

Configuring the XML Version

This chapter covers the following topics:

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 - Configuring the Internet Information Server
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 - Customizing the XSL Files
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About the XML Version

Prerequisites

The XML Version of Entire Screen Builder requires Microsoft Internet Information Server (IIS) running on Windows 2000 or above. In addition, version 3.0 of the MSXML DLL must be installed on the server machine running the Internet Information Server. This can be downloaded from the Microsoft web site, and is most easily installed by upgrading this computer to run Internet Explorer 6.0.

The client browsers must be capable of running JavaScript and displaying frames.

Components

The XML Version of Entire Screen Builder consists of two separate components.

The first component is the server module which is loaded by the Entire Screen Builder Server and is initialized on installation of the product. This can be configured using the System Management Hub. See *XML Version* in Entire Screen Builder's *System Management Hub* documentation.

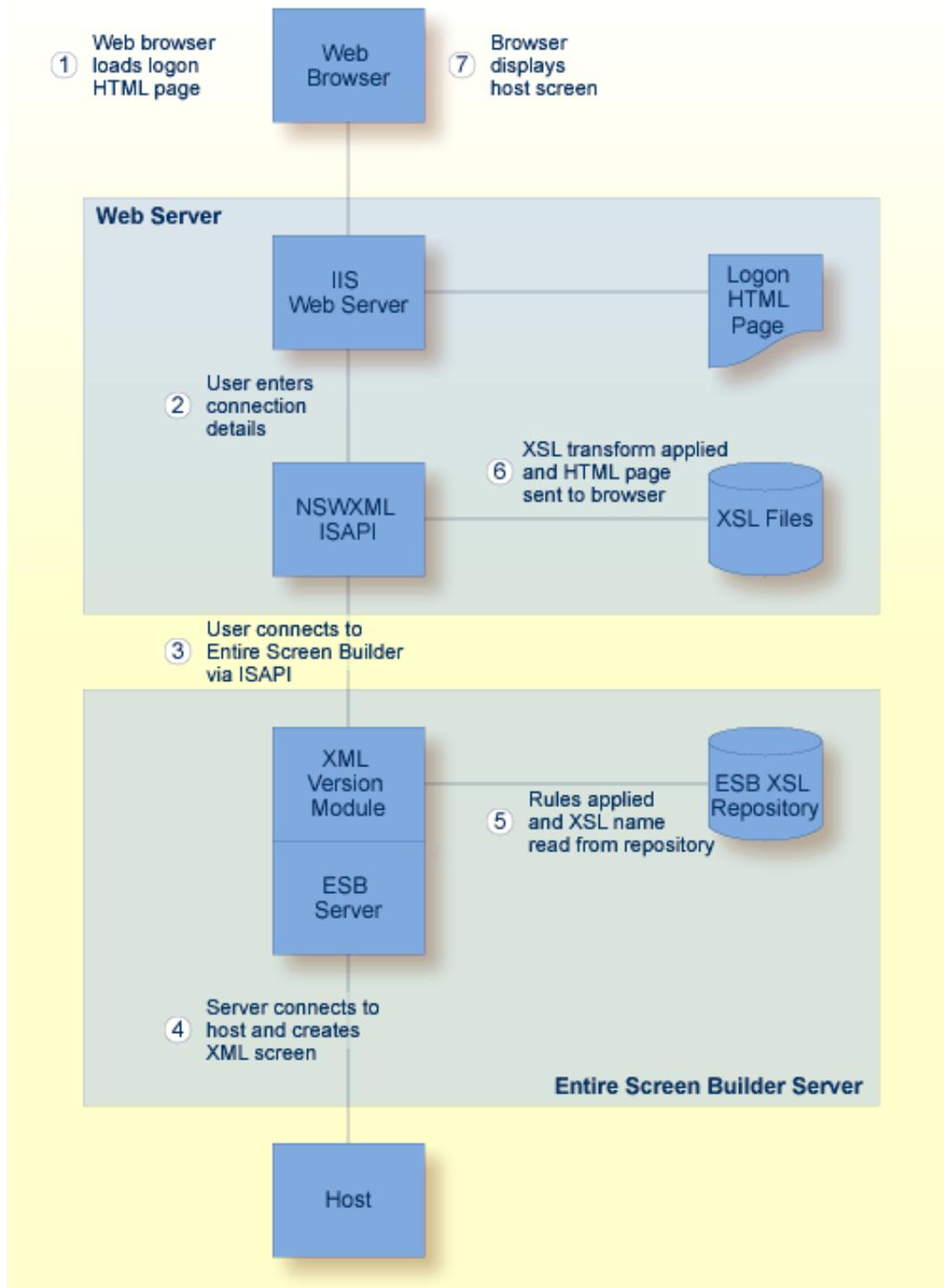
The second component is an Internet Information Server ISAPI DLL. This must be configured to run on Windows 2000 or above. It is planned in future versions to provide server extensions for Apache web servers.

Making a Connection

In order to use the XML Version from Entire Screen Builder, each user must connect to the server via an extension DLL (ISAPI) running inside Microsoft Internet Information Server.

This ISAPI DLL handles the connection to the Entire Screen Builder server, and converts the XML output to HTML.

The following graphic illustrates the control flow for a connection:



Browser Restrictions

Netscape/Mozilla

We have detected problems running all versions of Netscape Navigator when using the PF keys from the keyboard. On versions 4.x only the Carriage Return key can be identified, all other PF keys are not passed to the keyboard handler and the toolbars must be used.

Also note that the automatic reload on size function of Netscape 4.x is not supported since the reload function causes the host connection to be broken. Therefore, we recommend that you either block access to Netscape 4.x or only allow users to connect with a non-resizable browser window.

On version 7.0 of Netscape, the function keys such as PF5 are not intercepted completely and are returned to the browser. This fires a reload event which may cause the session to the host to be lost.

Others

On other browsers such as Opera the JavaScript implementation does not allow cross-frame scripting. Therefore, the no-frames option must be used (for further details, see the document *ConfigureCustomizeXMLVersion.doc* that is included as part of the preview kit provided in the *windows\Server Extensions\SDK_Preview* folder on the Entire Screen Builder CD).

Basic Requirements for the XML Version

Not all steps are required for the most basic installation. Optional steps are marked.

Step One - Install the Entire Screen Builder Server

- Install the Entire Screen Builder Server: Production Version, XML Version (EMV).
- Configure the Entire Screen Builder Server using the System Management Hub:
 - Create one or more host sessions. See *Host Sessions* in Entire Screen Builder's *System Management Hub* documentation.
 - Optional: set the listen port for the XML Version (if the default is not suitable). See *XML Version* in Entire Screen Builder's *System Management Hub* documentation.

Step Two - Connect

- Browse to the website, for example *www.mydomain.com/esb/esblogon.htm*.
- Enter the connection ID and any user details you require.
 - If no users are defined in Entire Screen Builder, you should use the Anonymous logon.
 - Enter the connection ID of the host session you have created.
- Choose **Connect**. The first host screen will appear.

Required Folders on the Internet Information Server

Folders for the following types of files are required on the Internet Information Server:

XSL Files

This folder contains all XSL files you have defined for the application (at least, the *default.xsl* provided). This folder must be accessible from the ISAPI DLL. It must have the same structure as the repository to which it refers.

HTML Files

This folder contains all HTML files for the ISAPI DLL. This folder must be accessible from the ISAPI DLL. It must have the same structure as the repository to which it refers.

This folder must contain the following files:

- *esbframebase.htm*

Contains the base layout of the HTML page from Entire Screen Builder.

- *esbdisconnect.htm*

Contains the page shown when the host has disconnected.

- *esberror.htm*

Configuring the Internet Information Server

The installation process for the XML ISAPI extensions adds the following virtual directories:

- *esbscripts*

The ISAPI extension DLLs are placed here. This virtual directory is given "Script and Executable" access.

- *esbxsl*

This gives access to XSL files when the XSL transformation is defined as being performed by the browser and not by the ISAPI extension (for further details, see the document *ConfigureCustomizeXMLVersion.doc* that is included as part of the preview kit provided in the *windows\Server Extensions\SDK_Preview* folder on the Entire Screen Builder CD).

- *esb*

This virtual directory references the folder *\Program Files\Software AG\Entire Screen Builder 5\server extensions\xml\html* and contains an example logon page, *esblogon.htm*.

For example, after installation you can browse to *http://myserver/esb/esblogon.htm* to test the XML Version.

Configuring the ISAPI DLL

The XML Configurator for the ISAPI DLL can be used to modify the registry settings for the Internet Information Server. It must be run on the same computer as the Internet Information Server is located.

Important:

It is strongly recommended that you use SSL in the connection between the browser and web server when on the Internet. Otherwise, all data transferred is insecure and there is a risk of this data being accessed by a third party. This risk includes all host passwords.

► To configure the ISAPI DLL

1. From the Start menu, choose **Programs > Software AG Entire Screen Builder *n.n.n* > Server Extensions > XML Configurator**.

The Configure ISAPI Entries dialog box appears.

Configure ISAPI Entries

Entire Screen Builder Server Details

Address: Port:

Folders

XSL Files: ...

File Transfer Upload: ...

HTML Files: ...

File Transfer Download: ...

Timeouts

First Screen (ms): Asynch Timeout (s):

General

Require Cookies Toolbar Background String:

Configured Browsers Only Toolbar Background Color:

HTML Page Window Title:

Default Encoding:

Note:

The above dialog box may also appear during installation. When you install the extensions for the Internet Information Server for the XML Version, a dialog appears asking whether you want to configure the ISAPI DLL.

2. Modify all required options as described in the *Overview of Options* below.

For a description of the **Validate IIS** button, see *Defined Websites* below.

For a description of the **Browsers** button, see *Browser Configuration* below.

3. Choose the **Close** button to save the new settings.
4. Restart the Internet Information Server to load the new settings.

Overview of Options

Address

The IP address or host name of the machine on which the Entire Screen Builder Server is running.

Port

The administration port number (listen address) that has been defined in the System Management Hub. See *XML Version* in Entire Screen Builder's *System Management Hub* documentation.

XSL Files

The full path to the XSL repository on the Internet Information Server machine. For further details, see the documentation included as part of the preview kit provided in the *windows\Server Extensions\SDK_Preview* folder on the CD.

HTML Files

The path to the folder containing the required HTML template files.

Required files:

- *esbframe.htm*
- *esbdisconnect.htm*
- *esberror.htm*

This page is shown when an error has occurred and the host session cannot continue. You should include the string "!!!ESB ERROR INSERTION!!!" in this file as a placeholder for any Entire Screen Builder error message.

File Transfer Upload

The path to the temporary folder to be used for data uploads. If this folder does not exist, or if this text box does not contain an entry, data uploads are disabled.

File Transfer Download

The path to the temporary folder to be used for data downloads. If this folder does not exist, or if this text box does not contain an entry, data downloads are disabled.

First Screen

The length of time between the browser connecting and requesting the first screen. If an application takes longer to start, this timeout can be increased. Timeout is in milliseconds.

Asynch Timeout

The length of time that the browser waits before checking for new screens or disconnections returned by the host. If an application has many asynchronous screens, this timeout can be lowered, but this will increase the amount of server traffic. Timeout is in seconds.

Require Cookies

The Entire Screen Builder Server attempts to set a unique cookie to enhance security and identify connected sessions uniquely. However, if the browser connecting does not allow cookies to be set, the connection will still be enabled unless this check box is enabled. This option is recommended, and if used in conjunction with an SSL connection provides a high degree of data protection.

Configured Browsers Only

Normally, all browsers that attempt to connect to the server will be allowed, unless specifically blocked in the browser configuration dialog. If you use specific features that are only available on a limited number of browsers, you can use this option to stop other users from connecting.

Toolbar Background String / Toolbar Background Color

The XML Version uses several generated HTML screens for actions such as data transfer. It also uses the toolbar which appears at the top of the screen. If you are using a certain background color or image file, you can specify one or the other here. This will then be added to the HTML file, for example:

```
<BODY background="/images/background.gif">
```

or

```
<BODY bgcolor="#ffffff">
```

If both fields are left blank, only <BODY> is used.

If you have defined a background color in the host session, you can use the `bgcolor` entry to keep the complete screen the same color.

HTML Page Window Title

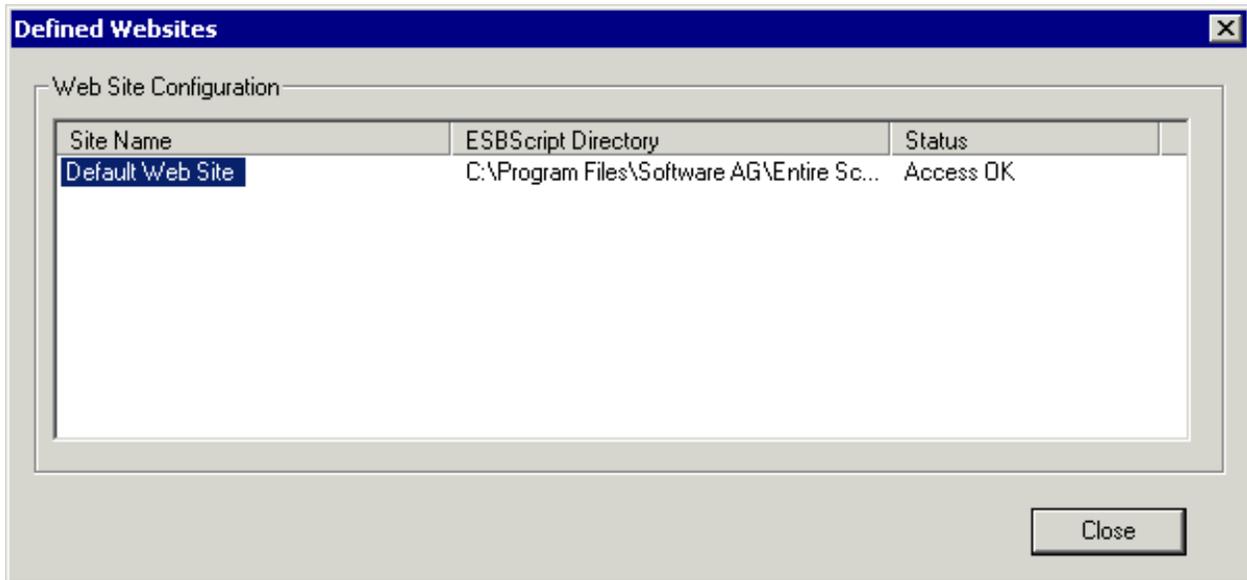
This text will be used for the <TITLE> section of any generated HTML pages.

Default Encoding

You can specify another default encoding.

Defined Websites

When you choose the **Validate IIS** button in the Configure ISAPI Entries dialog box, the Defined Websites dialog box appears.



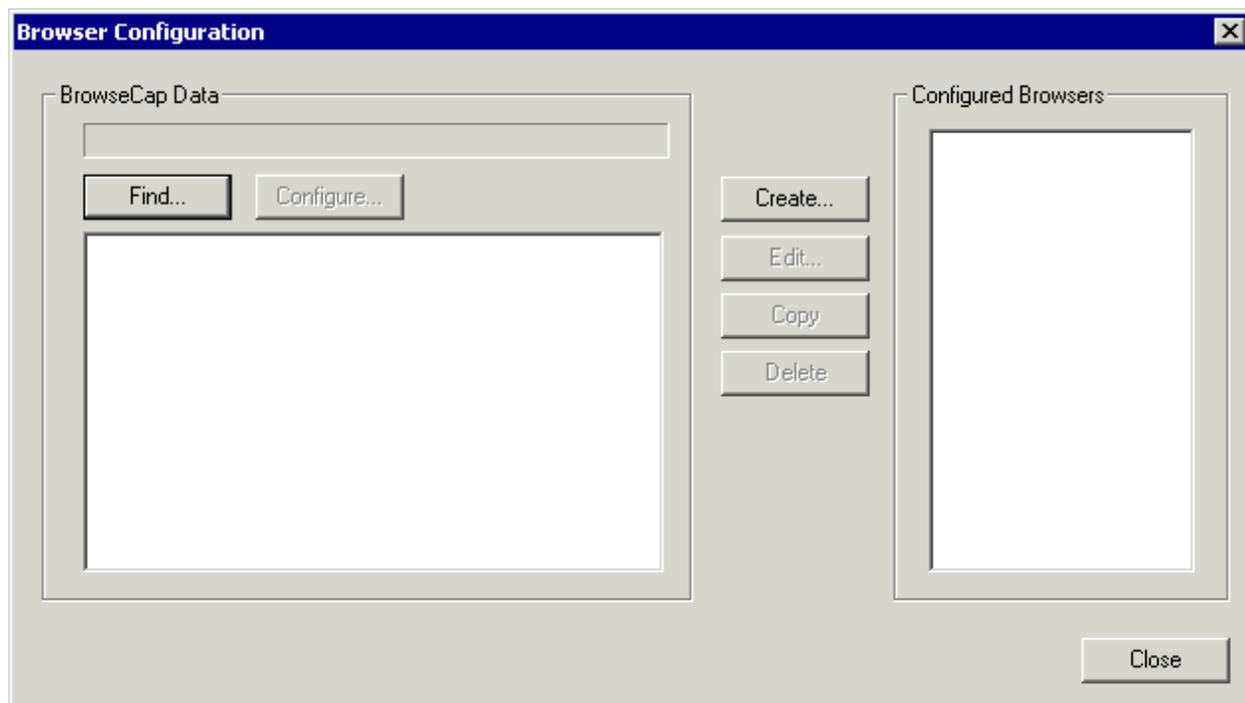
This dialog box shows the current location of the *esbscripts* directory. It also shows whether the permissions are sufficient for the XML Version. If the Status column shows "Too few permissions", you must set the Execute Permissions for this virtual directory to "Scripts and Executables" in the Internet Information Server Manager.

Note:

These permissions are set by default on installation.

Browser Configuration

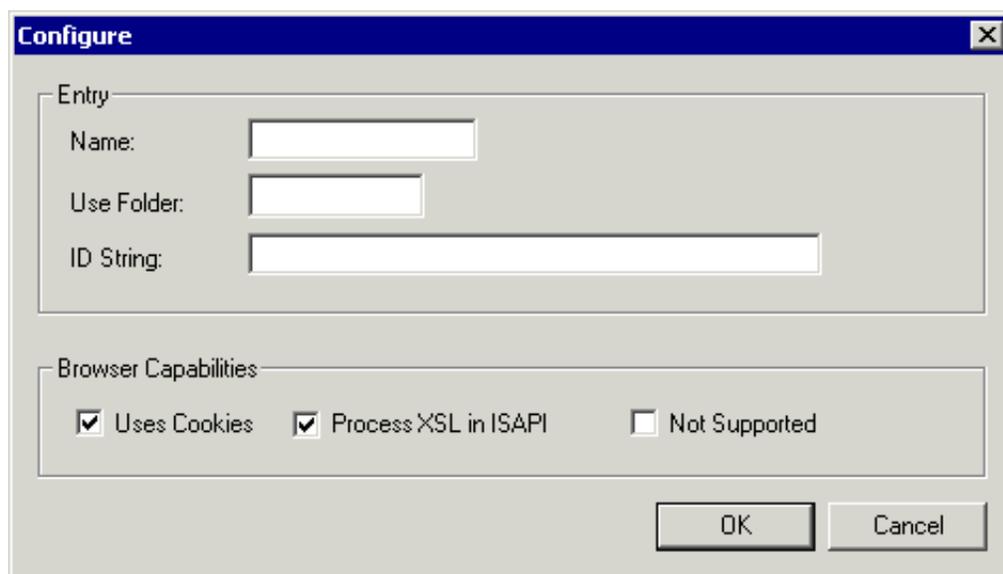
When you choose the **Browsers** button in the Configure ISAPI Entries dialog box, the Browser Configuration dialog box appears.



You can now specify XSL files and parameters. You can also block the use of certain browsers.

You can use a *browsecap.ini* file to get the default entries for the ID string that is used in the Configure dialog box below. This file is provided in the *inetsrv* folder of your *Windows\System32* folder. Choose the **Find** button to define this file.

To configure a browser, choose the **Create** button in the above Browser Configuration dialog box. The Configure dialog box appears.



Specify the following information:

Name

Name of the browser.

Use Folder

This is the relative path to the name of the folder containing the XSLT files that you have customized for this browser. If this field is blank, the default folder will be used.

A specific XSLT file for Netscape is included with Entire Screen Builder and in that case this value can be set to "Netscape" for Netscape browsers.

ID String

This field contains the browser agent description. In the cases where the same browser has various user-agent strings depending on the operating system, you can set this field to the start of the user-agent string. For example, the following string will identify all Internet Explorer 6 versions:

```
Mozilla/4.0 (compatible; MSIE 6
```

If you wish to identify browsers where the user-agent differs at the end (for example Netscape and Mozilla), you can use the asterisk (*) wildcard character. For example, the following string will uniquely identify Mozilla on Windows operating systems:

```
Mozilla/5.0 (Windows; *Gecko/20020910
```

Uses Cookies

If this check box is cleared, Entire Screen Builder will not attempt to set a connection cookie for this browser. Note that if the **Require Cookies** setting is active, this will block users of this browser.

Process XSL in ISAPI

If this check box is cleared, Entire Screen Builder will send XML to the browser. The browser must be capable of performing the XSL transformation itself. In this case, you must have defined the virtual directory *esbxsl*.

It is recommended that this check box is left checked unless you need access to the XML file in order to develop new XSLTs.

Please note that the ISAPI extension for Entire Screen Builder uses the MSXML3 library from Microsoft to execute these style sheet transformations. Therefore, it is recommended that you use Internet Explorer 6.0 or higher in this case.

Not Supported

This check box can be set to block all users of the specified browser from accessing Entire Screen Builder.

When you choose the **OK** button, the name of the browser appears in the Configured Browsers list box. The command buttons **Edit**, **Copy** and **Delete** can be used to manage the list of configured browsers.

When you have chosen the **Find** button, you can also select a browser in the list box below the **Find** button and then choose the **Configure** button. This displays the Configure dialog box (see the above description) with all information for this browser. When you choose the **OK** button in the Configure dialog box, the browser is added to the Configured Browsers list box.

Customizing the XSL Files

For further details, see the document *ConfigureCustomizeXMLVersion.doc* that is included as part of the preview kit provided in the *windows\Server Extensions\SDK_Preview* folder on the Entire Screen Builder CD.