

# WebFOCUS

Release 8207.10 About This Release

May 27, 2020

Active Technologies, EDA, EDA/SQL, FIDEL, FOCUS, Information Builders, the Information Builders logo, iWay, iWay Software, Parlay, PC/FOCUS, RStat, Table Talk, Web390, WebFOCUS, WebFOCUS Active Technologies, and WebFOCUS Magnify are registered trademarks, and DataMigrator and Hyperstage are trademarks of Information Builders, Inc.

Adobe, the Adobe logo, Acrobat, Adobe Reader, Flash, Adobe Flash Builder, Flex, and PostScript are either registered trademarks or trademarks of Adobe Systems Incorporated in the United States and/or other countries.

Due to the nature of this material, this document refers to numerous hardware and software products by their trademarks. In most, if not all cases, these designations are claimed as trademarks or registered trademarks by their respective companies. It is not this publisher's intent to use any of these names generically. The reader is therefore cautioned to investigate all claimed trademark rights before using any of these names other than to refer to the product described.

Copyright © 2020, by Information Builders, Inc. and iWay Software. All rights reserved. Patent Pending. This manual, or parts thereof, may not be reproduced in any form without the written permission of Information Builders, Inc.

# Contents

1. 8207.10 Release Notes	5
Release and Gen Information	5
New Features	5
Choosing Columns to Load When Uploading Files	5
Change Data Capture (CDC) on a Data Flow	6
Showing the Confidence Level for Adding a Union to a Data Flow	11
Support for GROUP BY On Column Position or AS Name	12
Adapter for REST: Setting a Default Field Length	14
Adapter for REST: Support for Passing Text and Binary in a REST POST Request. $\ldots$	14
Adapter for ElasticSearch	16
Fixes	16
Upgrade Notes	17
Known Issues	17
System Requirements	20

Contents

Chapter

# 8207.10 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**

Release Date	Gen Information	Reporting Server
Friday, May 22, 2020	wf052120a Gen 9	8207.10 Gen 1915
	wi052120a	
	as052120a	

#### **New Features**

#### **Choosing Columns to Load When Uploading Files**

When using Get Data to upload a file, you can choose which columns will be loaded to the target database or data store, so you only load the columns you need.

From the file upload Preview page, click the *Choose Columns* icon . The Choose Columns dialog box displays, as shown in the following image.

Choos	e columns to include in load $\qquad  imes$
	Title
$\checkmark$	Order Date
	Sales Rep
$\checkmark$	Store Code
$\checkmark$	Store Name
	Country
	Region
$\checkmark$	State
$\checkmark$	City 🗸
Reset	to defaults Cancel OK

All columns are selected by default. You can clear the check boxes for the columns you do not want to be loaded.

#### Change Data Capture (CDC) on a Data Flow

In the Web Console, when a table is log-enabled, you can use the load option *Change Data Capture* along with the log file to update only the rows that have changed since the last load.

#### *Procedure:* How to Use CDC on a Data Flow

In order to use CDC on a Data Flow, you need a synonym for the log file, a synonym for the existing target table, a Data Flow, and, optionally, a synonym for the source table (which is not used in this type of load). When changes are made to the source table, the log file is updated. If you submit a flow that has Change Data Capture as its load option, the target table will be updated using the information in the log.

- 1. Create a synonym for the log table.
  - a. Right-click the connection for the adapter with the log-enabled tables, and select Show DBMS Objects.

The Create Synonym page opens.

b. Select *Table Log Records* from the Object Type drop-down list, as shown in the following image.

oreate of	nonyn			(Biiiii 662)				
Object Type	?	Table Log Records	•	Database?	Default Database	e 🔹 Ow	ner/Schema? Object Name?	
Customize	data	Tables					~	
Create: ?	•	Tables, Views and Other Objects						
Application	?	External SQL Scripts			Prefix?	Suffix	?	
		Stored Procedures						
SYNONYI	M CA	Table Log Records		(DEFAULT)		Row Limit	50 ▼	
Fact	Dimen	sion Default Synonym Name	-	î Ta	ible Name 👔	Owner/Schema 1	Туре	
		m1_orders		м	1_ORDERS	dbo	Log Records	
		dimrep_s		di	mrep_s	dbo	Log Records	Í
		lobvarbin		LC	BVARBIN	dbo	Log Records	
		car_new_mss		Са	ar_new_mss	dbo	Log Records	
		carsales		CA	ARSALES	dbo	Log Records	
		carsales_enriched		Са	rsales_enriched	dbo	Log Records	
		lobtest		LC	BTEST	dbo	Log Records	

Create Synonym for MS SQL Server ODBC/AzureDB (DMTFS02)

ancel	Add	

- c. Click the Base Synonym button.
- d. Either accept the default application in the *Application* text box, enter an application name, or click the ellipsis (...) next to the text box to select the application name.
- e. Select the check boxes for one or more log records.

If you want to distinguish the synonym name for the log record from the synonym name for the base table, you can add a prefix or suffix using the *Prefix* or *Suffix* entry fields, or you can change the synonym name by typing over the default synonym name. (If the *Default Synonym Name* column is not showing, click the *Choose Columns* button and select that column.)

The following image shows one log table record named dimrep\_s selected, with the synonym name changed to dmrep\_s\_log (the characters \_*log* are entered in the *Suffix* field).

Create Sy	monym for MS SQ	L Server ODBC/A	zureDB (DMTFS02)		
Object Type	Table Log Red	cords	Database? Default Database      Owner/Schema?      Object Name?		•
Customize	data type mappings				~
Create:?	O Cluster Synonyn	n 💿 Base Syno	nym		
Application	? cdc_load		··· Prefix? Suffix? Log		
SYNONY	M CANDIDATES FO	OR DATABASE: M	ARINA (DEFAULT) — Row Limit — 50 V = = • Search	× C	٦
Select [	Table Name	Owner/Schema [	Type [		
0	M1_ORDERS	dbo	Log Records		
۲	dimrep_s	dbo	Log Records		
0	LOBVARBIN	dbo	Log Records		
0	car_new_mss	dbo	Log Records		
0	CARSALES	dbo	Log Records		
0	carsales_enriched	dbo	Log Records		
0	LOBTEST	dbo	Log Records		
			Cancel	Add	

- f. Click Add.
- 2. You should already have a synonym for the existing target table and, optionally, the source table. If you do not have a synonym for the target, create it now.
- 3. Create a Data Flow using the log file synonym as the source and the existing target as the Target, as shown in the following image.



4. Right-click the target synonym and select *Load Options*.

The Load Options dialog box opens.

5. Select *Change Data Capture* from the Load Option drop-down list, as shown in the following image.

Load Options	×
Load Option	Ø
Change Data Capture	-
Prior to Load Option	Ø
None	•
Select Target Synonym	Ø
cdc_load/dimrep.mas	•••
Control column	Ø
CDC_OPER	•
	Cancel

6. Click OK.

The Merge Editor opens, as shown in the following image.

Merge Editor fo	or CDC_LOAD	/DIMREP				×
Merging condition - if the record ex - if the record do Use Drag and Dr = Search	on: ists then includ- bes not exist the rop from Source	e the record en include the record e to Target to create N T I BA	Match/Insert/Updat	te expressions. tarch		×Q
Source Field	Usage Forma	Target Field	Usage Format 🕽	Insert expression 1		
TAL CDC_OPER	A1 ^	Abc REGION	A5	SRC.REGION		•
7Ab CDC_TID	A32	Abc FIRST_NAME	A17	SRC.FIRST_NAME		
7Ab CDC_TIMES	A26	Abc LAST_NAME	A34	SRC.LAST_NAME		
12 RKEY	111	START_DATE	HYYMDm			
Abc EMID	A5	🔛 END_DATE	HYYMDm			
	∧2 ▼	123 ACTIVE	111			-
					Cancel	ОК

Missing matches display in red.

- 7. Drag source columns to the Insert Expression field for the target where needed to eliminate missing matches, and click *OK*.
- 8. Save the flow.
- 9. If the flow is scheduled to run at set intervals, once the source table and log have been updated, the target will be updated the next time the flow runs. You can also right-click the flow and select *Submit*, as shown in the following image.



You can see the number of changes that were applied by right-clicking the flow, clicking *Logs*, and selecting *Last Log*.

## Showing the Confidence Level for Adding a Union to a Data Flow

You can right-click a source in a data flow and add a new source as a union, as shown in the following image.



A list of tables displays for choosing the new source to add. This table now includes a confidence level, based on matching column names and data types for each prospective new source, showing how compatible it is with the existing source, as shown in the following image.

Add Source via Union					×
Applications > citib	ike <i>C</i>				
- Applications				<b>Search</b>	×Q
+ foccache	Name	Confidence 1	Description 1 Type	Date Modified	
+ ibisamp	;x t0_rpt_t.mas	100%	Excel	2020/02/04 14:31:11	•
- citibike	💢 trip_station_cls.mas	100%	DATREC	2020/02/18 12:22:46	
+ doc82	💢 citibike_partial_mssql.mas	94%	MS SQL Server ODBC/	AzureDB 2020/02/20 16:19:31	_
+ jschart82	💢 citibike_partial_oledb.mas	94%	MS SQL Server OLE DE	B/AzureDB 2020/02/21 15:20:14	
+ python_tutorial	💢 citibike_tripdata_partial.mas	94%	DATREC	2020/02/18 16:33:20	
+ retail8205	💢 trip_partial_cls.mas	94%	DATREC	2020/02/18 16:34:12	
+ dmgeneral	💢 a201907_citibike_tripdata.ma	88%	Delimited Files (CSV/T	TAB) 2019/08/27 12:10:42	-
Selection:					
Extension: mas					
					Cancel OK

#### Support for GROUP BY On Column Position or AS Name

In prior releases, a GROUP BY clause in an SQL SELECT statement could only use a column name or expression. Now, the GROUP BY clause can also use the column position (such 1 to indicate the first column) or an AS name from the SELECT list.

This syntax is commonly generated by some third-party tools and can also be used in DataMigrator in a custom SQL flow, or in WebFOCUS in an SQL query.

#### *Example:* Using an AS Name in a GROUP BY Clause

The following SQL request uses the AS name CATEGORY in the GROUP BY clause.

```
SQL
SELECT
PRODCAT AS CATEGORY,
COUNT(QTY_IN_STOCK)
FROM
DMINV T1
GROUP BY CATEGORY;
TABLE
ON TABLE SET PAGE NOLEAD
ON TABLE SET PAGE NOLEAD
ON TABLE SET STYLE *
GRID=OFF,$
ENDSTYLE
END
```

The output is shown in the following image.

	Quantity
CATEGORY	in Stock
Camcorders	6
Cameras	4
CD Players	1
Digital Tape Recorders	1
DVD	2
PDA Devices	2
VCRs	1

### *Example:* Using a Column Position in a GROUP BY Clause

The following SQL request uses the column position 1 in the GROUP BY clause.

```
SQL
SELECT
PRODCAT,
COUNT(QTY_IN_STOCK)
GROUP BY 1
FROM
DMINV T1
GROUP BY 1
;
TABLE
ON TABLE SET PAGE NOLEAD
ON TABLE SET PAGE NOLEAD
ON TABLE SET STYLE *
GRID=OFF,$
ENDSTYLE
END
```

The output is shown in the following image.

Product	Quantity
<u>Category</u>	in Stock
Camcorders	6
Cameras	4
CD Players	1
Digital Tape Recorders	1
DVD	2
PDA Devices	2
VCRs	1

#### Adapter for REST: Setting a Default Field Length

The Adapter for REST SET FIELDLENGTH command sets a default USAGE and ACTUAL length for alphanumeric fields to be used when creating a synonym.

The syntax is:

ENGINE REST SET FIELDLENGTH nnn

where:

nnn

Is the default length.

For example, the following command sets the default USAGE and ACTUAL lengths for alphanumeric fields to 100.

ENGINE REST SET FIELDLENGTH 100

#### Adapter for REST: Support for Passing Text and Binary in a REST POST Request

The Adapter for REST now can read text and binary data from a file and pass it in the body of a POST request.

The following Access File attribute is used for passing text data to another REST request.

HTTPBODY=TEXT

The following Access File attribute is used for passing binary data to another REST request.

HTTPBODY=BINARY

The following Access File attribute is used to define the field used to pass the location of the file to be read for input to the REST call.

#### FIELD=DATAFILE, INPUT=FILENAME

Support has also been added for reading the binary response from a REST Web Service request and saving the output to a file. The USAGE and ACTUAL formats for the field containing the Binary output must be defined as STRING.

The following Access File attribute is used for reading binary data from a REST request.

#### RESTRESPONSE=BINARY

The following command is used to HOLD the binary output:

ON TABLE HOLD FORMAT BINFILE DATASET filename

where:

#### filename

Is the name of the file where the output is to be stored.

For example:

ON TABLE HOLD FORMAT BINFILE DATASET baseapp/wfretail.xlsx

You can also join the binary response from one REST Web Service request to the input of a subsequent REST Web Service request. The fieldname containing the binary response and the fieldname for the binary input both must be defined with USAGE=STRING and ACTUAL=STRING.

#### *Example:* Reading Binary Data from a REST POST Request and Storing the Output to a File

The following Master File describes the GET\_LIBRARYVERSION REST call. The \_\_RESPONSE field is described with USAGE and ACTUAL formats STRING:

```
FILENAME=M6ILO, SUFFIX=WFCREST , $
SEGMENT=M6ILO, SEGTYPE=S0, $
FIELDNAME=IBIRS_ACTION, ALIAS=IBIRS_action, USAGE=A30, ACTUAL=A30,
ACCESS_PROPERTY=(NEED_VALUE),
XDEFAULT='run', $
FIELDNAME=IBIRS_SERVICE, ALIAS=IBIRS_service, USAGE=A30, ACTUAL=A30,
ACCESS_PROPERTY=(NEED_VALUE),
XDEFAULT='ibfs', $
FIELDNAME=IBIRS_PATH, ALIAS=IBIRS_path, USAGE=A100, ACTUAL=A100,
ACCESS_PROPERTY=(NEED_VALUE), $
FIELDNAME=__RESPONSE, USAGE=STRING, ACTUAL=STRING,
ACCESS_PROPERTY=(INTERNAL), $
```

Following is the associated Access File:

```
SEGNAME=M6ILO,
CONNECTION=WIN10HYPER1,
OBJECT=rs,
SERVICETYPE=REST,
TIMEOUT=60,
HTTPMETHOD=POST,
HTTPMETHOD=POST,
HTTPBODY=ENCODE, $
```

The following request issues the REST call and stores the result in a file named holdversion.xlsx in the baseapp application:

```
SET EQTEST=EXACT
TABLE FILE GET_LIBRARYVERSION
PRINT
___RESPONSE
WHERE IBIRS_PATH EQ
'IBFS:/WFC/Repository/Binary_Data_TSCQ/L1e7us4uhe01.lib$(1)'
ON TABLE HOLD FORMAT BINFILE DATASET baseapp/holdversion.xlsx
END
```

#### Adapter for ElasticSearch

The Adapter for ElasticSearch is new in this release and can be found in the Search Engines group folder.

ElasticSearch is a highly-scalable search engine that performs fast searches and analytics against large amounts of data. It centrally stores all types of data, including textual, numerical, geospatial, structured, and unstructured. The Adapter for ElasticSearch is used to send search requests to the ElasticSearch engine and report against the information returned.

#### Fixes

- Multiple portals are not loading when invoked at the same time from the same portal. (200203134)
- □ Using the bulk load process to load Hyperstage data that contains missing or null values results in an error: FOC1426 DATA ELEMENT VALUE TOO BIG (200311100)
- Links to the log for failed flows are not displayed in red in Statistics reports In the Data Management Console. (200408156)
- ❑ When editing a synonym, adding a new DEFINE and deleting it, results in a TCP/HTTP listener crash when attempting to add another DEFINE. (200505013)

❑ The DECIMAL parameter marker value is formed incorrectly when an ODBC connector is used to read data from an Access database causing it to crash and terminate the connection. (200422045)

# **Upgrade Notes**

❑ When upgrading from release 8206.xx to 8207.xx, the WebFOCUS Integrated Installation does not automatically assign the Unicode UTF-8 (CP65001) code page to the Reporting Server configuration. In order to configure the Reporting Server to use the UTF-8 code page, you can select the entry directly from the CODE\_PAGE? list, as shown in the following image. In the Web Server console, this list appears in the NLS Configuration tab of the Workspace node.

Data Services Agents $ imes$ NLS Configuration Wizard $ imes$		
General		
CODE_PAGE?	1252 - Windows (Latin 1)	•
Optional customization	1252 - Windows (Latin 1)	^
? Customize code page conversion tables	65001 - Unicode (UTF-8)	
? Recreate ETLLOG, ETLSTATS and FOCUSSU system file	1250 - Central Europe (Latin 2)	
? Recreate FOCUS sample files (if present in ibisamp)	1251 - Cyrillic (Windows)	
TSGU command?	1253 - Greek (Windows)	

We recommend that you apply this change because, as of release 8207, WebFOCUS Integrated Installations configure all installed components to use the UTF-8 code page. Changing the Reporting Server code page to UTF-8 will ensure that there is no mismatch of code pages between WebFOCUS, Tomcat, and the Reporting Server, which could result in data retrieval issues.

- □ In Release 8207, Magnify functionality is not available. To add Magnify functionality to Release 8207 and higher, see the manual steps outlined in this *topic*.
- □ As of Release 8207, in App Studio, the *Domains* node in the Configured Environments tree has been renamed to the Workspaces node.

#### **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:

Configuration Security ReportCo	Aer Diagnostics	Licenses Clear Cach	e Close 😢
Configuration	Application Contexts		
Leparang servers     Lepa	Help     /bi_apps/bi_help     /bi_apps/bi_help		
Application Caches	Help Praxy Context     /ufapent/8206		
Change Hanagement	Help Praxy Secure     ReportCaster Application		
Client Settings	WebFOCUS Servlet     //bi_spp://W?servlet.bfs		
ESRI Dibers	WebFOCUS Application     //bi_apps     Default host and port for product features     http://doi/bi23-1:80		
Maprify Multiple Reports	Save Cance	4	
Cther			
Repository			
(			

- 6. Click the *Clear Cache* option and continue to sign out and sign in for the settings to take effect.
- ❑ The canvas of WebFOCUS Designer for this release is an interactive canvas based on AHTML. When creating a report, page and row break settings are not supported on this canvas for this release. If you select any other output format, such as HTML, PDF, PPTX, or XLSX, you will see these breaks at runtime. These output format options are available for stand-alone content items only. This will be resolved with the introduction of the non-interactive document canvas in a future release.

- When an Insight-enabled chart created in the 8207.00 version of WebFOCUS Designer is added to a visualization as external content, the Insight icon does not appear on the chart when the page is run, so Insight features cannot be accessed. Resave the chart in WebFOCUS Designer 8207.01 or later to make Insight available when the chart is added to a visualization.
- □ When working with the Cell menu in an interactive report, the filtering functionality does not work as expected.
- □ When saving an artifact (from or of and interactive report, chart or dashboard), the output file name is ARsave.html rather than ARhtml.html.
- □ 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.
- □ 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 are working with a procedure (.fex) and you change the ARVERSION to ARVERSION=2, global filters do not display when you run the procedure.
- In a scatter plot chart or bubble chart, multiple measure fields on the horizontal and vertical axes generate separate axes, resulting in a grid of scatter plots for each combination of measure fields. In WebFOCUS Designer, if you create a scatter plot chart or bubble chart with multiple measures in the Vertical or Horizontal buckets, only the axis for the first measure in each bucket displays on the canvas. When you run the chart, all measure fields in the Vertical and Horizontal buckets are shown as separate axes, as intended.
- ❑ The Expression Editor has a an area that displays objects that you can add to an expression, which are columns, variables or functions. The selection and display of these was controlled by buttons above the area, but when then size of the area was compressed, some of the buttons were hidden. Now there is a single button with a pull-down menu that allows selecting what objects are displayed.

- 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.
- ❑ App Studio upgrades are currently not supported. Messages related to failures that occurred while merging changes in the mime.wfs and languages.xml files display during the upgrade installation process.
- ❑ When using MS SQL Server as the database platform for the WebFOCUS Repository and upgrading from 8105M to 8207.06, only MS SQL Server 2008 and 2012 are supported. MS SQL Server 2014 and later versions are not supported.

## 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. Internet Explorer Compatibility mode is not supported. For additional browser details, see *Browser Information*.

For more information on supported clients and more, see *Release Information*.

# Feedback

Customer success is our top priority. Connect with us today!

Information Builders Technical Content Management team is comprised of many talented individuals who work together to design and deliver quality technical documentation products. Your feedback supports our ongoing efforts!

You can also preview new innovations to get an early look at new content products and services. Your participation helps us create great experiences for every customer.

To send us feedback or make a connection, contact Sarah Buccellato, Technical Editor, Technical Content Management at Sarah\_Buccellato@ibi.com.

To request permission to repurpose copyrighted material, please contact Frances Gambino, Vice President, Technical Content Management at *Frances\_Gambino@ibi.com*.



Release 8207.10 About This Release





Information Builders, Inc. Two Penn Plaza New York, NY 10121-2898

DN4501645.0520