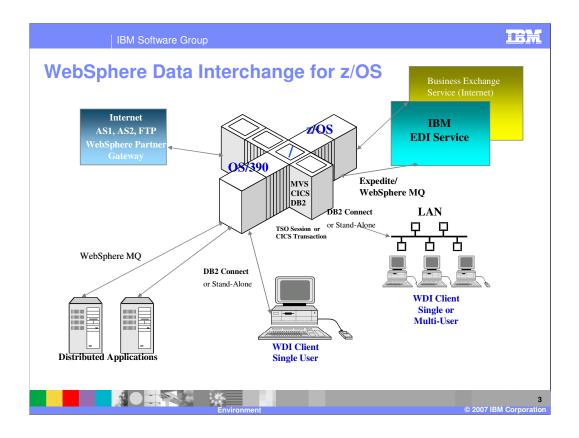


This presentation reviews the Environment setup for IBM WebSphere Data Interchange.



The presentation will describe the development and runtime environments used with WebSphere Data Interchange (WDI).



WebSphere Data Interchange (WDI) OS/390 and z/OS environment. A test and production environment is recommended for WDI.



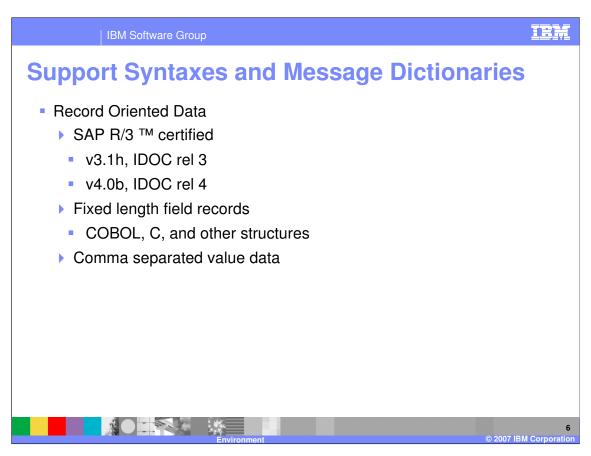
IBM Software Group

Support Syntaxes and Message Dictionaries

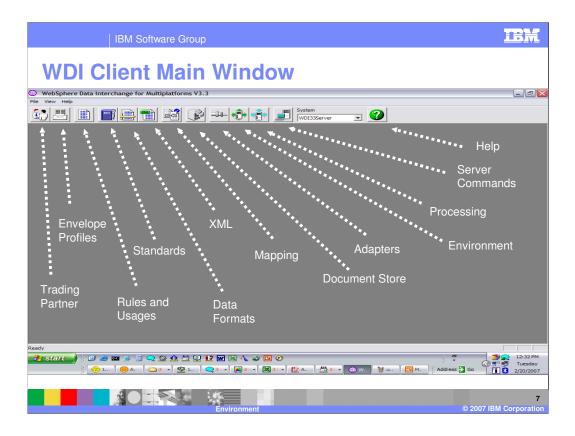
- EDI Standards
 - ▶ U.S. X12
 - ▶ International EDIFACT, ODETTE, EANCOM97, SAANA
 - Industry subsets for example UCS, VICS, RAIL,
 - ▶ HIPAA and ANSI X12 embedded HL7
- XML formats
 - Support for storing, displaying and mapping DTDs and Schemas



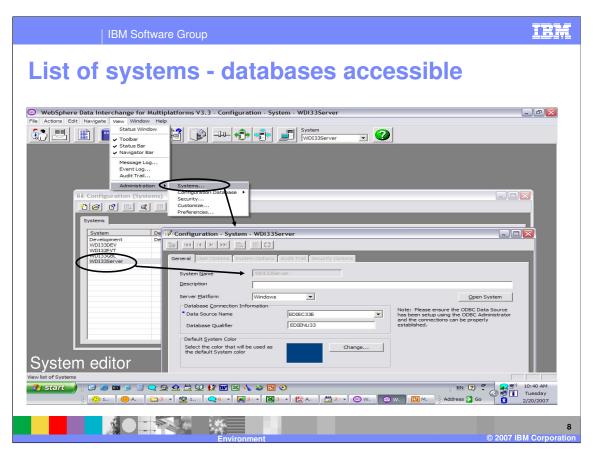
WDI supports a variety of electronic data interchange (EDI) and Industry standards for exchanging data between businesses including XML DTDs and Schemas.



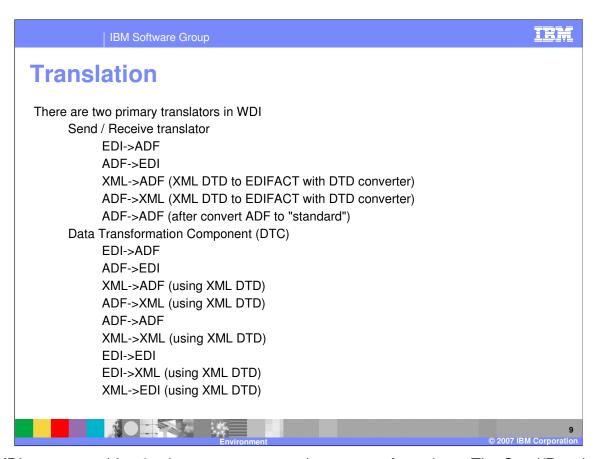
Record Oriented data is data flowing to and from your application that is in flat file record structures. WDI supports Fixed length records as well as comma separated records.



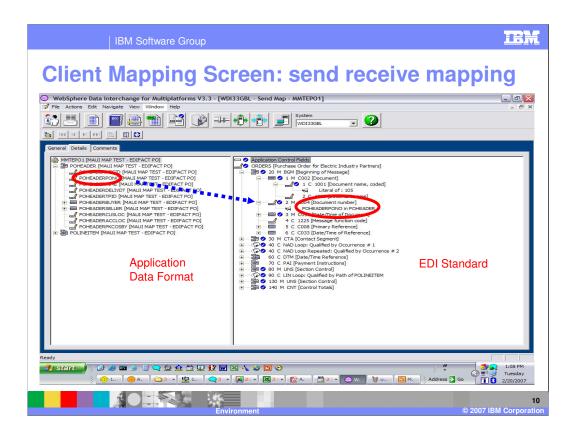
This is the main window of WDI Client. This is a standard Windows screen configuration with the addition of the WDI navigation bar.



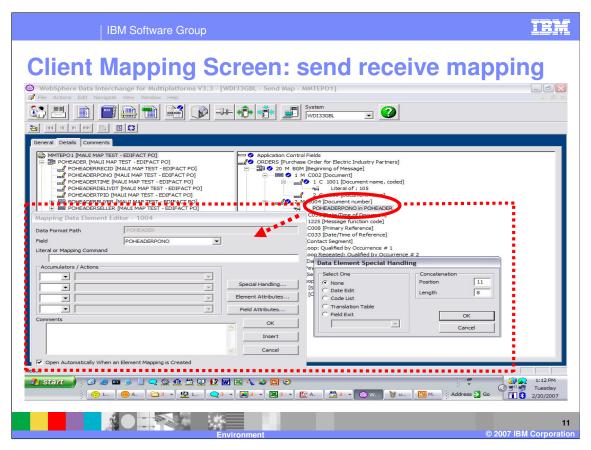
Using WDI Client you can view the database systems available for the development and runtime environments. To view a list of database systems available go to View, Administration, and select Systems. To view the details of the database, select the system from the list and double click.



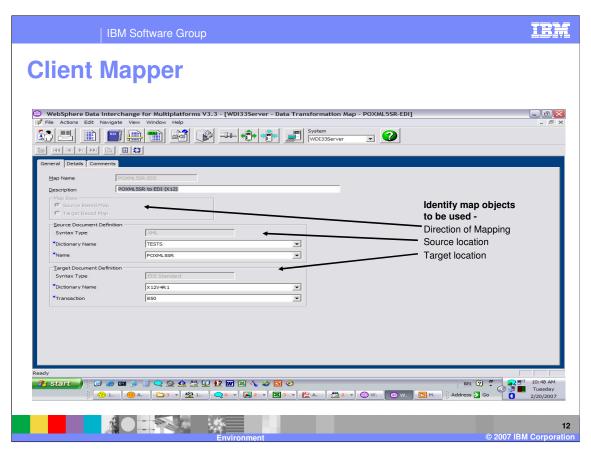
The WDI server provides 2 primary ways to translate or transform data. The Send/Receive Translator which supports source and target data types of EDI and application data format (ADF) or record oriented data. And the Data Transformation with includes support for EDI, XML, and application data.



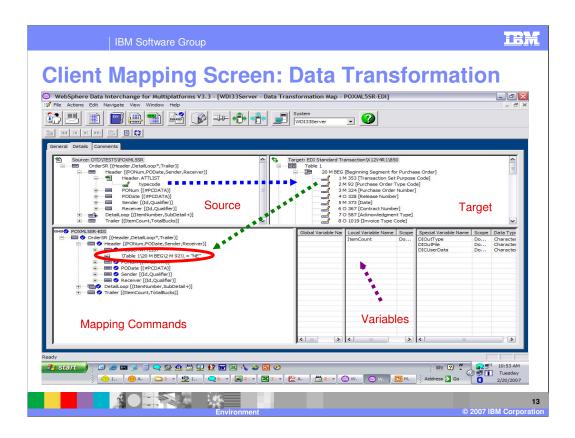
The Send/Receive translation requires a Send or Receive Map. WDI Client Send/Receive mapping screen provides side-by-side, drag and drop mapping with the Data Format (application data) on the left and the EDI transaction on the right. Advanced mapping is also available from this screen.



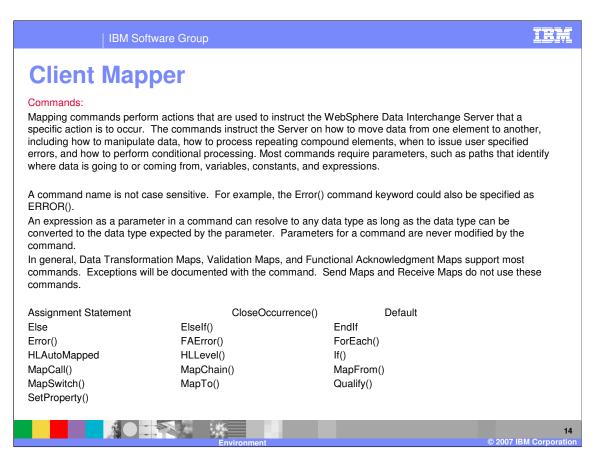
Additional mapping options are available with each field mapping.



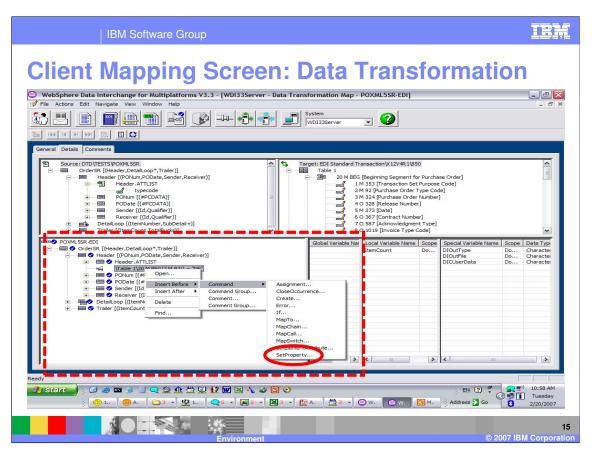
On the WDI Client Mapping dialogue, General tab, the source and target meta-data definitions are identified. With Data Transformation mapping you can choose either the source or the target display to enter your mapping commands.



WDI also provides Any-to-Any data transformation capability also known as Data Transformation or DT. This mapping screen is divided into 4 panes: source definition, target, mapping commands (including advanced mapping support) and variables which can be applied to the entire translation session or by document.



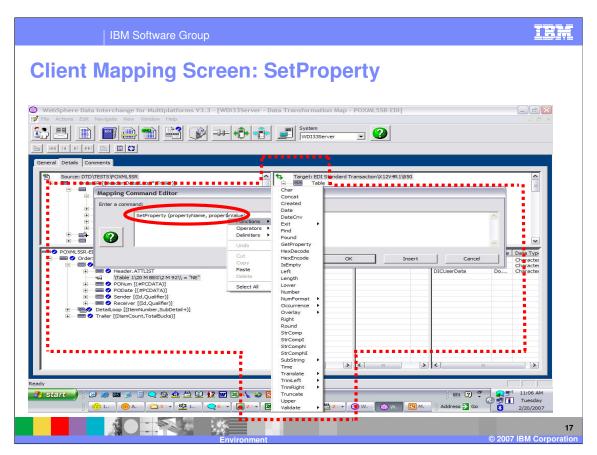
This is a list of some of the mapping commands available for data transformation mapping. Some but not all mapping commands are automatic. For example MapTo() is automatic with a drag-drop action using a Source based map.



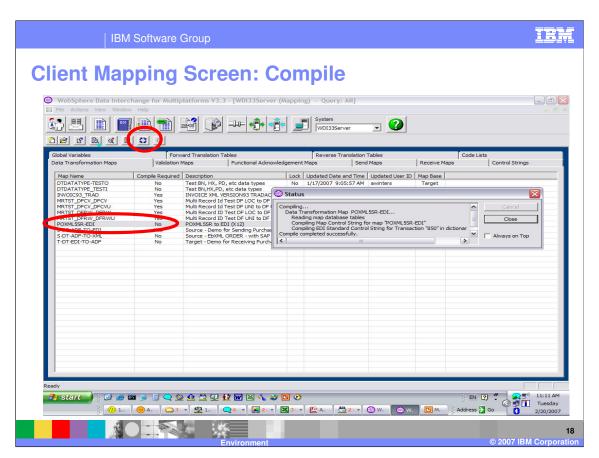
To add a mapping command, right click where you want the command, select to insert before or insert after, select command. A list of commands available is listed in the command window. When you select a command the format of that command will be displayed in a mapping window.



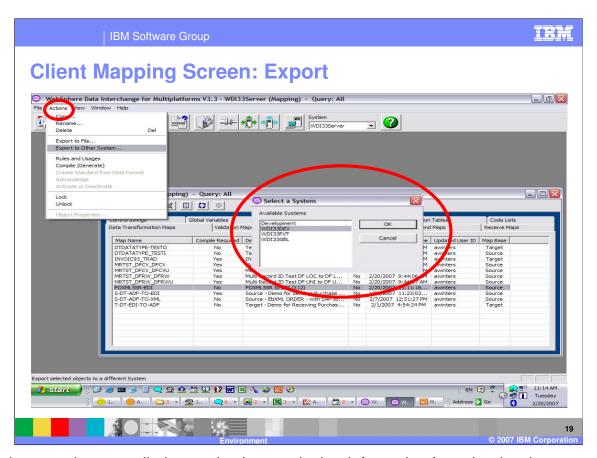
Along with commands, there are a number of functions available to add logic and format the data values.



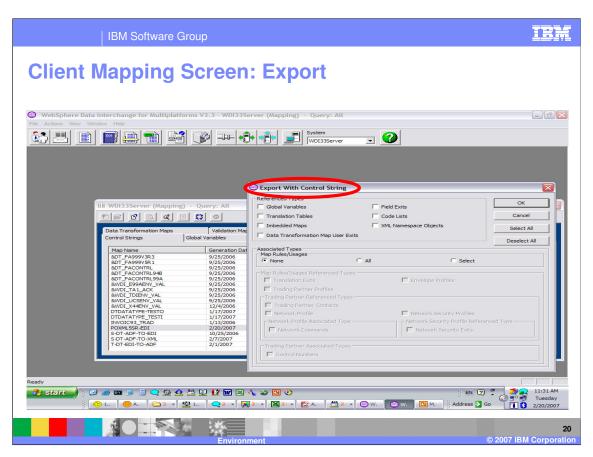
Functions perform an action and return a result. You can select the SetProperty command from the commands list to add a function as the parameters. The SetProperty command format has two parameters propertyName and propertyValue. Both parameters can be replaced with an expression. Any mapping command that contains an expression can contain a function for that expression. If you right click on the expression and select Functions, a list of functions will be displayed.



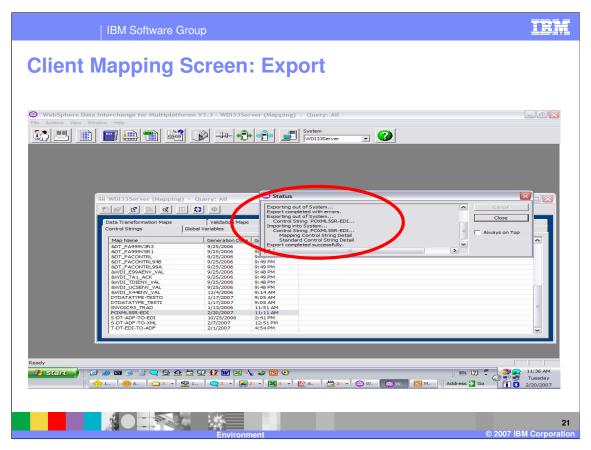
WDI uses a compiled version of the map during translation execution. When mapping has been completed, you must compile control string objects for translation execution. This is true for both Send/Receive and Data Transformation maps.



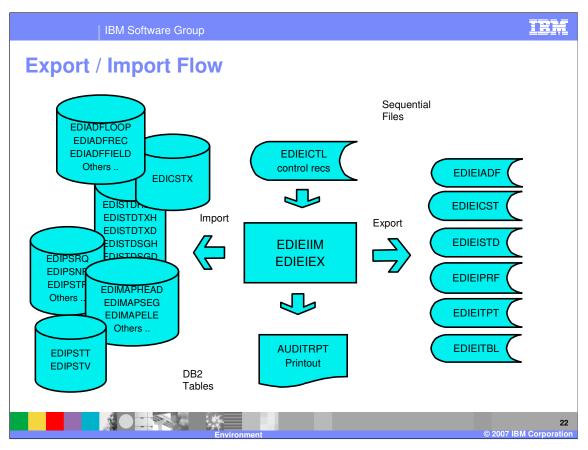
To deploy mapping, compiled control strings and other information from the development environment to the runtime environment or to another system or user you can use the Export function.



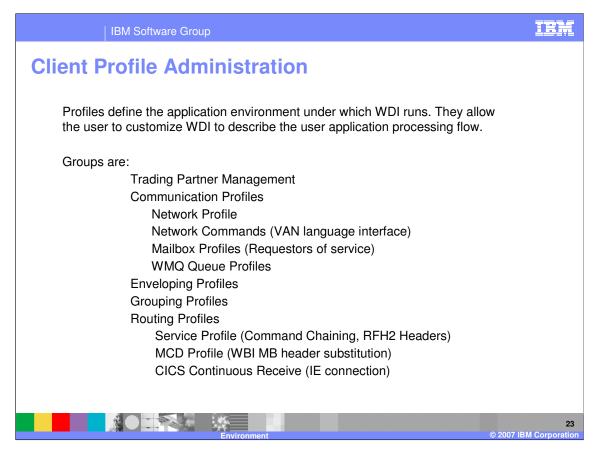
Select the mapping or control string object you want to deploy. A window to allow selection of various associated objects is displayed.



A status window will be displayed showing details of the export action.

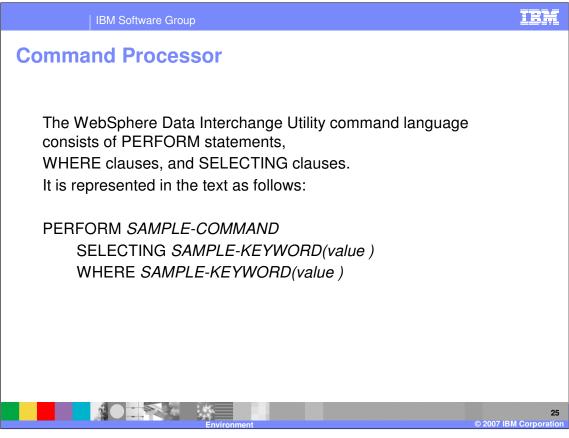


This is a diagram of the Export/Import flow.



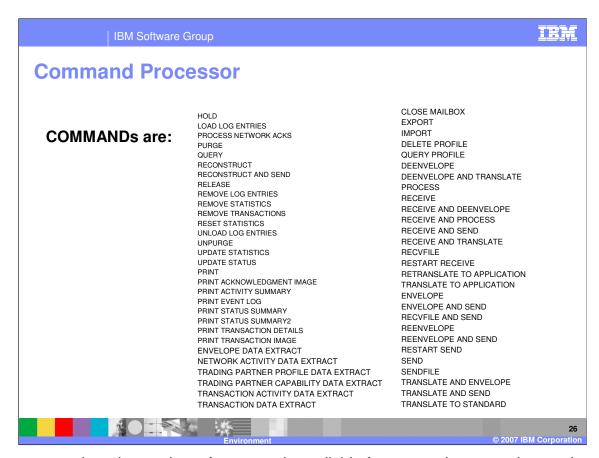
Profiles allow you to describe your processing flow. These are some of the associated objects that may be exported and imported.



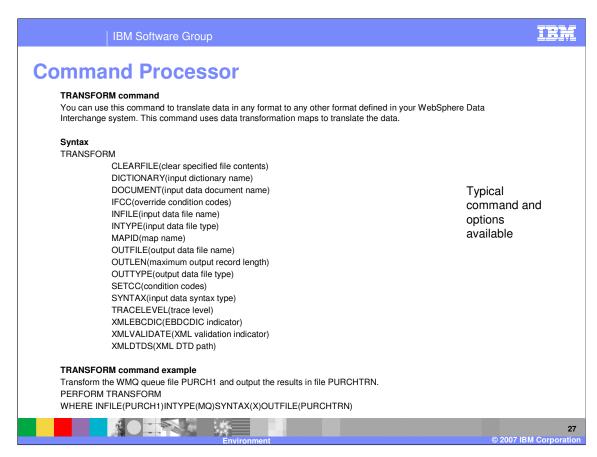


The WebSphere Data Interchange Utility command language consists of PERFORM statements,

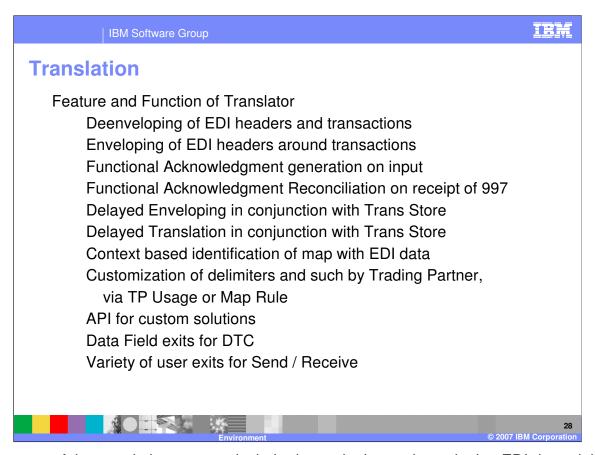
WHERE clauses, and SELECTING clauses.



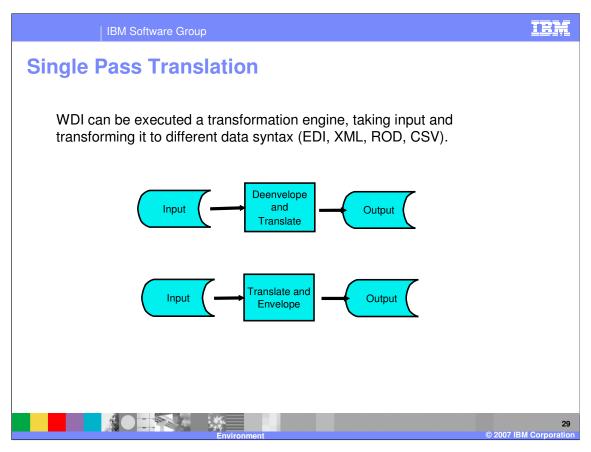
As you can see there is a variety of commands available for processing, reporting, and extracting information.



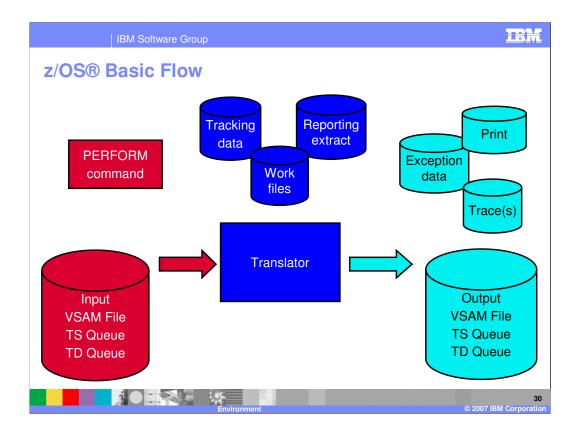
You can use the PERFORM TRANSFORM command to translate data in any supported source format to any supported target format.



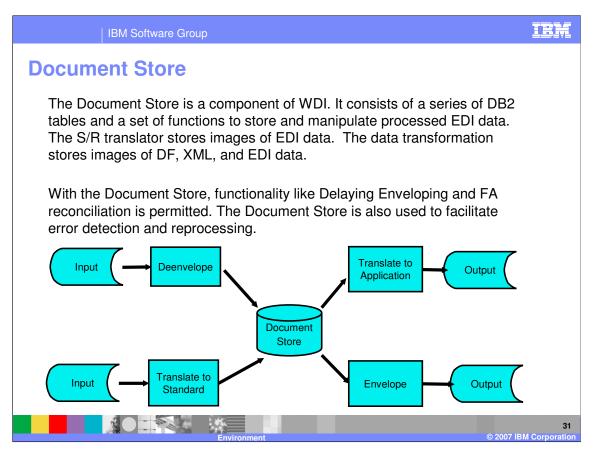
The features of the translation process include deenveloping and enveloping EDI data, delayed enveloping and translation, function ional acknowledgment generation and reconciliation, context based identification of the mapping to use for translation, customized delimiters by trading partner, Application Program Interfaces (APIs), and data field user exit programs.



WDI can be executed a transformation engine, taking input and transforming it to different data syntax (EDI, XML, Record Oriented Data, Comma Separated Values).

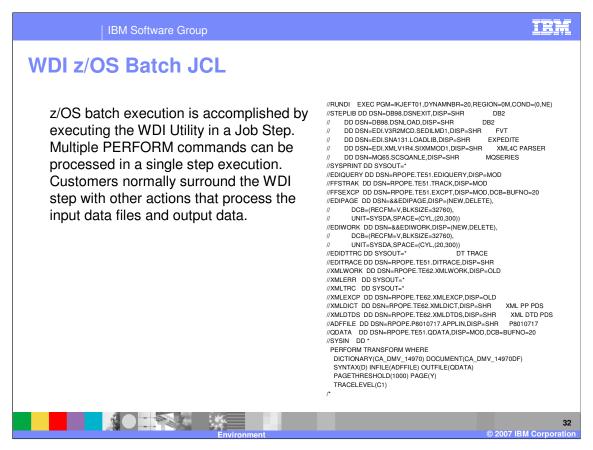


The Tracking file is an optional file into which "optional records" can be written. Optional Records can be created to provided softcopy information about the translation that could be used in user formatted costing or reporting applications. The Report file is used by select PERFORM commands to house data queried. The Work file is used by the Translator.

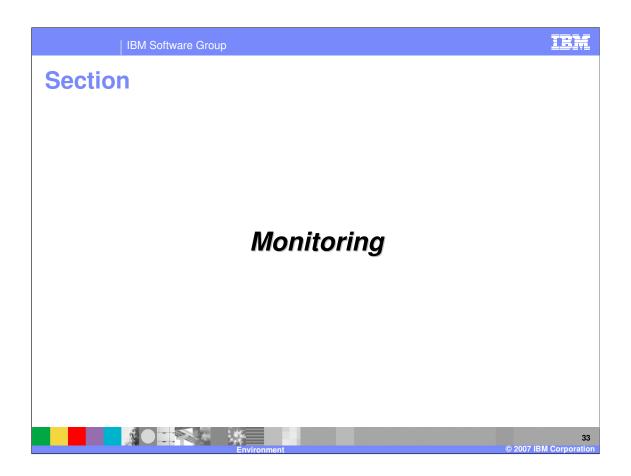


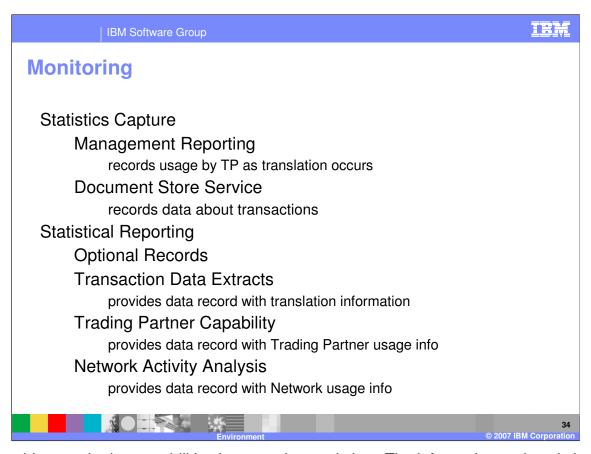
The Document Store is a component of WDI. It consists of a series of DB2 tables and a set of functions to store and manipulate processed EDI data. The S/R translator stores images of EDI data. The Data Transformation stores images of application, XML, and EDI data.

With the Document Store, functionality like Delaying Enveloping and FA reconciliation is permitted. The Document Store is also used to facilitate error detection and reprocessing.

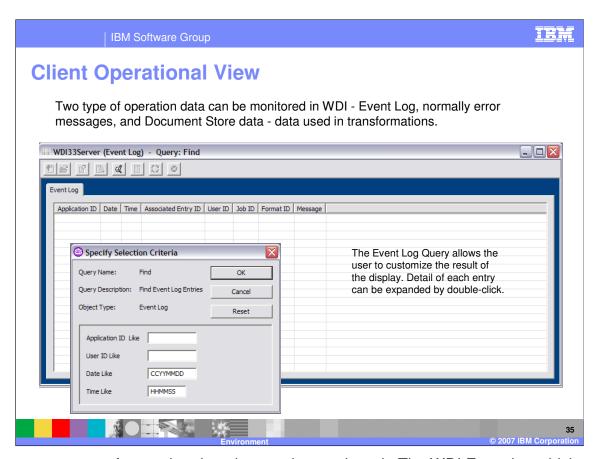


z/OS batch execution is accomplished by executing the WDI Utility in a Job Step. Multiple PERFORM commands can be processed in a single step execution. Customers normally surround the WDI step with other actions that process the input data files and output data.

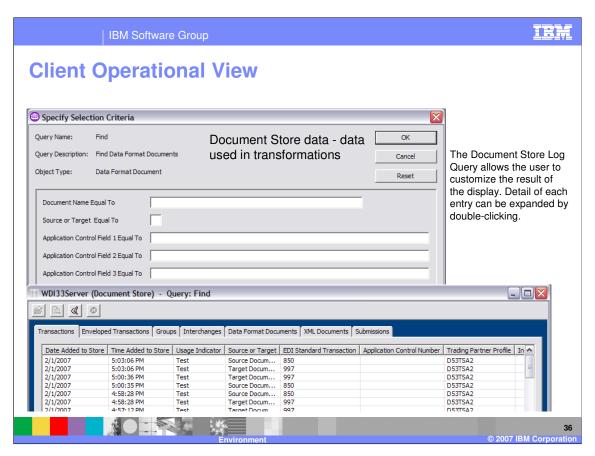




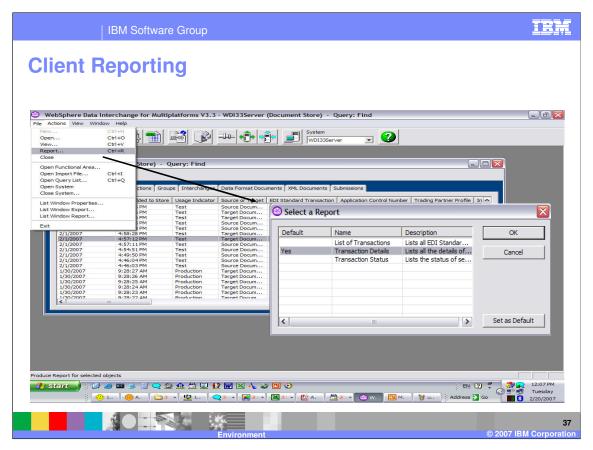
WDI provides monitoring capabilities by capturing statistics. The information and statistics may be extracted and or used to create reports.



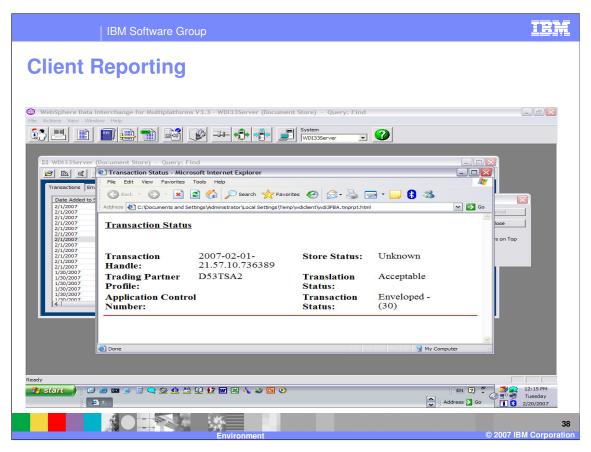
There are two types of operation data that can be monitored. The WDI Event log which contains error messages and the Document Store data which contains an audit trail of translation activity. To view the event log using WDI Client, select View then Event Log. A window to identify filtering values or selection criteria is displayed.



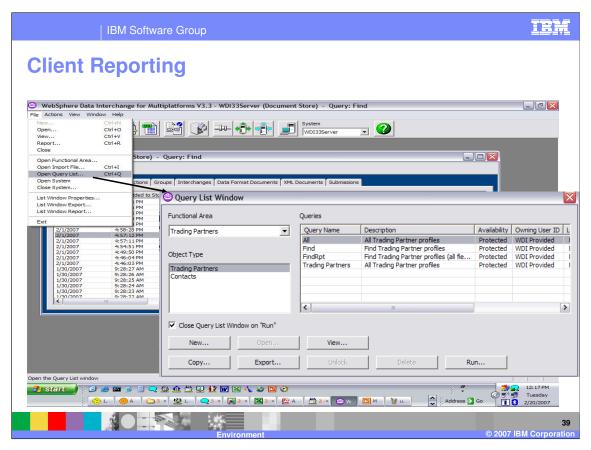
The Document Store Log Query allows you to customize the result of the display. Detail of each entry can be expanded via double-click.



There are a predefined set of Reports for WDI Objects.



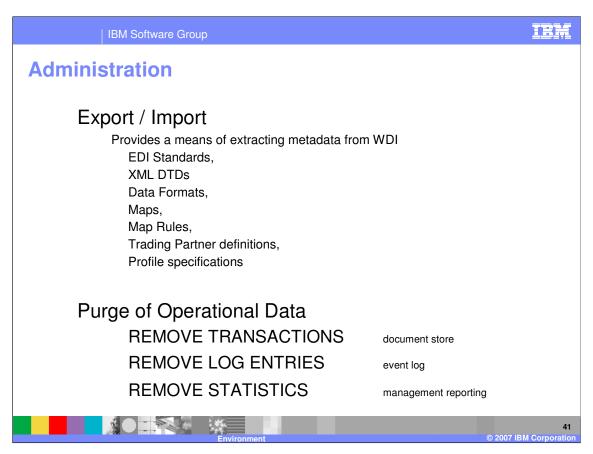
This is a Transaction Status Report.



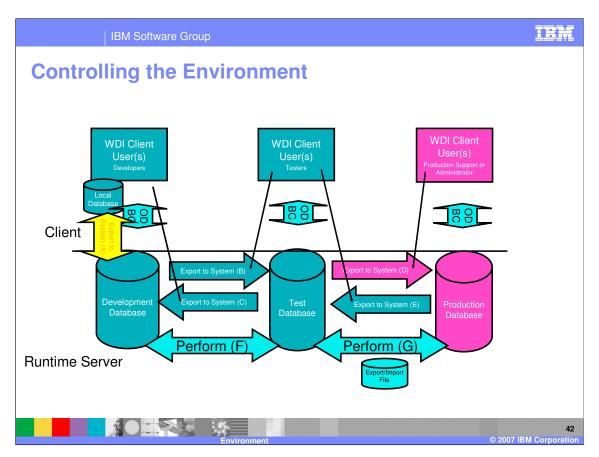
Queries are used to customize the way the WDI Object lists are presented.



Document Store (reporting and audit facility) is included with WDI. Reports may be accessed using WDI Client when configured as Client/Server.



Administrative functions to move your metadata definitions and customized processing options are provided using export and import. Operation data administration can be performed using the WDI Utility command interface.



The following configuration combines elements of a source code control system with a rigidly managed deployment process for changes in a multiple translation server environment. This configuration uses both PC and server databases. It makes extensive use of client/server access, along with the Export to System function within WebSphere Data Interchange Client to move objects, such as maps and DTDs, from system to system.



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