PeopleSoft

EnterpriseOne Table Conversion 8.9 PeopleBook

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Table Conversions Overview

Table conversions are a type of batch process. They allow you to do high-speed manipulation of data in tables. The table conversion tool includes the following four conversion types, which allow you to manipulate data in a variety of ways:

- Data Conversion allows you to transfer or copy data from an input table or business view into one or more output tables using any amount of logic necessary to perform the transfer. You also can use Data Conversion to update records in a table or business view.
- Data Copy allows you to copy one or more tables from one data source or environment to another data source or environment.
- Data Copy with Table Input allows you to copy tables based on information from an input table. For example, the input table might provide information about which tables should be copied, where they should be copied to, and so on.
- Batch Delete allows you to delete records from a table or business view.

The table conversion tool can use any J.D. Edwards software tables, business views, and text files, or any tables that are not J.D. Edwards software tables but reside in a database supported by J.D. Edwards software, such as Oracle, Access, AS/400, or SQL Server. These non-J.D. Edwards software tables are referred to as foreign tables.

When you create a table conversion, you set up the conversion (which can be saved and run multiple times), review it, and then run it. If necessary, you can test the conversion by running it in proof mode.

Like reports, table conversions consist of a template and one or more versions. You can override certain properties within a version at run time.

The table conversion tool allows you to access any available environment for both input and output. The environments that you choose determine which tables and business views are available for the conversion and where the tables reside. The environments that you choose also determine the specification, or description, of tables and business views.

Types of Tables You Can Convert

You can use the following table types in table conversion:

Standard J.D. Edwards software tables	These tables exist in Object Librarian, and you design and edit them using Table Design Aid. At design time, only the specification is needed to reference the table. At run time, the table must be generated. An instance of the table must be made in a specific database.
Non-J.D. Edwards software (foreign) tables	These tables do not have a J.D. Edwards software definition, but they reside in a database supported by J.D. Edwards software at design time and run time. You must set up a data source and environment in J.D. Edwards software to point to the location of a non-J.D. Edwards software table.

See Also

- *Preparing Non-J.D. Edwards Software Tables for Table Conversion* in the *Table Conversion Guide*

Using Business Views in Table Conversion

If you transfer data from multiple tables to a single table or if you transfer data from multiple tables to multiple other tables, you must establish a relationship between the input tables by defining a business view. A business view defines the relationship between two or more tables, and the data is joined into what looks like a single table. You can use J.D. Edwards software business views *only* for input to the table conversion, not for output. The system does not provide direct support for joining foreign tables. If you need to use multiple non-J.D. Edwards software tables as input to a conversion, you must first define them through J.D. Edwards software, and then create a business view for them.

Using Text Files in Table Conversion

You can import directly from or export directly to a text file. When you convert a text file, it is stored with a single, long text field (similarly to a foreign table). User-defined formats are stored the same for a text file as for any table. With a text file conversion, the table name includes the path and the file name. If you do not specify the path with the file name, the default path will be used.

Using Sort and Selection Criteria in Table Conversion

You can specify sort criteria in a table conversion to process input rows in a sequence that groups related records together. The table conversion tool allows you to add logic to the point at which a change occurs to the value in a field. The sort and selection features simplify the process of writing records to multiple tables in a typical one-to-many conversion. For example, if you have a table of customer information, you could sort the table by area code and split the single table into tables for each area code. Similarly, you could specify selection criteria for the input table if you want to convert only a subset of that table.

Understanding Input and Output Environments

An environment consists of a path code and one or more Object Configuration Management (OCM) mapping records that indicate where various J.D. Edwards software objects reside. The table conversion tool allows you to specify an input and output environment, and it uses the environments that you specify to locate input and output tables. To locate non-J.D. Edwards software tables, the table conversion tool uses the default OCM mapping records for tables.

The path code of the environment is used to locate specification files for the environment. This path code is usually a subdirectory under the J.D. Edwards software directory on your workstation. To reference J.D. Edwards software tables in an environment, the full path code must exist on the machines where the conversion is designed and runs. Non-J.D. Edwards software tables can be referenced even if the path code does not exist.

The table conversion tool uses the following three environments when it processes a conversion:

- The environment that you are signed into
- The environment for the input tables
- The environment for the output tables

The environment that you are logged on to determines where the table conversion specifications are stored. You can choose an environment for your input table or view, and one for your converted output tables. All three environments could be the same or all three could be different.

When you use J.D. Edwards software tables or views in a conversion, the environment provides the details of each table or view, such as the column names, data types, and descriptions. Because this information comes from the J.D. Edwards software specification tables, the J.D. Edwards software table or view does not have to exist in the database for you to design a conversion; but it needs to be created before the conversion is run. If you use a non-J.D. Edwards software table as input, you need to create the foreign table before you design the conversion because the tool gets its information about the table directly from the database containing the non-J.D. Edwards software table. The environment also provides a default path for text files.

See Also

- *Table Design* in the *Development Tools Guide* for more information about creating standard J.D. Edwards software tables
- *Preparing Non-J.D. Edwards Software Tables for Table Conversion* in the *Table Conversion Guide* for more information about using non-J.D. Edwards software tables as input to a conversion
- *Data Sources*, *Path Code Setup*, and *Environment Setup* in the *Configurable Network Computing Implementation Guide* for more information about data sources, path codes, and environments

Setting Up a Table Conversion

You use a Director to set up a table conversion. The Director guides you through the process and allows you to modify the table conversion at each point. Using the Director, you can design table conversions for converting data, copying tables between locations, and deleting records within tables.

You also can define user-defined formats (flat files) to use in the table conversion. You define these formats when you choose your input or output tables. User-defined formats are tables that store data as one continuous string of information, such as bank tapes.

After you set up a table conversion, you can save it and run it multiple times.

See Also

- *User-Defined Formats* in the *Table Conversion Guide*

Before You Begin

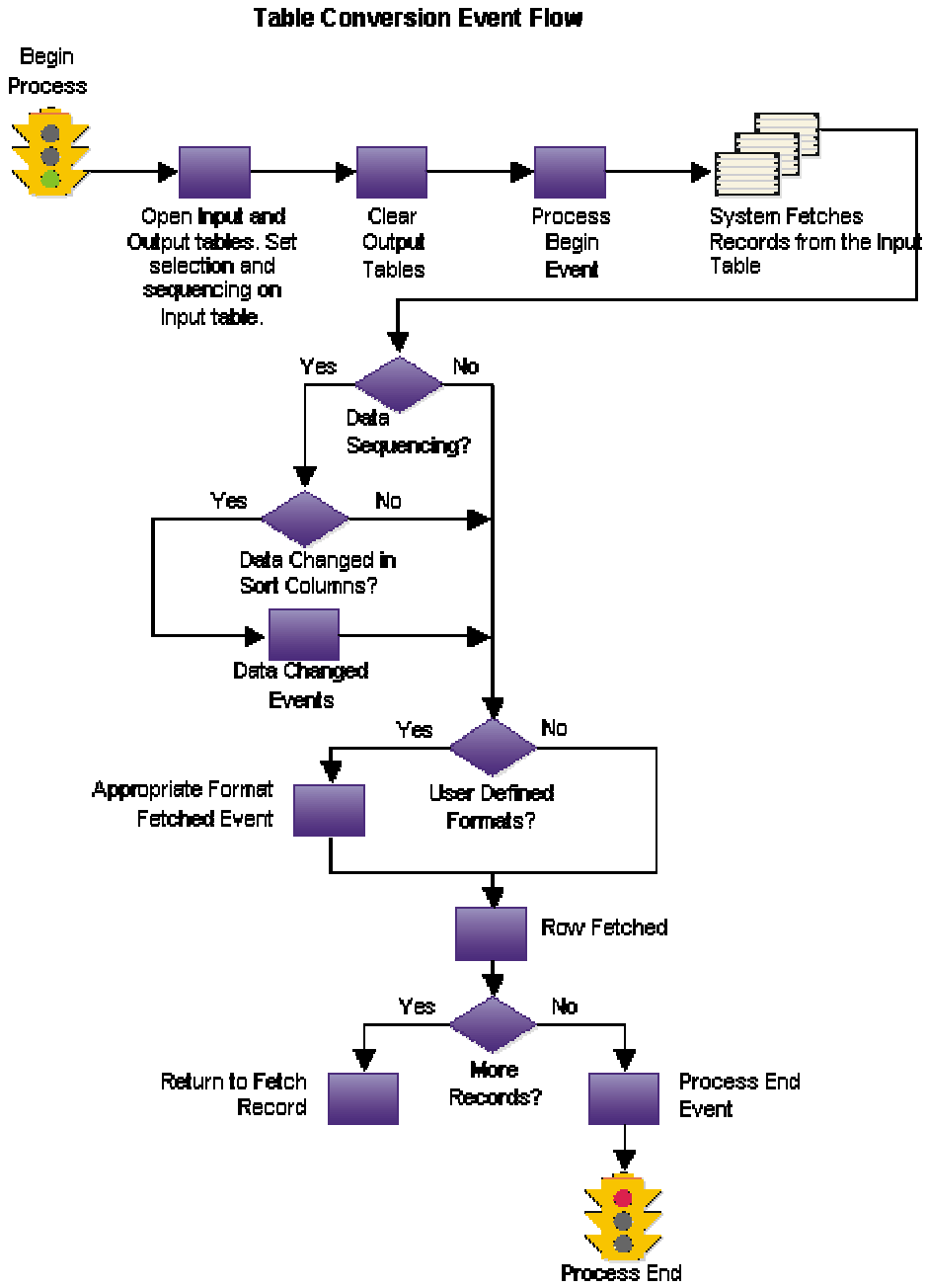
- If you are importing data from non-J.D. Edwards software tables, you must set up a data source and environment for those tables. For more information, see *Preparing Non-J.D. Edwards Software Tables for Table Conversion* in the *Table Conversion Guide*.
- If you are mapping from multiple tables, you must create a joined business view for the tables. For more information, see *Creating a Table Join* in the *Development Tools Guide*.
- If you want to validate the data items within a table against the data dictionary as part of the conversion process, you must create a business function to perform the validation. The table conversion tool does not provide automatic data dictionary validation for inputs or outputs. See *Business Functions* in the *Development Tools Guide* for more information about creating business functions.

The Flow of Events in Table Conversion

When a table conversion is processed, the system triggers events that are similar to the events that are triggered when a report or application is run. These events are specific to the table conversion that you set up, and they provide points where you can add logic to the conversion.

In general, the event flow is the same for all table conversion types (Copy Data, Copy Data with Table Input, Batch Delete) because these conversion types are subsets of a data conversion. For example, the Data Copy conversion type does not include input and output tables, and all actions are accomplished through the Process Begin event. The Data Copy with Table Input and Batch Delete conversion types do not include output tables and all actions are accomplished through the Process Begin, Process End, and Row Fetched events. This flexibility allows you to mix and match table conversion types within another conversion type, if necessary.

The following graphic shows all events that can be triggered in a conversion. Depending on the type of conversion that you set up, some events might not be triggered. In the graphic, events are shown as a yes or no decision.



Events in table conversion occur in the following order:

Process Begin Before fetching records from the input table, the system invokes the Process Begin event. At this point, you can attach any logic that processes only once at the beginning of a conversion, or any other value that does not change for each individual record. This event is useful for mapping output fields that do not change for each record.

Data Changed If you use data sequencing, the system invokes a Data Changed event for any sequenced field that changed. Data Changed events are not cascaded or hierarchical. For example, you can attach an event rule to this event if you want to total a field or group of values.

Format Fetched If you use user-defined formats (also known as flat files) in the input table, the system invokes a Format Fetched event for each record fetched from the input table. If you use multiple user-defined formats in a conversion, the Format Fetched event that is called will correspond to the format found in the record.

Row Fetched An input table invokes a Row Fetched event after each row is fetched from the input table.

Process End After all records have been processed, the system invokes the Process End event. You attach event rules to Process End when you want the system to process logic after all input records have been read; for example, to write a total record to an output table or to write a record to a log file to record the status of the conversion.

Using the Table Conversion Director

The Table Conversion Director guides you through the process of setting up a table conversion. The Navigation Assistant, which appears within the Director, provides a visual reminder of where you are throughout the setup process. You also can use the Navigation Assistant to move to a different step in the process by clicking any step listed in the Assistant.

► To use the Table Conversion Director

From the Cross Application Development Tools menu (GH902), choose Object Management Workbench.

1. Click Find.
2. Click the project to which the new batch process will be added, and then click Add.
3. On Add J.D. Edwards Object to the Project, choose Batch Application and click OK.
4. On Add Object, complete the following fields:
   - Object Name
   - Description
   - Product Code
   - Product System Code
   - Object Use
5. Turn on the Table Conversion option, and then click OK.
6. On Batch Application Design, click the Design Tools tab and then click Start Table Conversion Design Aid.

   The system displays the Introduction form for the Table Conversion Director. Depending on the conversion you want to perform, follow the steps that are described in the following topics in this guide:

   - *Data Conversion*
   - *Data Copy*
   - *Data Copy with Table Input*
   - *Batch Delete*

Data Conversion

You use the Data Conversion option on the Table Conversion Director when you want to move data to one or more tables from:

- A single table
- Multiple tables defined in a business view
- A single text file

The Director leads you through a process for creating a data conversion batch application by asking questions about its structure and function. When you are finished, you can review and alter the conversion, if necessary.

Before You Begin

- Create a batch application object. See *Using the Table Conversion Director* in the *Table Conversion Guide* for information about starting the data conversion design process and the Director. The last step launches the Director.

► To define external data

1. On the Introduction form of the Table Conversion Director, click the Data Conversion option and then click Next.
2. On the External Data form, click Select to attach a predefined processing option template to the table conversion.
3. On the Select Processing Option Template form, choose the processing option that you want to use and then click OK to return to the External Data form.
4. If you want to attach data structures, click Define.
5. On the Report Data Structure form, define the data structures that you want to attach to the table conversion, and then click OK to return to the External Data Form.

   Data structures contain a list of parameters that can be used to pass data into the conversion when called through Report Interconnect.

6. Click Next.

See Also

- *Data Structures* in the *Development Tools Guide*

► To define input and output environments

1. On the Select Environments form, choose the input and output environments that you want to use.

   Note
   Choose <LOGIN ENV> if you are creating a table conversion on your workstation that will be shipped to a client who does not have the environments that you have. The table conversion will use the client login environment.

2. If you are creating a table conversion that will run in a different environment than the one in which you are creating it and the <LOGIN ENV> is not appropriate for the type of conversion that you are creating, click the Force Version to Override Input Environment option or the Force Version to Override Output Environment option.

   For example, if you create a conversion that will be shipped to a client who does not have the environments that you have, you would turn on these options. When the conversion is invoked at the client site, the system will not run the conversion until the user chooses an appropriate environment in which to run it.

3. Click Next.

► To define input

1. On the Select Input form, click the appropriate tab based on whether your input is a table, a business view, a foreign table, or a text file.
2. If your input is a table or a business view, drag it to the Description pane.

   If you know the name of the table or business view that you want to use, enter the name in the Object Name field in the QBE (query by example) line and press Enter.

   You can choose only one table or one business view per conversion. If your input consists of multiple tables, you must create a single, joined business view.

3. If your input is a text file, on the Text File tab, type the name of the file and click Use or click Browse and then open the appropriate text file.

   Notes
   For the AS/400®, input text files are stored in the integrated file system (IFS). Enter the path to the IFS before the file name.

   If you change a table, business view, or text file, the system warns you that deleting tables removes all mappings from the table conversion. Click OK.

   If you are using a text file or if you need to define a format for a table or business view, click the User Defined Format option and follow the steps described in *Importing and Exporting Text Files* in the *Table Conversion Guide*.

4. To delete an input name, choose it and press Delete.
5. Click Next.
6. On the Sequencing form, click Data Sequencing to define data sequencing for a table or business view.

   If you specify a text file for input, you cannot define data sequencing or selection for that file.

   Note
   When you define data sequencing, you create new events that are available to you in the Mapping section of the Director. One new event is created for each sequence column that you define. The event is called *XXXX* Data Changed, where *XXXX* is the column alias—for example, *ALPH* Data Changed. Each time the value in one of these columns changes from its previous value, the column's Data Changed event is invoked. This event is similar to a level break in report writing, except that the Data Changed events are not related to each other. Invoking one does not invoke the others.

7. Click Next.

   The Data Selection form appears.

   Note
   You can only define selection criteria over database table columns. User-defined format columns are not available because they do not exist in the database.

   On the Data Selection form, *Where* is the default value in the Operator column for the first set of criteria. For subsequent statements, *And* and *Or* become the available values for the Operator column and are chosen by double-clicking the appropriate word.

8. Click the Left operand field to display the list of available objects, and then do one of the following:
   - Scroll through the list until you find the desired object, choose the object, and then double-click the object to populate the Left operand column.
   - Type the first letters of the object name in the Left operand field to find the object in the list, and then double-click the highlighted object.

   When you double-click the object for the Left operand column, the list of available values for the Comparison column appears.

9. Choose one of the following comparison operators:
   - is equal to
   - is equal to or empty
   - is greater than
   - is greater than or equal to

- is less than
- is less than or equal to
- is not equal to

10. Click in the Right operand column to display a list of available objects, special values, or variables.

    Your choices in this column depend on the choice that you made in the Comparison column. Some of the following options might be available:

Blank Enters a blank (space) value.

Literal Enter specific values (see the following step for information about entering specific values).

Null Indicates that no value is associated with the field.

Zero Enters a value of zero.

IC Indicates an input table column.

RI Indicates a value passed through report interconnections to this table conversion.

PO Indicates a processing options value for this report.

SL Indicates a system literal.

11. If you chose to enter a literal in the Right operand column, the Single value form opens and you can enter values on the following tabs:

    - Single value

      Enter a single value, and then click OK. For example, a value might be for a particular company.

    - Range of values

      Enter a range of values, and then click OK. For example, a range of values might include companies from 00001 to 00060. When using a range of values, only the following two logical operators are valid: *is equal to* and *is not equal to*.

    - List of values

      To add values to or remove values from the list, do the following:

      - Type each value in the field, and then press Enter or click the Add button at the top of the form.
      - Repeat this process until your list of values is complete.

      For example, a list of values might include several user-defined codes for search types, such as C for Customers, E for Employees, and V for Vendors. Only *is equal to* and *is not equal to* are valid logical operators when using List of values.

      - To delete a value, choose the value and click Delete.
      - Click OK when you are finished.

12. To delete a line of criteria on Data Selection, choose the row header to highlight the row, and then click the Delete button.
13. To change the order of the criteria, choose the row header to highlight the row, and then click the up or down button.
14. Click Next.

► To define output

1. On the Select Outputs form, drag the table or tables that you want to use as your outputs to the Description pane on the right and click Next.
2. For text file conversions, from the Text File tab, choose the file that you want to use as your output and click Use.

   Note
   On the AS/400®, output text files are stored in the integrated file system (IFS). Type the path to the IFS before the file name.

3. Click Next.
4. To delete an output, choose the row and press Delete.

   Notes
   If you are using a text file or if you need to define a user-defined format for a table or business view, click the User Defined Format button and follow the steps described in *Importing and Exporting Text Files* in the *Table Conversion Guide*.

5. Click Next.
6. On Table Options, click any of the following options, if applicable:

   - Run Currency Triggers

     Choose this option if the J.D. Edwards software table or tables contain currency triggers. If the tables contain currency fields and you do not choose this option, the system will not know how many decimal places exist in each column. Any time that the source or destination fields are currency fields and you do not turn on the currency trigger, problems could arise if the value is used in a calculation. The system has no way to determine where the decimal should be within a field.

     You might not want to choose the Run Currency Triggers option if the input and output data sources are of the same type (for example, Oracle, AS/400, or SQL Server) and no calculations are being performed. Choosing this option results in slower processing time.

     You should not use currency triggers for an environment that has a different path code than the login environment.

   - Clear Output Tables

- Force Row by Row Processing

  Choose this option if, for example, you want to test the table conversion or if you want to ensure that the conversion always runs in row-by-row mode.

  You might want to test a conversion to ensure that the mapping logic will perform correctly. In this case, you would also want to specify the number of rows to process. Specify the number of rows to process in the jde.ini file under [TCEngine] or when you submit the conversion.

  Choose this option if you know that the values in the input table will produce duplicate keys in the output, and you want the non-duplicate keys to be inserted.

  Choosing this option results in slower processing time.

- Buffer Inserts To Output Tables

  Choose this option to improve conversion performance if you have no event rules in place to process insertion errors and if you are processing row by row.

7. Click Next.

► To map inputs to outputs

1. On the Mapping form, specify the event on which you want mapping to occur by choosing an event from the Events list.

   In most cases, you use either the Row Fetched event or Format Fetched event. For example, if you are working with a user-defined format, choose the Format Fetched event.

2. Click Advanced ER to further modify your mappings based on a particular event.
3. Click Map Same to map your inputs directly to outputs.

   For example, if your input and outputs share some of the same data, these map directly. For J.D. Edwards software tables, the system maps by data dictionary item. For non-J.D. Edwards software tables, the system maps by column name.

4. Drag inputs to outputs to define exactly where you want information to map.

   Note
   Click Delete to erase the mapping for a selected output. Click Delete All to erase the mapping for all outputs.

5. If you have multiple output files, choose each file from the outputs list and map the appropriate input columns to output columns.
6. To define advanced output, double-click an output column.

   The Advanced Outputs form appears. This form allows you to define literals, calculations, and various other mappings without using Advanced ER. You might want to use an advanced input to add a constant, literal value into a field. Or, you might want to insert a calculation into an output field, such as adding two input fields together.

7. On Advanced Outputs, click one of the following tabs and add the appropriate input:
   - Available objects

     Choose the output column, choose the appropriate value, and then click Apply.

   - Literal

     Choose the output column, enter the appropriate value, and click Apply.

   - Defaults

     Choose the Use Dictionary Defaults option, and then click Apply.

     Use this option if you want to use the default value in the data dictionary at run time. If no default values exist in the data dictionary, the system displays a warning message.

   - Calculation

     Click Define Calculation and define a calculation in Expression Manager.

8. When you have finished defining an advanced input, click Apply, and then click Close.
9. On Mapping, choose the Issue a Write for this Event option to insert a row to the selected output after performing all column mappings for this event.

   When you choose the Issue a Write for this Event option, the system attaches the TC Insert Row event. This event is automatically inserted at the end of the event rules. You cannot move it to another area. If you want to specify when a row is inserted and where, attach the User Insert Row system function using Advanced ER and move it wherever you like.

10. Click Next.

See Also

- *The Flow of Events in Table Conversion* in the *Table Conversion Guide* for information about Row Fetched and Format Fetched events
- *Using Event Rules in a Table Conversion* in the *Table Conversion Guide* for information about event rules

► To choose logging options

The Logging Options form appears.

1. Choose one or more logging options, if applicable:
   - Log All Errors
   - Log Every Input Record
   - Log Outputs
   - Log Deletes
   - Log Updates
   - Trace Level
   - Log Details of Copy Table Actions
2. If you want to preview the actions of the table conversion before you run the actual conversion, choose the Run in Proof Mode option.

   Caution
   Proof mode is not an absolute proof mode. In some situations, the proof output might differ from the real output. If you insert the same record twice, for example, it will seem as though it worked in proof mode but, in reality, only one of the inserts will work when you run the conversion in final mode.

3. Click Next.

► To review the results of the director

The Finish form appears.

1. Choose one of the following options:
   - Yes, create a version of this table conversion
     If you choose Yes, enter the version name.
   - No, I will create a version of this table conversion later
2. Click Finish to complete the process.

   If you chose Yes in step 1, a Warning appears.

3. On the warning, click OK.

   The system displays the Properties form and the Table Conversion Mappings form.

4. Choose the Table Conversions Mappings form and review your choices.
5. Make changes as necessary by choosing the appropriate option from the View menu. If satisfied, click Save.
6. From the Conversion menu, choose Exit.

See Also

- *Reviewing Your Table Conversion* in the *Table Conversion Guide*

Example: Data Conversion

This data conversion example copies employee records from the Address Book Master (F0101) table in the Login Environment to the Address Book Master (F0101) table in the CMB9 environment.

The Introduction form of the Table Conversion Director appears.

1. Choose the Data Conversion option, and then click Next.

   The External Data form appears.

2. Accept the default value and click Next.

   The Select Environments form appears.

3. Choose <LOGIN ENV> for the input and CMB9 for the output environment, and click Next.

   The Select Input form appears.

4. From the Table tab, choose Address Book Master and click Next.

   Note
   To find Address Book Master, you can enter F0101 in the QBE line for Object Name.

   The Sequencing form appears.

5. Accept the default values and click Next.

   The Data Selection form appears.

6. Set the data selection criteria to “Where Search Type (AT8) is equal to E” to choose current employees, and click Next.

   The Select Outputs form appears.

7. From the Tables tab, choose Address Book Master and click Next.

   The Table Options form appears.

8. Since the Address Book Master file does not contain monetary information, remove the check mark for Run Currency Triggers and then click Next.

   The Mapping form appears.

9. Since you are converting data from similar files, click Map Same and click Next.

   The system automatically maps data elements with the same aliases to each other.

   The Logging Options form appears.

10. Choose Select Log All Errors and Log Outputs so that you can review the conversion after it is complete and then click Next.

    The Finish form appears.

11. Choose “No, I will create a version of this table conversion later” and click Finish.

    The Table Conversion Review form displays.

12. Click Save before exiting.

    You have created a table conversion.

User-Defined Formats

The table conversion tool uses user-defined formats to handle fixed-width or character-separated value (CSV) files in a table or text file. These files are collectively known as flat files because they do not have relationships defined for them as relational database tables do. Usually, flat files are text files stored on your workstation or server. They are used to import or export data from applications that have no other means of interaction. For example, you might want to share information between J.D. Edwards software and another application, but if the non-J.D. Edwards software application does not support one of the same databases that J.D. Edwards software supports, then flat files might be the only way to transfer data between the two applications.

In a flat file, records are stored as one continuous string of information. The user-defined format provides instruction on how data is presented.

The following example illustrates a single database character column that has a user-defined format with five columns: Last, First, Addr, City, and Phone:

Database Column	Doe	John	123 Main	Anytown	5551234
	Last	First	Addr	City	Phone

This example is a fixed-width column format in which all of the data for each column starts in the same relative position in each row of data.

The same data in a character-delimited format would look like the following example:

"Doe", "John", "123 Main", "Anytown", 5551234

Importing and Exporting Text Files

When you choose a text file as input to or output from a table conversion and do not specify a path, a default path is used. Conversions stored with the default path run on any platform. If an explicit path or AS/400 library name is indicated for the file, then the file is located or created exactly as specified. Conversions stored this way may not work on other platforms, depending on the nature of the file system on each platform.

The default paths on non-AS/400 platforms are:

```
path code\Import\file name

path code\Export\file name
```

You cannot specify a default path for the AS/400. Rather, the default will always be the Import or the Export directory under the path code of the input or output environment. For example, if you are running a conversion against an APPL_PGF environment, the path in the file system might be:

`\B9\appl_pgf\import\`*myfile.txt*

If the conversion specifies a file name with anything other than the file name and extension, such as `library/file(mbr)` or `\mytextfiles\myfile.txt`, the conversion will try to open the file as specified.

Using User-Defined Formats as Input

If you use user-defined input formats, add an event rule at the Format Fetched Event. If you do not, the system ignores the format and the data from the input table is never made available to the conversion. If you do not add an event rule, at least add a comment in Event Rules.

User-defined formats work with text files and tables.

Because the procedure for importing and exporting is database-specific, you should consult your database administrator for details.

Using User-Defined Formats as Output

If you use user-defined output formats, add an event rule at the Format Fetched Event. If you do not, the system ignores the format and the data from the input table is never made available to the conversion. If you do not add an event rule, at least add a comment in Event Rules.

User-defined formats work with text files and tables.

Because the procedure for importing and exporting is database-specific, you should consult your database administrator for details.

► To define delimited, single- or multiple-format files

Use the Navigation Assistant to move to the Select Input form or the Select Outputs form. You can also use the Back or Next buttons to navigate to these forms in the director. Alternatively, you can click the Select Input tab or Select Outputs tab in Table Conversion Properties.

1. On Select Input or Select Outputs, ensure that you have chosen a table, business view, or file. Choose User Defined Format, and then click Define Format(s).

   The User Defined Format - Type form appears.

2. Choose the delimited format type.

3. Choose one of the following Row Formats and click Next:
   - Single Format on Rows On/Off
   - Multiple Formats on Rows On/Off

   The User Defined Format - Column Delimiter form appears.
4. Choose the delimiter that separates the columns in the file:
   - Tab Delimiter
   - Comma Delimiter
   - Semicolon Delimiter
   - Space Delimiter
   - Other Delimiter
5. Choose the textual qualifier that is used to enclose a string of text:
   - No Text Qualifier
   - Single Quotation Qualifier
   - Double Quotation Qualifier
6. If you chose Single Format and the first row contains column headers, choose “The first row contains column headers.”
7. Click Next.
8. If you chose Multiple Format, the system displays Multiple Format Definition. If you chose Single Format, skip to Step 13.
9. On User Defined Format - Multiple Format Definition, enter the number of formats that your user-defined format contains.
10. To define the character length of the Designator column, complete the following field:
    - Length
11. Click Next.

    The User Defined Format - Multiple Format Names form appears.
12. In the Designator column, define the values for each format.

    The Designator name must match what is in your user-defined formats.

    For example, suppose you have a text file that contains purchase order information. Lines in the table with a first field designated as POH have information for a whole purchase order; lines with a first field designated as POI contain information about individual items in the purchase order; and lines in the table with a first field designated as POT contain information about purchase order totals. In this scenario, you would enter POH as the designator of the first format, POI as the designator of the second format, and POT as the designator of the third format.

Note
You can also rename the columns for each format to make it easier to remember the formats with which you are working. For example, you can rename the columns according to their function in the file, such as Header, Detail, and Total. These names will appear in the Inputs drop down list in the Mapping section of the conversion. To rename columns, select the column and in the name field, change the name of the column.

13. Click Next.

    The User Defined Format - Column Layout form appears.

14. Choose a format from the list of Available Formats.

    You define the columns for the format so that the system can parse the information from the file.

Note
If you need to move the Format Designator, choose the row and drag it to the new location.

15. For each column, click Add to define the column.

    The New Column Properties form appears.

16. Modify the following fields as needed, and then click OK:

    - Name
    - Length
    - Data Type

17. For each column, repeat steps 13 through 16.
18. To edit an existing column, choose it and click the Edit button. Change the properties in the Column Properties form.
19. To model the columns after an existing table, business view, or foreign table, click the Model button, click the appropriate tab, and then choose the table or business view that you want to use as a model for the user-defined format.

Note
You cannot model the columns after an existing object unless the layout of the two objects matches.

20. Click OK.

    The system copies the format from the model that you chose and places it into the column layout grid.

21. Click Next.

    The User Defined Format - Finish form appears.

22. Click Finish when you have completed defining formats.

    The system returns to the Select Input or Select Outputs form.

► To define fixed-width, single- or multiple-format files

Use the Navigation Assistant to move to the Select Input form or the Select Outputs form.

1. Choose User Defined Format, and then click Define Format(s).

   The User Defined Format - Type form appears.

2. Choose the fixed width format.
3. Choose one of the following Row Formats and click Next:
   - Single Format on Rows On/Off
   - Multiple Formats on Rows On/Off
4. If you chose Single Format, skip to step 10. If you chose Multiple Format, the system displays the Multiple Format Definitions form.
5. On User Defined Format - Multiple Formats Definition, enter the number of formats that your user-defined file contains.
6. Complete the following fields:
   - Start Position
   - Length

   The Start Position and Length fields define the position of the data for the rows. Start Position defines where the column starts, and Length defines the character length of the designator.

7. Click Next.

   The User Defined Format - Multiple Format Names form appears.

8. In the Designator column, define the values for each format.

   The Designator name must match what is in your user-defined formats.

   For example, suppose you have a text file that contains purchase order information. Lines in the table with a first field designated as POH have information for a whole purchase order; lines with a first field designated as POI contain information about individual items in the purchase order; and lines in the table with a first field designated as POT contain information about purchase order totals. In this scenario, you would enter POH as the designator of the first format, POI as the designator of the second format, and POT as the designator of the third format.

Note
You can also rename the columns for each format to make it easier to remember the formats with which you are working. For example, you can rename the columns according to their function in the file, such as Header, Detail, and Total. These names will appear in the Inputs drop down list in the Mapping section of the conversion. To rename columns, select the column and in the name field, change the name of the column.

9. Click Next.

   The User Defined Format - Column Layout form appears.

10. Choose a format from the list of Available Formats.

    You define the column so that the system can parse the information from the file.

Note
If you need to move the Format Locator, choose the row and drag it to the new location.

11. For each column, click Add to define the column layout.
12. On the New Column Properties form, modify the following fields as needed, and then click OK:
    - Name
    - Start
    - Length
    - Data Type
13. For each column, repeat steps 11 through 12.
14. To edit an existing column, choose it and click the Edit button. Change the properties in the Column Properties form.
15. To model the columns after an existing table, business view, or foreign table, click the Model button, click the appropriate tab, and then choose the table or business view that you want to use as a model.
16. Click OK.

    The system copies the format from the model that you chose and places it into the column layout grid.

17. Click Next.

    The system displays the summary of user-defined formats that you have defined.

18. Click Finish when you are finished defining formats.

    The system returns to the Select Input or Select Outputs form.

See Also

- *Defining Section Data Sequencing* in the *Enterprise Report Writing Guide* for information about how to determine a sort sequence for a batch process
- *Reviewing Your Table Conversion* in the *Table Conversion Guide*
- *Using Event Rules in a Table Conversion* in the *Table Conversion Guide*
- *Running a Table Conversion* in the *Table Conversion Guide*

Data Copy

You use the Data Copy option in the Table Conversion Director to copy one or more tables from one environment or data source to another. You also can import a copy table script to use in the conversion.

The Director leads you through a linear process for creating a data conversion batch application by asking you questions about its structure and function. When you are finished, you can review and modify the conversion, if necessary.

Before You Begin

- Create a batch application object. See *Using the Table Conversion Director* in the *Table Conversion Guide* for information about starting the data conversion design process and the Director. The last step launches the Director.

► To define external data

The Introduction form of the Table Conversion Director appears.

1. Choose the Data Copy option and click Next.

   The External Data form appears.

2. If you want to attach a predefined processing option template to the table conversion, click Select.
3. On the Select Processing Option Template form, find and choose the processing option that you want to use and click OK.
4. If you want to attach data structures, click Define on the External Data form.

   The Report Data Structures form appears. Data structures contain a list of parameters that can be used to pass data into the conversion when called through Report Interconnect.

5. Define the data structures that you want to attach to the table conversion and click OK.
6. Click Next.

See Also

- *Data Structures* in the *Development Tools Guide*

► To define input and output environments

1. On the Select Environments form, choose the input and output environments that you want to use.

   Note
   Choose <LOGIN ENV> if you are creating a table conversion on your workstation that will be shipped to a client who does not have the environments that you have. The table conversion will use the client login environment.

2. If you are creating a table conversion that will run in a different environment than the one in which you are creating it and the <LOGIN ENV> is not appropriate for the type of conversion that you are creating, click the Force Version to Override Input Environment option or the Force Version to Override Output Environment option.

   For example, if you create a conversion that will be shipped to a client who does not have the environments that you have, you would turn on these options. When the conversion is invoked at the client site, the system will not run the conversion until the user chooses an appropriate environment in which to run it.

3. Click Next.

► To define data copy actions

The Select Actions form appears.

1. Complete the following fields using the drop-down lists in each field to make your choice:

   When you enter the name of a table and then tab to the next field, the system automatically populates the remaining fields for you. You can make changes to these fields as necessary.

   - Table

     If you want to copy a single table, choose <Literal> and enter the name of that table on the Single Value Tab.

     If you do not know the name of the table that you want to copy, use the <Find a Table> option.

   - To Table

     Enter either the last table in a range of tables to be copied or leave this field blank if you are copying a single table.

   - Source Type

     Choose Data Source if your input and output sources are data sources. Choose Environment if your input and output sources are environments. When you choose Data Source or Environment, the appropriate system function (such as CopyTableEnvironment or CopyTableDataSource) is invoked during processing.

The Data Source function works in the same way as Copy Table and gets its table descriptions from the specifications in the login environment.

The Environments function uses the input and output environment to locate data and specifications for the tables, which allows the specifications to be different in the input and output environment but the data is copied. In this case, the system performs a "copy-map-drop" action.

- Input Source

  The input source is the data source or environment from which the inputs will be read.

- Output Source

  The output data source is the source or environment where the output is written.

- Create

  If you choose <If Table Exists>, the system creates the table and runs the conversion only if both the table specification and the actual table exist in the input.

  If you choose <Yes>, the system creates the table. If the table already exists in the output, the system deletes and re-creates it.

  If you choose <No>, the system assumes the table already exists in the output and does not re-create it.

- Clear

  If you choose <If Table Exists>, the system clears the table only if it exists in the input.

  If you choose <Yes>, the system deletes all rows in the output table before copying the table.

  If you choose <No>, the output table will not be cleared.

Note
Choosing not to clear the output table might result in key conflicts.

- Copy

  If you choose <Yes>, the system copies the data from the input table to the output table using Map Same.

  If you choose <No>, no data is copied.

- Owner ID

- Owner Pwd

  If the data source requires an owner ID and password, enter them here. If you leave these fields blank, the system enters the ID and password of the login user, or <None> if the data source does not have security.

2. To import an existing copy table script from another location, click the Import button. On Open, find the file that you want to import and click Open.

   The system adds an action for each copy table item in the copy table script.

3. On Select Actions, click Advanced ER to add event rules to the copy table process.

   You can use Event Rules to write a custom copy table script.

4. Click Next.

See Also

- *Using Event Rules in a Table Conversion* in the *Table Conversion Guide* for information about system functions

► To choose logging options

The Logging Options form appears.

1. Choose one or more logging options, if applicable.
   - Log All Errors
   - Trace Level
   - Log Details of Copy Table Actions
2. If you want to preview the actions of the table conversion before you run the actual conversion, choose the Run in Proof Mode option.
3. Click Next.

► To review the results of the director

The Finish form appears.

1. Choose one of the following options:
   - Yes, create a version of this table conversion
     If you choose Yes, enter the version name.
   - No, I will create a version of this table conversion later
2. Click Finish to complete the process.

   If you chose Yes in step 1, a Warning message displays.

3. Click OK.

   The system displays Table Conversion Actions.

4. Review your choices and, if satisfied, click Save.
5. From the File menu, choose Exit.

   You can now run the table conversion.

See Also

- *Using Event Rules in a Table Conversion* in the *Table Conversion Guide*
- *Reviewing Your Table Conversion* in the *Table Conversion Guide*
- *Running a Table Conversion* in the *Table Conversion Guide*

Data Copy with Table Input

Data Copy with Table Input is similar to Data Copy except that it also allows information for the process to come from an input table. The input table might provide information about which tables should be copied, where they should be copied, and so on. Data Copy with Table Input also allows you to select data.

For example, you create a table that has a table name, the next backup date, and the backup frequency. You might populate the table with a list of tables to be archived and information specifying how often they should be archived. You then can use Data Copy with Table Input to choose all rows in which the backup date is less than or equal to today's date, and calculate a new backup date.

The Director leads you through a linear process for creating a data conversion batch application by asking you questions about its structure and function. When you are finished, you can review and modify the conversion, if necessary.

Before You Begin

- Create a batch application object. See *Using the Table Conversion Director* in the *Table Conversion Guide* for information about starting the data conversion design process and the Director. The last step launches the Director.

► To define external data

The Introduction form of the Table Conversion Director appears.

1. Choose the Data Copy with Table Input option and click Next.

   The External Data form appears.

2. If you want to attach a predefined processing option template to the table conversion, click Select.
3. On the Select Processing Option Template form, find and choose the processing option you want to use and click OK.
4. If you want to attach data structures, click Define on the External Data form.

   The Report Data Structures form appears. Data structures contain a list of parameters that can be used to pass data into the conversion when called through Report Interconnect.

5. Define the data structures that you want to attach to the table conversion and click OK.

   - Output Source

6. Click Next.

See Also

- *Data Structures* in the *Development Tools Guide*

► To define input and output environments

1. On the Select Environments form, choose the input and output environments that you want to use.

   Note
   Choose <LOGIN ENV> if you are creating a table conversion on your workstation that will be shipped to a client who does not have the environments that you have. The table conversion will use the client login environment.

2. If you are creating a table conversion that will run in a different environment than the one in which you are creating it and the <LOGIN ENV> is not appropriate for the type of conversion that you are creating, click the Force Version to Override Input Environment option or the Force Version to Override Output Environment option.

   For example, if you create a conversion that will be shipped to a client who does not have the environments that you have, you would turn on these options. When the conversion is invoked at the client site, the system will not run the conversion until the user chooses an appropriate environment in which to run it.

3. Click Next.

► To define input

The Select Input form appears.

1. Drag the table or business view to the column on the right.

   You can choose only one table or one business view per conversion. If your input consists of multiple tables, you must create a single joined business view.

   Notes
   If you know the name of the table or business view you want to use, enter the name in the Name field in the QBE (query by example) row and press Enter. Alternately, for text files, you can select a file from the default directory, enter a new file name, or click the Browse button to locate a file.

   If you change the table, business view, or file, the system warns you that deleting tables removes all mappings from the table conversion.

2. If you are working with a user-defined format (flat file), click User-Defined Format.

   Note
   Follow the steps described in *User-Defined Formats* in the *Table Conversion Guide*. When you complete those steps, return here.

3. To delete an input name, choose it and press Delete.
4. Click Next.

   The Sequencing form appears.

5. To define data sequencing for a table or business view, click Data Sequencing.

   If you specify a text file for input, you cannot define data sequencing or selection for that file.

   When you define data sequencing, you create new events that are available to you in the Mapping section of the Director. One new event is created for each of the sequence columns that you define. The event is called *XXXX* Data Changed, where *XXXX* is the column alias; for example, *ALPH* Data Changed. Each time that the value in one of these columns changes from its previous value, the column's Data Changed event is invoked. This event is similar to a level break in report writing with the exception that the Data Changed events are not related to each other. Invoking one does not invoke the others.

6. Click Next.

   The Data Selection form appears. On this form, you can only define selection criteria over database table columns. User-defined format columns are unavailable because they do not exist in the database.

   Where is the default value in the Operator column for the first set of criteria. For subsequent statements, *And* and *Or* become the available values for the Operator column and are selected by double-clicking the appropriate one.

7. Click the Left Operand column to display the list of available objects, and then perform one of the following:

   - Scroll through the list until you find the desired object, choose the object, and then double-click the object to populate the Left Operand column.
   - Type in the first letters of the object name in the Left Operand field to bring you to the object in the list, and then double-click the highlighted object.

   When you double-click the object for the Left Operand column, the list in the Comparison column automatically appears.

8. Choose one of the following comparison operators:

   - is equal to
   - is greater than
   - is greater than or equal to
   - is less than
   - is less than or equal to
   - is not equal to

9. Click the Right Operand column to display an available list of objects, special values, or variables.

   Your choices in this column depend on the choice that you made in the Comparison column. Some of the following options could be available:

Blank Enters a blank (space) value

Literal Enter specific values (see the following step for information on entering specific values)

Null Indicates that no value is associated with the field

Zero Enters a value of zero

IC Indicates an input table column

RI Indicates a value passed through report interconnections to this table conversion

PO Indicates a processing options value for this report

SL Indicates a system literal

10. If you chose to enter a literal in the Right Operand column, the form that opens automatically enables you to enter the following:

    - Single value

      Enter a single value, and then click OK. For example, a value might be for a particular company.

    - Range of values

      Enter a range of values, and then click OK. For example, a range of values might include companies from 00001 to 00060. Only *is equal to* and *is not equal to* are valid logical operators when using range of values.

    - List of values

      To add values to or remove values from the list, do the following:

      - Type each value in the field, and then press Enter or click the Add button at the top of the form.
      - Repeat this process until your list of values is complete.

      For example, a list of values might include several user defined codes for search types such as C for Customers, E for Employees, and V for Vendors. Only *is equal to* and *is not equal to* are valid logical operators when using list of values.

      - Delete a value by choosing the value, and then click Delete at the top of the form.
      - Click OK when you are finished.

11. To delete a line of criteria on Data Selection, choose the row header to highlight the row, and then click Delete at the top of the form.
12. To change the order of the criteria, choose the row header to highlight the row, and then click the up or down button.
13. Click Next.

    The Table Options form appears.

14. Choose the Run Currency Triggers option, if applicable.

    Choose this option if the J.D. Edwards software table or tables contain currency triggers. If the tables contain currency fields and you do not choose this option, the system does not know how many decimal places exist in each column. Any time the source or destination fields are currency fields and you do not turn on the currency trigger, problems can arise if the value is used in a calculation because the system has no way to determine where the decimal should be within a field.

    You might not want to choose the currency trigger option if the input and output data sources are the same type (for example, Oracle, AS/400, or SQL Server) and no calculations are being performed. Choosing this option results in slower processing time.

    In addition, you should not use currency triggers on an environment that has a different path code than the login environment.

15. Click Next.

See Also

- *The Flow of Events in Table Conversion* in the *Table Conversion Guide* for information about the Data Changed event

► To define data copy actions

The Select Actions form appears.

1. Complete the following fields using the drop-down lists in each field to make your choice:

   When you enter the name of a table and then tab to the next field, the system automatically populates the remaining fields for you. You can make changes to these fields as necessary.

   - Table

     If you want to copy a single table, choose <Literal> and enter the name of that table on the Single Value Tab.

     If you do not know the name of the table that you want to copy, use the <Find a Table> option.

   - To Table

     Enter either the last table in a range of tables to be copied or leave this field blank if you are copying a single table.

   - Source Type

     Choose Data Source if your input and output sources are data sources. Choose Environment if your input and output sources are environments. When you choose Data Source or Environment, the appropriate system function (such as CopyTableEnvironment or CopyTableDataSource) is invoked during processing.

     The Data Source function works in the same way as Copy Table and gets its table descriptions from the specifications in the login environment.

The Environments function uses the input and output environment to locate data and specifications for the tables, which allows the specifications to be different in the input and output environment but the data is copied. In this case, the system performs a "copy-map-drop" action.

- Input Source

  The input source is the data source or environment from which the inputs will be read.

- Output Source

  The output data source is the source or environment where the output is written.

- Create

  If you choose <If Table Exists>, the system creates the table and runs the conversion only if both the table specification and the actual table exist in the input.

  If you choose <Yes>, the system creates the table. If the table already exists in the output, the system deletes and re-creates it.

  If you choose <No>, the system assumes the table already exists in the output and does not re-create it.

- Clear

  If you choose <If Table Exists>, the system clears the table only if it exists in the input.

  If you choose <Yes>, the system deletes all rows in the output table before copying the table.

  If you choose <No>, the output table will not be cleared.

Note
Choosing not to clear the output table might result in key conflicts.

- Copy

  If you choose <Yes>, the system copies the data from the input table to the output table using Map Same.

  If you choose <No>, no data is copied.

- Owner ID

- Owner Pwd

  If the data source requires an owner ID and password, enter them here. If you leave these fields blank, the system enters the ID and password of the login user, or <None> if the data source does not have security.

2. To import an existing copy table script from another location, click the Import button. On Open, find the file that you want to import and click Open.

   The system adds an action for each copy table item in the copy table script.

3. On Select Actions, click Advanced ER to add event rules to the copy table process.

   You can use Event Rules to write a custom copy table script.

4. Click Next.

► To choose logging options

The Logging Options form appears.

1. Choose one or more logging options, if applicable:
   - Log All Errors
   - Delete All Selected Records
   - Log Deletes
   - Log Updates
   - Trace Level
   - Log Details of Copy Table Actions
2. If you want to preview the actions of the table conversion before you run the actual conversion, choose the Run in Proof Mode option.
3. Click Next.

► To review the results of the director

The Finish form appears.

1. Choose one of the following options:
   - Yes, create a version of this table conversion
     If you choose Yes, enter the version name.
   - No, I will create a version of this table conversion later
2. Click Finish to complete the process.

   If you chose Yes in step 1, a Warning message displays.

3. Click OK.

   The system displays Table Conversion Actions.

4. Review your choices and, if satisfied, click Save.

5. From the File menu, choose Exit.

   You can now run the table conversion.

See Also

- *Using Event Rules in a Table Conversion* in the *Table Conversion Guide*
- *Reviewing Your Table Conversion* in the *Table Conversion Guide*
- *Running a Table Conversion* in the *Table Conversion Guide*

Batch Delete

The Batch Delete option allows you to delete a range of records from a J.D. Edwards software input table or foreign table, based on selection criteria that you define. For example, you can set up a batch delete table conversion that deletes any records in an input table that do not contain valid data or records. You might also want to set up a conversion that deletes all records from a particular table.

The Director leads you through a linear process for creating a data conversion batch application by asking questions about its structure and function. When you are finished, you can review and modify the conversion, if necessary.

Before You Begin

- Create a batch application object. See *Using the Table Conversion Director* in the *Table Conversion Guide* for information about starting the data conversion design process and the Director. The last step launches the Director.

► To define external data

The Introduction form of the Table Conversion Director appears.

1. Choose the Batch Delete option and click Next.

   The External Data form appears.

2. If you want to attach a predefined processing option template to the table conversion, click Select.

   The Select Processing Option Template form appears.

3. On Select Processing Option Template, find and choose the processing option that you want to use and click OK.
4. If you want to attach data structures, click Define on the External Data form.

   The Report Data Structures form appears. Data structures contain a list of parameters that can be used to pass data into the conversion when called through Report Interconnect.

5. Define the data structures that you want to attach to the table conversion and click OK.

   - Output Source

6. Click Next.

See Also

- *Data Structures* in the *Development Tools Guide*

► To define the environment

The Select Environment form appears.

1. Choose the environment in which the table resides.

   Note
   Choose <LOGIN ENV> if, for example, you are creating a table conversion on your workstation that will be shipped to a client who does not have the environments that you have. The environment they log on to will always be appropriate.

2. Choose the Force Version to Override Input Environment option or theForce Version to Override Output Environment option if you are creating a table conversion that will run in a different environment than the one in which you are creating it, and the <LOGIN ENV> is not appropriate for the type of conversion that you are creating.

   For example, if you create a conversion that will be shipped to a client who does not have the environments that you have, you would choose the Force Version to Override option. When the conversion is invoked at the client site, the system will not run the conversion until the user chooses an appropriate environment in which to run it.

3. Click Next.

► To define input

The Select Input form appears.

1. Drag the table to the column on the right. You can choose only one table per conversion.

   If you know the name of the table that you want to use, enter the name in the Name field in the query by example line and press Enter. For text files, choose a file from the default directory, enter a new file name, or click the Browse button to locate a file.

   Note
   If you change the table, the system warns you that deleting tables removes all mappings from the table conversion.

2. To delete an input name, choose it and press Delete.
3. Click Next.

   The Table Options form appears.

4. Choose the Run Currency Triggers option, if applicable.

   Choose this option if the J.D. Edwards software table or tables contain currency triggers. If the tables contain currency fields and you do not choose this option, the system does not know how many decimal places exist in each column. Any time that the source or destination fields are currency fields and you do not turn on the currency trigger, problems could arise if the value is used in a calculation. The system has no way to determine where the decimal should be within a field.

You might not want to choose the currency trigger option if the input and output data sources are the same type (for example, Oracle, AS/400, or SQL Server), and no calculations are being performed. Furthermore, choosing the currency trigger option results in slower processing time.

In addition, you should not use currency triggers on an environment that has a different path code than the login environment.

5. On the Data Selection form, define selection criteria over database table columns.

   User-defined format columns are unavailable because they do not exist in the database.

   Where is the default value in the Operator column for the first set of criteria. For subsequent statements, *And* and *Or* become the available values for the Operator column and are selected by double-clicking the appropriate one.

6. Click the Left Operand column to display the list of available objects, and then do one of the following:

   - Scroll through the list until you find the desired object, choose the object, and then double-click the object to populate the Left Operand column.
   - Type the first letters of the object name in the Left Operand field to bring you to the object in the list, and then double-click the highlighted object.

   When you double-click the object for the Left Operand column, the list in the Comparison column automatically appears.

7. Choose one of the following comparison operators:

   - is equal to
   - is greater than
   - is greater than or equal to
   - is less than
   - is less than or equal to
   - is not equal to

8. Click the Right operand column to display an available list of objects, special values, or variables. Your choices in this column depend on the choice you made in the Comparison column. Some of the following options could be available:

Blank Enters a blank (space) value

Literal Enter specific values (see the following step for information on entering specific values)

Null Indicates that no value is associated with the field

Zero Enters a value of zero

IC Indicates an input table column

RI Indicates a value passed through report interconnections to this table conversion

PO Indicates a processing options value for this report

SL Indicates a system literal

VA Indicates an event rule variable

9. If you chose to enter a literal in the Right operand column, the form that opens automatically enables you to enter the following:

    - Single value

      Enter a single value, and then click OK. For example, a value might be for a particular company.

    - Range of values

      Enter a range of values, and then click OK. For example, a range of values might include companies from 00001 to 00060. Only *is equal to* and *is not equal to* are valid logical operators when using range of values.

    - List of values

      To add values to or remove values from the list, do the following:

        - Type each value in the field, and then press Enter or click the Add button at the top of the form.
        - Repeat this process until your list of values is complete. For example, a list of values might include several user defined codes for search types such as C for Customers, E for Employees, and V for Vendors. Only *is equal to* and *is not equal to* are valid logical operators when using list of values.
        - Delete a value by choosing the value, and then click the Delete button at the top of the form.
        - Click OK when you are finished.

10. To delete a line of criteria on Data Selection, choose the row header to highlight the row, and then click the Delete button at the top of the form.
11. To change the order of the criteria, choose the row header to highlight the row, and then click the up or down button.
12. In the Events field, choose the appropriate event from the drop-down list. You must choose Row Fetched as the event where the delete occurs; otherwise, no records will be deleted.

    When you run the conversion, the system will fetch the rows one at a time, run the conversion for each row, and delete the record from the input.

13. Make sure the Delete all selected records option is checked.

    This option inserts the Delete Current Input Row event into Event Rules.

14. Click the Advanced ER button if you want to add event rules to define more complicated actions than simply deleting all selected records.
15. Click Next.

See Also

- *Using Event Rules in a Table Conversion* in the *Table Conversion Guide* for more information about table conversion event rules

► To choose logging options

The Logging Options form appears.

1. Choose one or more logging options, if applicable.
   - Log All Errors
   - Delete All Selected Records
   - Log Deletes
   - Log Updates
   - Trace Level
   - Log Details of Copy Table Actions
2. If you want to preview the actions of the table conversion before you run the actual conversion, choose the Run in Proof Mode option.
3. Click Next.

► To review the results of the director

The Finish form appears.

1. Choose one of the following options:
   - Yes, create a version of this table conversion
     If you choose Yes, enter the version name.
   - No, I will create a version of this table conversion later
2. Click Finish to complete the process.

   If you chose Yes in step 1, a Warning form appears.
3. On the Warning form, click OK.

   The system displays the Selection for Batch Delete form.
4. On Table Conversion Actions, review the options that you specified for the batch delete conversion. If you are satisfied with your choices, click Save. Otherwise, make changes as necessary and then click Save.
5. From the File menu, choose Exit.

You can now run the conversion.

See Also

- *Using Event Rules in a Table Conversion* in the *Table Conversion Guide*
- *Reviewing Your Table Conversion* in the *Table Conversion Guide*
- *Running a Table Conversion* in the *Table Conversion Guide*

Example: Batch Delete/Update

This table conversion was created using the Batch Delete option, but it does not actually delete records. Instead, it is an example of how you can use a batch delete conversion to do general batch processing over a single table. You can create a similar table conversion using the data conversion option; however, it takes longer to create and also requires an output table.

The following example updates all employee records in the F0101 table to make them ex-employees.

The Introduction form of the Table Conversion Director appears.

1. Choose Batch Delete and then click Next.

   The External Data form appears.

2. Specify whether you want to include processing options and data structures, and then click Next.

   For this example, no processing options or data structures are used.

   The Source Environment form appears.

3. Choose the environment in which you want to run the conversion, and then click Next.

   In this example, create and run the conversion in the login environment. The Force Version to Override Input Environment option is not chosen because it will not be ported to another system.

   The Select Input form appears.

4. Choose the F0101 table and then click Next.

   The Table Options form appears.

5. Because the F0101 table does not contain currency fields, do not choose the currency trigger option.
6. Click Next.

   The Data Selection form appears.

7. Choose all AT1 (Search Type) records that equal E (Employee).

   All employees will become ex-employees.

8. Choose Delete All Select Records and the Row Fetched event, and then click Next.

   The Logging Options form appears.

   If you click the Advanced ER button, you can see the system function that is added when you choose the Delete All Selected Records option on the previous form.

9. Choose Run in Proof Mode to ensure that all records are changed, and click Next.

   The Finish form displays.

10. Choose Yes, enter a version name, and click Next.
11. On the warning that appears, click OK.

    The Table Conversion Review form displays.

See Also

- *Running a Table Conversion* in the *Table Conversion Guide* for more information about turning on logging and setting the trace level

Example: Creating a Purge Program as a Batch Delete

The following example is a table conversion that deletes records from the input environment. Designing purge programs as batch deletes enables you to purge records with better control and greater accuracy. You can archive the data you purge or remove it from the system permanently. The archiving process is shown in this example. Before you start this example, create a handle for the table.

The Introduction form of the Table Conversion Director appears.

1. Choose Batch Delete and click Next.

   The External Data form appears.

2. Choose a Processing Option template and click Next.

   For this example, use Purge Processing Option (T42000P).

   The Source Environment form appears.

3. Choose the source environment in which you want to run the batch delete and click Next.

   For this example, choose the login environment <LOGIN ENV>. Enable the Force Version to Override Input Environment option to make sure that the person who runs the purge program provides a valid source environment from which to run the batch delete.

   The Select Input form appears.

4. Choose the table you want to purge and drag it to the Description area, and click Next.

   For the example, choose, User Defined Code Types (F0004).

   The Table Options form appears.

5. Choose Run Currency Triggers.

   The Data Selection form appears.

6. Choose the data you want purged by clicking a field and double-clicking an option from the drop-down list.

   For this example, choose Where IC UCD1(User Defined Code) is equal to Null.

7. Click Next.

   The Logging Options form appears.

8. Choose the options you want logged, and then click Next.

   For this example, do not log any information.

   The Finish form appears.

9. Choose “Yes, create a version of this table conversion” and enter the version name in the field.

   For this example, use XJDE001.

10. On the warning form that appears, click OK.

    The Table Conversion Review form appears.

11. In the Events field, choose Process Begin and click Advanced ER.

    The Event Rules Design form appears.

12. Enter the begin process event rules, along with any special logic.

    For this example, use event rules for R42119P, as follows:

```
0001 // Check to see if the purged data is being archived
0002 //
0003 If PO cArchiveRecords is equal to ”1”
0004    //
0005    // If the environment processing option is blank, stop processing.
0006    //
0007    If PO szArchiveEnvironmentName is equal to <Blank>
            Or PO szArchiveEnvironmentName is equal to <Null>
0008       Stop Conversion Processing(”The archive environment is invalid.”)
0009    Else
0010       //
0011       // Check to make sure that the archive environment and data
source is not the
0012       // same as the input environment and data source
0013       //
0014       If PO szArchiveEnvironmentName is equal to SL SourceEnvironment
0015          Stop Conversion Processing(”The source and archive
environments are the same”)
0016       Else
0017          Get and validate the data source for an environment / table
(B98700)
                    PO szArchiveEnvironmentName -> szEnvironment
                    ”F42119” -> szTableName
                    VA rpt_szArchiveDataSource_DATS <- szDataSource
                    VA rpt_szErrorCode_DTAI <- szErrorDataItem
                    VA rpt_mnErrorNumber_MATH01 <- mnErrorNumber
0018          If VA rpt_szErrorCode_DTAI is not equal to <Blank>
```

```
                 And VA rpt_szErrorCode_DTAI is not equal to <Null>
0019             Stop Conversion Processing(”No data source was found for
the archive environment”)
0020          Else
0021             Get and validate the data source for an environment / table
(B98700)
                       SL SourceEnvironment -> szEnvironment
                       ”F42119” -> szTableName
                       VA rpt_szPurgeDataSource_DATS <- szDataSource
                       VA rpt_szErrorCode_DTAI <- szErrorDataItem
                       VA rpt_mnErrorNumber_MATH01 <- mnErrorNumber
0022             If VA rpt_szArchiveDataSource_DATS is equal to VA
rpt_szPurgeDataSource_DATS
0023                Stop Conversion Processing(”The source and archive
environments have the same data source”)
0024             Else
0025                //
0026                // Open a table with the same table name in the output
environment. The table
0027                // will be renamed later if the table name processing
option was populated.
0028                //
0029                Copy Table Environment(”F42119”,  <None>, SL
SourceEnvironment              , PO szArchiveEnvironmentName, <Yes>, <Yes>,
<No>, <None>, <None>, <Null>, <Null>)
0030                //
0031                // Open a handle to the archive table
0032                //
0033                VA rpt_F42119Handle_HF42119 = F42119.Open Handle
0034                If VA rpt_F42119Handle_HF42119 is equal to <Null>
0035                   Stop Conversion Processing(”Failed to open F42119 in
the archive environment”)


0036                End If
0037             End If
0038          End If
0039       End If
0040    End If
0041 End If
```

13. Using this example, the system writes log messages on Stop Conversion Processing to the JDE.log and JDEDEBUG.log files.
14. After you have entered the begin process event rules, add the following variables:
    - FXXXXHandle_HFXXXX
    - szArchiveDataSource_DATS
    - szPurgeDataSource_DATS
    - szErrorCode_DTAI
    - cRenameFlag_EV01
    - mnErrorNumber_MATH01

    Make sure that you have mapped all parameters to a field, even if you will not use every value.
15. On Selection for Batch Delete, choose Row Fetched and click Advanced ER. On Event Rules Design, enter the row fetched event rules, along with any special logic. Make sure that you have mapped all parameters to a field, even if you will not use every value. This example includes event rules for R42119P, as follows:

```
0001 //
0002 // If we are archiving the purged records, write the record to the
archive table
0003 //
0004 If PO cArchiveRecords is equal to ”1”
0005    F42119(VA rpt_F42119Handle_HF42119).Insert
           IC Order Company (Order Number) -> TK Order Company (Order
Number)
           IC Document (Order No, Invoice, etc.) -> TK Document (Order No,
Invoice, etc.)
           IC Order Type -> TK Order Type
           IC Line Number -> TK Line Number
           IC Order Suffix -> TK Order Suffix
           IC Business Unit -> TK Business Unit
           IC Company -> TK Company
           IC Document Company (Original Order) -> TK Document Company
(Original Order)
           IC Original Order Number -> TK Original Order Number
           IC Original Order Type -> TK Original Order Type
           IC Original Line Number -> TK Original Line Number
           IC Company - Key (Related Order) -> TK Company - Key (Related
Order)
           IC Related PO/SO/WO Number -> TK Related PO/SO/WO Number
           IC Related PO/SO/WO Order Type -> TK Related PO/SO/WO Order Type
```

IC Related PO/SO Line Number -> TK Related PO/SO Line Number

IC Agreement Number - Distribution -> TK Agreement Number - Distribution

IC Agreement Supplement - Distribution -> TK Agreement Supplement - Distribution

IC Contract Balances Updated Y/N -> TK Contract Balances Updated Y/N

IC Address Number -> TK Address Number

IC Address Number - Ship To -> TK Address Number - Ship To

IC Address Number - Parent -> TK Address Number - Parent

IC Date - Requested -> TK Date - Requested

IC Date - Order/Transaction -> TK Date - Order/Transaction

IC Date - Scheduled Pick -> TK Date - Scheduled Pick

IC Date - Original Promised Delivery -> TK Date - Original Promised Delivery

IC Date - Actual Ship Date -> TK Date - Actual Ship Date

IC Date - Invoice -> TK Date - Invoice

IC Date - Cancel -> TK Date - Cancel

IC Date - For G/L (and Voucher) -> TK Date - For G/L (and Voucher)

IC Date - Promised Delivery -> TK Date - Promised Delivery

IC Date - Price Effective Date -> TK Date - Price Effective Date

IC Date - Promised Shipment -> TK Date - Promised Shipment

IC Date - Future Date 2 -> TK Date - Future Date 2

IC Reference -> TK Reference

IC Reference 2 -> TK Reference 2

IC Item Number - Short -> TK Item Number - Short

IC 2nd Item Number -> TK 2nd Item Number

IC 3rd Item Number -> TK 3rd Item Number

IC Location -> TK Location

IC Lot/Serial Number -> TK Lot/Serial Number

IC From Grade -> TK From Grade

IC Thru Grade -> TK Thru Grade

IC From Potency -> TK From Potency

IC Thru Potency -> TK Thru Potency

IC Days Before Expiration -> TK Days Before Expiration

IC Description -> TK Description

IC Description - Line 2 -> TK Description - Line 2

IC Line Type -> TK Line Type

IC Status Code - Next -> TK Status Code - Next

IC Status Code - Last -> TK Status Code - Last

IC Business Unit - Header -> TK Business Unit - Header

IC Item Number - Related (Kit) -> TK Item Number - Related (Kit)

IC Kit Master Line Number -> TK Kit Master Line Number

IC Component Line Number -> TK Component Line Number

IC Related Kit Component -> TK Related Kit Component

IC Number of Component Per Parent -> TK Number of Component Per Parent

IC Sales Catalog Section -> TK Sales Catalog Section

IC Sub Section -> TK Sub Section

IC Sales Category Code 3 -> TK Sales Category Code 3

IC Sales Category Code 4 -> TK Sales Category Code 4

IC Sales Category Code 5 -> TK Sales Category Code 5

IC Commodity Class -> TK Commodity Class

IC Commodity Sub Class -> TK Commodity Sub Class

IC Supplier Rebate Code -> TK Supplier Rebate Code

IC Master Planning Family -> TK Master Planning Family

IC Purchasing Category Code 5 -> TK Purchasing Category Code 5

IC Unit of Measure as Input -> TK Unit of Measure as Input

IC Units - Order/Transaction Quantity -> TK Units - Order/Transaction Quantity

IC Quantity Shipped -> TK Quantity Shipped

IC Units - Qty Backordered/Held -> TK Units - Qty Backordered/Held

IC Units - Quantity Canceled/Scrapped -> TK Units - Quantity Canceled/Scrapped

IC Units - Future Quantity Committed -> TK Units - Future Quantity Committed

IC Units - Open -> TK Units - Open

IC Units - Shipped to Date -> TK Units - Shipped to Date

IC Units - Relieved -> TK Units - Relieved

IC Committed (H/S) -> TK Committed (H/S)

IC Other Quantity (1/2) -> TK Other Quantity (1/2)

IC Amount - Price per Unit -> TK Amount - Price per Unit

IC Amount - Extended Price -> TK Amount - Extended Price

IC Amount - Open -> TK Amount - Open

IC Price Override Code -> TK Price Override Code

IC Temporary Price (Y/N) -> TK Temporary Price (Y/N)

IC Unit of Measure - Entered for Unit Price -> TK Unit of Measure - Entered for Unit Price

IC Amount - List Price -> TK Amount - List Price

IC Amount - Unit Cost -> TK Amount - Unit Cost

IC Amount - Extended Cost -> TK Amount - Extended Cost

IC Cost Override Code -> TK Cost Override Code

IC Extended Cost - Transfer -> TK Extended Cost - Transfer

IC Print Message -> TK Print Message

IC Payment Terms Code -> TK Payment Terms Code

IC Payment Instrument -> TK Payment Instrument

IC Based on Date -> TK Based on Date

IC Discount - Trade -> TK Discount - Trade

IC Trade Discount (Old) -> TK Trade Discount (Old)

IC Price and Adjustment Schedule -> TK Price and Adjustment Schedule

IC Item Price Group -> TK Item Price Group

IC Pricing Category Level -> TK Pricing Category Level

IC Discount Factor -> TK Discount Factor

IC Discount Factor Type - $ or % (D/P) -> TK Discount Factor Type - $ or % (D/P)

IC Discount Application Type -> TK Discount Application Type

IC Discount % - Cash -> TK Discount % - Cash

IC Document Company -> TK Document Company

IC Document (Voucher, Invoice, etc.) -> TK Document (Voucher, Invoice, etc.)

IC Document Type -> TK Document Type

IC Document - Original -> TK Document - Original

IC Document Type - Original -> TK Document Type - Original

IC Document Company - Original -> TK Document Company - Original

IC Pick Slip Number -> TK Pick Slip Number

IC Delivery Number -> TK Delivery Number

IC Number - Promotion Number -> TK Number - Promotion Number

IC Draft Number -> TK Draft Number

IC Sales Taxable (Y/N) -> TK Sales Taxable (Y/N)

IC Tax Rate/Area -> TK Tax Rate/Area

IC Tax Expl Code 1 -> TK Tax Expl Code 1

IC Associated Text -> TK Associated Text

IC Priority - Processing -> TK Priority - Processing

IC Printed Code -> TK Printed Code

IC Backorders Allowed (Y/N) -> TK Backorders Allowed (Y/N)

IC Substitutes Allowed (Y/N) -> TK Substitutes Allowed (Y/N)

IC Partial Line Shipments Allowed (Y/N) -> TK Partial Line Shipments Allowed (Y/N)

IC Line of Business -> TK Line of Business

IC End Use -> TK End Use

IC Duty Status -> TK Duty Status

IC Commodity Code -> TK Commodity Code

IC Nature of Transaction -> TK Nature of Transaction

IC Primary / Last Supplier Number -> TK Primary / Last Supplier Number

IC Buyer Number -> TK Buyer Number

IC Carrier Number -> TK Carrier Number

IC Mode of Transport -> TK Mode of Transport

IC Conditions of Transport -> TK Conditions of Transport

IC Route Code -> TK Route Code

IC Stop Code -> TK Stop Code

IC Zone Number -> TK Zone Number

IC Container I.D. -> TK Container I.D.

IC Freight Handling Code -> TK Freight Handling Code

IC Apply Freight - Y/N -> TK Apply Freight - Y/N

IC AIA Document Flag -> TK AIA Document Flag

IC Freight Calculated (Y/N) -> TK Freight Calculated (Y/N)

IC Rate Code - Frieght/Misc -> TK Rate Code - Frieght/Misc

IC Rate Type - Freight/Misc -> TK Rate Type - Freight/Misc

IC Shipping Commodity Class -> TK Shipping Commodity Class

IC Shipping Conditions Code -> TK Shipping Conditions Code

IC Serial Number - Lot -> TK Serial Number - Lot

IC Unit of Measure - Primary -> TK Unit of Measure - Primary

IC Units - Primary Quantity Ordered -> TK Units - Primary Quantity Ordered

IC Unit of Measure - Secondary -> TK Unit of Measure - Secondary

IC Units - Secondary Quantity Ordered -> TK Units - Secondary Quantity Ordered

IC Unit of Measure - Pricing -> TK Unit of Measure - Pricing

IC Unit Weight -> TK Unit Weight

IC Weight Unit of Measure -> TK Weight Unit of Measure

IC Unit Volume -> TK Unit Volume

IC Volume Unit of Measure -> TK Volume Unit of Measure

IC Reprice (Basket Price) Category -> TK Reprice (Basket Price) Category

IC Order Reprice Category -> TK Order Reprice Category

IC Order Repriced Indicator -> TK Order Repriced Indicator

IC Costing Method - Inventory -> TK Costing Method - Inventory

IC Commitment Method -> TK Commitment Method

IC G/L Offset -> TK G/L Offset

IC Century -> TK Century

IC Fiscal Year -> TK Fiscal Year

IC Line Status -> TK Line Status

IC Inter Branch Sales -> TK Inter Branch Sales

IC On Hand Updated -> TK On Hand Updated

IC Configurator Print Flag -> TK Configurator Print Flag

IC Sales Order Status 04 -> TK Sales Order Status 04

IC Substitute Item Indicator -> TK Substitute Item Indicator

IC Preference Commitment Indicator -> TK Preference Commitment Indicator

IC Ship date (PDDJ) overridden -> TK Ship date (PDDJ) overridden

IC Price Adjustment Line Indicator -> TK Price Adjustment Line Indicator

IC Price Adj. History Indicator -> TK Price Adj. History Indicator

IC Preference Production Allocation -> TK Preference Production Allocation

IC Transfer/Direct Ship/Intercompany Flag -> TK Transfer/Direct Ship/Intercompany Flag

IC Deferred entries flag -> TK Deferred entries flag

IC Euro Conversion Status Flag -> TK Euro Conversion Status Flag

IC Sales Order Status 14 -> TK Sales Order Status 14

IC Sales Order Status 15 -> TK Sales Order Status 15

IC Salesperson 01 -> TK Salesperson 01

IC Salesperson Commission 001 -> TK Salesperson Commission 001

IC Salesperson 02 -> TK Salesperson 02

IC Salesperson Commission 002 -> TK Salesperson Commission 002

IC Apply Commission (Y/N) -> TK Apply Commission (Y/N)

IC Commission Category -> TK Commission Category

IC Reason Code -> TK Reason Code

IC Gross Weight -> TK Gross Weight

IC Gross Weight Unit of Measure -> TK Gross Weight Unit of Measure

IC Account Number - Input (Mode Unknown) -> TK Account Number - Input (Mode Unknown)

IC Account ID -> TK Account ID

IC Project Business Unit -> TK Project Business Unit

IC Object Account -> TK Object Account

IC Subsidiary -> TK Subsidiary

IC Ledger Type -> TK Ledger Type

IC Subledger - G/L -> TK Subledger - G/L

IC Subledger Type -> TK Subledger Type

IC Code - Location Tax Status -> TK Code - Location Tax Status

IC Price Code 1 -> TK Price Code 1

IC Price Code 2 -> TK Price Code 2

IC Price Code 3 -> TK Price Code 3

IC Status - In Warehouse -> TK Status - In Warehouse

IC Work Order Freeze Code -> TK Work Order Freeze Code

IC Send Method -> TK Send Method

IC Currency Code - From -> TK Currency Code - From

IC Currency Conversion Rate - Spot Rate -> TK Currency Conversion Rate - Spot Rate

IC Amount - List Price per Unit -> TK Amount - List Price per Unit

IC Amount - Foreign Price per Unit -> TK Amount - Foreign Price per Unit

IC Amount - Foreign Extended Price -> TK Amount - Foreign Extended Price

IC Amount - Foreign Unit Cost -> TK Amount - Foreign Unit Cost

IC Amount - Foreign Extended Cost -> TK Amount - Foreign Extended Cost

IC User Reserved Code -> TK User Reserved Code

IC User Reserved Date -> TK User Reserved Date

IC User Reserved Amount -> TK User Reserved Amount

```
           IC User Reserved Number -> TK User Reserved Number
           IC User Reserved Reference -> TK User Reserved Reference
           IC Transaction Originator -> TK Transaction Originator
           IC User ID -> TK User ID
           IC Program ID -> TK Program ID
           IC Work Station ID -> TK Work Station ID
           IC Date - Updated -> TK Date - Updated
           IC Time of Day -> TK Time of Day
0006 //
0007 // Do not delete the record if the insert to the archive table failed.
0008 //
0009 If SV Error_Status is not equal to CO ERROR
0010  Delete Current Input Row
0011 End If
0012 Else
0013  Delete Current Input Row
0014 End If
```

16. On Selection for Batch Delete, choose Process End and click Advanced ER. On Event Rules Design, enter the process end event rules, along with any special logic. Ensure that you have mapped all parameters to a field, even if you will not use every value. For this example, use event rules for R42119P, as follows:

```
0001 If PO cArchiveRecords is equal to "1"
0002    //
0003    // Close the table
0004    //
0005    F42119(VA rpt_F42119Handle_HF42119).Close
0006    //
0007    // If the data was archived and the table name processing option was
populated,
0008    // rename the table.
0009    //
0010    If PO szArchiveTableName is not equal to <Blank>
        And PO szArchiveTableName is not equal to <Null>
0011       Rename Table   (B0000202)
              "F42119" -> szOldTableName
              PO szArchiveTableName -> szNewTableName
```

```
              "<Blank>" -> szTableOwnerID
              "<Blank>" -> szPassword
              VA rpt_szArchiveDataSource_DATS -> szDataSource
              VA rpt_cRenameFlag_EV01 <- cRenameTableSuccessful
0012    End If
0013 End If
```

See Also

- *Using a Handles* in the *Development Tools Guide* for instructions on creating and using handles
- *Batch Delete* in the *Table Conversion Guide* for information about currency triggers

Reviewing Your Table Conversion

To review your table conversion after you create it, use the Table Conversion Mapping and Properties forms, which display simultaneously when you complete or view a table conversion. These forms present the same options as the Director.

You also can review processing options, data structures, data sequencing, and data selection by choosing them from the Conversion menu from the menu bar. Each tab works as the forms in the Table Conversion Director do.

► To review your table conversion

The Table Conversion View menu appears.

1. Choose Table Conversion Properties.
2. On Table Conversion Properties, review and modify your table conversion.
3. When you are satisfied with your table conversion, click OK.
4. Click the Save button.
5. From the File menu, choose Exit.

Using Event Rules in a Table Conversion

You can use event rules to build complex functional capabilities into table conversions. For example, you can use event rules to insert information into a table or delete one or more rows in a table based on certain conditions.

You attach event rules to a particular event, such as Process Begin, Row Fetched, Format Fetched, and Process End.

Event rules in table conversion include system functions that are specific to the table conversion tool.

See Also

- *The Flow of Events in Table Conversion* in the *Table Conversion Guide* for more information about table conversion events
- *Table Conversion System Functions* in the *Table Conversion Guide* for a list of system functions and an explanation of each

► To use event rules in a table conversion

A form with an Advanced ER button appears.

1. Choose the event to which you want to add event rules from the Events drop-down list.
2. Click the Advanced ER button.
3. On Event Rules Design, choose any of the following buttons to define specific business logic:

   - Assignment

     Defines a field as a fixed value or a mathematical expression. For example, you can create an assignment that calculates a value rather than writing a business function to calculate it.

   - If/While

     Creates If and While logic statements, which are conditional instructions for an event rule.

   - Business Function

     Attaches an existing business function, such as a function that retrieves a next number for a new customer or a function that converts Julian dates to month, day, and year.

   - System Function

     Attaches an existing J.D. Edwards system function, such as Copy Table Environment or User Insert Row.

- Variables

  Attaches variables to accumulate totals, attaches variables that conditionally control what you write to a file, keeps a tally of the number of records you read in, and so on.

- Else

  Creates Else logic statements. When you create an If statement, an Else statement is automatically inserted after the If statement.

- Table I/O

  Allows you to open tables in the input, output, or login environment, and also allows you to open the same table twice. It also allows you to pull in data from tables other than the input table and use data from those tables to create an output record. For example, you might want to set up a table conversion that loops through records in F0101 (Address Book Master) and copies them to another table, and then loops back through the records, finds each customer that has a certain employee as a contact, and copies that information to the output table as well.

- Report Interconnect

  Connects a batch process or report to the table conversion.

4. After defining your event rules, click OK.
5. Repeat steps as necessary for the different input and output formats.

See Also

- *Table Conversion System Functions* in the *Table Conversion Guide* for more on system functions
- *Table I/O* in the *Development Tools Guide*

Table Conversion System Functions

Each system function within event rules that you can use within a table conversion is explained below:

CopyTableDataSource Use this system function to copy a table or range of tables from one data source to another. The system copies tables based on specifications in the login environment.

CopyTableEnvironment Use this system function to copy a table or range of tables from one environment to another. The system copies tables based on specifications in the input and output environments. If the specifications differ, the system performs a "map and drop," which means that it creates a mapping between like fields in the source and destination tables, and ignores all other fields.

TCInsertRow The table conversion system inserts this system function when you choose the Issue a write for this event? option and it cannot be moved. This function instructs the system that data should be written to the output table.

UserInsertRow	Use this system function to specify when and where a row should be inserted into the specified output table.
DeleteCurrentInputRow	Use this system function to delete the current record from the input table.
UpdateCurrentInputRow	Use this system function to update the current record in the input table after it has been changed.
SetSelectionAppendFlag	Use this system function to determine whether selection criteria added by the system function SetUserSelection will append or replace the existing selection criteria on the input table.
SetUserSelection	Use this system function to conditionally modify data selection on the input table. Call SetSelectionAppendFlag before calling SetUserSelection to determine whether to replace or append the existing data selection information on the input table.

See Also

- *Event Rules Design* in the *Development Tools Guide* for more information about event rules

Running a Table Conversion

When you run a table conversion, you submit it using a batch version. To track what happens during the conversion process, you can turn on tracing, which writes the details of what happened during the conversion to a log. You can set the trace level to control the detail of the log information. When you test a table conversion, you can designate that the conversion proceed one row at a time, which can help you isolate problems or unexpected results.

Submitting a Table Conversion

After you create your table conversion, you submit it using a batch version. When you submit the batch version, you can prompt the system to override the properties, such as input and output environment or trace level, and override the location at which your table conversion will process.

If you are using the Web client, you can also submit a table conversion, but you cannot override any properties except processing options, location, and job queue.

► To override the table conversion properties

From the System Administration Tools (GH9011) menu, choose Batch Versions.

Note

If you click Cancel while overriding the properties, J.D. Edwards software will not save your changes to the version. To change the properties of the version without running it, on Work With Batch Versions, choose Properties from the Row menu.

1. On Work With Batch Versions, complete the following field and click Find:
   - Batch Application
2. Highlight a version and click Select.
3. On Table Conversion Prompting, choose the Properties option and click Submit.

   Note
   If you are using a Web client, you cannot choose the Properties option, you can only choose and change Processing Options.

4. On the Properties form, review and override the environments, table options, data selection, and logging options that you specified within the conversion.

   You can edit these options the same way as when you set up the table conversion. Basically, the forms are the same.

5. To turn on debug logging, click the Debug Logging tab and do the following:
   - To use the jde.ini settings for the trace level and row-by-row conversion process, make sure that the Use ini settings for trace level and number of rows to process option is turned on. The system will use only the settings contained in your jde.ini file and will override any values that you enter in the Trace Level and Number of Rows fields described below.
   - To override the trace level in the jde.ini file, turn off the Use ini settings for trace level and number of rows to process option. Enter a number from 0 to 10 in the Trace Level field.

- To convert a specific number of records (for example, if you want to test the table conversion), turn off the Use ini settings for trace level and number of rows to process option. Enter the number of rows that you want to convert in the Number of Rows field. If you enter 0 for this value, the system processes all rows.

  This option corresponds to the StopAfterRow setting in the jde.ini file. If you enter a value here, you will override any specifications you added to the jde.ini file.

6. Click OK to save your changes to the version.

   The system submits the table conversion.

See Also

- *Testing a Table Conversion* in the *Table Conversion Guide* for more information about StopAfterRow

► To override the table conversion location

You can override the location where you want to process your table conversion if, for example, the server that you normally use is inoperable.

From the System Administration Tools menu (GH9011), choose Batch Versions.

1. On Work With Batch Versions, choose the version and click Select.
2. On Table Conversion Prompting, turn on the Override Location option and click Submit.
3. On JDE Data Sources, choose the data source that you want to use as your override location and click Select.

Testing a Table Conversion

You might want to test a table conversion to ensure that it has no errors. To do this, you can log debug information about the conversion while it runs. You also can force the conversion to run one row at a time, which is useful if the conversion normally runs as an insert-from-select.

To log debug information about a table conversion, enable tracing and set a trace level from 0 to 10 in the jde.ini file according to how specific you want the logged information to be.

You set debug logging in the jde.ini file; if necessary, you can override the jde.ini settings through the version of a conversion.

If you set the trace level for logging at 1, the system logs basic information about the table conversion, such as name, inputs, outputs, event rule logic, and how many rows were inserted. If you set the trace level at 10, the system logs all information about every column in every format, including user-defined formats, whether a processing option template is associated with the table conversion, and all other information involved in the table conversion process. The higher you set the trace level, the more information the system will supply about the table conversion process.

When you test a table conversion, you might want to force a row-by-row conversion. You also might want to set a trace level on your workstation or on the server, depending on where you want to run the conversion.

The Difference Between Logging Options and Debug Logging

Logging options, which you specify when you set up a conversion, can log all errors that occur during the conversion or can log all records that are copied, deleted, or updated. They also can log the details of copy table actions.

Debug logging can log more detailed information about the conversion. This information can help you pinpoint the exact area in the conversion where errors occurred.

Note

Debug logging changes that you make to the version will override the settings in the jde.ini file.

Trace Levels

The following information is specific to each trace level:

Trace Level	Logging Information
Level 1	Logs general information about the conversion, such as name, inputs, outputs, event rule logic, and how many rows were inserted.
Level 2	Logs function call traces, such as starting conversion, ending conversion, and inserting rows.

Level 3	Logs the points at which event rules are executed.
Level 4	Not applicable.
Level 5	Logs the points at which jdeCallObject is executed, such as calls to business functions from event rules.
Levels 6-8	Not applicable.
Level 9	Logs the content of columns during input, event rules, and before output.
Level 10	Logs all information contained in the first nine levels.

Caution

J. D. Edwards recommends that you do not set your trace level at 10 when running a table conversion over tables that contain a large amount of data. The system will write a large amount of data onto your server, which could cause it to run out of disk space. You can, however, specify a certain number of rows to run in the version of the table conversion by choosing the Properties option.

Setting the Trace Level for Debug Logging

You can set a trace level for debug logging on a workstation or on a server, depending on where you are running the conversion.

► To enable tracing and set the trace level on a workstation

1. Open the jde.ini file on the workstation.
2. To enable tracing and to set the trace level on a workstation, add the following:

   ```
   [TCEngine]

   TraceLevel=n
   ```

   (Where *n* is a number from 0 through 10.)

   ```
   [Debug]

   Output=File

   [UBE]

   UBESaveLogFile=1
   ```

► To enable tracing and set the trace level on a server

1. Open the jde.ini file on the server.
2. To enable tracing and to set the trace level on a server, add the following:

   ```
   [TCEngine]

   TraceLevel=n
   ```

   (Where *n* is a number from 0 through 10.)

   ```
   [Debug]

   Output=File

   KeepLogs=1
   ```

Forcing Row-By-Row Conversion

You can set the system to force a row-by-row conversion when you want to test your table conversion. You can force row-by-row on your workstation or the server. You can also specify a certain number of rows to process in conjunction with forcing a row-by-row conversion.

► To force row-by-row conversion

1. Open the jde.ini file.
2. Add the following to the jde.ini file:

   ```
   [TCEngine]

   ForceRowByRow=1
   ```

► To specify the number of rows to process

1. Open the jde.ini file.
2. In the jde.ini file beneath the `[TCEngine]` header, add the following:

   ```
   StopAfterRow=n
   ```

   (Where *n* is the number of rows you want to process.)

Preparing Non-J.D. Edwards Software Tables for Table Conversion

Non-J.D. Edwards software tables are text files, or any other file or database, that are not recognized by J.D. Edwards software but the database is a type supported by J.D. Edwards software, Oracle, Access, AS/400, or SQL Server.

Before you can work with non-J.D. Edwards software tables in the table conversion tool, you need to make them known to J.D. Edwards software. To do this, you must set up an ODBC data source for the foreign tables, and then set up a data source, environment, and OCM mapping in J.D. Edwards software that points to the ODBC data source.

Note

When you work with foreign tables, your database administrator needs to address database authority issues. Your J.D. Edwards software user ID (or, if you are using the J.D. Edwards software security server feature, the database user to which it maps) must be changed so that you will have authority to use the tables in the foreign database. Without this authority, you will not be able to see the tables in the design tool. Under certain conditions, the table conversion engine will need to create temporary tables in the output environment and will require create-and-drop authority for the database.

Adding a J.D. Edwards Software Data Source

Before you can add a J.D. Edwards software data source for a foreign table, you must first add a Microsoft ODBC data source or an Oracle OCI data source that points to the foreign table. For complete information about ODBC drivers and data sources, consult the appropriate Microsoft or Oracle documentation.

After you have added an ODBC or Oracle data source, you need to add a data source in J.D. Edwards software that points to the data source that you just set up.

► To add a J.D. Edwards software data source

From the System Administration Tools menu (GH9011), choose Database Data Sources.

1. On the Machine Search & Select form, highlight the machine on which the data source resides and click Select.
2. On Work With Data Sources, click Add.
3. On Data Source Revisions, complete the following fields and click OK:
   - Data Source Name

     The data source name can be different from the ODBC or Oracle database name, if necessary.

   - Data Source Use

     Enter DB in this field to identify the data source as a database data source. You use only database data sources when accessing data in tables.

   - Platform
   - Logical Server Name
   - Server Map Data Source Name
4. Click OK.

Adding a J.D. Edwards Software Environment

For each ODBC data source, database instance, or library that contains non-J.D. Edwards software tables, you must set up an environment. The environment points to the J.D. Edwards software data source, which in turn points to the database or library. The easiest way to add an environment is to copy an existing one.

► To add a J.D. Edwards software environment

From the Environments menu (GH9053), choose Environment Master.

1. On Work With Environments, find and highlight the environment that most closely matches the environment that you want to add (such as the environment you are logged in to or any other environment you can access from your workstation), and then choose Copy Environment from the Row menu.
2. On Copy Environment, type an environment name in the New Environment field.
3. To copy only the *PUBLIC Object Configuration Manager mappings of an environment, turn on the Copy *PUBLIC Records Only option.

   Leave this option turned off to copy mappings for the environment, individual users, and *PUBLIC.

4. Click OK.

See Also

- *Working with an Environment* in the *Configurable Network Computing Implementation Guide* for more information about adding environments

Setting up a Default OCM Mapping

You map objects, such as tables, by environment. When you set up a default OCM mapping, you choose an environment that you have already created and map that environment's objects to the data sources where those objects exist.

You create a default map for a TBLE object type. You create a mapping of an object name with a literal value of DEFAULT, and then enter an object type (TBLE) and a data source. When you create a default map for the object type TBLE, any table objects not mapped individually will point to the default data source. In addition, the table conversion tool will use this mapping for foreign tables.

Each environment must have a default map for table objects for the *PUBLIC user profile because no inherent default location exists for table objects. If table objects do not have a default map and are not explicitly mapped by name, J.D. Edwards software produces a Select/Failed error message when it tries to access the tables. Additionally, the tables will not appear in the input or output forms in the Table Conversion Design application.

► To set up a default OCM mapping

From the System Administration Tools menu (GH9011), choose Object Configuration Manager.

1. On Machine Search and Select, choose the data source that stores the Object Configuration Manager table with which you want to work, and click Select.
2. On Work With Object Mappings, click Add.

   The Object Mapping Revisions form appears. On this form, you determine to what data source your table will map.

3. Enter the following information:
   - Environment Name
   - Object Name

     Enter DEFAULT in this field.

   - Primary Data Source

     The primary data source refers to the location within the environment of the object for which you will create a mapping. Enter the data source name that you set up for your foreign tables.

   - User

     The user is the individual or group for whom the mapping applies. You normally enter *PUBLIC in this field.

- Data Source Mode

  Enter P in this field. P stands for primary.

- Allow QBE

  You can use this field to indicate whether applications based on the table include a Query By Example line.

4. Click OK to save your object mapping.

   The system displays the mapping that you created with an inactive status.

5. Change the status to active.

   You can now access the tables in this data source as foreign tables by using this environment in your table conversion.

See Also

- *Working with the Object Configuration Manager* in the *Configurable Network Computing Implementation Guide* for more information about J.D. Edwards software environments, data sources, and OCM mapping
- *Understanding Data Sources* and *Working with the Object Configuration Manager* in the *Configurable Network Computing Implementation Guide* for more information about data sources