



***Synametrics Technologies***

**SynaMan<sup>®</sup>**

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**User's Guide**

*Version 2.5*

April 17, 2010

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# ***Table of Contents***

Table of Contents.....	3
About This Document .....	6
Document Conventions .....	6
Chapter 1: Getting Started .....	7
Overview .....	7
Introduction.....	7
In this chapter.....	7
Requirements .....	7
Installation and Set Up .....	8
Using SynaMan for the first time .....	10
SynaMan Configuration Utility at a Glance.....	16
SynaMan License Policy .....	17
Upgrading to Professional Edition .....	18
Starting/Stopping SynaMan Utility .....	19
Uninstalling SynaMan.....	21
Chapter 2: Managing Shared Folders & Notifications .....	22
Shared Folders .....	22
Adding a new shared folder.....	22
Modifying an existing folder .....	23
Removing an existing folder .....	23
Notifications .....	23
Adding a Notification .....	24
Modifying an existing Notification .....	25
Deleting an existing Notification .....	25
Chapter 3: Managing User Accounts .....	26

Adding new users .....	26
Modifying existing users .....	27
Deleting existing users .....	27
Assigning folder permission to users.....	27
Modifying folder permissions for the users .....	28
Revoking access of a folder for a user .....	28
General user vs. Admin user .....	28
Chapter 4: Modifying Configuration .....	29
Setting up email configuration.....	29
Chapter 5: Client Access .....	31
Synametrics File Manager: .....	31
Uploading a file.....	31
Downloading a file .....	32
Preview.....	33
Creating ZIP file.....	35
Extracting from a ZIP file (UNZIP a file) .....	36
Remote Copy, Paste and Cut functions .....	36
Creating New Folder .....	37
Renaming & Deleting a file.....	37
Chapter 6: Creating public links .....	39
Chapter 7: Security Features .....	41
Audit Logs .....	41
Using the web interface to view Audit Log file.....	41
Https – Using SSL certificate .....	42
SSL Certificate .....	43
Multiple Http Ports .....	43
Setting up Security Alerts & Changing Admin Password.....	43

Chapter 8: Configuration of Host Discovery.....	46
How does it work? .....	46
Enabling Discovery Service.....	46
Disable Discovery Service:.....	47
Chapter 9: References.....	49
Important Concepts and Definitions .....	49

# About This Document

## Overview

SynaMan is a web-based remote file management utility that allows users to upload/download files from any machine, anywhere on the Internet. This SynaMan User's Guide is designed to provide details instructions for installing, configuring, and using the program. It also includes information about more enhanced features, such as email alerts, firewall settings and host discovery.

## Audience

The SynaMan User's Guide is designed for commercial users who install it for their companies to share the files with employees, clients and other technical staff. It is also intended home-based users who install it for personal use to share files, photos and videos with family and friends.

## Document Conventions

The following conventions are used throughout this document:

Convention	Description
Keyboard keys and function keys	Begin with an uppercase letter and appear in bold type, enclosed in brackets; for example, <b>[Enter]</b> or <b>[F1]</b> .
Key combinations	Are enclosed in brackets and appear in bold type If joined with a plus sign (+), press and hold the first and second key simultaneously; for example, Press <b>[Ctrl+B]</b> .
Execution icons	Begin with uppercase letters and appear in bold type, for example, <b>OK</b> .
Menu names and options	Begin with uppercase letters and appear in bold type; for example, On the <b>Edit</b> menu, click <b>Options</b> .
Window names	Begin with uppercase letters and appear in bold type; for example, the <b>Configuration</b> window is displayed.
Text variables	Are enclosed in angle brackets; for example, <file_name>.
Numeric variables	Are represented by a letter; for example, x.

In addition, the following special formats are used:

Format	Indicates...
<b>Green text</b>	a hyperlink to another section of this document or to a web site
<b>Bold</b>	a reference to a window or to an object in a window, such as an icon, field, or column; also indicates emphasis on a critical instruction or step
<i>Italics</i>	a reference to another document; also indicates emphasis on certain words (Example: do <i>not</i> delete this file)

# Chapter 1: Getting Started

## Overview

### Introduction

This chapter provides information about downloading, installing, and configuring SynaMan.

### In this chapter

This chapter contains the following topics:

Topic	See Page
Requirements	7
Installation and Set Up	8
Using SynaMan for the first time	10
SynaMan Configuration Utility At a Glance	15
SynaMan License Policy	16
Upgrading to Professional Edition	16
Starting/Stopping SynaMan Utility	18
Uninstalling SynaMan	20

### Requirements

SynaMan is a web-based utility that supports the following operating systems:

- Windows 2000
- Windows XP
- Windows Server 2003
- Windows Vista
- Windows 7
- Windows 2008
- Linux
- Mac OS X Snow Leopard or later (For older versions, download JDK 1.6 from Apple's website before installing SynaMan)
- Solaris, HP-UX, IBM AIX and other flavors of UNIX.

SynaMan also requires the following hardware configuration for its installation and configuration:

- Memory: 64MB required. 512 Recommended

- Hard Disk: 60 MB recommended.

For Windows installation, SynaMan recommends a Pentium 233 MHz – 500 MHz CPU or greater.

## Installation and Set Up

Whether it's the Personal edition or the Professional edition, the instructions to download the SynaMan installer for the following platforms is as following:

### Windows:

Follow the steps below to install SynaMan on a Microsoft Windows machine.

- Log in as Administrator
- Download the installer
- Extract the zipped file and run setup.exe
- Towards the end of installation, the installer will install a new service for SynaMan and will start it in the back-ground. In future, use Windows services applet in the Control Panel to start and stop the service or use the SynaMan Service Manager application that is accessible from the Start menu.
- Using your browser connect to <http://localhost:6060>

### Linux:

Follow the steps below to install SynaMan on a Linux machine:

- Log in as root
- Download the installer
- Extract the tar file using the following command:  
**tar -xf SynaManLinux.tar**
- Ensure the permissions for **install.sh** is set as an executable. If not, use the `chmod +x install.sh` command to change its permission
- Execute install.sh script
- By default, the installation script will install the server in /opt folder. You can change this location to any other value if desired. Additionally, it will create necessary scripts in /etc/init.d/ folder so that the server comes up when you restart the machine.
- Using your browser connect to <http://localhost:6060>

### MacOSX:

Follow the steps below to install SynaMan on an App Mac running MacOSX Leopard machine.

## Minimum Requirements



This installer works on out-of-the box MacOSX Snow Leopard (10.6). SynaMan requires JDK 1.6, which comes bundled with Snow Leopard 10.6, but not with older versions. Please go to: <http://web.synametrics.com/JDK6OnLeopard.htm> to see how to download JDK 6 if you are using an older version of Mac OS X.

### **Optional step**

Follow the steps below if you wish to launch SynaMan at startup.

- Launch your **System Preferences (Apple Menu -> System Preferences)** and click on the **Accounts** icons.
- Now visit the "Login Items" tab, and click the "+" icon in the lower corner
- Locate SynaMan on your disk and click "Add"
- Download the installer
- Double click the downloaded file if it does not automatically open towards the end.
- Drag **SynaMan.app** to any folder of your choice. The preferred location is the Applications folder.
- Double click SynaMan.app icon to launch SynaMan
- Using your browser connect to <http://localhost:6060>

**Other:** Follow the steps below to install SynaMan on any other platform including UNIX (Solaris, HP-UX, AIX), MacOSx and BSD.

**IMPORTANT:** *Installation file for these platforms does not come with a JRE (Java Runtime Environment). Therefore, you will need to install a JRE before installing SynaMan. Additionally, java must be in your machine path.*

If you are installing the server on Solaris or MacOSx, it is very likely that the JRE is already installed on the machine.

- Log in as root
- [Download](#) the necessary files
- Extract the tar file into any directory using the following command:  
**gunzip -c SynaManJava.tar.gz | tar -xvf -**
- Change the permissions on run.sh so that it becomes an executable by using the following command: `chmod +x run.sh`
- Execute run.sh to start the server
- Optionally, write a script to start the server when the machine restarts. Refer to the documentation for your platform to see how to run scripts at startup.
- Using your browser connect to <http://localhost:6060>

## Using SynaMan for the first time

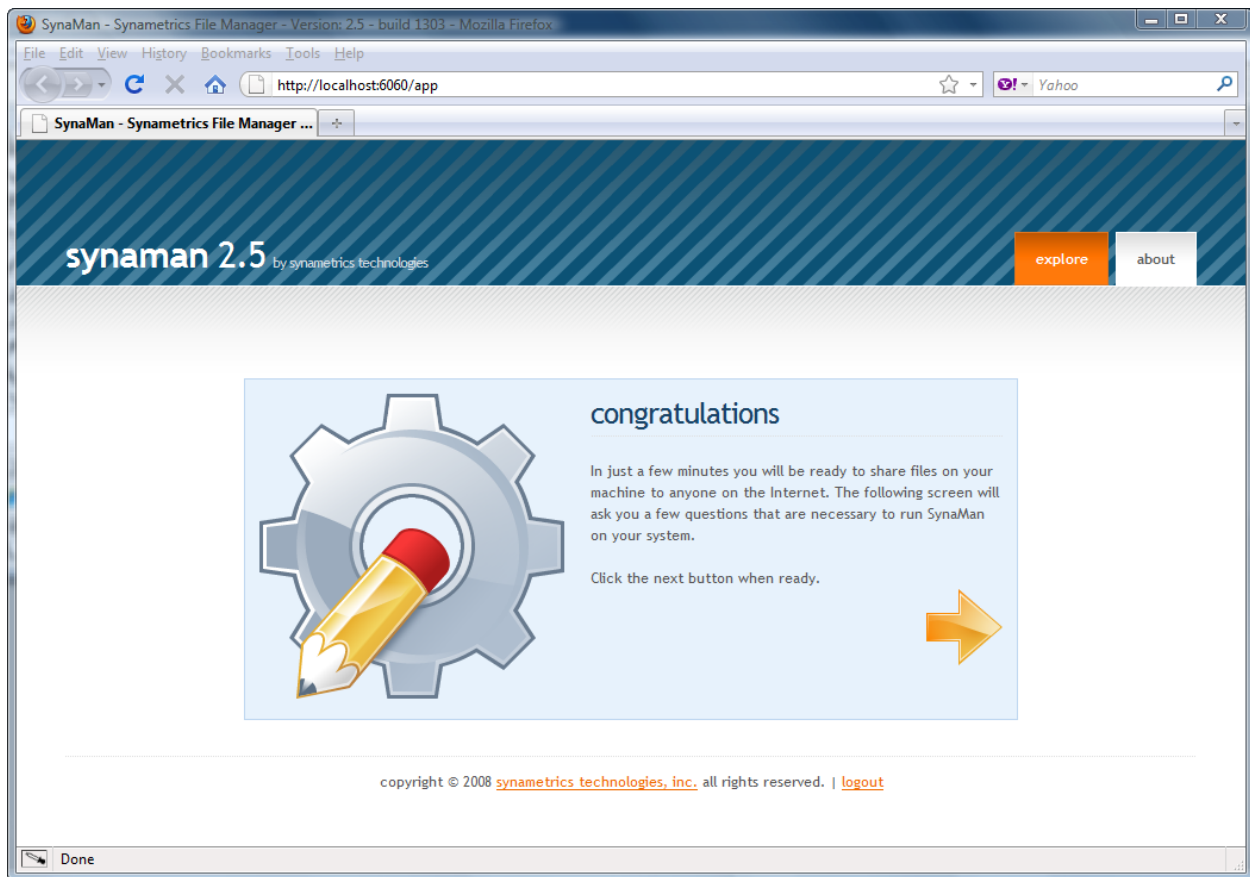
SynaMan has a web-based interface and can be accessed by typing the following in your favorite browser:

- <http://localhost:6060> (this assumes you are using the browser on the same machine where SynaMan is installed.)
- <http://192.168.1.50:6060> (this assumes SynaMan is running on a machine that has 192.168.1.50 as its IP address and you are connecting from a different computer)

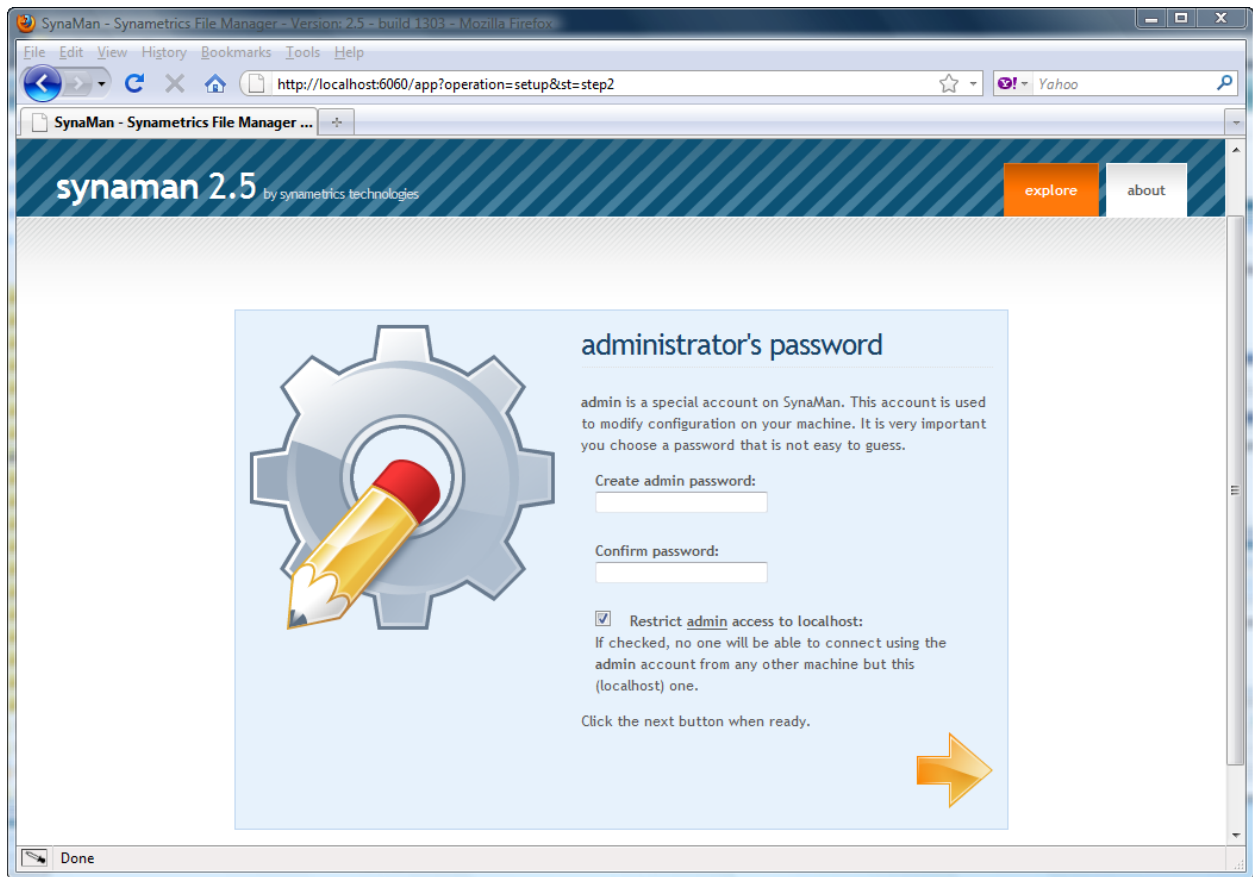
When you use SynaMan for the first time, it automatically brings up the configuration screen that requires you to go through the following three steps:

- Create an admin password
- Specify an admin email address.
- Registering your SynaMan

- 1 When you invoke SynaMan for the first time either via clicking on All Programs → SynaMan → AdminConsole.htm, or via your favorite browser and typing <http://localhost:6060>, the following screen will be displayed:

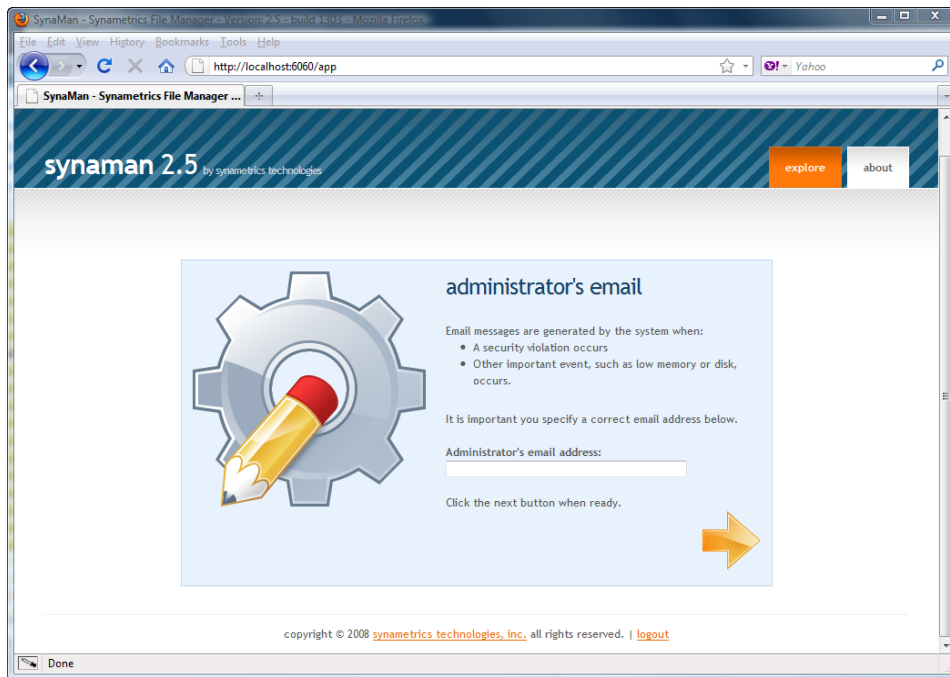


Click on the arrow at the right hand corner of the screen to continue. You will start your SynaMan configuration process and will be taken to the following screen:



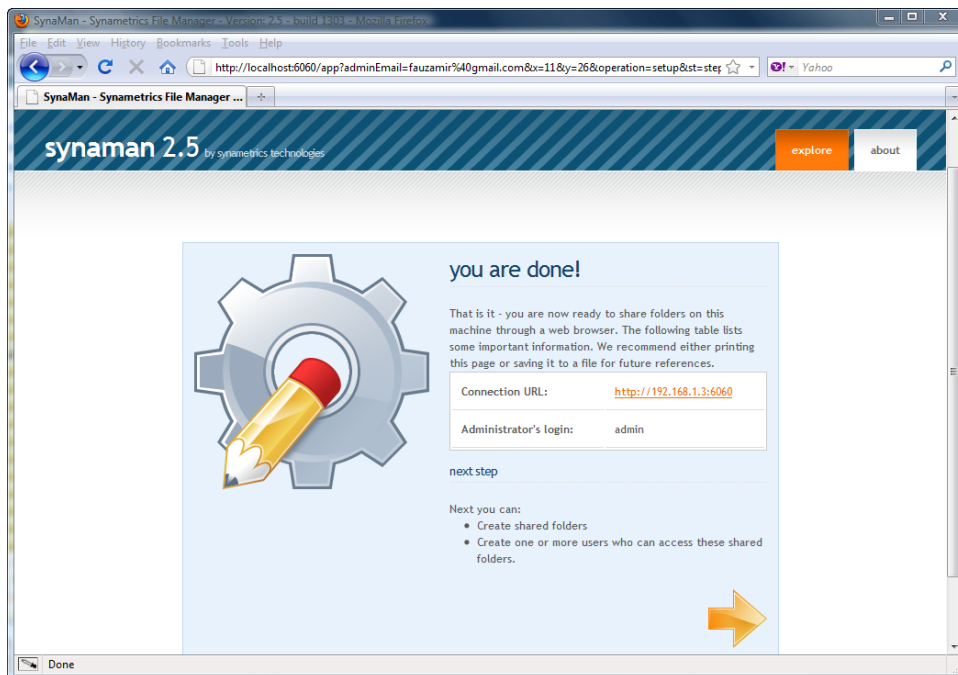
Please note that “admin” is a special user account in SynaMan. Refer to the definition section above to learn more about the “admin” account. Enter the admin’s password in the **Create admin password** field and then re-enter the same password in the **Confirm password** field.

- 1 By default, the **Restrict admin access to localhost** checkbox is selected. This restricts the admin user to connect to SynaMan only via the local machine. For added security, when this box is checked, no one can connect using the admin account from other machines even if they know the password. If you want to allow administrators to access SynaMan from other machines, uncheck this checkbox.
- 2 Once the password has been entered, click on the arrow at the lower right-hand corner of the screen for the next step.

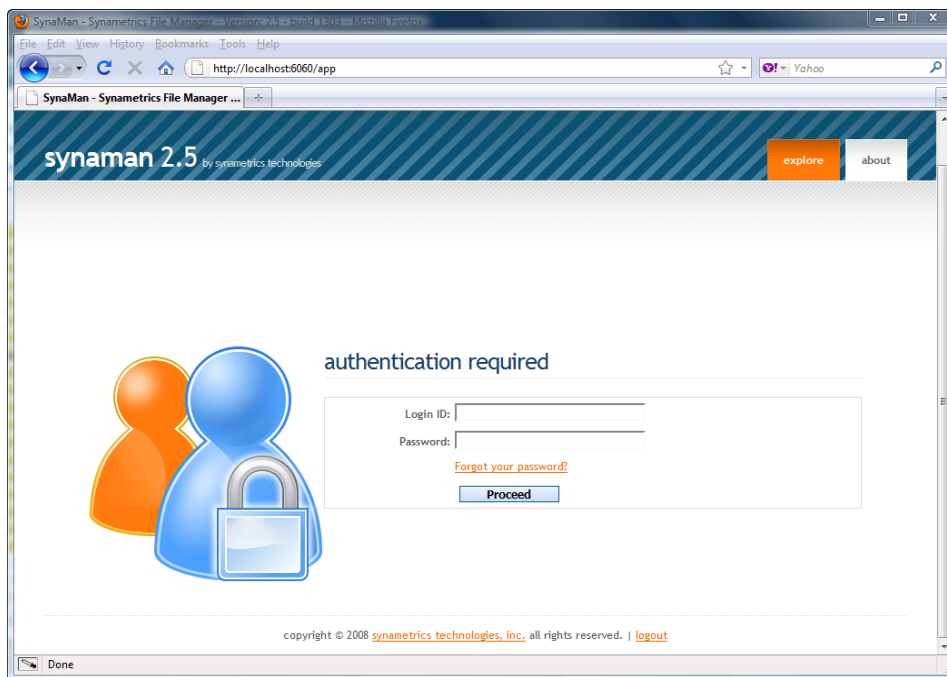


Enter the admin's email address in **Administrator's email address** field. Any issues with the SynaMan will be sent to this email address. Click on the arrow at the lower right-hand corner of the screen for the next step.

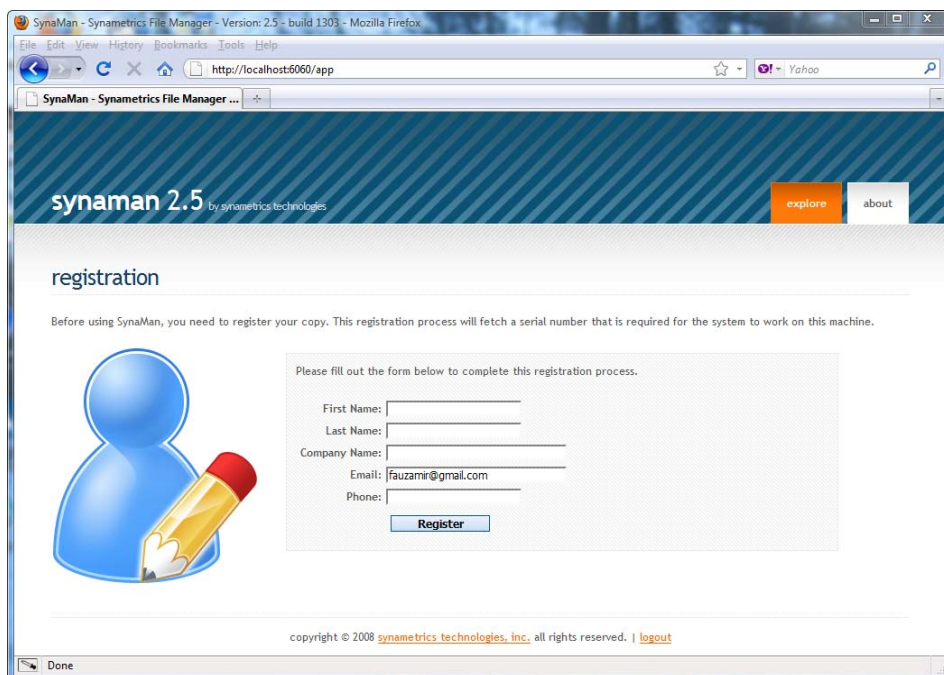
- 3 This screen shows your **Connection URL** that you can invoke to start the SynaMan utility. Save this information so that you can invoke SynaMan in future via this URL. Click on the arrow at the lower right-hand corner of the screen for the next step.



- 4 This screen displays a login screen, which comes up whenever someone connects to SynaMan. The first time you connect; please enter admin in the **Login ID** field and the admin's password in the **Password** field. Click **Proceed** to continue.

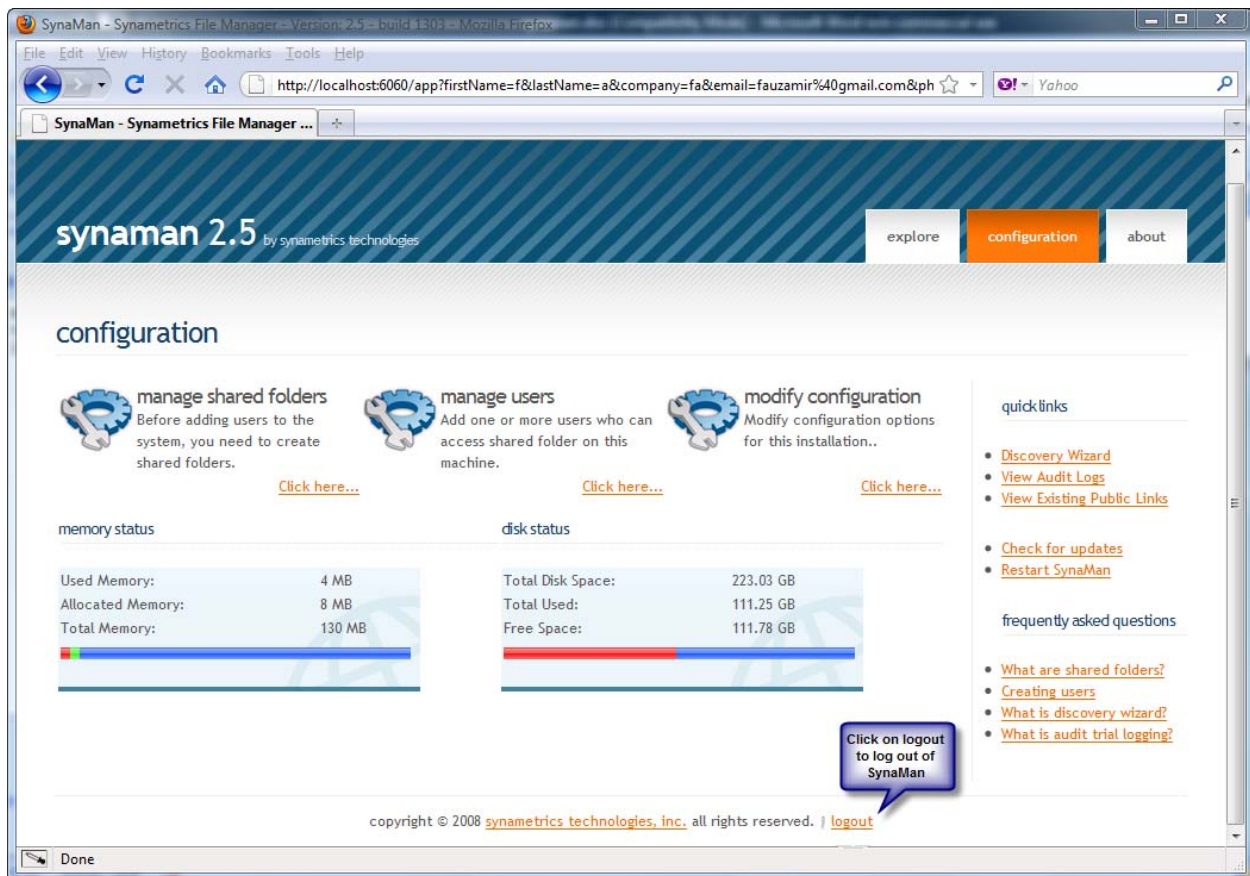


- 5 This screen will step you through the registration process so that you can have a serial number ready when you upgrade it to the Professional Version.



- 6 Enter your First Name in the **First Name** field.
- 7 Enter your Last Name in the **Last Name** field.
- 8 Enter your Company Name in the **Company Name** field if you belong to a Company or leave it blank if you are using it for personal use.
- 9 Your email address is filled by default as your Admin email address. You can change it if you want to.
- 10 Enter your phone number in the **Phone** field.
- 11 Click on Register to complete the Configuration process.

## SynaMan Configuration Utility at a Glance



There are three tabs in the upper right hand corner:

- **explore:** Clicking on this tab will show you the SynaMan File Manager utility that allows the user to manage the folders that are accessible to them.
- **configuration:** Clicking on this tab will show you the SynaMan Configuration page (as seen above). This is only accessible to admin user and allows the admin to manage folders, users and the configuration of this utility.
- **about:** Clicking on this tab will show the SynaMan version, the Serial Number and your version (whether its Personal or Professional). You can upgrade it to Professional if you currently own a Personal version.

The admin tasks include:

- **manage shared folders:** Shared folders are virtual folders created by the admin referencing the physical folders on the hard drive of the host machine. Similar to a Windows shortcut, a shared folder is only an alias for the real folder. By clicking on the



- manage users: admin user can create many users and provide them access to any/all shared folders. The three features required for the user are the User's Name, User's unique Login ID and a password. By clicking on the "click here..." under manage users, you are directed to a screen that allows you to create, modify and delete users and to manage folders for the users.
- manage configuration:
- quick links: This right hand column gives access to many enhanced features like discovery wizard, public links, audit logs and much more. Frequently asked questions also answer many questions and provide help for different tasks.
- logout: As the callout box shows, click on **logout** to log out of SynaMan.

## SynaMan License Policy

There are two editions of SynaMan available: Professional and Personal.

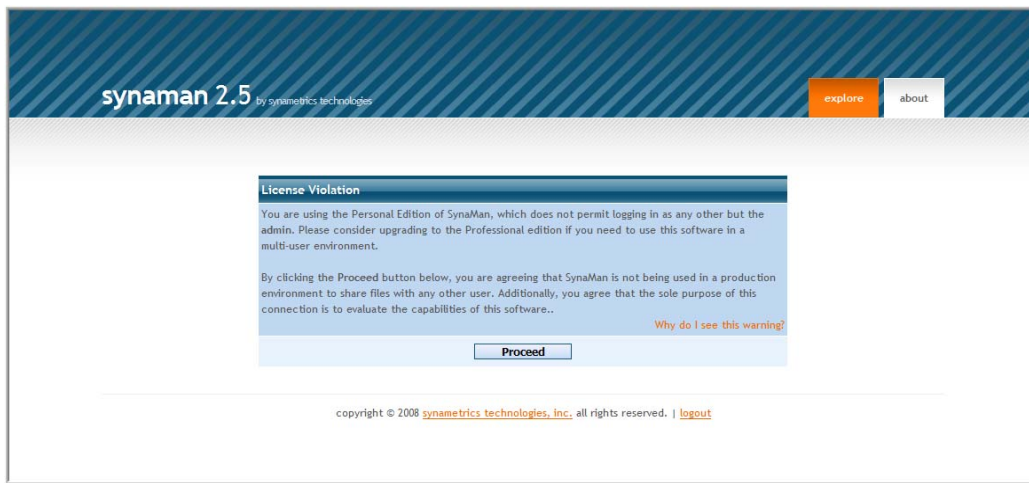
Professional: This edition is intended for commercial use and supports unlimited number of users. Advantages of Professional edition are:

- Companies can share highly sensitive data with their clients in a secure manner.
- Companies provide a methodology for their employees to upload/download files between work and home environment. Ideal for companies who want to share documents with their clients or have them upload documents directly to your office computer.
- Companies keep track of files uploaded/downloaded in specific directories.

Personal: This edition is intended for personal use to share pictures, videos, documents etc with friends and family. Advantages of Personal edition are:

- A good trial edition to test and try-out SynaMan before it can be purchased for Professional edition.
- A user can share large files with friends and family securely without the size restrictions imposed by many mail servers.

When SynaMan is installed it automatically creates one user account called **admin**, which is a special account used for managing SynaMan. If you are using the Personal Version of SynaMan, this is the only account you are allowed to have. Although, the Personal Version will allow you to create additional users, logging in as a different user in a production environment is a licensing policy violation and will display the following warning:



## Upgrading to Professional Edition

Perform the following steps to upgrade to a Professional Edition:

- Log in to SynaMan using the **admin** account and click on the **about** tab. You will see the following screen:



- Click on **Upgrade to Pro.** and you will be redirected to **Synametrics Technology Purchase** site (<https://www.synametrics.com/SynametricsWebApp/PurchaseNow.do>). Follow the instructions on this website and once you buy the SynaMan Professional Edition, you will be given a Serial Number.
- Click on **Enter Serial #.** You will see the following screen:



- Enter your Company Name in the **Company Name** field and the Serial number in the **Serial number** field.
- Click on **Proceed** to continue and you will enable the Professional Edition for SynaMan.

## Starting/Stopping SynaMan Utility

Depending upon the host operating system, the steps for starting and stopping SynaMan utility is as follows:

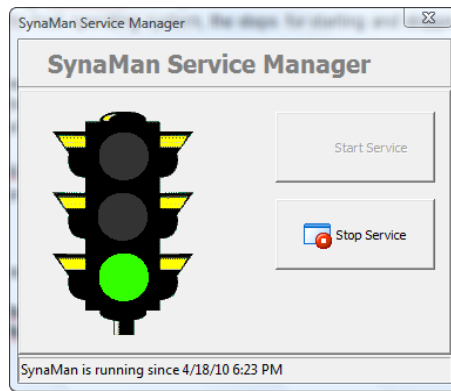
### Microsoft Windows:

SynaMan is installed as a Service on Windows. Therefore, to start or stop the SynaMan service, go to Control Panel / Administrative Tools / Services and perform the appropriate action.

Additionally, SynaMan comes with a Service Manager application on Windows that you can use to start/stop the server. By default, it is installed as SynaMan Service Manager under SynaMan folder in Program Files. The SynaMan service starts at every Windows start.

### Stopping/Starting SynaMan Service:

When you click on SynaMan Service Manager, you see the following window:



The status of SynaMan service can be seen:

- By the green light that shows that the service is up and running.
- By the status line at the bottom of the window that shows how long the service been running for.

If you want to stop the SynaMan service, click on “Stop Service” button. The service will stop and the window will change to:



You can now start SynaMan service by:

- Clicking on “Start Service” button, or
- Perform a system restart. The SynaMan service will start automatically.

#### **Linux:**

On Linux systems, the SynaMan script to start/stop SynaMan service resides in `/etc/init.d` directory.

- To start SynaMan service, run: **`/etc/init.d/synaman start`**
- To stop SynaMan service, run **`/etc/init.d/synaman stop`**

You must be root to run the above script.

#### **MacOS:**

Double click SynaMan.app application to run. Go to “Generic Method” to stop the SynaMan application.

#### **Other UNIX Platforms:**

Execute run.sh script to start SynaMan. You can stop it by sending a kill command or go to “Generic Method” to stop the SynaMan application.

#### **Generic Method to Stop SynaMan service:**

This method can be used on any operating system, provided following conditions are met:

- You must login as Admin
- You must be logged in from the localhost

Type the following URL in your browser to stop SynaMan:

<http://localhost/app?operation=terminate>

### **Uninstalling SynaMan**

SynaMan can be uninstalled on different platforms as follows:

#### **Microsoft Windows:**

- 1 From the **Start** menu, click **Control Panel**.
- 2 Double-click **Add/Remove Programs**.
- 3 Click **SynaMan** in the list of programs that is displayed, and then click **Add/Remove**.
- 4 Click **Next**.
- 5 Click **Remove**, and then click **Next**.
- 6 Click **Remove**.

#### **Note:**

*A reboot is NOT required after uninstalling SynaMan.*

#### **Linux:**

You must run the uninstall.sh script to uninstall SynaMan.

- Ensure the permissions for **uninstall.sh** is set as an executable. If not, use the **chmod +x uninstall.sh** command to change its permission
- Execute uninstall.sh script

#### **Mac OS and Others:**

For all other platforms, delete the installation folder.

# ***Chapter 2: Managing Shared Folders & Notifications***

## **Shared Folders**

Shared folders are virtual folders that references physical folders on the hard drive of the host machine. Similar to a Windows shortcut, a shared folder is only an alias for the real folder. The purpose of a shared folder is to hide the actual path from the end user, which is done for security purposes. When a user connects to a host machine, they only see that part of your hard drive that you decide to share. Since the end-user never knows the actual path, they cannot navigate to any other directory.

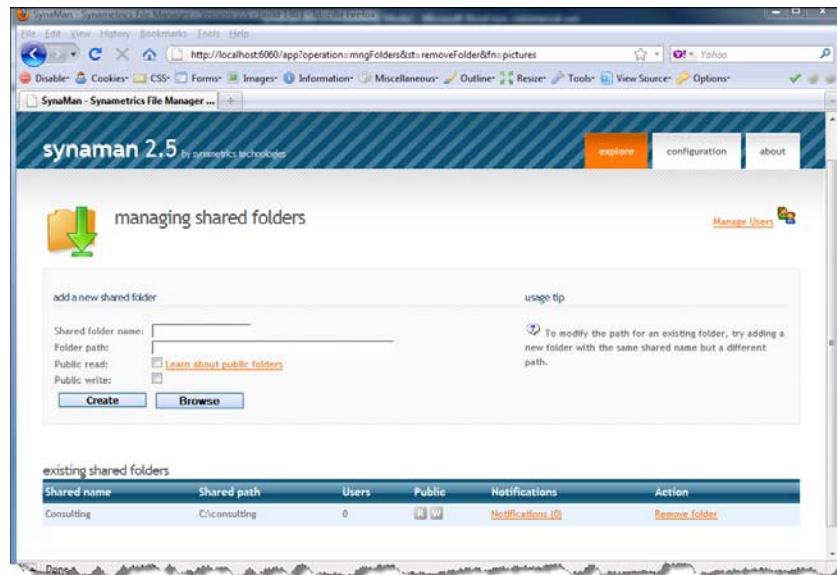
## **Adding a new shared folder**

Perform the following steps to create shared folders:

- 1 From the SynaMan Configuration window, click on “click here” under “manage shared folders”.
- 2 A new window with the title “managing shared folders” will appear.
- 3 Enter a desired name for the shared folder in the **Shared folder name** field.
- 4 Enter the path of the folder that you want to share in the **Folder path** field. Click on Browse to search your computer for the folder that you want to share. Once you have selected the folder, click on OK to continue.

## **Public Folders:**

- 5 If you make your folder public, it is added by default as a shared folder for all the users. Please note that a public folder does not allow access to its sub-folders. Only the files in the public folder are accessible to all.
- 6 Click on **Public read** checkbox if you want your folder to be accessible by all users with only read privilege.
- 7 Click on **Public write** checkbox if you want your folder to be accessible by all users with only write privilege.
- 8 Click on **Public read** and **Public write** checkbox if you want your folder to be accessible by all users for both read and write privileges.
- 9 Once a folder is created, it gets added under the existing shared folders table.



## Modifying an existing folder

To modify the path of an existing folder, or to change its Public Read/Write access, follow the same steps as defined in “Creating Shared Folders” title.

- 1 Enter the name of the shared folder that you want to modify in the **Shared folder name** field.
- 2 Enter the path of the folder that you want to share in the **Folder path** field. Click on Browse to search your computer for the folder that you want to share. Once you have selected the folder, click on OK to continue.
- 3 Click on **Public read** checkbox if you want your folder to have the read privilege for all the users.
- 4 Click on **Public write** checkbox if you want your folder to have the write privilege for all the users.

## Removing an existing folder

- 1 From the “managing shared folders” window, scroll down to the existing shared folders area.
- 2 Click on Remove under the Actions column to remove the shared folder.

## Notifications

Notifications allow the users of a shared folder to be aware of any updates made in the folder. Notification messages can be sent via email when a user uploads or downloads a file in the shared folder. This is a very useful feature if you are using SynaMan as a central repository for your project files as it can be configured to send an email confirmation to the entire team when a change is made in the repository.

## Adding a Notification

In order to add notification for a specific shared folder, click on the **Notifications** from the **managing shared folders** screen as shown by the red arrow.

The screenshot shows the 'managing shared folders' page in synaman 2.5. At the top, there's a navigation bar with 'explore', 'configuration', and 'about' links. Below the header, there's a 'managing shared folders' section with a folder icon and a 'Manage Users' link. A message states 'Folder has been saved successfully'. Below this, there's a form to 'add a new shared folder' with fields for 'Shared folder name', 'Folder path', 'Public read', and 'Public write', along with 'Create' and 'Browse' buttons. To the right, a 'usage tip' explains how to modify the path. Below the form, there's a table titled 'existing shared folders' with columns: 'Shared name', 'Shared path', 'Users', 'Public', 'Notifications', and 'Action'. A red arrow points to the 'Notifications' column header. The table contains one row for the 'consulting' folder, showing 1 user, public access, and a link to 'Notifications (1)'. The 'Action' column has a 'Remove folder' link.

Shared name	Shared path	Users	Public	Notifications	Action
consulting	C:\consulting	1	R W	<a href="#">Notifications (1)</a>	<a href="#">Remove folder</a>

A new screen will be displayed that will allow you to add a notification:

The screenshot shows the 'folder notifications' page in synaman 2.5. At the top, there's a navigation bar with 'explore', 'configuration', and 'about' links. Below the header, there's a 'folder notifications' section with a folder icon and links to 'Manage Folders' and 'Manage Users'. A message states 'Shared folder name: "consulting"'. Below this, there's a section titled 'add notification' with a sub-header 'Using folder notifications you can have the system generate email messages when someone uploads or downloads files from a shared folder.' The form includes 'Current folder name: consulting', an 'Email Address' field, and checkboxes for 'Upload notification' and 'Download notification', along with a 'Create' button. To the right, there's a 'frequently asked questions' section with links to 'What are notifications' and 'How to modify existing notifications'. Below the form, there's a table titled 'existing notifications' with columns: 'Email Address', 'Upload', 'Download', and 'Action'. The table contains one row for 'fauzia@focusskills.com', showing 'Yes' for both 'Upload' and 'Download', and a 'Remove' link.

Email Address	Upload	Download	Action
fauzia@focusskills.com	Yes	Yes	<a href="#">Remove</a>

- 1 Enter the email address on which the notification needs to be sent in the **Email Address** field.



- 2 Click on **Upload Notification** checkbox if you want the notification to be sent when an upload action occurs in the folder.
- 3 Click on **Download Notification** checkbox if you want the notification to be sent when a download action occurs in the folder.
- 4 Click on **Create** to create the notification.
- 5 To add more notifications, follow the same steps by adding another email address of the user that you want to notify.

### **Modifying an existing Notification**

- 1 In order to modify an existing notification, enter the email address of the user of the existing notification in the **Email Address** field.
- 2 Update the Upload Notification/Download Notification checkbox accordingly.
- 3 Click on **Create** to modify the notification.

### **Deleting an existing Notification**

- 1 From the “folder notifications” window, scroll down to the existing notifications area.
- 2 Click on Remove under the Actions column to remove the notification.

# Chapter 3: Managing User Accounts

## Adding new users

- 1 From the SynaMan Configuration window, click on “click here” under “manage users”.
- 2 A new window with the title “system users” will appear.
- 3 Click on Add a new user label. A new window will pop-up that will allow you to create users.



- 4 Enter User's Full Name in the **User's name** field.
- 5 Enter User's email address in the **Login Email** field. The user will login to SynaMan using this email address as his/her login ID.
- 6 Enter a password for the user in the **Create password** field.
- 7 Click on **Create User** to create the user.
- 8 Once the user is created, a new entry for the user is displayed on the page with the following information:
  - User's Login: User's email address (also known as User's Login ID)
  - Shared folders: Folders that can be accessed via the user. When user has no permissions to any folders, you will see the “This user does not have permissions to any folder” displayed.
  - Action: Actions that can be performed for the user:
    - Add folder: To add a folder for the user
    - Modify: To modify the user fields
    - Remove: To remove the user.

## Modifying existing users

- 1 From the SynaMan Configuration window, click on “click here” under “manage users”.
- 2 A new window with the title “system users” will appear.
- 3 Browse down to the user you want to modify. Click on the Modify link under Action column.
- 4 A new window will pop-up with User’s name and Login Email populated.
- 5 Modify the **User’s name**, **Login Email** or **Create Password** field accordingly.
- 6 Click **Create user** to modify the user.

## Deleting existing users

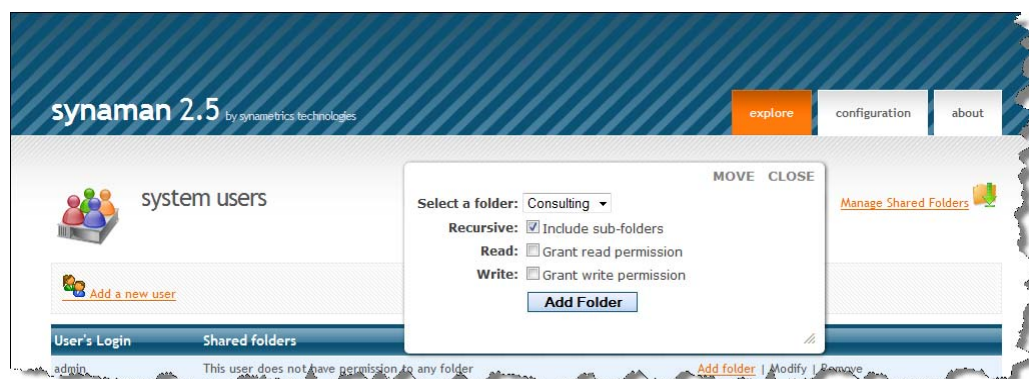
- 1 In the system users window, click on Remove under the Actions column to remove a specific user. A window will pop-up to ask:

This will permanently remove <User’s Login ID>. Are you sure?

- 2 Click **OK** to remove the user.
- 3 Click **Cancel** to cancel the remove operation.

## Assigning folder permission to users

- 1 In the system users window, click on Add Folder under the Actions column to add a folder for a specific user.
- 2 A new window will pop-up that will allow you to add a folder.



- 3 Select a folder from the “**Select a folder**” drop down menu.
- 4 Click on **Recursive** checkbox if you want all sub folders under the selected folder to be available to the user.
- 5 Click on **Read** checkbox if you want the user to have read access to the folder

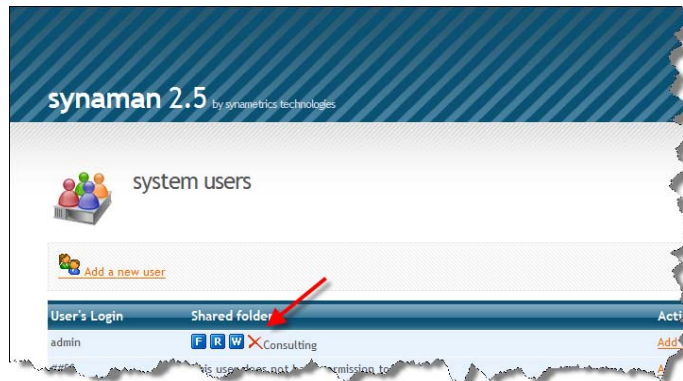
- 6 Click on **Write** checkbox if you want the user to have the write access to the folder.
- 7 Click on Add Folder once all fields have been populated.

### Modifying folder permissions for the users

- 1 To modify the permissions of an existing folder, or to change the sub-folder access, you have to follow the same steps as defined under “Assigning folder permissions to users” title.
- 2 In the system users window, click on Add Folder under the Actions column to modify an existing folder for a specific user.
- 3 A new window will pop-up that will allow you to modify a folder.
- 4 Select the folder that you want to modify from the “Select a folder” drop down menu.
- 5 Click on **Recursive** checkbox if you want all sub folders under the selected folder to be available to the user.
- 6 Click on **Read** checkbox if you want the user to have read access to the folder
- 7 Click on **Write** checkbox if you want the user to have the write access to the folder.
- 8 Click on **Add Folder** once all fields have been populated.

### Revoking access of a folder for a user

- 1 To revoke access of a folder from the user, click on the red X next to the folder. The access will be removed.



### General user vs. Admin user

*You cannot modify or remove the admin user. However in order to access the shared folders, you will need to add the shared folders for the admin user.*

## Chapter 4: Modifying Configuration

### Setting up email configuration

Out-bound emails are sent to an SMTP server. This is similar to the configuration you have to perform when using emails clients like MS Outlook Express or Mozilla Thunderbird. This information is usually provided by either your ISP or the system administrator in your company.

Below is a list of some major ISPs and email service providers that you can use to specify an SMTP server:

Provider Name	SMTP Server	Port	User Name	Security
Google	smtp.gmail.com	587	YourEmail@gmail.com	TLS
Hotmail	smtp.live.com	587	YourEmail@hotmail.com	TLS
Yahoo	smtp.mail.yahoo.com	465	YourEmail@yahoo.com	SSL
Verizon	outgoing.verizon.net	25	Your user id	None
Comcast	smtp.comcast.net	25	Your user id	None
1and1	smtp.1and1.com	25	Your user id	None
AOL	smtp.aol.com	25	Your user id	None
Optimum Online	mail.optonline.net	25	YourEmail@optOnline.net	None
Time Warner cable	Every state is assigned a different server.			None

If you do not have an option of using any of the above listed servers, contact your ISP or the system administrator in your company to get the actual values.

NOTE: We need your help in providing a list of major ISPs in countries other than the United States. Please contact us at support@synametrics.com if you have this information for other major ISPs.

In order to set up Email Server, please perform the following steps:

- Log in to SynaMan utility as an **admin** user.
- Click on **click here** under **modify configuration**.
- Select the **Email Configuration** tab. You will see the following screen:

## – Email Configuration

Administrator's Email:   
Email address of the administrator. This is where alerts are sent. Additionally, this address is also used as the sender for every email.

SMTP Server:   
SMTP server is required for out-bound emails. Ask the system administrator in your company (or your ISP if you are a home user) for the exact value.

SMTP Server Port:   
TCP/IP port on which the SMTP server listens on. The default value for this parameter is 25.

SMTP User:   
If your SMTP server requires authentication, specify the user name here. Leave it blank if no authentication is required.

SMTP Password:   
Password for your SMTP server

Secure connection  
☒ None ☐ TLS ☐ SSL

### ? when are emails sent?

Emails are generated by the system in the following cases:

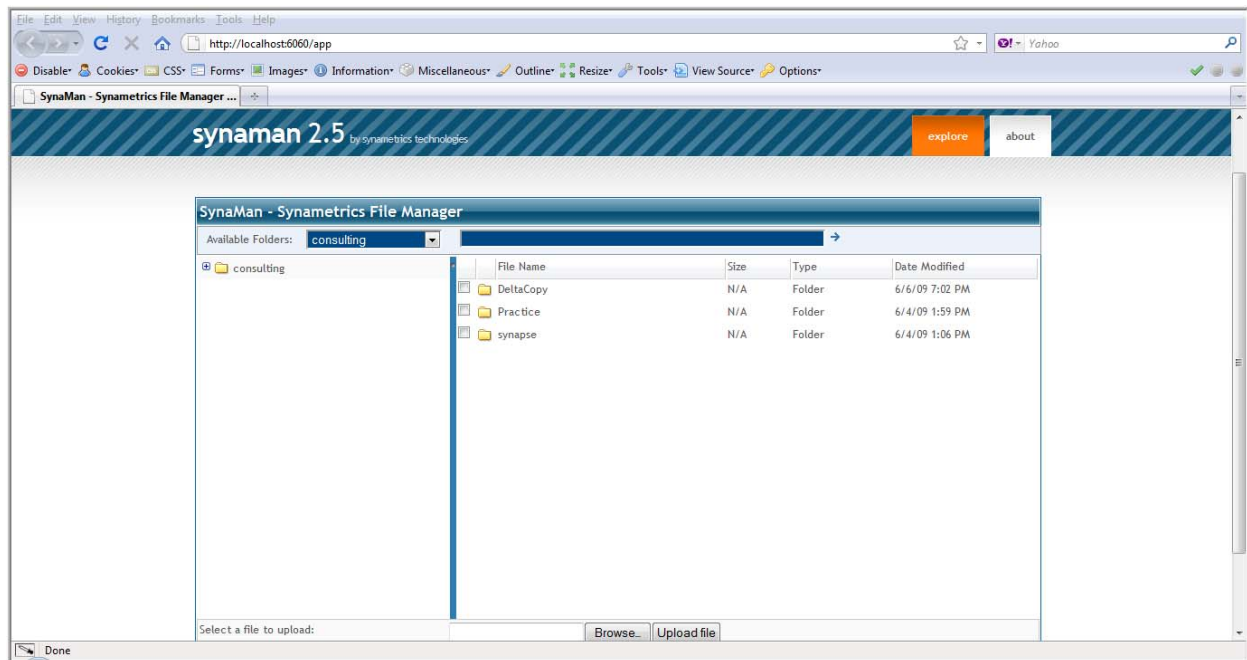
- When a user forgets his/her password and submit a request retrieve it via email.
- When a security violation occurs. You can setup security alerts under security tab.
- When upload or download notification rules are specified on a folder.

- The admin email address will be filled in the **Administrator's Email** field.
- Enter the name of your SMTP Server in the **SMTP Server** field.
- Enter your SMTP user name in the **SMTP User** field.
- Enter your SMTP password in the **SMTP Password** field.
- Select the radio button of the type of **Secure connection** that you want.
- Click on **Save** to save the Email configuration. You will see the following confirmation:

**Values have been saved successfully**

# Chapter 5: Client Access

When a user (other than admin) logs in SynaMan, the following screen is displayed:



There are two tabs at the upper right hand corner:

- explore: Clicking on this tab (as seen in the window) will show you the Synametrics File Manager utility that allows the user to manage the folders that are accessible to them.
- about: Clicking on this tab will show the SynaMan version, the name of the person that its registered to and the type of edition that you are running.

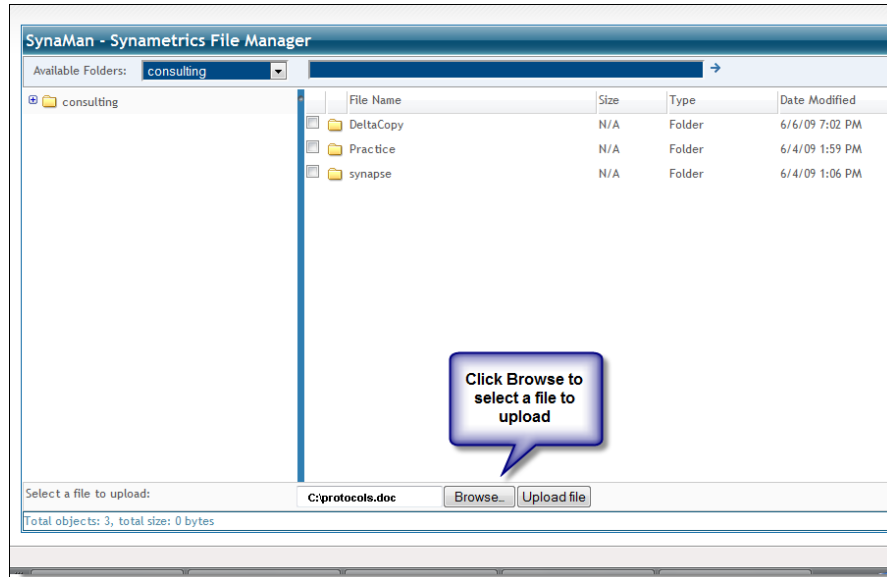
## Synametrics File Manager:

Synametrics File Manager is the file explorer for users. Right next to **Available Folders**, you will see a drop down menu with a list of shared folders that you have access to. These folders reference to an actual physical folder on the hard drive of the host machine, however you can only navigate in the folder or in its subfolder (if you have permission to do so). Depending on the privileges assigned to you, here are the tasks that you can perform on the shared folders:

## Uploading a file

Before you upload a file, make sure that you are in the correct directory/subdirectory where the file needs to be uploaded. Also, you can only upload a file if you have write permissions for that share folder.

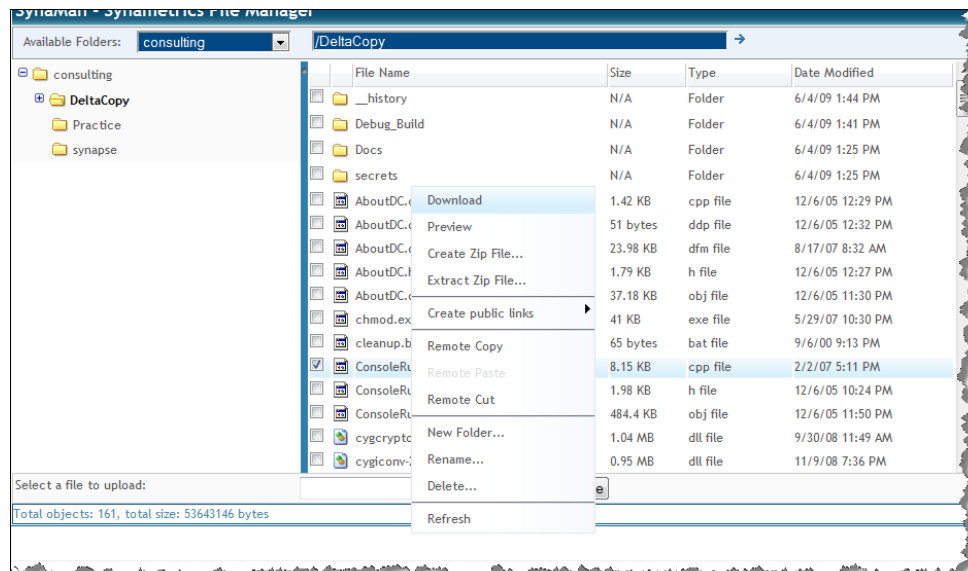
- 1 Enter the name of the file that you want to upload in the **Select the file that you want to upload** field.
- 2 If you need to find the path of the file, click on **Browse** and you can browse on your local machine to search the file for upload.
- 3 Click on **Upload file** to upload the file.



## Downloading a file

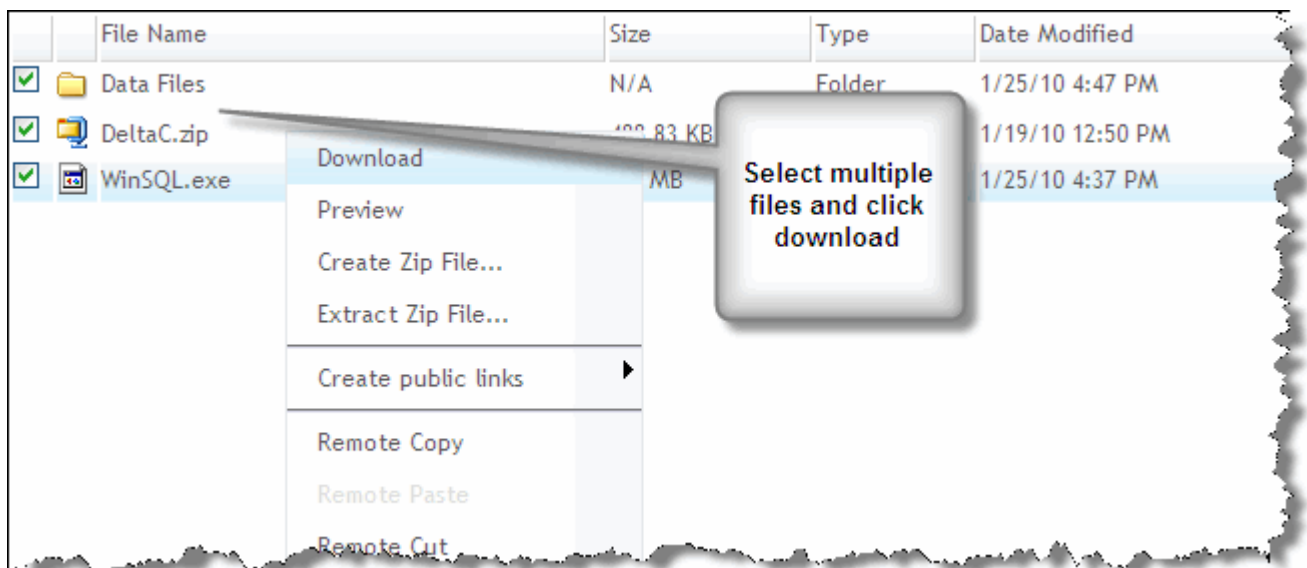
- 1 Click on the file that you want to download.
- 2 Right click on your mouse and you will see a menu. Select **Download** from the menu.
- 3 You will then see a pop-up window that will give you the option of opening the file or saving the file.





Starting from SynaMan version 2.5, you can download more than one file simultaneously. When multiple files are selected, SynaMan automatically creates a zip file in the background informs you about it. You will then see a pop-up window that will give you the option of opening the zipped file or saving it.

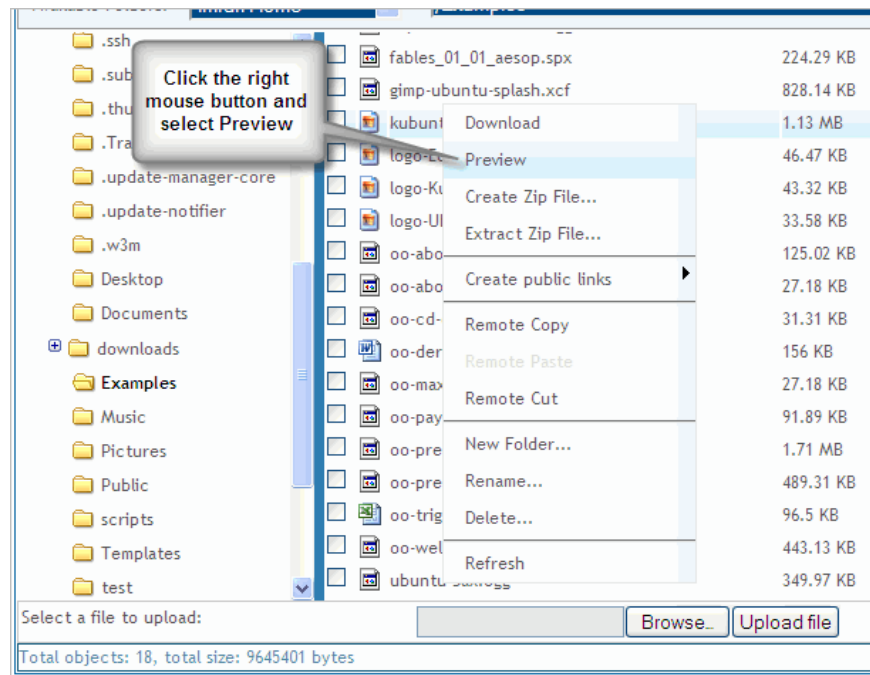
Similarly, when you choose to download a folder, SynaMan will zip the folder and then download it.



## Preview

Starting from SynaMan version 2.4, you can preview files (one at a time) on the host machine before you download them locally. Preview functionality is a quick way to view the contents of a file on the host machine. This reduces the two step process of downloading and viewing

to a one step process of “previewing” the file.



### Restrictions on file preview

- It can preview only one file at a time and displays the contents of the file in Preview Browser window.
- Out of the box, SynaMan can preview common extension files. You should be able to preview the following types of files:
  - Images (GIF, JPEG, PNG and Bitmaps)
  - Plain text files
  - HTML files
  - PDF files
- If you try to preview a file whose extension is not recognized by the Preview Browser (for example a file with extension .log, .cpp, .h), the follow the following steps to add this new file type in SynaMan so that it gets displayed in the preview window.
  - You must be on the machine where SynaMan is running
  - Using Windows Explorer or the Terminal on Linux go to the directory where SynaMan is installed
  - Change directory to the "config" folder
  - Create a file called mimeTypees.txt

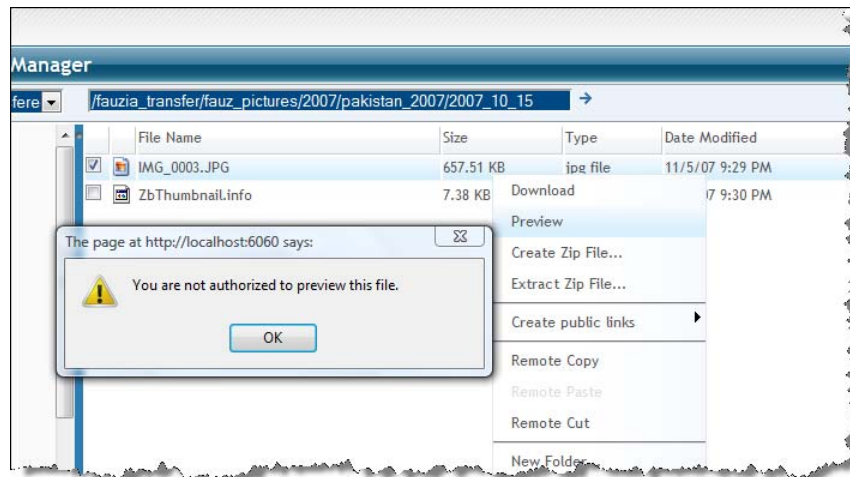
- Enter one file type per line, for example:

```
log=text/plain
dat=text/plain
aspx=text/html
```

- Save the file and restart SynaMan.
- Any files that cannot be opened in your browser cannot be previewed. For example:
  - A Microsoft Access database
  - An EXE or DLL file residing on the host machine

### Permissions on File Preview

If you try to preview a file, for which you do not have Read permissions, the following error will be displayed:



### Creating ZIP file

As long as you have write permissions on the shared folder, you can select multiple files and create them into a ZIP file. The **ZIP** file format is a data compression and archive format. A ZIP file contains one or more files that have been compressed to reduce file size, or stored as-is. Advantage of ZIP file that you can move multiple files from remote machine to local machine (and vice versa) simultaneously rather than one file at a time. In order to create a ZIP file, here are the steps:

- Select the files that you want to ZIP.
- Right click on the mouse and you will see a menu. Select **Create Zip file** from the menu.
- You will see the following confirmation dialog box that shows the name of the ZIP file that it will create:



- If you want, you can change the name of the file (but keep the .zip extension).
- Click on **Ok** to complete the ZIP file creation process.
- The ZIP file will be added to the current folder.

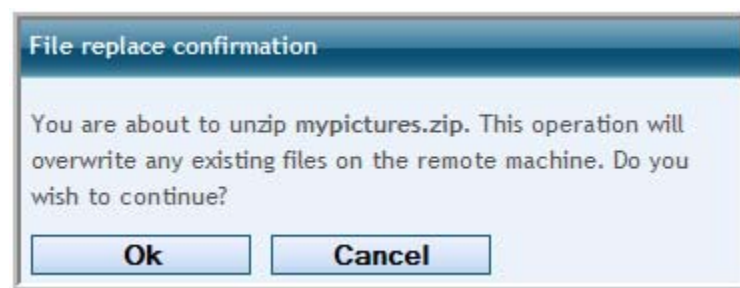
### Extracting from a ZIP file (UNZIP a file)

As long as you have write permissions on the folder, you can select any ZIP file (file in a ZIP format with .zip extension) and extract the files from the ZIP archive. Here are the steps:

- Select the file that you want to ZIP. You can only select one ZIP file, otherwise when you try to unzip, you will see an error dialog box that states:

**You can only unzip one file at a time.**

- Right click on the mouse and you will see a menu. Select **Extract Zip file** from the menu.
- You will see the following confirmation dialog box that shows the name of the ZIP file that it will extract.



- Click **Ok** to continue.

### Remote Copy, Paste and Cut functions

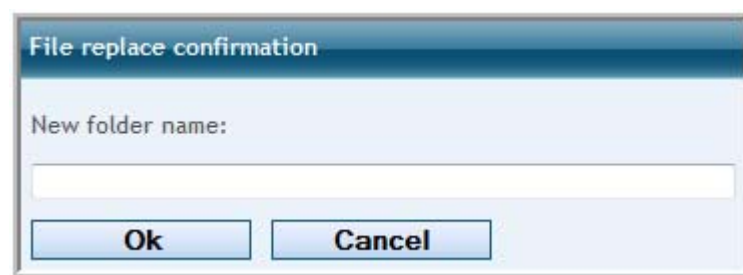
SynaMan allows you to cut, copy and paste files and file content via your remote connection. This is all done via a remote clipboard that comes as part of SynaMan. SynaMan remote functions give you the advantage of not only accessing remote folders but also manipulating the contents of the folders.

- Right click on the mouse and you will see a menu with Remote Copy, Remote Paste and Remote Cut options.
- Select a file that you want to copy and then click on **Remote Copy**. This will copy the file on the remote clipboard that comes with SynaMan.
- Browse to a subfolder or another folder where you want to copy the file.
- Right click on the mouse again and from the menu, click on **Remote Paste**.
- The file will be pasted in your folder from the remote clipboard.
- Follow the same instructions when you want to cut and paste a file.

## Creating New Folder

As long as you have the write access, you can create new subfolders in your host machine folder directory.

- Right click on the mouse and click on **New Folder** from the menu.
- A new dialog box will pop up prompting you to enter the name of the new folder.



- Enter the name of the new folder in the **New folder name** field and click on **OK**.
- Please make sure that the name of the folder is unique, otherwise you will get the following error:

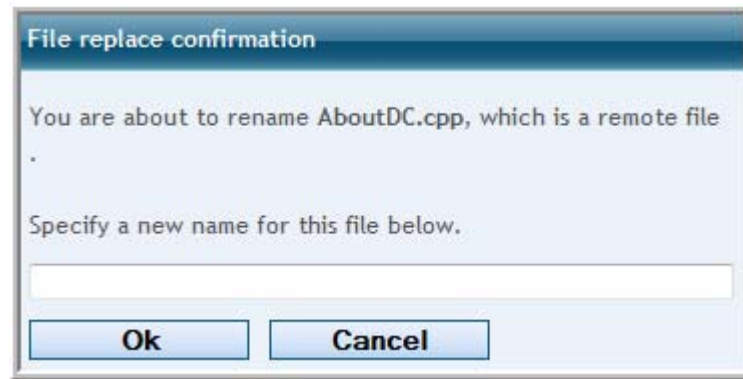
**“Could not create specified folder.”**

## Renaming & Deleting a file

You can rename and delete any file in your remote folder or subfolder as long as you have the write permissions.

- Select the remote file that you want to rename.
- Right click on the mouse and click on **Rename** from the menu.

- A new window will pop up that will show you the original name of the file and prompt you to enter the new name of the file.



- Enter the new name for the file in the **Specify a new name for this file below** field and click on **Ok**.
- Please make sure that you enter a unique name. If a file with same name already exists, you will get the following error:

**Target file already exist. Please choose a different name**

## Chapter 6: Creating public links

In typical environment you would create a user account for anyone who needs to manage files from the host machine. However, consider a scenario where a business associate or a client needs to send you a large file. Since this is a one-time need, creating a user account for this person is cumbersome and unnecessary.

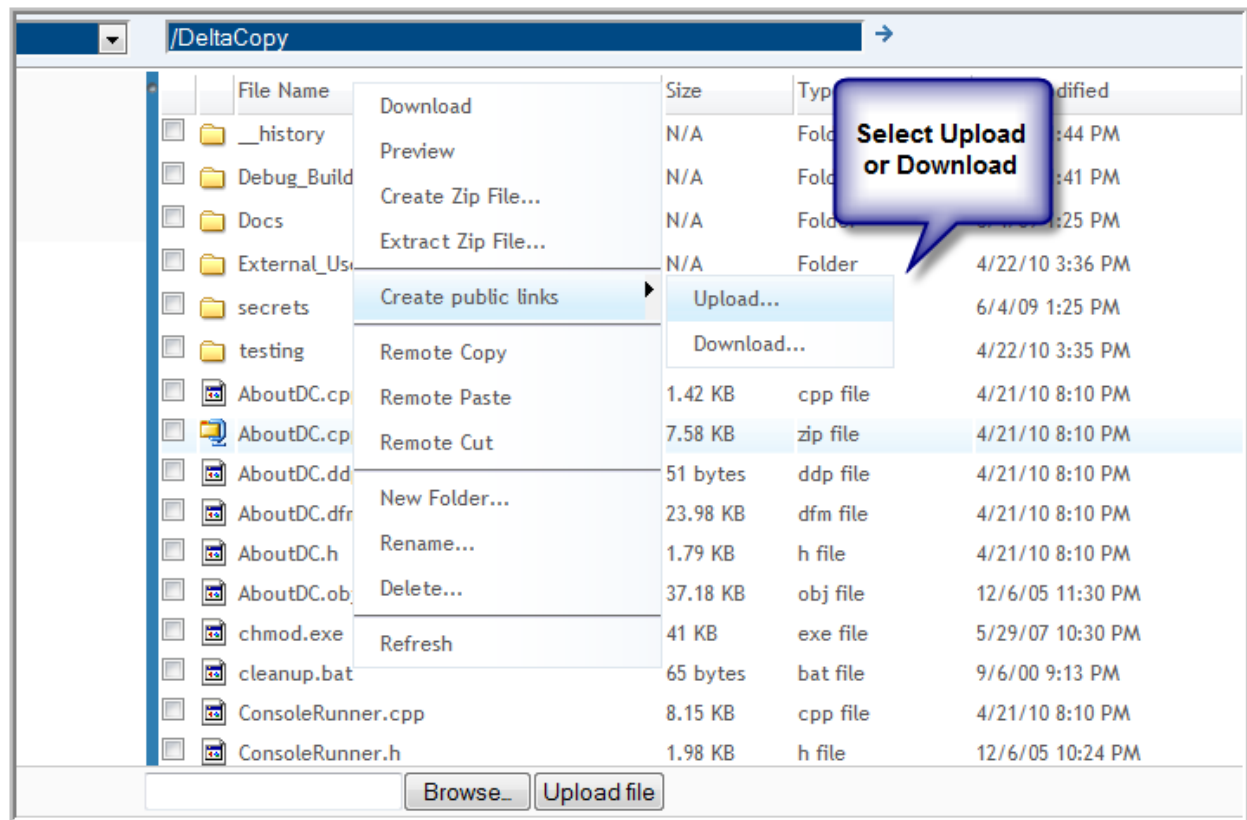
To facilitate uploading and downloading files for such occasional users, SynaMan allows you to create a public link, which is an HTML hyper link sent via email to the desired user. This user can click the hyper link from his/her email to either upload or download file.

These instructions assume:

- You have installed SynaMan on a computer running in your office and have configured your firewall to allow traffic for TCP/IP port 6060 to this machine

Use the following steps to create a public link.

- Select a folder in which you want the external user to upload or download the files.
- Click on the right mouse button and select **Upload** from the **Create public links** menu.



This opens up the following screen:



**Global upload link wizard**

Using this wizard you can invite a user on the Internet or your local network to upload a file to this folder without authentication.

When you click Ok, an email will be sent to the user with necessary hyper link.

Link type:

Expires after:

End-user name:

End-user email:

CC email to:

Comments:

- Select the **Link Type** field from its drop down menu to either Internet or - This can be either Internet or Local Network.
  - Select **Internet** if your external user is going to be connecting over the Internet. This option changes the host name in the URL to either use the public or private IP address of your network.
  - Select **Local Network** if your external user is going to connect locally.
- Select the number of days that you want the link to be active for from the **Expires after** drop down menu. You will see many choices in the **Expires after** option from 1 day to Never. Select the option Never if you want it to be a permanent public link
- Enter the name of the user that will use the public link in the **End-user name** field.
- Enter the email address of the user that will use the public link in the **End-user email** field.
- Enter the email address of the person that you want to be copied to the emails in the **CC email** field. This is an optional field used commonly to place your own email address so that you can get a copy of the message.
- Enter your comments in the **Comments** field. This is also an optional field and you can add comments for your own benefit.
- Click on **Ok** to finish this process. When you do so, the system will generate an email to **End-user email** containing a link to upload the project files.



When the end-user clicks on the link, he will connect to your host machine and upload/download necessary files. Other than uploading/downloading file(s), he will not be able to view any other files.

## Chapter 7: Security Features

### Audit Logs

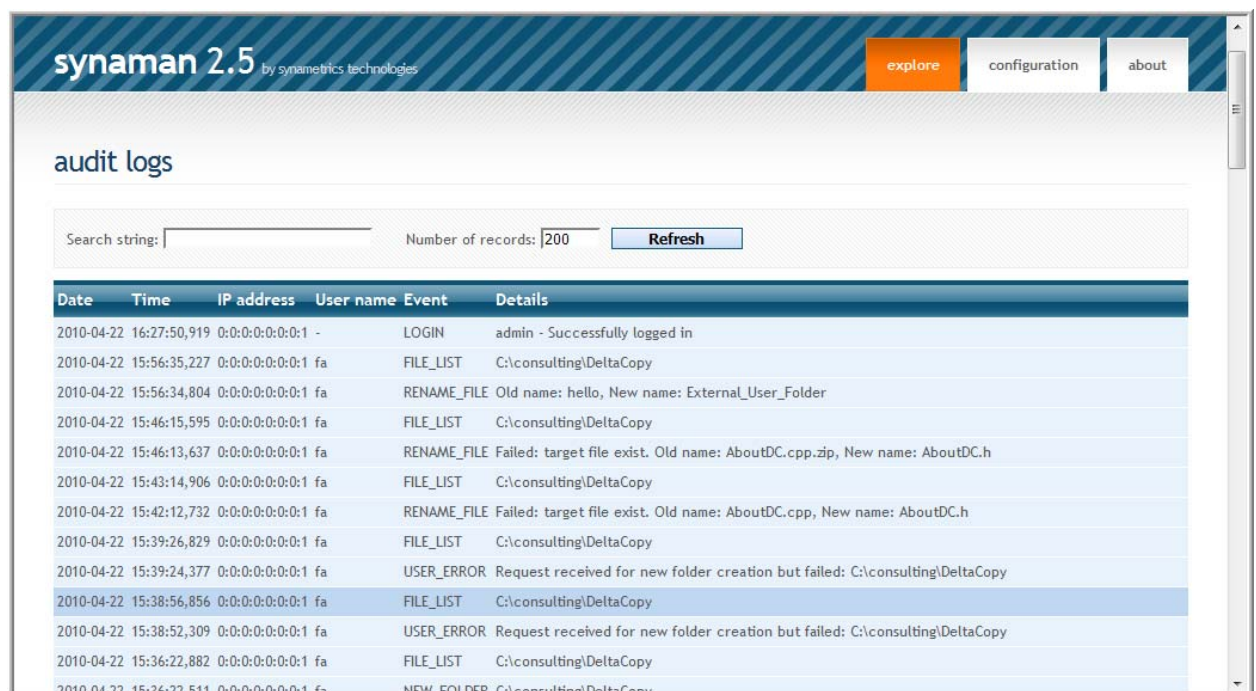
The audit-trail logging mechanism allows administrators to back-trace a user's activity. This includes whenever a user logs in, views the contents in a folder and download or uploads a file. In all these instances, a log file is generated in the background. This log file can be viewed in two ways:

- Using SynaMan's web interface
- Manually view the file in any text editor. The file is located in \$SYNAMAN/logs folder.

### Using the web interface to view Audit Log file

SynaMan's web interface provides a convenient way to view the audit-trail logs. Perform the following steps to view the log file:

- Log in to the SynaMan utility using the **admin** account.
- Click **View Audit Logs** under **Quick Links** on the right hand side.
- The following page displays entries in the log file in reverse order - meaning the most recent log entry appears first. Here is an example:



Date	Time	IP address	User name	Event	Details
2010-04-22	16:27:50,919	0:0:0:0:0:0:1	-	LOGIN	admin - Successfully logged in
2010-04-22	15:56:35,227	0:0:0:0:0:0:1	fa	FILE_LIST	C:\consulting\DeltaCopy
2010-04-22	15:56:34,804	0:0:0:0:0:0:1	fa	RENAME_FILE	Old name: hello, New name: External_User_Folder
2010-04-22	15:46:15,595	0:0:0:0:0:0:1	fa	FILE_LIST	C:\consulting\DeltaCopy
2010-04-22	15:46:13,637	0:0:0:0:0:0:1	fa	RENAME_FILE	Failed: target file exist. Old name: AboutDC.cpp.zip, New name: AboutDC.h
2010-04-22	15:43:14,906	0:0:0:0:0:0:1	fa	FILE_LIST	C:\consulting\DeltaCopy
2010-04-22	15:42:12,732	0:0:0:0:0:0:1	fa	RENAME_FILE	Failed: target file exist. Old name: AboutDC.cpp, New name: AboutDC.h
2010-04-22	15:39:26,829	0:0:0:0:0:0:1	fa	FILE_LIST	C:\consulting\DeltaCopy
2010-04-22	15:39:24,377	0:0:0:0:0:0:1	fa	USER_ERROR	Request received for new folder creation but failed: C:\consulting\DeltaCopy
2010-04-22	15:38:56,856	0:0:0:0:0:0:1	fa	FILE_LIST	C:\consulting\DeltaCopy
2010-04-22	15:38:52,309	0:0:0:0:0:0:1	fa	USER_ERROR	Request received for new folder creation but failed: C:\consulting\DeltaCopy
2010-04-22	15:36:22,882	0:0:0:0:0:0:1	fa	FILE_LIST	C:\consulting\DeltaCopy
2010-04-22	15:36:22,511	0:0:0:0:0:0:1	fa	NEW_FOLDER	C:\consulting\DeltaCopy

- To search for a specific string, enter the string in **Search string** field and hit Return.
- This will show you all the logs that have a match for the search string.

## Https – Using SSL certificate

SSL is an industry-standard encryption mechanism that you can use to make your transfer secure. When SSL is enabled, the URL of your browser starts with HTTPS instead of HTTP.

In order to enable SSL, please perform the following:

- Log in to SynaMan utility as an **admin**.
- Click on **click here** under **modify configuration**.
- Select the **Http Configuration** tab. You will see the following screen:

**synaman configuration**

email configuration security **http configuration**

**IMPORTANT:** Any changes to these settings will cause SynaMan to restart.

— Basic configuration —

Primary HTTP Port:   
 TCP/IP port for the built-in HTTP server. We recommend you use port 80 for this value, unless some other web server is being used on the machine.

Secondary HTTP Port:   
 TCP/IP port for the secondary HTTP server. A value greater than 0 for this field will cause SynaMan to listen to another TCP/IP port.

Secure HTTP Port:  **Specify a positive number less than 65000. Use 443 if no other web server is running on this machine.**  
 TCP/IP port for secure HTTP server (SSL). This value is used if you have an SSL certificate installed.

**Save**

**http port**  
 SynaMan contains a built-in web server. Users connect to this web server to upload and download files. This web server can listen on two TCP/IP ports: primary and secondary. Additionally, you can also install a third port to make the server more secure.

- Specify a positive value for **Secure HTTP port**.

- Click on **Save**
- Restart SynaMan (Please refer to Chapter 1: Starting/Stopping SynaMan utility on how to restart SynaMan).

## SSL Certificate

An SSL certificate is required when you enable this option. In order to test this functionality we have included a self-signed certificate with SynaMan. A self-signed certificate is not trusted by any browser and therefore, you will see a warning message regarding the certificate. Every browser displays this warning differently. Please go to

<http://web.synametrics.com/SynamanBrowserWarnings.htm> to see the warning messages displayed by different browsers.

In order to avoid getting this warning message, you need purchase an SSL certificate from a certificate authority. Refer to <http://web.synametrics.com/synamancsr.htm> to see how to install a purchased certificate in SynaMan.

## Multiple Http Ports

SynaMan by default listens on multiple HTTP ports:

- TCP/IP port 80 - HTTP
- TCP/IP port 6060 - HTTP
- TCP/IP port 443 - HTTPS

TCP/IP port 80 is a common port for any web server. However, this port is often blocked by many Internet Service Providers, particularly if you have a dynamic IP address.

If a web server listens on a port other than 80, the user will have to explicitly type that port in the URL. For example:

- <http://myHomeMachine.com:6060> - User will have to append the host name with a colon followed by the port number.

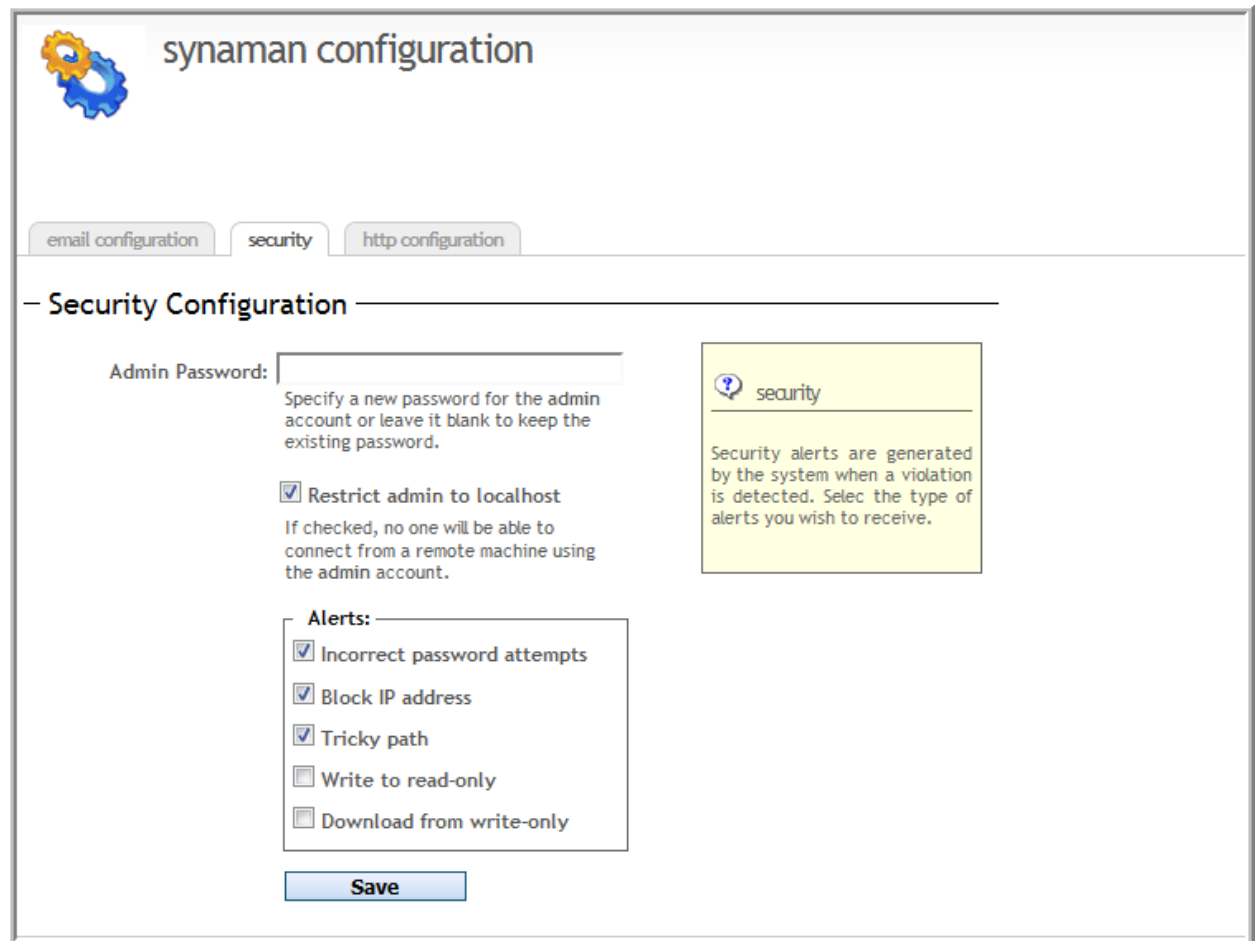
<http://myHomeMachine.com> - No need to type the port if the server listens on port 80.

Therefore, it is always convenient from the client's perspective to have a web server listen on port 80. However, in certain cases you may not be able to run a web server on this port. This could happen if another web server is listening on this port or your Internet Service Provider blocks this port. To avoid such scenarios, SynaMan can listen on two TCP/IP port for HTTP traffic. Depending upon your network settings, you can have one set of users connect to port 80 and another set to 6060.

## Setting up Security Alerts & Changing Admin Password

Security Alerts are generated by the SynaMan utility when it detects a violation or a security breach that may make your system and your shared files vulnerable to others. Perform the following steps for Security Configuration:

- Log in to SynaMan utility as an **admin**.
- Click on **click here** under **modify configuration**.
- Select the **security** tab. You will see the following screen:



The screenshot displays the 'synaman configuration' window with the 'security' tab selected. The window has a title bar and a logo in the top left. Below the title bar are three tabs: 'email configuration', 'security', and 'http configuration'. The 'security' tab is active, showing a section titled 'Security Configuration'. On the left, there is a text input field for 'Admin Password' with a placeholder text: 'Specify a new password for the admin account or leave it blank to keep the existing password.' Below this is a checked checkbox labeled 'Restrict admin to localhost' with a description: 'If checked, no one will be able to connect from a remote machine using the admin account.' To the right of this section is a yellow box with a question mark icon and the text: 'Security alerts are generated by the system when a violation is detected. Select the type of alerts you wish to receive.' Below the 'Restrict admin to localhost' section is an 'Alerts:' section with five checkboxes: 'Incorrect password attempts' (checked), 'Block IP address' (checked), 'Tricky path' (checked), 'Write to read-only' (unchecked), and 'Download from write-only' (unchecked). At the bottom of the form is a blue 'Save' button.

- To change the Admin password, specify a new password in the **Admin Password** field.
- In order to restrict admin from connecting to SynaMan via local host only, check the **Restrict admin to localhost** checkbox. This will ensure that admin can only connect from local system and not from any other remote systems.
- You can set up Alerts for the following conditions so that admin will receive an email if a violation occurs:
  - Check the **Incorrect password attempts** checkbox if you want admin to receive an email when someone tries to log in to SynaMan with incorrect password attempts of more than 3.

- Check the **Block IP address** checkbox if you want admin to receive an email when someone tries to connect to SynaMan unsuccessfully from a specific IP Address for more than 5 times.
- Check the **Tricky Path** checkbox if you want admin to receive an email when someone specifies a tricky path manually.
- Check the **Write to Read-only** checkbox if you want admin to receive an email when someone tries to write in a shared folder for which he has only read access.
- Check the **Download from write-only** checkbox if you want admin to receive an email when someone tries to download file(s) from a shared folder for which he has only access to upload file(s).
- You can find more information about the checkboxes by pointing your mouse at the **Alerts** checkboxes.

## Chapter 8: Configuration of Host Discovery

Discovery Wizard is a useful tool for users who want to run SynaMan on a machine that uses a Dynamic IP address. Consider the following scenario where using the Discovery Wizard comes in handy.

- You are running SynaMan on your home computer and want to connect to it from your office
- The Internet in your home runs on a Dynamic IP. This is the case with most ISP for example, Comcast, Verizon FIOS, etc.
- Since the IP address of your home network changes frequently, you cannot connect from your office machine by typing the IP address in the browser's URL.
- The Discovery Wizard helps you located your home machine from anywhere on the Internet using a static URL.

### How does it work?

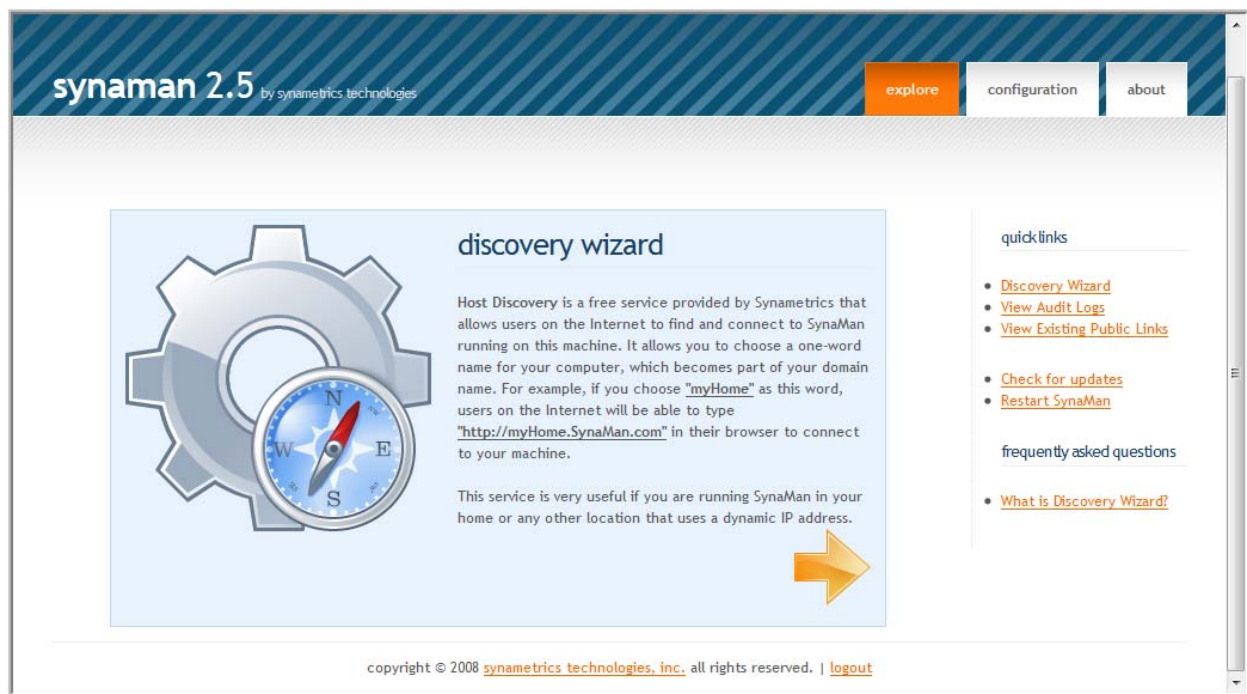
Following happen when you enable the Discovery Wizard:

- You choose a one-word name for your machine. This becomes the part of your domain name. For example, if you choose **myhome** as this word, you will be able to connect to your home machine by typing <http://myhome.synaman.com> in any browser.
- Your installation of SynaMan will frequently ping our web server, which records the IP address your ping comes from.
- When a user on the Internet types <http://myhome.synaman.com> in their browser, the request comes to our web server, which then redirects the client to your home machine.
- Once the client's browser is redirected, our web server no longer stays in the picture and the client talks directly to your host machine.

### Enabling Discovery Service

The discovery service is disabled by default. Please perform the following steps to enable it:

- Log in to SynaMan using the **admin** account.
- Click **Discovery Wizard's** link under **Quick Links** on the right hand side.
- Click next until you come to the screen where it prompts you to enter a one-word name as shown below. Enter a unique name in the **One-word name** field that you can remember and share with other users.

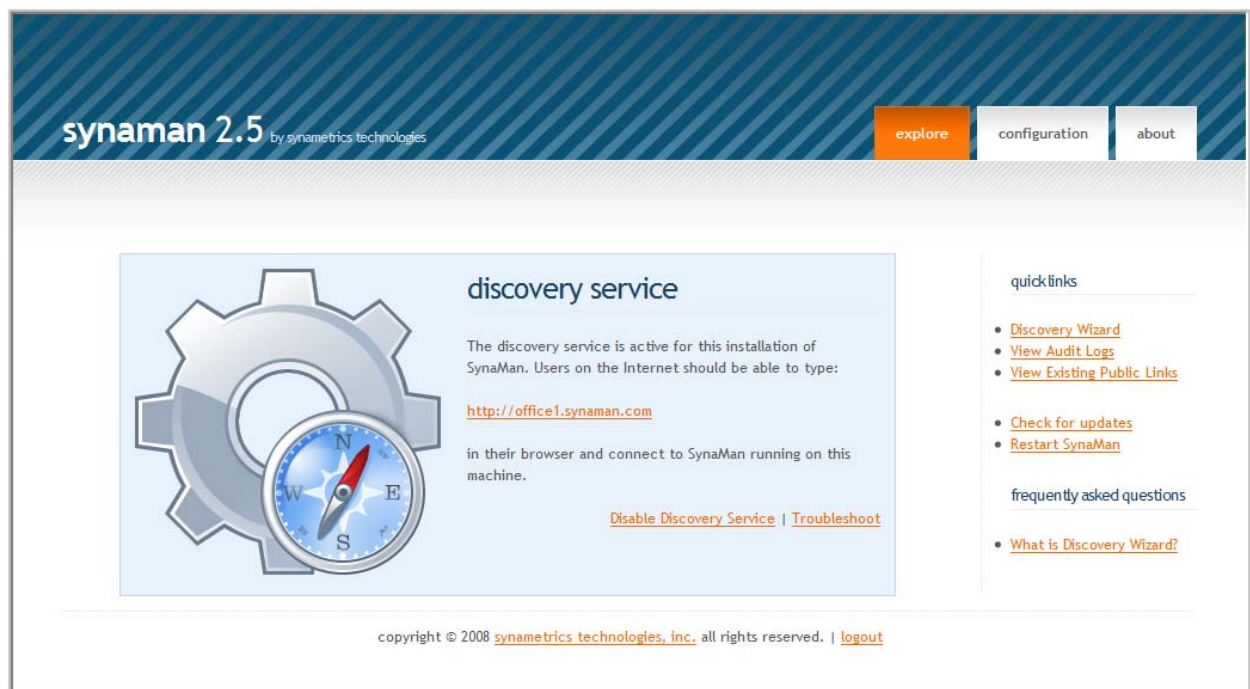


- Click on the arrow at the lower right-hand corner till the process is complete.

### Disable Discovery Service:

Perform the following steps to disable discovery service:

- Log in to SynaMan using the **admin** account.
- Click **Discovery Wizard's** link under **Quick Links** on the right hand side. You will see a window as below:



- Click on **Disable Discovery Service** under the **discovery service**.
- This will disable your discovery service.



## Chapter 9: References

### Important Concepts and Definitions

The following section provides definition of some important concepts and terminologies used in SynaMan.

Concepts & Terminologies	Definitions
<b>Web-based Interface</b>	Web-based Interface is the one that is always connected via a Web Browser. SynaMan is a web-based interface and hence, whether you are connecting as an administrator or a regular user, you always connect to SynaMan using a web browser.
<b>Host URL</b>	<p>Host URL is the web address for connecting to SynaMan. Following are some examples of host URL:</p> <ul style="list-style-type: none"><li>- Localhost: Connecting to SynaMan locally on port 6060 via website: <a href="http://localhost:6060">http://localhost:6060</a></li><li>- IP Address of the host on Intranet: Connecting to host via its intranet IP Address: <a href="http://192.168.1.4:6060">http://192.168.1.4:6060</a></li><li>- IP Address or the unique host name of the host on Internet: Connecting to host via its hostname or its IP Address <a href="http://synaman.mycompany.com">http://synaman.mycompany.com</a></li></ul>
<b>TCP/IP Port</b>	TCP/IP Port is the port that SynaMan listens to. Preferable port for SynaMan is 80. However, in many cases, this port may be taken up by another Web Service. SynaMan can listens on two TCP/IP port for HTTP traffic. Depending upon your network settings, you can have one set of users connect to port 80 and another set to 6060.
<b>Upload</b>	Transfer or copy a file from your local machine to the host machine.
<b>Download</b>	Transfer or copy a file from the host machine to your local machine.
<b>Public Link</b>	Public link is an HTML hyper-link that links to a specific file or folder. This link is sent as an email to a user, and when the user clicks on it, he can upload or download the given file.

<b>Admin account</b>	Admin is the user with administrative privileges. This user will manage the users, folders and the SynaMan configuration.
<b>Host machine</b>	Host machine is the machine on which SynaMan is installed.
<b>Public Folder</b>	Public folder is a folder that is added as a shared folder for all users.
<b>Dynamic IP</b>	An IP Address assigned to your computer temporarily for the duration of your Internet session. This address comes from a pool of IP Addresses that your Internet Service Provider possesses. Each time you connect to Internet, your computer is assigned a new dynamic IP Address.

- For Troubleshooting SynaMan, please go to [SynaMan Technical Documentation Collection](http://web.synametrics.com/SynaManKB.htm) (<http://web.synametrics.com/SynaManKB.htm>).
- For more information about SynaMan, please go to [SynaMan, Synametrics File Manager](http://web.synametrics.com/SynaMan.htm) (<http://web.synametrics.com/SynaMan.htm>).