CAPLIN

Caplin Trader Client 1.4

Browser Detection Configuration XML Reference

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Contents

1   Preface

1.1   What this document contains

This reference document describes the XML-based configuration that determines how Caplin Trader Client detects and validates the browser in which it is running. The document also describes the XML-based configuration that defines the browser support messages displayed to the end user.

The information in this document applies to Caplin Trader version 1.4.

About Caplin document formats

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◆   Portable document format (*.PDF* file), which you can read on-line using a suitable PDF reader such as Adobe Reader®. This version of the document is formatted as a printable manual; you can print it from the PDF reader.

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http://support.microsoft.com/kb/896054/.

1.2   Who should read this document

This document is intended for System Administrators and Software Developers who need to:

◆   Modify the list of supported browsers in Caplin Trader Client.

◆   Change the text of the messages displayed when unsupported browsers are detected.

Before making any changes, please read the section Changing the configuration – some rules 10.

1.3   Related documents

None.

1.4 Typographical conventions

The following typographical conventions are used to identify particular elements within the text.

Type	*Uses*
/AFolder/Afile.txt	File names, folders and directories
`Some code;`	Program output and code examples
The `value=10` attribute is...	Code fragment in line with normal text
Some text in a dialog box	Dialog box output
`Something typed in`	User input – things you type at the computer keyboard
XYZ Product Overview	Document name
◆	Information bullet point
■	Action bullet point – an action you should perform

> **Note:**   Important Notes are enclosed within a box like this.
> Please pay particular attention to these points to ensure proper configuration and operation of the solution.

> **Tip:**   Useful information is enclosed within a box like this.
> Use these points to find out where to get more help on a topic.

1.5 Feedback

Customer feedback can only improve the quality of our product documentation, and we would welcome any comments, criticisms or suggestions you may have regarding this document.

Please email your feedback to documentation@caplin.com.

1.6 Acknowledgments

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2   Introduction to the browser detection function

Caplin Trader Client runs in several different browsers. Each particular release of the Caplin Trader Client Reference Implementation is extensively tested for compatibility with a specific subset of browser versions. These are the browser versions that end users are recommended to use. For example the recommended subset could be Firefox 3.0 through 3.5 and Internet Explorer 8. The Reference Implementation also runs in other browsers, and in other versions of the recommended browsers, but is not fully tested for these browsers.

When Caplin Trader Client starts up, it detects the name and version of the browser in which the application is running. It compares this information against its configured list of permitted browser versions. This test has the following possible outcomes:

◆   The browser version is fully supported: Caplin Trader Client runs in the detected browser without displaying a browser support message.

◆   The browser version is in the list of browsers for which Caplin Trader has not been fully tested: Caplin Trader Client displays a browser support message, but continues to run when the end user acknowledges the message.

◆   The browser version is not supported: Caplin Trader Client displays a browser support message, but stops running when the end user acknowledges the message.

The behavior of this browser detection functionality is determined through configuration in XML files – the "browser detection configuration⎢12⎢" and the "browser support message configuration⎢15⎢". This XML configuration specifies:

◆   The list of permitted browsers and their versions.

◆   The level of support for each particular browser version.

◆   The messages that can be displayed ("browser support messages").

Each release of the Caplin Trader Client Reference Implementation is supplied with browser support configuration and associated message configuration appropriate for that release. The XML configuration files are available for you to modify, so that you can tailor the supported browsers, and the messages displayed, to suit your particular implementation of Caplin Trader Client. However, the modifications you can make are subject to some restrictions; see Changing the configuration – some rules⎢10⎢.

Note:	Whilst we take great care to ensure that Caplin Trader Client runs correctly in the most popular browser versions, Caplin Systems Ltd. is not responsible for faults occurring, or for loss of end-user service, as a result of running your implementation of Caplin Trader Client in an unsupported browser or browser version.
	An unsupported browser or browser version is a browser that is not specified in the `allow="yes"` category of the *Browsers.xml* configuration that was supplied in the version of the Caplin Trader Client Reference Implementation from which your version of Caplin Trader Client is derived.

3 How the configuration works

The following sections explain how the various XML configuration tags may be combined to define the supported and unsupported browsers, and how the associated browser support messages are defined.

3.1 Example configuration files

Here are some example XML files describing a typical configuration:

◆ *Browsers.xml*: Contains the browser detection configuration XML that defines the level of support for the various browsers and their versions.

◆ *BrowserMessages.xml*: Contains the XML defining the messages that are displayed to the end user when a browser is not supported or is not recommended for running Caplin Trader Client.

Browsers.xml: **Example browser detection configuration**

```
<cases xmlns="http://schema.caplin.com/CaplinTrader/Browsers"
       default_message_id="defaultNotAllowed"
       default_allow="no">

   <browser name="Firefox" min_version="3.0" max_version="3.5"
               allow="yes" />
   <browser name="Firefox"
               allow="warn" message_id="warning" />
   <browser name="Internet Explorer" min_version="8.1"
               allow="warn" message_id="warning" />
   <browser name="Internet Explorer" min_version="8.0" max_version="8.0"
               allow="yes" />
   <browser name="Internet Explorer" min_version="6" max_version="7"
               allow="yes" message_id="ieUpgrade" />
   <browser name="Safari" min_version="4"
               allow="warn" message_id="warning" />
   <browser name="Chrome" min_version="2"
               allow="warn" message_id="warning" />

</cases>
```

Also see the <u>Browser Detection Configuration Reference</u>⌐12⌐ section.

BrowserMessages.xml: **Example browser detection messages**

```
<messages xmlns="http://schema.caplin.com/CaplinTrader/BrowserMessages">

   <message id="enableJavaScript"><![CDATA[<p class="msg-heading">
      This application requires a JavaScript enabled web browser.
      </p>
      <div class="separator"></div>
      <p>
      Please enable JavaScript or use a different browser.
      </p>]]>
</message>

   <message id="applyIE6Patch"><![CDATA[<p class="msg-heading">
      Your browser contains an out-of-date component
      that must be updated before you can run this application.
      </p>
      <div class="separator"></div>
      <p>
      The update from Microsoft only takes a moment to install
```

```
      and will not change any other aspect of your system.
      </p>
      <p>
      <a class="button" href="http://support.microsoft.com/kb/942840">
      <span>Install Update</span></a>
      <span style="display:inline-block; width:225px; margin-left:8px;
       vertical-align:middle; font-weight:bold;">
      (For Windows XP SP2 or above)</span>
      </p>
      <P>
      <a class="button" href="http://support.microsoft.com/kb/919237">
      <span>Install Update</span></a>
      <span style="display:inline-block; width:225px; margin-left:8px;
       vertical-align:middle; font-weight:bold;">
      (For older versions of Windows XP and Windows 2000)</span>
      </P>
      <p>
      Alternatively, run the application in Mozilla Firefox 3.0
      or Internet Explorer 8<br/>
      </p>]]>
   </message>

   <message id="warning"><![CDATA[<p class="msg-heading">
      This application has not been fully tested in ${browser} ${version},
      and you could experience problems if you continue.
      </p>
      <div class="separator"></div>
      <p>
      The browsers we recommend are Mozilla Firefox 3.0
      and Internet Explorer 8.
      </p>
      <p>
      If you continue to log in using ${browser} ${version},
      then you do so at your own risk.
      </p>
      <div class="separator"></div>]]>
   </message>

   <message id="defaultNotAllowed"><![CDATA[<p class="msg-heading">
      ${browser} ${version} is not approved to run this application.
      </p>
      <div class="separator"></div>
      <p>
      The browsers we recommend are Mozilla Firefox 3.0
      and Internet Explorer 8.
      </p>]]>
   </message>

   <message id="ieUpgrade"><![CDATA[<p class="msg-heading">
      This application will be faster and more responsive
      if you run it in a more modern browser.
      </p>
      <div class="separator"></div>
      <p>
      The browsers we recommend are Mozilla Firefox 3.0
      and Internet Explorer 8.
      </p>
      <div class="separator"></div>]]>
   </message>

   <message id="continueAtOwnRisk"><![CDATA[<p>
      If you continue to log in using ${browser} ${version},
      then you do so at your own risk.
   </p>]]>
   </message>

</messages>
```

Also see the [Browser Support Messages Reference](#) 15 section.

3.2   An explanation of the example XML configuration

Here is an explanation of what the example XML configuration in *Browsers.xml* contains, and how this XML relates to what the end user sees on the screen:

The <cases> tag

```
<cases xmlns="http://schema.caplin.com/CaplinTrader/Browsers"
       default_message_id="defaultNotAllowed"
       default_allow="no">
...
</cases>
```

◆   `<cases>` is the outermost (root) tag.

◆   `default_allow="no"` is the default action for any browser version that is not specified in a `<browser>` tag. The end user is denied access to Caplin Trader Client, and the message (in *BrowserMessages.xml*) whose `id` is `defaultNotAllowed` is displayed. For example:

> Opera 9.64 is not approved to run this application.
> ———————————————————————————————
>
> The browsers we recommend are Mozilla Firefox 3.0
> and Internet Explorer 8.

The <browser> tag

```
<browser name="Firefox" min_version="3.0" max_version="3.5"
            allow="yes" />
```

◆   This instance of the `<browser>` tag specifies Firefox versions 3.0 through 3.5. The attribute `allow="yes"` means that Caplin Trader Client has been fully tested against these versions of Firefox. Since there is no `message_id` attribute specified, the end user is given immediate access to the application – no message is displayed.

This configuration implies that all minor versions of Firefox 3.0 through 3.5 are supported (3.0.x through 3.5.x)

```
<browser name="Firefox"
            allow="warn" message_id="warning" />
```

◆   This instance of the `<browser>` tag specifies all versions of Firefox other than 3.0.x through 3.5.x.
    The attribute `allow="warn"` means that Caplin Trader Client has not been fully tested against these
    versions of Firefox (all versions other than 3.0.x through 3.5.x). The end user is allowed to access the
    application, but a warning message is displayed. For example:

> This application has not been fully tested in Firefox 2.1, and you could
> experience problems if you continue.
> _____
>
> The browsers we recommend are Mozilla Firefox 3.0
> and Internet Explorer 8.
>
> If you continue to log in using Firefox 2.1,
> then you do so at your own risk.
> _____

Note that this instance of the tag must occur *after* the tag specifying Firefox 3.0 through 3.5, so that
access to the application from Firefox 3.0.x through 3.5.x is permitted.

```
<browser name="Internet Explorer" min_version="8.1"
            allow="warn" message_id="warning" />
```

◆   This instance of the `<browser>` tag specifies Internet Explorer (IE) version 8.1.x and higher. The
    attribute `allow="warn"` means that Caplin Trader Client has not been fully tested against these
    versions of IE. The end user is allowed to access the application, but a warning message is
    displayed. For example:

> This application has not been fully tested in Internet Explorer 8.1, and you
> could experience problems if you continue.
> _____
>
> The browsers we recommend are Mozilla Firefox 3.0
> and Internet Explorer 8.
>
> If you continue to log in using Internet Explorer 8.1,
> then you do so at your own risk.
> _____

```
<browser name="Internet Explorer" min_version="8.0" max_version="8.0"
         allow="yes" />
```

◆ This instance of the `<browser>` tag specifies Internet Explorer 8.0. The attribute `allow="yes"` means that Caplin Trader Client has been fully tested against this version of IE. Since there is no `message_id` attribute specified, the end user is given immediate access to the application – no message is displayed.

This configuration implies that all minor versions of IE 8.0 are supported (8.0.x)

```
<browser name="Internet Explorer" min_version="6" max_version="7"
         allow="yes" message_id="ieUpgrade" />
```

◆ This instance of the `<browser>` tag specifies Internet Explorer versions 6.x.x and 7.x.x. The attribute `allow="yes"` means that Caplin Trader Client has been fully tested against these versions of IE. However, before granting the end user access to the application, a recommendation message is displayed. For example:

> This application will be faster and more responsive if you run it in a more modern browser.
> _____
>
> The browsers we recommend are Mozilla Firefox 3.0
> and Internet Explorer 8.
> _____
>
> ☐   Do not show this message again.

When, as in this case, a `message_id` is specified when `allow="yes"`, the end user is given the option to prevent the message being shown again.

```
<browser name="Safari" min_version="4"
              allow="warn" message_id="warning" />
```

◆   This instance of the `<browser>` tag with attribute `allow="warn"` means that Caplin Trader Client has not been fully tested against Safari 4.x.x and above. The end user is allowed to access the application, but the standard warning message is displayed. For example:

> This application has not been fully tested in Safari 4.0.2, and you could experience problems if you continue.
>
> _____
>
> The browsers we recommend are Mozilla Firefox 3.0 and Internet Explorer 8.
>
> If you continue to log in using Safari 4.0.2, then you do so at your own risk.
>
> _____

Any version of Safari *below* 4 is rejected through the default handling specified in `<cases>`.

3.3 Changing the configuration – some rules

Each release of Caplin Trader Client is preconfigured to define the browsers and browser versions that are supported in that release, and the browser support messages that are displayed in the Reference Implementation. You may wish to change the configuration to suit the needs of your particular implementation of Caplin Trader Client. You can do this by editing the files *Browsers.xml* and *BrowserMessages.xml*.

Browsers.xml

You should only make changes to *Browsers.xml* that further restrict the browsers and/or browser versions that can be used, according to the following rules.

Rule 1:
You can remove browsers or browser versions from the `allow="warn"` category. This means that browsers that previously allowed the application to run with a warning message are no longer supported.

For example, the following change removes support for any version of Internet Explorer 8 other than 8.0.x:

```
    <browser name="Internet Explorer" min_version="8.1"
             allow="warn" message_id="warning" />
    <browser name="Internet Explorer" min_version="8.0" max_version="8.0"
             allow="yes" />
```

Rule 2:
You can place further restrictions on browser in the `allow="yes"` category, by reducing the range of versions supported.

For example, the following change removes support for Internet Explorer 6:

```
    <browser name="Internet Explorer"
            min_version="6" min_version="7" max_version="7"
              allow="yes" message_id="ieUpgrade" />
```

Rule 3:
You must not promote unsupported browsers or browser versions to the `allow="warn"` or `allow="yes"` categories.

For example, the following invalid modification allows end users to run Caplin Trader Client Chrome 2.x and upwards without being given a warning message.

INVALID modification 1:

```
    <browser name="Chrome" min_version="2"
             allow="warn" message_id="warning" />
             allow="yes" />
```

The following invalid modification allows end users to run Caplin Trader in Opera 9.6 and upwards, but at the time of writing, this is an unsupported browser.

INVALID modification 2:

```
<browser name=""Opera" min_version="9.6"
            allow="yes" />
```

BrowserMessages.xml

You can change the text of browser support messages supplied with the Reference Implementation of Caplin Trader Client to suit the needs of your end users. For information on how to configure the message text, see the `<message>` 16 tag in the Browser Support Messages XML Reference 16 section.

Rule 4:
Avoid changing the `id` attribute of a message. If you do change an `id` attribute, the corresponding `message_id` attribute(s) in *Browsers.xml* must be changed to the same value.

Rule 5:
Do not delete the messages with the following ids, or change their id settings:

◆   `id="applyIE6Patch"`

◆   `id="enableJavaScript"`

◆   `id="continueAtOwnRisk"`

Although *Browsers.xml* does not refer to these messages, they *are* used by the browser detection code in Caplin Trader Client.

You can change the text of these browser support messages if you wish.

3.4   Technical assumptions and restrictions

XML

The XML markup defined in this document conforms to XML version 1.0 and the XML schema version defined at
http://www.w3.org/2001/XMLSchema.

4   Browser Detection Configuration Reference

This is the reference information for the configuration XML in *Browsers.xml* that detects and validates the browser type and version.

4.1   Ordering and nesting of tags

Each top level tag of the browser detection configuration XML is shown below, together with the child tags that it can typically contain.

> **Tip**:   Advanced users may wish to consult the Relax NG Schema (*Browsers.rnc*) for definitive information on the ordering and nesting of tags.

For a description of each tag and its attributes, see the Browser Detection XML Reference 12 section.

<cases>

This is the outermost tag
```
<cases>
    <browser /> (zero or more)
</cases>
```

<browser>

```
<browser /> (no children)
```

4.2   Browser Detection XML Reference

This section describes the XML tags that you can use to configure browser detection.

Default attribute values

In the tables that follow, if an attribute is not required (Req? = 'N') and there is a default value specified, then not supplying the attribute is equivalent to setting the attribute to this default value. If an attribute is not required and the default is '(none)', then not supplying the attribute can result in one of two behaviors, depending on the particular attribute – either the behavior is as specified in the description column of the table, or there is no effect on the appearance or behavior of the component.

\<browser\>

```
<browser>
```

The \<browser\> tag defines a Web browser (by name and version range), and the action the application takes when an end user tries to run Caplin Trader Client in that browser.

Attributes:

Name	Type	Default	Req?	Description
allow	string	(none)	Y	Determines whether Caplin Trader Client will run in this browser version. Permitted values are: "yes" - Caplin Trader Client will run in this browser version. If a 'message_id' attribute is specified, the corresponding message is displayed. (The end user is given the option to prevent the message being shown again.) "warn" - Caplin Trader Client will run in this browser version, but a warning message is displayed before it runs. When 'allow' is set to "warn", the 'message_id' attribute must also be set. "no" - Caplin Trader Client will not run in this browser version, and a message is displayed to the end user. When allow is set to "no", the 'message_id' attribute must also be set.
max_version	string	(none)	N	The maximum supported version of the browser. This is a numeric string, with or without decimal points. Examples are: "6", "8.3", "8.3.5". If this attribute is not specified, there is no upper limit on the supported version of the browser.
message_id	string	(none)	N	The id of a \<message\> tag in the browser detection messages XML. The \<message\> tag defines a message that can be displayed for this browser version (see the 'allow' attribute).
min_version	string	(none)	N	The minimum supported version of the browser; This is a numeric string, with or without decimal points. Examples are: "5", "8.0", "8.0.7". If this attribute is not specified, there is no lower limit on the supported version of the browser.
name	string	(none)	Y	The name of the browser. This must be one of the following: "Camino", "Chrome", "Firefox", "iCab", "Internet Explorer", "Konqueror", "Mozilla", "Netscape", "Netscape", "OmniWeb", "Opera", "Safari".

<cases>

```
<cases>
```

This is the root tag of the browser validation XML. In addition to acting as a container for the <browser> tags, it also defines the default browser detection behavior for browsers that are not explicitly defined in <browser> tags.

Attributes:

Name	Type	Default	Req?	Description
default_allow	string	(none)	Y	Determines whether Caplin Trader Client will run in a browser that is not defined by a <browser> tag. For a list of the permitted values and associated actions, see the 'allow' attribute of the <browser> tag.
default_message_id	string	(none)	N	The id of a <message> tag in the browser detection messages XML. This is the message that is displayed for any browser not defined in a <browser> tag.

5 Browser Support Messages Reference

This is the reference information for the configuration XML in *BrowserMessages.xml.* This XML defines the messages that are displayed to the end user when a browser is not supported or is not recommended for running Caplin Trader Client.

5.1 Ordering and nesting of tags

Each top level tag of the browser support message XML is shown below, together with the child tags that it can typically contain.

> **Tip**: Advanced users may wish to consult the Relax NG Schema (*BrowserMessages.rnc*) for definitive information on the ordering and nesting of tags.

For a description of each tag and its attributes, see the <u>Browser Support Messages XML Reference</u> [16] section.

\<messages\>

This is the outermost tag
```
<messages>
    <message></message> (zero or more)
</messages>
```

\<message\>

```
<message>  (no children)
```

5.2   Browser Support Messages XML Reference

This section describes the XML tags that you can use to configure browser support messages.

Default attribute values

In the tables that follow, if an attribute is not required (Req? = 'N') and there is a default value specified, then not supplying the attribute is equivalent to setting the attribute to this default value. If an attribute is not required and the default is '(none)', then not supplying the attribute can result in one of two behaviors, depending on the particular attribute – either the behavior is as specified in the description column of the table, or there is no effect on the appearance or behavior of the component.

<message>

`<message>`

This tag defines a message that may be displayed to the end user when the browser name and version are compared against the list of valid browsers. The message text is enclosed between <message> and </message>, and must be defined in a CDATA section. The text can be formatted using HTML formatting tags, such as <p>...</p> to split the displayed text into paragraphs. To include the browser name and version in the displayed message, use the placeholders ${browser} and ${version}; for example:
"Sorry, ${browser} ${version} is not approved for use with this application."

Attributes:

Name	Type	Default	Req?	Description
id	string	(none)	Y	The id of the message. The browser detection XML can refer to this id (see the 'message_id' attribute of the <browser> tag and the 'default_message_id' attribute of the <cases> tag.)

<messages>

`<messages>`

This is the root tag of the browser validation messages document. The <messages> tag simply acts as a container for <message> tags.

Attributes: This tag has no attributes.