



Sage 100 2021

eBusiness Manager Installation Guide

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Contents

Chapter 1 — Introduction 1

- Overview of eBusiness Manager 1
- How to Use This Installation Guide 1
 - Graphic Conventions 2
 - Text Conventions 2

Chapter 2 — Architecture 3

- Application Server 3
 - Configuration Settings 4
 - Workstation Settings 4
- Web Engine 4
 - Web Engine Components 5
 - Web Engine Configuration Settings 5
- Internet Information Server 6
 - Installation Steps 6
 - IIS Configuration Settings 7
- Images, Style Sheets, and JavaScripts 8
 - Copying Images 8
- Supported Configurations 8
 - Company-Hosted Web Site 9
 - ISP-Hosted Web Site 10

Chapter 3 — Installation 11

- Before Installing the Web Engine 11
- Installing the Web Engine 12
- Running the Web Engine 13
 - Security on the Server 13
- ISAPI Plug-In Setup 13
 - Access to the Web Engine 14
 - Installing the ISAPI Plug-In 14
 - Installing the MASISAPI.DLL Plug-in for IIS7 for Windows Server 2008 and Windows Server 2008 R2 15
 - Installing the MASISAPI.DLL Plug-in for IIS8 for Windows Server 2012 16
 - Generating an SSL Key 16
 - Modifying the ISAPI for Hosting Multiple SSL Sites 17

Appendix A — Installation Checklist 18

- Installation Settings Worksheet 19

Appendix B — Troubleshooting 20

- Installation Troubleshooting 20
- Browser-Related Error Messages 21
- Web Engine Error Messages 22
- ISAPI Error Messages 22

Chapter 1

Introduction

Overview of eBusiness Manager

The eBusiness Manager module is designed to provide an electronic commerce solution through the Internet. In addition to the eBusiness Manager programs, modifiable HTML templates are provided to create a Web site quickly. These templates allow you to create Web pages that are dynamically generated based on the eBusiness Manager applets installed, the user's security rights, and the data files.

The eBusiness Manager module uses an Internet Server API (ISAPI) Plug-In developed for Microsoft® Internet Information Server (IIS). This plug-in redirects requests to the Web Engine running behind a firewall. This structure provides for Secure Sockets Layer (SSL) and firewall configurations to ensure adequate security for the user.



NOTE

This manual is written for the experienced Microsoft IIS and Internet user. Knowledge of these areas is required.

How to Use This Installation Guide

This installation guide discusses the installation, configuration, and architecture used by the eBusiness Manager module. Refer to this installation guide when setting up the eBusiness Manager module for the first time or when making changes to your network (such as changing Internet Service Providers [ISPs] or moving the software to another server).

The eBusiness Manager installation process is more complicated than standard modules. Every effort has been made to make this process as simple as possible; however, before you start, you must know some important information about your network configuration. An installation checklist is provided on page 18 to assist you in obtaining all the information required to install the eBusiness Manager module.

For information on the eBusiness Manager module, see the Help system. For a complete list of system requirements, refer to the Supported Platform Matrix. To access the matrix, see article ID 47649 in the Sage Knowledgebase at support.na.sage.com.

Graphic Conventions

The following icons are used throughout this manual to indicate different types of information.



The **NOTE** symbol is followed by additional information about a topic.



The **WARNING** symbol is followed by information to help you avoid costly mistakes.

Text Conventions

The following table describes the text conventions used in this manual.

Text Convention	Explanation
Menus	<p>Menus are shown in this format: Select menu > menu task name.</p> <p>Examples:</p> <ul style="list-style-type: none">• Select File menu > Change Company.• Select General Ledger Budget menu > Budget Maintenance.
Bold font	<p>Indicates text entered at a field or text selected at a field.</p> <p>Examples:</p> <ul style="list-style-type: none">• At the Value field, type a search value, such as 01, for the lookup.• In the Filter window, to delete a filter, select <none> at a filter's Column field.
<i>Italic font</i>	<p>Indicates references to other manuals.</p> <p>Example:</p> <ul style="list-style-type: none">• For more information about installing demo data, refer to your <i>Installation and System Administrator's Guide</i>.

Chapter 2

Architecture

The eBusiness Manager architecture is divided into three servers, which split the overall processing power requirement for optimal flexibility and performance.

Application Server

This is the existing Application Server from which data is accessed. Existing users already have an Application Server and only need to install the eBusiness Manager module. Application modules must be updated to the levels compatible with the eBusiness Manager module.

Web Engine

This is the server that performs the HTML merges with data. The Web Engine can be installed on the same server as the Application Server, but not in the same folder. The Web Engine has its own set of programs that must not be combined with the Sage 100 data and program files.

Microsoft Internet Information Server (IIS)

This server hosts the Web site used for the eBusiness Manager module and is the primary access point for all users (customers and "casual visitors") to access the company's Web site. An ISAPI Plug-In installed on this server redirects eBusiness Manager requests to the Web Engine.

The installation and configuration of each of these servers is discussed in detail throughout this installation guide. The system requirements for running the Web engine are the same as the requirements for Sage 100. For a complete list of system requirements, refer to the Supported Platform Matrix. To access the matrix, see article ID 47649 in the Sage Knowledgebase at support.na.sage.com.

Application Server

The eBusiness Manager module is supported on both the Sage 100 Standard and Advanced platforms. Many of the features available in the eBusiness Manager module are configured from their respective modules, such as Inventory Management and Accounts Receivable. All configurations can be performed from within the software. For information on configuring the eBusiness Manager module, see the Help system.

Configuration Settings

The following settings must be configured on the Application Server before the eBusiness Manager module is fully functional. Many of these configuration settings can be set up before installing the eBusiness Manager module.



NOTE

The share point folder must be above the MAS90 folder, and its name must not contain the words "MAS90", "home", or "soa".

- The Application Server must have a share point defined that points to the data. The Web Engine must be able to access data on the Application Server in order to generate Web content. The user account configured to run the Web Engine must, therefore, have access and appropriate permissions to the Application Server to access data.
- For each company that you want to allow customers to access the eBusiness Manager module, you must set up eBusiness Manager data for user accounts and define product categories.

When the Application Server and Web Engine are installed on separate servers, one of the most common problems encountered is with user permissions. The account running the Web Engine must have a secure connection to the Application Server and full rights to the data on that server.

After all the eBusiness Manager components are installed, the Application Server must be configured with the following information.

- The Application Server requires the IP address or server name and port number for the Web Engine, and the URL and port number for the IIS.
- The Application Server requires the IP address of the user's Simple Mail Transfer Protocol (SMTP) server to send e-mail from the Web Engine.

Workstation Settings

If you are using Sage 100 Advanced to associate image files with categories, you must enter a UNC path to the Application Server during Workstation Setup. For more information, refer to your *Installation and System Administrator's Guide*.

Web Engine

You must know where the Application Server is installed and make sure the Application Server is accessible from the server on which the Web Engine is being installed. For more information, See Installing the Web Engine on page 12.

The Web Engine is built on Sage ProvideX technology to publish dynamically created Web content by merging standard HTML documents with data files. The Web Engine listens on a specific Transmission Control Protocol (TCP) port for requests for data from the IIS. It then returns content to the IIS, which sends the content back to the requesting user's browser.

Web Engine Components

The Web Engine consists of the following components. These components cannot be shared with an existing installation.

- ProvideX Interpreter with Web-enabled activation key
- ProvideX Web Engine programs
- HTML templates and merging programs
 - Templates have an .htm extension and can be modified to add additional graphics or content. Back up any files you modify, or save them with a new name, then modify the template. These files will be overwritten the next time you install the Web Engine. For more information, see Template Maintenance in the Help system.
 - Merging programs have an IW prefix (for example, IW_Customer.m4p) and can only be modified by an authorized development partner.
 - All templates and merging programs are located in the IW folder. There are no company-specific files on this server.
- E-mail program used to send electronic mail through an SMTP server

These components are installed and configured as part of the installation process. After they are configured, they do not need to be modified unless the configuration changes (for example, the Application Server moves to another physical server).

Web Engine Configuration Settings

The following configuration information is required when setting up the Web Engine.

Access to the share point on the Application Server

The Web Engine must determine where to obtain its data, and must have sufficient rights to do so. The path to the Application Server is stored in the webhide.ini configuration file in the C:\Sage\Sage Web Engine\WEBENG\Home\Lib_Web folder at the Web Engine Server.



NOTE
The Web Engine can point to only one Application Server.

If you need to change the path to the Application Server, reinstall the Web Engine (rather than modifying the configuration file directly).

Port on which the Web Engine will be listening

This port is required for the configuration of IIS. By default, the port is set to 2953; however, users can set the port to any value. For security reasons, the port should not be set to 80 or any other commonly used port.

Certificate for Secure Transactions

To secure the transmission of data between IIS and the Web Engine using SSL, you must provide a secure port (the default port number is 2954) and a certificate in .pem format. This certificate should be different from the certificate used on IIS for secure transactions.

Internet Information Server

The eBusiness Manager module requires the Microsoft Internet Information Server (IIS) to host the Web site used to access the data. For system requirements, refer to the Microsoft requirements. The use of the eBusiness Manager module does not preclude the use of the IIS for the corporate Web site; access to the data files is accomplished through a link from the user's Web site to the Web Engine.

Users must establish an account with an Internet Service Provider (ISP) to gain access to the Internet. The ISP can offer a number of services, depending on how large your company is and whether you want to administer your server directly or have the ISP manage and maintain your Web site. The eBusiness Manager module supports both configurations.

Installation Steps

The installation program assumes that IIS has been installed on the server. For system requirements, refer to the Microsoft requirements.



WARNING
Do not proceed with the installation if the Web site cannot be accessed.

- 1 Configure IIS. You may want to import or create a Web site for public Web surfers. Make sure the Web site can be accessed from the Internet, specifically from a computer that is not connected or physically located on the same backbone as the IIS Web Engine.
- 2 Install the ISAPI Plug-In. If firewalls are set up, the most significant modification required will be to open a port through the firewall to your internal network to allow data to transfer freely between the IIS and the Web Engine. Make sure the network administrator understands what is required and that this procedure is completed before installation. Some information technology (IT) departments may prefer to have an outside consultant perform any firewall modifications; this process can take some time. You will need to coordinate with the IS department to make the installation go smoothly.

The IT administrator must have the TCP port number that the Web Engine is monitoring and the IP address of the IIS. The IT administrator may need more information, based on the type of firewall you use.



NOTE
For .store customers, the link specified here must match the path at the HREF Link in the Menu Maintenance window if STORE_MAIN is selected at the Group field and 0030 is selected at the Sequence field.

- 3 Add the following links to the Web page where you want to access the eBusiness Manager module:

`http://www.example.com/IW_Login.m4p.pvx?;login` (for .order customers)

`http://www.example.com/IW_Products.m4p.pvx?;products_no_tree? company=xxx`
(for .store customers and when not using frames.)

or

`http://www.example.com/IW_Login.m4p.pvx?;products?company=xxx`
(for .store customers and when using frames)

Replace `www.example.com` with the domain of your Web site. The link can be a graphic button or plain text. You can use an IP address instead of a URL if the Web Engine is not a published server (visible/accessible using the Internet).

At this point, clicking the link accesses the Web Engine and displays the logon window for .order customers and the Products and Services Web page for .store customers.

IIS Configuration Settings

Generally, the ISAPI Plug-In is configured in the eBusiness Manager Options window. Using FTP or some other transport mechanism, you must copy the configuration file to the IIS, along with the images, JavaScripts, and style sheets for the Web site. For more information, see eBusiness Manager Options in the Help system.

To manually configure the ISAPI Plug-In



NOTE
For a list of the MASISAPI.DLL and its supported files, see Installing the ISAPI Plug-In on page 14.

- 1 If it is necessary to move the MASISAPI.DLL and supporting files to a new path, you must reconfigure its application mapping.
 - a From the Microsoft Management Console (MMC) for the IIS, right-click the Web site and click Properties.
 - b In the Properties dialog box, select Home Directory and click Configure.
 - c In the Configuration dialog box, select App Mappings.
 - d Select the .pvx extension and click Edit.
 - e Browse to the new path for the MASISAPI.DLL file and click OK to confirm the change.
- 2 From any browser, connect to the Web site and run the `__DEBUG.PVX` program (for example, enter `www.example.com/__/debug.pvx`). The ISAPI Plug-In information should appear, providing details about the ISAPI configuration. Verify these settings.

- 3 If you relocate the Web Engine to another machine or change IP addresses, you may need to change the mappings for the ISAPI Plug-In to a different Web Engine. The ISAPI Plug-In can handle multiple Web Engines from the same machine, but those Web Engines must be on separate servers. The configuration file for the ISAPI Plug-In is located in the root folder for each Web site on IIS. Do not edit the MASISAPI.INI file on the server. Make appropriate changes in the eBusiness Manager Options window, which re-generates the MASISAPI.INI file, and then publish the MASISAPI.INI file to the IIS. For more information, see Publish Files to the Internet in the Help system.

Images, Style Sheets, and JavaScripts

The eBusiness Manager module allows you to publish all images, style sheets, and JavaScripts to IIS. This reduces the amount of traffic between the IIS and the Web Engine when users are requesting Web pages. You can republish all images, style sheets, and JavaScripts to the IIS at any time using FTP or some other transport mechanism. For more information, see Publish Files to Web in the Help system. Sage can update the JavaScript files at any time. Changes made to JavaScripts are overwritten when the software is reinstalled or upgraded. If you make changes to the JavaScripts, be sure to copy or rename the existing script, so that your changes are not deleted during the next installation. The new JavaScript program name must replace the standard JavaScript name in the affected HTML templates.

Copying Images



WARNING

All images for all companies that are eBusiness Manager-enabled must be copied into the images folder on IIS. Avoid using the same file names for the images in any company or the incorrect image may appear on your Web site.

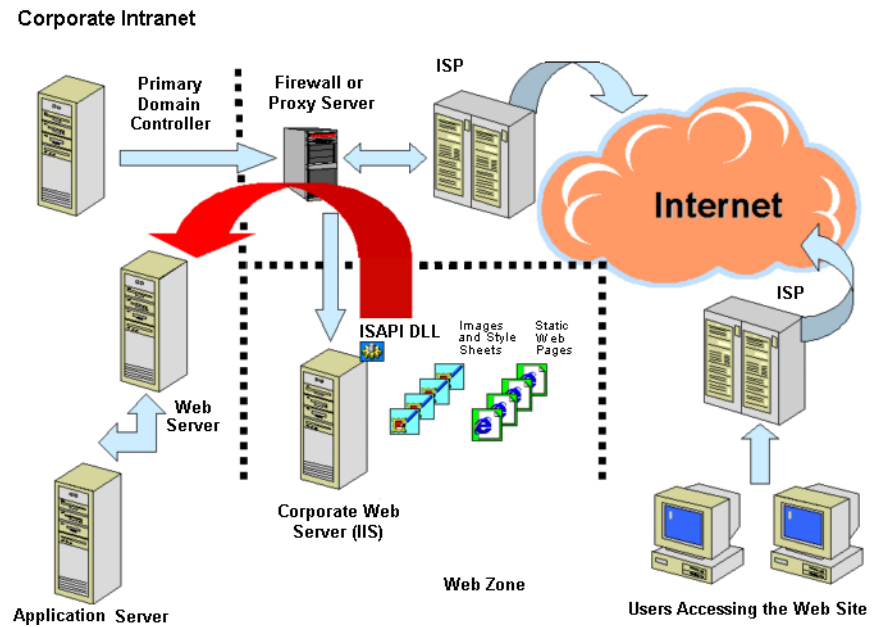
Images must be copied or published to the images folder under the root folder of your Web site. Web pages have been coded with the assumption that all images are located in this folder. If your images are not appearing on the Web site, verify that all of your images are in the images folder under the root folder of your Web site. JavaScripts and style sheets must be stored at the root folder of the Web site.

Supported Configurations

The illustrations shown in this section represent different generic configurations supported by the eBusiness Manager module. All networks follow a similar configuration. These illustrations refer only to components essential to the eBusiness Manager module.

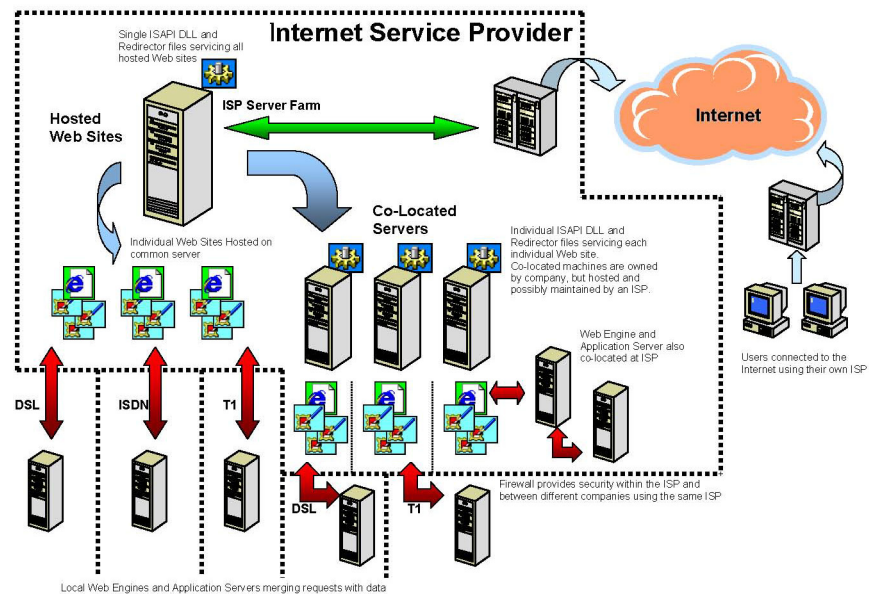
Company-Hosted Web Site

The following illustration shows a standard configuration in which the company hosts and maintains their own Web site. Many companies have this configuration because their Web sites change regularly and they want complete control over the site. This configuration also has a direct line into the Internet through an ISP and a firewall, preventing unauthorized users from accessing the internal network.



ISP-Hosted Web Site

The following illustration shows a standard configuration in which the company's Web site is hosted by an ISP. Some companies may choose this option because they do not need, nor have the resources to maintain a Web site on a full-time basis, but want to keep a Web presence on the Internet. Multiple Web sites can be hosted on the same machine. A direct connection is made from the ISP to the company's site where the Web Engine is located. In this situation, the company does not need to install the IIS, the ISAPI Plug-In, firewall configurations, etc. The ISP will perform these tasks for a monthly fee.



Consider ISP package options carefully and take into consideration how many people will be accessing the Internet from within the company (unless they are going to the Internet through another ISP), how much Web space will be required for your images, and what other activities you will want to do on the Internet (such as a corporate Web page). ISPs offer solutions that vary greatly in price, depending on your requirements. You may also want to consider co-locating the IIS to an ISP. Consult your Sage business partner, ISP partners, or other Internet professionals to determine what configuration is best for your business.

Chapter 3

Installation

The Web Engine and the ISAPI Plug-In are delivered on the Sage 100 installation program. This chapter covers the installation process for the Web Engine and the ISAPI Plug-In. For installation information regarding the software, refer to your *Installation and System Administrator's Guide*.

Before Installing the Web Engine

The Web Engine is primarily responsible for the merging of HTML pages with data. You must have Sage 100 installed before installing the Web Engine. The system requirements for running the Web Engine are the same as those for Sage 100. For a complete list of system requirements, refer to the Supported Platform Matrix. To access the matrix, see article ID 47649 in the Sage Knowledgebase at support.na.sage.com.

Before installing the Web Engine, decide on one of the following configurations for incorporating SSL technology in your Web pages:

- Always use SSL encryption when redirecting requests to the Web Engine.
- Use SSL encryption for redirecting requests to the Web Engine for select Web pages (such as the Shopping Cart Web pages), when the external request to IIS uses SSL encryption.
- Never use SSL encryption when redirecting requests to the Web Engine.

Depending on which configuration you select, the bold portion of the URL in the sample MASISAPI.INI file below would differ. This URL resembles the URL to the Web Engine.

```
[Http Remappings]  
www.example.com=http://servername:2953
```

```
[Https Remappings]  
www.example.com=https://servername:2954
```

If you are configuring your system to always use SSL encryption or to use SSL encryption for select Web pages, you must generate an SSL certificate in a .pem file format before installing the Web Engine. For more information, See *Generating an SSL Key* on page 16.

 **NOTE**

You must uninstall your previous Web Engine before proceeding. Because your templates may be deleted or replaced, back up any templates, .htm files, and the IW folder before uninstalling.

 **NOTE**

Click No if you are not using SSL encryption for any of your Web pages.

 **NOTE**

For information on creating a .pem file See Generating an SSL Key on page 16.

 **NOTE**

The MAS90 folder cannot be the share point.

Installing the Web Engine

After installing Sage 100, you are ready to install the Web Engine.

To begin the installation process

- 1 Click the applicable Sage 100 product from the installation Autorun screen, click Productivity Applications, and then click Install eBusiness Manager Web Engine to begin the installation.
- 2 After the Welcome and Software License Agreement windows appear, the Web Engine Setup program prompts you to select a destination folder. Click Browse to locate a folder. The folder you select must not be the MAS90 folder. Sage 100 and the Web Engine can be installed on the same server, but must be installed to separate folders. Click Next to begin the installation process.
- 3 Type the port number to use for the Web Engine. By default, the port number used by the Web Engine is 2953.

Make a note of the port number; you will need to enter it in the Port field for the Web Engine address in eBusiness Manager Options.

- 4 After typing a port for the Web Engine, you are prompted to secure your connection between IIS and the Web Engine through SSL. If your connection between IIS and the Web Engine is already secure (using a fire wall, dedicated connection, or some other proxy), you do not need to connect using SSL; however, if your connection between the IIS and the Web Engine is through the Internet, SSL is strongly recommended.

If you click No in the Question dialog box, go to step 7; if you click Yes, complete steps 5 and 6.


- 5 Type the SSL port number to use for the secure connection and then click Next. By default, the SSL port number used by the Web Engine is 2954.


Make note of the port number. You will need to enter it in the SSL field for the Web Engine address in eBusiness Manager Options.


- 6 Click Browse to browse to the location of your certificate file. The certificate must be in .pem format. Click Next.
- 7 Enter the Universal Naming Convention (UNC) path to the MAS90 folder for the installation you are making available for use with the eBusiness Manager module.


For example, if your server's name is ACCOUNTING and the share point containing the MAS90 folder is APPS, you would enter \\ACCOUNTING\APPS\MAS90 and click Next. You can also click Browse to locate the MAS90 folder.

If you are installing the Web Engine on the same server, you must still specify the UNC path to the MAS90 folder, not the local drive path.

 **WARNING**
Before uninstalling the Web Engine, create a backup of any Web templates that you modified.

 **NOTE**
To change or view your Web Engine configuration settings, you must stop the service.

 **NOTE**
You must access Web Config before running the service for the first time.

 **NOTE**
Do not install the ISAPI Plug-In if an ISP is hosting your Web site.

- 8 If you are installing the Web Engine on a SQL server, the SQL Server Information window appears. Type the server name where SQL is running.
- 9 After typing the path to the Application Server, you are prompted to select a program folder for the Web Engine program icon. Select an existing folder or type a new folder name and click Next.

- 10 After selecting a program folder for the Web Engine icon, you are prompted to configure the Web Engine as a service. Click Yes to run the Web Engine as a Service; click No to run the Web Engine as an Application.

If you have completed running the Web Engine Setup program, and you want to change your configuration selection, you must uninstall the Web Engine, and re-run the Web Engine Setup program.

- 11 The Start Copying Files window appears. Review the settings listed and click Back to make changes or click Next to accept all.
- 12 Click Finish.

Running the Web Engine

To run the Web Engine as a stand-alone application, select Start menu > All Programs > Sage > Web Config. Running the Web Engine in this manner requires a persistent user logon, and this user must have sufficient permissions to access the share point and all data on the Application Server.

Security on the Server

The server should be protected from unauthorized access, especially if the server is in an easily accessible area. Windows server provides two features for protecting a server: screen savers and lock workstation. Use either of these features to prevent users from accessing the server on which the Web Engine is running. When choosing a screen saver, select one with minimal functionality that requires little computation by the computer.

ISAPI Plug-In Setup

The ISAPI Plug-In is responsible for redirecting Internet requests to the Web Engine. You must have Sage 100 and the Web Engine installed before setting up the ISAPI Plug-In. For a complete list of system requirements, refer to the Supported Platform Matrix. To access the matrix, see article ID 47649 in the Sage Knowledgebase at support.na.sage.com.

To set up the ISAPI Plug-In

- 1 Install the ISAPI Plug-In.
- 2 Enable Web service extensions on the IIS server.
- 3 Generate an SSL key.

Access to the Web Engine

The Windows server on which you install the ISAPI Plug-In must have access to the server running the Web Engine, which may be behind a firewall. For a description of this security configuration, See IIS Configuration Settings on page 7.

Before installing the ISAPI Plug-In, make sure you can access your Web site from a workstation that is not connected to the main network (for example, from home or another business).



NOTE
The ISAPI Plug-In should only be installed on a Windows Server operating system.

Installing the ISAPI Plug-In

To install the ISAPI Plug-In

- 1 Click Browse on the Sage 100 installation program. Open the ISAPI Plug-in folder on the Windows server. The ISAPI Plug-in folder contains the following .dll files:
 - o libeay32.dll
 - o masisapi.dll
 - o openssl.dll
 - o ssleay32.dll
- 2 Copy the four .dll files to one of the following locations. Make sure that Web users have read-only access to the Scripts folder.
 - o To install the ISAPI Plug-In for multiple Web sites, copy the .dll files to the Scripts folder under the Inetpub folder.
 - o To install the ISAPI Plug-In for one Web site only, copy the .dll files to the Scripts folder under the root folder of your Web site. Create a Scripts folder if it does not already exist.
- 3 To register the Server Side Include on IIS, select Start menu > Settings > Control Panel. Double-click Administrative Tools. Double-click Internet Information Services (IIS) Manager.
- 4 In the Internet Information Services (IIS) Manager window, right-click the Web site used for eBusiness Manager and click Properties.
- 5 In the Properties window, click the Home Directory tab and click Configuration.
- 6 In the Application Configuration window, click either the Mappings tab or the App Mappings tab, as applicable. Click Add.
- 7 In the Add/Edit Application Extension Mapping window, in the Executable field, click Browse and browse to the location of the MASISAPI.DLL file.
- 8 In the Extension field, type PVX. Accept all other default settings, and click OK.



NOTE
If your IIS hosts multiple Web sites, the ISAPI Plug-In does not need to be re-installed for each Web site if the .dll files are copied to the Inetpub\Scripts folder. The ISAPI Plug-In does need to be re-installed for each Web site if the .dll files are copied to the Scripts folder in the root folder of a Web site.

- 9 In the Application Configuration window, verify that PVX appears in the Application Extensions panel or the Application Mappings panel, as applicable. Click OK.
- 10 Click OK to close the Properties window.

Installing the MASISAPI.DLL Plug-in for IIS7 for Windows Server 2008 and Windows Server 2008 R2

To install the MASISAPI.DLL plug-in

- 1 Copy all the files in the ISAPI Plug-in folder found at the root of the Sage 100 installation program to the C:\inetpub\Scripts folder in the IIS server. If the Scripts folder does not exist, create it.
- 2 Select Start menu > Control Panel. Open Administrative Tools. Double-click Internet Information Services (IIS) Manager.
- 3 In the Internet Information Services (IIS) Manager window, on the Connections panel, double-click the server that is used for eBusiness Manager.
- 4 Expand the Sites folder and select the Web site where the MASISAPI.DLL will be installed.
- 5 Double-click the Handler Mappings icon. In the Actions panel, click Add Module Mapping.
- 6 In the Add Module Mapping window, enter the following at the applicable fields:

Request path: *.pvx

Module: ISAPIModule

Executable (optional): Enter the path to the MASISAPI.DLL program file (for example, C:\inetpub\Scripts\masisapi.dll)

Name: Sage EBM ISAPI
- 7 Click OK to add the Module Mapping.
- 8 In the Do you want to allow this ISAPI extension message dialog box, click Yes.



NOTE

The IIS Web Server roles must be fully configured and operational.



NOTE

Do not modify the settings in the Request Restrictions field.

Installing the MASISAPI.DLL Plug-in for IIS8 for Windows Server 2012

To install the MASISAPI.DLL plug-in

- 1 Copy all the files in the ISAPI Plug-in folder found at the root of the Sage 100 installation program to the C:\inetpub\Scripts folder in the IIS server. If the Scripts folder does not exist, create it.
- 2 Select Start menu > Control Panel. Open Administrative Tools. Double-click Internet Information Services (IIS) Manager.
- 3 In the Internet Information Services (IIS) Manager window, on the Connections panel, double-click the server that is used for eBusiness Manager.
- 4 Expand the Sites folder and select the Web site where the MASISAPI.DLL will be installed.
- 5 Double-click the Handler Mappings icon. In the Actions panel, click Add Module Mapping.
- 6 In the Add Module Mapping window, enter the following at the applicable fields:
Request path: *.pvx
Module: ISAPIModule
Executable (optional): Enter the path to the MASISAPI.DLL program file (for example, C:\inetpub\Scripts\masisapi.dll)
Name: Sage EBM ISAPI
- 7 Click Request Restrictions.
- 8 On the Mapping tab, clear the Invoke handler only if request is mapped to check box.
- 9 Click OK to close the Request Restrictions window.
- 10 Click OK to add the Module Mapping.
- 11 In the Do you want to allow this ISAPI extension message dialog box, click Yes.



NOTE

The IIS Web Server roles must be fully configured and operational.



NOTE

If you are unfamiliar with generating a certificate for secure transactions, consult a network consultant or business partner.

Generating an SSL Key

To use the SSL capabilities of the Web Engine, create a .pem file that contains both the certificate and your private key in X509 format.

Modifying the ISAPI for Hosting Multiple SSL Sites

Because Host Header Names are not supported with Secure Socket Layer (SSL), if you are hosting multiple SSL Web sites from one Web server, the SSL proxy server will have difficulties locating the correct SSL Web site that a client browser requests.



NOTE

This procedure is not necessary if each Web server is hosting just one SSL Web site or none at all.

To resolve this problem, if you are hosting multiple SSL Web sites from one Web server, you must distinguish each SSL Web site with a different TCP port and modify the MASISAPI.ini file. If there are multiple MASISAPI.ini files on the Web server, one for each SSL Web site, then modify each MASISAPI.ini file.

To modify the MASISAPI.ini file

- 1 Open the MASISAPI.ini file in Notepad. The MASISAPI.ini file is located in the root folder of each Web site.
- 2 Add an entry for the server and port that the proxy is using to access each SSL Web site. Use the following example to determine the entry to add:

Example

Your Web server hosts two SSL Web sites. The Web server's IP address is 123.4.56.789. The first SSL Web site uses port 441 and its URL is https://website1.example.com. The second SSL Web site uses port 442 and its URL is https://website2.example.com. Based on this example, type the following entry:

```
[Http Proxy Remappings]
123.4.56.789:441=https://website1.example.com
123.4.56.789:442=https://website2.example.com
```

- 3 Select File menu > Save.



NOTE

You can place one MASISAPI.ini with all company information in the C:\Windows folder for all the SSL Web sites to share.

Appendix A

Installation Checklist

Use the following checklist to step through the installation. Write down the information you enter during the installation in the worksheet shown on page 19 for future reference.

- 1___ Install or upgrade the software on your Application Server.
- 2___ To enable secure Web transactions, you must first generate a certificate. For more information, See Generating an SSL Key on page 16.
- 3___ Create a share point to the Application Server that has access to the MAS90 folder. You probably have this share point if you are using Crystal Reports or the ODBC driver.
- 4___ Install the Web Engine. Specify the folder to the Application Server during the installation. Use a UNC formatted path for the highest level of compatibility. If you are running the Web Engine as a Service, make sure the service account has local administrative rights as well as access to the UNC path to the MAS90 folder. Do not use the built-in Windows Local System account, because it cannot access other servers via a UNC.
- 5___ The installation process prompts you for a port number. The default TCP port used is 2953. The port number entered at the Port field for the Web Engine address in eBusiness Manager Options must match the port number entered during the installation process. For security reasons, do not use port 80 for the Web Engine.
- 6___ The installation process prompts you for a SSL port number. The default SSL port used is 2954. The SSL port number entered at the SSL Port field for the Web Engine address in eBusiness Manager Options must match the SSL port number entered during the installation process. Enter the path of the certificate created in step 2 above. For security reasons, do not use port 443.
- 7___ The Web Engine is usually installed on an internal server that is behind the firewall. For this reason, you may need two IP addresses: one for the server's address from outside the firewall, and one for the server's address from within the firewall (an alias IP address that cannot be accessed from outside the firewall).
- 8___ Contact your ISP or your IS department for the IP address and port of your SMTP server (the port is usually 25). You will need this server to send e-mail from the Web Engine. If you are using an ISP to host your Web site, you are now ready to start configuring the software (go to step 10).



NOTE

The port the Web Server is listening on needs to be different than port 80, which is used by IIS.

- 9___ If you are setting up your own IIS, make sure you can access your Web site from a workstation not connected to the main network (for example, from home or another business). You must make sure your Web server or Web site can be accessed through the Internet. Install the ISAPI Plug-In.
- 10___ Configure the eBusiness Manager module using information found in the Help system. From the worksheet shown on page 19, you must provide the Web Engine URL or IP Address of the IIS, and the Inside Firewall IP address of the Web Engine and port it will be using. Each of these services runs on a specific TCP port. Use default ports when possible. The IP address of the SMTP server must be entered in Company Maintenance.
- 11___ Use FTP or some other transport mechanism to update the IIS configuration files and all images, JavaScripts, and style sheets being used by the server. For more information, see Publish Files to the Internet in the Help system.

Installation Settings Worksheet

Application Server Name	
Share Point	
Port Number IIS Standard IIS SSL Web Engine Standard SSL Port Number	
IP Address Outside Firewall Inside Firewall	
SMTP IP Address	
SMTP IP Port	
Web Engine URL or IP Address	

Appendix B

Troubleshooting

The eBusiness Manager module incorporates a number of different technologies that must communicate together in order for the product to function properly. (There are three server-based software programs that function independently of each other in the eBusiness Manager architecture.)

Installation Troubleshooting

To effectively troubleshoot the installation, you must narrow the scope of the problem. Define your problem and follow the troubleshooting steps that will assist you in determining the cause of the problem and its solution.

To determine the problem

- 1___ Did you receive a logon screen, or Products and Services (.store) page? If so, the problem may be with the configuration of the data files. Verify that all your items and customers are Internet-enabled and that users have been set up.

- 2___ Is there a link on your Web page? Verify that the home page has a link to the eBusiness Manager module. Somewhere on the Web page there should be a link to the following:

 IW_Login.m4p.pvx?;login
 (for .order customers.)

 IW_Products.m4p.pvx?products_no_tree?company=xxx
 (for .store customers and when not using frames.)

 or

 IW_Products.m4p.pvx?products?company=xxx
 (for .store customers and when using frames.)

 For more information, see step 3 on page 7.

- 3___ Can you access your home page? If you receive any kind of error (for example, File Not Found, Forbidden, or Access Denied) check the IIS to verify that you have appropriate rights to your Web folder. Verify that your connection to the Internet through your ISP is functioning correctly.

- 4___ In a browser pointing to an IIS URL, can you run the __DEBUG.PVX program? When you type __DEBUG.PVX, you should receive information about the ISAPI Plug-In. If you receive an Error 404 when running this program, the ISAPI Plug-In is not installed or configured correctly. If you receive information from the server, make sure the Redirection field is configured and formatted properly (for example, http://www.example.com:2953). Verify that there is an "http" and the slashes

are in the correct direction. Changes to the configuration files should be made on the application server and re-published to the IIS server. This verifies that all components of the eBusiness Manager module have the same configuration details.

- 5___ Check the connectivity between the IIS and the server where the Web Engine is running. Make sure you can transmit from the IIS to the Web Engine and vice-versa. This is most likely a firewall issue. If you receive an ISAPI error, there is a good chance that the firewall is not configured to allow messages through to the Web Engine. Consult with your network administrator about opening a port through the firewall so that information can be communicated through the Internet.
- 6___ If you receive a message, "Unable to establish connection (4)", make sure the Web Engine is running. For more information, see Running the Web Engine on page 13.
- 7___ Make sure the path to the Application Server is correct in the context of the user who is logged onto the Web Engine. The path to the Application Server can be found in the webhide.ini file in the \Webeng\home\lib_web folder. Make sure the Application Server has a share point and the UNC is used as the path to the Application Server. Do not use a mapped drive.
- 8___ Security and permissions are the most likely cause of problems with connectivity. If the above solutions do not solve your problem, then to troubleshoot security and permissions, open up access so you are not hindered by firewalls and user security from the Web site down to the Application Server. Start closing the security holes until you find the problem (restricting firewall access, user, and file permissions).
- 9___ If you cannot see any images on your Item Detail page, verify the images are posted to the \wwwroot\images folder. Use FTP or some other transport mechanism to copy images up to the IIS.
- 10___ If you are receiving syntax errors, or your Web pages do not appear correct, make sure your style sheets and JavaScripts have been published to the Web site.

Browser-Related Error Messages

The following error message is an example of an error that your users may receive. Following the instruction for the error message may help resolve the error.

Problems with this Web page might prevent it from being displayed properly.

- Make sure your JavaScripts have been published to the Web site. You must publish images, JavaScripts, and style sheets to the IIS Web site before eBusiness Manager can be used.
- If the page is hanging or not loading correctly, adjust the delay setting at the MASISAPI.ini Delay (millisecond) field in eBusiness Manager Options to a higher number (for example, 3000), and then publish the MASISAPI.ini file.

Web Engine Error Messages

When starting the Web Engine, you may encounter one of the following error messages. Following the instructions for each error message may help resolve these errors. If you receive an error message during the Web Engine startup, users cannot access your Web site until the condition is resolved.

- The directory specified is being serviced by another Web Engine.

Another Web Engine has been configured and is running using the data to which this Web Engine is pointing. Only one Web Engine can point to the Application Server where the data is residing. Point your Web Engine to a different Application Server. The Web Engine is attempting to create and lock a file called `webserv.lock` in the `..\MAS90\IT` folder. If it receives a busy signal, another user is using this data.

- Error XXX occurred when attempting to open the Server path.

When the Web Engine tries to create or lock the `webserv.lock` file on the Application Server, an error occurs; it may be a permissions error or an invalid path. The most common error condition is an Error 12. If the eBusiness Manager module is not installed to the path specified, the Web Engine returns an Error 12.

- The path specified is invalid or does not exist.

The path specified in the `webhide.ini` file is invalid or cannot be reached by the user currently logged onto the server, or the user account set up for the Web Engine Service. If this path is incorrect use Notepad to make the appropriate changes, or check permissions for the user logged on to make sure the user has adequate rights to the share point.

ISAPI Error Messages

When accessing an eBusiness Manager Web site, you may encounter one of the following error messages generated by the ISAPI. Following the instructions for each error message may help resolve these errors.

- Unable to resolve the host name.

The Web Engine name or IP is incorrect. Verify that you can ping the name or IP address from the IIS server. Verify that the name or IP address of the Web Engine is spelled correctly in the `MASISAPI.ini` file. If you manually edit the `MASISAPI.ini` file, be sure to make the same changes in eBusiness Manager Setup Options as well.

- Unable to establish a connection
 - The Web Engine has stalled or is not running. If you are running the Web Engine as a service, you can verify whether it has stalled or stopped. Open a Web browser and type `http://127.0.0.1:PORT/IW_Login.m4p;login` (where PORT is the port at which the Web Engine is running). If you get a Business to Business logon prompt, then the Web Engine is running. Stop and restart the service. If the Web Engine still does not start, then contact Sage for further assistance.
 - The Web Engine port number in the MASISAPI.ini file is incorrect or missing. Open the MASISAPI.ini file in Notepad, and verify that the port number in the file matches the port number displayed on the Web Engine Configuration window and eBusiness Manager Setup Options.
 - The Web Engine port is blocked. A router and/or firewall may be the cause. Sage cannot assist in the configuration or troubleshooting of routers and firewalls.

- Unable to establish an SSL connection.

The Web Engine is connected to the ProvideX server, but the server is running a non-secured port or protocol. To make the Web site non-secure, change the remapping information in the MASISAPI.ini file from `https://` to `http://`. To keep the Web site secure, make sure the port is running SSL on the ProvideX Web server.

- SSL handshake with server failed.
 - The Web Engine is not configured for SSL. If this is the case, both of your Web Engine ports in eBusiness Manager Setup Options should be set to the same value. The MASISAPI.ini should reflect these values as well.
 - The SSL entry in the MASISAPI.ini file is missing or incorrect. If SSL encryption is enabled on the Web Engine, then the remapping information in the MASISAPI.ini should read `https://`.
 - The SSL certificate is invalid or is not in the correct format. The SSL certificate should be in X509 format with a .pem file extension. If this is correct, then contact your SSL certificate provider for further assistance in resolving this issue. Sage cannot assist in troubleshooting SSL certificate issues.

- Unable to write the socket connection

The TCP/IP connection with the ProvideX server was unexpectedly disconnected. The ProvideX Web server has stalled or encountered an error. If you are running the Web Engine as a service, you can verify whether it has stalled or stopped. Open a Web browser and type `http://127.0.0.1:PORT/IW_Login.m4p;login` (where PORT is the port at which the Web Engine is running). If you get a Business to Business logon prompt, then the Web Engine is running. Stop and restart the service. If the Web Engine still does not start, then contact Sage for further assistance.

- The connection with the server was reset.

The TCP/IP connection with the ProvideX server was unexpectedly disconnected. The ProvideX Web server has stalled or encountered an error. If you are running the Web Engine as a service, you can verify whether it has stalled or stopped. Open a Web browser and type `http://127.0.0.1:PORT/IW_Login.m4p;login` (where PORT is the port at which the Web Engine is running). If you get a Business to Business logon prompt, then the Web Engine is running. Stop and restart the service. If the Web Engine still does not start, then contact Sage for further assistance.

- Unable to read from the socket connection.

The TCP/IP connection with the ProvideX server was unexpectedly disconnected. The ProvideX Web server has stalled or encountered an error. If you are running the Web Engine as a service, you can verify whether it has stalled or stopped. Open a Web browser and type `http://127.0.0.1:PORT/IW_Login.m4p;login` (where PORT is the port at which the Web Engine is running). If you get a Business to Business logon prompt, then the Web Engine is running. Stop and restart the service. If the Web Engine still does not start, then contact Sage for further assistance.

Index

A

Application Server
 architecture 3
 configuration settings 4
 overview 3
architecture 3

C

checklist, installation 18
configuration
 examples
 company hosted Web site 9
 ISP Hosted Web Site 10
 Internet Information Services (IIS) 7
 Web Engine 5
copying images 8

E

eBusiness Manager
 architecture 3
 overview 1
error messages
 browser related 21
 Web Engine 22

G

graphic conventions 2

H

how to use this installation guide 1

I

images
 copying 8
 publishing 8
installation checklist 18
installing
 Internet Information Services (IIS) 6
 ISAPI Plug-In 11, 14
 Web Engine 11, 12
Internet Information Services (IIS)
 architecture 3
 configuration settings 7
 installation steps 6
 overview 6

ISAPI Plug-In 7

 access to Web Engine 14
 hosting multiple SSL sites 17
 installing 14
 manually configuring 7
 registering the Server Side Include (SSI) 14

J

JavaScripts, publishing 8

M

MASISAPI.DLL plug-in
 installing for Windows 8 and Windows Server
 2012 16
 installing for Windows Server 2008 and Win-
 dows Server 2008 R2 15
Microsoft Internet Information Services (IIS),
 overview 6
Microsoft Web Publishing Wizard 8

O

overview, eBusiness Manager 1

P

Plug-In, setup 13
publishing
 images 8
 JavaScripts 8
 style sheets 8

S

Server Side Include (SSI), registering 14
SSL
 generating an SSL key 16
 hosting multiple SSL sites 17
style sheets, publishing 8

T

troubleshooting 20

W

Web Engine
 architecture 3

Index

Web Engine (continued)

- components 5
- configuration 5
- configuration settings 5
- error messages 22
- installing 12
- overview 4
- starting, from the Start menu 13
- window samples
 - Application Server Path 12
 - Choose Destination Location 12
 - Port Number 12
 - Start Copying Files 13
 - Warning 13

Web Publishing Wizard 8

window samples

Web Engine

- Application Server Path 12
- Choose Destination Location 12
- Port Number 12
- Start Copying Files 13
- Warning 13