

PeopleSoft®

EnterpriseOne JDE5
Table Conversion
PeopleBook

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Table Conversion 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 four conversion types that allow you to do a variety of data manipulation:

- 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 can also 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, and so on.
- Batch delete allows you to delete records from a table or business view.

The table conversion tool can make use of 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 commonly 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, both for input and output. The environments that you choose determines 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 that table must be made in a specific database.
Non-J.D. Edwards software tables (foreign tables)	<p>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.</p> <p>See <i>Preparing Non-J.D. Edwards Software Tables for Table Conversion</i> for more information.</p>

Using Business Views in Table Conversion

If you transfer data from multiple tables to a single table or if you are transfer data from multiple tables to multiple 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 it, the text file is stored similarly to a foreign table—with a single, long text field. 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 in the value of 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 had 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 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 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 signed into determines where the table conversion specifications are stored. You can select an environment for your input table or view, and one for your converted output tables. All three of these environments could be the same or they could all 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 in this guide for more information about using non-J.D. Edwards software tables as input to a conversion
- *CNC 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 steps you through the process and allows you to modify the table conversion at each point. With the help of the Director, you can design conversions for converting data, copying tables between locations, and deleting records within tables.

You can also define user-defined formats (flat files) to use in the conversion. You define user-defined 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. See *Understanding User-Defined Formats* for more information.

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

See Also

- *Understanding User-Defined Formats* for more information.

Before You Begin

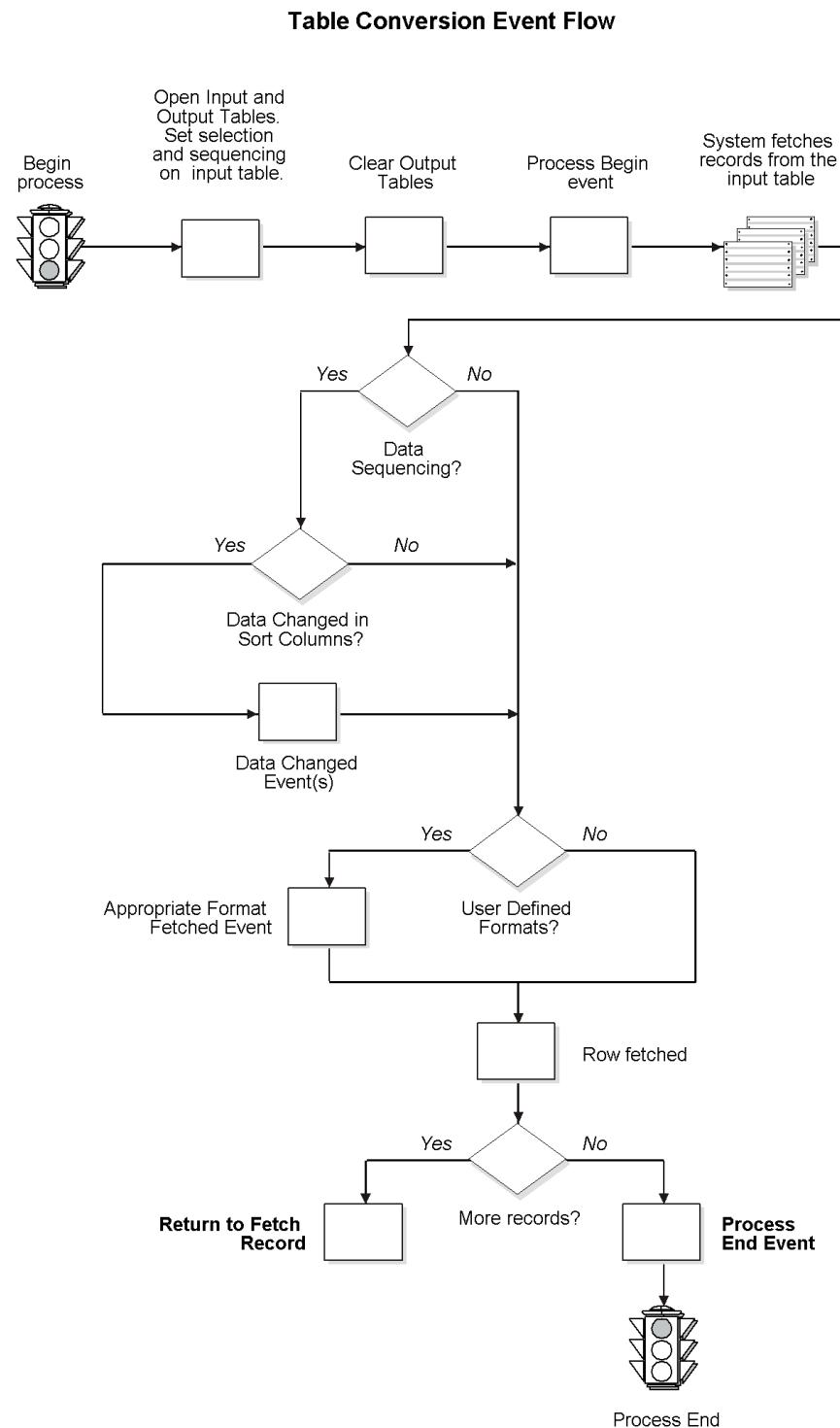
- If you are importing data from non-J.D. Edwards software tables, you must set up a data source and environment for those tables. For more information, see *Preparing Non-J.D. Edwards Software Tables for Table Conversion* in this guide.
- If you are mapping from multiple tables, you must create a joined business view over 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 *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 certain events, similar to the events that are triggered when a report or application is run. These events are specific to the conversion that you set up, and they also provide points where you can add logic to the conversion.

The event flow is generally the same for all table conversion types, such as Copy Data, Copy Data with Table Input, and Batch Delete because these conversion types are just 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. Moreover, 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. However, some events may not be triggered, depending on the type of the conversion you set up. In the graphic, events are shown as a yes or no decision.



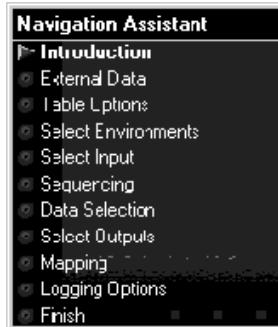
As shown in the graphic, events in table conversion occur in the following order:

Events in table conversion occur in the following order:

Process Begin	Before fetching any 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 individual 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) on 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 steps 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 can also 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

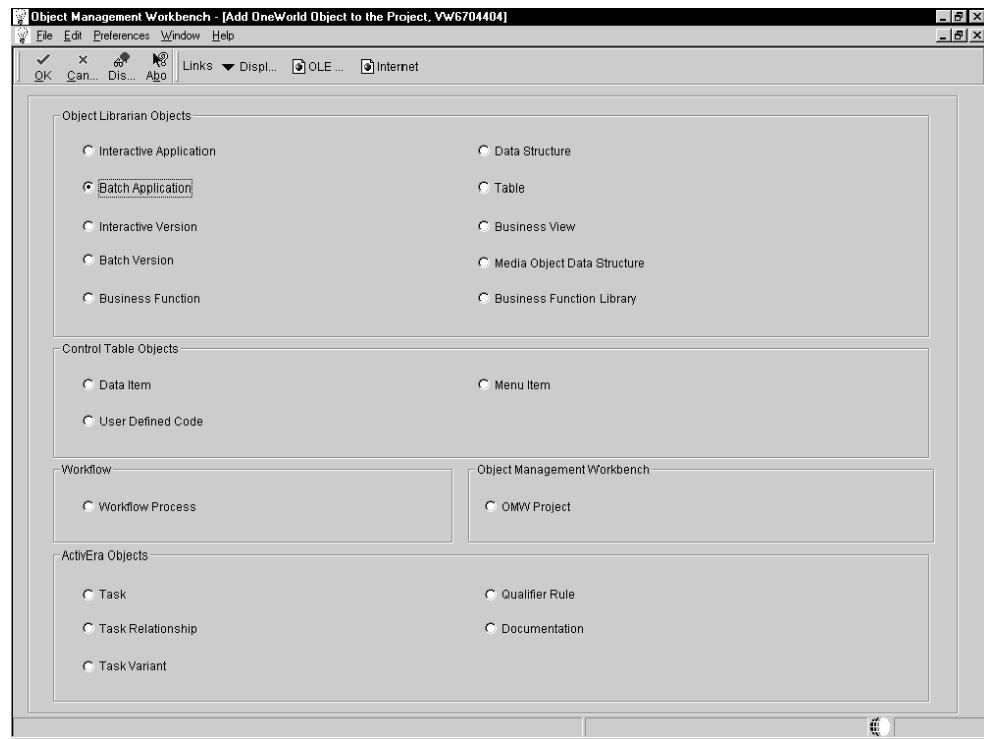
1. From Cross Application Development Tools (GH902), choose Object Management Workbench.

The Object Management Workbench appears.

2. Click Find.

3. Click the project to which the new batch process will be added, and then click Add.

The Add OneWorld Object to the Project form appears.



4. Select Batch Application and click OK.

The Add Object form appears.

5. On Add Object, complete the following fields:

- Description
- Product Code
- Product System Code
- Object Use

6. Click the Table Conversion option, and then click OK.

The Batch Application Design form appears.

7. 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 as described in:

- ❑ *Converting Data*
- ❑ *Copying Data*
- ❑ *Copying Data with Table Input*

- Deleting Records*

Converting Data

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 through a business view
- A single text file

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 alter the conversion, if necessary.

Defining External Data

In some cases, you may need to apply a processing option template or a data structure to external data before it is converted.

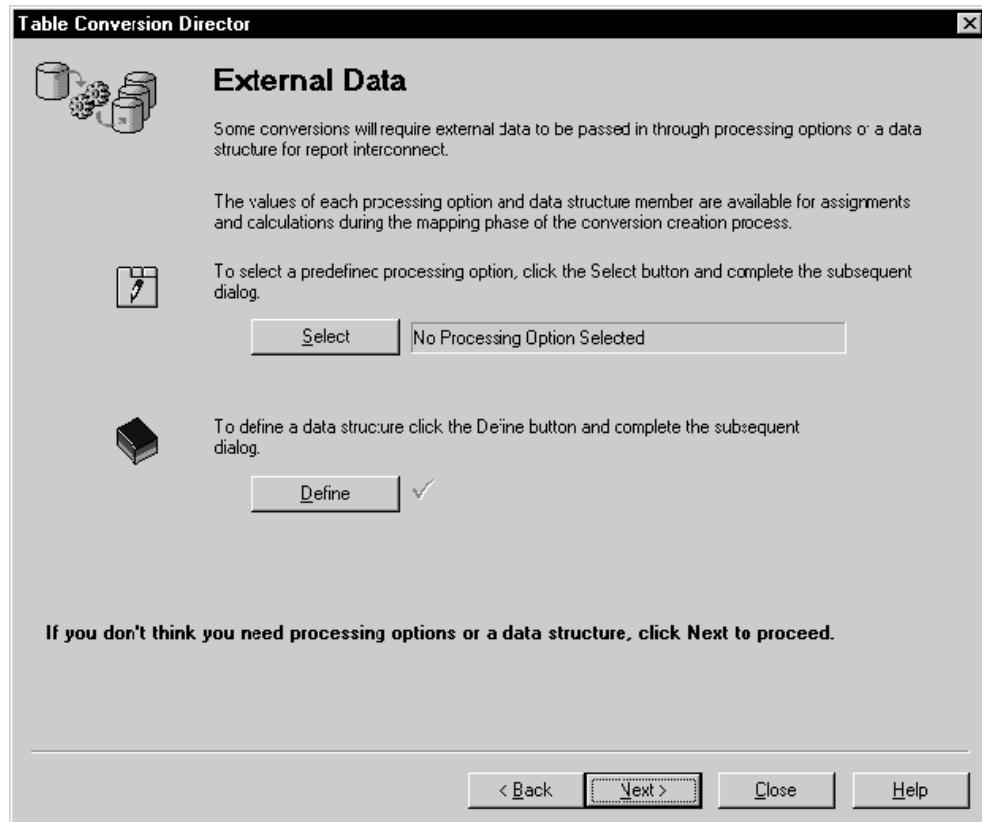
Before You Begin

- Create a batch application object. See *Using the Table Conversion Director* 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, choose the Data Conversion 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 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 then click OK.
6. Click Next.

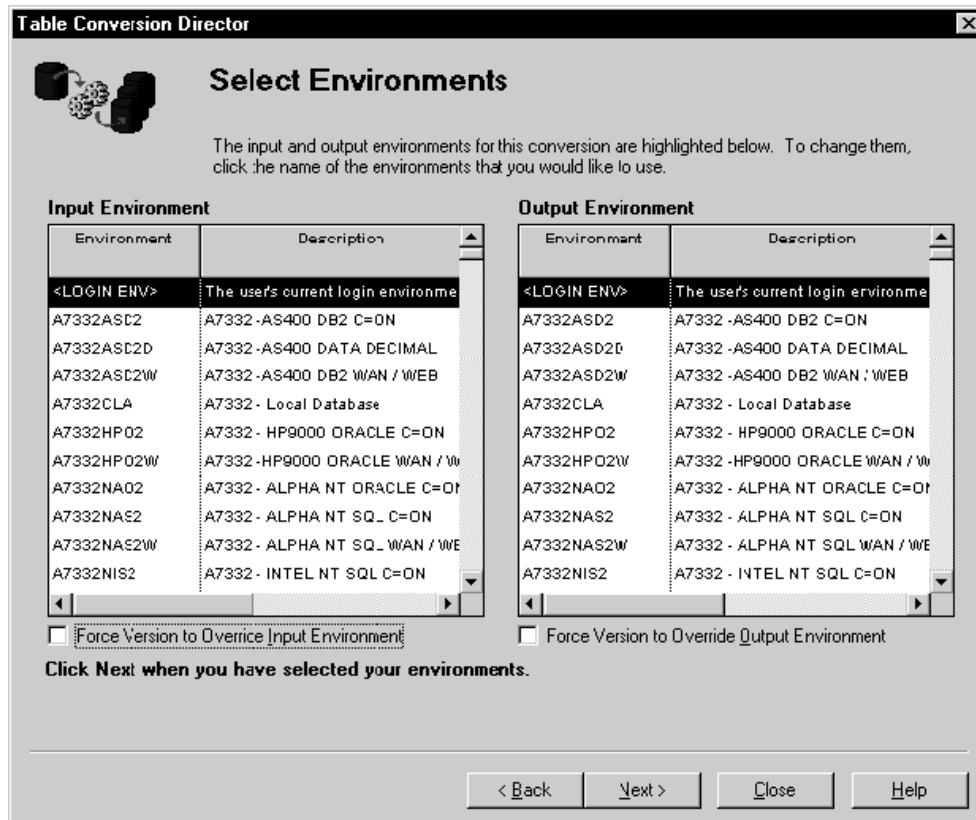
See Also

- Data Structures in the Development Tools.*

Defining Input and Output Environments

You may define a different environment for the input and the output.

After you click Next from External Data as described in the previous task, the Select Environments form appears.



► To define input and output environments

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

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, and the environment they log into will always be appropriate.

2. Choose the Force Version to Override Input Environment or the Force Version to Override Output Environment 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

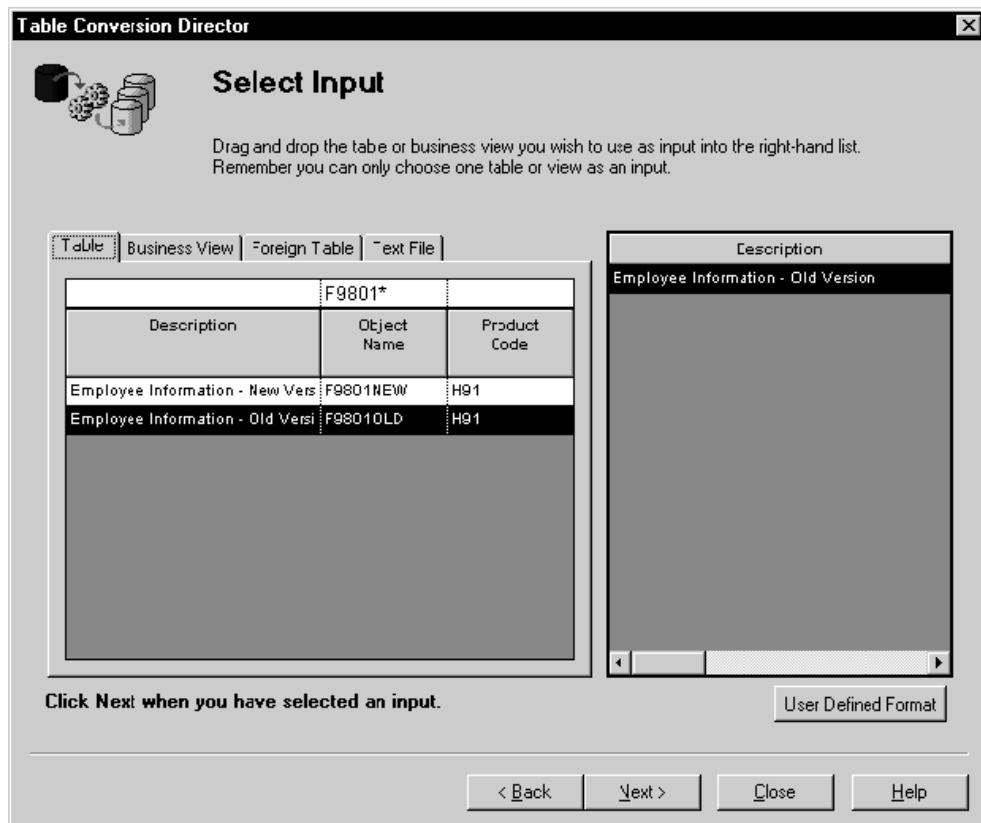
Override option. When the conversion is invoked at the client site, the system will not run the conversion until the user chooses an appropriate environment in which to run it.

3. Click Next.

Defining Input

Conversion input may originate from a table, business view, or text file. You can select only one input object.

After you click Next from Select Environments as described in the previous task, the Select Input form appears.



► To define input

1. On Select Input, 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.

For a text file conversion, choose the file on the Text File tab.

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

Note

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 using a text file, or if you need to define a user-defined format for a table or business view, click User-Defined Format and follow the steps described in *Defining User-Defined Formats*. When you complete those steps, return here.
3. To delete an input name, choose it and press Delete.
4. Click Next.

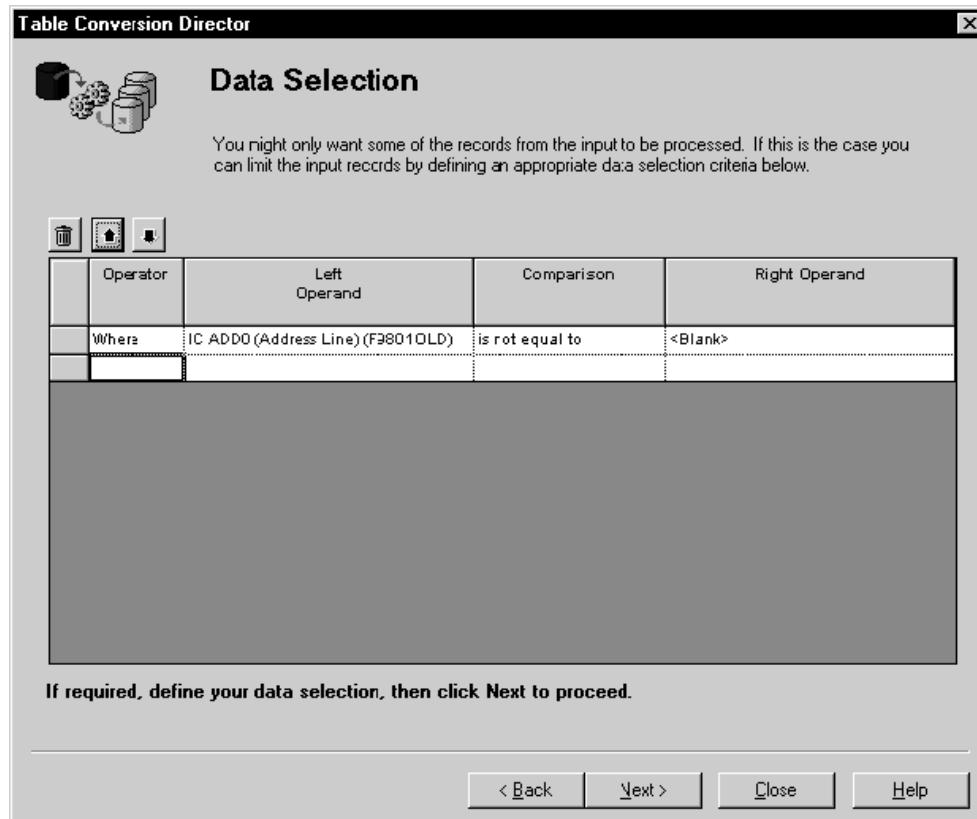
The Sequencing form appears.

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 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.



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

7. On Data Selection, *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 word.

8. Click in the Left Operand column to display the list of available objects, 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 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.

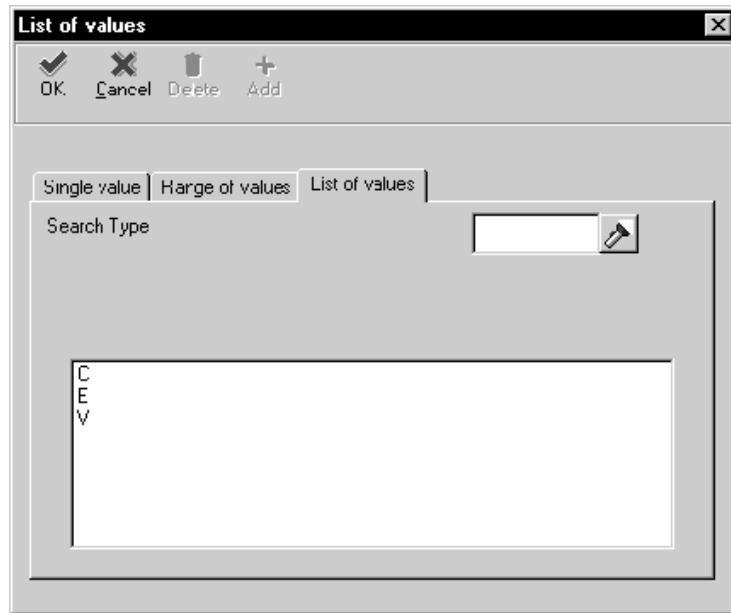
9. Select one of the following comparison operators:

- 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
10. Click in 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

11. 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 a 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.

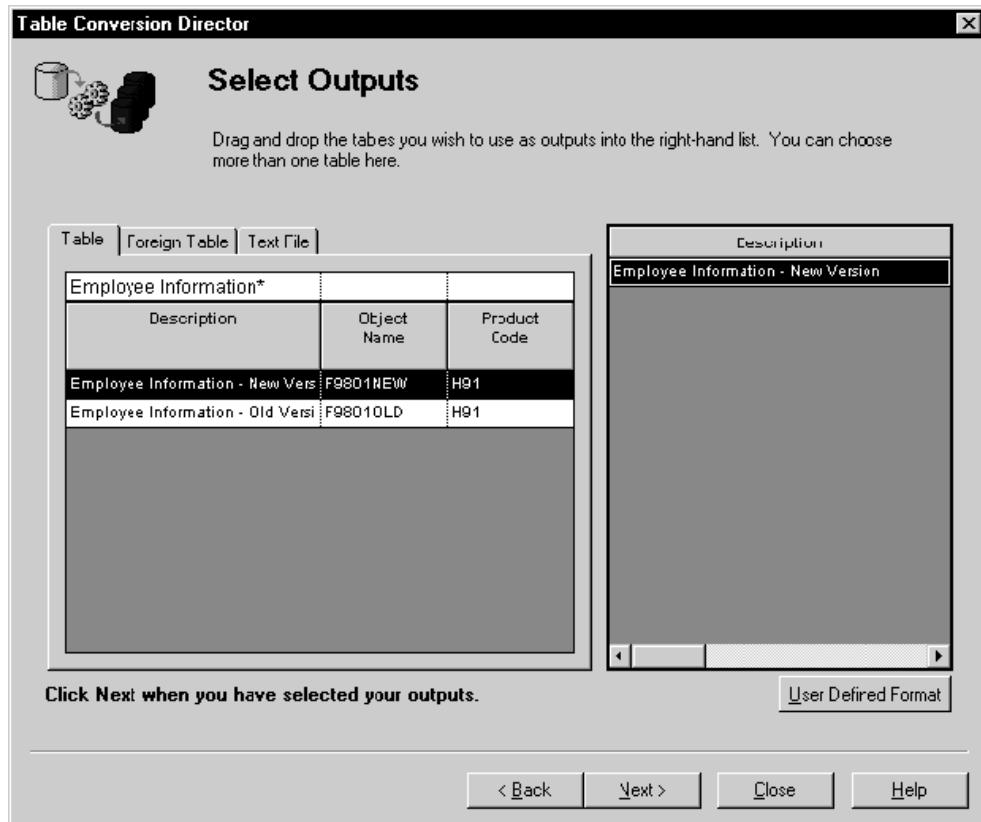


12. To delete a line of criteria on Data Selection, choose the row header to highlight the row, and then click the Delete button at the top of the form.
13. To change the order of the criteria, choose the row header to highlight the row, and then click the up or down button.
14. Click Next.

Defining Output

You can output to a table or text file. You can choose multiple outputs per conversion.

After you click Next from Data Selection as described in the previous task, the Select Outputs form appears.



► To define output

1. On Select Outputs, drag the table or tables that you want to use as your outputs to the list on the right and click Next. For text file conversions, choose the file on the Text File tab.
2. To delete an output, choose the row and press Delete.
3. 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 *Defining User-Defined Formats*.
4. Click Next.

The Table Options form appears.

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

- 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.

Anytime 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 of 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.

- Clear Output
- Force Row by Row

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. You can either specify the number of rows to process in the jde.ini file under [TCEngine] or specify the number of rows when you submit the conversion. See *Running a Table Conversion* for more information.

Another reason for forcing row-by-row processing is if you know that the values in the input table will produce duplicate keys in the output and you still want the non-duplicate keys to be inserted.

The disadvantage of forcing row-by-row processing is that it slows down the conversion process.

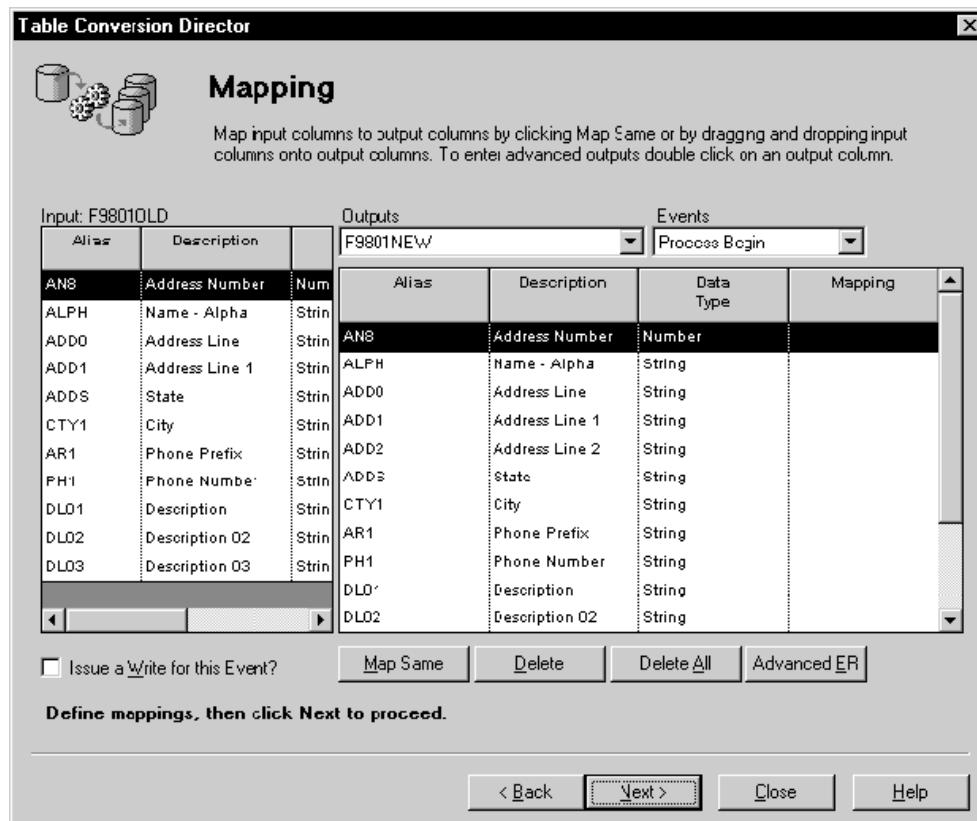
- Buffer Inserts to Output Tables

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.

6. Click Next.

Mapping Input to Output

After you click Next from Table Options as described in the previous task, the Mapping form appears.



► To map inputs to outputs

1. 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 the Advanced ER button 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 the 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 on an output column.

The Advanced Outputs form appears.

The Advanced Outputs 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, then choose the appropriate value, and then click the Apply button.
 - Literal: Choose the output column, enter the appropriate value, and click the Apply button.
 - Defaults: Choose the Use Dictionary Defaults option, and then click the Apply button.

Use this option if you want to use the default value in the data dictionary at run time. If there are no default values in the data dictionary, the system displays a warning message.
 - Calculation: Click the Define Calculation button and define a calculation in Expression Manager.
8. When you have finished defining an advanced input, click Apply, 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 would like.
10. Click Next.

See Also

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

Choosing Logging Options

Use logging options to record specific events that will occur during the conversion.

After you click Next as described in the previous task, the Logging Options form appears.

► To choose logging options

1. On Logging Options, choose one or more logging options, if applicable.
 - Log All Errors
 - Delete All Selected Records

- Event List
- 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. For example, if you insert the same record twice, 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.

Reviewing the Results of the Director

After you click Next from Logging Options as described in the previous task, the Finish form appears.

► To review the results of the director

1. Click Finish on the Finish form to complete the process.
The system displays the Properties form and Table Conversion Mappings form.
2. Choose the Table Conversions Mappings form and review your choices.
3. Make changes as necessary by choosing the appropriate option from the View menu. If satisfied, click Save.
4. From the Conversion menu, choose Exit.

See Also

- *Reviewing Your Table Conversion.*

Understanding User-Defined Formats

User-defined formats are the table conversion tool's way of dealing with 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 like relational database tables do. Flat files are usually 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:

Doe	John	123 Main	Anytown	5551234
Last	First	Addr	City	Phone

← database column

This 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-AS400 platforms will be:

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:

\B733\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

Note

If you are using user-defined input formats and do not add an event rule at the Format Fetched event, the system ignores the format, and the data from the input table is never made available to the conversion. Therefore, you must add some sort of event rule logic to the Format Fetched event. At the very least, add a comment in Event Rules.

Using User-Defined Formats as Output

The requirements for using user-defined formats as output are basically the same as for using user-defined formats as input. 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.

Defining User-Defined Formats

A table conversion will not work with data that is formatted in a table.

► 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, and then click User Defined Format.

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, specify whether 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:
17. For each column, repeat steps 13 through 16.
18. To edit an existing column, select 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**

1. Click User Defined Format.

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 Formats, the system displays the Multiple Formats Definition 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. For instance, Start Position defines where the column starts. 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 for the third format.

Tip: 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.

Tip: 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.

The New Column Properties form appears.

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

13. For each column, repeat steps 11 through 12.

14. To edit an existing column, select 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 Data Sequence* in the *Enterprise Report Writing Guide* for information about how to determine a sort sequence for a batch process
- ❑ *Reviewing Your Table Conversion*
- ❑ *Using Event Rules in a Table Conversion*
- ❑ *Running a Table Conversion*

Copying Data

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 can also 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 alter the conversion, if necessary.

Defining External Data

In some cases, you may need to apply a processing option template or a data structure to external data before it is converted.

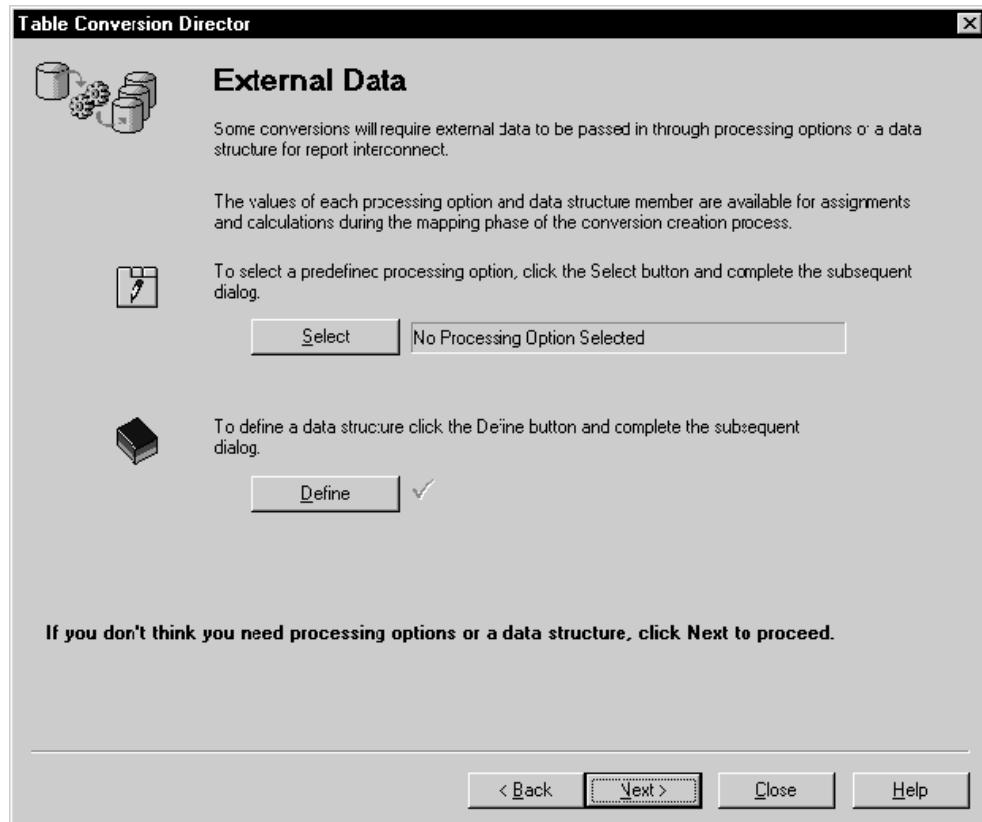
Before You Begin

- ❑ Create a batch application object. See *Using the Table Conversion Director* 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, 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.
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.
6. Click Next.

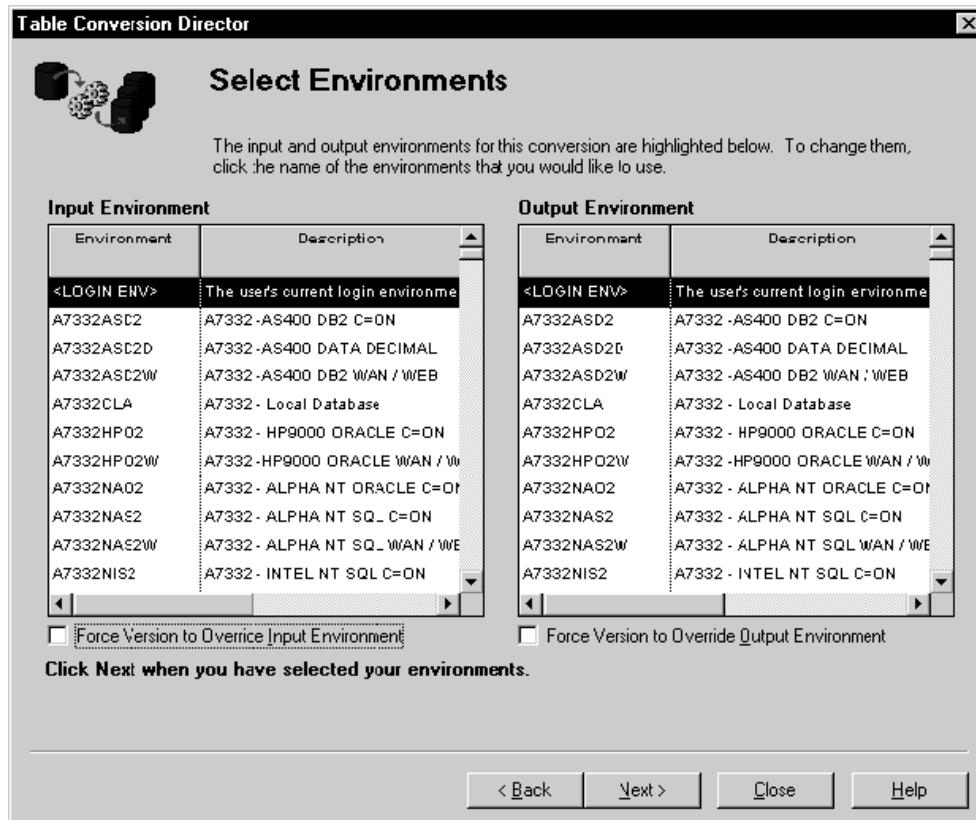
See Also

- Data Structures* in the *Development Tools Guide* for more information.

Defining Input and Output Environments

You may define a different environment for the input and the output.

After you click Next from External Data as described in the previous task, the Select Environments form appears.



► To define input and output environments

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

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, and the environment they log into will always be appropriate.

2. Choose the Force Version to Override Input Environment or the Force Version to Override Output Environment 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.

Defining Data Copy Actions

After you click Next as described in the previous task, the Select Actions form appears.

Select Actions

To add an action fill in appropriate values in the grid below. Required values are: "Table," "Source Type," "Input Source," "Output Source," "Create," "Clear," and "Copy". Values can be literals or any available object.

	Table	To Table	Source Type	Input Source	Output Source	Create	Clear	Copy	Owner
	"FO101"	<None>	<Environment>	SL.SourceEnv	SL.TargetEnv	<If Tabl	<No>	<Yes>	<None>
	"FO301"	"FO3012Z1"	<Environment>	SL.SourceEnv	SL.TargetEnv	<Yes>	<No>	<Yes>	<None>

Define actions, then click Next to proceed.

► To define data copy actions

1. On Select Actions, complete the following fields. Use the drop-down lists in each field to make your choice.

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

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.

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.

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. This allows the specifications to be different in the input and output environment, but the data still gets copied. In this case, the system performs a "copy-map-drop."

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

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

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.

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.

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.

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.
3. 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.

4. 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.

5. Click Next.

See Also

- Using Event Rules in Table a Conversion* for information about system functions.,
- Using Event Rules in a Table Conversion.*

Choosing Logging Options

Use logging options to record specific events that will occur during the conversion.

After you click Next as described in the previous task, the Logging Options form appears.

► To choose logging options

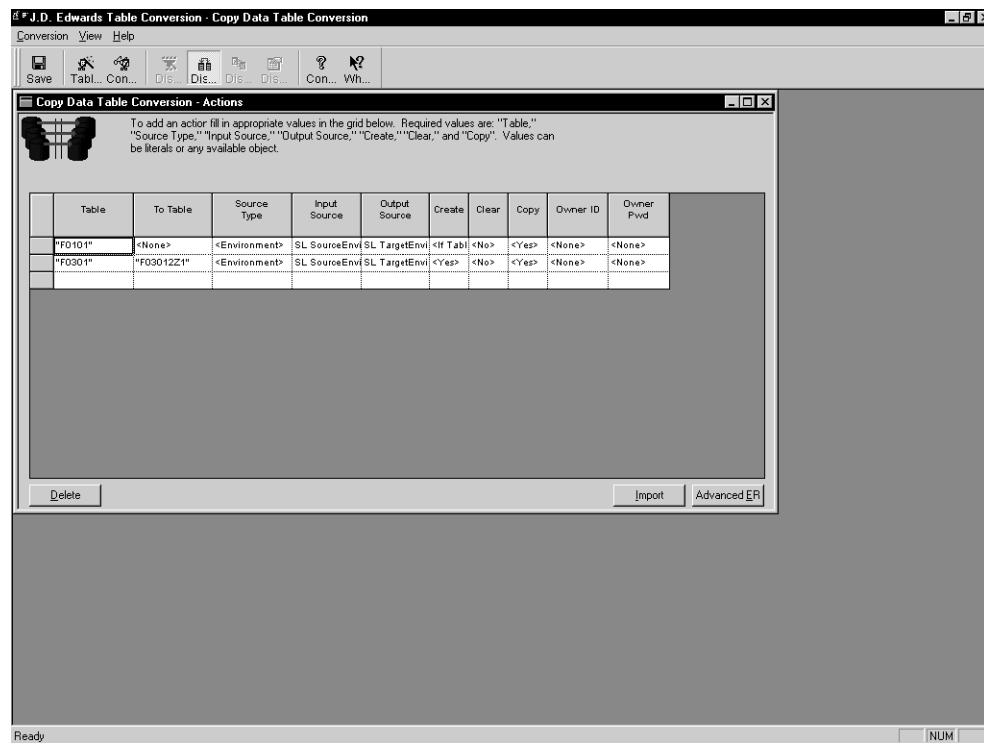
1. On Logging Options, choose one or more logging options, if applicable.
 - Log All Errors
 - Trace Level
 - Log Details of Copy Table Actions
2. If you want to preview the actions of the table conversion before you run the actual conversion, choose the *Run in Proof Mode* option.
3. Click Next.

Reviewing the Results of the Director

After you click Next from Logging Options as described in the previous task, the Finish form appears.

► To review the results of the director

1. Click Finish on the finish form to complete the process.
The system displays Table Conversion Actions.



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

You can now run the table conversion.

See Also

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

Copying Data 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 do data selection.

For example, suppose 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 how often they should be archived. You can then use Data Copy with Table Input to select all rows in which the backup date is less than or equal to today's date, and then 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 alter the conversion if necessary.

Defining External Data

In some cases, you may need to apply a processing option template or a data structure to external data before it is converted.

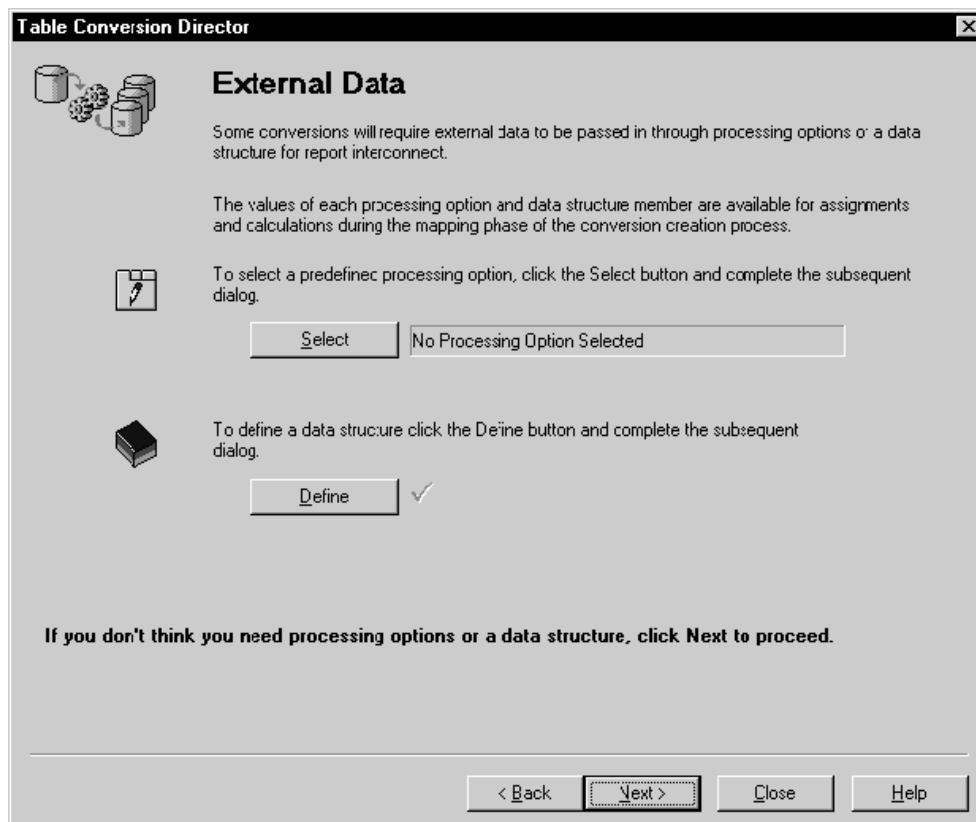
Before You Begin

- Create a batch application object. See *Using the Table Conversion Director* 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, 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.

The Select Processing Option Template form appears.

3. On Select Processing Option Template, 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.
6. Click Next.

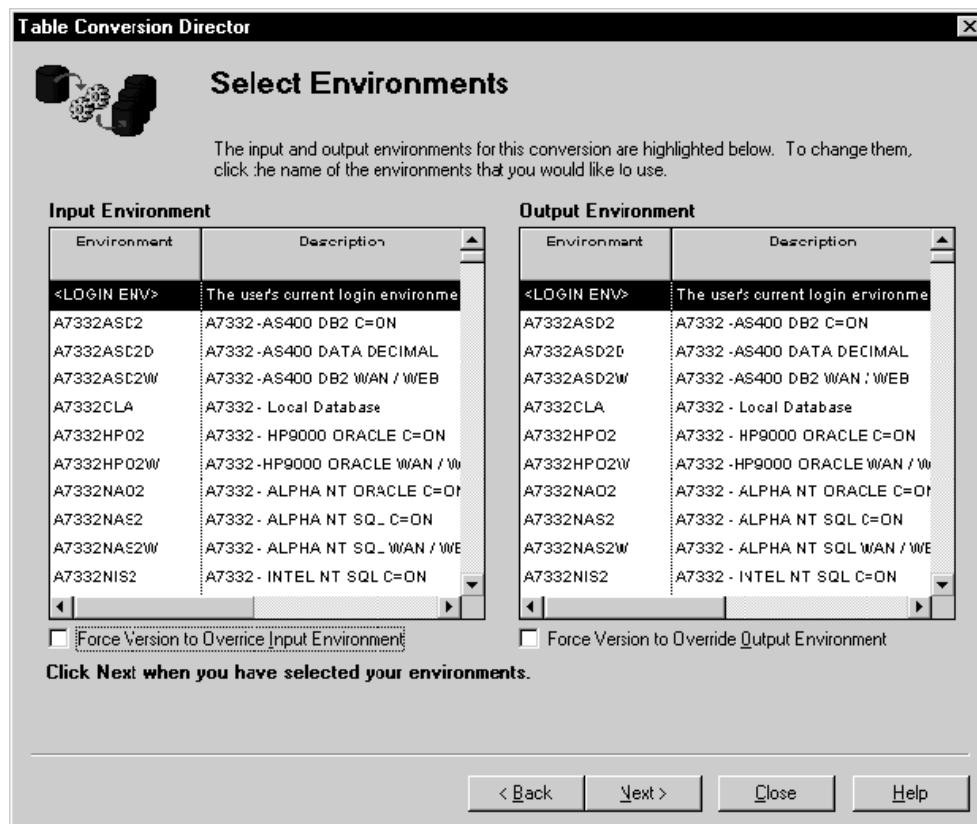
See Also

- ❑ *Data Structures in the Development Tools.*

Defining Input and Output Environments

You may define a different environment for the input and the output.

After you click Next from External Data as described in the previous task, the Select Environments form appears.



► To define input and output environments

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

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, and the environment they log into will always be appropriate.

2. Choose the Force Version to Override Input Environment or the Force Version to Override Output Environment 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.

Defining Input

Conversion input may originate from a table, a business view, or a flat file. You may select only one input object.

The input table in this conversion scenario acts as a control table. Event rules that you create governing whether data is copied is based on the input table you choose in this part of the process.

After you click Next from Select Environments as described in the previous task, the Select Input form appears.

► To define input

1. On Select Input, 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.

Tip: 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.

Note

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 and follow the steps described in *Defining User-Defined Formats*. 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.

The screenshot shows the 'Table Conversion Director' application window with the title 'Data Selection'. The interface includes a toolbar with icons for back, forward, and close, and a message area stating: 'You might only want some of the records from the input to be processed. If this is the case you can limit the input records by defining an appropriate data selection criteria below.' Below this is a table with four columns: 'Operator', 'Left Operand', 'Comparison', and 'Right Operand'. A single row is present with the operator 'Where', left operand 'IC ADD0 (Address Line) (F3801OLD)', comparison 'is not equal to', and right operand '<Blank>'. At the bottom, a note says 'If required, define your data selection, then click Next to proceed.' and a footer bar contains buttons for '< Back', 'Next >', 'Close', and 'Help'.

Operator	Left Operand	Comparison	Right Operand
Where	IC ADD0 (Address Line) (F3801OLD)	is not equal to	<Blank>

7. On Data Selection, 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.

8. Click in 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.

9. Select 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
10. Click in 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

11. 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.

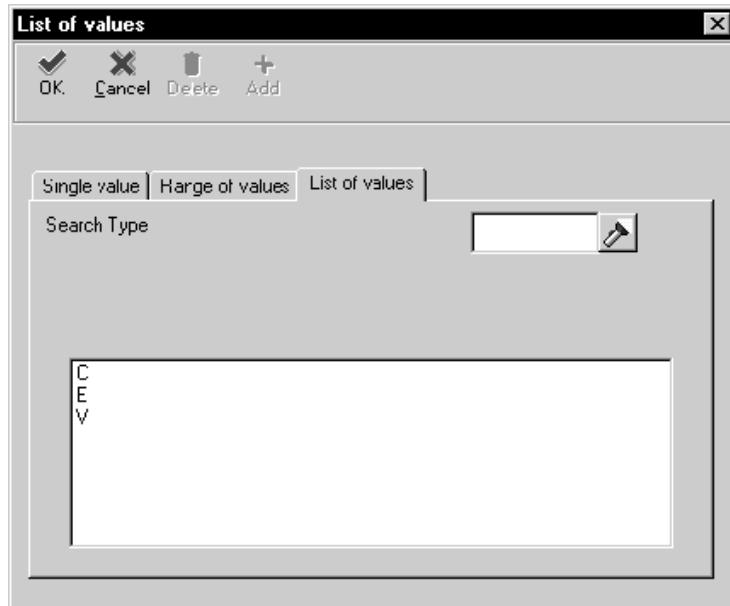
- Range of values

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, then click the Delete button at the top of the form.
- 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 at the top of the form.
13. To change the order of the criteria, choose the row header to highlight the row, then click the up or down button.
14. Click Next.

The Table Options form appears.

15. 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. Anytime 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. 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.

16. Click Next.

See Also

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

Defining Data Copy Actions

After you click Next as described in the previous task, the Select Actions form appears.

Select Actions

To add an action fill in appropriate values in the grid below. Required values are: "Table," "Source Type," "Input Source," "Output Source," "Create," "Clear," and "Copy". Values can be literals or any available object.

	Table	To Table	Source Type	Input Source	Output Source	Create	Clear	Copy	Owner
	"F0101"	<None>	<Environment>	SL.SourceEnv	SL.TargetEnv	<If Table>	<No>	<Yes>	<None>
	"F0301"	"F03012Z1"	<Environment>	SL.SourceEnv	SL.TargetEnv	<Yes>	<No>	<Yes>	<None>

Define actions, then click **Next** to proceed.

◀ | ▶

► To define data copy actions

1. On Select Actions, complete the following fields. Use the drop-down lists in each field to make your choice.

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

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.

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.

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. This allows the specifications to be different in the input and output environment, but the data still gets copied. In this case, the system performs a "copy-map-drop."

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

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

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.

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.

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.

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.
3. 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.
4. 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.
5. Click Next.

Choosing Logging Options

Use logging options to record specific events that will occur during the conversion.

After you click Next as described in the previous task, the Logging Options form appears.

► To choose logging options

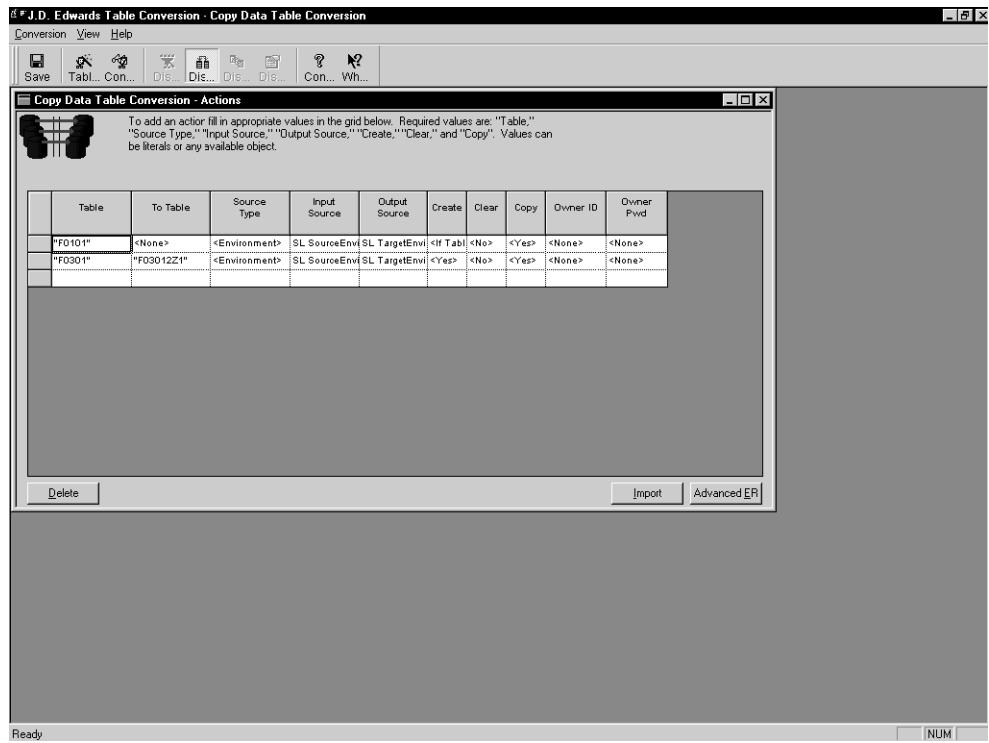
1. On Logging Options, choose one or more logging options, if applicable.
 - Log All Errors
 - Delete All Selected Records
 - Log Deletes
 - Log Updates
 - Trace Level
 - Log Details of Copy Table Actions
2. If you want to preview the actions of the table conversion before you run the actual conversion,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

Reviewing the Results of the Director

After you click Next from Logging Options as described in the previous task, the Finish form appears.

► To review the results of the director

1. Click Finish on the finish form to complete the process.
The system displays Table Conversion Actions.



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

You can now run the table conversion.

See Also

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

Deleting Records

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 invalid 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 alter the conversion, if necessary.

Defining External Data

In some cases, you may need to apply a processing option template or a data structure to external data before it is converted.

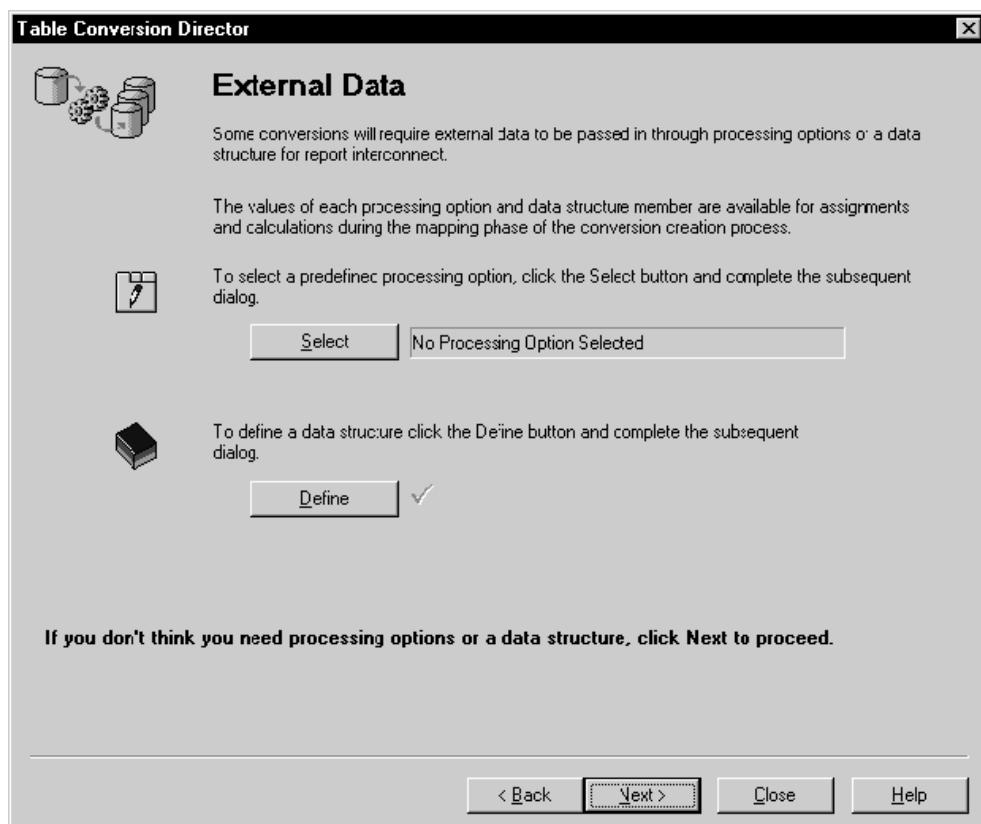
Before You Begin

- Create a batch application object. See *Using the Table Conversion Director* 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, 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. See *Data Structures* in the *Development Tools Guide* for more information.

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

Defining the Environment

After you click Next from External Data as described in the previous task, the Select Environment form appears.

► To define the environment

1. On Select Environment, 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 into will always be appropriate.

2. Choose the "Force Version to Override Input Environment" or "Force Version to Override Output Environment" 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 are creating 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.

Defining Input

Conversion input may originate from a table. You may select only one input object.

After you click Next from Select Environment as described in the previous task, the Select Input form appears.

► To define input

1. On Select Input, drag the table to the column on the right. You can choose only one table per conversion.

Tip: If you know the name of the table that you want to use, enter the name in the Name field in the QBE (query by example) row and press Enter. Or 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.

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 will not know how many decimal places exist in each column. Anytime 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.

The Data Selection form appears.

5. On Data Selection, 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.

6. Click in 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 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.

7. Select 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 in 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.

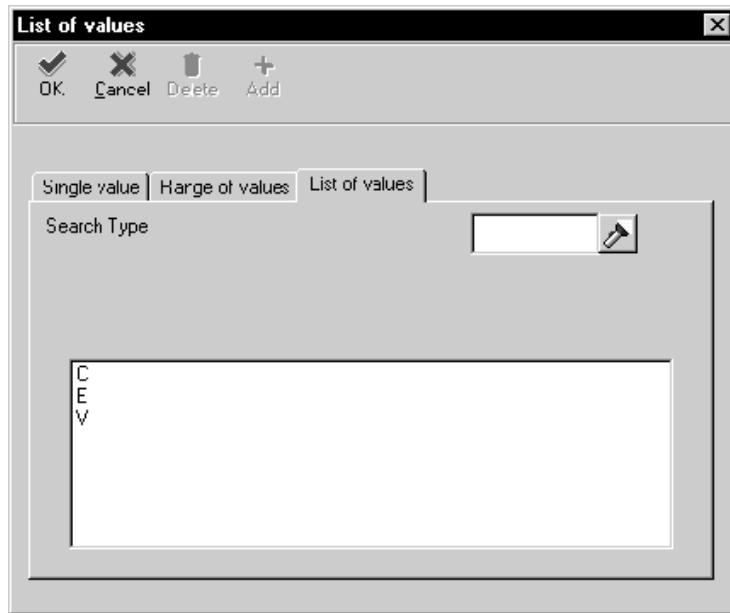
- Range of values

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.

See *Using Event Rules in a Table Conversion* for more information about table conversion event rules.
15. Click Next.

Choosing Logging Options

Use logging options to record specific events that will occur during the conversion.

After you click Next as described in the previous task, the Logging Options form appears.

► To choose logging options

1. On Logging Options, 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.

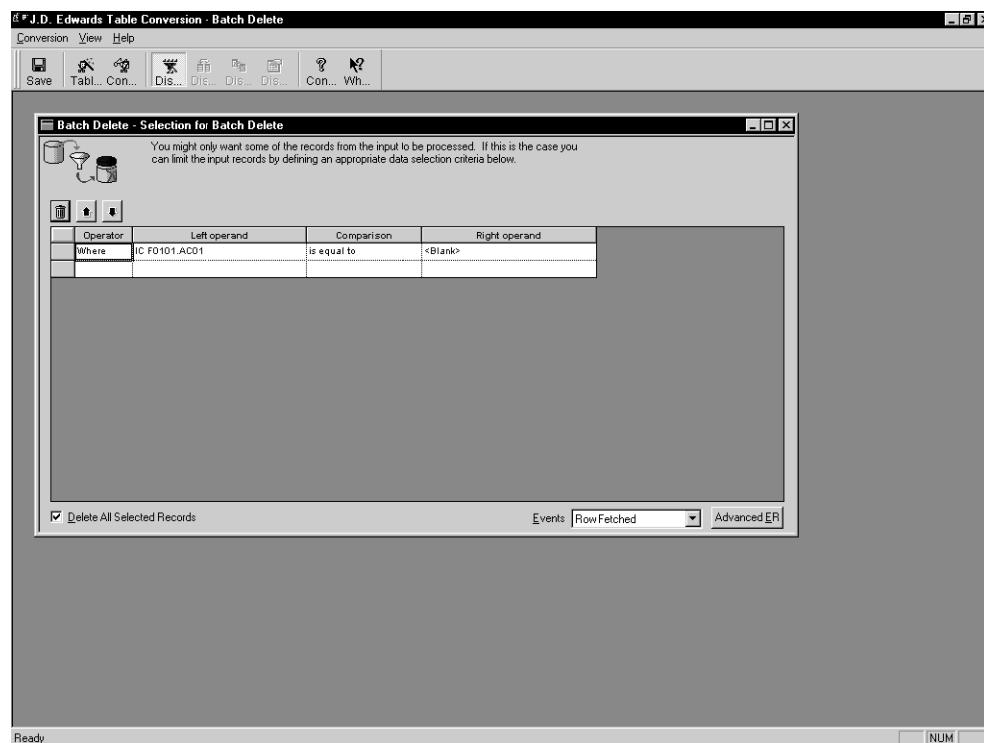
Reviewing the Results of the Director

After you click Next from Logging Options as described in the previous task, the Finish form appears.

► To review the results of the director

1. Click Finish on the Finish form to complete the process.

The system displays the Selection for Batch Delete form.



2. 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.
3. From the File menu, choose Exit.

You can now run the conversion.

See Also

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

Reviewing Your Table Conversion

You can review your table conversion after you create it using the Table Conversion Properties form. This form has multiple tabs and presents the same options as the Director. You can also review processing options, data structures, data sequencing, and data selection by choosing them from the Conversion menu. Each of the tabs on the form works identically to the forms in the Table Conversion Director.

► To review your table conversion

1. On Table Conversion, from the View menu, choose Table Conversion Properties. The Table Conversion Properties form appears.
2. On Table Conversion Properties, you can 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.

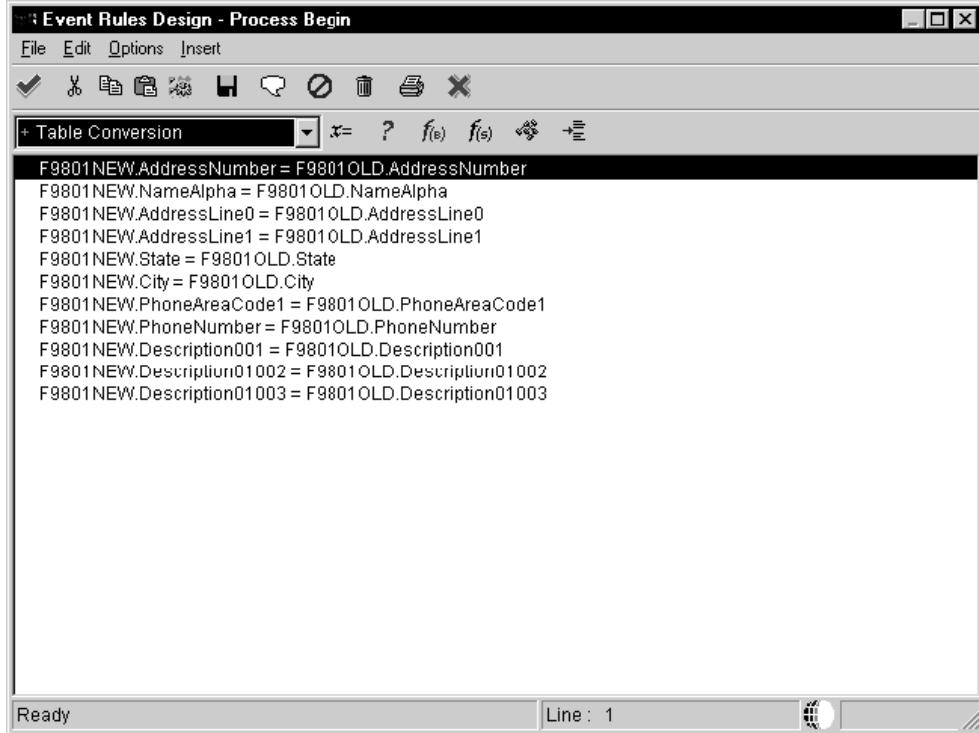
See *The Flow of Events in Table Conversion* for more information about table conversion events.

Event rules in table conversion include system functions that are specific to the table conversion tool. For a list of these system functions and an explanation of each, see *Table Conversion System Functions* at the end of this chapter.

► To use event rules in a table conversion

1. On the appropriate form in a data conversion, data copy, or data copy with table input (or Data Selection for Batch Delete), choose the event to which you want to add event rules from the Events drop-down list.

- Click the Advanced ER button.



- On Event Rules Design, choose any of the following buttons to define specific business logic:
 - Assignment:** An 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:** Create If and While logic statements, which are conditional instructions for an event rule.
 - Business Function:** You can attach 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:** You can attach an existing J.D. Edwards system function, such as Copy Table Environment or User Insert Row.

See *Table Conversion System Functions* for more information. You can also look them up online under *Tools APIs*.

 - Variables:** You can attach variables to accumulate totals, attach variables that conditionally control what you write to a file, keep a tally of the number of records you read in, and so on.
 - Else:** Create Else logic statements. When you create an If statement, an Else statement is automatically inserted after the If statement.
 - Table I/O:** 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, 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.

See *Table I/O* in the *Development Tools Guide* for more information.

- Report Interconnect: You use report interconnect to connect 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.

Table Conversion System Functions

An explanation of each system function within event rules that you can use within a table conversion follows:

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 the 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 the specifications in the input and output environment. If the specifications differ, the system performs a "map and drop," meaning that it creates a mapping between like fields in the source and destination tables, and all other fields are ignored.
TCInsertRow	This system function is inserted by the table conversion system when you choose the "Issue a write for this event?" option, and it cannot be moved. It 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 be appended to 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 prior to calling SetUserSelection to determine whether to replace or append to 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 proceeds one row at a time, this designation 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.

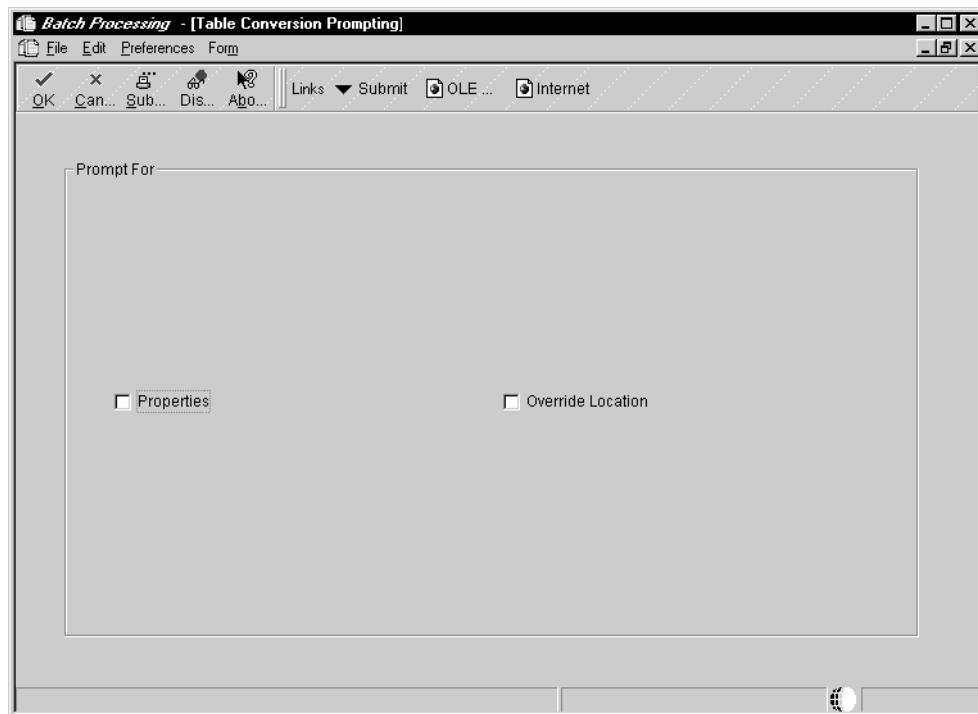
► To override the table conversion properties

Note

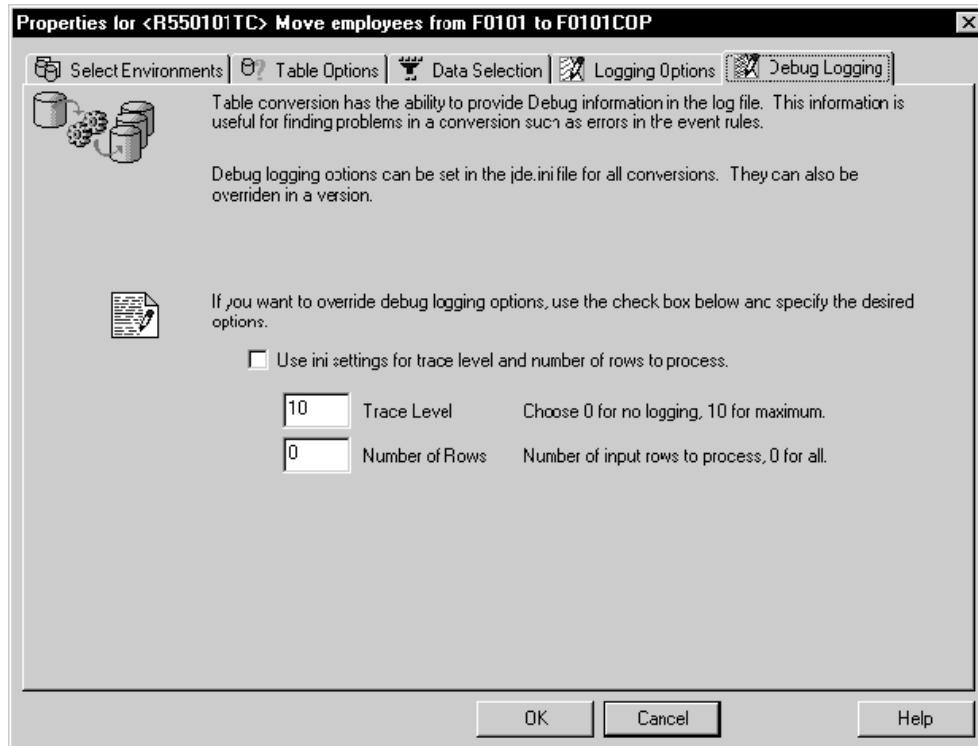
If you click Cancel while overriding the properties, J.D. Edwards software will not save your changes to the version. To change the properties of the version without running it, on Work With Batch Versions, choose Properties from the Row menu.

1. On Work With Batch Versions, add a batch version if you did not choose the Auto Create option when you set up the table conversion.
2. On Work With Batch Versions, highlight the version and click Select.

The system displays Table Conversion Prompting.



3. On Table Conversion Prompting, choose the Properties option and click Submit.
The system displays the Properties form.



4. On Properties, you can review and override the environments, table options, data selection, and logging options that you specified within the conversion. Note that you can edit these options the same way as when you set up the table conversion. The forms are basically 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 overrides 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.

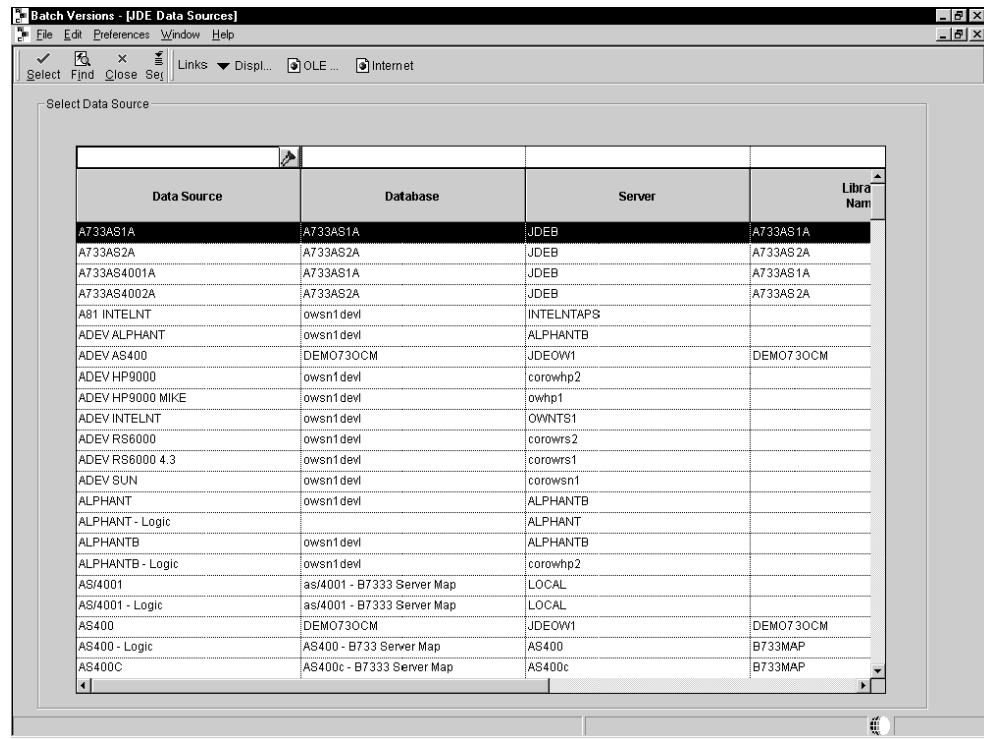
See *Testing a Table Conversion* for more information about StopAfterRow.

6. Click OK to save your changes to the version. The system submits the table conversion.

► **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.

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 there are no errors within it. To do this, you can log debug information about the conversion while it runs. You can also force the conversion to run one row at a time, which is useful if the conversion is normally running 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 that you want the logged information to be.

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

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 applicable. If you set your trace level at 10, the system logs all information about every column in every format, including user-defined formats, whether there is a processing option template associated with the table conversion, and all other information that is involved in the table conversion process. In other words, the higher you set the trace level, the more information the system supplies 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

The logging options that 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, on the other hand, logs more detailed information about the conversion. This information can help you pinpoint the exact area in the conversion where errors occurred.

Note

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

Trace Levels

The following table presents specific information about 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, if applicable.
Level 2	Logs function call traces, such as starting conversion, ending conversion, inserting rows.
Level 3	Logs the points at which event rules are being 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 prior to 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. See *Submitting a Table Conversion* for more information.

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

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

```
[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

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

```
[TCEngine]  
  
TraceLevel=n  
  
(Where n is a number from 0 through 10.)  
  
[Debug]  
  
Output=File  
  
KeepLogs=1
```

See Also

- *System Administration Guide* for more information about tracing
- *Server and Workstation Administration Guide* for information about reading logs

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

To force row-by-row conversion, add the following to the jde.ini file:

```
[TCEngine]
```

```
ForceRowByRow=1
```

► To specify the number of rows to process

To specify the number of rows to process, add the following to the jde.ini file beneath the [TCEngine] header:

```
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 is not recognized by J.D. Edwards software, as long as 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 the 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

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

The Machine Search & Select form appears.

2. Highlight the machine on which the data source resides and click Select.

The Work with Data Sources form appears.

3. Click Add.

The Data Source Revisions form appears.

4. Complete the following fields and click OK:

- 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.

- Data Source Name

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

- Data Source Type

Enter A (Access) in this field if you are using an Access data source or text data source.

- Object Owner ID

- Library Name

- Library List Name

- DLL Name

Enter the name of the DLL you want to use to access the foreign table. The correct DLL will depend on the platform and the database of the foreign table.

To see a list of the DLLs and their use, see the online help.

- Database Name

This name should be the same as the ODBC or Oracle data source name.

- Server Name

- Platform

5. Click OK.

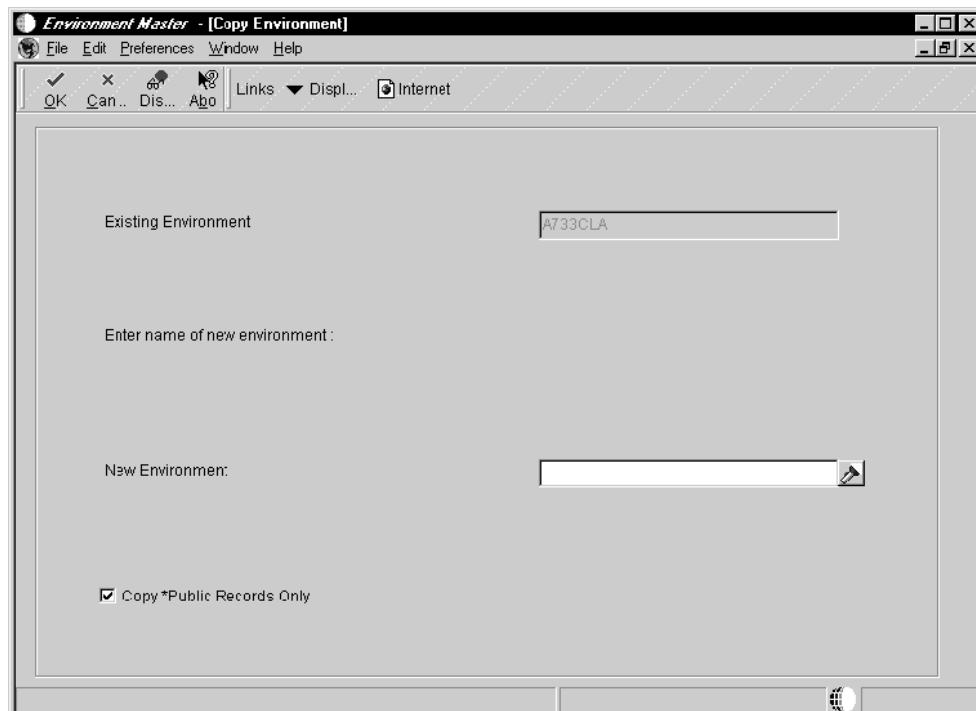
Adding a J.D. Edwards Software Environment

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. If you need more information about environments, see the *CNC Implementation Guide*.

► To add a J.D. Edwards software environment

1. On Environments (GH9053), choose Environment Master.
2. 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 into, or any other environment you can access from your workstation), and then choose Copy Environment from the Row menu.



3. On Copy Environment, type an environment name in the New Environment field.
4. To copy only the *PUBLIC Object Configuration Manager mappings of an environment, choose the *PUBLIC Records Only option.
Leave this option turned off to copy mappings for the environment, individual users, and *PUBLIC.
5. Click OK.

See Also

- *Working with an Environment* in the *CNC 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 select 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 there is no inherent default location 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

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

The Machine Search and Select form appears.

2. Choose the data source that stores the Object Configuration Manager table with which you want to work, and then click Select.

The Work with Object Mappings form appears.

See *Understanding Data Sources and Working with the Object Configuration Manager* in the *Configurable Network Computing Implementation Guide* for more information about data sources.

3. Click Add.

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

4. 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 would 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.

5. Click OK to save your object mapping.

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

6. 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

Appendices

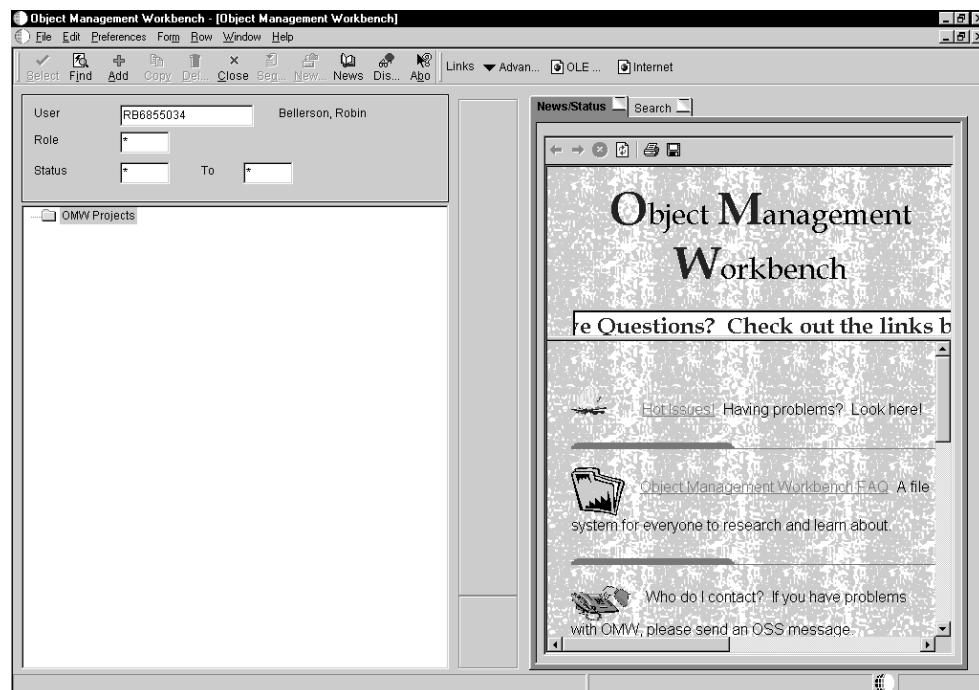
Table Conversion Examples

This section contains two examples of table conversions. These examples give you a better understanding of how advanced table conversions can be set up.

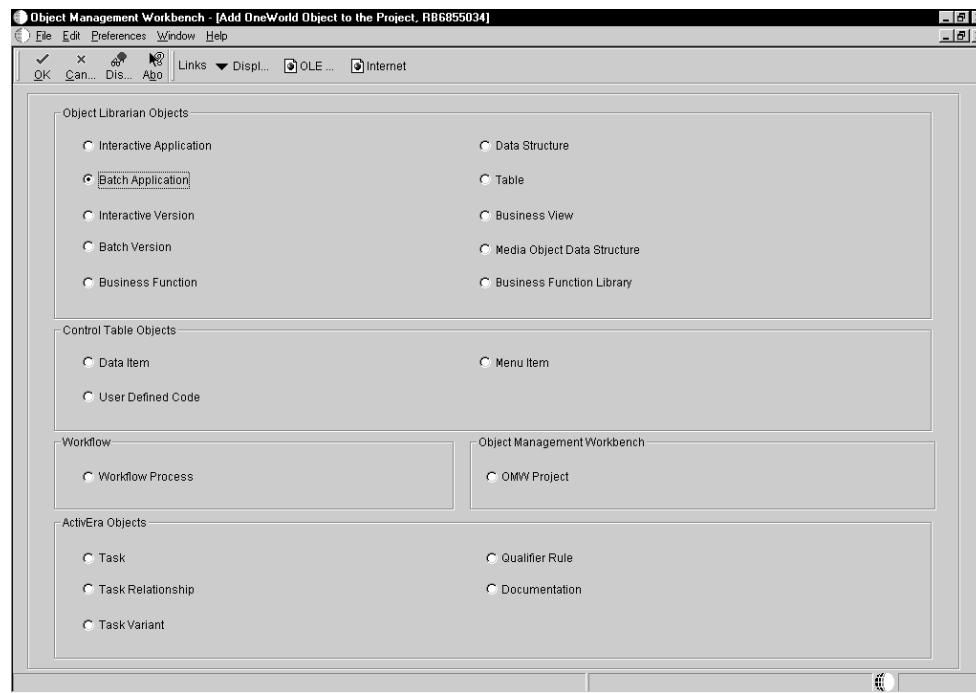
Example: Batch Delete/Update

This table conversion was created using the Batch Delete option, but it does not actually delete records. Instead, it is meant as an example of how you can use a batch delete conversion to do general batch processing over a single table. You can create a table conversion such as this by using the data conversion option, but 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:



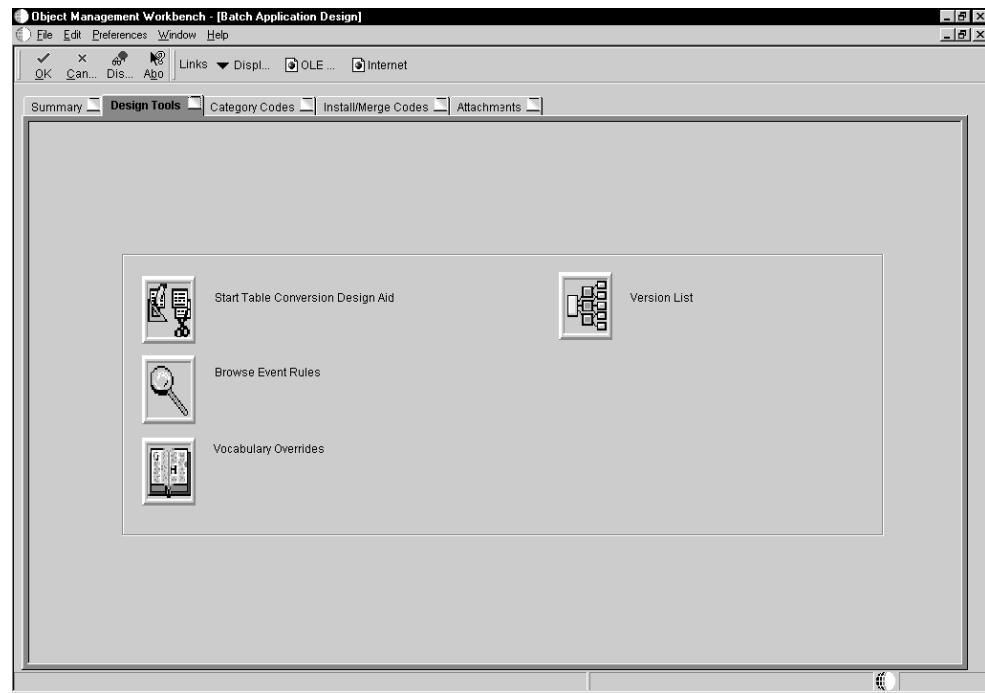
After you choose Batch Delete from the Introduction form of the table conversion director, specify whether you want to include processing options and data structures. In this example, no processing options or data structures are used.



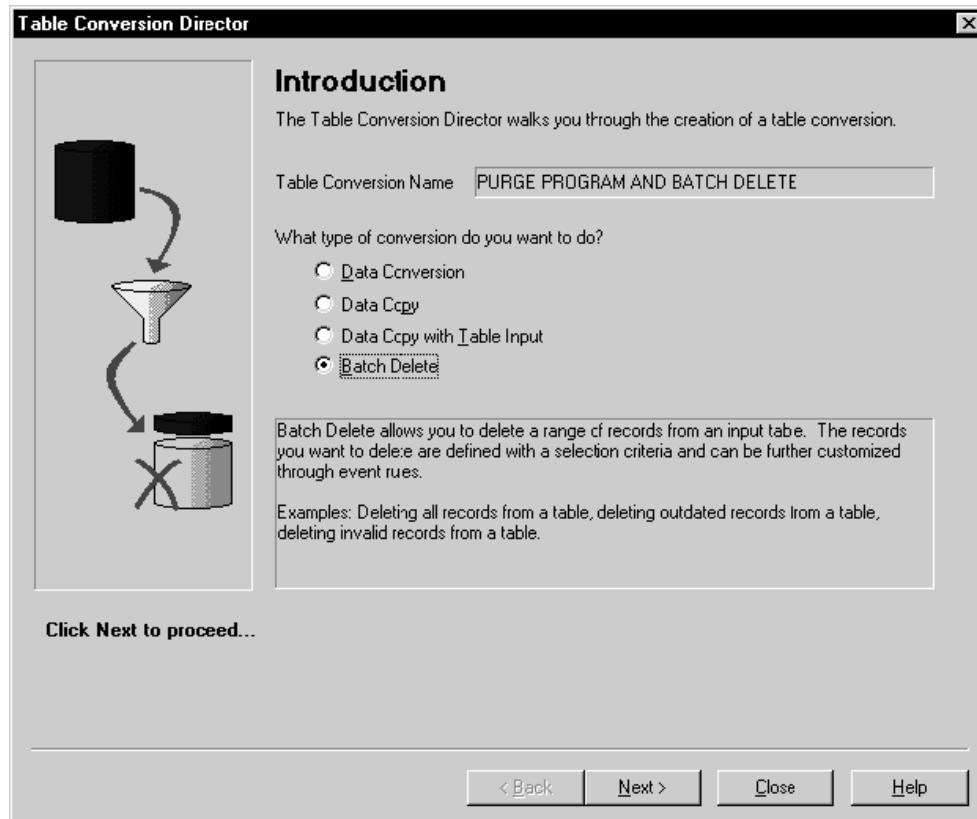
Next, choose the environment in which you want to run the conversion. In this example, create and run the conversion in the login environment. The "Force version to override input environment" option is not chosen because it will not be ported to another system.

Object Name	BATDELETE	Object Type	UIBE
Description	PURGE PROGRAM AND BATCH DELETE		
Product Code	55	Reserved for Clients	
Product System Code	55	Reserved for Clients	
Object Use	161	Simple Reports	
<input type="checkbox"/> Table Conversion			

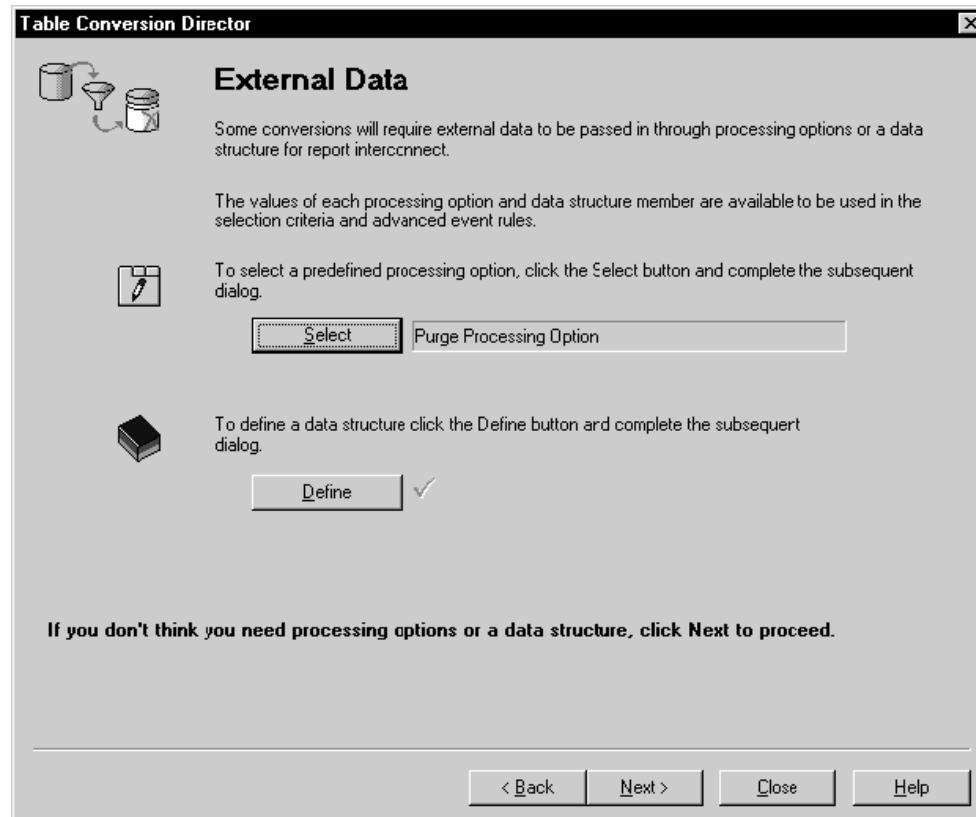
On Select Inputs, the F0101 table is chosen.



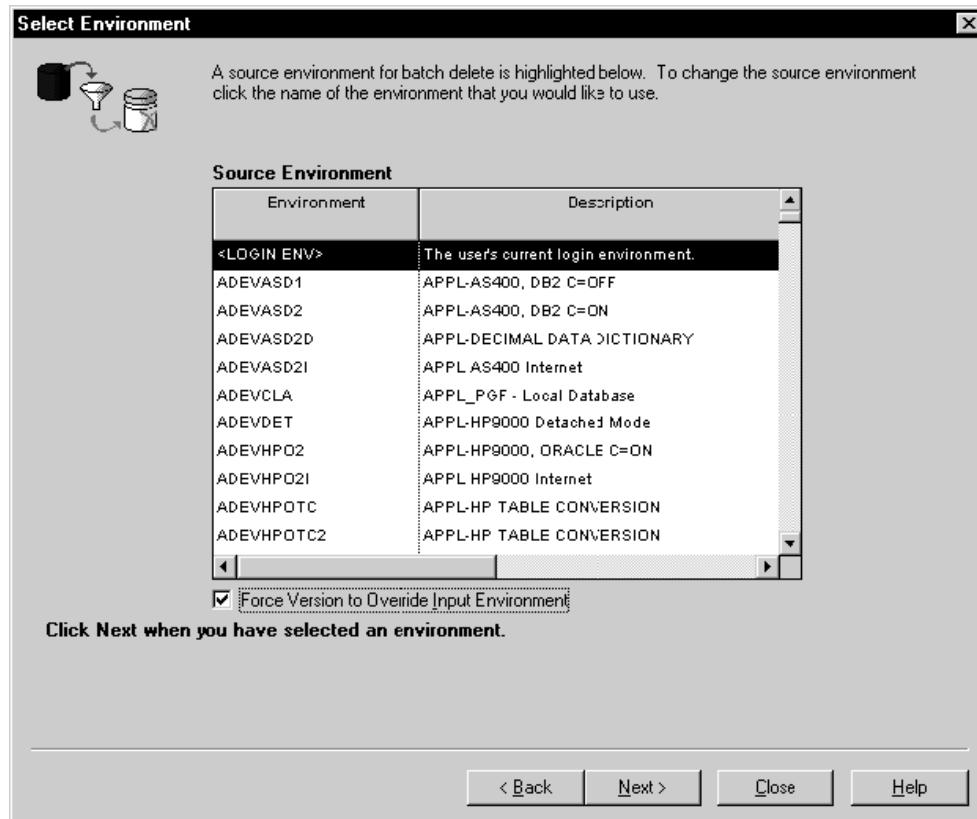
Because the F0101 table does not contain currency fields, the currency trigger option is not chosen for this table conversion.



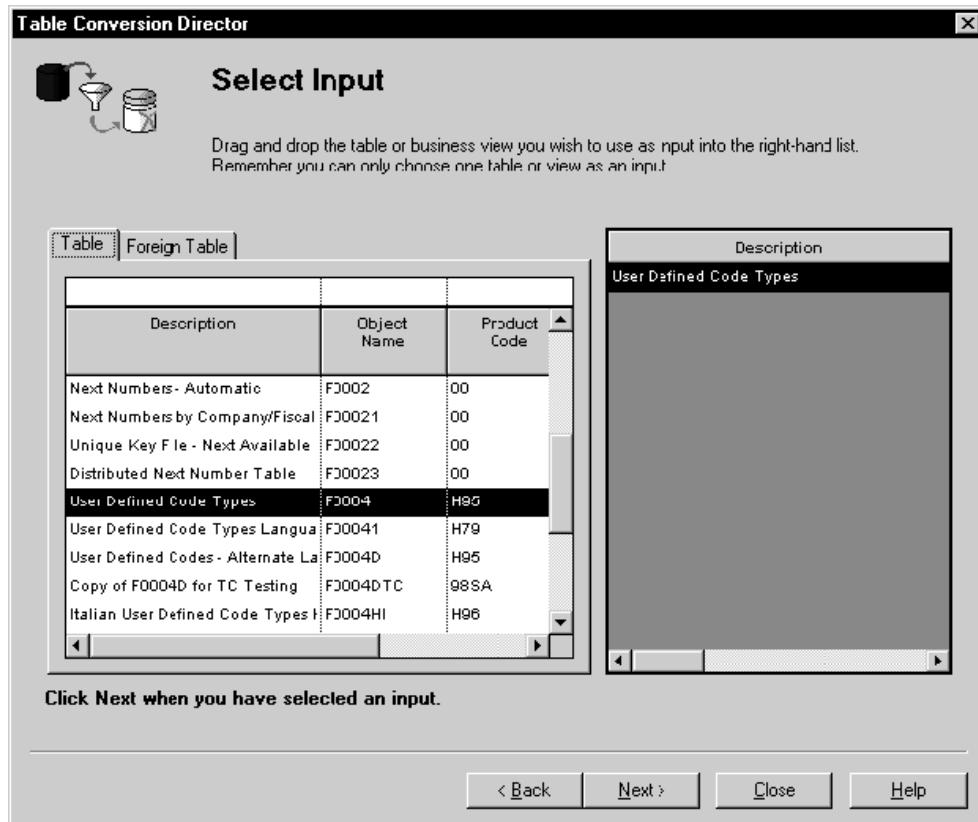
On data selection, specify that all AT1 (Search Type) records that contain E (Employee) should be selected, meaning that all employees will become ex-employees. Note that Delete All Select Records is chosen, as is the Row Fetched event.



When 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.



This table conversion will be run in proof mode initially to ensure that all the records that should be changed will, in fact, be changed.



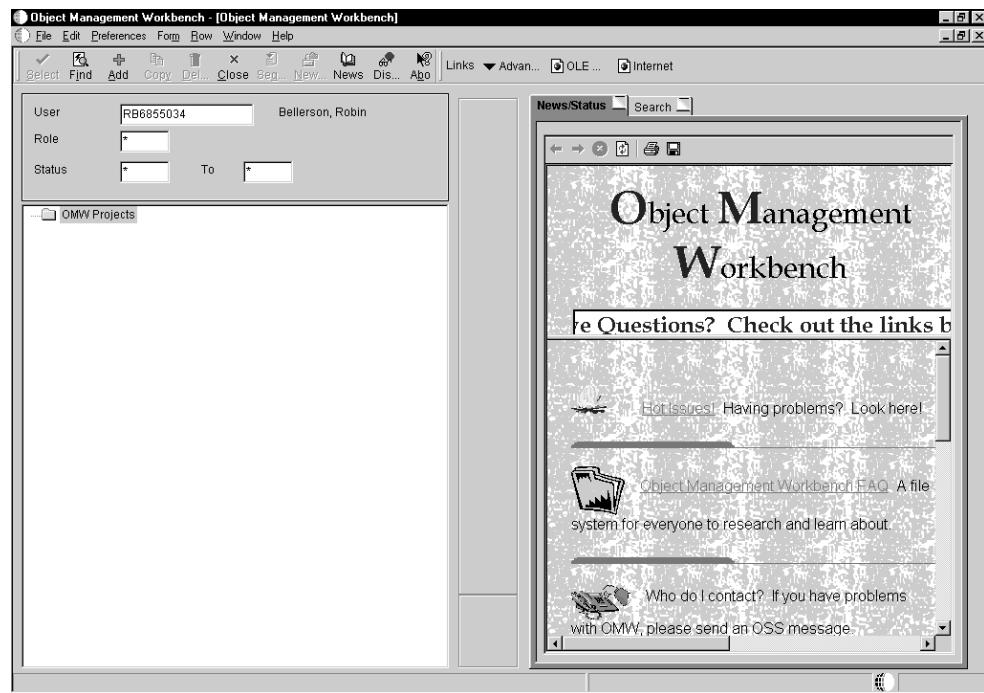
See Also

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

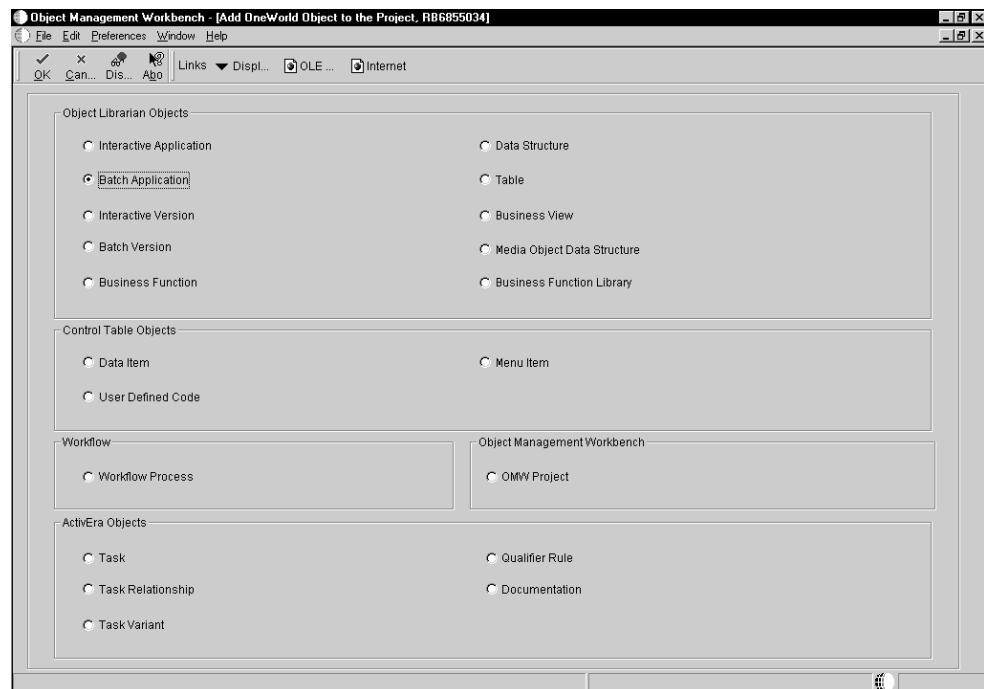
Example: Data Conversion/Batch Delete

The following example is a data conversion that copies employee records from the input environment into a new table and then deletes the records in the input table after the records have been copied.

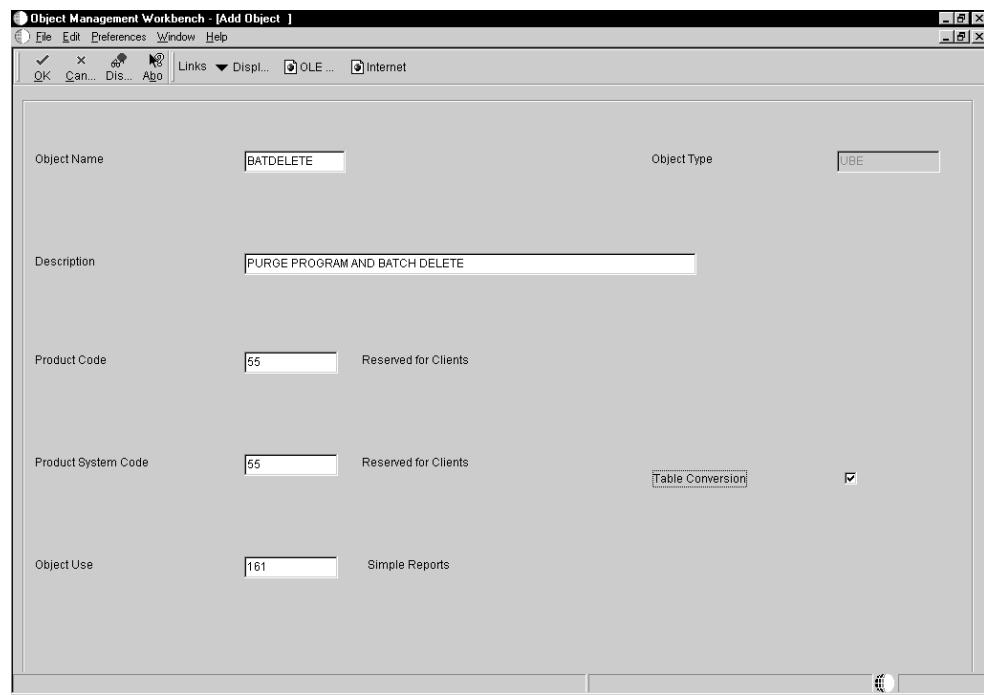
Use the data conversion option to set up this table conversion, and then add event rules in the mapping section of the conversion.



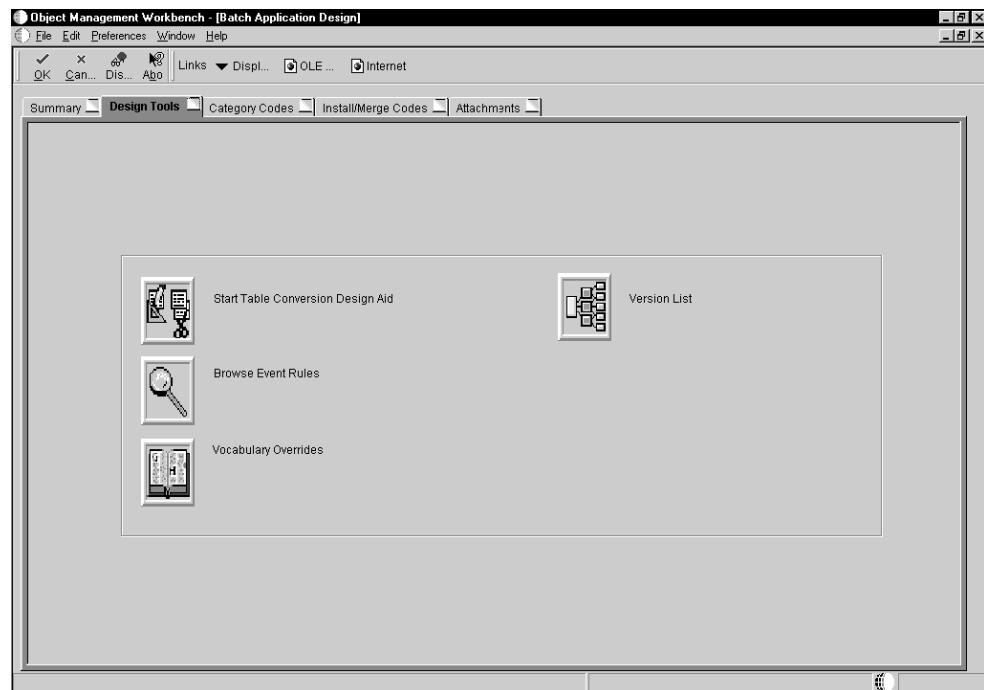
In this example, create and run the conversion in the login environment. The "Force version to override input environment" option is not chosen because it will not be ported to another system.



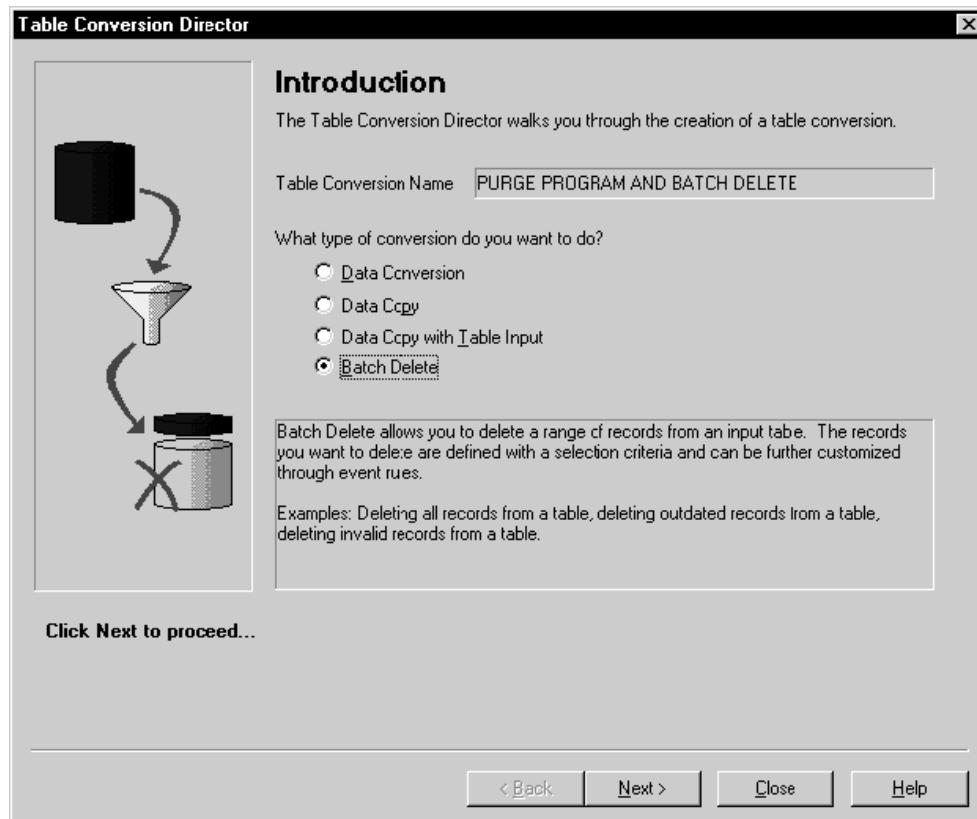
The F0101 table is chosen as the one from which records will be copied to the new table.



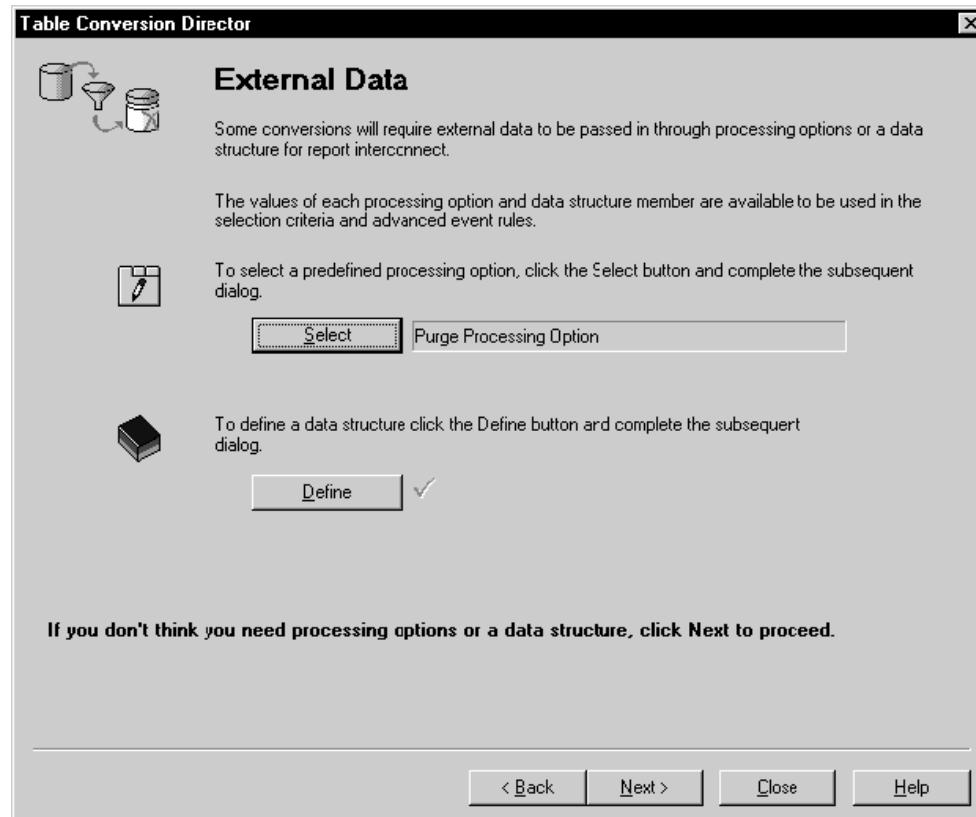
In this conversion, all records with a search type of E (Employee) will be deleted from the input table after they are copied to the output table.



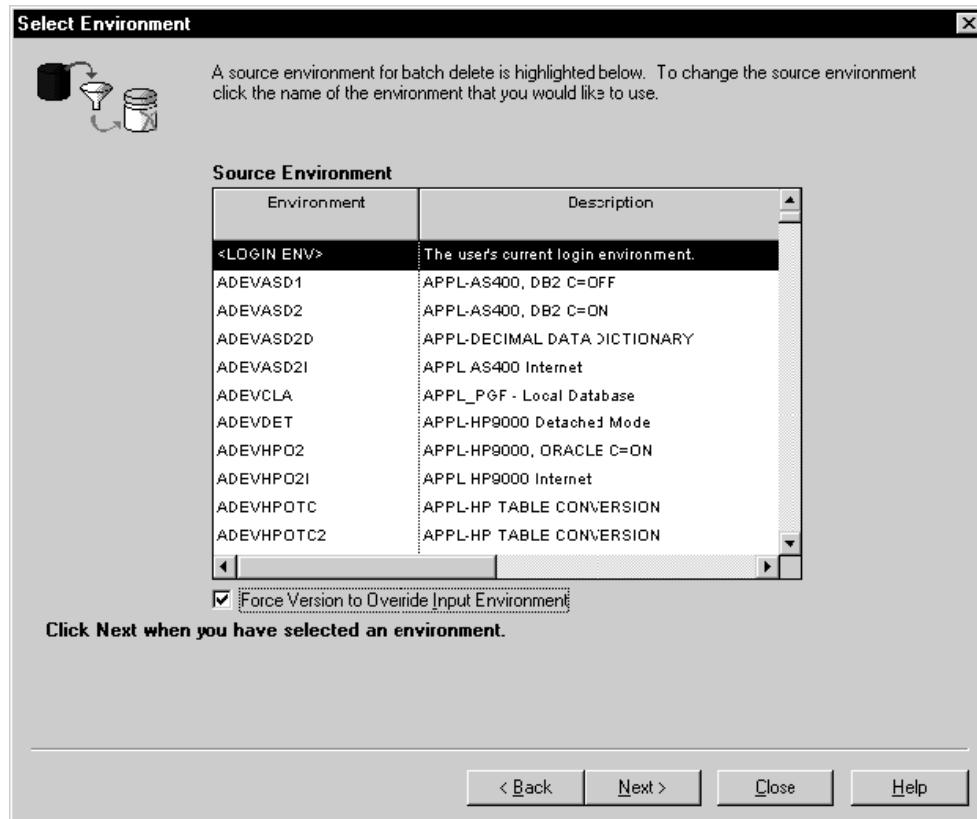
A copy of the Address Book Master (F0101) is made and used as the output table.



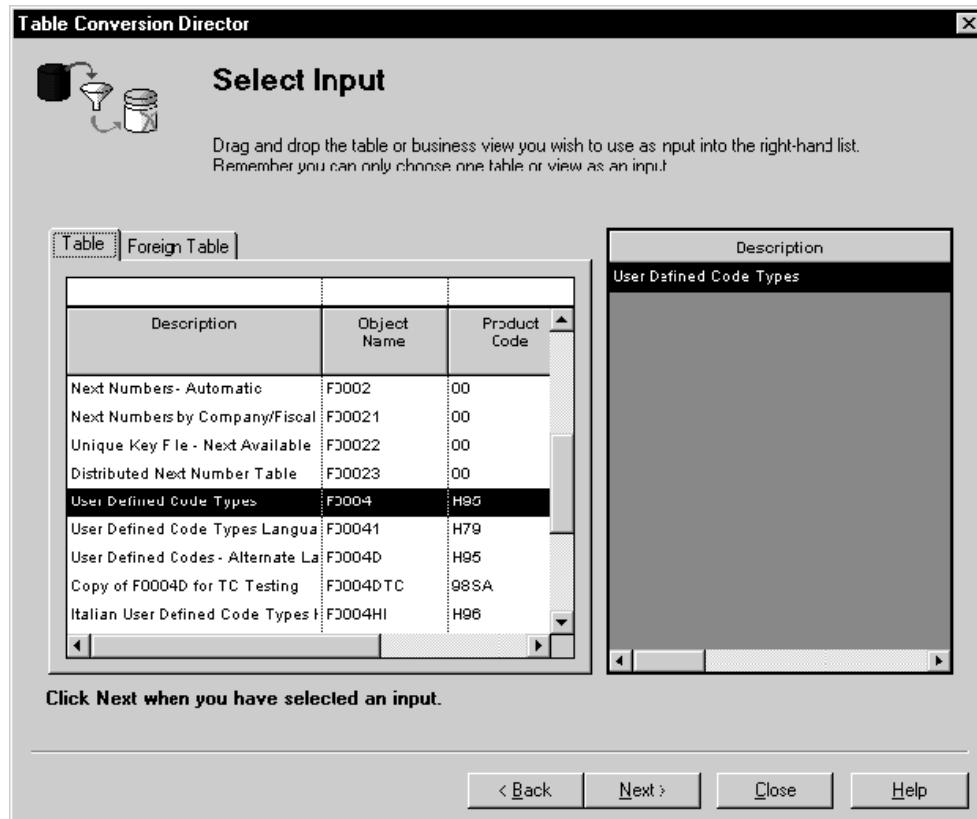
Because the F0101 (Address Book Master) does not contain currency fields, the Run Currency Triggers option is not chosen. However, the Clear Output Tables option is chosen to clear the output table before the conversion is run.



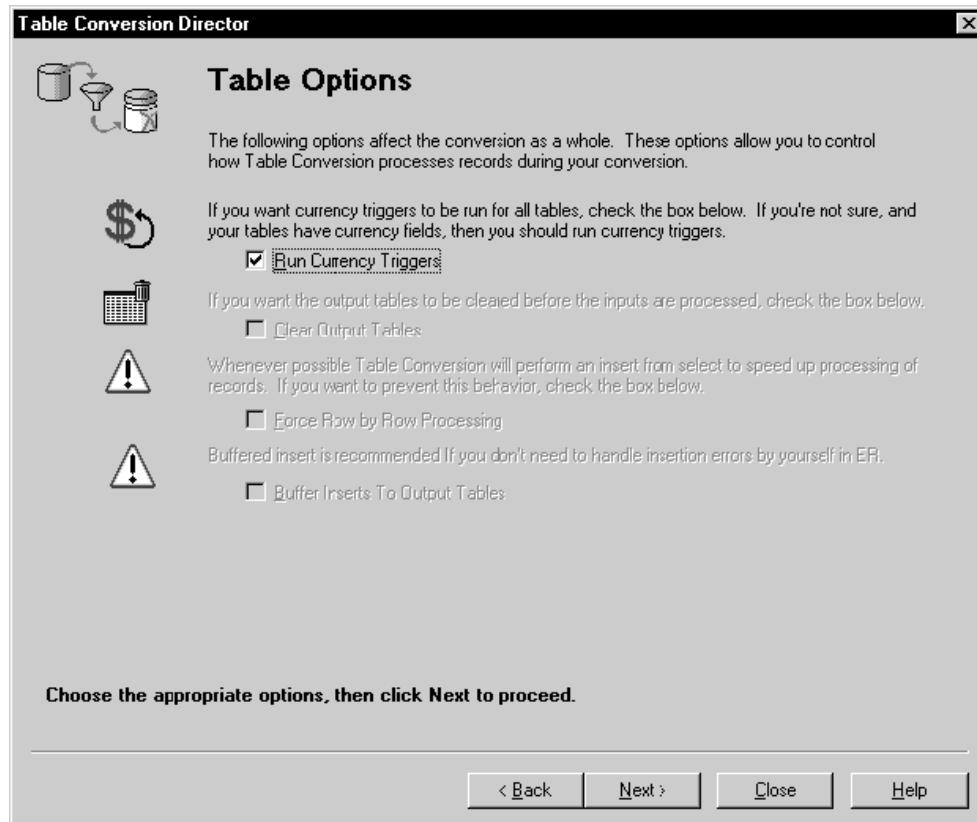
Each time that a row is fetched from the input, the record will be copied to the output and then deleted from the input.



Event rules are added to the Row Fetched Event, as shown in the following example:



In the Mapping section of the conversion, the Delete Current Record Input system function was added immediately after the User Insert Row event. In other words, each time that a record is copied from the input, the system copies the record, and then deletes that record from the input.



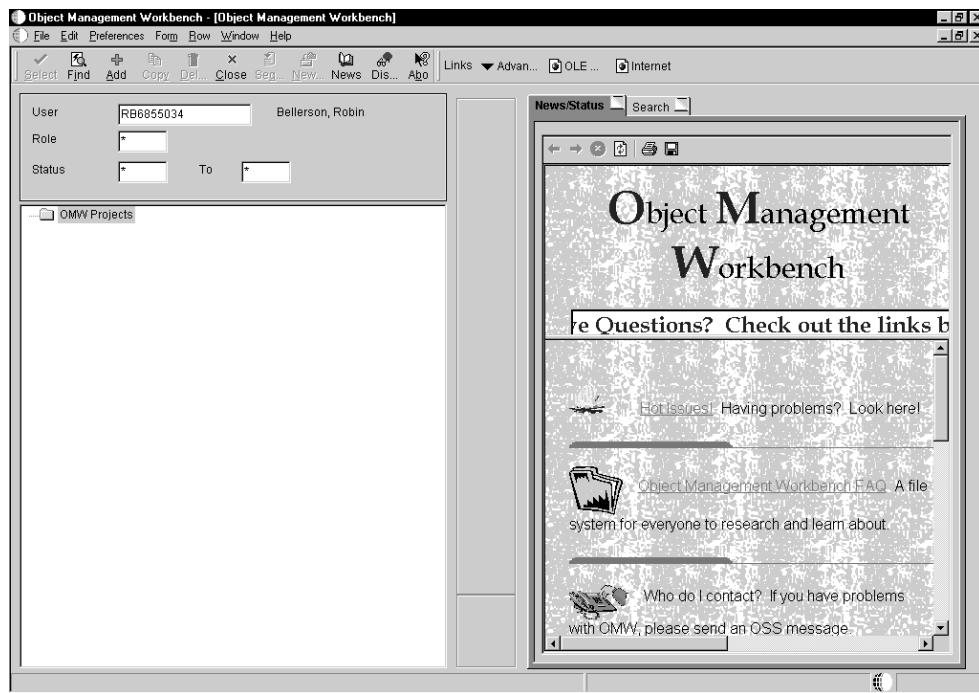
The Log Outputs and Log Deletes options were both turned on for logging options so that all inputs and deletes could be reviewed after the conversion is run.

Example: Creating a Purge Program as a Batch Delete

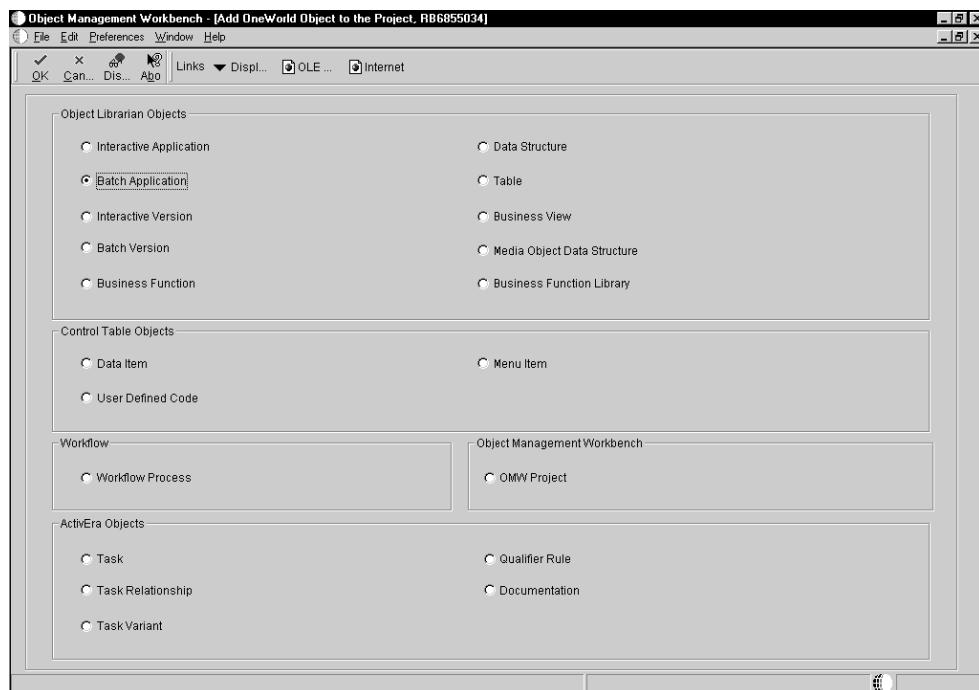
The following example is a table conversion that deletes records from the input environment. Designing purge programs as batch deletes enables you to purge records with better control and greater accuracy. You can archive the data you purge or remove it from the system permanently. This example includes the archiving process.

Before you start this example, create a handle for the table. See *Using a Handle* in the *Development Tools* guide for instructions on creating and using handles.

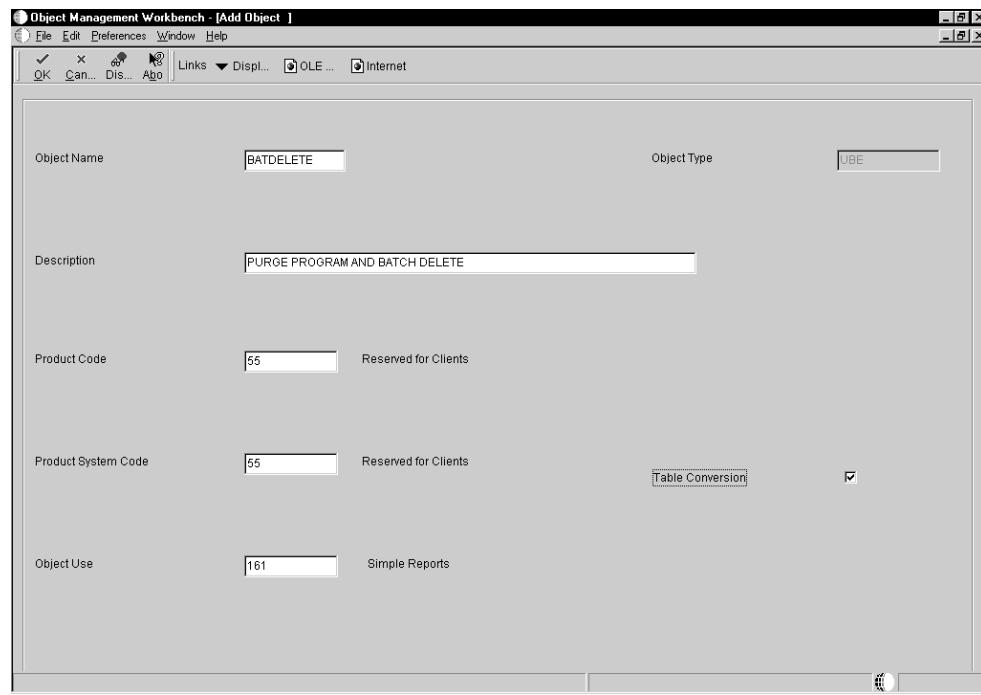
On Object Management Workbench (OMW), click Add.



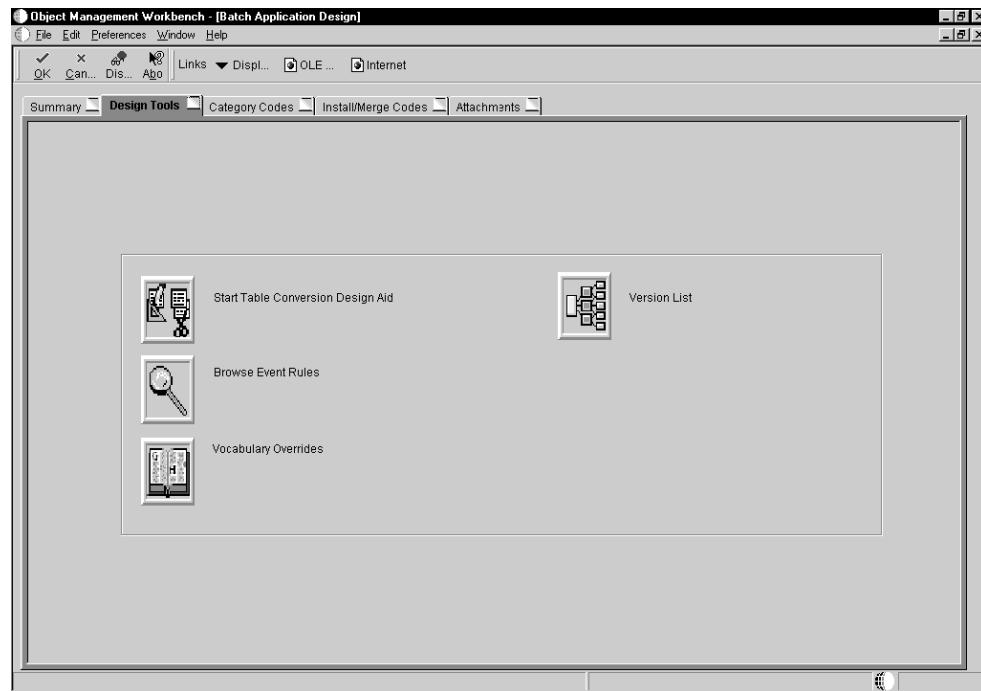
On Add J.D. Edwards software Object to the Project, click Batch Application.



On Add Object, enter the appropriate information into the existing fields and choose Table Conversion.

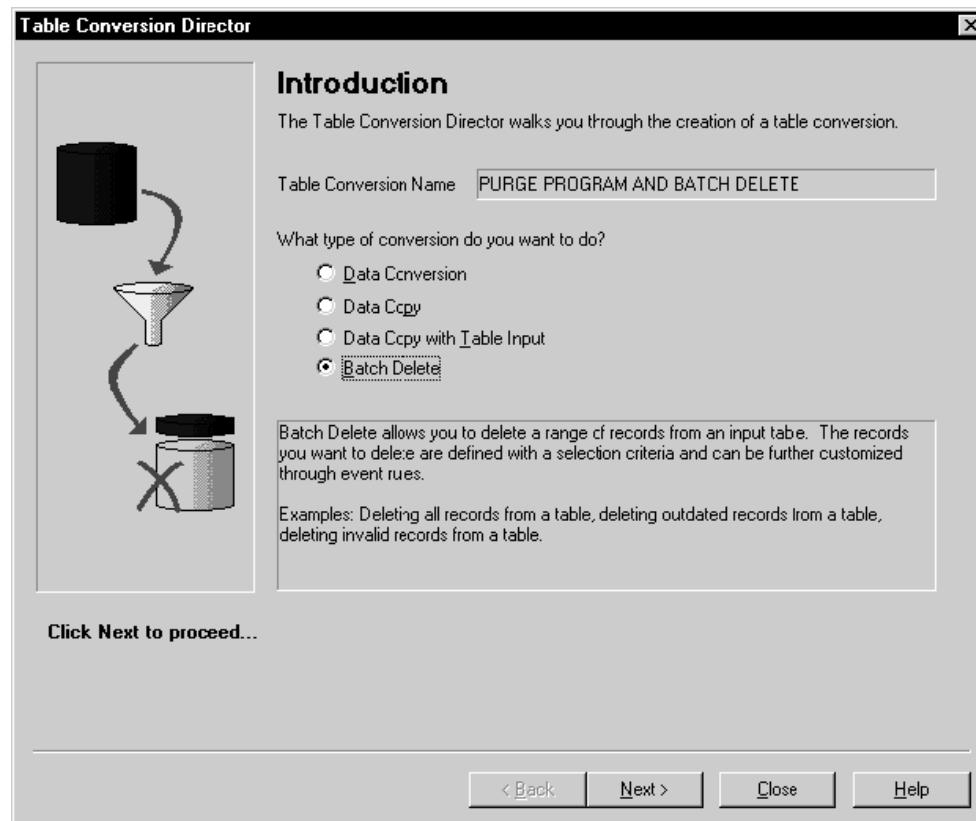


On Batch Application Design, click Design Tools tab.

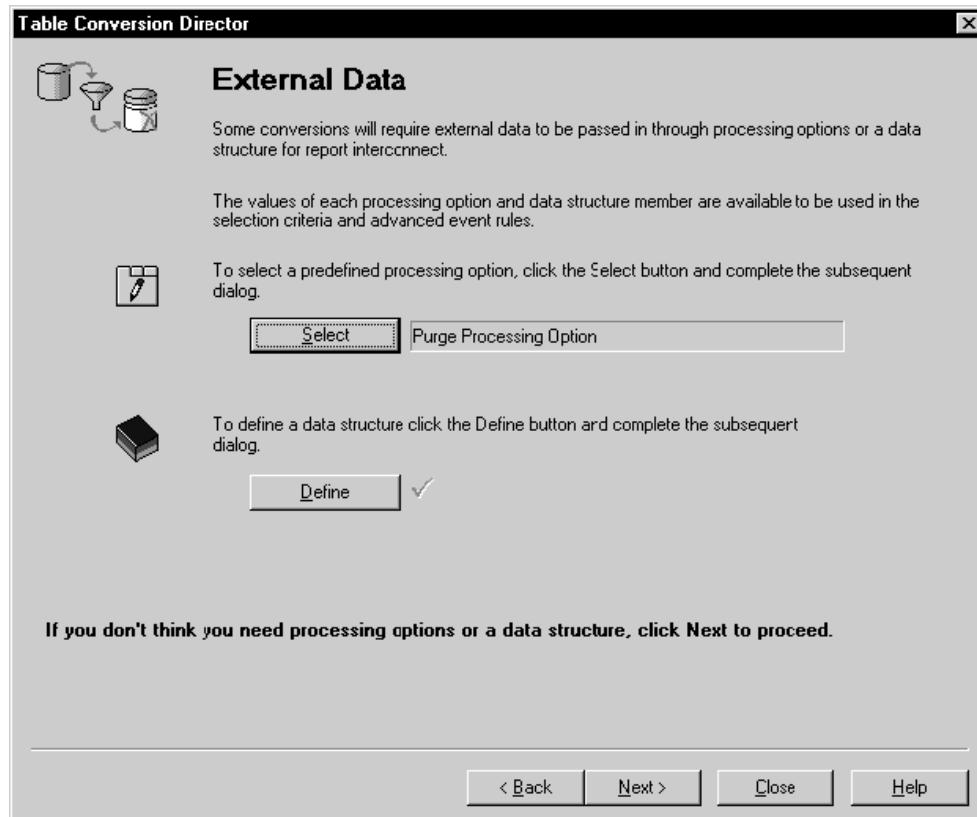


Click *Start Table Conversion Design Aid*.

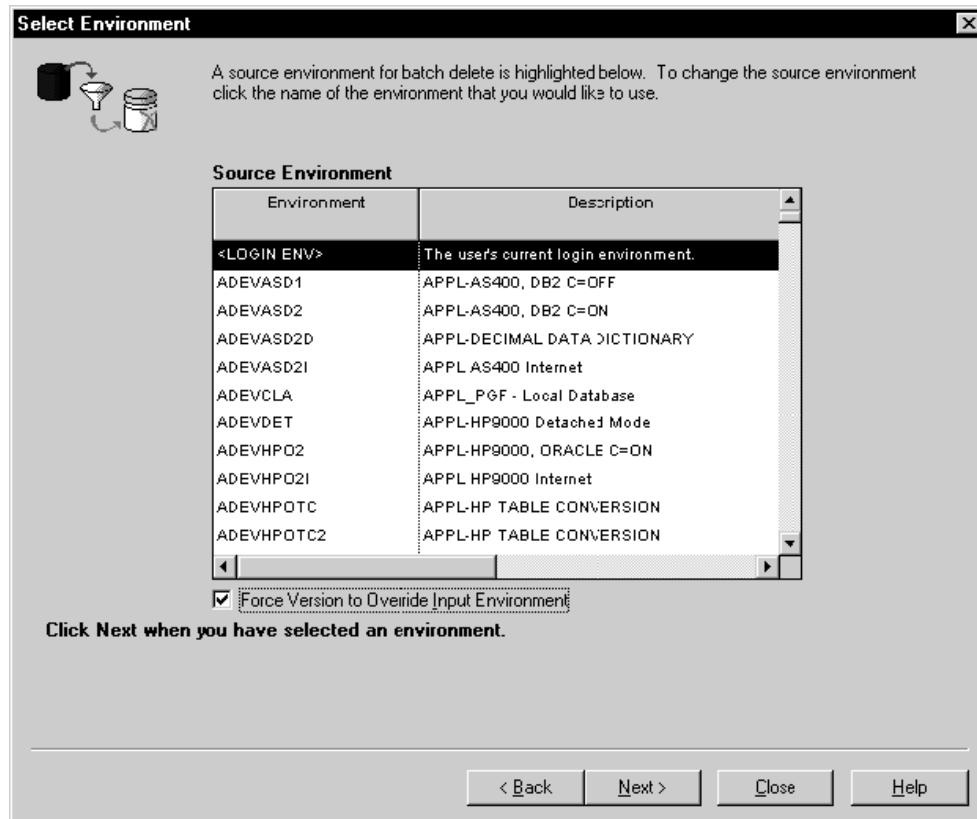
On Introduction, choose Batch Delete.



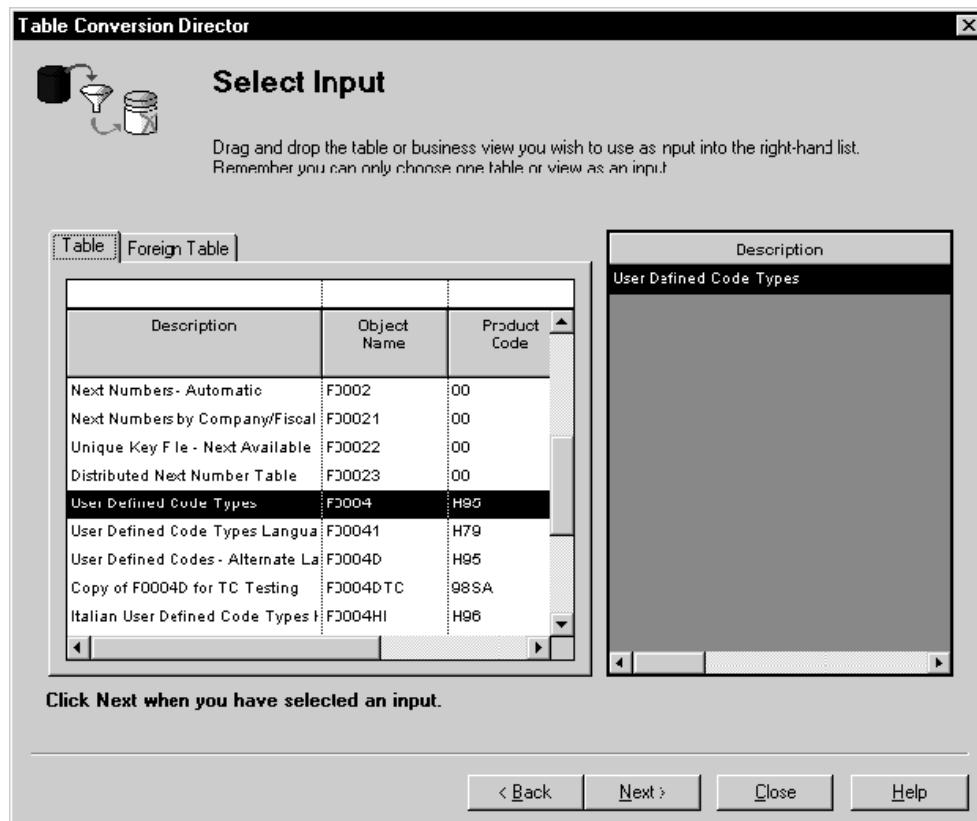
On External Data, choose a Processing Option template. For this example, use Purge Processing Option (T42000P).



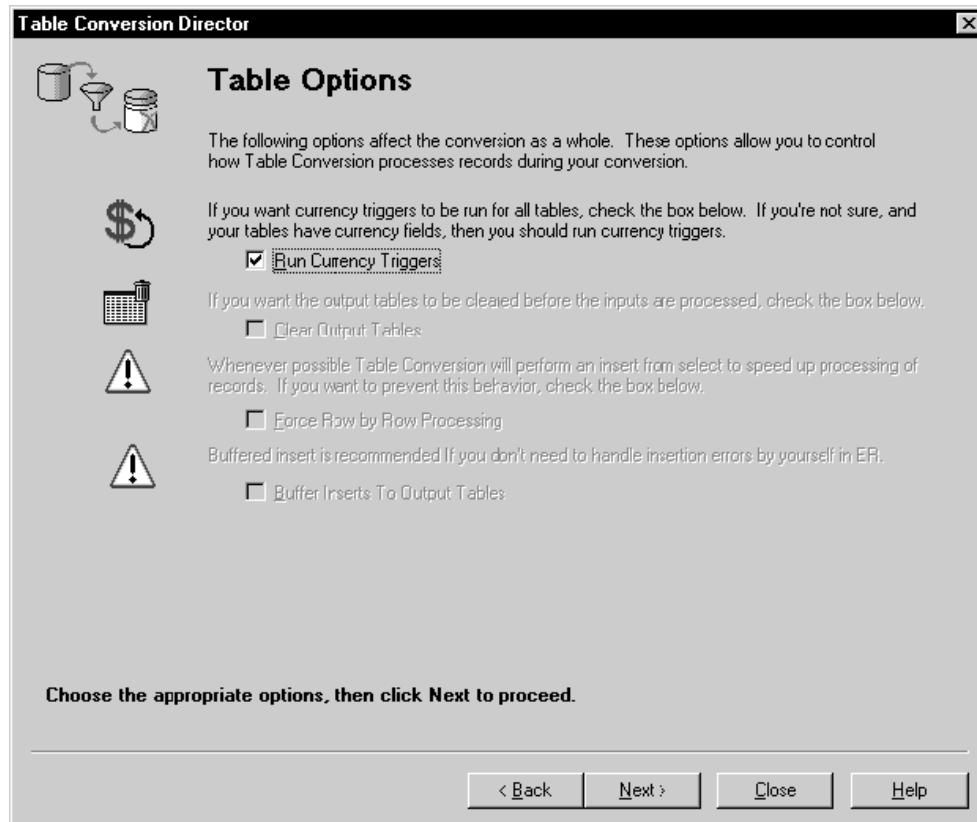
Choose a source environment in which you want to run the batch delete. For this example, choose the login environment. Enable the "Force Version to Override Input Environment" option to make sure that the person who runs the purge program provides a valid source environment from which to run the batch delete.



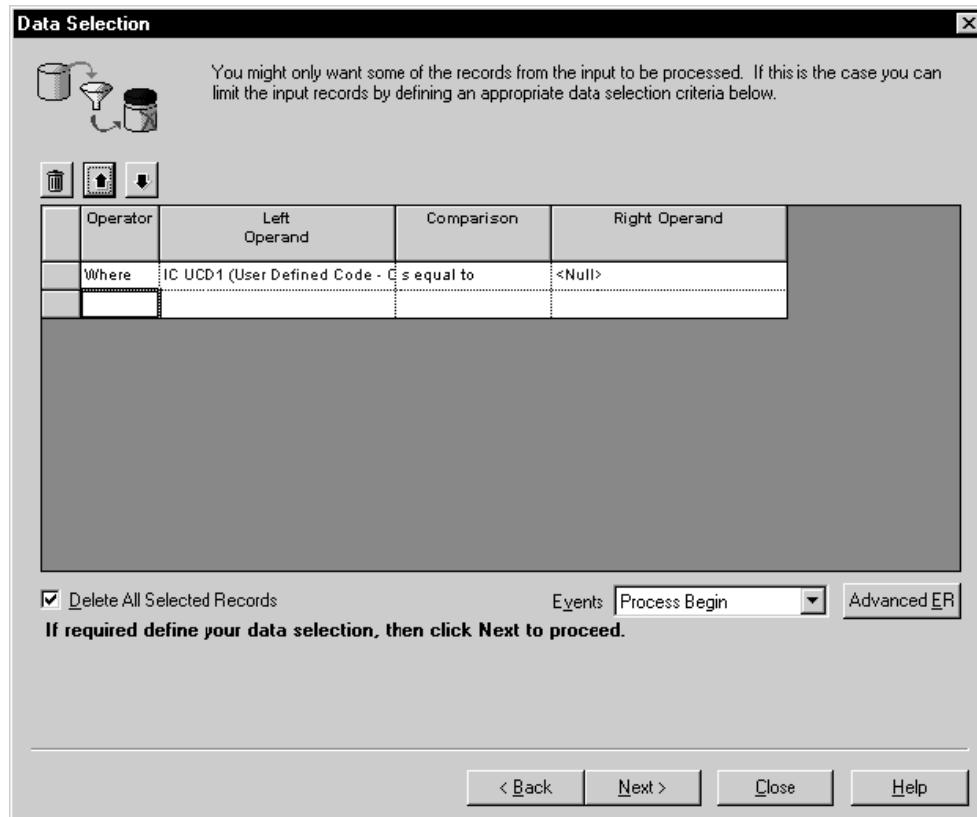
On Select Input, choose the table you want to purge and drag it to the Description area.



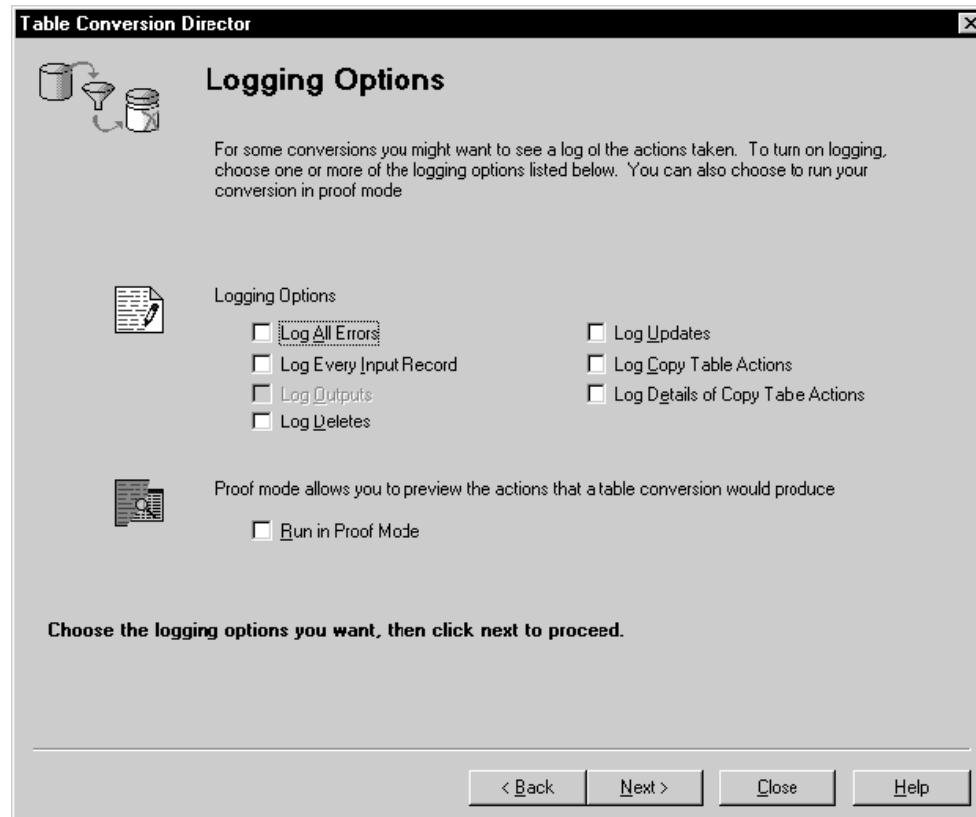
On Table Options, choose Run Currency Triggers. See *Deleting Records* for information about currency triggers.



On Data Selection, choose the data you want purged by clicking in a field and double-clicking an option from the drop-down list.



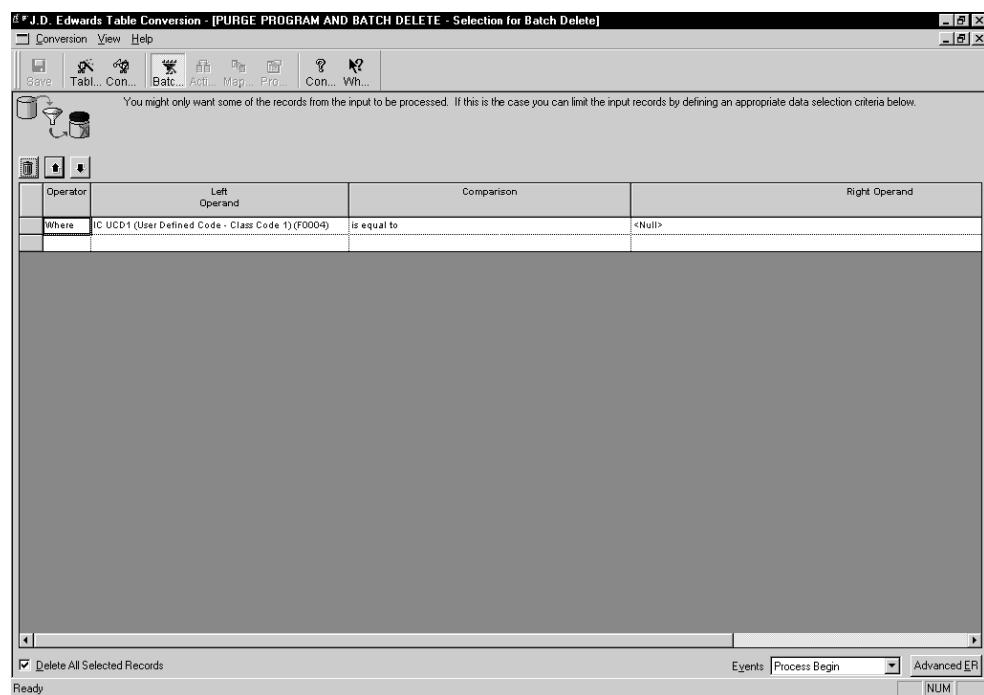
On Logging Options, choose the options you want logged. For this example, do not log any information.



On Finish, choose Yes, *create a version of this table conversion* and enter the version name in the field. For this example, use XJDE001.



On Selection for Batch Delete, choose Process Begin and click Advanced ER.



On Event Rules Design, 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

```

Using this example, the system writes log messages on Stop Conversion Processing to the JDE.log and JDEDEBUG.log files.

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.

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

```

Y/N	IC Contract Balances Updated Y/N -> TK Contract Balances Updated 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
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	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 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
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Schedule	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)
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	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
Number	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

Category	IC Reprice (Basket Price) Category -> TK Reprice (Basket Price) 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
Indicator	IC Price Adjustment Line Indicator -> TK Price Adjustment Line
Indicator	IC Price Adj. History Indicator -> TK Price Adj. History
Allocation	IC Preference Production Allocation -> TK Preference Production Allocation
Ship/Intercompany	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

Measure	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
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```

        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

```

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

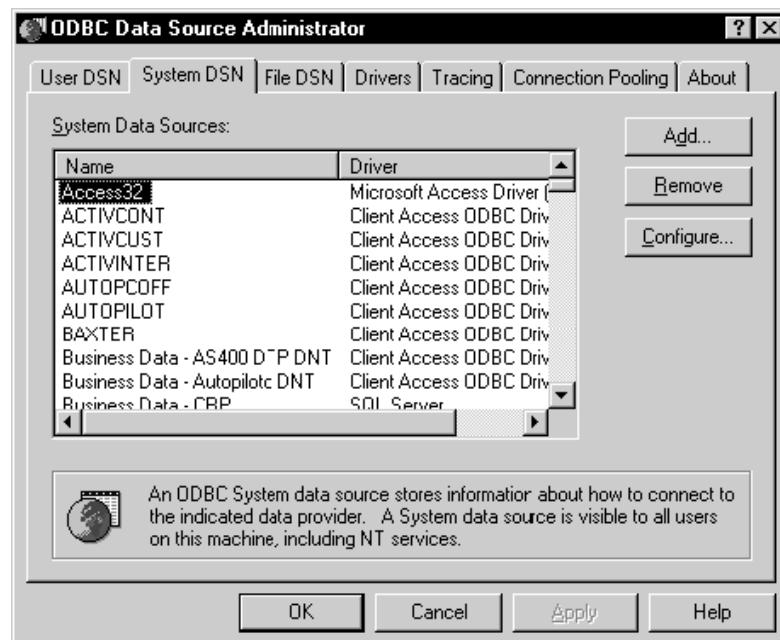
```

```
0012    End If  
0013 End If
```

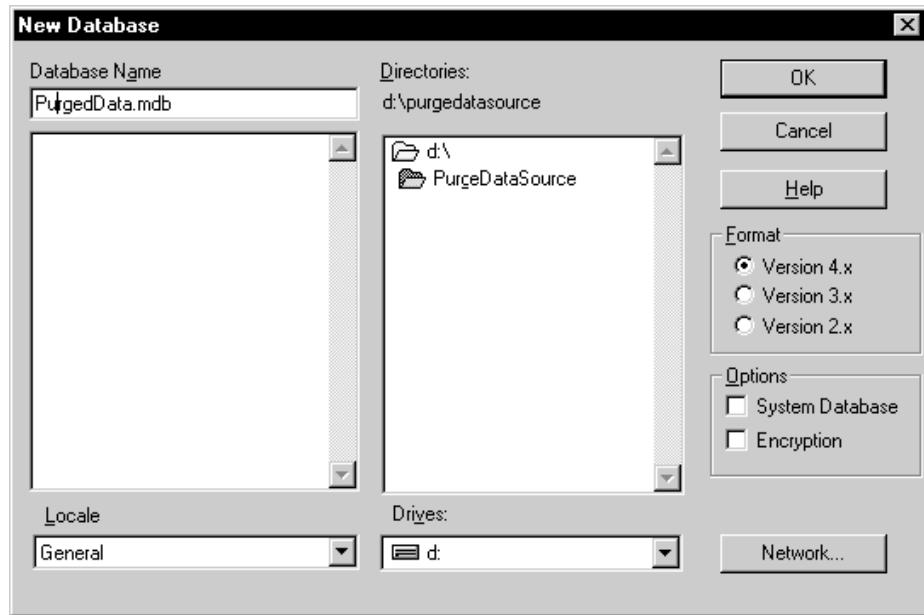
Test the purge program. You must have an archive environment that has a different data source than the source environment. This example explains how to test locally and uses the ODBC Data Source Administrator application to set up the test.

Create a new folder on the D drive.

Using the ODBC Data Source Administrator application, on the System DSN tab, create an ODBC data source. For this example, use Access 32.

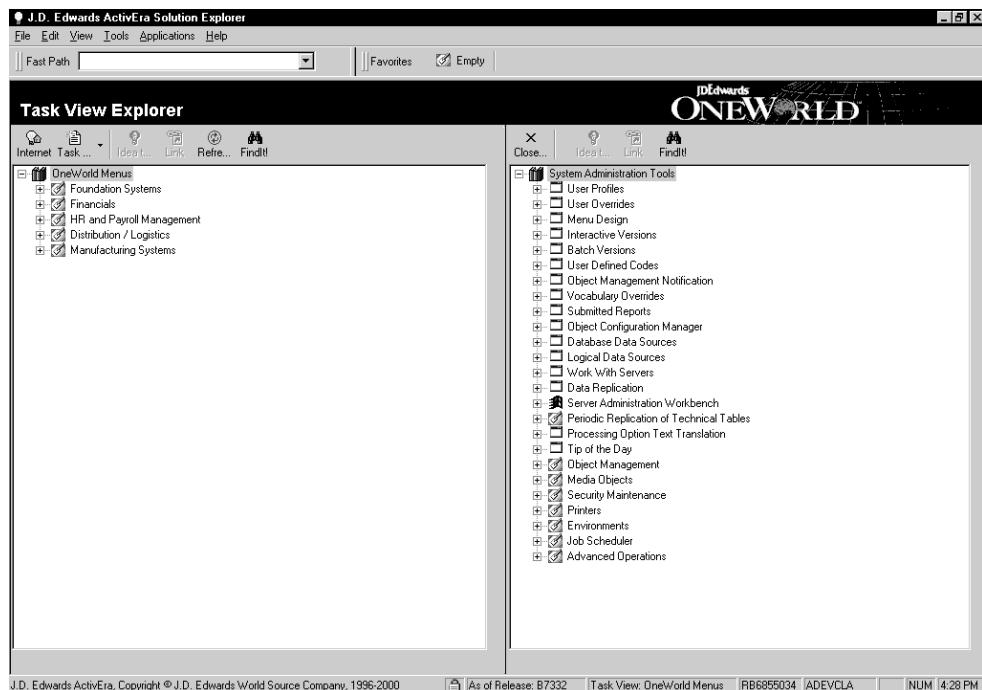


On New Database, create a new database in the new folder you already created. You must associate this database with the ODBC data source.



Log into J.D. Edwards software. For this example, choose ADEVCLA as the environment.

On GH9011, select Database Data Sources to create a J.D. Edwards software data source.

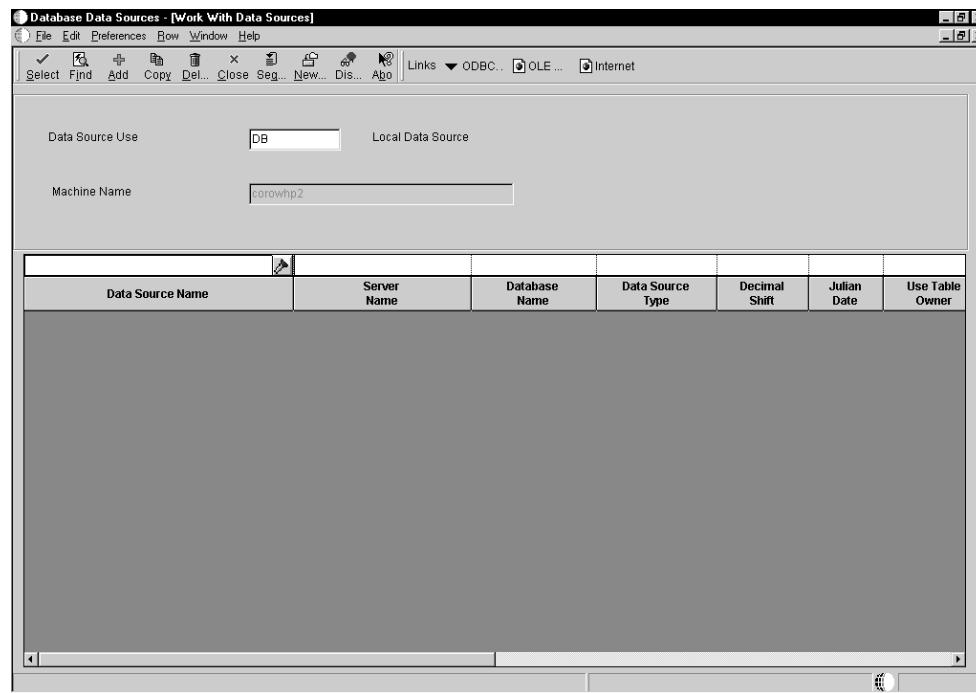


On Machine Search and Select, choose the machine name you are currently using. For this example, use corowhip2 ORACLE PVC.

Machine Name	Data Source
JDECRP	JDEDTP - AS400
JDED	JDEDOC
JDEOW1	DEMO730CM
LOCAL	System B7333 Offline
OWDTNT1	OWDTNT1 - B7333 Server Map
corowhp2	ORACLE PVC
corowhp2	ORACLE JDESVR
corowhp2	ORACLE JDESVR4
owhp1	ORACLE OWSVR
owhp1	ORACLE OWSVR4

On Data Source Revisions, add a data source. For this example, use the following information:

- Data Source Name-Same name as ODBC name.
- Database Name-ODBC data source name.
- Library List Name-Select the environment you want to use as your testing environment. Make sure the environment you select has the same path code as your local environment. For this example, use ADEVCLA for the source environment, and ADEVASD2 for the archive environment.



Create a new Object Configuration Manager (OCM) mapping to re-direct the table you want to purge from ADEVASD2 to the new J.D. Edwards software data source you created. Make the mapping object status Active (AV).