WebStore Guide

The Uniform Solution

Premier Data Systems
1778 North Plano Road
Suite 110
Richardson, Texas 75081-1962
(972) 235-2800

Table of Contents

1. WebStore Overview

THE eCOMMERCE CHALLENGE

The need for eCommerce with on-line shopping has gone from being an optional way to increase sales and broaden a retailer's reach, to a requirement that is as essential to opening the doors for business. eCommerce sites give customers the ability to shop 24-hours a day, and when the eCommerce site has real-time access to the retailer's point-of-sale system, it can also provide the customer with purchase history, order status, account balance information, reports, and much more.

With eCommerce becoming a required extension of a retailers business, the need for the independent retailer to quickly and easily establish a "WebStore" that works seamlessly with their point-of-sale system is paramount. In most cases today, a retailers' WebStore is totally independent from their point-of-sale system. This independence means the retailer must expend a great deal of time, effort, and money to establish and maintain their WebStore.

THE ULTIMATE SOLUTION

The Uniform Solution completely changes the typical eCommerce paradigm by enabling the retailer to establish a WebStore that operates seamlessly and in real-time with their point-of-sale system.

With just a few clicks of the mouse, an entire WebStore can be created by setting a few configuration options in **The Uniform Solution**. Creating, deploying, and maintaining the WebStore with **The Uniform Solution** could not be any easier.

THE WEB SERVER

Overview

Anyone that deploys a website uses a Web Server whether they know it or not. The Web Server receives requests from a Browser like Internet Explorer, Safari, or Firefox and returns the information used to create a "page" in the Browser. Most Web Servers are difficult to install and maintain, so most people use a "hosted" solution through ISP's like Yahoo, GoDaddy, and others. The problem with "hosted" solutions is that (1) the WebStore doesn't have access to the current information in a retailers' point-of-sale system, and (2) the information has to be set up twice, once for the POS system and once for the Website, or it has to be "pushed" and "pulled" back and forth from the POS System and the Website.

The Uniform Solution's WebStore uses a proprietary Web Server installed on the computer that is acting as your "Server". Installation is very simple and is part of the normal installation and update process. To install the Web Server, all you need to do is to install **The Uniform Solution**. By installing a Web Server that operates on the same Server as **The Uniform Solution**, the WebStore will always have information that is up-to-date and accurate.

Once a WebStore Configuration has been created in **The Uniform Solution**, the Web Server will be able to create a WebStore that is accessible from any computer on the LAN. To enable the WebStore to be accessible from any computer on the Internet, you will need to configure your router to forward incoming traffic to the Web Server computer.   See Section 5, Deploying your WebStore to the Internet, for more details.

Performance

The WebStore Web Server is designed to handle approximately 25-50 simultaneous Browser sessions with typical broadband internet access at the installation site. Increasing the bandwidth of the broadband internet access and the speed of the computer where the Web Server is installed will have a positive impact on performance. In installations with 3 or more computers, it is often ideal to have a dedicated computer acting as the "Server".

Security Concerns

The WebStore Web Server used by **The Uniform Solution** to deploy your WebStore does not use IIS (Internet Information Services). IIS creates a much greater security risk than the stand-alone Web Server used by **The Uniform Solution**. Our Web Server uses proprietary technology and great care has been taken to make the product reliable and secure. We strongly recommend using SSL to create a secure connection for each session that accesses the WebStore.

TECHNICAL REQUIREMENTS

1. The WebStore Web Server is installed as a "Service" on the computer where the "Single Computer" or "Server" installation of **The Uniform Solution** was performed. The WebStore Web Server application requires a computer running Windows XP, Vista, Windows 7, server 2008, or newer operating systems.

2. Broadband Internet. The WebStore Web Server application requires broadband internet access with both port 80 (and port 443 for SSL) open to incoming and outgoing internet traffic. The LAN's router will need to be configured to route incoming port 80 (and port 443) traffic to the IP address of computer where the Web Server is installed.

3. Fixed IP Address. A fixed IP address should be obtained so the IP address to the WebStore Web Server can be easily assigned to a Domain or Sub Domain Name. Dynamic IP addresses can be used but require additional configuration and some annual costs.

4. Domain or Sub-Domain Name. A Domain or Sub Domain Name should be used to make access to the WebStore Web Server easy. Typically the Domain Name will be the name of the business, but may require a city or state extension to be unique (i.e. <u>mystoreconroe.com</u>).

5. Credit Card Processing. An X-Charge internet merchant account is required to process credit card payments. This account is separate from the retail location's merchant account.

6. SSL Certificate. A SSL (Secure Sockets Layer) Certificate must be obtained to provide secure access to the WebStore. The certificate can be assigned to a Domain Name or a Sub-Domain Name.

TYPICAL WEBSTORE DEPLOYMENT COSTS

Once the WebStore Web Server is installed and operational, the WebStore you create in **The Uniform Solution** can be viewed anywhere on your LAN by selecting the WebStore button found on **The Uniform Solution** Toolbar. Making the WebStore available to the public may have some additional costs depending on your current ISP services and security preferences.

1. Fixed IP Address - $0-10/month. Check with your ISP.

2. Domain Name Registration - $10/year (see GoDaddy.com)

3. Email Hosting for the Domain - $25/year (see GoDaddy.com)

4. Standard SSL Certificate - $30/year (see GoDaddy.com)

2. The WebStore Web Server Monitor

OVERVIEW

The WebStore Web Server Monitor is an application that runs in the "system tray" of the Windows operating system. It is used to view the status of the Web Server, to start or stop the Web Server, to set configuration options, and to easily create a SSL certificate for the Web Server.

The WebStore Web Server Monitor is installed on the computer where **The Uniform Solution** was first installed, or on the computer acting as the "Server" for **The Uniform Solution**.

In most cases, you will use this application to check the status of the Web Server and ensure the Web Server is operational. To view the WebStore Web Server Monitor, RIGHT-CLICK the icon in the system tray, and select **Show WebStore Web Server Monitor User Interface**.
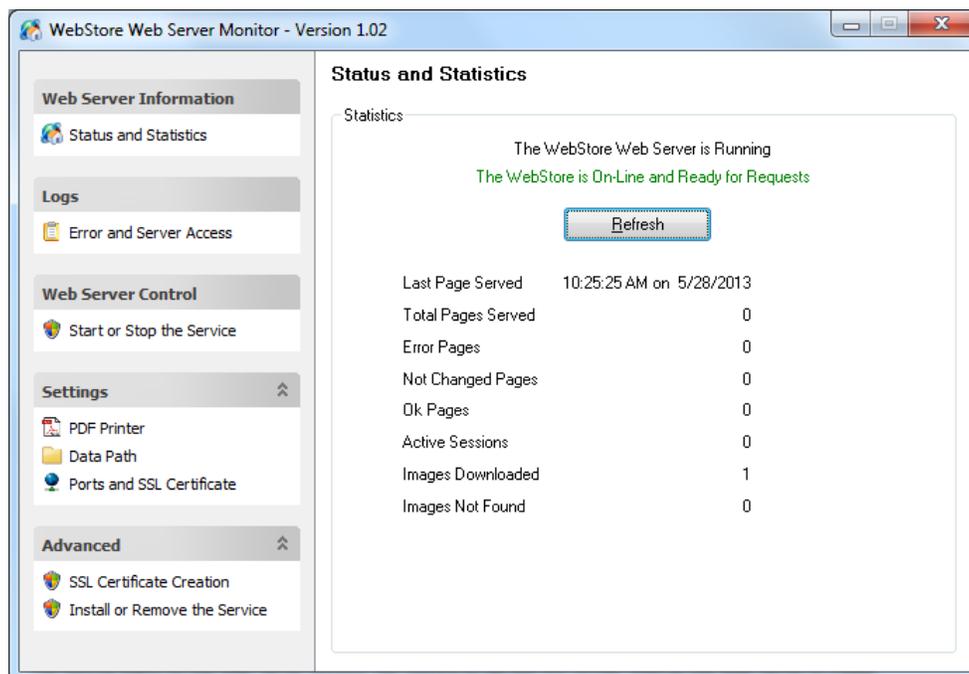
SETTINGS

The Setting Menu on the Web Server Monitor has options to set the PDF printer used by the Web Server to create PDF files, to select the data path to **The Uniform Solution** data files, and to set the computer Ports and SSL certificate used by the Web Server.

ADVANCED

The Advanced Menu on the Web Server Monitor has options to help you create a SSL certificate for your WebStore, and Install or Remove the Web Server from the Windows Service Manager.

3. Setting Up the WebStore

Setting up a WebStore in **The Uniform Solution** is simple and straight-forward. From the main application menu, select **Setup > WebStore**. If you have not defined a WebStore Configuration, you will be taken to the WebStore Configuration Form.
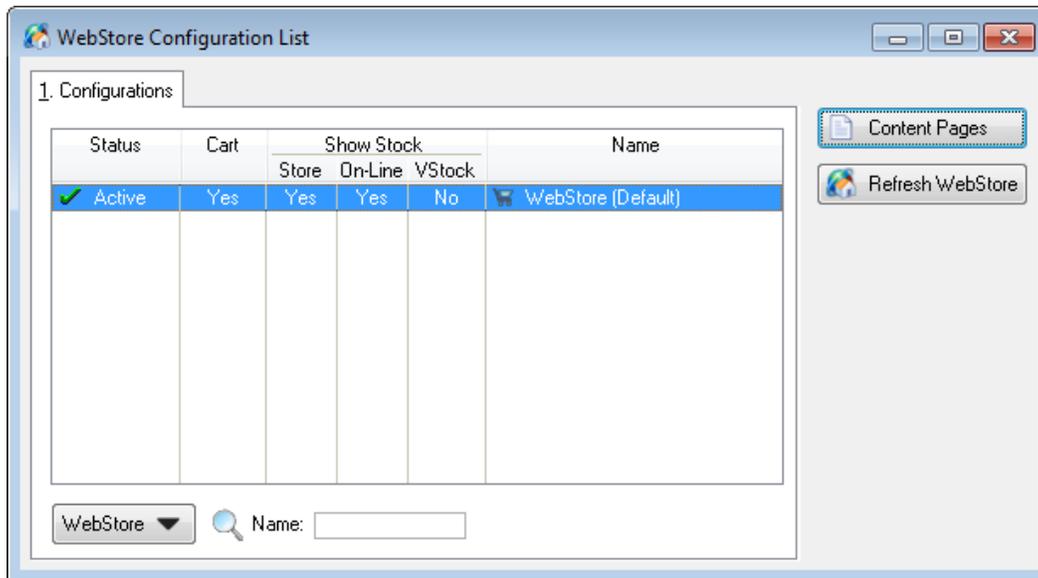
If you have already set up a WebStore Configuration, you will be taken to the WebStore Configuration Table. This table allows you to add a **New** WebStore Configuration, **Edit** an existing WebStore Configuration, **Delete** a WebStore Configuration, or set the "Active" WebStore configuration. One really nice feature is the option to **Copy** a WebStore Configuration. Just select the **WebStore** button for the available options.

The **Content Pages** button displays a List of user customizable pages used in a WebStore configuration. Every WebStore configuration has a Home Page, a Privacy Page, and a Contact Us Page.

WEBSTORE CONFIGURATION FORM

The WebStore Configuration Form is used to define all of the major components of your WebStore. The Menu items in the left pane of the Form are used to navigate to each section of the WebStore Configuration.

Settings

The Settings section of the WebStore Configuration Form is used to define the settings that control how the WebStore functions.

General

The General section lets you name the WebStore configuration, set the URL for the WebStore, choose Sign-in options, define the Home and Privacy Page Content Page (see the section on Content Pages) to use for the WebStore, and set a configuration as "Active".
Note: In a multi-store configuration, the Polling location is the only location that can set up a WebStore configuration, and only one configuration can be "Active" for a store number. The first configuration that is active for a "Local" store is the configuration used by the Web Server.

Shopping Cart

If you have registered **The Uniform Solution** to enable the WebStore shopping cart functionality, selecting to include a Shopping Cart in the WebStore will enable your WebStore customers to create orders while visiting your WebStore. You can also choose whether or not WebStore customers have the option to pick up their purchase in the retail store. If you have more than one location, you can specify which retail location will offer this option.

Stock

The Stock Options section lets you decide what stock information will be displayed to your WebStore customers. You can choose to show the actual stock levels of items and whether or not those items are available "On-line" – meaning you will order those items from the vendor. If you have more than one location, you can specify which retail locations will show their stock levels.

Customers

The Customers section lets you make selections about your customers. You can set which Countries are allowed for address entry, whether or not a new WebStore customer can be linked to an existing retail customer record, whether or not to allow purchases on-account, etc..

Email

The Email section lets you make selections about how and when email is used by the WebStore. For emails that are sent, you can choose to use the default email content or customize the email content to your liking.

Search Engine

Use the Search engine section to include a title and keywords for each page generated by the WebStore. Using the right keywords is critical to helping search engines rank your website according to search criteria used. There is also an option to register and use the Google Analytics features.

Design and Selections

The Design and Selections section of the WebStore Configuration Form is used to define the look, menu selections, and items included in the WebStore.

Graphics

The Graphics section is used select the graphic and enter the text that will be displayed at the top of the WebStore. You can select from a list of pre-designed graphics, or select a header graphic that you have had professionally done for your WebStore. The graphic should be 800 pixels wide and 150 pixels tall. If you use a custom graphic, you will probably remove the **Header Title** and **Sub-Heading**.

Menus

The Menus section allows you to define the menus, menu items, and the Content that is displayed when a menu item is selected in the WebStore. When a new WebStore Configuration is added, a default Menu structure is created and the menu items select "content" that is typical for most WebStores.
A menu item can be set up to show a menu, call pre-defined content, show a user defined Content Page, or show the Home Page.

Editing the Menu Structure

To add or delete menu items from the Menu structure, use the Menu button. To change the order of a menu item, highlight the item and use the arrow buttons. To change the Content or action when a menu item is selected, highlight the menu item and set the options in the right-hand portion of the screen.
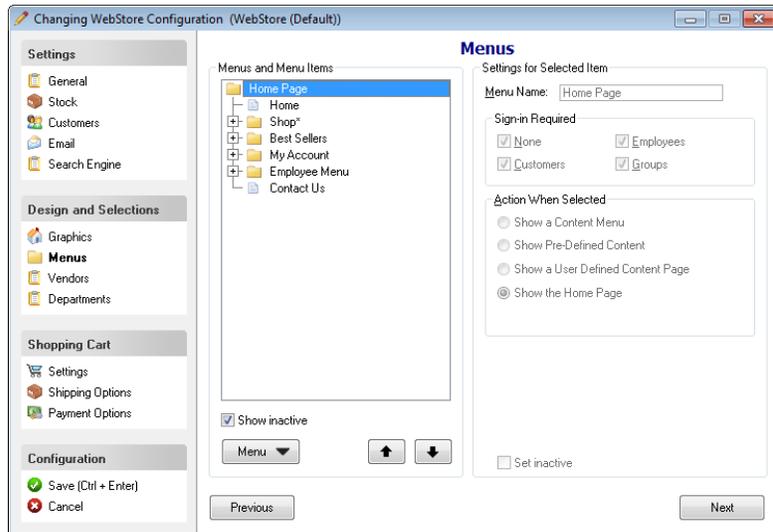
Vendors

The Vendors section allows you to select items that will be included in the WebStore by selecting the Vendors to include. Once you select a Vendor, you can choose to include **All** items for the Vendor, or **Selected** items. You can change the Vendor selection by clicking the **Include** column with your mouse.
Note: If you select to include **Selected** Vendor items, then you will need to select the individuals Styles and Products to include in the WebStore by updating the inventory item in the Inventory List. To do this, *Select Lists > Inventory*, select an item to update, and select the **Include in WebStore** checkbox.
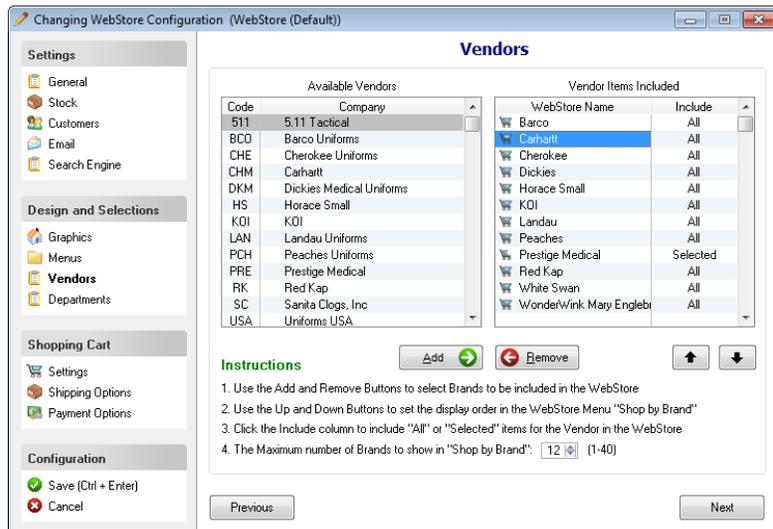
Departments

The Departments section allows you to select the departments that will be included in the WebStore menu "Shop by Department".

CONTENT PAGES

Content Pages are web pages that are used by a WebStore configuration to display "content" (text and graphics) in the lower right portion of the Browser for a WebStore. A Content Page can be used to display a *.htm or *.html file, or can be user defined.

When you set up a WebStore Configuration for the first time, three user defined Content Pages are created for you automatically - a Home page, a Privacy page, and a Contact Us page. You can use the Content Page List to select and modify these pages, or create new pages that are used by a WebStore Configuration.

Content Page List

The Content Page List enables you to add a **New** Content Page, **Edit** an existing Content Page, **Delete** a Content Page, and **Copy** a Content Page. Just select the **Page** button for the available options.
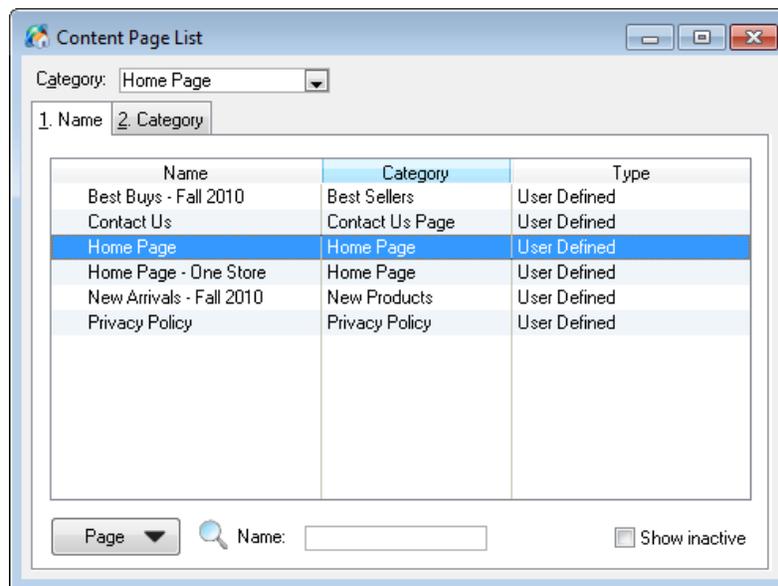
Understanding Content Pages

*.HTM and *.HTML Content Pages
A Content Page that references a *.html or *.html file will simply display the text and graphics referenced by the file.

User Defined Content Pages
A user defined Content Page is made up of horizontal "Sections" (or rows). Sections are displayed in the order they appear and each Content Page can have as many Sections as you like. Each Section can be made up of "Text" or 1-4 "Objects".
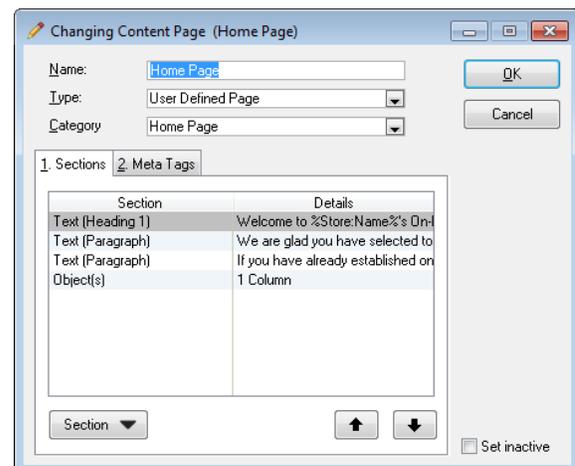
Text Sections

A "Text" Section is very simple. You simply enter the text to display and specify the "Style" of the text (i.e. Heading 1, Heading 2, Heading 3, or Paragraph).

Object Sections

An "Object" section is comprised of 1-4 objects. The number of "Objects" controls how many columns are created in the Section. Each object can be a graphic, plain text, or a pre-defined item such as an inventory item, department, or vendor. The Object Setup Form is used to define each object. Below is an example of a single "Graphic" object defined for the last section on a Content Page.
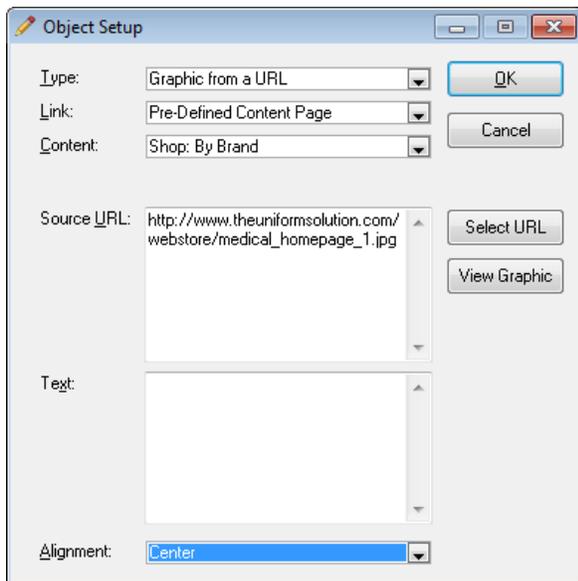
Object Setup
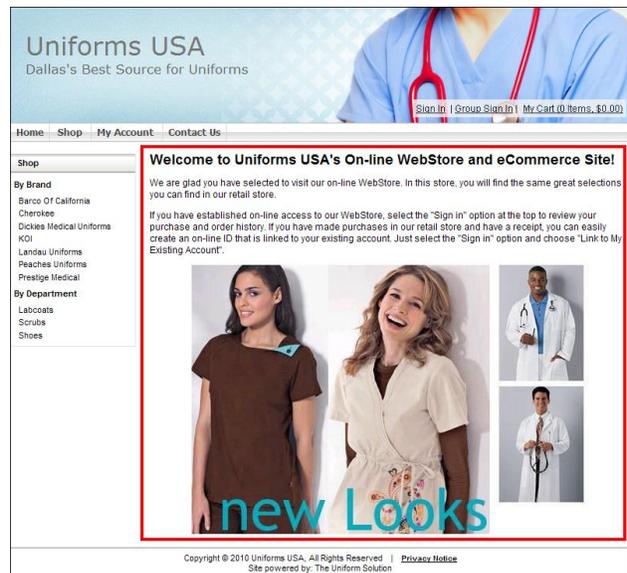
Content Page Result (inside outline)

4. Accessing the WebStore Locally

Once a WebStore configuration has been created, the WebStore can be accessed from any computer on the LAN running **The Uniform Solution** by selecting the **WebStore** button on the toolbar.
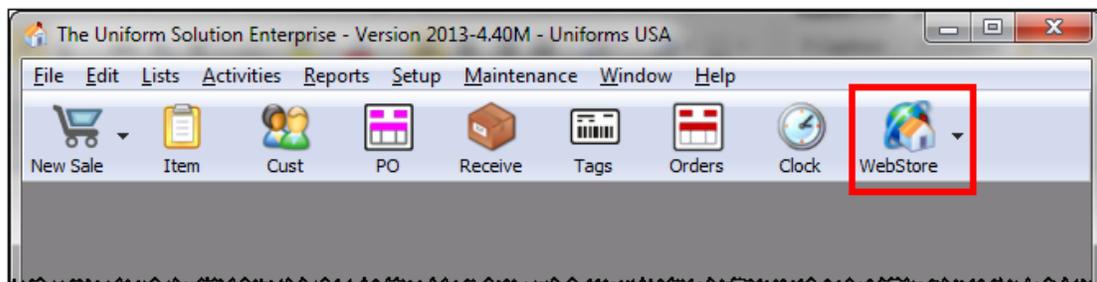
5. Deploying Your WebStore to the Internet

After the WebStore is working on your LAN, there are additional steps required to make it available to anyone with internet access. First, the router on the LAN will need to forward internet traffic to the WebStore Web Server. Once the router has been forwarded and the WebStore is accessible, you will want to assign a name to the internet address of your router to make it easy for your customers to find the WebStore.

ACCESSING THE WEBSTORE FROM ANYWHERE

Step 1 - Forward HTTP & HTTPS Traffic to the WebStore Web Server

In order to access the WebStore from any computer with internet access, you will need to set the LAN's router to send all website traffic to the IP address of the computer where the WebStore Web Server is installed. This usually involves: (1) setting a fixed IP address of the NIC where the WebStore Web Server is installed, and (2) sending all Port 80 and Port 443 traffic going to the router to that IP address. You will need to use the routers setup screens to forward the Port 80 and Port 443 traffic to the computer where the WebStore Web Server is installed. In most router setup screens, this is handled in the port forwarding section. If you need help configuring your router to use port forwarding, please visit www.portforward.com for help and a list of user guides for the most popular routers.

Step 2 – Verify the WebStore Web Server Can be Reached

Once you have the router forwarding website traffic to the WebStore Web Server computer, you should verify the WebStore can be accessed outside the LAN. First you will need to know internet IP address for router. To find the IP address for the router on a LAN, go to the website www.whatismyip.com using a computer on the LAN. Once you know the internet IP address of the Router, type the IP address into any browser *outside the WebStore's LAN* and see if the WebStore can be reached.
If the WebStore cannot be reached and the router is properly forwarding Port 80 and Port 443, you should check and see if the ISP is blocking incoming port 80 traffic. You can do this by changing the WebStore Web Server to listen on another port, forwarding this port to the WebStore Web Server with the router, and telling the browser to go to the internet IP address for the router and use a different port (example: if you are forwarding port 88 to the WebStore Web Server the syntax for the browser is xxxx.xxxx.xxxx.xxxx:Port (i.e. 70.128.87.114:88).

ACCESSING THE WEBSTORE WITH AN INTERNET NAME

The best way to access a WebStore from anywhere on the internet is to assign a Domain Name (i.e. mystore.com) to the IP address of your router. This seemingly simple concept has several steps to make this happen.

Step 1 - Get a Fixed IP Address

In most configurations, it's best to get a fixed IP address for the router (i.e. physical location) where the WebStore Web Server is installed. The Internet Service Provider (ISP) will be able to provide a fixed IP address for the router used to access the Internet. Fixed IP addresses typically cost about $10/month and allow you to set up a Domain Name to find your WebStore. Once you have a fixed IP address working, you can see about getting a Doman Name (i.e. theunifromsolution.com) to make it easy for people to access the WebStore with a browser.
Note: If you find it too expensive to get a fixed IP address from your ISP, there are some options, but they require extra work and set up. DynDNS.com can provide the tools and services you need to keep a Domain Name or Sub-Domain updated with an IP address that is always changed by the ISP. The

"Dynamic DNS" service from DynDNS.com will keep a Sub-Domain of dyndns.org (i.e. mystore.dyndns.org) updated with the current IP address, and the "Custom DNS" service from DynDNS.com will allow a Domain Name (i.e. mystore.com) to stay updated with the current IP address - provided that DynDNS.com maintains the Domain Name registration. If needed, you can transfer your Domain Name to a new registrar like DynDNS.org or GoDaddy.com.

Step 2 – Get a Domain Name

Get a Domain Name from an internet registrar like Network Solutions, GoDaddy.com, or DynDNS.com. This can be any name with any extension. Domain name registration typically costs about $10/year. Once you have your Domain Name registered, typically you will want to use the Domain Name Server (DNS) provided by the registrar to assign your Domain Name to your fixed IP address. You will do this in Step 3. **Note:** If you already have a Domain Name, you will want to either (1) use this Domain Name for the WebStore, or create a Sub Domain for your Domain Name (i.e. shop.mystore.com). You can use www.whois.org to determine your registrar if you do not remember.

Step 3 – Set Up the Domain Name Server (DNS) and Email

Using the Advanced DNS tools provided by the Domain Name Server, you will specify the fixed IP address of your Domain Name (or Sub Domain). You will also specify the address or MX Record for any email sent to your Domain Name (example john@mystore.com).
If you do not have an Email Server (which most small businesses do not), you will need to establish an email hosting account to receive email sent to your Domain Name, and enter the address for the email server in the MX Record. GoDaddy.com provides email hosting for less than $5/month.

SECURING YOUR WEBSTORE WITH A SSL CERTIFICATE

Most consumers using the internet expect for the websites they visit to be secure. A secure website transmits all data using encryption that ensures hackers cannot read the information being sent back and forth between the Web Server and the Browser. A secure website provides authentication details to confirm the site is being hosted by a reputable company. In order to secure your WebStore, you will need to obtain a SSL (Secure Sockets Layer) certificate.
SSL Certificates are assigned to a Domain Name or a Sub Domain. If you change your Domain Name or Sub Domain name after a certificate is issued, you will need to purchase another certificate.

Step 1 – Verify Your WebStore works without a SSL Certificate

Ensure that your WebStore is working properly without a SSL Certificate.

Step 2 – Create a Certificate Signing Request

Open the Web Server Monitor application from the tool tray. In the **Advanced** section, select the **SSL Certificate Creation** option to create two files based on the Domain or Sub-Domain Name you will be using. The first file is a Private Encryption Key. Make sure you back this file up. If you lose it, your SSL certificate will not work and will have to be reissued. The second is a Certificate Signing Request and is based on the Private Encryption Key. You will need these files to apply for a SSL Certificate.

Step 3 – Apply for a SSL Certificate

Apply for a SSL Certificate from a reputable authority like GoDaddy.com. When you purchase a SSL certificate, you will need to provide the issuer with the Certificate Signing Request (CSR) you generated with the Web Server Monitor application. In most cases the CSR will be copied/pasted from the Web Server Monitor into the browser interface for the reputable authority such as GoDaddy.com.

Certificates vary greatly in price and the scrutiny used to verify the ownership of a Domain or Sub Domain. In most cases, it is recommended to purchase an entry level certificate. The entry level certificate will provide the same level of security to WebStore users, but won't provide advanced features like the "greenbar" address found in newer browsers. Most WebStore users will find this acceptable. GoDaddy.com currently offers Standard SSL certificates for $69/year. It is recommended to purchase the certificate for a minimum of 2 years, but you should consider purchasing one for 5 years. Domain Names and SSL Certificates being renewed on an annual basis just require more effort to maintain.

When the SSL certificate is issued by the company you selected, they will often ask you what type of Web Server you will be using such as Apache, IIS, etc. Don't worry about the directions they provide, just download the file and follow the next step. If you are required to select an option you can typically select "other" as an option.

Step 4 – Install the SSL Certificate

After receiving the SSL Certificate file from the issuing authority, you should copy the certificate file to the [InstallationPath]\SSL\certificates folder. In most cases, the SSL will be in a zipped file and have a random file name. Unzip the file and rename the SSL file to match the private key. For Example, if your private key were named yourdomain.com.key, then your certificate would be named yourdomain.com.crt. Next, open the Web Server Monitor and select the option **Ports and SSL Certificate** under the **Settings** menu**.** Choose the **Select SSL Certificate** button to locate the SSL certificate file you copied into the .\certificates folder. Then select the **Use Secure server** checkbox to indicate you want the Web Server to use the SSL certificate. Many companies will require the use of an intermediate certificate. If your company requires an intermediate certificate you will check the box indicating "Use an Intermediate Certificate" and select the intermediate file. Click the Save button, then Stop and Start the WebServer from the WebStore Monitor. Your site should now be secured by the SSL and you should see https:// before your domain name in the browser. You will also want to ensure you have forwarded port 443 in your router. See instructions previously written in this document under the Deploying your WebStore to the Internet section.

Step 5 – Backup the SSL Certificate

Backup Your Private Encryption Key File and the SSL Certificate file and keep it in a safe place.

6. Deploying Multiple WebStores

In many cases, creating a single WebStore to serve as the on-line presence for all retail locations is sufficient for a group of stores. However, it is possible to create a separate WebStore for each physical location. This may be ideal when the stores are located in different towns, sell different products, or you just want to tie your retail and WebStore operations more closely together.

You also may want to create a WebStore for internal use at each physical location. Features found on the WebStore Employee Menu provide reporting capabilities and much more. Having both internal and remote access to a physical location using a Browser could be ideal.

So how do you set up Multiple WebStores? The WebStore Configuration Form enables you to enter the local store number for a WebStore. When the Web Server starts up, it locates the first WebStore Configuration it can find for a store defined as "local".

7. Glossary

The Domain Name Registrar

This is the company that maintains your Domain Name (i.e. mystore.com) registration and the internet IP address for the Domain Name Server for your Domain Name. Originally Network Solutions maintained all internet registrations, but now there are many registrars like DynDNS.com and GoDaddy.com.
At a minimum, the registrar will point a Domain Name to a Domain Name Server (DNS). Domain names typically cost around $10/year and most registrars allow the Domain Name to use their Domain Name Server. For example, the Domain Name **mystore.com** is being directed to the Yahoo Domain Name Server *yn1.yahoo.com*.

Domain Name Server (DNS)

The Domain Name Server is responsible for directing the internet traffic that goes to a domain name like mystore.com. Typically a Domain name server will be set up to send website traffic to your website and emails to an MX Record or Email Server address.

A Record

The A Record is the IP address for domain name (example: mystore.com). The A Record is the IP address for the domain. If the WebStore will be hosted at a location with a fixed IP address, set the A Record to this fixed IP address.

CName Record

A CName (canonical) record contains the address of a "sub" domain for the domain name. A CName record contains the name of the sub domain (example: shop.mystore.com), and the address to the sub domain. The address to the sub domain can be a fixed IP address or another hostname (example: premierdata.dyndns.org).