Information Builders

WebFOCUS

Release 8207.11

About This Release

July 13, 2020

Contents

Chapter 1

8207.11 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

Release Date	Gen Information	Reporting Server
Monday, June 8, 2020	wf060420a Gen 6 wi060420a as060420a	8207.11 Gen 1916

New Features

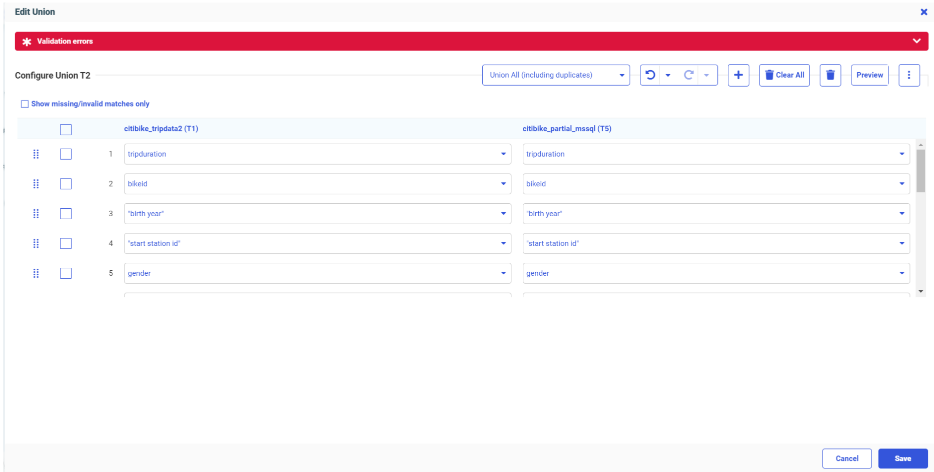
Enhancements to the Union Editor

The union editor has been redesigned to show clearly what needs to be corrected, if there are validation problems.

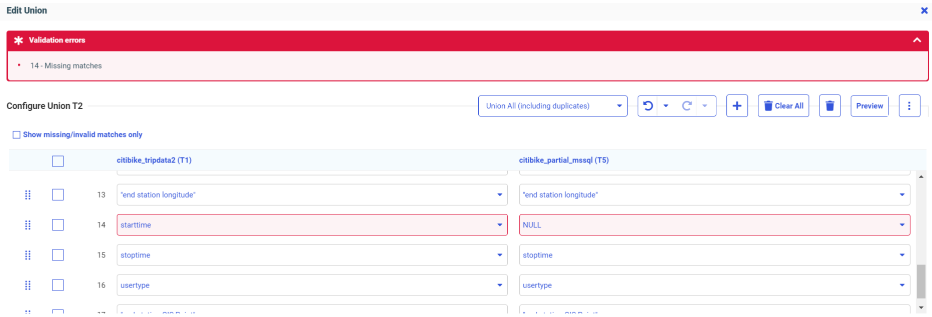
Reference: Correcting Validation Errors and Editing the Matches

The Union Editor has two areas. The top area shows the matches between the fields in the two tables. The bottom area contains a preview of the data in the union. When you first open the Union Editor, the Preview area is hidden.

If any validation errors exist, a message appears at the top of the window, as shown in the following image.



You can click the down arrow in the message area to see a list of problems. In the following image, line 14 has a missing match and, when you scroll down to that line, it is outlined in red.



You can also select the check box *Show missing/invalid matches only*, to display only those lines with missing or invalid matches.

To correct a missing match, you can:

- ❑ Click the down arrow next to the right table and select a different field that matches the field from the left table.
- ❑ Click the down arrow next to the left table and select a different field that matches the field from the right table.
- ❑ Select the check box next to the line and click the *Delete selected columns* button (trash can) at the top of the page.

  You can select multiple columns and delete them all at once.
- ❑ Click the *Clear All* button (trash can with the text *Clear All*) at the top of the page to remove all columns.

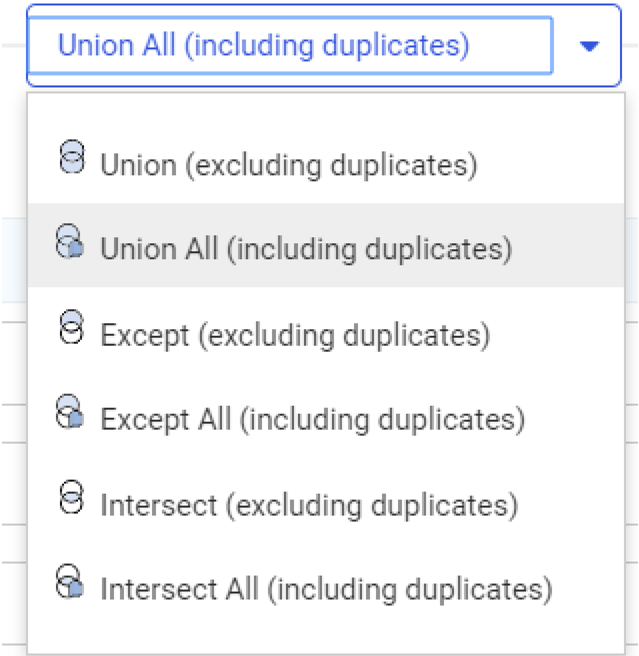
  You will then need to add pairs manually using the *Add a pair* (+) button.
- ❑ Click the *Add a pair* (+) button to add a matching pair.

  Clicking this button adds a line with NULL selected for each table. Select fields from the left and right tables using the drop-down lists, to create a matching pair.
- ❑ Change the type of union generated, if that is appropriate. For information, see *Selecting the Type of Union* on page 8.

When all validation problems are resolved, the message area disappears.

Reference: Selecting the Type of Union

By default, Union All, including duplicates, is selected. However, you can change the type of union that is generated by selecting an option from the drop-down list at the top of the page, as shown in the following image.



A union combines the output of two SELECT statements into one answer set, where the number of columns in each is the same, and the data types are compatible. You can select the following types of union:

- **Union (excluding duplicates).** Returns the rows from both SELECT statements with duplicate rows removed.
- **Union All (including duplicates).** Returns all rows from both SELECT statements, including duplicates. This is the default union type.
- **Except (excluding duplicates).** Returns distinct rows from the left SELECT statement that are not returned by the right SELECT statement.
- **Except All (including duplicates).** Returns all rows from the left SELECT statement that are not returned by the right SELECT statement.

- **Intersect (excluding duplicates).** Returns matching rows from the left SELECT statement and the right SELECT statement based on matching all columns. Duplicate rows are removed.
- **Intersect All (including duplicates).** Returns matching rows from the left SELECT statement and the right SELECT statement based on matching all columns. Duplicate rows are retained.

Reference: Editing the Union Properties and View

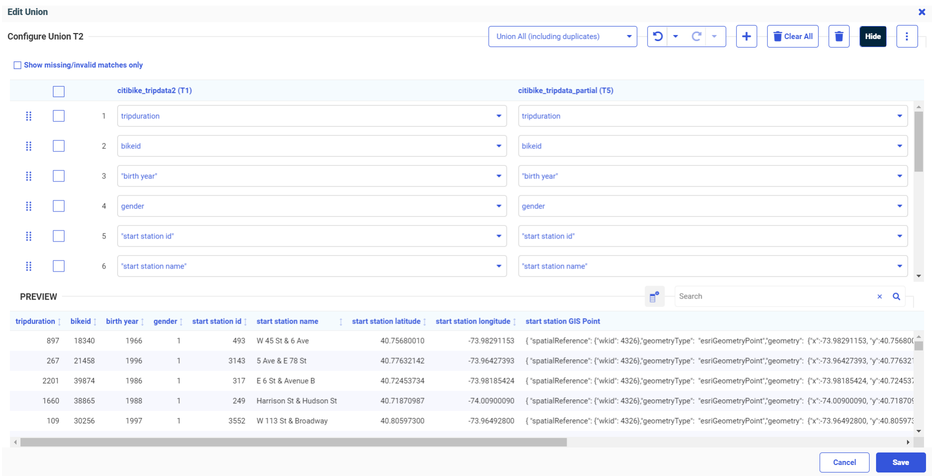
The following table list changes you can make to the union properties and view.

Operation	Icon	Description
Move columns		Click to drag a pair up or down on the list.
Undo		Undoes the most recent change made to the union properties. You can click the down arrow next to the button to see a list of the changes that have been made, and select from the list. Selecting an item undoes that change and all prior changes.
Redo		Redoes the most recent change made to the union properties. You can click the down arrow next to the button to see a list of the changes that have been made and, select from the list. Selecting an item redoes that change and all prior changes.
View		Provides the following options. ❑ **Show title.** Displays the field title. This is the default view. ❑ **Show Name.** Displays the field name. ❑ **Show source name.** Displays the name from the source file. ❑ **Diagnostics.** Has two options, Session Log, which opens the Session Log, and Clear Session Log, which clears the Session Log.
Choose Columns		In the Preview area, enables you to select the columns that display.

Operation	Icon	Description
Sort		In the Preview area, for each column, changes the sort order of the rows based on the data in that column. The sort toggles between the original order, descending, and ascending.

Reference: Viewing Sample Data

Click the *Preview* button at the top of the page to display sample data for the union, as shown in the following image.



The *Preview* button changes to a *Hide* button, which you can click to hide the sample data.

You can enter characters in the *Search* box to display lines with data values that match those characters.

You can use the *Choose Columns* button to select which columns display in the preview.

You can use the *Sort* button in a column to sort the rows based on that column.

Reference: Saving the Union

When you have resolved all validation errors and made any edits you need, click *Save*.

Click *Cancel* if you do not want to save your changes.

Slowly Changing Dimensions: Enhanced Processing for Type I Columns

In prior releases, if a source row had Type I field values that were the same as the existing row, the Changed Flag was restored and the record was updated with the same value.

Now, when DataMigrator Slowly Changing Dimension processing is used to load a dimension table with Type I columns, only rows in which the source and target rows have different values for the Type I columns are updated. This can result in reduced processing time, especially for large dimension tables.

Returning an Ordered Answer Set of a Limited Number of Rows in a Sub-Select

A sub-select can now contain the TOP n, ORDER BY, and FETCH FIRST n ROWS ONLY phrases to return an ordered answer set with a limited number of rows.

The syntax is:

```
ORDER BY column ... FETCH FIRST n ROWS ONLY
```

or:

```
SELECT TOP n ... ORDER BY column
```

where:

column

Is a column in the subquery used to sort the rows. The column can be expressed as an index number, column name, or AS name.

n

Is the number of rows in the sub-select to retrieve.

Example: Using FETCH FIRST n ROW ONLY in a Subquery

The following request retrieves the first 5 rows from dmsale, ordered by plant in descending order, and then retrieves rows from dminv that have plant values retrieved from the sub-select.

```
SQL
SELECT
    order_num,
    order_date,
    plant
FROM
    dmord

WHERE
    plant IN (
        SELECT
            plant
        FROM
            dmsale
ORDER BY
  1 DESC
FETCH FIRST 5 ROWS ONLY
    )
    ;
TABLE
ON TABLE SET PAGE NOLEAD
ON TABLE SET STYLE *
GRID=OFF,$
ENDSTYLE
END
```

The output is shown in the following image.

Order Number	Date of Order	Plant Location
93677	2004/03/30	STL
93705	2005/02/07	STL
93706	2006/02/14	STL
93708	2005/03/08	STL
93710	2005/02/14	STL
93711	2005/02/14	STL
93712	2005/02/14	STL
93713	2005/03/06	STL
93714	2005/02/23	STL
93717	2005/02/14	STL
93718	2006/02/14	STL
93719	2005/02/14	STL
93727	2005/02/14	STL
93729	2005/02/09	STL
93734	2005/02/14	STL
93743	2005/02/14	STL
93753	2006/02/22	STL
93755	2005/02/15	STL
93770	2005/02/15	STL
93774	2006/02/14	STL
93779	2006/02/14	STL
93780	2006/02/14	STL
93791	2006/02/14	STL
93793	2005/02/14	STL
93797	2005/02/14	STL
93812	2005/02/20	STL
93816	2006/03/06	STL
93822	2005/03/06	STL
93825	2005/03/06	STL
93829	2006/02/20	STL
93843	2006/02/20	STL
93847	2005/02/20	STL
93848	2006/02/20	STL
93855	2006/02/20	STL
93856	2005/02/15	STL
93858	2005/02/15	STL
93860	2005/02/15	STL

If the ORDER BY phrase had been ascending instead of descending, the plant location would have been BOS.

Example: Using SELECT TOP n in a Subquery

The following request retrieves the top 2 plant values from dmsale, ordered by plant in ascending order, and then retrieves rows from dminv that have plant values retrieved from the sub-select.

```
SQL
SELECT
    order_num,
    order_date,
    plant
FROM
    dmord

WHERE
    plant IN (
        SELECT TOP 2
           plant
        FROM
            dmsale
ORDER BY 1

    )
    ;
    TABLE
    ON TABLE SET PAGE NOLEAD
    ON TABLE SET STYLE *
    GRID=OFF,$
    ENDSTYLE
END
```

The output is shown in the following image.

Order Number	Date of Order	Plant Location
93674	2005/02/15	BOS
93675	2005/02/15	BOS
93693	2006/02/10	BOS
93700	2006/02/14	BOS
93715	2005/02/10	BOS
93730	2006/02/14	BOS
93702	2006/02/14	BOS
93744	2006/02/14	BOS
93742	2005/02/14	BOS
93754	2005/02/15	BOS
93775	2005/02/15	BOS
93776	2005/02/20	BOS
93777	2006/02/20	BOS
93787	2005/02/14	BOS
93788	2005/02/16	BOS
93769	2006/02/20	BOS
93796	2005/02/14	BOS
93803	2005/03/06	BOS
93805	2006/02/20	BOS
93818	2005/02/20	BOS
93839	2005/02/20	BOS
93849	2005/02/20	BOS
93850	2005/02/20	BOS
93853	2005/02/15	BOS
93861	2005/02/15	BOS

If the ORDER BY phrase had been descending instead of ascending, the plant location would have been STL.

Adapter for REST: Support for STRING Format

The Adapter for REST now supports STRING USAGE and ACTUAL formats in both the request and response. Since STRING format supports an unlimited string, PDF, binary, and graph output can be retrieved from a variety of Web Services using this format.

Raised Limit for Join Fields

In prior releases, the limit for field pairs in a join was 20. The number of join field pairs has now been raised to 128.

Generating Data Flows Using a Template Flow

You can now use a template data flow that has one source and one new target to generate multiple new data flows. A process flow will be created that contains all of the generated data flows. This feature enables you to easily move any number of single sources to new targets.

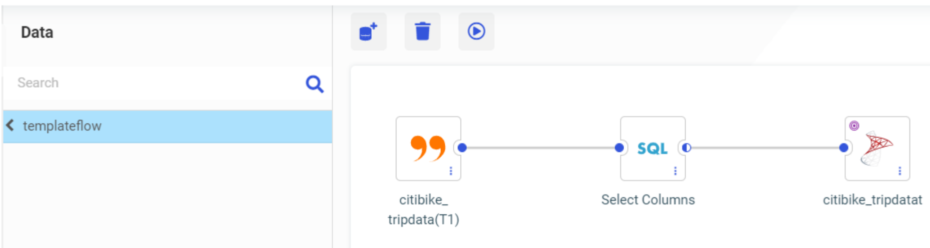
Procedure: How to Generate Data Flows

The template data flow and the generated data flows can each have one source and one new target.

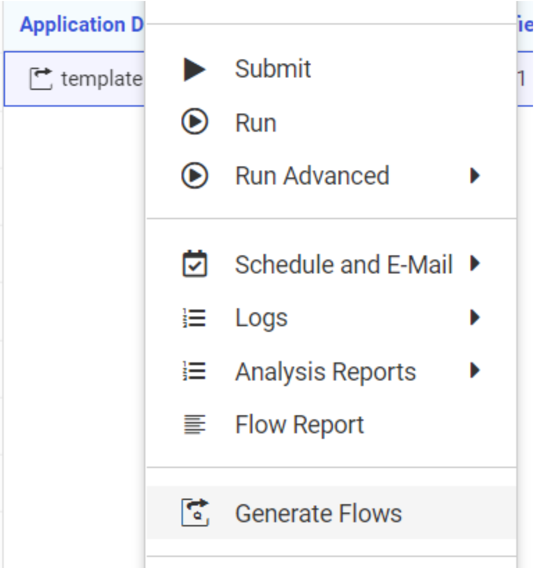
1. Create and save a data flow that has one source and one new target to use as the template.

   The template flow is a normal data flow and can have any name and be saved in any application directory.

   For example, the following image shows a flow named template1 that has a delimited source and new SQL Server target.

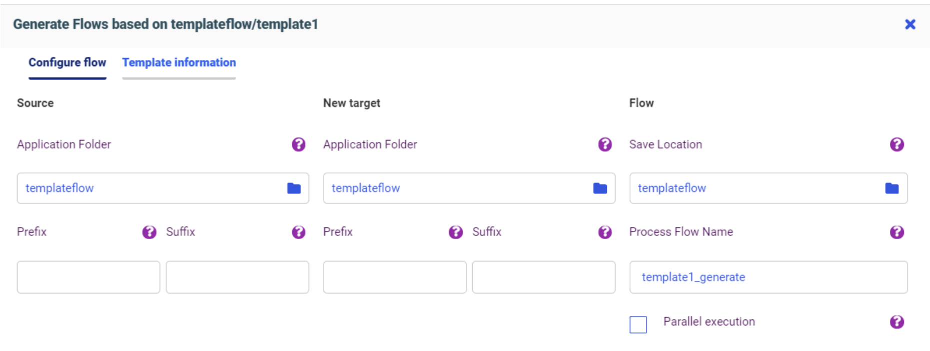
   

2. Right-click the template flow and click *Generate Flows*, as shown in the following image.



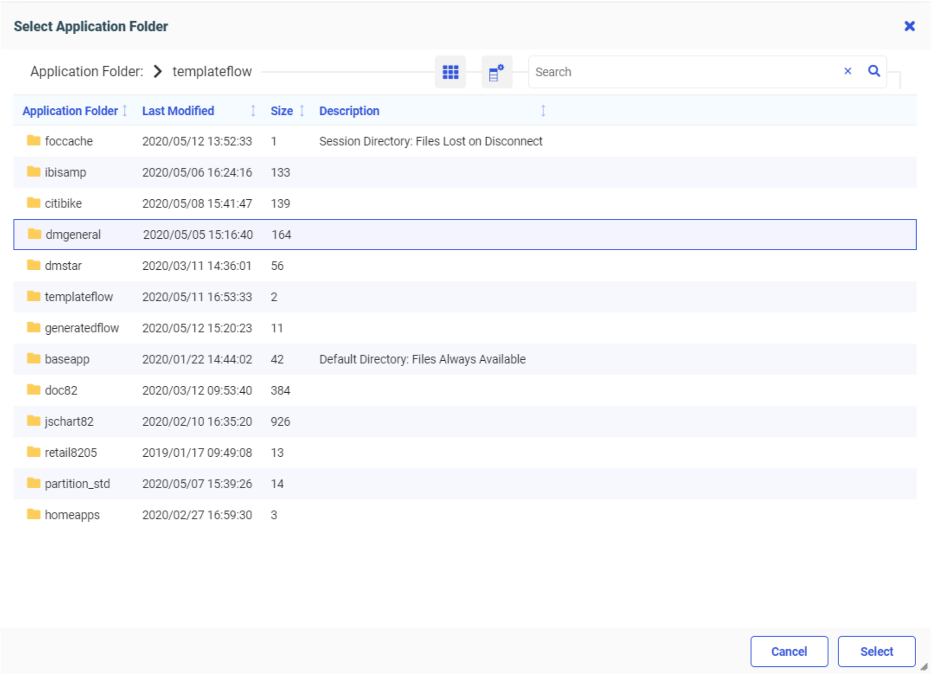
Note: The *Generate Flows* option appears as long as the flow conforms to the requirements for a template flow (one source, one new target).

The *Generate Flows* window opens, as shown in the following image.



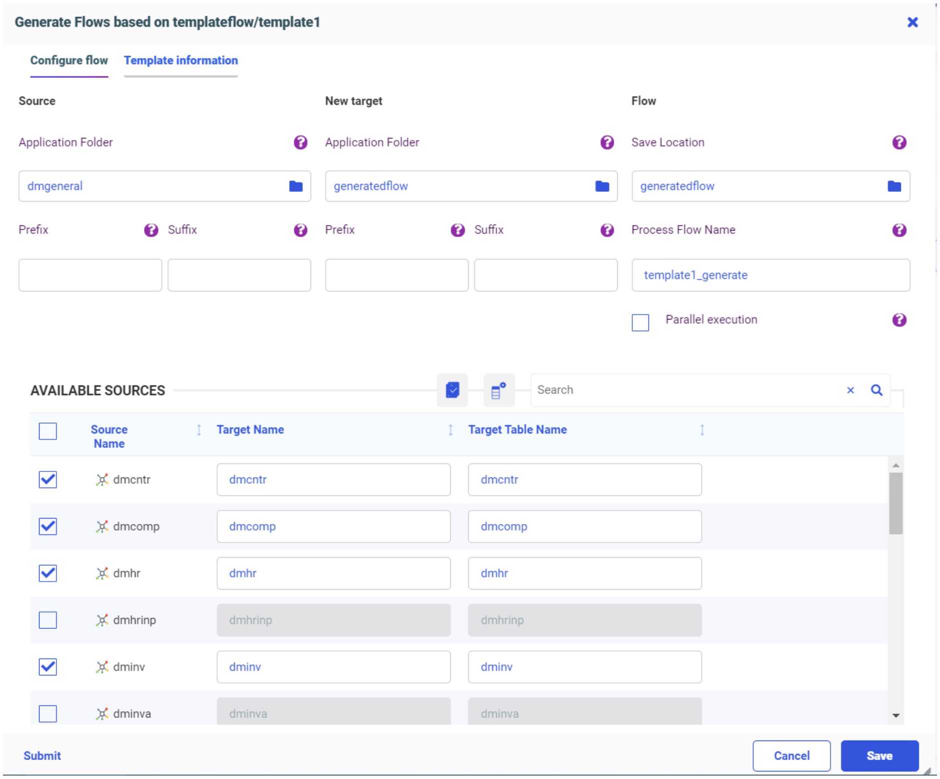
3. Select the source, target, and flow application folders.

If the source application folder does not have the sources you want to use, click the application name and navigate to the application you need, as shown in the following image.



Do the same for the New Target application and the Flow application. The source and target applications must be different. The New Target application will contain the new target synonyms. The Flow application will contain the generated data flows and process flow. The Target and Flow application folders can be the same or different.

4. Select the sources for the new flows, as shown in the following image.

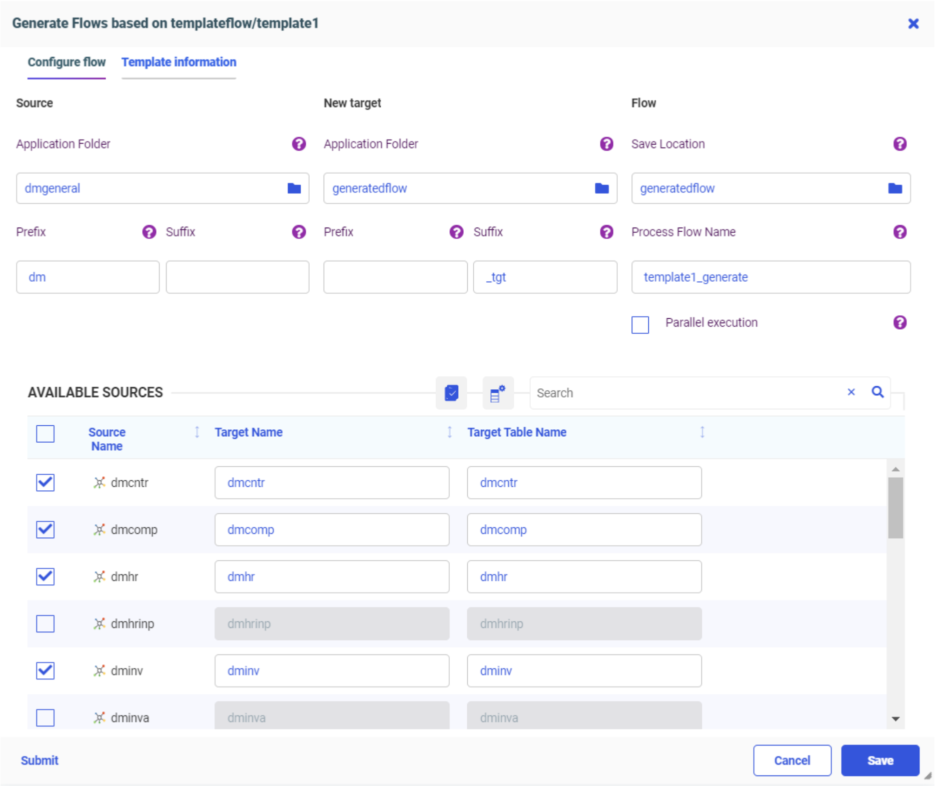


The sources do not have to be the same type as the source in the template flow. Any source type can be selected.

5. Optionally, use one of the following techniques to edit generated target synonym names.

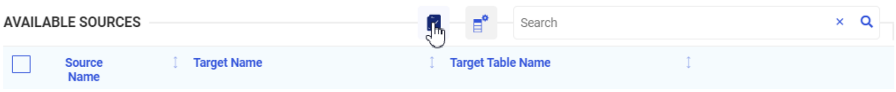
   - You can type over the default target names to create new names.
   - You can use the Source *Prefix* text box to specify characters that will be removed from the start of the source synonym name when creating the target synonym name, and the Source *Suffix* text box to specify characters that will be removed from the end of the source synonym name when creating the target synonym name.
   - You can use the Target *Prefix* text box to specify characters that will be added to the start of the target synonym name, and the Target *Suffix* text box to specify characters that will be added to the end of the target synonym.

The following image shows that the characters *dm* will be removed from the beginning of the source synonym name when creating the target synonym name, and that the characters *_tgt* will be appended to the synonym name for the new target.

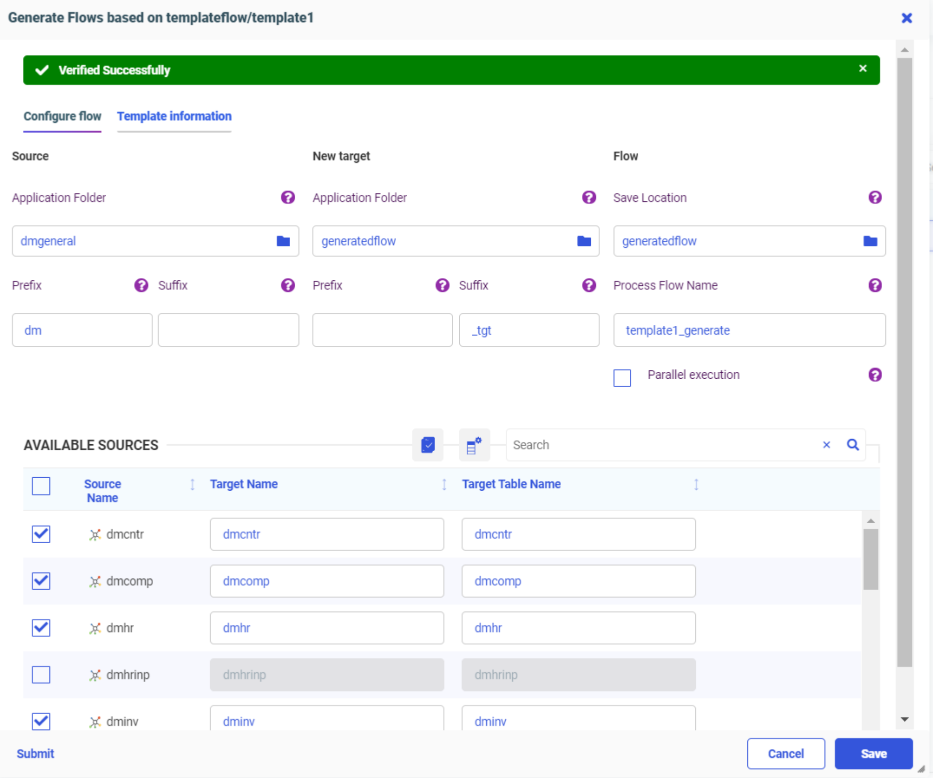


For example, the source synonym name *dminv* will generate a target synonym named *inv_tgt*.

6. Optionally, type over the target table names to generate the table names you need.
7. Optionally, type over the default process flow name to generate the process flow name you need.
8. Optionally, select the *Parallel execution* check box to create a group with the data flows inside.
9. Once you have made all of your changes, click the *Verify* button to check that your selections are valid, as shown in the following image.



If there were any problems with your choices, messages will display in red at the top of the window, identifying the problems. If your choices are valid, a successful verification message displays in green, as shown in the following image.

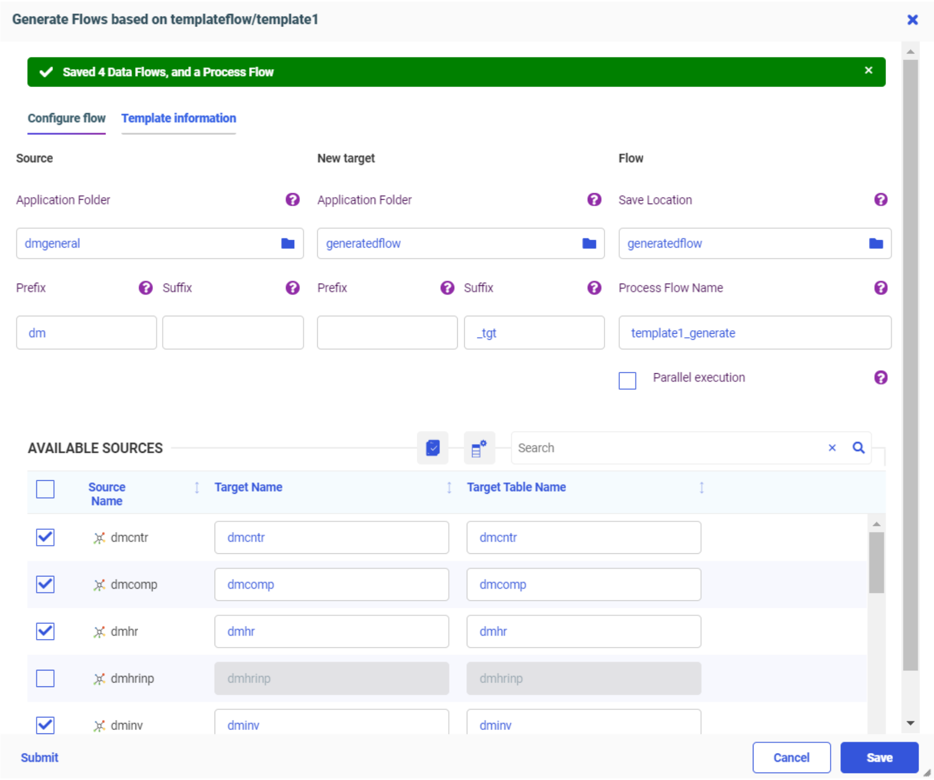


If there were problems identified, correct them. Examples of choices that could prevent verification are:

- The application directories for source and target are the same. They must be different.
- The target synonym name is not valid. It should not exceed 64 characters, and the general guidelines for a synonym name should be followed.
- The target adapter is not available. It must be available (not removed accidentally) at the time when *Generate Flows* is in progress.
- Transformations you made in the template data flow are not valid for the generated flows. Any transformations you made in the template data flow must be valid for the generated flows. If the source tables do not have the columns necessary to apply the transformations, the flows will not be successfully verified.

10. Once the verification is successful, click *Save*.

    Some additional verification processes will be run. If problems occur, messages will display in red at the top of the window, identifying the problems. If no problems occur, a message will display in green, indicating that the save was successful and identifying the objects that were generated, as shown in the following image,

    If there were problems, correct them.

    You can submit the flows at this point, by clicking the *Submit* button.

11. Close the *Generate Flows* window by clicking *Cancel*.

The generated data flows and the process flow are generated in the application directories you selected, as shown in the following image.

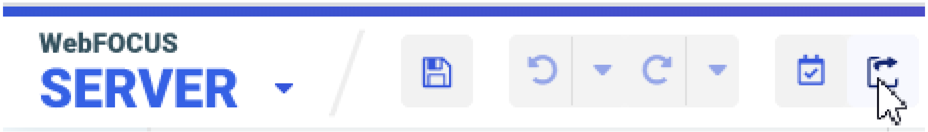
Application Directories/Files	Size	Date Modified
template1_dmcntr	2146	2020/05/12 13.43.43
template1_dmcomp	2233	2020/05/12 13.43.43
template1_dmhr	3015	2020/05/12 13.43.43
template1_dminv	2335	2020/05/12 13.43.43
template1_generate	2031	2020/05/12 13.43.43

The flow named template1_generate is the generated process flow. The other flows are the generated data flows, one for each source synonym (identified by having the source synonym name at the end of the flow name).

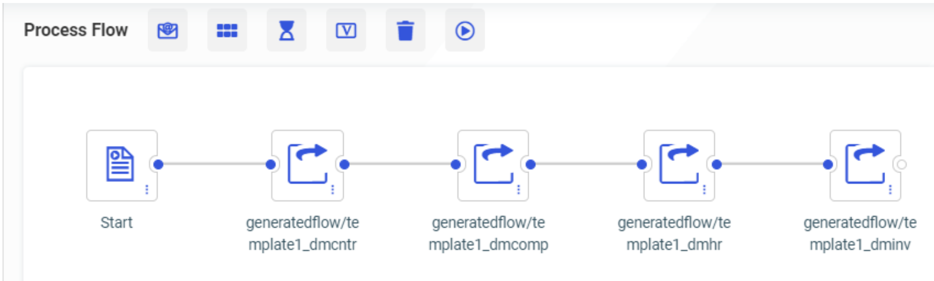
The following image shows the data flow generated for the dminv source synonym. The target synonym name was generated by removing the characters *dm* from the start of the source synonym name and adding the characters *_tgt* to the end of the target synonym name, as specified on the Generate Flows window.

The data flows are generated with the same load options as the template flow, but you can now open any of the flows and edit them as needed.

To open the process flow, you will have to toggle the flow view by clicking the *Toggle Flow View* button at the top of the window, as shown in the following image.

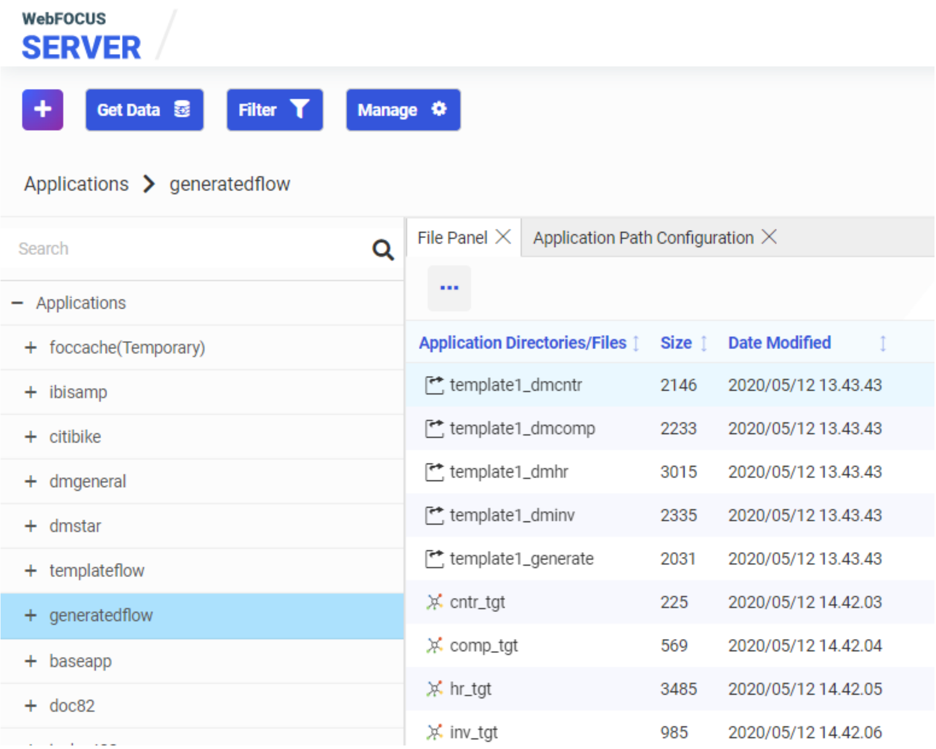


The following image shows the generated process flow.



12. You can add a schedule, an email node, variables, a wait node, or a parallel group to the process flow using the buttons at the top of the page.
13. Once you have finished your edits to the flows, if any, you can submit the generated process flow by right-clicking it and selecting *Submit*.

The targets are generated, as shown in the following image.



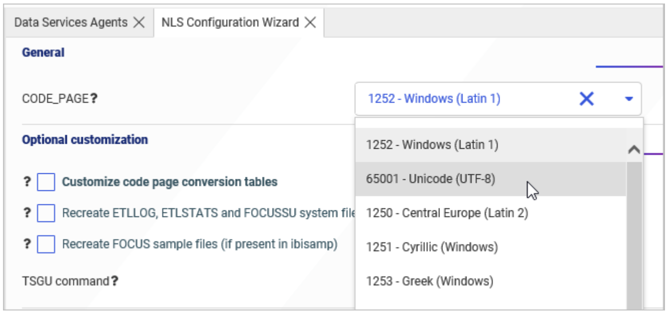
Fixes

- Using more than 14 fonts in a PDF report request does not apply properly to the report output. (191230051)
- When creating metadata with a default dataset configured, a FOC45645 error occurs.
- When connecting from a client tool, the user is prompted for their ID and password even when it is stored and encrypted in the communications configuration file.
- The client ID and secret are not sent in the token request body during Create Synonym when BDYCLT:TRUE is configured in the REST connection. (200519060)
- When using App Studio with the adapter for SAP configured and opening a synonym, the HTTP listener crashes. (200330086, 200430012)
- When a synonym is created for a file with a name that starts with a number, the synonym and segment name would start with a number causing the join profiler to fail.

- Removing selected items in a double list box hangs the browser session. (200522071, 200527041)
- Portal hang on loading when Usage Analytics is enabled on iOS devices. (200424080)
- App Studio is removing the br tags from the JavaScript code. (200518064)
- The default format used (I3) is not large enough for the value calculated when a dimension is added as a measure to a Designer chart. (200423136)
- If a DEFINE field is created in InfoAssist which references another field, and then a JOIN is created, the Define is duplicated. (191121013)
- Editing a Reporting Object with multiple DEFINE fields or a report created from the Reporting Object is making multiple calls to the Reporting Server which is impacting performance. (180404044)
- Importing a Blackout Dates file 1.38MB in size results in the browser hanging and F12 displays an uncaught type error. (200403013)
- An X/Y scatter chart with valid syntax to turn on data labels does not show the data labels. However, turning the chart into an X/Y/Z scatter chart with a measure in the SIZE bucket shows the data labels. (191211100)

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.



  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*.

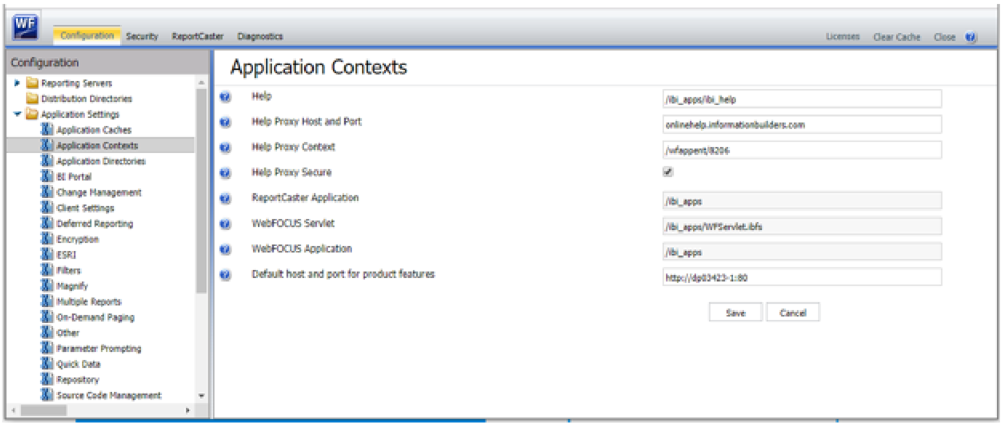
   Note: The ibi_apps value must be the same as the WebFOCUS web app context created during installation. If you provided an alias, for example, ibi_apps8206, then the value for Help should be entered as /ibi_apps8206/ibi_help.

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:



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 creating a data grid in WebFOCUS Designer, italic formatting may not work for Japanese and Chinese characters in row and column headings, depending on the font and browser that are used. This applies to both Unicode and applicable DBCS code pages.
- 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 83, Firefox version 76, 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*.

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WebFOCUS

Release 8207.11

About This Release

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