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Preface

This content describes the WebFOCUS Managed Reporting environment, which enables the creation of powerful enterprise information systems. These decision-support applications deliver easy access to the information that users need, regardless of the hardware platforms, database structures, or application programs. This manual is intended for all users.

How This Manual Is Organized

This manual includes the following chapters:

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<td>Describes Managed Reporting, Managed Reporting concepts, and Managed Reporting interfaces and tools.</td>
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Conventions

The following table describes the conventions that are used in this manual.

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<th>Convention</th>
<th>Description</th>
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<tr>
<td><strong>THIS TYPEFACE</strong></td>
<td>Denotes syntax that you must enter exactly as shown.</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td><strong>this typeface</strong></td>
<td></td>
</tr>
<tr>
<td><strong>this typeface</strong></td>
<td>Represents a placeholder (or variable) in syntax for a value that you or the system must supply.</td>
</tr>
<tr>
<td><strong>underscore</strong></td>
<td>Indicates a default setting.</td>
</tr>
<tr>
<td><strong>this typeface</strong></td>
<td>Represents a placeholder (or variable), a cross-reference, or an important term. It may also indicate a button, menu item, or dialog box option that you can click or select.</td>
</tr>
<tr>
<td><strong>Key + Key</strong></td>
<td>Indicates keys that you must press simultaneously.</td>
</tr>
<tr>
<td><strong>{  }</strong></td>
<td>Indicates two or three choices. Type one of them, not the braces.</td>
</tr>
<tr>
<td>Convention</td>
<td>Description</td>
</tr>
<tr>
<td>------------</td>
<td>-------------</td>
</tr>
<tr>
<td>[ ]</td>
<td>Indicates a group of optional parameters. None are required, but you may select one of them. Type only the parameter in the brackets, not the brackets.</td>
</tr>
<tr>
<td></td>
<td>Separates mutually exclusive choices in syntax. Type one of them, not the symbol.</td>
</tr>
<tr>
<td>. . .</td>
<td>Indicates that you can enter a parameter multiple times. Type only the parameter, not the ellipsis (...).</td>
</tr>
<tr>
<td>. . .</td>
<td>Indicates that there are (or could be) intervening or additional commands.</td>
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To learn about the full range of available support services, ask your Information Builders representative about InfoResponse Online, or call (800) 969-INFO.

Information You Should Have

To help our consultants answer your questions effectively, be prepared to provide the following information when you call:

- Your six-digit site code (xxxx.xx).
- Your WebFOCUS configuration:
  - The front-end software you are using, including vendor and release.
  - The communications protocol (for example, TCP/IP or HLLAPI), including vendor and release.
  - The software release.
  - Your server version and release. You can find this information using the Version option in the Web Console.
- The stored procedure (preferably with line numbers) or SQL statements being used in server access.
- The Master File and Access File.
- The exact nature of the problem:
  - Are the results or the format incorrect? Are the text or calculations missing or misplaced?
  - Provide the error message and return code, if applicable.
  - Is this related to any other problem?
- Has the procedure or query ever worked in its present form? Has it been changed recently? How often does the problem occur?
- What release of the operating system are you using? Has it, your security system, communications protocol, or front-end software changed?
Is this problem reproducible? If so, how?

Have you tried to reproduce your problem in the simplest form possible? For example, if you are having problems joining two data sources, have you tried executing a query containing just the code to access the data source?

Do you have a trace file?

How is the problem affecting your business? Is it halting development or production? Do you just have questions about functionality or documentation?

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Thank you, in advance, for your comments.

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Introducing WebFOCUS Managed Reporting

WebFOCUS is a complete, web-ready, enterprise data access and reporting system, which takes advantage of the low-cost, low-maintenance, and wide distribution capabilities of the World Wide Web and internal corporate websites.

Managed Reporting enables your organization to grant authorized users access to information they need, while restricting unauthorized users from sensitive or confidential data. Developers can create sophisticated WebFOCUS Business Intelligence web pages that enable end users to view static reports, run dynamic reports, and create parameterized queries for individual requests.

In this chapter:

- Managed Reporting Overview
- Managed Reporting Concepts
- Managed Reporting Interfaces and Tools

Managed Reporting Overview

WebFOCUS enables application developers and web designers to create powerful decision-support applications and Enterprise Information Systems that deliver easy access to the information that users need, regardless of hardware platforms, data source structures, or application programs. Administrators grant authorized users access to the information they need, while restricting unauthorized users from sensitive or confidential data. Developers can create sophisticated web pages that enable end users to view static reports, run dynamic reports, and create parameterized queries for individual requests.

Users of Managed Reporting can create and save reports that meet their individual business needs without knowing the details and complexities of the underlying data source or of the WebFOCUS reporting language. Managed Reporting ensures that users can access the information they require, while protecting sensitive or confidential data.

Managed Reporting has many features that enable security integration with your business at the enterprise level. Managed Reporting utilizes the WebFOCUS Repository, which is a relational (SQL) database repository configured during the WebFOCUS Client installation. For more information, see the WebFOCUS Security and Administration manual.
The first step in an enterprise Managed Reporting deployment is to identify roles and responsibilities. It is possible in a large enterprise that there are different people charged with the following roles:

- **WebFOCUS Administrator.** This role has access to the WebFOCUS Administration Console and can configure global settings, including Managed Reporting security, multi-language support, and data server access. You can access the Reporting Server Console from the WebFOCUS Administration Console.

- **Reporting Server Administrator.** This role has access to the Reporting Server Console and has rights to configure adapter settings and global settings, such as server security. They can also identify and set access rights for other individuals who can use the Reporting Server Console.

- **Reporting Server Application Administrator.** This role has access to the Reporting Server Console and has rights to create metadata and application resources. To create a report that accesses a data source, you must first create and access the metadata for that data source. Metadata is information about the structure of the data, which may include the fields in the data sources, the format of the data, and the location of the data sources. You can enhance metadata with additional descriptive information, for example, the business context of a particular field.

For a complete description of metadata and other Reporting Server privilege levels, see the WebFOCUS Describing Data With WebFOCUS Language manual and the Server Administration manual.

- **Managed Reporting Administrator.** This role is authorized to access the WebFOCUS Security Center to implement security at a granular level for every resource in the WebFOCUS Repository, if needed. User actions can be permitted or not permitted for individual combinations of resources. Access can be granted or specifically denied on a group or individual level, and it can be inherited from higher folders. Administrators can create and manage users, groups, domains, roles, and rules, and define which reports are available to each different group of users. Administrators can also delegate limited administrative capabilities.

  **Note:** If you are upgrading from WebFOCUS 7.x or earlier, see the WebFOCUS Security and Administration manual for legacy roles, which replicate the different user roles and privileges provided with earlier releases of Managed Reporting. This allows administrators to easily map user types and their privileges to the current WebFOCUS 8 security model.

- **Managed Reporting Group Administrator.** This role can add and remove users from the groups to which they are granted administration rights, and can create users with some limitations.
Managed Reporting Developer. This role can use the Business Intelligence Portal and App Studio interfaces to create report content for Managed Reporting domains. This includes Reporting Objects, which enable end users to create their own ad hoc reports. If granted access, these users can create metadata on the server.

Managed Reporting Users. This role can run reports they have been authorized to access and may also be authorized to create ad hoc reports and access other features, such as Report Library reports.

After you have identified roles and responsibilities, the WebFOCUS Administrator should decide how users will be authenticated and authorized to use Managed Reporting. To configure this security option, use the WebFOCUS Administration Console. For more information, see the WebFOCUS Security and Administration manual.

WebFOCUS Client Repository and Authorization Security Model. Uses the Universal Object Access layer, an implementation of Role-Based Access Control (RBAC), to enforce security across all resources in the repository. The flexibility of the model enables an administrator to implement security at a granular level for every resource in the WebFOCUS Repository, if needed. User actions can be permitted or not permitted for individual combinations of users and resources. Access can be granted or specifically denied on a group or individual level, and it can be inherited from higher folders.

Highlights of the model include:

- Relational database storage for all content, including ReportCaster.
- Component integration with Single Sign-On (SSO).
- Blended user capabilities, which do not require the creation of new roles.
- Integration with software service vendors, such as IBM Tivoli® Access Manager and CA SiteMinder®, as well as a security plug-in that provides built-in support for Active Directory, LDAP, WebFOCUS Reporting Server, and relational database systems.
- Granular authorization to assets and the delegation of administrative functions.

As an administrator, you can create a comprehensive security model for your WebFOCUS implementation. For more information on the security model, see the WebFOCUS Security and Administration manual.

Managed Reporting Concepts

The WebFOCUS Client security controls access to all content stored in the WebFOCUS Repository. Managed Reporting stores the following content in the WebFOCUS Repository:
Domains. Domains are the highest level of folder organization for Managed Reporting. Domains provide data on a particular topic (such as sales, inventory, or personnel) or to isolate specific users (utilized in SaaS and Multi-tenancy deployment). The data is stored in different forms in the following domain components: predefined reports (published content), data sources used to create reports (Reporting Objects), and reports created and saved by users (private content, My Content).

Application Content. Application content is predefined report procedures (FEX) and HTML forms that produce output when run. Application content is stored in a folder that groups or individual users are permitted to access. It is used to retrieve data that changes on a regular basis, for example, monthly inventory reports or weekly sales reports. Each time you run application content the output reflects the most current data, while the format of the report remains constant.

For example, a Reporting Object is a report procedure (FEX) that is a tailored view of a set of data that groups or individual users use to create personal reports quickly and in compliance with the reporting rules and guidelines of your company.

Static Content. A static report is content in which the output does not change. Unlike application content, which always reflects current data, a static report delivers a snapshot of data from a specific time. For example, a static report can be report output distributed by ReportCaster to Managed Reporting or the Report Library.

Private Content. Private content is the initial state of content created by a user, which is often referred to as personal reports. Users permitted to access InfoAssist or to open a Reporting Object with the InfoAssist tool can create private reports in the folders to which they are permitted to write and create content. Users authorized to access the Text Editor tool, Import Files tool, or App Studio can also create private content in the folders to which they are permitted to write and create content. Once created, users can run or edit their private reports, if authorized, as defined in the WebFOCUS Client security. No other user has access to the private reports of a user unless they are authorized to manage private content.

Shared Reports. A shared report is private content that another user has created and permitted a group or individual users to access. What users are permitted to do with a shared report is controlled by the WebFOCUS Client security. For more information on the security model, see the WebFOCUS Security and Administration manual.

Published Content. Published content is application or static content that is accessible to all users who are permitted to access the folder location that the content is stored in within the WebFOCUS Repository.
Managed Reporting Interfaces and Tools

Managed Reporting offers you a selection of products and reporting tools that you use to create and edit portals and reports, manipulate data in an existing report, submit a report for background processing, and view a report.

WebFOCUS Business Intelligence Portal (BI Portal). The BI Portal enables you to build complete, modern websites, with multi-levels of navigation. You can have as many levels as you like.

Content is dynamic and end users experience the drag-and-drop behavior that they are familiar with in popular online portals. This is a key feature, as end users do not need to learn anything new.

While at work, people should have the same satisfying experiences that they have every day when reading news, reading email, and performing other activities. With the BI Portal, the result is zero product training and a high usage rate.

With this product, a portal is easy to build. The BI Portal uses the same familiar ribbon interface that the WebFOCUS InfoAssist report development tool uses. Building a portal is just a matter of a few clicks and drag-and-drop actions. With the BI Portal, anyone who can build a report using InfoAssist can develop an impressive portal without any knowledge of web design. For more information on the BI Portal, see the Business Intelligence Portal manual. For questions on licensing, contact your Information Builders branch representative.

App Studio. Is a Windows-based graphical user interface (GUI) development environment that enables you to build WebFOCUS applications in a single, multi-operational interface. App Studio can be configured as a stand-alone entity, or to operate against a full WebFOCUS environment.

App Studio utilizes the Microsoft Windows® ribbon framework to deliver an interactive user interface (UI) from which you can build multiple business intelligence applications in the same workspace.

In App Studio, you can do the following:

- **Access data and descriptions.** Using the Metadata canvas, you can create new synonyms, and view or modify existing synonyms, in a graphical user interface. Synonyms enable you to access and interpret data sources for use in reporting applications.

- **Create reporting applications.** Build reporting procedures in the Report Canvas, Chart Canvas, HTML Canvas, or Document Canvas.

- **Reports.** Display your data in a tabular format. You can create stand-alone reporting procedures, or add the report to a document or an HTML page.
Charts. Communicate your data in a more illustrative format. You can translate complex data into an easy-to-read and understandable visual format. This often provides a new perspective to the information that users view. You can create stand-alone charting procedures or add the chart to a document or an HTML page.

HTML pages. Build webpages for users to launch, view, and analyze data. You can add multiple reports and charting procedures to an HTML page, in addition to the controls that enable you to manipulate the data. You can also apply styling through the use of cascading style sheets, JavaScript files, and jQuery animations.

Documents. Combine multiple report and charting procedures in a single output that you can organize and format. You can also add pre-process and post-process codes to customize how your document is executed.

Visualizations. Create charts, maps, and grids to visually represent your data. You can add multiple visuals to the canvas to create a complete visualization, and you can update, change, or revise the visualization at any time to account for shifts in data needs.

Alerts. Create event-driven procedures that apply test conditions and then trigger customized reports if the test conditions are true. You can schedule an Alert using ReportCaster Distribution Methods.

Reporting Objects. Transform complex views of data into simple objects that are labeled with common business terminology for users to understand and use as templates to create their own reports.

WebFOCUS Designer. Is a web-based development tool that you can use to develop interactive, responsive pages and meaningful InfoApps, using content that you or other members of your organization develop. The WebFOCUS Designer offers an integrated filter control capability that enables you to create compelling applications. Other features include an interactive canvas, responsive grid layout, streamlined resources tree, and intuitive ways of adding content to a page. The WebFOCUS Designer also offers a modern user interface with simplified navigation and the flexibility to build filtered responsive pages that are compatible with many browsers or mobile devices.

For more information on WebFOCUS Designer, see the Using WebFOCUS Designer manual.

InfoAssist. WebFOCUS InfoAssist is a reporting tool that extends the power of WebFOCUS Managed Reporting. InfoAssist provides business users with the most advanced, yet simple to use, ad hoc reporting features needed to create intricate reports, charts, and documents from any enterprise information source without IT intervention.
InfoAssist is a Rich Internet Application (RIA) that delivers cutting-edge functionality using a familiar Microsoft® Office-like interface. This highly intuitive environment shields users from the underlying technical complexities associated with ad hoc reporting features, while providing access to all the functionality needed to address mission-critical information requirements. This powerful ad hoc reporting tool enables rapid and efficient design and deployment of reports and charts. It uses an interactive and fully customizable WYSIWYG (What You See Is What You Get) development environment. Users receive instant feedback throughout the development process to ensure that reports and charts are properly built.

**Insight.** Insight, available in InfoAssist HTML5 Chart mode, is a visualization tool for interactively selecting measures and dimensions. The chart type determines the field containers that display. For example, for a pie chart, you can specify values for the following field containers: Measure, Rows, Columns, Color, and Size. In many cases, these field containers mirror the field containers that display when working with InfoAssist. With Insight, you can build a chart that shows the data fields in real time. It even rebuilds as you select additional fields or specify filters to customize the data that displays. Insight helps you make quick decisions, particularly because you can change and adapt field selections quickly, and easily view different scenarios. Add and remove fields, at any time, and in any pattern, to enhance your chart. You can take advantage of the customization options that are available right from the toolbar.

For more information on InfoAssist and Insight, see the WebFOCUS InfoAssist User’s Manual.

**Deferred Receipt.** Deferred Receipt is a report request submission option that allows you to submit a report for background processing. Once you submit a report, you can continue working in Managed Reporting while WebFOCUS processes the report. You then use the Deferred Report Status Interface to view the report output and save the report as private content.

**WebFOCUS Viewer.** The WebFOCUS Viewer displays report output one page at a time. This tool is useful for reports that contain a large number of pages. Only the first page is sent from the web server to your browser. The WebFOCUS Viewer enables you to page through the output, as well as search for a specific string of text.

**Alert Reports.** You are able to create an Alert report that will first apply test conditions (rules or events to be checked against a data source) that specify when to create a report. ReportCaster can then be used to specify how often you would like the conditions to be checked and distribute the report to users whenever the conditions are met (true).

For more information about Alert reports and scheduling Alert reports with ReportCaster, see the ReportCaster manual.
For more information about the Alert Assistant tool, see the Business Intelligence Portal manual.

**Mobile Viewer.** You can use the Mobile Viewer web-based interface to share published content with other users, from a basic URL. To use this feature, you do not need to save content as a Mobile Favorite or create a portal. Instead, you can organize published content in a folder and distribute the URL to this folder to users.

**Favorites.** Favorites provides you a convenient and fast way to find and use your favorite content, and also allows you to access your content from a mobile device.

For more information, see the Home Page or Business Intelligence Portal technical content.

**ReportCaster.** Is an optional product that provides a single point of management for report scheduling and distribution. ReportCaster enables you to provide essential, updated information directly to the people who need it, on time, automatically.

With ReportCaster, you can:

- Schedule reports to be run once or repeatedly.
- Burst reports to send specific values in a report to different users, files, or printers.
- Distribute report output using Email, FTP or SFTP, Printer, Repository, Report Library, and file system locations that are defined by the WebFOCUS Client configuration and user authorization. Repository and Report Library reports are stored in the WebFOCUS Repository.
- Maintain scheduled jobs, the address book of distribution lists, and log files.

For more information about ReportCaster, see the ReportCaster manual.
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WebFOCUS

Managed Reporting
Release 8.2 Version 04 and Higher