WebFOCUS

WebFOCUS New Feature Highlights

Version 7 Release 6
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WebFOCUS New Feature Highlights
Version 7 Release 6

This documentation describes the new features available in WebFOCUS Version 7 Release 6.

It is intended for all levels of users, including application developers, administrators, and end users. It is also intended to serve as a quick reference for users upgrading from a prior release.

For detailed information on each new feature, see the appropriate product documentation and the New Features manual for your release on documentation.informationbuilders.com.
Browser Certification

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- **Microsoft Internet Explorer Version 8 Certification.** Developer Studio, WebFOCUS applications, Managed Reporting Dashboard, OLAP, and other end-user features are certified with Microsoft Internet Explorer Version 8.

- **Firefox Version 3.5.2 Certification.** WebFOCUS applications, Managed Reporting Dashboard, OLAP, and other end-user features are certified with Firefox Version 3.5.2.

WebFOCUS RStat

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WebFOCUS Rstat is a statistical modeling workbench embedded in Developer Studio. It allows you to perform common statistical and data mining tasks, and develop models that can be deployed as scoring applications on every platform. Rstat enables data miners and Business Intelligence developers to collaborate with the same tools used to access, manipulate, or transform data, develop predictive models, and create and deploy scoring applications along with associated reports to any worker within their organization.

WebFOCUS InfoAssist

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- **Ranking a BY or Measure Field.** For reports only, you can use the Rank button in the Query Design view, Interactive Design view, and the Compose view to insert a rank column in InfoAssist queries.

- **Applying a Unique Value Limit to a Column.** For reports only, you can use the Limit option in the Query Design view, Interactive Design view, and the Compose view to specify the number of unique values displayed for a field in an InfoAssist query.

- **Applying Global Styling to a Query.** You can use the Style button in the Query Design view, Interactive Design view, and the Compose view to apply global styling to an entire InfoAssist query.
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- **Compose View and Building Compound Reports.** Compose view combines the features of query building with the ability to style and present customized documents. Compose view allows you to build multiple reports and charts on the same canvas. The styling, design, and report building functionality of Interactive and Query Design view is available in Compose view, as well as additional features that simplify building compound documents. You can build and insert multiple queries in the form of reports and charts. You can also insert images and text for presentation and organizational purposes.

- **Creating Active PDF Output Format.** The Output Types group provides buttons that you can select to create output in any of the supported formats. Active PDF is now a supported format for creating outputs when running a report query.

- **Hierarchical Reporting.** InfoAssist enables you to create hierarchical reports from multi-dimensional (cube) data sources, such as SAP BW, Essbase, and Microsoft Analysis Server 2005.

- **Cube Browsing Support in InfoAssist Active Preview.** You can access an Essbase, SAP BW, or Microsoft SQL Server Analysis Services cube in the InfoAssist Interactive Design view and see a live preview of the query output as you add and remove objects and formatting in the Layout Canvas. InfoAssist actively edits and displays the report output in response to your choices on the Layout Canvas. This interactive update of query results for cube data sources is called *cube browsing*.

- **Global Preferences.** WebFOCUS Administrators can configure InfoAssist Global Preferences from the WebFOCUS Administration Console.

- **Advanced Filter Options.** Advanced filtering options include the ability to use Where and Where Total, in addition to enabling And, as well as Or, conjunctions in a single expression. You can also group conditions and expressions, as well as apply functions and calculations within criteria. This option provides more functionality than the simple filter, which is still available through the Filter group of the Home tab.
- **Where-Based Joins.** Using conditional joins, you can establish joins based on conditions other than equality between fields. In addition, the host and cross-referenced join fields do not have to contain matching formats, and the cross-referenced field does not have to be indexed. The conditional join is supported for FOCUS and all relational data adapters.

- **Multi-Select Data Source Fields.** You can multi-select data source fields that you want to add to a query in Interactive Design view, Query Design view, and Compose view by clicking the desired fields while holding the Ctrl key on the keyboard. You can drag and drop fields onto the canvas pane, or add them to the Query field container.

- **Changing a Field Format.** The Format group provides formatting options for virtual or column fields including Alphanumeric, Integer, Decimal, Currency, Percentage, Comma, and Decimal Spaces. You can also apply floating and non-floating currency, percent signs, and commas. You can increase and decrease decimal places.

- **Recalculating the Results of a Compute Command.** For reports only, selecting Recompute recalculates the result of a Compute command. Recompute is similar to subtotal in that it recalculates only at the specified sort break.

- **Adding Page Headings and Footings to a Report in Interactive Design View.** You can add page headings and footings to a report in Interactive Design view. Headings and footings supply context and key information about a report, such as its purpose and audience. Headings and footings also provide structure, helping you navigate to the detail sought, and they enhance visual appeal.

- **Undo/Redo Last Action.** You can undo and redo up to 25 actions per session. InfoAssist maintains the undo/redo list of actions even when you switch between queries.
Chart New Features. A chart often conveys meaning more clearly and effectively than data displayed in tabular format. On a chart, you can give data a shape and form, and reveal patterns and relationships among many data values. The following chart new feature enhancements are available:

Selecting a Chart Type. InfoAssist provides a complete chart type library, which includes advanced chart types, as well as basic types. The Chart Types group, which provides buttons for selecting the most commonly used chart types, now includes an additional button labeled Other. Clicking Other gives you access to the chart type library. The chart type categories in the library are bar, line, area, pie, XY plot, 3D, stock, and special.

Designing a Chart in Active Preview. The preview of the query that you are creating is called “active” because the chart image is live. InfoAssist can recognize and quickly process your mouse actions on the chart. A single right click on a selected chart element opens a pop-up menu with the available design options. Once you have made a choice from the menu, InfoAssist applies it to the chart element, so that you see the result right away. For example, you can control how color is applied to a series, specify the color of the background or frame, and adjust the display of axis labels and titles.

Adding a Page Heading and Page Footing to a Chart. You can make a chart more meaningful by adding a page heading and page footing. Page headings and page footings supply context and key information about a chart, such as its purpose, audience, and author. Using the Head/Foot button in the Report group of the Home tab, you can add a page heading and page footing to a chart, and style and render the heading and footing as desired.

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InfoAssist Functionality. WebFOCUS InfoAssist extends the power of WebFOCUS Managed Reporting, providing business users with the most advanced, yet simple to use, ad hoc reporting features needed to create intricate reports and perform insightful analysis. Contact your local Information Builders account manager to learn how this new capability can be licensed and enabled.
- **Personal InfoAssist.** The self-service version of InfoAssist is available outside of the Dashboard (Managed Reporting) environment and can be called from any application to open the tool. This enables you to integrate InfoAssist into your own self-service applications. Contact your local Information Builders account manager to learn how this new capability can be licensed and enabled.

**Developer Studio**

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- **Repeating Headings and Footings on Panels in PDF Report Output.** When the columns presented on PDF reports cannot be displayed on a single page, the pages automatically panel. Paneling places subsequent columns for the same page on additional pages until the entire width of the report is presented, after which a new page number is generated with a new set of panels. In order to make panels following the initial panel more readable, you can repeat headings and footings on each panel page and turn on page numbering.

- **Styling the Alignment Grid With Grid Options and Cell Options.** When using a heading or footing in Report Painter and enabling the Alignment Grid, you can align your border settings to the headings and footings with Grid Options and Cell Options. Alignment grid is supported for reports in HTML and PDF output formats and aligns fields, text, and borders within report headings and footings with precision. With Alignment Grid enabled, Grid Options and Cell Options provide further styling options for the alignment items.

- **Wrapping a Horizontal Across Column in a PDF Report.** When sorting a PDF report with a horizontal Across column, Report Painter displays sort field values horizontally and creates columns. You can wrap the values in the Across column, automatically changing the width of the Across column so that it does not exceed the width of the value underneath it. The Wrap option is available from the Style tab of the Field Properties dialog box when an Across column is selected.
Suppressing Blank Lines in Report Output With the Set Tool. By default, WebFOCUS inserts blank lines around subtotals, and subheadings and subfootings for invisible fields, when formatting a report for output. In addition, certain data lines may be blank and appear as blank lines on the report output. You can eliminate these blank lines from the report output using the DROPBLNNKLINE command from the Set tool.

Controlling Gauge Scale Values. Advanced Graph Assistant and Power Painter have properties that allow you to set the maximum and minimum values on a numeric scale for Gauge charts. This provides you with the ability to control the lowest and highest values that appear on the Gauge scale.

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Supporting Cluster Load Manager (CLM) Processing Configurations. From the Developer Studio Data Servers area, you can perform development against WebFOCUS environments that are configured with Cluster Manager (CLM) Processing.

Authoring Mode Options for Field Names. Authoring Mode options have been added to the Reporting tab of the Developer Studio Options dialog box. Authoring Mode determines how field names for a procedure (.fex) are written in the WebFOCUS source code. Options are Qualified fieldname, Unqualified fieldname, or Alias fieldname.

Applying Mandatory Filters to Fields in Report Painter. If you specify the Access Property NEED_VALUE option for fields in the Master File being used in Report Painter, the Object Inspector indicates the fields that require a mandatory filter in the report.

Join Tool Enhancements. The Join tool has been enhanced by providing a Save icon on the Join toolbar. Additionally, right-clicking anywhere in the Join window provides a context menu with options to create a new join, add a file, clear a join, or run a join.

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Using DHTML and PS Output Formats in Precision Reports. The DHTML and PS output formats are available in the Precision Report tool.
Allocating WebFOCUS Files With the Allocation Wizard. The Filedef Tool is replaced by the Allocation Wizard. The Allocation Wizard enables you to create a FILEDEF command and generates platform independent file paths for all portable platforms by creating FILEDEF syntax with application names.

Printing the Color-Coded Source Code From the Text Editor. The Text Editor preserves the color-coded text when you print the source code.

Executing a Request With the F5 Shortcut Key. The Developer Studio Text Editor has been enhanced so that you may execute procedures by using the F5 shortcut key.

Displaying a Grid for Object Placement Evaluation. For Portable Document Format (PDF), PostScript (PS), or DHTML reports you can select the Display grid for object placement evaluation check box to display a grid in the report output. This setting enables you to evaluate the correct placement of data and objects during your report design.

Assigning Date/Time Formats. The Date and Time Formats dialog has been enhanced to enforce valid Date-only and DateTime format combinations, based on the input entered and the field selected. You may assign the Date/Time format, value, and function in the Report Painter.

Reading Values From a File With a DECODE Function. The DECODE function is available in the Function Arguments dialog box of the Report Painter and now enables you to read values from a file in addition to having the values inline. The DECODE function assigns values based on the coded value of an input field.

Showing Cluster Nodes Under Data Servers. In the Data Servers area of Developer Studio, you may view Reporting Server Cluster Nodes and the Reporting Servers that are part of the Cluster Node configuration.

Displaying the File Name Column in the Managed Reporting Area. In the Explorer tree of the Managed Reporting area of Developer Studio, the File name column specifies the resource of the hypertext reference (HREF) for files and folders.
- **Command Console Enhancements.** The Command Console has been enhanced to provide more options for working with commands in the Console.

- **Preserving User-Defined Cookies in Developer Studio.** By default, Developer Studio deletes cookie information when logging off from a WebFOCUS Environment, shutting down the product, or restarting it. To preserve user-specified cookies, the cookie names must be specified using a cookie exception list in the template file. This list can be added to an existing template or a new template can be created to store just the cookie list. There is no limit on the number of cookies that can be specified.

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- **Creating Precision Reports.** Accessible from the Report Painter, precision reports enable you to create perfectly aligned PDF output for a pre-printed form, such as a Bill of Sale or Shipping Invoice. The Precision Report tool enables you to build an exact layout for a form by embedding data in headings and text objects, managing images, and drawing objects to fit specific positions.

- **Renaming the PDF and HTML Layout Painter Tools.** The following tools have been renamed in the local projects, Managed Reporting, and Data Servers areas:
  - HTML Layout Painter is now HTML Composer.
  - PDF Layout Painter is now Document Composer.

- **Adding or Modifying External Tools.** You may edit the list of registered external tools by clicking the Add or Modify External Tools icon, located on the Commands Toolbar in Developer Studio. The Commands Toolbar enables you to access any external program added in the External Tools tab of the Developer Studio Options dialog box. When you add an external program, it appears as an additional icon on the Commands Toolbar.
Adding Different Headers and Footers on an Overflow Page. When you use a coordinated compound document in Document Composer, any report component that exceeds the designated vertical coordinates within the page layout automatically generates an overflow page at run time. You may customize the layout of the subsequent pages by adding a new overflow layout page for the selected page layout. This enables you to add different headers and footers between the first page of the report and the overflow pages of the report.

Resetting Page Numbers in a Coordinated Compound Report. Within a coordinated compound report in Document Composer, you may select whether page numbers are reset at each new coordinated sort key value or run continuously through the entire document. The Reset Page Number option enables the coordinated compound layout to be used to create single continuous reports across sort values, or to burst into individual reports by the primary sort key, and retain the desired page numbers.

Styling Column Totals and Row Totals. You may apply styling options to column totals and row totals from the Report Options dialog box. In the Report Painter, column totaling produces a final row on the report, which contains the totals for each column of numbers. Row totaling produces a new column containing the sum of all numbers in each row.

Creating Dynamic Parameters by Adding a Filter. In the HTML Composer, dynamic values are available by default if a data field used in the procedure is associated with the selected form control. You may also create new dynamic parameters by adding a filter to a report or graph component in the layout.

Controlling the Format of Reports With Multiple Display Commands Using the SET Tool. You can select the SET DUPLICATECOL command in the SET tool to reformat report requests that use multiple display commands (Sort Groups), placing aggregated fields in the same column above the displayed field. By default (ON), each new display command in a request generates additional sort field and display field columns. With DUPLICATECOL set to OFF, each field occupies only one column in the request, with the values from each display command stacked under the values for the previous display command.
Magnify Demo Sample Application. A new sample application included in Developer Studio demonstrates Magnify Lucene, an enterprise search solution. When Developer Studio is installed, an application/project folder called Magnify Demo is created. The application folder contains all the reports and data used by the sample application, as well as a form to feed new items to Magnify Lucene.

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WebFOCUS for Google Maps. Teaming WebFOCUS with Google™ Maps in HTML Layout Painter gives you flexibility to enrich maps with analytic content. You can use WebFOCUS to drive what is displayed on a map, conditionally style location indicators to visually convey operational trends, and navigate the map from a related report to zoom in and out of critical areas. You can also use Google Maps to pre-filter and drill down to your WebFOCUS reports containing all the details on one or more locations of interest.

Tab Control Enhancements. The tab control options in the HTML Layout Painter have been enhanced so that you may resize the tab control to fit the full screen of your layout, change the default size of the tab labels, change the appearance of the tabs, and change the location of the tab items on the tab control. You may also add background images to tab items.

Entering Masked Text in HTML Layout Painter. In HTML Layout Painter, when entering a value in a text box at run time, you may set the mask text property so that the text is not displayed as text, but masked by default characters. This is recommended when using passwords or other sensitive information.

Setting the Display Value for a Dynamic List. When using a Dynamic Accept list in Report Painter, you may select a value to be displayed as a parameter. A dynamic list retrieves values from a specified data source when the request is run. The display value can be different from the return value by using the Values for Displayed Field option in the Variable Editor.
Adding No Selection to a Static List of Parameter Values. When using a Static Accept list, No Selection sends FOC_NONE to the list of available parameters at run time. When selected, FOC_NONE is sent as the parameter value and the WebFOCUS Reporting Server will run the report without the Where clause.

Using PowerPoint Templates With Compound Documents. When Microsoft® PowerPoint® is set as the compound document output format, you may embed the compound output into a pre-existing PowerPoint template. A compound layout report is comprised of individual component reports or graphs, either embedded or external. You may build compound reports in the PDF Layout Painter.

Formatting Text Elements. Text formatting options in the PDF Layout Painter and HTML Layout Painter have been enhanced so that you may format individual text elements and style entire strings of text, words, or individual characters. You may format individual pieces of text by using the Bold, Italic, Underline, Superscript, and Font Style options. If the entire text element is selected, Font Style and Alignment options are available. These text formatting options are only applicable in the PDF Layout Painter when PDF is set as the Compound document output format.

Freezing the Scrollable Area for HTML Report Output. You may freeze page headings and footings, report headings and footings, column titles, and totals for your report output. A scroll bar is created so that the headings and footings are locked in place in the HTML output. The freeze option is available from the Features tab of the Report Options dialog box.

Preserving Leading and Internal Blanks in Report Output. You can use the SET SHOWBLANKS command if you want to preserve leading and internal blanks in HTML and EXL2K report output. By default, HTML browsers and Excel remove leading and trailing blanks from text and compress multiple internal blanks to a single blank.
Setting the Currency Symbol. You can use the SET CURRSYMB command to display a currency symbol in the reporting tools as something other than the default currency symbol (that is set in the code page). By default, the Floating dollar-M and Non-floating dollar-N format for fields display the currency symbol for the code page being used by the server.

Creating Synonyms From Reporting Tools. You can create a synonym directly from any of the Developer Studio reporting tools. When you begin a report in Developer Studio, a list of available synonyms is displayed. If you want to report against a synonym that is not in the list, simply click the Create New button in the file list window to launch the Create Synonym tool.

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Enabling Pop-Up Descriptions for Column Titles. You can enable pop-up descriptions for column titles in report output using the POPUPDESC parameter. The POPUPDESC parameter enables you to view pop-up field descriptions in an HTML report when your mouse pointer is positioned over a column title in the report output. Field description text is displayed in a pop-up box near the column title using the default font for the report.

Handling Missing Values in the Define and Compute Tools. Using the Options button in the Define and Compute tools, you can specify how to handle missing values in temporary fields (Define expressions and Compute expressions) in report output. This prevents the use of default values in calculations (numeric fields assigned the value 0, and alphanumeric fields assigned the value blank) which might give erroneous results.

Uploading Data Files. You can upload (import) external data files, such as Excel spreadsheets, or files with comma-delimited values, tab-separated values, or pipe-separated values, for use in WebFOCUS reporting tools. When you upload a file, a WebFOCUS file description (Master File) and data file are created for use in your reporting application.

Source Control Enhancements. The following version control systems are supported through the Developer Studio Source Control feature: ClearCase, CVS, and Subversion. Version control programs enable you to manage files, providing backup and change tracking.
PDF Layout Painter. Several enhancements are available in PDF Layout Painter:

- **Setting Page Orientation in PDF Layout Painter.** When creating a report in PDF Layout Painter, you can set portrait and landscape page orientation for individual pages in the same document. This allows you to customize a single page for the best display of the data on that page, for example, a wide graph.

- **Creating Active Technologies Dashboards in PDF Layout Painter.** The Active Technologies Reports feature has evolved from a report output type to an entirely new way of reporting. The PDF Layout Painter is used to develop active dashboards, which combine multiple active reports into a variety of scenarios that are coordinated with a common sort field. Active dashboards are best suited for developing storyboards with multiple charts and tables that give users a complete view of a business issue. You can send active dashboards to users as stand-alone Dashboard pages or incorporate them into corporate Dashboards.

HTML Layout Painter. Several enhancements are available in HTML Layout Painter:

- **Creating Active Technologies Dashboards.** HTML Layout Painter has extended the functionality of active reports by providing the features to build an active dashboard: an HTML form with one or more active report procedures and controls to mimic active report menu options. This allows global modification of multiple active reports in HTML Layout Painter created pages.

- **Adding Schedule Capability.** From the Developer Studio HTML Layout Painter tool, you can add a Schedule button to an HTML form that will enable you to schedule an externally referenced Managed Reporting Standard Report by opening the ReportCaster single page Scheduler Tool. The Scheduler Tool provides the full function of ReportCaster presented in a unified user interface.

- **Adding a Tab Control to the Layout.** You can add a tab control to the report page layout. Tab controls enable you to create one or more pages in one HTML form in order to improve the display of secondary data.
- **Setting Default Values.** When using Dynamic or active report control values, you can specify value(s) to be selected as the default whenever the procedure is run. These values will be automatically selected (highlighted) in the Parameter list when the procedure is run.

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- **Displaying Subtotals and Other Summary Values Using Prefix Operators in Power Painter.** The Subtotal property in the Field Properties palette enables you to display subtotals, and other summary values using prefix operators, for any or all of the numeric fields whenever the value of the selected sort field changes in a report query.

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- **Always Author Reports With Qualified Field Names.** Enables you to set how fields are written to the procedure files (.fex). Consequently, the field names are displayed in the Developer Studio reporting tools as they are written in the procedure files (.fex).

- **Styling Options for Subheadings and Subfootings.** You can selectively style individual items in the subheading and subfooting object areas.

- **Expression Builder.** Import Values has been added to the Compare Type options in the Expression Builder, enabling you to use a local external file to provide a query limit for the selected data.

- **Comments in the Text Editor.** A comment option is available in the text editor, which enables you to add and remove comments for selected lines of WebFOCUS code.

- **Power Painter Enhancements.** Conditional styling for Y-axis fields in graph objects, right-click context menu for image properties, option to view procedure source code, ability to set user preferences, support for define-based joins, Size to Fit option for reports, support of the AHTML, PPT, and Excel formats, and functionality for Field, Coordinate Reports, Page Number, and Font properties.
HTML Layout Painter. Several enhancements are available in HTML Layout Painter:

- **Double List Parameter Controls in HTML Layout Painter.** A double list form control displaying multi-select parameter values can be added. This enables you to view a list of available values and add or remove them from one list to another.

- **Slider Parameter Controls.** You can add a slider control for numeric range values in a report or graph. This enables you to use a slider bar to select from a range of values.

- **Show/Hide Frame.** When running a report with parameters, you can selectively show or hide the frame until the output is selected.

- **Send Display Values for Static and Dynamic Controls.** You can show the display value, rather than the actual data, for headings and footings in the report output.

- **Thumbnails Tab.** You can view thumbnails of each page in the HTML layout.

Graph Assistant. Several enhancements are available in Graph Assistant:

- **Preview Live or Sample Data.** You have a choice of viewing live or sample data in the graph preview area.

- **Multiple Field Selection.** You have the option to select and add multiple fields to a graph and then drag and drop the fields on the graph preview area or the query pane.

- **Line Stroke Styling.** You can apply line stroke styles to line objects using the Chart Editor. Line objects make up the lines and grids displayed in a graph.

- **Display Options for Pie Chart Labels.** Additional options are available for displaying the data labels used to represent the individual pie slices in a pie chart.
Coordinated Compound Reports. Several enhancements are available for coordinated compound reports:

Using Bookmarks in the PDF Layout Painter. When creating a compound layout report or a coordinated compound report in the PDF Layout Painter, you can enable bookmarks available in Adobe Acrobat for PDF formatted reports.

Output Formats for Coordinated Compound Documents. When creating compound reports from Power Painter and the PDF Layout Painter, HTML active reports, Excel, and PowerPoint are available as output formats.

Thumbnails Tab. You can view thumbnails of each page in the PDF layout.

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PDF Layout Painter. You can format individual strings of text, add page numbers, and add a printable Table of Contents page to a coordinated compound report. In addition, you can create and share customized layout templates to streamline the development process and you can control the overflow and relative (vertical) positioning of objects in the report.

PowerPoint Output Format. You can create single reports in PowerPoint format and use a PowerPoint template.

Workspace Files. You can filter projects using workspace files in the Projects area. This reduces the time it takes to launch a product when performing local or remote project-based development.

Column Totals. You can apply column totals to selected fields in Report Painter.

Report Painter Field Tree. You can set options to show the Field Tree collapsed, as well as organize how Filters and Master File Computes are displayed in the Field Tree.

New Demo Application. WebFOCUS includes a new demonstration that represents the types of Business Intelligence reporting applications you can create in WebFOCUS.
- **HTML Layout Painter.** Several enhancements are available in HTML Layout Painter:
  
  - **Loading Dynamic Parameters.** The process of loading dynamic parameters has been enhanced to deliver faster load times.
  
  - **Additional Chaining Logic.** Include such options as Not Equal to, Greater than, Less than, and so on.
  
  - **Settings Dialog Box.** This dialog box enables you to customize form settings in your layout, customize grid settings, and select the preview settings for the report and graph data in your layout.

- **Synonym Editor.** The Synonym Editor is the graphical tool used to view and edit synonyms in Developer Studio. It replaces and improves upon the Master File tool, which was used for this purpose in previous releases of Developer Studio. The Synonym Editor supports:
  
  - **Business Views.** You can create and save a business view of a synonym by selecting columns from a source synonym and grouping them into folders according to their functions in a business application. You can report against the business view using any WebFOCUS reporting tool.
  
  - **Adapter-specific information**, such as connections, keys, SQL table names, Web Service attributes, as required for 80+ adapters.
  
  - **Improved presentation of display and format options** for field level information.
  
  - **Unicode metadata**, where synonym attributes can be in any language as long as the synonym is saved in UTF-8 format on a Unicode-enabled UTF-8 server.
  
  - **Multilanguage Titles (Captions), and Descriptions.** You can open a synonym in the Synonym Editor and provide translated text for the title (caption in a cube data source) and description in multiple languages. These attributes appear in the specified language in reports generated against the synonym.
  
  - **Filters** in the Master File.
Quick display of sample data to test database fields, virtual fields (Defines), Filters, and Joins in the synonym.

Impact analysis to determine where a field is used.

Dimensions, measures, and user-defined attributes (UDAs) for OLAP data sources, such as SAP BW, Essbase, Microsoft OLAP Services.

Modeling View enables developers to view and preserve a graphical presentation of the synonym and perform a variety of tasks, including adding existing synonyms, creating cluster joins, using Dimension Builder, and launching the Create Synonym tool.

Integration with Create Synonym tool to create and import segments into a synonym.

Improved error reporting, for example, if a synonym that has been edited by hand and contains an error is opened in the Synonym Editor, the message returned will include a reason and line number.

Graph Assistant. Several enhancements are available in Graph Assistant:

Enhanced Graph Tool. Advanced Graph Assistant is a new, enhanced graph tool that utilizes AJAX technology. It provides a more powerful and user-friendly interface for creating and editing graphs.

Easier Navigation. More intuitive menus and fewer tabs make tool navigation easier. This graph tool is efficiently designed to satisfy the needs of both novice and advanced users.

Enhanced Preview Area. An enhanced graph preview area is built directly into the graph tool. This preview area is larger in size, shows greater details, and is positioned in the center of the tool to provide users with a clear picture of the chart as it is being created.
- **New Method of Chart Type Selection.** Chart type selection is made easier by enabling you to browse through a vast array of colorful icons organized into eight main categories. When you select a specific icon, the graph preview area is updated and the chart definition appears at the bottom of the preview area.

- **New Chart Types.** There are several new chart types available, including 3D Smooth Surface, 3D Smooth Surface With Sides, and Error Bar.

- **Intelligent Data Mapping.** Based on the chart type you select, the required and optional dimensions appear to guide you in creating a chart.

- **Drag-and-Drop Data.** You can drag and drop data fields directly on the graph preview area to see a close approximation of how the graph will appear at run time.

- **Expanded Graph Merging Capabilities.** Expanded merging capabilities enable you to build powerful graph requests. You can map more dimensions with multiple sort fields on a graph, providing the ability to create nested X-axis labels.

- **Enhanced Chart Editing Interface.** New chart editing features include a redesigned user interface that is easy to use while providing advanced chart customizing options. You can specify the size and location of various chart elements, including frame, legend, and title. Other enhancements include axis scale customization, advanced 3D chart handling, and the ability to create annotations.

- **Graph Changes Appear Immediately.** Any changes you make to text, color, and other styling options are reflected immediately in the graph preview area, which displays the graph utilizing WYSIWYG (What You See Is What You Get) methodology.

- **Enhanced Color Management.** A redesigned color management interface provides a color gradient panel for selecting customizable colors and contrasts, in addition to a traditional predefined color selection palette. You can also use new menus to select RGB (Red Green Blue) colors, and customize any selected color further by adjusting the hue, saturation, and lumination.
Coordinated Compound Reports. Several enhancements are available for coordinated compound reports:

- **Power Painter.** You can create Compound Reports and Coordinated Compound Reports in Managed Reporting using the Power Painter tool.

- **Enhanced Text Formatting.** You can style individual text within a text element in a Coordinated Compound Report.

- **Page Numbering.** Coordinated Compound Reports include a new page numbering format (for example, page 1 of 10).

- **ReportCaster Distribution.** You can burst and distribute Coordinated Compound Reports with ReportCaster in PDF format.

- **Table Of Contents Page.** A printable Table Of Contents page enables you to navigate to specific pages and objects in a Coordinated Compound Report.

- **Overflow and Relative Positioning.** You can control the overflow and relative (vertical) positioning of objects in Coordinated Compound Reports.

**HTML Composer**

**Version 7 Release 6.11**

- **Report Library Integration in the HTML Composer.** When you create a schedule in ReportCaster, you have the option to distribute the scheduled output to the ReportCaster Report Library, a storage and retrieval facility. The HTML Composer enables you to integrate Report Library reports into an HTML Composer page, utilizing the ReportCaster API to obtain records for reports in the Report Library.

- **Integrating a Report With a Table of Contents and On Demand Paging.** When creating a report in Report Painter with the HTML output format, the Table of Contents options are enabled for a report when using the On Demand Paging feature. The combination of using the Table of Contents with On Demand Paging displays at run time when the report is used in the HTML Composer.
Auto Arranging Objects in the HTML Composer. The HTML Composer automatically arranges the objects on the Parameters tab so that they take the least amount of space without overlapping each other. The Auto Arrange Objects option is available from the Settings dialog box and is on by default.

Version 7 Release 6.10

Loading Screen at Run Time for HTML Composer Pages. When running an HTML page from the HTML Composer, the Web browser displays a “Loading, please wait…” message until the page is fully loaded.

Chaining Icons From the Parameters Tab of the HTML Composer. In the HTML Composer, Add to the chain and Remove from the chain icons have been added to the Positioning toolbar. These chaining icons are available when controls are multi-selected on the Parameters tab.

Setting the Form Type for the Parameter Grouping Options. You may create a single layer form or multiple layer form in the HTML Composer. These form types, available as the parameter grouping options, display the placement of the form control and the associated parameters on the Design tab. The default, multiple layer form, contains group boxes around each element in the form. You may move and resize each element of the form control. The single layer form contains all of the elements within a single group box.

Adding a Label Control to the Layout. You may insert a label control from the Components toolbar in the HTML Composer. The label component enables you to create and name a label, and link it to a control by assigning the label HtmlFor property the same value as the Unique Identifier property for the control. Additionally, new pages will show label tags in the Properties window. Existing pages will continue to show SPAN tags in the Properties window.

Reloading the External Procedure in the Properties and Settings Dialog Box. When using an External Procedure to supply dynamic values in the HTML Composer, once you edit the external procedure that is associated with a control, you can right-click and choose Reload external procedure to reload and display the new syntax in the Properties and Settings dialog box.
Undo/Redo Icons in the HTML Composer. When using the Parameters tab in the HTML Composer, the Undo and Redo icons are activated on the Standard toolbar, enabling you to reset or repeat the last action performed.

Creating a Rich Internet Application (RIA) With the HTML Composer. In Version 7 Release 6.10, RIA is available as a Candidate for Release (CFR) feature in the HTML Composer. A Rich Internet Application (RIA) enables you to create an interactive Web page experience inside a browser. Using RIA, you can generate the exact look and feel of a Windows Graphical User Interface in your Web applications. A RIA provides rich and powerful graphics and themes. You may set a RIA theme and animation properties for objects in the Design tab of the HTML Composer. Additionally, you may convert an existing page to a RIA or create a new page as a RIA.

Note: This feature is not available by default. If you are interested in participating in the Beta program for this CFR feature, click the Beta Program Registration link, located at http://techsupport.informationbuilders.com to register. In Version 7 Release 7.0, RIA will be provided as a General Availability (GA) feature.

Version 7 Release 6.9

Running a Managed Reporting Report Deferred From the HTML Composer. A deferred report is a Managed Reporting report that you can run as a background task, while continuing other work. In the HTML Composer, you may add a hyperlink to run a report deferred, or create a form control that adds a Defer button.

Toggling Parameter Selections From the New Parameters Dialog Box. In the HTML Composer, the Toggle selection option enables you to switch between selecting and deseleting all of the controls in the New Parameters dialog box.

Chaining Controls for Dependencies. The process of chaining controls for dependencies is available through the Parameters tab of the HTML Composer.

Creating Parameter Values and Binding Controls. The process of creating parameters and binding controls in the HTML Composer has been enhanced through the Parameters tab.
Creating Hyperlink Actions With Additional Parameters. When you manually add a new parameter on the Parameters tab in the HTML Composer, you may pass the parameter variable to a hyperlink action. The additional parameters appear on the Hyperlink Properties dialog box when you create a new action.

Setting the Default Caching Option. You can set properties for the HTML Composer with the Settings dialog box. The default caching option controls whether cache run time data is on or off for the HTML page. The default is off.

Grouping Objects on the HTML Page. You may group objects together on a HTML page by inserting a Group Box, Panel, or Form. You can copy and paste components (such as images, push buttons, and so on) between the HTML page and the grouping object while maintaining the association to the grouping object or the page.

Reordering Selected Values in a List Box and Double List Control. When using a list box or a double list control in the HTML Composer, you may reorder the selected values in the report.

Sorting a Dynamic List of Values. In the HTML Composer, sort options enable you to set the sort order for displaying values in dynamic list controls.

Creating Polygons in the Google Map Output. You may create polygon shape selectors in the Google Map output. Shape selection is the act of clicking in a specific location on the Google Map and then drawing an area with the mouse on the map to form a shape. This shape enables you to select all markers within the drawn area.

Creating Bullseye Charts in the Google Map Output. You may create a fixed or freehand bullseye chart in the Google Map output. A bullseye chart is used to show radius distance from a location using three rings of increasing size. The bullseye options are available from the New Polygon context menu on the Google Map.
- **Showing and Hiding Marker Visibility in the Google Map.**
  You can control the initial visibility of the marker groups, from the layer, when the map runs. The visible option is useful when you want to make selections on the Google Map without other markers, from other layers, interfering. For example, when making selections and doing a drill down, only visible markers should be selected and passed along.

- **Refreshing the Google Map Output.** You can refresh the source for a layer when the map runs. You may refresh a layer on demand, or automatically at a timed interval. The default refresh time is set to 0 seconds, which indicates that the automatic refresh is disabled. The minimum automatic refresh time is 60 seconds.

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**Active Technologies Reports**

**Version 7 Release 6.10**

- **Modifying a Chart Legend With StyleSheet Syntax.** When creating charts with active reports using Adobe® Flex®, you may modify the chart legend by using WebFOCUS syntax.

**Version 7 Release 6.9**

- **Using Active Technologies Flash®/Flex® in PDF.** Using Active Technologies Flash®/Flex® in PDF provides the ability to include interactive Flash®-based reports, dashboards, and animations in PDF documents. Flash®/Flex® in PDF is available in the Document Composer of Developer Studio and in InfoAssist.

- **Creating Active Technologies Dashboard Flash/Flex in the Document Composer.** You may create active dashboards using Adobe® Flex® in the Document Composer.

- **Active Technologies Reports for Flash/Flex Style Enhancements.** When using Adobe® Flex® to create active reports, the active report menu is displayed in a larger and clearer font. The active report pagination bar is available, and you may move the pagination bar from the top of the page to the bottom of the page by clicking on the Pagination icon.

- **Printing Active Technologies Report Data.** You may print all records, or filtered records, for an active report.
- **Using the Grid Tool.** When using an active report, the Grid Tool enables you to change the column order, select multiple columns to sort ascending or descending, hide and show columns, add a calculation result to a column, and add subtotals.

- **Using the Chart/Rollup Tool.** When using an active report, the Chart/Rollup Tool enables you to select multiple group fields in the Chart or Rollup Table generated.

- **Using the Pivot Tool.** When using an active report, the Pivot Tool enables you to select multiple group fields in the Pivot Table generated.

- **Applying Wrapping of Report Data in Active Technologies Reports (AHTML/FLEX).** You can control the wrapping of report data in a report, thus preventing line breaks within report cells. This bumps the contents of the cell onto a second line. Use the WRAP attribute to apply Web browser data wrapping. The WRAP StyleSheet attribute may be applied to alphanumeric columns in an HTML active report (AHTML) and an active report for Flash/Flex (FLEX) report.

- **Filtering Selections Using Multiple Values.** When selecting a value in the Filter Selection dialog box, a value selection dialog box displays if there are over 20 data values for your active report. Additionally, when item(s) are selected in the value selection dialog box, the item is highlighted and checked to indicate the selection.

- **Showing/Hiding Active Technologies Report Menu Options.** When using an active report, the Customize User Interactivity dialog box has been enhanced to enable you to show or hide the options for each user type.

- **By Sort Field Values Appearing on Every Page.** When running an active report, the By sort field value appears on each new page in the report output.
Version 7 Release 6.7

- **Active Technologies Report Integration With Adobe® Flex®.** Includes most of the capabilities available in the HTML version of active reports in a visually enhanced, user-friendly report format. The output format is available in all report development tools including HTML Report Assistant, InfoAssist, and Report Painter, and the format is available for distribution with ReportCaster. The appropriate ON TABLE HOLD/PCHOLD FORMAT FLEX syntax is added to the procedure for the active report.

- **Propagating Fields to a HOLD File Using the SET Tool.** You can select the SET HOLDLIST=ALLKEYS command in the SET tool to propagate all fields to a HOLD file. The ALLKEYS setting enables caching of all the data necessary for manipulating an active report.

Version 7 Release 6.5

- **Enabling Active Technologies Cache for an HTML Active Technologies Report.** When running HTML active reports, substantial response time improvements and the removal of answer set size limitations are available through the use of the active dashboard option. To create answer sets in excess of 5,000 records, the active dashboard option enables you to send only the first page of active report output to the browser and retrieve subsequent pages from a temporary cache on the WebFOCUS Reporting Server. The server also becomes the resource for performing all calculations, sorting, and filtering when active dashboard is enabled.

- **Adding a Table of Contents to an HTML Active Technologies Report.** For HTML active reports, you can enhance navigation within a large executed report by adding a dynamic Table of Contents (TOC). The Table of Contents enhances the display of groups of data. You can view one section of a report at a time, or you can view all sections at once.
Report Options Dialog Box for HTML and HTML Active Technologies Reports. The Report Options dialog box in Report Painter has been redesigned for the HTML and HTML active report output formats. The Report Options dialog box is driven by the selected output format. This enables you to easily distinguish between various options specific to each output format.

Hiding Report Columns for an HTML Active Technologies Report. In Report Painter you can hide report columns in the output of an HTML active report by using the Present Hidden option. This option is available from the Style tab in the Field Properties dialog box. This option enables you to determine the columns that will be hidden from view in the report output.

Version 7 Release 6.4

Adding Comments to HTML Active Technologies Report Output. The HTML active report Comments option enables you to comment individual rows of data in the active report output. You can add multiple comments per row.

Version 7 Release 6.2

Setting an Expiration Date for HTML Active Technologies Reports. The SET parameter, AREXPIRE, enables you to set a date when an HTML active report expires and the report output can no longer be displayed.

Setting a Password for HTML Active Technologies Reports. The SET parameter, ARPASSWORD, enables you to set a password that is required to view HTML active report output. Prior to opening the report output, the user is prompted to enter a password to unlock the report.

Version 7 Release 6.1

Support for Pivot Tables. Pivot Tables reorganizes and summarizes selected columns and rows of data in order to obtain a desired report.

Tab Window Navigation. Tab window navigation options are available when multiple windows are open in the HTML active report Web browser.
- **Opera Web Browser Support.** You can run HTML active reports on your mobile device with the Opera browser (Version 8.60 U2 or higher) installed.

### Version 7 Release 6.0

- **Support for ACROSS.** HTML active reports supports one or more ACROSS phrases, with an interactive menu for the first ACROSS phrase.
- **Support for Column Totals.** You can show a total for every column in the report.
- **Support for SUMMARIZE/RECOMPUTE.** HTML active reports supports SUMMARIZE and RECOMPUTE for ON sort fields.
- **Support for Roll-up Tables.** A Roll-up Table is an active report with its own menu and enables you to perform calculations.
- **Create New Charts.** You can open another chart window with the same chart to compare values.
- **E-mail and Save Reports.** You can e-mail HTML active reports as an HTML attachment and save the most recent modifications of your report to a separate file.
- **Output Graphs to Microsoft Word, Excel, and PowerPoint.** You can export a chart to Microsoft Word, Excel, or PowerPoint as a Live Graph by using the HTML active report menu option.

### Advanced Graph Assistant

**Version 7 Release 6.7**

- **Alternating Background Styling.** An enhancement has been made in the graph area where the graph background can be styled with alternating banded colors. This feature allows color banded styling to be applied to the horizontal and vertical axis of a graph. This is helpful to visually identify which scale range the graphical data falls into.

- **Legend Marker Enhancement.** You can apply a line style to legend markers. When creating a line chart with various marker shapes (square, circle, star, and so on), these marker shapes are now represented in corresponding legend markers. This is helpful to visually map the line segment to the legend entry.
Version 7 Release 6.4

- **Pie Chart Enhancements.** Enhancements have been made to eliminate overlapping of feeler lines and labels when creating pie charts. This enhanced functionality is available in all graph reporting tools including Graph Assistant, Advanced Graph Assistant, and Power Painter.

- **Creating a Thermometer Gauge Chart.** A thermometer gauge chart type is available in the Advanced Graph Assistant and Power Painter tools. A thermometer gauge chart displays data in the form of a traditional thermometer. Depending on the number of sort values, one or more thermometers are displayed in the graph output. For each thermometer, the liquid on the inside indicates the current position of a single data value, and the numeric values displayed on the outside of the thermometer represent the given scale.

Quick Data

Version 7 Release 6.7

- **Restricting Users From Creating Structured Ad Hoc Forms for WebFOCUS Quick Data.** The WebFOCUS Quick Data panel in the WebFOCUS Security Administration Console provides a quick_data_form_only setting. The quick_data_form_only setting provides the Use guided ad hoc forms only check box that you can select to restrict users from creating Structured Ad hoc Forms with ad hoc reporting tools, for example, Report Assistant.

Version 7 Release 6.5

- **Managed Reporting Authorization.** Optional settings in the WebFOCUS Administration Console allow secure access to data through the WebFOCUS Managed Reporting environment.

- **Structured Ad Hoc Forms (SAFs).** Users with valid Managed Reporting credentials can access SAFs stored in the Managed Reporting repository. SAFs contain a report procedure that is already connected to a data source enabling users to select from a series of parameters to build a data set for analysis in Excel.
- **Edit Connections.** While working in Excel, a right-click menu option enables you to edit and save connection information, which includes the HTML Alias and Client Path information required to connect to your WebFOCUS environment. The ability to edit connection information saves time when reusing reports and helps facilitate the sharing of workbooks across an organization.

- **Join Data Sources.** The Join tab in WebFOCUS Quick Data enables you to join data sources.

### Version 7 Release 6.1

- **Quick Data Functionality.** WebFOCUS Quick Data is a Microsoft Office add-in that allows you to create WebFOCUS reports directly from Microsoft Excel. You can create reports using the WebFOCUS Report Assistant tool, and output is displayed in the active Excel Workbook.

## WebFOCUS Magnify

### Version 7 Release 6.7

- **Magnify Setting Enhancements.** All existing Magnify settings have been moved to a new location in the WebFOCUS Administration Console. A new Magnify button was inserted between the existing ReportCaster and Utilities buttons on the main panel of the WebFOCUS Administration Console. Two links, labeled General Settings and Lucene Security, are available from the new Magnify button.

- **Magnify Demo Sample Application.** A new sample application included in Developer Studio demonstrates Magnify Lucene, an enterprise search solution. When Developer Studio is installed, an application/project folder called Magnify Demo is created. The application folder contains all the reports and data used by the sample application, as well as a form to feed new items to Magnify Lucene.

### Version 7 Release 6.4

- **Lucene Support.** Lucene, the Java-based open source search engine, is packaged with WebFOCUS Magnify. This gives you the option of using Lucene or the original search engine offering, the Google Search Appliance (GSA), as the Magnify search engine.
Configuration. Magnify is now configured using iWay Service Manager, rather than iWay Adapter Manager. The configuration process has changed slightly, in that you now create an iWay channel to contain the Magnify-specific iWay components, such as the data source listener and indexing process flow.

Managed Reporting

Version 7 Release 6.10

Displaying Repeating Sort Values in Report Assistant. The Display all sort values option is available as a global setting from the Report options tab in Report Assistant. This option enables you to display the repeated sort values and to prevent discontinuous data in a report. This is recommended for use with Excel Named Ranges.

Version 7 Release 6.9

Allowing the User Role to Schedule. The Managed Reporting User role has been enhanced to include an optional Schedule privilege. Managed Reporting users who are assigned the User role and the Schedule privilege are allowed to create schedules, using ReportCaster, for Managed Reporting Standard Reports.

New Managed Reporting FEX and HTM File Properties. Managed Reporting FEX and HTM file properties include the following new properties:

Restrict Developer Access. The MR Administrator can set this property to restrict the Developer role to that of an end user level (Analytical Users and lesser roles).

Schedule Only. MR Administrators and Developers (when Restrict Developer Access is not enabled) can set this property so that end users (Analytical Users and lesser roles) and Developers (when Restrict Developer Access is enabled) can schedule Standard Reports using ReportCaster.
Power Painter and Advanced Graph Assistant Tool Enhancement. The Power Painter and Advanced Graph Assistant tools include a new property that allows you the option to hide or display the Coordinated Field in a Coordinated Compound Layout report and a Multi-graph report. The property is named Visible and can be set to Yes (to display) or No (to hide). The default value is No.

Version 7 Release 6.7

Deferred Status Interface Enhancements. Enhancements to the Deferred Status Interface are available:

- Next to reports in completed or queued status, a Run or Parameters button is displayed. The Run button is displayed for all reports that do not contain parameters. Clicking the Run button runs the report in deferred status again. The Parameters button is displayed for reports that contain parameters. Clicking the Parameters button enables you to review or change report variables before running the report. Changing report variables generates a new report that does not overwrite the original request.

- You can delete tickets for all report status types using the Delete drop-down list located in the toolbar at the top of the interface. The drop-down list provides options to delete All, All Completed, All Running, All Queued, All Expired, and All Unknown reports, but only when one or more reports exist for that status type in the Deferred Status Interface.

Properties Icon in Power Painter. A new Properties icon was added to the Query Palette in Power Painter to the right of the delete key. When you select the Properties icon, the Report Properties palette is highlighted for the field that you selected in the Query Palette. Selecting the icon performs the same function as right-clicking a field in the Query Palette and selecting Properties.
Version 7 Release 6.5

- **Change Management Load Utility.** The Change Management Load Utility is available in a GUI interface. The utility enables administrators working in Managed Reporting environments to load change packages created with the Change Management Extract Utility. The Change Management Load Utility is accessible from the WebFOCUS Welcome Page by selecting the Managed Reporting Change Management Load link. Previously, only the Change Management Extract Utility was available in a GUI interface.

- **Enable Accessibility Features (Section 508).** The Enable Accessibility Features (Section 508) optional privilege is available for the Managed Reporting Administrator role. This privilege gives a user access to Section 508 compliant online help, user interfaces, and tools.

- **Recomputing Grand Totals.** In the Report Assistant tool, you can select an option to recalculate computed fields before displaying grand totals for each column in a report.

Version 7 Release 6.4

- **Displaying All Instances of Sort Values.** The "Display every sort value" property in the Report Properties palette in Power Painter enables new functionality to display all instances of a vertical sort (BY) field in a report.

- **Displaying a Fully Qualified Field Name.** A check box is available in the Variable Editor to display the fully qualified field name for data source and field values when setting parameter properties. This functionality is available in the Report Assistant and Graph Assistant tools.

Version 7 Release 6.2

- **Migrating Deferred Tickets From Version 5 Release 2.x and Higher.** The WebFOCUS Managed Reporting migration utility can be used to migrate deferred tickets from Version 5 Release 2 and higher releases to Version 7 Release 6.2. An option is available to administrators to load deferred tickets to the latest WebFOCUS environment.
Displaying Subtotals and Other Summary Values Using Prefix Operators. The Subtotal tab enables you to display subtotals, and other summary values using prefix operators, for any or all of the numeric fields for a selected sort field in a report query.

Version 7 Release 6.1

New Domains Tab in the Managed Reporting Administration Interface. A Domains tab is available in the Managed Reporting Administration interface. The Domains tab enables administrators to create, edit, and delete domains in one location.

Importing Values From External Files for WHERE Statements. Importing selection criteria values from external files is enabled for building WHERE statements in the Report Assistant, Graph Assistant, Power Painter, and Advanced Graph Assistant reporting tools.

Version 7 Release 6.0

New User Role. The "Library Only User" role enables MR Administrators to restrict Dashboard users to only be able to view content in the Report Library.

Deferred Status Delete Option. The Deferred Status interface presents the user with a delete confirmation message before deleting a deferred ticket.

Support for Reading Saved Deferred Output Created by the WebFOCUS CGI/ISAPI Client. The WF_CGI_ENDIANNESS setting in the WebFOCUS Administration Console enables you to view deferred output previously stored by the WebFOCUS CGI/ISAPI Client (as of Version 7 Release 1, MR only supports WFServlet).

MR Deferred Ticket Cleanup Utility Options in Console. You can view log and trace file information for the Deferred Ticket Cleanup Utility in the WebFOCUS Administration Console.
- **Synchronizing the ReportCaster Repository During MR Sign-on.** The SYNC_CASTER_ON_MRSIGNON setting in the WebFOCUS Administration Console specifies whether the Managed Reporting Realm Driver should synchronize user privileges and groups with the ReportCaster Repository during MR (and Dashboard) sign-on.

- **MR Domain Content and User Resource Caching.** The WebFOCUS Client caches information about Managed Reporting domain content and user resources.

- **MR Properties Enhancements.** Additional detail information represented by four new properties is available within the Dashboard, MR Domain, and procedure properties dialogs.

- **Ranking Sort Fields in HTML Report Assistant.** A Ranking tab is available in the Field options area of the Field Selection tab in the Report Assistant.

- **Long File Name Support for MR Procedures.** Managed Reporting supports long file names for My Reports, Standard Reports, Reporting Objects, and Other files in the repository file system. The maximum length of a file name is extended from 8 to 64 characters.

- **Power Painter.** Several enhancements are available in Power Painter:
  - **New Web Layout and Report Creation Tool with Managed Reporting.** Power Painter is a Web layout and report creation tool, built using AJAX technology, that enables you to create output and page layout formats. It combines reporting, graphs, and page layout design in a single tool.
  - **Multiple Access Points.** Power Painter is accessible from MR Dashboard, MR Domain Builder applet, and the MR User Management tree in both MR Domain Builder and Developer Studio.
  - **Accessing Multiple Data Sources.** You can access multiple data sources to build reports and perform ad hoc analysis.
  - **Combining Reports and Graphs.** You can coordinate and distribute various free-form layouts comprising multiple reports and graphs in a single file.
Coordinated Reports. You can link reports together by a common sort field so that multiple reports and graphs can be coordinated into individual page layouts.

Changing Themes or Skins. You can change the theme or skin of the Power Painter environment, enabling a seamless integration with the existing color scheme of your organization.

Using Visual Design Guides. You can use visual design guides, such as grids, rulers, and alignment to fulfill exact positioning requirements.

Real-Time Data. You can develop charts and reports using real-time data or sample data.

Auto-Prompting Facility. For reports that use the auto-prompting facility, there is a selection of templates for the amper auto-prompt form.

WebFOCUS Administration Console. Administrators can use the Utilities section of the WebFOCUS Administration Console to configure the Power Painter license code that enables Managed Reporting users to access Power Painter.

Dashboard

Version 7 Release 6.10

Controlling Reporting Tool Access in Dashboard. You can control reporting tool access at the global level or the view level in Dashboard. The configuration file, bid-config.xml, contains the variables that control whether or not a reporting tool is available globally. The reporting tools are Report Assistant, Graph Assistant, Advanced Graph Assistant, InfoAssist, Power Painter, and Text Editor.

Version 7 Release 6.9

Hiding Domains. A new Domain property, Do not show on User's list, allows you to hide the domain from the end user display in the Business Intelligence Dashboard. This allows an administrator or developer to control when a domain is available to end users.
Creating Reporting Objects and Other Objects From the Dashboard. Managed Reporting Administrators and Developers by default can create Reporting Objects and Other Objects in the Business Intelligence Dashboard. Previously, this had to be manually configured.

Creating and Using Reporting Object With InfoAssist. When creating a Reporting Object, the New Reporting Object dialog box provides the option to create the Reporting Object using InfoAssist. The Use InfoAssist option is used to create components. When this option is selected, then InfoAssist will be the only reporting tool available to open this object in the Business Intelligence Dashboard.

Version 7 Release 6.7

Accessibility Banner Link. The Accessibility banner link in Dashboard allows you to enable or disable accessibility in your views. The link is customizable and can be removed by an administrator in View Builder. For non-section 508 users, accessibility is disabled by default and clicking the Accessibility On link enables accessibility in the current browser session. For Section 508 users, accessibility is enabled by default and clicking the Accessibility Off link disables accessibility in the current browser session.

Cutting, Copying, and Pasting Custom Reports. You can cut, copy, and paste custom reports within the same Custom Reports folder, and also from one Custom Reports folder to another. When a custom report is copied or cut from one Custom Report folder and pasted in another Custom Report folder, the new copied report takes the same name as the original report. When a custom report is copied or cut, and then pasted within the same Custom Report folder, the new copied report appends (Copy n) to the original report name, where n is the number of copies of the same report.
Version 7 Release 6.5

- **Creating Standard Reports in Dashboard.** You can enable administrators and developers to create Standard Reports in Dashboard with any of the available reporting tools. Additionally, they can create new folders under Standard Reports and set properties at the Standard Report level. The creation of Standard Reports can be enabled for all views by editing a variable setting in the bid-config.xml configuration file, or enabled for specific views using the Dashboard View Builder.

- **Changing the ReportCaster Scheduling Tool.** When a Dashboard user selects the Schedule option for a selected report, the multi-page ReportCaster Scheduling Wizard opens by default. The tool that opens with the Schedule option can be changed to the ReportCaster single page Scheduler Tool, which provides all scheduling fields and settings in one interface. The ReportCaster scheduling tool that opens with the Schedule option can be changed globally in all views by editing a variable setting in the bid-config.xml configuration file, or changed in specific views using the Dashboard View Builder.

Version 7 Release 6.4

- **Enabling Automatic Block Refresh.** Administrators can enable automatic block refresh functionality on a per block basis to provide users with the option of setting a time interval (in seconds) when content blocks are automatically refreshed. The Automatic Block Refresh check box is displayed to administrators on the Edit Block and Add Block pages for all block types, and is hidden to users who are editing content for their personal views.

- **Setting Automatic Block Refresh.** After an administrator enables automatic block refresh functionality for a content block, a Refresh check box and refresh time interval field are displayed in the block toolbar. To ensure that you are viewing the most current data, you can set automatic block refresh functionality to refresh the data in your content block automatically at regular intervals.
Mobile Favorites. The Add to Mobile Favorites right-click menu option enables you to add reports, graphs, hyperlinks, and any other item type, except reporting objects, to the Mobile tab in your Favorites list. Adding items to Mobile Favorites enables you to view the items in the browser of a mobile device. Items can be added to Mobile Favorites from a Domain Tree, Role Tree, List block, Folder block, Tree block, or Domains search result.

Customizing the Logoff Window for Specific Views. When users log off from a view, they are redirected to the Welcome Page by default. An administrator can customize the logoff window for specific views to direct users to another page within Dashboard, or to a Web page outside of Dashboard, such as your company's Web site.

Version 7 Release 6.2

Displaying a Welcome Message in the Banner. A welcome message can optionally be displayed in the left top corner of the banner, where the name of the user logged into the view appears as “Welcome, user name.”

Hiding the Share Report Option for Finished My Reports. The Share Report option, which is displayed by default, can be hidden in the properties of finished Deferred Reports Output and OLAP Reports saved in the My Reports directory. Hiding the Share Report option provides another layer of security to safeguard sensitive content in these types of finished reports.

Displaying a Collapsible Tree in a Folder Block. Subfolders can optionally be displayed in a folder block as a collapsible tree. By default, all subfolders in a folder block are expanded and cannot be collapsed.

Displaying Square Corner Page Tabs in Dashboard. Square corner style page tabs can optionally be displayed in Dashboard. By default, round corner style page tabs are displayed for all views.

Version 7 Release 6.1

Logging on to Dashboard and View Inheritance. The GoToPersonalViewOnLogin setting in the bid-config.xml file affects the way users log on to Dashboard and inherit views.
Customizing Dashboard Pages for a Public or Group View. The Dashboard View Builder Edit Setting button launches a dialog box which enables Administrators and Group Administrators to customize the Dashboard page for a selected public or group view, without editing any files.

Group Administrator Access to the View Builder. View Builder access is enabled for Group Administrators to create and edit Group Views and Library Views for the groups they administer.

Tree Block Type Option in Dashboard View Builder. A Tree Block Type option is available in Dashboard View Builder, which enables you to add a Domain Tree without the sidebar frame to a Public or Group View page.

Hiding Report Types in the Domain Tree for All Role Types. You can customize the Domain Tree to display Standard Reports in Dashboard and hide any or all of the other report types (Shared Reports, My Reports, and Reporting Objects) for all users of all role types by using the ALL-ROLES value in the bid-config.xml file.

Uploading Data Files. An option is available in the Custom Reports folder of the Domain Tree to upload (import) external data files for use in WebFOCUS reporting tools. This functionality enables you to easily create a WebFOCUS file description and data file, for use in your reporting application.

Multiple Domains Displayed in the Domain Tree. The Domain Tree displays multiple domains. All of the domains that a user is authorized to access are displayed in the Domain Tree by default. Previously, only a single domain could be viewed by selecting from a drop-down list.

Version 7 Release 6.0

PowerPoint Output. You can export Dashboard reports and graphs into the PowerPoint application.

Viewing Reports in the Report Library. Users with the Library privilege can click a report and access a menu option to view report content stored in the Report Library.
- **Domain Tree Enhancements.** Dashboard loads Domain Tree folders more efficiently, and when you create a list, launch, or output block, clicking a folder expands the tree one level at a time. Additionally, new Domain Tree options are available by selecting the Personalize Banner Link, and then the Options submenu.

- **Library Access for Public User.** Dashboard public pages can now include static content retrieved from the Report Library repository. This functional change eliminates the need for the public page to execute a report each time the page is viewed and increases the capabilities of the public user from within Dashboard.

- **Multiple Logons Allowed.** Multiple logons for a single user are available using the Dashboard main logon page and View Builder.

**WebFOCUS Open Portal**

**Version 7 Release 6.1**

- **Output Portlet.** The Output portlet is available for JSR 168 compliant portlets and SAP NetWeaver certified iViews. It is used to display every report that is executed using the Domain, Report, or Favorites portlet. In addition, the Output portlet remembers the last report that was executed.

**WebFOCUS Client**

**Version 7 Release 6.11**

- **Stopping a Managed Reporting or Self-Service Request.** Request parameters enable users to stop any report request or group of requests from a Managed Reporting environment or self-service application. The parameters are specified in the URL of the request.

- **Stopping a Business Intelligence Dashboard Request.** In the Dashboard, users can cancel active requests that are initiated from their browser session on all available reporting servers by clicking Stop Requests under the Utilities menu on the top banner.
- **Monitoring WebFOCUS Sessions.** The Session Monitor menu enables a WebFOCUS Administrator to track all WebFOCUS Client sessions, as well as connections and activity on the WebFOCUS Reporting Server(s). To refresh the information displayed, select the *Refresh every* check box and specify the frequency in seconds using the *Seconds* check box. The Session Monitor displays information about connected users, report requests, and reporting server nodes.

**Version 7 Release 6.9**

- **Accessing Product Information.** The WebFOCUS Home Page has been updated to include information about the current WebFOCUS installation. You can access the WebFOCUS Home Page by selecting *Welcome to WebFOCUS* in the *Quick Links* menu of the WebFOCUS Administration Console.

- **Configuring WebFOCUS Web Services License.** WebFOCUS Web Services is an optional product that is enabled using the WebFOCUS Administration Console. If you are licensed to use WebFOCUS Web Services, click WebFOCUS Client under the Utilities menu and enter a valid license key in the WebFOCUS Web Services input box to enable the feature.

- **Configuring InfoAssist Settings.** In the WebFOCUS Administration Console, an administrator can enable or disable reporting options in the InfoAssist tool. The InfoAssist Settings are configured in the InfoAssist Properties menu under the Utilities section.

- **WebFOCUS Reporting Server Security Enhancements.** The following WebFOCUS Reporting Server security enhancements are available:
  
  - **Specifying HTTP Cookie and HTTP Header Information.** A WebFOCUS administrator can use the Security Object parameter in the WebFOCUS Administration Console to specify one or more HTTP Header names and/or Cookie names for authentication to a WebFOCUS Reporting Server.
- **Enabling SSL Communication to a WebFOCUS Reporting Server.** WebFOCUS administrators can enable encrypted communication between the WebFOCUS Client and the WebFOCUS Reporting Server HTTP listener by using the HTTP_SSL parameter in the WebFOCUS Administration Console.

- **Accessing License Information For Third-Party Software.** The WebFOCUS product uses various third-party software for use with different features. You can access the license information for each software vendor by selecting 3rd Party Information under the License Management section of the Utilities menu.

- **Setting a Default Server Environment for Users of Quick Data.** A default configuration file is provided with the Quick Data Add-in to be used as a template for an administrator to design a default WebFOCUS environment in which Quick Data can be used. This configuration file can contain multiple configurations.

### Version 7 Release 6.7

- **Displaying Product Licenses on the WebFOCUS Info Page.** The WebFOCUS Info link, which is available at the top of all pages in the WebFOCUS Administration Console, has been enhanced to display WebFOCUS product license information and a link to the License management dialog.

- **WebFOCUS Info Page.** The following license codes were added under the WebFOCUS Client Additional Licenses heading:
  - InfoAssist for MR
  - Personal InfoAssist

- **Cluster Manager Processing Node Configuration.** Administrators can configure a new Cluster Manager (CLM) processing node from the Remote Services window available in the Reporting Servers area of the WebFOCUS Administration Console. The WebFOCUS Client can communicate directly with the CLM, and the CLM will monitor the server performance statistics and send requests to the best available server for processing.
Magnify Setting Enhancements. All existing Magnify settings have been moved to a new location in the WebFOCUS Administration Console. A new Magnify button was inserted between the existing ReportCaster and Utilities buttons on the main panel of the WebFOCUS Administration Console. Two links, labeled General Settings and Lucene Security, are available from the new Magnify button.

Preserving File Extensions and AS Names. PCHOLD has been enhanced to preserve file extensions and AS names using the Save Report parameter in the mime.wfs file. When the Save Report parameter is enabled, users have the option to open or save the report output. If an AS name is specified in the request, the Save Report option allows users to open or save the report with the specified name.

Restricting Users From Creating Structured Ad Hoc Forms for WebFOCUS Quick Data. The WebFOCUS Quick Data panel in the WebFOCUS Security Administration Console provides a quick_data_form_only setting. The quick_data_form_only setting provides the Use guided ad hoc forms only check box that you can select to restrict users from creating Structured Ad hoc Forms with ad hoc reporting tools, for example, Report Assistant.

Permanently Displaying the OLAP Control Panel in OLAP Reports. The Client Settings - OLAP window, available in the Configuration section of the WebFOCUS Administration Console, provides the OLAP_DOCKED setting, which can be set to YES or NO. When set to YES, the OLAP Control Panel is permanently displayed while running an OLAP report.

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WebFOCUS Quick Data Panel. Configuration settings that enable WebFOCUS Quick Data have been added to the WebFOCUS Administration Console. WebFOCUS Quick Data is a Microsoft Office add-in that enables you to create WebFOCUS reports directly from Excel using WebFOCUS reporting tools.
Google Maps Configuration Settings. Configuration settings that enable Google Maps have been added to the WebFOCUS Administration Console. A Google Map is a Google service offering powerful, user-friendly mapping technology that can be customized to show points on a map with drill-down capabilities. You can customize the Google Map properties and bind them to a report. The Google map tool is available from the HTML Layout Painter.

Cache Control Configuration Setting. You can use the CACHE_CONTROL setting, which is an HTTP Header field, to specify how a browser should handle the caching of data in a request.

ReportCaster Server Configuration Settings. You can use the WebFOCUS Administration Console to invoke the ReportCaster API to configure ReportCaster, create the ReportCaster repository, restart the Distribution Server, and turn ReportCaster traces on and off. The WebFOCUS Administration Console authenticates to ReportCaster, and if authentication fails, users are prompted for their credentials.

Change Management Extract and Load Utilities. The Change Management Extract Utility and Change Management Load Utility are available from the WebFOCUS Administration Console. These utilities are accessible in GUI interfaces from the MR Change Management section of the Utilities menu by selecting either Extract or Load.

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Java JDK 1.6.03 Certification. WebFOCUS is certified with Java JDK 1.6.03.

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Auto-Prompting Templates. Several auto prompting templates are available. The different versions are changeable through the WebFOCUS Administration Console, in the Parameter Prompting section of the Configuration settings.

Version 7 Release 6.0

Java JDK 1.5.0.07 Certification. WebFOCUS is certified with Java JDK 1.5.0.07.
Apache Tomcat 5.5 Certification. WebFOCUS is certified with Apache Tomcat 5.5, as well as Tomcat 5.0.

Support for Multiple Entry Points Into a Single WebFOCUS Installation. WebFOCUS supports multiple entry points into a single WebFOCUS installation. For example, there may be both external users going through a reverse proxy server, and internal users directly accessing the Web-tier.

Controlling WebFOCUS Reporting Server Messages. The IBIF_max_messages setting in the WebFOCUS Administration Console enables you to control how many WebFOCUS Reporting Server messages will be accumulated before WFServlet stops processing the request. The setting protects against a situation where the Java VM executing WFServlet runs out of memory.

Decoupled Servlet and CGI. The WebFOCUS Servlet and CGI installations are packaged separately to optimize servlet implementations and decrease installation downloads.

Testing Ad Hoc Graph Procedures. The Diagnostics menu in the WebFOCUS Administration Console enables you to test ad hoc graph procedures.

HTTP Request Headers and JVM Property Information. The Diagnostics menu in the WebFOCUS Administration Console enables you to view information about HTTP or HTTPS headers returned to your browser, and your Java VM environment.

Server-side Graphics Tracing. Information about server-side graphics is available using the Graph trace setting in the WebFOCUS Administration Console.

Inline Client Connector Tracing. The TRACE=ON setting in the Startup Parameters section of the Configuration menu of the WebFOCUS Administration Console enables client connector traces (NGXXJ or JLINK). When TRACE=ON is set, the Client Connector trace information is included within the trace file of the component (for example, WFServlet) that uses the WebFOCUS API (WFAPI) to make use of the Client Connector.

Edited Procedure Names Sent to Resource Analyzer for Tracking. When you edit and run a WebFOCUS procedure without saving it, instead of considering it an ad hoc request, the WebFOCUS Client passes the name of the procedure to Resource Analyzer for tracking purposes.
Quick Links. The Quick Links menu in the WebFOCUS Administration Console has links to Information Builders Focal Point and Technical Support Web sites.

Application Server Only Deployments of WebFOCUS. You can easily run WebFOCUS using an Application Server without a Web (HTTP) Server, even when the Application Server only serves Web applications.

Enhanced Menu Options. The main menu options in the WebFOCUS Administration Console, for example WebFOCUS Info and Clears Memory Cache, have been enhanced.

Power Painter License Code. Administrators can use the Utilities section of the WebFOCUS Administration Console to configure the Power Painter license code that enables Managed Reporting users to access Power Painter.

UNC Paths Supported for WebFOCUS Installation Program on Windows. The WebFOCUS client can be installed using Universal Naming Convention (UNC) paths on a Windows operating system, making it easier to configure WebFOCUS in a clustered Web-tier.

Reporting Language

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Controlling Generation of Blank Lines on Report Output. By default, WebFOCUS inserts blank lines around subtotals, subheadings, and subfootings when formatting a report for output. In addition, certain data lines may be blank and appear as blank lines on the report output. You can eliminate these blank lines from the report output using the SET DROPBLNKLINE=ON command.

Enhanced Alignment of Fields in Reports Using OVER. When columns are placed on report output, they are separated by gaps. Using the GAPINTERNAL=ON StyleSheet attribute, you can have the gaps placed within the column boundaries. This feature makes it much easier to align fields and headings in reports that use the OVER phrase to create multiple lines.
Wrapping of Columns Placed on a New Line With OVER on PDF Output. The WRAP StyleSheet attribute wraps data onto a new line when it does not fit within its defined column width. WebFOCUS supports wrapping of columns placed on a new line with the OVER phrase for report output in PDF format. WebFOCUS Version 7 Release 6.11 includes a series of enhancements designed to support the development of multi-row reports using blank AS names.

Wrapping ACROSS Field Values in PDF Report Output. In a request that uses ACROSS, the output displays each value of the ACROSS field above the set of data columns applicable to that ACROSS value. If the ACROSS value is longer than the width of its columns, you can wrap the ACROSS value within the sum of its underlying column widths. For reports containing multiple ACROSS fields, you can wrap individual ACROSS fields or all of them. Each designated value will wrap within the defined ACROSS group.

Support for Repeated Headings and Footings on Panels in PDF Report Output. When the columns presented on PDF reports cannot be displayed on a single page, the pages automatically panel. Paneling places subsequent columns for the same page on overflow pages. These overflow pages are generated until the entire width of the report is presented, after which the next vertical page is generated with a new page number and its associated horizontal panels. In order to make panels following the initial panel more readable, you can designate that heading elements from the initial panel should be repeated on each subsequent panel using the HEADPANEL=ON StyleSheet attribute.

Alignment of Items in Headings in PDF Report Output. In PDF report output, you can have heading items span multiple columns and have heading or footing items align with report columns.

Borders for Items in Headings and Footings in PDF Report Output. The BORDERRALL StyleSheet attribute creates a heading or footing grid with borders around each individual heading or footing cell in PDF report output. Using this attribute along with BORDER attributes for individual objects in a heading or footing enables you to create borders around individual items.
Aligning Subheading and Subfooting Margins With the Report Body. Currently, with SQUEEZE=ON, the right margin border for subheadings and subfootings is defined based on the maximum width of all heading, footing, subheading, and subfooting lines. This means that the length of subheading and subfooting lines is tied to the lengths of the page heading and page footing, not to the size of the data columns in the body of the report. You can use the ALIGN-BORDERS=BODY attribute in a StyleSheet to align the subheadings and subfootings with the report body on PDF report output.

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Supporting Images Stored in BLOB Fields in Reports. WebFOCUS StyleSheets used to produce report output in PDF format can access a BLOB field as an image source when an instance of the BLOB field contains an exact binary copy of a GIF or JPEG image. The image can be inserted in report columns, headings, footings, subheadings, and subfootings. The following relational data sources support the Binary Large Object (BLOB) data type: Microsoft SQL Server, DB2, Oracle, Infomix, and PostgreSQL using its BYTEA data type.

Excel (EXL2K Format) Style Enhancements. The StyleSheet options ORIENTATION=LANDSCAPE and BORDER=ON are now supported for EXL2K report output.

Symbol Font Support. The Symbol font is now supported for PDF, DHTML, and PPT report output. To use the Symbol font, specify font=symbol in your WebFOCUS StyleSheet.

Creating PDF Compound Layout Reports With Drill Through. Drill Through allows you to define hyperlinks between the individual component reports embedded within a single PDF output file. Compound Layout reports now support Drill Through hyperlinks. You identify which reports are related by defining a DRILLMAP attribute in the COMPONENT declaration of the calling report which specifies the target report for the drill through. You generate the hyperlinks by adding the DRILLTHROUGH attribute to the StyleSheet declaration for the report component to contain the link.
Support for Missing Data in Coordinated Compound Layout Reports. Coordinated Compound Layout report output is now generated whether or not all of the coordinated components share exactly the same set of values for their common sort field. A coordinated page is generated in the designated page layout for every sort field value found in at least one of the component reports, presenting the appropriate data for those components where data exists for that value, and presenting an empty component report where data does not exist.

Support for Markup Tags and Line Spacing Attributes in Text Boxes. With Document Composer syntax, you can create reports containing drawing objects, such as boxes, lines, and text strings. You can format any portion of the text entered in a text object by adding HTML markup tags to the relevant portions of the text. A report with markup tags is called a markup report. The report can be generated as a PDF, DHTML, or PPT output file. You can also use the LINESPACING attribute to control line spacing for the text.

Compressing PRINT With ACROSS. When PRINT is used in conjunction with an ACROSS phrase, many of the generated columns may be empty. Those columns display the missing data symbol. To avoid printing such a sparse report, you can use the SET ACROSSPRT command to compress the lines in the report. The number of lines is reduced within each sort group by swapping non-missing values from lower lines with missing values from higher lines, and then eliminating any lines whose columns all have missing values.

Changing the Overflow Character. Overflow characters are displayed in a numeric report column when the format assigned to the column does not provide enough space to display its value. By default, the displayed overflow character is the asterisk (*). You can change the overflow character using the SET OVERFLOWCHAR command.

Extending Underlines to Data. By default, underlines for column titles on a report extend only from the beginning to the end of the column title text. You can extend the underline to the entire report column for formats DHTML, PDF, PS, and PPT, using the EXTUNDERLINE option in the STYLE attribute for the TITLE component in your WebFOCUS StyleSheet.
Displaying the Total Number of Pages in a Sort Group: 
<BYLASTPAGE>. You can use the <BYLASTPAGE> variable in a 
heading or footing to display the number of pages of output 
within each sort group when a report uses the REPAGE option 
to reset the page numbers for each sort group. This variable 
can only be used with styled output formats.

Increased Number of Function Arguments. The number of 
arguments supported for user-written subroutines has been 
increased from 28 to 200.

LCWORD2: Converting a Character String to Mixed-Case. 
The LCWORD2 function converts the letters in a character string 
to mixed-case by converting every alphanumeric character to 
lowercase except the first letter of each new word. If LCWORD2 
encounters a lone single quotation mark, the next letter is 
converted to lowercase. For example, 'SMITH' would be changed 
to 'Smith,' and JACK'S would be changed to Jack's.

GETCOOKI Function. The WebFOCUS Reporting Server can use 
the GETCOOKI function to retrieve the value of a browser cookie 
passed to it by the WebFOCUS Client.

GETHEADR Function. The WebFOCUS Reporting Server can 
use the GETHEADR function to retrieve the value of an HTTP 
Header variable from an HTTP header passed to it by the 
WebFOCUS Client.

Creating a Delimited Sequential File. You can use the HOLD 
FORMAT DFIX command to create an alphanumeric sequential 
file delimited by any character or combination of characters. You 
can also specify whether to enclose alphanumeric values in 
quotation marks or some other enclosure and whether to include 
a header record that lists the names of the fields. A Master File 
and an Access File are created to describe the delimited 
sequential file that is generated.
DATEPATTERN in the Master File. In some data sources, date values are stored in alphanumeric format without any particular standard, with any combination of components, such as year, quarter, and month, and with any delimiter. In a sorted report, if such data is sorted alphabetically, the sequence does not make business sense. To ensure adequate sorting, aggregation, and reporting on date fields, WebFOCUS can convert the alphanumeric dates into standard WebFOCUS date format using a conversion pattern that you can specify in the Master File attribute called DATEPATTERN.

Storing the Number of Repetitions of a Repeating Field in a Virtual Field. The OCCURS attribute in a Master File describes repeating fields or groups of fields in a non-FOCUS data source. Sometimes, the number of repetitions can be derived from a field in the data source. In that case, you can create a virtual field in the Master File that indicates the number of repetitions for each record and use that virtual field as the value of the OCCURS attribute.

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Propagating Fields to a HOLD File. You can use the SET HOLDLIST=ALLKEYS command to propagate all fields, including suppressed BY fields, to a HOLD file. The ALLKEYS setting enables caching of all the data necessary for manipulating an active report.

Controlling the Format of Reports With Multiple Display Commands. You can use the SET DUPLICATECOL command to reformat report requests that use multiple display commands, placing aggregated fields in the same column above the displayed field.

Precision for Date-Time Values. To control the precision of the seconds component in a date-time format, you can specify a digit from 1 to 9 in the format.

Testing Whether a Value Exists in a File in Dialogue Manager. You can use the IN FILE phrase in Dialogue Manager to test whether a character value exists in a file and populate a Dialogue Manager (amper) variable with the result.
- **Using a Field as an EDIT Mask.** You can store the mask used with the EDIT function in an alphanumeric string. The EDIT function extracts characters from or adds characters to an alphanumeric string. It can extract a substring from different parts of the parent string, and can also insert characters from a parent string into another substring.

**Version 7 Release 6.5**

- **Locking Excel Spreadsheet Values.** Using StyleSheet attributes, you can lock Excel spreadsheet values so they are read-only. These attributes apply to all Excel formats including EXL2K, EXL2K PIVOT, and EXL2K FORMULA.

- **Compressing PDF Output Files.** You can use the SET FILECOMPRESS command to compress PDF output files. The compressed PDF file size can be reduced to 25% of the original PDF file size.

- **Processing Dynamic Amper Variables.** An optional display value is available, in addition to the existing return value, when processing dynamic amper variables in a procedure (FOCEXEC). This functionality is available in auto-prompt forms (launch pages) to prompt users to select from a list of displayed values that is different from the values processed internally by the procedure. The optional display value can be used when adding a dynamic single-select or dynamic multi-select list of values to an auto-prompt form.

- **Scrolling HTML Report Output.** You may want to scroll the data in a report while freezing headings, column titles, and footings in order to see the context of the report output while scrolling. Using StyleSheet attributes, you can set aside a scrollable area for HTML report output.

- **Alternate Extended Currency Format.** The colon (:) has been added as an alternate for the exclamation point (!) for displaying extended currency symbols. Extended currency symbol formats are specified as two-character combinations in the last position of any numeric display format. The first character in the combination can be either an exclamation point (!) or a colon (:).
- **Returning an ISO Standard Week Number.** The HPART and HNAME subroutines extract a week number from a date-time value. To determine a week number, you can use ISO 8601 standard week numbering (which defines the first week of the year as the first week in January with four or more days) or the numbering method used in prior releases (which defines the first week of the year as the first week in January with seven days). You specify which type of week numbering to use by setting the WEEKFIRST parameter. The function HYYWD returns both the year and the week from a given date-time value.

- **Generating a Pattern From an Input String.** You can use the PATTERN function to examine a source string and produce a pattern that indicates the sequence of numbers, uppercase letters, and lowercase letters in the input string. This function is useful for examining data to make sure that it follows a standard pattern.

- **Storing Packed Values.** You can use the XTPACK function to store packed numbers with up to 31 significant digits in an alphanumeric field, retaining decimal data. This enables you to write a short or long packed field of any length, 1 to 16 bytes, to an output file. You can use the output file as input to an application that supports packed arithmetic, such as a Cobol application in the z/OS environment.

- **Creating a Comma-Delimited Access File.** The Access File for a FOCUS or XFOCUS data source can be comma-delimited, similar to the Master File syntax. The Access File is required to take advantage of intelligent partitioning or to access a Multi-Dimensional Index (MDI).

- **Extracting a Substring.** If your configuration uses a DBCS code page, you can use the DSUBSTR function to extract a substring based on its length and position in the parent string. If your configuration uses a DBCS code page, you can use the DEDIT function to extract or add characters from a string.

- **Date-Time Value Option.** You can use the "b" or "B" option in a date-time value to display a date-time value with a twelve-hour time value followed by a blank space and then by am or pm (for b) or AM or PM (for B).
Version 7 Release 6.4

- **Controlling the Currency Symbol.** By default, the M and N format options for fields display the currency symbol for the code page being used by the server. You can use the SET CURRSYMB command to specify a currency symbol if your report is using a value for a currency symbol that is not the default for the code page.

- **Suspending Execution.** You can suspend execution of your WebFOCUS application for a specified number of seconds using the SLEEP function. This is most useful in Dialogue Manager when one process cannot begin until another process has started.

- **Displaying Subfoot Values Within a Sorted Report.** When creating a sorted report, you can display footing values that depend on the value of the sort field by adding the WITHIN phrase to a SUBFOOT command.

Version 7 Release 6.2

- **Comma-Delimited Files Support Joins.** A single-segment comma-delimited file with SUFFIX COM or COMT and following the rules of SET PCOMMA=ON, can participate as the FROM or TO file in a join.

- **Compiled DEFINEs Support Missing Data.** A DEFINE command with the MISSING attribute on either side of the equals sign can be compiled on z/OS.

Version 7 Release 6.1

- **Propagating the Missing Attribute to a Reformatted Field.** You can use the SET COMPMISS command to propagate the missing attribute to a reformatted field in a report request.

- **Controlling Case Sensitivity of Passwords.** You can use the SET DBACSENSITIV command to control whether user and DBA passwords are uppercase before validation.

- **Creating HTML Report Output With Absolute Positioning.** You can hold report output as format DHTML to create HTML output that supports most of the features available for PDF output.
- **Loading Fixed Format Sequential Files with MODIFY.** You can use MODIFY to load data into a fixed format sequential file. Update and Delete actions are not supported.

- **Controlling FIXFORM Input Fields.** You can use the SET FIXFRMINPUT command to control whether FIXFORM input fields are conditional (field/format C) or non-conditional fields. This enables you to make spaces in transaction fields acceptable for updating database fields.

- **Assignment Between Text and Alphanumeric Fields.** A DEFINE or COMPUTE command can assign an alphanumeric value to a text field or a text value to an alphanumeric field.

### Version 7 Release 6.0

- **Structured HOLD Files.** A new HOLD option allows you to retain both your request data and the data structure from the original file(s), facilitating easy migration and reuse of databases and reports across platforms and on the Web.

- **Display of Lines in Report Output.** You can use the SET ACROSSLINE command to turn on/off the display of lines in report output you generate with ACROSS.

- **Reviewing Options by Parameter Categories.** You can use the ? SET BY CATEGORY command to review options by major parameter categories, such as MEMORY, DATES, SECURITY, ENVIRONMENT, and PLATFORM.

- **Time Scale Axis.** WebFOCUS supports Time Scale Axis for the X-Axis in GRAPH.

- **Merge Capability.** You can build complex GRAPH requests with multiple sort fields and nested X-Axis labels. The GRMERGE=ADVANCED setting will be added along with three SET commands (GRMULTIGRAPH, GRLEGEND, GRXAXIS).

- **LIKE and UNLIKE Operators Supported with IF.** The IF phrase supports the LIKE and UNLIKE (equivalent to NOT LIKE) operators with masks and multiple escape characters.

- **Querying Site Code Value.** Using the Web Console, you can add the site code associated with a server to its edaserve.cfg file. You can then issue the ? SITEMODE query to view the site code value on the screen or in a trace file.
Business Views of a Master File. You can create a view of a Master File by selecting fields from a source Master File and grouping them into pseudo-segments called folders according to their function in a business application.

Summaries on ACROSS fields. The summary commands SUBTOTAL, SUB-TOTAL, SUMMARIZE, and RECOMPUTE can be specified with horizontal sort fields.

SET CNOTATION=EXPLICIT Command. This command assigns column numbers to those fields that are explicitly referenced in a request, whether or not they appear in the report output.

DB_LOOKUP Function. This function enables you to retrieve a value from one data source in a request against another data source without joining or combining the two data sources.

SET DMPRECISION Command. This command enables Dialogue Manager -SET commands to calculate accurate numeric variable values without using the FTOA function.

GROUP ELEMENTS. USAGE and ACTUAL formats for a group field are calculated automatically when you define the group using the ELEMENTS attribute.

Increased number of fields. The maximum number of fields supported in a reporting or Maintain structure has increased to 32K.

Increased Number of Segments in a Structure. The maximum number of segments in a structure for reporting is 256.

Multi-Field Join to a Fixed Format Sequential File. A single-segment fixed format sequential file can be the target file of a multi-field join.

SET SHOWBLANKS Command. This command preserves leading and internal blanks in HTML and EXL2K report output.

SET CDN=QUOTEP Option. This option for the Continental Decimal Notation parameter sets the period as the decimal separator and the apostrophe as the thousands separator in numbers displayed on report output.
Native Compiler for MODIFY Expressions. The SET MODCOMPUTE=NATV command enhances the efficiency of MODIFY procedures by compiling expressions in COMPUTE and VALIDATE commands using the arithmetic expression processing of the underlying operating system.

Hidden Dialogue Manager Variables. The -DEFAULTH command initializes a variable but does not return the variable to the front-end for use by WebFOCUS parameter auto-prompting features.

RNK. Prefix Operator. The RNK. prefix operator ranks values of vertical sort fields. Unlike the RANKED BY sort option, the RNK. operator enables you to place ranked values anywhere on the report and to rank multiple sort fields.

HOLD FORMAT FOCUS With Unique Segments. A HOLD file in FOCUS format is created with unique child segments when the data is too long to fit in a segment.

Direct HOLD FORMAT FOCUS. HOLD files in FOCUS format are created directly, without an internal MODIFY procedure unless the DIRECTHOLD parameter is set to OFF.

HEXTR and HMASK Date-Time Functions. The HEXTR function extracts components of a date-time value and moves them to a date-time field with the remaining components set to zero. The HMASK function extracts components of a date-time value and moves them to a date-time field with the remaining components preserved.

SET DEFECHO. This setting sets a default value for the &ECHO variable that spans all procedures executed in an application. Any procedure that does not explicitly set a value for &ECHO uses this default value.

Displaying a Row for Data Not Included in Requested Sort Field Groups. The PLUS OTHER phrase aggregates and displays a row of all sort values outside of the HIGHEST/LOWEST n requested in a BY phrase.

HOLD FORMAT PPT. Saves report output as a PowerPoint presentation.
• **Multilingual Descriptions in a Master File.** A FILE or FIELD declaration in a Master File can have description attributes in multiple languages.

• **Filters in a Master File.** A Boolean virtual field can be described as a filter in a Master File and used in screening criteria in a report request.

• **Support for Multiple Text Fields in FIXFORM FROM HOLD.** A MODIFY procedure can read multiple text fields with a FIXFORM FROM HOLD command.

### ReportCaster

**Version 7 Release 6.10**

• **Bursting Distribution Option for Packet Email.** The Packet Email setting located under the General tab in the Distribution Server Configuration tool includes a BURST option. This option generates a separate e-mail for each burst value for a given e-mail address and contains the appropriate attachments.

**Version 7 Release 6.9**

• **Selecting Library Categories When Distributing to the Report Library.** When you schedule a Standard Report or My Report, you have the option to specify a category in the Report Library where you want the report to reside. This option allows you to specify an existing Library category or create a new category.

• **Bursting Supported When Using Unstyled Formats.** Bursting is supported for the unstyled formats ALPHA, COMMA, COM, COMT, TAB, and TABT.

• **ReportCaster Distribution of DFIX Format.** A new specialized format, DFIX, allows you to designate any character as a delimiter, include quotation marks around alpha fields, and include column titles.
- **On-demand Paging in Library.** The Report Library On-demand Paging feature allows you to view a report one page at a time from the Library while the Web server holds the remaining pages and feeds them at your request. This feature is useful for large reports because it decreases the amount of time you must wait before you can begin viewing the report. The new distribution format, HTML ODP, must be used when scheduling a report for On-demand Paging in the Report Library.

- **Using the Distribution Server Status Interface.** The ReportCaster Console includes the Server Status interface, which provides the status of the Distribution Server, and when configured for failover, both the primary and failover Distribution Servers. The status provides information, such as, the host name and port number, the number of jobs currently running on the server, and the status of each Distribution Server service. In addition to providing the server status, the Server Status interface allows you to stop and restart a Distribution Server and to switch the roles of the primary and failover servers.

- **ReportCaster Plug-Ins.** ReportCaster includes the following Plug-ins that you can customize to fit the needs of your application.
  - **Repository Connection Plug-in.** A custom written Java class that implements the ReportCaster repository connection interface to dynamically retrieve the parameter values needed by ReportCaster to connect to the repository.
  - **Job Status Notification Plug-in.** A custom written Java class that implements the ReportCaster Job Status Notification interface and instructs the Distribution Server to perform some action (such as notifying a Web Service or other listener) that a scheduled job has started and ended.
  - **SFTP Security Plug-in.** A custom written Java class that implements the ReportCaster SFTP security interface to dynamically retrieve the value of a public key needed to connect to a secure FTP server.
  - **SMTP Security Plug-in.** A custom written Java class that implements the ReportCaster SMTP security interface to dynamically retrieve the user ID and password needed to connect to an SMTP server.
Version 7 Release 6.7

Library Watch List. A new feature in the Report Library allows you to easily track and focus on reports of interest that reside in the Library. Once a report is included on the watch list, you will receive an e-mail notification each time a new version of the report is distributed to the Library. In addition, the Library Watch List view displays the most recent version of your watch list reports.

Supporting Adobe Flex Format for Active Technologies Reports. ReportCaster supports the Adobe Flex format for scheduled output of active reports. The Flex format provides portability and interactive enhancements to the active report. The format is available in the Report Formats drop-down list as FLEX - active report (Flash/Flex). Files in this format have a .swf extension.

Encrypting Zipped Output. You can secure zipped output through encryption and password protection by providing a password associated with the zipped output to the Distribution Server at schedule execution time. You can add a password to a dynamic distribution list or distribution file, associate a password with the domain of a procedure in Managed Reporting using the default Java plug-in, or write a custom Java plug-in that will provide the password to the Distribution Server.

Zip Encryption Password Plug-in. The Zip Encryption Password Plugin setting, located in the ReportCaster Server Configuration tool, controls how passwords are obtained by the Distribution Server for protecting zipped output.

Bursting With Wildcards, Java Regular Expressions, and Default Distribution. When you burst a report, you can use wildcards and Java regular expressions in the burst value. Each occurrence of a wildcard or Java regular expression in a burst value must be preceded by a keyword.

Configuring a Backup Distribution Server. The Distribution Server Failover feature allows you to configure a backup Distribution Server that can resume ReportCaster operations when there is an interruption (planned or unplanned) in the primary Distribution Server service. This feature is being introduced as a Candidate for Release (CFR).
- **Failover Settings.** The Failover Setting folder, under the General tab of the ReportCaster Server Configuration tool, contains the Console Host, Failover Console Host, Failover Console Port, and Failover Enabled options that are used to set up a backup Distribution Server.

- **Setting Default Distribution List Access.** Use the Default Distribution List Access setting, found in the ReportCaster Server Configuration tool, to set the default value of the Access option located in the Distribution List dialog box used to create a new Distribution List. The default value can be set to either Public or Private.

- **Limiting Address Book Access Types.** The Address Book Access Types setting, found in the ReportCaster Server Configuration tool, allows you to control the type of access a user can select when creating a distribution list. Possible values are Public, Private, or Public and Private. In addition, if you disable either the Private or Public access option, another option is available to designate whether or not to run existing schedules that use the prohibited access type.

- **Zipping FTP Output Distribution.** When you distribute scheduled output to an FTP server, the Distribution tab of the New Schedule dialog box provides an option to distribute the output in a zip file. If the output is a burst report, you have the option to create separate zip files for each burst value.

- **Limiting Inline Report Distribution.** The Inline Report Distribution setting, found in the ReportCaster Server Configuration tool, controls whether or not a user will have the option to include a report in the body of an e-mail when setting up an e-mail distribution method for a schedule. When inline report distribution is not allowed, the option is not available for selection in the schedule user interface.

- **Reusing a Folder When Distributing to Managed Reporting.** The Default Reuse Folder When Distributing to Managed Reporting setting, found in the ReportCaster Server Configuration tool, is a global setting that designates whether a new folder is created each time a schedule distributes output to Managed Reporting (set to No), or whether a folder is reused each time a schedule distributes output to Managed Reporting (set to Yes).
Controlling the Creation of an Index File With Burst FTP Distribution. The Create Index File with Burst FTP Distribution setting, found in the ReportCaster Server Configuration tool, is a global setting that designates whether or not to create an index file whenever a schedule that distributes burst reports using FTP distribution runs.

Controlling Use of Group Blackout Dates. The Allow Group Blackout Dates setting, found in the ReportCaster Server Configuration tool, designates whether or not ReportCaster administrators and Managed Reporting group administrators can configure blackout dates for a specific group of users. The Allow Group Blackout Dates setting is respected at distribution time.

Purging Log Reports at Distribution Server Startup. The Log Purge at Distribution Server Start setting, found in the ReportCaster Server Configuration tool, allows you to automatically purge existing log reports each time the Distribution Server starts. Possible values are On and Off. This is in addition to the scheduled log purging that is set using the Log Purge Period and Log Purge Time options. These settings appear under a new Log Purge folder under the General tab in the Server Configuration tool.

Deleting a File After Distribution. The Schedule interface provides an option to delete a file from the source location ReportCaster obtained it from after it is distributed. This option is available for task types FTP and File.

Controlling Notification and Next Run Time When Using &KILL_RPC. The &KILL_RPC flag is a global ReportCaster variable that you can use in a pre-processing procedure to stop the execution of a ReportCaster schedule. Two new &KILL variables allow you to control certain behavior once a schedule is stopped, as follows:

- &KILL_RPC_NRT designates whether or not to reset the next run time of the schedule.
- &KILL_RPC_ERR designates whether or not to trigger an e-mail On Error Notification when the schedule is stopped.
Referencing Task ID at Execution Time. The &DSTASKID and &DSTPACKETID amper variables, which represent the Task ID and Packet ID, are available at schedule execution time. The &DSTASKID is the ID associated with a scheduled task, and the &DSTPACKETID is the ID associated with a scheduled packet. You can use these variables in a procedure that you schedule.

Configuring Windows Distribution Server Service Java Heap Size. In addition to configuring the Distribution Server Java heap size from the command line, you can also use the Registry if the Distribution Server is running as a service on Windows. To change the Java heap size through the Registry Editor, edit the value of JAVAOPTIONS.

Version 7 Release 6.5

Distribution Server Restart Option. In order to implement changes that have been made to the ReportCaster configuration settings, the Distribution Server and ReportCaster application must be restarted. Previously, the server and application had to be manually restarted. To improve usability, a restart option is available in the ReportCaster Server Configuration tool when it is accessed through the ReportCaster Web application. (A manual restart is still required when the ReportCaster Server Configuration tool has been accessed from the command line.) The restart option is available from either the Restart icon that appears at the top of the tool or as a selection in the Action menu.

WebFOCUS Administration Console ReportCaster Options. Several ReportCaster configuration parameters, Repository functions, and ReportCaster restart and status options are available in the WebFOCUS Administration Console.
- **ReportCaster Change Management.** The ReportCaster Change Management tool is available as a graphical user interface from the ReportCaster Web application and the ReportCaster HTML user interface. This tool allows ReportCaster administrators to move specific ReportCaster data belonging to specific users from one Repository to another. Typically, you would use this tool to move data from a development to a testing environment, or from a testing to a production environment. The Repository objects you can move are schedules, schedule distribution lists, and Library access lists. Using the Change Management user interface, you select the type of data you want to move, select a user who owns the data, and the specific items to be moved.

- **Library Email and Access Option.** In the ReportCaster Server Configuration tool, a ReportCaster administrator can limit the Library e-mail notification and Library access options available to a user when creating a schedule whose output will be distributed to the Library. A new option, Owner & Public, has been added to the current options (Owner, Owner & Access List). A Library configuration setting, Send Report ID and Version with Notification Email, allows the administrator to designate whether or not the report is sent with the e-mail notification.

- **Report ID and Version Number Included in Log Report.** The ReportCaster Log includes the Report ID and Version Number of a report distributed to the Library. This provides confirmation of which report and version of the report has been successfully distributed to the Library.

- **SFTP Distribution Option.** When using SFTP as the report distribution method, you can designate an SFTP port rather than having to use the default port assignment. The option to designate an SFTP server name and port number is provided in the New Schedule window, Distribution tab, SFTP Server Name field.
Version 7 Release 6.4

- **Enhancements to E-mail Settings.** The ReportCaster Server Configuration tool provides two settings that allow an administrator to designate whether or not to restrict an e-mail distribution (Restrict Email Domains) and if so, which domains to distribute to (Allowed Email Domains). A folder, Email Delivery, has been created under the Email Domains folder to bring these two dependent settings together. In addition, the Allowed Email Domains setting provides a separate dialog box for adding or removing e-mail addresses from the Allowed Email Domains list.

In addition to changing the mail server name, you can assign a port number other than the default in the following ReportCaster Server Configuration options:

- Email Delivery options, Mailhost, and Notify Mailhost
- Two Way option, Mail Server

- **Categorizing the "No Report to Distribute" Notification.** In the ReportCaster Server Configuration tool, an administrator can specify whether the “No Report to Distribute” notification from the WebFOCUS Reporting Server is categorized as an error or a warning. This is a global setting, relevant to all schedules.

- **Setting FOC Message Numbers to be Processed as Warnings.** By default, the ReportCaster Distribution Server will not distribute report output returned by the WebFOCUS Reporting Server if a FOC message is received. Through the FOC Message Numbers to be Processed as Warnings server configuration setting, an administrator can designate which FOC messages the WebFOCUS Reporting Server will ignore when processing report requests.

- **Setting Minimum File Size for Zipping.** The server configuration parameter, Default ZIP Minimum File Size, allows an administrator to specify the file size at which the schedule output will be zipped. This parameter is relevant only to schedules that are configured to zip the distribution output. The file will be zipped when the file size is equal to or greater than this value.
Cloning a Task Within a Schedule. For schedules that permit multiple tasks, you can clone (duplicate) an existing task to use as a template for a new task. A Clone button is provided in the New Schedule, Tasks tab dialog box.

ReportCaster Scheduler Tool. From the Developer Studio HTML Layout Painter tool, you can add a schedule button to an HTML form that will open the ReportCaster single page Scheduler Tool. The Scheduler Tool provides the full function of ReportCaster presented in a unified user interface.

Version 7 Release 6.2

New Configuration Settings. The ReportCaster Server Configuration tool includes Email Delivery configuration options that restrict the distribution of e-mail to specific users (Restrict Email Domains and Allowed Email Domains), and define the number of tries for the Distribution server to connect to the e-mail server (Email Retries) and the interval between tries (Email Retry Interval). Previous e-mail options (Mailhost, Notify Mailhost, Packet Email) now appear under Email Delivery in the server configuration tool.

The ReportCaster Server Configuration tool contains settings that enable ReportCaster Administrators to specify what types of tasks, distribution methods, and report formats are available to users. There are also settings that enable you to suppress the Email for Library option and Access Options that appear in ReportCaster when distributing scheduled output to the Report Library. Additionally, the Log Purge Time setting enables you to specify the time at which log purging occurs.

Schedule Blackout Dates. In addition to schedule blackout dates being set for all users, administrators can also set blackout dates for specific user groups. ReportCaster Administrators can define and manage schedule blackout dates for all users (Global group) and for any group. Managed Reporting Group Administrators can define and manage blackout dates for the group(s) they administer. The Schedule Blackout Date Import and Extract Utilities can also be targeted to a specific group.

New Report Formats. The PowerPoint (PPT) template is supported as a specialized format.
Version 7 Release 6.1

- **Schedule Blackout Dates.** An Import Utility allows you to import a file containing specific blackout dates, and an Extract Utility allows you to save existing blackout dates in ReportCaster to a file for future use. These utilities can be run in silent and interactive modes on Windows and UNIX systems.

- **New Report Formats.** COM (Comma delimited text file without blanks) and VISDIS (Visual Discovery report file) were added as available non-burst scheduled outputs.

- **Select Multiple Owners.** Within the ReportCaster Console Info and Log functions, an Administrator can now view schedules and log reports for more than one owner in a single session.

- **Select Multiple Schedules and Log Reports.** From the schedule list, you can now view, run, and delete more than one schedule, and run and purge multiple log reports.

- **Two-Way Email.** ReportCaster provides two additional report types for Two-Way Email distribution; HTML Attachment and AHTML (Active HTML) Attachment.

- **Environment Variable Usability.** An override of the default GRAPHSERVURL value is available for Managed Reporting procedures. FOCEXURL and FOCHTMLURL variables are automatically added to a FEX by ReportCaster. You can recode the host and port values in these variables if reports are distributed to users who are not within the context of the application environment.

- **Library Content Delete Usability.** Adds the "Delete report folder and all report versions" option.

- **Parameter Enhancements.** ReportCaster has several parameter prompting enhancements, including the ability to store multiple values for a parameter, dynamically prompt for parameters for WF Server Procedures, and display the description for the parameter when it is specified in the procedure.

- **ReportCaster API.** The ReportCaster API supports the report formats COM and VISDIS.
Version 7 Release 6.0

- **New Report Formats.** ReportCaster can distribute non-burst scheduled output in COMT (Comma Delimited Variable Length Text File) and PPT (PowerPoint) formats.

- **Report Library Integration With the Google Search Engine.** The Report Library provides the ability to search for content using the Google search engine.

- **Monthly Schedule Interval Enhancement.** The monthly schedule interval has been enhanced to enable you to schedule a job every nth day of the week every n months (for example, the first Monday every 2 months), or on specific days every n months.

- **Schedule Subinterval Enhancement.** You can optionally create a secondary run interval within the day the schedule runs. You can apply the secondary run interval every n minutes or hours for a specified number of hours/minutes or until a specified time. This option is available for schedules that run every day(s), week(s), month(s), or year(s).

- **FTP Task Type.** ReportCaster has a new Task Type, FTP, which enables you to retrieve and distribute externally located files.

- **ReportCaster API.** Introduces the following methods and classes:
  - `TimeInfoDay.java`, `TimeInfoMonth.java`, `TimeInfoWeek.java`, and `TimeInterval.java`, which include methods that specify a secondary run interval for a schedule.
  - `StorageLibrary.java`, which includes a method that limits content distributed to the Report Library to only include burst values specified in an Access List.
  - `DistributionSFTP.java`, a class that enables you to distribute reports using SFTP (SSH File Transfer Protocol).
  - `CasterManagedConnectionFactory.java`, which includes methods to specify or retrieve the Trusted Key File, which is required for ReportCaster authentication performed by the Managed Reporting Realm Driver or another external authentication driver.
- LibraryContentManager.java, which includes methods for Report Library security enhancements.
- Schedule.java, which includes methods to compress reports stored in the Report Library.
- WebAuthenticateCredential.java, which includes methods to use HttpServletRequest for Web server authentication.
- Task.Ftp.java, a class that allows ReportCaster to schedule the retrieval of a file from any FTP server.

- **Pre-processing Procedure Enhancements.** ReportCaster internal variables can be referenced in pre-processing procedures when you specify to pass the variable value to the pre-processing procedure. For example, the &DSTOWNER variable can be read to access the owner (user ID), or the &DSTEDAUSER variable can be read to access the Execution ID.

- **Limiting Burst Values Distributed to Report Library.** You can limit the content distributed to the Report Library to only include burst values specified in an Access List.

- **Distributing Burst Coordinated Compound Reports.** ReportCaster has the ability to burst and distribute a Coordinated Compound Report in PDF format.

- **SFTP Distribution Method.** SFTP (SSH File Transfer Protocol) is available as a distribution method.

- **Schedule Run Option With Traces Enabled.** ReportCaster provides the ability to enable SCHEDULE or SCHEDULE & REPORT tracing on a per schedule basis when dynamically running the schedule on demand.

- **Maximum Field Size Increases.** ReportCaster has increased the maximum allowable size for many fields in the ReportCaster Repository. For example, the maximum field size for a parameter value has increased to 3200 characters.

- **SQL Server 2005 Support.** SQL Server 2005 is certified as a ReportCaster Repository and the installation provides an option to use the SQL Server 2005 JDBC driver.
UNIX and z/OS Script Files. The $CLASSPATH variable for the ReportCaster Distribution Server on UNIX and z/OS is set in one script rather than duplicated in all scripts in the ReportCaster76/bin directory.

Utility to Create Table SQL in a File. In addition to the default utility which creates and submits ReportCaster Repository creation SQL, a utility is provided that creates the SQL in a file that a DBA can review and manually submit.

WFTransInOut Setting. Configures the WebFOCUS Servlet WFTRANSINOUT plug-in. This is a custom-written program that, when configured, is called by the ReportCaster Distribution Server as the last step prior to sending each request to the Reporting Server and again as the first step when receiving output from the Reporting Server.

DSTRUN and DSTRUNNOW. You can run a scheduled job with an execution ID other than the execution ID stored with the schedule information in the ReportCaster tables.

Adapter for Geographic Information System

Version 7 Release 6.0

Map Items Buffering. You can use any map layer type to select items from other map layers using a buffer. For example, if you run a report by selecting a store or office, the Adapter for Geographic Information System (GIS) can issue a map query to retrieve all customers within 10 miles of the selected store.

Mouse-Over Pop-Ups. When you enable this option in the GIS Definition Editor, the adapter enables you to see a pop-up message by dragging your mouse over points on the map.

Synthetic Map Layer Line Features. If a data source has latitude and longitude values, you can use it to draw lines between common points. This enables you to create a map that includes, for example, lines from a repair shop to all customers who had something fixed there.
- **Synthetic Map Layer Polygon Features.** Support for polygon shapes enables you to incorporate multiple points with a common unique feature key that describe a series of segments comprising polygon features. The shape is automatically completed, with a line drawn between the last point and the first point.

- **Multiple Map Layer Attribute Selection.** For parameter layers (inbound), you can use Shift-click and/or Ctrl-click to make multiple selections of map layer attributes. This creates a multi-field Master File and FIX format FTM file. The values in the file correspond to the rectangle, circle, or buffered selection from the map. You can then use the data file as a JOIN statement parent to filter the child data.

- **Map Layers as Report Data Sources.** By using the multi-attribute selection technique for inbound layers, you can generate reports and graphs directly against map layers.

## Maintain

### Version 7 Release 6.5

- **Changing the Order of Controls.** You can use the ZIndex property to designate which control will be displayed on top of another control when more than one control is overlaid on a form. This property applies to all controls except Read/Write Grid and ActiveX controls.

- **Saving Form Generation Code.** A deploy option has been added to the New Scenario Wizard dialog box that deploys .MNT files with original underlying form code intact.

### Version 7 Release 6.0

- **Maintain From HTML Layout Painter.** The HTML Layout Painter gives you the option of selecting Maintain procedures (.mnt, .fcm) to run from your HTML form, either within a frame or in a new window.

- **Validation for Edit Boxes and Multi-Edit Boxes.** An MDE property, IBIValidation, enables you to automatically validate data formats for edit boxes and multi-edit boxes at run time.
WebFOCUS Graphics

Version 7 Release 6.9

- **FrameAutoshade.** This property allows you to control auto-shading of Side and Bottom Frames in a 2.5D graph.

- **GaugeSizeMode.** This property allows you to control the size of the gauges and specify whether they should all be the same size or the size should be flexible.

- **MajorGridColorBand get Method.** These methods allow color-banded styling to be applied to X-axis grid in a graph.

- **setLineStyleLegendMarkers().** This method allows marker shapes to be represented in corresponding legend markers in line charts.

- **FrontZoneLine Method.** These methods return an ObjectID of the Y-axis front zero line.

- **Multiple Drill-Down From Graphs.** You can create multiple drill-down links from a graph by choosing any combination of supported actions, such as creating links to a detail report or Maintain procedure, a JavaScript function, or a URL.

National Language Support

Version 7 Release 6.9

- **Unicode Support for Master Files, Data Files, and Application Directory Names.** Support for UTF-8 file names is now available for Master Files, Data Files, and Application Directory names.

- **Tahoma Font Support for Thai PDF and PostScript Formats.** Users that want to output Thai characters in PDF or PostScript formats can now select the Tahoma font.

- **Times New Roman Font Support for Arabic PDF and PostScript Formats.** Users that want to output Arabic characters in PDF or PostScript formats can now select the Times New Roman font.

- **Apache Tomcat Application Server Unicode Configuration.** You can configure Unicode either with or without the Apache Tomcat Application Server.
Modifying the User Tools Font Using the WebFOCUS Administration Console. In the WebFOCUS Administration Console, you can modify the font in the NLS Settings tab in Japanese, Traditional Chinese, or Simplified Chinese.

Version 7 Release 6.7

NLS Server: Default Fonts for PDF and PS Output in Hebrew and Arabic. The PDF and PS formats are based on the server language parameter, LANG. The default for Hebrew is Lucinda Sans Unicode and the default for Arabic is Traditional Arabic, assuming, in each case, that the StyleSheet does not specify a font name and that no default font is set in the PDF font mapping file.

NLS Server: SET CURRSYMB=NIS for Hebrew. You can use the SET CURRSYMB=NIS command to specify the Israeli New Sheqel.

NLS Client: NLV Excel Add-In for Quick Data. A localized version of Information Builders Quick Data plug-in is provided to Microsoft Excel with Developer Studio. When you launch Quick Data from a localized version of Excel, the dialog boxes are localized in French, German, Spanish, Japanese, Traditional Chinese, and Simplified Chinese.

Version 7 Release 6.5

NLS Server: Language File for Brazilian Portuguese. A separate language file with the suffix BRA is available to distinguish Brazilian Portuguese from European Portuguese.

NLS WebFOCUS Client: Languages Added to the Client Code Page List. Russian, Eastern European, and Turkish (Windows) have been added to the client code page list in the NLS settings area of the WebFOCUS Administration Console.
- **NLS WebFOCUS Client: NLS and NLV Integration of WebFOCUS Open Portal Services and SAP Portal.** NLS and NLV support is available for WebFOCUS Open Portal Services integration with the SAP Portal. The iViews are rendered based on the browser language settings in the following WebFOCUS-supported languages: English, French, Spanish, German, Brazilian Portuguese, Japanese, Chinese (Traditional) and Chinese (Simplified). Content associated with WebFOCUS iViews (for example, Report Assistant and Graph Assistant windows) is fully localized for these languages.

**Version 7 Release 6.2**

- **Unicode Support on the WebFOCUS Client for Self-Service Deployment.**

**Version 7 Release 6.1**

- **Adding a Localized WebFOCUS Reporting Server Language.** You can localize a language that does not yet have an asterisk next to its name, allowing users to see both the Reporting Server Console and the Data Management Console in the localized language. The added language becomes available from the Dynamic Language Switch menu.

- **Support for Lithuanian, Latvian, and Estonian Code Pages.** In prior releases, Lithuanian, Latvian, and Estonian languages were grouped under the Baltic language option. In Version 7 Release 6.1, the Baltic language option was removed and has been replaced with a separate option for each of these languages.

**Version 7 Release 6.0**

- **Language Resource File Utility.** In order to configure the WebFOCUS interface to display another language, you must first copy resource files by executing the Language Resource Files Utility to automatically install the necessary resource files.

- **Unicode PDF.** You can create PDF reports with single-byte Unicode data.

- **Dynamic Language Switch Menu.** When you choose a language with an asterisk (*) during NLS configuration, the associated languages are displayed as a menu on the Web Console toolbar.
Server

Version 7 Release 6.7

- Core Server and Client: User Profile Naming Switch (domain_userid vs. userid). On the Windows Server, the profile_no_domain option on the Workspace Configuration Profile Settings pane enables you to choose whether to include or exclude the domain name from a user profile name.

Version 7 Release 6.5

- Core Server and Client. Several core server and client enhancements are available:

  - Foccache Persistent Directory for Caching Files. When you want to be able to reuse data within the same browser session, you can store the data in the form of a HOLD, SAVE, or SAVEB file in the foccache directory, which is automatically created when the connection to the server is established. This feature provides a mechanism for caching and running multiple instances of WebFOCUS active reports.

  - Mixed-Case and NLS Characters in i5/OS Library and File Names. When you create a synonym for DB2, DB Heritage Files, or Query/400 on the i5/OS platform, standard i5/OS naming conventions apply to the target data source. These adapters, therefore, support the use of double quotation marks around any library name and/or file name that contains lowercase or NLS characters.

  - Data Management Console: PATTERN Function. You can use the PATTERN function to examine a source string and produce a pattern that indicates the sequence of numbers, uppercase letters, and lowercase letters in the input string.

Version 7 Release 6.4

- Core Server and Client: Supporting Failover Using Multiple Cluster Managers. To enhance failover capability, a WebFOCUS Client can randomly connect to one of several remote Cluster Managers (CLMs), as defined in the server’s communication file. With this configuration, if one Cluster Manager is unavailable, another Cluster Manager can perform its tasks.
Version 7 Release 6.2

- Core Server and Client. Several core server and client enhancements are available:
  - **Execution of Multiple Group Profiles.** You can execute multiple group profiles during logon using execution options on the Workspace Configuration Profile Settings pane.
  - **LDAP Security: Support for Trusted Connections.** In prior releases, LDAP security mode allowed only explicit connections to the server, which requires a user ID and password. In Version 7 Release 6.2, LDAP security also supports trusted connections, where only the user ID is required.
  - **OPSYS Enhancement for Adapters Running on i5/OS.** Upon connection, an i5/OS Server running OPSYS security picks up the connecting user’s default library and library path from the user’s system profile. This is useful for dynamically finding files when the metadata contains unqualified QSYS names. This feature affects the Adapters for DB2, Query/400, and DB Heritage Files when the library name is not saved in the synonym’s Master File.
  - **Web Console: Controlling Display of Pop-Up Menus From Navigation Panes.** Right-click behavior opens pop-up menus. However, if you prefer to use left-click behavior to access these menus you can choose My Console, then Preferences from the Web Console menu bar. This is particularly useful for browsers that do not support right-click behavior. Double-click behavior executes the first option on a pop-up menu.

Version 7 Release 6.1

- Core Server and Client. Several core server and client enhancements are available:
  - **Support for Internet Protocol Version 6 (IPv6).** The WebFOCUS Reporting Server supports the IPv6 internet protocol on all platforms that support IPv6.
  - **SAP Login Ticket Authorization.** Single-signon SAP login ticket authorization is supported on the Web.
- **Unicode Support.** The WebFOCUS Reporting Server supports a Unicode Transformation Format (UTF) called UTF-8. The main benefit of the new system is the ability to have multiple languages (both European and Asian) in the following WebFOCUS and Dialogue Manager objects: titles, descriptions, and names in synonyms; headings and prompts in procedures; and data for all supported adapters (for example, SAP BW and R/3-ECC, Web Services, Oracle, DB2, Microsoft SQL Server, Sybase ASE, and Fixed files). In Version 7 Release 6.1, Unicode support has been added for MySQL and Teradata.

- **z/OS: Controlling SMF Subtypes.** You can control the recording of EDA SMF records by sub-type pair.

- **z/OS: PDS Application Caching.** A SRVINIT member of the dataset referenced by //EDACCFG DD in IRUNJCL is available for z/OS in PDS deployment. The SRVINIT member enables DYNAM commands to be executed during server startup. These commands remain in effect until the server is shut down.

- **Web Console.** Several Web Console enhancements are available:
  
  - **Adding a Segment Using Metadata Import.** You can open a synonym in the Synonym Editor and launch the Create Synonym tool for a configured adapter. The tool generates a synonym and adds it directly to the original synonym as a new segment, thereby creating a multi-segment structure. (If you generate multiple synonyms, each one becomes a separate segment.)

  - **Changing the Color Theme of the Web Console.** You can change the color of the Web Console display using the Theme option. The available colors are white (the default), blue, and gray.

  - **Changing E-mail Flow Properties.** DataMigrator users can change the properties of a flow from the Web Console.
Version 7 Release 6.0

- **Core Server and Client.** Several core server and client enhancements are available:

  - **z/OS: Unified Server PDS Deployment.** You can deploy the server on z/OS using PDS libraries rather than the Hierarchical File System (HFS) on UNIX System Services. This feature, which had early release status in Version 7 Release 1.3, is now a production-level feature. It can be viewed as a migration path for existing users of the MVS classic server.

  - **z/OS: Customizing the Calling IKJEFF10 Exit for DYNAM SUBMIT.** When using the DYNAM SUBMIT command, the site IKJEFT10 exit is normally bypassed. However, you can set the server to either call the exit with various parameters, or to bypass the call.

  - **z/OS: Operator Command Improvements.** When you issue an operator command against the server on z/OS, the output is routed to the ULOG of the operator console that issued the command. The output has a unique identifier, associating it with the Server.

  - **i5/OS: HTTPS Listener Support.** Web Console support for the HTTPS Listener has been extended to the i5/OS platform. The feature uses the IBM standard i5/OS Secure Sockets Layer (SSL) software, which is included as part of the operating system.

  - **Stress Tool: Display Percentile Statistics in Results.** A percentile is the point in a distribution of scores below which a given percentage of scores is found. When you perform a stress test, you can calculate percentile statistics for processing time by specifying the percentage against which the percentile value will be derived.

  - **Stress Tool: Refreshing and Removing Directories.** In the Web Console Playback navigation pane, you can expand the Individual Tests folder and click a specific directory. A pop-up menu enables you to remove the selected directory or refresh it without having to refresh all of the other test directories.
Stress Tool: Selecting Directory for Storing HTI Scripts. When you create a recording of an HTI script file, you can choose the directory in which you want to store the file from a pre-populated drop-down list, rather than having to type in the directory name.

Stress Tool: Custom Option for Performance Reports. When you select this option from the Performance Reports folder on the Playback navigation pane, you can specify which statistics to include in the reports.

Limiting the Number of Concurrent Web Sessions. An authorized administrator can limit the number of active Web Console sessions in order to restrict concurrent usage. The HTTP listener rejects connections to the Web Console after this maximum number is reached.

Adding Login IDs Without Recycling the Server. Adding a new user is now a quick operation that does not require stopping and restarting the server.

PTH Security: Group Implementation Changes. Group administration of user access to the Web Console has been fully implemented for PTH security mode.

PTH Security: Restricting Basic User Access to the Web Console. By default, a user who starts the Web Console and is not identified in the admin.cfg file as belonging to one of the three administration levels (Server Administrator, Application Administrator, Server Operator) is given access to Web Console functions based on the combination of authenticate_all_pthuser and default_admin_level settings.

Switching Security Modes After Restarting the Server. In previous releases, switching security modes required manually setting the EDAEXTSEC variable, then starting the server. You can now switch from any non-OPSYS security mode (OFF, DBMS, PTH, LDAP) to any other non-OPSYS security mode through the Web Console and restart the server. The security mode is maintained in the EDAEXTSEC variable in memory for any soft restarts (that is, edastart restarts or Web Console restarts).
Setting a Default Administration Level for Undefined Users. A server administrator can assign a default administration level to a user who is not defined in the admin.cfg file.

Setting Customized Privileges for Administrator Levels. A server administrator can set selected privileges for basic users, application administrators, and server operators. Configurable options are tailored to each user group.

Monitoring Login Status and Privileges. You can access login status information from the My Console, Login Status option on the menu bar, and drill down to generic information about each displayed keyword and to more specific information about privileges assigned to the identified administration level.

Enhanced Encryption Options for Remote Server Configuration. You can select and combine ciphers, modes, and RSA key lengths from the Web Console more easily using an Advanced encryption option on the Remote Server Configuration pane. The Advanced option provides the following additional ciphers: AES 128, AES192, and AES 256.

Support for AES 128-Bit Password Encryption. You can select an AES 128 bit encryption algorithm for passwords stored in configuration files.

Defining Environment Variables for the Server and DMC. A server administrator can define any environment variable in the edaenv.cfg file. When the server starts, environment variables are set according to entries in the edaenv.cfg. If the environment conflicts with an entry in the edaenv.cfg file, the entry in edaenv.cfg takes precedence. You can access and edit this file from the Configuration Files, Miscellaneous option on the Workspace Configuration navigation pane.

JVM: Support for Multiple Instances. A Java Services folder has been added to the Workspace Configuration navigation pane. This area of the Web Console enables you to create and manage multiple client connections to JSCOM3, thereby supporting redundancy and load balancing, as well as the ability to refresh JSCOM3 instances while ensuring that at least one connection is always available.
- **JVM: Showing Current Connections.** An authorized administrator can track the number of active JSCOM3 connections. In previous releases, the system reported the total number of connections, both active and inactive. The new behavior enables an administrator to see how many clients are currently connected to JSCOM3 on the Special Services Statistics pane.

- **JVM: Memory and Configuration Options.** These include a Force Finalization option that releases memory not currently in use by JVM, a headless option (that is, without a display) that provides a mechanism for graph optimization in non-graphical environments, the display of Java exceptions in edaprint.log, the display of JVM version and path information in edaprint.log and on the Java Services Configuration pane.

- **Identifying GLIBC Information on CDs and FTP Site.** CD labels and the FTP download site includes Linux GLIBC information to properly identify differences in Linux builds and the minimum GLIBC level that a machine must have to run the build.

- **Passing Parameters to Server, Group, and User Profiles.** By passing parameters to profiles, you can submit different session parameters at different connection times. When this feature is active, you are prompted for any unresolved &variables during your initial logon to the Web Console.

- **Controlling Scheduling Priorities on UNIX and Windows.** A load management feature enables you to define the scheduling priority of each agent process running under the specified service entry. By setting the sched_priority keyword, you can indicate the relative importance of the work being done by the service.

- **Diagnostic Service Accelerator (DSA).** This enhancement to -savediag processing automatically triggers customer e-mail confirmations, thereby accelerating diagnostic services and avoiding communication gaps between customer and customer services.
Web Console. Several Web Console enhancements are available:

- **Synonym Editor: Building a Cluster Master File With Joins.** You can combine several Master Files into one by supplying the join criteria in the Web Console Synonym Editor.

- **Synonym Editor: Multilingual Titles, Captions, Descriptions.** You can open a Master File in the Synonym Editor and provide translated text for the title, caption, and description in multiple languages. These attributes appear in the specified language in reports generated against the Master File. (This feature assumes you have already specified the appropriate code pages.)

- **Synonym Editor: Support for OLAP Data Sources (SAP BW, Essbase).** The Web Console Synonym Editor enables you to view the properties of an SAP BW or Essbase Master File and change or delete appropriate attributes for each data source. The tool ensures that any changes made do not make the cube syntax invalid. For example, you are not permitted to delete certain parts of a hierarchy without deleting the whole hierarchy or to delete dimensions that make the generated structure invalid.

- **New Layout for Application Path Configuration.** The process of application path configuration has been streamlined by the implementation of new Web Console icons, menus, and panes for all path related tasks.

- **Multiple Refresh Synonym and Application File Management.** The processes of moving and copying one or more synonyms or procedures between applications, deleting one or more synonyms or procedures from applications, and refreshing one or more synonyms in applications have been streamlined. You can perform these file management operations from the new Manage Synonyms and Manage Procedures panes.

- **Quicker Display of Large Object Trees.**

- **Improved Display of Pop-Up Menus.** Pop-up menus accessed from the Web Console navigation pane open in the right-hand pane for easier viewing of options.
- **Showing Synonym and Procedure Names in Pop-Up Menus.** The file name is shown above the action list on the synonym and procedure display. This facilitates navigation of directories with a large number of files.

- **Setting Session Expiration to Days/Hours/Minutes/Seconds.** You can limit the lifetime of a Web session by setting the desired days, hours, minutes, and seconds in the session_expiration parameter on the Web Console Listener Properties pane.

- **Data Management Options Moved to Submenu.** The Data Management options (Recreate DBMS Table, Delete ALL Data, and Insert Sample Data) have been moved to a submenu to avoid inadvertent selection of these options from the higher-level menu.

- **Selection of Pooled User From Menu of Predefined Users.** When you specify connection_pooling as your deployment method on the Services pane, you are prompted for the ID of a pooled_user. You can select the pooled_user from a pre-populated drop-down list rather than typing the ID in an entry field.

- **Customizable Login Message.** A server administrator can define a message that users will see at login. Typical messages might be announcements of release upgrades and suggestions to clear the cookie cache.

- **Filtering HTML Files and Procedures in the Procedures Tree.** You can filter the Application Directories list in the Procedures navigation pane by procedure, HTML, or both.

- **Long Master File and Procedure Names in Agent Statistics.** On the Web Console Monitoring pane for Services (Agents) pane, the server provides improved agent statistics, including the last Master File and procedure name that were processed. The display length for both of these objects has increased to 31 characters.
- **Data Management Console.** Several Data Management Console enhancements are available:

- **Test Options for Level/Parent Hierarchies.** The DMC Synonym Editor provides a tool called Dimension Builder, which is accessible from Modeling View. Dimension Builder allows developers to create an OLAP-type virtual view for non-OLAP data sources and test the hierarchy by displaying sample data.

- **Concurrent Versions System (CVS) Version Control.** The Data Management Console supports Concurrent Versions System (CVS), a versioning control software product that is used for source management. CVS source control is available for all DMC-based usage, including DataMigrator flows and metadata operations with synonyms.

- **Business Grouping of Columns in Synonyms.** You can store hierarchical groupings of the columns in a synonym and display them in the Data Management Console and in Developer Studio.

- **Unicode Support.** The Data Management Console is built with Unicode support capabilities, enabling connection to Unicode servers and the development of metadata and DataMigrator flows in multiple languages. You can display column names and titles in multiple languages, and sample data appears correctly for Asian and European languages.

- **Virtual Measures and UDAs in Synonyms for SAP BW.** The Data Management Console supports the creation of virtual measures and properties (UDAs) as Defines and Computes in SAP BW Master Files.

- **Support for Multilingual Titles (Captions) and Descriptions.** You can open a synonym in the DMC Synonym Editor and provide translated text for the title (caption in a cube data source) and remarks (descriptions) in multiple languages. These attributes appear in the specified language in reports generated against the synonym. (This feature assumes you have already specified the appropriate code pages.)

- **Shortcut Keys.** You can use shortcut keys to move around the DMC interface instead of a mouse.
- **Support for Mixed-Case in Column Names.** You can use mixed-case in column names.

- **Displaying Synonym and Column Lists in the Grid or Tree View.** Columns can be displayed in trees or grids using their Name, Title, or Description. You can also change the way columns, variables, and functions display.

- **Function Assist.** When you use a function in one of the calculators, the Assist dialog box supplies the syntax and helps you set the parameters.

- **Automatic Calculation of Formats.** If you add a virtual column without supplying a format, the DMC will automatically provide the format based on the expression. Similarly, if you supply the wrong format, the DMC will replace it with the correct format.

- **Parameters in Stored Procedures.** Parameters for stored procedures can be set from the DMC.

- **Data Profiling Reports.** Data Profiling provides data characteristics for the columns in a synonym. You can display the characteristics for all the columns in a synonym or segment, or for an individual column.

- **Relational Expression Builder.** The Relational Expression Builder has been added to the Transformation Calculator, where it can be used to add a virtual column to a synonym (that is, a DEFINE in the Master File). The expression builder enables you to create a relational expression that can be used as a filter.

**Adapters**

The following features are organized in the groupings under which adapters appear on the Web Console and Data Management Console.
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- **SQL Adapters.** Several SQL adapter enhancements are available:
  
  - **SQL Adapters: Increased Number of Joins Supported for SQL Adapters.** The maximum number of joins that can be optimized by an SQL adapter has been increased to 64, or to the maximum number permitted by each RDBMS, up to the 64 join limit.

  - **Microsoft Analysis Server: Converting Alphanumeric Dates to WebFOCUS Dates.** Microsoft Analysis Server (2005 and 2008) natively stores dates in alphanumeric format and allows them to consist of any combination of components, such as year, quarter, and month, with any delimiter, and without applying any particular standard. In a sorted report, if such data is sorted alphabetically, the sequence does not make business sense. To ensure adequate sorting, aggregation, and reporting on date fields, WebFOCUS converts the alphanumeric dates into standard WebFOCUS date format using a conversion pattern that you can specify in the Master File attribute called DATEPATTERN.

- **OLAP Adapters.**
  
  - **Adapter for Essbase: Supporting Unicode Mode Applications.** An Essbase application can be set to work in Unicode or non-Unicode mode. If the Reporting Server is not configured for Unicode but your Essbase cube is configured for Unicode, you must issue the ENGINE ESSBASE SET UNICODE ON command.

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- **SQL Adapters.** Several SQL adapter enhancements are available:
  
  - **Adapter for Microsoft SQL Server: Capturing Non-Unicode Column Descriptions From Microsoft SQL Tables.** When you generate a synonym for a Microsoft SQL table, the adapter maps Microsoft SQL Server column comments (if present) to the Description attribute in the synonym Master File.
- **Adapter for Sybase IQ: Support for Stored Procedures.**
  The adapter supports stored procedures in synonyms beginning with the SYBIQ 12.7 ESD #4 release. You can use any WebFOCUS reporting tool, such as Report Painter, or the TABLE command, to execute a stored procedure and report against the procedure output parameters and answer set.

- **ERP Adapters.**

  - **Adapter for JD Edwards EnterpriseOne.** Configuration and maintenance tasks have been simplified for the adapter. You can now refresh the metadata repository and security exits using options on the Web Console or the Data Management Console.

- **Version 7 Release 6.5**

  - **SQL Adapters.** Several SQL adapter enhancements are available:

    - **Adapter for DB2: Support for Mixed-Case and NLS Characters in i5/OS Library and File Names.** When you create a synonym for DB2 on the i5/OS platform, standard i5/OS naming conventions apply to the target data source. The adapter supports the use of double quotation marks around any library name and/or file name that contains lowercase or NLS characters.

    - **Adapter for Microsoft SQL Server: Optimization of Non-Equality Conditional Left Outer Joins.** The adapter can optimize any WHERE-based left outer join command in which the conditional expression is supported by the RDBMS.

    - **Adapter for PostgreSQL: Boolean Field Types.** The Boolean data type has been tested and certified for READ/WRITE support with 1 and 0 values for FOCUS operations. All valid boolean values are supported via Direct Passthru.

    - **Adapter for PostgreSQL: POINT Type in PostGIS (Geographic Information System).** The adapter supports the PostGIS POINT(XY) data type, which is used to describe geographical data. The adapter can connect to PostGIS databases, create PostGIS tables, and use PostGIS POINT(X,Y) data with READ/WRITE functionality. POINT fields are mapped in synonyms as A42.
- **Adapter for PostgreSQL: BLOB Data.** The bytea data type has been tested and certified for READ/WRITE support. It is used for storing images files and is mapped in synonyms as BLOB.

- **Adapters for Sybase ASE and Sybase IQ: Passing a Program Name to Sybase.** The adapters automatically pass the program name *IBI Adapter for Sybase* when the server connects to Sybase.

- **Adapter for Teradata: Optimization of Non-Equality Conditional Left Outer Joins.** The adapter can optimize any WHERE-based left outer join command in which the conditional expression is supported by the RDBMS.

- **OLAP Adapters.** Several OLAP adapter enhancements are available:
  - **Adapter for SQL Server Analysis Services (SSAS): Include All Hierarchies.** You can include all hierarchies, not just user-defined hierarchies, from Web Console and Data Management Console Create Synonym panes.
  - **Adapter for SQL Server Analysis Services (SSAS): Parent/Child and Level Hierarchies.** You can select how you want hierarchies represented in the synonym by selecting parent/child or level hierarchies from Web Console and Data Management Console Create Synonym panes.
  - **Adapter for Essbase: Engine Setting for MDX.** Essbase Version 7 makes an interface available that communicates with the Essbase engine using MDX instead of the Essbase proprietary query language. If you issue the SET MDX ON command in any supported profile, the Adapter for Essbase will submit queries to Essbase using MDX.
Procedures Adapters. Several procedures adapter enhancements are available:

Adapter for Query/400: Support for Mixed-Case and NLS Characters in i5/OS Library and File Names. When you create a synonym for Query/400, standard i5/OS naming conventions apply to the target data source. The adapter supports the use of double quotation marks around any library name and/or file name that contains lowercase or NLS characters.

Adapter for Siebel: Supports Releases up to Siebel 8.

Sequential and Indexed Adapters. Several sequential and indexed adapter enhancements are available:

Adapter for DB Heritage Files: Support for Mixed-Case and NLS Characters in i5/OS Library and File Names. When you create a synonym for DB Heritage Files, standard i5/OS naming conventions apply to the target data source. The adapter supports the use of double quotation marks around any library name and/or file name that contains lowercase or NLS characters.

Adapter for Informix C-ISAM: Supported on the Windows Platform.

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XML Adapters. Several XML adapter enhancements are available:

Adapter for XBRL: Reporting Against Multiple Instances. In addition to being able to report against a single XBRL instance, you can report against a collection of XBRL instances.

Adapter for XBRL: Reporting on Dimensions. You can group concepts hierarchically, defining data based on the hypercube it applies to. You can create subsets of data in an XBRL document, where the dimension members in the subset are hierarchically related to one another.
ERP Adapters. Several ERP adapter enhancements are available:

- **Adapter for JD Edwards World.** The Adapter for JD Edwards World provides simplified options on the Web Console for adapter configuration and for performing key processing tasks, such as refreshing the metadata repository and converting Master Files.

- **Adapter for JD Edwards EnterpriseOne.** User input has been simplified for the Adapter for JD Edwards EnterpriseOne. The adapter now provides check boxes on the Web Console and Data Management Console Connect Parameters pane for setting server authentication and role-based security.

- **Adapter for Lawson.** User input has been simplified for the Adapter for Lawson. The adapter now provides a check box on the Web Console and Data Management Console Connect Parameters pane for setting server authentication and an option for refreshing security extracts on the pop-up menu for the configured Lawson adapter.

OLAP Adapters.

- **Adapter for SQL Server Analysis Services (SSAS).** The Adapter for SQL Server Analysis Services (SSAS) supports: parent/child hierarchies and mixed-case field names in synonyms, a new paradigm of reporting from cubes, retrieval of hierarchy data based on SQL Server Analysis Services (SSAS) sets defined on a single hierarchy, a Test button for each adapter connection.

Version 7 Release 6.2

SQL Adapters. Several SQL adapter enhancements are available:

- **SQL Adapters: Support for External SQL Scripts in Synonyms.** All relational adapters have been enhanced with an option to represent SQL Queries as synonyms for read-only reporting.
SQL Adapters: Support for SQL Strings Greater Than 32K in Case Logic. The Server provides enhanced optimization of SQL CASE logic generation that can be passed to a relational engine based on complex IF-THEN-ELSE FOCUS coding in a DEFINE FILE statement. The limitation of 32K for the size of the generated SQL string no longer applies. The new limit is 2G.

Adapter for DB2: Support for DB2 Version 9. DB2 Version 9 is supported on z/OS.

Adapter for DB2: XML Data Type in DB2 Version 9. The XML data type is mapped as a TX field in the synonym. (This feature is supported on UNIX, Windows, and z/OS; it is not supported on i5/OS.)

Adapter for DB2: Support for BLOB Data Type for Update/Insert. You can insert and update data into a BLOB (Binary Large Object) column using DataMigrator flows.

Adapter for DB2: Controlling HOLD DBMS Creation With HOLD FORMAT DB2 Options. For DB2 running on i5/OS, if the TABLENAME parameter and value are omitted from the HOLD DBMS creation syntax, the default location for the resulting table is the user default login library. This applies whether the adapter is configured for SQL or CLI.

Adapter for Informix: Support for NONBLOCK Mode. The Adapter for Informix can issue calls in NONBLOCK mode. This feature allows the adapter to react to a client request to cancel a query while the adapter is waiting on engine processing.

Adapter for Informix: Support for BLOB Data Type for Update/Insert. You can insert and update data into a BLOB (Binary Large Object) column using DataMigrator flows.

Adapter for Microsoft SQL Server: Support for BLOB Data Type for Update/Insert. You can insert and update data into a BLOB (Binary Large Object) column using DataMigrator flows.
Adapter for Microsoft SQL Server: Support for N ‘…’ Prefix Literal. The N prefix stands for National Language in the SQL-92 standard. In Version 7 Release 6.2, the adapter can pass an encoded string to the server and ensure that the server will process it as Unicode, regardless of whether the database itself is Unicode-enabled.

Adapter for MySQL: Extended Connection Properties. The SET CONNECTION_ATTRIBUTES command for MySQL has been extended to support additional MySQL connection properties.

Adapter for MySQL: Bulk Load for MySQL Targets. Bulk loading is supported for MySQL targets.

Adapter for Oracle: Support for BLOB Data Type for Update/Insert. You can insert and update data into a BLOB (Binary Large Object) column using DataMigrator flows.

Adapter for Teradata: Table and Column Comments. When you generate a synonym for a Teradata table, the adapter maps each Teradata table comment from the Teradata data dictionary to a Remarks attribute and each Teradata column comment from the Teradata data dictionary to a Description attribute in the synonym Master File.

XML Adapters. Several XML adapter enhancements are available:

Adapter for XML: Support for Synonym Creation From an XML Document. You can create a synonym from an XML document when no schema or DTD is available. 80100

Adapter for XML: Map Internal XML From Web Console and DMC. You can access XML data from an RDBMS using Web Console or Data Management Console tools.
ERP Adapters.

- **Adapter for SAP R/3-ECC: Support for Connection Attributes in a User Profile.** The adapter supports connection attributes in a user profile. You can enter connection and authentication information on the Web Console or Data Management Console Add Adapter to Configuration pane. The consoles add the command to the profile you select: the global server profile (edasprof.prf), a user profile (user.prf), or a group profile (if supported on your platform). The global profile, edasprof.prf, is the default.

OLAP Adapters. Several OLAP adapter enhancements are available:

- **Adapter for SAP BW: Support on z/OS.** The Adapter for SAP BW is supported on the z/OS platform.

- **Adapter for SAP BW: Support for Multi-Line Titles.** Carriage returns and special characters used by Bex to support multi-line titles are translated to ',' in the Master File TITLE attribute, enabling WebFOCUS to support the same multi-line titles.

- **Adapter for SAP BW: Support for Connection Attributes in a User Profile.** The adapter supports connection attributes in a user profile. You can enter connection and authentication information on the Web Console or Data Management Console Add Adapter to Configuration pane. The consoles add the command to the profile you select: the global server profile (edasprof.prf), a user profile (user.prf), or a group profile (if supported on your platform). The global profile, edasprof.prf, is the default.

- **Adapter for SAP BW: Support for NetWeaver BI Version 7.0.** The Adapter for SAP BW supports the integrated technology platform, NetWeaver BI Version 7.0.
Procedures Adapters. Several procedures adapter enhancements are available:

Adapter for Query/400. The Adapter for Query/400 enables you to create a synonym that WebFOCUS can use for reporting against a Query iSeries object. The adapter generates metadata in such a way that only the required fields and ancillary information are retained for use as a basis for requests or queries.

Adapter for Web Services: Capturing a SOAP Request. You can use the command FILEDEF SOAPTSCQ within a procedure to capture the SOAP request being generated and store it in a designated location in the file system.

Sequential and Indexed Adapters.

Adapter for Delimited Flat Files: Updating Delimited Flat Files. You can update Delimited Flat files using the MODIFY facility. Delimited Flat files have been added as a target type for DataMigrator flows.

DBMS Adapters.

Adapter for Lotus Notes: Support for BLOB Data Type. The adapter supports BLOBs as a component of the Rich Text data type used to distribute e-mail attachments. The attachment portion uses the BLOB format in the Master File.

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SQL Adapters. Several SQL adapter enhancements are available:

Adapter for Cache: Connection Name. Connection name is supported on the Web Console. It provides the logical name used to identify this particular set of connections.

Adapter for DB2: Controlling HOLD DBMS Creation With HOLD FORMAT DB2 Options. You can use extended options in the HOLD AS app/name FORMAT DB2 syntax to exercise more precise control over HOLD DBMS creation.
Adapter for DB2: SET ISOLATION NC (No Commit) for CLI. If the server is configured with DB2 as a CLI-based adapter on the i5/OS platform, you can use the ISOLATION setting of NC (No Commit) to prevent DB2 from triggering an error message that interferes with loading newly created tables.

Adapter for DB2: Specifying One-Part Names on i5/OS. You can control whether the library name of the query is stored in the metadata.

Adapter for Interplex: Connection Name. Connection name is supported on the Web Console. It provides the logical name used to identify this particular set of connections.

Adapter for Microsoft Access: Connection Name. Connection name is supported on the Web Console. It provides the logical name used to identify this particular set of connections.

Adapter for MySQL: Support for Unicode. The JDBC implementation of the adapter supports Unicode data stored in character fields, with the CHARACTER SET set to UTF-8.

Adapter for Nucleus: Connection Name. Connection name is supported on the Web Console. It provides the logical name used to identify this particular set of connections.

Adapter for ODBC: Connection Name. Connection name is supported on the Web Console. It provides the logical name used to identify this particular set of connections.

Adapter for Oracle: Connection Name. Connection name is supported on the Web Console. It provides the logical name used to identify this particular set of connections.

Adapter for Progress: Connection Name. Connection name is supported on the Web Console. It provides the logical name used to identify this particular set of connections.

Adapter for Redbrick: Connection Name. Connection name is supported on the Web Console. It provides the logical name used to identify this particular set of connections.
.Adapter for Teradata: Extending Teradata Bulk Load Support With Upsert. Bulk load options for Teradata targets include Upsert. Upsert performs inserts for missing update rows. This feature is available for adapters configured with Call-Level Interface (CLI).

.Adapter for Teradata: Support for Unicode. The Teradata CLI adapter supports Unicode UTF8 format if the Teradata CLI client components are part of release TTU8.0 or higher, if the Teradata database is release V2R6.0 or higher, and if appropriate language support was enabled during the sysinit process.

.Adapter for Teradata: Connection Name. Connection name is supported on the Web Console. It provides the logical name used to identify this particular set of connections.

.ERP Adapters.

.Adapter for ERwin. The Adapter for ERwin enables users to enhance existing synonyms with business data that is stored in ERwin logical models (LM) or physical models (PM). The original synonyms can be created using adapters for the following relational data sources, which both IBI and ERwin support: DB2, Informix, Ingres, Microsoft SQL Server, ODBC/Generic, Oracle, Progress, Redbrick, Sybase, Teradata.

.OLAP Adapters. Several OLAP adapter enhancements are available:

.Adapter for Essbase: Support the SPARSE Data Extraction Method. You can use the SPARSE data extraction method when retrieving data where many of the rows are missing.

.Adapter for Essbase: Testing a Connection. You can generate a list of catalogs and cubes accessible using an Essbase connection.

.Adapter for Essbase: Establishing a Default Connection. You can use the ENGINE ESSBASE SET DEFAULT_CONNECTION command to establish a default connection if the server or connection is not specified in the Access File. The default connection must be one of the connections defined in edasprof.prf with the ENGINE ESSBASE SET CONNECTION_ATTRIBUTES command.
- **Adapter for Microsoft SQL Server 2000 Analysis Services (Microsoft OLAP): Support for System-Enabled Hierarchies in a Synonym.** Synonyms can be created with fields for all hierarchies, not just user-defined hierarchies.

- **Adapter for Microsoft SQL Server 2000 Analysis Services (Microsoft OLAP): Support for Mixed or Uppercase Field Names in a Synonym.** Synonyms can be created with field names that are all uppercase or mixed-case.

- **Adapter for SAP BW: Support for Technical and Language Based Field Names in Multilanguage Synonyms.** If you select Multilanguage synonyms, you can specify whether you wish to use Technical-based or Language-based field names. If you choose Language-based, you can also specify the case in which to display field names in the Master File component of the synonym: uppercase displays all field names in uppercase characters, mixed-case displays field names in the same case that is used by SAP BW. Mixed-case is the default setting.

- **Sequential and Indexed Adapters.**

  - **Adapter for Delimited Flat Files: Synonym Enhancements.** The adapter includes two additional Create Synonym parameters: Enclosure and Header. These items are added to the Access File.

- **DBMS Adapters.** Several DBMS adapter enhancements are available:

  - **Adapter for LDAP: Testing the Connection to the LDAP Server.** You can click a Test button on the Web Console’s Add an LDAP Connection or Change Connect Parameters for LDAP panes to verify that the parameters you have entered are valid and that a connection has been made to the LDAP Directory Server.

  - **Adapter for Lotus Notes: Support for Folders and Calendars.** The adapter can create synonyms for documents based on these additional object types.
Version 7 Release 6.0

- **SQL Adapters.** Several SQL adapter enhancements are available:

  - **Adapter for DB2: Support for 255-Character Column Descriptions in Synonyms.** The adapter supports column descriptions of up to 255 characters. The previous limit was 78 characters.

  - **Adapter for DB2: Support for Nicknames.** The Web Console supports the selection of DB2 Nicknames as candidates for the synonym creation process. This option is available on platforms where DB2 supports Nicknames (Windows and UNIX). A basic synonym is created for this type of DB2 object; no Titles, Remarks, or Key information is recorded.

  - **Adapter for DB2: Support for Unicode.** The adapter supports Unicode in DB2 version 8 and higher. Unicode, a universal character encoding standard that assigns a code to every character and symbol in every language in the world, is the only encoding standard that ensures that you can retrieve or combine data using any combination of languages.

  - **Adapter for JDBC: Support for Multiple Concurrent JDBC Drivers.** You can configure the following JDBC adapters concurrently on the same Server: PostgreSQL, Metamatrix, UniData, Transoft, SQLBase, and PSQL.

  - **Adapter for Microsoft SQL Server: Enhanced Aggregation Control.** The adapter offers fine-grained optimization control for users who expect to encounter NULL values in their data. To ensure proper handling of these values, the SET OPTNOAGGR command instructs the adapter to generate SQL without performing any aggregation. The server performs aggregation internally. JOIN and SORT operations continue to be handled by the RDBMS.

  - **Adapter for Microsoft SQL Server: Support for Unicode.** The adapter supports Unicode, a universal character encoding standard that assigns a code to every character and symbol in every language in the world. Unicode is the only encoding standard that ensures that you can retrieve or combine data using any combination of languages.
- **Adapter for MySQL: JDBC Implementation.** The adapter is implemented using JDBC.

- **Adapter for Oracle: 255-Character Column Descriptions in Synonyms.** The adapter supports column descriptions of up to 255 characters. The previous limit was 78 characters.

- **Adapter for Oracle: Enhanced Aggregation Control.** The adapter offers fine-grained optimization control for users who expect to encounter NULL values in their data. To ensure proper handling of these values, the SET OPTNOAGGR command instructs the adapter to generate SQL without performing any aggregation. The server performs aggregation internally. JOIN and SORT operations continue to be handled by the RDBMS.

- **Adapter for Oracle: Increased Support for Materialized View.** For Oracle 10g, the adapter supports restricting candidates for synonym creation to materialized views. Prior to 10g, due to Oracle’s earlier data dictionary organization, you could create synonyms for Oracle materialized views, but could not restrict candidates to materialized views independently of table views.

- **Adapter for Oracle: Support for Unicode.** The adapter supports Unicode in Oracle release 10g configured with the database parameter NLS_CHARACTERSET = UTF8. Unicode, a universal character encoding standard that assigns a code to every character and symbol in every language in the world, is the only encoding standard that ensures that you can retrieve or combine data using any combination of languages.

- **Adapter for Sybase ASE: SSL Security.** The adapter supports Secure Sockets Layer (SSL) security when communicating with the Sybase environment. This includes connection and query interactions when the highest level of security is required.

- **Adapter for Sybase ASE: Support for Stored Procedures in Synonyms.** You can use any WebFOCUS reporting tool, such as Report Painter or the TABLE command, to execute a stored procedure and report against the procedure output parameters and answer set.
- **Adapter for Sybase ASE: Support for Unicode.** The adapter supports Unicode in Sybase ASE version 15.0 and higher when the database was created with the CHARACTER SET option set to UTF-8. Unicode, a universal character encoding standard that assigns a code to every character and symbol in every language in the world, is the only encoding standard that ensures that you can retrieve or combine data using any combination of languages.

- **XML Adapters.** Several XML adapter enhancements are available:
  - **Adapter for XML: Support for Unicode.** The adapter supports Unicode, a universal character encoding standard that assigns a code to every character and symbol in every language in the world. Unicode is the only encoding standard that ensures that you can retrieve or combine data using any combination of languages.
  - **Adapter for XBRL.** The adapter accesses XBRL documents that are designed to facilitate electronic communication of business and financial data. Consumers of financial data, including investors, analysts, financial institutions and regulators can rapidly and efficiently receive, find, compare, and analyze data using the XBRL format. The adapter supports Unicode.

- **ERP Adapters.** Several ERP adapter enhancements are available:
  - **Adapter for JD Edwards World: Web Console Enhancements.** You can perform configuration, conversion, and security functions directly from the Web Console.
  - **Adapter for SAP R/3-ECC: Enhanced Synonym Creation Performance.** Improved synonym creation dialog boxes enable you to drill down to specific synonym object types: BAPI, LDB, TABLE, FUNCTION MODULE, QUERY, and DIRECT INPUT. You can select options by application tree, development class, and name mask. (These options mirror the way SAP organizes and filters its data.)
- **Adapter for SAP R/3-ECC: Multilanguage Titles in Synonyms.** The synonym creation process supports the optional import and storage of SAP field titles in multiple languages. This enables WebFOCUS reports to display titles based on the current language.

- **Adapter for SAP R/3-ECC: Unicode Support.** The adapter provides access to Unicode SAP ECC systems. This extends support of data and metadata in multiple languages, as provided by the SAP server, to the WebFOCUS Reporting Server.

- **OLAP Adapters.** Several OLAP adapter enhancements are available:
  
  - **Adapter for Essbase: Support for Parent/Child Hierarchies.** The adapter supports expanded metadata functionality, including parent/child hierarchies.
  
  - **Adapter for SAP BW: Improved Connection Testing.** After you configure the adapter, you can access a connection test directly from the configured SAP BW adapter folder.
  
  - **Adapter for SAP BW: Performance Improvement for BW Variables.** Improved optimization techniques enable the adapter to pass WebFOCUS WHERE phrases on fields that represent BW variables to the MDX engine.
  
  - **Adapter for SAP BW: Support for Parent/Child Hierarchies With Multiple Root Nodes.** Parent/child hierarchies now support multiple root nodes. You can include unassigned members on hierarchical report output against parent/child hierarchies by issuing the adapter SET INCLUDE_UNASSIGNED ALL command. Without this setting, unassigned members are not shown on report output.

  - **Adapter for SAP BW: Unicode Support.** The adapter provides access to Unicode SAP BW systems. This extends support of data and metadata in multiple languages, as provided by the SAP server, to the WebFOCUS Reporting Server.
Procedures Adapters.

Adapter for Web Services: Unicode Support. Unicode supports multiple languages (both European and Asian) in Web Services data.

Sequential and Indexed Adapters.

Adapter for Flat Files: Unicode Support. The Adapter for Flat Files supports Unicode. When retrieving a fixed-format sequential file, the adapter attempts to determine the code page the file was meant to be retrieved with by checking the Master File CODEPAGE attribute. If the Master File does not contain the CODEPAGE attribute, the server code page is used to read the file. If you use the Data Management Console to generate a data flow that creates a fixed-format sequential file, you can specify a code page in the Data Management Console. In a Unicode configuration, HOLD files in BINARY and ALPHA formats are created using UTF-8 conversion, which assigns each character three bytes of storage in ASCII environments or four bytes in EBCDIC environments.

DBMS Adapters. Several DBMS adapter enhancements are available:

Adapter for Adabas: Postponed Database Closing (Connection Sharing). To reduce overhead incurred in opening and closing databases when processing requests from multiple agents, the adapter allows opened databases to remain open until a request changes the database, the file, the database mode (close) or its access mode (read/write), or until the last agent disconnects or the last open database is explicitly closed.

Adapter for Lotus Notes: Based on Native Client API. This new adapter, based on the native client API, is configurable from the Web Console. It supports both local Lotus Notes databases and remote Domino Server databases.
DataMigrator

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- **Relational and Non-Relational Lookups.** The DB_LOOKUP function simplifies the building of data flows by enabling a table lookup without a join. It enables you to look up a value or values in one or more columns of a table and return the value found in another column of the same row.

- **Parameters in Stored Procedures.** Parameters for store procedures can be set from the DMC.

- **Sending the Log When a Flow Completes Successfully.** E-mail notification now includes the log file as an attachment and is available at both Flow End and Failure of Flow.

- **BLOB Format.** BLOB represents a Binary Large Object. A BLOB is used to store an image, sound, or some other large, unstructured block of data. The corresponding database data types are ORACLE - BLOB, Microsoft SQL Server - Image, Informix - Byte, and DB2 - BLOB.

- **Changing the Schedule of Flows From the Web Console.** You can now change the schedule of flows from the Web Console.

- **Making Schedules Inactive From the Schedule Pane or Web Console.** You can stop a scheduled flow without removing the Schedule object.

- **Passing Parameters to All Data Flows in a Parallel Group.** You can pass parameters to all the procedures in a parallel group using the Properties dialog box of the flow.

- **Support for Mixed-Case in Column Names.** You can use mixed-case in column names.

- **Specifying a Delimiter for Bulk Loading a Sybase IQ Target.** The bulk load options for Sybase IQ targets enable you to specify the delimiter to use for the intermediate file.

- **Bulk Loading MySQL Targets via JDBC.** Bulk load is now supported for MYSQL targets.

- **Extending Teradata Bulk Load Support With Upsert.** Bulk load options for Teradata targets now include Upsert.
- **Predefined XML File Targets.** You can use predefined XML files as targets, and you can map to them as with a database.
- **Support for New Delimited Flat File Targets.** Delimited flat files can be used as data targets.
- **Specifying a Codepage for New File Targets.** You can now set a codepage for a new target file.
- **Displaying Synonym and Column Lists in the Grid or Tree View.** Columns can be displayed in trees or grids using their Name, Title, or Description. You can also change the way columns, variables and functions display.
- **Function Assist.** When you use a function in one of the calculators, the Assist dialog box supplies the syntax and helps you set the parameters.
- **Automatic Calculation of Formats in Transformations.** If you add a transformation or a virtual column without supplying a format, the DMC will automatically provide the format based on the expression. Similarly, if you supply the wrong format, the DMC will replace it with the correct format.
- **Unicode Support.** Unicode support has been added to the DMC. You can connect to different servers and see data in different languages.
- **Shortcut Keys.** Shortcut keys enable you to move around the DMC interface using key strokes instead of a mouse.
- **Concurrent Versions System (CVS) Version Control.** CVS (Concurrent Versions System) is now supported to provide source management for DataMigrator files through the Data Management Console (DMC).
- **Data Profiling.** Data Profiling provides data characteristics for the columns in a synonym.
- **Summary Flow Reports.** Summary flow reports contain information about all of the flows in the server’s path or in a specific application directory. They include the flow type, application directory, description, modify date, and creator.
- **Viewing and Printing Detailed Flow Reports From the Web Console.** Detailed reports for all the flows on the server or in a specific application directory are available for viewing and printing from the Web Console.

- **Printing a Graphical Representation of a Data or Process Flow.** You can print a graphical representation of an open flow from the print icon on the toolbar or from the Print option on the File menu.

### Resource Analyzer and Resource Governor

**Version 7 Release 6.0**

- **Enterprise Collection.** Resource Analyzer and Resource Governor servers in your enterprise can store all monitored data in the same relational repository, rather than in separate relational repositories for each server.

- **Ability to Monitor Relational Data Sources From Web Console.** You can monitor relational data sources accessed through Direct Passthru from the Web Console, just like any other data source.

- **Add Governing Administrative Components to the Web Console.** Resource Governor administrative components appear on the Web Console as a Governing attributes folder, enabling you to view the Resource Governor administration components.

- **Network Analysis Reports.** A new category of Resource Analyzer reports shows network traffic for requests on the Web server, for example, the users for each connected IP address.

### Information Assurance

**Version 7 Release 6.10**
**Information Assurance.** Information Assurance* refers to measures that protect and defend information and information systems by ensuring their availability, integrity, authentication, confidentiality, and non-repudiation. These measures include providing for restoration of information systems by incorporating protection, detection, and reaction capabilities. In this release, WebFOCUS has been enhanced with a number of new security capabilities that emphasize strategic risk management and defend against malicious hacker attacks. This level of security is critical for externally-facing Web-based Business Intelligence applications. Release 7.6.10 has achieved Level 3 Application Security Verification Standards low risk security certification against the industry’s most important security vulnerabilities and threats as defined by the Open Web Application Security Project (OWASP). For more information about Information Assurance and OWASP, click on this link: http://www.owasp.org/index.php/Main_Page.*Source: US Government’s Information Assurance Glossary Superset of Security Integration
WebFOCUS

WebFOCUS New Feature Highlights

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