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8206.18 Release Notes

The following topic provides all the information that you need to know about this release of WebFOCUS.

In this chapter:

- Release and Gen Information
- New Features
- Fixes
- Upgrade Notes
- Known Issues
- System Requirements

Release and Gen Information

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New Features
Adapter for OData: Support for Selection on Aggregation

If you configured your OData connection with the Aggregation Extension, as shown in the following image, certain OData requests that involve summation or summation prefixes will send OData requests based on the OData Aggregation Extension specification.

This feature adds filters to the syntax of an OData Aggregation Extension request when WHERE_GROUPED or WHERE TOTAL is used in a WebFOCUS report.

Track Time for XML Adapters

On the Server Workspace page, a table of data service agent statistics is displayed for use in monitoring server performance, as shown in the following image.

The column DBMS Time is used to track the amount of DBMS processing time in seconds that is used to retrieve the data when a request is run.
This feature enables the DBMS Time statistic for the XML, JSON, and OData adapters.

**Fixes**

- When a connection to a remote server is deleted from one user profile, it gets deleted from all user profiles. (200117051)

- When using the advanced mode to upload an Excel® workbook with a name that includes periods and contains multiple worksheets, dragging a worksheet to the Join editor results in an error. (200128075)

- Encode Filter parameter values in OData Adapter Aggregation requests. (200317064)

- The displayed output for sorting a field in descending order is not sorted correctly in an aggregated OData request. (200311015)

- An attempt to switch the adapter connection to a different user (via SET CONNECTION_ATTRIBUTES/DEFAULT_CONNECTION commands or via the CONNECTION attribute in the Access File) may fail if the adapter is JDBC-based (e.g., Vertica®) and all connections have the same logical name. (200213038)

- HOLD APPEND for Bulkload does not always load the records to the Target. (191203041)

- Agent crashes when a report is run multiple times in PostScript® format, with the Lucida Sans Unicode font. (190403174)

- When accessing and opening a wide In-Document Analytics report as an email attachment from an iPad® with iOS version 13, you will get a blank space if you switch the orientation from Landscape to Portrait mode. (200403106)

**Upgrade Notes**

- In App Studio, the Action, Method, Enctype, and Accept properties have been removed from the Form component in the Properties panel because these properties were not actually being used.

- In App Studio, an output widget container no longer contains the Autosize options in the Properties panel. Everything inside the widget is now fully CSS3 responsive at run time. Autosize is handled by JavaScript and responsive is handled by CSS3 styles.
When upgrading from previous versions of ReportCaster, FTP setting configuration information remains available in existing distribution schedules as long as the default value (Customized FTP) is assigned to the FTP Server Name field.

If you replace this value with a predefined FTP setting configuration in an individual schedule, the previous FTP Setting configuration information for that schedule is overwritten automatically.

If you limit FTP Setting configurations to a predefined list by selecting the Don’t allow user defined FTP in schedule check box in the (Default Settings) configuration, the previously FTP Setting configuration information for all schedules becomes unavailable, and is replaced by the default FTP Setting configuration or a predefined FTP Setting configuration selected for an individual schedule.

After an upgrade to Release 8206, only those users working in roles that include the new Create Shortcuts (opShortcut) privilege, located in the Basic Reporting privilege category, can continue to create shortcuts. Even though this privilege is included in the DomainBasicUser, DomainAdvancedUser, DomainDeveloper, DomainAnalyst, and WebFOCUSManager roles, it is not selected by default. Administrators must either select the Create Shortcuts privilege check box directly, or use the Role Update utility, located on the Configuration tab of the Administration Console, to include this privilege in each of the roles that can continue to use this feature.

The Display Esri Configuration Utility (opEsriAdminConsole) privilege, which granted access to the Esri Configuration Utility, was removed from the Application Development privilege category located on the Roles tab of the Security Center. The new ArcGIS API for JavaScript replaces the Esri Configuration Utility and is available to all users. Existing maps created using the ESRI Configuration Utility continue to work with the new ArcGIS API for JavaScript. However, you cannot upgrade them without first recreating them with the new ESRI HTML5 component-based Point Map or Choropleth Map options available from the WebFOCUS Designer or InfoAssist Chart Picker.

The following changes appear on the InfoAssist Properties page of the Administration Console Configuration tab.

In the Format Tab section:

- The Active PDF option was renamed PDF Analytic Document Format.
- The Active Report option was renamed HTML Analytic Document Format.
In the Report Output Format, Chart Output Format, and Document Output Format lists located in the Tools Options Dialog Defaults section:

- The Active Report option was renamed HTML Analytic Document.
- The Active PDF option was renamed PDF Analytic Document.

These changes were called for by In-Document Analytics rebranding, and they match changes to the labels of the corresponding format options in the Output File Format list that opens from the Format Group in the InfoAssist Home Page ribbon.

- The functions previously categorized as Statistical Python functions have been reclassified as Machine Learning (Python-based) functions. The names of the functions have changed as follows:
  - BLR_CLASSIFY is now named CLASSIFY_BLR.
  - KNN_CLASSIFY is now named CLASSIFY_KNN.
  - KNN_REGRESS is now named REGRESS_KNN.
  - RF_CLASSIFY is now named CLASSIFY_RF.
  - RF_REGRESS is now named REGRESS_RF.
  - POLY_REGRESS is now named REGRESS_POLY.

- The enhanced In-Document Analytics user interface available is configured by default for new installations and is not supported with the Microsoft Internet Explorer 11 browser. If you have requirements to support Microsoft Internet Explorer 11 browser, you can configure the Legacy In-Document Analytics user interface using the WebFOCUS Administration Console.

Customers upgrading to 8206 from 8205 or earlier releases will have the Legacy In-Document Analytics user interface configured.

The new In-Document Analytics setting appears in the Tools Option Dialog Defaults section of the InfoAssist Properties page, which is located on the Configuration tab of the Administration Console. This setting establishes the default value for the In-Document Analytics setting in the Procedure Settings dialog box which opens from the InfoAssist Quick Access toolbar. The value in this setting determines the interface used to display reports, charts, and documents using the HTML Analytic Document format. There are two valid values:

- **Designer Style.** Content displayed conforms to the conventions of WebFOCUS Designer and includes the Navigation icons, such as the Chart Format menu and the ellipsis menu.
- **Legacy.** Content displayed conforms to the legacy run-time interface and provides options like the legacy column menu.

Content created in earlier versions is automatically assigned to the Legacy display, which conforms to the conventions of the Active Technologies format, and provides options like the Chart/Rollup and Pivot tools.

New content is automatically assigned to the WebFOCUS Designer option, which is selected by default.

To convert content created in earlier versions to the WebFOCUS Designer display, developers must open that content for editing, reset the value in the In-Document Analytics setting to Web FOCUS Designer, and save the revised procedure. As an alternative, developers can use the text editor to add the following commands directly to a procedure:

```
-DEFAULTH &WF_ARVERSION=2; SET ARVERSION=&WF_ARVERSION;
```

- To prevent unexpected field transformations, when creating a chart in WebFOCUS Designer, the buckets are type sensitive. Certain buckets, such as the Size and Tooltip buckets, only accept measure fields, while others, such as the Horizontal and MultiPage buckets, only accept dimension fields. Additional buckets, such as the Vertical and Color buckets, accept both field types. When you attempt to drag a field into an incompatible bucket, the cursor changes to a cancel sign.

To add a measure field to a dimension bucket or a dimension field to a measure bucket, right-click a field in the Fields panel and click Add as dimension or Add as measure. The field is added to the default dimension or measure bucket. You can drag the field into another bucket, as needed. As in previous releases, measure fields used as dimensions display as distinct instead of aggregated values, while dimension fields used as measures are aggregated using the Count operation.

- If, in Release 8206.03 and higher, when migrating a chart created in InfoAssist to WebFOCUS Designer, the chart type is not supported and a similar chart type cannot be found, the chart is converted to a bar chart. You can then modify the bar chart in Designer. Previously, the chart type was maintained, but the buckets were not accessible and the chart could not be edited. Affected chart types include 3D charts, stock charts, and polar charts.

**Note:** To open an InfoAssist chart in WebFOCUS Designer, you must have the associated Technical Preview enabled. For more information, contact your Information Builders representative.
In Release 8206, the default value assigned to the Account Creation on Sign In (IBI_ALLOW_LOGIN_EXTERNAL_GROUPS) setting, located on the External page of the Administration Console Security tab, changes from All to OFF. If you must continue to use All as the default value in this setting, after upgrading to Release 8206, you must open or create the webfocus.cfg file, type the IBI_ALLOW_LOGIN_EXTERNAL_GROUPS=* setting in it, including the asterisk (*) value, which represents All, and then save the updated file.

WebFOCUS page breaks in format XLSX report output are synchronized with Excel page breaks. To revert to the behavior in previous releases in which page breaks were not synchronized, issue the SET XLSXPAGEBRKIGNORE=ON command.

Known Issues

The WebFOCUS help system does not work when the Application Server is configured with Java Version 11. As a workaround, you can configure your WebFOCUS instance to use help hosted by IBI. This provides an additional benefit, as users will have access to the latest content.

To accomplish this, you need to perform the following configuration using the WebFOCUS Administration Console:

1. Select the Configuration tab and navigate to Application Settings and then Application Contexts.
2. Change the Help value to /ibi_apps/ibi_help.
   
   Note: The ibi_apps value must be the same as the WebFOCUS web app context created during installation. If you provided an alias, for example, ibi_apps8206, then the value for Help should be entered as /ibi_apps8206/ibi_help.
3. Set the Help Proxy Host and Port value to onlinehelp.informationbuilders.com.
4. Set the Help Proxy Context to /wfappent/8206. If you are using WebFOCUS Release 8207, set the value to /wfappent/8207.
5. Select the Help Proxy Secure check box.
For example:

6. Click the Clear Cache option and continue to sign out and sign in for the settings to take effect.

- Bursting reports by parameter values is not supported with interactive content using the new Designer style of In-Document Analytics capabilities.

- If you create a report or chart in ARVERSION=2 (In-Document Analytics) and you set the output format to PDF Analytic Document, an error occurs when you run it. If you change the option in Procedure Settings to Legacy, the report or chart is produced correctly.

- If you are working with an In-Document Analytics chart in landscape mode on an Android mobile device and you switch to portrait mode, your content displays in fullscreen mode. Your chart displays at the bottom. If you run your content in new window mode, your In-Document Analytics chart does not display in fullscreen mode, displaying the chart on the right.

- HIDENULLACRS, which hides across columns that have null or zero values in the entire column, is not supported with interactive content using the new Designer style of In-Document Analytics capabilities.

- When creating bar charts using the New option on the Ellipsis menu, the Color bucket incorrectly performs a count for a dimension field. It also shows a heat legend. The expected result is a color legend for each unique item.

- If you add an existing ARVERSION=1 report to an AHTML document set to ARVERSION=2, it fails at run time, displaying JSON text on the screen instead of the expected report output.
If you attempt to run an ARVERSION=2 (In-Document Analytics) AHTML Fusion chart procedure (.fex), it continuously loads and produces an F12 error. This does not occur with Fusion charts that employ ARVERSION=1.

If you are working with a procedure (.fex) and you change the ARVERSION to ARVERSION=2, global filters do not display when you run the procedure.

Running the configuration migration from the CMD line or UNIX Shell displays an error message in the log file. This error does not impact migration of the configuration files.

After running WFRreposUtilCMDLine.bat or WFRreposUtilCMDLine.sh, the RPT_DATA, RPT_METADATA, and RPT_USAGE tables are not getting dropped and are still available in the repository.

When you use the WebFOCUS Online Help in Japanese, if you type a search term in the Search box that contains NLS characters and press Enter, the words next to the Search box are corrupted. The workaround is to click the Go button next to the Search box, instead of pressing Enter.

To ensure that Choropleth maps run correctly when working with the sample procedure Sales by Country and Product, you must replace the URL on line 155 with: https://services.arcgis.com/P3ePLMYs2RVChkJx/arcgis/rest/services/World_Administrative_Divisions/FeatureServer/0 or open the procedure file in the newer version of the software. The previously provided URL is no longer supported by Esri®.

When creating reports in WebFOCUS Designer using the Technical Preview feature, the default font may not display all NLS characters correctly. To ensure that these characters display properly in reports, change the values of the FONT attributes, in the report section of the embedded StyleSheet you are using, to a font that supports the required NLS characters. For example:

```
TYPE=REPORT, FONT='Arial Unicode MS',
```

When a user who does not have the Upload Data privilege (opUploadDataFile) creates a chart or report using WebFOCUS Designer, they will still be presented with the Upload option in the Open dialog box when selecting a data source. While they can click Upload, they will be presented with a 403 error because they do not have the required privileges.

The Export Scenario dialog box does not display Master File Shortcuts in the list of available items under the Resources node. Even though they are not visible, Master File Shortcuts are present in the list and can be included in Export Scenarios. In order to add a Master File Shortcut to a scenario you must right-click the folder that contains it and choose the Select with Sub-tree menu option. The Master File Shortcut will be transferred to the Scenario, along with the rest of the items in the folder.
Both the db_collation.sh file and the db_collation.bat file generate the "Main WARN Error while converting string [] to type," error message in the Command Prompt window at the end of their run. This message has no impact on the functionality of this post-installation utility, and it completes the run successfully.

The load_repos.sh file generates the "WARNING: sun.reflect.Reflection.getCaller Class is not supported. This will impact performance," error message in the Command Prompt window at the end of its run. In addition, the db_inplace_update.sh, WFRreposUtilCMDLine.sh, and update_repos.sh files generate the "Main WARN Error while converting string [] to type," error message in the Command Prompt window at the end of their run. These messages have no impact on the functionality of these post installation utilities, and each one completes its run successfully.

When installing WebFOCUS Release 8.2.06, the Change Management import and export folders are backed up to the backup_files folder, under the ibi\WebFOCUSxx directory. However, the Change Management files are not copied back to the cm folder after the installation is complete.

The workaround is to copy the files from the backup_files folder to the ibi\WebFOCUSxx\cm folders.

Performing an upgrade on a WebFOCUS instance that was not configured to use a local ReportCaster Distribution Server creates a ReportCaster service and it should not.

The workaround is to remove the service by opening a CMD window as an admin and running the following command:

`sc delete "service_name"`

For example:

`sc delete "WF82"`

**System Requirements**

This release is now certified and has been tested with Google Chrome version 81, Firefox version 75, Microsoft Edge Chromium version 81 (WebFOCUS only), Microsoft Edge version 44 (WebFOCUS only), and Internet Explorer version 11 (Compatibility mode is not supported).
8206.17 Release Notes

The following topic provides all the information that you need to know about this release of WebFOCUS.

In this chapter:

- Release and Gen Information
- Fixes
- Upgrade Notes
- Known Issues
- System Requirements

Release and Gen Information

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<td>8206 Gen 1765</td>
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Fixes

- On the Microsoft Windows® operating system, the Reporting Server’s TCP listener sporadically becomes unresponsive after a large number of connections. (190708017)

- Emails generated for Library subscriptions do not contain a subject line. (190508079)

- The WebFOCUS application receives various inputs from users, including values from HTTP headers and parameters to perform dynamic operations on the server side. If an exception is thrown, the application should catch it and return a generic error message that does not include any information regarding the system. (200211076)

- When using the adapter for Salesforce.com®, some server-generated SOQL (Salesforce Object Query Language) queries to retrieve data were not valid or efficient.
An attempt to switch an adapter connection to a different user via SET CONNECTION_ATTRIBUTES/DEFAULT_CONNECTION commands or CONNECTION attribute in the Access File may fail if the adapter is JDBC-based and all connections have the same logical name. (200213038)

Using the adapter forSalesforce.com® for a request using the NOT-FROM operator is converted to NOT BETWEEN a AND b in a SOQL request.

A query using a prefix DT(YYYYMMDD) for a timestamp field generates an invalid SOQL request when using the Salesforce.com adapter.

By default, Grant Password for OAuth security sends the Client ID and Client Secret as Base64 encoded for the authorization in the HTTP Header of the Token request. If BDYCLT:TRUE is added to the REST adapter connection string, the Client ID and Client Secret is sent as encoded parameters in the body of the token request. (200204125)

When parsing an XML file, the parser does not disable the access to external entities, thus enabling payloads that might cause the server to perform unexpected actions. (200211064)

Clicking on the Data tab from a Workbook results in an agent crash when the server is configured with the WebFOCUS Client REST adapter. (190628097, 190927075, 200214052)

GEO ROLE is still generated when using Get Data after setting Activate GEOGRAPHIC_ROLE to Off and uploading a file. (190902027)

Creating a savediag from the Web Console using a secondary administration ID (iadmin) and security provider OPSYS results in an error. Error: failed to run EXSDIAG Warning: can’t find savediag log (190404027)

Unable to create a savediag sometimes resulting in an EC6 abend where a REASON CODE=0594E04B is encountered. (200224015)

AppStudio closes unexpectedly when you right-click the Embedded CSS editor tab on the HTML canvas, uncheck Outlining and Auto Complete, and start typing any CSS code. (200128027)

The WebFOCUS Administration Console displays Brazilian-Portuguese words incorrectly for English words that contain special characters. (200408162)
Upgrade Notes

- In App Studio, the Action, Method, Enctype, and Accept properties have been removed from the Form component in the Properties panel because these properties were not actually being used.

- In App Studio, an output widget container no longer contains the Autosize options in the Properties panel. Everything inside the widget is now fully CSS3 responsive at run time. Autosize is handled by JavaScript and responsive is handled by CSS3 styles.

- When upgrading from previous versions of ReportCaster, FTP setting configuration information remains available in existing distribution schedules as long as the default value (Customized FTP) is assigned to the FTP Server Name field.

- If you replace this value with a predefined FTP setting configuration in an individual schedule, the previous FTP Setting configuration information for that schedule is overwritten automatically.

- If you limit FTP Setting configurations to a predefined list by selecting the Don't allow user defined FTP in schedule check box in the (Default Settings) configuration, the previously FTP Setting configuration information for all schedules becomes unavailable, and is replaced by the default FTP Setting configuration or a predefined FTP Setting configuration selected for an individual schedule.

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- The Display Esri Configuration Utility (opEsriAdminConsole) privilege, which granted access to the Esri Configuration Utility, was removed from the Application Development privilege category located on the Roles tab of the Security Center. The new ArcGIS API for JavaScript replaces the Esri Configuration Utility and is available to all users. Existing maps created using the ESRI Configuration Utility continue to work with the new ArcGIS API for JavaScript. However, you cannot upgrade them without first recreating them with the new ESRI HTML5 component-based Point Map or Choropleth Map options available from the WebFOCUS Designer or InfoAssist Chart Picker.

- The following changes appear on the InfoAssist Properties page of the Administration Console Configuration tab.
In the Format Tab section:

- The Active PDF option was renamed PDF Analytic Document Format.
- The Active Report option was renamed HTML Analytic Document Format.

In the Report Output Format, Chart Output Format, and Document Output Format lists located in the Tools Options Dialog Defaults section:

- The Active Report option was renamed HTML Analytic Document.
- The Active PDF option was renamed PDF Analytic Document.

These changes were called for by In-Document Analytics rebranding, and they match changes to the labels of the corresponding format options in the Output File Format list that opens from the Format Group in the InfoAssist Home Page ribbon.

- The functions previously categorized as Statistical Python functions have been reclassified as Machine Learning (Python-based) functions. The names of the functions have changed as follows:
  - BLR_CLASSIFY is now named CLASSIFY_BLR.
  - KNN_CLASSIFY is now named CLASSIFY_KNN.
  - KNN_REGRESS is now named REGRESS_KNN.
  - RF_CLASSIFY is now named CLASSIFY_RF.
  - RF_REGRESS is now named REGRESS_RF.
  - POLY_REGRESS is now named REGRESS_POLY.

- The enhanced In-Document Analytics user interface available is configured by default for new installations and is not supported with the Microsoft Internet Explorer 11 browser. If you have requirements to support Microsoft Internet Explorer 11 browser, you can configure the Legacy In-Document Analytics user interface using the WebFOCUS Administration Console.

  Customers upgrading to 8206 from 8205 or earlier releases will have the Legacy In-Document Analytics user interface configured.
The new In-Document Analytics setting appears in the Tools Option Dialog Defaults section of the InfoAssist Properties page, which is located on the Configuration tab of the Administration Console. This setting establishes the default value for the In-Document Analytics setting in the Procedure Settings dialog box which opens from the InfoAssist Quick Access toolbar. The value in this setting determines the interface used to display reports, charts, and documents using the HTML Analytic Document format. There are two valid values:

- **Designer Style.** Content displayed conforms to the conventions of WebFOCUS Designer and includes the Navigation icons, such as the Chart Format menu and the ellipsis menu.

- **Legacy.** Content displayed conforms to the legacy run-time interface and provides options like the legacy column menu.

Content created in earlier versions is automatically assigned to the Legacy display, which conforms to the conventions of the Active Technologies format, and provides options like the Chart/Rollup and Pivot tools.

New content is automatically assigned to the WebFOCUS Designer option, which is selected by default.

To convert content created in earlier versions to the WebFOCUS Designer display, developers must open that content for editing, reset the value in the In-Document Analytics setting to Web FOCUS Designer, and save the revised procedure. As an alternative, developers can use the text editor to add the following commands directly to a procedure:

```
-DEFAULTH &WF_ARVERSION=2; SET ARVERSION=&WF_ARVERSION;
```  

To prevent unexpected field transformations, when creating a chart in WebFOCUS Designer, the buckets are type sensitive. Certain buckets, such as the Size and Tooltip buckets, only accept measure fields, while others, such as the Horizontal and MultiPage buckets, only accept dimension fields. Additional buckets, such as the Vertical and Color buckets, accept both field types. When you attempt to drag a field into an incompatible bucket, the cursor changes to a cancel sign.

To add a measure field to a dimension bucket or a dimension field to a measure bucket, right-click a field in the Fields panel and click Add as dimension or Add as measure. The field is added to the default dimension or measure bucket. You can drag the field into another bucket, as needed. As in previous releases, measure fields used as dimensions display as distinct instead of aggregated values, while dimension fields used as measures are aggregated using the Count operation.
If, in Release 8206.03 and higher, when migrating a chart created in InfoAssist to WebFOCUS Designer, the chart type is not supported and a similar chart type cannot be found, the chart is converted to a bar chart. You can then modify the bar chart in Designer. Previously, the chart type was maintained, but the buckets were not accessible and the chart could not be edited. Affected chart types include 3D charts, stock charts, and polar charts.

**Note:** To open an InfoAssist chart in WebFOCUS Designer, you must have the associated Technical Preview enabled. For more information, contact your Information Builders representative.

In Release 8206, the default value assigned to the Account Creation on Sign In (IBI_ALLOW_LOGIN_EXTERNAL_GROUPS) setting, located on the External page of the Administration Console Security tab, changes from All to OFF. If you must continue to use All as the default value in this setting, after upgrading to Release 8206, you must open or create the webfocus.cfg file, type the IBI_ALLOW_LOGIN_EXTERNAL_GROUPS=* setting in it, including the asterisk (*) value, which represents All, and then save the updated file.

WebFOCUS page breaks in format XLSX report output are synchronized with Excel page breaks. To revert to the behavior in previous releases in which page breaks were not synchronized, issue the SET XLSXPAGEBRKIGNORE=ON command.

### Known Issues

- The WebFOCUS help system does not work when the Application Server is configured with Java Version 11. As a workaround, you can configure your WebFOCUS instance to use help hosted by IBI. This provides an additional benefit, as users will have access to the latest content.

To accomplish this, you need to perform the following configuration using the WebFOCUS Administration Console:

1. Select the Configuration tab and navigate to Application Settings and then Application Contexts.
2. Change the Help value to /ibi_apps/ibi_help.
   
   **Note:** The ibi_apps value must be the same as the WebFOCUS web app context created during installation. If you provided an alias, for example, ibi_apps8206, then the value for Help should be entered as /ibi_apps8206/ibi_help.

3. Set the Help Proxy Host and Port value to onlinehelp.informationbuilders.com.
4. Set the Help Proxy Context to /wfappent/8206. If you are using WebFOCUS Release 8207, set the value to /wfappent/8207.
5. Select the **Help Proxy Secure** check box.

For example:

![Application Contexts](image)

6. Click the **Clear Cache** option and continue to sign out and sign in for the settings to take effect.

- Bursting reports by parameter values is not supported with interactive content using the new Designer style of In-Document Analytics capabilities.

- If you create a report or chart in ARVERSION=2 (In-Document Analytics) and you set the output format to PDF Analytic Document, an error occurs when you run it. If you change the option in Procedure Settings to Legacy, the report or chart is produced correctly.

- If you are working with an In-Document Analytics chart in landscape mode on an Android mobile device and you switch to portrait mode, your content displays in fullscreen mode. Your chart displays at the bottom. If you run your content in new window mode, your In-Document Analytics chart does not display in fullscreen mode, displaying the chart on the right.

- **HIDENULLACRS**, which hides across columns that have null or zero values in the entire column, is not supported with interactive content using the new Designer style of In-Document Analytics capabilities.

- When creating bar charts using the New option on the Ellipsis menu, the Color bucket incorrectly performs a count for a dimension field. It also shows a heat legend. The expected result is a color legend for each unique item.

- If you add an existing ARVERSION=1 report to an AHTML document set to ARVERSION=2, it fails at run time, displaying JSON text on the screen instead of the expected report output.
If you attempt to run an ARVERSION=2 (In-Document Analytics) AHTML Fusion chart procedure (.fex), it continuously loads and produces an F12 error. This does not occur with Fusion charts that employ ARVERSION=1.

If you are working with a procedure (.fex) and you change the ARVERSION to ARVERSION=2, global filters do not display when you run the procedure.

Running the configuration migration from the CMD line or UNIX Shell displays an error message in the log file. This error does not impact migration of the configuration files.

After running WFRreposUtilCMDLine.bat or WFRreposUtilCMDLine.sh, the RPT_DATA, RPT_METADATA, and RPT_USAGE tables are not getting dropped and are still available in the repository.

When you use the WebFOCUS Online Help in Japanese, if you type a search term in the Search box that contains NLS characters and press Enter, the words next to the Search box are corrupted. The workaround is to click the Go button next to the Search box, instead of pressing Enter.

To ensure that Choropleth maps run correctly when working with the sample procedure Sales by Country and Product, you must replace the URL on line 155 with: https://services.arcgis.com/P3ePLMYs2RVChkJx/arcgis/rest/services/World_Administrative_Divisions/FeatureServer/0 or open the procedure file in the newer version of the software. The previously provided URL is no longer supported by Esri®.

When creating reports in WebFOCUS Designer using the Technical Preview feature, the default font may not display all NLS characters correctly. To ensure that these characters display properly in reports, change the values of the FONT attributes, in the report section of the embedded StyleSheet you are using, to a font that supports the required NLS characters. For example:

```
TYPE=REPORT, FONT='Arial Unicode MS',$
```

When a user who does not have the Upload Data privilege (opUploadDataFile) creates a chart or report using WebFOCUS Designer, they will still be presented with the Upload option in the Open dialog box when selecting a data source. While they can click Upload, they will be presented with a 403 error because they do not have the required privileges.

The Export Scenario dialog box does not display Master File Shortcuts in the list of available items under the Resources node. Even though they are not visible, Master File Shortcuts are present in the list and can be included in Export Scenarios. In order to add a Master File Shortcut to a scenario you must right-click the folder that contains it and choose the Select with Sub-tree menu option. The Master File Shortcut will be transferred to the Scenario, along with the rest of the items in the folder.
Both the `db_collation.sh` file and the `db_collation.bat` file generate the "Main WARN Error while converting string [] to type," error message in the Command Prompt window at the end of their run. This message has no impact on the functionality of this post-installation utility, and it completes the run successfully.

The `load_repos.sh` file generates the "WARNING: sun.reflect.Reflection.getCaller Class is not supported. This will impact performance," error message in the Command Prompt window at the end of its run. In addition, the `db_inplace_update.sh`, `WFReposUtilCMDLine.sh`, and `update_repos.sh` files generate the "Main WARN Error while converting string [] to type," error message in the Command Prompt window at the end of their run. These messages have no impact on the functionality of these post installation utilities, and each one completes its run successfully.

When installing WebFOCUS Release 8.2.06, the Change Management import and export folders are backed up to the `backup_files` folder, under the `ibi\WebFOCUS\xx` directory. However, the Change Management files are not copied back to the `cm` folder after the installation is complete.

The workaround is to copy the files from the `backup_files` folder to the `ibi\WebFOCUS\xx\cm` folders.

Performing an upgrade on a WebFOCUS instance that was not configured to use a local ReportCaster Distribution Server creates a ReportCaster service and it should not.

The workaround is to remove the service by opening a CMD window as an admin and running the following command:

```
sc delete "service_name"
```

For example:

```
sc delete "WF82"
```

**System Requirements**

This release is now certified and has been tested with Google Chrome version 80, Firefox version 74, Microsoft Edge version 44 (WebFOCUS only), and Internet Explorer version 11 (Compatibility mode is not supported).

OpenJDK 8 JRE Update 242 (8u242) and Tomcat 8.5.51 are supported and included with the packaging.
System Requirements
8206.16 Release Notes

The following topic provides all the information that you need to know about this release of WebFOCUS.

In this chapter:

- Release and Gen Information
- Fixes
- Upgrade Notes
- Known Issues
- System Requirements

Release and Gen Information

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<tr>
<th>Release Date</th>
<th>Gen Information</th>
<th>Reporting Server</th>
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<tbody>
<tr>
<td>Monday, March 9, 2020</td>
<td>wf022820a Gen 157 as022820a</td>
<td>8206 Gen 1761</td>
</tr>
</tbody>
</table>

Fixes

- A flow contains corrupted syntax and is not scheduled when the Mail to addresses defined in procedure is used and the application directory name contains a percent sign. (191114059)
- Support added to the OData adapter to be able to filter on fields from child entity segments. (191202120)
- Deselecting a push button does not remove the filter on an HTML page or the dashboard. (191120073)
- Global Names set in App Studio are not updated across portal tabs. (191203023)
In an SJIS or Unicode environment, an Excel® report does not download with .xlsx extension when viewed from an HTML page created by App studio that runs the referenced procedure (FEX) to create the Excel report and that procedure has a filter with a parameter using DBCS characters for a parameter name. (200124003, 200205001)

Deselecting a push button does not remove the filter on an HTML page or the dashboard. (191120073)

The Parent-Response segment does not contain field definitions when a multi-segment JSON response is returned from the REST adapter Create Synonym process. (200114033)

Using the irpcusf.js for translation, certain words from English to Portuguese are not showing in all the charts. (190924078)

An error occurs when running WebFOCUS in Portuguese and creating a Reporting Object. (200125001)

Salesforce® adapter query that uses BY TOTAL gets an error on a generated SOQL. (200210058)

May 2020 has its last weekday on Friday the 29th and should be covered by the blackout period, but the schedule can be saved without an error. (190510023)

Upgrade Notes

In App Studio, the Action, Method, Enctype, and Accept properties have been removed from the Form component in the Properties panel because these properties were not actually being used.

In App Studio, an output widget container no longer contains the Autosize options in the Properties panel. Everything inside the widget is now fully CSS3 responsive at run time. Autosize is handled by JavaScript and responsive is handled by CSS3 styles.

When upgrading from previous versions of ReportCaster, FTP setting configuration information remains available in existing distribution schedules as long as the default value (Customized FTP) is assigned to the FTP Server Name field.

If you replace this value with a predefined FTP setting configuration in an individual schedule, the previous FTP Setting configuration information for that schedule is overwritten automatically.
If you limit FTP Setting configurations to a predefined list by selecting the Don't allow user defined FTP in schedule check box in the (Default Settings) configuration, the previously FTP Setting configuration information for all schedules becomes unavailable, and is replaced by the default FTP Setting configuration or a predefined FTP Setting configuration selected for an individual schedule.

After an upgrade to Release 8206, only those users working in roles that include the new Create Shortcuts (opShortcut) privilege, located in the Basic Reporting privilege category, can continue to create shortcuts. Even though this privilege is included in the DomainBasicUser, DomainAdvancedUser, DomainDeveloper, DomainAnalyst, and WebFOCUSManager roles, it is not selected by default. Administrators must either select the Create Shortcuts privilege check box directly, or use the Role Update utility, located on the Configuration tab of the Administration Console, to include this privilege in each of the roles that can continue to use this feature.

The Display Esri Configuration Utility (opEsriAdminConsole) privilege, which granted access to the Esri Configuration Utility, was removed from the Application Development privilege category located on the Roles tab of the Security Center. The new ArcGIS API for JavaScript replaces the Esri Configuration Utility and is available to all users. Existing maps created using the ESRI Configuration Utility continue to work with the new ArcGIS API for JavaScript. However, you cannot upgrade them without first recreating them with the new ESRI HTML5 component-based Point Map or Choropleth Map options available from the WebFOCUS Designer or InfoAssist Chart Picker.

The following changes appear on the InfoAssist Properties page of the Administration Console Configuration tab.

In the Format Tab section:

- The Active PDF option was renamed PDF Analytic Document Format.
- The Active Report option was renamed HTML Analytic Document Format.

In the Report Output Format, Chart Output Format, and Document Output Format lists located in the Tools Options Dialog Defaults section:

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- RF_CLASSIFY is now named CLASSIFY_RF.
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- POLY_REGRESS is now named REGRESS_POLY.

The enhanced In-Document Analytics user interface available is configured by default for new installations and is not supported with the Microsoft Internet Explorer 11 browser. If you have requirements to support Microsoft Internet Explorer 11 browser, you can configure the Legacy In-Document Analytics user interface using the WebFOCUS Administration Console.

Customers upgrading to 8206 from 8205 or earlier releases will have the Legacy In-Document Analytics user interface configured.

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2. Change the Help value to `/ibi_apps/ibi_help`.
   
   **Note:** The `ibi_apps` value must be the same as the WebFOCUS web app context created during installation. If you provided an alias, for example, `ibi_apps8206`, then the value for Help should be entered as `/ibi_apps8206/ibi_help`.

3. Set the Help Proxy Host and Port value to `onlinehelp.informationbuilders.com`.
4. Set the Help Proxy Context to `/wfappent/8206`. If you are using WebFOCUS Release 8207, set the value to `/wfappent/8207`.
5. Select the Help Proxy Secure check box.

   For example:

6. Click the Clear Cache option and continue to sign out and sign in for the settings to take effect.

- Bursting reports by parameter values is not supported with interactive content using the new Designer style of In-Document Analytics capabilities.
If you create a report or chart in ARVERSION=2 (In-Document Analytics) and you set the output format to PDF Analytic Document, an error occurs when you run it. If you change the option in Procedure Settings to Legacy, the report or chart is produced correctly.

If you are working with an In-Document Analytics chart in landscape mode on an Android mobile device and you switch to portrait mode, your content displays in full-screen mode. Your chart displays at the bottom. If you run your content in new window mode, your In-Document Analytics chart does not display in full-screen mode, displaying the chart on the right.

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After running WFRreposUtilCMDLine.bat or WFRreposUtilCMDLine.sh, the RPT_DATA, RPT_METADATA, and RPT_USAGE tables are not getting dropped and are still available in the repository.

When you use the WebFOCUS Online Help in Japanese, if you type a search term in the Search box that contains NLS characters and press Enter, the words next to the Search box are corrupted. The workaround is to click the Go button next to the Search box, instead of pressing Enter.
To ensure that Choropleth maps run correctly when working with the sample procedure Sales by Country and Product, you must replace the URL on line 155 with: https://services.arcgis.com/P3ePLMYs2RVChkJx/arcgis/rest/services/World_Administrative_Divisions/FeatureServer/0 or open the procedure file in the newer version of the software. The previously provided URL is no longer supported by Esri®.

When creating reports in WebFOCUS Designer using the Technical Preview feature, the default font may not display all NLS characters correctly. To ensure that these characters display properly in reports, change the values of the FONT attributes, in the report section of the embedded StyleSheet you are using, to a font that supports the required NLS characters. For example:

```
TYPE=REPORT, FONT='Arial Unicode MS',$
```

When a user who does not have the Upload Data privilege (opUploadDataFile) creates a chart or report using WebFOCUS Designer, they will still be presented with the Upload option in the Open dialog box when selecting a data source. While they can click Upload, they will be presented with a 403 error because they do not have the required privileges.

The Export Scenario dialog box does not display Master File Shortcuts in the list of available items under the Resources node. Even though they are not visible, Master File Shortcuts are present in the list and can be included in Export Scenarios. In order to add a Master File Shortcut to a scenario you must right-click the folder that contains it and choose the Select with Sub-tree menu option. The Master File Shortcut will be transferred to the Scenario, along with the rest of the items in the folder.

Both the db_collation.sh file and the db_collation.bat file generate the "Main WARN Error while converting string [] to type," error message in the Command Prompt window at the end of their run. This message has no impact on the functionality of this post-installation utility, and it completes the run successfully.

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System Requirements

This release is now certified and has been tested with Google Chrome version 80, Firefox Quantum version 73, Microsoft Edge version 44 (WebFOCUS only), and Internet Explorer version 11 (Compatibility mode is not supported).
8206.15 Release Notes

The following topic provides all the information that you need to know about this release of WebFOCUS.

In this chapter:

- Release and Gen Information
- Fixes
- Upgrade Notes
- Known Issues
- System Requirements

Release and Gen Information

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<td>Friday, February 21, 2020</td>
<td>wf021320a Gen 151 as021320a</td>
<td>8206 Gen 1758</td>
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Fixes

- HTML page layout with responsive template does not display properly when using the Google Chrome™ browser. (200110053)

- A second compute column displays incorrect numbers (plausible wrong results) when using the export to Excel® functionality with In-Document Analytics. (191021088)

- Fixed: Date fields in chained hierarchies are not interacting properly with the other fields in the chain from the autoprompt screen. (190930096)

- Added enhanced flowing of compound reports across pages to ensure the correct pages are generated and page number information is available in more complex reports. (82552524, 11113001)
If you subscribe to a Library item that is imported from another system, ReportCaster will use the value from the original system as the Library notification URL. (190520013)

When in Manage Private Resources mode, a delete deferred report request fails against a cluster Reporting Server configuration. (190516014)

Users with the privilege to CREATE SYNONYM (METAP) do not see a list of Adapter Connections and cannot create synonyms. (191106026, 191113095, 191015109, 191212164)

The final SQL statement generates incorrectly by DataMigrator when using a filter with a specific combination of conditions. (200122015)

An uploaded file used as a cross-reference in a Join to a host without any BV information only shows the cross-reference fields in the WebFOCUS field tree.

Using the adapter for Salesforce.com® for a request with a child-to-parent join, a WHERE condition with an AND clause, or more than one WHERE or IF condition, and a field in the WHERE condition from both segments (data sources) will generate incorrect SOQL and the request fails. (200205086)

Running an HTML report that contains OVER, ACROSS, and SET BYDISPLAY=ACROSS commands results in incorrect output. (190918031)

Restore the \config\was\ folder during upgrades to preserve configurations files used by SAML authentication.

Response time submitting a schedule manually has been improved. (190828112, 191126128)

Date fields in chained hierarchies are not interacting properly with the other fields in the chain from the autoprompt screen. (190930096)

Redirection to the Client trace page (http://<host>:<port>/ibi_apps/WFClientTrace) occurs if there is a JavaScript error when a page reloads. (190815024)

Upgrade Notes

In App Studio, the Action, Method, Enctype, and Accept properties have been removed from the Form component in the Properties panel because these properties were not actually being used.

In App Studio, an output widget container no longer contains the Autosize options in the Properties panel. Everything inside the widget is now fully CSS3 responsive at run time. Autosize is handled by JavaScript and responsive is handled by CSS3 styles.
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After an upgrade to Release 8206, only those users working in roles that include the new Create Shortcuts (opShortcut) privilege, located in the Basic Reporting privilege category, can continue to create shortcuts. Even though this privilege is included in the DomainBasicUser, DomainAdvancedUser, DomainDeveloper, DomainAnalyst, and WebFOCUSManager roles, it is not selected by default. Administrators must either select the Create Shortcuts privilege check box directly, or use the Role Update utility, located on the Configuration tab of the Administration Console, to include this privilege in each of the roles that can continue to use this feature.

The Display Esri Configuration Utility (opEsriAdminConsole) privilege, which granted access to the Esri Configuration Utility, was removed from the Application Development privilege category located on the Roles tab of the Security Center. The new ArcGIS API for JavaScript replaces the Esri Configuration Utility and is available to all users. Existing maps created using the ESRI Configuration Utility continue to work with the new ArcGIS API for JavaScript. However, you cannot upgrade them without first recreating them with the new ESRI HTML5 component-based Point Map or Choropleth Map options available from the WebFOCUS Designer or InfoAssist Chart Picker.

The following changes appear on the InfoAssist Properties page of the Administration Console Configuration tab.

In the Format Tab section:

- The Active PDF option was renamed PDF Analytic Document Format.
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These changes were called for by In-Document Analytics rebranding, and they match changes to the labels of the corresponding format options in the Output File Format list that opens from the Format Group in the InfoAssist Home Page ribbon.

- The functions previously categorized as Statistical Python functions have been reclassified as Machine Learning (Python-based) functions. The names of the functions have changed as follows:

  - BLR_CLASSIFY is now named CLASSIFY_BLR.
  - KNN_CLASSIFY is now named CLASSIFY_KNN.
  - KNN_REGRESS is now named REGRESS_KNN.
  - RF_CLASSIFY is now named CLASSIFY_RF.
  - RF_REGRESS is now named REGRESS_RF.
  - POLY_REGRESS is now named REGRESS_POLY.

- The enhanced In-Document Analytics user interface available is configured by default for new installations and is not supported with the Microsoft Internet Explorer 11 browser. If you have requirements to support Microsoft Internet Explorer 11 browser, you can configure the Legacy In-Document Analytics user interface using the WebFOCUS Administration Console.

Customers upgrading to 8206 from 8205 or earlier releases will have the Legacy In-Document Analytics user interface configured.

The new In-Document Analytics setting appears in the Tools Option Dialog Defaults section of the InfoAssist Properties page, which is located on the Configuration tab of the Administration Console. This setting establishes the default value for the In-Document Analytics setting in the Procedure Settings dialog box which opens from the InfoAssist Quick Access toolbar. The value in this setting determines the interface used to display reports, charts, and documents using the HTML Analytic Document format. There are two valid values:

- **Designer Style.** Content displayed conforms to the conventions of WebFOCUS Designer and includes the Navigation icons, such as the Chart Format menu and the ellipsis menu.
- **Legacy.** Content displayed conforms to the legacy run-time interface and provides options like the legacy column menu.

Content created in earlier versions is automatically assigned to the Legacy display, which conforms to the conventions of the Active Technologies format, and provides options like the Chart/Rollup and Pivot tools.

New content is automatically assigned to the WebFOCUS Designer option, which is selected by default.

To convert content created in earlier versions to the WebFOCUS Designer display, developers must open that content for editing, reset the value in the In-Document Analytics setting to Web FOCUS Designer, and save the revised procedure. As an alternative, developers can use the text editor to add the following commands directly to a procedure:

-DEFAULTH &WF_ARVERSION=2; SET ARVERSION=&WF_ARVERSION;

- **To prevent unexpected field transformations, when creating a chart in WebFOCUS Designer, the buckets are type sensitive.** Certain buckets, such as the Size and Tooltip buckets, only accept measure fields, while others, such as the Horizontal and MultiPage buckets, only accept dimension fields. Additional buckets, such as the Vertical and Color buckets, accept both field types. When you attempt to drag a field into an incompatible bucket, the cursor changes to a cancel sign.

To add a measure field to a dimension bucket or a dimension field to a measure bucket, right-click a field in the Fields panel and click Add as dimension or Add as measure. The field is added to the default dimension or measure bucket. You can drag the field into another bucket, as needed. As in previous releases, measure fields used as dimensions display as distinct instead of aggregated values, while dimension fields used as measures are aggregated using the Count operation.

- **If, in Release 8206.03 and higher, when migrating a chart created in InfoAssist to WebFOCUS Designer, the chart type is not supported and a similar chart type cannot be found, the chart is converted to a bar chart.** You can then modify the bar chart in Designer. Previously, the chart type was maintained, but the buckets were not accessible and the chart could not be edited. Affected chart types include 3D charts, stock charts, and polar charts.

**Note:** To open an InfoAssist chart in WebFOCUS Designer, you must have the associated Technical Preview enabled. For more information, contact your Information Builders representative.
In Release 8206, the default value assigned to the Account Creation on Sign In (IBI_ALLOW_LOGIN_EXTERNAL_GROUPS) setting, located on the External page of the Administration Console Security tab, changes from All to OFF. If you must continue to use All as the default value in this setting, after upgrading to Release 8206, you must open or create the webfocus.cfg file, type the IBI_ALLOW_LOGIN_EXTERNAL_GROUPS=* setting in it, including the asterisk (*) value, which represents All, and then save the updated file.

WebFOCUS page breaks in format XLSX report output are synchronized with Excel page breaks. To revert to the behavior in previous releases in which page breaks were not synchronized, issue the SET XLSXPAGEBRKIGNORE=ON command.

Known Issues

The WebFOCUS help system does not work when the Application Server is configured with Java Version 11. As a workaround, you can configure your WebFOCUS instance to use help hosted by IBI. This provides an additional benefit, as users will have access to the latest content.

To accomplish this, you need to perform the following configuration using the WebFOCUS Administration Console:

1. Select the **Configuration** tab and navigate to **Application Settings** and then **Application Contexts**.
2. Change the **Help** value to /ibi_apps/ibi_help.

   **Note:** The ibi_apps value must be the same as the WebFOCUS web app context created during installation. If you provided an alias, for example, ibi_apps8206, then the value for Help should be entered as /ibi_apps8206/ibi_help.

3. Set the **Help Proxy Host and Port** value to onlinehelp.informationbuilders.com.
4. Set the **Help Proxy Context** to /wfappent/8206. If you are using WebFOCUS Release 8207, set the value to /wfappent/8207.
5. Select the **Help Proxy Secure** check box.
For example:

6. Click the Clear Cache option and continue to sign out and sign in for the settings to take effect.

- Bursting reports by parameter values is not supported with interactive content using the new Designer style of In-Document Analytics capabilities.

- If you create a report or chart in ARVERSION=2 (In-Document Analytics) and you set the output format to PDF Analytic Document, an error occurs when you run it. If you change the option in Procedure Settings to Legacy, the report or chart is produced correctly.

- If you are working with an In-Document Analytics chart in landscape mode on an Android mobile device and you switch to portrait mode, your content displays in full-screen mode. Your chart displays at the bottom. If you run your content in new window mode, your In-Document Analytics chart does not display in full-screen mode, displaying the chart on the right.

- HIDENULLACRS, which hides across columns that have null or zero values in the entire column, is not supported with interactive content using the new Designer style of In-Document Analytics capabilities.

- When creating bar charts using the New option on the Ellipsis menu, the Color bucket incorrectly performs a count for a dimension field. It also shows a heat legend. The expected result is a color legend for each unique item.

- If you add an existing ARVERSION=1 report to an AHTML document set to ARVERSION=2, it fails at run time, displaying JSON text on the screen instead of the expected report output.
If you attempt to run an ARVERSION=2 (In-Document Analytics) AHTML Fusion chart procedure (.fex), it continuously loads and produces an F12 error. This does not occur with Fusion charts that employ ARVERSION=1.

If you are working with a procedure (.fex) and you change the ARVERSION to ARVERSION=2, global filters do not display when you run the procedure.

Running the configuration migration from the CMD line or UNIX Shell displays an error message in the log file. This error does not impact migration of the configuration files.

After running WFRreposUtilCMDLine.bat or WFRreposUtilCMDLine.sh, the RPT_DATA, RPT_METADATA, and RPT_USAGE tables are not getting dropped and are still available in the repository.

When you use the WebFOCUS Online Help in Japanese, if you type a search term in the Search box that contains NLS characters and press Enter, the words next to the Search box are corrupted. The workaround is to click the Go button next to the Search box, instead of pressing Enter.

To ensure that Choropleth maps run correctly when working with the sample procedure Sales by Country and Product, you must replace the URL on line 155 with: https://services.arcgis.com/P3ePLMYs2RVChkJx/arcgis/rest/services/World_Administrative_Divisions/FeatureServer/0 or open the procedure file in the newer version of the software. The previously provided URL is no longer supported by Esri®.

When creating reports in WebFOCUS Designer using the Technical Preview feature, the default font may not display all NLS characters correctly. To ensure that these characters display properly in reports, change the values of the FONT attributes, in the report section of the embedded StyleSheet you are using, to a font that supports the required NLS characters. For example:

```
TYPE=REPORT, FONT='Arial Unicode MS',$
```

When a user who does not have the Upload Data privilege (opUploadDataFile) creates a chart or report using WebFOCUS Designer, they will still be presented with the Upload option in the Open dialog box when selecting a data source. While they can click Upload, they will be presented with a 403 error because they do not have the required privileges.

The Export Scenario dialog box does not display Master File Shortcuts in the list of available items under the Resources node. Even though they are not visible, Master File Shortcuts are present in the list and can be included in Export Scenarios. In order to add a Master File Shortcut to a scenario you must right-click the folder that contains it and choose the Select with Sub-tree menu option. The Master File Shortcut will be transferred to the Scenario, along with the rest of the items in the folder.
Both the db_collation.sh file and the db_collation.bat file generate the "Main WARN Error while converting string [] to type," error message in the Command Prompt window at the end of their run. This message has no impact on the functionality of this post-installation utility, and it completes the run successfully.

The load_repos.sh file generates the "WARNING: sun.reflect.Reflection.getCaller Class is not supported. This will impact performance," error message in the Command Prompt window at the end of its run. In addition, the db_inplace_update.sh, WFRreposUtilCMDLine.sh, and update_repos.sh files generate the "Main WARN Error while converting string [] to type," error message in the Command Prompt window at the end of their run. These messages have no impact on the functionality of these post installation utilities, and each one completes its run successfully.

**System Requirements**

This release is now certified and has been tested with Google Chrome version 79, Firefox Quantum version 73, Microsoft Edge version 44 (WebFOCUS only), and Internet Explorer version 11 (Compatibility mode is not supported).
8206.14 Release Notes

The following topic provides all the information that you need to know about this release of WebFOCUS.

In this chapter:

- Release and Gen Information
- Fixes
- Upgrade Notes
- Known Issues
- System Requirements

Release and Gen Information

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<tr>
<th>Release Date</th>
<th>Gen Information</th>
<th>Reporting Server</th>
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<tbody>
<tr>
<td>Thursday, December 26, 2019</td>
<td>wf121819a Gen 134 as121819a</td>
<td>8206 Gen 1753</td>
</tr>
</tbody>
</table>

Fixes

- A combination of a ReportCaster Schedule with a pre-processing focexec procedure that performs security processing in combination with Resource Analyzer results in an crashed agent. (190829102)

- Conditional styling used with multi-drill (drillmenuitem) is not applied correctly in AHTML report output. (190903114, 191209162)

- MySQL has been certified with the latest version of the JDBC Driver (Connector/J). (191111022)

- Executing a procedure that contains Dialogue Manager commands after an ON TABLE PCHOLD command returns an internal error. (191104062)
On a Windows machine on which two Servers with different releases are installed, when installing an additional configuration for the newer release, the install dialogue only displays the older release as the EDAHOME value. (190729132)

When running Hyperstage on Windows, if the System Event Log is cleared while Hyperstage is running and the bulk loader DLP is executed to perform a load of data, the Hyperstage server becomes inoperable and unusable and any query shows file not found errors. (191209028)

The combination of PRINT MAX.fields or another aggregating prefix with FORMAT SAME_DB results in the skipping of the prefixed fields from the SQL generated. (191128006)

A report runs twice when executed from an HTML page. (191210013)

Creating the default Business View for an OData synonym removes the REFERENCE= key when the synonym is saved. (191016029)

Upgrade Notes

In App Studio, the Action, Method, Enctype, and Accept properties have been removed from the Form component in the Properties panel because these properties were not actually being used.

In App Studio, an output widget container no longer contains the Autosize options in the Properties panel. Everything inside the widget is now fully CSS3 responsive at run time. Autosize is handled by JavaScript and responsive is handled by CSS3 styles.

When upgrading from previous versions of ReportCaster, FTP setting configuration information remains available in existing distribution schedules as long as the default value (Customized FTP) is assigned to the FTP Server Name field.

If you replace this value with a predefined FTP setting configuration in an individual schedule, the previous FTP Setting configuration information for that schedule is overwritten automatically.

If you limit FTP Setting configurations to a predefined list by selecting the Don't allow user defined FTP in schedule check box in the (Default Settings) configuration, the previously FTP Setting configuration information for all schedules becomes unavailable, and is replaced by the default FTP Setting configuration or a predefined FTP Setting configuration selected for an individual schedule.
After an upgrade to Release 8206, only those users working in roles that include the new Create Shortcuts (opShortcut) privilege, located in the Basic Reporting privilege category, can continue to create shortcuts. Even though this privilege is included in the DomainBasicUser, DomainAdvancedUser, DomainDeveloper, DomainAnalyst, and WebFOCUSManager roles, it is not selected by default. Administrators must either select the Create Shortcuts privilege check box directly, or use the Role Update utility, located on the Configuration tab of the Administration Console, to include this privilege in each of the roles that can continue to use this feature.

The Display Esri Configuration Utility (opEsriAdminConsole) privilege, which granted access to the Esri Configuration Utility, was removed from the Application Development privilege category located on the Roles tab of the Security Center. The new ArcGIS API for JavaScript replaces the Esri Configuration Utility and is available to all users. Existing maps created using the ESRI Configuration Utility continue to work with the new ArcGIS API for JavaScript. However, you cannot upgrade them without first recreating them with the new ESRI HTML5 component-based Point Map or Choropleth Map options available from the WebFOCUS Designer or InfoAssist Chart Picker.

The following changes appear on the InfoAssist Properties page of the Administration Console Configuration tab.

In the Format Tab section:

- The Active PDF option was renamed PDF Analytic Document Format.
- The Active Report option was renamed HTML Analytic Document Format.

In the Report Output Format, Chart Output Format, and Document Output Format lists located in the Tools Options Dialog Defaults section:

- The Active Report option was renamed HTML Analytic Document.
- The Active PDF option was renamed PDF Analytic Document.

These changes were called for by In-Document Analytics rebranding, and they match changes to the labels of the corresponding format options in the Output File Format list that opens from the Format Group in the InfoAssist Home Page ribbon.

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KNN_REGRESS is now named REGRESS_KNN.

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The enhanced In-Document Analytics user interface available is configured by default for new installations and is not supported with the Microsoft Internet Explorer 11 browser. If you have requirements to support Microsoft Internet Explorer 11 browser, you can configure the Legacy In-Document Analytics user interface using the WebFOCUS Administration Console.

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- **Legacy.** Content displayed conforms to the legacy run-time interface and provides options like the legacy column menu.

Content created in earlier versions is automatically assigned to the Legacy display, which conforms to the conventions of the Active Technologies format, and provides options like the Chart/Rollup and Pivot tools.

New content is automatically assigned to the WebFOCUS Designer option, which is selected by default.

To convert content created in earlier versions to the WebFOCUS Designer display, developers must open that content for editing, reset the value in the In-Document Analytics setting to WebFOCUS Designer, and save the revised procedure. As an alternative, developers can use the text editor to add the following commands directly to a procedure:

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-DEFAULTH &WF_ARVERSION=2; SET ARVERSION=&WF_ARVERSION;
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To prevent unexpected field transformations, when creating a chart in WebFOCUS Designer, the buckets are type sensitive. Certain buckets, such as the Size and Tooltip buckets, only accept measure fields, while others, such as the Horizontal and MultiPage buckets, only accept dimension fields. Additional buckets, such as the Vertical and Color buckets, accept both field types. When you attempt to drag a field into an incompatible bucket, the cursor changes to a cancel sign.

To add a measure field to a dimension bucket or a dimension field to a measure bucket, right-click a field in the Fields panel and click Add as dimension or Add as measure. The field is added to the default dimension or measure bucket. You can drag the field into another bucket, as needed. As in previous releases, measure fields used as dimensions display as distinct instead of aggregated values, while dimension fields used as measures are aggregated using the Count operation.

If, in Release 8206.03 and higher, when migrating a chart created in InfoAssist to WebFOCUS Designer, the chart type is not supported and a similar chart type cannot be found, the chart is converted to a bar chart. You can then modify the bar chart in Designer. Previously, the chart type was maintained, but the buckets were not accessible and the chart could not be edited. Affected chart types include 3D charts, stock charts, and polar charts.

**Note:** To open an InfoAssist chart in WebFOCUS Designer, you must have the associated Technical Preview enabled. For more information, contact your Information Builders representative.

In Release 8206, the default value assigned to the Account Creation on Sign In (IBI_ALLOW_LOGIN_EXTERNAL_GROUPS) setting, located on the External page of the Administration Console Security tab, changes from All to OFF. If you must continue to use All as the default value in this setting, after upgrading to Release 8206, you must open or create the webfocus.cfg file, type the IBI_ALLOW_LOGIN_EXTERNAL_GROUPS=* setting in it, including the asterisk (*) value, which represents All, and then save the updated file.

WebFOCUS page breaks in format XLSX report output are synchronized with Excel page breaks. To revert to the behavior in previous releases in which page breaks were not synchronized, issue the SET XLSXPAGEBRKIGNORE=ON command.

**Known Issues**

The WebFOCUS help system does not work when the Application Server is configured with Java Version 11. As a workaround, you can configure your WebFOCUS instance to use help hosted by IBI. This provides an additional benefit, as users will have access to the latest content.
To accomplish this, you need to perform the following configuration using the WebFOCUS Administration Console:

1. Select the Configuration tab and navigate to Application Settings and then Application Contexts.

2. Change the Help value to /ibi_apps/ibi_help.
   
   **Note:** The ibi_apps value must be the same as the WebFOCUS web app context created during installation. If you provided an alias, for example, ibi_apps8206, then the value for Help should be entered as /ibi_apps8206/ibi_help.

3. Set the Help Proxy Host and Port value to onlinehelp.informationbuilders.com.

4. Set the Help Proxy Context to /wfappent/8206. If you are using WebFOCUS Release 8207, set the value to /wfappent/8207.

5. Select the Help Proxy Secure check box.

   For example:

   ![Application Contexts Settings](image)

6. Click the Clear Cache option and continue to sign out and sign in for the settings to take effect.

   - Bursting reports by parameter values is not supported with interactive content using the new Designer style of In-Document Analytics capabilities.

   - If you create a report or chart in ARVERSION=2 (In-Document Analytics) and you set the output format to PDF Analytic Document, an error occurs when you run it. If you change the option in Procedure Settings to Legacy, the report or chart is produced correctly.
If you are working with an In-Document Analytics chart in landscape mode on an Android mobile device and you switch to portrait mode, your content displays in fullscreen mode. Your chart displays at the bottom. If you run your content in new window mode, your In-Document Analytics chart does not display in fullscreen mode, displaying the chart on the right.

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When creating bar charts using the New option on the Ellipsis menu, the Color bucket incorrectly performs a count for a dimension field. It also shows a heat legend. The expected result is a color legend for each unique item.

If you add an existing ARVERSION=1 report to an AHTML document set to ARVERSION=2, it fails at run time, displaying JSON text on the screen instead of the expected report output.

If you attempt to run an ARVERSION=2 (In-Document Analytics) AHTML Fusion chart procedure (.fex), it continuously loads and produces an F12 error. This does not occur with Fusion charts that employ ARVERSION=1.

If you are working with a procedure (.fex) and you change the ARVERSION to ARVERSION=2, global filters do not display when you run the procedure.

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When you use the WebFOCUS Online Help in Japanese, if you type a search term in the Search box that contains NLS characters and press Enter, the words next to the Search box are corrupted. The workaround is to click the Go button next to the Search box, instead of pressing Enter.

To ensure that Choropleth maps run correctly when working with the sample procedure Sales by Country and Product, you must replace the URL on line 155 with: https://services.arcgis.com/P3ePLMYs2RVChkJx/arcgis/rest/services/World_Administrative_Divisions/FeatureServer/0 or open the procedure file in the newer version of the software. The previously provided URL is no longer supported by Esri®.
When creating reports in WebFOCUS Designer using the Technical Preview feature, the default font may not display all NLS characters correctly. To ensure that these characters display properly in reports, change the values of the FONT attributes, in the report section of the embedded StyleSheet you are using, to a font that supports the required NLS characters. For example:

```
TYPE=REPORT, FONT='Arial Unicode MS',$
```

When a user who does not have the Upload Data privilege (opUploadDataFile) creates a chart or report using WebFOCUS Designer, they will still be presented with the Upload option in the Open dialog box when selecting a data source. While they can click Upload, they will be presented with a 403 error because they do not have the required privileges.

The Export Scenario dialog box does not display Master File Shortcuts in the list of available items under the Resources node. Even though they are not visible, Master File Shortcuts are present in the list and can be included in Export Scenarios. In order to add a Master File Shortcut to a scenario you must right-click the folder that contains it and choose the Select with Sub-tree menu option. The Master File Shortcut will be transferred to the Scenario, along with the rest of the items in the folder.

Both the db_collation.sh file and the db_collation.bat file generate the "Main WARN Error while converting string [] to type," error message in the Command Prompt window at the end of their run. This message has no impact on the functionality of this post-installation utility, and it completes the run successfully.

The load_repos.sh file generates the "WARNING: sun.reflect.Reflection.getCaller Class is not supported. This will impact performance," error message in the Command Prompt window at the end of its run. In addition, the db_inplace_update.sh, WFReposUtilCMDLine.sh, and update_repos.sh files generate the "Main WARN Error while converting string [] to type," error message in the Command Prompt window at the end of their run. These messages have no impact on the functionality of these post installation utilities, and each one completes its run successfully.

**System Requirements**

This release is now certified and has been tested with Google Chrome version 78, Firefox Quantum version 70, Microsoft Edge version 44 (WebFOCUS only), and Internet Explorer version 11 (Compatibility mode is not supported).
8206.13 Release Notes

The following topic provides all the information that you need to know about this release of WebFOCUS.

In this chapter:

- Release and Gen Information
- New Features
- Fixes
- Upgrade Notes
- Known Issues
- System Requirements

Release and Gen Information

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<td></td>
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New Features

Java Version 11 Support

This release supports Java Version 11.

Fixes

- When setting a SUM field to Japanese yen in an AHTML report, the Yen currency symbol is not reflected in the excel spreadsheet generated using the Export to Excel option at runtime. (191017136)
Running a procedure with an Excel template results in an error: File Level Verification and repair completed. Parts of this book may have been repaired or destroyed. Removed part: drawing shape.

When running an HTML report with PRINT and GRANDTOTAL, the font size of the grand total does not match the rest of the report, even though the font size was not set for the grand total. (190826009)

If the value of a field in an HTML drilldown report starts with a period, WebFOCUS passes the value as _FOC_MISSING. (191017017, 191018023)

Running a procedure that has an Excel template results in an error preventing the population of the macros and buttons in Excel: Excel was able to open the file by repairing or removing the unreadable content. Removed Part: Drawing shape

Attempts to add a new chart fails with an http503 error in Designer when authentication to Reporting Server is configured for Kerberos. (190905049)

The items in a list box control in an Excel template overlap after feeding it data from a WebFOCUS XLSX report. If any items are selected, the date on the first sheet’s Balance Sheet does not update. (190816039)

When a procedure uses an -HTMLFORM to specify a Cascading Style Sheet for styling, a JavaScript error occurs. (191108005)

Migration support for all servers upgraded to release 8206 has been added. (191114079, 190716017, 190710048, 190709118, 190627081, 190613076, 191210061)

Deferred status page returns as blank when Kerberos connection to Reporting Server is configured. (190925013)

When starting InfoAssist the correct group profile is not run when the connection from client to server is Trusted and the group id passed is a custom header with the value of &IIBIMR_domain. (190311125, 190620107, 190814009)

The iSeries 8206 Reporting Server downloadable savefiles are missing key files preventing installation. (191203073)

Upgrade Notes

In App Studio, the Action, Method, Enctype, and Accept properties have been removed from the Form component in the Properties panel because these properties were not actually being used.
In App Studio, an output widget container no longer contains the Autosize options in the Properties panel. Everything inside the widget is now fully CSS3 responsive at run time. Autosize is handled by JavaScript and responsive is handled by CSS3 styles.

When upgrading from previous versions of ReportCaster, FTP setting configuration information remains available in existing distribution schedules as long as the default value (Customized FTP) is assigned to the FTP Server Name field.

If you replace this value with a predefined FTP setting configuration in an individual schedule, the previous FTP Setting configuration information for that schedule is overwritten automatically.

If you limit FTP Setting configurations to a predefined list by selecting the Don’t allow user defined FTP in schedule check box in the (Default Settings) configuration, the previously FTP Setting configuration information for all schedules becomes unavailable, and is replaced by the default FTP Setting configuration or a predefined FTP Setting configuration selected for an individual schedule.

After an upgrade to Release 8206, only those users working in roles that include the new Create Shortcuts (opShortcut) privilege, located in the Basic Reporting privilege category, can continue to create shortcuts. Even though this privilege is included in the DomainBasicUser, DomainAdvancedUser, DomainDeveloper, DomainAnalyst, and WebFOCUSManager roles, it is not selected by default. Administrators must either select the Create Shortcuts privilege check box directly, or use the Role Update utility, located on the Configuration tab of the Administration Console, to include this privilege in each of the roles that can continue to use this feature.

The Display Esri Configuration Utility (opEsriAdminConsole) privilege, which granted access to the Esri Configuration Utility, was removed from the Application Development privilege category located on the Roles tab of the Security Center. The new ArcGIS API for JavaScript replaces the Esri Configuration Utility and is available to all users. Existing maps created using the ESRI Configuration Utility continue to work with the new ArcGIS API for JavaScript. However, you cannot upgrade them without first recreating them with the new ESRI HTML5 component-based Point Map or Choropleth Map options available from the WebFOCUS Designer or InfoAssist Chart Picker.

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- The Active Report option was renamed HTML Analytic Document.
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  - KNN_CLASSIFY is now named CLASSIFY_KNN.
  - KNN_REGRESS is now named REGRESS_KNN.
  - RF_CLASSIFY is now named CLASSIFY_RF.
  - RF_REGRESS is now named REGRESS_RF.
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The enhanced In-Document Analytics user interface available is configured by default for new installations and is not supported with the Microsoft Internet Explorer 11 browser. If you have requirements to support Microsoft Internet Explorer 11 browser, you can configure the Legacy In-Document Analytics user interface using the WebFOCUS Administration Console.

Customers upgrading to 8206 from 8205 or earlier releases will have the Legacy In-Document Analytics user interface configured.
The new In-Document Analytics setting appears in the Tools Option Dialog Defaults section of the InfoAssist Properties page, which is located on the Configuration tab of the Administration Console. This setting establishes the default value for the In-Document Analytics setting in the Procedure Settings dialog box which opens from the InfoAssist Quick Access toolbar. The value in this setting determines the interface used to display reports, charts, and documents using the HTML Analytic Document format. There are two valid values:

- **Designer Style.** Content displayed conforms to the conventions of WebFOCUS Designer and includes the Navigation icons, such as the Chart Format menu and the ellipsis menu.

- **Legacy.** Content displayed conforms to the legacy run-time interface and provides options like the legacy column menu.

Content created in earlier versions is automatically assigned to the Legacy display, which conforms to the conventions of the Active Technologies format, and provides options like the Chart/Rollup and Pivot tools.

New content is automatically assigned to the WebFOCUS Designer option, which is selected by default.

To convert content created in earlier versions to the WebFOCUS Designer display, developers must open that content for editing, reset the value in the In-Document Analytics setting to Web FOCUS Designer, and save the revised procedure. As an alternative, developers can use the text editor to add the following commands directly to a procedure:

```
-DEFAULTH &WF_ARVERSION=2; SET ARVERSION=&WF_ARVERSION;
```

To prevent unexpected field transformations, when creating a chart in WebFOCUS Designer, the buckets are type sensitive. Certain buckets, such as the Size and Tooltip buckets, only accept measure fields, while others, such as the Horizontal and MultiPage buckets, only accept dimension fields. Additional buckets, such as the Vertical and Color buckets, accept both field types. When you attempt to drag a field into an incompatible bucket, the cursor changes to a cancel sign.

To add a measure field to a dimension bucket or a dimension field to a measure bucket, right-click a field in the Fields panel and click Add as dimension or Add as measure. The field is added to the default dimension or measure bucket. You can drag the field into another bucket, as needed. As in previous releases, measure fields used as dimensions display as distinct instead of aggregated values, while dimension fields used as measures are aggregated using the Count operation.
If, in Release 8206.03 and higher, when migrating a chart created in InfoAssist to WebFOCUS Designer, the chart type is not supported and a similar chart type cannot be found, the chart is converted to a bar chart. You can then modify the bar chart in Designer. Previously, the chart type was maintained, but the buckets were not accessible and the chart could not be edited. Affected chart types include 3D charts, stock charts, and polar charts.

**Note:** To open an InfoAssist chart in WebFOCUS Designer, you must have the associated Technical Preview enabled. For more information, contact your Information Builders representative.

In Release 8206, the default value assigned to the Account Creation on Sign In (IBI_ALLOW_LOGIN_EXTERNAL_GROUPS) setting, located on the External page of the Administration Console Security tab, changes from All to OFF. If you must continue to use All as the default value in this setting, after upgrading to Release 8206, you must open or create the webfocus.cfg file, type the IBI_ALLOW_LOGIN_EXTERNAL_GROUPS=* setting in it, including the asterisk (*) value, which represents All, and then save the updated file.

WebFOCUS page breaks in format XLSX report output are synchronized with Excel page breaks. To revert to the behavior in previous releases in which page breaks were not synchronized, issue the SET XLSXPAGEBRKIGNORE=ON command.

Known Issues

- The WebFOCUS help system does not work when the Application Server is configured with Java Version 11. As a workaround, you can configure your WebFOCUS instance to use help hosted by IBI. This provides an additional benefit, as users will have access to the latest content.

To accomplish this, you need to perform the following configuration using the WebFOCUS Administration Console:

1. Select the **Configuration** tab and navigate to **Application Settings** and then **Application Contexts**.

2. Change the **Help** value to `/ibi_apps/ibi_help`.

   **Note:** The `ibi_apps` value must be the same as the WebFOCUS web app context created during installation. If you provided an alias, for example, `ibi_apps8206`, then the value for Help should be entered as `/ibi_apps8206/ibi_help`.

3. Set the **Help Proxy Host and Port** value to `onlinehelp.informationbuilders.com`.

4. Set the **Help Proxy Context** to `/wfappent/8206`. If you are using WebFOCUS Release 8207, set the value to `/wfappent/8207`.  

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5. Select the Help Proxy Secure check box.

For example:

![Image of Configuration window with Application Contexts selected]

6. Click the Clear Cache option and continue to sign out and sign in for the settings to take effect.

- Bursting reports by parameter values is not supported with interactive content using the new Designer style of In-Document Analytics capabilities.

- If you create a report or chart in ARVERSION=2 (In-Document Analytics) and you set the output format to PDF Analytic Document, an error occurs when you run it. If you change the option in Procedure Settings to Legacy, the report or chart is produced correctly.

- If you are working with an In-Document Analytics chart in landscape mode on an Android mobile device and you switch to portrait mode, your content displays in fullscreen mode. Your chart displays at the bottom. If you run your content in new window mode, your In-Document Analytics chart does not display in fullscreen mode, displaying the chart on the right.

- HIDENULLACRS, which hides across columns that have null or zero values in the entire column, is not supported with interactive content using the new Designer style of In-Document Analytics capabilities.

- When creating bar charts using the New option on the Ellipsis menu, the Color bucket incorrectly performs a count for a dimension field. It also shows a heat legend. The expected result is a color legend for each unique item.

- If you add an existing ARVERSION=1 report to an AHTML document set to ARVERSION=2, it fails at run time, displaying JSON text on the screen instead of the expected report output.
If you attempt to run an ARVERSION=2 (In-Document Analytics) AHTML Fusion chart procedure (.fex), it continuously loads and produces an F12 error. This does not occur with Fusion charts that employ ARVERSION=1.

If you are working with a procedure (.fex) and you change the ARVERSION to ARVERSION=2, global filters do not display when you run the procedure.

Running the configuration migration from the CMD line or UNIX Shell displays an error message in the log file. This error does not impact migration of the configuration files.

After running WFRreposUtilCMDLine.bat or WFRreposUtilCMDLine.sh, the RPT_DATA, RPT_METADATA, and RPT_USAGE tables are not getting dropped and are still available in the repository.

When you use the WebFOCUS Online Help in Japanese, if you type a search term in the Search box that contains NLS characters and press Enter, the words next to the Search box are corrupted. The workaround is to click the Go button next to the Search box, instead of pressing Enter.

To ensure that Choropleth maps run correctly when working with the sample procedure Sales by Country and Product, you must replace the URL on line 155 with: https://services.arcgis.com/P3ePLMYs2RVChkJx/arcgis/rest/services/World_Administrative_Divisions/FeatureServer/0 or open the procedure file in the newer version of the software. The previously provided URL is no longer supported by Esri®.

When creating reports in WebFOCUS Designer using the Technical Preview feature, the default font may not display all NLS characters correctly. To ensure that these characters display properly in reports, change the values of the FONT attributes, in the report section of the embedded StyleSheet you are using, to a font that supports the required NLS characters. For example:

```
TYPE=REPORT, FONT='Arial Unicode MS',$
```

When a user who does not have the Upload Data privilege (opUploadDataFile) creates a chart or report using WebFOCUS Designer, they will still be presented with the Upload option in the Open dialog box when selecting a data source. While they can click Upload, they will be presented with a 403 error because they do not have the required privileges.

The Export Scenario dialog box does not display Master File Shortcuts in the list of available items under the Resources node. Even though they are not visible, Master File Shortcuts are present in the list and can be included in Export Scenarios. In order to add a Master File Shortcut to a scenario you must right-click the folder that contains it and choose the Select with Sub-tree menu option. The Master File Shortcut will be transferred to the Scenario, along with the rest of the items in the folder.
Both the db_collation.sh file and the db_collation.bat file generate the "Main WARN Error while converting string [] to type," error message in the Command Prompt window at the end of their run. This message has no impact on the functionality of this post-installation utility, and it completes the run successfully.

The load_repos.sh file generates the "WARNING: sun.reflect.Reflection.getCaller Class is not supported. This will impact performance," error message in the Command Prompt window at the end of its run. In addition, the db_inplace_update.sh, WFRreposUtilCMDLine.sh, and update_repos.sh files generate the "Main WARN Error while converting string [] to type," error message in the Command Prompt window at the end of their run. These messages have no impact on the functionality of these post installation utilities, and each one completes its run successfully.

System Requirements

This release is now certified and has been tested with Google Chrome version 78, Firefox Quantum version 70, Microsoft Edge version 44 (WebFOCUS only), and Internet Explorer version 11 (Compatibility mode is not supported).
8206.12 Release Notes

The following topic provides all the information that you need to know about this release of WebFOCUS.

In this chapter:

- Release and Gen Information
- Fixes
- Upgrade Notes
- Known Issues
- System Requirements

Release and Gen Information

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<tr>
<td>Friday, December 6, 2019</td>
<td>wf120319a Gen 126 as120319a</td>
<td>8206 Gen 1752</td>
</tr>
</tbody>
</table>

Fixes

- When setting a SUM field to Japanese yen in an AHTML report, the Yen currency symbol is not reflected in the excel spreadsheet generated using the Export to Excel option at runtime. (191017136)

- Running a procedure with an Excel template results in an error: File Level Verification and repair completed. Parts of this book may have been repaired or destroyed. Removed part: drawing shape.

- When running an HTML report with PRINT and GRANDTOTAL, the font size of the grand total does not match the rest of the report, even though the font size was not set for the grand total. (190826009)

- If the value of a field in an HTML drilldown report starts with a period, WebFOCUS passes the value as _FOC_MISSING. (191017017, 191018023)
Running a procedure that has an Excel template results in an error preventing the population of the macros and buttons in Excel: Excel was able to open the file by repairing or removing the unreadable content. Removed Part: Drawing shape

Attempts to add a new chart fails with an http503 error in Designer when authentication to Reporting Server is configured for Kerberos. (190905049)

The items in a list box control in an Excel template overlap after feeding it data from a WebFOCUS XLSX report. If any items are selected, the date on the first sheet’s Balance Sheet does not update. (190816039)

Specifying cell padding in the Matrix view causes Report canvas to crash. (191002069)

The text area value is not saved correctly on the second Save selection. (190325026)

Settings dialog tab does not show the selected radio buttons for Sort by and Sort order. (191101001)

The TAB key does not advance to a radio button set as a push button. (191108032)

Maintain migration does not create valid syntax when Winform Set commands are used on the right side of an IF THEN ELSE statement. (191111030)

The Winform set Form.field.Enabled to var code is assigned to Disabled property of the object which disables the field. (191113124)

A request that contains a fully qualified DEFINE field resulted in an error: FOC003 THE FIELDNAME IS NOT RECOGNIZED: SEGMENT.FIELDNAME (190723037)

Running a dashboard that submits multiple requests against a Vertica database can result in a JSCOM3 crash due to the number of concurrent requests to the Vertica JDBC driver or JVM. (191004040)

**Upgrade Notes**

- In App Studio, the Action, Method, Enctype, and Accept properties have been removed from the Form component in the Properties panel because these properties were not actually being used.

- In App Studio, an output widget container no longer contains the Autosize options in the Properties panel. Everything inside the widget is now fully CSS3 responsive at run time. Autosize is handled by JavaScript and responsive is handled by CSS3 styles.
When upgrading from previous versions of ReportCaster, FTP setting configuration information remains available in existing distribution schedules as long as the default value (Customized FTP) is assigned to the FTP Server Name field.

If you replace this value with a predefined FTP setting configuration in an individual schedule, the previous FTP Setting configuration information for that schedule is overwritten automatically.

If you limit FTP Setting configurations to a predefined list by selecting the Don’t allow user defined FTP in schedule check box in the (Default Settings) configuration, the previously FTP Setting configuration information for all schedules becomes unavailable, and is replaced by the default FTP Setting configuration or a predefined FTP Setting configuration selected for an individual schedule.

After an upgrade to Release 8206, only those users working in roles that include the new Create Shortcuts (opShortcut) privilege, located in the Basic Reporting privilege category, can continue to create shortcuts. Even though this privilege is included in the DomainBasicUser, DomainAdvancedUser, DomainDeveloper, DomainAnalyst, and WebFOCUSManager roles, it is not selected by default. Administrators must either select the Create Shortcuts privilege check box directly, or use the Role Update utility, located on the Configuration tab of the Administration Console, to include this privilege in each of the roles that can continue to use this feature.

The Display Esri Configuration Utility (opEsriAdminConsole) privilege, which granted access to the Esri Configuration Utility, was removed from the Application Development privilege category located on the Roles tab of the Security Center. The new ArcGIS API for JavaScript replaces the Esri Configuration Utility and is available to all users. Existing maps created using the ESRI Configuration Utility continue to work with the new ArcGIS API for JavaScript. However, you cannot upgrade them without first recreating them with the new ESRI HTML5 component-based Point Map or Choropleth Map options available from the WebFOCUS Designer or InfoAssist Chart Picker.

The following changes appear on the InfoAssist Properties page of the Administration Console Configuration tab.

In the Format Tab section:

- The Active PDF option was renamed PDF Analytic Document Format.
- The Active Report option was renamed HTML Analytic Document Format.
In the Report Output Format, Chart Output Format, and Document Output Format lists located in the Tools Options Dialog Defaults section:

- The Active Report option was renamed HTML Analytic Document.
- The Active PDF option was renamed PDF Analytic Document.

These changes were called for by In-Document Analytics rebranding, and they match changes to the labels of the corresponding format options in the Output File Format list that opens from the Format Group in the InfoAssist Home Page ribbon.

- The functions previously categorized as Statistical Python functions have been reclassified as Machine Learning (Python-based) functions. The names of the functions have changed as follows:
  - BLR_CLASSIFY is now named CLASSIFY_BLR.
  - KNN_CLASSIFY is now named CLASSIFY_KNN.
  - KNN_REGRESS is now named REGRESS_KNN.
  - RF_CLASSIFY is now named CLASSIFY_RF.
  - RF_REGRESS is now named REGRESS_RF.
  - POLY_REGRESS is now named REGRESS_POLY.

- The enhanced In-Document Analytics user interface available is configured by default for new installations and is not supported with the Microsoft Internet Explorer 11 browser. If you have requirements to support Microsoft Internet Explorer 11 browser, you can configure the Legacy In-Document Analytics user interface using the WebFOCUS Administration Console.

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WebFOCUS page breaks in format XLSX report output are synchronized with Excel page breaks. To revert to the behavior in previous releases in which page breaks were not synchronized, issue the SET XLSXPAGEBKRKIGNORE=ON command.

**Known Issues**

- Bursting reports by parameter values is not supported with interactive content using the new Designer style of In-Document Analytics capabilities.

- If you create a report or chart in ARVERSION=2 (In-Document Analytics) and you set the output format to PDF Analytic Document, an error occurs when you run it. If you change the option in Procedure Settings to Legacy, the report or chart is produced correctly.

- If you are working with an In-Document Analytics chart in landscape mode on an Android mobile device and you switch to portrait mode, your content displays in fullscreen mode. Your chart displays at the bottom. If you run your content in new window mode, your In-Document Analytics chart does not display in fullscreen mode, displaying the chart on the right.

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To ensure that Choropleth maps run correctly when working with the sample procedure Sales by Country and Product, you must replace the URL on line 155 with: https://services.arcgis.com/P3ePLMYs2RVChkJx/arcgis/rest/services/World_Administrative_Divisions/FeatureServer/0 or open the procedure file in the newer version of the software. The previously provided URL is no longer supported by Esri®.

When creating reports in WebFOCUS Designer using the Technical Preview feature, the default font may not display all NLS characters correctly. To ensure that these characters display properly in reports, change the values of the FONT attributes, in the report section of the embedded StyleSheet you are using, to a font that supports the required NLS characters. For example:

```
TYPE=REPORT, FONT='Arial Unicode MS',$
```

When a user who does not have the Upload Data privilege (opUploadDataFile) creates a chart or report using WebFOCUS Designer, they will still be presented with the Upload option in the Open dialog box when selecting a data source. While they can click Upload, they will be presented with a 403 error because they do not have the required privileges.

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System Requirements

This release is now certified and has been tested with Google Chrome version 78, Firefox Quantum version 70, Microsoft Edge version 44 (WebFOCUS only), and Internet Explorer version 11 (Compatibility mode is not supported).
8206.11 Release Notes

The following topic provides all the information that you need to know about this release of WebFOCUS.

**In this chapter:**

- Release and Gen Information
- Fixes
- Upgrade Notes
- Known Issues
- System Requirements

## Release and Gen Information

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</tr>
<tr>
<td></td>
<td>as111919a</td>
<td></td>
</tr>
</tbody>
</table>

## Fixes

- Unable to delete a JOIN in a multi-fact Master File in a Metadata canvas. (191018008)

- Creating a synonym for the REST adapter with Resource Management active may result in the following error: FOC1544 Syntax error (191105068)

- JSON Array notation was not being set when ACCESS_PROPERTY=(ARRAY_ITEM) was set in the Metadata and proper statements were sent in the request. (191028106)

- An invalid URL was created with multiple question mark characters (?) while signing out of a WebFOCUS portal when WebFOCUS was configured for Security Assertion Markup Language authentication and single sign out was disabled. (191003101)

- The jakarta-regexp-1.5.jar file has been removed.
An invalid URL is created with multiple question mark characters (?) while signing out of a WebFOCUS portal when WebFOCUS is configured for Security Assertion Markup Language authentication and single sign out is disabled. (191003101)

Web Console support was added for the OData Aggregation Extension setting. (191112059)

If an iframe is being loaded with another HTML Canvas page, there will be a spinner for the loading of the page, and then another spinner for the content on that page. (191011031)

The checkbox control fails when using IBComposer_setCurrentSelection with multiple values. (191021066)

The text on push-type radio buttons disappears with hide or show animations. (191101025)

Dynamic Symbol Settings does not refresh the Image Source, Color or Image Angle. (191007019)

ONLOAD will not select the correct value if there are over 100 values in a control that it is chained to. (191108001)

Setting security to shared results in a NullPointerException error when the schedule is executed. (190822154)

JSON array notation is not set when ACCESS_PROPERTY=(ARRAY_ITEM) is set in the Metadata and proper statements are sent in the request. (191028106)

Upgrade Notes

In App Studio, the Action, Method, Enctype, and Accept properties have been removed from the Form component in the Properties panel because these properties were not actually being used.

In App Studio, an output widget container no longer contains the Autosize options in the Properties panel. Everything inside the widget is now fully CSS3 responsive at run time. Autosize is handled by JavaScript and responsive is handled by CSS3 styles.

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- KNN_CLASSIFY is now named CLASSIFY_KNN.
- KNN_REGRESS is now named REGRESS_KNN.
- RF_CLASSIFY is now named CLASSIFY_RF.
- RF_REGRESS is now named REGRESS_RF.
- POLY_REGRESS is now named REGRESS_POLY.

The enhanced In-Document Analytics user interface available is configured by default for new installations and is not supported with the Microsoft Internet Explorer 11 browser. If you have requirements to support Microsoft Internet Explorer 11 browser, you can configure the Legacy In-Document Analytics user interface using the WebFOCUS Administration Console.

Customers upgrading to 8206 from 8205 or earlier releases will have the Legacy In-Document Analytics user interface configured.

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Content created in earlier versions is automatically assigned to the Legacy display, which conforms to the conventions of the Active Technologies format, and provides options like the Chart/Rollup and Pivot tools.

New content is automatically assigned to the WebFOCUS Designer option, which is selected by default.
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-DEFAULTH &WF_ARVERSION=2; SET ARVERSION=&WF_ARVERSION;
```

- To prevent unexpected field transformations, when creating a chart in WebFOCUS Designer, the buckets are type sensitive. Certain buckets, such as the Size and Tooltip buckets, only accept measure fields, while others, such as the Horizontal and MultiPage buckets, only accept dimension fields. Additional buckets, such as the Vertical and Color buckets, accept both field types. When you attempt to drag a field into an incompatible bucket, the cursor changes to a cancel sign.

- To add a measure field to a dimension bucket or a dimension field to a measure bucket, right-click a field in the Fields panel and click Add as dimension or Add as measure. The field is added to the default dimension or measure bucket. You can drag the field into another bucket, as needed. As in previous releases, measure fields used as dimensions display as distinct instead of aggregated values, while dimension fields used as measures are aggregated using the Count operation.

- If, in Release 8206.03 and higher, when migrating a chart created in InfoAssist to WebFOCUS Designer, the chart type is not supported and a similar chart type cannot be found, the chart is converted to a bar chart. You can then modify the bar chart in Designer. Previously, the chart type was maintained, but the buckets were not accessible and the chart could not be edited. Affected chart types include 3D charts, stock charts, and polar charts.

  **Note:** To open an InfoAssist chart in WebFOCUS Designer, you must have the associated Technical Preview enabled. For more information, contact your Information Builders representative.

- In Release 8206, the default value assigned to the Account Creation on Sign In (IBI_ALLOW_LOGIN_EXTERNAL_GROUPS) setting, located on the External page of the Administration Console Security tab, changes from All to OFF. If you must continue to use All as the default value in this setting, after upgrading to Release 8206, you must open or create the webfocus.cfg file, type the IBI_ALLOW_LOGIN_EXTERNAL_GROUPS=* setting in it, including the asterisk (*) value, which represents All, and then save the updated file.

- WebFOCUS page breaks in format XLSX report output are synchronized with Excel page breaks. To revert to the behavior in previous releases in which page breaks were not synchronized, issue the SET XLSXPAGEBRKIGNORE=ON command.
Known Issues

- Bursting reports by parameter values is not supported with interactive content using the new Designer style of In-Document Analytics capabilities.

- If you create a report or chart in ARVERSION=2 (In-Document Analytics) and you set the output format to PDF Analytic Document, an error occurs when you run it. If you change the option in Procedure Settings to Legacy, the report or chart is produced correctly.

- If you are working with an In-Document Analytics chart in landscape mode on an Android mobile device and you switch to portrait mode, your content displays in fullscreen mode. Your chart displays at the bottom. If you run your content in new window mode, your In-Document Analytics chart does not display in fullscreen mode, displaying the chart on the right.

- HIDENULLACRS, which hides across columns that have null or zero values in the entire column, is not supported with interactive content using the new Designer style of In-Document Analytics capabilities.

- When creating bar charts using the New option on the Ellipsis menu, the Color bucket incorrectly performs a count for a dimension field. It also shows a heat legend. The expected result is a color legend for each unique item.

- If you add an existing ARVERSION=1 report to an AHTML document set to ARVERSION=2, it fails at run time, displaying JSON text on the screen instead of the expected report output.

- If you attempt to run an ARVERSION=2 (In-Document Analytics) AHTML Fusion chart procedure (.fex), it continuously loads and produces an F12 error. This does not occur with Fusion charts that employ ARVERSION=1.

- If you are working with a procedure (.fex) and you change the ARVERSION to ARVERSION=2, global filters do not display when you run the procedure.

- Running the configuration migration from the CMD line or UNIX Shell displays an error message in the log file. This error does not impact migration of the configuration files.

- After running WFRreposUtilCMDLine.bat or WFRreposUtilCMDLine.sh, the RPT_DATA, RPT_METADATA, and RPT_USAGE tables are not getting dropped and are still available in the repository.

- When you use the WebFOCUS Online Help in Japanese, if you type a search term in the Search box that contains NLS characters and press Enter, the words next to the Search box are corrupted. The workaround is to click the Go button next to the Search box, instead of pressing Enter.
To ensure that Choropleth maps run correctly when working with the sample procedure Sales by Country and Product, you must replace the URL on line 155 with: https://services.arcgis.com/P3ePLMYs2RVChkJx/arcgis/rest/services/World_Administrative_Divisions/FeatureServer/0 or open the procedure file in the newer version of the software. The previously provided URL is no longer supported by Esri®.

When creating reports in WebFOCUS Designer using the Technical Preview feature, the default font may not display all NLS characters correctly. To ensure that these characters display properly in reports, change the values of the FONT attributes, in the report section of the embedded StyleSheet you are using, to a font that supports the required NLS characters. For example:

```
TYPE=REPORT, FONT='Arial Unicode MS',$
```

When a user who does not have the Upload Data privilege (opUploadDataFile) creates a chart or report using WebFOCUS Designer, they will still be presented with the Upload option in the Open dialog box when selecting a data source. While they can click Upload, they will be presented with a 403 error because they do not have the required privileges.

The Export Scenario dialog box does not display Master File Shortcuts in the list of available items under the Resources node. Even though they are not visible, Master File Shortcuts are present in the list and can be included in Export Scenarios. In order to add a Master File Shortcut to a scenario you must right-click the folder that contains it and choose the Select with Sub-tree menu option. The Master File Shortcut will be transferred to the Scenario, along with the rest of the items in the folder.

Both the db_collation.sh file and the db_collation.bat file generate the "Main WARN Error while converting string [ ] to type," error message in the Command Prompt window at the end of their run. This message has no impact on the functionality of this post-installation utility, and it completes the run successfully.

The load_repos.sh file generates the "WARNING: sun.reflect.Reflection.getCaller Class is not supported. This will impact performance," error message in the Command Prompt window at the end of its run. In addition, the db_inplace_update.sh, WFReposUtilCMDLine.sh, and update_repos.sh files generate the "Main WARN Error while converting string [ ] to type," error message in the Command Prompt window at the end of their run. These messages have no impact on the functionality of these post installation utilities, and each one completes its run successfully.
System Requirements

This release is now certified and has been tested with Google Chrome version 78, Firefox Quantum version 70, Microsoft Edge version 44 (WebFOCUS only), and Internet Explorer version 11 (Compatibility mode is not supported).
8206.10 Release Notes

The following topic provides all the information that you need to know about this release of WebFOCUS.

In this chapter:

- Release and Gen Information
- New Features
- Fixes
- Upgrade Notes
- Known Issues
- System Requirements

Release and Gen Information

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<tr>
<td>Wednesday, November 13, 2019</td>
<td>wf110419a Gen 115 as110419a</td>
<td>8206 Gen 1749</td>
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New Features

New Settings Support the Solr Search Engine Configuration

New settings, located on the Search Settings page of the Administration Console Configuration tab, identify the location of the Solr search engine and the credentials required to authenticate InfoSearch calls from the WebFOCUS Client to the Solr search engine.

- **Solr URL (IBI_INFOSEARCH_SOLR_URL).** Identifies the URL for the Solr Search engine. Calls for indexing and searches are directed to this URL.

- **Username for Basic Authentication (IBI_SEARCH_USERNAME).** Identifies the user name that authenticates Solr-based indexing and search queries.
Password for Basic Authentication (IBI_SEARCH_PASSWORD). Identifies the password that authenticates Solr-based indexing and search queries.

Collection Name (IBI_SEARCH_COLLECTION). Contains the name of the collection that contains your search data and is accessible only with a valid Solr username and password.

The placement of these settings in the administration console makes them readily available for configuration and updates.

For more information, see the Search Settings topic of the Security and Administration technical content.

Fixes

- The Title property is not updated in the Environments Detail panel. (190919107)
- When required parameter values are not entered on a multipage control, the red borders around those controls display on other pages. (191010015)
- There is a time lag between the user and the editor when typing in the JavaScript editor. (190911081)
- If the first report results in no output in an XLSX compound document, the column titles for the second report are missing in the resulting XLSX workbook. (190802013)
- In an HTML report, TABLE SUBHEAD is duplicated on empty reports using ACROSSTITLE=SIDE. (10513510)
- Corrupt PowerPoint output is generated when a template containing 38 or more slides is used in a PPTX report.
- When outputting to Excel, if Japanese is selected as the language and the default font is bold, the column width is not set correctly and cuts off some of the data. (190322024)
- Enhanced functionality has been added to the Create Synonym process for the OData adapter to support creating the SEGTYPE definition for child segments based on the OData Service Navigation property. A Single Entity definition within the OData Service will translate to SEGTYPE=U. (190903139)
- Library distribution of Excel content has incorrect drilldown URLs. (190409040)

Upgrade Notes

- In App Studio, the Action, Method, Enctype, and Accept properties have been removed from the Form component in the Properties panel because these properties were not actually being used.
In App Studio, an output widget container no longer contains the Autosize options in the Properties panel. Everything inside the widget is now fully CSS3 responsive at run time. Autosize is handled by JavaScript and responsive is handled by CSS3 styles.

When upgrading from previous versions of ReportCaster, FTP setting configuration information remains available in existing distribution schedules as long as the default value (Customized FTP) is assigned to the FTP Server Name field.

If you replace this value with a predefined FTP setting configuration in an individual schedule, the previous FTP Setting configuration information for that schedule is overwritten automatically.

If you limit FTP Setting configurations to a predefined list by selecting the Don't allow user defined FTP in schedule check box in the (Default Settings) configuration, the previously FTP Setting configuration information for all schedules becomes unavailable, and is replaced by the default FTP Setting configuration or a predefined FTP Setting configuration selected for an individual schedule.

After an upgrade to Release 8206, only those users working in roles that include the new Create Shortcuts (opShortcut) privilege, located in the Basic Reporting privilege category, can continue to create shortcuts. Even though this privilege is included in the DomainBasicUser, DomainAdvancedUser, DomainDeveloper, DomainAnalyst, and WebFOCUSManager roles, it is not selected by default. Administrators must either select the Create Shortcuts privilege check box directly, or use the Role Update utility, located on the Configuration tab of the Administration Console, to include this privilege in each of the roles that can continue to use this feature.

The Display Esri Configuration Utility (opEsriAdminConsole) privilege, which granted access to the Esri Configuration Utility, was removed from the Application Development privilege category located on the Roles tab of the Security Center. The new ArcGIS API for JavaScript replaces the Esri Configuration Utility and is available to all users. Existing maps created using the ESRI Configuration Utility continue to work with the new ArcGIS API for JavaScript. However, you cannot upgrade them without first recreating them with the new ESRI HTML5 component-based Point Map or Choropleth Map options available from the WebFOCUS Designer or InfoAssist Chart Picker.

The following changes appear on the InfoAssist Properties page of the Administration Console Configuration tab.

In the Format Tab section:

- The Active PDF option was renamed PDF Analytic Document Format.
The Active Report option was renamed HTML Analytic Document Format.

In the Report Output Format, Chart Output Format, and Document Output Format lists located in the Tools Options Dialog Defaults section:

- The Active Report option was renamed HTML Analytic Document.
- The Active PDF option was renamed PDF Analytic Document.

These changes were called for by In-Document Analytics rebranding, and they match changes to the labels of the corresponding format options in the Output File Format list that opens from the Format Group in the InfoAssist Home Page ribbon.

The functions previously categorized as Statistical Python functions have been reclassified as Machine Learning (Python-based) functions. The names of the functions have changed as follows:

- BLR_CLASSIFY is now named CLASSIFY_BLR.
- KNN_CLASSIFY is now named CLASSIFY_KNN.
- KNN_REGRESS is now named REGRESS_KNN.
- RF_CLASSIFY is now named CLASSIFY_RF.
- RF_REGRESS is now named REGRESS_RF.
- POLY_REGRESS is now named REGRESS_POLY.

The enhanced In-Document Analytics user interface available is configured by default for new installations and is not supported with the Microsoft Internet Explorer 11 browser. If you have requirements to support Microsoft Internet Explorer 11 browser, you can configure the Legacy In-Document Analytics user interface using the WebFOCUS Administration Console.

Customers upgrading to 8206 from 8205 or earlier releases will have the Legacy In-Document Analytics user interface configured.
The new In-Document Analytics setting appears in the Tools Option Dialog Defaults section of the InfoAssist Properties page, which is located on the Configuration tab of the Administration Console. This setting establishes the default value for the In-Document Analytics setting in the Procedure Settings dialog box which opens from the InfoAssist Quick Access toolbar. The value in this setting determines the interface used to display reports, charts, and documents using the HTML Analytic Document format. There are two valid values:

- **Designer Style.** Content displayed conforms to the conventions of WebFOCUS Designer and includes the Navigation icons, such as the Chart Format menu and the ellipsis menu.

- **Legacy.** Content displayed conforms to the legacy run-time interface and provides options like the legacy column menu.

Content created in earlier versions is automatically assigned to the Legacy display, which conforms to the conventions of the Active Technologies format, and provides options like the Chart/Rollup and Pivot tools.

New content is automatically assigned to the WebFOCUS Designer option, which is selected by default.

To convert content created in earlier versions to the WebFOCUS Designer display, developers must open that content for editing, reset the value in the In-Document Analytics setting to WebFOCUS Designer, and save the revised procedure. As an alternative, developers can use the text editor to add the following commands directly to a procedure:

```
-DEFAULTH &WF_ARVERSION=2; SET ARVERSION=&WF_ARVERSION;
```

- To prevent unexpected field transformations, when creating a chart in WebFOCUS Designer, the buckets are type sensitive. Certain buckets, such as the Size and Tooltip buckets, only accept measure fields, while others, such as the Horizontal and MultiPage buckets, only accept dimension fields. Additional buckets, such as the Vertical and Color buckets, accept both field types. When you attempt to drag a field into an incompatible bucket, the cursor changes to a cancel sign.

To add a measure field to a dimension bucket or a dimension field to a measure bucket, right-click a field in the Fields panel and click Add as dimension or Add as measure. The field is added to the default dimension or measure bucket. You can drag the field into another bucket, as needed. As in previous releases, measure fields used as dimensions display as distinct instead of aggregated values, while dimension fields used as measures are aggregated using the Count operation.
If, in Release 8206.03 and higher, when migrating a chart created in InfoAssist to WebFOCUS Designer, the chart type is not supported and a similar chart type cannot be found, the chart is converted to a bar chart. You can then modify the bar chart in Designer. Previously, the chart type was maintained, but the buckets were not accessible and the chart could not be edited. Affected chart types include 3D charts, stock charts, and polar charts.

**Note:** To open an InfoAssist chart in WebFOCUS Designer, you must have the associated Technical Preview enabled. For more information, contact your Information Builders representative.

In Release 8206, the default value assigned to the Account Creation on Sign In (IBI_ALLOW_LOGIN_EXTERNAL_GROUPS) setting, located on the External page of the Administration Console Security tab, changes from All to OFF. If you must continue to use All as the default value in this setting, after upgrading to Release 8206, you must open or create the webfocus.cfg file, type the IBI_ALLOW_LOGIN_EXTERNAL_GROUPS=* setting in it, including the asterisk (*) value, which represents All, and then save the updated file.

WebFOCUS page breaks in format XLSX report output are synchronized with Excel page breaks. To revert to the behavior in previous releases in which page breaks were not synchronized, issue the SET XLSXPAGEBRKIGNORE=ON command.

**Known Issues**

- Bursting reports by parameter values is not supported with interactive content using the new Designer style of In-Document Analytics capabilities.

- If you create a report or chart in ARVERSION=2 (In-Document Analytics) and you set the output format to PDF Analytic Document, an error occurs when you run it. If you change the option in Procedure Settings to Legacy, the report or chart is produced correctly.

- If you are working with an In-Document Analytics chart in landscape mode on an Android mobile device and you switch to portrait mode, your content displays in fullscreen mode. Your chart displays at the bottom. If you run your content in new window mode, your In-Document Analytics chart does not display in fullscreen mode, displaying the chart on the right.

- HIDENULLACRS, which hides across columns that have null or zero values in the entire column, is not supported with interactive content using the new Designer style of In-Document Analytics capabilities.
When creating bar charts using the New option on the Ellipsis menu, the Color bucket incorrectly performs a count for a dimension field. It also shows a heat legend. The expected result is a color legend for each unique item.

If you add an existing ARVERSION=1 report to an AHTML document set to ARVERSION=2, it fails at run time, displaying JSON text on the screen instead of the expected report output.

If you attempt to run an ARVERSION=2 (In-Document Analytics) AHTML Fusion chart procedure (.fex), it continuously loads and produces an F12 error. This does not occur with Fusion charts that employ ARVERSION=1.

If you are working with a procedure (.fex) and you change the ARVERSION to ARVERSION=2, global filters do not display when you run the procedure.

Running the configuration migration from the CMD line or UNIX Shell displays an error message in the log file. This error does not impact migration of the configuration files.

After running WFReposUtilCMDLine.bat or WFReposUtilCMDLine.sh, the RPT_DATA, RPT_METADATA, and RPT_USAGE tables are not getting dropped and are still available in the repository.

When you use the WebFOCUS Online Help in Japanese, if you type a search term in the Search box that contains NLS characters and press Enter, the words next to the Search box are corrupted. The workaround is to click the Go button next to the Search box, instead of pressing Enter.

To ensure that Choropleth maps run correctly when working with the sample procedure Sales by Country and Product, you must replace the URL on line 155 with: https://services.arcgis.com/P3ePLMYs2RVChkJx/arcgis/rest/services/World_Administrative_Divisions/FeatureServer/0 or open the procedure file in the newer version of the software. The previously provided URL is no longer supported by Esri.

When creating reports in WebFOCUS Designer using the Technical Preview feature, the default font may not display all NLS characters correctly. To ensure that these characters display properly in reports, change the values of the FONT attributes, in the report section of the embedded StyleSheet you are using, to a font that supports the required NLS characters. For example:

```
TYPE=REPORT, FONT='Arial Unicode MS',$
```

When a user who does not have the Upload Data privilege (opUploadDataFile) creates a chart or report using WebFOCUS Designer, they will still be presented with the Upload option in the Open dialog box when selecting a data source. While they can click Upload, they will be presented with a 403 error because they do not have the required privileges.
Kerberos Authentication cannot be completed successfully in installations of WebFOCUS that use Java version 1.8.0_212, which is currently delivered in the WebFOCUS installation. In order to address this issue, replace version 1.8.0_212 with the latest available version of Java, currently 1.8.0_232. Upcoming WebFOCUS installations will include the most recent working version of Java.

Field Titles are not displayed properly on HTML charts in installations of WebFOCUS that are configured for the Japanese language and use Java version 1.8.0_212, which is currently delivered in the WebFOCUS installation. In order to address this issue, replace version 1.8.0_212 with the latest available version of Java, currently 1.8.0_232. Upcoming WebFOCUS installations will include the most recent working version of Java.

The Export Scenario dialog box does not display Master File Shortcuts in the list of available items under the Resources node. Even though they are not visible, Master File Shortcuts are present in the list and can be included in Export Scenarios. In order to add a Master File Shortcut to a scenario you must right-click the folder that contains it and choose the Select with Sub-tree menu option. The Master File Shortcut will be transferred to the Scenario, along with the rest of the items in the folder.

Both the db_collation.sh file and the db_collation.bat file generate the "Main WARN Error while converting string [ ] to type," error message in the Command Prompt window at the end of their run. This message has no impact on the functionality of this post-installation utility, and it completes the run successfully.

The load_repos.sh file generates the "WARNING: sun.reflect.Reflection.getCaller Class is not supported. This will impact performance," error message in the Command Prompt window at the end of its run. In addition, the db_inplace_update.sh, WFReposUtilCMDLine.sh, and update_repos.sh files generate the "Main WARN Error while converting string [ ] to type," error message in the Command Prompt window at the end of their run. These messages have no impact on the functionality of these post installation utilities, and each one completes its run successfully.

System Requirements

This release is now certified and has been tested with Google Chrome version 77, Firefox version 69, Microsoft Edge version 44 (WebFOCUS only), and Internet Explorer version 11 (Compatibility mode is not supported).
8206.09 Release Notes

The following topic provides all the information that you need to know about this release of WebFOCUS.

In this chapter:

- Release and Gen Information
- New Features
- Fixes
- Upgrade Notes
- Known Issues
- System Requirements

Release and Gen Information

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<td>wf100819a Gen 99 as100819a</td>
<td>8206 Gen 1746</td>
</tr>
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New Features
Updates to the Sort Capabilities for Columns in a Report

You can now sort the columns in your report using the ascending and descending radio buttons, as shown in the following image.

![Sort Capabilities](image)

You can also use the up and down arrows in the column header to sort your columnar data. For more information, see the In-Document Analytics User's Guide.

Fixes

- When App Studio is set to Japanese, the border style properties is not reflected in preview or at run time. (190910014)

- Double-clicking a Master File in the filtered file list selects a Master File in the file list behind the filtered list and opens InfoAssist. (190725036)

- An HTTP 403 error or blank screen displays when attempting to access the Reporting Server Console from the WebFOCUS Administration Console after signing out and signing back into WebFOCUS. (190618027)

- The Microsoft Azure SQL Data Warehouse is available for SQL reports. (190522028)

- The third page in a collaborative portal populated with HTML pages created in App Studio appears as blank. (191007059)

- When the following SET command is active, InfoAssist requests will fail, after a system is selected: ENGINE INT SET MFACT-OUTPUT SQL (190925023)

- The Resource Management archive job reports successful processing although an error has occurred and no data is loaded into the repository. Due to this combination, the input rmldata.log data file is also deleted. (190808063)

- Attempting to page a very wide In-Document Analytics cached document may result in a blank page. (190603013).
In Dialogue Manager, creating an amper variable using concatenation within a looping IF...THEN...ELSE phrase causes the server to crash after the variable exceeds 200 characters. (190905104)

When running the Web Console's download function using Internet Explorer 11, Japanese file names are corrupted when they display in dialog boxes or the browser's status line. (190903011)

Running a .fex that uses DYNAM SUBMIT causes a S0C4/agent crash. (190920058)

Magnify search is slow when feeds contain errors. (190820042)

The text value ' of ' is not translated to Portuguese while working with an AHTML chart at run-time and showing a percentage of a value in the chart tooltip. (190410130)

Upgrade Notes

In App Studio, the Action, Method, Enctype, and Accept properties have been removed from the Form component in the Properties panel because these properties were not actually being used.

In App Studio, an output widget container no longer contains the Autosize options in the Properties panel. Everything inside the widget is now fully CSS3 responsive at run time. Autosize is handled by JavaScript and responsive is handled by CSS3 styles.

When upgrading from previous versions of ReportCaster, FTP setting configuration information remains available in existing distribution schedules as long as the default value (Customized FTP) is assigned to the FTP Server Name field.

If you replace this value with a predefined FTP setting configuration in an individual schedule, the previous FTP Setting configuration information for that schedule is overwritten automatically.

If you limit FTP Setting configurations to a predefined list by selecting the Don't allow user defined FTP in schedule check box in the (Default Settings) configuration, the previously FTP Setting configuration information for all schedules becomes unavailable, and is replaced by the default FTP Setting configuration or a predefined FTP Setting configuration selected for an individual schedule.
After an upgrade to Release 8206, only those users working in roles that include the new Create Shortcuts (opShortcut) privilege, located in the Basic Reporting privilege category, can continue to create shortcuts. Even though this privilege is included in the DomainBasicUser, DomainAdvancedUser, DomainDeveloper, DomainAnalyst, and WebFOCUSManager roles, it is not selected by default. Administrators must either select the Create Shortcuts privilege check box directly, or use the Role Update utility, located on the Configuration tab of the Administration Console, to include this privilege in each of the roles that can continue to use this feature.

The Display Esri Configuration Utility (opEsriAdminConsole) privilege, which granted access to the Esri Configuration Utility, was removed from the Application Development privilege category located on the Roles tab of the Security Center. The new ArcGIS API for JavaScript replaces the Esri Configuration Utility and is available to all users. Existing maps created using the ESRI Configuration Utility continue to work with the new ArcGIS API for JavaScript. However, you cannot upgrade them without first recreating them with the new ESRI HTML5 component-based Point Map or Choropleth Map options available from the WebFOCUS Designer or InfoAssist Chart Picker.

The following changes appear on the InfoAssist Properties page of the Administration Console Configuration tab.

In the Format Tab section:

- The Active PDF option was renamed PDF Analytic Document Format.
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These changes were called for by In-Document Analytics rebranding, and they match changes to the labels of the corresponding format options in the Output File Format list that opens from the Format Group in the InfoAssist Home Page ribbon.

The functions previously categorized as Statistical Python functions have been reclassified as Machine Learning (Python-based) functions. The names of the functions have changed as follows:

- BLR_CLASSIFY is now named CLASSIFY_BLR.
- KNN_CLASSIFY is now named CLASSIFY_KNN.
- KNN_REGRESS is now named REGRESS_KNN.
- RF_CLASSIFY is now named CLASSIFY_RF.
- RF_REGRESS is now named REGRESS_RF.
- POLY_REGRESS is now named REGRESS_POLY.

The enhanced In-Document Analytics user interface available is configured by default for new installations and is not supported with the Microsoft Internet Explorer 11 browser. If you have requirements to support Microsoft Internet Explorer 11 browser, you can configure the Legacy In-Document Analytics user interface using the WebFOCUS Administration Console.

Customers upgrading to 8206 from 8205 or earlier releases will have the Legacy In-Document Analytics user interface configured.

The new In-Document Analytics setting appears in the Tools Option Dialog Defaults section of the InfoAssist Properties page, which is located on the Configuration tab of the Administration Console. This setting establishes the default value for the In-Document Analytics setting in the Procedure Settings dialog box which opens from the InfoAssist Quick Access toolbar. The value in this setting determines the interface used to display reports, charts, and documents using the HTML Analytic Document format. There are two valid values:

- **Designer Style.** Content displayed conforms to the conventions of WebFOCUS Designer and includes the Navigation icons, such as the Chart Format menu and the ellipsis menu.

- **Legacy.** Content displayed conforms to the legacy run-time interface and provides options like the legacy column menu.

Content created in earlier versions is automatically assigned to the Legacy display, which conforms to the conventions of the Active Technologies format, and provides options like the Chart/Rollup and Pivot tools.

New content is automatically assigned to the WebFOCUS Designer option, which is selected by default.

To convert content created in earlier versions to the WebFOCUS Designer display, developers must open that content for editing, reset the value in the In-Document Analytics setting to WebFOCUS Designer, and save the revised procedure. As an alternative, developers can use the text editor to add the following commands directly to a procedure:

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To prevent unexpected field transformations, when creating a chart in WebFOCUS Designer, the buckets are type sensitive. Certain buckets, such as the Size and Tooltip buckets, only accept measure fields, while others, such as the Horizontal and MultiPage buckets, only accept dimension fields. Additional buckets, such as the Vertical and Color buckets, accept both field types. When you attempt to drag a field into an incompatible bucket, the cursor changes to a cancel sign.

To add a measure field to a dimension bucket or a dimension field to a measure bucket, right-click a field in the Fields panel and click Add as dimension or Add as measure. The field is added to the default dimension or measure bucket. You can drag the field into another bucket, as needed. As in previous releases, measure fields used as dimensions display as distinct instead of aggregated values, while dimension fields used as measures are aggregated using the Count operation.

If, in Release 8206.03 and higher, when migrating a chart created in InfoAssist to WebFOCUS Designer, the chart type is not supported and a similar chart type cannot be found, the chart is converted to a bar chart. You can then modify the bar chart in Designer. Previously, the chart type was maintained, but the buckets were not accessible and the chart could not be edited. Affected chart types include 3D charts, stock charts, and polar charts.

**Note:** To open an InfoAssist chart in WebFOCUS Designer, you must have the associated Technical Preview enabled. For more information, contact your Information Builders representative.

In Release 8206, the default value assigned to the Account Creation on Sign In (IBI_ALLOW_LOGIN_EXTERNAL_GROUPS) setting, located on the External page of the Administration Console Security tab, changes from All to OFF. If you must continue to use All as the default value in this setting, after upgrading to Release 8206, you must open or create the webfocus.cfg file, type the IBI_ALLOW_LOGIN_EXTERNAL_GROUPS=* setting in it, including the asterisk (*) value, which represents All, and then save the updated file.

WebFOCUS page breaks in format XLSX report output are synchronized with Excel page breaks. To revert to the behavior in previous releases in which page breaks were not synchronized, issue the SET XLSXPAGEBRKIGNORE=ON command.

**Known Issues**

- Bursting reports by parameter values is not supported with interactive content using the new Designer style of In-Document Analytics capabilities.
If you create a report or chart in ARVERSION=2 (In-Document Analytics) and you set the output format to PDF Analytic Document, an error occurs when you run it. If you change the option in Procedure Settings to Legacy, the report or chart is produced correctly.

If you are working with an In-Document Analytics chart in landscape mode on an Android mobile device and you switch to portrait mode, your content displays in fullscreen mode. Your chart displays at the bottom. If you run your content in new window mode, your In-Document Analytics chart does not display in fullscreen mode, displaying the chart on the right.

HIDENULLACRS, which hides across columns that have null or zero values in the entire column, is not supported with interactive content using the new Designer style of In-Document Analytics capabilities.

When creating bar charts using the New option on the Ellipsis menu, the Color bucket incorrectly performs a count for a dimension field. It also shows a heat legend. The expected result is a color legend for each unique item.

If you add an existing ARVERSION=1 report to an AHTML document set to ARVERSION=2, it fails at run time, displaying JSON text on the screen instead of the expected report output.

If you attempt to run an ARVERSION=2 (In-Document Analytics) AHTML Fusion chart procedure (.fex), it continuously loads and produces an F12 error. This does not occur with Fusion charts that employ ARVERSION=1.

If you are working with a procedure (.fex) and you change the ARVERSION to ARVERSION=2, global filters do not display when you run the procedure.

Running the configuration migration from the CMD line or UNIX Shell displays an error message in the log file. This error does not impact migration of the configuration files.

After running WFRreposUtilCMDLine.bat or WFRreposUtilCMDLine.sh, the RPT_DATA, RPT_METADATA, and RPT_USAGE tables are not getting dropped and are still available in the repository.

When you use the WebFOCUS Online Help in Japanese, if you type a search term in the Search box that contains NLS characters and press Enter, the words next to the Search box are corrupted. The workaround is to click the Go button next to the Search box, instead of pressing Enter.
To ensure that Choropleth maps run correctly when working with the sample procedure Sales by Country and Product, you must replace the URL on line 155 with: https://services.arcgis.com/P3ePLMYs2RVChkJx/arcgis/rest/services/World_Administrative_Divisions/FeatureServer/0 or open the procedure file in the newer version of the software. The previously provided URL is no longer supported by Esri®.

When creating reports in WebFOCUS Designer using the Technical Preview feature, the default font may not display all NLS characters correctly. To ensure that these characters display properly in reports, change the values of the FONT attributes, in the report section of the embedded StyleSheet you are using, to a font that supports the required NLS characters. For example:

```
TYPE=REPORT, FONT='Arial Unicode MS',$
```

When a user who does not have the Upload Data privilege (opUploadDataFile) creates a chart or report using WebFOCUS Designer, they will still be presented with the Upload option in the Open dialog box when selecting a data source. While they can click Upload, they will be presented with a 403 error because they do not have the required privileges.

When creating an Esri map in an App Studio HTML page, data layers using the County geographic role do not display and result in the following error message: Geographic role is empty.

Creating a procedure with a DEFINE field using the GIS_DRIVE_ROUTE function returns an error.

Kerberos Authentication cannot be completed successfully in installations of WebFOCUS that use Java version 1.8.0_212, which is currently delivered in the WebFOCUS installation. In order to address this issue, replace version 1.8.0_212 with the latest available version of Java, currently 1.8.0_232. Upcoming WebFOCUS installations will include the most recent working version of Java.

Field Titles are not displayed properly on HTML charts in installations of WebFOCUS that are configured for the Japanese language and use Java version 1.8.0_212, which is currently delivered in the WebFOCUS installation. In order to address this issue, replace version 1.8.0_212 with the latest available version of Java, currently 1.8.0_232. Upcoming WebFOCUS installations will include the most recent working version of Java.
The Export Scenario dialog box does not display Master File Shortcuts in the list of available items under the Resources node. Even though they are not visible, Master File Shortcuts are present in the list and can be included in Export Scenarios. In order to add a Master File Shortcut to a scenario you must right-click the folder that contains it and choose the Select with Sub-tree menu option. The Master File Shortcut will be transferred to the Scenario, along with the rest of the items in the folder.

Both the db_collation.sh file and the db_collation.bat file generate the "Main WARN Error while converting string [ ] to type," error message in the Command Prompt window at the end of their run. This message has no impact on the functionality of this post-installation utility, and it completes the run successfully.

The load_repos.sh file generates the "WARNING: sun.reflect.Reflection.getCaller Class is not supported. This will impact performance," error message in the Command Prompt window at the end of its run. In addition, the db_inplace_update.sh, WFRreposUtilCMDLine.sh, and update_repos.sh files generate the "Main WARN Error while converting string [ ] to type," error message in the Command Prompt window at the end of their run. These messages have no impact on the functionality of these post installation utilities, and each one completes its run successfully.

System Requirements

This release is now certified and has been tested with Google Chrome version 77, Firefox Quantum version 69, Microsoft Edge version 44 (WebFOCUS only), and Internet Explorer version 11 (Compatibility mode is not supported).
The following topic provides all the information that you need to know about this release of WebFOCUS.

In this chapter:

- Release and Gen Information
- New Features
- Fixes
- Upgrade Notes
- Known Issues
- System Requirements

## Release and Gen Information

<table>
<thead>
<tr>
<th>Release Date</th>
<th>Gen Information</th>
<th>Reporting Server</th>
</tr>
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<tbody>
<tr>
<td>Friday, October 11, 2019</td>
<td>wf100819a Gen 99</td>
<td>8206 Gen 1746</td>
</tr>
<tr>
<td></td>
<td>as100819a</td>
<td></td>
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</tbody>
</table>

## New Features

### HTML5 Chart Types Now Support Bursting and Scheduling

HTML5 charts can be burst and scheduled for distribution by ReportCaster. Chart requests that use chart attribute syntax are burst on a field assigned to the page attribute category. Chart requests that use legacy syntax must be multi-graph requests in order to be burst.

## Fixes

- A DBCS character entered in the Custom Settings configuration option in the Administration Console does not display the DBCS character. (190627007)
The Loading screen image remains after the HTML composer page is loaded. (190808104)
App Studio crashes when trying to drag and drop components of a report in Procedure View. (190724020)

The jQuery animation is not working correctly after migration. (190807086)

Switching tabs in an HTML page displays an error within the browser. (190918087, 190923095)

App Studio crashes when opening specific, large HTML pages. (190923023)

Unable to display an image as a DEFINE field when using WRAP and PPTX as the output format. Also, for all styling formats (PDF, EXL07, DHTML, PPTX), specified column widths are not respected if images are present in data columns. (170921006)

App Studio crashes when opening specific HTML pages. (190923023, 190924128, 191008076)

When the Reporting Server is configured with Data at Rest encryption, agent trace and agent output are encrypted preventing the trace and output from being viewed from the regular editor. Trace and output can only be viewed from the Web Console by Server Administrators. (190818003)

The user receives Permission Denied error while running an HTML5 chart. (190621077)

Users in groups are able to see group profile adapter connections they should be restricted from.

Japanese characters are garbled after importing a Change Management package.

Upgrade Notes

In App Studio, the Action, Method, Enctype, and Accept properties have been removed from the Form component in the Properties panel because these properties were not actually being used.

In App Studio, an output widget container no longer contains the Autosize options in the Properties panel. Everything inside the widget is now fully CSS3 responsive at run time. Autosize is handled by JavaScript and responsive is handled by CSS3 styles.
When upgrading from previous versions of ReportCaster, FTP setting configuration information remains available in existing distribution schedules as long as the default value (Customized FTP) is assigned to the FTP Server Name field.

If you replace this value with a predefined FTP setting configuration in an individual schedule, the previous FTP Setting configuration information for that schedule is overwritten automatically.

If you limit FTP Setting configurations to a predefined list by selecting the Don't allow user defined FTP in schedule check box in the (Default Settings) configuration, the previously FTP Setting configuration information for all schedules becomes unavailable, and is replaced by the default FTP Setting configuration or a predefined FTP Setting configuration selected for an individual schedule.

After an upgrade to Release 8206, only those users working in roles that include the new Create Shortcuts (opShortcut) privilege, located in the Basic Reporting privilege category, can continue to create shortcuts. Even though this privilege is included in the DomainBasicUser, DomainAdvancedUser, DomainDeveloper, DomainAnalyst, and WebFOCUSManager roles, it is not selected by default. Administrators must either select the Create Shortcuts privilege check box directly, or use the Role Update utility, located on the Configuration tab of the Administration Console, to include this privilege in each of the roles that can continue to use this feature.

The Display Esri Configuration Utility (opEsriAdminConsole) privilege, which granted access to the Esri Configuration Utility, was removed from the Application Development privilege category located on the Roles tab of the Security Center. The new ArcGIS API for JavaScript replaces the Esri Configuration Utility and is available to all users. Existing maps created using the ESRI Configuration Utility continue to work with the new ArcGIS API for JavaScript. However, you cannot upgrade them without first recreating them with the new ESRI HTML5 component-based Point Map or Choropleth Map options available from the WebFOCUS Designer or InfoAssist Chart Picker.

The following changes appear on the InfoAssist Properties page of the Administration Console Configuration tab.

In the Format Tab section:

- The Active PDF option was renamed PDF Analytic Document Format.
- The Active Report option was renamed HTML Analytic Document Format.
In the Report Output Format, Chart Output Format, and Document Output Format lists located in the Tools Options Dialog Defaults section:

- The Active Report option was renamed HTML Analytic Document.
- The Active PDF option was renamed PDF Analytic Document.

These changes were called for by In-Document Analytics rebranding, and they match changes to the labels of the corresponding format options in the Output File Format list that opens from the Format Group in the InfoAssist Home Page ribbon.

- The functions previously categorized as Statistical Python functions have been reclassified as Machine Learning (Python-based) functions. The names of the functions have changed as follows:
  - BLR_CLASSIFY is now named CLASSIFY_BLR.
  - KNN_CLASSIFY is now named CLASSIFY_KNN.
  - KNN_REGRESS is now named REGRESS_KNN.
  - RF_CLASSIFY is now named CLASSIFY_RF.
  - RF_REGRESS is now named REGRESS_RF.
  - POLY_REGRESS is now named REGRESS_POLY.

- The enhanced In-Document Analytics user interface available is configured by default for new installations and is not supported with the Microsoft Internet Explorer 11 browser. If you have requirements to support Microsoft Internet Explorer 11 browser, you can configure the Legacy In-Document Analytics user interface using the WebFOCUS Administration Console.

Customers upgrading to 8206 from 8205 or earlier releases will have the Legacy In-Document Analytics user interface configured.

The new In-Document Analytics setting appears in the Tools Option Dialog Defaults section of the InfoAssist Properties page, which is located on the Configuration tab of the Administration Console. This setting establishes the default value for the In-Document Analytics setting in the Procedure Settings dialog box which opens from the InfoAssist Quick Access toolbar. The value in this setting determines the interface used to display reports, charts, and documents using the HTML Analytic Document format. There are two valid values:

- **Designer Style.** Content displayed conforms to the conventions of WebFOCUS Designer and includes the Navigation icons, such as the Chart Format menu and the ellipsis menu.
Legacy. Content displayed conforms to the legacy run-time interface and provides options like the legacy column menu.

Content created in earlier versions is automatically assigned to the Legacy display, which conforms to the conventions of the Active Technologies format, and provides options like the Chart/Rollup and Pivot tools.

New content is automatically assigned to the WebFOCUS Designer option, which is selected by default.

To convert content created in earlier versions to the WebFOCUS Designer display, developers must open that content for editing, reset the value in the In-Document Analytics setting to Web FOCUS Designer, and save the revised procedure. As an alternative, developers can use the text editor to add the following commands directly to a procedure:

```
-DEFAULTH &WF_ARVERSION=2; SET ARVERSION=&WF_ARVERSION;
```

To prevent unexpected field transformations, when creating a chart in WebFOCUS Designer, the buckets are type sensitive. Certain buckets, such as the Size and Tooltip buckets, only accept measure fields, while others, such as the Horizontal and MultiPage buckets, only accept dimension fields. Additional buckets, such as the Vertical and Color buckets, accept both field types. When you attempt to drag a field into an incompatible bucket, the cursor changes to a cancel sign.

To add a measure field to a dimension bucket or a dimension field to a measure bucket, right-click a field in the Fields panel and click Add as dimension or Add as measure. The field is added to the default dimension or measure bucket. You can drag the field into another bucket, as needed. As in previous releases, measure fields used as dimensions display as distinct instead of aggregated values, while dimension fields used as measures are aggregated using the Count operation.

If, in Release 8206.03 and higher, when migrating a chart created in InfoAssist to WebFOCUS Designer, the chart type is not supported and a similar chart type cannot be found, the chart is converted to a bar chart. You can then modify the bar chart in Designer. Previously, the chart type was maintained, but the buckets were not accessible and the chart could not be edited. Affected chart types include 3D charts, stock charts, and polar charts.

Note: To open an InfoAssist chart in WebFOCUS Designer, you must have the associated Technical Preview enabled. For more information, contact your Information Builders representative.
In Release 8206, the default value assigned to the Account Creation on Sign In (IBI_ALLOW_LOGIN_EXTERNAL_GROUPS) setting, located on the External page of the Administration Console Security tab, changes from All to OFF. If you must continue to use All as the default value in this setting, after upgrading to Release 8206, you must open or create the webfocus.cfg file, type the IBI_ALLOW_LOGIN_EXTERNAL_GROUPS=* setting in it, including the asterisk (*) value, which represents All, and then save the updated file.

WebFOCUS page breaks in format XLSX report output are synchronized with Excel page breaks. To revert to the behavior in previous releases in which page breaks were not synchronized, issue the SET XLSXPAGEBKIGNORE=ON command.

Known Issues

- Bursting reports by parameter values is not supported with interactive content using the new Designer style of In-Document Analytics capabilities.

- If you create a report or chart in ARVERSION=2 (In-Document Analytics) and you set the output format to PDF Analytic Document, an error occurs when you run it. If you change the option in Procedure Settings to Legacy, the report or chart is produced correctly.

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- HIDENULLACRS, which hides across columns that have null or zero values in the entire column, is not supported with interactive content using the new Designer style of In-Document Analytics capabilities.

- When creating bar charts using the New option on the Ellipsis menu, the Color bucket incorrectly performs a count for a dimension field. It also shows a heat legend. The expected result is a color legend for each unique item.

- If you add an existing ARVERSION=1 report to an AHTML document set to ARVERSION=2, it fails at run time, displaying JSON text on the screen instead of the expected report output.

- If you attempt to run an ARVERSION=2 (In-Document Analytics) AHTML Fusion chart procedure (.fex), it continuously loads and produces an F12 error. This does not occur with Fusion charts that employ ARVERSION=1.

- If you are working with a procedure (.fex) and you change the ARVERSION to ARVERSION=2, global filters do not display when you run the procedure.
Running the configuration migration from the CMD line or UNIX Shell displays an error message in the log file. This error does not impact migration of the configuration files.

After running WFReposUtilCMDLine.bat or WFReposUtilCMDLine.sh, the RPT_DATA, RPT_METADATA, and RPT_USAGE tables are not getting dropped and are still available in the repository.

When you use the WebFOCUS Online Help in Japanese, if you type a search term in the Search box that contains NLS characters and press Enter, the words next to the Search box are corrupted. The workaround is to click the Go button next to the Search box, instead of pressing Enter.

To ensure that Choropleth maps run correctly when working with the sample procedure Sales by Country and Product, you must replace the URL on line 155 with: https://services.arcgis.com/P3ePLMYs2RVChkJx/arcgis/rest/services/World_Administrative_Divisions/FeatureServer/0 or open the procedure file in the newer version of the software. The previously provided URL is no longer supported by Esri®.

When creating reports in WebFOCUS Designer using the Technical Preview feature, the default font may not display all NLS characters correctly. To ensure that these characters display properly in reports, change the values of the FONT attributes, in the report section of the embedded StyleSheet you are using, to a font that supports the required NLS characters. For example:

```
TYPE=REPORT, FONT='Arial Unicode MS',$
```

Kerberos Authentication cannot be completed successfully in installations of WebFOCUS that use Java version 1.8.0_212, which is currently delivered in the WebFOCUS installation. In order to address this issue, replace version 1.8.0_212 with the latest available version of Java, currently 1.8.0_232. Upcoming WebFOCUS installations will include the most recent working version of Java.

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The Export Scenario dialog box does not display Master File Shortcuts in the list of available items under the Resources node. Even though they are not visible, Master File Shortcuts are present in the list and can be included in Export Scenarios. In order to add a Master File Shortcut to a scenario you must right-click the folder that contains it and choose the Select with Sub-tree menu option. The Master File Shortcut will be transferred to the Scenario, along with the rest of the items in the folder.

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The load_repos.sh file generates the "WARNING: sun.reflect.Reflection.getCaller Class is not supported. This will impact performance," error message in the Command Prompt window at the end of its run. In addition, the db_inplace_update.sh, WFReposUtilCMDLine.sh, and update_repos.sh files generate the "Main WARN Error while converting string [ ] to type," error message in the Command Prompt window at the end of their run. These messages have no impact on the functionality of these post installation utilities, and each one completes its run successfully.

System Requirements

This release is now certified and has been tested with Google Chrome version 77, Firefox version 69, Microsoft Edge version 44 (WebFOCUS only), and Internet Explorer version 11 (Compatibility mode is not supported).
8206.07 Release Notes

The following topic provides all the information that you need to know about this release of WebFOCUS.

**In this chapter:**
- Release and Gen Information
- New Features
- Fixes
- Upgrade Notes
- Known Issues
- System Requirements

## Release and Gen Information

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<tr>
<th>Release Date</th>
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<tbody>
<tr>
<td>Monday, September 13, 2019</td>
<td>wf092519a Gen 91 as092519a</td>
<td>8206 Gen 1745</td>
</tr>
</tbody>
</table>

## New Features

### New Installation Program Option to Enable Collection of Usage Metrics

A new License Agreement option in the WebFOCUS Installation program gives you the opportunity to confirm your acceptance of the automatic collection of metrics that support the development of usage analytics by a third-party provider. You can obtain copies of the usage analytics created from your metrics by requesting them from Customer_Support@ibi.com.

During the installation, you may opt out of this service by not accepting this option when it is presented to you. After the installation, you may opt out of this service by clearing the Usage Analytics setting check box in the WebFOCUS Administration Console.
For more information, see the WebFOCUS Integrated Installation technical content, the WebFOCUS and ReportCaster Installation and Configuration for Windows technical content, or the WebFOCUS and ReportCaster Installation and Configuration for UNIX technical content.

Enhancement for Aligning a PDF Report Within a Page

Instead of specifying margin spacing, you can now left-align, center, or right-align an entire PDF report within a page, using the JUSTIFYREPORT StyleSheet attribute.

To left-align, center, or right-align a PDF report, include the following syntax in your procedure, accordingly.

```
TYPE=REPORT, JUSTIFYREPORT={LEFT|CENTER|RIGHT},$
```

**Example:** Centering a PDF Report Within a Page

The following example, shows a PDF report that is centered within a page.

```
Budget Dollars By Region and Category

<table>
<thead>
<tr>
<th>Region</th>
<th>Category</th>
<th>Budget Dollars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Midwest</td>
<td>Coffee</td>
<td>4086032</td>
</tr>
<tr>
<td></td>
<td>Food</td>
<td>4220721</td>
</tr>
<tr>
<td></td>
<td>Gifts</td>
<td>2087620</td>
</tr>
<tr>
<td>Northeast</td>
<td>Coffee</td>
<td>4252462</td>
</tr>
<tr>
<td></td>
<td>Food</td>
<td>4453907</td>
</tr>
<tr>
<td></td>
<td>Gifts</td>
<td>2870552</td>
</tr>
<tr>
<td>Southeast</td>
<td>Coffee</td>
<td>4431429</td>
</tr>
<tr>
<td></td>
<td>Food</td>
<td>4409288</td>
</tr>
<tr>
<td></td>
<td>Gifts</td>
<td>2967254</td>
</tr>
<tr>
<td>West</td>
<td>Coffee</td>
<td>4523963</td>
</tr>
<tr>
<td></td>
<td>Food</td>
<td>4183244</td>
</tr>
<tr>
<td></td>
<td>Gifts</td>
<td>2934306</td>
</tr>
</tbody>
</table>
```

For more information, see the Creating Reports With WebFOCUS Language manual.

Inserting Text Into XLSX Workbook Headers and Footers

In addition to supporting the insertion of images in XLSX Workbook headers and footers, you can now insert text in XLSX Workbook headers and footers. You can include text in headers and footers on every printed page, on the first page of the report only, or only on all subsequent pages. You can also specify the justification of placement within the defined area. This functionality is designed to enhance overall usability of the worksheets.
The following request against the GGSALES data source places the ibi_logo.gif image in the left header area and text in the center header area of the worksheet. It also places the webfocus_logo.gif image in the left footer area and text in the center footer area.

For more information, see the Creating Reports With WebFOCUS Language manual.

**Fixes**

- In App Studio, the calendar drop-down menu displays the month in Spanish but after selecting the date, the text box displays the month in English. (190724055, 190912003)

- When creating a double list box on an App Studio HTML page in a Hebrew environment at runtime, the move down arrow displays an error message. (190805021)

- The push button style radio button does not execute the event in App Studio. (190819056).

- Invalid credential errors occur when migrating ReportCaster from release 7 to release 8. (190531077)
When using a Reporting Server configured with UTF-8 (codepage 65001), and running a PDF report with Courier New as a proportional font using the Chrome Internal Viewer, the report output only shows random characters. (190228043)

- Updated bootstrap to version 8.4.1, due to vulnerabilities in earlier versions.

- Axis2 has been updated to the latest version, to eliminate vulnerabilities that allowed forged messages and bypassed authentication as identified in CVE-2012-4418 and CVE-2012-5351. (190611005)

- When accessing the repository from the WebFOCUS Portal, it can take a long time to open a domain when there is a lot of content. (190703121, 190808125)

- A RESTful Web Service call to create a new schedule in a My Content folder fails on the initial call if the My Content folder does not exist. (190510031, 190910079)

- The functions NULLIF, COALESCE, FPRINT, EDIT2, and TO_CHAR when used in an expression with LAST will cause the server to abend. (190819045)

- When the Reporting Server is configured with Data at Rest encryption, agent trace and agent output are encrypted preventing the trace and output from being viewed from the regular editor. Trace and output can only be viewed from the Web Console by Server Administrators.

- Reporting Server Live Console receives an error when connecting to the Reporting Server from the client via the Web Console with AJP connection: error: undefined and server disconnected (190527005)

Upgrade Notes

- In App Studio, the Action, Method, Enctype, and Accept properties have been removed from the Form component in the Properties panel because these properties were not actually being used.

- In App Studio, an output widget container no longer contains the Autosize options in the Properties panel. Everything inside the widget is now fully CSS3 responsive at run time. Autosize is handled by JavaScript and responsive is handled by CSS3 styles.

- When upgrading from previous versions of ReportCaster, FTP setting configuration information remains available in existing distribution schedules as long as the default value (Customized FTP) is assigned to the FTP Server Name field.

- If you replace this value with a predefined FTP setting configuration in an individual schedule, the previous FTP Setting configuration information for that schedule is overwritten automatically.
If you limit FTP Setting configurations to a predefined list by selecting the Don't allow user defined FTP in schedule check box in the (Default Settings) configuration, the previously FTP Setting configuration information for all schedules becomes unavailable, and is replaced by the default FTP Setting configuration or a predefined FTP Setting configuration selected for an individual schedule.

After an upgrade to Release 8206, only those users working in roles that include the new Create Shortcuts (opShortcut) privilege, located in the Basic Reporting privilege category, can continue to create shortcuts. Even though this privilege is included in the DomainBasicUser, DomainAdvancedUser, DomainDeveloper, DomainAnalyst, and WebFOCUSManager roles, it is not selected by default. Administrators must either select the Create Shortcuts privilege check box directly, or use the Role Update utility, located on the Configuration tab of the Administration Console, to include this privilege in each of the roles that can continue to use this feature.

The Display Esri Configuration Utility (opEsriAdminConsole) privilege, which granted access to the Esri Configuration Utility, was removed from the Application Development privilege category located on the Roles tab of the Security Center. The new ArcGIS API for JavaScript replaces the Esri Configuration Utility and is available to all users. Existing maps created using the ESRI Configuration Utility continue to work with the new ArcGIS API for JavaScript. However, you cannot upgrade them without first recreating them with the new ESRI HTML5 component-based Point Map or Choropleth Map options available from the WebFOCUS Designer or InfoAssist Chart Picker.

The following changes appear on the InfoAssist Properties page of the Administration Console Configuration tab.

In the Format Tab section:

- The Active PDF option was renamed PDF Analytic Document Format.
- The Active Report option was renamed HTML Analytic Document Format.

In the Report Output Format, Chart Output Format, and Document Output Format lists located in the Tools Options Dialog Defaults section:

- The Active Report option was renamed HTML Analytic Document.
- The Active PDF option was renamed PDF Analytic Document.

These changes were called for by In-Document Analytics rebranding, and they match changes to the labels of the corresponding format options in the Output File Format list that opens from the Format Group in the InfoAssist Home Page ribbon.
The functions previously categorized as Statistical Python functions have been reclassified as Machine Learning (Python-based) functions. The names of the functions have changed as follows:

- BLR_CLASSIFY is now named CLASSIFY_BLR.
- KNN_CLASSIFY is now named CLASSIFY_KNN.
- KNN_REGRESS is now named REGRESS_KNN.
- RF_CLASSIFY is now named CLASSIFY_RF.
- RF_REGRESS is now named REGRESS_RF.
- POLY_REGRESS is now named REGRESS_POLY.

The enhanced In-Document Analytics user interface available is configured by default for new installations and is not supported with the Microsoft Internet Explorer 11 browser. If you have requirements to support Microsoft Internet Explorer 11 browser, you can configure the Legacy In-Document Analytics user interface using the WebFOCUS Administration Console.

Customers upgrading to 8206 from 8205 or earlier releases will have the Legacy In-Document Analytics user interface configured.

The new In-Document Analytics setting appears in the Tools Option Dialog Defaults section of the InfoAssist Properties page, which is located on the Configuration tab of the Administration Console. This setting establishes the default value for the In-Document Analytics setting in the Procedure Settings dialog box which opens from the InfoAssist Quick Access toolbar. The value in this setting determines the interface used to display reports, charts, and documents using the HTML Analytic Document format. There are two valid values:

- **Designer Style.** Content displayed conforms to the conventions of WebFOCUS Designer and includes the Navigation icons, such as the Chart Format menu and the ellipsis menu.

- **Legacy.** Content displayed conforms to the legacy run-time interface and provides options like the legacy column menu.

Content created in earlier versions is automatically assigned to the Legacy display, which conforms to the conventions of the Active Technologies format, and provides options like the Chart/Rollup and Pivot tools.

New content is automatically assigned to the WebFOCUS Designer option, which is selected by default.
To convert content created in earlier versions to the WebFOCUS Designer display, developers must open that content for editing, reset the value in the In-Document Analytics setting to Web FOCUS Designer, and save the revised procedure. As an alternative, developers can use the text editor to add the following commands directly to a procedure:

```
-DEFAULTH &WF_ARVERSION=2; SET ARVERSION=&WF_ARVERSION;
```

- To prevent unexpected field transformations, when creating a chart in WebFOCUS Designer, the buckets are type sensitive. Certain buckets, such as the Size and Tooltip buckets, only accept measure fields, while others, such as the Horizontal and MultiPage buckets, only accept dimension fields. Additional buckets, such as the Vertical and Color buckets, accept both field types. When you attempt to drag a field into an incompatible bucket, the cursor changes to a cancel sign.

- To add a measure field to a dimension bucket or a dimension field to a measure bucket, right-click a field in the Fields panel and click Add as dimension or Add as measure. The field is added to the default dimension or measure bucket. You can drag the field into another bucket, as needed. As in previous releases, measure fields used as dimensions display as distinct instead of aggregated values, while dimension fields used as measures are aggregated using the Count operation.

- If, in Release 8206.03 and higher, when migrating a chart created in InfoAssist to WebFOCUS Designer, the chart type is not supported and a similar chart type cannot be found, the chart is converted to a bar chart. You can then modify the bar chart in Designer. Previously, the chart type was maintained, but the buckets were not accessible and the chart could not be edited. Affected chart types include 3D charts, stock charts, and polar charts.

  **Note:** To open an InfoAssist chart in WebFOCUS Designer, you must have the associated Technical Preview enabled. For more information, contact your Information Builders representative.

- In Release 8206, the default value assigned to the Account Creation on Sign In (IBI_ALLOW_LOGIN_EXTERNAL_GROUPS) setting, located on the External page of the Administration Console Security tab, changes from All to OFF. If you must continue to use All as the default value in this setting, after upgrading to Release 8206, you must open or create the webfocus.cfg file, type the IBI_ALLOW_LOGIN_EXTERNAL_GROUPS=* setting in it, including the asterisk (*) value, which represents All, and then save the updated file.

- WebFOCUS page breaks in format XLSX report output are synchronized with Excel page breaks. To revert to the behavior in previous releases in which page breaks were not synchronized, issue the SET XLSXPAGEBRKIGNORE=ON command.
Known Issues

- Bursting reports by parameter values is not supported with interactive content using the new Designer style of In-Document Analytics capabilities.

- If you create a report or chart in ARVERSION=2 (In-Document Analytics) and you set the output format to PDF Analytic Document, an error occurs when you run it. If you change the option in Procedure Settings to Legacy, the report or chart is produced correctly.

- If you are working with an In-Document Analytics chart in landscape mode on an Android mobile device and you switch to portrait mode, your content displays in fullscreen mode. Your chart displays at the bottom. If you run your content in new window mode, your In-Document Analytics chart does not display in fullscreen mode, displaying the chart on the right.

- HIDDENULLACRS, which hides across columns that have null or zero values in the entire column, is not supported with interactive content using the new Designer style of In-Document Analytics capabilities.

- When creating bar charts using the New option on the Ellipsis menu, the Color bucket incorrectly performs a count for a dimension field. It also shows a heat legend. The expected result is a color legend for each unique item.

- If you add an existing ARVERSION=1 report to an AHTML document set to ARVERSION=2, it fails at run time, displaying JSON text on the screen instead of the expected report output.

- If you attempt to run an ARVERSION=2 (In-Document Analytics) AHTML Fusion chart procedure (.fex), it continuously loads and produces an F12 error. This does not occur with Fusion charts that employ ARVERSION=1.

- If you are working with a procedure (.fex) and you change the ARVERSION to ARVERSION=2, global filters do not display when you run the procedure.

- Running the configuration migration from the CMD line or UNIX Shell displays an error message in the log file. This error does not impact migration of the configuration files.

- After running WFRreposUtilCMDLine.bat or WFRreposUtilCMDLine.sh, the RPT_DATA, RPT_METADATA, and RPT_USAGE tables are not getting dropped and are still available in the repository.

- When you use the WebFOCUS Online Help in Japanese, if you type a search term in the Search box that contains NLS characters and press Enter, the words next to the Search box are corrupted. The workaround is to click the Go button next to the Search box, instead of pressing Enter.
To ensure that Choropleth maps run correctly when working with the sample procedure Sales by Country and Product, you must replace the URL on line 155 with: https://services.arcgis.com/P3ePLMYs2RVChkJx/arcgis/rest/services/World_Administrative_Divisions/FeatureServer/0 or open the procedure file in the newer version of the software. The previously provided URL is no longer supported by Esri®.

When creating reports in WebFOCUS Designer using the Technical Preview feature, the default font may not display all NLS characters correctly. To ensure that these characters display properly in reports, change the values of the FONT attributes, in the report section of the embedded StyleSheet you are using, to a font that supports the required NLS characters. For example:

```
TYPE=REPORT, FONT='Arial Unicode MS',$
```

Kerberos Authentication cannot be completed successfully in installations of WebFOCUS that use Java version 1.8.0_212, which is currently delivered in the WebFOCUS installation. In order to address this issue, replace version 1.8.0_212 with the latest available version of Java, currently 1.8.0_232. Upcoming WebFOCUS installations will include the most recent working version of Java.

Field Titles are not displayed properly on HTML charts in installations of WebFOCUS that are configured for the Japanese language and use Java version 1.8.0_212, which is currently delivered in the WebFOCUS installation. In order to address this issue, replace version 1.8.0_212 with the latest available version of Java, currently 1.8.0_232. Upcoming WebFOCUS installations will include the most recent working version of Java.

The Export Scenario dialog box does not display Master File Shortcuts in the list of available items under the Resources node. Even though they are not visible, Master File Shortcuts are present in the list and can be included in Export Scenarios. In order to add a Master File Shortcut to a scenario you must right-click the folder that contains it and choose the Select with Sub-tree menu option. The Master File Shortcut will be transferred to the Scenario, along with the rest of the items in the folder.

Both the db_collation.sh file and the db_collation.bat file generate the "Main WARN Error while converting string [ ] to type," error message in the Command Prompt window at the end of their run. This message has no impact on the functionality of this post-installation utility, and it completes the run successfully.
The load_repos.sh file generates the "WARNING: sun.reflect.Reflection.getCaller Class is not supported. This will impact performance," error message in the Command Prompt window at the end of its run. In addition, the db_inplace_update.sh, WFReposUtilCMDLine.sh, and update_repos.sh files generate the "Main WARN Error while converting string [ ] to type," error message in the Command Prompt window at the end of their run. These messages have no impact on the functionality of these post installation utilities, and each one completes its run successfully.

System Requirements

This release is now certified and has been tested with Google Chrome version 76, Firefox version 68, Microsoft Edge version 44 (WebFOCUS only), and Internet Explorer version 11 (Compatibility mode is not supported).
8206.06 Release Notes

The following topic provides all the information that you need to know about this release of WebFOCUS.

In this chapter:

- Release and Gen Information
- New Features
- Fixes
- Upgrade Notes
- Known Issues
- System Requirements

Release and Gen Information

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New Features

Merging WebFOCUS Content With PowerPoint Template Content

Using the TEMPLATE-ACTION Stylesheet attribute, you can merge WebFOCUS content with PowerPoint template content. The MERGE action allows you to edit components, such as comments in native PowerPoint text boxes, in the resulting PowerPoint PPTX output.

Syntax: How to Merge WebFOCUS Content With PowerPoint Template Content

To merge WebFOCUS content with PowerPoint template content, include the following StyleSheet syntax in your procedure.

```
TYPE=REPORT, TEMPLATE-ACTION=MERGE ,
```
Note: You can include the TEMPLATE-ACTION=REPLACE StyleSheet attribute to retain the default behavior, which causes WebFOCUS output to override all target slide content.

Example: Merging WebFOCUS Content With PowerPoint Template Content

The following image shows WebFOCUS content merged with PowerPoint template content.

![Image showing merged content]

For more information, see the Creating Reports With WebFOCUS Language manual.

Adapter for Apache Hive: Mapping CLOB Columns as STRING Format

In prior releases, when creating a synonym for a Hive table, a CLOB column was described in the synonym with format TX. CLOB columns are now described with USAGE=STRING, ACTUAL=STRING.

Fixes

- When an autofit chart is inside an output widget container, the chart will not automatically resize when the container is resized. (190813079)

- Unable to edit a synonym created in a proxy environment. (190823142)

- HTML file with Save Selection option is displayed correctly under My Content, but incorrectly under the Content tree. (190401003)

- When using the DB_LOOKUP double select feature, an erroneous blank bar pops up and remains on the browser, even after clicking the Cancel button. ()
If a drilldown passes several parameters, and one of those parameters has a null value, it is passed as FOC_MISSING, but all subsequent parameters are incorrectly passed as FOC_MISSING, producing incorrect output. (1904222003, 190116071, 190521073, 190703091, 190730005)

The Web Console Create Synonym will not allow manual schema override in the Owner/Schema box.

When two DBA protected synonyms are dynamically joined, the DBA in the second synonym is not activated when that synonym is a cluster. (190620003)

The user receives an error when the folder name is EDA: Upload Data yields 503 - Service Unavailable (190730069)

Upgrade Notes

In App Studio, the Action, Method, Enctype, and Accept properties have been removed from the Form component in the Properties panel because these properties were not actually being used.

In App Studio, an output widget container no longer contains the Autosize options in the Properties panel. Everything inside the widget is now fully CSS3 responsive at run time. Autosize is handled by JavaScript and responsive is handled by CSS3 styles.

When upgrading from previous versions of ReportCaster, FTP setting configuration information remains available in existing distribution schedules as long as the default value (Customized FTP) is assigned to the FTP Server Name field.

If you replace this value with a predefined FTP setting configuration in an individual schedule, the previous FTP Setting configuration information for that schedule is overwritten automatically.

If you limit FTP Setting configurations to a predefined list by selecting the Don't allow user defined FTP in schedule check box in the (Default Settings) configuration, the previously FTP Setting configuration information for all schedules becomes unavailable, and is replaced by the default FTP Setting configuration or a predefined FTP Setting configuration selected for an individual schedule.
After an upgrade to Release 8206, only those users working in roles that include the new Create Shortcuts (opShortcut) privilege, located in the Basic Reporting privilege category, can continue to create shortcuts. Even though this privilege is included in the DomainBasicUser, DomainAdvancedUser, DomainDeveloper, DomainAnalyst, and WebFOCUSManager roles, it is not selected by default. Administrators must either select the Create Shortcuts privilege check box directly, or use the Role Update utility, located on the Configuration tab of the Administration Console, to include this privilege in each of the roles that can continue to use this feature.

The Display Esri Configuration Utility (opEsriAdminConsole) privilege, which granted access to the Esri Configuration Utility, was removed from the Application Development privilege category located on the Roles tab of the Security Center. The new ArcGIS API for JavaScript replaces the Esri Configuration Utility and is available to all users. Existing maps created using the ESRI Configuration Utility continue to work with the new ArcGIS API for JavaScript. However, you cannot upgrade them without first recreating them with the new ESRI HTML5 component-based Point Map or Choropleth Map options available from the WebFOCUS Designer or InfoAssist Chart Picker.

The following changes appear on the InfoAssist Properties page of the Administration Console Configuration tab.

In the Format Tab section:

- The Active PDF option was renamed PDF Analytic Document Format.
- The Active Report option was renamed HTML Analytic Document Format.

In the Report Output Format, Chart Output Format, and Document Output Format lists located in the Tools Options Dialog Defaults section:

- The Active Report option was renamed HTML Analytic Document.
- The Active PDF option was renamed PDF Analytic Document.

These changes were called for by In-Document Analytics rebranding, and they match changes to the labels of the corresponding format options in the Output File Format list that opens from the Format Group in the InfoAssist Home Page ribbon.

The functions previously categorized as Statistical Python functions have been reclassified as Machine Learning (Python-based) functions. The names of the functions have changed as follows:

- BLR_CLASSIFY is now named CLASSIFY_BLR.
- KNN_CLASSIFY is now named CLASSIFY_KNN.
- KNN_REGRESS is now named REGRESS_KNN.
- RF_CLASSIFY is now named CLASSIFY_RF.
- RF_REGRESS is now named REGRESS_RF.
- POLY_REGRESS is now named REGRESS_POLY.

- The enhanced In-Document Analytics user interface available is configured by default for new installations and is not supported with the Microsoft Internet Explorer 11 browser. If you have requirements to support Microsoft Internet Explorer 11 browser, you can configure the Legacy In-Document Analytics user interface using the WebFOCUS Administration Console.

Customers upgrading to 8206 from 8205 or earlier releases will have the Legacy In-Document Analytics user interface configured.

The new In-Document Analytics setting appears in the Tools Option Dialog Defaults section of the InfoAssist Properties page, which is located on the Configuration tab of the Administration Console. This setting establishes the default value for the In-Document Analytics setting in the Procedure Settings dialog box which opens from the InfoAssist Quick Access toolbar. The value in this setting determines the interface used to display reports, charts, and documents using the HTML Analytic Document format. There are two valid values:

- **Designer Style.** Content displayed conforms to the conventions of WebFOCUS Designer and includes the Navigation icons, such as the Chart Format menu and the ellipsis menu.

- **Legacy.** Content displayed conforms to the legacy run-time interface and provides options like the legacy column menu.

Content created in earlier versions is automatically assigned to the Legacy display, which conforms to the conventions of the Active Technologies format, and provides options like the Chart/Rollup and Pivot tools.

New content is automatically assigned to the WebFOCUS Designer option, which is selected by default.

To convert content created in earlier versions to the WebFOCUS Designer display, developers must open that content for editing, reset the value in the In-Document Analytics setting to Web FOCUS Designer, and save the revised procedure. As an alternative, developers can use the text editor to add the following commands directly to a procedure:

```
-DEFAULTH &WF_ARVERSION=2; SET ARVERSION=&WF_ARVERSION;
```
To prevent unexpected field transformations, when creating a chart in WebFOCUS Designer, the buckets are type sensitive. Certain buckets, such as the Size and Tooltip buckets, only accept measure fields, while others, such as the Horizontal and MultiPage buckets, only accept dimension fields. Additional buckets, such as the Vertical and Color buckets, accept both field types. When you attempt to drag a field into an incompatible bucket, the cursor changes to a cancel sign.

To add a measure field to a dimension bucket or a dimension field to a measure bucket, right-click a field in the Fields panel and click Add as dimension or Add as measure. The field is added to the default dimension or measure bucket. You can drag the field into another bucket, as needed. As in previous releases, measure fields used as dimensions display as distinct instead of aggregated values, while dimension fields used as measures are aggregated using the Count operation.

In Release 8206, the default value assigned to the Account Creation on Sign In (IBI_ALLOWLOGINEXTERNALGROUPS) setting, located on the External page of the Administration Console Security tab, changes from All to OFF. If you must continue to use All as the default value in this setting, after upgrading to Release 8206, you must open or create the webfocus.cfg file, type the IBI_ALLOWLOGINEXTERNALGROUPS=* setting in it, including the asterisk (*) value, which represents All, and then save the updated file.

WebFOCUS page breaks in format XLSX report output are synchronized with Excel page breaks. To revert to the behavior in previous releases in which page breaks were not synchronized, issue the SET XLSXPAGEBRKIGNORE=ON command.

Known Issues

- Bursting reports by parameter values is not supported with interactive content using the new Designer style of In-Document Analytics capabilities.

- If you are working with an In-Document Analytics chart in landscape mode on an Android mobile device and you switch to portrait mode, your content displays in fullscreen mode. Your chart displays at the bottom. If you run your content in new window mode, your In-Document Analytics chart does not display in fullscreen mode, displaying the chart on the right.

- When working in Document mode with In-Document Analytics, an error occurs if you attempt to run a document or dashboard using Internet Explorer 11.

- HIDDENULLACRS, which hides across columns that have null or zero values in the entire column, is not supported with interactive content using the new Designer style of In-Document Analytics capabilities.
When creating bar charts using the New option on the Ellipsis menu, the Color bucket incorrectly performs a count for a dimension field. It also shows a heat legend. The expected result is a color legend for each unique item.

If you add an existing ARVERSION=1 report to an AHTML document set to ARVERSION=2, it fails at run time, displaying JSON text on the screen instead of the expected report output.

Running the configuration migration from the CMD line or UNIX Shell displays an error message in the log file. This error does not impact migration of the configuration files.

After running WFReposUtilCMDLine.bat or WFReposUtilCMDLine.sh, the RPT_DATA, RPT_METADATA, and RPT_USAGE tables are not getting dropped and are still available in the repository.

If you attempt to run an ARVERSION=2 (In-Document Analytics) AHTML Fusion chart procedure (.fex), it continuously loads and produces an F12 error. This does not occur with Fusion charts that employ ARVERSION=1.

If you are working with a procedure (.fex) and you change the ARVERSION to ARVERSION=2, global filters do not display when you run the procedure.

When you use the WebFOCUS Online Help in Japanese, if you type a search term in the Search box that contains NLS characters and press Enter, the words next to the Search box are corrupted. The workaround is to click the Go button next to the Search box, instead of pressing Enter.

When creating reports in WebFOCUS Designer using the Technical Preview feature, the default font may not display all NLS characters correctly. To ensure that these characters display properly in reports, change the values of the FONT attributes, in the report section of the embedded StyleSheet you are using, to a font that supports the required NLS characters. For example:

```
TYPE=REPORT, FONT='Arial Unicode MS',
```

When using the Chrome 76 browser, the show filter panel icon on the responsive autoprompt interface does not redisplay the filter panel after the first run of a report with parameters. This behavior does not occur with the Chrome 77, Firefox, or IE11 browsers.

Kerberos Authentication cannot be completed successfully in installations of WebFOCUS that use Java version 1.8.0_212, which is currently delivered in the WebFOCUS installation. In order to address this issue, replace version 1.8.0_212 with the latest available version of Java, currently 1.8.0_232. Upcoming WebFOCUS installations will include the most recent working version of Java.
Field Titles are not displayed properly on HTML charts in installations of WebFOCUS that are configured for the Japanese language and use Java version 1.8.0_212, which is currently delivered in the WebFOCUS installation. In order to address this issue, replace version 1.8.0_212 with the latest available version of Java, currently 1.8.0_232. Upcoming WebFOCUS installations will include the most recent working version of Java.

The Export Scenario dialog box does not display Master File Shortcuts in the list of available items under the Resources node. Even though they are not visible, Master File Shortcuts are present in the list and can be included in Export Scenarios. In order to add a Master File Shortcut to a scenario you must right-click the folder that contains it and choose the Select with Sub-tree menu option. The Master File Shortcut will be transferred to the Scenario, along with the rest of the items in the folder.

Both the db_collation.sh file and the db_collation.bat file generate the "Main WARN Error while converting string [ ] to type," error message in the Command Prompt window at the end of their run. This message has no impact on the functionality of this post-installation utility, and it completes the run successfully.

The load_repos.sh file generates the "WARNING: sun.reflect.Reflection.getCaller Class is not supported. This will impact performance," error message in the Command Prompt window at the end of its run. In addition, the db_inplace_update.sh, WFRreposUtilCMDLine.sh, and update_repos.sh files generate the "Main WARN Error while converting string [ ] to type," error message in the Command Prompt window at the end of their run. These messages have no impact on the functionality of these post installation utilities, and each one completes its run successfully.

**System Requirements**

This release is now certified and has been tested with Google Chrome version 76, Firefox Quantum version 68, Microsoft Edge version 44 (WebFOCUS only), and Internet Explorer version 11 (Compatibility mode is not supported).
8206.05 Release Notes

The following topic provides all the information that you need to know about this release of WebFOCUS.

In this chapter:

- Release and Gen Information
- New Features
- Fixes
- Upgrade Notes
- Known Issues
- System Requirements

Release and Gen Information

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New Features

New WebFOCUS Integrated Installation for Linux

WebFOCUS Integrated Installation is a new, simplified installation, which installs and configures all required product components to allow you to use the product for your reporting and analytics needs.

WebFOCUS Integrated Installation is an all-in-one downloadable installation package. Benefits include:

- WebFOCUS and the Reporting Server bundled with Tomcat, Derby, Java, and Solr.
- Hyperstage preconfigured as a high-speed target for uploaded data.
Simplified configuration for email distribution.

With WebFOCUS Integrated Installation, you can quickly and easily perform reporting and analysis, data discovery, and scheduling and distribution, all in a single web-based environment.

For more information, see WebFOCUS Integrated Installation.

Enhancements to the Refresh BI Portal Drill-Down Option

When creating charts and reports in InfoAssist and App Studio, you can create drilldowns using the Refresh BI Portal option. When that content is run as part of a page in a portal, selecting a drill-down link passes the selected value to any parameters that use the specified parameter name in content on the page or in the entire portal. This allows you to synchronize all of the content in a portal, and even use drilldowns in your content as a replacement for filter controls. Portal refresh behavior has been enhanced and is available in collaborative portals as well as Designer portals.

For more information, see the Using Drilldowns to Refresh and Filter Items in a Portal topic, or the How to Use Drill-Down Links to Filter a Portal video.

Fixes

- When an autofit chart is inside an output widget container, the chart will not automatically resize when the container is resized. (190813079)

- Unable to edit a synonym created in a proxy environment. (190823142)

- HTML file with Save Selection option is displayed correctly under My Content, but incorrectly under the Content tree. (190401003)

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Upgrade Notes

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- After an upgrade to Release 8206, only those users working in roles that include the new Create Shortcuts (opShortcut) privilege, located in the Basic Reporting privilege category, can continue to create shortcuts. Even though this privilege is included in the DomainBasicUser, DomainAdvancedUser, DomainDeveloper, DomainAnalyst, and WebFOCUSManager roles, it is not selected by default. Administrators must either select the Create Shortcuts privilege check box directly, or use the Role Update utility, located on the Configuration tab of the Administration Console, to include this privilege in each of the roles that can continue to use this feature.
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- POLY_REGRESS is now named REGRESS_POLY.
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Known Issues

- Bursting reports by parameter values is not supported with interactive content using the new Designer style of In-Document Analytics capabilities.

- If you are working with an In-Document Analytics chart in landscape mode on an Android mobile device and you switch to portrait mode, your content displays in fullscreen mode. Your chart displays at the bottom. If you run your content in new window mode, your In-Document Analytics chart does not display in fullscreen mode, displaying the chart on the right.

- When working in Document mode with In-Document Analytics, an error occurs if you attempt to run a document or dashboard using Internet Explorer 11.

- HIDENULLACRS, which hides across columns that have null or zero values in the entire column, is not supported with interactive content using the new Designer style of In-Document Analytics capabilities.

- When creating bar charts using the New option on the Ellipsis menu, the Color bucket incorrectly performs a count for a dimension field. It also shows a heat legend. The expected result is a color legend for each unique item.

- If you add an existing ARVERSION=1 report to an AHTML document set to ARVERSION=2, it fails at run time, displaying JSON text on the screen instead of the expected report output.
Running the configuration migration from the CMD line or UNIX Shell displays an error message in the log file. This error does not impact migration of the configuration files.

After running WFReposUtilCMDLine.bat or WFReposUtilCMDLine.sh, the RPT_DATA, RPT_METADATA, and RPT_USAGE tables are not getting dropped and are still available in the repository.

If you attempt to run an ARVERSION=2 (In-Document Analytics) AHTML Fusion chart procedure (.fex), it continuously loads and produces an F12 error. This does not occur with Fusion charts that employ ARVERSION=1.

If you are working with a procedure (.fex) and you change the ARVERSION to ARVERSION=2, global filters do not display when you run the procedure.

When you use the WebFOCUS Online Help in Japanese, if you type a search term in the Search box that contains NLS characters and press Enter, the words next to the Search box are corrupted. The workaround is to click the Go button next to the Search box, instead of pressing Enter.

When creating reports in WebFOCUS Designer using the Technical Preview feature, the default font may not display all NLS characters correctly. To ensure that these characters display properly in reports, change the values of the FONT attributes, in the report section of the embedded StyleSheet you are using, to a font that supports the required NLS characters. For example:

```
TYPE=REPORT, FONT='Arial Unicode MS',$
```

When using the Chrome 76 browser, the show filter panel icon on the responsive autoprompt interface does not redisplay the filter panel after the first run of a report with parameters. This behavior does not occur with the Chrome 77, Firefox, or IE11 browsers.

Kerberos Authentication cannot be completed successfully in installations of WebFOCUS that use Java version 1.8.0_212, which is currently delivered in the WebFOCUS installation. In order to address this issue, replace version 1.8.0_212 with the latest available version of Java, currently 1.8.0_232. Upcoming WebFOCUS installations will include the most recent working version of Java.

Field Titles are not displayed properly on HTML charts in installations of WebFOCUS that are configured for the Japanese language and use Java version 1.8.0_212, which is currently delivered in the WebFOCUS installation. In order to address this issue, replace version 1.8.0_212 with the latest available version of Java, currently 1.8.0_232. Upcoming WebFOCUS installations will include the most recent working version of Java.
The Export Scenario dialog box does not display Master File Shortcuts in the list of available items under the Resources node. Even though they are not visible, Master File Shortcuts are present in the list and can be included in Export Scenarios. In order to add a Master File Shortcut to a scenario you must right-click the folder that contains it and choose the Select with Sub-tree menu option. The Master File Shortcut will be transferred to the Scenario, along with the rest of the items in the folder.

Both the db_collation.sh file and the db_collation.bat file generate the "Main WARN Error while converting string [ ] to type," error message in the Command Prompt window at the end of their run. This message has no impact on the functionality of this post-installation utility, and it completes the run successfully.

The load_repos.sh file generates the "WARNING: sun.reflect.Reflection.getCaller Class is not supported. This will impact performance," error message in the Command Prompt window at the end of its run. In addition, the db_inplace_update.sh, WFRreposUtilCMDLine.sh, and update_repos.sh files generate the "Main WARN Error while converting string [ ] to type," error message in the Command Prompt window at the end of their run. These messages have no impact on the functionality of these post installation utilities, and each one completes its run successfully.

System Requirements

This release is now certified and has been tested with Google Chrome version 76, Firefox Quantum version 68, Microsoft Edge version 44 (WebFOCUS only), and Internet Explorer version 11 (Compatibility mode is not supported).
The following topic provides all the information that you need to know about this release of WebFOCUS.

In this chapter:

- Release and Gen Information
- New Features
- Fixes
- Upgrade Notes
- Known Issues
- System Requirements

Release and Gen Information

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New Features

New WebFOCUS Integrated Installation

WebFOCUS Integrated Installation is a new, simplified installation, which installs and configures all required product components to allow you to use the product for your reporting and analytics needs.

WebFOCUS Integrated Installation is an all-in-one downloadable installation package. Benefits include:

- WebFOCUS and the Reporting Server bundled with Tomcat, Derby, and Java.
- Hyperstage preconfigured as a high-speed target for uploaded data.
Simplified configuration for email distribution.

With WebFOCUS Integrated Installation, you can quickly and easily perform reporting and analysis, data discovery, and scheduling and distribution, all in a single web-based environment.

For more information, see WebFOCUS Integrated Installation.

New Integration of the Solr Search Platform With WebFOCUS

You can now configure Solr, an open-source, high-performance, full-featured enterprise-search platform, to work with WebFOCUS features. Solr uses the Apache Lucene Java search library as its core for searching and indexing. The WebFOCUS Integrated Installation and WebFOCUS Client create a directory with zip files that contain Solr indexes for the retail samples data and the Solr Version 8.0.0 distribution archive, which enable enterprise search and analytics.

The following Information Builders features make use of the Solr platform:

- InfoSearch
- WebFOCUS Home Page
- Home Widget
- Navigation Widget

For more information, see WebFOCUS Integrated Installation.

WebFOCUS Repository Procedures Now Available for Use as Pre- and Post-Distribution Schedule Procedures

The Task Pre/Post Processing Procedures dialog box now includes links to procedures located in the WebFOCUS Repository, as well as the Reporting Server, as shown in the following image.
This new capability expands the range of pre-processing and post-processing procedures you can attach to distribution schedules to include procedures located in the WebFOCUS Repository as well as those located on the Reporting Server.

For more information, see the Schedule Pre-Processing and Post-Processing Procedures topic in the ReportCaster Guide.

**Adapter for REST: Enabling Support for Custom Headers**

When you configure a connection for the Adapter for REST, you can now add custom headers consisting of name=value pairs that are passed in the HTTP headers.

To add custom headers for a REST connection, on the Connect to Data page of the Web Console, either add REST to the configuration or, if the adapter is already configured, edit an existing connection or add a new connection. In the Advanced HTTP connection options section, click Add Custom Headers.

A text box opens in which you can add the custom header, as shown in the following image.

![Custom Headers Image]

Custom Header values should be enclosed in double quotation marks, and the individual custom headers should be delimited by semi-colons (;). For example:

```
Content-Type="CDF";PARAM1="ABC"
```

Custom headers can also be created in the metadata as part of the process of creating a synonym. Defining custom headers in the connection string makes the custom headers apply to the entire REST service. Defining the custom headers at the metadata level makes the custom headers apply to the specific REST call, and the custom header values can be changed at report time using WHERE or IF statements.

For more information, see Adapter Administration.
Automatically Adjusting Only the Width of a Chart

This feature enables you to adjust only the width of a chart without adjusting the height, giving you more flexibility in displaying chart output. When the AUTOFIT parameter is set to ON, chart height and width are adjusted to fit the size of the container. When the AUTOFIT parameter is set to WIDTH, the width of the chart is adjusted to fit the width of the container without adjusting the height.

For more information, see Creating HTML5 Charts With WebFOCUS Language.

Fixes

- When creating a chart from App Studio, the Run with OLAP property is enabled when it should not be. (190730106, 190722101, 190729102)

- Unable to control borders within internal cells in a heading and footing in XLSX or HTML reports. (20553557, 70352006, 80172024, 90592515, 92672521, 11813555, 30393512, 61012021, 170125094, 170223043, 170428050, 170517097, 170621009, 30063540, 160329026, 22093513, 180522092, 190320059)

- A report containing many spot markers for fields is triggering an agent crash error. This occurs with all styling formats. (190529056)

- An XLSX report may not open when a numeric field used in a styled multi-item heading is either zero, formatted with the S option, or missing with the NODATA set to a blank value. (190108003)

- User receives unreadable content errors while running an XLSX template report and trying to open the report in Excel 2010 or Excel 2013. (190725070)

- When a field containing ACCEPT= code is dragged or dropped onto the Business View pane, the ACCEPT code is executed causing a potential performance issue with re-drawing the Business View structure. (190328032)

Upgrade Notes

- In App Studio, the Action, Method, Enctype, and Accept properties have been removed from the Form component in the Properties panel because these properties were not actually being used.

- In App Studio, an output widget container no longer contains the Autosize options in the Properties panel. Everything inside the widget is now fully CSS3 responsive at run time. Autosize is handled by JavaScript and responsive is handled by CSS3 styles.
When upgrading from previous versions of ReportCaster, FTP setting configuration information remains available in existing distribution schedules as long as the default value (Customized FTP) is assigned to the FTP Server Name field.

If you replace this value with a predefined FTP setting configuration in an individual schedule, the previous FTP Setting configuration information for that schedule is overwritten automatically.

If you limit FTP Setting configurations to a predefined list by selecting the Don’t allow user defined FTP in schedule check box in the (Default Settings) configuration, the previously FTP Setting configuration information for all schedules becomes unavailable, and is replaced by the default FTP Setting configuration or a predefined FTP Setting configuration selected for an individual schedule.

After an upgrade to Release 8206, only those users working in roles that include the new Create Shortcuts (opShortcut) privilege, located in the Basic Reporting privilege category, can continue to create shortcuts. Even though this privilege is included in the DomainBasicUser, DomainAdvancedUser, DomainDeveloper, DomainAnalyst, and WebFOCUSManager roles, it is not selected by default. Administrators must either select the Create Shortcuts privilege check box directly, or use the Role Update utility, located on the Configuration tab of the Administration Console, to include this privilege in each of the roles that can continue to use this feature.

The Display Esri Configuration Utility (opEsriAdminConsole) privilege, which granted access to the Esri Configuration Utility, was removed from the Application Development privilege category located on the Roles tab of the Security Center. The new ArcGIS API for JavaScript replaces the Esri Configuration Utility and is available to all users. Existing maps created using the ESRI Configuration Utility continue to work with the new ArcGIS API for JavaScript. However, you cannot upgrade them without first recreating them with the new ESRI HTML5 component-based Point Map or Choropleth Map options available from the WebFOCUS Designer or InfoAssist Chart Picker.

The following changes appear on the InfoAssist Properties page of the Administration Console Configuration tab.

In the Format Tab section:

- The Active PDF option was renamed PDF Analytic Document Format.
- The Active Report option was renamed HTML Analytic Document Format.
In the Report Output Format, Chart Output Format, and Document Output Format lists located in the Tools Options Dialog Defaults section:

- The Active Report option was renamed HTML Analytic Document.
- The Active PDF option was renamed PDF Analytic Document.

These changes were called for by In-Document Analytics rebranding, and they match changes to the labels of the corresponding format options in the Output File Format list that opens from the Format Group in the InfoAssist Home Page ribbon.

- The functions previously categorized as Statistical Python functions have been reclassified as Machine Learning (Python-based) functions. The names of the functions have changed as follows:
  - BLR_CLASSIFY is now named CLASSIFY_BLR.
  - KNN_CLASSIFY is now named CLASSIFY_KNN.
  - KNN_REGRESS is now named REGRESS_KNN.
  - RF_CLASSIFY is now named CLASSIFY_RF.
  - RF_REGRESS is now named REGRESS_RF.
  - POLY_REGRESS is now named REGRESS_POLY.

- The enhanced In-Document Analytics user interface available is configured by default for new installations and is not supported with the Microsoft Internet Explorer 11 browser. If you have requirements to support Microsoft Internet Explorer 11 browser, you can configure the Legacy In-Document Analytics user interface using the WebFOCUS Administration Console.

Customers upgrading to 8206 from 8205 or earlier releases will have the Legacy In-Document Analytics user interface configured.

The new In-Document Analytics setting appears in the Tools Option Dialog Defaults section of the InfoAssist Properties page, which is located on the Configuration tab of the Administration Console. This setting establishes the default value for the In-Document Analytics setting in the Procedure Settings dialog box which opens from the InfoAssist Quick Access toolbar. The value in this setting determines the interface used to display reports, charts, and documents using the HTML Analytic Document format. There are two valid values:

- **Designer Style.** Content displayed conforms to the conventions of WebFOCUS Designer and includes the Navigation icons, such as the Chart Format menu and the ellipsis menu.
Legacy. Content displayed conforms to the legacy run-time interface and provides options like the legacy column menu.

Content created in earlier versions is automatically assigned to the Legacy display, which conforms to the conventions of the Active Technologies format, and provides options like the Chart/Rollup and Pivot tools.

New content is automatically assigned to the WebFOCUS Designer option, which is selected by default.

To convert content created in earlier versions to the WebFOCUS Designer display, developers must open that content for editing, reset the value in the In-Document Analytics setting to Web FOCUS Designer, and save the revised procedure. As an alternative, developers can use the text editor to add the following commands directly to a procedure:

```
-DEFAULTH &WF_ARVERSION=2; SET ARVERSION=&WF_ARVERSION;
```

To prevent unexpected field transformations, when creating a chart in WebFOCUS Designer, the buckets are type sensitive. Certain buckets, such as the Size and Tooltip buckets, only accept measure fields, while others, such as the Horizontal and MultiPage buckets, only accept dimension fields. Additional buckets, such as the Vertical and Color buckets, accept both field types. When you attempt to drag a field into an incompatible bucket, the cursor changes to a cancel sign.

To add a measure field to a dimension bucket or a dimension field to a measure bucket, right-click a field in the Fields panel and click Add as dimension or Add as measure. The field is added to the default dimension or measure bucket. You can drag the field into another bucket, as needed. As in previous releases, measure fields used as dimensions display as distinct instead of aggregated values, while dimension fields used as measures are aggregated using the Count operation.

In Release 8206, the default value assigned to the Account Creation on Sign In (IBI_ALLOW_LOGIN_EXTERNAL_GROUPS) setting, located on the External page of the Administration Console Security tab, changes from All to OFF. If you must continue to use All as the default value in this setting, after upgrading to Release 8206, you must open or create the webfocus.cfg file, type the IBI_ALLOW_LOGIN_EXTERNAL_GROUPS=* setting in it, including the asterisk (*) value, which represents All, and then save the updated file.

WebFOCUS page breaks in format XLSX report output are synchronized with Excel page breaks. To revert to the behavior in previous releases in which page breaks were not synchronized, issue the SET XLSXPAGEBRKIGNORE=ON command.
In Release 8206, distribution directory nodes were enhanced to include connections to predefined FTP Setting configurations. This enhancement does not affect existing distribution directory nodes, and they remain unchanged after the upgrade.

Known Issues

- Bursting reports by parameter values is not supported with interactive content using the new Designer style of In-Document Analytics capabilities.

- When clicking a column for a report that has only the Freeze option enabled, and the width of the report container is big enough to display all columns, a blank column menu displays.

- If you are working with an In-Document Analytics chart in landscape mode on an Android mobile device and you switch to portrait mode, your content displays in fullscreen mode. Your chart displays at the bottom. If you run your content in new window mode, your In-Document Analytics chart does not display in fullscreen mode, displaying the chart on the right.

- When working in Document mode with In-Document Analytics, an error occurs if you attempt to run a document or dashboard using Internet Explorer 11.

- HİDENULLACRS, which hides across columns that have null or zero values in the entire column, is not supported with interactive content using the new Designer style of In-Document Analytics capabilities.

- When creating bar charts using the New option on the Ellipsis menu, the Color bucket incorrectly performs a count for a dimension field. It also shows a heat legend. The expected result is a color legend for each unique item.

- If you add an existing ARVERSION=1 report to an AHTML document set to ARVERSION=2, it fails at run time, displaying JSON text on the screen instead of the expected report output.

- Running the configuration migration from the CMD line or UNIX Shell displays an error message in the log file. This error does not impact migration of the configuration files.

- After running WFReposUtilCMDLine.bat or WFReposUtilCMDLine.sh, the RPT_DATA, RPT_METADATA, and RPT_USAGE tables are not getting dropped and are still available in the repository.

- If you attempt to run an ARVERSION=2 (In-Document Analytics) AHTML Fusion chart procedure (.fex), it continuously loads and produces an F12 error. This does not occur with Fusion charts that employ ARVERSION=1.
- If you are working with a procedure (.fex) and you change the ARVERSION to ARVERSION=2, global filters do not display when you run the procedure.

- When you use the WebFOCUS Online Help in Japanese, if you type a search term in the Search box that contains NLS characters and press Enter, the words next to the Search box are corrupted. The workaround is to click the Go button next to the Search box, instead of pressing Enter.

- When creating reports in WebFOCUS Designer using the Technical Preview feature, the default font may not display all NLS characters correctly. To ensure that these characters display properly in reports, change the values of the FONT attributes, in the report section of the embedded StyleSheet you are using, to a font that supports the required NLS characters. For example:

  TYPE=REPORT, FONT='Arial Unicode MS',$

- When using the Chrome 76 browser, the show filter panel icon on the responsive autoprompt interface does not redisplay the filter panel after the first run of a report with parameters. This behavior does not occur with the Chrome 77, Firefox, or IE11 browsers.

- Kerberos Authentication cannot be completed successfully in installations of WebFOCUS that use Java version 1.8.0_212, which is currently delivered in the WebFOCUS installation. In order to address this issue, replace version 1.8.0_212 with the latest available version of Java, currently 1.8.0_232. Upcoming WebFOCUS installations will include the most recent working version of Java.

- Field Titles are not displayed properly on HTML charts in installations of WebFOCUS that are configured for the Japanese language and use Java version 1.8.0_212, which is currently delivered in the WebFOCUS installation. In order to address this issue, replace version 1.8.0_212 with the latest available version of Java, currently 1.8.0_232. Upcoming WebFOCUS installations will include the most recent working version of Java.

- The Export Scenario dialog box does not display Master File Shortcuts in the list of available items under the Resources node. Even though they are not visible, Master File Shortcuts are present in the list and can be included in Export Scenarios. In order to add a Master File Shortcut to a scenario you must right-click the folder that contains it and choose the Select with Sub-tree menu option. The Master File Shortcut will be transferred to the Scenario, along with the rest of the items in the folder.

- Both the db_collation.sh file and the db_collation.bat file generate the "Main WARN Error while converting string [ ] to type," error message in the Command Prompt window at the end of their run. This message has no impact on the functionality of this post-installation utility, and it completes the run successfully.
The load_repos.sh file generates the "WARNING: sun.reflect.Reflection.getCaller Class is not supported. This will impact performance," error message in the Command Prompt window at the end of its run. In addition, the db_inplace_update.sh, WFReposUtilCMDLine.sh, and update_repos.sh files generate the "Main WARN Error while converting string [ ] to type," error message in the Command Prompt window at the end of their run. These messages have no impact on the functionality of these post installation utilities, and each one completes its run successfully.

System Requirements

This release is now certified and has been tested with Google Chrome version 76, Firefox Quantum version 68, Microsoft Edge version 44 (WebFOCUS only), and Internet Explorer version 11 (Compatibility mode is not supported).
8206.03 Release Notes

The following topic provides all the information that you need to know about this release of WebFOCUS.

In this chapter:

- Release and Gen Information
- New Features
- Fixes
- Upgrade Notes
- Known Issues
- System Requirements

### Release and Gen Information

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### New Features

**Options to Include the Selected Value When Specifying Minimum and Maximum Filter Values**

Additional filtering options are now available for numeric fields and date fields in WebFOCUS Designer charts and reports. These options enable you to include the selected value when you specify the minimum and maximum filter values in a control. You can use the **Greater than or equal** and **Less than or equal** options for numeric field filters, and the **On or after** and **On or before** options for date field filters.
An example of the Greater than or equal option, using a minimum filter value set to 100,000,000, is shown in the following image.

For more information, see *Adding Filters to Content*.

**Ability to Select Fields for Previewing and Creating Filters in a Profile Bar Chart**

From the Web Console, when viewing profile bar charts in a data flow, you can now select one or more values to see how your selection affects the other fields in your data. This allows you to preview your data filters, before you create them. If the preview provides the desired extract of your data, you can then use your selection to create a permanent filter that includes or excludes the selected fields when your data is loaded to a target.
SET Command for Synchronizing WebFOCUS Page Breaks With Excel Page Breaks

You can use the SET XLSXPAGEBKIGNORE command to control whether page breaks in WebFOCUS format XLSX report output insert Excel page breaks at the same points in the output. You can use this setting to apply default Excel page breaks instead of the page breaks from the report. By default, the page breaks will be synchronized.

For more information, see Creating Reports With WebFOCUS Language.
Attribute for Scaling PDF Report Output to Fit the Page Width

By default, if PDF report output is too wide to fit on a single page, the report generates multiple panels of the same page for the columns that do not fit. The page numbers specify the page and panel numbers. For example, page numbers 1.1 and 1.2 represent page 1/panel 1 and page 1/panel 2. You can scale the output to fit across the width of the page using the PAGE-SCALE StyleSheet attribute or the PAGE-SCALE SET parameter.
For more information, see *Creating Reports With WebFOCUS Language*.

**Technical Preview: New Repository Search and Navigation Widgets for Embedding in Portals or Pages**

You can now embed the new Home and Navigation Widgets in your portal or pages to create an app-like display of repository content, and provide users with new search functionality and navigation options. These URL-based widgets are available as Technical Preview features in Release 8206.03, and include the ability to access recent items, favorites, and portals from a single view.

For more information, see *Working With Embeddable Widgets*. 
Using URL Images as Markers in an HTML5 Chart

Using the chart template engine, if you have a field in your data that contains URL references that point to per-series or per-group images, you can display those images as markers on an HTML5 chart.

For more information, see Creating Reports With WebFOCUS Language.

Fixes

- Date validation does not work for calendar controls. (190417081)
- The push button style check box controls are not aligning the text properly. (190617005, 190626069)
- Some FocIndex variables do not migrate to App Studio Maintain Data. (190701054)
- A Maintain Data onOpen trigger does not migrate to the new App Studio Maintain Data paradigm. (190703053)
- When loading layers asynchronously, the onAfterLoad event is called before all of the layers are loaded. (190701083)
- When NLS is configured for Unicode - 65001, and the field name containing Database Management System characters are added to the Color BY bucket of a visualization or AHTML chart, a "Request failed. Your session may have expired." error occurs. (190408125)
The border is not displayed correctly when using a combination of an ACROSS statement in a multi-verb request, with SET BYPANEL = ON and SET ACROSSTITLE = ABOVE. (180724018)

When using SET BYDISPLAY = ACROSS with a field containing missing data and multiple SUM fields for PDF, HTML, and DHTML formats, some values are displayed with the missing character placeholder rather than their values. (190318001)

Using the Data Management Console and editing a flow or synonym with an expression comparing a field calculated as a date part and comparing it with a number results in a FOC177 INVALID DATE CONSTANT error message.

Upgrade Notes

In App Studio, the Action, Method, Enctype, and Accept properties have been removed from the Form component in the Properties panel because these properties were not actually being used.

In App Studio, an output widget container no longer contains the Autosize options in the Properties panel. Everything inside the widget is now fully CSS3 responsive at run time. Autosize is handled by JavaScript and responsive is handled by CSS3 styles.

When upgrading from previous versions of ReportCaster, FTP setting configuration information remains available in existing distribution schedules as long as the default value (Customized FTP) is assigned to the FTP Server Name field.

If you replace this value with a predefined FTP setting configuration in an individual schedule, the previous FTP Setting configuration information for that schedule is overwritten automatically.

If you limit FTP Setting configurations to a predefined list by selecting the Don't allow user defined FTP in schedule check box in the (Default Settings) configuration, the previously FTP Setting configuration information for all schedules becomes unavailable, and is replaced by the default FTP Setting configuration or a predefined FTP Setting configuration selected for an individual schedule.
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The functions previously categorized as Statistical Python functions have been reclassified as Machine Learning (Python-based) functions. The names of the functions have changed as follows:

- BLR_CLASSIFY is now named CLASSIFY_BLR.
- KNN_CLASSIFY is now named CLASSIFY_KNN.
KNN_REGRESS is now named REGRESS_KNN.

RF_CLASSIFY is now named CLASSIFY_RF.

RF_REGRESS is now named REGRESS_RF.

POLY_REGRESS is now named REGRESS_POLY.

The enhanced In-Document Analytics user interface available is configured by default for new installations and is not supported with the Microsoft Internet Explorer 11 browser. If you have requirements to support Microsoft Internet Explorer 11 browser, you can configure the Legacy In-Document Analytics user interface using the WebFOCUS Administration Console.

Customers upgrading to 8206 from 8205 or earlier releases will have the Legacy In-Document Analytics user interface configured.

The new In-Document Analytics setting appears in the Tools Option Dialog Defaults section of the InfoAssist Properties page, which is located on the Configuration tab of the Administration Console. This setting establishes the default value for the In-Document Analytics setting in the Procedure Settings dialog box which opens from the InfoAssist Quick Access toolbar. The value in this setting determines the interface used to display reports, charts, and documents using the HTML Analytic Document format. There are two valid values:

- **Designer Style.** Content displayed conforms to the conventions of WebFOCUS Designer and includes the Navigation icons, such as the Chart Format menu and the ellipsis menu.

- **Legacy.** Content displayed conforms to the legacy run-time interface and provides options like the legacy column menu.

Content created in earlier versions is automatically assigned to the Legacy display, which conforms to the conventions of the Active Technologies format, and provides options like the Chart/Rollup and Pivot tools.

New content is automatically assigned to the WebFOCUS Designer option, which is selected by default.

To convert content created in earlier versions to the WebFOCUS Designer display, developers must open that content for editing, reset the value in the In-Document Analytics setting to Web FOCUS Designer, and save the revised procedure. As an alternative, developers can use the text editor to add the following commands directly to a procedure:

```
-DEFAULTH &WF_ARVERSION=2; SET ARVERSION=&WF_ARVERSION;
```
To prevent unexpected field transformations, when creating a chart in WebFOCUS Designer, the buckets are type sensitive. Certain buckets, such as the Size and Tooltip buckets, only accept measure fields, while others, such as the Horizontal and MultiPage buckets, only accept dimension fields. Additional buckets, such as the Vertical and Color buckets, accept both field types. When you attempt to drag a field into an incompatible bucket, the cursor changes to a cancel sign.

To add a measure field to a dimension bucket or a dimension field to a measure bucket, right-click a field in the Fields panel and click Add as dimension or Add as measure. The field is added to the default dimension or measure bucket. You can drag the field into another bucket, as needed. As in previous releases, measure fields used as dimensions display as distinct instead of aggregated values, while dimension fields used as measures are aggregated using the Count operation.

In Release 8206, the default value assigned to the Account Creation on Sign In (IBI_ALLOW_LOGIN_EXTERNAL_GROUPS) setting, located on the External page of the Administration Console Security tab, changes from All to OFF. If you must continue to use All as the default value in this setting, after upgrading to Release 8206, you must open or create the webfocus.cfg file, type the IBI_ALLOW_LOGIN_EXTERNAL_GROUPS=\* setting in it, including the asterisk (*) value, which represents All, and then save the updated file.

WebFOCUS page breaks in format XLSX report output are synchronized with Excel page breaks. To revert to the behavior in previous releases in which page breaks were not synchronized, issue the SET XLSXPAGEBRKIGNORE=ON command.

Known Issues

- Bursting reports by parameter values is not supported with interactive content using the new Designer style of In-Document Analytics capabilities.
- If you are working with an In-Document Analytics chart in landscape mode on an Android mobile device and you switch to portrait mode, your content displays in fullscreen mode. Your chart displays at the bottom. If you run your content in new window mode, your In-Document Analytics chart does not display in fullscreen mode, displaying the chart on the right.
- When working in Document mode with In-Document Analytics, an error occurs if you attempt to run a document or dashboard using Internet Explorer 11.
- When creating bar charts using the New option on the Ellipsis menu, the Color bucket incorrectly performs a count for a dimension field. It also shows a heat legend. The expected result is a color legend for each unique item.
If you add an existing ARVERSION=1 report to an AHTML document set to ARVERSION=2, it fails at run time, displaying JSON text on the screen instead of the expected report output.

Running the configuration migration from the CMD line or UNIX Shell displays an error message in the log file. This error does not impact migration of the configuration files.

After running WFRreposUtilCMDLine.bat or WFRreposUtilCMDLine.sh, the RPT_DATA, RPT_METADATA, and RPT_USAGE tables are not getting dropped and are still available in the repository.

If you attempt to run an ARVERSION=2 (In-Document Analytics) AHTML Fusion chart procedure (.fex), it continuously loads and produces an F12 error. This does not occur with Fusion charts that employ ARVERSION=1.

If you are working with a procedure (.fex) and you change the ARVERSION to ARVERSION=2, global filters do not display when you run the procedure.

When you use the WebFOCUS Online Help in Japanese, if you type a search term in the Search box that contains NLS characters and press Enter, the words next to the Search box are corrupted. The workaround is to click the Go button next to the Search box, instead of pressing Enter.

When creating reports in WebFOCUS Designer using the Technical Preview feature, the default font may not display all NLS characters correctly. To ensure that these characters display properly in reports, change the values of the FONT attributes, in the report section of the embedded StyleSheet you are using, to a font that supports the required NLS characters. For example:

```
TYPE=REPORT, FONT='Arial Unicode MS',$
```

Kerberos Authentication cannot be completed successfully in installations of WebFOCUS that use Java version 1.8.0_212, which is currently delivered in the WebFOCUS installation. In order to address this issue, replace version 1.8.0_212 with the latest available version of Java, currently 1.8.0_232. Upcoming WebFOCUS installations will include the most recent working version of Java.

Field Titles are not displayed properly on HTML charts in installations of WebFOCUS that are configured for the Japanese language and use Java version 1.8.0_212, which is currently delivered in the WebFOCUS installation. In order to address this issue, replace version 1.8.0_212 with the latest available version of Java, currently 1.8.0_232. Upcoming WebFOCUS installations will include the most recent working version of Java.
The Export Scenario dialog box does not display Master File Shortcuts in the list of available items under the Resources node. Even though they are not visible, Master File Shortcuts are present in the list and can be included in Export Scenarios. In order to add a Master File Shortcut to a scenario you must right-click the folder that contains it and choose the Select with Sub-tree menu option. The Master File Shortcut will be transferred to the Scenario, along with the rest of the items in the folder.

Both the db_collation.sh file and the db_collation.bat file generate the "Main WARN Error while converting string [ ] to type," error message in the Command Prompt window at the end of their run. This message has no impact on the functionality of this post-installation utility, and it completes the run successfully.

The load_repos.sh file generates the "WARNING: sun.reflect.Reflection.getCaller Class is not supported. This will impact performance," error message in the Command Prompt window at the end of its run. In addition, the db_inplace_update.sh, WFRreposUtilCMDLine.sh, and update_repos.sh files generate the "Main WARN Error while converting string [ ] to type," error message in the Command Prompt window at the end of their run. These messages have no impact on the functionality of these post installation utilities, and each one completes its run successfully.

System Requirements

This release is now certified and has been tested with Google Chrome version 75, Firefox version 68, Internet Explorer version 11 (Compatibility mode is not supported), and Microsoft Edge version 44 (WebFOCUS only).
8206.02 Release Notes

The following topic provides all the information that you need to know about this release of WebFOCUS.

In this chapter:

- Release and Gen Information
- New Features
- Fixes
- Upgrade Notes
- Known Issues
- System Requirements

Release and Gen Information

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<td>Friday, July 19, 2019</td>
<td>wf071519a Gen 44 as071519a</td>
<td>8206 Gen 1740</td>
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New Features

There were no new features introduced in this release.

Fixes

- When you have multiple multi-drill reports laid out side-by-side on an HTMLFORM, if you drill on a report from the right side, the reports on the left disappear. (190701056)

- An HTML report that results in a single row of data, and which has HFREEZE=ON with Subtotals, displays only the subtotals at run time. (190422019)

- JavaScript and Cascading Style Sheet files are not being found in the Web Applications area in App Studio. (190612037, 190703004)
Upgrade Notes

- Display value not working properly for date field in App Studio. (190425084, 190613053)
- A calendar widget in App Studio is not selecting the current hour and minutes in the calendar. (190602007)
- Maintain Data migration support added for applications that reside in multiple folders. (190627085)

Upgrade Notes

- In App Studio, the Action, Method, Enctype, and Accept properties have been removed from the Form component in the Properties panel because these properties were not actually being used.
- In App Studio, an output widget container no longer contains the Autosize options in the Properties panel. Everything inside the widget is now fully CSS3 responsive at run time. Autosize is handled by JavaScript and responsive is handled by CSS3 styles.
- When upgrading from previous versions of ReportCaster, FTP setting configuration information remains available in existing distribution schedules as long as the default value (Customized FTP) is assigned to the FTP Server Name field.
  - If you replace this value with a predefined FTP setting configuration in an individual schedule, the previous FTP Setting configuration information for that schedule is overwritten automatically.
  - If you limit FTP Setting configurations to a predefined list by selecting the Don't allow user defined FTP in schedule check box in the (Default Settings) configuration, the previously FTP Setting configuration information for all schedules becomes unavailable, and is replaced by the default FTP Setting configuration or a predefined FTP Setting configuration selected for an individual schedule.
- After an upgrade to Release 8206, only those users working in roles that include the new Create Shortcuts (opShortcut) privilege, located in the Basic Reporting privilege category, can continue to create shortcuts. Even though this privilege is included in the DomainBasicUser, DomainAdvancedUser, DomainDeveloper, DomainAnalyst, and WebFOCUSManager roles, it is not selected by default. Administrators must either select the Create Shortcuts privilege check box directly, or use the Role Update utility, located on the Configuration tab of the Administration Console, to include this privilege in each of the roles that can continue to use this feature.
The Display Esri Configuration Utility (opEsriAdminConsole) privilege, which granted access to the Esri Configuration Utility, was removed from the Application Development privilege category located on the Roles tab of the Security Center. The new ArcGIS API for JavaScript replaces the Esri Configuration Utility and is available to all users. Existing maps created using the ESRI Configuration Utility continue to work with the new ArcGIS API for JavaScript. However, you cannot upgrade them without first recreating them with the new ESRI HTML5 component-based Point Map or Choropleth Map options available from the WebFOCUS Designer or InfoAssist Chart Picker.

The following changes appear on the InfoAssist Properties page of the Administration Console Configuration tab.

In the Format Tab section:

- The Active PDF option was renamed PDF Analytic Document Format.
- The Active Report option was renamed HTML Analytic Document Format.

In the Report Output Format, Chart Output Format, and Document Output Format lists located in the Tools Options Dialog Defaults section:

- The Active Report option was renamed HTML Analytic Document.
- The Active PDF option was renamed PDF Analytic Document.

These changes were called for by In-Document Analytics rebranding, and they match changes to the labels of the corresponding format options in the Output File Format list that opens from the Format Group in the InfoAssist Home Page ribbon.

The functions previously categorized as Statistical Python functions have been reclassified as Machine Learning (Python-based) functions. The names of the functions have changed as follows:

- BLR_CLASSIFY is now named CLASSIFY_BLR.
- KNN_CLASSIFY is now named CLASSIFY_KNN.
- KNN_REGRESS is now named REGRESS_KNN.
- RF_CLASSIFY is now named CLASSIFY_RF.
- RF_REGRESS is now named REGRESS_RF.
- POLY_REGRESS is now named REGRESS_POLY.
The enhanced In-Document Analytics user interface available is configured by default for new installations and is not supported with the Microsoft Internet Explorer 11 browser. If you have requirements to support Microsoft Internet Explorer 11 browser, you can configure the Legacy In-Document Analytics user interface using the WebFOCUS Administration Console.

Customers upgrading to 8206 from 8205 or earlier releases will have the Legacy In-Document Analytics user interface configured.

The new In-Document Analytics setting appears in the Tools Option Dialog Defaults section of the InfoAssist Properties page, which is located on the Configuration tab of the Administration Console. This setting establishes the default value for the In-Document Analytics setting in the Procedure Settings dialog box which opens from the InfoAssist Quick Access toolbar. The value in this setting determines the interface used to display reports, charts, and documents using the HTML Analytic Document format. There are two valid values:

- **Designer Style.** Content displayed conforms to the conventions of WebFOCUS Designer and includes the Navigation icons, such as the Chart Format menu and the ellipsis menu.
- **Legacy.** Content displayed conforms to the legacy run-time interface and provides options like the legacy column menu.

Content created in earlier versions is automatically assigned to the Legacy display, which conforms to the conventions of the Active Technologies format, and provides options like the Chart/Rollup and Pivot tools.

New content is automatically assigned to the WebFOCUS Designer option, which is selected by default.

To convert content created in earlier versions to the WebFOCUS Designer display, developers must open that content for editing, reset the value in the In-Document Analytics setting to Web FOCUS Designer, and save the revised procedure. As an alternative, developers can use the text editor to add the following commands directly to a procedure:

```
-DEFAULTH &WF_ARVERSION=2; SET ARVERSION=&WF_ARVERSION;
```

In order to prevent unexpected field transformations when creating a chart in WebFOCUS Designer, the buckets are type sensitive. Certain buckets, such as the Size and Tooltip buckets, only accept measure fields, while others, such as the Horizontal and MultiPage buckets, only accept dimension fields. Additional buckets, such as the Vertical and Color buckets, accept both field types. When you attempt to drag a field into an incompatible bucket, the cursor changes to a cancel sign.
To add a measure field to a dimension bucket or a dimension field to a measure bucket, right-click a field in the Fields panel and click Add as dimension or Add as measure. The field is added to the default dimension or measure bucket. You can drag the field into another bucket, as needed. As in previous releases, measure fields used as dimensions display as distinct instead of aggregated values, while dimension fields used as measures are aggregated using the Count operation.

**Known Issues**

- Bursting reports by parameter values is not supported with interactive content using the new Designer style of In-Document Analytics capabilities.

- When creating interactive Dashboards, you can only use Fullscreen mode to modify chart or report (grid) components. Other Dashboard components, such as images and text, do not display.

- If you are working with an In-Document Analytics chart in landscape mode on an Android mobile device and you switch to portrait mode, your content displays in fullscreen mode. Your chart displays at the bottom. If you run your content in new window mode, your In-Document Analytics chart does not display in fullscreen mode, displaying the chart on the right.

- When working in Document mode with In-Document Analytics, an error occurs if you attempt to run a document or dashboard using Internet Explorer 11.

- When creating bar charts using the New option on the Ellipsis menu, the Color bucket incorrectly performs a count for a dimension field. It also shows a heat legend. The expected result is a color legend for each unique item.

- If you add an existing ARVERSION=1 report to an AHTML document set to ARVERSION=2, it fails at run time, displaying JSON text on the screen instead of the expected report output.

- Running the configuration migration from the CMD line or UNIX Shell displays an error message in the log file. This error does not impact migration of the configuration files.

- After running WFRreposUtilCMDLine.bat or WFRreposUtilCMDLine.sh, the RPT_DATA, RPT_METADATA, and RPT_USAGE tables are not getting dropped and are still available in the repository.

- If you attempt to run an ARVERSION=2 (In-Document Analytics) AHTML Fusion chart procedure (.fex), it continuously loads and produces an F12 error. This does not occur with Fusion charts that employ ARVERSION=1.
If you are working with a procedure (.fex) and you change the ARVERSION to ARVERSION=2, global filters do not display when you run the procedure.

When you use the WebFOCUS Online Help in Japanese, if you type a search term in the Search box that contains NLS characters and press the Enter key, the words next to the Search box are corrupted. The workaround is to click the Go button next to the Search box, instead of pressing the Enter key.

When creating reports in WebFOCUS Designer using the Technical Preview feature, the default font may not display all NLS characters correctly. To ensure that these characters display properly in reports, change the values of the FONT attributes, in the report section of the embedded StyleSheet you are using, to a font that supports the required NLS characters. For example:

```
TYPE=REPORT, FONT='Arial Unicode MS',$
```

Kerberos Authentication cannot be completed successfully in installations of WebFOCUS that use Java version 1.8.0_212, which is currently delivered in the WebFOCUS installation. In order to address this issue, replace version 1.8.0_212 with the latest available version of Java, currently 1.8.0_232. Upcoming WebFOCUS installations will include the most recent working version of Java.

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The Export Scenario dialog box does not display Master File Shortcuts in the list of available items under the Resources node. Even though they are not visible, Master File Shortcuts are present in the list and can be included in Export Scenarios. In order to add a Master File Shortcut to a scenario you must right-click the folder that contains it and choose the Select with Sub-tree menu option. The Master File Shortcut will be transferred to the Scenario, along with the rest of the items in the folder.

Both the db_collation.sh file and the db_collation.bat file generate the "Main WARN Error while converting string [ ] to type," error message in the Command Prompt window at the end of their run. This message has no impact on the functionality of this post-installation utility, and it completes the run successfully.
The load_repos.sh file generates the "WARNING: sun.reflect.Reflection.getCaller Class is not supported. This will impact performance," error message in the Command Prompt window at the end of its run. In addition, the db_inplace_update.sh, WFReposUtilCMDLine.sh, and update_repos.sh files generate the "Main WARN Error while converting string [ ] to type," error message in the Command Prompt window at the end of their run. These messages have no impact on the functionality of these post installation utilities, and each one completes its run successfully.

System Requirements

There were no system requirement changes introduced in this release.
System Requirements
The following topic provides all the information that you need to know about this release of WebFOCUS.

In this chapter:

- Release and Gen Information
- New Features
- Fixes
- Upgrade Notes
- Known Issues
- System Requirements

## Release and Gen Information

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<tr>
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<td>Monday, July 8, 2019</td>
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## New Features

**New autoGlobal Property to Synchronize Maximum and Minimum Values on Dual-Y and Split-Y Charts**

You can synchronize the minimum and maximum values on dual-y and split-y charts using the "autoGlobal" property for the axis minimum and maximum values. If both the minimum and maximum values are synchronized for multiple y-axes, their scales will also be synchronized.
**Syntax:** How to Synchronize the Axis Maximum and Minimum Values on Dual-Y and Split-Y Charts

```json
"yaxis": {
   "min": "autoGlobal",
   "max": "autoGlobal"
},
"y2axis": {
   "min": "autoGlobal",
   "max": "autoGlobal"
}
```

or

```json
"axisList": {
   "y1": {
      "min": "autoGlobal",
      "max": "autoGlobal"
   },
   "y2": {
      "min": "autoGlobal",
      "max": "autoGlobal"
   },
   ...
}
```

**Example:** Synchronizing Scales on a Dual-Y Chart

The following request generates a line chart with dual-y axes, without synchronizing their minimum and maximum values.

```
GRAPH FILE WF_RETAIL_LITE
SUM COGS_US DISCOUNT_US
BY PRODUCTCATEGORY
ON GRAPH PCHOLD FORMAT JSCART
ON GRAPH SET LOOKGRAPH LINE
ON GRAPH SET STYLE *
type=data, column=n1, bucket=x-axis,$
type=data, column=n2, bucket=y-axis,$
type=data, column=n3, bucket=y-axis(2),$
ENDSTYLE
END
```
The output is shown in the following image.

![Graph Image](image)

The following version of the request synchronizes the maximum values for both y-axes. Since the minimum values are equal without the autoGlobal property, it is not necessary to implement that property for this chart.

```
GRAPH FILE WF_RETAIL_LITE
SUM COGS_US DISCOUNT_US
BY PRODUCT_CATEGORY
ON GRAPH PCHOLD FORMAT JSCHART
ON GRAPH SET LOOKGRAPH LINE
ON GRAPH SET STYLE *
type=data, column=n1, bucket=x-axis,$
type=data, column=n2, bucket=y-axis,$
type=data, column=n3, bucket=y-axis(2),$
*GRAPH_JS
"axisList":
{
  "y1": {
    "max": "autoGlobal"
  },
  "y2": {
    "max": "autoGlobal"
  }
}
*END
ENDSTYLE
END
```
The output is shown in the following image.

For more information, see the *Creating HTML5 Charts With WebFOCUS Language* manual.

**Automatically Fitting Multiple Charts in a Container**

SET AUTOFIT command controls whether HTML5 chart output resizes to fit into the container in which it is placed. Two new SET commands implement AUTOFIT for a request that generates multiple charts. In order for these commands to take effect, AUTOFIT must also be enabled:

- SET AUTOFIT-MULTI specifies whether to automatically fit multiple charts in the container.
- SET AUTOFIT-MIN-PCT defines a minimum height for each chart.

**Syntax:** How to New SET Commands to Automatically Fit Multiple Charts in a Container

```plaintext
ON GRAPH SET AUTOFIT-MULTI {ON|OFF}
ON GRAPH SET AUTOFIT-MIN-PCT pct
```

where:

ON

   Enables automatic fitting of multiple charts in their container. AUTOFIT must also be set to ON or RESIZE.

OFF

   Disables automatic fitting of multiple charts.
**pct**

Is the minimum height of each chart, as a percentage of the VAXIS value. The default AUTOFIT-MIN-PCT value is 100. If the charts do not all fit vertically in the container with that minimum height, the window will be generated with a scroll bar.

**Example:** Automatically Fitting Multiple Charts in Their Container

The following request generates a chart for each value of the BUSINESS_REGION field. AUTOFIT is set ON, AUTOFIT-MULTI is set ON, and AUTOFIT-MIN-PCT is set to 50% of the VAXIS value.

```plaintext
GRAPH FILE WF_RETAIL_LITE
HEADING CENTER
"Region: <BUSINESS_REGION"
SUM COGS_US REVENUE_US
BY BUSINESS_REGION NOPRINT
BY PRODUCT_CATEGORY
ON GRAPH PCHOLD FORMAT JSCHART
ON GRAPH SET LOOKGRAPH LINE
ON GRAPH SET EMBEDHEADING ON
ON GRAPH SET VAXIS 200
ON GRAPH SET AUTOFIT ON
ON GRAPH SET AUTOFIT-MULTI ON
ON GRAPH SET AUTOFIT-MIN-PCT 50
ON GRAPH SET STYLE *
type=heading, size=16, style=bold, 
TYPE=DATA, COLUMN=N1, BUCKET=page, 
TYPE=DATA, COLUMN=N2, BUCKET=x-axis, 
TYPE=DATA, COLUMN=N3, BUCKET=y-axis, 
TYPE=DATA, COLUMN=N4, BUCKET=y-axis, 
END
```
The output is shown in the following image. All four charts fit in the window, and no scrollbar is generated.

For more information, see the Creating HTML5 Charts With WebFOCUS Language manual.
Enhanced FTP Server Configuration Management

ReportCaster administrators who wish to take advantage of the speed and efficiency of the FTP protocol for scheduled report distributions can now create and manage predefined FTP Server connection configurations from the Configuration tab in the ReportCaster console, as shown in the following image.

Predefined FTP Setting configurations can be made available to FTP distribution schedules as shown in the following image.
This new feature is an enhancement of the existing capability to create FTP setting configurations within individual schedules. However, administrators can deactivate this capability and limit all schedules to predefined FTP settings by selecting the Don’t allow user defined FTP in schedule check box in the (Default Settings) configuration.

This ability to limit users to predefined FTP Setting configurations enables administrators to manage all FTP Setting configurations from a central location, and ensures that users always select a valid FTP Server connection when creating FTP or File system distribution schedules.

To learn more, see *Using the FTP Distribution Option*.

**Fixes**

- When using a dual-axis graph, linear trendlines used for measures on the y2-axis are displayed using the scale of the y1-axis. (190304015)

- Added validation for variable name of IBIF_focexec for valid focexec names. (190212043)

**Upgrade Notes**

- In App Studio, the Action, Method, Enctype, and Accept properties have been removed from the Form component in the Properties panel because these properties were not actually being used.

- In App Studio, an output widget container no longer contains the Autosize options in the Properties panel. Everything inside the widget is now fully CSS3 responsive at run time. Autosize is handled by JavaScript and responsive is handled by CSS3 styles.

- When upgrading from previous versions of ReportCaster, FTP setting configuration information remains available in existing distribution schedules as long as the default value (Customized FTP) is assigned to the FTP Server Name field.

- If you replace this value with a predefined FTP setting configuration in an individual schedule, the previous FTP Setting configuration information for that schedule is overwritten automatically.

- If you limit FTP Setting configurations to a predefined list by selecting the Don’t allow user defined FTP in schedule check box in the (Default Settings) configuration, the previously FTP Setting configuration information for all schedules becomes unavailable, and is replaced by the default FTP Setting configuration or a predefined FTP Setting configuration selected for an individual schedule.
After an upgrade to Release 8206, only those users working in roles that include the new Create Shortcuts (opShortcut) privilege, located in the Basic Reporting privilege category, can continue to create shortcuts. Even though this privilege is included in the DomainBasicUser, DomainAdvancedUser, DomainDeveloper, DomainAnalyst, and WebFOCUSManager roles, it is not selected by default. Administrators must either select the Create Shortcuts privilege check box directly, or use the Role Update utility, located on the Configuration tab of the Administration Console, to include this privilege in each of the roles that can continue to use this feature.

The Display Esri Configuration Utility (opEsriAdminConsole) privilege, which granted access to the Esri Configuration Utility, was removed from the Application Development privilege category located on the Roles tab of the Security Center. The new ArcGIS API for JavaScript replaces the Esri Configuration Utility and is available to all users. Existing maps created using the ESRI Configuration Utility continue to work with the new ArcGIS API for JavaScript. However, you cannot upgrade them without first recreating them with the new ESRI HTML5 component-based Point Map or Choropleth Map options available from the WebFOCUS Designer or InfoAssist Chart Picker.

The following changes appear on the InfoAssist Properties page of the Administration Console Configuration tab.

In the Format Tab section:

- The Active PDF option was renamed PDF Analytic Document Format.
- The Active Report option was renamed HTML Analytic Document Format.

In the Report Output Format, Chart Output Format, and Document Output Format lists located in the Tools Options Dialog Defaults section:

- The Active Report option was renamed HTML Analytic Document.
- The Active PDF option was renamed PDF Analytic Document.

These changes were called for by In-Document Analytics rebranding, and they match changes to the labels of the corresponding format options in the Output File Format list that opens from the Format Group in the InfoAssist Home Page ribbon.

The functions previously categorized as Statistical Python functions have been reclassified as Machine Learning (Python-based) functions. The names of the functions have changed as follows:

- BLR_CLASSIFY is now named CLASSIFY_BLR.
- KNN_CLASSIFY is now named CLASSIFY_KNN.
KNN_REGRESS is now named REGRESS_KNN.

RF_CLASSIFY is now named CLASSIFY_RF.

RF_REGRESS is now named REGRESS_RF.

POLY_REGRESS is now named REGRESS_POLY.

The enhanced In-Document Analytics user interface available is configured by default for new installations and is not supported with the Microsoft Internet Explorer 11 browser. If you have requirements to support Microsoft Internet Explorer 11 browser, you can configure the Legacy In-Document Analytics user interface using the WebFOCUS Administration Console.

Customers upgrading to 8206 from 8205 or earlier releases will have the Legacy In-Document Analytics user interface configured.

The new In-Document Analytics setting appears in the Tools Option Dialog Defaults section of the InfoAssist Properties page, which is located on the Configuration tab of the Administration Console. This setting establishes the default value for the In-Document Analytics setting in the Procedure Settings dialog box which opens from the InfoAssist Quick Access toolbar. The value in this setting determines the interface used to display reports, charts, and documents using the HTML Analytic Document format. There are two valid values:

- **Designer Style.** Content displayed conforms to the conventions of WebFOCUS Designer and includes the Navigation icons, such as the Chart Format menu and the ellipsis menu.

- **Legacy.** Content displayed conforms to the legacy run-time interface and provides options like the legacy column menu.

Content created in earlier versions is automatically assigned to the Legacy display, which conforms to the conventions of the Active Technologies format, and provides options like the Chart/Rollup and Pivot tools.

New content is automatically assigned to the WebFOCUS Designer option, which is selected by default.
To convert content created in earlier versions to the WebFOCUS Designer display, developers must open that content for editing, reset the value in the In-Document Analytics setting to Web FOCUS Designer, and save the revised procedure. As an alternative, developers can use the text editor to add the following commands directly to a procedure:

```
-DEFUALTH &WF_ARVERSION=2; SET ARVERSION=&WF_ARVERSION;
```

**Known Issues**

- Bursting reports by parameter values is not supported with interactive content using the new Designer style of In-Document Analytics capabilities.

- If you are working with an In-Document Analytics chart in landscape mode on an Android mobile device and you switch to portrait mode, your content displays in fullscreen mode. Your chart displays at the bottom. If you run your content in new window mode, your In-Document Analytics chart does not display in fullscreen mode, displaying the chart on the right.

- When working in Document mode with In-Document Analytics, an error occurs if you attempt to run a document or dashboard using Internet Explorer 11.

- When creating bar charts using the New option on the Ellipsis menu, the Color bucket incorrectly performs a count for a dimension field. It also shows a heat legend. The expected result is a color legend for each unique item.

- If you add an existing ARVERSION=1 report to an AHTML document set to ARVERSION=2, it fails at run time, displaying JSON text on the screen instead of the expected report output.

- Running the configuration migration from the CMD line or UNIX Shell displays an error message in the log file. This error does not impact migration of the configuration files.

- After running WFReposUtilCMDLine.bat or WFReposUtilCMDLine.sh, the RPT_DATA, RPT_METADATA, and RPT_USAGE tables are not getting dropped and are still available in the repository.

- If you attempt to run an ARVERSION=2 (In-Document Analytics) AHTML Fusion chart procedure (.fex), it continuously loads and produces an F12 error. This does not occur with Fusion charts that employ ARVERSION=1.

- If you are working with a procedure (.fex) and you change the ARVERSION to ARVERSION=2, global filters do not display when you run the procedure.
When creating reports in WebFOCUS Designer using the Technical Preview feature, the default font may not display all NLS characters correctly. To ensure that these characters display properly in reports, change the values of the FONT attributes, in the report section of the embedded StyleSheet you are using, to a font that supports the required NLS characters. For example:

```
TYPE=REPORT, FONT='Arial Unicode MS',$
```

Kerberos Authentication cannot be completed successfully in installations of WebFOCUS that use Java version 1.8.0_212, which is currently delivered in the WebFOCUS installation. In order to address this issue, replace version 1.8.0_212 with the latest available version of Java, currently 1.8.0_232. Upcoming WebFOCUS installations will include the most recent working version of Java.

Field Titles are not displayed properly on HTML charts in installations of WebFOCUS that are configured for the Japanese language and use Java version 1.8.0_212, which is currently delivered in the WebFOCUS installation. In order to address this issue, replace version 1.8.0_212 with the latest available version of Java, currently 1.8.0_232. Upcoming WebFOCUS installations will include the most recent working version of Java.

The Export Scenario dialog box does not display Master File Shortcuts in the list of available items under the Resources node. Even though they are not visible, Master File Shortcuts are present in the list and can be included in Export Scenarios. In order to add a Master File Shortcut to a scenario you must right-click the folder that contains it and choose the Select with Sub-tree menu option. The Master File Shortcut will be transferred to the Scenario, along with the rest of the items in the folder.

Both the db_collation.sh file and the db_collation.bat file generate the "Main WARN Error while converting string [ ] to type," error message in the Command Prompt window at the end of their run. This message has no impact on the functionality of this post-installation utility, and it completes the run successfully.

The load_repos.sh file generates the "WARNING: sun.reflect.Reflection.getCaller Class is not supported. This will impact performance," error message in the Command Prompt window at the end of its run. In addition, the db_inplace_update.sh, WFRreposUtilCMDLine.sh, and update_repos.sh files generate the "Main WARN Error while converting string [ ] to type," error message in the Command Prompt window at the end of their run. These messages have no impact on the functionality of these post installation utilities, and each one completes its run successfully.
System Requirements

This release is now certified and has been tested with Google Chrome version 75 and Firefox version 67.
WebFOCUS 8206 introduces significant enhancements throughout the product line, as well as fixes, incorporating UI/UX best practices throughout.

WebFOCUS agile development targets incremental releases approximately every two to four weeks, and includes both maintenance enhancements and new features. See the other chapters in this content for more information on the features, fixes, and enhancements introduced in those incremental releases.

The following topic provides all the information that you need to know about this release of WebFOCUS.

In this chapter:

- Release and Gen Information
- New Features
- Fixes
- Upgrade Notes
- Known Issues

## Release and Gen Information

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<td>Monday, June 10, 2019</td>
<td>wf060419a Gen 22 as060519a</td>
<td>8206 Gen 1732</td>
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## New Features

### Joining Data in WebFOCUS Designer

An enhanced Join Tool is now available in WebFOCUS Designer, providing greater analytical and comparative capabilities.
Click the Data Prep tab in WebFOCUS Designer to create a Join from an original and second data source, as shown in the following image.

Choose from more Join types, and select options for editing and displaying your Join with the new canvas toolbar. You can then create content from your single joined data source.

**Using URL Images as Marker Shapes**

Using the chart template engine, you can reference URLs that point to per-series or per-group images and display those images as marker shapes.

**Syntax:** How to Use URL Images as Marker Shapes

```
"series": [{"series": "reset",
  "marker": {"shape": "url:{{macro}}"}
}]
```

where:

"url:{{macro}}"

Displays the images pointed to by the URL references as series or group markers. The macro can be a template engine macro or a virtual attribute category to which a field containing URL references has been assigned.
**Example:** Using URL Images as Marker Shapes

The following examples use a .csv file containing soccer data that is publicly available online and has been uploaded to the Reporting Server. A partial listing of the generated Master File follows:

```
FILENAME=FIFI_PLAYERS_2019_TOPRATED, SUFFIX=DIREXCEL, DATASET=baseapp/fifi_players_2019_toprated.xlsx, 
SEGMENT=FIFI_PLAYERS_2019_TOPRATED, SEGTYPE=S0, 
  FIELDNAME=PLAYER_ID, ALIAS='Player ID', USAGE=I9, ACTUAL=A11V, MISSING=ON, TITLE='Player ID', 
  FIELDNAME=NAME, ALIAS=Name, USAGE=A19V, ACTUAL=A19V, MISSING=ON, TITLE='Name', 
  FIELDNAME=AGE, ALIAS=Age, USAGE=I5, ACTUAL=A11V, MISSING=ON, TITLE='Age', 
  FIELDNAME=PHOTO, ALIAS=Photo, USAGE=A46V, ACTUAL=A46V, MISSING=ON, TITLE='Photo', 
  FIELDNAME=NATIONALITY, ALIAS=Nationality, USAGE=A18V, ACTUAL=A18V, MISSING=ON, TITLE='Nationality', 
  FIELDNAME=FLAG, ALIAS=Flag, USAGE=A36V, ACTUAL=A36V, MISSING=ON, TITLE='Flag', 
  FIELDNAME=OVERALL, ALIAS=Overall, USAGE=I5, ACTUAL=A11V, MISSING=ON, TITLE='Overall', 
  FIELDNAME=POTENTIAL, ALIAS=Potential, USAGE=I5, ACTUAL=A11V, MISSING=ON, TITLE='Potential', 
  FIELDNAME=CLUB, ALIAS=Club, USAGE=A30V, ACTUAL=A30V, MISSING=ON, TITLE='Club', 
  FIELDNAME=CLUB_LOGO, ALIAS='Club Logo', USAGE=A47V, ACTUAL=A47V, MISSING=ON, TITLE='Club Logo', 
  FIELDNAME=VALUE__€M_, ALIAS='Value (€M)', USAGE=D8.1, ACTUAL=A64V, MISSING=ON, TITLE='Value (€M)', 
  FIELDNAME=WAGE__€K_, ALIAS='Wage (€K)', USAGE=D8.1, ACTUAL=A64V, MISSING=ON, TITLE='Wage (€K)', ...
```
The following request generates a bubble chart in which the marker shapes are the images pointed to by the PHOTO field values. The PHOTO field contains URL references that point to images of the players. In this example, the series_label template macro is used to generate the images.

```
GRAPH FILE baseapp/fifi_players_2019_toprated
SUM HEIGHT__IN_
WAGE__€K_
ACCELERATION
BY PHOTO
ON GRAPH PCHOLD FORMAT JSCHART
ON GRAPH SET LOOKGRAPH BUBBLE
ON GRAPH SET STYLE *
INCLUDE=IBFS:/FILE/IBI_HTML_DIR/ibi_themes/Warm.sty,$
TYPE=DATA, COLUMN=PHOTO, BUCKET=color, $
TYPE=DATA, COLUMN=HEIGHT__IN, BUCKET=y-axis, $
TYPE=DATA, COLUMN=WAGE__€K, BUCKET=x-axis, $
TYPE=DATA, COLUMN=ACCELERATION, BUCKET=size, $
*GRAPH_JS_FINAL
"series": [{
  "series": "all",
  "marker": {
    "shape": "url({{series_label}})"
  }
},
"legend": {
  "visible": false
},
"bubbleMarker": {
  "maxSize": "12.0%"
},
"yaxis": {
  "min": 60.0,
  "max": 80.0
},
*END
ENDSTYLE
END
```
The output is shown in the following image.

The following request generates a line chart in which the marker shapes are the images pointed to by the FLAG field. Each flag corresponds to a group in the chart request (the NATIONALITY field). The FLAG field is assigned to a virtual attribute category named flag. The flag image displays as the marker for the corresponding nationality group on the x-axis.

GRAPH FILE baseapp/fifi_players_2019_toprated
SUM
AVE.WAGE__€K_
FLAG
BY NATIONALITY
ON GRAPH PCHOLD FORMAT JSCHART
ON GRAPH SET LOOKGRAPH LINE
ON GRAPH SET STYLE *
INCLUDE=IBFS:/FILE/IBI_HTML_DIR/ibi_themes/Warm.sty,
$TYPE=DATA, COLUMN=N1, BUCKET=x-axis, $
TYPE=DATA, COLUMN=N2, BUCKET=y-axis, $
TYPE=DATA, COLUMN=N3, BUCKET=flag, $
*GRAPH_JS_FINAL
"series": [{
  "series": 0,
  "marker": {"visible": true, "size": 20,
    "shape": "url({{flag}})"},
},
"legend": { "visible": false
}]
*END
ENDSTYLE
END
The output is shown in the following image.

![Chart Image]

**Generating HTML5 Charts for Use in Formats PDF, Excel, PowerPoint, and PNG**

HTML5 chart output is normally rendered in the browser, making it highly interactive. However, in prior releases, this type of output could not be generated in other formats, such as .png or .pdf. When customers wanted to generate chart output in a static format, they had to use the legacy graph API engine, which does not support the new features available with HTML5 charts, such as maps and other chart extensions.

The server-side graphics feature adds the capability of generating HTML5 chart output in formats PDF, PNG, DHTML, XLSX, and PPTX. While the interactive capabilities of HTML5 charts are not available with these static formats, maps and chart extensions are supported. The output file generated shows the chart exactly as you would see it in the browser if it were not rendered in another format by the Reporting Server.

**Reference:** Usage Notes for Server-Side HTML5 Chart Output

- In this release, server-side graphics for HTML5 charts is supported only on Windows and on Linux running on Intel x86-64 CPUs.

- The HAXIS, VAXIS, and UNITS parameters that specify the dimensions of the chart output are supported. For information about these parameters, see the *Creating Reports With WebFOCUS Language* manual.

- Server-side HTML5 chart output is static. Even if a button appears (such as a zoom button), it will not be active, it will be an image.
The server-side chart output is rendered using a default resolution of 192 PPI (Pixels-Per-Inch) to prevent anti-aliasing effects (for example, jagged edges). You can change the resolution used by issuing the SET GRAPH-PPI command. The syntax is:

```
SET GRAPH-PPI = n
```

or, in a chart request:

```
ON GRAPH SET GRAPH-PPI n
```

where:

```
 n
```

Is an integer from 72 to 1200 that specifies the output resolution in pixels-per-inch. The default value is 192. A higher number produces a larger output file.

HTML5 charts can be used as components of compound reports.

**Syntax:**

**How to Enable Server-Side Chart Output**

The server recognizes that it needs to generate HTML5 output, rather than legacy graph output, when the following setting is in effect:

```
SET GRAPHENGINE = JSCHART
```

By default, this setting is implemented when the chart request uses chart attribute syntax. For chart requests that do not use chart attribute syntax, you must issue this command manually in your request or in a supported profile. If you do not, the legacy graph API will be used to generate the output. For information about chart attribute syntax, see the Creating HTML5 Charts With WebFOCUS Language manual.

**Syntax:**

**How to Generate HTML5 Chart Output in Other Formats**

When you generate interactive HTML5 charts, you include the following command in your chart request.

```
ON GRAPH PCHOLD FORMAT JSCHART
```

To generate HTML5 chart output in other formats, you must include the following command in your chart request.

```
ON GRAPH PCHOLD FORMAT format
```
where:

*format*

Can be one of the following output formats.

- PDF
- PNG
- DHTML
- XLSX
- PPTX

For more information about these output formats see, the *Creating Reports With WebFOCUS Language* manual.

In addition, the SET GRAPHENGINE = JSCHART command must be in effect, either by default (if the request uses chart attribute syntax), or because the command is issued in the FOCEXEC or in a profile.
Example: Generating an Esri Map Chart as a PowerPoint File

The following chart request generates an Esri map and exports it as a PowerPoint file.

```
GRAPH FILE wf_retail_lite
SUM COGS_US
BY STATE_PROV_NAME
WHERE COUNTRY_NAME EQ 'United States' AND STATE_PROV_NAME NE 'Puerto Rico'
ON GRAPH PCHOLD FORMAT PPTX
ON GRAPH SET LOOKGRAPH CHOROPLETH
ON GRAPH SET AUTOFIT ON
ON GRAPH SET STYLE *
INCLUDE=IBFS:/FILE/IBI_HTML_DIR/ibi_themes/Warm.sty,$
TYPE=REPORT, CHART-LOOK=com.esri.map, $
TYPE=DATA, COLUMN=COGS_US, BUCKET=color, $
*GRAPH_JS_FINAL
"extensions": {
  "com.esri.map": {
    "overlayLayers": [
      {
        "ibiDataLayer": {
          "map-metadata": {
            "map_by_field": "STATE_PROV_NAME"
          }
        }
      }
    ],
    "baseMapInfo": {
      "customBaseMaps": [
        {
          "ibiBaseLayer": "gray"
        }
      ]
    }
  }
}
*END
ENDSTYLE
END
```
The output is shown in the following image.

Example: Changing the Resolution of HTML5 Chart Output in PDF Format

The following request generates a bubble chart in PDF format using the default resolution.

```
GRAPH FILE ibisamp/ggsales
SUM GGSALES.SALES01.BUDDOLLARS
GGSALES.SALES01.BUDUNITS
GGSALES.SALES01.UNITS
BY GGSALES.SALES01.PRODUCT
BY GGSALES.SALES01.REGION
ON GRAPH PCHOLD FORMAT PDF
ON GRAPH SET LOOKGRAPH BUBBLE
ON GRAPH SET AUTOFIT OFF
ON GRAPH SET STYLE *
INCLUDE=IBFS:/FILE/IBI_HTML_DIR/ibi_themes/Warm.sty,$
TYPE=REPORT, CHART-ORIENTATION=VERTICAL, CHART-SERIES-LAYOUT=side-by-side,
ARGRAPHENGINE=JSCHART, $
TYPE=DATA, COLUMN=N3, BUCKET=y-axis, $
TYPE=DATA, COLUMN=N1, BUCKET=color, $
TYPE=DATA, COLUMN=N4, BUCKET=x-axis, $
TYPE=DATA, COLUMN=N5, BUCKET=size, $
TYPE=DATA, COLUMN=N2, BUCKET=detail, $
ENDSTYLE
END
```
The output is shown in the following image.

Adding the command ON GRAPH SET GRAPH-PPI 1200 generates cleaner-looking markers. To show the difference even more clearly, the following image shows two of the bubbles at the default resolution, when the chart is zoomed in.
The following image shows the same two bubbles zoomed in, when the ON GRAPH SET GRAPH-PPI 1200 is added to the request.

**Example:** Generating an HTML5 Chart Without Chart Attribute Syntax as an Excel Output File

The following request generates a radar chart as an Excel output file. As the request does not use chart attribute syntax, the command ON GRAPH SET GRAPHENGINE JSCHART has been added to the request.

```
GRAPH FILE WF_RETAIL_LITE
SUM AVE.COGS_US MDN.COGS_US
BY PRODUCT_CATEGORY
ON GRAPH PCHOLD FORMAT XLSX
ON GRAPH SET LOOKGRAPH RADARL
ON GRAPH SET GRAPHENGINE JSCHART
ON GRAPH SET STYLE *
INCLUDE=IBFS:/FILE/IBI_HTML_DIR/javaassist/intl/EN/ENIADefault_combine.sty,
  $*GRAPH_JS
"legend": {"visible": true},
"polarProperties": {
  "straightGridLines": false, "extrudeAxisLabels": false, "drawAsArea": false},
"yaxis": {
  "numberFormat": ":\#","majorGrid": {"lineStyle": {
  "width": 1, "color": "navy", "dash": "2 2"}},
  "series": [
    {"series": 0, "color": "purple", "border": {"width": 2}},
    {"series": 1, "color": "cyan", "border": {"width": 2}},
    {"series": 2, "color": "grey", "border": {"width": 2}},
    {"series": 3, "color": "teal", "border": {"width": 2}}]
*END
ENDSTYLE
END
```
Generating a Statistical Box Plot Chart

A box plot shows a series broken down into quartiles for each group value. In a box plot, each series and group requires five values. For a given series and group box, the first value is the minimum (lower hat or whisker), the second defines the box bottom (first quartile), the third value is the median (second quartile), the fourth value defines the box top (third quartile), and the fifth value defines the maximum value (top hat or whisker). Outliers are drawn as separate points.

The statistical box plot chart type calculates the five values, given one or more measures and one dimension.

Box plot fill color and border are defined by the series color and border. The series marker properties control the appearance of outlier points.

The chart type is STAT-BOXPLOT. STAT-BOXPLOT attribute categories are as follows:

- x-axis for the sort field (dimension).
- y-axis for the series fields (measures).
**Example:** Generating a Statistical Box Plot Chart

The following request generates a statistical box plot with two measures. The series properties specify the box fill colors and borders.

```
GRAPH FILE wf_retail_lite
PRINT COGS_US REVENUE_US
BY PRODUCT_CATEGORY
ON GRAPH PCHOLD FORMAT JSCHART
ON GRAPH SET LOOKGRAPH STAT-BOXPLOT
ON GRAPH SET STYLE *
INCLUDE=IBFS:/FILE/IBI_HTML_DIR/ibi_themes/Warm.sty,$
type=data, column=product_category, bucket=x-axis, $
type=data, column=cogs_us, bucket=y-axis, $
type=data, column=revenue_us, bucket=y-axis, $
*GRAPH_JS
"axisList":{
"y1": {"max": 2000, "min": 0},
"series":[
{"series":0, "color": "beige", "border": {"color": "brown", "width": 3}},
{"series":1, "color": "cyan", "border": {"color": "navy", "width": 3, 
"dash": "1 1"}}]
*END
ENDSTYLE
END
```

The output is shown in the following image.
**Example:**  Generating a Statistical Box Plot With Outliers

The following request generates points that do not fall within the statistical measures of the boxes.

```
DEFINE FILE GGSALES
SALES/D12 = IF ((CATEGORY EQ 'Coffee') AND (STCD EQ 'R1019')) THEN 19000
   ELSE IF ((CATEGORY EQ 'Coffee') AND (STCD EQ 'R1020')) THEN 20000
   ELSE IF ((CATEGORY EQ 'Coffee') AND (STCD EQ 'R1040')) THEN 7000
   ELSE DOLLARS;
BUD_SALES/I12 = IF ((CATEGORY EQ 'Food') AND (STCD EQ 'R1019')) THEN 15000
   ELSE BUDDOLLARS;
END

GRAPH FILE GGSALES
SUM SALES
BUD_SALES
BY CATEGORY
BY STCD
ON GRAPH PCHOLD FORMAT JSCART
ON GRAPH SET LOOKGRAPH STAT-BOXPLOT
ON GRAPH SET STYLE *
INCLUDE=IBFS:/FILE/IBI_HTML_DIR/ibi_themes/Warm.sty,$
   type=data, column=n1, bucket=x-axis, $
   type=data, column=n2, bucket=detail, $
   type=data, column=n3, bucket=y-axis, $
   type=data, column=n4, bucket=y-axis, $
   *GRAPH_JS
"series": [{"series": 0, "marker": {"visible": true}},
   {"series": 1, "marker": {"visible": true}}],
"boxPlotProperties": {
   "notch": {"width": "70%"}
}
*END
ENDSTYLE
END
```
The output is shown in the following image. The outliers are the individual points that display above and below the boxes.
Syntax: How to Configure Box Plot Chart Properties

The following properties can be used to format box plots and statistical box plots.

```
"boxPlotProperties": {
  "hatWidth": "string",
  "drawHatAsBox": boolean,
  "notch": {
    "width": "string",
    "multiplier": number
  },
  "medianLine": {
    "width": number,
    "color": "string",
    "dash": "string"
  },
  "connectorLine": {
    "width": number,
    "color": "string",
    "dash": "string"
  },
  "meanMarker": {
    "visible": boolean,
    "color": "string",
    "border": {
      "width": number,
      "color": "string",
      "dash": "string"
    },
    "size": number,
    "shape": "string",
    "rotation": number,
    "tooltip": "string"
  }
},
```

where:

"hatWidth": width

Can be a number that defines the width of the hat in pixels or a string that includes a percent symbol, enclosed in double quotation marks (") that expresses a percentage value ("0%"..."100%"). The default value is "50%".

"drawHatAsBox": boolean

Defines the style of the box plot hats. Valid values are:

- true, which draws box plot hats as boxes.
- false, which draws normal hats. This is the default value.
"notch"
Defines the properties of an optional indentation of the box at the median line.

"width": "string"
Is a percent string (less than "100%") that defines the notch inset as a percent of the width of the box. The default value is undefined, which does not draw a notch.

"multiplier": number
Is a factor used in determining how far the notch extends between the median point and the first and third quartile points. The default value is 1.58. The formula used to calculate the range is:

\[ +/- \text{notch.multiplier} \times (\text{box upper value} - \text{box lower value}) / \sqrt{\text{data point count}} \]

"medianLine"
Defines the properties of the line that represents the median point of the box plot.

"width": number
Is the width of the median line, in pixels. The default value is 1.

"color": "string"
Is a color specification string that defines the color of the median line. The default value is "black".

"dash": "string"
Is a string that defines the dash properties of the median line. Enter the pixel size of a dash followed by the number of pixels between the dashes. The default value is ", which draws a solid line.

"connectorLine"
Defines the properties of the connector lines and hats, when "drawHatAsBox" is false.

"width": number
Is the width of the connector lines, in pixels. The default value is 1.

"color": "string"
Is a color specification string that defines the color of the connector lines. The default value is "black".

"dash": "string"
Is a string that defines the dash properties of the connector lines. Enter the pixel size of a dash followed by the number of pixels between the dashes. The default value is ", which draws a solid line.
"meanMarker"
Defines the properties of a marker drawn at the mean point in the box plot.

"visible": boolean
Defines whether to draw a mean marker. Valid values are:

- true, which draws a mean marker.
- false, which does not draw a mean marker. This is the default value.

"color": "string"
Is a color specification string that defines the color of the mean marker. The default value is undefined.

"border"
Defines the properties of the mean marker border.

"width": number
Is the width of the mean marker border, in pixels. The default value is 1.

"color": "string"
Is a color specification string that defines the color of the mean marker border. The default value is undefined.

"dash": "string"
Is a string that defines the dash properties of the mean marker border. Enter the pixel size of a dash followed by the number of pixels between the dashes. The default value is undefined.

"size": number
Is the size of the mean marker, in pixels. The default value is 8.

"shape": "string"
Defines the shape of the mean marker. All standard marker shapes are supported. The default value is "circle".

"rotation": number
Is a number that defines the number of degrees to rotate the mean marker. The default value is 0.

"tooltip": "string"
Defines a tooltip for the mean marker. The default value is undefined.
**Example:** Configuring Statistical Box Plot Properties

The following request generates a statistical box plot chart in which the hat width is 80% of the width of the boxes, the notch is a 50% indentation at the median line, the median line is a green 5-pixel wide line, the connector lines are purple dashed lines, and the mean marker is a red circle with an orange dashed border.

```plaintext
GRAPH FILE GGSALES
PRINT DOLLARS
BY CATEGORY
IF ST EQ 'NY'
ON GRAPH SET VZERO OFF
ON GRAPH PCHOLD FORMAT JSCHART
ON GRAPH SET LOOKGRAPH STAT-BOXPLOT
ON GRAPH SET STYLE *
INCLUDE=IBFS:/FILE/IBI_HTML_DIR/ibi_themes/Warm.sty,$
type=data, column=n1, bucket=x-axis, $
type=data, column=n2, bucket=y-axis, $
*GRAPH_JS
"boxPlotProperties": {
    "hatWidth": "80%",
    "drawHatAsBox": false,
    "notch": {
        "width": "50%",
        multiplier: 1.58
    },
    "medianLine": {
        "width": 5,
        "color": "green",
        "dash": ""
    },
    "connectorLine": {
        "width": 1,
        "color": "purple",
        "dash": "3 3"
    },
    "meanMarker": {
        "visible": true,
        "color": "red",
        "border": {
            "width": 3,
            "color": "orange",
            "dash": "1 1"
        },
        "size": 20,
        "shape": "circle",
        "rotation": 0,
        "tooltip": undefined
    }
}
*END
ENDSTYLE
END
```
Increasing the multiplier for the notch to 3.5 extends the notch, as shown in the following image.

**Synchronizing the Axis Maximum and Minimum Values on Dual-Y and Split-Y Charts**

You can synchronize the minimum and maximum values on dual-y and split-y charts using the "autoGlobal" property for the axis minimum and maximum values. If both the minimum and maximum values are synchronized for multiple y-axes, their scales will also be synchronized.
**Syntax:** How to Synchronize the Axis Maximum and Minimum Values on Dual-Y and Split-Y Charts

```
"yaxis":
{
    "min": "autoGlobal",
    "max": "autoGlobal"
},
"y2axis":
{
    "min": "autoGlobal",
    "max": "autoGlobal"
}
```

or

```
"axisList":
{
    "y1":
    {
        "min": "autoGlobal",
        "max": "autoGlobal"
    },
    "y2":
    {
        "min": "autoGlobal",
        "max": "autoGlobal"
    },
    ...
}
```

**Example:** Synchronizing Scales on a Dual-Y Chart

The following request generates a line chart with dual-y axes, without synchronizing their minimum and maximum values.

```
GRAPH FILE WF_RETAIL_LITE
SUM COGS_US DISCOUNT_US
BY PRODUCT_CATEGORY
ON GRAPH PCHOLD FORMAT JSCHART
ON GRAPH SET LOOKGRAPH LINE
ON GRAPH SET STYLE *
type=data, column=n1, bucket=x-axis,$
type=data, column=n2, bucket=y-axis,$
type=data, column=n3, bucket=y-axis(2),$ ENDSTYLE
END
```
The output is shown in the following image.

The following version of the request synchronizes the maximum values for both y-axes. Since the minimum values are equal without the autoGlobal property, it is not necessary to implement that property for this chart.

```
GRAPH FILE WF_RETAIL_LITE
SUM COGS_US DISCOUNT_US
BY PRODUCT_CATEGORY
ON GRAPH PCHOLD FORMAT JSCHART
ON GRAPH SET LOOKGRAPH LINE
ON GRAPH SET STYLE *
  type=data, column=n1, bucket=x-axis,$
  type=data, column=n2, bucket=y-axis,$
  type=data, column=n3, bucket=y-axis(2),$
*GRAPH_JS
  "axisList":
  {"y1": {
    "max": "autoGlobal"
  },
   "y2": {
    "max": "autoGlobal"
  }
}
*END
ENDSTYLE
END
```
Automatically Fitting Multiple Charts in a Container

SET AUTOFIT command controls whether HTML5 chart output resizes to fit into the container in which it is placed. Two new SET commands implement AUTOFIT for a request that generates multiple charts. In order for these commands to take effect, AUTOFIT must also be enabled:

- **SET AUTOFIT-MULTI** specifies whether to automatically fit multiple charts in the container.
- **SET AUTOFIT-MIN-PCT** defines a minimum height for each chart.

**Syntax:**

```
ON GRAPH SET AUTOFIT-MULTI {ON | OFF}
ON GRAPH SET AUTOFIT-MIN-PCT pct
```

where:

- **ON**
  Enables automatic fitting of multiple charts in their container. AUTOFIT must also be set to ON or RESIZE.
- **OFF**
  Disables automatic fitting of multiple charts.
Is the minimum height of each chart, as a percentage of the VAXIS value. The default AUTOFIT-MIN-PCT value is 100. If the charts do not all fit vertically in the container with that minimum height, the window will be generated with a scroll bar.

**Example:**  
**Automatically Fitting Multiple Charts in Their Container**

The following request generates a chart for each value of the BUSINESS_REGION field. AUTOFIT is set ON, AUTOFIT-MULTI is set ON, and AUTOFIT-MIN-PCT is set to 50% of the VAXIS value.

```
GRAPH FILE WF_RETAIL_LITE
HEADING CENTER
"Region: <BUSINESS_REGION"
SUM COGS_US REVENUE_US
BY BUSINESS_REGION NOPRINT
BY PRODUCT_CATEGORY
ON GRAPH PCHOLD FORMAT JSCHART
ON GRAPH SET LOOKGRAPH LINE
ON GRAPH SET EMBEDHEADING ON
ON GRAPH SET VAXIS 200
ON GRAPH SET AUTOFIT ON
ON GRAPH SET AUTOFIT-MULTI ON
ON GRAPH SET AUTOFIT-MIN-PCT 50
ON GRAPH SET STYLE *
type=heading, size=16, style=bold, $
TYPE=DATA, COLUMN=N1, BUCKET=page, $
TYPE=DATA, COLUMN=N2, BUCKET=x-axis, $
TYPE=DATA, COLUMN=N3, BUCKET=y-axis, $
TYPE=DATA, COLUMN=N4, BUCKET=y-axis, $
END
```
Configuring the Automatic Refresh Option for Charts

WebFOCUS Designer allows you to integrate real-time streaming data with your charts using the Automatic refresh option. For example, for IoT analytics applications, if you configured a connection to a streaming data source using the Kafka adapter, the Automatic refresh option can be enabled to update your chart dynamically at a specified interval (in seconds). Depending on your specific use case or requirements, you can configure multiple charts using the Automatic refresh option and add them to a page, portal, or workbook. Each chart will refresh independently with updated data based on the specified refresh rate.

Considerations

As of Release 8206, the Automatic refresh option is supported for all chart types, except for maps (for example, Proportional Symbol and Choropleth maps). Support for maps will be provided in a future release. The Automatic refresh option is not available for reports in WebFOCUS Designer. In addition, this option is not included in InfoAssist.
**Procedure:** How to Enable and Configure the Automatic Refresh Option for a Chart

To enable and configure the Automatic refresh option:

1. From the WebFOCUS Home Page, click the *Designer* tab.
2. Click *Chart*.
3. Select an existing data source or connect to a new data source, and click *Select*.
4. Choose a chart type from the chart picker, as shown in the following image.

5. Add measures and dimensions according to your requirements by dragging them onto the canvas.

   **Note:** You can also double-click a measure or dimension to add it to the relevant bucket or drag it into the relevant bucket.

6. Apply any required formatting or styling to your chart (for example, adding a header or footer).
7. Click More from the WebFOCUS Designer toolbar and select **Automatic refresh** from the shortcut menu, as shown in the following image.

By default, the Automatic refresh option is disabled (set to None).
8. Select *Refresh every* to enable the Automatic refresh option, as shown in the following image.

![Refresh every](image)

9. Specify the refresh rate in seconds, which is the period of time to wait until the chart polls the corresponding data source to reflect any updated data.

   **Note:** You can specify a maximum value of 120 seconds (two minutes) as the refresh rate.

10. Click *OK*.

    You can continue to build and modify your chart as required.

    Before you save your chart, you can also create a thumbnail, which is used to show an image of the chart on the Home Page or when you create a page in WebFOCUS Designer. To create a thumbnail, on the WebFOCUS Designer toolbar, click *Thumbnail*.

11. When you are finished, click *Save* on the WebFOCUS Designer toolbar to save your chart.

12. To test and verify that your chart is being refreshed correctly, locate it on the Home Page, right-click it and select *Run* from the shortcut menu.

    Observe your chart while it is running and make a note of any adjustments that should be made. For example, if the chart is being refreshed too quickly, then you should consider increasing the number of seconds specified for the Automatic refresh option.

**Procedure: How to Disable the Automatic Refresh Option for a Chart**

To disable the Automatic refresh option:

1. Locate your chart on the Home Page, right-click it, and select *Edit* from the shortcut menu.

   Your selected chart opens in WebFOCUS Designer.
2. Click More from the WebFOCUS Designer toolbar and select *Automatic refresh* from the shortcut menu, as shown in the following image.

![](image)

3. Select *None* to disable the Automatic refresh option, and then click *OK*.

**Interacting With Content Using In-Document Analytics**

Content that uses In-Document Analytics provides users with an interactive interface that allows the generation of real-time, dynamic reports, charts, and dashboards. Its versatility allows you to package a data set with a combination of analytical views, resulting in highly intuitive and interactive self-service business intelligence. This gives you an edge in presentation and analysis, making it easy to develop and share concepts, ideas, and scenarios.
An interactive report is a self-contained report, meaning that it contains all the data and JavaScript® within the HTML output file. Packaging the data and the interactive functions in the HTML file also makes the output highly compressible for email and transparent to security systems.

Your users can explore and interact with your data using various analytical tools such as sorting, filtering, calculations, roll-ups, and pivoting. They can also experiment with different scenarios using various options.

All of the interactive content that you create functions independently of a server, and is portable, making it easy for your users to work with and analyze complex data without requiring the use of an external application, such as Microsoft Excel. With two types of users (developer and end user), the roles in development and delivery of materials are clear. The end user interacts with the content that the developer creates and deploys. They can obtain content without any additional plug-ins or programs should they choose to access your content remotely or offline, independent of a server.

In InfoAssist, there are two output formats that you can use to enable In-Document Analytics functionality: HTML Analytical Document format (formerly known as AHTML) and PDF Analytical Document format (formerly known as APDF). Using Analytical Document format (ADF), you can generate dynamic content and distribute it offline, even when you are disconnected from a browser, as shown in the following image.
In-Document Analytics is a dynamic tool that allows you to visualize, calculate, and perform various other analytical actions. Robust and flexible, In-Document Analytics gives you the accessibility and portability you need to succeed in your analysis.

**Using Sort Column Indicators to Control the Display of Information in Your Report**

When working with In-Document Analytics (IDA) reports, you can sort a column in ascending and descending order, giving you control over the display of information in your report. The indicator that shows how a column has been adjusted by a previous action shows to the right of the column, as shown in the following image.

<table>
<thead>
<tr>
<th>Product Category</th>
<th>Cost of Goods</th>
<th>Gross Profit</th>
<th>Revenue</th>
<th>Quantity Sold</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video Production</td>
<td>$40,105,557.00</td>
<td>$17,947,619.62</td>
<td>$58,053,276.62</td>
<td>199,749</td>
</tr>
<tr>
<td>Televisions</td>
<td>$61,551,109.00</td>
<td>$16,830,023.81</td>
<td>$78,361,312.81</td>
<td>105,188</td>
</tr>
<tr>
<td>Computers</td>
<td>$69,807,564.00</td>
<td>$33,508,818.12</td>
<td>$103,316,482.12</td>
<td>351,777</td>
</tr>
<tr>
<td>Accessories</td>
<td>$89,753,898.00</td>
<td>$39,854,440.53</td>
<td>$129,608,338.53</td>
<td>511,667</td>
</tr>
<tr>
<td>Camcorder</td>
<td>$104,806,857.00</td>
<td>$49,598,645.24</td>
<td>$154,465,702.24</td>
<td>455,244</td>
</tr>
<tr>
<td>Media Player</td>
<td>$90,240,481.00</td>
<td>$55,632,578.36</td>
<td>$240,073,059.30</td>
<td>771,934</td>
</tr>
<tr>
<td>Stereo Systems</td>
<td>$205,113,803.00</td>
<td>$86,181,070.52</td>
<td>$291,294,933.52</td>
<td>1,114,332</td>
</tr>
</tbody>
</table>

The selected column is sorted in ascending order, where the values in the column are sorted from lowest to highest. If you click the arrow again, the column will be sorted in descending order, where the values are sorted from highest to lowest. If you click the arrow again, it will return to the default arrow that points in both directions, indicating that no sort has been applied.
Using the Slider Feature to Control the Display of Numeric Values

When working with data values in a report, you can use the slider feature to control the display of numeric values. This allows you to manage the content that displays based on numeric values, rather than text-based values such as Product Category. This gives you more flexibility and control when displaying information, particularly in those cases where you only want to show a specific range of values. The slider control is shown in the following image.

Creating Reports in WebFOCUS Designer

As a Technical Preview feature, you can create reports using WebFOCUS Designer. WebFOCUS Designer provides a simplified interface that provides easy access to core reporting functionality with streamlined navigation and fewer clicks.

To enable the Technical Preview so that you can create reports using WebFOCUS Designer, on the WebFOCUS Home Page, expand the user menu, point to Administration, and click Administration Console. In the Administration Console, from the navigation pane on the Configuration tab, click Other. On the Other page, type ALL in the Technical Preview Features field, and then click Save.
Once enabled, to create a report using WebFOCUS Designer, select the Common tab or Designer tab on the Action bar, and then click Report. Once you select a data source, WebFOCUS Designer opens in report mode, as shown in the following image.

Add fields to the report by double-clicking them in the Fields panel or dragging them into a bucket or the canvas. You can change the structure of the report by moving fields between the rows and columns buckets to organize sort values vertically or horizontally.

Designer also allows you to quickly change the display of values in the report from an aggregated summary to a count, allowing you to see the distribution of your data, or detail, allowing you to see all record values from your data source.

Just like when you create charts in Designer, you can filter your report by simply dragging a field into the Filter toolbar and selecting filter values. These filters are dynamic, so when you add the report to a page, you are prompted to create controls for them automatically.

You can also add custom fields to the report using pre- and post-aggregation calculations and quick transforms to modify and combine the fields existing in your data source in order to gain further insight.
Designer also includes a number of common formatting options. You can use the report picker to quickly change the layout of the report from a tabbed layout to a data grid or a report with stacked measures. You can add subtotals and recomputes, page and row breaks, sort limits, column and row totals, and more.

You can also enable run-time interaction with Auto Drill and Auto Linking, allowing you to navigate your data hierarchies within a single report or connect to related, Auto Link-enabled content.

You can output your report in a variety of common file types. These include web-based formats such as HTML and the new In-Document Analytic format and standard office suite formats such as an Excel spreadsheet, PowerPoint presentation, or PDF, providing the flexibility to access and distribute your report in the way that is most convenient for you.

Learn More
For more information, see the Creating Reports in WebFOCUS Designer topic.

Applying Custom CSS and JavaScript to a Page

You can apply custom cascading style sheet (CSS) properties and JavaScript code to a page, allowing you to significantly enhance the page with countless styling options and run-time behaviors.

You can add custom CSS and JavaScript to a page by typing code into the CSS and JavaScript tabs, respectively. To enable these tabs, select the entire page and, in the Properties panel, enable the CSS and JavaScript options. The CSS and JavaScript tabs appear below the canvas. Select one of these tabs to access a text editor where you can add your code.

Note: Custom CSS and JavaScript is not displayed in the page canvas or in preview mode. You must save and then run the page from the WebFOCUS Home Page to see the results of your custom code.

Custom CSS can be applied to specific objects on a page by specifying a CSS class for the object, and then using a class selector in your CSS code.

To specify a CSS class for an object on a page, select the object and, on the Properties panel, type a class name into the text box for the Classes property. You can specify multiple classes for an object by separating the class names with spaces, and you are encouraged to use the same class names for multiple items on the page. When you assign attributes to a class in the CSS tab, they will affect all elements on the page that are assigned to that class.
You can call these same classes to modify items in the page with custom JavaScript code. You can use JavaScript to enhance your page with functionalities and behaviors that you create and configure yourself. You can add menu items, buttons, and even entire components using JavaScript, and leverage the Designer JavaScript API to facilitate your page development with predefined classes, associated with different types of components in a Designer page, and different methods associated with them.

Adding Panels to a Responsive Container

You can utilize responsive panel in panel behavior by adding items to a panel group. When you run the page, top-level containers in the page, including the panel group, fold responsively based on the size of the browser, and the panels within the panel group fold based on its current size, independent of the rest of the page. Additionally, items in the panel group are kept together when folding occurs. A panel group can be a good way to group together closely related content that you want to be visually separated from the other items on the page. This is particularly true when related items are arranged vertically. Typically, the order on which objects on the page wrap is based on rows. A panel group allows you to ensure that items arranged in a column are kept together when responsive folding occurs.

To create a panel group, click the Containers tab, select the Panel group container, and drag it onto the page. You can then resize it like any other container. If you add a panel group to the page by dragging it onto an existing empty panel container, the empty panel container is replaced with the panel group. Otherwise, if the panel contains content or is a multi-content container, the panel group is placed into an empty area of the page.

To add a panel to a panel group, drag a content item or another container into it. You can then resize the new container inside the panel group.

Properties applied to the panel group, such as margins or styling, affect all panels within it. You cannot add a title or toolbar to a panel group.

You cannot set devices from which to hide individual panels in a panel group. You can set device availability for the entire panel group, which affects all panels within it, using the Show On property.

Modifying the Color Scale in a Chart

When you add a measure to the Color bucket in a chart, a color scale is created, changing the color of chart components based on measure values. You can change the colors used in the color scale, whether the color scale is a continuous gradient or composed of distinct segments, and the order of colors in the color scale.
To change the color scale options, right-click a measure in the Color bucket and select *Set color ranges*, as shown in the following image.

![Set color ranges](image)
The Set Color Ranges dialog box opens, where you can select a color scale for your chart, as shown in the following image.

By default, Theme is selected, which applies the styling specified in the theme you are using. There are also a number of preset color scales that you can use, which override the color scale from the theme.

The color that you select dictates the color scale in the legend, which in turn displays the various chart components, based on the colors and measurements specified. These color ranges give you more control over how color is used in your chart to create contrasts between various aspects based on the type of data in your chart. For example, if your chart displays different temperature values using a measure in the Color bucket, you may wish to use the Red/White/Blue option to intuitively show higher temperature values in red and lower ones in blue.

You can select Continuous or Discrete to determine how the color scale is generated. When Continuous is selected, the color scale is a gradient, and each color in the color scale represents a different value. When Discrete is selected, the color scale is divided into segments. Each color in the color scale represents a range of values.
The following image shows a matrix marker chart that uses the Red/Yellow/Green color scale with the Continuous option selected.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Accessories</td>
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<tr>
<td>Camcorder</td>
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<tr>
<td>Computers</td>
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<tr>
<td>Media Player</td>
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<tr>
<td>Stereo Systems</td>
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<tr>
<td>Televisions</td>
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<td></td>
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<tr>
<td>Video Production</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The Continuous option creates a more granular color scale, allowing you to see slight differences between similarly colored chart components.
The following image shows the same chart, with the Discrete option selected.

The Discrete option creates identifiable groups based on sections of the color scale.

When using the Theme color scale option, the default color scale type and number of segments in discrete mode are dependent on the values of the colorScale property in the theme that you are using. For example, if 5 colors are listed for the colorScale property in the StyleSheet being used as your theme, then 5 colors display in the color scale when the discrete option is used.

**Procedure:**  How to Change the Color Scale in a Chart

To set a color range in your chart:

1. On the WebFOCUS Home Page, click the *Designer* tab.
2. Click *Chart*.
3. Choose a data source and click *Select*.
4. Add one or more measures and dimensions to your chart.
5. Add a measure to the Color bucket.
6. Right-click the measure field in the Color bucket and click *Set color ranges.*
The Set Color Ranges dialog box displays, as shown in the following image.

7. From the list of colors, select a color range, as shown in the following image. You can use a preset color scale, or use the color scale defined in the theme that you are using for the chart.

8. Optionally, select Continuous or Discrete to determine how the color scale is generated. When Continuous is selected, the color scale is a gradient, and each color in the color scale represents a different value. When Discrete is selected, the color scale is divided into segments. Each color in the color scale represents a range of values.
9. Click OK.

   Note the change in the color and hues in your chart.

Deleting Components in a Workbook

When there are multiple reports and charts in a workbook, you can delete one by right-clicking a content tab and selecting Delete, as shown in the following image.

Click Yes to confirm that you wish to delete the selected chart or report.

You cannot delete a chart or report that is being used in the page component of a workbook. You must remove the component from the page first before deleting it. If you right-click the tab for a component currently being used in the workbook page and select Delete, a message appears, informing you that the content is currently in use.

Additionally, you cannot delete the only component in a workbook, or the page component.

Filtering With Greater Than or Equal To and Less Than or Equal To Relationships

By default, filters for numeric fields are adjustable ranges for which you can change both the minimum and maximum values. To specify a single minimum or maximum value for a numeric field, right-click the filter control and select Greater than or equal, Greater than, Less than or equal, or Less than to set the filter range using a single-headed slider. The operation used for the filter is indicated on the filter control label, as shown in the following image.
While the Greater than and Less than options do not include the value of the slider head in the filter value selection, the Greater than or equal and Less than or equal options do.

Similarly, for date fields, you can use the On or after or On or before option to set a single start or end date in the calendar that is included in the filter. Alternatively, you can use the After or Before option to set a start or end date that is not included.

**Enhanced FTP Server Configuration Management**

ReportCaster administrators who wish to take advantage of the speed and efficiency of the FTP protocol for scheduled report distributions can now create and manage predefined FTP Server connection configurations from the Configuration tab in the ReportCaster console, as shown in the following image.
Predefined FTP Setting configurations can be made available to FTP distribution schedules, as shown in the following image.

![FTP Distribution Options](image)

This new feature is an enhancement of the existing capability to create FTP setting configurations within individual schedules. However, administrators can deactivate this capability and limit all schedules to predefined FTP settings by selecting the Don’t allow user defined FTP in schedule check box in the (Default Settings) configuration.

This ability to limit users to predefined FTP Setting configurations enables administrators to manage all FTP Setting configurations from a central location, and ensures that users always select a valid FTP Server connection when creating FTP or File system distribution schedules.

Learn More

For more information about FTP Setting configurations, see the ReportCaster technical content.
New Time Zone Selection List Adapts Distribution Delivery Schedules to Local Time Zones

You can use the new Time Zone list, located on the Recurrence tab of the Basic and Advanced Scheduling Tools in ReportCaster, to establish a time zone for a distribution schedule that corresponds to your local time zone or to the local time zone of the recipients of the distribution, as shown in the following image.

All times in a schedule are defined in terms of the time zone you specify, including the next run time for recurring distributions. The specified time zone enables the Distribution Server to run a scheduled distribution at the appropriate local time, regardless of the time zone in which the Distribution Server is located, and ensures that content is delivered to recipients as anticipated. Therefore, by specifying a time zone, you can schedule a distribution for a local time that is most convenient to the recipients of the distributed content without having to factor the time difference into the values you assign to the times in the schedule.

Learn More

For more information, see the ReportCaster technical content.
WebFOCUS Repository Procedures Now Available for Use as Pre- and Post-Distribution Schedule Procedures

The Task Pre/Post Processing Procedures dialog box now includes links to procedures located in the WebFOCUS Repository, as well as the Reporting Server, as shown in the following image.

![Task Pre/Post-processing Procedures dialog box](image)

This new capability expands the range of pre-processing and post-processing procedures you can attach to distribution schedules to include procedures located in the WebFOCUS Repository as well as those located on the Reporting Server.

For more information, see the Schedule Pre-Processing and Post-Processing Procedures topic in the ReportCaster Guide.

New Privilege – Create Shortcuts (opShortcut)

In WebFOCUS Release 8206, the new Create Shortcuts (opShortcuts) privilege was added to the Basic Reporting Privileges Category. When this new privilege is included in a role, users assigned to that role can create shortcuts.

In previous releases, the ability to create shortcuts was available to all users without restriction. Administrators can use this new privilege to withhold the ability to create shortcuts from users whose roles and daily responsibilities do not require them to have this capability.

Note that this privilege only affects the ability to create a new shortcut. It does not affect the ability to run any other command on an existing shortcut.

This privilege is selected in the DomainAdvancedUser, DomainBasicUser, DomainDeveloper, DomainAnalyst, and WebFOCUSManager, roles, by default. However, administrators can remove it from any role that should not have the ability to create shortcuts.
This privilege permits users in the BasicUsers and AdvancedUsers groups to create shortcuts from the My Content folder of the domains to which they are assigned. It permits users in the Developers groups to create shortcuts from the domains to which they are assigned, and users in the Administrators group to create shortcuts from any domain.

Users assigned to roles that include this privilege only can create shortcuts to items in the Repository. Users assigned to roles that also include the Create Metadata (opMetadata) privilege, can create shortcuts to Master Files as well. Typically, users in the Developers and Administrators groups have the Create Metadata (OpMetadata) privilege, but users in the BasicUsers and AdvancedUsers groups do not.

To see this new privilege from the WebFOCUS Home Page, expand the user menu, point to Security, and then click Security Center. To see it from Legacy Home Page BI Portal menu bar, click Administration, and then click Security Center. In the Security Center, click the Roles tab, and then click New Role. The Create Shortcut privilege appears under the Basic Reporting folder.

Learn More

For more information, see the Basic Reporting Privileges topic in the WebFOCUS Security and Administration technical content, and the Creating Shortcuts (8205 and higher) topic.

Upgrade In Place

As of Release 8206, for both Windows and UNIX installations, you can use the Upgrade In Place feature to upgrade an existing installation and migrate content from Release 8.1.05M to Release 8206. Prior to this release, in order to upgrade from Release 8.1.05M to Release 8.2.x, you needed to perform a separate new Release 8.2.x installation and perform manual steps to update the 8.1.05M WebFOCUS repository, import required Change Management packages, and move configuration files and settings.

The Upgrade In Place feature automatically migrates existing data, settings, configuration files, and applications from Release 8.1.05M to Release 8206. The new installation is performed in the same WebFOCUS Release 8.1.05M folder and the installation applies required edits to configuration files, checks the database collation, and makes changes, if necessary. As a safety measure, the installation program backs up the entire directory prior to upgrading and will restore all files in case the installation does not complete successfully.
To upgrade from Release 8.1.05M to Release 8206, on the Choose Install Type dialog box, select *Update*, as shown in the following image.

For more information, see the *WebFOCUS and ReportCaster Installation and Configuration* manual for your platform.

**New Setting - In-Document Analytics**

The new In-Document Analytics setting appears in the Tools Option Dialog Defaults section of the InfoAssist Properties page, which is located on the Configuration tab of the Administration Console. This setting establishes the default value for the In-Document Analytics setting in the Procedure Settings dialog box, which opens from the InfoAssist Quick Access toolbar. The value in this setting determines the interface used to display reports, charts, and documents using the HTML Analytic Document format. The list of values contains two valid options, Designer Style and Legacy.
Content displayed using the Designer Style option conforms to the conventions of WebFOCUS Designer and includes the Navigation icons such as the Chart Format menu and the ellipsis menu. Content displayed using the Legacy option conforms to the legacy run-time interface and provides options like the legacy column menu.

Server Enhancements

The server provides a wide range of capabilities and tools for adapter configuration, metadata creation, application and path management, security control, communications configuration, and for monitoring, tuning, and troubleshooting server performance. Authorized users can perform most server administration tasks from a graphical Web Console. The server supports WebFOCUS reporting functions, extraction, load and transformation functions, and analysis and data access control functions.

Adapter Enhancements

This section describes new adapter features. All adapters can be used for WebFOCUS Reporting and SQL requests, and as sources for DataMigrator flows.

The server supports adapters designed to access a wide variety of data sources. Using the graphical Web Console, you can configure these adapters and create the metadata you need to seamlessly access the corresponding type of data.

On the Web Console, adapters are grouped as SQL, XML-based, ERP, OLAP, Procedures, Files, DBMS, Statistics, GIS, and Social Media.

SQL Adapters

This section provides descriptions of new features for SQL adapters.

Adapter for Db2: JDBC Support

The Adapter for Db2 can now be configured to use JDBC in addition to CLI and CAF.

Adapter for MariaDB: Support for Fractions of a Second

The Adapter for MariaDB supports fractions of seconds for TIMESTAMP, DATETIME, and TIME data types with Oracle Connector/J v.8.0.13 or higher.

Adapter for MySQL: Support for Fractions of a Second

The Adapter for MySQL supports fractions of a second for TIMESTAMP and DATETIME data types with MySQL Connector/J v.8.0.16 or higher.
Adapter for Oracle: CDC Archive Log Support

The Adapter for Oracle allows *Time Traveling*, that is, starting Change Data Capture (CDC) from a redo log that is already archived and continuing into the future until the current redo log is reached. This is a performance improvement from prior releases, where CDC could only be started from the current redo log. The starting point can be specified as a TIMESTAMP.

Adapter for Oracle: Timestamp with Local Time Zone as HYYMDm

The Adapter for Oracle now supports reporting on a timestamp field that includes a Local Time Zone (LTZ) by mapping it as format HYYMDm, the same format as an ordinary timestamp.

Adapter for Presto

The Adapter for Presto is a distributed SQL query engine designed to query large data sets. The adapter converts application requests into JDBC calls and returns optimized answer sets to the requesting application.

Adapter for SAP HANA DB: Pass SQL Hints

The Adapter for SAP HANA DB can now pass native SQL hint syntax to the DBMS using the following command.

```
SQL SQLHANA SET HINT hint_syntax
```

where:

*hint_syntax*

Is the SAP HANA DB proprietary syntax for SQL Hint. For example:

```
WITH HINT (RESULT_CACHE)
```

is converted to

```
SQL SQLHANA SET HINT WITH HINT (RESULT_CACHE)
```

According to HANA SQL syntax, A TABLE command will place the Hint at the end of the generated SQL. For example:

```
TABLE FILE T1 PRINT *
END
```

will be passed to SAP HANA as:

```
SELECT * FROM T1
WITH HINT (RESULT_CACHE)
```
The hint or hint combinations will only be passed when the adapter constructs a single SQL SELECT statement. It will not be passed in the case of a FOCUS-managed join. The user is responsible for the hint or hint combination syntax.

**Adapter for Teradata: Support for New Simba Driver**

The Adapter for Teradata ODBC now supports Simba driver version 16.20.

**Adapter for Vertica: Use Error-Less DROP TABLE IF EXISTS**

The DROP clause of CREATE FILE will now be converted into the following SQL syntax for the Adapter for Vertica:

```sql
DROP TABLE IF EXISTS tablename
```

This syntax will not cause an error if the table does not exist.

**OLAP Adapters**

This section provides descriptions of new features for OLAP adapters.

**Adapter for SQL Server Analysis Services (SSAS): Automatic Recognition of Date Patterns**

The following SET command for the Adapter for SSAS (multidimensional model) controls whether the adapter scans dimension members and automatically recognizes date and time patterns in the data. Recognized date/time patterns are described with USAGE formats and DATEPATTERN values for the corresponding fields in the generated synonym. The syntax is:

```
ENGINE SSAS SET DATEPATTERN_SCAN {ALL|DT|OFF}
```

where:

- **ALL**
  Specifies scanning data for all of the cube hierarchy levels.

- **DT**
  Specifies scanning for attributes with date- or time-related types (assigned using SQL Server Data Tools).

- **OFF**
  Specifies no scanning. This is the default behavior compatible with prior releases of the adapter.

**Sequential and Indexed Files Adapters**

This section provides descriptions of new features for Sequential and Indexed Files adapters.
Adapter for Kafka

The Adapter for Kafka provides access to and reporting against messages resident in the Apache Kafka environment.

Social Media Adapters

This section provides descriptions of new features for Social Media adapters.

Adapter for Slack

The Adapter for Slack enables WebFOCUS to integrate with the Slack business messaging application. WebFOCUS can retrieve and post Slack messages and, using the SLACK function, can send Slack messages from a WebFOCUS procedure.

Reporting Language Enhancements

WebFOCUS is a complete information control system with comprehensive features for retrieving and analyzing data. It enables you to create reports quickly and easily. It also provides facilities for creating highly complex reports, but its strength lies in the simplicity of the request language. You can begin with simple queries and progress to complex reports as you learn about additional facilities.

Full Outer Join Support

Full outer joins and right outer joins are now supported whether or not the underlying data source supports them. When the underlying data source has support for these joins, the join processing is passed to the database engine. When it does not support them, all necessary data is returned and the join processing is handled by WebFOCUS.

Using a WHERE Phrase in a Filter on a Calculated Value

In prior releases, specifying a WHERE phrase on a calculated value (COMPUTE field) generated an error, and processing was terminated. In the current release, a WHERE condition on a calculated field will be automatically replaced with WHERE_GROUPED if the filter is eligible for WHERE_GROUPED processing, or with WHERE TOTAL if it is not.
**IMPUTE: Replacing Missing Values With Aggregated Values**

IMPUTE calculates a value to replace missing numeric data on report output, within a partition.

In place of eliminating data records with missing values from analysis, IMPUTE enables you to substitute a variety of estimates for the missing values, including the mean, the median, the mode, or a numeric constant, all calculated within the data partition specified by the reset key. This function is designed to be used with detail level reports (PRINT or LIST commands), and with calculated values (fields created with the COMPUTE command).

The syntax is:

```
IMPUTE(field, reset_key, replacement)
```

where:

- **field**
  Is the name of the numeric input field that is defined with MISSING ON.

- **reset_key**
  Defines the partition for the calculation. Valid values are:
  - A sort field name.
  - PRESET, which uses the break defined by the SET PARTITION_ON command.
  - TABLE, which performs the calculation on the entire table.

- **replacement**
  Is a numeric constant or one of the following:
  - MEAN
  - MEDIAN
  - MODE
Example: Replacing Missing Values With Aggregated Values

To run this example, the FOCUS data source SALEMISS must be created. SALEMISS is the SALES data source with some missing values added in the RETURNS and DAMAGED fields. The following is the SALEMISS Master File, which should be added to the IBISAMP application.

FILENAME=KSALES, SUFFIX=FOC, REMARKS='Legacy Metadata Sample: sales',$

SEGNAME=STOR_SEG, SEGTYPE=S1,
  FIELDNAME=STORE_CODE, ALIAS=SNO, FORMAT=A3,$
  FIELDNAME=CITY, ALIAS=CTY, FORMAT=A15,$
  FIELDNAME=AREA, ALIAS=LOC, FORMAT=A1,$

SEGNAME=DATE_SEG, PARENT=STOR_SEG, SEGTYPE=SH1,
  FIELDNAME=DATE, ALIAS=DTE, FORMAT=A4MD,$

SEGNAME=PRODUCT, PARENT=DATE_SEG, SEGTYPE=S1,
  FIELDNAME=PROD_CODE, ALIAS=PCODE, FORMAT=A3,$
  FIELDNAME=UNIT_SOLD, ALIAS=SOLD, FORMAT=I5,$
  FIELDNAME=RETAIL_PRICE, ALIAS=RP, FORMAT=D5.2M,$
  FIELDNAME=DELIVER_AMT, ALIAS=SHIP, FORMAT=I5,$
  FIELDNAME=OPENING_AMT, ALIAS=INV, FORMAT=I5,$
  FIELDNAME=RETURNS, ALIAS=RTN, FORMAT=I3, MISSING=ON,$
  FIELDNAME=DAMAGED, ALIAS=BAD, FORMAT=I3, MISSING=ON,$
The following procedure creates the SALEMISS data source and then adds the missing values to the RETURNS and DAMAGED fields:

```
CREATE FILE ibisamp/SALEMISS
MODIFY FILE ibisamp/SALEMISS
FIXFORM STORE_CODE/3 CITY/15 AREA/1 DATE/4 PROD_CODE/3
FIXFORM UNIT_SOLD/5 RETAIL_PRICE/5 DELIVER_AMT/5
FIXFORM OPENING_AMT/5 RETURNS/3 DAMAGED/3
MATCH STORE_CODE
ON NOMATCH INCLUDE
ON MATCH CONTINUE
MATCH DATE
ON NOMATCH INCLUDE
ON MATCH CONTINUE
MATCH PROD_CODE
ON NOMATCH INCLUDE
ON MATCH REJECT
DATA
14BSTAMFORD S1212B10 60 .95 80 65 10 6
14BSTAMFORD S1212B12 40 1.29 20 50 3 3
14BSTAMFORD S1212B17 29 1.89 30 30 2 1
14BSTAMFORD S1212C13 25 1.99 30 40 3 0
14BSTAMFORD S1212C7 45 2.39 50 49 5 4
14BSTAMFORD S1212D12 27 2.19 40 35 0 0
14BSTAMFORD S1212E2 80 .99 100 100 9 4
14BSTAMFORD S1212E3 70 1.09 80 90 8 9
14NEW YORK U1017B10 30 .85 30 10 2 3
14NEW YORK U1017B17 20 1.89 40 25 2 1
14NEW YORK U1017B20 15 1.99 30 5 0 1
14NEW YORK U1017C17 12 2.09 10 15 0 0
14NEW YORK U1017D12 20 2.09 30 10 3 2
14NEW YORK U1017E1 30 .89 25 45 4 7
14NEW YORK U1017E3 35 1.09 25 45 4 2
77FUNIONDALE R1018B20 25 2.09 40 25 1 1
77FUNIONDALE R1018C7 40 2.49 40 40 0 0
K1 NEWARK U1018B12 29 1.49 30 30 1 0
K1 NEWARK U1018B10 13 .99 30 15 1 1
END
-RUN
```
The following request against the SALEMISS data source generates replacement values for the missing values in the RETURNS field, using only the values within the same store.

```
SET PARTITION_ON=FIRST
TABLE FILE SALEMISS
PRINT RETURNS
COMPUTE MEDIAN1 = IMPUTE(RETURNS, PRESET, MEDIAN);
COMPUTE MEAN1 = IMPUTE(RETURNS, PRESET, MEAN);
COMPUTE MODE1 = IMPUTE(RETURNS, PRESET, MODE);
BY STORE_CODE
ON TABLE SET PAGE NOPAGE
ON TABLE SET STYLE *
TYPE=REPORT, GRID=OFF,$
ENDSTYLE
END
```
The output is shown in the following image. The missing values occur in store 14Z, and the replacement values are calculated using only the RETURNS values from that store because PARTITION_ON is set to FIRST.

<table>
<thead>
<tr>
<th>STORE_CODE</th>
<th>RETURNS</th>
<th>MEDIAN1</th>
<th>MEAN1</th>
<th>MODE1</th>
</tr>
</thead>
<tbody>
<tr>
<td>14B</td>
<td>10</td>
<td>10.00</td>
<td>10.00</td>
<td>10.00</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>3.00</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>2.00</td>
<td>2.00</td>
<td>2.00</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>3.00</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>9.00</td>
<td>9.00</td>
<td>9.00</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>8.00</td>
<td>8.00</td>
<td>8.00</td>
</tr>
<tr>
<td>14Z</td>
<td>2</td>
<td>2.00</td>
<td>2.00</td>
<td>2.00</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>2.00</td>
<td>2.00</td>
<td>2.00</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>.</td>
<td>2.00</td>
<td>2.00</td>
<td>4.00</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>3.00</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
</tr>
<tr>
<td></td>
<td>.</td>
<td>2.00</td>
<td>2.00</td>
<td>4.00</td>
</tr>
<tr>
<td>77F</td>
<td>1</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>K1</td>
<td>1</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
</tbody>
</table>
Changing the PARTITION_ON setting to TABLE produces the following output, in which the replacement values are calculated using all of the rows in the table.

<table>
<thead>
<tr>
<th>STORE_CODE</th>
<th>RETURNS</th>
<th>MEDIAN</th>
<th>MEAN</th>
<th>MODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>14B</td>
<td>10</td>
<td>10.00</td>
<td>10.00</td>
<td>10.00</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>3.00</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>2.00</td>
<td>2.00</td>
<td>2.00</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>3.00</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>9.00</td>
<td>9.00</td>
<td>9.00</td>
</tr>
<tr>
<td></td>
<td>8</td>
<td>8.00</td>
<td>8.00</td>
<td>8.00</td>
</tr>
<tr>
<td>14Z</td>
<td>2</td>
<td>2.00</td>
<td>2.00</td>
<td>2.00</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>2.00</td>
<td>2.00</td>
<td>2.00</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>.</td>
<td>2.00</td>
<td>3.00</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>3.00</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>4.00</td>
<td>4.00</td>
<td>4.00</td>
</tr>
<tr>
<td></td>
<td>.</td>
<td>2.00</td>
<td>3.00</td>
<td>.00</td>
</tr>
<tr>
<td>77F</td>
<td>1</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>.00</td>
<td>.00</td>
<td>.00</td>
</tr>
<tr>
<td>K1</td>
<td>1</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>1.00</td>
<td>1.00</td>
<td>1.00</td>
</tr>
</tbody>
</table>
OUTLIER: Identifying Outliers in Numeric Data

The 1.5 * IQR rule (where IQR means Inner Quartile Range) is a common way to identify outliers in data. This rule defines an outlier as a value that is above or below 1.5 times the inner quartile range in the data. The inner quartile range is based on sorting the data values, dividing it into equal quarters, and calculating the range of values between the first quartile (the value one quarter of the way through the sorted data) and third quartile (the value three quarters of the way through the sorted data). The value that is 1.5 times below the inner quartile range is called the lower fence, and the value that is 1.5 times above the inner quartile range is called the upper fence.

Given a numeric field as input, OUTLIER returns one of the following values for each value of the field, using the 1.5 * IQR rule:

- **0 (zero).** The value is not an outlier.
- **-1.** The value is below the lower fence.
- **1.** The value is above the upper fence.

**Syntax:**

How to Identify Outliers in Numeric Data

```plaintext
OUTLIER(input_field)
```

where:

`input_field`

Numeric

Is the numeric field to be analyzed.
**Example:**  Identifying Outliers

The following request defines the SALES field to have different values depending on the store code, and uses OUTLIER to determine whether each field value is an outlier.

```
DEFINE FILE GGSALES
SALES/D12 = IF ((CATEGORY EQ 'Coffee') AND (STCD EQ 'R1019')) THEN 19000
  ELSE IF ((CATEGORY EQ 'Coffee') AND (STCD EQ 'R1020')) THEN 20000
  ELSE IF ((CATEGORY EQ 'Coffee') AND (STCD EQ 'R1040')) THEN 7000
  ELSE DOLLARS;
END
TABLE FILE GGSALES
SUM SALES
COMPUTE OUT1/I3 = OUTLIER(SALES);
BY CATEGORY
BY STCD
WHERE CATEGORY EQ 'Coffee'
ON TABLE SET PAGE NOLEAD
ON TABLE SET STYLE *
GRID=OFF,$
ENDSTYLE
END
```

The output is shown in the following image. Values above 2 million are above the upper fence, values below 1 million are below the lower fence, and other values are not outliers:
Enhancement to the PARTITION_AGGR Function

The post-aggregation calculations MEDIAN and MODE have been added to the PARTITION_AGGR function.

SLACK: Posting a Message to a Slack Channel

SLACK posts a message to a Slack channel from a WebFOCUS procedure:

- If the message is sent successfully, the function returns the value true.
- If the message is not sent successfully, the function returns a blank.

The syntax is:

```
SLACK(workspace, channel, message)
```

where:

- **workspace**
  - Is a Workspace name.
- **channel**
  - Is a Channel name.
- **message**
  - Is an alphanumeric field containing the message.

**Example:** Sending a Slack Message From a WebFOCUS Request

The Adapter for Slack has been configured to have a connection to the devibi workspace, as shown in the following image.
The following request sends a Slack message to the *general* channel of the *devibi* Workspace, when the department is MIS.

```
TABLE FILE ibisamp/EMPLOYEE
SUM
  CURR_SAL
AND COMPUTE SLACK_MESSAGE/A200 = 'Salary for Department ' || DEPARTMENT || ' is ' || LJUST(20, FPRINT(CURR_SAL,'D12.2M'), 'A20');
AND COMPUTE CURR_SAL_SLACK/A20 = IF DEPARTMENT EQ 'MIS'
    THEN SLACK('devibi', 'general', SLACK_MESSAGE) ELSE 'false';
AS 'Message Sent to Slack highlighting Salary'
BY DEPARTMENT
HEADING
"Slack"
"Slack Function Example"
ON TABLE SET PAGE-NUM NOLEAD
ON TABLE NOTOTAL
ON TABLE SET STYLE *
INCLUDE=IBFS:/FILE/IBI_HTML_DIR/javaassist/intl/EN/ENIADefault_combine.sty,
ENDSTYLE
END
```

The output is shown in the following image.

![Slack Message](image)

The message in the Slack channel is shown in the following image.

![Slack Channel Message](image)

**Scaling PDF Report Output to Fit the Page Width**

By default, if PDF report output is too wide to fit on a single page, the report generates multiple panels of the same page for the columns that do not fit. The page numbers specify the page and panel numbers. For example, page numbers 1.1 and 1.2 represent page 1/panel 1 and page 1/panel 2.

You can scale the output to fit across the width of the page using the PAGE-SCALE StyleSheet attribute or the PAGE-SCALE SET parameter.
**Syntax:**  
How to Scale PDF Report Output to Fit the Page Width

In a StyleSheet, use the following syntax.

```
TYPE=REPORT, PAGE-SCALE={OFF|AUTO}, $
```

In a procedure or profile, use the following syntax.

```
SET PAGE-SCALE = {OFF|AUTO}
```

In a request, use the following syntax.

```
ON TABLE SET PAGE-SCALE {OFF|AUTO}
```

where:

- **OFF**
  - Disables page scaling in PDF report output. This is the default value.

- **AUTO**
  - Implements page scaling in PDF report output.

**Reference:**  
Usage Notes for PAGE-SCALE

- PAGE-SCALE is supported for PDF report output only.

- When a page is scaled to fit more content on the page horizontally, fewer vertical pages may be generated, as well.
*Example: Scaling PDF Report Output to Fit the Page Width*

The following request generates PDF report output without using page scaling.

```
SET SQUEEZE=ON
DEFINE FILE WF_RETAIL_LITE
SHOWPIC/A100='C:\ibi\WebFOCUS82\samples\web_resource\signin\images\favicon.jpg';
END

TABLE FILE WF_RETAIL_LITE
PRINT PRODUCT_CATEGORY
BY SHOWPIC NOPRINT
BY CONTINENT_NAME
BY COUNTRY_NAME
WHERE COUNTRY_NAME EQ 'FRANCE' OR 'ITALY'
WHERE RECORDLIMIT=3000;
ON TABLE SUBHEAD
  " "
  " Report Without PDF Scaling "
  " "
ON COUNTRY_NAME SUBHEAD
  " "
ON TABLE PCHOLD FORMAT PDF

ON TABLE SET STYLE *
  TYPE=DATA, COLUMN=CONTINENT_NAME, FONT=COMIC SANS MS,
    COLOR=BLUE, STYLE=BOLD+ITALIC, $
  TYPE=DATA, COLUMN=PRODUCT_CATEGORY, COLOR=FUSCHIA, $
  TYPE=HEADING, STYLE=BOLD, COLOR=RGB(0 35 95), SIZE=12, JUSTIFY=CENTER, $
  TYPE=SUBHEAD, SIZE=18, STYLE=BOLD, COLOR=RED, $
  TYPE=SUBHEAD, IMAGE=(SHOWPIC), SIZE=(.5 .5), $
  TYPE=TABHEADING, SIZE=12, STYLE=BOLD, JUSTIFY=CENTER, $
ENDSTYLE
END
```

*Note:* The image displayed in the subheading is distributed with WebFOCUS. The path to the image is dependent on your platform and installation options. The path in the request uses the default installation directory on Windows.
The output is too wide for the page and is paneled. Page 1.1 has the columns that fit across the width of the page, as shown in the following image.

<table>
<thead>
<tr>
<th>Customer Continent</th>
<th>Customer Country</th>
<th>Product Category</th>
<th>Cost of Goods</th>
<th>Revenue</th>
<th>MSRP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe</td>
<td>France</td>
<td>Camcorder</td>
<td>$82.00</td>
<td>$179.00</td>
<td>179.00</td>
</tr>
<tr>
<td>Camcorder</td>
<td>$60.00</td>
<td>$169.99</td>
<td>169.99</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video Production</td>
<td>$380.00</td>
<td>$598.00</td>
<td>598.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Media Player</td>
<td>$260.00</td>
<td>$379.98</td>
<td>379.98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accessories</td>
<td>$80.00</td>
<td>$169.00</td>
<td>169.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computers</td>
<td>$167.00</td>
<td>$280.00</td>
<td>280.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accessories</td>
<td>$500.00</td>
<td>$699.99</td>
<td>699.99</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Video Production</td>
<td>$234.00</td>
<td>$399.00</td>
<td>399.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stereo Systems</td>
<td>$122.00</td>
<td>$199.99</td>
<td>199.99</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Televisions</td>
<td>$730.00</td>
<td>$998.00</td>
<td>998.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stereo Systems</td>
<td>$96.00</td>
<td>$199.98</td>
<td>199.98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Media Player</td>
<td>$87.00</td>
<td>$179.99</td>
<td>179.99</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Accessories</td>
<td>$160.00</td>
<td>$253.50</td>
<td>338.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Computers</td>
<td>$167.00</td>
<td>$280.00</td>
<td>280.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stereo Systems</td>
<td>$145.00</td>
<td>$119.99</td>
<td>199.99</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camcorder</td>
<td>$398.00</td>
<td>$449.99</td>
<td>599.98</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Camcorder</td>
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</table>
Page 1.2 has the remaining columns, as shown in the following image.

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</tr>
<tr>
<td>$0.00</td>
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</tr>
</tbody>
</table>
The following version of the request uses page scaling.

```
SET SQUEEZE=ON
DEFINE FILE WF_RETAIL_LITE
SHOWPIC/A100='C:\ibi\WebFOCUS82\samples\web_resource\signin\images\favicon.jpg';
END

TABLE FILE WF_RETAIL_LITE
PRINT PRODUCT_CATEGORY
BY SHOWPIC NOPRINT
BY CONTINENT_NAME
BY COUNTRY_NAME
WHERE COUNTRY_NAME EQ 'FRANCE' OR 'ITALY'
WHERE RECORDLIMIT=3000;
ON TABLE SUBHEAD
  " "
" Report With PDF Scaling "
" "
ON COUNTRY_NAME SUBHEAD
  " "
ON TABLE PCHOLD FORMAT PDF
ON TABLE SET STYLE *
  TYPE=REPORT, PAGE-SCALE=AUTO, $
  TYPE=DATA, COLUMN=CONTINENT_NAME, FONT=COMIC SANS MS,
    COLOR=BLUE, STYLE=BOLD+ITALIC, $
  TYPE=DATA, COLUMN=PRODUCTCATEGORY, COLOR=FUSCHIA, $
  TYPE=HEADING, STYLE=BOLD, COLOR=RGB(0 35 95), SIZE=12, JUSTIFY=CENTER, $
  TYPE=SUBHEAD, SIZE=18, STYLE=BOLD, COLOR=RED, $
  TYPE=SUBHEAD, IMAGE=(SHOWPIC), SIZE=(.5 .5), $
  TYPE=TABHEADING, SIZE=12, STYLE=BOLD, JUSTIFY=CENTER, $
ENDSTYLE
END
```
The output is shown in the following image. All of the columns fit across the width of the page, with no paneling.

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<tr>
<th>Customer Country</th>
<th>Product Category</th>
<th>Cost of Goods</th>
<th>Revenue</th>
<th>MRP</th>
<th>Discount</th>
<th>Gross Profit</th>
<th>Quantity Sold</th>
</tr>
</thead>
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<td>$109.00</td>
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</tr>
</tbody>
</table>
Synchronizing WebFOCUS Page Breaks With Excel Page Breaks

As of WebFOCUS Release 8206.03, WebFOCUS page breaks in format XLSX report output are synchronized with Excel page breaks.

JSON Syntax for Adapter Connection Parameters

New JSON-based syntax has been implemented for setting connection attributes. This syntax supports additional connection parameters.

Two new parameters have initially been implemented:

- auto_prompt to enable prompting for Adapter connection credentials at run time.
- allow_data_load to configure SQL Adapter Connections allowed for Upload, Quick Copy, and Custom copy.

Selecting Adapter Connections for Upload and Data Load

The new JSON-based SET CONNECTION_ATTRIBUTES_EXT command supports the following parameter to allow the adapter connection to be available for Upload, Quick Copy and Custom Copy.

"allow_data_load"

If this parameter is set to "y", the connection is available for upload and data load and would be shown in the Load Options dialog box for any data load. This is the default value.

If this parameter is set to "n", the server will hide this connection in the Load Options dialog box.

This parameter can be set or changed from the Web Console Adapter page. Right-click a connection for an SQL adapter, click Properties, and expand Advanced parameters. Update "Allow Data Load".

Prompting for DBMS Credentials at Run Time for Procedure and Upload

You can configure the server to prompt for user credentials on running a procedure and upload.

First, you must enable this feature on the server by adding connections_autoprompt=y in the edaserve.cfg file.
New Features

This setting can be enabled from the Workspace page. Click Settings, Workspace SET, then Profile Settings. The Profile Settings page opens, as shown in the following image.

Set connections_autoprompt to y.

After this parameter is configured, the server will:

- Add an additional parameter to the new Connection string for SQL Adapters. You can configure this on the Web Console Adapter Connection Properties page by setting "Auto Prompt Connection Credentials" to "y". The CONNECTION_ATTRIBUTES_EXT statement in the server profile will be updated with "auto_prompt": "y".
- Add the "Run As" option for procedures on the Web Console.
- When a procedure runs using the "Run As" option, it will be executed with WFDESCRIBE=XMLETLAS. WFDESCRIBE will return all connections from all Master Files used in procedures that are configured with "auto_prompt": "y".

Enhance Session Log With WFDESCRIBE Output

The Session Log now shows output from WFDESCRIBE, which shows procedures executed with WFDESCRIBE=XMLETLAS that is generated by the Run As option used for prompting for credentials prior to running a procedure.

New Privilege METUP for Create Synonym During Data Load

The new General Privilege METUP enables CREATE SYNONYM only for upload, quick copy, and custom copy.

Auto-Populate Combo-Box on Typing

When entering text in a combo-box, the selections will be filtered by the characters entered.
Branching Now Available for Git

Branching on Git repositories is now supported and the following options are available:

**New Branch**  
Creates a new branch and optionally, allows you to switch to the newly created branch.

**Current Branch**  
Selects the current branch and allows you to switch to it.

**Delete Branch**  
Deletes a specified branch.

**Merge into Current Branch**  
Merges the selected branch into the current branch.

**Checkout Remote Branch**  
Allows you to checkout a remote branch to access a branch that is stored remotely.
Once a Git adapter is configured, you can access these options from both the Reporting Server Web Console and the DataMigrator Data Management Console by right-clicking an application directory, pointing to Git, and then pointing to Branch, as shown in the following image.

### Data Preparation Enhancements

The following Data Preparation enhancements have been added.

- A new data preparation capability from a web browser enables you to build flows to convert and load raw data for visualization in WebFOCUS designer.

- You can apply functions, write advanced transformations, select which columns to include, filter rows, and perform aggregation.
You can prepare large data sets using an automatically generated representative sample, for rapid response time.

A new data profiling Distribution report helps you understand how data in each field is distributed.

You can automatically calculate the range of values for dates and numbers, and generate a count of unique values for character-valued fields.

You can automatically generate a bar chart that shows how frequently each value or group of values appears. Selecting one or more bars changes the display to show the effect that selection has on all of the other fields.

Selections can be used on a filter when loading data.

Data can be loaded to relational databases or column stores from the Web Console.

**Support for Favorites**

You can add a file to your list of favorites by right-clicking a file on the Web Console and clicking *Add to Favorites*.

To see your list of Favorites, on the Application Page ribbon, click *Filter* and select *Favorites*. Once the list of Favorites is displayed, you can delete a file from the list by right-clicking the file on the Favorites list and clicking *Delete from Favorites*.

**Support for History/Recent Files**

The myhome application directory for each user will contain a file named `history.txt` that contains a list of recent files opened by the user. By default, the history file contains the ten most recent files opened by the user.

To change the number of recent files or to disable saving recent files, on the Workspace page under Settings, click *FOCUS Sets and Info*, then *Core Engine Settings*. Under APP Service, the setting `HISTORY_DEPTH` configures the number of files to be kept on the recent files list. The value zero (0) means no history will be kept.

You can open the list of recent files by clicking *Filter* on the Application page ribbon and selecting *Recent*.

You can also issue the `SET HISTORY_DEPTH` command in any supported profile.
Text Editor: Alternate Color Theme

The text editor options offer a color theme with a dark background in addition to the default color theme that has a light background.

DataMigrator Enhancements

This section describes the new features for DataMigrator.

DataMigrator represents a broad category of tools designed to facilitate and automate the extraction and integration of data. From source extraction through target load, data is transformed through the application of business rules. Once the transformation is complete, the data is loaded into table structures that have been optimized for a particular application.

For more information on any of these new features, see the DataMigrator User's Guide.

Adapters

The following section provides descriptions of new features for adapters.

Adapter for Kafka

The Adapter for Kafka provides access to and reporting against messages resident in the Apache Kafka environment.

Adapter for Presto

The Adapter for Presto is a distributed SQL query engine designed to query large data sets. The adapter converts application requests into JDBC calls and returns optimized answer sets to the requesting application.

Adapter for Slack

The Adapter for Slack enables WebFOCUS to integrate with the Slack business messaging application. WebFOCUS can retrieve and post Slack messages and, using the SLACK function, can send Slack messages from a WebFOCUS procedure.

Data and Process Flows

The following section provides descriptions of new features for data and process flows.

Ability to Disable the Automatically Connect Object Feature
Currently, when you add an object to a Data Flow, the object automatically gets connected to the SQL object in the workspace. A new option for Data Flows allows you to disable this automatic connection. You can find this option in the Data Flow Designer section of the Options dialog box.

**Resource Analyzer and Resource Governor Enhancements**

This section describes the new features for Resource Analyzer.

Resource Analyzer provides Information Systems (IS) organizations with the ability to manage the growing volume and unpredictable nature of ad hoc data access.

Resource Governor controls monitoring, system configuration parameters, and governing rules. It provides preemptive governing for requests issued to both relational and non-relational data sources.

Together, Resource Analyzer and its partner product, Resource Governor, are designed specifically to help IS organizations analyze and control end user data access.

**Adapter Connection Node Now Displays**

Configured adapters in Resource Management now display each connection node in the navigation pane tree, allowing for a more streamlined approach to monitoring data sources using the updated Manage Monitoring page.

**Enhancement to Access Control Report**

The option to run a report that returns any errors being produced has been added to the ACI report. You can access this option by selecting Error from the Category drop-down menu that is available on the Report filter page for the report. To run the filter, expand the Reports folder in the Resource Management tree, right-click ACI Monitoring, and click Run.

**Fixes**

- When editing the Excel Server URL or the Graph Server URL setting in the Administration Console, the previously visible, but incorrectly displayed, third list option no longer appears. (190123017)
- When using a grid in Maintain Data, if you tab to a protected field, the cursor jumps to the top of the grid. (180823137)
- When selecting the Share with... option, the Environments Tree panel is collapsed. (190118065)
- In App Studio, when a procedure contains a –INCLUDE and is executed as a Remote call, an error occurs unless the –INCLUDE contains the full path. (190222086, 190503032)
In App Studio, the left-justification of text on a push button style radio group control is ignored. (170531058)

Passing 707% as a parameter value in a scheduled App Studio HTML report saves 707%25 in the scheduled task. (181219038)

When creating a custom load page using the HTML canvas, the wf_globals.jsp file is missing at portal run time in Internet Explorer 11 and Firefox. (170825067, 171115069, 180215084, 180430039, 190117053, 190116058)

The calendar Start Date setting is not working correctly for an HTML canvas. (190329034)

Using a mandatory filter defined in a synonym’s Master File with ACCEPT=FOCEXEC does not show the values to select from in the sort order specified in the called focexec. The values are always listed in ascending order. (190124019)

Conditional styling does not apply when using a field in the Animate bucket. (180302032, 190215021)

The animation in a Pie Chart does not work properly when combined with the riserBevel property. (181129123)

The tooltips on a line chart disappear after a few seconds. (181204021)

Hyperlinks that exist in embedded headings do not work in some versions of Chrome browsers. (190119001)

When the WebFOCUS Client Dynamic Language option is configured and an existing schedule is edited and saved by a user signed in with a language different than the user who created the schedule, the schedule title becomes blank. (180517038)

The reader task goes into an infinite loop when it encounters a schedule that has an invalid recurrence of zero minutes which causes the Distribution server to stop instead of recording the error and continuing to process schedules. (190209001)

The index file created when bursting a report via FTP is only created outside the ZIP file. (190212043)

Some fonts (such as Tahoma and Trebuchet MS) are not displayed properly in the Chrome internal viewer when running a PDF report against a Unicode Reporting Server. (180712063, 181024026, 181125001, 190228175, 190228043)

Changing the column order using the SEQUENCE style sheet attribute with an ACROSS in an HTML report will generate additional unwanted columns. (181129083)
When running an HTML report that includes SET BYDISPLAY=ACROSS or SET BYDISPLAY=ALL, styling color, borders, and two verb objects, the second verb object is not styled and the border is incomplete. (190108131)

When creating multiple PDF outputs with an image, the image is only added in the first PDF. Additional PDF output files receive an error message. (190305106)

When running a complex procedure that creates multiple PDF’s using a -REPEAT loop, and includes an image, a server crash results after generating the eighth PDF output file. (190305100)

The report date is indented when using <REQUEST.FILTERS in a procedure with multiple WHERE and IF conditions. (60812520, 60812526, 53452532, 80832508, 62252507, 12813531, 90532525, 72512515, 91842532, 12933008, 160615235, 160714032, 42192049, 170928061, 21813546, 190208061, 190402093)

A blank page is displayed when running an HTML report with AUTOFIT and HFREEZE using -HTMLFORM. (190401078)

The Home page sign-out link is incorrect for KeyCloak or OpenID Connect security configurations. (181129199, 190206139, 190429065)

User Licensing information for InfoAssist is incorrect for users assigned the InfoAssist privilege and are not assigned to a group authorized to access InfoAssist. (190218046)

If you run a report deferred and the Reporting Server agent is terminated because of exceeding the Reporting Server CPU, memory or disk limits, when you click to view the deferred report from the deferred status screen, a message displays without information on the limit exceeded. (190319129)

Date prompting for a page created with Page Designer duplicates the year if the language is German. (180618025, 190325028)

A Choropleth Map chart does not render Postal Codes in Designer Maps. (190429059)

**Upgrade Notes**

In App Studio, the Action, Method, Enctype, and Accept properties have been removed from the Form component in the Properties panel because these properties were not actually being used.

In App Studio, an output widget container no longer contains the Autosize options in the Properties panel. Everything inside the widget is now fully CSS3 responsive at run time. Autosize is handled by JavaScript and responsive is handled by CSS3 styles.
When upgrading from previous versions of ReportCaster, FTP setting configuration information remains available in existing distribution schedules as long as the default value (Customized FTP) is assigned to the FTP Server Name field.

If you replace this value with a predefined FTP setting configuration in an individual schedule, the previous FTP Setting configuration information for that schedule is overwritten automatically.

If you limit FTP Setting configurations to a predefined list by selecting the Don’t allow user defined FTP in schedule check box in the (Default Settings) configuration, the previously FTP Setting configuration information for all schedules becomes unavailable, and is replaced by the default FTP Setting configuration or a predefined FTP Setting configuration selected for an individual schedule.

After an upgrade to Release 8206, only those users working in roles that include the new Create Shortcuts (opShortcut) privilege, located in the Basic Reporting privilege category, can continue to create shortcuts. Even though this privilege is included in the DomainBasicUser, DomainAdvancedUser, DomainDeveloper, DomainAnalyst, and WebFOCUSManager roles, it is not selected by default. Administrators must either select the Create Shortcuts privilege check box directly, or use the Role Update utility, located on the Configuration tab of the Administration Console, to include this privilege in each of the roles that can continue to use this feature.

The Display Esri Configuration Utility (opEsriAdminConsole) privilege, which granted access to the Esri Configuration Utility, was removed from the Application Development privilege category located on the Roles tab of the Security Center. The new ArcGIS API for JavaScript replaces the Esri Configuration Utility and is available to all users. Existing maps created using the ESRI Configuration Utility continue to work with the new ArcGIS API for JavaScript. However, you cannot upgrade them without first recreating them with the new ESRI HTML5 component-based Point Map or Choropleth Map options available from the WebFOCUS Designer or InfoAssist Chart Picker.

The following changes appear on the InfoAssist Properties page of the Administration Console Configuration tab. These changes were called for by In-Document Analytics rebranding, and they match changes to the labels of the corresponding format options in the Output File Format list that opens from the Format Group in the InfoAssist Home Page ribbon.

In the Format Tab section, the Active PDF option was renamed PDF Analytic Document Format and the Active Report option was renamed HTML Analytic Document Format.
In the Report Output Format, Chart Output Format, and Document Output Format lists located in the Tools Options Dialog Defaults section, the Active Report option was renamed HTML Analytic Document and the Active PDF option was renamed PDF Analytic Document.

The functions previously categorized as Statistical Python functions have been reclassified as Machine Learning (Python-based) functions. The names of the functions have changed as follows:

- BLR_CLASSIFY is now named CLASSIFY_BLR.
- KNN_CLASSIFY is now named CLASSIFY_KNN.
- KNN_REGRESS is now named REGRESS_KNN.
- RF_CLASSIFY is now named CLASSIFY_RF.
- RF_REGRESS is now named REGRESS_RF.
- POLY_REGRESS is now named REGRESS_POLY.

The enhanced In-Document Analytics user interface available is configured by default for new installations and is not supported with the Microsoft Internet Explorer 11 browser. If you have requirements to support Microsoft Internet Explorer 11 browser, you can configure the Legacy In-Document Analytics user interface using the WebFOCUS Administration Console. Customers upgrading to 8206 from 8205 or earlier releases will have the Legacy In-Document Analytics user interface configured. The new In-Document Analytics setting appears in the Tools Option Dialog Defaults section of the InfoAssist Properties page, which is located on the Configuration tab of the Administration Console. This setting establishes the default value for the In-Document Analytics setting in the Procedure Settings dialog box which opens from the InfoAssist Quick Access toolbar. The value in this setting determines the interface used to display reports, charts, and documents using the HTML Analytic Document format. There are two valid values:

- Designer Style. Content displayed conforms to the conventions of WebFOCUS Designer and includes the Navigation icons, such as the Chart Format menu and the ellipsis menu.
Legacy. Content displayed conforms to the legacy run-time interface and provides options like the legacy column menu. Content created in earlier versions is automatically assigned to the Legacy display, which conforms to the conventions of the Active Technologies format, and provides options like the Chart/Rollup and Pivot tools. New content is automatically assigned to the WebFOCUS Designer option, which is selected by default. To convert content created in earlier versions to the WebFOCUS Designer display, developers must open that content for editing, reset the value in the In-Document Analytics setting to Web FOCUS Designer, and save the revised procedure. As an alternative, developers can use the text editor to add the following commands directly to a procedure. -DEFAULTH &WF_ARVERSION=2; SET ARVERSION=&WF_ARVERSION;

To prevent unexpected field transformations, when creating a chart in WebFOCUS Designer, the buckets are type sensitive. Certain buckets, such as the Size and Tooltip buckets, only accept measure fields, while others, such as the Horizontal and MultiPage buckets, only accept dimension fields. Additional buckets, such as the Vertical and Color buckets, accept both field types. When you attempt to drag a field into an incompatible bucket, the cursor changes to a cancel sign. To add a measure field to a dimension bucket or a dimension field to a measure bucket, right-click a field in the Fields panel and click Add as dimension or Add as measure. The field is added to the default dimension or measure bucket. You can drag the field into another bucket, as needed. As in previous releases, measure fields used as dimensions display as distinct instead of aggregated values, while dimension fields used as measures are aggregated using the Count operation.

In Release 8206, the default value assigned to the Account Creation on Sign In (IBI_ALLOW_LOGIN_EXTERNAL_GROUPS) setting, located on the External page of the Administration Console Security tab, changes from All to OFF. If you must continue to use All as the default value in this setting, after upgrading to Release 8206, you must open or create the webfocus.cfg file, type the IBI_ALLOW_LOGIN_EXTERNAL_GROUPS=* setting in it, including the asterisk (*) value, which represents All, and then save the updated file.

WebFOCUS page breaks in format XLSX report output are synchronized with Excel page breaks. To revert to the behavior in previous releases in which page breaks were not synchronized, issue the SET XLSXPAGEBRKIGNORE=ON command.
Known Issues

- If you are working with an In-Document Analytics chart in landscape mode on an Android mobile device and you switch to portrait mode, your content displays in fullscreen mode. Your chart displays at the bottom. If you run your content in new window mode, your In-Document Analytics chart does not display in fullscreen mode, displaying the chart on the right.

- When working in Document mode with In-Document Analytics, an error occurs if you attempt to run a document or dashboard using Internet Explorer 11.

- When creating bar charts using the New option on the Ellipsis menu, the Color bucket incorrectly performs a count for a dimension field. It also shows a heat legend. The expected result is a color legend for each unique item.

- If you add an existing ARVERSION=1 report to an AHTML document set to ARVERSION=2, it fails at run time, displaying JSON text on the screen instead of the expected report output.

- Running the configuration migration from the CMD line or UNIX Shell displays an error message in the log file. This error does not impact migration of the configuration files.

- After running WFReposUtilCMDLine.bat or WFReposUtilCMDLine.sh, the RPT_DATA, RPT_METADATA, and RPT_USAGE tables are not getting dropped and are still available in the repository.

- If you attempt to run an ARVERSION=2 (In-Document Analytics) AHTML Fusion chart procedure (.fex), it continuously loads and produces an F12 error. This does not occur with Fusion charts that employ ARVERSION=1.

- If you are working with a procedure (.fex) and you change the ARVERSION to ARVERSION=2, global filters do not display when you run the procedure.

- When you use the WebFOCUS Online Help in Japanese, if you type a search term in the Search box that contains NLS characters and press Enter, the words next to the Search box are corrupted. The workaround is to click the Go button next to the Search box, instead of pressing Enter.
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