayed, containing both the all-users sessions for this computer and your own per-user sessions:



The list shows the session name and access code, as well as the name of the associated Access Gateway registration and whether each session is available to all users or just yourself. In addition, a status column gives you a simple overview of the status of each session:

- Idle – the session is currently being made available, but no viewers are connected
- In use – the session is currently being made available and one or more viewers are connected
- Finished – the session is not configured to allow multiple viewers, and a viewer has just disconnected; the session will be restarted and become Idle shortly
- Disabled – the session has been disabled temporarily (see below)
- Error – the session is not being made available due to a temporary error
- Inactive – the session is not being made available because the required service or background process is not running
- Invalid – the session is not being made available due to a permanent error, and as a result will not be able to be restarted in the future

i The most common reason for a session to become Invalid is that the Access Gateway administrator has deleted the persistent session remotely.

To obtain additional details on a session, such as an error message (if appropriate) or when the status was last updated, select the session in the list and click the Details button.


Enabling and Disabling Persistent Sessions

Persistent sessions can be enabled or disabled from the same list as just seen under Checking the Status of a Persistent Session. A session is enabled if the checkbox next to it is ticked – clearing the tick from the box will disable the session after you click OK to close the Options dialog. To re-enable a session, simply tick the box again.

You can only enable or disable an all-users persistent session if you are logged in or started the Remote Connector as an Administrator (or equivalent) user; if the checkboxes do not appear next to such a session, close the Remote Connector and restart it using the 'Run as administrator' or 'Run as different user' options found by right-clicking the Remote Connector icon on the desktop or in the Start menu or screen.

Renaming a Persistent Session

To rename a persistent session, locate it in the persistent session list (as seen under *Checking the Status of a Persistent Session*) and double-click on it. You can then type a new name and press Enter to save it; the session will be renamed when you click OK to dismiss the Options dialog box.

 You will be prompted to elevate to an Administrator (or equivalent) user when you close the dialog box after changing the name of an all-users persistent session.

Deleting a Persistent Session

To delete a persistent session, select it in the persistent session list (as seen under *Checking the Status of a Persistent Session*) and click the Delete button. The Remote Connector will prompt you to confirm that you wish to delete the selected session or sessions; once you confirm this prompt the session will be removed from the list.

The session will be terminated (if currently running) and deleted with no further confirmations once you click OK to dismiss the dialog box. Once a session has been deleted, it cannot be restored – you will need to create a new session with a new access code if you later change your mind!

Notes:

Access Gateway Registrations

About Access Gateway Registrations

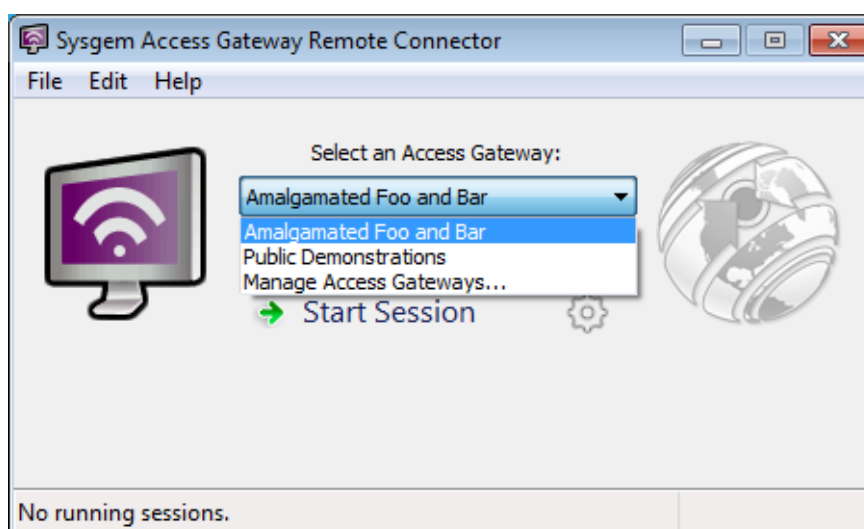
In order to connect to an Access Gateway, the Remote Connector requires several pieces of information – mainly the address of the Access Gateway server along with a suitable account name and password. These details are collected together into an Access Gateway *registration*, allowing you to easily select the Access Gateway you wish to connect to.

Every (Windows) user of the computer has their own private set of registrations, as well as a shared set that is made available to all users.

① Only all-users Access Gateway registrations can be used to create all-users persistent sessions; apart from this restriction, all-users and per-user registrations behave identically.

Working with Multiple Access Gateways

When the Remote Connector is not connected to an Access Gateway (that is, before the Start Session button has been clicked), a list appears above the connection status indicators allowing you to select which Access Gateway should be used when the next session is started:



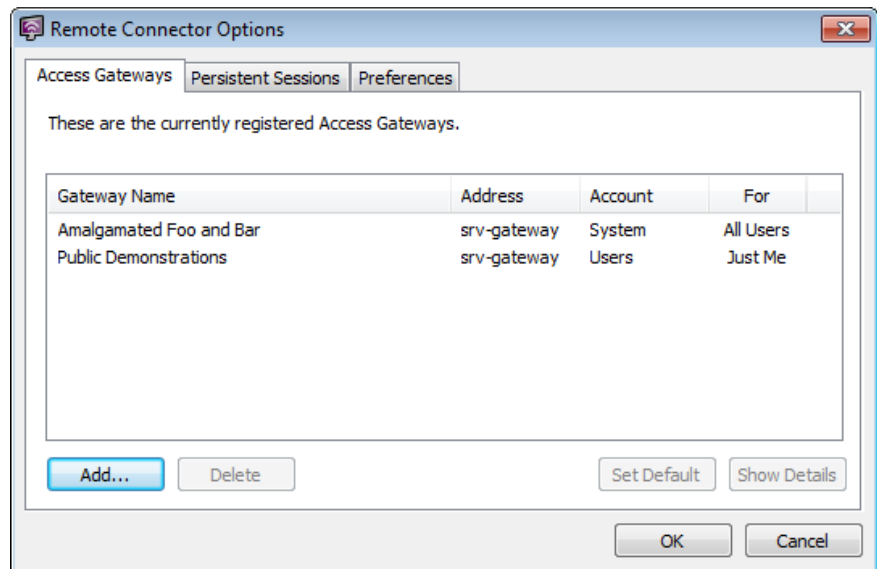
Switching between Access Gateways is as simple as changing the selection in this list. The default selection can be configured in the Options dialog box, as described in the following section.

You will also find that a similar list of Gateway registrations is shown in the Create New Persistent Session wizard; this allows you to select the Access Gateway through which a persistent session should be made available. Again, simply select the correct registration from the list before creating the session.

i Note that a persistent session is associated with the Access Gateway on which it was created; you cannot move it to a different Access Gateway later, so make sure you select the correct registration in the wizard!

Managing Access Gateway Registrations

The Remote Connector's list of Access Gateway registrations can be managed by selecting the Manage Access Gateways... option from the drop-down list in the main Remote Connector window; this will display the Access Gateways tab of the Options dialog:



i This dialog can also be opened using the Options item on the Edit menu.

The list shows both personal (per-user) and shared (all-users) registrations; however, Administrator permissions (or equivalent) are required to make any changes to the shared registrations. You may be prompted to elevate with suitable credentials if required.

i Any changes you make to the Access Gateway registrations will take effect immediately; cancelling the dialog box will not restore your original settings or registrations!

The default registration – the Access Gateway that will be selected each time the Remote Connector window is opened – is highlighted in bold. To change the default registration, select the desired Gateway in the list and click the Set Default button.

The Show Details button allows you to perform a test connection to the selected Access Gateway; after pressing the button, the Remote Connector connects to the Access Gateway and displays its official name, along with any contact details or additional information that has been configured. If the connection fails, you will instead receive an error message describing the problem.

Registering with a New Access Gateway

To create a new Access Gateway registration, click the Add button below the list. The Add Access Gateway Registration wizard will appear, as we have already seen when we first started the Remote Connector; follow the wizard's prompts, as described earlier in the Initial Registration section.

Deleting an Access Gateway Registration

To delete an Access Gateway registration, select it in the list and click the Delete button; the selected registrations will be deleted immediately.

Changing an Access Gateway Registration

It is not possible to change the details associated with an Access Gateway registration once it has been created; should this be necessary at any point, please delete the existing registration and then create a new one, as described above.

Notes:

The One-Click Connector

What is the One-Click Connector?

A One-Click Connector package is a small, self-contained application package provided by your Access Gateway administrator, which is configured to automatically connect to an Access Gateway and create a session.


The One-Click Connector does not need to be installed, and does not leave any files or components on your computer once the session has finished and the Remote Connector window has been closed.

However, because of this, the One-Click Connector cannot be used to configure persistent sessions or to connect to different Access Gateways.

Using the One-Click Connector

The One-Click Connector is started by simply running the package, for instance after downloading it from your support website. The package will prepare itself before displaying the Remote Connector and automatically creating a session, as if you had selected the appropriate Access Gateway and clicked the Start Session button yourself. When you are finished with your Access Gateway session, simply close the Remote Connector window.

Most of the features of the Remote Connector window are available in the same way as they would be for a full Remote Connector installation; please see the Basic Remote Connector Features section for details of this window. However, you will not be able to create a persistent session, and the Options dialog box will not allow you to view or modify any persistent sessions or Access Gateway registrations.

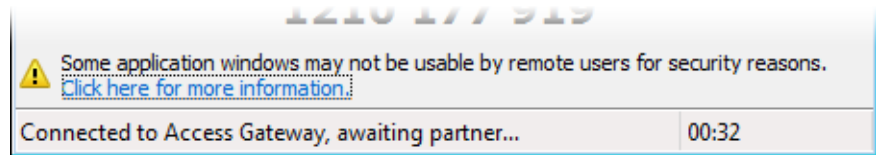
 Any changes you make to the Preferences settings in the Options dialog box will be saved for future use, and will also affect any Remote Connector installation on your computer.

Privileged Applications and the One-Click Connector

As part of the security features included in Windows, the remote user connected to a One-Click Connector session may have difficulties interacting with some applications that are running with elevated permissions (such as Control Panel applets or applications that trigger a UAC elevation prompt when started).

This is due to a feature called User Interface Privilege Isolation, or UIPI, which prevents applications started by a normal user from communicating with applications running at a higher privilege level. In this situation, the One-Click

Connector may be able to display the contents of such application windows, but the remote user will find the window appears to be 'frozen' and not reacting to their input. If the One-Click Connector detects that UIPI is in effect and might prevent the remote user from working with privileged applications, a warning message will be displayed at the bottom of the One-Click Connector window:

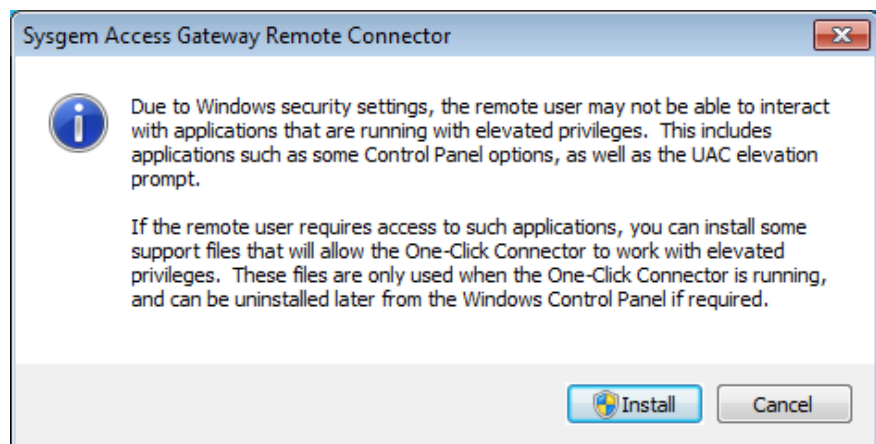


Installing Support Files to Allow Interaction

Windows does provide a mechanism that allows certain classes of program (such as remote control utilities) to interact with privileged applications despite UIPI, but in order to preserve the security of the system this mechanism only applies to programs that have been installed by an Administrator user – such as the full Remote Connector package. Since the One-Click Connector is not installed on the computer where a session is started, it cannot use this mechanism unless the Remote Connector has also been installed on the same computer.

- ① If the Remote Connector has been installed on the computer where a One-Click Connector is started, it will be used automatically and the warning message will not appear in the One-Click Connector window.

However, the One-Click Connector can also optionally install a small set of support files on the computer where it is running; once this is done, Windows will allow it to make use of the same mechanism to allow the remote user full access to privileged applications. This option is available after clicking the 'more information' link in the warning message at the bottom of the One-Click Connector window:



Clicking the Install button in this dialog box will display a UAC prompt; once permission has been granted (and appropriate Administrator credentials have been provided, if required), the support files will be installed and the One-Click Connector will make use of them automatically. Once the support files have been installed and are in use, the warning message will disappear from the bottom of the One-Click Connector window.

- ① If one or more remote users are already connected to the One-Click Connector session, the support files will only be used after all users have disconnected. This avoids disconnecting users in the middle of a session.

Upgrading the Support Files

If the installed support files are from an older version of the One-Click Connector, they may need to be updated before they can be used. In this case, the security warning prompt will appear in the same manner as above; simply follow the prompts to install the files as normal and they will be upgraded to the correct version.

Uninstalling the Support Files

The support files installed by the One-Click Connector are small, and are not used except when a One-Click Connector is running; they do not need to run at startup or in the background. However, if it is desired to remove the support files for any reason, this can be done using the standard Uninstall option in the 'Add or remove programs' section of the Windows Control Panel.

Notes:

Glossary of Terms

A

access code

A short code used to identify and connect to an Access Gateway session.

Access Gateway account

A name and password used to connect to an Access Gateway server.

Access Gateway client

The software used to connect to an Access Gateway session and view or control the remote user's screen. Included with and installed as an integral part of all SysMan products.

Access Gateway Management Tools

The software used to configure and manage an Access Gateway server. Included with and installed as an integral part of all SysMan products.

Access Gateway registration

The configuration information required to connect to a given Access Gateway, given a friendly name for reference and stored within the Remote Connector, Access Gateway client and Management Tools.

Access Gateway Registration file

A file containing all the details required to connect a Remote Connector or Access Gateway client to an Access Gateway server.

Access Gateway Remote Connector

The software used to create Access Gateway sessions and allow remote users to view or control your screen.

Access Gateway server

The central software component of the Access Gateway. Installed on a central server that is accessible to all other Access Gateway users, the Access Gateway server provides communication facilities for the Access Gateway Remote Connector and client components.

Access Gateway session

An individual remote control session, established by a user running the Access Gateway Remote Connector and identified with a short access code.

account isolation

A feature of the Access Gateway server, allowing the administrator to individually control which Access Gateway accounts are allowed to connect to sessions created by other accounts (*see* basic permissions *and* advanced permissions.)

advanced permissions

The additional access permissions and restrictions that take effect when account isolation has been enabled; advanced permissions consist of a list of Access Gateway accounts that can view a given account's sessions, and *vice versa*. (*See* account isolation *and* basic permissions.)

B**basic permissions**

The set of access permissions associated with every Access Gateway account, whether account isolation has been enabled or not; basic permissions control whether an account can be used for connections from the Remote Connector and/or the Access Gateway client.

C**channel**

A connection between a viewer and a session; the Access Gateway is licensed based on maximum concurrent open channels. Each individual viewer of a session counts as using one channel, but a session with no connected viewers does not count towards the number of licensed channels.

M**multiuser session**

A type of Access Gateway session that allows multiple viewers to connect to it simultaneously. Users may connect and disconnect freely until the session is closed.

N**non-persistent session**

A type of Access Gateway session that is created interactively by a user using the Remote Connector. A non-persistent session can only be used until the user closes the Remote Connector.

O

One-Click Connector

A small self-contained program that is customized with your Access Gateway details and configuration settings. Users can create Access Gateway sessions by simply running your One-Click Connector package (*e.g.* after having downloaded it from your intranet), without any requirement to install the Remote Connector ahead of time.

P

persistent session

A type of Access Gateway session that runs in the background and remains available whenever the Remote Connector is running. Persistent sessions retain their access codes even when the Remote Connector is shut down and restarted.

R

registration (*see also* Access Gateway registration)

The process of creating an Access Gateway registration from within the Remote Connector or the Access Gateway client.

registration file

see Access Gateway Registration file

S

session

see Access Gateway session

single-use session

A type of Access Gateway session that can only be connected to once; after the remote user has connected, the session's access code is no longer valid for any other users to use.

SysMan

A family of system management products from Sysgem; used to refer to any member of the SysMan family, *e.g.* SysMan Remote Control or SysMan Utilities.

SysMan Explorer

The tree view window to the left of the SysMan workspace, showing all computers, Access Gateways and management options available to the user.

SysMan Professional

A product in the SysMan family that provides the same features as SysMan Utilities, along with multi-user support for central authentication, auditing and authorization.

SysMan Remote Control

A product in the SysMan family that provides just the Remote Control and Access Gateway-related features, as opposed to the full set of Windows management utilities available in other SysMan products.

SysMan Remote Control client

The GUI application that allows a user to interact with a SysMan Remote Control Server or an Access Gateway session. Included with and installed as an integral part of all SysMan products.

SysMan Remote Control Engine

The underlying component of the Access Gateway Remote Connector and SysMan Remote Control Server that provides them with remote control capabilities. The SysMan Remote Control Engine configuration includes various settings that are shared between the Remote Connector and Remote Control Server running on the same computer.

SysMan Remote Control Server

The server component of SysMan Remote Control, allowing direct access to computers in a LAN environment.

SysMan Utilities

A product in the SysMan family that provides Windows management tools as well as all of the Access Gateway management and client facilities included in SysMan Remote Control.

W

Windows Management Instrumentation

A Microsoft technology allowing remote administration and configuration of Windows systems; used by SysMan and the Access Gateway management tools to work with remote computers.

WMI

see Windows Management Instrumentation