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The WebFOCUS Business User Edition (BUE) is intended for business users and analysts that want to generate and share reports, charts, documents, and visualizations. It is also intended for those who want to conduct data discovery to explore trends, patterns, and opportunities. It is a WebFOCUS business intelligence (BI) and analytics platform that enables reporting and analytic capabilities, which can be delivered to users inside and outside of your organization.

WebFOCUS Business User Edition is a self-service analytics solution for groups of business users and analysts. It is not only a web-based environment, but also a multi-user, server-based product designed with a user interface that is oriented toward non-technical users.

This topic describes the Key Features and enhancements for WebFOCUS Business User Edition (BUE) Release 8.2 Version 01M and Release 8.2 Version 01.

**In this chapter:**

- WebFOCUS Business User Edition Key Features and Enhancements List
- Installation and Configuration
- Data Adapters
- Data Management and Preparation
- Developing Applications
- Navigation and Analytics
- Business User Edition Portal
- Visibility Into Shared Application Directory
- Release Enhancements

**WebFOCUS Business User Edition Key Features and Enhancements List**

Use the tables below for descriptions on the Key Features and enhancements for WebFOCUS BUE Release 8.2 Version 01M and Release 8.2 Version 01.
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### WebFOCUS 8.2.01 Key Features

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### Installation and Configuration

The WebFOCUS BUE Release 8.2 Version 01 key features for installation are:

- Upgrade installation
- Email configuration
- Password validation

### Upgrade Installations

Support for upgrade installations from WebFOCUS Business User Edition Release 8.2 Version 00 is now available. This will upgrade the binaries to Release 8.2.01, while preserving your existing content.

**Learn More**

For more information, see the *Installation* topic, under WebFOCUS Business User Edition 8.2.01, in the WebFOCUS BUE Technical Library, Release 8.2.01.

### Email Configuration

Email configuration options have been added to configure a mail server for ReportCaster distribution services.

**Learn More**

For more information, see the *Installation* topic, under WebFOCUS Business User Edition 8.2.01, in the WebFOCUS BUE Technical Library, Release 8.2.01.

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Password Validation

Password validation for the manager user ID has been added to prevent special characters from being used.

Learn More

For more information, see the Installation topic, under WebFOCUS Business User Edition 8.2.01, in the WebFOCUS BUE Technical Library, Release 8.2.01.

Data Adapters

The WebFOCUS BUE Release 8.2 Version 01M and Release 8.2 Version 01 Key Features for data adapters are:

- Adapter for Cloudera Impala
- Adapter for Jethro
- Social Media Demonstration Application
- Apache Phoenix Adapter
- Apache Drill Adapter
- Adapter for Google BigQuery

Adapter for Cloudera Impala

The Adapter for Cloudera Impala provides for analysis of both structured and complex data. Impala provides a JDBC driver and the Hive Query Language, a SQL-like interface with a real-time query capability that shares the metadata layer and query language with Hive.

Adapter for Jethro

Jethro is an acceleration engine that makes real-time business intelligence work on Big Data. The adapter is available for ODBC (on Windows only) and JDBC (on Linux/UNIX/Windows).

Social Media Demonstration Application

In WebFOCUS BUE Release 8.2 Version 01M and higher, a social media demonstration (“demo”) application is available for deployment, which highlights the capabilities of WebFOCUS Social Media Integration when performing various levels of social media analysis.

The first level of analysis is known as the engagement level, where you analyze if, when, and how much activity took place. As companies mature, they start to focus on not just the activity but the actual conversations themselves.
WebFOCUS Social Media Integration offers techniques such as sentiment and word frequency analysis to help quantify and visualize this textual data to more effectively see trends and patterns in the data.

The second level of analysis is integrating your social data with enterprise data to better understand social impact on business outcomes. The data analysis that is used in this demo was obtained when Walmart was running a very specific campaign around their meat products. Note that the sales data was fabricated to provide better understanding, especially since there was no conclusive access to their real sales data. However, the social data is real.

The WebFOCUS social media demo files are located in the following folder of your WebFOCUS BUE installation:

drive:\ibi\WebFOCUS_BUE82\samples\social_media_demo

**Adapter for Apache Phoenix for HBase**

Apache Phoenix provides SQL read/write access to Apache HBase (and MapR-DB), a NoSQL database distributed with Hadoop.

For full functionality, this adapter requires Phoenix release 4.5.0 or later.

**Adapter for Apache Drill**

Apache Drill is a query engine for data managed by Hadoop in HDFS or Mapr-FS, a variety of NoSQL databases including HBase and MapR-DB, and MongoDB, and other data sources. Drill can use Hive metadata or derive metadata from self-describing data files.

**Adapter for Google BigQuery**

The Adapter for Google BigQuery is new in this release and can be found under SQL Adapters on the Web Console. The adapter is used to load data into the Google BigQuery environment and report against the information that is residing in the Google BigQuery environment. BigQuery provides a REST-based API that requires all requests to be authorized by an authenticated user or a service account.

**Data Management and Preparation**

The WebFOCUS BUE Release 8.2 Version 01M and Release 8.2 Version 01 Key Features for data management and preparation are:

- Business View Plus (BV+)
- New Upload Wizard
Business View Plus (BV+) Candidate for Release

Business View Plus (BV+) combines the power and capabilities of Business View (BV) and Dimension View (DV) into one feature that allows a customized view of the data source and enables the use of joins, measures, hierarchies, attributes, expressions, and filters. This allows for robust report, chart, document, and visualization development using a customized logical view of a data source.

A traditional Business View offered users a customized logical view of a data source by grouping related items into folders that reflect business logic for an application, rather than the physical position of items in the data source. However, the fields in these folders did not have any indication of their roles in a request.

A traditional Dimension View, on the other hand, categorized fields on the basis of their roles in a request. Measures were placed in measure groups, hierarchies were organized within dimensions, levels were organized within hierarchies, and attributes were organized within levels. Then, when a field was double-clicked in InfoAssist+, it was added as a sort field or aggregation field depending on its placement in the Dimension View structure. Dimension Views, however, offered no ability to create a custom logical view of the data source.

BV+ combines Business Views and Dimension Views by enabling you to group fields into folders and, for each field, assign a role that indicates its role in a request. The syntax is clear and simple, and it provides all of the functions of both traditional Business Views and Dimension Views. In addition, BV+ gives you total flexibility in creating folders anywhere in the structure, and in reusing fields in multiple folders.

For example, if you assign the role DIMENSION to a field, it will automatically be added to the By field container for reports and the horizontal axis for charts if you double-click or drag the field onto the report or chart canvas. If you assign the role Drill Level to successive fields in a folder and turn AUTODRILL on, automatic drilldowns will be generated from the top level to the bottom level on the generated output.

You can create or edit a synonym to use BV+ in the Reporting Server Web Console.
Introduction to BV Namespace Modes

When you upload a file, or create or open a synonym in the Reporting Server Web Console, the synonym opens in one of two modes for creating a BV+ structure, BV_NAMESPACE=OFF mode or BV_NAMESPACE=ON mode. The mode in which the synonym opens determines the types of BV+ structures you can add to your synonym. It also controls the type of field name qualifiers that will be used, after the synonym is saved, when you create a request using the WebFOCUS tools.

You can set your Web Console preferences to open Data Assist and the wizards in your preferred BV Namespace mode by going to the Workspace tab, clicking FOCUS Sets and Info, clicking Settings for Web Console Preferences, and setting the parameter AUTO_BV_NAMESPACE to OFF (the default if you install a new server) or ON. If the synonym already contains a DV or BV structure, the presence of this existing structure will override your setting with BV_NAMESPACE=OFF or BV_NAMESPACE=ON, respectively.

If you create a new synonym, or open an existing synonym that has no DV or BV, it will respect the setting you set in the Web Console. When you upload a file, the synonym has no existing DV or BV structure, so it respects the mode you set in the Web Console.

Reference: BV_NAMESPACE=OFF Mode

BV_NAMESPACE=OFF mode uses physical segment names to qualify field references in reports. If you open an existing synonym that has a DV, it will open in this mode, regardless of the setting you configured. In this mode, you can only add nodes that conform to the DV structure. That is, you can add new measure groups and dimensions under the existing measure group and dimension structure.
The following describes the structures and actions available in new or existing synonyms in BV_NAMESPACE=OFF mode:

- **Creating a new cluster synonym or opening an existing synonym that has no BV or DV.** If the synonym has no logical view defined, it opens with three default nodes in the Business View pane, Filters and Variables, Measure Groups, and Dimensions, as shown in the following image.

These nodes are based on a DV structure, and any edits you make to the synonym in this pane using BV_NAMESPACE=OFF mode must adhere to this structure. The right-click menu options provide only the structures available for a DV. You can insert a new measure group under the Measure Group node or a new dimension folder under the Dimensions node, but you cannot create a new node in the synonym. In a measure group folder, you can only place measures. In a dimensions folder, you can only place dimensions. Under a dimension, you can only add hierarchies, and under a hierarchy field, you can only add attributes.
Opening an existing synonym with a DV defined. It opens showing the DV organization and icons in the Business View pane. The synonym syntax is converted to use BV+ folders with the DV structure. You cannot create new folders, you are limited to the structure already defined in the Business View pane. The right-click menu options provide only the structures available for a DV, as shown in the following image that shows the right-click options for the Measure Group folder.

Reference: BV_NAMESPACE=ON Mode

BV_NAMESPACE=ON mode uses logical folder names to qualify field references in reports. If you open an existing synonym that has a BV, it will open in this mode, regardless of the setting you configured. In this mode, you can create your own logical view of the synonym. You are free to add new folders and assign DV roles to fields and folders.
The following describes the structures and actions available in new or existing synonyms in BV_NAMESPACE=ON mode:

- **Creating a new cluster synonym or opening an existing synonym with no DV or BV.** No nodes are pre-configured, as shown in the following image.

![Image showing table and column display](image)

The right-click menu options provide all BV+ options.
Opening an existing synonym with a BV defined. It opens in BV_NAMESPACE=ON mode. It will open showing the Business View structure defined within it. The right-click menu options provide BV+ options, as shown in the following image.

Reference: Usage Notes for BV_NAMESPACE Modes

- In BV_NAMESPACE=ON or OFF mode, the folder structure must include all of the fields referenced in the request, as fields not included in folders will not be accessible.
- In BV_NAMESPACE=ON mode, moving a field from one folder to another may also make the field inaccessible, as the request will not have the correct folder qualifier for the field.
- Synonyms in BV_NAMESPACE=OFF mode have the attribute BV_NAMESPACE=OFF on the file declaration.
- You can change BV Namespace modes in the Reporting Server Web Console by clicking the BV menu at the top of the Business View pane and selecting BV_NAMESPACE=ON or BV_NAMESPACE=OFF.
- If you generate a request using the WebFOCUS tools in one BV_NAMESPACE mode, it may not run if the synonym is converted to the other BV_NAMESPACE mode, as the field qualifiers will be incorrect for the new mode.
If you change the BV_NAMESPACE mode, a popup window opens to warn you of the potential effects on existing requests.

When you begin the cycle of developing reports and metadata in parallel, use BV_NAMESPACE=OFF mode to make sure that procedures developed earlier in the cycle will continue to run as changes are made to the metadata.

Any changes to metadata should be thoroughly tested before use in production environments.

Assigning DV Roles

In BV+, you define folders, which function as segments to provide a view of the synonym and to define the accessible fields and their relationships. Folder relationships are the same as segment relationships, with parent folders, child folders, and sibling folders.

While you have total flexibility defining a structure using any fields from your data source, when you issue a report request against the synonym, the retrieval path for the data must conform to any constraints imposed by your DBMS entity diagrams and by the rules of WebFOCUS retrieval.

Only the folders will be displayed in the WebFOCUS tools, not the real segments, and only the fields within the folder structure will be accessible for reporting.
You can assign a DV role to a folder or field by right-clicking the folder or field and selecting a DV role. The following image shows the right-click options for a folder.

You can explicitly assign a DV role to a folder or field, or have it automatically inherit its role from its parent. If you explicitly assign a DV role, that role moves with the object if you drag it to another location within the BV+ structure. If you do not explicitly assign a DV role, the role changes as you move the object under a new parent, except if you drop it onto a field with the Drill Level role. If dropped onto a Drill Level field, the moved field inherits the Drill Level role.

The following DV roles can be assigned.

- **Dimension.** A dimension field, when double-clicked or dragged onto the report or chart canvas in the WebFOCUS tools, will automatically be added to the request as a vertical (BY) sort field.

  A folder can be assigned the role Dimension.
A field can be assigned the role Dimension (Standalone) or Dimension (Drill Level). When it is assigned the role Dimension (Drill Level), it will become part of a hierarchy where the levels depend on the order of the fields in the folder. Then, when AUTODRILL is turned on, automatic drilldowns will be created on the report or chart output. The following image shows the choices for DV role when you right-click a dimension field.

For a folder assigned the DV role Dimension or a field assigned the DV role Dimension (Standalone), the following attribute is added to the folder or field declaration in the synonym.

\[
\text{DV\_ROLE=}\text{DIMENSION}
\]

For a field assigned the DV role Dimension (Drill Level), the following attribute is added to the field declaration in the synonym.

\[
\text{DV\_ROLE=}\text{LEVEL}
\]

A folder can contain only one drill level hierarchy. However, you can use the same fields in multiple hierarchies by placing each hierarchy in a separate folder. A folder with a drill level hierarchy is not limited to just the hierarchy. It can contain other fields with different DV\_ROLES.
- **Measure.** A measure field, when double-clicked or dragged onto the report or chart canvas in the WebFOCUS tools, will automatically be added to the request as an aggregated value (SUM), if it is numeric. If it is alphanumeric, it will be added as a vertical (BY) sort field. A folder or field can be assigned the role Measure.

For a folder or field assigned the DV role Measure, the following attribute is added to the folder or field declaration in the synonym.

```
DV_ROLE=MEASURE
```

- **Attribute.** An attribute field, when double-clicked or dragged onto the report or chart canvas in the WebFOCUS tools, will automatically be added to the request as an aggregated value (SUM), if it is numeric, or as a vertical sort field (BY), if it is alphanumeric.

For a folder or field assigned the DV role Attribute, the following attribute is added to the folder or field declaration in the synonym.

```
DV_ROLE=ATTRIBUTE
```

- **Folder.** A folder is a virtual segment in a BV+. It can be assigned the roles Dimension, Measure, or Attribute.

**Note:** When a folder is inserted as a child of a field, the attribute PARENT_FIELD describes this relationship. By default, such a folder and its fields will be assumed to have the Attribute role.

- **None.** If no role is assigned, the field or folder will inherit its role from its parent. If a role has been assigned, you can remove it by selecting the option to inherit its role from its parent, as shown in the following image.
Example: Sample BV+ Declarations

The following declarations show sample BV+ folder and field definitions. Note that the declaration for each field in a BV+ folder specifies the real segment it actually belongs to.

Sample Dimension Folder Declaration

The DV_ROLE for the PRODUCT_CATEGORY folder is DIMENSION.

```plaintext
FOLDER=PRODUCT_CATEGORY, PARENT=FOLDER1, DV_ROLE=DIMENSION, DESCRIPTION='Product and Vendor', $
```

Sample Attributes Folder Declared as a Child of a Field

The ATTRIBUTES1 folder has the DV_ROLE ATTRIBUTE. Its parent folder is PRODUCT_CATEGORY, and its parent field is MODEL.

```plaintext
FOLDER=ATTRIBUTES1, PARENT=PRODUCT_CATEGORY, PARENT_FIELD=MODEL, DV_ROLE=ATTRIBUTE, DESCRIPTION='Model Details', $
```

Sample BV+ Level Hierarchy and Standalone Dimension

The PRODUCT_CATEGORY folder has a hierarchy defined consisting of the PRODUCT_CATEGORY, PRODUCT_SUBCATEG, BRAND, and MODEL fields. The field VENDOR_NAME is a standalone dimension field.

```plaintext
FOLDER=PRODUCT_CATEGORY, PARENT=FOLDER1, DV_ROLE=DIMENSION, DESCRIPTION='Product and Vendor', $
FIELDNAME=PRODUCT_CATEGORY, ALIAS=PRODUCT_CATEGORY, BELONGS_TO_SEGMENT=WF_RETAIL_PRODUCT, DESCRIPTION='Product Category', DV_ROLE=LEVEL, $
FIELDNAME=PRODUCT_SUBCATEG, ALIAS=PRODUCT_SUBCATEG, BELONGS_TO_SEGMENT=WF_RETAIL_PRODUCT, DESCRIPTION='Product Subcategory', DV_ROLE=LEVEL, $
FIELDNAME=BRAND, ALIAS=BRAND, BELONGS_TO_SEGMENT=WF_RETAIL_PRODUCT, DESCRIPTION='Product Brand', DV_ROLE=LEVEL, $
FIELDNAME=MODEL, ALIAS=MODEL, BELONGS_TO_SEGMENT=WF_RETAIL_PRODUCT, DESCRIPTION='Product Model', DV_ROLE=LEVEL, $
FIELDNAME=VENDOR_NAME, ALIAS=VENDOR_NAME, BELONGS_TO_SEGMENT=WF_RETAIL_VENDOR, DESCRIPTION='Vendor Name', DV_ROLE=DIMENSION, $
```
Sample Measure Field

The PRODUCT_COST field has been assigned the DV_ROLE MEASURE.

FIELDNAME=PRODUCT_COST, ALIAS=PRODUCT_COST,
BELONGS_TO_SEGMENT=WF_RETAIL_PRODUCT,
DESCRIPTION='Product Cost',
DV_ROLE=MEASURE,

Learn More

For more information on BV+, see the Working With Data Overview topic, under Working With Data, in the WebFOCUS BUE Technical Library, Release 8.2.01M.

New Upload Wizard

The new Upload wizard allows you to preview and change the uploaded spreadsheets and delimited data files before you upload them to the repository. The tool supports multiple sheet upload. After the initial file selection is complete, the wizard shows you the default breakdown of your data into measures, dimensions, and hierarchies. At this point, you can perform many advanced data preparation techniques, such as:

- Data grouping
- Joining multiple fact tables into a cluster
- Geo role determination
- Geo encoding
- Data profiling
- Pivoting with immediate preview/undo
- Creating and editing measure and dimension fields, dimension hierarchies, and attributes

The full ribbon based interface of the new Upload wizard makes the process of preparing your data easy and intuitive. You can configure the view options to customize your Upload wizard UI and make it suit your needs. Once your synonym is complete, you can upload it to the repository, append it to an existing synonym, or save it as a template to allow repeated transformations.

Learn More

For more information on the new Upload wizard, see the Uploading and Appending Spreadsheets topic, under Working With Data, in the WebFOCUS BUE Technical Library, Release 8.2.01.
Data Preparation

The Upload wizard and Connect to Data wizard offer a suite of data wrangling options, which are designed to help you prepare your data for future analytics. With these data wrangling tools, you can assess your data for validity and consistency, weed out errors, and enhance accuracy and uniformity of your data. Thanks to these options, you can spend less time collecting and cleaning data, and more time working on analysis and reporting.

Learn More

For more information on the new Upload wizard, see the *Uploading and Appending Spreadsheets* topic, under Working With Data, in the WebFOCUS BUE Technical Library, Release 8.2.01.

Developing Applications

The WebFOCUS BUE Release 8.2.01M Key Feature for developing applications is:

- Page Designer

Page Designer

In WebFOCUS Release 8.2 Version 01M, an enhanced portal allows rearranging, reusing, and sharing content and pages between users more easily. The Page Designer is characterized by the following features:

- **Domain Pages.** Pages can be created independently under the Domains node in your WebFOCUS repository.

- **Page Designer.** A new tool that enables you to create domain pages and store them in a repository folder of your choice.

- **Page Templates.** Functionality that allows you to select one of many pre-configured page layouts, and then populate it with your own content.

- **Base Page.** A domain page can be added to the BUE portal, at which time it becomes a base page. Base pages appear in the portal navigation bar, and can be seen by any user who has access to the domain to which the page belongs.

- **Commenting and Collaboration.** Developers and users can view, post, edit, and manage comments. Comments are available on several content levels, including pages and panels.
Learn More
For more information, see the Working With Pages topic, under Creating Content, in the WebFOCUS BUE Technical Library, Release 8.2.01M.

Navigation and Analytics
The WebFOCUS BUE Release 8.2.01M and 8.2.01 Key Features for navigation and analytics are:

- Esri On Premise (Offline) Mapping Capabilities in InfoAssist+
- Dynamic Navigation: Auto Drill and Auto Linking
- Responsive Autoprompt
- Parameter-driven Charts and Reports

Esri On Premise (Offline) Mapping Capabilities in InfoAssist+
The Esri On Premise functionality enables you to download and access mapping files through the use of a local Application Programming Interface (API). Once you download and configure the API, you do not need an internet connection to utilize the robust mapping features that Esri provides.

The Esri On Premise functionality provides you with local access to Esri mapping files. The following components are supported when using this functionality:

- **Offline Basemaps.** Basemaps are an offering from ArcGIS. Standard basemaps are provided for your use offline. In InfoAssist+, these basemaps are known as backgrounds. In an online setting, there are 10 basemaps available. In order to use offline basemaps, you need to use a tiled mapservice published in the ArcGIS Server.

- **Offline Geographic Roles.** Geographic Roles are used to visualize measures with commonly known dimensions (for example, Country, State, Cities, and so on). These provide the location information, often in the form of (x/y), needed to plot on a map. Geographic roles are pre-defined for online users through ArcGIS Online. In InfoAssist+, a geographic role defines the geographic component that you can select when creating a map (for example, State or Continent). For an offline user, the options that display can be customized in the geoservices.xml file.

  **Note:** Demographic Layers are not supported in an Esri On Premise environment.
Learn More

For more information, see the Creating Maps to Illustrate Trends topic in the WebFOCUS BUE Technical Library, Release 8.2.01M.

Dynamic Navigation: Auto Drill and Auto Linking

Auto Drill and Auto Linking enable you to navigate your data and streamline the effort needed to create drilldowns. Auto Drill enables you to navigate through different levels within the dimension hierarchy of your data source. This allows you to review underlying data for a particular area, and move through the structure of your data source based on your informational needs. All that is required is a hierarchical data source.

Auto Linking makes it easy to connect reports and charts in your development environment, expanding the reporting capabilities of your organization. Using Auto Linking, you can dynamically link HTML reports, active reports, and HTML5 charts with a single report or chart of any format, based on their common sort (BY) fields and parameters referenced in any filters. It is this commonality that dynamically links content in your WebFOCUS BUE repository, allowing you to discover new possibilities in your data, and explore new relationships within your reporting enterprise. In addition, Auto Linking saves development time and effort, because drilldowns do not need to be manually created and maintained.

Auto Drill and Auto Linking give you the advantage of navigating your data dynamically by simply selecting these report options. These features broaden your analytical insights, giving you access to different views of your data through these dynamic links.

Learn More

For more information about these features, see the Using Auto Drill and Using the Auto Linking Feature to Link Content topics, under Customizing Content, in the WebFOCUS BUE Technical Library, Release 8.2.01.

Responsive Autoprompt

The WebFOCUS BUE Autoprompting facility dynamically creates a launch page that prompts users for the parameters (amper variables) necessary to execute a procedure (FEX). The parameter values entered or selected by users on the Autoprompt launch page can be used as field values, or as the objects of the display and sort commands in the report request.
Release 8.2.01 introduces a new Responsive Autoprompt facility that provides a modern user interface design with responsive mobile support, chaining of dynamic lists for fields in a dimension hierarchy, and a calendar control for simple filters to select a date for a date field of YYMD format with modifiers. The date format must have all components (year, month, day) and not be a Date-Time field format.

**Parameter-Driven Charts and Reports**

When creating reports, charts, or documents, you can add parameters to enable options for selection at run-time. This gives you the full advantage of reviewing and comparing your data using convenient drop-down lists that help you quickly gain insight into your data.

You add parameters by right-clicking on any field container, except Multi-graph. Simply click New Parameter. This creates a new, unique Parameter field container, into which you can place any number of measures and dimensions in accordance with how you want them to display at run-time. You can also rename the parameter, using a relevant label, to organize different parameters categorically.

Once you have defined your parameters and selected the relevant data fields, run the report, chart or document. Using the drop-down lists for each parameter, you can select different options from the parameter lists to view the data in your report, chart, or document dynamically. You can then select different parameter options and re-run the report, chart, or document and your data is refreshed based on these new selections.

When you define parameters, you can dynamically select different options at run-time, giving you the advantage of reviewing different data scenarios on the fly. Once your parameters are set up, the run-time options enable you to quickly and easily navigate different data relationships and make relevant, rapid decisions with your data.

**Learn More**

For more information about this feature, see the *Adding Parameters for Data Selection at Run Time* topic, under Customizing Content, in the WebFOCUS BUE Technical Library, Release 8.2.01.

**Business User Edition Portal**

The WebFOCUS BUE Release 8.2 Version 01 Key Features for the Business User Edition (BUE) Portal are:

- User Experience Improvements
- Sample Content Generator
Visibility Into Shared Application Directory

User Experience Improvements

In Release 8.2 Version 01, you can take advantage of the improved drag-and-drop function, which allows you more flexibility in adding content to your page. Now, when you drag an item on the canvas, the drop target highlights the entire area, in which the content will be placed. Furthermore, you now have a choice to either replace a content item or add it as another tab. If you choose the latter, a tabbed container will be automatically created. Using this simple and intuitive action, you can build many complex layouts. For example, rows spanning columns can be accomplished by dragging content to a 25%, a top, bottom, or either side of the page. This enhancement applies to all page layouts.

Learn More

For more information, see the WebFOCUS BUE Technical Library, Release 8.2.01.

Sample Content Generator

The enhanced Samples Generator expands the ability to automatically generate a suite of analytic content based on existing single-path Master Files in your repository. The Samples Generator is an instant introduction to reporting, demonstrating how any spreadsheet or Master File can become a basis for a set of compelling content to quickly help you visualize and analyze your data.

To generate new sample content from an existing Master File, right-click a domain or folder, point to New, and click Sample Content. After you select a Master File, the Samples Generator will run and populate your directory with sample charts, reports, and dashboards. Additionally, the suite will contain charts and reports that provide quick and easy navigation through the levels of each available hierarchy.

The sample content generated typically contains 15 to 40 items organized in subfolders, in the selected folder or domain. You can view, edit, or delete this content, as well as use it as a starting point to develop new content or dashboards.

Learn More

For more information, see the Generating Sample Content topic, under Creating Content, in the WebFOCUS BUE Technical Library, Release 8.2.01.

Visibility Into Shared Application Directory

The Edit Metadata option has been improved to allow the foccache and baseapp application directories to be seen in addition to the matching domain name application directory.
Foccache is a temporary application directory for your current session. Do not store any content or metadata in foccache as the contents are automatically deleted once you close the Metadata Edit window.

Baseapp is a permanent application directory that is seen by all users across all domains. Baseapp should be used to store synonyms and images that need to be shared by all users. Only the manager user ID is able to write into baseapp.

Baseapp is last in the application path definition. If a synonym resides in both the domain name application directory and baseapp, the one in the domain name application directory will be used at development and run time.

Learn More

For more information, see the Connecting to Data and Editing Data topic, under Working With Data, in the WebFOCUS BUE Technical Library, Release 8.2.01.

Release Enhancements

The following enhancements are available in Release 8.2 Version 01M and Release 8.2 Version 01.

Changes to the Themes Dialog Box

In Release 8.2 Version 01M InfoAssist+, the Environment and Styling area provides settings for styling reports and charts through the specification of a Document Theme. Click the Browse button to open the Templates - Browse predefined template files dialog box, in which you can search for an existing WebFOCUS StyleSheet. The default StyleSheet is Warm.sty, but you can select from the other themes that are available (Dark.sty or Flat.sty).

StyleSheets are stored in the following directory of your WebFOCUS BUE installation:

`drive:\ibi\WebFOCUSBUE82\WebFOCUS\ibi_html\ibi_themes`
In addition, you can access a repository of additional themes by accessing the Legacy Templates, under Libraries, as shown in the following image.
The theme that you select determines the coloring and hues that display within InfoAssist+, as shown in the following image.

![Image of InfoAssist+ theme examples]

The default templates in the Templates section apply to all languages, whereas some of those in the Legacy Templates sections are specific to just one language (for example, EN=English).

**Learn More**

For more information, see the *Changing InfoAssist+ User Preferences* topic in the WebFOCUS BUE Technical Library, Release 8.2.01M.
InfoAssist+ Auto Drill Properties

The Auto Drill Properties section has been added to the InfoAssist+ Properties page of the Configuration Tab on the Administration Console. Settings in this section control the use of drill-down navigation options in reports and charts configured to use Auto Drill functionality, as shown in the following image.

To open and review these properties:
1. In the BUE Portal, on the Menu bar, click Administration, and then click Administration Console.
2. On the Configuration tab, under the Application Settings folder, click InfoAssist+ Properties.
3. Scroll down to the Auto Drill section and review the default settings.
4. Select each check box to select or clear the option it represents.

Hyperstage Adapter

As of Release 8.2 Version 01, data that is uploaded into Hyperstage now has a target owner/schema associated with it. The target schema is set to the domain where the upload was initiated. This secures data across domains.

Learn More

For more information, see the Configuring Hyperstage topic in the WebFOCUS BUE 8.2.01 Technical Library.

Adapter Connections

As of Release 8.2 Version 01, you can now configure any available adapter on a given platform. Up to five adapters can be configured for a WebFOCUS BUE installation.
Chapter 2
WebFOCUS Business User Edition
Release Notes

This topic describes the Release Notes for WebFOCUS Business User Edition (BUE) Release 8.2 Version 01M.

In this chapter:
- Browsers
- InfoAssist+
- National Language Support (NLS)
- ReportCaster

Browsers

The following browsers are certified for WebFOCUS Business User Edition Release 8.2.01M:
- Microsoft® Edge™ 38
- Internet Explorer® 11
- Google Chrome™ 57
- Mozilla® Firefox® 52

InfoAssist+

Internet Explorer Browser Compatibility Mode

- When running in IE compatibility mode, drill links may not work properly for Auto Drill, Multi Drill, and Auto Linking.

National Language Support (NLS)

- When signed in as a Developer in a double-byte character set (DBCS) or a single-byte character set (SBCS) WebFOCUS BUE environment, the Developer Name is not displayed correctly in the Web Console.
ReportCaster

- Charts with HTML5 output yield an error when scheduled in the ReportCaster End User Scheduling tool, if the format is overridden to PNG, SVG, GIF, JPG, or PDF.

- A printer schedule will not work unless the report output format is a valid print format. Therefore, ReportCaster always sets the format of a schedule with distribution to a printer to a valid format. If the default configuration of PDF as a valid print format is in place, the override format is set to PDF. Otherwise, the override format is set to DOC. You can change this format on the Task tab.
These topics provide upgrade considerations and product changes for WebFOCUS Business User Edition (BUE) Release 8.2 Version 01M.

In this chapter:
- Active Technologies
- Business Intelligence Portal
- InfoAssist+
- Installation
- ReportCaster
- WebFOCUS Business User Edition Infrastructure and Security
- WebFOCUS Language

Active Technologies

The following are release considerations and product changes for Active Technologies (WebFOCUS BUE Reporting Server Release 82).

Support for a Floating-Point Value on a WHERE Filter

You can now use a floating-point single-precision (F) value or a floating-point double-precision (D) value on a WHERE filter for an active report. However, we recommend that you convert a floating-point single-precision or floating-point double-precision value to packed decimal (P) for better precision. A WHERE filter using a floating-point value can, in some cases, produce an imprecise result due to rounding differences unique to each database engine.

Menu Update

The Enable Transitions option on a column drop-down menu for a tabular active report on an active dashboard has been removed.
Coordinated Fields and NOPRINT

When a coordinated field is added to an active dashboard, it is added as a NOPRINT field. The coordinated field name is not displayed as part of the default chart title, and the coordinated field value that is selected on the dashboard is not concatenated to the X-axis labels.

Title for Coordinated Field Drop-Down List

When you run an active dashboard with a coordinated field, Active Technologies labels the drop-down list for the field with its title when available, instead of its name. Active Technologies derives the title from the following sources.

1. If the Master File contains a TITLE attribute for the field, Active Technologies uses the title specified on the TITLE attribute in the Master File. An example is TITLE = 'Product ID'.

2. If the Master File does not contain a TITLE attribute for the field, Active Technologies uses the name specified on the FIELDNAME or FIELD attribute in the Master File. An example is FIELD=PCD.

Business Intelligence Portal

The following is a general release consideration:

- The About WebFOCUS dialog box replaces the Build Version field with two new fields, Package Name and Release ID. By identifying the name of the individual package that is currently installed, in addition to the number of the current release, it is possible to identify the current installation in more detail than was possible in the Build Version field.

InfoAssist+

The following are release considerations and product changes for InfoAssist+.

General Enhancements

The following is a general release consideration:

- In Report mode, the Auto Drill option has been moved from the Navigation group into its own group on the Format tab. This change allows you to use Auto Drill at the same time as other features in the Navigation group, such as On-demand Paging, Freeze, and Table of Contents options. The Auto Drill option is on the right side of the Format tab.
Enhancements to Charting

The following are release considerations related to charting:

- In Chart mode, the Embed Header and Footer in the chart option is enabled, by default.

- When working with measure and dimension fields in a chart, measure fields are not automatically moved to the vertical axis when the horizontal axis contains a dimension field. In these cases, the measure field will replace the existing dimension field in the horizontal axis.

- When working with charts that use the new chart attribute syntax, the 1x4 and 2x2 views are disabled in the Query Panel group on the View tab. If you switch from a chart without the new chart attribute syntax or a report to a chart with the new chart attribute syntax, the default Query view is Tree.

Installation

The following are general release considerations:

- **Anti-Virus and Malware Protection Applications During an Installation, Upgrade, or Uninstall**

  For new installations, upgrades, and uninstalls, it is recommended to turn off any anti-virus and anti-malware protection programs you have for the duration of the installation, upgrade, or uninstall process, as these applications may block, interfere, or slow down the installation, upgrade, or uninstall process, and in turn, possibly cause a failure.

  Restart your protection programs when the installation, upgrade, or uninstall completes. If you chose to leave protection programs active and an error occurred, the protection logs should be checked and the installation, upgrade, or uninstall repeated after protection deactivation. As there are many protection vendors, we cannot be specific as to what to expect in logs or during a failure, aside from the error likely being a file in use error.
If you are using Malwarebytes Anti-Ransomware, and during upgrade installations of WebFOCUS Business User Edition, you receive a *File Error* similar to the following image, this is an indication that files are locked by the Malwarebytes software.

![File Error Image]

To proceed, open the Windows Services application and stop the Malware service, *MB3Service*, as shown in the following image.

![Windows Services Image]

Return to the installation program and click *Retry* on the File Error dialog box.

**Upgrade Installation**

As new versions of files are included in packaging, the upgrade installation needs to remove the old versions of files from ..\ibi\WebFOCUS_BUE82\WebFOCUS\webapps \webfocus\WEB-INF\lib\ to ensure that there are no duplicates.
The upgrade of Release 8.2.01 to Release 8.2.01M results in duplicate POI files as a new version of these files was introduced. The following files need to be removed after performing an upgrade:

- `..\ibi\WebFOCUS_BUE82\WebFOCUS\webapps\webfocus\WEB-INF\lib\poi-3.14-20160307.jar`
- `..\ibi\WebFOCUS_BUE82\WebFOCUS\webapps\webfocus\WEB-INF\lib\poi-excelant-3.14-20160307.jar`
- `..\ibi\WebFOCUS_BUE82\WebFOCUS\webapps\webfocus\WEB-INF\lib\poi-ooxml-3.14-20160307.jar`
- `..\ibi\WebFOCUS_BUE82\WebFOCUS\webapps\webfocus\WEB-INF\lib\poi-ooxml-schemas-3.14-20160307.jar`
- `..\ibi\WebFOCUS_BUE82\WebFOCUS\webapps\webfocus\WEB-INF\lib\poi-scratchpad-3.14-20160307.jar`

After upgrading WebFOCUS BUE from Release 8.2.00 to Release 8.2 Version 01 on Linux, the `../ibi/WebFOCUS_BUE82/srv/wfs/hs/pg_data` directory is set with group/world access. For example, `drwxrwxr-x`. In order for the PostgreSQL database used by the Hyperstage server to start, permissions for the `/pg_data` directory need to be updated and set as `u=rwx` (0700).

Once this is done, restart the Reporting Server.

To stop the WebFOCUS BUE Reporting Server, run:

`../ibi/WebFOCUS_BUE82/srv/wfs/bin/edastart -stop`

To start the WebFOCUS BUE Reporting Server, run:

`../ibi/WebFOCUS_BUE82/srv/wfs/bin/edastart -start`

**ReportCaster**

The following are general release considerations and product changes for ReportCaster:

- Running a schedule with traces is not yet implemented when selecting a schedule from the Resources tree in the BI Portal. A schedule can be run with trace options from within the Basic Scheduling tool.
As of Release 8.2, the ReportCaster Console option in the Tools menu, on the BUE Portal Menu bar, has been renamed to ReportCaster Status. The functionality of the ReportCaster Console has not changed.

WebFOCUS Business User Edition Infrastructure and Security

The following are general release considerations and product changes for WebFOCUS BUE infrastructure and security:

- The maximum number of characters in the WF Repository Summary field on the Properties dialog box has been increased from 512 to 2048 characters.

- As of Release 8.2, the Client License Key Expiration Warning display period was reduced from 30 to 14 days prior to expiration date. By default, a warning message for the client license key expiration date begins to appear fourteen (14) days before the actual expiration date. The warning message displays the expiration date and the number of days remaining until that date. It appears only to managers during sign on, and it is written to the event.log file located in the logs directory of the WebFOCUS BUE Client installation.

WebFOCUS Language

The following are release considerations and product changes for the WebFOCUS reporting language.

Change to ACROSS Column Limit

The limit on the number of ACROSS columns has been removed. The limit on the number of ACROSS keys remains the same. Total sort keys (BY and ACROSS) has a maximum of 128.

Change in Results With WHERE TOTAL, Multi-Verb, and MAX.

A multi-verb request that uses the same field name in a WHERE TOTAL as it does in a field calculation causes a different output.

If a prefix operation is done on the same field in the lower verb request, the WHERE TOTAL is using the first verb occurrence, which is not intended behavior.

Changing verb object names to be unique or switching the multi-verb request to a single-verb request using WITHIN works.
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