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**Sysgem Access Gateway**

# **Getting Started**

**Sysgem AG**



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# Welcome

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## Introduction

Welcome to the Sysgem Access Gateway – a hassle-free remote access solution which leaves you in control.

We hope you find the Access Gateway straightforward to install and use, but we recommend you read through this Getting Started guide to familiarize yourself with the organization and operation of the Access Gateway components.

Once you have installed your Access Gateway and become comfortable with its basic functionality, you will no doubt wish to explore the further features and options that it makes available to you. There are described in detail in other parts of the Access Gateway documentation; for more details, please see the About This Manual section.

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## About This Manual

This is the first 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: Server Connector User's Guide
- Volume 4: Client Connector User's Guide

The other three volumes should be available from the same location as this one, or from your distributor or Sysgem's web site.

➤ 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 Getting Started guide is a top-level overview of the Access Gateway components and their basic operation. Each section of the guide begins with a short explanation of the subject it covers, which should allow you to quickly locate information of interest as you work with the software.

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 not covered until later in this guide, or are advanced features that are covered elsewhere.

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 make 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](mailto:support@sysgem.eu) for assistance.

# Sysgem Access Gateway: An Overview

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## About This Section

This section of the Getting Started guide aims to explain what the Access Gateway software can do for you, how the major components interact, and how a typical installation might be organized. The typical installation described is used as the basis for the later sections of the guide, so you may wish to refer back to it as required.

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## What is the Sysgem Access Gateway?

The Sysgem Access Gateway is a product that provides you with secure, controlled remote access to the desktops of Windows workstations, laptops and servers, whether you (or they) are inside or outside your network boundaries.

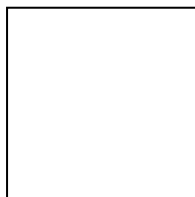
By installing the Access Gateway on your own network, instead of relying on a third party to provide similar services using their external servers, you retain control and oversight of remote sessions without exposing your data or users to a system that you don't control.

Access Gateway is an integrated member of Sysgem's SysMan family of products, and can be used either stand-alone or as part of an existing SysMan or Sysgem Enterprise Manager installation.

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## What are the Major Access Gateway Components?

The major components of the Access Gateway installation are shown in the diagram below.

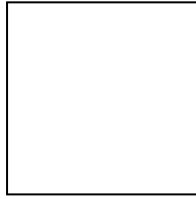


The Access Gateway itself is a software service that should be installed on a central server, accessible to all other Access Gateway components. This server can be inside or outside your network, as best suits your particular requirements; the only requirement is that your firewalls allow it be accessed from any location that an Access Gateway user may wish to use it from.

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## A Typical Access Gateway Installation

A typical installation of the Sysgem Access Gateway is shown in the diagram below. This diagram represents the requirements of the hypothetical customer we will be visiting throughout this guide, Amalgamated Foo and Bar Inc.:





# The Access Gateway Service

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## About This Section

This section of the Getting Started guide illustrates the steps required to install the Access Gateway service on a suitable server, as well as the management tools that will be used to configure and maintain it.

The activities performed in this section take place on the machine MACHINE in our example network.

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## Prerequisites

The Access Gateway service does not depend on any other Access Gateway components, and so should be the first component to be installed.

The service should be installed on a Microsoft Windows system, and also requires that version 4 of the Microsoft .NET Framework is present; as a result, Windows versions starting with Vista/Server 2008 are supported. No other software is required before installing.

The system you choose to use as the Access Gateway server should be accessible on the network from all locations where the Access Gateway users may wish to connect to it. This may require that your firewall configuration is updated to allow inbound connections to the Access Gateway; however, for initial testing within your network this should be unnecessary.

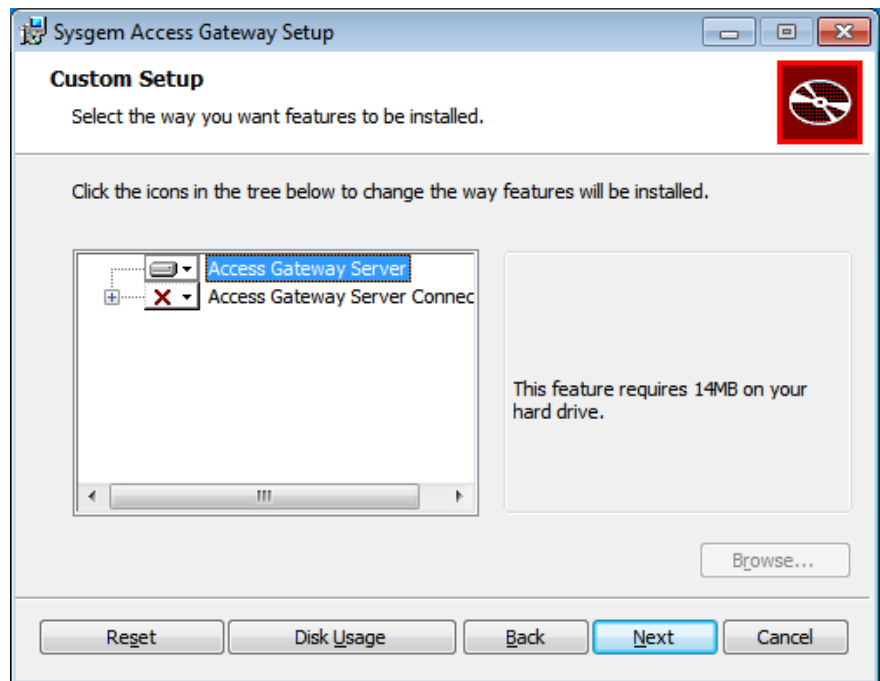
➤ More information about network and firewall requirements can be found in the Configuration and Administration Guide.

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## Installing the Central Service

The Access Gateway service is installed using a standard Windows Installer kit; this can be obtained from your distributor or the Sysgem website.

The installation procedure should be straightforward; there are no questions to answer during the installation wizard, although it may ask you to select the components to install:



At this point, ensure that the Access Gateway Server is selected; you may also want to select the Remote Control Server and Server Connector options, to provide remote access to the Gateway server via the Gateway itself.

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## Installing the Management Tools

The Access Gateway is configured and managed through the standard SysMan Utilities interface. If you have an existing SysMan installation you do not need to install a new one just for the Access Gateway; the management tools are included in every edition of SysMan:

- SysMan Utilities Standard Edition
- SysMan Utilities Professional Edition
- SysMan Utilities Free Edition
- SysMan Remote Control

However, if you do not currently have a SysMan product installed, you will need to install one before you can make use of the Access Gateway. So that we can concentrate on the Access Gateway-related facilities of SysMan, we will use the Remote Control edition for the remainder of this guide; the more advanced editions will work identically (with the exception of the Professional Edition, which will require you to log into SysMan before starting.)

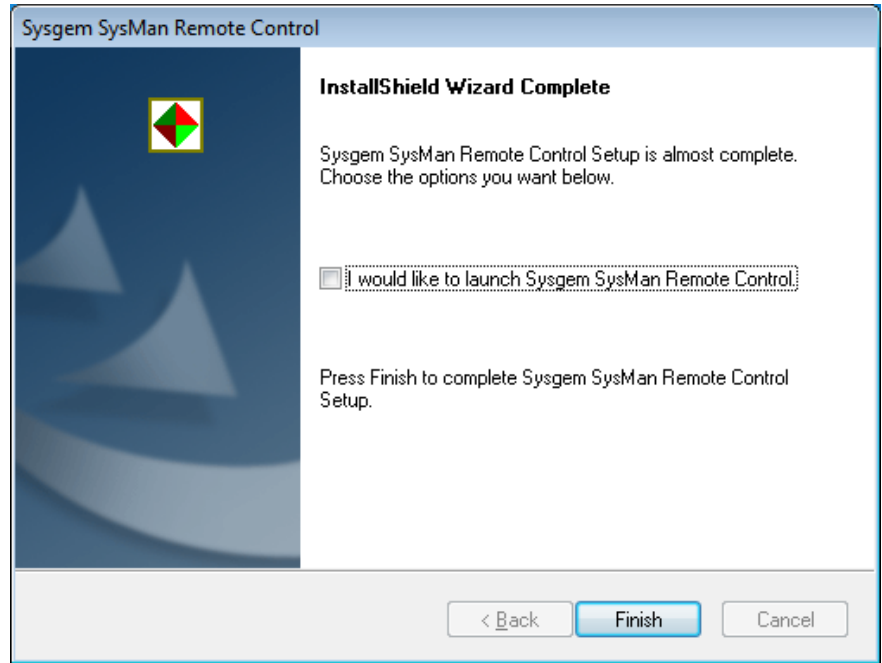
➤ More information on choosing and installing SysMan editions to use with the Access Gateway can be found in the Configuration and Administration Guide.

If you have an existing SysMan installation, feel free to skip the following section and proceed directly to the Registering the Access Gateway in SysMan section. However, you may want to ensure your version of SysMan is up-to-date before doing so; for more details, please see the Updating an Existing SysMan Installation section.

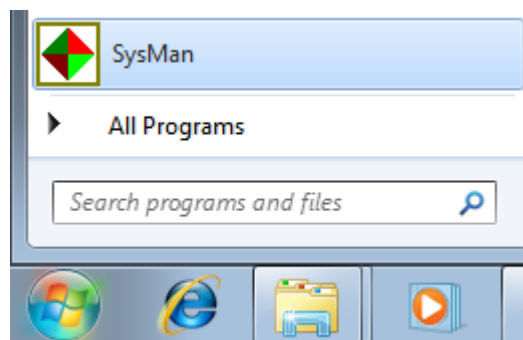
## Installing SysMan Remote Control

The Remote Control edition of SysMan is available from your distributor or from Sysgem, and is provided as a separate installation kit.

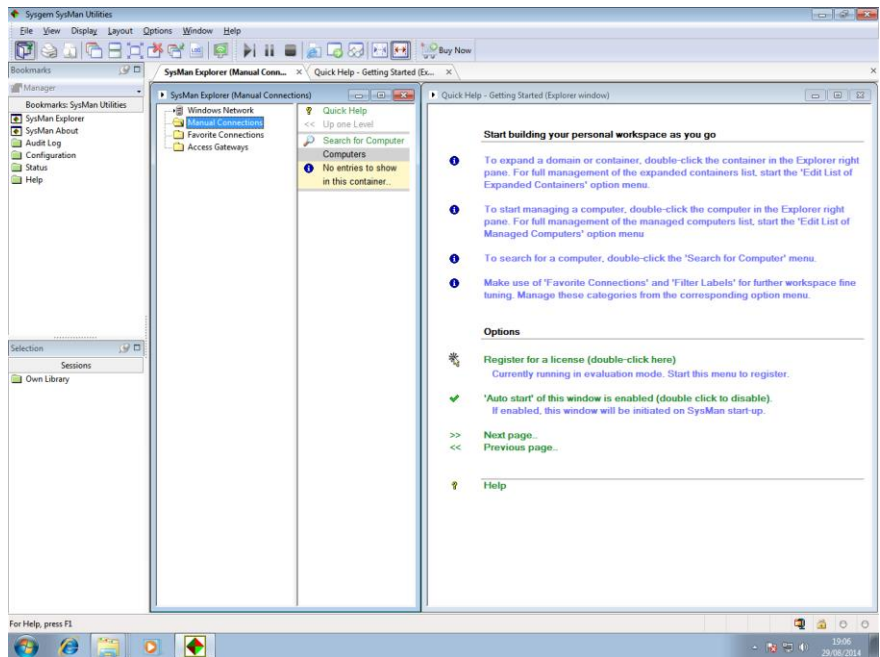
Installation is straightforward; the installation routine will ask you to agree to the SysMan license agreement, and then provide your name and company details. Once these steps are complete, just continue through the wizard until SysMan Remote Control has been installed.



Once the installation has completed, you will be asked if you wish to start SysMan right away. Tick the box to launch the SysMan environment; alternatively, you can leave it without a tick and launch SysMan at a later time using the relevant icon on your Windows desktop or Start Menu:



When SysMan starts, it will display the SysMan Explorer and Getting Starting windows as shown below:

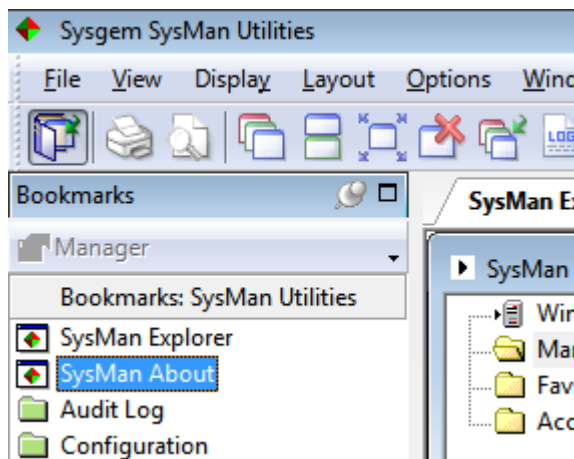


You are now ready to continue with configuring the Access Gateway, as described in the Registering the Access Gateway in SysMan section.

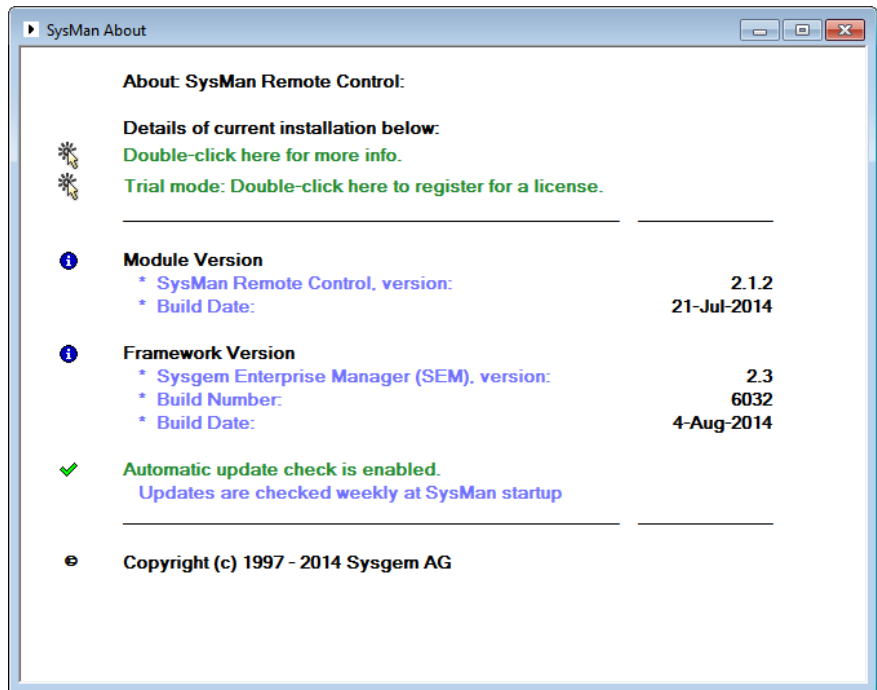
## Updating an Existing SysMan Installation

The configuration and management tools for the Access Gateway were first introduced in SysMan version 3.0.0, along with the Access Gateway support in the Remote Control client. If you have an existing SysMan installation that predates this version, you will need to ensure it is up-to-date before you will be able to connect to your new Access Gateway installation.

To check the version of SysMan you are currently running, start SysMan as usual (and, in the case of SysMan Professional, logging in), and then select SysMan About from the Bookmarks pane:



This will display the SysMan About window, containing details about your currently-installed SysMan version:



If this version is before 3.0.0, you will need to update to the latest version. The update kit can be obtained either using the Check For Updates option in the SysMan About window, or from your distributor; once you have obtained it, it can simply be installed over the top of your existing installation following the usual installation procedure for your SysMan edition.

❗ If you are using SysMan Utilities Professional Edition, you may only need to update the central Authorization Server.

➤ More information about updating SysMan can be found in the documentation supplied with SysMan.

## Registering the Access Gateway in SysMan

Once you have started SysMan and have the SysMan Explorer window visible on the left of your workspace, it is time to connect to your Access Gateway and perform the initial installation checks and optional configuration steps.

To get started, you will need to inform SysMan of your Access Gateway's network location and any required access credentials. This process is called registration, and is performed from within SysMan Explorer.

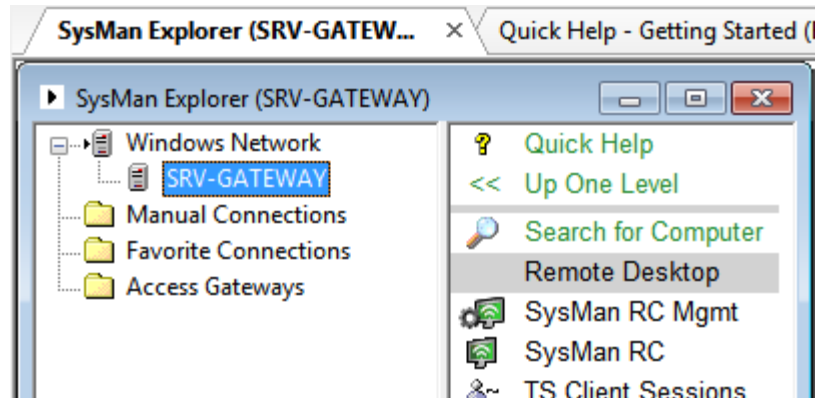
You can register an Access Gateway for management purposes in one of two ways:

- By browsing the SysMan Explorer tree to locate the Access Gateway server on your network
- By specifying the server details manually

Since this example installation has the management tools installed on the same server as the Access Gateway itself, either approach will work equally well; however, in some network situations you may find you prefer one approach over the other. There is no difference in the end result, though, so feel free to choose whichever route suits you best.

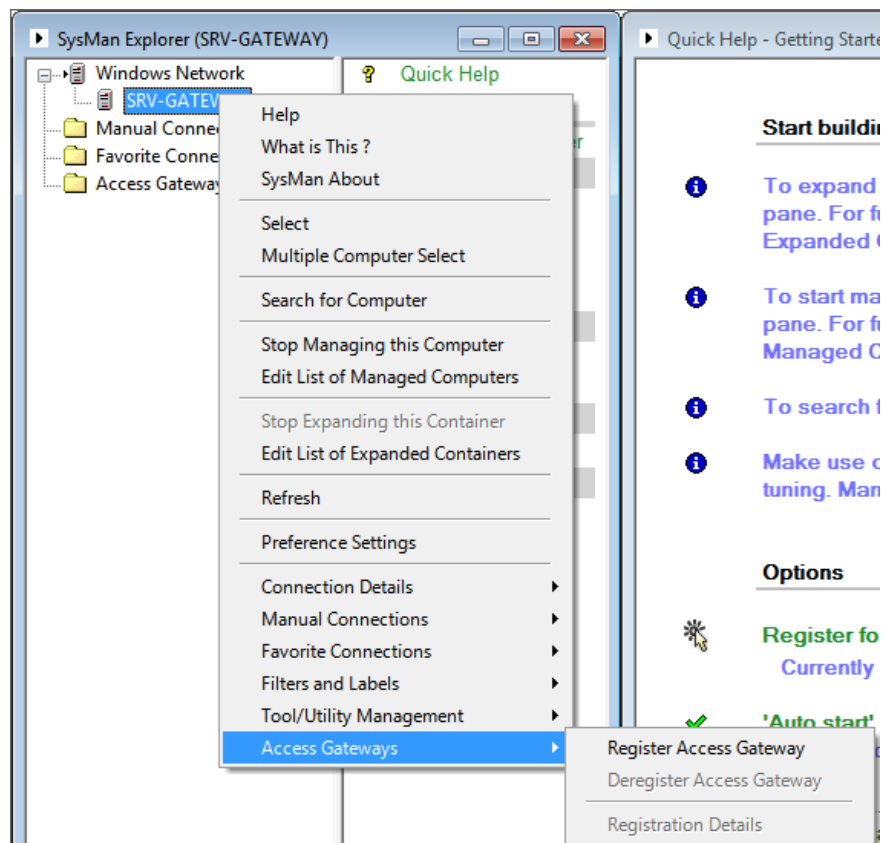
## Browsing for the Access Gateway Server

To browse for the Access Gateway server in the SysMan Explorer tree, simply expand the tree folders to locate the server where the Access Gateway is installed; the server does not need to be selected for management by SysMan itself, so it can appear in either the left (tree) or right (list) sides of the Explorer window:



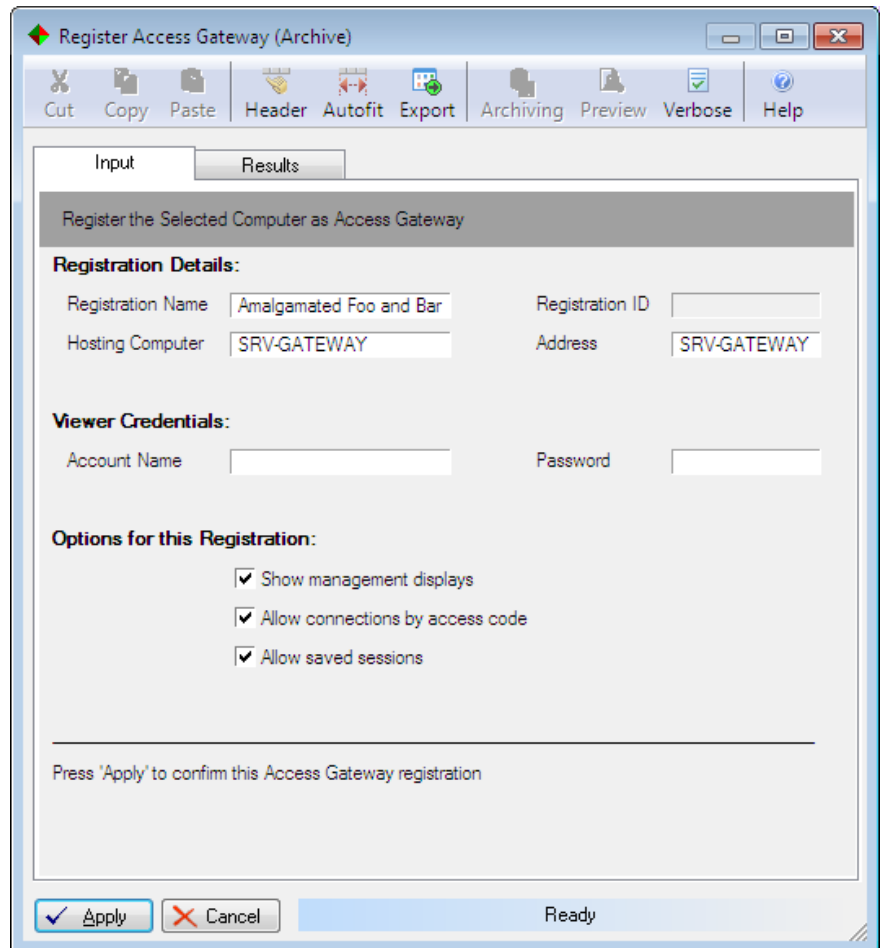
❗ If you are new to SysMan, you may find the folders appear empty at first but show a 'Double-click to expand' message on the right-hand side of the window. Double-clicking the Expand option will show the contents of the selected folder; this allows you to control which computers appear in your personal workspace, so it is not cluttered up by computers you do not use.

Once you have located your Access Gateway server, right-click on it and select the Register Access Gateway option from the Access Gateways submenu:



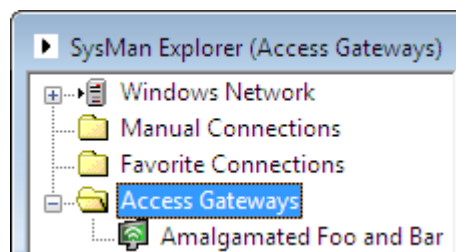
The Register Access Gateway input form will appear; the only additional information you need to provide at this point is a name for the Access Gateway registration. This is simply a descriptive name used to identify this particular

Access Gateway within your SysMan environment, and can be chosen freely. The remaining fields should be automatically populated with the server details and options:



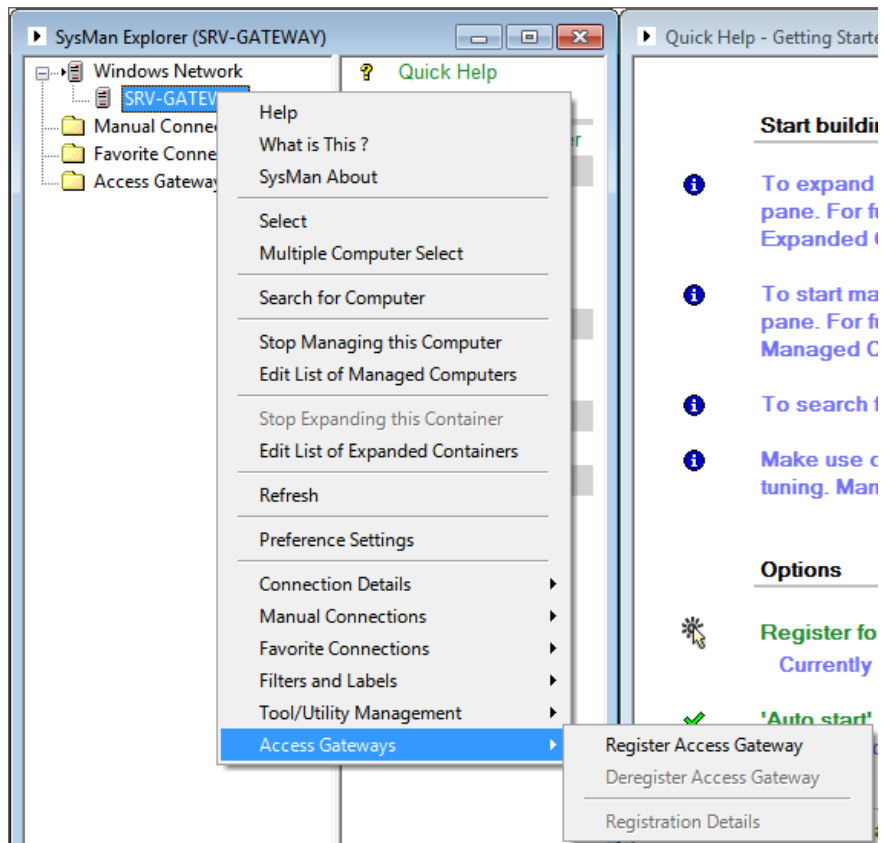
① You do not need to provide an account name or password under Viewer Credentials at this stage; we will look at these details later in the guide.

After naming your Gateway using the Registration Name field (under Registration Details), press Apply to confirm the registration. If everything goes well, the SysMan Explorer window will refresh and your new registration will appear under the Access Gateways branch of the tree:



## Specifying Server Details Manually

To specify your Access Gateway's server details manually, simply right-click in any blank area of the SysMan Explorer and select the Register Access Gateway option from the Access Gateways submenu:



The Register Access Gateway input form will appear; you will need to fill in the fields under the Registration Details heading. These are:

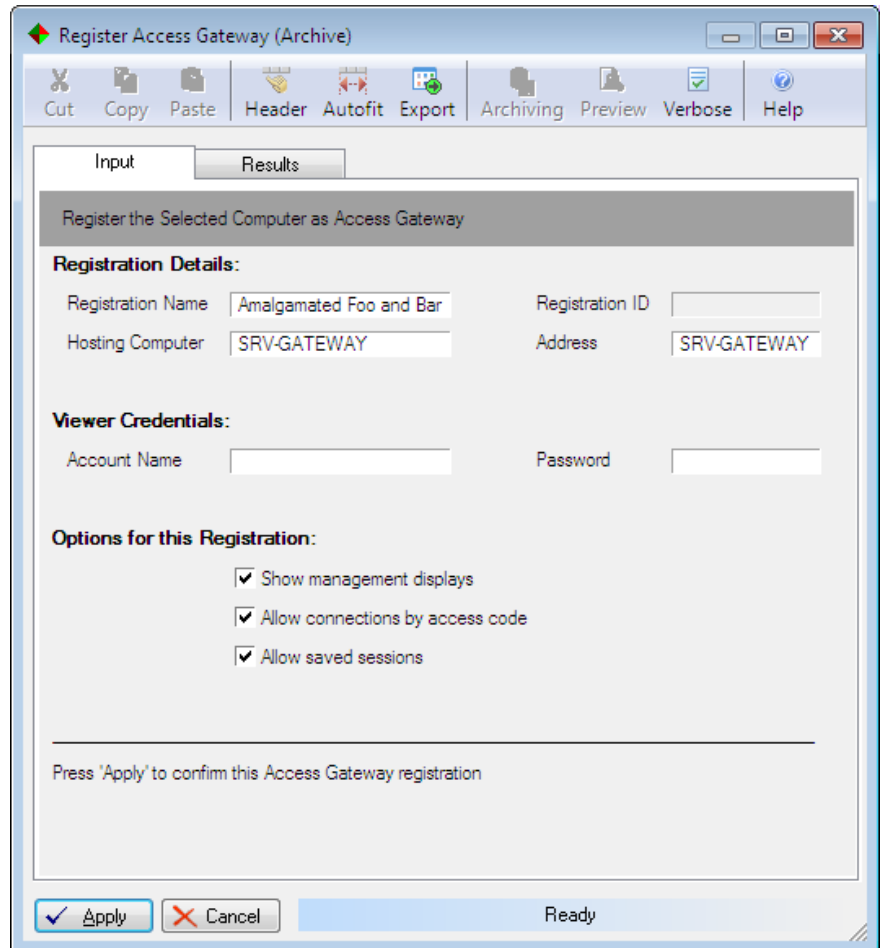
- Registration Name: a descriptive name used to identify this particular Access Gateway within your SysMan environment, which can be chosen freely;
- Hosting Computer: the name or address of the Windows server on which the Access Gateway has been installed, as used for management;
- Address: the internal or external name or address of the Access Gateway, as used for connections from end-user computers.

You should not need to alter the Options listed at the bottom of the form, but for management purposes you should ensure that at least the 'Show management displays' checkbox is selected.

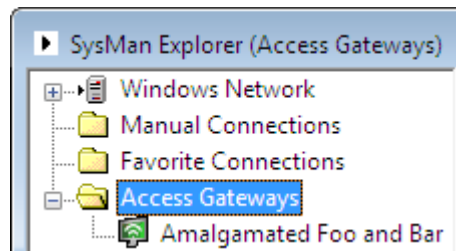
**i** You do not need to provide an account name or password under Viewer Credentials at this stage; we will look at these details later in the guide.



For our demonstration environment, the completed form will look as follows:

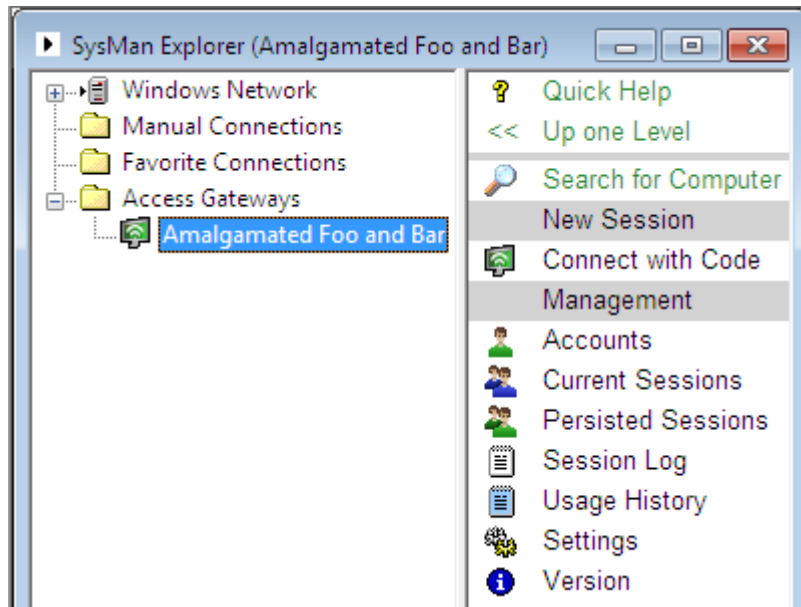


Once all the Gateway details have been provided, press Apply to confirm the registration. If everything goes well, the SysMan Explorer window will refresh and your new registration will appear under the Access Gateways branch of the tree:

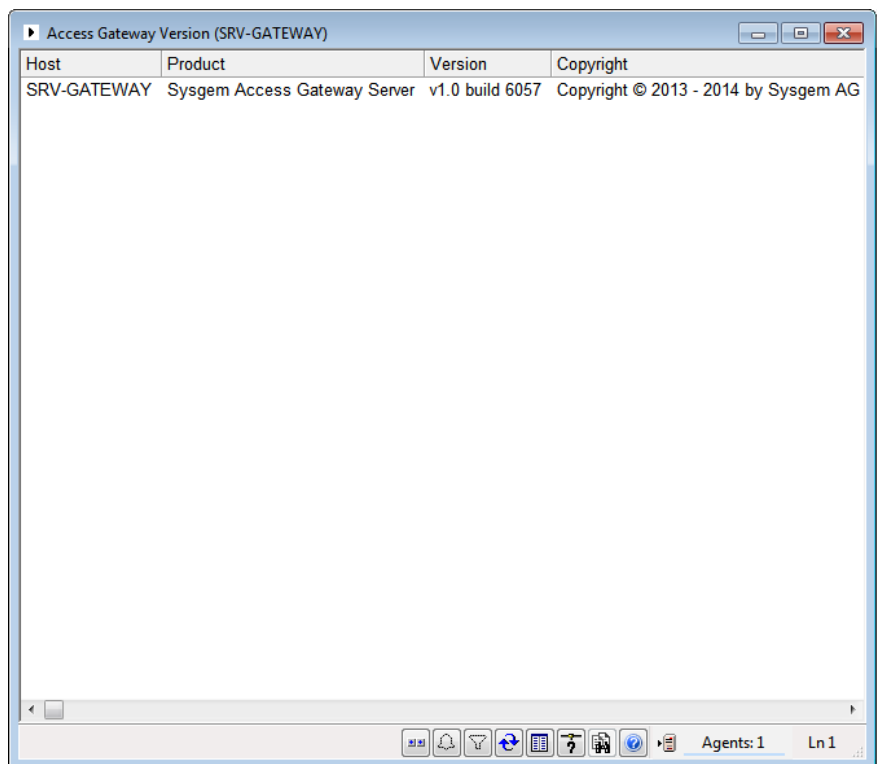


## Initial Configuration

Once you have registered your Access Gateway in the SysMan environment, it will appear under the Access Gateways branch of the SysMan Explorer tree. Selecting this tree item will change the right-hand side of the Explorer window to show the options available for Gateway management:



To check that your Access Gateway is properly installed and functional, double-click the Version option. This will open the Access Gateway Version window on the right-hand side of your workspace, and after a moment should display the version and copyright information of the Access Gateway:



If these details do not appear, there may be several causes:

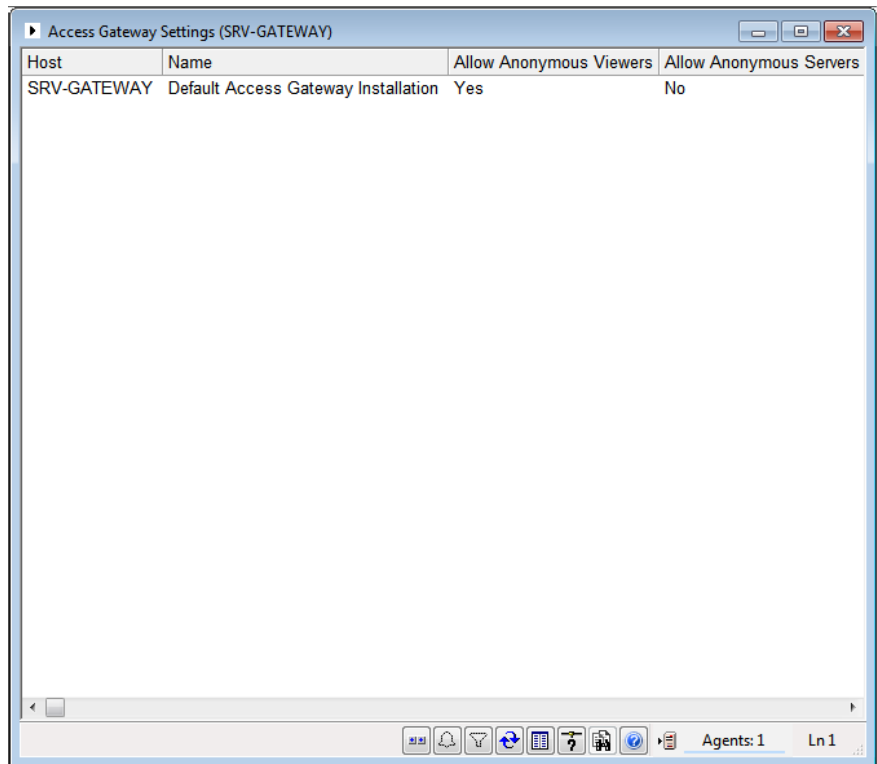
- if the window opened without any error messages but just displays the Access Gateway's computer name in the 'Host' column, the Gateway service might not be started on the selected machine;
- if instead a pop-up error message appeared with a short error description and offering the option to inspect errors that occurred, you may need to provide management credentials before SysMan can connect to the computer and manage the Access Gateway.

➤ More details on troubleshooting Access Gateway management issues can be found in the Configuration and Administration guide; general advice for troubleshooting SysMan issues can also be found in the documentation supplied with SysMan.

Once you have successfully displayed the Access Gateway version details, your SysMan installation is correctly configured to manage the Access Gateway. If you are keen to get started with using the Gateway, you can now proceed to installing the next component (the Server Connector) as described in the next section.

However, if you would rather proceed with some basic configuration tasks to customize your Access Gateway installation (or just to get used to the SysMan user interface!), there are some simple server settings that we suggest you change from the defaults.

To display the current server settings, make sure your Access Gateway registration is selected in the SysMan Explorer tree and double-click the Settings option from the list side of the Explorer window. This will display the Access Gateway Settings window on the right-hand side of your workspace:



You should see that the Name column describes your Gateway as ‘Default Access Gateway Installation’ – we would obviously like to change this to something more descriptive before our users see it!

ⓘ If the display appears blank (or just contains the computer name under the Host column), or you receive an error message when opening the window, refer back to the troubleshooting steps above.

To change the name of the Access Gateway, double-click on the line of data displayed in the window; this will open the Properties form containing the Gateway's current settings:

Properties (Archive)

Cut Copy Paste Header Autofit Export Archiving Preview Verbose

Input Results

Access Gateway Properties

**Access Gateway Data:**

Instance ID 0

Name Default Access Gateway Installation

Contact

**Access Gateway Options:**

Allow anonymous server connections

Allow anonymous viewer connections

Enable Account Isolation \*

\* When account isolation is enabled, then the access gateway will only allow connections between viewers and servers as configured by account specific permissions. See this displays' help for more information.

Press 'Apply' to confirm any changes

Apply Cancel Ready

Change the Name field to something more useful, and also (if you wish – it's entirely optional!) provide some contact details or other informational message for your users to consult if they encounter problems:

Properties (Archive)

Cut Copy Paste Header Autofit Export Archiving Preview Verbose

Input Results

Access Gateway Properties

**Access Gateway Data:**

Instance ID 0

Name Amalgamated Foo and Bar Access Gateway

Contact Please contact the IT Helpdesk on x7000 for support if you have difficulty registering with the Access Gateway.

**Access Gateway Options:**

Allow anonymous server connections

Allow anonymous viewer connections

Enable Account Isolation \*

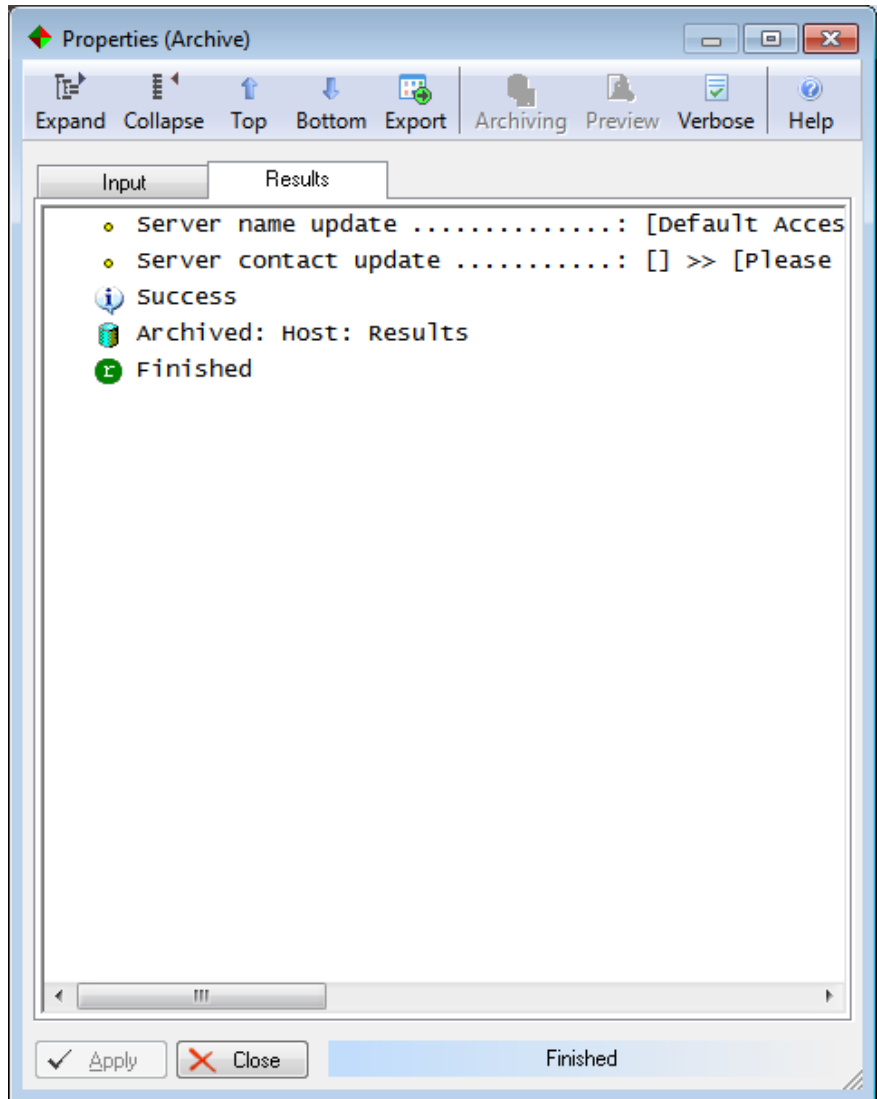
\* When account isolation is enabled, then the access gateway will only allow connections between viewers and servers as configured by account specific permissions. See this displays' help for more information.

Press 'Apply' to confirm any changes

Apply Cancel Ready

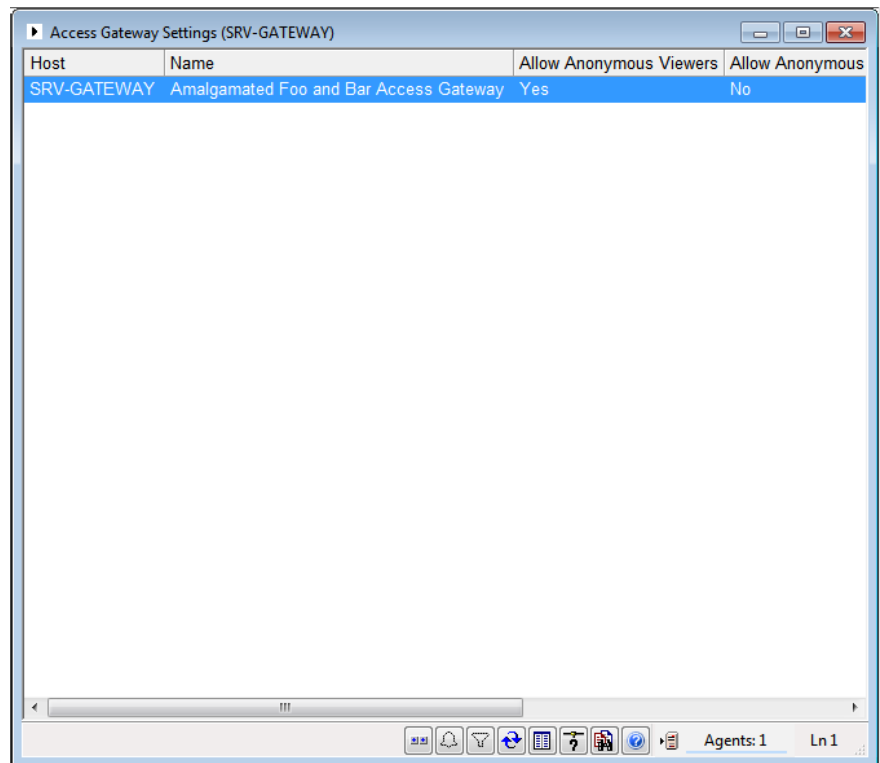
① Don't worry about the other settings on this form at the moment – we will explore them later.

Once you are happy with the new contents of the Name and Contact fields, click Apply to save your changes. The Properties window will change to show you the results of the operation; each field that changed will be listed, along with the old and new values:



If all went well (as indicated by the 'Success' indicator), click Close to dismiss the Properties window; if any errors are listed, examine them for further details and select the Input tab to amend the new details and try again.

Once the Properties window has been closed, the Access Gateway Settings window should refresh to reflect the new configuration:



Congratulations! You have successfully completed the initial configuration of your Access Gateway installation. Now it's time to install the Server Connector component, as described in the next section.





# The Server Connector

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## About This Section

This section of the Getting Started guide illustrates the steps required to install the Access Gateway Server Connector on a workstation or other end-user machine.

The activities performed in this section take place on the machine MACHINE in our example network.

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## Prerequisites

The Server Connector is a small Windows application that works alongside the SysMan Remote Control Server to provide remote access to the desktop of the user running the application.

It will run on all versions of Windows from Windows XP / Server 2003 and up, and does not have any additional software prerequisites.

The Server Connector installation kit includes the SysMan Remote Control Server, so the single installation contains everything required to get started. If the SysMan Remote Control Server is already installed on the target computer, the Server Connector installation will update it to the latest version; your existing configuration settings will not be disturbed.

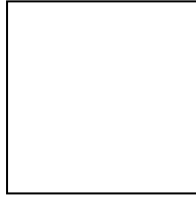
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## Installing the Server Connector

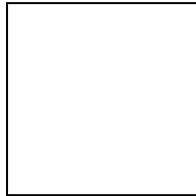
The Server Connector is provided as a standard Windows Installer kit, and installation should be straightforward; there are very few questions to answer during the installation process.

① The Server Connector can also be installed using the full Access Gateway kit, for convenience when it is required on the same machine as the Access Gateway server; however, if end-users may be installing the Server Connector themselves, or to simplify automated deployments, we recommend using the standalone Server Connector kit where possible.


After starting the installer and accepting the license agreement, the installer will prompt you to select the combination of components to install. By default both the Server Connector and the Remote Control Server are selected, as well as the option to create shortcuts on the desktop and Start Menu:

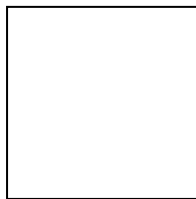


Make sure that the Server Connector option is selected, and click Next to continue. The next page of the installation wizard prompts for security settings for the SysMan Remote Control Server:

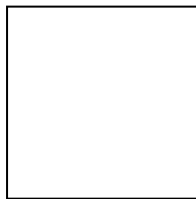


Click Next to accept the defaults, or make any changes you require first.

 By default, no connection password is specified; this configures the Remote Control server to allow connections only if valid Windows credentials are provided instead.



The Access Gateway Settings page appears; we do not want to automatically configure any registrations or sessions yet, so accept the default options and click Next:

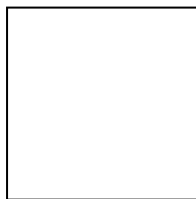


Finally, click Finish to start the installation.

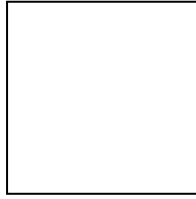
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## Registering with the Access Gateway

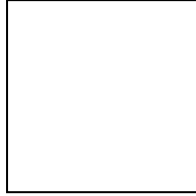
To create an Access Gateway session, start the Server Connector either from the Start Menu or the desktop icon:



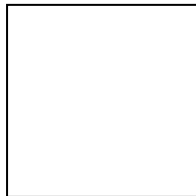
Since we did not configure an Access Gateway registration during installation, the first time the Server Connector is started it will automatically launch the Add Access Gateway Registration wizard:



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



Type the address of your Access Gateway server in the Address field and click Next. The wizard attempts to connect to your Access Gateway and displays the Access Gateway Credentials page:



**i** If an error message appears, make sure you typed the address of the Gateway correctly and try again; if the test connection still fails, ensure your network and firewall configuration allows you to access the Access Gateway server at the address you specified.

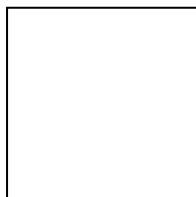
Because the default Access Gateway configuration does not allow anonymous users to connect using the Server Connector, you need to provide an account name and password at this point. An initial account will have been created during installation; this account has the following credentials:

Account name: System  
Password: sysgem

Provide these credentials in the relevant fields.

**i** If you provided contact details (or any other informational message) when configuring the Gateway earlier, you will notice a 'Contact' button above the credentials prompt. Clicking this button displays the configured Gateway name and contact details, to aid end-users with the registration process if they install the Server Connector themselves.

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

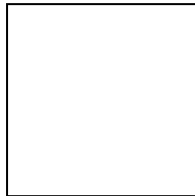


On this page you have the opportunity to change the name of the registration from the default (which in turn is taken from the Gateway configuration, as seen

earlier). You can also specify whether this registration should be available to just yourself, or all users on the computer where you have installed the Server Connector. Either option will be fine for this test installation, but if other users might log in to the computer you are using you may wish to select All Users so that they do not have to go through the registration process themselves.

➤ More details about using the Server Connector on a multi-user machine can be found in the Server Connector User's Guide.

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

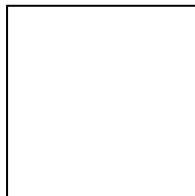


ⓘ Your Gateway registration is now saved for future use; you will not be prompted to register again.

---

## Starting an Access Gateway Session

Once the Server Connector window is open, establishing an Access Gateway session is straightforward. Ensure the correct Access Gateway is selected in the drop-down list – as we have only registered this Server Connector with one Access Gateway, this should already be the case – and click the Get Access Code button:



The Server Connector has now connected to the Access Gateway and generated an Access Code, which is a short numeric code used to connect to the new session. Make a note of this code, as you will use it in the next section.

# The Access Gateway Client

---

## About This Section

This section of the Getting Started guide illustrates the steps required to connect to an Access Gateway session using the Access Gateway Client.

The activities performed in this section take place on the machine MACHINE in our example network; to save time during initial testing, they could also take place on MACHINE as the Access Gateway Client will already be installed on that computer.

---

## Prerequisites

The Access Gateway Client is a part of the SysMan Remote Control client software, which is a Windows application which allows you to connect to SysMan Remote Control servers as well as Access Gateway sessions.

It will run on all versions of Windows from Windows XP / Server 2003 and up, and is bundled as part of the SysMan Utilities software. It does not have any additional software prerequisites.

---

## Installing the Access Gateway Client

**i** If you wish to use the Access Gateway Client on the same machine you used to manage the Gateway earlier in this guide, you can skip both this section and the following section and instead continue immediately with Connecting to an Access Gateway Session.

However, you may wish to revisit this section later, when you add additional clients to your Access Gateway installation.

The Access Gateway client software is part of the standard SysMan Utilities family of products. If you have an existing SysMan installation you do not need to install a new one just for the Access Gateway; the required client support is included with every edition of SysMan:

- SysMan Utilities Standard Edition
- SysMan Utilities Professional Edition
- SysMan Utilities Free Edition
- SysMan Remote Control

However, if you do not currently have a SysMan product installed, you will need to install one before you can make use of the Access Gateway. So that we can

concentrate on the Access Gateway-related facilities of SysMan, we will use the Remote Control edition for the remainder of this guide; the more advanced editions will work identically (with the exception of the Professional Edition, which will require you to log into SysMan before starting.)

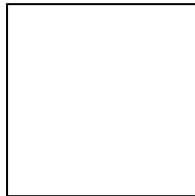
➤ More information on choosing and installing SysMan editions to use with the Access Gateway can be found in the Configuration and Administration Guide.

If you have an existing SysMan installation, feel free to skip the following section and proceed directly to the Registering the Access Gateway section. However, you may want to ensure your version of SysMan is up-to-date before doing so; for more details, please see the Updating an Existing SysMan Installation section.

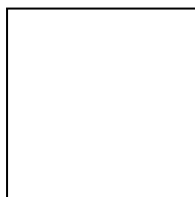
## Installing SysMan Remote Control

The Remote Control edition of SysMan is available from your distributor or from Sysgem, and is provided as a separate installation kit.

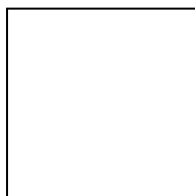
Installation is straightforward; the installation routine will ask you to agree to the SysMan license agreement, and then provide your name and company details. Once these steps are complete, just continue through the wizard until SysMan Remote Control has been installed.



Once the installation has completed, you will be asked if you wish to start SysMan right away. Select Yes to launch the SysMan environment; alternatively, you can select No and launch SysMan at a later time using the relevant icon on your Windows desktop or Start Menu:



When SysMan starts, it will display the SysMan Explorer and Getting Starting windows as shown below:



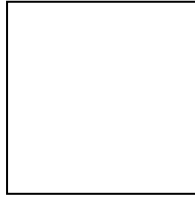
You are now ready to continue with registering the Access Gateway with the new client installation, as described in the Registering the Access Gateway section.

## Updating an Existing SysMan Installation

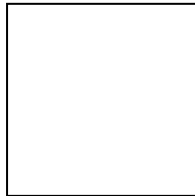
The Remote Control client support for the Access Gateway was first introduced in SysMan version 3.0.0, along with the Access Gateway management tools. If

you have an existing SysMan installation that predates this version, you will need to ensure it is up-to-date before you will be able to connect to your new Access Gateway installation.

To check the version of SysMan you are currently running, start SysMan as usual (and log in, in the case of SysMan Professional), and then select SysMan About from the Bookmarks pane:



This will display the SysMan About window, containing details about your currently-installed SysMan version:



If this version is before 3.0.0, you will need to update to the latest version. The update kit can be obtained either using the Check For Updates option in the SysMan About window, or from your distributor; once you have obtained it, it can simply be installed over the top of your existing installation following the usual installation procedure for your SysMan edition.

ⓘ If you are using SysMan Utilities Professional Edition, you may only need to update the central Authorization Server.

➤ More information about updating SysMan can be found in the documentation supplied with SysMan.

---

## Registering the Access Gateway at the Client

Once you have started SysMan and have the SysMan Explorer window visible on the left of your workspace, it is time to connect to your Access Gateway.

To get started, you will need to inform SysMan of your Access Gateway's network location and any required access credentials. This process is called registration, and is performed from within SysMan Explorer.

You can register an Access Gateway with the client software in one of two ways:

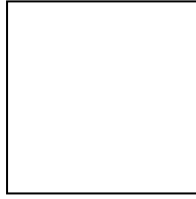
- By browsing the SysMan Explorer tree to locate the Access Gateway server on your network
- By specifying the server details manually

Since this example installation has the client software installed on the same LAN as the Access Gateway itself, either approach should work equally well here; however, for client installations that are outside the LAN you will probably find it easier to specify the server details manually. There is no difference in the end result, though, so feel free to choose whichever route suits you best.

### Browsing for the Access Gateway Server

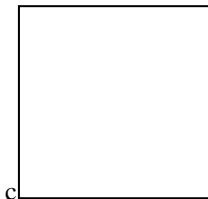
To browse for the Access Gateway server in the SysMan Explorer tree, simply expand the tree folders to locate the server where the Access Gateway is

installed; the server does not need to be selected for management by SysMan itself, so it can appear in either the left (tree) or right (list) sides of the Explorer window:

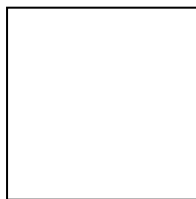


❗ If you are new to SysMan, you may find the folders appear empty at first but show a 'Double-click to expand' message on the right-hand side of the window. Double-clicking the Expand option will show the contents of the selected folder; this allows you to control which computers appear in your personal workspace, so it is not cluttered up by computers you do not use.

Once you have located your Access Gateway server, right-click on it and select the Register Access Gateway option from the Access Gateways submenu:

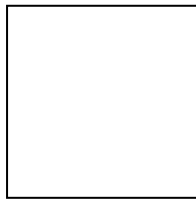


The Register Access Gateway input form will appear; the only additional information you need to provide at this point is a name for the Access Gateway registration. This is simply a descriptive name used to identify this particular Access Gateway within your SysMan environment, and can be chosen freely. The remaining fields should be automatically populated with the server details and options:



❗ You do not need to provide an account name or password under Viewer Credentials at this stage; we will look at these details later in the guide.

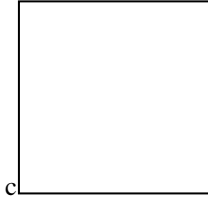
After naming your Gateway using the Registration Name field (under Registration Details), press Apply to confirm the registration. If everything goes well, the SysMan Explorer window will refresh and your new registration will appear under the Access Gateways branch of the tree:



## Specifying Server Details Manually

To specify your Access Gateway's server details manually, simply right-click in any blank area of the SysMan Explorer and select the Register Access Gateway option from the Access Gateways submenu:





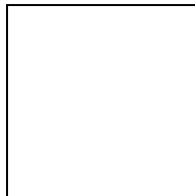
The Register Access Gateway input form will appear; you will need to fill in the fields under the Registration Details heading. These are:

- Registration Name: a descriptive name used to identify this particular Access Gateway within your SysMan environment, which can be chosen freely;
- Hosting Computer (optional): the name or address of the Windows server on which the Access Gateway has been installed, as used for management;
- Address: the internal or external name or address of the Access Gateway, as used for connections from end-user computers.

You should not need to alter the Options listed at the bottom of the form, but when using the Access Gateway client you should ensure that at least the 'Allow connection by access code' checkbox is selected.

- ① If you have not specified the Hosting Computer name or address, make sure the 'Show management displays' option is not selected, or you will not be able to continue.
- ① You do not need to provide an account name or password under Viewer Credentials at this stage; we will look at these details later in the guide.

For our demonstration environment, the completed form will look as follows:



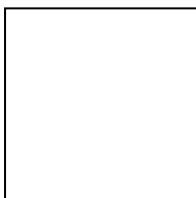
Once all the Gateway details have been provided, press Apply to confirm the registration. If everything goes well, the SysMan Explorer window will refresh and your new registration will appear under the Access Gateways branch of the tree:



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## Connecting to an Access Gateway Session

Once you have registered your Access Gateway in the SysMan environment, it will appear under the Access Gateways branch of the SysMan Explorer tree. Selecting this tree item will change the right-hand side of the Explorer window to show the available management and session options:



From here, you can connect to the Gateway session you started on MACHINE in one of two ways:

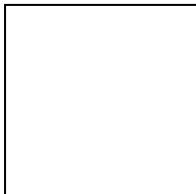
- by entering the numeric Access Code,
- or by selecting the session from a list of available sessions (if you have configured the Gateway registration to include the management tools)

## Connecting with an Access Code

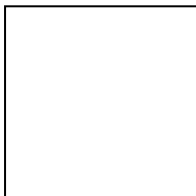
To connect to the session using the Access Code you noted in the Starting an Access Gateway Session section, simply double-click the Connect with Code option in the SysMan Explorer window:



This will open the Connect via Access Gateway Code window:

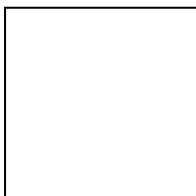


Type the Access Code for the session in the relevant field, and then click Apply:



**i** Don't worry about the Options fields at the bottom of the window; these don't apply to the type of session we have created in this guide.

The SysMan Remote Control window will open and automatically establish a connection to the Access Gateway session. When this completes, a prompt will appear to allow you to authenticate with the SysMan Remote Control Server:

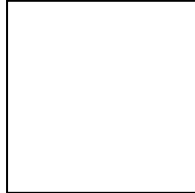


Enter a valid Windows username and password with Administrator access to the MACHINE computer; alternatively, if you configured a password in the Installing the Server Connector section, you can instead change the Type: field

to 'SysMan Remote Control (with session password)' and enter the session password.

① You are also provided with the option to save the details you have entered as connection preferences either for the MACHINE computer or as defaults for all future connections; these will be securely stored as part of your SysMan configuration, allowing you to skip this credentials prompt for future sessions.

Finally, click OK to continue with the connection. Once your credentials have been verified, the SysMan Remote Control window will display the MACHINE computer's desktop:



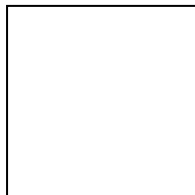
① If you instead receive an 'authentication rejected' error message, click OK to dismiss it; the credentials prompt will re-appear and you can verify that you entered the correct details before trying again.

Congratulations – you have successfully created and connected to your first Access Gateway session! Now that you have connected to the session, all the features of the SysMan Remote Control client are available as normal, including the text chat and file transfer between the two machines.

➤ More details on the features available in the SysMan Remote Control client can be found in the SysMan Remote Control User's Guide, supplied as part of the SysMan documentation.

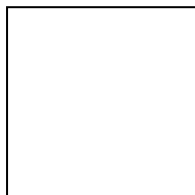
## Connecting by Selecting a Session

To connect to a session by choosing it from a list of all available sessions, double-click on the Current Sessions tool in the SysMan Explorer window:

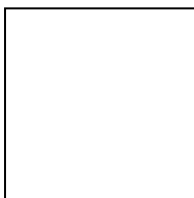


① The Current Sessions tool only appears when you have configured the Access Gateway registration to allow management tools.

The Access Gateway Current Sessions window will appear on the right-hand side of the workspace, and after a moment will display a list of currently-active sessions:

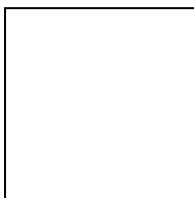


Find the session you want to connect to in the list, and double click on it. The Connect to Session form will appear, showing basic information about the session:



① Don't worry about the Access Gateway field or the Options fields at the bottom of the window; these don't apply to configuration and the type of session we have created in this guide.

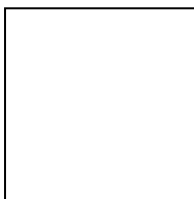
Click Apply to start the connection; the SysMan Remote Control window will open and automatically establish a connection to the Access Gateway session. When this completes, a prompt will appear to allow you to authenticate with the SysMan Remote Control Server:



Enter a valid Windows username and password with Administrator access to the MACHINE computer; alternatively, if you configured a password in the Installing the Server Connector section, you can instead change the Type: field to 'SysMan Remote Control (with session password)' and enter the session password.

① You are also provided with the option to save the details you have entered as connection preferences either for the MACHINE computer or as defaults for all future connections; these will be securely stored as part of your SysMan configuration, allowing you to skip this credentials prompt for future sessions.

Finally, click OK to continue with the connection. Once your credentials have been verified, the SysMan Remote Control window will display the MACHINE computer's desktop:



① If you instead receive an 'authentication rejected' error message, click OK to dismiss it; the credentials prompt will re-appear and you can verify that you entered the correct details before trying again.

Congratulations – you have successfully created and connected to your first Access Gateway session! Now that you have connected to the session, all the features of the SysMan Remote Control client are available as normal, including the text chat and file transfer between the two machines.

➤ More details on the features available in the SysMan Remote Control client can be found in the SysMan Remote Control User's Guide, supplied as part of the SysMan documentation.

# Basic Gateway Management

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## About This Section

This section of the Getting Started guide provides a basic introduction to some of the tools available for managing the Access Gateway installation.

The activities performed in this section take place on the machine MACHINE in our example network.

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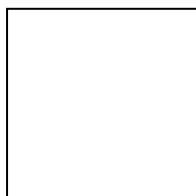
## Prerequisites

Before you can manage the Access Gateway, you will need to have installed and configured the SysMan-based management tools (as described in the Installing the Management Tools and Registering the Access Gateway in SysMan sections earlier in this guide); these tools need to be installed on a Windows computer that has administrative access to the Access Gateway server computer.

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## An Introduction to the Management Tools

The Access Gateway management tools are designed to integrate with the SysMan environment, and so consist of a set of management displays that can be opened from within the SysMan Explorer when an Access Gateway registration has been selected in the tree:



We have already used some of the management tools in the Initial Configuration section earlier in the guide, but there are several others that we will explore briefly in this section.

The full set of management tools comprises:

- Accounts – to configure access credentials and permissions for Access Gateway users;
- Current Sessions – to obtain information about currently-active sessions;
- Persistent Sessions – to obtain information about and manage persistent sessions, which are sessions that are available without creating a new Access Code every time;

- Session Log – to obtain historical auditing information about sessions;
- Usage History – to obtain statistics about the number and length of historical sessions, as well as their bandwidth usage;
- Settings – to view or change various configuration options that affect the Access Gateway as a whole; and
- Version – to view version details about the Access Gateway server software.

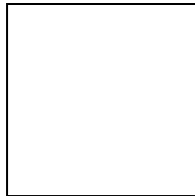
We have already seen everything the Version tool can offer us, but we'll visit each of the remaining tools in this section.

---

## The Settings Tool: General Access Gateway Options

The Settings tool allows you configure various options that change how the Gateway as a whole behaves; we have already used it (in the Initial Configuration section) to change the name of the Gateway installation, and optionally to provide some contact details or informational text to be displayed to users during registration.

However, during our earlier encounter with the Properties dialog box, we glossed over some of the other available options:



Apart from the Name and Contact fields, the following options are available:

- Allow anonymous server/viewer connections – to control whether Server Connectors and Access Gateway Clients, respectively, can register with and connect to the Gateway without providing an account name and password
- Enable Account Isolation – to control whether Access Gateway Clients can connect to sessions established by Server Connectors that logged in with a different account name

By default, anonymous viewers are allowed (but not anonymous servers), and account isolation is disabled – this allows any viewer to connect to any session, regardless of the accounts involved. We have already seen this in action; in the Starting an Access Gateway Session section we created a session from the System account, but in the Connecting to an Access Gateway Session section we connected to that session without providing an account name. Had account isolation been enabled, we would have needed to provide the System account name and password when we registered the Gateway in our SysMan installation.

➤ When account isolation is enabled, a more flexible permissions system is available; more details on these advanced permissions controls can be found in the Configuration and Administration Guide.

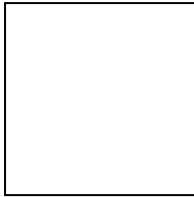
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## The Accounts Tool: Authentication and Permissions

As we saw when registering the Server Connector and Access Gateway Client components earlier, the Access Gateway supports authentication in the form of an account name and password for each connection.

In addition, by default it allows anonymous users to connect to a session using the Access Gateway Client, but sessions can only be created (using the Server Connector) when the System account name and password are provided.

The Accounts tool allows us to create additional Access Gateway accounts, and configure the permissions associated with each account. To open the tool, ensure your Access Gateway registration is selected in the SysMan Explorer tree and then double-click the Accounts entry:

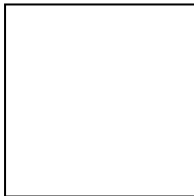


The Accounts window will open on the right of your workspace, and after a moment will show you a list of accounts available on the Access Gateway.

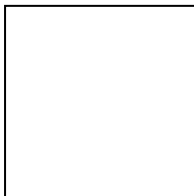
## Changing the System Account Password

Since the Access Gateway is installed along with a default System account, with a known password, we will want to change that password to something more secure.

To do this, start the Accounts tool and right-click on the System entry. Select Set Password from the context menu:



The Set Password input form will appear:



Type a new password in the Set Password field (and the same password again in the Verify field), then press Apply to save your changes.

When you change an account password, any Server Connectors or Access Gateway Clients that are using that account will need to update their registrations with the new details. This can be done as follows:

### ***At the Server Connector***

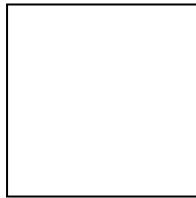
- Start the Server Connector, and select the Options item from the File menu
- Select the Access Gateways tabs, and click on the relevant Gateway registration in the list
- Click Delete to remove the old registration
- Click Add to start the Add Access Gateway Registration Wizard and create a new registration, as seen in the Registering with the Access Gateway section
- Once the wizard completes, click OK to exit the Options dialog

### ***At the Access Gateway Client***

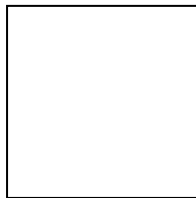
- Right-click on the relevant entry in the Access Gateways tree branch of the SysMan Explorer window
- Select the Registration Details option from the Access Gateways submenu of the context menu
- Replace the Account Name and Password fields with the new details, and click OK to save your changes

## **Creating a New Account**

To create additional Access Gateway accounts, start the Accounts tool and right-click anywhere in the Access Gateway Accounts window. Select Create New Account from the context menu:



The Create New Account input form will appear:



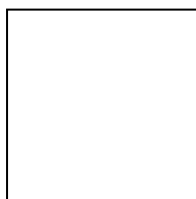
Specify a name for the new account, and optionally provide a description to help identify the account in future. Select the basic permissions you wish the account to have using the three options checkboxes:

- Account can connect as a server – allows the account to use the Server Connector to create sessions
- Account can connect as a viewer – allows the account to connect to sessions using the Access Gateway Client
- Account is enabled – allows the account to log in

Finally, provide a new password in the Set Password and Verify fields, and click Apply to create the new account.

## **Changing Basic Account Permissions**

The permissions granted to existing accounts can be changed from the Properties window of the account. To view the current account properties, double-click on its entry in the Access Gateway Accounts window; this will open the Properties form:



This form opens on the General tab by default, which contains fields to allow the account name and description to be changed, as well as a checkbox to enable or



disable the account. In addition, this form shows the date and time the account was created, and when it was last used.

The remaining basic permissions are found on separate tabs:

- The 'connect as a viewer' permission is set on the Can View tab
- The 'connect as a server' permission is set on the Can Be Viewed By tab

❗ These tabs also contain additional permission settings, which relate to the advanced permissions system enabled when the Account Isolation setting is enabled. They have no effect on a default Access Gateway installation.

➤ For more details on the Account Isolation setting and advanced permissions, please see the Configuration and Administration Guide.

Once you have made the changes you require, click Apply to save them.

---

## The Current Sessions Tool: Finding Active Sessions

We have already seen the Current Sessions tool earlier in the guide, in the Connecting by Selecting a Session section; in that section, we used it to connect to a session that we had established.

The same tool also allows us to see information about active sessions, such as the date and time the session was created, the name of the computer the Server Connector is running on and the username of the person running it, the number of viewers currently connected, and whether the session will allow you to connect to it now.

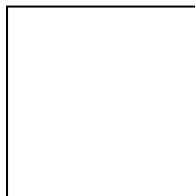
It also includes some details that are only relevant to types of session that we haven't yet seen in this guide; these include the Multicast and Persistent flags and the session name.

➤ We will explore these other types of session in detail in the Configuration and Administration Guide, as well as the Server Connector User's Guides.

### Terminating Active Sessions

As well as viewing details about active sessions, this tool allows administrators to terminate a session – immediately disconnecting any viewers and shutting down the session at the Server Connector.

To do this, right-click on the session to be terminated and select the Terminate Selected Sessions option from the context menu. The Terminate Selected Sessions input form will open, show details of the selected sessions:



Click Apply to continue; the session will be terminated, and any viewers disconnected immediately.

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## The Persistent Sessions Tool: Easy Session Access

In addition to the short-term sessions seen so far in this guide, the Access Gateway supports the creation of persistent sessions. These sessions are only

created once, but thereafter remain available whenever the Server Connector is running on the same computer.

We have not looked at creating a persistent session in this guide, so if we were to open the Persistent Sessions tool in the usual way – by double-clicking it from the SysMan Explorer window – we would find it empty. However, it works in a similar fashion to the Current Sessions tool, showing us:

- The name of the session, its Access Code, and whether it is available for connections
- The date and time the session was first created, and the name of the computer and user who did so
- The date and time the Server Connector last started publishing the session
- The date and time an Access Gateway Client last connected to the session

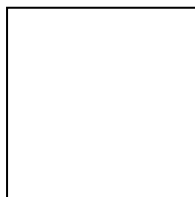
It also allows you to connect to a selected session, in the same way as in the Current Sessions tool (see the Connecting by Selecting a Session section); in addition, right-clicking on a persistent session in the list provides the option to delete the session, which will prevent it from being used in the future.

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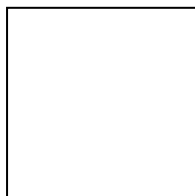
## The Session Log Tool: Viewing Auditing Information

When you start using the Access Gateway for more than the basic demonstration sessions shown in this guide, you may find you need to refer back to auditing information to check who made a historical connection, or who was using the Gateway at a certain point in time.

To provide this information, the Access Gateway maintains a session log containing details about every event associated with a particular session. This log can be viewed using the Session Log tool, started – as always – by double-clicking it in the SysMan Explorer window:



When the Access Gateway Session Log window opens on the right-hand side of the workspace, it will show the entire log contents by default:



From this we can see the events associated with our earlier test session – the session being created by the Server Connector on MACHINE, then one or two connections from the Access Gateway Client running on MACHINE. We can also see the (Windows) username of the person using the Server Connector or Client, as well as the (Access Gateway) account name involved.

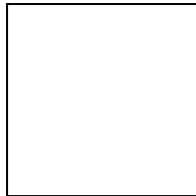
- For more details about the session log, see the Configuration and Administration Guide; in addition, the documentation supplied with SysMan includes information about effectively navigating SysMan displays (such as this one) that potentially contain a lot of data.

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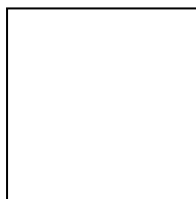
## The Usage History Tool: Accounting for Traffic

In addition to recording events related to a session in the session log, the Access Gateway also maintains accounting information about the total duration and volume of data traffic associated with each Access Gateway Client connection.

These details can be viewed by double-clicking the Usage History tool in the SysMan Explorer window:

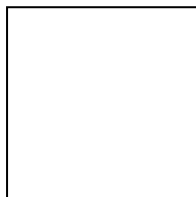


This will open the Access Gateway Usage History window:



By default, this window includes an entry for each historical client connection, showing the date and time the client connected, the Access Gateway account the viewer was using, whether the connection is on-going or has completed, the duration of the connection and the total data traffic (so far, if on-going).

More detailed information is available by adding additional columns to the display; these columns include the Access Gateway account details for the server side of the session, the date and time the connection was closed, and the ability to split the total data traffic figure into traffic flows in each direction. These columns can be accessed using the Column Layout button in the toolbar at the bottom of the display window:



- For information about changing window column layouts, please see the documentation supplied with SysMan.



# Expanding Your Installation

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## About This Section

This section of the Getting Started guide outlines the steps required to expand your Access Gateway installation beyond the basic demonstration environment we have created so far.

The activities performed in this section take place on various machines which can be inside or outside our example network, for instance MACHINE or MACHINE.

---

## Prerequisites

Before expanding the Access Gateway installation beyond the basic structure we've created so far, you should make sure you are comfortable with the role of each component in the system and how they are used.

If you intend to expand the Access Gateway installation beyond your LAN, for instance to a machine (such as MACHINE in our example network) at an external location, you will need to ensure that the Access Gateway is accessible from outside your network boundary. This will typically involve opening TCP port 7257 at your firewall.

- For more information about Access Gateway communications and firewall requirements, please see the Configuration and Administration Guide.

You may also want to create some additional Access Gateway accounts for the new components; please refer back to the Creating a New Account section for more information on how to do so.

- ❗ The pre-defined System account comes configured with some special permissions; although these will not affect the default installation of the Gateway, we do not recommend using it for day-to-day operations.

Accounts within the Access Gateway system are designed to be as flexible as possible, to reflect and accommodate your specific requirements. These requirements might vary based on how you intend to use the Gateway; for instance, you may wish to use one account for all Server Connectors and a different account for all Access Gateway clients.

- For more information about using accounts effectively, please see the Configuration and Administration Guide.

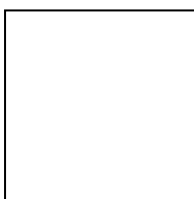
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## Adding Additional Server Connectors

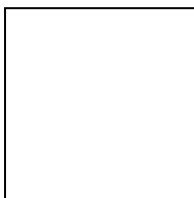
Installing additional Server Connectors is straightforward, and follows the same procedure as your first Server Connector installation in the Installing the Server Connector section of the guide.

As before, when you start the Server Connector for the first time after installation, it will automatically start the New Access Gateway Registration Wizard. Refer back to the Registering with the Access Gateway section for more details on using this wizard, and remember that you may want to use a different account for the registration.

Alternatively, if users might be installing the Server Connector themselves, you can provide them with a Access Gateway registration file containing all the details required to connect to your Access Gateway. Such a file can be used during the New Access Gateway Registration Wizard by selecting the 'Register using Access Gateway registration file' option on the Select Access Gateway page of the wizard, and then entering (or browsing for) the location of the file:



When you click Next after selecting the file to use, the wizard will verify the connection details it contains and, if valid, skip straight to the Save Access Gateway Registration page:



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## Adding Additional Access Gateway Clients

Installing additional Access Gateway clients also follows the same procedure seen earlier in the guide, in the Installing the Access Gateway Client section. Each client requires its own installation of SysMan, of whichever edition best suits your purposes.

➤ For more information on choosing a SysMan edition, see the Configuration and Administration Guide.

If you are using SysMan Professional, then you will probably wish to link your new Access Gateway client installations to your existing SysMan Professional Authorization Server. This is done in the same way as usual when installing SysMan Professional, and once completed these additional clients will automatically include the same Access Gateway registrations as have already been configured earlier in the guide.

① SysMan Professional support multiple user accounts within the SysMan environment, each of which has its own set of independent, personal Access Gateway registrations.

If you are not using SysMan Professional, but rather one of the stand-alone editions (Standard Edition, Remote Control or Free Edition), then each SysMan installation is entirely independent; you will need to register each individual

installation with the Access Gateway, following the same procedure as already seen in the Registering the Access Gateway at the Client section.

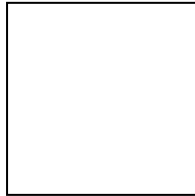
## Client Connections and Management Tasks

The Access Gateway Client can be used from outside your network – after all, the Gateway is designed to allow either or both end of a Gateway session to be established from anywhere with access to the Gateway server – but the management tools and some other features may not be available in all network situations.

Since the Access Gateway management tools are based on the SysMan suite of tools and use a direct WMI connection to the Access Gateway server computer, they require access to management facilities on these computers which are typically only made available to suitably-privileged users on the local network. Because of this, these tools will generally not function properly from an external location such as MACHINE in our example network.

① Note that the Current Sessions display, as used in the Connecting by Selecting a Session section, is one of these management tools – therefore, only connections using an Access Code or saved persistent sessions are supported from external network locations,

If a certain Gateway client will always be used from such a location, you can configured the registration details to hide the management tools in order to prevent confusion. To do this, make sure the ‘Show management displays’ option is cleared in the Registration Details form for the registration, and then optionally clear any value from the Hosting Computer field:



Press Apply to update the registration details; the SysMan Explorer tree will refresh, and the management tools will no longer appear under the selected Access Gateway registration.

① These options can also be specified at registration time in the Register Access Gateway input form.





# Glossary of Terms



# Index

Error! No index entries found.