webElements 2.47

User Guide

Overview

webElements is a library of custom functions which allows a report developer to embed web controls into a Crystal report. Controls can be used to add additional functionality or interactivity to a report. webElements controls can also be used as a user interface to allow a report to directly interact with a database.

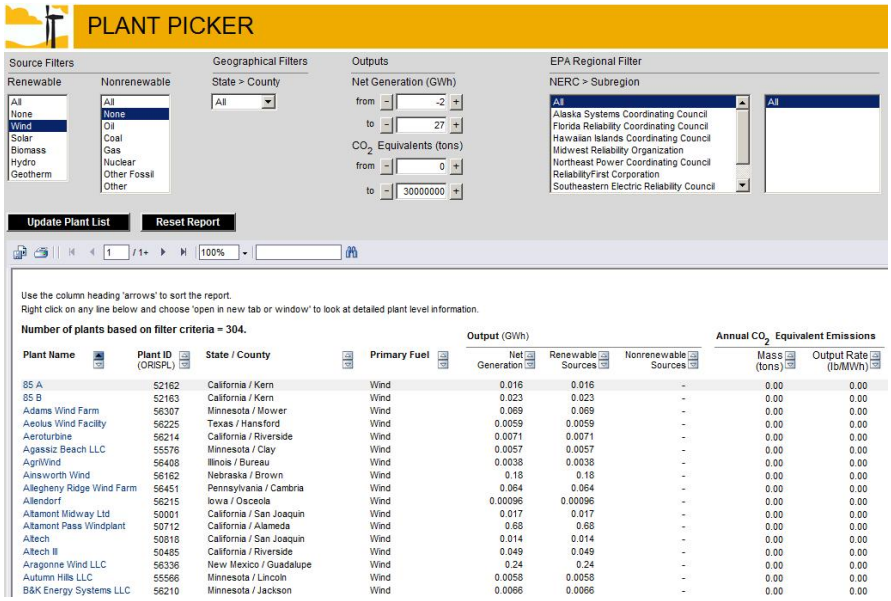
This document describes how to install the webElements custom function suite onto a Java or .Net based BusinessObjects Enterprise system. Additionally, each of the functions and their required parameters are described. A troubleshooting section can be found at the end of the document that will help diagnose and repair common problems.

Contents

Introduction

This Custom Function suite allows report developers to add dynamic web controls to your reports

- Add custom parameter screens for Crystal Reports, Web Intelligence documents, web pages, etc.
- Improve the functionality of your reports with interactive controls, such as check-boxes, select menus, or calendars.
- Create input controls that are an interface to update a database.



Creating a web-based form is as simple as creating a function-driven formula in Crystal Reports

1. Drag and drop required webElements into a Crystal formula.
2. Fill in parameter values of the webElements functions.
3. Add the path of the target form to the formula.
4. Publish the report to the BusinessObjects Enterprise environment.

Report Developers do not need any HTML programming knowledge

- The webElements functions automatically generate the required HTML and JavaScript.
- webElements are Crystal Custom Functions and therefore use input methods identical to existing Crystal Reports functions.
- Makes use of the Business Intelligence tools that you already have. With Crystal Reports and either BusinessObjects Enterprise or Crystal Reports Server report designers can create interactive reports and web-based forms.

- For easier report creation, copy and paste formulae (that have default syntax) from the webElements_247.rpt onto your report

Using webElements in a Crystal Report

To use webElements in a Crystal report you must have access to a BusinessObjects Enterprise or Crystal Reports Server system that is configured to allow pass-through html.

Configuring the server to allow pass-through HTML

When pass-through HTML is enabled on your BusinessObjects Enterprise (BOE) Server or Crystal Reports Server, it is possible to write HTML code that is not pre-processed by the system. This allows a user to create a function that will output HTML tags that will be treated as HTML by the client browser. Normally, if a function outputs HTML tags, those tags are processed by the server and rendered as plain text on the client browser.

By default, pass-through HTML is disabled for security reasons. It is recommended that the System Administrator change the default behaviour of your system.

To enable pass-through HTML for a BI 4 Java Environment

1. Un-deploy the BOE web application in the application server, as documented in the web application deployment guide for your platform.

   Web Application Deployment Guide for Windows / Web Application Deployment Guide for Unix

```
C:\Program Files (x86)\ SAP BusinessObjects\SAP BusinessObjects
    Enterprise XI 4.0\wdeploy>wdeploy

wdeploy tomcat6 -DAPP=BOE undeploy
```

2. Prepare the deployment

```
wdeploy tomcat6 -DAPP=BOE predeploy
```

3. Add context parameter to the Crystal Reports web.xml file

Navigate to <installation path>/SAP BusinessObjects/SAP BusinessObjects Enterprise XI 4.0/wdeploy/workdir/<application server>/application/BOE.war

Open file "BOE.war\WEB-INF\eclipse\plugins\webpath.CrystalReports\web\WEB-INF\web.xml" with a text editor and add the following lines to the context parameter section of the web.xml file.

```
<context-param>

<param-name>
```

```
crystal_encode_html_for_single_line_field_objects
</param-name>
<param-value>no</param-value>
</context-param>
```

4. Deploy BOE web application in the application server, as documented in the web application deployment guide for your platform.

```
wdeploy tomcat6 -DAPP=BOE deployonly
```

To enable pass-through HTML for a Java based environment

1. Locate the `web.xml` configuration file for your BusinessObjects Enterprise installation.

BusinessObjects Enterprise XI

```
C:\Program Files\Business
    Objects\Tomcat\webapps\businessobjects\enterprise11\
    desktoplaunch\WEB-INF\web.xml
```

BusinessObjects Enterprise XIr2

```
C:\Program Files\Business
    Objects\Tomcat\webapps\businessobjects\enterprise115\
    desktoplaunch\WEB-INF\web.xml
```

BusinessObjects Enterprise XI 3.0, XI 3.1, Crystal Reports Server 2008

```
C:\Program Files\Business
    Objects\Tomcat55\webapps\CrystalReports\WEB-INF\web.xml
```

2. Add the following context parameter as the last context parameter in the `web.xml` file. Ensure that this context parameter is in the web.xml file only once or errors will occur in InfoView.

```
<context-param>
    <param-name>
    crystal_encode_html_for_single_line_field_objects
    </param-name>
    <param-value>no</param-value>
</context-param>
```

3. If you are using XI or XIr2 and another web server such as WebLogic, have your server administrator use the deployment console to redeploy the destktop.war file as an application.
4. If you are using XI 3.0, XI 3.1, or Crystal Reports Server 2008 and another web server such as WebLogic, have your server administrator use the deployment console to redeploy the CrystalReports.war file as an application.

To enable pass-through HTML for a .Net, IIS, or WACS based environment

If you are using XI 3.1 or Crystal Reports Server 2008 with .Net, IIS, or WACS pass-through HTML is enable using a web.config file.

1. Locate the `web.config` file for your BusinessObjects Enterprise installation.

BusinessObjects Enterprise XI 3.1

```
C:\Program Files\Business Objects\BusinessObjects Enterprise
    12.0\Web Content\InfoViewApp\CrystalReports\web.config
```

2. Change the web.config file so that it looks like the "After" section below.

Before:

```
<configSections>

      <section name="CrystalReports"
    type="System.Configuration.NameValueFileSectionHandler,System,
    Version=1.0.5000.0, Culture=neutral,
    PublicKeyToken=b77a5c561934e089" />

    </configSections>

    <CrystalReports>

            <add key="path.dhtmlViewer"
    value="/crystalreportviewers12" />

    </CrystalReports>
```

After:

```
<configSections>

      <section name="CrystalReports"
    type="System.Configuration.NameValueFileSectionHandler,System,
    Version=1.0.5000.0, Culture=neutral,
    PublicKeyToken=b77a5c561934e089" />

      <sectionGroup name="businessObjects">

            <sectionGroup name="crystalReports">

                  <section name="crystalReportViewer"
    type="System.Configuration.NameValueFileSectionHandler,System,
    Version=1.0.5000.0, Culture=neutral,
    PublicKeyToken=b77a5c561934e089">

                  </section>

            </sectionGroup>

      </sectionGroup>

    </configSections>

    <CrystalReports>

            <add key="path.dhtmlViewer"
    value="/crystalreportviewers12" />

    </CrystalReports>

    <businessObjects>

      <crystalReports>

            <crystalReportViewer>

                  <add
    key="EncodeHtmlForSingleLineFieldObjects" value="false"/>
```

```
            </crystalReportViewer>
        </crystalReports>
    </businessObjects>
```

If you are using XI or XIR2 pass-through HTML is enable using a Windows registry key.

The webElements installation files include two .reg files that you can merge with your registry. Each registry file is contained within a separate zip file that corresponds to your version of Business Objects Enterprise. There is one file for Business Objects Enterprise XI, and one file for Business Objects Enterprise XI release 2.

For BusinessObjects Enterprise XI:

1. Locate `XIDotNetRegKey.zip`.
2. Unzip `passthruhtml.reg` from `XIDotNetRegKey.zip`.
3. Double-click `passthruhtml.reg` to merge the key with the Windows registry.
4. In the Registry Editor prompt, click Yes.
   The following key will be added to the Windows registry:

```
[HKEY_LOCAL_MACHINE\SOFTWARE\Business Objects\Suite
    11.0\Components\DHTMLViewer]

"EncodeHTMLForSingleLineFieldObjects"="no"
```

For BusinessObjects Enterprise XI Release 2:

1. Locate `XIR2DotNetRegKey.zip.`
2. Unzip `passthruhtml.reg` from `XIR2DotNetRegKey.zip.`
3. Double-click `passthruhtml.reg` to merge the key with the Windows registry.
4. In the Registry Editor prompt, click Yes.
   The following key will be added to the Windows registry:

```
[HKEY_LOCAL_MACHINE\SOFTWARE\Business Objects\Suite
    11.5\Components\DHTMLViewer]

"EncodeHTMLForSingleLineFieldObjects"="no"
```

Installing webElements

webElements can be installed from a report to a repository or from a repository to a report. The first time that you use webElements, you must install the functions to the BusinessObjects Enterprise repository that will host your reports.

You must install the custom function suite from the repository to each report that contains webElements.

Adding webElements to a Repository

In order to correctly display webElements in a report, you must install the most recent webElements functions to BusinessObjects Enterprise.

1. Open the `webElements_247.rpt` file included with the webElements installation files.
2. From the Report menu, click Formula Workshop
3. Expand the Report Custom Functions > webElements 2.47 > Admin nodes.
4. Right click on the `WEInstaller` function and select Add to Repository.
5. When prompted to add the additional custom functions to the repository, click Yes.

Note: The installation process may take several minutes.

Adding webElements to a New Report

To use webElements in a report, you must add the webElements custom functions suite to the report from a BusinessObjects Enterprise repository. You must repeat this step for each report that uses the webElements custom functions.

1. Open a report in Crystal Reports XI (or later).
2. From the Report menu select Formula Workshop.
3. Expand the Repository Custom Functions> Repository >webElements 2.47 > Admin nodes.
4. Right click on the `WEInstaller` function and select Add to Report.
5. When prompted to add the additional custom functions to the report, click Yes.

The webElements suite is now ready to use in your report. The suite must be added to any report or sub-report in which webElements are used.

Removing webElements

To uninstall webElements from either a BusinessObjects Enterprise repository or a report file you must manually delete each function.

1. Open a report in Crystal Reports XI (later).
2. From the Report menu select Formula Workshop
   - Expand the Repository Custom Functions node to uninstall webElements from a BusinessObjects Enterprise repository
   - Expand the Report Custom Functions node to uninstall webElements from a report
3. Expand the webElements 2.47 node
4. For each webElements function, select the function and press Delete

Requirements for all Crystal Reports

Every report using webElements must contain the following:

1. A formula containing a WEBuilder function if any functions from the webElements 2.47 > InputsAndControls are used on a report.

2. A formula containing a submit button or link (found in the webElements 2.47 > ButtonsAndLinks node) is required if you wish to interact with the current report or to target another report
3. An input or control to interact with a current report target document (found in the Custom Functions in the webElements 2.47 > InputsAndControls node of the webElements_247.rpt)
4. A WEPlatform function set to the version of BusinessObjects Enterprise that you are using. After installing the webElements 2.47 suite open the WEPlatform function from the webElements 2.47 > Admin node on your report. By default this is set for BusinessObjects XI 3.0 (includes BusinessObjects XI 3.1 and Crystal Reports Server 2008) java. Further instructions are in the function itself and later in this guide.

Report sections are less than one page in length only:

All webElements should be in a section that does not extend past one page. The report itself can be more than one page but webElements will not function properly when they are in a section that spans more than one page. This is due to a limitation in html and working with multi-page html documents that the viewer creates.

Note that the section that webElements are in can be repeated on more than one page as long as the section's length is less than one page…i.e. webElements can be in a Page Header section or in a repeated Group Header section that repeats on each page.

Easy Report Creation with webElements

You can copy formulae from the webElements_247 report for easier report creation.

There are formulae on the webElements_247 report that contain default syntax for each relevant webElements control. You can copy a formula that contains default syntax for any function to your new report. Afterwards, edit the function parameters to the desired values.

Use this report only in the Crystal Reports designer as it is not formatted for viewing in InfoView. Ensure that you have installed webElements and have read the Requirements for all Crystal Reports section of the webElements User Guide.

To start building reports using webElements quickly:

1. Open webElements_247.rpt in the Crystal Reports designer
2. Find the type of control that you want to use on your report
3. Right click on the formula and choose Copy
4. Go to the report that you are developing and Paste the formula on to your report
5. Edit the formula to use your desired values and settings

6. Repeat steps 2 to 5 for any required controls.
7. Copy the WEBuilder formula to a section below all of the other webElements formulae
8. Edit the WEBuilder formula to include the formulae that you are using in your report
9. Save your report to your Business Objects Enterprise environment and open your report in InfoView to test
10. Consult the User Guide and sample reports for further help and more information

Samples

This section includes several samples that will walk you through the creation of a report that uses the webElements custom function suite.

Creating a report that includes webElements

Before you can make use of any of the webElements functions, you must create a report, add the webElements functions, and save it to BusinessObjects Enterprise. This procedure is a pre-requisite for all other example.

1. Create a blank Crystal report using Crystal Reports XI (or later).
2. From the Report menu, select Formula Workshop.
3. Connect to the repository to which you have installed the webElements custom function suite.
   - Expand the Repository Custom Functions node.
   - Expand the node corresponding to your BusinessObjects enterprise server.
   - Enter your connection information and click OK.
4. Add the webElements functions to your report.
   - Expand the webElements 2.47 > Admin nodes.
   - Right-click on WEInstaller.
   - Click Add to Report.
   - When prompted to add multiple formulae to the report, click OK.
5. Close the Formula Workshop
6. Save the report to your BusinessObjects Enterprise repository as `webelementsreport` without the .rpt extension.

Add a select menu to a report

This sample demonstrates how to add a select menu control to a Crystal report using the webElements custom function suite.

Pre-requisites Before you can add a select menu to a report, you must first add the webElements custom functions to the report and save it to BusinessObjects Enterprise. See the section entitled “Installing webElements” for more information.

7. From the Report menu, select Formula Workshop.
8. Right click on the Formula Fields node, and select New. When prompted, name the new formula 'selectmenu' and click OK.
9. In the Formula Editor, enter the following code.

```
stringvar ElementName:= "Select1";
stringvar ElementValues:= "1|2|3|4";
stringvar ElementDisplays:= "One|Two|Three|Four";
```

```
stringvar ElementDefault:= "1";

WESelect (ElementName, ElementValues, ElementDisplays,
      ElementDefault, "")
```

10. Click Save.
11. Right click on the Formula Fields node and select New. When prompted, name the new formula `'builder'`. This formula will create all of the JavaScript variables needed for the select menu.
12. In the Formula Editor, create a new `stringvar` called `allElements`, and add the `select` function.

```
stringvar allElements:= {@selectmenu};
```

13. Below the `allElements stringvar`, enter the `WEBuilder` function, and pass it the `allElements stringvar`, and set the debug level to '2'. By doing this, you will have a pop up window that displays the OpenDocument URL created by your webElements formula.

```
WEBuilder(allelements, 2)
```

14. Click Save and Close.
15. In the Field Explorer, expand the Formula Fields node.
16. Drag and drop the `calc` formula from the Field Explorer to the report.
17. Drag and drop the `builder` formula from the Field Explorer to the report ensuring that the `builder` formula is below the `selectmenu` formula.
18. Save the report to your BusinessObjects Enterprise repository.

When you view the report in InfoView, you should see a select menu control.

Pass a prompt to a webElements control

This sample demonstrates how pass a report prompt value to a webElements control.

Pre-requisites You must first add the webElements custom functions to the report and save it to BusinessObjects Enterprise. See the section entitled "Creating a report that includes webElements" for more information. This sample assumes that you have completed the steps outlined in 'Add a select menu to a report', above.

1. In the Field Explorer, right-click on the Parameter Fields node and click New.
   - Enter 'Select1' in the Name field. Note that the parameter name matches the ElementName that you gave to the select menu.
   - Click OK.
2. Save the report to your BusinessObjects Enterprise repository.

When you view the report in Infoview, you should be prompted for an Integer value. The Integer entered at the prompt screen will be used as the default number for the calculator control.

Add a submit button to a report

This sample demonstrates how to add a submit button to a report and have the report update upon pressing the submit button.

Pre-requisites You must first add the webElements custom functions to the report and save it to BusinessObjects Enterprise. See the section entitled "Creating a report that includes webElements" for more information. This sample assumes that you have completed the steps outlined in 'Pass a parameter to a webElements control', above.

1. From the Report menu, select Formula Workshop.
2. Right click on the Formula Fields node, and select New. When prompted, name the new formula '`submit`' and click OK.
3. In the Formula Editor, enter the following code.

```
stringvar path:= WETargetPath ("rpt", "Name", "webelementsreport", "");
WESubmitButton ("update", path, "")
```

4. Click Save.
5. Left click on the `builder` formula in the Formula Fields node.
6. In the Formula Editor, change the `builder` formula to the following code.

```
stringvar allElements:= {@selectmenu} + {@submit};
WEBuilder(allelements, 2)
```

7. Click Save and Close.
8. In the Field Explorer, expand the Formula Fields node.
9. Drag and drop the `submit` formula from the Field Explorer to the report ensuring that the `submit` formula is above the `builder` formula.
10. Save the report to your BusinessObjects Enterprise repository.

When you view the report in InfoView, you should see a submit button. Pressing the submit button should repost the report with the current select menu value.

webElements Function Reference

This section outlines each of the functions in the webElements custom function suite and its required parameters. Click on a function name to go to the detailed information for that function.

Quick Reference

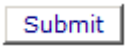
Main Elements

WEBuilder	The WEBuilder function generates the HTML required to run the other webElements functions. Required for most reports.
WETargetPath	Defines the target URL for report actions. Required for most reports.

Admin

CRDHTMLViewerSDK	This is the Crystal Reports DHTML Viewer SDK.
WEAdminNotes	Used as a change log.
WEInstaller	Used to install the webElements suite to a repository or to a report.
WEPlatform	Used to specify which version of the BusinessObjects Enterprise platform you are using.
WEUtilities	Contains utilities that allow interaction with the DOM elements that the webElements library writes out.
WEValidator	For internal use only. Contains code for validation of webElements controls.
WEWindowUtilities	For internal use only. Contains code to determine how reports and or browser windows are opened.

Buttons and Links

WESubmit	Creates a button or link that submits all chosen input and control values to target URL's when pressed. 
WESubmitImage	Uses a set of images that submit all chosen input and control values to target URL's when clicked.
WESubmitLinkList	Creates several links that submit all chosen input and control values to the target URL

when clicked.

Go to report 1

Go to report 2

Go to report 3

WESubmitLinkRadio	Creates a radio button control that submits all chosen input and control values to target URL's when clicked.
WESubmitLinkSelect	Creates a drop-down list that submits all chosen input and control values to the target URL when a selection is made.

Formatting

WEBreak	Adds one or more line breaks.
WECollapsibleSection	Creates a collapsible section in which text and controls can be displayed.
WEFlyoutSections	Creates a set of fly-out sections in which text and controls can be displayed.

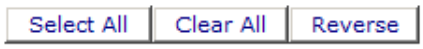
WEFont	Used to format the fonts of most inputs and controls.
WEFontEXT	Used to format the fonts of most inputs and controls.
WEIFrame	Creates an IFrame within a report.
WEImage	Adds an image to a report.

WEMarquee	Creates a region of the report where content scrolls from right to left.
WEMarqueeEXT	Creates a region of the report where content scrolls from right to left.
WEPulldownSections	Creates a set of pull-down sections in which text and controls can be displayed.

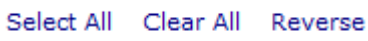
WEScroll	Creates a region of the report where content scrolls from bottom to top.
WESpace	Adds a non-breaking space.
WETextObject	Creates a formatted block of text.
WETextObjectExt	Creates a formatted block of text.
WEViewer	Adds controls that change the look of the Crystal Report viewer.

Form Controls

WEControlDisplaySelect	Creates a drop-down list that will hide or show other controls.
WEOutputTextArea	
WESelectAllClearAllReverseButtons	Creates a set of three buttons that will set, clear, or reverse all values of a control.

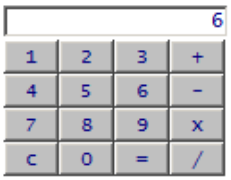


WESelectAllClearAllReverseLink	Creates a set of three hyperlinks that will set, clear, or reverse all values of a control.



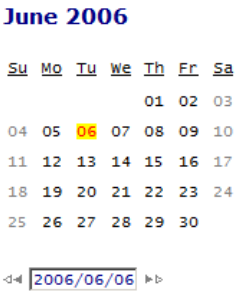
Inputs and Controls

WECalculator	Adds a calculator to the report.



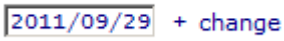
WECalendar

Adds a calendar or date picker control to the report.



WECalendarPopup

Adds a pop-up calendar or date picker control to the report.



WECalendarRange

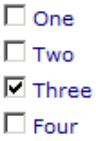
Create two embedded calendars or date picker controls that allow a user to select a start and end date for a range.

WECalendarRangePopUp

Create two calendars or date picker controls, in a pop-up section, that allow a user to select a start and end date for a range.

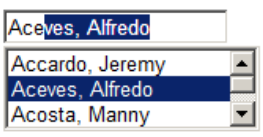
WECheckBox

Creates a check box control that allows the user to choose one or more values from a collection of checkboxes.



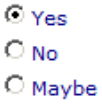
WEComboBoxSelect

Creates a combination text box and select control that allows the user to search for values in the select using the text box.



WERadio

Creates a radio button control that allows the user to choose only one value from a set of choices.



WESelect

Creates a drop-down menu that allows the user to choose a single value from a set of choices.

WESelectCascade

Creates a drop-down menu that is part of a cascading prompt set. This type of control allows the user to choose a single value from a set of choices.

WESelectCascadeExt

Creates a drop-down menu that is part of a cascading prompt set. This control allows for the value passed to the result URL to be different than the selection options.

WESelectDate

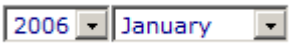
Creates a set of three drop-down menus to select a year, month, and day.

WESelectDateRange

Creates two sets of three drop-down menus to select a year, month, and day.

WESelectDuo

Creates two drop-down menus. When the page is submitted, the values from both drop-down menus will be concatenated and passed as a single parameter to the URL.



WESelectMulti

Creates a list of items that allows a user to select one or more items from a list.

WESelectMultiCascade

Creates a drop-down menu that is part of a cascading prompt set.

WESelectMultiCascadeExt	Creates a drop-down menu that is part of a cascading prompt set. This control allows for the value passed to the result URL to be different than the selection options.
WESelectTrio	Creates three drop-down menus. When the page is submitted, the values from the three drop-down menus will be concatenated and passed as a single parameter to the URL.

WESpin	Creates a "spinner" type control that allows a user to increment and select a number.

WETextArea	Creates a multi-line text area input control.

WETextBox	Creates a single line text box control.

WETextBoxAndCheckBox	Creates a text input that is bound to a checkbox control. The value of both the text box and checkbox are passed to the result URL.

WETextBoxMulti	Creates a multiple value text box control.

WETreePicker	Creates a tree picker control where chosen tree menu values are displayed in a text area.

WETreePickerExt	Creates a tree picker control where chosen tree menu values are displayed in a text area. This control allows for the value passed to the result URL to be different than the selection options.

Menus

WETabMenu	Adds a tab menu to a report.
WETreeMenu	Adds a tree menu to a report.

Other

ArrayPositionFinder	Finds the position of a specific value in a String Array.
WEAutoRefresh	Refreshes a report automatically.
WEMailer	Creates email when a report is opened.

Target Paths

WETargetPathExt	Defines the target URL for submit actions and defines the target window properties.

Main Elements

Requirement: One formula containing the WEBuilder function is required to generate the web objects in the Crystal Report.

WEBuilder(FormElements, ProductionMode)

The `WEBuilder` function generates the HTML required to run the other webElements functions. A single `WEBuilder` function must appear in an unsuppressed section of the report.

Parameters:

FormElements is a String list of all of the webElements in the report.

ProductionMode is used by the report developer for debugging the URL output. `ProductionMode` has three possible values:

- If `ProductionMode` is set to '1' the result URL will appear in a pop-up alert. The target URL will not be run.
- If `ProductionMode` is set to '2' the result URL will appear in a pop-up alert and the target URL will run.
- If `ProductionMode` is set to '3' the target URL will run but no pop-up alert will appear.

Set `ProductionMode` to either '1' or '2' during when designing and debugging a report. Set `ProductionMode` to '3' when placing the report into a production environment.

WETargetPath(DocType, IDType, ID, OtherParams)

The `WETargetPath` function creates a target URL. This target URL is used to pass parameters to other reports in the system. `WETargetPath` utilizes the OpenDocument function to link to other reports.

Parameters:

DocType is a String value that represents the type of document being linked to. `DocType` can be set to one of the following values.

- "rpt" for a Crystal report
- "wid" for a Web Intelligence document.
- "car" for an OlapI application
- "web" to open a web page

As an example of opening a web page, the syntax for WETargetPath would be similar to the code below.

WETargetPath("web", "", "http://www.google.com", "");

IDType represents the type of the ID passed in the ID parameter. Set `IDType` to "CUID" if you are linking to an object in the repository by its ID. Set `IDType` to "Name" if you are linking to an object in the repository by its name.

ID is either the CUID or the Name of the object being linked to.

The type of value passed to the `ID` parameter depends upon the value passed to the `IDType` parameter.

OtherParams are any other parameters you wish to pass in the URL string that will not be passed by the webElements functions. For example, set `OtherParams` to `&lsSCountry="USA"` to set the country prompt of the report to USA.

Use the `OtherParams` parameter to pass control values to an IFrame, a named window / named viewer.

To pass control values to an IFrame, set `OtherParams` to `"weIframe="` plus the IFrame name. This is useful if you wish to pass values to a Crystal Report or Web Intelligence document that is embedded into your main report with the `WEIFrame` function.

To pass control values to a new window each time, set `OtherParams` to `"weWindow=New"`.

To pass control values to a name window, set `OtherParams` to `"weWindow="` plus the window name. This is useful if you wish to pass values to a Crystal report or Web Intelligence document that is in a named window. Using named windows will prevent a new window from being opened each time.

Remarks:

The `WETargetPath` function specifies the default location of the `openDocument` function for your installation of BusinessObjects Enterprise. The default location is selected as a result of the value specified in the `WEPlatform` function.

Admin

This section includes functions in the Admin folder of the webElements function library. Administrative functions are use to install or validate webElements functions. These functions are not used in regular report design.

WEInstaller

The `WEInstaller` function is used to install the webElements suite to a repository or to a report. See the section entitled Installing webElements for more information.

The first time that you use webElements, you must install the functions to the BusinessObjects Enterprise repository that will host your reports. You must then install the custom function suite from the repository to each report that contains webElements.

WEPlatform

This function is used to specify which version of the BusinessObjects Enterprise platform you are using. You must customize this function so that it refers to the correct system. By default it is set to the BusinessObjects Enterprise XI 3.0 for Java. Available options for `WEPlatform` are:

- "XI Java" for BusinessObjects Enterprise XI for Java
- "XI .Net" for BusinessObjects Enterprise XI for .Net
- "XIr2 Java" for BusinessObjects Enterprise XI release 2 for Java
- "XIr2 .Net" for BusinessObjects Enterprise XI release 2 for .Net
- "XI 3.0 Java" for BusinessObjects Enterprise XI release 3x or Crystal Reports Server 2008 for Java
- "XI 3.0 .Net" for BusinessObjects Enterprise XI release 3x or Crystal Reports Server 2008 for .Net

If you are unsure which version of BusinessObjects Enterprise you are using ask your BusinessObjects Enterprise administrator.

WEValidator

`WEValidator` is used to validate inputs and controls used in a report. Calls to `WEValidator` are automatically made by other functions. This function does not need to be modified or called directly in any report formulae.

WEWindowUtilities

`WEWindowUtilities` is used to determine how reports or web browsers are opened. Calls to `WEWindowUtilities` are automatically made by other functions. This function does not need to be modified or called directly in any report formulae.

Buttons and Links

This section includes functions in the ButtonsAndLinks folder of the webElements function library. These functions will add buttons, hyperlinks, or hyperlinked images to your report that can then be used to submit a URL to a target window or IFrame.

WESubmit (ElementName, Type, LinkText, Paths, ElementFont)

The WESubmit function creates a link or button that submits all selected input and control values to the target URL when clicked.

The WESubmit function can be placed in a different formula, section or group from the webElements controls it affects.

Parameters:

ElementName is a unique name assigned to the control. This name does not have to match a prompt / parameter name.

Type determines what kind of submit control is used. This parameter is either "Link" or "Button".

LinkText is the text that will appear on the link or button.

Paths is a character separated list of the URL paths to the target reports. Use the "|" character to separate multiple elements. When the end user presses the submit control, all targets defined in the paths parameter will be opened. For example:

```
WETargetPath ("rpt", "Name", "Sales Report", "weWindow=New") + "|"
    + WETargetPath ("rpt", "Name", "Cost Report",
    "weWindow=namedwindow1")
```

Use the WETargetPathExt function if you wish to have a report open in a custom window where the size and browser toolbars are specified.

Using weWindow=New in the last parameter of WETargetPath will open the report in a new window each time.

Using weWindow=yourname in the last parameter of WETargetPath will open the report in a named window.

ElementFont is used to format the text on the link or button. The report developer can use the WEFont function in the Formatting functions to easily define a formatted font style.

WESubmitImage(ElementName, ImageLocations, Paths, ToolTip, Width, Height)

The WESubmitImage function creates a hyperlinked image set that allows the user to submit all chosen input and control values to the target URL.

The WESubmitImage function does not have to be in the same formula as any of the controls or in the same area or section of the report where the controls are.

Parameters:

ElementName is a unique name assigned to the control. This name does not have to match a prompt / parameter name.

ImageLocations is a character separated list that contains the paths to the images (e.g. http://server.com/path/imagename.gif) or file paths to the images (e.g. c:\folder\imagename.gif). Use the "|" character to separate multiple image files.

Up to three (3) images can be used. The first image is the 'base' image, the second image is the 'hover over' image, and the third image is the 'on click' image.

Paths is a character separated list of the URL paths to the target reports. Use the "|" character to separate multiple elements. For example:

```
WETargetPath ("rpt", "Name", "Sales Report", "") + "|" +
    WETargetPath ("rpt", "Name", "Cost Report", "")
```

Tooltip is the text that will appear as a browser tooltip when a mouse cursor is hovered over the image.

Width is a String that represents the image width. Use an integer such as "66" to give a width in pixels, "2in" for a width in inches, or "2cm" for a width in centimeters. Leave the width blank "" to use the default width of the image.

Height is a String that represents the image height. Use an integer such as "66" to give a height in pixels, "2in" for a height in inches, or "2cm" for a height in centimeters.. Leave the height blank "" to use the default height of the image.

WESubmitLinkList(LinkTexts, Paths, AlignVertically, Spacing, ElementFont)

The `WESubmitLinkList` function creates a list of hyperlinks that allows the user to choose a target URL and to submit all selected input and control values to that target URL.

The `WESubmitButton` element can be placed in a different formula, section or group from the webElements controls it affects.

Parameters:

LinkTexts is a character separated list of the text that will appear for the hyperlinks. Use the "|" character to separate multiple elements.

E.g. ">> Go to sales report|>> Go to cost report".

Paths is a character separated list of the URL paths to the target reports. Use the "|" character to separate multiple elements. For example:

```
WETargetPath ("rpt", "Name", "Sales Report", "") + "|" +
    WETargetPath ("rpt", "Name", "Cost Report", "")
```

AlignVertically is a Boolean value. Set `AlignVertically` to True to align the URLs vertically. Set `AlignVertically` to False to align the URLs in one horizontal line.

Spacing is a number value representing the number of line breaks between URLs if `AlignVertically` is set to True, or the number of spaces between URLs if `AlignVertically` is set to False.

ElementFont is used to format the text of the hyperlink. The report developer can use the `WEFont` function in the Formatting functions to easily define a formatted font style. Note: This is a single value that will format all URLs generated by this function.

WESubmitLinkRadio(ElementName, LinkTexts, Paths, ElementDefault, SubmitLinkLabel, AlignVertically, ElementFont, InvalidMessage)

The `WESubmitLinkRadio` function creates a radio button control. When an item is selected from the control, the page will submit all selected input and control values to the target URL.

The `WESubmitLinkRadio` element can be placed in a different formula, section or group from the webElements controls it affects.

Parameters:

ElementName is a unique name assigned to the control. This name does not have to match a prompt / parameter name.

E.g. "SLR1"

LinkTexts is a character separated list of the text that will beside the radio buttons. Use the " | " character to separate multiple elements.

E.g. "Sales Report | Logistics Report".

Paths is a character separated list of the URL paths to the target reports. Use the " | " character to separate multiple elements. For example:

```
WETargetPath ("rpt", "Name", "Sales Report", "") + "|" +
    WETargetPath ("rpt", "Name", "Cost Report", "")
```

ElementDefault is used to preselect a radio control member.

E.g. WETargetPath ("rpt", "Name", "Sales Report", "")

SubmitLinkLabel is an optional link that will appear below the radio button control.

If SubmitLinkLabel is left blank, "", then the URL will be generated whenever a radio button is selected. If SubmitLinkLabel is not blank, e.g. ">> Submit", then the URL will only be generated once the link below the radio control is clicked.

The font for SubmitLinkLabel is, by default, the same font used by the radio control text displays. The SubmitLinkLabel font can be changed by editing the syntax of the WESubmitLinkRadio function. Further instructions are in the function syntax.

AlignVertically is a Boolean value. Setting `AlignVertically` to True aligns the radio buttons and display values vertically. Setting this value to False or leaving the parameter empty places the radio buttons and display values in one horizontal line.

ElementFont is used to format the text of the display elements. The report developer can use the `WEFont` function in the Formatting functions to easily

define a formatted font style. Note: This is a single value that will format all URLs generated by this function.

InvalidMessage is the message that will be displayed in an alert pop-up if no radio buttons are selected at the time of submission. Leaving this parameter blank, "", will not activate validation for the control.

WESubmitLinkSelect(ElementTitle, LinkText, Path, ElementFont)

The `WESubmitLinkSelect` function creates a drop-down list. When an item is selected from the list, the page will submit all selected input and control values to the target URL.

The `WESubmitButton` element can be placed in a different formula, section or group from the webElements controls it affects.

Parameters:

ElementTitle will appear as the first item in the drop down list. It is used only as a display and will not create a hyperlink.

E.g. "Select target report"

LinkText is a character separated list of the text that will appear for the hyperlinks. Use the "|" character to separate multiple elements.

E.g. ">> Go to sales report|>> Go to cost report".

Path is a character separated list of the URL paths to the target reports. Use the "|" character to separate multiple elements. For example:

```
WETargetPath ("rpt", "Name", "Sales Report", "") + "|" +
    WETargetPath ("rpt", "Name", "Cost Report", "")
```

ElementFont is used to format the text of the hyperlink. The report developer can use the `WEFont` function in the Formatting functions to easily define a formatted font style. Note: This is a single value that will format all URLs generated by this function.

Formatting

This section includes functions in the Formatting folder of the webElements function library. These functions can be used to add images to your report, change the font of text elements, or manually insert spacing.

WEBreak(N)

The `WEBreak` function is used to create one or more line breaks between elements if you have more than one element in a formula.

Parameters:

N is an integer representing the number of line breaks to place between elements.

Example:

The following is an example formula containing the `WEBreak` function. This formula creates a checkbox control followed by, two line breaks, and a drop-down list.

```
WECheckBox("Country", "Canada|USA|Mexico", "Canada|USA|Mexico",
    "Canada", True, "", "Checked", "Please select at least one
    country.") +

WEBreak(2) +

WESelect("Value", "1|2|3|4|5|6", "One|Two|Three|Four|Five|Six",
    "One", "")
```

WECollapsibleSection(ElementName, SectionElements, OpenText, CloseText, ElementFont, SectionWidth, SectionHeight)

The `WECollapsibleSection` function creates a section that can be opened and closed on a report. These sections can contain webElements text objects, inputs, and controls.

The `WECollapsibleSection` function has syntax that can be further edited to match the desired look and feel. Open this function in the Formula Workshop of Crystal Reports for further information. The background, section margins, border, and open / close icons and fonts can be modified within the function syntax.

Parameters:

ElementName is a unique name that the report developer assigns to the section.

SectionElements is a String list of all of the webElements in the section.

OpenText is a String that will be displayed when the section is closed (e.g. "Open prompt section").

CloseText is a String that will be displayed when the section is open (e.g. "Close this section now").

ElementFont formats both the OpenText and CloseText displays. The report developer can use the `WEFont` function in the Formatting functions to easily define a formatted font style.

SectionWidth is a String that can be in inches (e.g. “3in”) centimeters (e.g. “6cm”), or pixels (e.g. “1600pi”).

SectionHeight is a String that can be in inches (e.g. “3in”) centimeters (e.g. “6cm”), or pixels (e.g. “1600pi”).

Example:

The following is an example formula containing the `WECollapsibleSection` function.

```
stringvar sectionfonts := WEFont (“Verdana”, 8, “Blue”, “Center”,
    True, False, “Underline”, “Navy”);

stringvar sectionelements:= {@selectmenu} + {@submitbutton};

stringvar collapsiblesection1:= WECollapsibleSection (“section1”,
    sectionelements, "View Controls", "Hide Section",
    "sectionfonts", "3in", "4in")
```

WEFlyoutSection(ElementName, ElementHeight, ContentWidth, ElementHeaders, ElementContent)

The `WEFlyoutSection` function creates a set of fly-out sections that can be opened and closed on a report. These sections can contain webElements text objects, inputs, and controls.

The `WEFlyoutSection` function has syntax that can be further edited to match the desired look and feel. Open this function in the Formula Workshop of Crystal Reports for further information. The background, section margins, border, and fonts can be modified within the function syntax.

For best results, also ensure that plain or formatted text that you wish to use in a `WEFlyoutSection` is inside a `WETextObject` or a `WETextObjectExt` function.

Parameters:

ElementName is a unique name that the report developer assigns to the set of sections.

ElementHeight is a String that can be in inches (e.g. “3in”) centimeters (e.g. “6cm”), or pixels (e.g. “1600pi”).

ContentWidth is a String that can be in inches (e.g. “3in”) centimeters (e.g. “6cm”), or pixels (e.g. “1600pi”). This sets the width of each individual section.

ElementHeaders is a String Array of the text that will be displayed in the individual section headers.

ElementContent is a String Array of the content that will be displayed in each section.

Ensure that the number of items in the ElementHeaders array matches the number of items in the ElementContent array.

Example:

The following is an example formula containing the `WEFlyoutSection` function.

```
stringvar fsheight:= "6cm";

stringvar fswidth:= "4cm";

stringvar array fsheaders:= ["section one","section two","section
    three","section four"];

stringvar array fscontent:=
    [{@text1},{@iframe},{@calendar},{@text3}];

WEFlyoutSections ("fs1", fsheight, fswidth, fsheaders, fscontent)
```

WEFont (FType, FSize, FColour, FAlignment, FBold, FItalic, FDecoration, FBackground)

The WEFont function is used to format the fonts of any input or control elements. It is used with any element that has a Font parameter in the function.

Parameters:

FontType is a string value that defines the font to use. The default value is Verdana.

FontSize is a number that defines the size of the font in points. The default value is 9 pt.

FontColour defines colour of the text. This can be a string such as “Green” or a hex value such as “B51626”. The default value is black.

FontAlignment will change the alignment of the text. Choose one of the following values: “Left”, “Right”, “Justify” or “Center”. The default value is left aligned.

FontBold is a Boolean value. Set to True to make the font bold face. The default value is False.

FontItalic is a Boolean value. Set to True to make the font italicized. The default value is False.

FDecoration is a string variable used for the font decoration.

Choose one of the following values: “”, “underline”, “overline”, or “line-through”. The default value is “None”.

FBackground defines the background colour of the text. This can be a string such as “Green” or a hex value such as “B51626”.

Example:

The following is an example formula containing the `WEFont` function.

```
stringvar checkboxfont := WEFont (“Verdana”, 8, “Blue”, “Center”,
    True, False, “Underline”, “Navy”);

stringvar checkboxcontrol := WECheckBox(“Country”,
    “Canada|USA|Mexico”, “Canada|USA|Mexico”, “Canada”, True,
    checkboxfont, “Checked”, “Please select at least one
    country.”)
```

WEFontEXT (FType, FSize, FColour, FAlignment, FBold, FItalic, FDecoration, FBackground)

The WEFontEXT function is used to format the fonts of any input or control elements. It is used with any element that has a Font parameter in the function.

AIthough WEFontEXT shares identical parameters to WEFont its syntax can be modified in the Formula Workshop of Crystal Reports to format more properties.

These properties are activated when the user's mouse hovers over an object, when the user clicks on an object, or when the user's mouse stops hovering over an object.

WEIFrame(ElementName, Path, Width, Height, Scroll)

Note: to have a Crystal Report in a transparent IFrame, a WEViewer function must be added to the IFrame report.

The background color (in the WEViewer) of this report must be changed to the following:

BackgroundColor:="transparent";

stringvar BackgroundImage:="none";.

The `WEIFrame` function is used to render a web page within the report viewer. The frame can be used to display another portion of your web portal, another report, etc.

The `WEIFrame` function syntax can be edited to allow for a transparent background. Open the `WEIFrame` function in the Report menu, Formula Workshop for more information.

Parameters:

ElementName is a unique name that the report developer assigns to the IFrame. This is important if a report is being developed with a report viewer IFrame that is targeted with controls on the report.

Path is a String that represents the virtual path to the frame display.

Width is a Number that represents the frame width in pixels.

Height is a Number that represents the frame height in pixels.

Scroll is a String value used to turn scrolling within the IFrame on or off. Set to "Yes" or "On" to enable scrolling, set to "No" or "Off" to disable scrolling. This will not overwrite any scroll code in the page being displayed within the frame.

Example:

The following is an example formula containing the `WEIFrame` function.

```
WEIFrame ("bobj", "http://diamond.businessobjects.com", "400",
    "600", "No")
```

WEImage(Path, Width, Height)

The `WEImage` function is used to render a picture in the report viewer.

This function does not require a `WEBuilder` function on the report.

Parameters:

Path is a String that represents the virtual path to the image (e.g. http://server.com/path/imagename.gif) or file path to the image (e.g. c:\folder\imagename.gif).

Width is a String that represents the image width. Use an integer such as "66" to give a width in pixels, "2in" for a width in inches, "2cm" for a width in

centimeters, or “10%” for a percentage of the original width. Leave the width blank “” to use the default width of the image.

Height is a String that represents the image height. Use an integer such as “66” to give a height in pixels, “2in” for a height in inches, “2cm” for a height in centimeters, or “10%” for a percentage of the original height. Leave the height blank “” to use the default height of the image.

WEMarquee(ElementName, ElementDisplay, ElementWidth, ScrollSpeed, ScrollAmount)

Note: This function may not work in all browsers. For best results use Internet Explorer.

The `WEMarquee` function is used to scroll text and links within a Crystal Report. This function is useful for displaying selected prompt values in a limited amount of space.

By default, content scrolls from right to left. The scroll direction can be edited within the function itself. Open the `WEMarquee` function in the Report menu, Formula Workshop for more information.

This function does not require a `WEBuilder` function on the report.

Parameters:

ElementName is a text value representing a unique name assigned to each `WEMarquee` function on a report. This name is not associated with a prompt as the function is used only to display information.

ElementDisplay is a text value representing the content that will display in the report.

ElementWidth is a String that represents the scroll width. Use an integer such as “66” to give a width in pixels, “2in” for a width in inches, or “2cm” for a width in centimeters.

ScrollSpeed is an integer value that determines the speed at which the content moves. 1 is the slowest scroll speed and 100 is the fastest scroll speed.

ScrollAmount is an integer value that determines the length of content that is moved at each increment. 1 is the smallest length and 100 is the largest length of content that is moved.

WEMarqueeExt(ElementName, ElementDisplay, ElementWidth, ScrollSpeed, ScrollAmount, ScrollDirection, ControlPositions, ControlTooltips)

Note: This function may not work in all browsers. For best results use Internet Explorer.

The `WEMarqueeExt` function is used to scroll text and links and other content within a Crystal Report.

The `WEMarqueeExt` function syntax can be edited to create a desired look and feel for your tab menu. Control icons, fonts, tooltips, etc. can be customized within the function syntax. Open the `WEMarqueeExt` function in the Report menu, Formula Workshop for more information.

This function does not require a `WEBuilder` function on the report.

Parameters:

ElementName is a text value representing a unique name assigned to each `WEMarquee` function on a report. This name is not associated with a prompt as the function is used only to display information.

ElementDisplay is a text value representing the content that will display in the report.

ElementWidth is a String that represents the marquee width. Use an integer such as “66” to give a width in pixels, “2in” for a width in inches, or “2cm” for a width in centimeters.

ScrollSpeed is an integer value that determines the speed at which the content moves. 1 is the slowest scroll speed and 100 is the fastest scroll speed.

ScrollAmount is an integer value that determines the length of content that is moved at each increment. 1 is the smallest length and 100 is the largest length of content that is moved.

ScrollDirection is a text value that determines the direction that the content should scroll. Values include “left”, “right”, “up”, or “down”.

ControlPositions is a text value that determines the position of the start, stop, and reverse controls for the marquee. Values include “bottom”, “top”, “left”, or “right”.

ControlTooltips is a character separated list of the text that will appear for the start, stop, and reverse controls. Use the “|” character to separate multiple elements. This parameter can be left blank and the defaults of “Left” or “Up”, “Stop, “Right” or “Down” will be used depending on whether the marquee scrolls vertically or horizontally.

Example:

The following is an example formula containing the `WEMarqueeExt` function.

```
stringvar mcontent:= {@image1} + {@image2} + {@image3};
stringvar mwidth:= "6cm";
numbervar mscrollspeed:= 90;
numbervar mscrollamount:= 2;
stringvar mscrolldirection:= “left”;
stringvar mcontrolpositions:= “bottom”;
WEMarqueeExt ("m1", mcontent, mwidth, mscrollspeed,
    mscrollamount, mscrolldirection, mcontrolpositions, “”)
```

WEPulldownSection(ElementName, ElementHeight, ContentWidth, ElementHeaders, ElementContent)

The `WEPulldownSection` function creates a set of fly-out sections that can be opened and closed on a report. These sections can contain webElements text objects, inputs, and controls.

The `WEPulldownSection` function has syntax that can be further edited to match the desired look and feel. Open this function in the Formula Workshop of Crystal Reports for further information. The background, section margins, border, and fonts can be modified within the function syntax.

For best results, also ensure that plain or formatted text that you wish to use in a WEPulldownSection is inside a WETextObject or a WETextObjectExt function.

Parameters:

ElementName is a unique name that the report developer assigns to the set of sections.

ElementHeight is a String that can be in inches (e.g. “3in”) centimeters (e.g. “6cm”), or pixels (e.g. “1600pi”).

ContentWidth is a String that can be in inches (e.g. “3in”) centimeters (e.g. “6cm”), or pixels (e.g. “1600pi”). This sets the width of each individual section.

ElementHeaders is a String Array of the text that will be displayed in the individual section headers.

ElementContent is a String Array of the content that will be displayed in each section.

Ensure that the number of items in the ElementHeaders array matches the number of items in the ElementContent array.

Example:

The following is an example formula containing the WEPulldownSection function.

```
stringvar psheight:= "6cm";

stringvar pswidth:= "4cm";

stringvar array psheaders:= ["section one","section two","section
    three","section four"];

stringvar array pscontent:=
    [{@text1},{@iframe},{@calendar},{@text3}];

WEPulldownSection ("ps1", psheight, pswidth, psheaders,
    pscontent)
```

WEScroll(ElementName, ElementDisplay, ElementHeight, ElementWidth, ScrollLength, ScrollSpeed)

The WEScroll function is used to scroll text and pictures within a Crystal Report. Content scrolls from top to bottom. This function is useful for displaying selected prompt values in a limited amount of space.

This function does not require a WEBuilder function on the report.

Parameters:

ElementName is a text value representing a unique name assigned to each WEScroll function on a report. This name is not associated with a prompt as the function is used only to display information.

ElementDisplay is a text value representing the content that will display in the report.

ElementHeight is an integer representing the height, in pixels, of the scroll window in the report.

ElementWidth is an integer representing the width, in pixels, of the scroll window in the report.

ScrollLength is an integer representing the overall length, in pixels, of the scroll inside the window. It is recommended that you experiment with this value until all content scrolls from end to end.

ScrollSpeed is an integer value that determines the speed at which the content moves. 1 is the slowest scroll speed and 100 is the fastest scroll speed.

WESpace(N)

The WESpace function is used to create a space between elements if you have more than one element in a formula.

Parameters:

N is an integer representing the number of spaces to place between elements.

Note: WETextObject does not support text wrap in some browsers such as Safari.

WETextObjectExt will support text wrap in all conditions.

WETextObject can be used as an inline object and WETextObjectExt cannot be used inline. This affects the output when these functions are used in the same formula as other webElements functions.

As a result, WETextObject is good for short text, and WETextObjectExt is good for long text.

WETextObject(ElementDisplay, ElementFont)

The `WETextObject` function is used to create a formatted block of text in the report viewer. A `WETextObject` element is required for the `WEScroll` element. This element can also be used to insert formatted text blocks between `WebElement` controls when all controls are written in a single formula.

This function does not require a `WEBuilder` function on the report.

Parameters:

ElementDisplay is the text that will be shown in the report viewer.

ElementFont is used to format the text displayed by the `WETextObject` element. The report developer can use the `WEFont` function in the Formatting functions to easily define a formatted font style.

WETextObjectExt(ElementDisplay, ElementFont, ElementHeight, ElementWidth, ElementScroll)

The `WETextObjectExt` function is used to create a formatted block of text in the report viewer. A `WETextObjectExt` can be used in the `WEScroll` or `WEMarquee` elements. This element can also be used to insert formatted text blocks between `WebElement` controls when all controls are written in a single formula.

This function does not require a `WEBuilder` function on the report.

Parameters:

ElementDisplay is the text that will be shown in the report viewer.

ElementFont is used to format the text displayed by the `WETextObject` element. The report developer can use the `WEFont` function in the Formatting functions to easily define a formatted font style.

ElementHeight is a String that represents the text object height. Use an integer such as “66” to give a width in pixels, “2in” for a width in inches, or “2cm” for a width in centimeters.

ElementWidth is a String that represents the text object width. Use an integer such as "66" to give a width in pixels, "2in" for a width in inches, or "2cm" for a width in centimeters.

ElementScroll is a Boolean that dictates whether scrollbars will appear in the text object should its content exceed its size. Setting this to false will clip the content that exceeds the height and width of the text object.

WEViewer (ToolbarDisplay, ScrollbarsDisplay)

The `WEViewer` function is used to format the Crystal Reports viewer toolbar.

This function does not require a `WEBuilder` function on the report.

NOTE	By default, the formula containing the WEViewer function must be placed in the top left hand corner of the first unsuppressed Report Header of the report. It must also be placed in the top left hand corner of the first unsuppressed Page Header of the report should you wish to have the functionality available for pages after the Report Header.

The `WEViewer` function syntax can be edited to create a desired look and feel for the toolbar. The export and print buttons for example can be hidden using the function syntax. The toolbar can also be set to use freeform placement using the function syntax.

There are settings in the WEViewer function syntax to alter the background colour of the viewer or to use an image as the background.

Open the `WEViewer` function in the Report menu, Formula Workshop for more information.

Parameters:

ToolbarDisplay accepts one of four text values. The value of the `ToolbarDisplay` parameter will affect the display of the Crystal Report toolbar at the top of the report viewer.

- Setting the value to "Show" will display the toolbar and display an "expand / collapse" arrow on the far right hand side of the toolbar.
- Setting the value to "Hide" will hide the toolbar and display an "expand / collapse" arrow at the far right hand side of the report.
- Setting the value to "Suppress" will suppress the toolbar. A suppressed toolbar cannot be dynamically displayed.
- Leaving this parameter blank, i.e. "", will display the default Crystal Report Viewer toolbar.

ScrollbarsDisplay accepts one of four text values. The value of the `ScrollbarsDisplay` parameter will affect the display of the scrollbars on the right and bottom of the Crystal report viewer.

- Setting the value to "Show" will display both scrollbars and display a "hide / show" button at the right hand side of the toolbar or report. The "hide / show" button will appear as two lines on the right of the report.

- Setting the value to "Hide" will hide both scrollbars and display a "hide / show" button at the right hand side of the toolbar or report. The "hide / show" button will appear as two lines on the right of the report.

- Setting the value to "Suppress" will suppress both scrollbars. A suppressed scrollbar cannot be dynamically displayed. This is useful when displaying a report in a dashboard where scrollbars may take up too much space.

- Leaving this parameter blank, i.e. "", will display the default scrollbars.

Form Controls

This section includes functions in the Form Controls folder of the webElements function library. These functions can be used to reset controls or reset all form controls.

WEControlDisplaySelect (ElementName, ElementDisplays, ElementControls, ElementDefault, Prompt, ElementFont)

The `WEControlDisplaySelect` function creates a drop-down list. When an item is select from the list, all controls that are associated with that item will be displayed. All other controls will be hidden.

Parameters:

ElementName is a unique name assigned to the control. This name must match a prompt / parameter name only if the chosen value is to be added to the OpenDocument URL.

ElementDisplays is a list of the menu items that will be displayed for the control sets. Use the "|" character to separate multiple elements.

Use "All" as an option for showing all controls. Use "None" as an option for hiding all controls.

ElementControls is a list of the actual controls that are associated with the ElementDisplays. Use the "|" character to separate multiple elements.

Use "All" as an option for showing all controls. Use "None" as an option for hiding all controls.

ElementDefault will appear as the first item in the drop down list. Any controls that are associated with the default value will be shown.

The ElementDefault must be an item from the ElementDisplays list.

Prompt is a Boolean variable that allows the chosen value of the control to be added to the OpenDocument URL.

ElementFont is used to format the text on the control. The report developer can use the `WEFont` function in the Formatting functions to easily define a formatted font style.

Example:

The following is an example formula containing the `WEControlDisplaySelect` function.

```
stringvar ElementName:= "cs1";

stringvar ElementDisplays:=
"All|None|Tree|Select Menus|Select Menus|Calendar";

stringvar ElementControls:=
"All|None|TreePicker1|Select1|Select2|Radio1|Calendar1";

stringvar ElementDefault:= "Select Menus";

booleanvar AddThisValueToURL:= true;
// this variable is used for the “Prompt” value of the function

WEControlDisplaySelect (ElementName, ElementDisplays,
    ElementControls, ElementDefault, AddThisValueToURL, "")
```

WEOutputTextArea (ElementDefault, ElementHeight, ElementWidth, ElementFont)

NOTE: You must set your WEBuilder debugging parameter to 1.1 or 2.1 when you wish to use this control.

The `WEOutputTextArea` function creates a text box that displays the OpenDocument URL when a submit button or link is pressed.

This is useful for debugging OpenDocument URL’s as the output can be copied and pasted into a new browser window.

Parameters:

ElementDefault is the text that will appear in the text box by default. This text will be overwritten when the submit button or link is pressed.

ElementHeight is a String that represents the text object height. Use an integer such as “66” to give a width in pixels, “2in” for a width in inches, or “2cm” for a width in centimeters.

ElementWidth is a String that represents the text object width. Use an integer such as “66” to give a width in pixels, “2in” for a width in inches, or “2cm” for a width in centimeters.

ElementFont is used to format the text on the control. The report developer can use the `WEFont` function in the Formatting functions to easily define a formatted font style.

Example:

The following is an example formula containing the `WEControlDisplaySelect` function.

```
WEOutputTextArea ('The opendocument url will show up here when you
    press the submit button.', '1in', '2.5in', '')
```

WEResetButton(ButtonText, ButtonFont)

NOTE: WEResetButton will work in XI and XIR2 platforms only.

The `WEResetButton` function creates a reset button that will set all webElements inputs and controls to their default values when clicked. The `WEResetButton` element can be placed in a different formula, section or group from the webElements controls it affects.

Parameters:

ButtonText is the text that will appear on the button. For example, “Reset All Values”.

ButtonFont is used to format the text on the button and the colour of the button. Use the `WEFont` function to define a specific font or style.

WESelectAllClearAllReverseButtons(ElementName, ButtonText, ButtonFont)

The `WESelectAllClearAllReverseButtons` function creates three buttons in the report.

- A button to select all values of a specific control
- A button to clear all selected values of a specific control
- A button to reverse the selection of a specific control

The `WESelectAllClearAllReverseButtons` function must be used with the `WESelectMulti`, `WECheckBox`, or the `WETextBoxAndCheckBox` functions. The `WESelectAllClearAllReverseButtons` function can be placed in a different formula, section or group from other webElements controls.

Parameters:

ElementName is the same `ElementName` as the `WESelectMulti` or `WECheckBox` that is associated with the buttons. For example, if your report has a checkbox for a `{?Country}` prompt, then both the `WECheckBox` and the `WESelectAllClearAllReverseButtons` will have an `ElementName` of "Country".

ButtonText is a character separated list of the text that will be displayed on the buttons. If left blank, "", the buttons will default to "Select All", "Clear All", and "Reverse".

ButtonFont is used to format the text on the buttons and the colour of the buttons. The report developer can use the `WEFont` function in the Formatting functions to easily define a formatted font style.

WESelectAllClearAllReverseLinks(ElementName, LinkText, ElementFont, AlignVertically)

The `WESelectAllClearAllReverseLinks` function creates three hyperlinks in the report.

- A link to select all values of a specific control
- A link to clear all selected values of a specific control
- A link to reverse the selection of a specific control

The `WESelectAllClearAllReverseLinks` function must be used with the `WESelectMulti`, `WECheckBox`, or the `WETextBoxAndCheckBox` functions. The `WESelectAllClearAllReverseLinks` function can be placed in a different formula, section or group from other webElements controls.

Parameters:

ElementName is the same `ElementName` as the `WESelectMulti` or `WECheckBox` that is associated with the links. For example, if your report has a checkbox for a `{?Country}` prompt, then both the `WECheckBox` and the `WESelectAllClearAllReverseLinks` will have an `ElementName` of "Country".

LinkText is a character separated list of the text that will be displayed for the hyperlinks. If left blank, “”, the links will default to "Select All", "Clear All", and "Reverse".

ElementFont is used to format the text of the hyperlinks. The report developer can use the `WEFont` function in the Formatting functions to easily define a formatted font style.

AlignVertically is a Boolean value. Set `AlignVertically` to True to align the hyperlinks vertically. Set `AlignVertically` to False to align the hyperlinks in one horizontal line.

Inputs and Controls

This section includes functions in the InputsAndControls folder of the webElements function library. These functions are used to add common form elements to your report, such as Radio Buttons, Check boxes, and Text Areas.

WECalculator (ElementName, ElementDefault, Validation, InvalidMessage)

The `WECalculator` function adds a calculator to the report. The calculator object is useful for performing quick calculations in financial reports.

Parameters:

ElementName must be set to the name of the prompt that the calculator is used to satisfy. For example, if the prompt is `{?OrderAmount}`, then the `ElementName` parameter must be set to `"OrderAmount"`.

ElementDefault is a string variable representing a number. It is possible to pass a number field as a parameter if it is first converted to a string. For example `totext({InventoryAmount},0,"")`.

Validation is a string value that can be set to either `"Numeric"` or `"Integer"`.

InvalidMessage is a string value that will appear as a pop-up alert if validation is used and a number has not been entered.

WECalendar (ElementName, ElementDefault, MonthDisplays, DayDisplays)

The `WECalendar` function adds a calendar or a date picker control to the report.

Parameters:

ElementName must be set to the name of the `datetime` prompt that the calendar is used to satisfy. For example, if the prompt is `{?OrderDates}`, then the `ElementName` parameter must be set to `"OrderDates"`.

ElementDefault can be any date value. The `ElementDefault` property indicates the starting month for the calendar.

MonthDisplays is the array of values that will be used on the calendar title display. If `MonthDisplays` is left blank, i.e. "", then the values will be "January|February|March|April|May|June|July|August|September|October|November|December".

A formula can be written to localize this string to the preferred language of the user.

DayDisplays is the array of values that will be used on the calendar subtitle display. If `DayDisplays` is left blank, i.e. `""`, then the default value will `"Sun|Mon|Tue|Wed|Thu|Fri|Sat"`.

A formula can be written to localize this string to the preferred language of the user.

Ensure that the values are always 3 characters in length so that the spacing of the calendar is correct. Another option to the above is to use "Su |Mo |Tu |We |Th |Fr |Sa ". Note that in each of the strings there are three characters, two letters followed by a blank space.

WECalendarPopUp (ElementName, ElementDefault, MonthDisplays, DayDisplays, OpenText, CloseText, ElementFont))

The WECalendarPopUp function adds a pop-up calendar or a pop-up date picker control to the report.

Parameters:

ElementName must be set to the name of the datetime prompt that the calendar is used to satisfy. For example, if the prompt is {?OrderDates}, then the ElementName parameter must be set to "OrderDates".

ElementDefault can be any date value. The ElementDefault property indicates the starting month for the calendar.

MonthDisplays is the array of values that will be used on the calendar title display. If MonthDisplays is left blank, i.e. "", then the values will be "January | February | March | April | May | June | July | August | September | October | November | December".

A formula can be written to localize this string to the preferred language of the user.

DayDisplays is the array of values that will be used on the calendar subtitle display. If DayDisplays is left blank, i.e. "", then the default value will "Sun|Mon|Tue|Wed|Thu|Fri|Sat".

A formula can be written to localize this string to the preferred language of the user.

Ensure that the values are always 3 characters in length so that the spacing of the calendar is correct. Another option to the above is to use "Su |Mo |Tu |We |Th |Fr |Sa ". Note that in each of the strings there are three characters, two letters followed by a blank space.

OpenText is a String that will be displayed when the pop-up calendar is closed (e.g. "Change Date").

CloseText is a String that will be displayed when the pop-up calendar is open (e.g. "Save and Close").

ElementFont formats both the OpenText and CloseText displays. The report developer can use the WEFont function in the Formatting functions to easily define a formatted font style.

WECalendarRange(ElementName, ElementStartDefault, ElementEndDefault, MonthDisplays, DayDisplays, AlignVertically)

The `WECalendarRange` function is used to create two embedded calendars or date picker controls.

The `WECalendarRange` function is used in conjunction with a date range prompt.

Parameters:

ElementName must be set to the name of the `date range` prompt that the calendar is used to satisfy. For example, if the prompt is `{?OrderDates}`, then the `ElementName` parameter must be set to "`OrderDates`".

ElementStartDefault can be any date value. This will dictate the starting month for the first calendar. The `ElementStartDefault` parameter will be the value passed to the date prompt minimum if the user does not choose a different date.

ElementEndDefault can be any date value. This will dictate the starting month for the second calendar. The `ElementEndDefault` parameter will be the value passed to the date prompt maximum if the user does not choose a different date.

MonthDisplays is the array of values that will be used on the calendar title display. If `MonthDisplays` is left blank, i.e. "", then the values will be "January|February|March|April|May|June|July|August|September|October|November|December".

A formula can be written to localize this string to the preferred language of the user.

DayDisplays is the array of values that will be used on the calendar subtitle display. If `DayDisplays` is left blank, i.e. "", then the default value will "`Sun|Mon|Tue|Wed|Thu|Fri|Sat`".

A formula can be written to localize this string to the preferred language of the user.

Ensure that the values are always 3 characters in length so that the spacing of the calendar is correct. Another option to the above is to use "`Su |Mo |Tu |We |Th |Fr |Sa `". Note that in each of the strings there are three characters, two letters followed by a blank space.

AlignVertically is a Boolean value. Setting `AlignVertically` to True will aligns the two calendars vertically. Setting the parameter to False will align the two calendars horizontally.

WECalendarRangePopUp(ElementName, ElementStartDefault, ElementEndDefault, MonthDisplays, DayDisplays, AlignVertically, OpenText, CloseText, ElementFont)

The `WECalendarRange` function is used to create two embedded calendars or date picker controls.

The `WECalendarRange` function is used in conjunction with a date range prompt.

Parameters:

ElementName must be set to the name of the `date range` prompt that the calendar is used to satisfy. For example, if the prompt is `{?OrderDates}`, then the `ElementName` parameter must be set to `"OrderDates"`.

ElementStartDefault can be any date value. This will dictate the starting month for the first calendar. The `ElementStartDefault` parameter will be the value passed to the date prompt minimum if the user does not choose a different date.

ElementEndDefault can be any date value. This will dictate the starting month for the second calendar. The `ElementEndDefault` parameter will be the value passed to the date prompt maximum if the user does not choose a different date.

MonthDisplays is the array of values that will be used on the calendar title display. If `MonthDisplays` is left blank, i.e. "", then the values will be "January|February|March|April|May|June|July|August|September|October|November|December".

A formula can be written to localize this string to the preferred language of the user.

DayDisplays is the array of values that will be used on the calendar subtitle display. If `DayDisplays` is left blank, i.e. `""`, then the default value will `"Sun|Mon|Tue|Wed|Thu|Fri|Sat"`.

A formula can be written to localize this string to the preferred language of the user.

Ensure that the values are always 3 characters in length so that the spacing of the calendar is correct. Another option to the above is to use `"Su |Mo |Tu |We |Th |Fr |Sa "`. Note that in each of the strings there are three characters, two letters followed by a blank space.

AlignVertically is a Boolean value. Setting `AlignVertically` to True will aligns the two calendars vertically. Setting the parameter to False will align the two calendars horizontally.

OpenText is a String that will be displayed when the pop-up calendar range is closed (e.g. “Change Date”).

CloseText is a String that will be displayed when the pop-up calendar range is open (e.g. “Save and Close”).

ElementFont formats both the OpenText and CloseText displays. The report developer can use the `WEFont` function in the Formatting functions to easily define a formatted font style.

WECheckBox(ElementName, ElementValue, ElementDisplay, ElementDefault, AlignVertically, ElementFont, Validation, InvalidMessage)

The `WECheckBox` function is used to create a check box control. This type of control allows the user to choose one or more values from a collection of checkboxes. To allow the user to select only one option, use the `WERadioButton` control.

The `WECheckBox` function can be used in conjunction with the `WESelectAllClearAllReverseButtons` function.

Parameters:

ElementName must be set to the name of the prompt that the checkbox is used to satisfy. For example, if the prompt is `{?OrderOptions}`, then the `ElementName` parameter must be set to “`OrderOptions`”.

ElementValue is a character separated array of what will be passed to the URL depending on what the user selects. Separate multiple values with the “|” character.

ElementDisplay is a character separated array of the values that will display beside each checkbox. Separate multiple values with the “|” character.

The display is different than the value as the report developer may wish to pass an ID as a value whereas the display will show the name associated with that particular ID. If no display is required beside the check box use “”.

ElementDefault can be one or more values or left blank. All default values will be checked when the report is first viewed. If the prompt is used as the default, e.g. `{?Country}`, the value or values selected will be checked when the target report is opened.

AlignVertically is a Boolean value. Setting `AlignVertically` to True aligns the checkboxes and display values vertically. Setting this value to False places the checkboxes and display values in one horizontal line.

ElementFont is used to format the text of the display elements. The report developer can use the `WEFont` function in the Formatting functions to easily define a formatted font style. Note: This is a single value that will format all display elements generated by this function.

Validation should be set to “Checked” if validation is required for this function.

InvalidMessage is the message that will be displayed in an alert pop-up if no boxes are checked at the time of submission. Validation must be set to “Checked” in order for the message to display.

WEComboBoxSelect (ElementName, ElementValues, ElementDisplays, ElementDefault, AllowCustomValues, MatchSelectValues, ElementBoxSize, ElementSelectSize, AlignVertically, ElementFont, Validation, InvalidMessage)

The `WEComboBoxSelect` function is used to create a combination select text box control. This type of control allows the user to choose a single value from a set of choices or to enter the value in a text box. Values entered into the text box will update the default value in the select menu.

Parameters:

ElementName must be set to the name of the prompt that the drop down menu is used to satisfy. For example, if the prompt is `{?OrderOptions}`, then the `ElementName` parameter must be set to "`OrderOptions`".

ElementValues is a character separated array of what will be passed to the URL depending on what the user selects. Separate multiple values with the " | " character.

ElementDisplays is a character separated array of the values that will display in the drop down list. Separate multiple values with the " | " character.

The display is different than the value as the report developer may wish to pass an ID as a value whereas the display will show the name associated with that particular ID.

ElementDefault is a single text value that will appear at the top of the drop-down menu and in the text box.

AllowCustomValues is a Boolean value. Setting `AllowCustomValues` to True gives the end user the ability to enter a value in the text input box that is not a value in the select menu. Setting this value to False forces the end user to enter a value into the text input box that matches a value in the select menu. This is done by a character by character input match.

MatchSelectValues is a Boolean value. Setting `MatchSelectValues` to True will match the text box input to a value in the select menu versus matching the select menu display.

For example, if `MatchSelectValues` was True the end user could type a Customer ID into the text input box. The select menu would change to display the Customer Name which corresponds to that ID.

ElementBoxSize is the length, in characters, of the text box input.

ElementSelectSize is the height, in number of lines, of the select menu.

AlignVertically is a Boolean value. Setting `AlignVertically` to True aligns the text box input and select menu vertically. Setting this value to False places the text box input and select menu in one horizontal line.

ElementFont is used to format the text of the drop down list and the text of the text box. The report developer can use the `WEFont` function in the Formatting functions to easily define a formatted font style. Note: This is a single value that will format all display elements generated by this function.

Validation is used to ensure that the user selects a value from the dropdown menu or types in a valid value in the text box before the URL is run. Please see the Validation section in the webElements Parameter List for more information on validation.

InvalidMessage is the message that will be displayed in an alert pop-up if no value is selected at the time of submission.

WERadio (ElementName, ElementValues, ElementDisplays, ElementDefault, AlignVertically, ElementFont, Validation, InvalidMessage)

The `WERadio` function is used to create a radio button control. This type of control allows the user to choose only one value from a set of choices. To allow the user to select more than once option, use the `WECheckBox` control.

Parameters:

ElementName must be set to the name of the prompt that the radio button is used to satisfy. For example, if the prompt is `{?OrderOptions}`, then the `ElementName` parameter must be set to "`OrderOptions`".

ElementValues is a character separated array of what will be passed to the URL depending on what the user selects. Separate multiple values with the "|" character.

ElementDisplays is a character separated array of the values that will display beside each checkbox. Separate multiple values with the "|" character.

The display is different than the value as the report developer may wish to pass an ID as a value whereas the display will show the name associated with that particular ID. If no display is required beside the check box use "".

ElementDefault is a single text value that is selected by default.

If the prompt is used as the default, e.g. `{?Country}`, the value selected will be checked when the target report is opened.

AlignVertically is a Boolean value. Setting `AlignVertically` to True aligns the radio buttons and display values vertically. Setting this value to False or leaving the parameter empty places the radio buttons and display values in one horizontal line.

ElementFont is used to format the text of the display elements. The report developer can use the `WEFont` function in the Formatting functions to easily define a formatted font style. Note: This is a single value that will format all URLs generated by this function.

Validation should be set to "Checked" if validation is required for this function.

InvalidMessage is the message that will be displayed in an alert pop-up if no radio buttons are selected at the time of submission. Validation must be set to "Checked" in order for the message to display.

WESelect (ElementName, ElementValues, ElementDisplays, ElementDefault, ElementFont)

The `WESelect` function is used to create a drop-down menu. This type of control allows the user to choose a single value from a set of choices.

Parameters:

ElementName must be set to the name of the prompt that the drop down menu is used to satisfy. For example, if the prompt is `{?OrderOptions}`, then the `ElementName` parameter must be set to "`OrderOptions`".

ElementValues is a character separated array of what will be passed to the URL depending on what the user selects. Separate multiple values with the "|" character.

ElementDisplays is a character separated array of the values that will display in the drop down list. Separate multiple values with the "|" character.

The display is different than the value as the report developer may wish to pass an ID as a value whereas the display will show the name associated with that particular ID.

ElementDefault is a single text value that will appear at the top of the drop-down menu.

ElementFont is used to format the text of the drop down list. The report developer can use the `WEFont` function in the Formatting functions to easily define a formatted font style. Note: This is a single value that will format all display elements generated by this function.

NOTE	There is no validation for WESelect. If nothing is selected by the user, the first value on the list will be passed to the URL.

WESelectCascade (ElementName, ElementDisplays, ElementSet, ElementDefault, ElementConstant, Prompt, ElementWidth, ElementFont, Validation, InvalidMessage)

The `WESelectCascade` function is used to create a drop-down menu that is part of a cascading prompt set. This type of control allows the user to choose a single value from a set of choices. To allow the user to select more than one value, use the `WESelectMultiCascade` function.

Parameters:

ElementName must be set to the name of the prompt that the cascading list is used to satisfy. For example, if the prompt is `{?OrderOptions}`, then the `ElementName` parameter must be set to "`OrderOptions`".

ElementDisplays is an array of what the user will see in the drop-down menu. The chosen display will also be the value passed via the URL.

A first level displays array would have syntax such as "Level 1 Value 1|Level 1 Value 2|Level 1 Value 3"

The following is an example of a displays array for a first level prompt in a `Region|Country|City` set.

```
"North America|South America|Europe"
```

A second or greater level displays array would have syntax such as

```
"||Level 1 Value 1|Level 2 Value 1|Level 2 Value 2||Level 1 Value
    2|Level 2 Value 3"
```

The following is an example of a displays array for a second level prompt in a `Region|Country|City` set.

```
"||North America|Canada|USA|Mexico||South America|Brazil
    Argentina||Europe|France|Germany|United Kingdom"
```

An example of a displays array for a third level prompt in a `Region|Country|City` set would be

```
"||BC|Vancouver||CA|San Francisco|San Jose||FLA|Miami"
```

ElementSet is the character separated prompt names in a set or family of cascading prompts. For example, if a set of prompts "`Region`", "`Country`", "`City`" is on the report, the `ElementSet` name for all of the controls would be "`Region|Country|City`".

The `ElementSet` name must be identical for all prompts that are in the same cascade set or family or they will not cascade properly.

There can be more than one set or family of cascading prompts on a report. For example there can be an `ElementSet` for a product hierarchy "`ProductCategory|ProductSubcategory|ProductName`" and an `ElementSet` for a geographical hierarchy "`Region|Country|City`" in the same report. These separate sets of prompts will not influence each other.

ElementDefault is a single text value that will appear at the top of the drop-down menu.

If the prompt is used as the default, e.g. {?`Country`}, the value selected will appear at the top of the menu when the target report is opened.

ElementConstant is an option value that will appear at the top of the drop-down menu at all times. This is useful for keeping a wildcard value such as "All" available for the report user.

If the report user does not choose an option in the menu, then the `ElementConstant` will be passed automatically to the URL.

Prompt is a Boolean value. Setting `Prompt` to True will append the chosen value along with the `ElementName` to the URL. This requires that a prompt of the same name be present on the report. Setting `Prompt` to False will allow the control to cascade but the `ElementName` and chosen value will not be appended to the URL.

ElementWidth represents the width of the control in characters. Ensure that the width set in the formula will be large enough to display the longest option.

ElementFont is used to format the text in the drop-down menu. If `ElementFont` is left blank, i.e. "", the font will assume the formatting of the formula object containing the `WESelectCascade` function.

Validation is used to ensure that the user selects a value from the dropdown menu before the URL is run. Please see the Validation section in the webElements Parameter List for more information on validation.

InvalidMessage is the message that will be displayed in an alert pop-up if no values are selected at the time of submission.

NOTE	If no `ElementConstant` is used then there is a risk of having no prompt value passed to the URL unless the user enters values for every select menu in the prompt family.

WESelectCascadeExt (ElementName, ElementValues, ElementDisplays, ElementSet, ElementDefault, ElementConstant, Prompt, ElementWidth, ElementFont, Validation, InvalidMessage)

The `WESelectCascadeExt` function is used to create a drop-down menu that is part of a cascading prompt set. This type of control allows the user to choose a single value from a set of choices.

The `WESelectCascadeExt` differs from the `WESelectCascade` function in that it allows for a different value to be passed to the URL than the display value. For example, a customer names could appear in the drop down menu while a customer ID is passed to the URL.

Parameters:

ElementName must be set to the name of the prompt that the cascading list is used to satisfy. For example, if the prompt is `{?OrderOptions}`, then the `ElementName` parameter must be set to "`OrderOptions`".

ElementValues is an array of values that may be passed to the URL.

A first level values array would have syntax such as

```
"Level 1 ID 1|Level 1 ID 2|Level 1 ID 3"
```

The following is an example of a displays array for a first level prompt in a `RegionID|CountryID|CityID` set.

```
"101|102|201"
```

A second or greater level displays array would have syntax such as

```
"||Level 1 Value 1|Level 2 Value 1|Level 2 Value 2||Level 1 Value
    2|Level 2 Value 3"
```

The following is an example of a values array for a second level prompt in a `Region|Country|City` set.

```
"||101|1011|1012|1013||102|1021|1022||201|2011|2012|2013"
```

An example of a values array for a third level prompt in a `Region|Country|City` set would be

```
"||1011|10111||1012|10121|10122|10123…"
```

ElementDisplays is an array of what the user will see in the drop-down menu. The chosen display will also be the value passed via the URL.

A first level displays array would have syntax such as “Level 1 Value 1|Level 1 Value 2|Level 1 Value 3”

The following is an example of a displays array for a first level prompt in a `Region|Country|City` set.

```
“North America|South America|Europe”
```

A second or greater level displays array would have syntax such as

```
“||Level 1 Value 1|Level 2 Value 1|Level 2 Value 2||Level 1 Value
    2|Level 2 Value 3”
```

The following is an example of a displays array for a second level prompt in a `Region|Country|City` set.

```
“||North America|Canada|USA|Mexico||South America|Brazil
    Argentina||Europe|France|Germany|United Kingdom”
```

An example of a displays array for a third level prompt in a `Region|Country|City` set would be

```
“||BC|Vancouver||CA|San Francisco|San Jose||FLA|Miami”
```

ElementSet is the character separated prompt names in a set or family of cascading prompts. For example, if a set of prompts “`Region`”, “`Country`”, “`City`” is on the report, the `ElementSet` name for all of the controls would be “`Region|Country|City`”.

The `ElementSet` name must be identical for all prompts that are in the same cascade set or family or they will not cascade properly.

There can be more than one set or family of cascading prompts on a report. For example there can be an `ElementSet` for a product hierarchy “`ProductCategory|ProductSubcategory|ProductName`” and an `ElementSet` for a geographical hierarchy “`Region|Country|City`” in the same report. These separate sets of prompts will not influence each other.

ElementDefault is a single text value that will appear at the top of the drop-down menu.

If the prompt is used as the default, e.g. `{?Country}`, the value selected will appear at the top of the menu when the target report is opened.

ElementConstant is an option value that will appear at the top of the drop-down menu at all times. This is useful for keeping a wildcard value such as “All” available for the report user.

If the report user does not choose an option in the menu, then the `ElementConstant` will be passed automatically to the URL.

Prompt is a Boolean value. Setting `Prompt` to True will append the chosen value along with the `ElementName` to the URL. This requires that a prompt of the same name be present on the report. Setting `Prompt` to False will allow the control to cascade but the `ElementName` and chosen value will not be appended to the URL.

ElementWidth represents the width of the control in characters. Ensure that the width set in the formula will be large enough to display the longest option.

ElementFont is used to format the text in the drop-down menu. If `ElementFont` is left blank, i.e. "", the font will assume the formatting of the formula object containing the `WESelectCascade` function.

Validation is used to ensure that the user selects a value from the dropdown menu before the URL is run. Please see the Validation section in the webElements Parameter List for more information on validation.

InvalidMessage is the message that will be displayed in an alert pop-up if no values are selected at the time of submission.

NOTE	If no `ElementConstant` is used then there is a risk of having no prompt value passed to the URL unless the user enters values for every select menu in the prompt family.

WESelectDate(ElementName, ElementDefault, MonthDisplays, StartYear, EndYear, ElementFont)

The `WESelectDate` function is used to create a set of three drop-down menus to select a year, month, and day.

Parameters:

ElementName must be set to the name of the prompt that the drop-down menu is used to satisfy. For example, if the prompt is `{?OrderOptions}`, then the `ElementName` parameter must be set to "`OrderOptions`".

ElementDefault is a date value that will appear at the top of each drop-down menu when the report is viewed.

If the prompt is used as the default, such as `{?StartDate}`, the date selected will appear at the top of the menus when the target report is viewed.

MonthDisplays is a character separated array of what the user will see in the drop-down menu for the months. This character separated array must include twelve (12) values.

If nothing is entered as a month display, i.e. "", then the function will use the default value of:
"`January|February|March|April|May|June|July|August|September|October|November|December`"

StartYear is a number representing the minimum available year.

EndYear is a number representing the maximum available year.

ElementFont is used to format the text in the drop-down menu. If `ElementFont` is left blank, i.e. "", the font will assume the formatting of the formula object containing the `WESelectDate` function.

NOTE	There is no validation for `WESelectDate`. If nothing is selected by the user, the first value on the list will be passed to the URL.

WESelectDateRange(ElementName, ElementStartDefault, ElementEndDefault, MonthDisplays, StartYear, EndYear, ElementFont, AlignVertically)

The `WESelectDate` function is used to create a set of three drop-down menus to select a year, month, and day.

`WESelectDateRange` is used in conjunction with a date range prompt.

Parameters:

ElementName must be set to the name of the prompt that the drop-down menu is used to satisfy. For example, if the prompt is `{?OrderOptions}`, then the `ElementName` parameter must be set to "`OrderOptions`".

ElementStartDefault is a date value that will appear at the top of the first set of drop-down menus when the report is viewed.

If the prompt is used as the default, such as `{?StartDate}`, the date selected will appear at the top of the menus when the target report is viewed.

ElementEndDefault is a date value that will appear at the top of the second set of drop-down menus when the report is viewed.

If the prompt is used as the default, e.g. `{?EndDate}`, the date selected will appear at the top of the second set of menus when the target report is viewed.

MonthDisplays is a character separated array of what the user will see in the drop-down menu for the months. This character separated array must include twelve (12) values.

If nothing is entered as a month display, i.e. "", then the function will use the default value of:
"`January|February|March|April|May|June|July|August|September|October|November|December`"

StartYear is a number representing the minimum available year.

EndYear is a number representing the maximum available year.

ElementFont is used to format the text in the drop-down menu. If `ElementFont` is left blank, i.e. "", the font will assume the formatting of the formula object containing the `WESelectDateRange` function.

AlignVertically is a Boolean value. Setting this parameter to True aligns the two sets of date select prompts vertically. Setting this parameter to False places the controls in one horizontal line.

NOTE	There is no validation for `WESelectDateRange`. If nothing is selected by the user, the first value on the list will be passed to the URL.

WESelectDuo (ElementName, AValues, ADisplays, BValues, BDisplays, ElementDefault, ElementFont)

The `WESelectDuo` function is used to create two drop-down menus. When the page is submitted, the values from both drop-down menus will be concatenated and passed as a single parameter to the URL.

For example WESelectDuo could be used to create Year and Quarter controls where the final result passed to the URL will be YYQ.

Parameters:

ElementName must be set to the name of the prompt that the drop-down menus satisfy. For example, if the prompt is {?OrderOptions}, then the ElementName parameter must be set to "OrderOptions".

AValues is a character separated array of values for the first drop-down menu. An example of a values array would be "02|03|04|05|06". Separate multiple values with the " | " character.

ADisplays is a character separated array of the values that will display in the first checkbox. Separate multiple values with the " | " character.

The display is different than the value as the report developer may wish to pass an ID as a value whereas the display will show the name associated with that particular ID.

BValues is a character separated array of values for the second drop-down menu. An example of a values array would be "1 | 2 | 3 | 4". Separate multiple values with the " | " character.

BDisplays is a character separated array of the values that will display in the second checkbox. Separate multiple values with the " | " character.

The display is different than the value as the report developer may wish to pass an ID as a value whereas the display will show the name associated with that particular ID.

ElementDefault is a character separated pair of values that will appear at the top of the first and second controls.

If you want to display the chosen prompt values as the default, e.g. {?YearQuarter}, you would use syntax similar to

```
{?YearQuarter}[1 to 2]  + "|" + {?YearQuarter}[3]
```

ElementFont is used to format the text of the drop-down list elements. The report developer can use the WEFont function in the Formatting functions to easily define a formatted font style. Note: This is a single value that will format all display elements generated by this function.

NOTE	There is no validation for WESelectDuo. If nothing is selected by the user, the first values on the controls will be passed to the URL.

WESelectMulti (ElementName, ElementValues, ElementDisplays, ElementDefault, ElementSize, ElementFont)

The WESelectMulti function is used to create a list of items. This type of control allows the user to choose one or more values from a set of choices.

Parameters:

ElementName must be set to the name of the prompt that the multi-select control is used to satisfy. For example, if the prompt is {?OrderOptions}, then the ElementName parameter must be set to "OrderOptions".

ElementValues is a character separated array of what will be passed to the URL depending on what the user selects. Separate multiple values with the "|" character.

ElementDisplays is a character separated array of the values that will display in the drop down list. Separate multiple values with the "|" character.

The display is different than the value as the report developer may wish to pass an ID as a value whereas the display will show the name associated with that particular ID.

ElementDefault is a single text value that will appear selected by default.

ElementSize is the height, in number of lines, of the multi-select control.

ElementFont is used to format the text in the multi-select control. The report developer can use the WEFont function in the Formatting functions to easily define a formatted font style. Note: This is a single value that will format all display elements generated by this function.

NOTE	There is no validation for WESelectMulti. If nothing is selected by the user, the first value on the list will be passed to the URL.

WESelectMultiCascade(ElementName, ElementDisplays, ElementSet, ElementDefault, ElementConstant, Prompt, ElementWidth, ElementSize, ElementFont, Validation, InvalidMessage)

The WESelectMultiCascade function creates a drop-down menu that is part of a cascading prompt set. This type of control allows the user to choose more than one value from a set of choices. To allow the user to select only one value, use the WESelectCascade function.

Parameters:

ElementName must be set to the name of the prompt that the cascading list is used to satisfy. For example, if the prompt is {?OrderOptions}, then the ElementName parameter must be set to "OrderOptions".

ElementDisplays is an array of what the user will see in the drop-down menu. The chosen display will also be the value passed via the URL.

A first level displays array would have syntax such as "Level 1 Value 1|Level 1 Value 2|Level 1 Value 3"

The following is an example of a displays array for a first level prompt in a Region|Country|City set.

```
"North America|South America|Europe"
```

A second or greater level displays array would have syntax such as

```
"||Level 1 Value 1|Level 2 Value 1|Level 2 Value 2||Level 1 Value
    2|Level 2 Value 3"
```

The following is an example of a displays array for a second level prompt in a `Region|Country|City` set.

```
"||North America|Canada|USA|Mexico||South America|Brazil
    Argentina||Europe|France|Germany|United Kingdom"
```

An example of a displays array for a third level prompt in a `Region|Country|City` set would be

```
"||BC|Vancouver||CA|San Francisco|San Jose||FLA|Miami"
```

ElementSet is the character separated prompt names in a set or family of cascading prompts. For example, if a set of prompts "`Region`", "`Country`", "`City`" is on the report, the `ElementSet` name for all of the controls would be "`Region|Country|City`".

The `ElementSet` name must be identical for all prompts that are in the same cascade set or family or they will not cascade properly.

There can be more than one set or family of cascading prompts on a report. For example there can be an `ElementSet` for a product hierarchy "`ProductCategory|ProductSubcategory|ProductName`" and an `ElementSet` for a geographical hierarchy "`Region|Country|City`" in the same report. These separate sets of prompts will not influence each other.

ElementDefault is a single text value that will appear at the top of the drop-down menu.

If the prompt is used as the default, e.g. `{?Country}`, the value selected will appear at the top of the menu when the target report is opened.

ElementConstant is an option value that will appear at the top of the drop-down menu at all times. This is useful for keeping a wildcard value such as "All" available for the report user.

If the report user does not choose an option in the menu, then the `ElementConstant` will be passed automatically to the URL.

Prompt is a Boolean value. Setting `Prompt` to True will append the chosen value along with the `ElementName` to the URL. This requires that a prompt of the same name be present on the report. Setting `Prompt` to False will allow the control to cascade but the `ElementName` and chosen value will not be appended to the URL.

ElementWidth represents the width of the control in characters. Ensure that the width set in the formula will be large enough to display the longest option.

ElementSize is the height, in number of lines, of the control.

ElementFont is used to format the text in the drop-down menu. If `ElementFont` is left blank, i.e. "", the font will assume the formatting of the formula object containing the `WESelectMultiCascade` function.

Validation is used to ensure that the user selects a value from the dropdown menu before the URL is run. Please see the Validation section in the webElements Parameter List for more information on validation.

InvalidMessage is the message that will be displayed in an alert pop-up if no values are selected at the time of submission.

NOTE	There is validation available for `WESelectMultiCascade` function. If no `ElementConstant` is defined then there is a risk of having no prompt value passed to the URL unless the user enters values for all select menus in the prompt family.

WESelectMultiCascadeExt(ElementName, ElementValues, ElementDisplays, ElementSet, ElementDefault, ElementConstantValue, ElementConstantDisplay, Prompt, ElementWidth, ElementSize, ElementFont, Validation, InvalidMessage)

The `WESelectMultiCascadeExt` function is used to create a drop-down menu that is part of a cascading prompt set. This type of control allows the user to choose a single value from a set of choices.

The `WESelectMultiCascadeExt` function differs from the `WESelectMultiCascade` function in that it allows for a different value to be passed to the URL than the display value. For example, a customer name appears in the drop down menu while a customer ID is passed to the URL.

Parameters:

ElementValues is an array of values that may be passed to the URL.

A first level values array would have syntax such as

```
"Level 1 ID 1|Level 1 ID 2|Level 1 ID 3"
```

The following is an example of a displays array for a first level prompt in a `RegionID|CountryID|CityID` set.

```
"101|102|201"
```

A second or greater level displays array would have syntax such as

```
"||Level 1 Value 1|Level 2 Value 1|Level 2 Value 2||Level 1 Value
    2|Level 2 Value 3"
```

The following is an example of a values array for a second level prompt in a `Region|Country|City` set.

```
"||101|1011|1012|1013||102|1021|1022||201|2011|2012|2013"
```

An example of a values array for a third level prompt in a `Region|Country|City` set would be

```
"||1011|10111||1012|10121|10122|10123…"
```

ElementName must be set to the name of the prompt that the cascading list is used to satisfy. For example, if the prompt is `{?OrderOptions}`, then the `ElementName` parameter must be set to "`OrderOptions`".

ElementDisplays is an array of what the user will see in the select multi menu. The chosen display will also be the value passed via the URL.

A first level `ElementDisplays` array would have syntax such as

```
"Level 1 Value 1|Level 1 Value 2|Level 1 Value 3"
```

The following is an example of a displays array for a first level prompt in a `Region|Country|City` set.

```
"North America|South America|Europe"
```

A second or greater level displays array would have syntax such as

```
"||Level 1 Value 1|Level 2 Value 1|Level 2 Value 2||Level 1 Value
    2|Level 2 Value 3"
```

The following is an example of a displays array for a second level prompt in a `Region|Country|City` set.

```
"||North America|Canada|USA|Mexico||South America|Brazil
    Argentina||Europe|France|Germany|United Kingdom"
```

An example of a displays array for a third level prompt in a `Region|Country|City` set would be

```
"||Canada|Vancouver||USA|San Francisco|San Jose|Miami…"
```

ElementSet is the character separated "|" prompt names in a set or family of cascading prompts. For example, if a set of prompts "`Region`", "`Country`", "`City`" is on the report, the `ElementSet` name for all of the controls would be "`Region|Country|City`".

The `ElementSet` name must be identical for all prompts that are in the same cascade set or family or they will not cascade properly.

There can be more than one set or family of cascading prompts on a report. For example there can be an `ElementSet` for a product hierarchy "`ProductCategory|ProductSubcategory|ProductName`" and an `ElementSet` for a geographical hierarchy "`Region|Country|City`" on the same report. These separate prompt sets or families will not influence each other.

ElementDefault is a single text value that will appear at the top of the select multi menu.

If the prompt is used as the default, e.g. `{?Country}`, the value selected will appear at the top of the menu when the target report is opened.

ElementConstantValue is the value that corresponds to the `ElementConstantDisplay.`

If the report user does not choose an option in the menu, then the ElementConstantValue will be passed automatically to the URL.

ElementConstantDisplay is an option value that will appear at the top of the drop-down menu at all times. This is useful for keeping a wildcard value such as "All" available for the report user.

Prompt is a Boolean value. Setting `Prompt` to True will append the chosen value along with the `ElementName` to the URL. This requires that a prompt of the same name be present on the report. Setting `Prompt` to False will allow the control to cascade but the `ElementName` and chosen value will not be appended to the URL.

ElementWidth represents the width of the control in characters as set by the report developer at design time. Ensure that the width set in the formula will be great enough to display the longest option.

ElementSize is the height, in number of lines, which will be displayed on the report.

ElementFont is used to format the text in the drop-down menu…this can be left blank ("") and the font will assume the font formatting of the formula object containing the `WESelectCascade` element, or the report developer can use the `WEFonts` function in the Formatting section to easily define a formatted font style.

Validation is used to ensure that the user selects a value from the dropdown menu before the URL is run. Please see the Validation section in the webElements Parameter List for more information on validation.

InvalidMessage is the message that will be displayed in an alert pop-up if no values are selected at the time of submission.

NOTE	There is validation available for `WESelectMultiCascadeExt`. If no `ElementConstantValue` is used then there is a risk of having no prompt value passed to the URL unless the user enters values for all select menus in the prompt family.

WESelectTrio (ElementName, AValues, ADisplays, BValues, BDisplays, CValues, CDisplays, ElementDefault, ElementFont)

The `WESelectTrio` function is used to create three drop-down menus. When the page is submitted, the values from all three drop-down menus will be concatenated and passed as a single parameter to the URL.

For example `WESelectTrio` could be used to create Location, Division, Group controls where the final result passed to the URL will be a single ID field representing location, division, and group.

Parameters:

ElementName must be set to the name of the prompt that the drop-down menus satisfy. For example, if the prompt is `{?OrderOptions}`, then the `ElementName` parameter must be set to "`OrderOptions`".

AValues is a character separated array of values for the first drop-down menu. An example of a values array would be "100|101|102". Separate multiple values with the "|" character.

ADisplays is a character separated array of the values that will display in the first checkbox. Separate multiple values with the "|" character.

The display is different than the value as the report developer may wish to pass an ID as a value whereas the display will show the name associated with that particular ID.

BValues is a character separated array of values for the second drop-down menu. Separate multiple values with the " | " character.

BDisplays is a character separated array of the values that will display in the second checkbox. Separate multiple values with the " | " character.

CValues is a character separated array of values for the second drop-down menu. Separate multiple values with the " | " character.

CDisplays is a character separated array of the values that will display in the second checkbox. Separate multiple values with the " | " character.

The display is different than the value as the report developer may wish to pass an ID as a value whereas the display will show the name associated with that particular ID.

ElementDefault is a character separated trio of values that will appear at the top of the individual select menus.

If you want to display the chosen prompt values as the default, e.g. {?DepartmentCode}, you would use syntax similar to

```
{?DepartmentCode}[1 to 3] + "|" + {?DepartmentCode}[4] +
    "|" + {?DepartmentCode}[5]
```

ElementFont is used to format the text of the drop-down list elements. The report developer can use the WEFont function in the Formatting functions to easily define a formatted font style. Note: This is a single value that will format all display elements generated by this function.

Example:

An example of a WESelectTrio function with parameter values entered would be

```
stringvar avalues:= "101|102|103";

stringvar adisplays:= "Location 1|Location 2|Location 3";

stringvar bvalues:= "a|b|c|d";

stringvar bdisplays:= "Group A|Group B|Group C|Group D";

stringvar cvalues:= "s|m|f";

stringvar cdisplays:= "Sales Department|Marketing
    Department|Finance Department";

stringvar defaultvalue:= {?DepartmentCode}[1 to 3] + "|" +
    {?DepartmentCode}[4] + "|" + {?DepartmentCode}[5];

WESelectTrio ("DepartmentCode", avalues, adisplays, bvalues,
    bdisplays, cvalues, cdisplays, defaultvalue, "") +
```

NOTE	There is no validation for WESelectTrio. If nothing is selected by the user, the first values on the controls will be passed to the URL.

WESpin (ElementName, ElementDefault, ElementMin, ElementMax, IncrementValue, ElementSize, ElementFont, Validation, ValidationMessage)

The `WESpin` function is used to create a "spinner" control. This type of control allows the user to increment and select a number.

Parameters:

ElementName must be set to the name of the prompt that the drop down menu is used to satisfy. For example, if the prompt is `{?SalesLimit}`, then the `ElementName` parameter must be set to "`SalesLimit`".

ElementDefault is a numeric value that will appear in the text box of the control.

ElementMin is the lower limit of the control. The end user cannot use the decrement button to produce a lower value than this in the text box.

ElementMax is the upper limit of the control. The end user cannot use the increment button to produce a higher value than this in the text box.

IncrementValue is used to set how the number in the text box increments or decrements. For example, if IncrementValue was set to 5, every time the end user touched the increment button, the value in the text box would increase by 5.

ElementSize is the length, in characters, of the text box in the control.

ElementFont is used to format the text in the text box and the buttons. The report developer can use the `WEFont` function in the Formatting functions to easily define a formatted font style.

Validation is used to ensure that the user enters a value into the text box before the URL is run. This should be set to "Number" if validation is required.

InvalidMessage is the message that will be displayed in an alert pop-up if there is not a valid value in the control.

WETextArea (ElementName, ElementDefault, ElementHeight, ElementWidth, ElementFont, Validation, InvalidMessage)

The `WETextArea` function is used to create a text area input control. A text area is a multi line text input field control that allows text to wrap and scroll. For a single line text input, use the `WETextBox` function.

Parameters:

ElementName must be set to the name of the prompt that the text area satisfies. For example, if the prompt is `{?OrderOptions}`, then the `ElementName` parameter must be set to "`OrderOptions`".

ElementDefault is the text that you wish to display in the text area when the report is opened.

If the prompt is used as the default, e.g. {?Country}, the value entered will appear in the text box when the target report is opened.

ElementHeight is a text value that can be in inches (e.g. "3in") centimeters (e.g. "6cm"), or pixels (e.g. "1600pi").

ElementWidth is a text value that can be in inches (e.g. "3in") centimeters (e.g. "6cm"), or pixels (e.g. "1600pi").

ElementFont is used to format the text in the text area. The report developer can use the WEFont function in the Formatting functions to easily define a formatted font style.

Validation is used to ensure that the user enters a value into the text area before the URL is run.

InvalidMessage is the message that will be displayed in an alert pop-up if the user does not enter valid values into the text area.

WETextBox(ElementName, ElementDefault, ElementSize, MaxLength, ElementFont, Validation, InvalidMessage)

The WETextBox function is used to create a text box control within the report. A text box control allows the user to enter custom text. Text box controls are one line high – for a text field that is more than a one line high, use the WETextArea function.

Parameters:

ElementName must be set to the name of the prompt that the text box satisfies. For example, if the prompt is {?OrderOptions}, then the ElementName parameter must be set to "OrderOptions".

ElementDefault is the text that you wish to display in the text box when the report is opened.

If the prompt is used as the default, e.g. {?Country}, the value entered will appear in the text box when the target report is opened.

MaxLength is the maximum number of characters that a user is allowed to type into the text box control.

ElementSize is the length, in characters, of the text box control.

ElementFont is used to format the text in the text box. The report developer can use the WEFont function in the Formatting functions to easily define a formatted font style.

Validation is used to ensure that the user enters a value into the text box before the URL is run.

InvalidMessage is the message that will be displayed in an alert pop-up if the user does not enter valid values into the textbox.

Example:

An example of a WETextBox function with parameter values entered would be

```
WETextBox("Country", "Canada", 16, 16, {?Country}, "Empty", "Please
    enter the Country here.")
```

WETextBoxAndCheckBox(ElementNameTextbox, ElementDisplayTextbox, ElementSizeTextbox, MaxLengthTextbox, ElementFontTextbox, ElementNameCheckbox, ElementValueCheckbox, ElementDefaultCheckbox)

The `WETextBoxAndCheckBox` function is used to create a text input that is bound to a check box control. This type of control allows the user to choose one or more values from a set of choices. The value of both the checkbox and the textbox are passed to the URL.

The `WETextBoxAndCheckBox` function can be used in conjunction with the `WESelectAllClearAllReverseButtons` function.

Parameters:

ElementNameTextbox must be the name of the prompt that the textbox is used to satisfy. i.e. if the prompt is {?Country}, it is imperative that the `ElementNameTextbox` be "Country".

ElementDisplayTextbox is the text that will appear beside the text box control.

ElementSizeTextbox is the length, in characters, of the textbox input.

MaxLengthTextbox is the maximum acceptable length of the input string.

ElementFontTextbox is used to format the text that is typed and displayed in the text box. If this is the font will assume the formatting of the formula object containing the `WETextBoxAndCheckBox` element.

ElementNameCheckbox must be the name of the prompt that the checkbox is used to satisfy. For example, if the prompt is {?Country}, it is imperative that the `ElementNameCheckbox` be "Country".

ElementValueCheckbox are the values that will be passed to the URL depending on which checkboxes are selected by the user.

ElementDefaultTextbox is a String value that will appear in the textbox by default. This value can be blank, a static value, a field or a formula.

WETextBoxMulti (ElementName, ElementDefault, ElementWidth, MaxLength, TextAreaRows, ElementFont, ElementLabels, Validation, InvalidMessage)

The `WETextBoxMulti` function is used to create a multiple value text box control within the report. A text box control allows the user to enter multiple values of custom text.

Parameters:

ElementName must be set to the name of the prompt that the text box satisfies. For example, if the prompt is `{?OrderOptions}`, then the `ElementName` parameter must be set to "`OrderOptions`".

ElementDefault is the text values that you wish to display in the multiple value text box when the report is opened.

If a prompt is used as the default, with syntax similar to `join({?Countries},"|")`, the values entered will appear in the text box when the target report is opened.

ElementWidth is a text value that can be in inches (e.g. “3in”) centimeters (e.g. “6cm”), or pixels (e.g. “1600pi”).

MaxLength is the maximum number of characters that a user is allowed to type into the text box control.

TextAreaRows is the height, in number of rows, of the multiple value text box control. If the number of values entered into the control is greater than TextAreaRows, then the control will have a vertical scrollbar.

Note that TextAreaRows does not limit the number of values that can be added to the control.

ElementFont is used to format the text in the text box. The report developer can use the `WEFont` function in the Formatting functions to easily define a formatted font style.

ElementLabels is a character separated value used to define the “Add”, “Reset” and “Clear” label links at the bottom of the text area. For example “Add Value|Reset Control|Clear All”.

If this parameter is left blank then the defaults of Add, Reset and Clear are used.

Validation is used to ensure that the user enters a value into the text box before the URL is run.

InvalidMessage is the message that will be displayed in an alert pop-up if the user does not enter valid values into the textbox.

Example:

An example of a `WETextBoxMulti` function with parameter values entered would be

```
stringvar elementdefault:= join({?Countries},"|");

stringvar elementfont:= WEFont ("Verdana", 8, "green", "left",
     false, false, "", "");

WETextBoxMulti ("Countries", elementdefault, 16, 16, 3,
     elementfont, "", "empty", "enter a value please")
```

WETreePicker(ElementName, ElementValues, ElementHierarchy, ElementPicks, ElementDefault, TextAreaHeight, TextAreaWidth, TextAreaFont, ElementLabels, Validation, InvalidMessage)

The `WETreePicker` function is used to create a tree picker control in a report. The tree menu can have multiple levels of hierarchy. Values picked from the tree are inserted into a text area.

The `WETreePicker` function syntax can be edited to create a desired look and feel for your tree menu. Menu fonts and icons can be customized within the function syntax. Open the `WETreePicker` in Report > Formula Workshop for more information.

Parameters:

ElementName must be set to the name of the prompt that the tree picker control satisfies. For example, if the prompt is `{?groups}`, then the `ElementName` parameter must be set to "`groups`".

ElementValues is a character separated array of what will be displayed in the tree menu. Values can include text objects (using quoted text or `WETextObject` functions) for folders and values.

Separate multiple values with the "|" character.

ElementHierarchy is a character separated array representing the hierarchy of the `ElementValues` of the tree menu. A zero (0) represents a parent or root folder level item where a one (1) represents the second level of hierarchy and a two (2) represents the third level of hierarchy.

Separate multiple values with the "|" character.

ElementPicks is a character separated array representing the values of the tree menu that are available to be chosen by the end user. A yes (y) represents a value that can be added into the chosen value text area. Element picks can be either a folder or child item. A no (n) represents a folder or value in the tree that cannot be added into the chosen value text area.

Separate multiple values with the "|" character.

ElementDefault is the value or values that you wish to display in the text area when the report is opened.

Separate multiple values with the "|" character.

If the prompt is used as the default, e.g. split(`{?Country},"|"`), the values entered will appear in the text box when the target report is opened.

TextAreaHeight is a text value that can be in inches (e.g. "3in") centimeters (e.g. "6cm"), or pixels (e.g. "1600pi").

TextAreaWidth is a text value that can be in inches (e.g. "3in") centimeters (e.g. "6cm"), or pixels (e.g. "1600pi").

TextAreaFont is used to format the text in the text area. The report developer can use the `WEFont` function in the Formatting functions to easily define a formatted font style.

ElementLabels is a character separated value used to define the "Reset" and "Clear" label links at the bottom of the text area. For example "Reset Choices|Clear Choices".

If this parameter is left blank then the defaults of Reset and Clear are used.

Validation is used to ensure that the user enters a value into the text area before the URL is run.

InvalidMessage is the message that will be displayed in an alert pop-up if the user does not enter valid values into the text area.

Example:

An example of a `WETreePicker` function with parameter values entered would be

```
stringvar items:= "Product|Product Line|Product Category|Product
    Name|Geography|Region|Country";

stringvar hierarchy:= '0|1|1|1|0|1|1';

stringvar picks:= 'n|y|y|y|n|y|y';

WETreePicker ("groups", items, hierarchy, picks,
    join({?groups},"|"), "3cm", "4cm", "", "", "empty", "Please
    enter at least one value to group on")
```

WETreePickerExt(ElementName, ElementValues, ElementDisplays, ElementHierarchy, ElementPicks, ElementDefault, TextAreaHeight, TextAreaWidth, TextAreaFont, ElementLabels, Validation, InvalidMessage)

The `WETreePickerExt` function is used to create a tree picker control in a report. The tree menu can have multiple levels of hierarchy. Values picked from the tree are inserted into a text area.

The `WETreePickerExt` function differs from the `WETreePicker` function in that the extended (Ext) function passes a value that can differ from the display. For example a customer name can be displayed while a customer ID is passed from the control.

The `WETreePickerExt` function syntax can be edited to create a desired look and feel for your tree menu. Menu fonts and icons can be customized within the function syntax. Open the `WETreePickerExt` in Report > Formula Workshop for more information.

Parameters:

ElementName must be set to the name of the prompt that the tree picker control satisfies. For example, if the prompt is `{?groups}`, then the `ElementName` parameter must be set to "`groups`".

ElementValues is a character separated array of what will be passed to a resultant URL based on the chosen values in the tree menu. Values can include text objects (using quoted text or `WETextObject` functions) for folders and values.

Separate multiple values with the " | " character.

ElementDisplays is a character separated array of what will be displayed in the tree menu. Values can include text objects (using quoted text or `WETextObject` functions) for folders and values.

Separate multiple values with the " | " character.

ElementHierarchy is a character separated array representing the hierarchy of the `ElementValues` of the tree menu. A zero (0) represents a parent or root folder level item where a one (1) represents the second level of hierarchy and a two (2) represents the third level of hierarchy.

Separate multiple values with the "|" character.

ElementPicks is a character separated array representing the values of the tree menu that are available to be chosen by the end user. A yes (y) represents a value that can be added into the chosen value text area. Element picks can be either a folder or child item. A no (n) represents a folder or value in the tree that cannot be added into the chosen value text area.

Separate multiple values with the "|" character.

ElementDefault is the value or values that you wish to display in the text area when the report is opened.

Separate multiple values with the "|" character.

If the prompt is used as the default, e.g. split({?Country},"|"), the values entered will appear in the text box when the target report is opened.

TextAreaHeight is a text value that can be in inches (e.g. "3in") centimeters (e.g. "6cm"), or pixels (e.g. "1600pi").

TextAreaWidth is a text value that can be in inches (e.g. "3in") centimeters (e.g. "6cm"), or pixels (e.g. "1600pi").

TextAreaFont is used to format the text in the text area. The report developer can use the `WEFont` function in the Formatting functions to easily define a formatted font style.

ElementLabels is a character separated value used to define the "Reset" and "Clear" label links at the bottom of the text area. For example "Reset Choices|Clear Choices".

If this parameter is left blank then the defaults of Reset and Clear are used.

Validation is used to ensure that the user enters a value into the text area before the URL is run.

InvalidMessage is the message that will be displayed in an alert pop-up if the user does not enter valid values into the text area.

Example:

An example of a `WETreePickerExt` function with parameter values entered would be

```
stringvar values:= "P|P1|P2|P3|G|G1|G2";

stringvar displays:= "Product|Product Line|Product Category|Product
    Name|Geography|Region|Country";

stringvar hierarchy:= '0|1|1|1|0|1|1';

stringvar picks:= 'n|y|y|y|n|y|y';
```

```
WETreePickerExt ("groups", values, displays, hierarchy, picks,
    join({?groups},"|"), "3cm", "4cm", “”, "empty", "Please enter
    at least one value to group on")
```

Menus

This section includes functions in the Menus folder of the webElements function library.

WETabMenu(ElementName, ElementValues, ElementHierarchy)

The WETabMenu function is used to create a tab menu in a report. The tab menu can have multiple levels of hierarchy.

The WETabMenu function syntax can be edited to create a desired look and feel for your tab menu. Menu widths, colours, hover over formatting, etc. can be customized within the function syntax. Open the WETabMenu in the Report menu, Formula Workshop for more information.

Parameters:

ElementName is a unique name that the report developer assigns to the tab menu.

ElementValues is a character separated array of what will be displayed in the tab menu. Values can include text objects (using quoted text or WETextObject functions) for folders and links to open content (using WEOpenInTargetLink or WEOpenInNewWindowLink).

Separate multiple values with the " | " character.

ElementHierarchy is a character separated array representing the hierarchy of the ElementValues of the tab menu. A zero (0) represents a parent or tab level item where a one (1) represents the second level of hierarchy and a two (2) represents the third level of hierarchy.

Separate multiple values with the " | " character.

Example:

An example of a WETabMenu function with parameter values entered would be

```
Stringvar menuvalues:= "Sales" +"|"+ {@saleslink1} +"|"+
    {@saleslink2} +"|"+ "HR" + "|" + {@hrlink1};

Stringvar menuhier:= "0|1|1|0|1";

Stringvar menu1:= WETabMenu("menu1", menuvalues, menuhier);
```

WETreeMenu(ElementName, ElementValues, ElementHierarchy)

The WETreeMenu function is used to create a tree menu in a report. The tree menu can have multiple levels of hierarchy.

The WETreeMenu function syntax can be edited to create a desired look and feel for your tree menu. Menu fonts and icons can be customized within the function syntax. Open the WETreeMenu in Report > Formula Workshop for more information.

Parameters:

ElementName is a unique name that the report developer assigns to the tree menu.

ElementValues is a character separated array of what will be displayed in the tree menu. Values can include text objects (using quoted text or `WETextObject` functions) for folders and links to open content (using `WEOpenInTargetLink` or `WEOpenInNewWindowLink`).

Separate multiple values with the " | " character.

ElementHierarchy is a character separated array representing the hierarchy of the `ElementValues` of the tree menu. A zero (0) represents a parent or root folder level item where a one (1) represents the second level of hierarchy and a two (2) represents the third level of hierarchy.

Separate multiple values with the " | " character.

Example:

An example of a `WETreeMenu` function with parameter values entered would be

```
Stringvar menuvalues:= "Sales" +"|"+ {@saleslink1} +"|"+
    {@saleslink2} +"|"+ "HR" + "|" + {@hrlink1};

Stringvar menuhier:= "0|1|1|0|1";

Stringvar menu1:= WETabMenu("menu1", menuvalues, menuhier);
```

Other

This section includes functions in the Other folder of the webElements function library.

ArrayPositionFinder(SearchIn, SearchFor)

The `ArrayPositionFinder` function is used to find the position of a specific value in a String Array. This function is used internally by several of the webElements functions.

Parameters:

SearchIn is the String Array that is being searched.

SearchFor is the String that is to be found in the Array defined in the `SearchIn` parameter.

WEAutoRefresh(RefreshInterval, Path)

The `WEAutoRefresh` function is used to automatically refresh a report.

WEAutoRefresh does not have to be used in conjunction with any other webElements functions. An unsuppressed formula containing the function must be placed in an un-suppressed section of the report that you wish to automatically refresh.

Note: this function will not override any report specific settings in your Enterprise environment.

Parameters:

RefreshInterval is the Number of seconds between report refreshes.

Path is the text URL path to the current report. This can be left blank (i.e. "") if the current report contains no prompts.

Example:

An example of a `WEAutoRefresh` function with parameter values entered would be

```
Stringvar path:= WETargetPath("rpt", "Name", "SalesReport",
     "lsSCountry="+{?CountryPrompt});

Stringvar autoref:= WEAutoRefresh(6, path)
```

WEMailer(MailTo, CopyTo, BlindCopyTo, Subject, Message)

The `WEMailer` function creates emails when a report is opened. The function will create a new email or multiple emails on the users system with several fields already populated. If the client email application is not already open, `WEMailer` will start the client email application.

This process will occur when a report containing a `WEMailer` function is run and any conditional aspects of the formula are met.

Parameters:

MailTo populates the "To" field in the email.

CopyTo populates the "CC" field in the email.

BlindCopyTo populates the "BCC" field in the email.

Subject populates the "Subject" field in the email.

Message populates the message field in the email.

Other > Deprecated

This section includes webElements functions which have been deprecated.

WEOpenInNewWindow (LinkText, Target, Path, ElementFont)

The `WEOpenInNewWindowLink` function creates a hyperlink that will open a report in a new window.

You cannot use this function in conjunction with any webElements controls. If you wish to pass control values to an IFrame or target window or viewer, use the `WETargetPath` function.

The `WEOpenInNewWindowLink` function does not require a `WEBuilder` function to be present on the report.

Parameters:

LinkText is the text that will appear for the hyperlink, e.g. ">> Open this report in a new window".

WName is the name that the new window will be assigned.

Path is the text URL path to the target report.

```
/businessobjects/enterprise11/desktoplaunch/opendoc/openDocument.js
    p?sType=rpt&sDocName=SalesReport".
```

ElementFont is used to format the text that is typed and displayed in the hyperlink. If this parameter is left blank ("") the font will assume the formatting of the formula object containing the `WESubmitLink` element.

WWidth represents the width, in pixels, of the new window.

WHeight represents the height, in pixels, of the new window.

WResizable if set to "True" will allow the user to resize the new window upon opening.

WXPosn represents the distance, in pixels, that the left edge of the new window will appear from the left of the screen.

WYPosn represents the distance, in pixels, that the top edge of the new window will appear from the top of the screen.

WScrollBars if set to "True" will allow the user to scroll the new window upon opening.

WStatusBar if set to "True" will allow the status bar to appear in the new window.

WToolBar if set to "True" will allow the tool bar to appear in the new window.

WLocationBar if set to "True" will allow the location or address bar to appear in the new window.

WMenuBar if set to "True" will allow the menu bar to appear in the new window.

Requirement: You must be licensed to use Report Explorer in order for the WEOpenInReportExplorerLink function to work. Contact your BusinessObjects Enterprise administrator for more information.

WEOpenInReportExplorerLink(ReportID, LinkText, ElementFont)

The `WEOpenInReportExplorerLink` function creates a hyperlink that will open a report in the Report Explorer application.

This function does not require a `WEBuilder` function to be present on the report.

Parameters:

ReportID is a number that represents the target report in Report Explorer. To determine the `ReportID` of a report, open the Repository Explorer in Crystal Reports, find the target report in Enterprise Items, and hover the mouse over the report name. The `ReportID` should appear as a ToolTip.

LinkText is the text that will appear as a hyperlink, e.g. "Modify this report".

ElementFont specifies the font used for the hyperlink. Use the `WEFont` function to define a specific font or style.

WEOpenInTargetLink (LinkText, Target, Path, ElementFont)

The `WEOpenInTargetLink` function creates a hyperlink that will open a report in a named viewer, window or embedded IFrame.

This is useful if you embed another Crystal Report into your main report using the `WEIFrame` element and wish to pass this Crystal Report a URL.

You cannot use this function in conjunction with any webElements controls. If you wish to pass control values to an IFrame or target window or viewer, use the `WETargetPath` function.

The `WEOpenInTargetLink` function does not require a `WEBuilder` function to be present on the report.

Parameters:

LinkText is the text that will appear for the hyperlink, e.g. ">> Modify this report".

Target is a string representing the target viewer, IFrame, or window that you to pass the URL to.

Path is the text URL path to the target report.

```
/businessobjects/enterprise11/desktoplaunch/opendoc/openDocument.jsp?sType=rpt&sDocName=SalesReport".
```

ElementFont is used to format the text that is typed and displayed in the hyperlink. If this parameter is left blank ("") the font will assume the formatting of the formula object containing the `WESubmitLink` element.

WESubmitButton(ButtonText, Path, ButtonFont)

The `WESubmitButton` function creates a button that submits all selected input and control values to the target URL when clicked.

The `WESubmitButton` function can be placed in a different formula, section or group from the webElements controls it affects.

Parameters:

ButtonText is the text that will appear on the button.

Path is the URL path to the target report. For example:

```
/businessobjects/enterprise11/desktoplaunch/opendoc/openDocument.js
    p?sType=rpt&sDocName=SalesReport".
```

ButtonFont is used to format the text on the buttons and the colour of the buttons. The report developer can use the `WEFont` function in the Formatting functions to easily define a formatted font style.

WESubmitButtonToTargets(ElementName, ButtonText, Path, ElementFont)

The `WESubmitButtonToTargets` function creates a button that submits all selected input and control values to one or more target URL's when clicked.

The `WESubmitButtonToTargets` function can be placed in a different formula, section or group from the webElements controls it affects.

Parameters:

ButtonText is the text that will appear on the button.

Path is the URL path to the target report. For example:

```
/businessobjects/enterprise11/desktoplaunch/opendoc/openDocument.js
    p?sType=rpt&sDocName=SalesReport".
```

ButtonFont is used to format the text on the buttons and the colour of the buttons. The report developer can use the `WEFont` function in the Formatting functions to easily define a formatted font style.

WESubmitLink(LinkText, Path, ElementFont)

The `WESubmitLink` function creates a hyperlink that allows the user to submit all selected input and control values to the target URL.

The `WEResetButton` element can be placed in a different formula, section or group from the webElements controls it affects.

Parameters:

LinkText is the String that will appear as the hyperlink.

Path is the URL path to the target report.

```
/businessobjects/enterprise11/desktoplaunch/opendoc/openDocument.js
    p?sType=rpt&sDocName=SalesReport".
```

ElementFont is used to format the text of the hyperlink. The report developer can use the `WEFont` function in the Formatting functions to easily define a formatted font style.

WESubmitLinkToTargets(ElementName, LinkText, Path, ElementFont)

The `WESubmitLinkToTargets` function creates a link that submits all selected input and control values to one or more target URL's when clicked.

The `WESubmitLinkToTargets` function can be placed in a different formula, section or group from the webElements controls it affects.

Parameters:

LinkText is the text that will appear on the link.

Path is the URL path to the target report. For example:

```
/businessobjects/enterprise11/desktoplaunch/opendoc/openDocument.jsp?sType=rpt&sDocName=SalesReport".
```

LinkFont is used to format the text on the link. The report developer can use the `WEFont` function in the Formatting functions to easily define a formatted font style.

TargetPaths

This section includes functions in the TargetPaths folder of the webElements function library.

WETargetPathExt(DocType, IDType, ID, WName, WWidth, WHeight, WResizable, WXPosn, WYPosn, WScrollBars, WStatusBar, WToolbar, WLocation, WMenuBar, OtherParams)

The `WETargetPathExt` function creates a target URL. This target URL is used to pass parameters to other reports in the system. `WETargetPathExt` utilizes the OpenDocument function to link to other reports.

This function is useful for opening or updating, and controlling the format, of new or named windows.

Parameters:

DocType is a String value that represents the type of document being linked to. `DocType` can be set to one of three possible values.

- "rpt" for a Crystal report
- "car" for an OlapI application
- "wid" for a Web Intelligence document.

IDType represents the type of the ID passed in the ID parameter. Set `IDType` to "CUID" if you are linking to an object in the repository by its ID. Set `IDType` to "Name" if you are linking to an object in the repository by its name.

ID is either the CUID or the Name of the object being linked to.

The type of value passed to the `ID` parameter depends upon the value passed to the `IDType` parameter.

WName is a String value that represents the name of the window or i-frame that you are targeting or opening.

WWidth represents the width, in pixels, of the window.

WHeight represents the height, in pixels, of the window.

WResizable if set to "True" will allow the user to resize the window upon opening.

WXPosn represents the distance, in pixels, that the left edge of the window will appear from the left of the screen.

WYPosn represents the distance, in pixels, that the top edge of the window will appear from the top of the screen.

WScrollBars if set to "True" will allow the user to scroll the window upon opening.

WStatusBar if set to "True" will allow the status bar to appear in the window.

WToolBar if set to "True" will allow the tool bar to appear in the new window.

WLocationBar if set to "True" will allow the location or address bar to appear in the window.

WMenuBar if set to "True" will allow the menu bar to appear in the window.

OtherParams are any other parameters you wish to pass in the URL string that will not be passed by the webElements functions. For example, set `OtherParams` to `&lsSCountry="USA"` to set the country prompt of the report to USA.

Use the `OtherParams` parameter to pass control values to an IFrame, a named window / named viewer.

To pass control values to an IFrame, set `OtherParams` to `"weIframe="` plus the IFrame name. This is useful if you wish to pass values to a Crystal Report or Web Intelligence document that is embedded into your main report with the `WEIFrame` function.

To pass control values to a new window each time, set `OtherParams` to `"weWindow=New"`.

To pass control values to a name window, set `OtherParams` to `"weWindow="` plus the window name. This is useful if you wish to pass values to a Crystal report or Web Intelligence document that is in a named window. Using named windows will prevent a new window from being opened each time.

Remarks:

The `WETargetPathExt` function specifies the default location of the `openDocument` function for your installation of BusinessObjects Enterprise. The default location is selected as a result of the value specified in the `WEPlatform` function.

webElements Common Parameter List

All webElements functions are Crystal Reports custom functions. This section describes some of the common Custom Function parameters and what they represent.

ElementName

The `ElementName` parameter is used to pass a parameter or prompt name through a URL string. The `ElementName` parameter must be set to the name of the prompt that the function satisfies. For example, if the prompt is `{?OrderOptions}`, then the `ElementName` parameter must be set to "`OrderOptions`". This will append the syntax "`&lsSCountry=`" to the URL. This syntax is based on OpenDocument requirements.

The values of the `ElementName` parameter should not be duplicated within a report.

ElementDisplay

The `ElementDisplay` parameter is used to populate the text that displays beside an input control, such as a radio button or a check box.

`ElementDisplay` can be left blank.

ElementValue

The `ElementValue` parameter is used to specify a value that will be passed to the URL when its matching input is selected. This will not necessarily be the same as the `ElementDisplay`.

ElementDefault

The `ElementDefault` parameter is used to specify a pre-selected value in an input control when the report is opened. Clicking a Reset button will set all webElements values back to their defaults.

`ElementDefault` can be left blank, or "".

Validation

All inputs and controls allow the report developer to specify whether they should be validated. This will ensure that proper values and value types are being entered by the user before the URL is processed.

Validation parameters include:

- `Empty` – used in `WETextBox` and `WETextArea` inputs to ensure that the parameter is not empty, or null.
- `Checked` – used in `WERadio` and `WECheckBox` controls to ensure that at least one value is selected.
- `Numeric` – used in `WETextBox` and `WETextArea` inputs to ensure that a number is entered.
- `Integer` – used in `WETextBox` and `WETextArea` inputs to ensure that an integer is entered.

- `Date` - used in `WETextBox` and `WETextArea` inputs to ensure that a date is entered.
- `Email` - used in `WETextBox` and `WETextArea` inputs to ensure that an e-mail address is entered. Note that this does not test the e-mail address works.
- `Length>` – used in `WETextBox` and `WETextArea` inputs to ensure that the value is not longer than a certain number of characters. The following syntax alerts the user on submit when greater than 60 characters have been entered in the text box.

```
WETextBox ("tb1", {?tb1prompt}, 6, 6, "", "Length>60", "Too many
    characters have been entered.")
```

- `Length<` – used in `WETextBox` and `WETextArea` inputs to ensure that the value is not shorter than a certain number of characters.
- `Value=` – used in `WETextBox` and `WETextArea` inputs to ensure that the parameter is not a certain value. The following syntax alerts the user on submit when the value "*" has been entered in the text box.

```
WETextBox ("tb1", {?tb1prompt}, 6, 6, "", "Value=*", "This is an
    invalid entry.")
```

Multiple validation parameters can be used. The validation types must be separated by "|". The number of validation messages must match the number of validation parameters.

The following syntax alerts the user on submit when the text area is empty or when greater than 6 characters have been entered in the text box.

```
WETextBox ("tb1", {?tb1prompt}, 6, 6, "", "Empty|Length>6", "Enter
    a value.|Enter a code of 1 to 5 characters in length.")
```

Printing or Exporting Reports that use webElements

Formulae containing webElements print as text or export as text.

This behaviour is as per the support policy for pass-through html. Formulae containing pass-through html will print as text and not as rendered html objects.

The following sections will give you ideas on how to work around this issue.

Use the browser print feature should you wish to print the controls.

A workaround if you wish to print the controls as seen in the browser is to use the browser print feature instead of the viewer print feature.

Format the formula to hide the webElements text when printing or exporting.

A workaround should you not wish to print the controls is to format the formula on the report to have white text and to use the font formatting within the function itself to format the object while in the viewer. Upon printing using the viewer print feature, the formula font will be white and will not show up. This may be a suitable workaround for some export types as well.

Use an IFrame (WEIFrame function) to contain the information that you wish to print or export.

A workaround should you wish to print the contents of a report, including charts, but do not wish to print the controls is to use an IFrame for the report contents.

1. Create a main “container” report that only has the webElements controls (select menus, text boxes, submit buttons, etc.) in it.
2. Create a new formula using the WEIFrame (in the Formatting folder) and insert this new formula on your “container” report.
3. Have the IFrame formula point to the report that contains your content / data.
4. On the container report, create a new formula using the WEViewer function and choose Suppress for the toolbar parameter so that you don't see a toolbar on the container report.
5. Optional: On the content / data report you can hide / show the toolbar using the WEViewer function and choosing Hide as the toolbar parameter and Hide as the Scrollbar parameter...now the user can print from the content report instead of the report with the controls...hence none of the controls will print or export as the IFrame drives this content.
6. Optional: In the content / data report format the formula that contains the WEViewer function as white...when it prints it will not show up. It will still export to some formats such as Excel, but the number of controls that do export will be minimized.

Troubleshooting

All of the formulae containing inputs and controls show up as text in the BusinessObjects or HTML viewers.

Ensure that an unsuppressed `WEBuilder` function appears in your report. This function should contain all of the webElements that interact with the target report.

Formulae containing webElements print as text or export as text.

This behaviour is as per the support policy for pass-through html. Formulae containing pass-through html will print as text and not as rendered html objects.

See the Printing or Exporting Reports with webElements section for more information and workarounds.

All of the inputs and controls show up correctly on the report; but, nothing is passed to the target report when you click the submit button.

Ensure that an unsuppressed `WEBuilder` function appears in your report. This function should contain all of the webElements that interact with the target report.

All of the inputs and controls show up on the report; but, the report retains its original parameter values when you click the submit button. No error appears at the left side of the browser's Status Toolbar.

This problem occurs when data is saved with the report.

To ensure that data is not saved with the report, select File > Report Options and clear the Save Data With Report checkbox.

All of the inputs and controls show up on the report; but, "Error on page." appears at the left side of the browser's Status Toolbar when a submit button or submit link is clicked. Double-clicking on the error icon reveals that a "'getform' is undefined" error has occurred.

This problem can occur when there is no formula containing a `WEBuilder` function on the report, or the formula containing the `WEBuilder` function is suppressed or on a different page than the other webElements controls.

See the *Requirements for all Crystal Reports* section of this user guide for more information.

All of the inputs and controls show up on the report; but, "Error on page." appears at the left side of the browser's Status Toolbar when a submit button or submit link is clicked. Double-clicking on the error icon reveals that a "'getform' is undefined" error has occurred.

This problem can occur when a prompt on the report and the corresponding ElementName for the control starts with a number or contains non-alphanumeric characters.

The ElementNames are used for JavaScript variables for storing values. A variable name can consist of alphanumeric characters and the underscore. It cannot begin with a numeral. Variable names are case sensitive.

In the report designer Preview mode no text shows up in the formula containing the WEBuilder function.

Verify that formulae and variables used in the formula containing the `WEBuilder` function return a value. Null values will interfere with the proper results.

To disable Null values, select File > Report Options and check the Convert Database NULL Values to Default checkbox and the Convert Other NULL Values to Default checkbox.

"Report Linking Error. Parameter parsing problem: String index out of range: -2" appears after clicking a submit button.

A URL is being passed with null values for one or more `lsS` or `lsM` parameters. Ensure that you validate parameters that may return null values.

"A string can be at most 65534 characters long." appears in the designer when running a report containing webElements formulae.

A formula in Crystal Reports can be no more than 64k in length.

Use one formula per webElements control to minimize the amount of data that is returned per formula.

If you are rolling up data in variables to use in webElements controls, use one formula per variable to minimize the amount of data that is returned per formula.

Symbols on calendar controls and other controls do not show properly.

Ensure that you have the Arial font installed on machines which view the reports. If this is not an option, change the icons and the appropriate icon fonts within the calendar controls to a symbol and font type that your end users will have installed.

Controls not working properly in FireFox.

Certain controls will not render properly in Mozilla FireFox. These include the marquee controls and the fly-out section control. Certain functionality is not supported in FireFox which prevents these controls from working properly in this browser.

Controls not working properly in Navigator or Opera.

These functions have not been tested in Netscape Navigator or Opera. You may experience controls not working in these browsers. Certain functionality that works in Internet Explorer will not work in Navigator or Opera.

WESelectCascadeExt or WESelectMultiCascadeExt controls are not passing the correct values in the final URL.

Ensure that in your cascade set that you do not use non-Ext controls in conjunction with the Ext controls. Non-Ext controls do not have separate values & displays and will cause issues with Ext controls.

Select menu controls always appear on the top of any object regardless of the order they are placed in.

Select lists do not obey the normal z-index stacking order. Nothing can be placed "on top of" a select list unless it is another select list with a higher z-index. Other elements are always rendered below select lists, even if they are given a higher z-index value than the select.

As a workaround place the select menu into a collapsible section or a pull-down section or a fly-out section. Otherwise ensure there is enough space around select menus to avoid this issue.

Tips and Tricks

A report containing prompts and webElements controls is published to the Enterprise environment. How can the default prompt page be avoided?

Move the report into a folder that users will not access. In the Central Management Console > Objects > New Object interface create a Hyperlink that will open the report with chosen default prompt values. Publish the hyperlink to the folder that the users will access.

Example:

The following is an example hyperlink for BI 4 (Crystal Reports 2011) using OpenDocument syntax to open a Crystal Report with default prompt values.

```
/BOE/OpenDocument/opendoc/openDocument.jsp?
sType=rpt&sIDType=CUID&iDocID=AaWLhmtS9kVHvRSSmRzDJk8&lsSCusto
mer=6&lsSCountry=Canada
```

Can webElements be used with live data?

Yes. Controls such as select menus that require that data be rolled up or amalgamated before the control is created are populated by running a Report Header sub-report that rolls the data up. The data is then passed to the main report via a shared variable which is used in the control.

Please see the DCP report in the webElements .zip package for ideas on how to do this.

Controls such as check boxes or radio buttons can be populated by placing the formula containing the control in the Details section or the Group Header / Footer section where the control is needed. Ensure that the controls do not span more than one page. See the Requirements section of the User Guide for more information.

When is a WEBuilder function required on a report?

A WEBuilder function is required on a report when webElements controls (e.g. WESelect, WETextBox, etc.) are used on the report. WEBuilder creates JavaScript functions and variables that are used to build a URL or to pass control values to another viewer.

Finding more information

For more information and resources related to webElements, visit the Crystal Reports design forum at
http://forums.sdn.sap.com/forum.jspa?forumID=300&start=0

When posting to the forums, ensure that you use “webElements” in your subject line.

If you need help implementing a webElements solution at your site, visit the SAP Business Objects consulting services site at:
http://www.sap.com/services/bysubject/businessobjectsconsulting/index.epx

► www.sap.com