

# WebSiteRobot

Version 1.2

User Guide

**NetForAll**

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## INTRODUCTION

*WebSiteRobot creates and operates your web site on your computer without additional equipment, software or skill. You may show your resume, recipes, documents, research, poetry, pictures, music, and video, advertise your skills, sell your goods, services, or share your views and hobbies with millions of web users. It's a powerful and convenient way of promoting yourself.*

## **What is WebSiteRobot?**

WebSiteRobot is a computer program that creates, maintains, and hosts your web site on your computer. It uses any Internet Connection that is available. It only requires that you install it and allow it to run. It creates a folder on your computer where you put any file that you want to publish, and your visitors see it instantly on your web site.

WebSiteRobot does not require any additional software or hardware, and there is no need for you to acquire any new skill. This manual helps you become familiar with the work that the Robot does in order to setup your web page on the Internet, the files that it will publish and the feedback that it gives you.

The Robot knows what it needs to do, and it does all that is required to setup your web site and keep you informed about its progress. It will also tell you about the visitors to your sites and what files they are requesting in real time.

You don't have to write HTML, create a special kind of document, or make special arrangements. In essence, you focus on your normal work, and continue to produce the kind of material that you are familiar with, like pictures, text, sound, video, word documents, spreadsheets, reports. It is a good practice to leave your work in its original form instead of transforming it into HTML document. The reason is that it's easier for your colleagues or visitors to download the files and use them directly into the type of application that you used to create the files, without further conversions.

When you need to sell, share, or otherwise publish something, you copy it into the folder that holds your web site, and inform the Robot of the update. That takes one single click, and regardless of the type of file, the robot figures out the best way to show it on the web instantly.

There is a deep-rooted myth that creating a web site is a complicated job. Another very persistent myth is that another company has to host your web site on a web server somewhere in a data center. The fact is, when you are connected to the Internet, your

computer is actually part of the Internet. WebSiteRobot turns it into a practical web server, with the same abilities as any other. Your web site may be as big as the entire 40 Gigs or so available in your hard drive, meanwhile a Web Hosting company makes you share that storage space with hundreds or thousands of other customers.

If you can afford it you can hire a web master or a web design, or if you have the skills, you can setup your web site manually. You will find out that it is either very costly or time consuming. You don't need to spend the money or waste the time. WebSiteRobot makes it easy and fun.

It is worth emphasizing that contrary to what you might expect, there is no file to upload. No web server to acquire. There is no thumbnail to make. There is no HTML document to create, there is nothing to link, and there is nothing to learn. The Robot knows how to do things that are related to the Internet, like recognizing an image file, creating a thumbnail if does not exists already, updating your web site but putting up only the files that are new, or updating the comments that you have added to the documents. It knows that when you put files in a given folder, there is logic in what you are doing, so it maintains that logic all the way. Your web site is right at your fingertips. It is just a directory in your computer, just like any other directory. It's as if you own your own managed web server like any company that respects itself, and the Robot is your web design department.

Using WebSiteRobot to publish your files on the World-Wide-Web presents a big advantage in that all the web users can your web site on the web using the web browser, which comes already installed in virtually every computer nowadays. They don't need to obtain or install any software in order to see your files. The robot leverages the web tools that are commonly used, in contrast with peer-to-peer applications or other files-sharing applications whereas your visitors have to install custom software and be part of a specific file-sharing network.

## **Who Should Use WebSiteRobot**

WebSiteRobot was designed for everyone. If you don't feel confident about your computer skills, the Robot is for you because it does not expect any input from you. The only thing you do is to signal that you are done with copying files into your web folder. It builds a professional looking web site on its own, and your visitors or customers will be impressed with your site. WebSiteRobot is unlike any computer software you have purchased recently. It knows what it needs to do, and how to do it. It does its job and tells you along the way what it is up to. You are the boss, and you can never be wrong. You click on any available option on its screens without fear, because at any given point, the bad options are disabled.

If you don't feel confident about expressing yourself to a large audience like the millions of people on Internet, then it is by itself a good reason to get started and slowly get used to it. With the help of the Robot, you will quickly catch and join all those who are turning the Internet technology to their advantage.

If you know about computers and have the skills for setting up a web site, then you will find out that WebSiteRobot is of great help. You may know how to register a site, how to deal with a web hosting company, create HTML documents, ftp your files to a host server. None of that is required because the Robot simplifies everything. You may think of it as the GUI and mouse of web hosting, coming at a time when you are used to operating a computer from the command line. Becoming familiar with a more effective strategy will speed things up greatly.

## **How is the Robot Useful to You?**

WebSiteRobot increases your bottom line directly or indirectly.

Almost every medium to large company has a web site to advertise its products and services to millions of web users worldwide. The Internet strategy of such companies is one of the most vital parts of their business, and the first stop for public relations. They

have realized that it is more effective to direct their customers to the web site and handle as many tasks as possible over the web in order to streamline the operations save money. They also increase their income by offering as many products and services online. Your web site would benefits you the same way.

Regardless of you profession, interests, education, you have skills to advertise, products or services to sell, a hobby to share or an opinion to express. You stand to benefit greatly from the Internet as long as you expand your own Internet strategy to producing your own web site instead of limiting yourself to only browsing the web sites of others.

Hosting your own web site is like having an agent that talks positively about you 24 hours a day. An agent that shows your resume to your future employers, your pictures to your potential dates, shows your catalog and inventory to your customers. A partner who shows images of your hobbies to coworkers, family pictures and videos to your friends and family, share your recipes, and homework with others, advertise your skills and service to the public.

Imagine that you have been contemplating the idea of an online store, but you are still contemplating all the expenses involved, the time and the dedication required to manage it and keep it current. With use of the Robot, everything is made simple. All you need is pictures of the items in your catalog, then you add the descriptions and the prices and the robot instantly builds it all for you.

The same is true when you are marketing your skills or services. When you potential employers or customers come to your site, they will find the latest information. It's like you are giving a chance to interact with them at their convenience and inform them of everything you want in your own terms.

The Robot builds and hosts your web site, keeps it current, while you harvest all the benefits.

## **How to Use This Manual**

If you already have compelling reason to own a web site or have experimented with the Robot before, you may jump to the sections of this manual that seem interesting to you. Otherwise it is useful to read this manual and refer to it as much as possible to make your experience with the Robot rewarding and fun.

The introduction is important because it tells you about WebSiteRobot and the great benefits it offers. Even if you already own a web site, or know how to setup and operate a web site the old way, you probably don't know all the advantages that the Robot offers.

Chapter 1 tells you how to obtain and install the Robot. It is very short. Chapter 2 shows how to run the Robot. It is the most important chapter in this manual. The 10 minutes or so that will you will spend reading it will be greatly rewarded. That is very little time compare to what it normally takes to create even a basic document for the web. Chapter 3 basically gives you the pointers on how to keep your site relevant and attractive. If you run into a problem while running the Robot, chances are the problem is with the network environment around your computer, not the Robot itself. In any case, chances are the answer to the problem may be found in Chapter 4. It explains how the Robot operate in your network, from using a standard dial-up modem to connect to the Internet, to more complex networks with Cable or DSL modem, Firewall, Gateway, or Router. It shows how to configure the network such that the Robot performs as expected.

This manual is written without any assumption about a previous knowledge about setting up or operating a web site. As long as you own a computer and normally use it to read email, browse the web, download files, and create documents, the manual will tell you all you need to know in order to effectively use your Robot and become an expert at it.

Each chapter starts with a brief summary. If you are familiar with earlier versions of the Robot or if you otherwise understand the concepts introduced in the summary, you may skip the entire chapter to save time, then read the details later as needed.

If you run into a term like FTP and it does not mean anything to you, it is probably not important to know it right away. You may read on and things will make more sense to you along the way. Later on, you may find a simple explanation in the Glossary of Appendix 1. Appendix 2 answers the most Frequently Asked Questions or FAQ.

## **What is NetForAll?**

NetForAll is the company that created WebSiteRobot. It continues to develop the Robot such that it can take advantage of emerging concepts and technologies. It is also constantly looking for ways to improve the look and feel of your site, and adding features that make your site both fun and useful to the visitor, and lucrative to you.

NetForAll provides the infrastructure behind the scenes so that people locate your web site. As you know, whenever you connect to the Internet, your ISP probably assigns you a different address each time. NetForAll ensures that your web site address is always [www.netforall.com/your\\_name/](http://www.netforall.com/your_name/) even if you have decide to move to a different city or change your ISP. NetForAll also keeps samples and descriptions of the files that are available in your computer such that even when you are temporary offline, your visitors can still have a preview of your site.

NetForAll is not a Web Hosting company, and it does not host your web site. It makes sure your web site is visible, but your web site stays in your computer and so, your and your own computer is your Web Hosting company. When your visitors see your pictures and documents on the Internet, they are getting them directly from WebSiteRobot at that moment, and there is no one in between. In fact the Robot tells you about your visitors as they browse through your web site in real time.

NetForAll is not interested in hosting your web site because you have the capability to it yourself. You have a connection to the Internet, meaning that your computer is part of the Internet, and it has tens of Gigabytes of hard drive space to spare. It is meaningful to

leverage such resources to host your site. Better yet, if you bought your computer recently, it may be more powerful than the average server in data centers.

## **CHAPTER 1**

### **OBTAINING AND INSTALLING THE ROBOT**

*You may download WebSiteRobot from the Internet, on the download page at [www.netforall.com/downloads.html](http://www.netforall.com/downloads.html). Right click on the download link for your type of OS and select "save target as" to save into your hard drive, then double-click it to install. You may find this program on its distribution CD.*

## **System Requirements**

If you don't know much about your computer system, chances are, it is suitable to install and run WebSiteRobot. The Robot works on virtually any computer with any Operating System without change. It only uses the Internet Connection that is available, whether it is via an ordinary dial-up, Cable or DSL modem, or Local Area Network (LAN).

It has been tested on Windows95, 98, 2000, NT and XP, and Linux computers with dial-up, Cable or DSL modem and ISP such as AOL, MSN, NetZero, EarthLink, SISNA, QWEST, JOI Internet, etc. It is also in use on computers connected to a LAN. It needs about 50 Mbytes of storage space for the software itself, and 32 Mbytes of RAM to operate effectively. In most cases, it works well with the default configuration. If you connect to the Internet with a dial-up modem, or if your computer is otherwise directly connected to the Internet, no change is needed.

If a software Firewall is installed on your computer, as it is the case with Windows XP, or recent distributions of the Linux OS, the Firewall needs to be configured to allow inbound TCP traffic on Port 8888.

If the computer is connected to the Internet via a Cable or DSL Modem configured as a Gateway, or Router, or if it is on a Small Office or Home Office (SOHO), or a corporate LAN, the Router or Gateway device has to allow Port Forwarding and forward inbound TCP traffic on Port 8888 to the LAN IP address of your computer. In most cases, it is an easy configuration change that can be done with the help of your ISP or your Computer System Administrator. However, you can expect some sort of surprise or resistance when you intend to use your computer as a web server solely because it is a new trend.

There are rare cases where the browser on your computer needs a Socks or Proxy Server to access web sites. In such cases, the Socks or Proxy Server IP address and Port should be inserted in the configuration file of WebSiteRobot. Chapter 4 gives details explanations and instructions about the changes that might be needed for any type of network to allow the Robot to operate effectively.

## Obtaining The Robot

The most common way to obtain the Robot is to download it from the Internet at the site [www.netforall.com/downloads.html](http://www.netforall.com/downloads.html). From this address, click on the suitable link for your platform and you will see a dialog screen such as the one on Figure1. Choose the Save option. On the following dialog screen seen on Figure 2, select a convenient local folder in your computer and click on Open to save. Alternatively you may right-click on the download link for your platform and select "save target as".

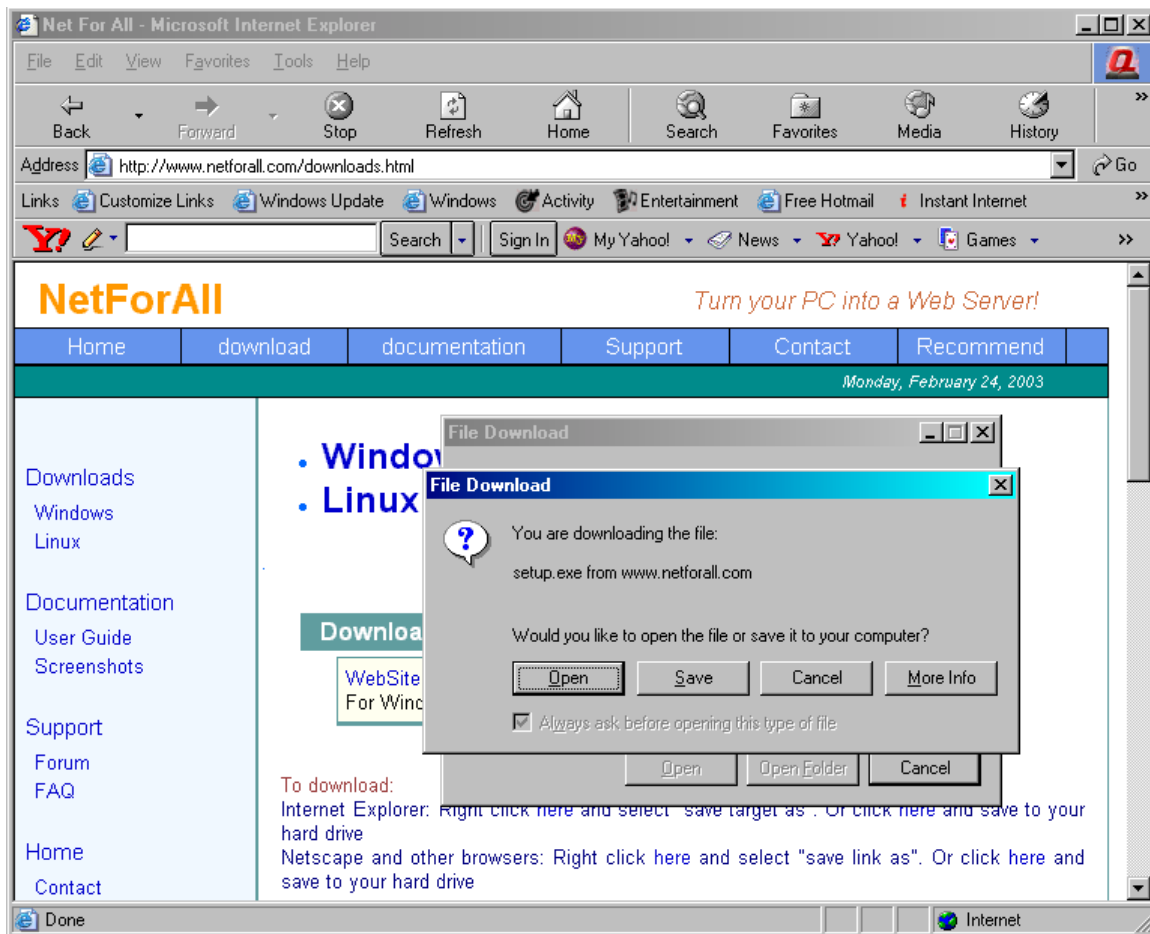


Figure 1. Downloading WebSiteRobot Setup application from the NetForAll download page.

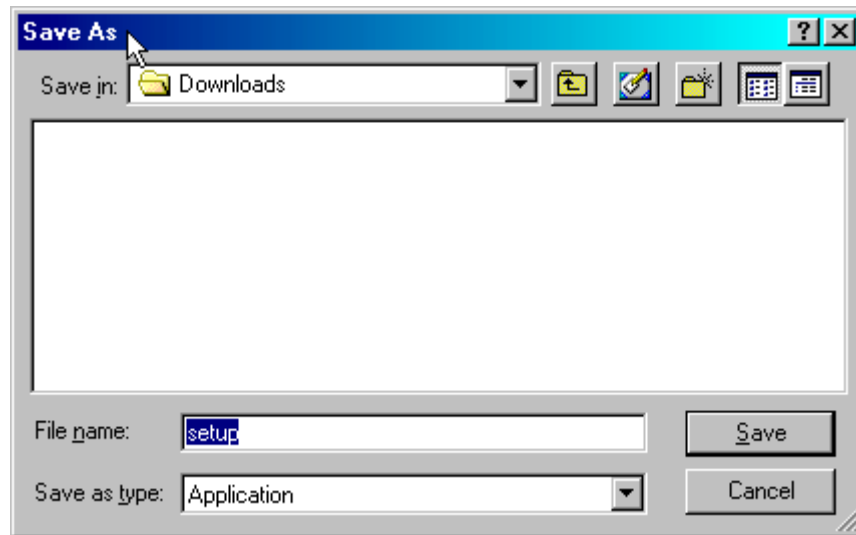


Figure 2. Saving WebSiteRobot Setup in a convenient folder of your hard drive.

You may also obtain the Robot from the distribution CD that is found at various sources like a local library, grocery store or electronic shop depending on your area. Since it is legal to copy and distribute the CD for free or for a fee, you may get it from a friend or burn a copy and pass to a relative. If you cannot download the Robot or obtain a distribution CD, please send a self-addressed and stamped envelope to:

NetForAll  
P.O. Box 543  
Sandy, UT 84091

## **Installing The Robot**

When you finish downloading the Setup application into your hard drive, exit all applications that may be running on your computer, then double-click on the Setup application to kick off the installation. Figure 3 below shows the extraction phase of the setup application. On the installation screens such as the one on Figure 4 below, you may accept the default options or change them depending on your needs.

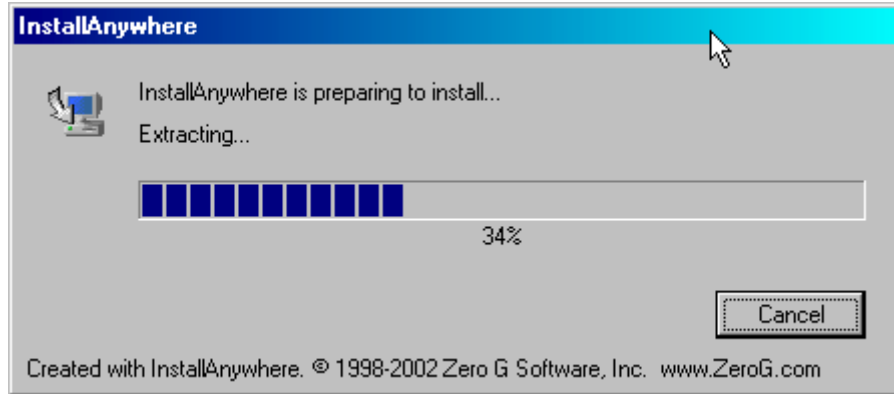


Figure 3. Extraction phase of WebSiteRobot Installation

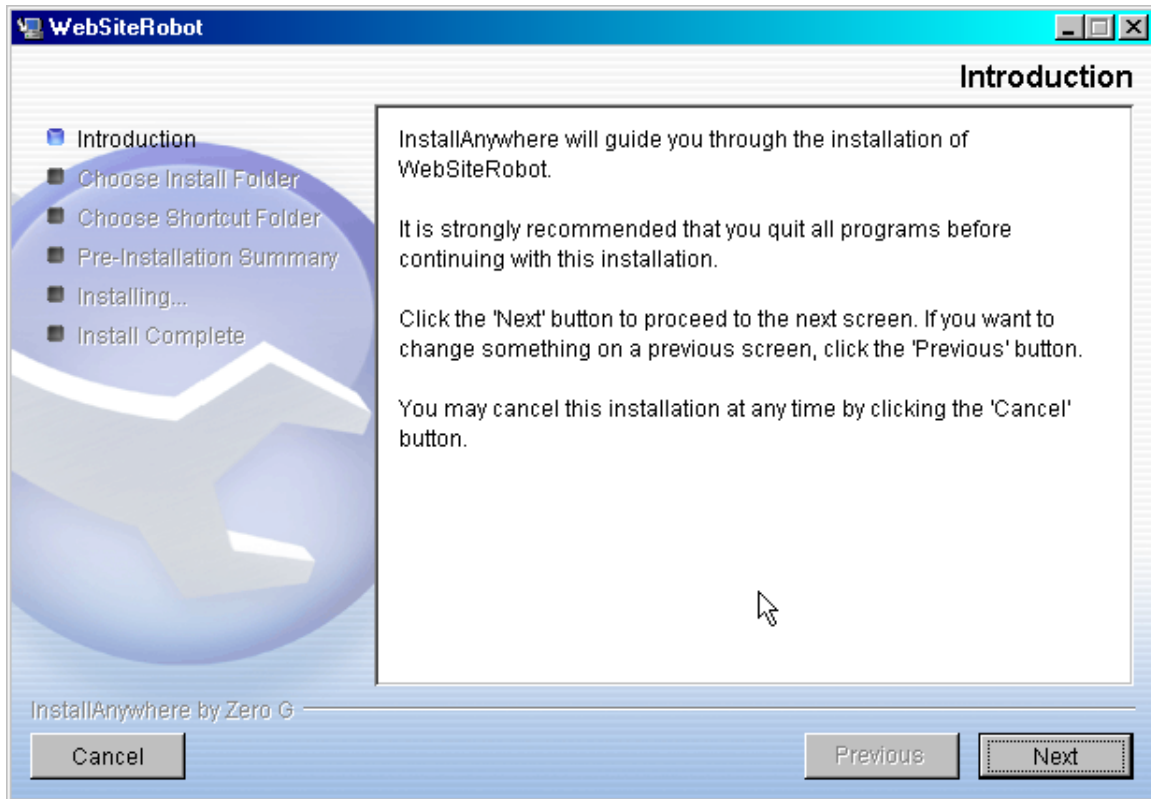


Figure 4. First Screen of WebSiteRobot Installation

If you have the distribution CD, place it in the CD tray, and double-click on the Setup application, which should be setup.exe for the windows platform or install.bin for Linux. After installation you don't have to restart your computer but you may do so if you are used to it.

## CHAPTER 2

### RUNNING THE ROBOT

*After installation, the folder MyWebSite appears as a shortcut on your desktop and a folder in your hard drive. Copy a few files into the MyWebSite folder. Make sure you are connected to the Internet, then start WebSiteRobot from Start → Program → NetForAll → WebSiteRobot. Fill the Registration form and send. Check that you now have a web site on the Internet at [www.netforall.com/your\\_name/](http://www.netforall.com/your_name/) where your\_name is the login name that you have filled in the registration screen.*

## MyWebSite Folder

When you install WebSiteRobot, the shortcut for MyWebSite appears on your desktop, alongside the shortcut to start WebSiteRobot. The folder icon on your desktop is the shortcut to the actual folder that is located on your hard drive. Figure 1 below shows a picture of a computer desktop with MyWebSite and WebSiteRobot shortcuts.

MyWebSite is just an ordinary folder, local to your computer like any other folder. That means you can copy files into MyWebSite or edit them as you wish. You may also create sub-folders to organize your files. For instance, you may create folders for your pictures, music, hobbies, school, business, recipes, homework, hobbies and others inside the MyWebSite folder.



Figure 5. Image of a computer desktop showing the shortcuts to MyWebSite folder and WebSiteRobot command that starts the Robot.

While the Robot is operating all the files and folders in MyWebSite are available to the public. By default it is the only folder that is available to the public through the WebSiteRobot. In fact the Robot only knows about the files in MyWebSite folder and its installation directory. It is not aware of any other files in your computer.

The Robot uses the files in MyWebSite to build your web site in real time, that is any change you make to these files is instantly reflected on your web site. They are not uploaded to a remote location, instead, there are shown to the public directly from your computer. The files in MyWebSite are the content of your web site.

### **Starting WebSiteRobot**

In order to start the Robot double-click on WebSiteRobot icon. You may also start the Robot like any other program in your computer, from Start → Programs → NetForAll → WebSiteRobot. While the Robot is starting, it shows the Splash Screen on Figure 6.



Figure 6. WebSiteRobot Starting Splash Screen

## Registration

When WebSiteRobot starts for the first time, it conveniently shows the Registration Screen as in Figure 7 below. The left panel displays WebSiteRobot License Agreement. Please read the license and indicate that you accept the terms of the License Agreement by clicking on the “I Agree Button” on the bottom right of the License Agreement panel. This action unlocks the right panel and makes it accessible.

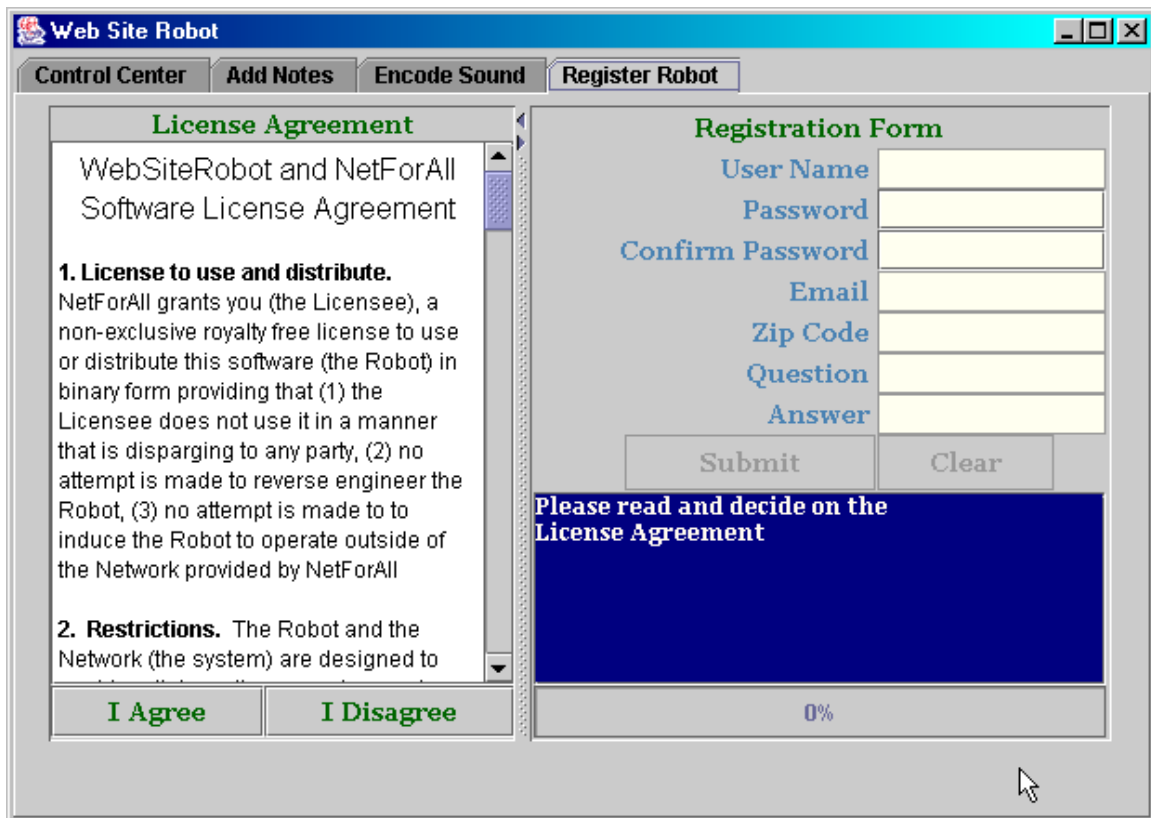


Figure 7. WebSiteRobot Registration Screen

Click on “I Agree” to indicate that you accept the terms of the license, and fill the User Name, Password, Confirm Password, email, zip code, Question, and Answer. Make sure you are connected to the Internet, and click on Submit.

The right panel of the Registration Screen is the Registration Form. Fill out your User Name, Password, Confirm Password, Email, Zip Code, Password Reminder Question, and Answer. To avoid spamming, your email is not displayed on your web site and is normally not available to the public or any third party. It is important to enter a valid email address that you check often so that you can receive useful feedback from the Robot and the information that your visitors may send using the contact form on your web site.

When you finish filling the registration form, make sure you are connected to the Internet, and click on send.

The Progress Bar on the bottom of the registration form shows that your registration information is being processed. Basically, the Robot sends out your registration, and wait for a response from NetForAll and the Progress Bar shows what percentage of that process has been completed so far. When the registration is successful and the Progress Bar comes back to 0%, you may continue using the Robot by selecting the Control Center Tab.

The Text Area below the submit button shows an indication about the registration process. It may prompt you to correct your email address, or to change login name in case of name conflicts with an existing user. It may also give other network information, most likely in case an Internet connection is not available. When this Text Area is filled, a scroll bar appears on the right side, and may be use to scroll up or down the feedback information.

When the Registration is successful, your web site exists already and it is visible to the outside world. You may view it by opening a browser (Internet Explorer, Netscape, Mozilla or other) and typing the URL [www.netforall.com/your\\_name/](http://www.netforall.com/your_name/) where your\_name is the User Name you just entered in the Registration Form. However, at this point, your web site appears to be empty because the Robot has not yet process your files to build your web site. To instruct the Robot to begin processing your web files, select the

Control Center Tab of the Robot, and then click on the Synchronize button, which is near the bottom of the Synchronizer Panel.

In case you select the Registration Tab again after your registration information has been accepted, the Registration Form is filled, the Text Area indicates that you have already registered and most buttons on the Registration screen are inactive as you would expect.

There are rare instances where the Registration cannot proceed even while you are connected to the Internet. That would be case when your web browser uses a Socks or Proxy Server on your LAN to access the Internet. In that case, you need to enter the Socks or Proxy Server Port and LAN IP address in the Configuration File of WebSiteRobot before registering. You may request your Socks or Proxy information from your Computer System administrator. Detailed information about the WebSiteRobot Configuration File and the instructions for editing it are given in Chapter 4 of this manual.

### **Using the Robot the First Time**

Once the Registration is successful, you may tell the Robot to start building your web site. If you have not already added files to your MyWebSite folder, it is time to copy the files that you wish to publish on your web page and put them in the MyWebSite folder. This folder is visible as a shortcut the Desktop of your PC, and it may also be found in your hard drive as illustrated on Figure 8 below.

At this point you don't have to copy all the necessary files. You just need any number of files to get started, because it is very easy to update your web page with the Robot whenever you want.

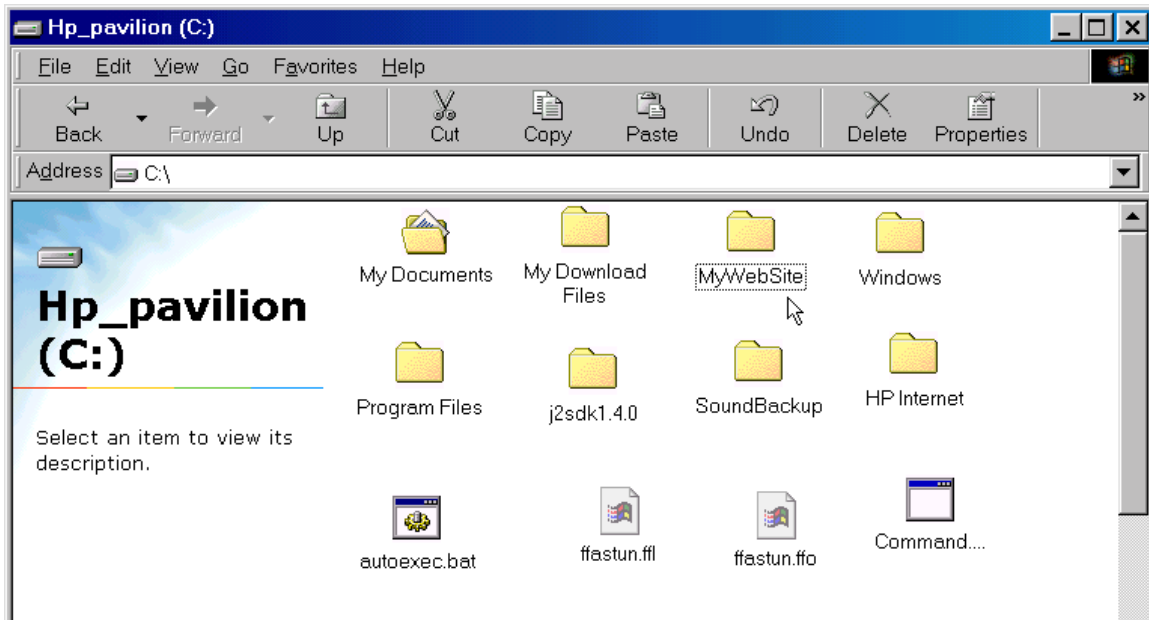


Figure 8. MyWebSite folder is visible in the root drive of your PC

Copy the files and folders that you wish to publish on your web page into the MyWebSide folder, then on the Robot Screen, select the Control Panel Tab, and click on the Synchronize button.

Select the Control Center Tab on the top of the Robot's screen. This brings up the Control Center Panel of the Robot, as in Figure 9 below. The left side of the Control Panel is the Synchronizer Panel. In order to instruct the Robot to begin updating your web site, click on the Synchronize button near the bottom of the left panel. The large Text Area is a feedback region where WebSiteRobot tells you about its activities. The Robot first look for the MyWebSite folder and creates it when it does not exists. Then it examines all the files, and processes them as needed.

The Robot automatically creates the thumbnails of your pictures, link them to the larger images, and organize then in a slide show that is available on your web site. It also creates samples of your music files and link the to the larger files such that one can sample the music before deciding to download the whole file. On the Text Area, it tells what file is being processed, and when it done with the files, it shows an inventory of the files found in the MyWebSite folder. It also contacts NetForAll and obtains your current

IP address, which is basically an address that every computer has while it is connected to the Internet and is use to send or receive information from other computers. The Text Area also has a scroll bar that allows you to scroll up or down in the feedback text.

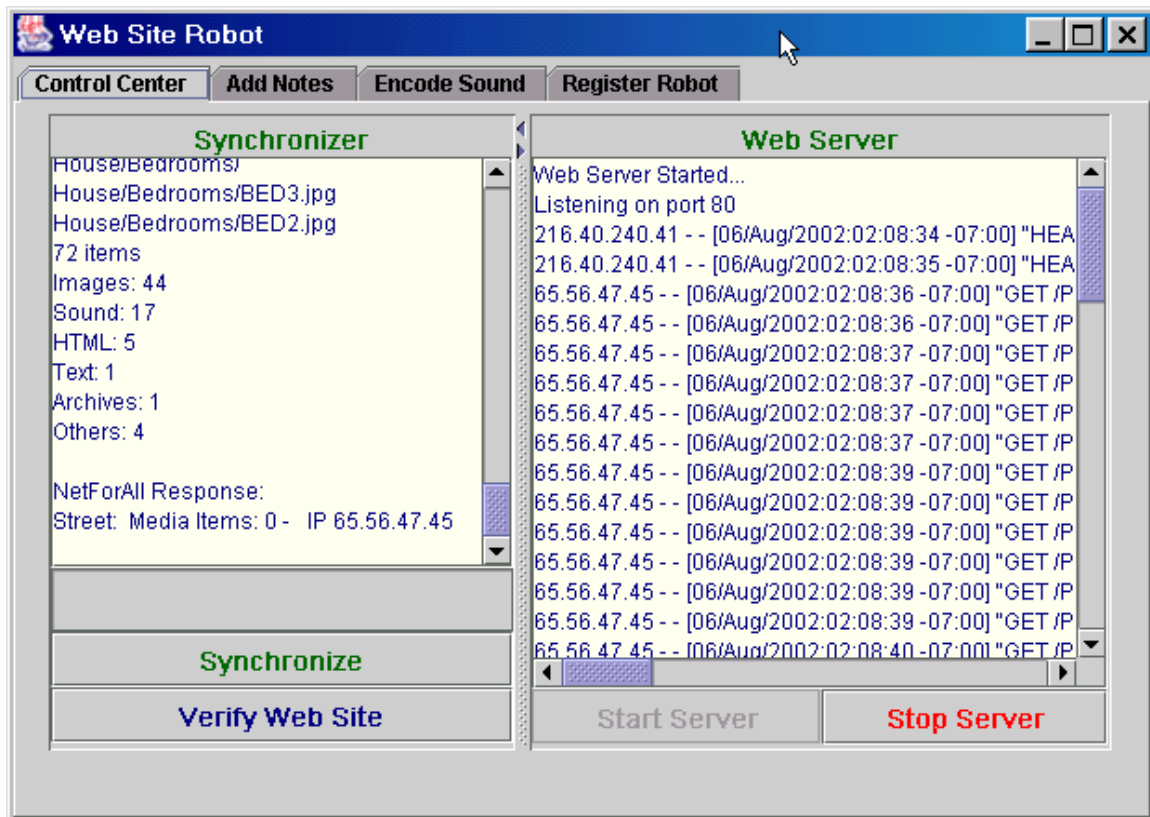


Figure 9. Control Center Screen

Whenever you finish copying files into MyWebSite folder, click on the Synchronize button in order to update your web page. The Robot processes your web files automatically, and inform you about its activities on the feedback Text Area.

Below the Text Area of the Synchronizer panel is a Progress Bar that shows the percentage of the work done for the current set of tasks, which may be making thumbnails, music samples or contacting NetForAll.

Near the bottom of the Synchronizer panel is the Synchronize button, which is the most important command on the control center. It signals the Robot to update your web page with the files that are currently in the MyWebSite folder. The Robot automatically detects whether a files is new or has already been processed, whether the accompanying notes have been edited. Whenever changes have been made in your MyWebSite folder, click on the Synchronize button in order to update your web page.

The Verify Web Site button is used optionally to get the list of files in the web page. The Robot actually looks at your web page as seen by your visitors and make an inventory of the files currently available. In the process of verifying your web site, the Robot automatically updates your web page if it notices a difference that would occur if you have just made changes in the MyWebSite folder and had not synchronized yet.

On the right side of the Control Panel is the Web Server Panel. As indicated previously, your web site is in your computer and other computers on the Internet obtain the files directly form your computer. The Web Sever part of the Robot has the responsibility of showing your files to the world.

The Robot tells you about the activities of the visitors on your web site in real time on the feedback text area. The first few output lines tell you about the status of the Web Sever function of the Robot, for instance, the Robot might have started, and is listening on an its default HTTP Port 8888, or such. Briefly stated, when computers deal with one another on the Internet, each service has a port: email clients check mail on the mail server Port 110, and FTP takes place on Ports 20 and 21, etc. Likewise, the visitors to your web site get your files on the Port that the Robot is watching.

The subsequent lines on the feedback Text Area of the Web Server Panel tell you in real time about the visitors to your web site. A typical line is shown on Figure 10 below. The information on the feedback line can be described as follows:

```
67.30.224.105 - - [09/Jan/2003:20:54:43 -07:00] "GET /Finances/investvar.html HTTP/1.1" 200 2110
"http://www.netforall.com/servlets/ShowSite?reqtype=domain&admin=Poly&folder=Finances"
"Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; .NET CLR 1.0.3705)"
```

Figure 10. Typical feedback line about your visitors activities on your web site

- **67.30.224.105** Is IP address of the computer used by your visitor
- **[09/Jan/2003:20:54:43 -07:00]** Is the date and time when the visitor requests a file
- **"GET /Finances/investvar.html HTTP/1.1"** The command that the web browser of your visitor used to request the file, the location or path of the file inside your MyWebSite folder, and the version of the HTTP protocol that was used during the transaction
- **200 2110** The response code of the Robot: 200 means all is OK. 2110 is the size (bytes) of the file that was returned.
- **"http://www.netforall.com/servlets/ShowSite?reqtype=domain&admin=Poly&folder=Finances"** The URL that referred the visitor to your web site,
- **"Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1; .NET CLR 1.0.3705)"** Is the type of browser and computer that your visitor is using to view your site

Clearly, the Robot provides you with a two-way view of the Internet. As the files in your MyWebSite directory are instantly available to your visitors, you can also watch in real time as they surf your page. You know all the details of their activities. The Robot clearly identifies your visitors and only shows to them the files that are under the MyWebSite folder tree.

The Feedback Text Area of the Web Server Panel has a scroll bar on the right to go up and down the text and see the log of all your visitors. It also has a scroll bar on the

bottom to slide left or right and see the details of each output line. At the bottom left of the panel is the Start Server button that may be used to start the server. This button is conveniently disabled when the Web Server function of the Robot is in operation. On the bottom right is the Stop Server button that may be used to stop the web server function without shutting down the remaining functions of the Robots. This may be used to take your web page down in the event of a major update, or if you have configured the Robot to operate with a different web server.

## **Your Web Site on the Internet**

While from your standpoint your web files are just in an ordinary folder in your computer, your visitors see your web page using a browser as with any other web site. They may use Internet Explorer, Netscape, Mozilla, Konqueror or any other web browser they like. You may also open a browser to see how your web page looks like on the Internet. Your URL, that is the address of your web site is: netforall.com/your\_name/ which can be extended to [http://www.netforall.com/your\\_name/index.html](http://www.netforall.com/your_name/index.html), where your\_name is the User Name that you have chosen during the Registration.

You may include your Internet web site address in all your emails, either by mentioning it at the bottom of the email or by including it in your signature file. Such a practice would give you a very competitive advantage in many real life situations. Attracting the other party to your web site is a very effective way to convey your image, your views, promote your hobbies and showcase your skills. The key to your success is the ability to sell your skills, products or services, and there is no means that is better and cheaper than the web.

Even though your web site was built from just one click after copying the files in your MyWebSite folder, the result is very striking. Depending on the files and folders in your MyWebSite folder, your site on the Internet may look like the one on Figure 11 below. A navigation bar on the top gives link the important pages on your web site. The left bar provides other navigation links that are arranged in categories that reflects the sub-directory structure of your MyWebSiteFolder.

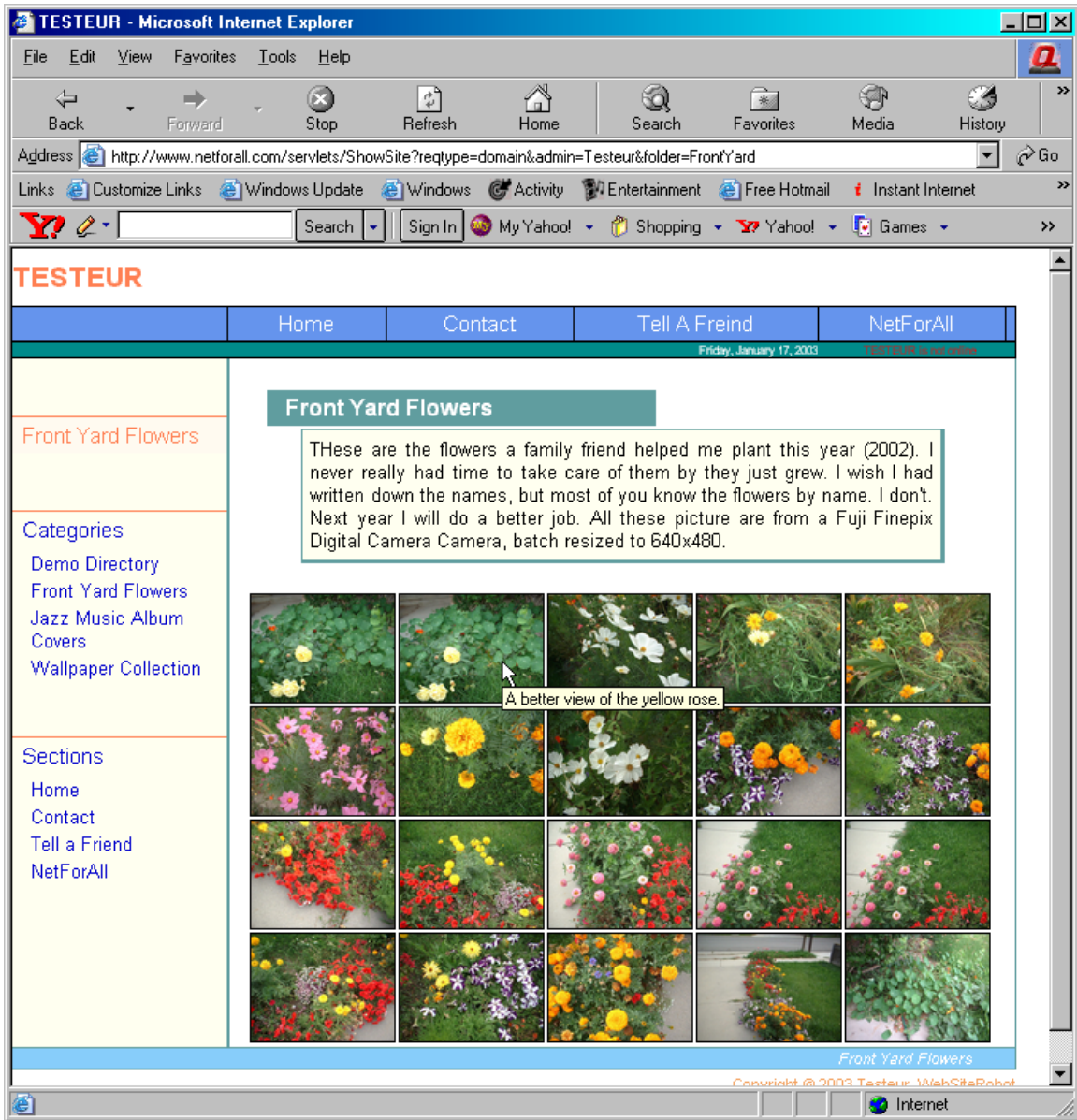


Figure 11. A typical view of a web site built by WebSiteRobot

The web site is organized in Categories along side the sub-directories found in your MyWebSite folder. The main sections are also arranged on the top and left bar for easy navigation. Thumbnails of the images are created in each folder and linked to a convenient slide show.

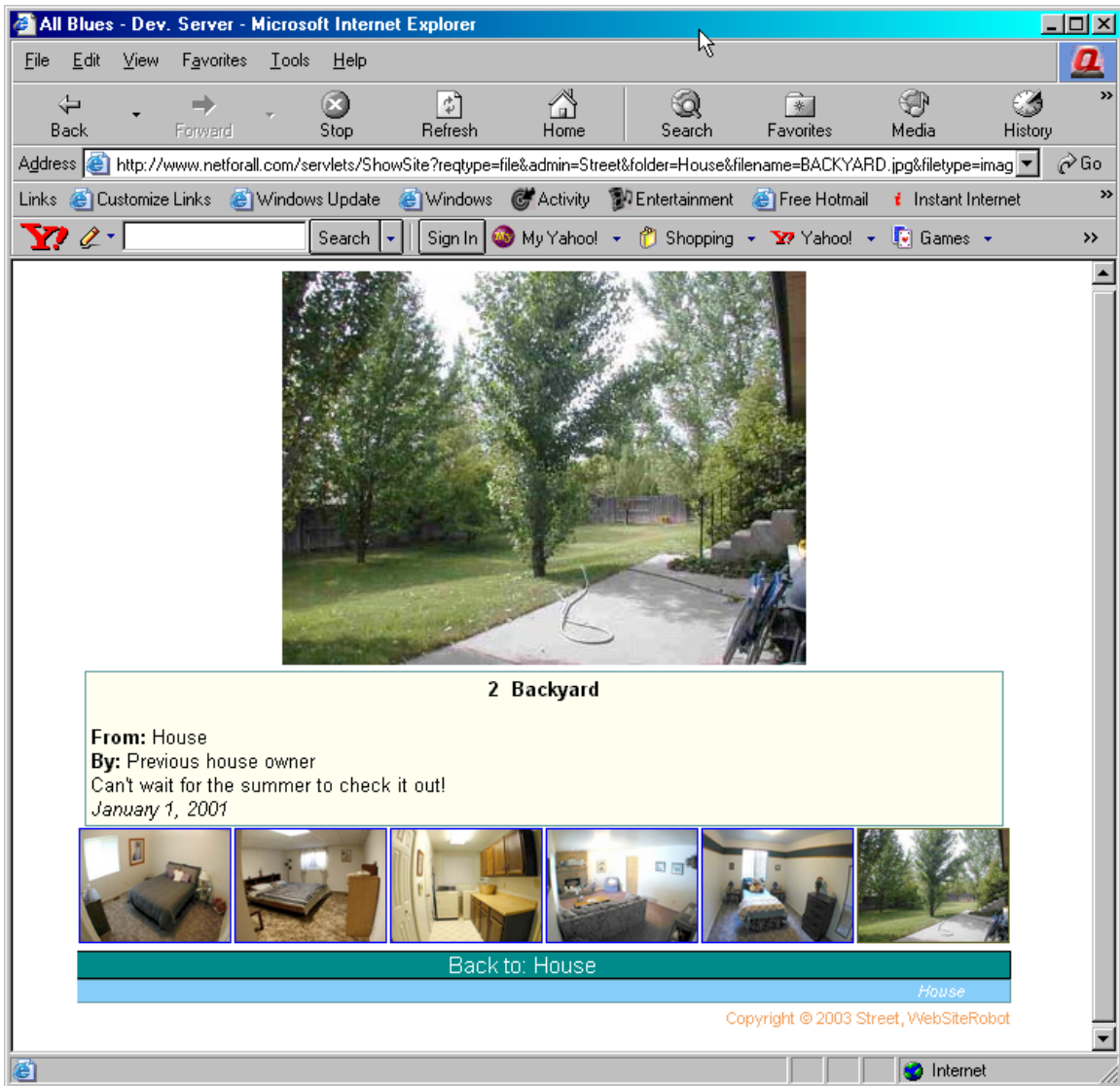


Figure 12. Online slide show created by WebSiteRobot based on the pictures available on a sub-directory of MyWebSide folder

The title, author, date, and description of each image are provided when available. The price is also shown when the item is for sale. A link back to the main page of the current category is located at the bottom of the slide show. Navigating the slide is very convenient as one clicks on a preview to get the large image.

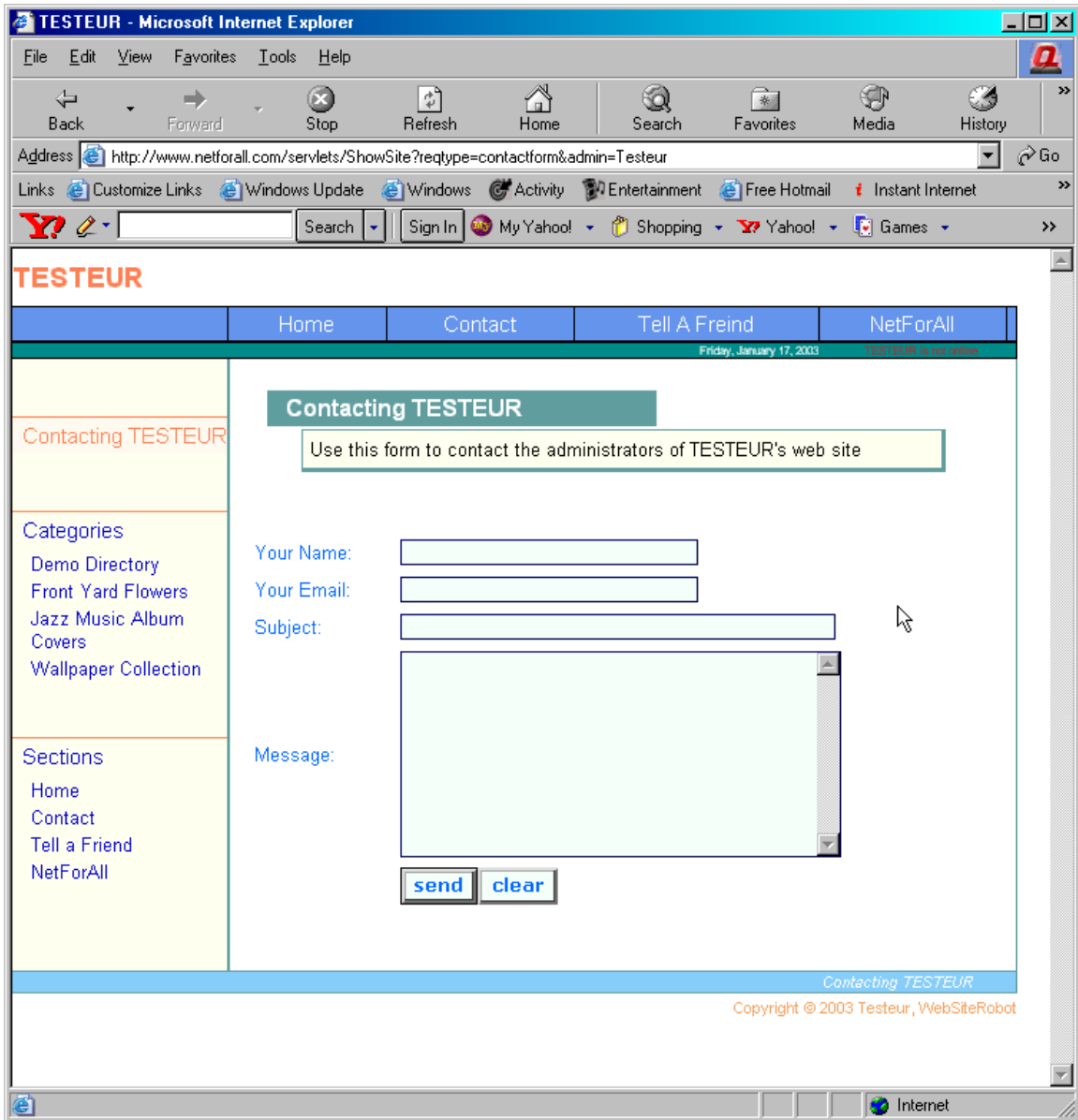


Figure 13. The contact form on a typical web site built by WebSiteRobot

To prevent spamming, WebSiteRobot does not show your email address. It provides a contact form that your visitors may use to send you feedback whether you are online or not. There is also a form that your visitors may use to recommend your site to others.

When a folder contains images, the thumbnails are organized into a table and linked to a slide show as in Figure 12. Navigating the slide show is very convenient because the main image is selected by clicking on the preview thumbnails at the bottom of each slide.

Others amenities on your web site include a contact form that your visitors may use to provide feedback even when you are not connected to the Internet, as shown on Figure 8. It also contains a Recommendation form that your friends may use to recommend your site to others. Also a link back to NetForAll is visible for convenience.

## **CHAPTER 3**

### **IMPROVING YOUR WEB SITE**

*To update your web page, add files and folders into MyWebSide folder. To add or change Title, Name, Description, and Price etc. of an item, select the Add Notes Tab, then select the item, fill the form and save. To compress music files, select the Encode Music tab, choose the music file and encode. Once the changes have been made, select the Control Center Tab of WebSiteRobot, click on the Synchronize button and your web page is instantly updated on the Internet.*

## **Updating Your Web Site**

WebsiteRobot greatly simplifies the process of updating your web page on the Internet. Your page on the Internet is built instantly from the files that are in the MyWebSite folder of your computer. Also, the Robot shows the files directly from your computer. So the key concept is that MyWebSite folder is just another folder in your computer, where you can add or edit files as usual, but at the same time, it is the content of your web page as seen on the Internet.

To update your web page on the Internet, locate the MyWebSite folder on the hard drive of your computer or its shortcut on your desktop. Copy the files you wish to publish from their current location into MyWebSite folder. The files may be of any type, from pictures, music, video, documents, spreadsheets, presentations, simple text files or HTML documents. Notice that you may also create sub-folders, or copy entire folders into your MyWebSite folder.

Another key concept is that you don't have to create HTML documents, that is the kind of documents commonly found on the web. It's cool if you already have HTML documents, but you don't have to convert existing documents into HTML. The main reason is that users who need your files would most likely open them with the same kind of application that you used to create them, even if they cannot see them directly in their browser. Therefore it is more practical to leave your documents as such rather than converting them and having your visitors try to reverse the conversion. This means you just need to keep producing files in the form that is convenient for you, focus on what you do best and let the Robot handle web related issues.

Once you have finished copying files and folders to your MyWebSite folder, you need to indicate to the Robot that it can go ahead and update your page on the Internet. Make sure you are currently connected to the Internet, then select the Control Center Tab of the Robot and click on the Synchronize button located near the bottom of the left panel. The Robot will check the MyWebSite folder for any change, and process the files that it finds. It will create thumbnails of your pictures, samples of your music files and link them to

the original document accordingly. If you have added notes that describe the contents of your documents, they will also be presented on your web page next to the files or folders. WebSiteRobot will also contact NetForAll to obtain your current IP address, such that you user can see still see your site even when your ISP changes your IP address.

The Robot will make all the necessary changes on your web site automatically. You don't need to worry about links, or tags or any web related issue. The Robot does not expect any input from you besides one click to signal that you are done with your own work. It will simply keep you informed of its activities in the feedback Text Area.

When the Robot is done updating your web site, you may check that the changes are instantly reflected in your site on the Internet. Start your favorite web browser and type in the location of your site, [www.netforall.com/your\\_name/](http://www.netforall.com/your_name/) to observe the changes. Those changes are also available to your visitors from their own web browsers.

## **Organizing Your Web Site**

As it the case with other files in your computer, you may organize the files in MyWebSite folder into a hierarchy of sub-directories. For instance if your web site is for a car dealership, you may arrange the SUVs, the vans and the cars in different sub-directories. These in turn might contain other sub-directories for different makes or years and so on.

The hierarchy of sub-directories in the MyWebSite folder will be directly visible in your web site. The main sub-directories in the MyWebSite will be the main categories in your Internet web page. Links to these categories will always be visible for easy access. Also for the convenience of your visitors, while looking at the files in one sub-category, they will have easy access to all the others.

One of the nice things about letting the Robot host your web page on your computer is the fact that there is no limit to how many files you may have, as long as there is space in

your hard drive. You are free to go out there and purchase a 100 Gbytes hard drive to hold your multimedia files, add more RAM, or switch to a broadband connection on the Internet as need without having to make arrangements with any third party. Likewise, you are free to create as many sub-directories as you want, and the tree of sub-directories may go as deep as you see fit.

While organizing your files, your main concern should be to make the files easily accessible. It is desirable to see the important items in your site with the fewest number of clicks, even if that means changing the logical structure of the hierarchy. If needed, the information might be duplicated a bit. For instance, on a commerce site, one could create a special sub-directory of the items on a special promotion, or the latest offering even if those are also included in other folders for their respective categories.

In any case, a description of each category would give the visitor an idea of what it contains. The next section will show how to add descriptions and other annotations to your files.

### **Adding Notes to the Items on the Web Site**

There are many reasons why it is very important to add comments on the files that are on your web page. It is more appealing to see that the author has taken the time to add the details of a file. The language and style also conveys an idea of the type of files that are expected in a category. Comments are a way to guide the visitors while they are browsing the site.

Looking at the description of a folder, they can quickly decide whether they want to check out its contents or not. Imagine also that you have a folder full of pictures, so it is in effect an online album that your visitors would browse when you are not present. When an item is for sale, the image is a must, but the comments are also a great way to inform potential buyers about the quality of the merchandise, for instance whether it is

new or refurbished etc. Finally, the comments provide a way to organize the items on a page, and they are very helpful when searching.

WebSiteRobot provides a convenient way to add generic note fields that are applicable to a broad range of media:

- **Title.** This field may be used for the title, name, company or make of the item
- **Author.** The Author field may also be used for the owner, or the editor, group or band that created the media.
- **Album.** The album may be the name of the folder, group, category, genre, type that best describes the item.
- **Number.** This field may be used for track number, serial number, or part number of an item. It is also used to arrange the items of the same file type in an alphanumeric order.
- **Month-Day-Year.** These fields could be the date when the item was made, bought, sold, invented or the date of the last edition.
- **Keywords.** The keywords do not normally show on the web page, but they may be very helpful for searching.
- **Description.** The description is a very important field because it gives the visitor an indication of the nature of an item or media. A description should be written in a neat and pleasant style, and should be complete yet concise.
- **Price.** A price is an indication that the item is for sale, and a visitor may wish to contact you in order to buy it. It could also be placed in a shopping cart, bought or subject to an online auction. When the item is not for sale but one wishes to inform about its value, it's good to mention the price in the description instead.

In order to add comments on the items on your web page, select the Add Notes tab of the Robot. It brings up the Notes screen on Figure 14 below.

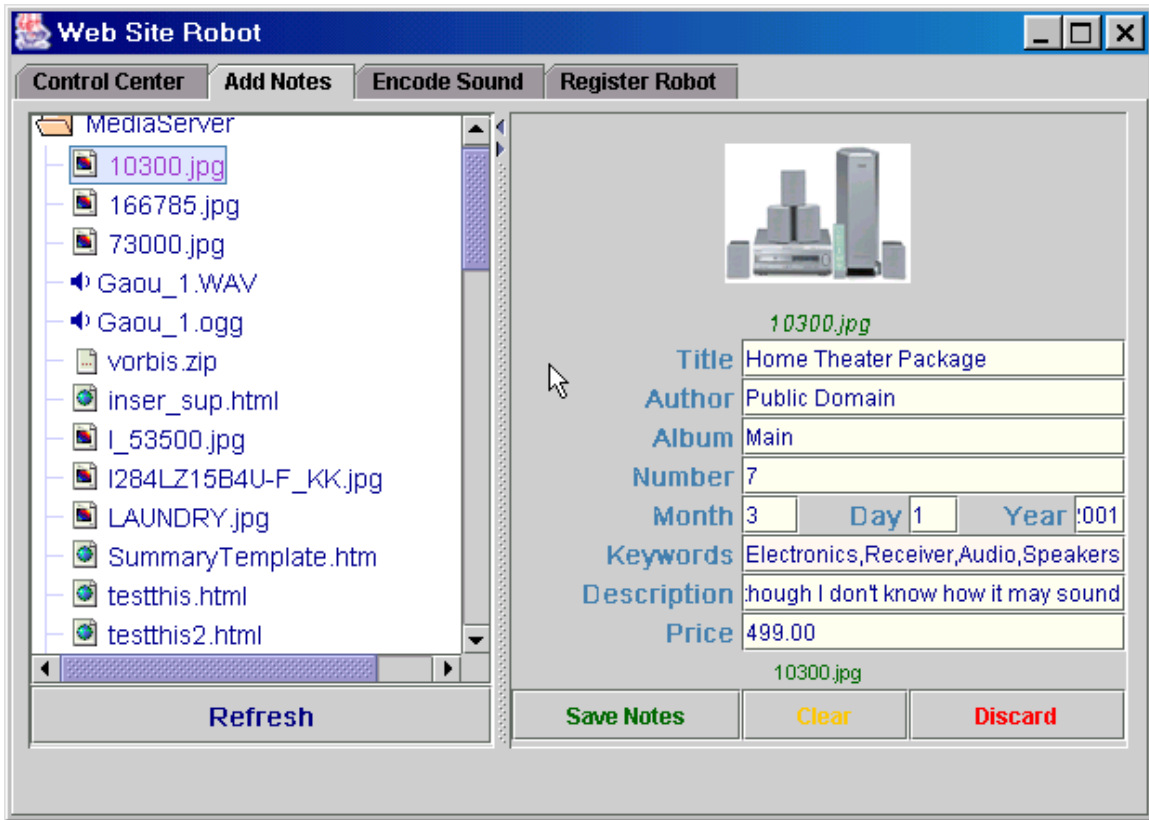


Figure 14. Notes Screen

Select a media from the MyWebSite directory tree on the left panel, fill out the notes fields on the right panel, and click on Save Notes.

The left panel of the Notes screen is the directory tree of MyWebSite. It shows the files and folders inside MyWebSite organized into a tree structure for convenience. If an item that you recently copied into MyWebSite folder is not visible, update the directory tree by clicking on the Refresh button below the directory tree. To open a folder, click on the pointer on its left or double-click on its name or item. To select an item whether a folder or a file click on its icon or name. Indeed, notes may be added to files as well as folders.

When an item is selected on the left panel, its name shows on the top of the right panel, along with the thumbnail if it is an image file. Fill out the notes fields Title, Author, Album, Number, Month, Day, Year, Keywords, Description, Price, and click on Save

Notes. To edit the notes on an item, select the item again, and the existing notes will populate the notes fields. Make the necessary changes and save.

When you finish adding or editing the notes on the files and folders in your web site, you need to signal the Robot to update your Internet web page. Select the Control Center Tab to see the Control Center screen shown on Figure 15. Then click on Synchronize button near the bottom of the left panel. The Robot will figure out the notes that have been changed and update your web site accordingly. The new notes will instantly appear on your web page on the Internet.

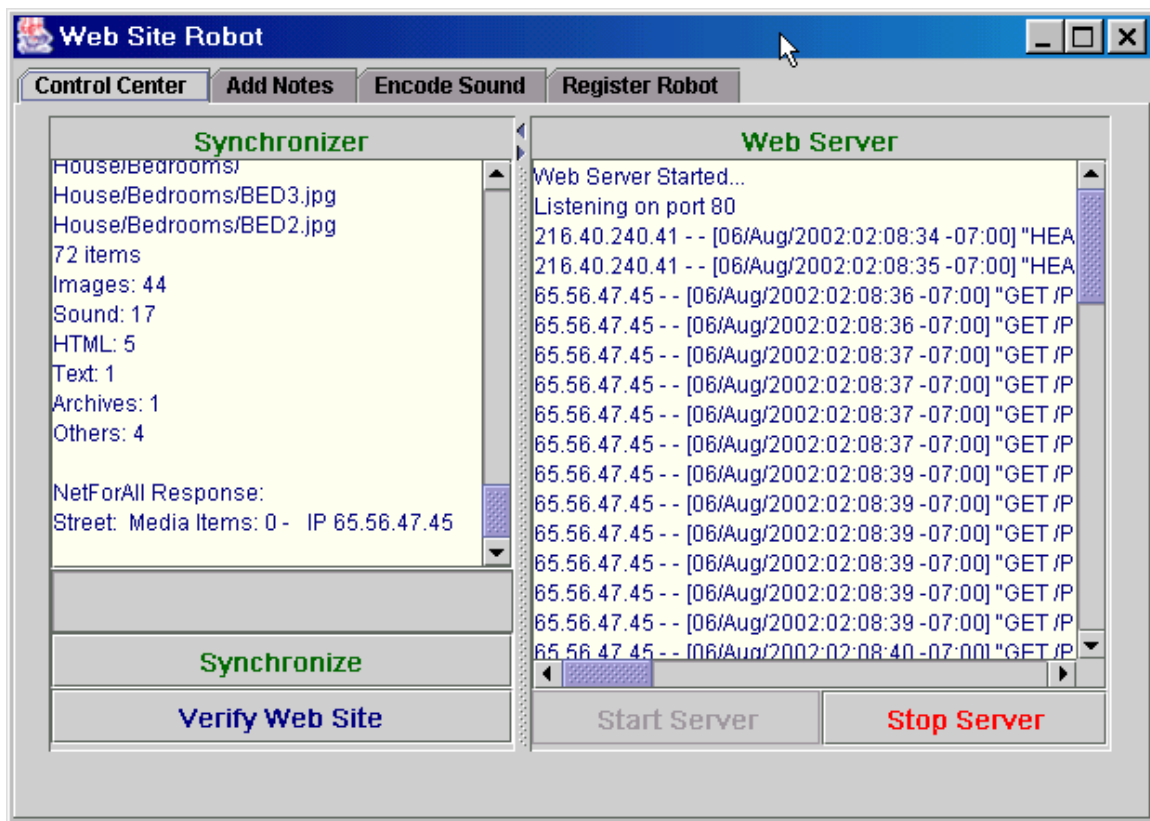


Figure 15. Control Center Screen

When you finish adding or editing the notes, click on the Synchronize button to update your web page on the Internet.

## **Encoding Music Files**

There are many popular digital audio file formats in use today for various types of devices and players or recorders. The different formats vary widely in sound quality and file size. When the audio file comes from a digital recording through your sound or a CD Ripper, it is generally in audio, midi or wav formats which use up considerable amounts of disk space. Such large files are also not very suitable for transmission over the Internet or publication on your web site because they need large bandwidths. The latter is one of the most important factors when it comes to multimedia files. It is more advisable to encode the audio file into a more compact file type. The Encode Music Screen shown on Figure 16 below allows you to compress the audio files.

One of the most popular music file formats that are compact and suitable for Internet music files is the MP3 format. Unfortunately, MP3 is a proprietary file format currently subjected to patent restrictions. Unless you have purchased a license usage of software that allows you to encode mp3 audio files, your activities are open to possible litigations. Many sources continue to use such software because the authors of the MP3 format do not normally go after individual users, but there is a better solution.

WebSiteRobot uses the OGG format because it is open source, free, and stable. It also encodes into OGG audio files that are generally of smaller file size, better sound quality than their corresponding MP3.

Regardless of the file format, you are expected to only distribute your own music for free or for a fee, or music of others as long as you have the right to do so. The Robot is transparent to Copyrights considerations. It is not a shield, nor is it a censor. Its job consists in publishing the files found in your MyWebSite folder in your web page on the Internet and it does not control your activities. It does not use any prohibited tool, algorithm, format or scheme. It does the things that anyone could do given enough time and adequate skills.

To encode large sound files into smaller files that are more suitable for your web page, select the Encode Sound Tab to bring up the Encode Sound screen of Figure 16. The Large Sound panel on the left displays the content of the MyWebSite folder as a directory tree for easy navigation. The only visible items on this panel are folders and large sound files that should be encoded. The size of the file is displayed because it determines how much bandwidth is used when your visitors download the music file.

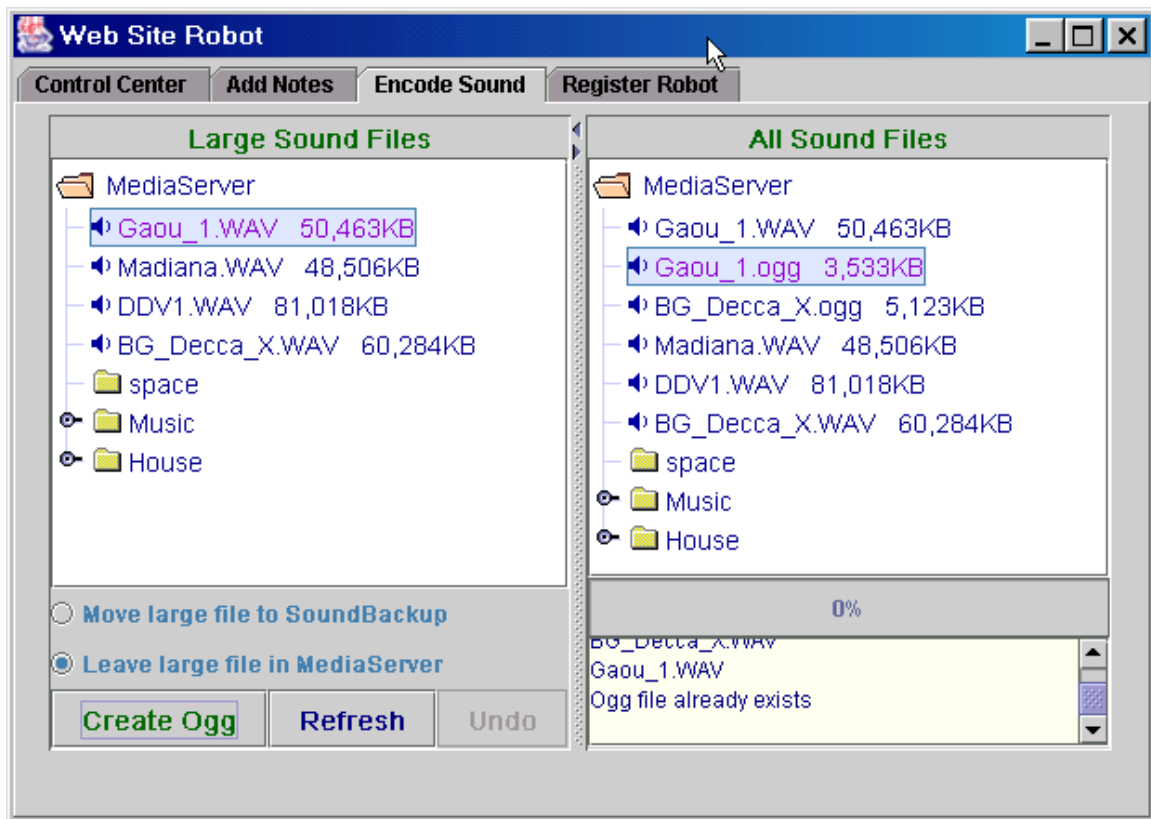


Figure 16. Encode Sound Screen

Choose a large sound file from the Large Sound File panel on the left, and click on Create Ogg button on the bottom left. The Progress Bar on the All Sound Files panel shows the percentage of the file that has been encoded so far.

The two radio buttons below the directory tree give the choice between keeping large sound file in you web site directory or moving them to the Sound Backup folder when encoding is complete. Once the large music file is selected, press the Create Ogg button on the bottom left panel to start encoding. If you have recently copied an audio file into the MyWebSite folder but it does not appear on the directory tree, click on the Refresh button on the bottom center of the left panel.

The All Sound Files panel on the right shows the content of the MyWebSite folder in the form of a directory tree. It shows all the music files, encoded or not to give a picture of all the sound files that are being published. This panel is in only for display and does not allow files to be selected for encoding. Such files are selected on the left panel. When a file selected on the Large Sound panel is encoded, it appears on the All Sound Panel. If the OGG file is not visible, one can click on the Refresh button as mentioned earlier. Below the Progress Bar is the feedback Text Area where the Robot informs you about its activities. The scroll bars on the right and bottom of the Text area may be used to visualize hidden parts of the output text.

Once you finish encoding your music files, select the Control Center tab and click on Synchronize so that the Robot can update your web site with the changes.

Sound files that are not encoded such as WAV CD files may take about 60 Mbytes in storage space. Such a file might encode into a 5 Mbytes OGG file, which represents about 92% reduction in size. Also, the Robot will create a 250 Kbytes sample that your visitor may quickly download and listen to determine if they wish to download the whole song. Such an arrangement saves a considerable amount of bandwidth. When you se WebSiteRobot to build your web site, storage space is not a limitation because you can use all the disk space available on your hard drive if you so wish.

As effective as it is the OGG music file format is a recent technology and slowly being adopted by major multimedia players. If your current player does not allow you to listen to OGG files, you may download one from on of the sources listed on the ogg vorbis web

site at [www.vorbis.com/software.psp](http://www.vorbis.com/software.psp). There are many choices and one of favorite for the Windows platform is Ashampoo Media Player that can be used to play OGG sound files as well as burn them on CD. It may be downloaded from the site [www.ashampoo.com/products/0014/](http://www.ashampoo.com/products/0014/). Among other great players for the Linux platform Zinf at [www.zinf.org/features.php](http://www.zinf.org/features.php) plays OGG sound files and support streaming media.

## **Copyrights Considerations**

WebSiteRobot does not consider or circumvent Copyrights issues. It does not promote or prevent the distribution of any material. It only makes available the files that its owner has copied into the web site folder. In one click it creates or update the web site, but it does not do anything that one couldn't do manually given enough time and adequate expertise. The files are obtained directly from your computer and there is no central server somewhere that mirrors your files, or otherwise promote the distribution of any specific type of material.

The Robot creates thumbnails of your images in the PNG format, which is a free graphics file format. It is not subject to patent restrictions like the popular JPEG or GIF formats. It also creates music samples and encodes large music files in the OGG format, a patent-free file format unlike MP3 or others. This ensures the legitimacy of your files is not affected by the use of the Robot. There is no need to obtain any third party license in order to use the Robot.

While making your original creation available to the public using the Robot, you are confident that you are not alienating the intellectual property of anyone. When you do not have ownership of the files, it is your responsibility to make sure that you have the right to publish them, or otherwise to obtain such a right. The purpose of the Robot is only to publish the files in your web site folder on the Internet on your behalf. It does not control your activities.

## **Tips for Using the Web to Promote Yourself**

Once you use the WebSiteRobot to create your web site with beautiful pictures, video useful files with insightful comments or to build a dynamic E-commerce portal, all that is left is for you to bring in the visitors and reap the benefits. Indeed, such visitors need to know that you have a web site.

One of the most effective ways to attract visitors to your web site may be using email. First you may send email to everyone in your address book and contact inviting them to check out your new web site. Whenever you join an association and have the opportunity to introduce yourself, make sure that you indicate that your web site is a good place for people to get to know you and some of the things that drive your interest.

Whenever major changes are made, take the time to inform everyone who might have an interest in your site or the changes. It is also a good idea to always include your web site address in all your email, or to simply write it in your signature file. You may also refer people to specific files in your web site so that they may download when it suits them, rather than flooding their mailboxes with large files.

In some situations, more conventional means are also very effective. For instance, you can add your web site address on your business card. You also mention it on greeting cards, invitations, announcements, or any such mail to friends or relatives.

Once people know about your web site, its popularity will depend on its content. It is important to organize the site such that information is easy to find. Also, take advantage of the simplicity of the Robot to update your web site often, keep it relevant and leave it online. You may think of it as if you had your own TV show, the content must evolve in order to keep the audience, and in time you have a shot at becoming a celebrity.

If you can afford to have your own name like [www.yourname.com](http://www.yourname.com) or any .net, .biz, or other, you may be able to use it with your web page built by the Robot. Once your site is operating, you may register your domain name with verisign.com or any other Domain

Name Registration Service and request Web Forwarding to your full URL, [http://www.netforall.com/servlets/ShowSite?reqtype=domain&admin=your\\_name](http://www.netforall.com/servlets/ShowSite?reqtype=domain&admin=your_name). This is the address that you see in the address field of the browser when you open the Home section of your web page. It is also a good idea to submit your full web site address to popular search engines such as Google, Yahoo, or others.

## CHAPTER 4

### ADVANCED CONFIGURATION

*WebSiteRobot requirements are similar to that of a web browser and a web server. It comes ready to work with a direct connection to the Internet. If the connection is via a Cable or DSL modem, a Gateway, a Router, or any such device, one has to setup Port Forwarding on that device to forward TCP traffic on Port 8888 to the LAN IP address of your computer. In presence of a Firewall, it needs to be configured to allow TCP traffic on Port 8888 as well. You can change the behavior of the Robot using one single configuration file in XML format, as long as you understand the basics of your computer network environment.*

## **WebSiteRobot with a Direct Connection to the Internet**

When your computer has a direct connection to the Internet as with a dial-up modem for example, WebSiteRobot operates as illustrated on Figure 17 a, and b below. The Robot resides in its Installation Directory, which by default is Programs\NetForAll or Applications/NetForAll. The Robot is mainly concerned the folder that contains your web files, and the incoming requests for your documents originating from the Internet.

The files that are seen on your web site are located in a local folder in your computer, which by default is MyWebSite. WebSiteRobot is tied to this folder and constantly watches its contents and the changes that take place. It also sends out files to your visitors at their request. Since these files are local to your computer, WebSiteRobot always send out the current version and so, all your changes are instantly available on the Internet.

WebsiteRobot is also tied to your Internet connection, which is achieved by means of an internal or external dial-up modem, or any other type of direct connection achieved through your ISP. By default, WebSiteRobot permanently watches Port 8888 of your Internet connection for incoming requests for documents.

When your visitors type in the URL of your web page in their browser, it is converted into the current IP address of your computer and Port 8888. The current IP address of your computer is assigned by your ISP and may be static or dynamic depending on your specific arrangements. A dynamic IP address is very common with standard dial-up accounts, and it always changes whenever you connect to the Internet, or loose and restart your connection. That does not pose a problem because WebSiteRobot updates your IP address on the Internet whenever you click on the Synchronize button. Therefore, when your visitors type your URL [www.netforall.com/your\\_name/](http://www.netforall.com/your_name/) on their browsers, they always find your web page.

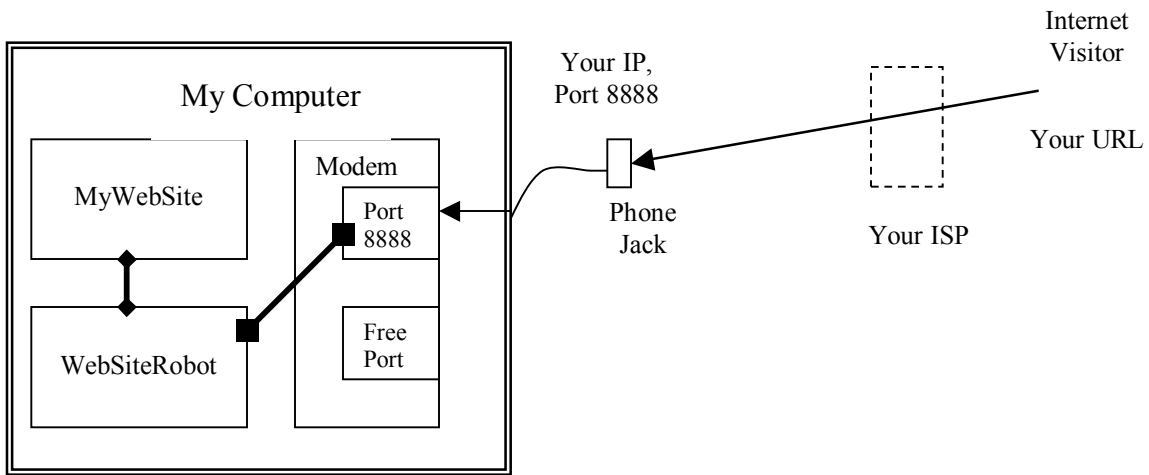


Figure 17 a. Direct Connection to the Internet

Inbound Request: A visitor on the Internet makes a request for your web site using your URL. It reaches WebSiteRobot through your ISP, at your IP Address and Port 8888.

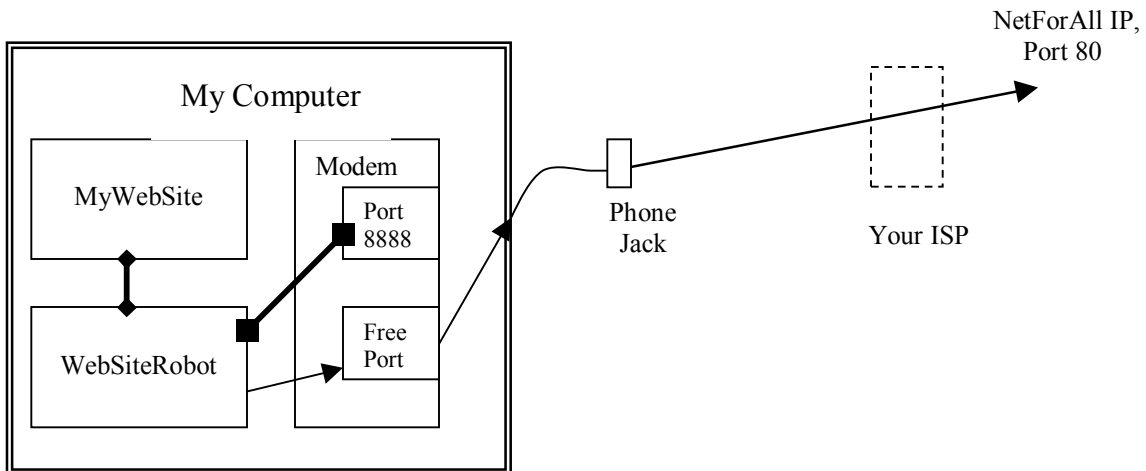


Figure 17 b. Direct Connection to the Internet

Outbound Request: WebSiteRobot uses any local Port available to send your Registration Information to NetForAll IP Address and the standard HTTP Port 80.

Requests for your web page come from the Internet, through your ISP, your phone line and finally, Port 8888 of your Internet connection. Since WebSiteRobot constantly watches that Port, it answers requests by sending out documents to your visitors. These documents take the same route as the request to reach the computer of your visitor.

Normally, your ISP is transparent to the whole process, that is, when you dial-up or otherwise connect to the Internet your ISP assigns your computer an IP address, associates it with your phone line, and then stands by and does not interfere in your Internet traffic. Most dial-up connections to the Internet with ordinary modems work this way. It may be necessary to use the software provided by your ISP Company to properly setup and configure your dial-up connection instead of configuring it manually.

WebSiteRobot also makes outbound requests on the Internet, for instance when it is sending out your Registration Information to NetForAll. It uses any available Port on your Internet connection to send its request to the NetForAll IP address and the destination Port 80, and receives the response along the same route. It is basically the same type of traffic that your browser generates when you are out there surfing the web.

If software Firewall is installed in your computer, as it is the case with most WindowsXP machines, and recent distributions of the Linux operating system, your web page may state that you are not online while you are indeed connected to the Internet and WebSiteRobot is in operation. That means WebSiteRobot is not receiving inbound request for your web site. In that case, you need to configure your software Firewall so as to accept inbound TCP traffic on Port 8888. On the Windows platform that is done via the Firewall configuration option screens, while on Linux, one may modify the iptables, or ipchains configuration depending on the distribution. It is not necessary or advisable to disable your Firewall.

## **WebSiteRobot on a Local Area Network**

When your computer is part of a LAN as it is the case for a large corporation, University, or a Small Office or Home Office (SOHO) environment, it and relies on another device or computer to connect to the Internet. In such a case, WebSiteRobot functions as illustrated in Figure 18 a, and b, below. The Robot resides in its Installation Directory, which by default is Programs\NetForAll or Applications/NetForAll. It monitors the folder MyWebSite, and your Internet connection on Port 8888. So internally, the operation is similar to the previous section, but the data traffic between your computer and the Internet is a little more complex. It goes through other devices or computers that may be hardware Firewall, Router, Gateway, DSL or Cable modem, a single multifunction device, or a cascade of devices. The following discussion assumes a single multifunction device, but the same reasoning may be applied to a combination of devices. It is a simplification of a complex subject, and it provides the necessary information to operate the Robot on any networking environment.

The files shown in your web page on the Internet are located in a local folder in your computer, which by default is MyWebSite. WebSiteRobot is tied to this folder and permanently monitors its contents and the changes that take place. It also sends out files to your visitors at their request while they are browsing your web page. Since these files are local to your computer, WebSiteRobot always sends the current version and so, all your changes are instantly available on the Internet.

WebsiteRobot is also tied to your Internet connection, which is achieved locally by your Network Interface Card (NIC) and its supporting program. By default, WebSiteRobot watches Port 8888 of your Internet connection permanently for incoming requests for documents.

On a LAN environment, the IP address of your computer is a private IP address that is only known to the other computers on your LAN. The LAN IP address is unknown by the computers on the Internet and to your visitors. It is also private and cannot be used to reach your computer from the Internet. The computer or device that provides your

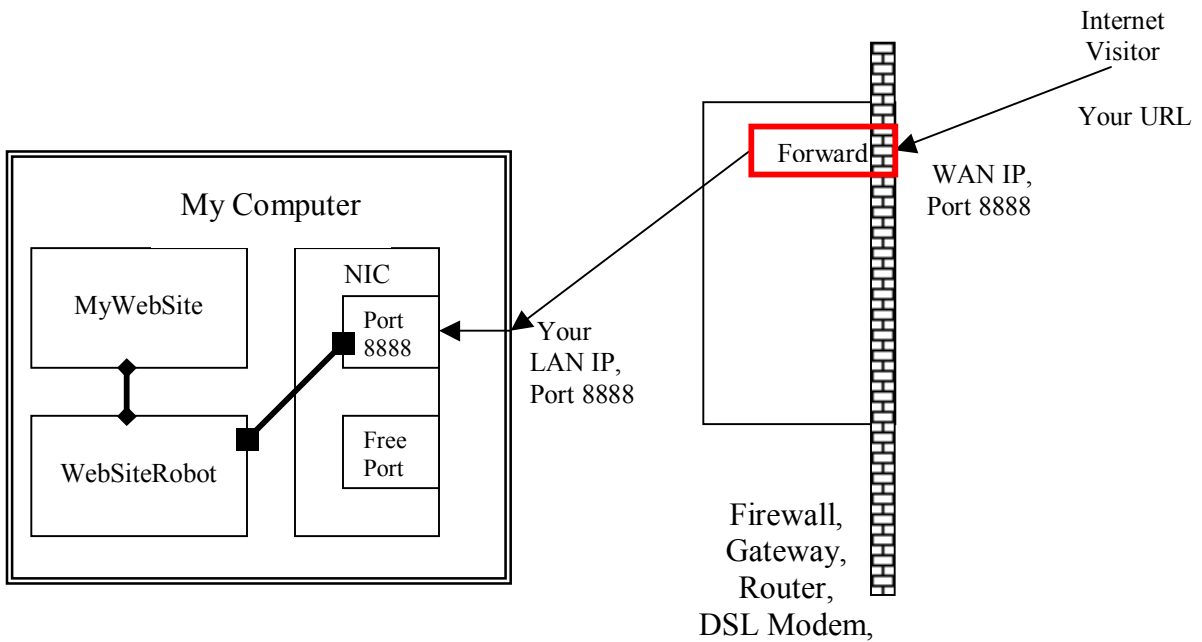


Figure 18 a. WebSiteRobot on a Local Area Network

Inbound Request: A visitor on the Internet requests your web page with its URL. It is translated into your WAN IP, Port 8888 then forwarded to your computer.

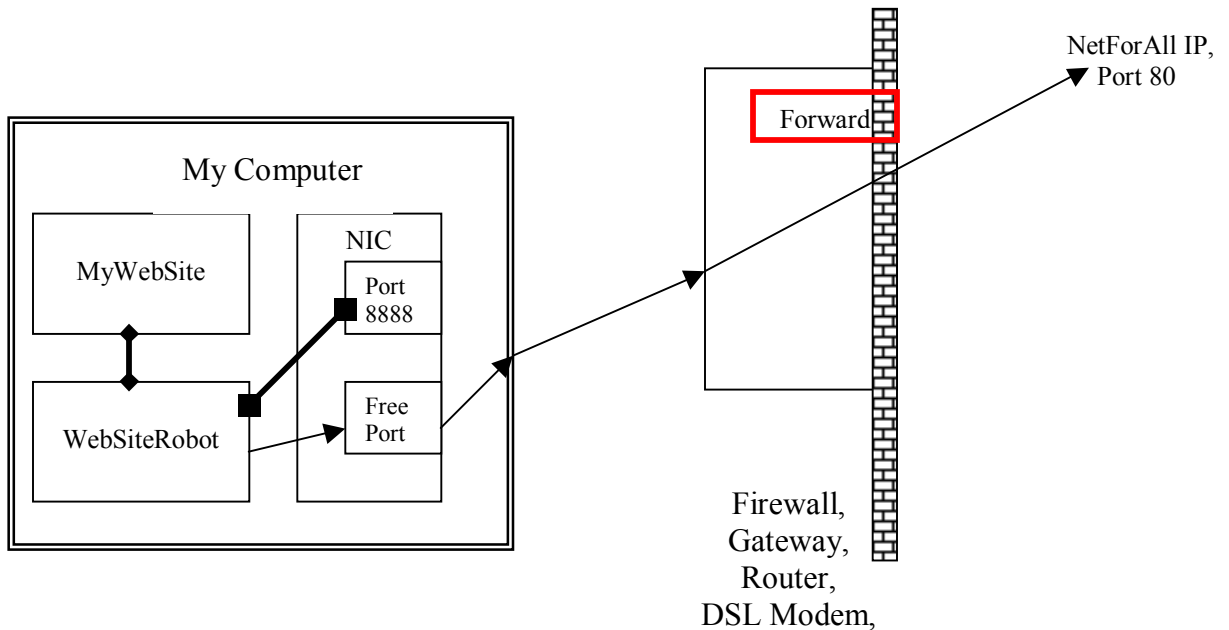


Figure 18 b. WebSiteRobot Local Area Network or behind a Firewall

Outbound Request: WebSiteRobot sends information such as your registration to NetForAll. Your Gateway, Router, or Modem routes the request transparently to the Internet.

connection has a LAN IP address to communicate with your computer, and a public or WAN IP address that is valid on the Internet. When your visitors type in their browser the URL of your web page, [www.netforall.com/your\\_name/](http://www.netforall.com/your_name/), it is translated into the WAN IP of the device that provides the connection, on the default Port 8888. It is up to that device to forwards inbound requests for your web page to your computer. Such devices are designed explicitly to manage data traffic, and in general, they need to be provided with the Port information and the LAN IP address of your computer in order to forward the data.

Thus, before installing WebSiteRobot on any computer on a LAN, it is necessary to setup or configure Port Forwarding on the Router, Gateway, Cable or DSL modem and forward TCP traffic on Port 8888 to the LAN IP of your computer. Notice that this is the same requirement as with any computer on the local network that would operate as a web server, except if it already has a its own WAN IP address. Any computer on the LAN that has both LAN and WAN IP addresses functions as if it was directly connected to the Internet, as discussed in the previous section.

In the presence of a Firewall in your network or in your computer, it may need to be configured to accept TCP traffic on Port 8888. It is a normal function of a Firewall to accept specific traffic on assigned Ports, and reject all others.

In a SOHO environment, you may seek the help of the company that provides your Firewall, Gateway, DSL or Cable modem in order to enable Port Forwarding. It may be your ISP or DSL provider. In a large company or University environment, your computer System Administrator would handle such a configuration. By default, the Robot expects the incoming HTTP requests to arrive on Port 8888 of your computer.

The default Port is 8888 but as you can see in the following sections, you are free to change it depending on your needs. The WAN IP address of your Router, Gateway, Firewall, or DSL modem may be static or dynamic depending on your ISP. WebSiteRobot works well in both cases. It will determine your current WAN IP address

and use it. It will also show it to you on the Synchronizer feedback Text Area as seen in previous chapters.

There are rare cases where a computer in corporate, SOHO or University environment has its own WAN IP address and is configured for direct access to the Internet. It may be that it is placed outside of the LAN, in the demilitarized zone (DMZ), or it is configured that way in order to minimize Internet traffic through other devices. In this situation, Port Forwarding is not required. It is not necessary to place your computer in the DMZ just to operate the Robot, because it works effectively in the privacy of your LAN as long as Port Forwarding is enabled and the Firewall is properly configured.

WebSiteRobot also makes outbound requests on the Internet for example when it is sending your registration information or determining your WAN IP address. In that case, the request is similar to the requests that your web browser sends on a regular basis when you are surfing the web. The request leaves your computer through your NIC card on any available Port, with the destination IP and Port number of the site that it wishes to reach on the Internet. In order to get to the Internet, the request goes to your Router, Gateway, Firewall, DSL Modem, or any device that provides your access to the Internet. In most cases, that device acts as a transparent proxy, that is, it routes your requests to the Internet as if you had a direct connection to the Internet. By default, WebSiteRobot is configured for transparent proxy, so if your PC is in that type of network, no configuration change is needed.

There are numerous cases, notably in big corporations and Universities where a transparent proxy is not the standard. Instead, your computer uses either a Socks or a Proxy Server to gain access to the Internet. This situation is illustrated on Figure 18 c. below. In that case you need to indicate to the Robot the LAN IP address of the Proxy Server, and the required Port. Depending on the type of service available, the Socks IP address, or Proxy IP address are the LAN IP address of your Router, Gateway, Firewall or DSL modem. The default Socks Port is 1080 and the default HTTP Proxy Port is 80, but your network may be using different ports. These are the same parameters that your

web browser needs in order to enable you to surf the web. You may find these values by looking at the connection settings of your web browser. You may also request them from your ISP or your DSL provider if you are in a SOHO environment, or contact your computer System Administrator if you are in a corporation or a University. Once you know the IP address and Port of your Proxy or Socks Server, you may edit WebSiteRobot Configuration files and insert the values. The next section shows how to edit the configuration file.

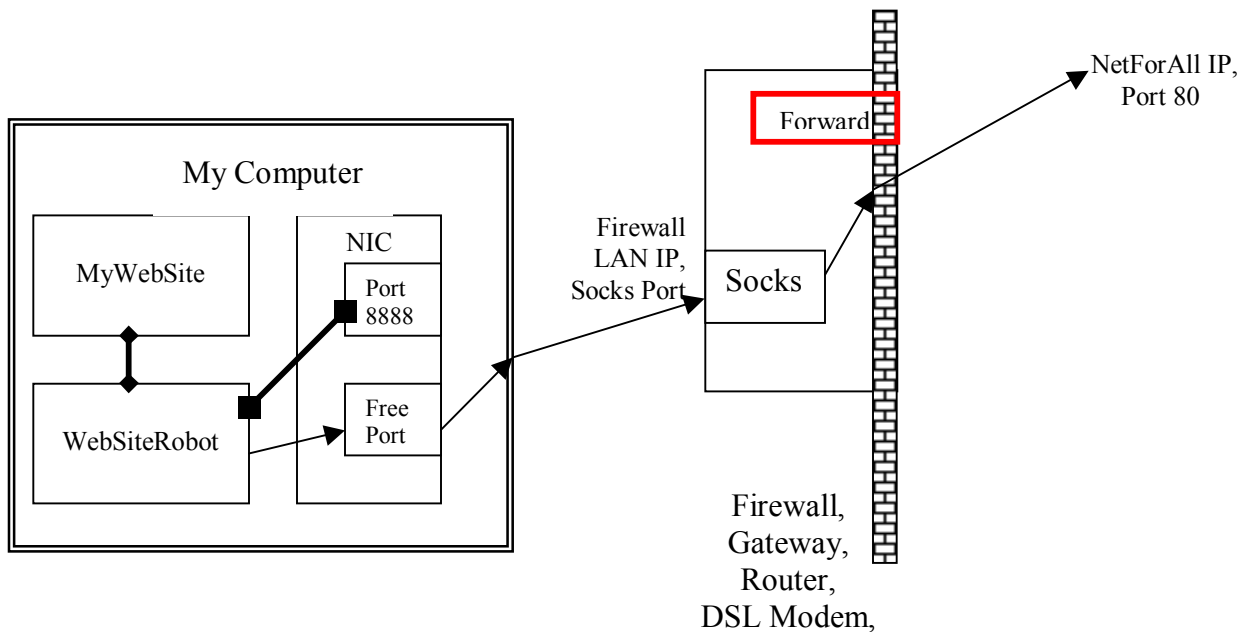


Figure 18 c. WebSiteRobot Local Area Network with Socks Proxy  
 Outbound Request: WebSiteRobot needs to send information such as your registration to NetForAll. The Socks or Proxy Server comes in between and sends the data on your behalf.

There are also cases where the ISP does not have the resources to give you an unrestricted traffic to the Internet. For instance, some Cable Modem companies prohibit web hosting with home computers in order to sustain a high bandwidth for outbound access to the Internet. They stick to the older scenario where the home computer only makes outbound requests such as browsing another site, downloading a file, uploading to a central server for file sharing. They allow a web server configuration at higher business prices. Hence your options are limited to upgrading your service for higher fees, or paying a third party for a fraction of the disk space that you have in your computer. You also have to create your own web pages, edit the links and upload to another location whenever you need to update your site.

### **WebSiteRobot Configuration File**

The Robot uses the configuration file `sysinfo.xml` that is located in the `conf` folder inside WebSiteRobot Installation Directory. Depending on the system, its path would be `Programs\NetForall\conf\sysinfo.xml`, `Applications/NetForall/conf/sysinfo.xml`, or such. Figure 19 below shows WebSiteRobot Configuration File `sysinfo.xml` open with a web browser or an XML file editor. It is an XML file with a single element and several attribute and value pairs. To edit this file, you may do a “find files” then open it with a XML file editor, preferably a basic one like notepad, vi, or kate. Using a more advanced word processor would be overkill and might add other formatting tags that will ruin the file.

Even if you are not familiar with XML, you can still change the configuration file successfully. The main thing is to remember that we are dealing with a set of *attribute="value"* pairs and it is very important to preserve the brackets “ signs, otherwise the file would be useless and the Robot will revert to default values. Between the brackets is the value for the parameter or attribute at the left of the equal = sign. There is no bracket around the attribute, and the attribute should be changed, renamed or otherwise modified.

```

<?xml version="1.0" ?>
- <sysdata>
  <sysinfo serverpath="C:/MyWebSite"
    soundbackup="C:/MySoundBackup" serverport="8888"
    urlpath="" sponsor="" synctimeout="120" regtimeout="180"
    pfport="8888" lanproxyserver="" lanproxyport="80"
    lansocksserver="" lansocksport="1080" />
</sysdata>

```

Figure 19 a. Default WebSiteRobot Configuration File, sysinfo.xml for Windows.

```

<?xml version="1.0" ?>
- <sysdata>
  <sysinfo serverpath="/home/user_home_dir/MyWebSite"
    soundbackup="/home/user_home_dir/MySoundBackup"
    serverport="8888" urlpath="" sponsor=""
    synctimeout="120" regtimeout="180" pfport="8888"
    lanproxyserver="" lanproxyport="80" lansocksserver=""
    lansocksport="1080" startserver="yes" />
</sysdata>

```

Figure 19 b. Default WebSiteRobot Configuration File, sysinfo.xml for Linux.

The configuration file assigns the value of the following parameters:

- **serverpath** Absolute path of the folder that contains the files that the Robot may publish in your web site. By default, the location of your web file is *C:/MyWebSite* on the Windows platform, and */home/user\_home\_dir/MyWebSite* on Linux and other Unix machines. *user\_home\_dir* is automatically replaced by the login name current user and does not need to be changed.
- **soundbackup** Absolute path of the folder where the Robot may put the original Large Sound Files if you choose to remove them from the web site folder. By default, this folder is *C:/MySoundBackup* on the Windows Platform and */home/user\_home\_dir /MySoundBackup* on Linux and the different flavors of Unix.
- **serverport** The default serverport value is *8888*. The Robot listens to the server port for requests for your web files. Your visitors initiates the request from the Internet, and they come from your ISP directly to your PC if you have a direct connection to the Internet, or is forwarded to your PC through a router, gateway, Firewall, DSL or cable modem.
- **urlpath** The urlpath is left blank by default. Leave it blank when the Robot is to operate on Windows platforms. It is useful on Linux or other Unix systems when you wish to use WebSiteRobot with an existing web server, say Apache. If your web files for the robot are in a subfolder of the DocumentRoot, that urlpath is the relative path to that web folder from DocumentRoot.
- **sponsor** It the user or institution who is sponsoring your clone of the Robot. It should not be changed.
- **synctimeout** Timeout of the Synchronizer. Robot synchronizes you computer with the Internet and determines your current IP address by contacting NetForAll. If the reply does not come within synctimeout, the Robot breaks the connection. The default value is *120 seconds*.

- **regtimeout** Timeout of the Registration. When the Robot sends your registration information to NetForAll the reply has to come within regtimeout otherwise, the Robot breaks the connection. The default value is *180 seconds*.
- **pfport** When your visitor requests a document from your web page, the request is directed to pfport. If your computer is behind a Firewall, Router, Gateway, DSL or Cable modem, this port needs to be forwarded to the LAN IP address of your computer, and its serverport. The default value is same as serverport, 8888.
- **lanproxyserver** On some corporate and University networks, individual computers browse the web through an HTTP Proxy Server. In such a case, fill in the LAN IP address of the Proxy Server. By default, the lanproxyserver is blank, signifying that there is no need for a proxy. Entering a value here forces the Robot to expect a HTTP Proxy Server and use it, so leave it blank if you don't have to use a proxy to browse the web. This is similar to the configuration of your web browser.
- **proxyport** This is the port of your HTTP Proxy Server. The default value 80 is the standard port for HTTP Proxy Server. This is the same value that your web browser may use if you need a proxy to get to the Internet.
- **lansocksserver** There are cases where a computer on a corporate and University network browses the web through an Socks Server. In such a case, fill in the LAN IP address of the Socks Server. By default, the lansocksserver is blank, signifying that there is no need for a proxy. Entering a value here forces the Robot to expect a Socks Server and use it, so leave it blank if you don't have to use a proxy to browse the web. This is similar to the configuration of your web browser.
- **socksport** This is the port of your Socks Server. The default value 1080 is the standard port for a Socks Server. This is the same value that your web browser may use if you need Socks to browse the Internet.
- **startserver** This parameter exists only on the Linux and Unix versions or the WebSiteRobot. It enables or disables the web server function of the Robot, in case one wishes to use an existing web server like Apache. Notice that by default, WebSiteRobot uses Port 8888 while the standard HTTP Port is 80, and so there is

no obligation to disable one or the other until you need to consolidate everything. By default this value is *yes* and activates the server function of the Robot. You may still override this by using the Start Server and Stop Server buttons of the Control Center Screen.

Now that you understand the meaning and the effects of each configuration parameters, you may work with the default values or make the changes as to best suits your needs.

### **Changing Your Web Site Directory**

The default path of your web file is C:/MyWebSite on the Windows platform, and /home/user\_home\_dir/MyWebSite on Linux and other Unix machines where user\_home\_dir is automatically replaced by the home directory path of the current user. To change the location of your web files edit the configuration file with notepad, vi, emacs, or any other simple text editor and fill the value of serverpath with the absolute path of your new web folder. Also, remember to change the shortcuts on your desktop to reflect the new location. If the new folder does not exist, WebSiteRobot will create it. Also, on the Linux platform one has to make sure that Robot has permission to read, write and execute on the web site folder and its own installation directory where is caches information as needed. The permissions are those of the user that launched the Robot.

### **Running WebSiteRobot with a Direct Connection to the Internet**

Your computer has a direct connection to the Internet when it uses its own dial-up modem, or when it is on a LAN and has both a private LAN IP address and a public WAN IP address. In this situation, WebSiteRobot works well with no need to make changes in its configuration file or in your LAN. However, you may need to verify that your Internet Connection is properly configured, by using the software from your ISP to set it up. Please refer to the next section if a Firewall is installed inside your computer or somewhere else in your Network.

## **Running WebSiteRobot in Presence of a Firewall**

A Firewall is like a security guard who inspects all entities and only allow those that it has been instructed to accept and reject all others. WindowsXP comes with software Firewall already installed. On Linux, or Unix machines, the network traffic is regulated by the ipchains or iptables software Firewall, in addition to the options in /etc/services. You may also install software Firewall on your computer if it did not come with one. In some cases, it is installed in a different computer in your LAN, or it may be a dedicated Network Appliance.

In order to run any service in your system like mail server, web server, FTP server, the Firewall has to be configured explicitly to accept the associated traffic at the specified Port. For WebSiteRobot to run effectively, you have to configure the Firewall to accept inbound TCP traffic on the default Port 8888. To relate to a more common application, the Firewall configuration is the same as if you were operating a standard web server on Port 8888.

The details of Firewall Configuration vary and you should seek the help the company that provided it, your System Administrator or a local guru, if you cannot figure it out. No change is needed in the default configuration of WebSiteRobot itself. In case your computer is part of a LAN, please refer to the next section for additional information.

## **Running the Robot on a Local Area Network**

If your computer is part of the LAN but has its own WAN or public IP address, it is as if it had a direct connection to the Internet. In that case, no configuration change is required on your computer, network, or WebSiteRobot, as discussed earlier.

If your computer only has a LAN IP address, you need setup Port Forwarding on the device that provides your Internet connection and forwards TCP traffic on Port 8888 to the LAN IP address of your computer. That device may a Router, Gateway, DSL or

Cable Modem, a combination of such devices, or a single multifunction device. Figure 20 shows the web based GUI of the Port Forwarding configuration option of the ActionTec DSL Gateway modem. In this case, TCP traffic on Port 8888 (Port Range 8888 to 8888) is being forwarded to the PC with local IP 192.168.0.3. The DSL Gateway itself is has the LAN IP 192.168.0.1. The IP addresses may vary depending on your specific LAN and the GUI or such configuration tools will differ for your brand of DSL, Modem, Gateway or Firewall Device, but there should be an Advanced Configuration Option that enables Port Forwarding.

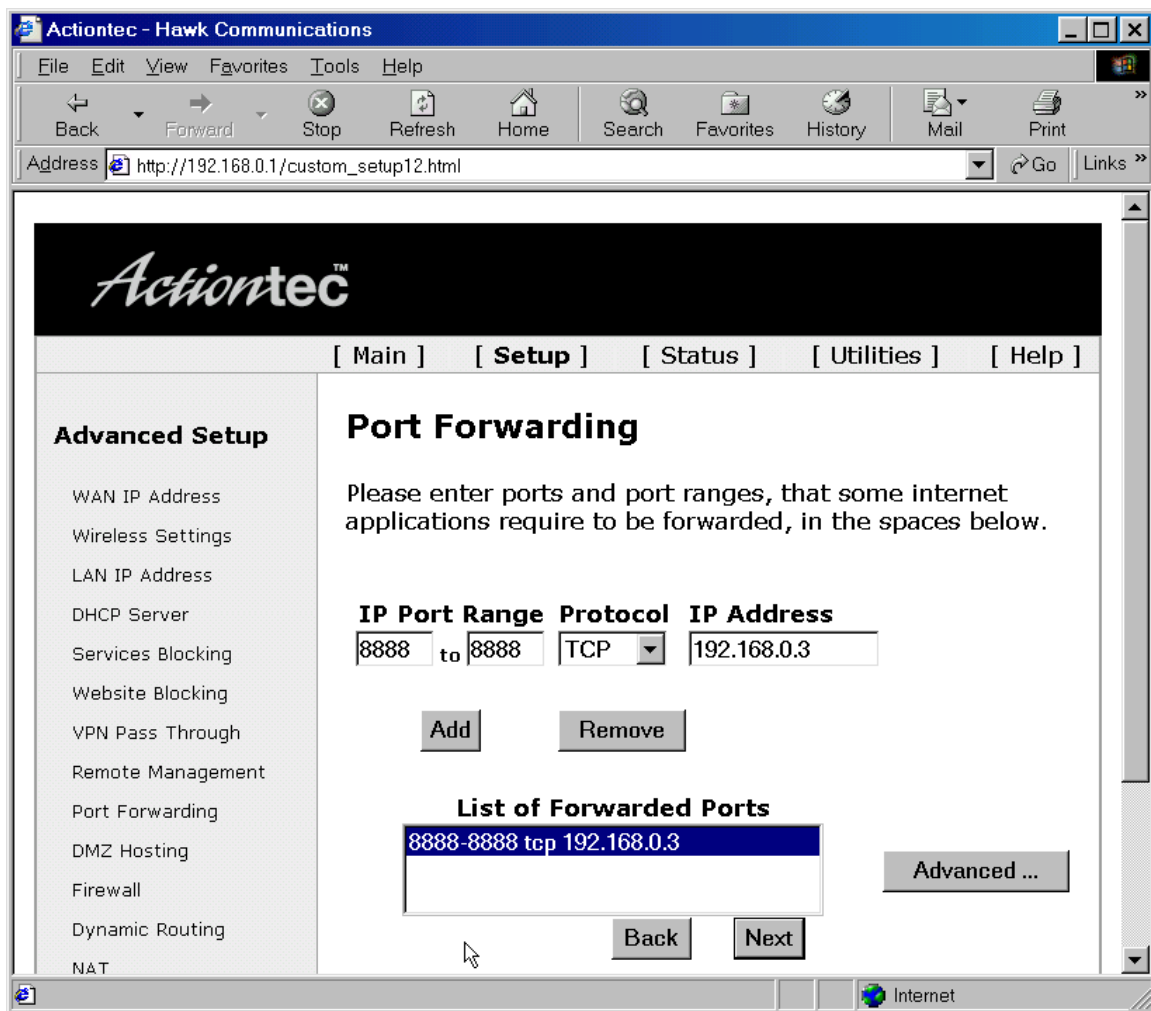


Figure 20. Port Forwarding Configuration on the web-based GUI of a modern DSL Gateway modem

In case you normally need HTTP Proxy information for your web browser to surf the Internet, then you also need to indicate the LAN IP address of the Proxy Server and its Port Number to WebSiteRobot. These are the values of `lanproxyserver` and `lanproxyport` respectively, in the WebSiteRobot Configuration file `sysinfo.xml`. If you normally need Socks Server for your web browser to access the web, then you need to indicate the LAN IP address of the Socks Server and its Port Number to the Robot. These are the values of `lansocksserver` and `lansocksport` respectively, in the configuration file of the Robot. The details of editing the configuration file were discussed in a previous section.

## Running WebSiteRobot with Apache or Another Web Server

On a Linux or Unix machines, you may already have Apache or another web server working with the default HTTP Port 80. Since WebSiteRobot default Port is 8888, it may be installed and run without conflict. It is also possible to let the Robot build your web site, while Apache or an existing web server shows the files to your visitors. In that case, the following changes will be needed in the configuration file of the Robot.

- **serverpath** This path needs to be the DocumentRoot of the existing web server, or a subfolder of the DocumentRoot, say `/var/www/htdocs/MyWebSite`, or `/home/user_home_dir/public_html/MyWebSite` where `user_home_dir` is the login name current user. The above paths may be the real location of your web folder for the Robot or its symbolic link.
- **serverport** This will be `80` for the standard HTTP Port, or the actual Port number of the current server.
- **pfport** This will also be `80` or the actual Port number that is currently forwarded to your existing web server.
- **urlpath** This will be left empty if the value for `serverpath` is the DocumentRoot of your existing server. If your web folder for the Robot is a subfolder of DocumentRoot, then the `urlpath` is the relative path to that folder. For instance, if `serverpath` is `/home/user_home_dir/public_html/MyWebSite` then `urlpath` is `MyWebSite`.

- **startserver** This should be changed to *no* to indicate to the Robot to not activate its web server function as you have another one already using the serverport.

## **Troubleshooting Connection Errors**

Two types of Connection Error might appear while using the Robot. The first one is when the computer is connected to the Internet and the Robot is running, but when a visitor comes on your site, only the thumbnails and comments are available. On the top of the page, it shows that your site is “not online”. That means WebSiteRobot is not answering the requests for your web documents because it is not receiving these requests to begin with

If you have a direct connection to the Internet with a dial-up modem for example, it is possible that you have lost your connection to the Internet and reconnected again. Each time you connect to the Internet, your IP address changes because it is a dynamic IP. WebSiteRobot needs to update your IP address each time you connect to the Internet. To do that, select the Control Center screen, and then click on the Synchronize button near the bottom of the left panel.

If you are on a LAN, make sure that when the requests for your web files come from the Internet and reach the Router, Gateway, Firewall, DSL or Cable Modem that connects your LAN to the Internet, they are accepted and forwarded to your computer. If a Firewall is installed on your computer or on another computer or device in your network, make sure that Port 8888 is open for inbound connections. Then, check that Port Forwarding is setup and TCP traffic on Port 8888 is forwarded to the LAN IP address of your computer. Firewall Configuration and Port Forwarding are discussed further in previous sections.

The other type of Connection Error occurs when WebSiteRobot tries to get on the Internet to update your IP address, or to send your Registration Information, and its

request cannot get out of your LAN and reach the Internet. When that happens a messages such the following appears on the feedback Text Area below the on the Registration Screen:

*java.net.UnknownHostException: www.netforall.com*

*Please wait a little and try again*

There may also be a message such the following in the feedback Text Area of the Control Center screen:

*NetForAll Response:*

*Error retrieving response from NetForAll*

If you are using a dial-up connection to the Internet, make sure you did not loose connection. If it is indeed the case, connect to the Internet and try again. If it does not work, try setting up your dial-up connection with the original software from your ISP, or test with one that is known to work like NetZero, EarthLink, MSN, AOL, Joi Internet, Sisna, etc.

If you are on a LAN and your normally need a HTTP Proxy Server for your web browser to surf the net, make sure that you have entered the LAN IP address and Port Number of the Proxy Server in the lanproxyserver and lanproxypport of WebSiteRobot Configuration File located in the Installation Directory, conf/sysinfo.xml. You may instead need to enter the LAN IP address and Port Number of the Socks Server in the lansockserver and lansocksport if your web browser needs Socks to surf the web. Only one of the two fields lanproxyserver or lansockserver might have a value, not both.

## **Troubleshooting Writing Errors**

A Writing Error occurs when WebSiteRobot fails to write in the Directory where it is installed, or in the MyWebSite folder, *C:\MyWebSite* on Windows and */home/user\_home\_dir/MyWebSite* on Linux and Unix. It is actually the path to any other directory that was entered in the serverpath field of WebSiteRobot Configuration File.

Writing might also fail when trying to move a large sound file into MySoundBackup directory which by default is *C:\MySoundBackup* on Windows and */home/user\_home\_dir/MySoundBackup* on Linux or any other directory path that was entered in the soundbackup field of the configuration file of the Robot.

On the Windows platform, make sure that the above directories are not full. On Linux and Unix machines, make sure that WebSiteRobot or the user who is running it does have read and write permissions on those directories, and a read permission on the web files.

### **WebSiteRobot and your Network Security**

While there are tremendous benefits in going online, like using email or Instant Messengers, browsing the web, downloading files, hosting a web site to promote yourself or your business and generate revenues, there are also some security concerns. It is good to have a basic understanding of how the applications on your computer tie it to the Internet, evaluate and implement adequate the safeguards.

WebSiteRobot only leverage the traffic channels that already exist in your network, and use them to create your presence on the Internet as a producer instead of just a consumer. Unlike peer-to-peer applications, it does not need any esoteric Port or Protocol. There is no need to place your computer in a DMZ for it to operate correctly. Your computer does not join an obscure peer-to-peer network, it does not broadcast information or listen to any channel or community. WebSiteRobot does not by itself breach the security of your system. All existing security safeguards should be left in place.

It is important to mention that a common myth is to believe that your system is safe when you have a Firewall, and unsafe if you add a service. The fact is a Firewall does prevent unwanted traffic from getting into your network, but it does not protect you from receiving viruses in your email or downloading Trojan Horses from the Internet. When adding a service that runs on an existing channel and a known Protocol, your Firewall can

be configured to only add that specific service in its list of known services, and thus continue to fully protect your role in your network.

From a security standpoint, operating WebSiteRobot is similar to having a web client like the web browser you already have, and a web server. Therefore all the information in and out of your computer uses the ubiquitous HTTP protocol defined in RFC 2616, at <http://www.w3.org/Protocols/rfc2616/rfc2616.html>. This is the same protocol that is in effect when you use your web browser to surf the Internet. Also, only one port is used, by default Port 8888, which can be changed to the standard HTTP Port 80 if another web server is not using it.

WebSiteRobot offers many great security advantages compare to most web servers:

- You can see the traffic on your web site live, on the Web Server Panel of the Control Center Screen. It instantly shows the IP address of your visitor, the page that referred it, the files that is being requested, the type of HTTP command sent, and the date and time of the request, the HTTP Status Code that was returned. Too many Status Codes above 400 are an indication that something may be wrong. You don't have to analyze a log file afterwards, because you are seeing in real time what is happening on your site. You can stop the web server function of the Robot or start it directly from the Control Center Screen.
- You may also edit the configuration file and change the serverport value while WebSiteRobot is running, stop and start the server again, and if the new Port is being forwarded to your computer or you have a direct connection to the Internet, your site will continue to work as before. If you try that with another server, all your visitors will need to change your URL, in the meantime, it will be as if your site has vanished from the web. With the Robot you can change the server Port on the fly and legitimate requests will continue to reach your web site.

- Your visitors can only request static documents. They cannot request to run a script or program, otherwise the Robot responds with an error message and the corresponding HTTP Status Code. While only showing static documents, your web site operates like a dynamic E-commerce site powered by a back-end database, in that you can add new items in your web site, or change the notes without having to write HTML code.
- The Robot only shows the documents that are inside your web folder. It does not know and cannot tell any information beyond your web folder. A request for any other document would return a “Not Found” error, HTTP status Code 404.

**APPENDIX 1 GLOSSARY**

**Apache Server** A public domain or otherwise free web server. It is maintained by a group of programmers known as the Apache Group but any one can access, modified the source code and share the improvements. It's name is derived from "a patchy server" because it was developed from an initial code and patches contributed by various hackers. It is the most widely used web server. See also Jetty Web Server.

**Byte** The amount of computer memory space used to store one character. Almost all modern computers 8-bit bytes and can distinguish 256 different characters. A bit is the smallest unit of information on a machine and can only hold the values 0 or 1.

**Configuration File** A file that contains the necessary parameters that a computer software or hardware needs in order to work as intended.

**Data Center** A specialized facility that houses numerous servers and sells storage space and bandwidth to companies and individuals. See also Web Hosting Company.

**DMZ** Stands for DeMilitarized Zone. It designates portion of the network outside of the LAN, or otherwise not protected by Firewall and used by a company to host its web site on a sacrificial server.

**DSL** Short for Digital Subscriber Line or Digital Subscriber Loop, it is a technology which enables high-speed transmission of digital data over regular copper telephone lines.

**FAQ** Acronym for Frequently Asked Questions. A reference document created for particular topic or group that answers to common beginners' questions. It is considered poor Netiquette to ask a question without first reading the FAQ.

**File Compression** Reducing the size of files for ease of storage and transfer. WinZip, GZIP, are examples of an application that compresses files.

**File Encoding** Process that transform a file into a specific format more suitable for a specific application, or to achieve compression.

**File Transfer** Process of copying or transferring a file from one location to another, as between two programs or from one computer to another.

**Firewall** A set of security procedures that prevents unauthorized access to or from a private network or LAN. Firewalls can be implemented in both hardware and software, or a combination of both. All messages entering or leaving the intranet pass through the

firewall, which examines each message and blocks those that do not meet the specified security criteria.

**FTP** The File Transfer Protocol defines the procedure for transferring files. It is documented in the RFC 950 at <http://www.ietf.org/rfc/rfc0959.txt?number=959>. In practice, programs such as CuteFTP or WS\_FTP can be used to perform FTP.

**GIF** Short for Graphics Interchange Format, another of the graphics formats suitable for the Web but it supports only 256 colors. The compression algorithm used in the GIF format is owned by Unisys, and companies that use the algorithm are supposed to license the use from Unisys.

**Gigabytes** Large amount of memory: 1,073,741,824 bytes. See also bytes.

**Hacker** A computer enthusiast who enjoys learning everything about a computer system and, through clever programming, pushes the system to its highest possible level of performance. It is a person who enjoys programming rather than just theorizing about it. Not to be confused with crackers, these skilled programmers who have a mischievous tendency for breaking into secured systems or distribute malicious programs.

**HTML** The HyperText Mark-up Language is the authoring language for creating documents that are published on the Internet. It contains special codes or tags that define the appearance of the document, and other codes or links that connect to other documents. HTML pages located and displayed with a web browser like Netscape, Internet Explorer, Mozilla, Konqueror and others. See also HTTP.

**HTTP** The HyperText Transfer Protocol, is the underlying protocol used by the World Wide Web. HTTP defines how messages are formatted and transmitted, and what actions web servers and web browsers should take in response to various commands. For instance, when you enter a web page address or URL in your browser, this actually sends an HTTP command to the Web server directing it to fetch and transmit the requested Web page.

**Internet** A global network of linked computer networks that facilitates the exchange of information and supports communication services, such as remote login, file transfer, email, newsgroups, and the World Wide Web. It uses the TCP/IP communications protocol and share a common address space. It is also known as "the net", "the information superhighway", and "cyberspace". Today it is the most convenient means for

companies to reach their customers with products and services. The Internet is the network itself or the infrastructure, meanwhile the web or World Wide Web is one of the ways to access documents on that infrastructure.

**Internet Explorer** A free web browser application from Microsoft.

**IP** Stands for Internet Protocol. It specifies the format of data packets that are send over the Internet and the addressing scheme to route them from the source to the destination. You can think of it as the postal system of the Internet. It allows you to address a package and drop it in the system, but there's no direct link between you and the recipient. Each computers connected to the Internet has an IP address and exchange information with other computers using their IP address. It is part of the TCP/IP set of Protocols. See also TCP.

**ISP** Stands for Internet Service Provider. Also called IAP for Internet Access Provider. It refers to the company that provides your connection to the Internet. For a monthly fee, the service provider gives you a software package, username, password and access phone number. Equipped with a modem, you can then log on to the Internet and use different services like email, web browsing etc.

**Java** is a general purpose programming language with a number of features that make the language well suited for use on the World Wide Web. It is developed by Sun Microsystems at <http://java.sun.com>

**Jetty Server** A powerful web server that has a rich set of features. It is open source like Apache, and it is written in Java. It empowers WebSiteRobot with a web server service.

**JPEG** Stands for Joint Photographic Experts Group, the committee that devised the format. It is widely used format in digital photography and is suitable for web publication.

**Kilobytes** Large amount of memory: 1,024 bytes. See also bytes.

**LAN** Stands for Local Area Network, a computer network that covers a small area like a home, small business office or a group of building. It is normally designed to allow computers to share resources like printers, broadband access to the Internet, and a public IP address. See also WAN.

**lanproxyserver** LAN IP address of the Proxy Server. The value is entered in the configuration file of the Robot. See also Chapter 4.

**lansockserver** LAN IP address of the Socks Server. The value is filled in the Configuration file of the Robot when your computer needs Socks proxy to browse the web. See also Chapter 4.

**MediaServer** A network device created by NetForAll and operated by WebSiteRobot. It is a Network Appliance dedicated to publishing your still media files and real time live video on the web.

**Megabytes** Large amount of memory: 1,048,576 bytes. See also bytes.

**Modem** Short for modulator-demodulator. The modem modulates the digital data of computers into analog signals to send over the telephone lines, then demodulates back into digital signals to be read by the computer on the other end. Modems are used for sending and receiving email, transferring files, and surfing the Internet.

**NIC** stands for Network Interface Card. It is the piece of hardware that allows your computer to be connected to a network.

**Open Source** A computer program that is distributed along with the source code for the general public to use and/or modification from its original design free of charge. Since the source code is open, such programs are typically developed by a collaborative effort in which programmers improve upon the code and share the changes within the community. The Open Source movement started out in the technological community as a response to proprietary software owned by corporations. See also the Open Source Initiative at <http://www.opensource.org/> and the Free Software definition at <http://www.gnu.org/philosophy/free-sw.html>

**pfport** It is a configuration parameter of WebSiteRobot that tells which port the request for your web page are sent to before being forwarded to your computer. See also Chapter 4.

**PNG** Portable Network Graphics, a patent-free graphics format that is compact and suitable for web publication of image files. It offers about 5% to 25% more compression than the GIF format. See also GIF and JPEG.

**PORT** A logical communication channel on the Internet identified by its unique Port number. For instance, Port 80 is for web traffic, 110 is used for checking email, 20 and 21 are used for FTP, and WebSiteRobot uses 8888 by default.

**Protocol** An agreed-upon for transmitting between two. The protocol determines the type of error checking to be used the data compression method, if any, how the sending device will indicate that it has finished sending a message how the receiving device will indicate that it has received a message.

**Proxy** A server that provides access to files from other servers by retrieving them either from its local cache or from the remote server. Proxy servers can dramatically improve performance for groups of users. This is because it saves the results of all requests for a certain amount of time, and when the same request is repeated, it does not need to contact the remote server. When your web browser needs a Proxy to surf the web, you need to fill the LAN IP address and Port number of the Proxy Server in the configuration file of WebSiteRobot.

**proxyport** This is the port of your HTTP Proxy Server found in the configuration file of the Robot. The default value 80 is the standard port for HTTP Proxy Server. See also Chapter 4.

**RAM** Random Access Memory is the working memory of the computer. It is used for storing data temporarily while working on it, running application programs, etc. Consider the analogy of a basic workspace, such as a drawing board. More memory lets you create a larger drawing table to work on. RAM is one of the most important factors that affect your computer performance, even more so than the processor speed.**Robot** Short name for WebSiteRobot.

**regtimeout** It is the timeout of the Registration in WebSiteRobot Configuration File. See also Chapter 4.

**Server** Computer or software inside the computer, that provides information to client machines. For example, a web server sends out web pages, a mail server manages email, a list server administers mailing lists, FTP servers holds FTP sites receiving files or delivering files to users, and a DNS or name server provides information about Internet Host Names and IP addresses.

**serverpath** Absolute path of the folder that contains the files that WebSiteRobot may publish in your web site. Its value is found in the configuration file sysinfo.xml. See also Chapter 4.

**serverport** A parameter in WebSiteRobot Configuration File, it indicates the port that the Robot listens for requests for your web files. See also Chapter 4.

**SOCKS** A protocol for handling TCP traffic through a Proxy server. If your web browser needs a Socks Proxy to surf the web, then you need to fill the LAN IP address and Port number of the Socks Proxy Server in the WebSiteRobot Configuration File. See also Proxy.

**socksport** This is the port of your Socks Server found in the configuration file of the Robot. The default value 1080 is the standard port for a Socks Server. See also Chapter 4.

**SOHO** Refers to a computer network environment of a Small Office Home Office.

**soundbackup** Absolute path of the folder where WebSiteRobot may put the original Large Sound Files if you choose to remove them from the web site folder. Its value is found in the configuration file sysinfo.xml. See also Chapter 4.

**sponsor** It is the user or institution who is sponsoring your copy of the Robot. Its value is found in the configuration file sysinfo.xml. See also Chapter 4.

**startserver** This parameter exists only on the Linux and Unix versions or the found in the configuration file of WebSiteRobot and enables or disables the web server function of the Robot. See also chapter 4.

**Synchronize** The button on the WebSiteRobot Control Center screen that instructs the Robot to update your web site. Whenever you make changes on your web files, you should click on Synchronize

**synctimeout** A parameter in WebSiteRobot Configuration File, it is Timeout of the Synchronizer in seconds. See also Chapter 4.

**TCP** Stands for Transmission Control Protocol. It is the most common Internet transport layer protocol. TCP enables two hosts to establish a connection and exchange streams of data. TCP guarantees delivery of data and also guarantees that packets will be delivered in the same order in which they were sent. It sits on top of the IP Protocol. See also IP.

**Upload** Transfer a file from a local computer or client, into a server that is a special computer that will in turn make the file available to other clients. WebSiteRobot transforms your computer into a server, thus there is no need to upload files.

**urlpath** It is a WebSiteRobot configuration parameter useful on Linux or other Unix systems when you wish to use WebSiteRobot with an existing web server, and your web files for the robot are in a subfolder of the Document Root of the other server. See also Chapter 4.

**WAN** Wide Area Network. A network in which computers are connected to each other over a long distance, using telephone lines and satellite communications. The Internet is the largest WAN. See also LAN.

**Web Browser** A computer program used to locate and display web documents or otherwise surf the web. It interprets the HTML tags in a documents and displays text, multimedia, and let the user jump to other documents through hyperlinks. Examples of web browsers are Netscape, Internet Explorer, Mozilla, Konqueror and others.

**Web Hosting Company** A company that hosts your web site for a monthly fee, in a Data Center or other such facility. The later is populated by computers that may be similar to the one you have.

**Web Server** It refers to a computer or software inside the computer that acts like a waiter. The client asks it for something a file and the Web Server gets the file and sends it to the client. In most cases the Web Server does not read or otherwise process this file, but simply hands it off to the client that asked for it. Apache is a very widely used web server. WebSiteRobot has a server function provided by the Jetty Web Server.

**Web Site** A set of static or dynamically generated documents that can be accessed by any user on the World Wide Web using a web browser. Documents are obtained by typing the web site address or URL into the web browser. In turn, the browser obtains the document from a web server and displays it on its screen.

**XML** Is the eXtensible Markup Language, an open standard for describing data and devised by the World-Wide-Web Committee. It is used for defining data elements on a Web page and business-to-business documents. It uses a similar tag structure as HTML; however, whereas HTML defines how elements are displayed, XML defines what those elements contain.

**APPENDIX 2**  
**FREQUENTLY ASKED QUESTIONS**

**I have registered, where is my Web Page?**

Your Web Page is at [www.netforall.com/your\\_name/](http://www.netforall.com/your_name/) where your\_name is the username you chose at the registration.

**Do I need to know html**

No. All you need is to be able to copy some files into the MyWebSite folder of your computer.

**My Web Page is empty, what do I do?**

Locate the folder MyWebSite in your computer. It should be in the main hard drive. Copy any file or folder into MyWebSite, then on the Control Center of the Robot, click on Synchronize. Now your Web Site is built. To update your web site, copy more files into your MyWebSite, then click on Synchronize. Also, see Chapter 3, Figure 9.

**Why do I need WebSiteRobot?**

Everyone who owns a computer has things to show like vacation pictures, homemade videos, musical recordings, homework, resume, recipes, poetry, thoughts, or something to sell like a house, a used car, etc. Our computers are all sitting right there on the Internet, but most of us have little time, skills, or resources to put things on the web. The Robot creates your web page on the Internet with little or no input from you. You focus on your work as usual, and the robot takes care of publishing it on the web.

**What do I need for the robot to work for me?**

A computer and a connection to the Net via a dial-up modem, DSL, T1, or whatever you have.

**What kind of machine do I need?**

Whatever you already have or whatever you are planning to buy. The Robot works Desktop, Laptop, with Windows95/98/2000/NT/XP, Linux, Unix...

**How long does it take to set up WebSiteRobot?**

5-10 minutes to create a professional looking web site. Once you install and register, all you do is copy files or folders into the MyWebSite directory, and click to synchronize. You can add notes, more files or folders, encode music etc.

### **Does the robot works behind Firewalls?**

Yes. If the firewall is installed on your computer or somewhere on your LAN, you need to open Port 8888 for inbound TCP traffic. If your computer is on a LAN, you also need to setup Port Forwarding on the computer or device that connects your LAN to the Internet, and forward inbound TCP traffic on Port 8888 to the LAN IP address of your computer.

### **How secure is the Robot?**

The Web Server is configured to only show static files from the directory tree under MyWebSite. It does not know other directories. It does not run any servlet, cgi, or other executables. It also shows you who are accessing your site, and what file they are requested. It does not introduce any new Protocol your system. It only leverages the HTTP Protocol that you are using to surf the web to establish your own web presence. Your Firewall and other security measures work as usual. You only open Port 8888 for inbound HTTP requests.

### **I cannot see the MyWebSite Folder!**

Select the Control Center Screen of WebSiteRobot and click on Synchronize. It will create the MyWebSite folder if it was deleted. Whenever you add new files in the MyWebSite, you need to click on Synchronize (Control Center) or Refresh (Add Notes or Encode Panel). With the default configuration, the MyWebSite directory is found or created at C:\MyWebSite under Windows. One may also do a find under Windows or locate under Linux.

### **I am having a Connection Error**

If you are using a dial-up connection to the Internet, make sure you did not loose connection. If you did, connect to the Internet and try again. If it does not work, try setting up your dial-up connection with the original software from your ISP.

If you are on a LAN and your normally need a HTTP Proxy Server for your web browser to surf the net, make sure that you have entered the LAN IP address and Port Number of the Proxy Server in the WebSiteRobot Configuration File.

You may instead need to enter the LAN IP address and Port Number of the Socks Server in the configuration file if your web browser needs Socks to surf the web. To see how to edit the configuration file, please refer to Chapter 4.

**I am having Writing Errors**

On the Windows platform, make sure that your hard drive is not full. The Robot needs to find space to write in the MyWebSite Folder and also in its own Installation Directory. On Linux and Unix machines, make sure that WebSiteRobot or the user who is running it does have read and write permissions on those directories, and a read permission on the web files. See also Chapter 4.

**Can I make copies of WebSiteRobot CD?**

Yes! We even encourage you to install it the computers of friends and relatives.