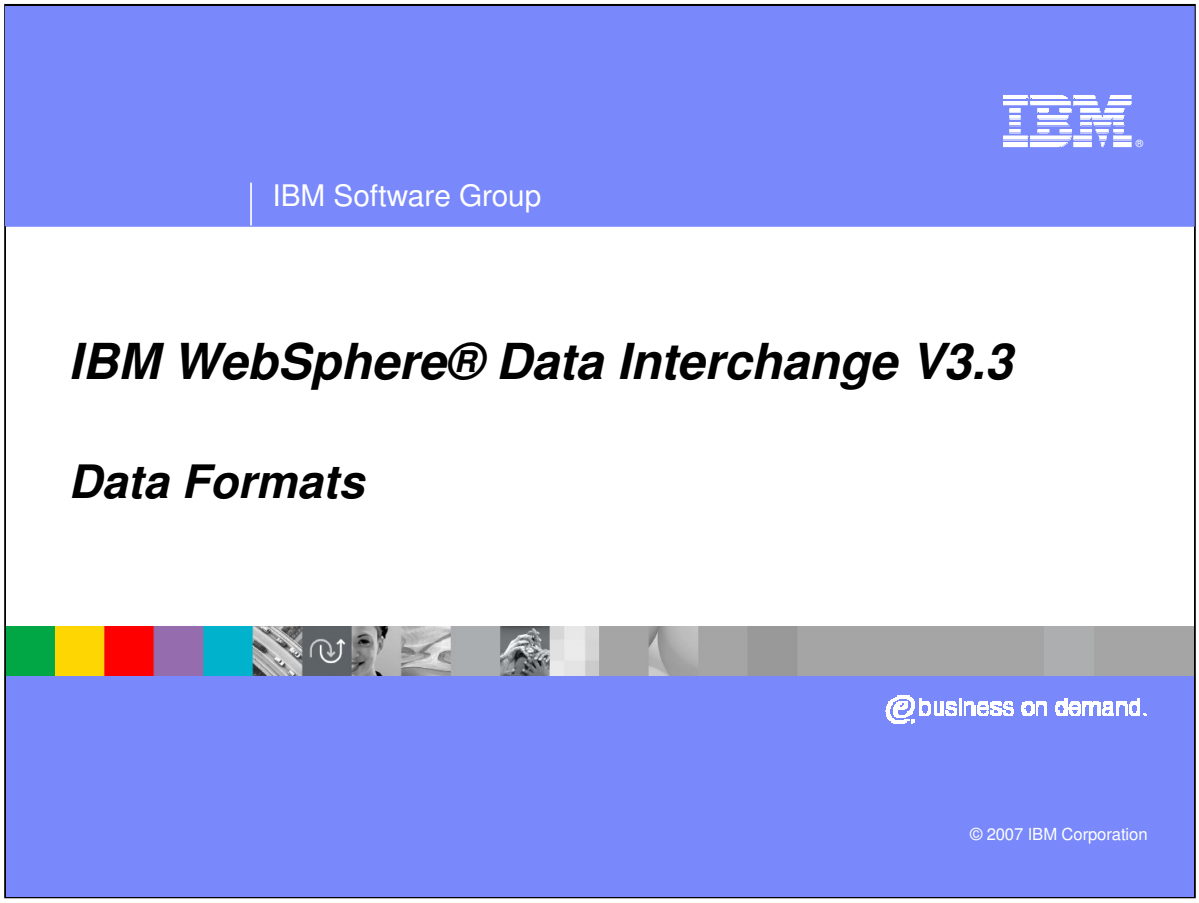


This presentation will review Data Formats.

Agenda

- Review mapping steps
- Describe Data Formats

The presentation will review the steps for mapping and describe Data Formats.

EDI Standards

- Mapping steps
  - Load Standard – Electronic Data Interchange (EDI) standards
  - Create Data Format (DF) – Application data definition or metadata
  - Load XML – DTDs and Schemas
  - Select Map type
    - Data Transformation
      - For Translation
      - Functional Acknowledgement
      - Validation
    - Send or Receive
  - Create Map – Relationship of source and target document
  - Setup Trading Partner Rules and Usages – Map execution

Before you can use WebSphere Data Interchange (WDI) to translate data, or to send or receive transactions, messages, or files, you must define certain information. This information describes how your system sends and receives data, how data is formatted in your application files and to a standard, to whom you send data and from whom you receive data, and other pertinent information. A WebSphere Data Interchange map relates a source document to a target document. In WebSphere Data Interchange you can create or import document definitions for the source and target documents, and then create a map which relates the elements in the source document to elements in the target document.

Data Formats

- Defines the layout of your application data
- Records, field names, and lengths
- Repeating structures and loops

The term *data format* defines the layout of your application data. It is a document definition. The word *data* refers to the information itself. The word *format* refers to the physical layout of information in the file, such as field names and lengths. WebSphere Data Interchange requires a description of the data format for each business application that generates data for translation, or uses translated data. Application data must be described to WebSphere Data Interchange so that it can be used as either a source or target for translation.

Data Formats

- Application Business Document Definitions
  - Defined as Raw data or C&D format
  - Records
  - Structures not a record (Occurs within a record)
  - Fields

You usually need to create a data format for every unique business document that is used or created by WebSphere Data Interchange. A single data format can be mapped to multiple documents. A data format can be defined as raw data or Control and Data (C&D) format. Raw data means there is a record identification that uniquely identifies each record and each record is fixed length. Raw data formats can also be delimited for example comma separated values. C&D format is a WDI defined format. The C or Control Record in the input data contains information for the data format to use for parsing the input, trading partner information, and override information. Each C record in the input data will signal a new message. Each D or Data Record in the input data begins with the value 'D' followed by the Record name used when the data format was defined followed by the data for the record. Records contain fields and structures. Fields are individual values and structures are grouped fields that may or may not repeat within a record.

Data Formats

- C&D format example

```
CDIUSER              DIUSERWORKSHOP          YY N
DRECORD10      24100000PONUM                 19990818
DRECORD11      BY 9999
DRECORD11      SE V00000WWWW
DRECORD11      DP XXXX
DRECORD20      1    0000042XYZ               BP 92 XXXX
DRECORD20      2    00000XXXXXXX             BP 92 TEST
DRECORD21      4  000000000001000PCE19990906
DRECORD21      4  000000000002000PCE19990913
DRECORD21      4  000000000001000PCE19990906
DRECORD21      4  000000000002000PCE19990913
DRECORD21      4  000000000012000PCE20000501
DRECORD21      4  000000000011000PCE20000601
DRECORD21      4  000000000010000PCE20000701
```


This is an example of C&D input data. The Control or C record is pre-defined and is documented in the WebSphere Data Interchange Version 3.3 Utility Commands and File Formats Reference.

Data Formats

- Raw Data Fixed length records example

```
H00 ROHIT       ZZ003020VICS  98052110220000017080000061920
H01 00121212121212              0007142024190002
SH011                  S
SH02CNT250001984                                                0000000000
SH03B               M ABCD LEASING INC              CC                      0000
SH06011940715
SH07STHLLOOP, INC.                  9 DUNSNUMBR0897
SH07SFTEST COMPANY PDQRST           9 0023233332222
SH08123419 STREETS AVENUE
SH09WALKER                  GA49503
OR012                  O
OR02896261                          940712
IT013                  I
IT02        UA011111005970              UP111110059700
IT03        0000000012CA00000000000000012CA
IT0400000100001200EA      000000000000000  000000000000000
IT014                  I
IT02
IT03        0000000022CA00000000000000022CA
IT0400000100001200EA      000000000000000  000000000000000
```


This is an example of Raw data fixed length records.

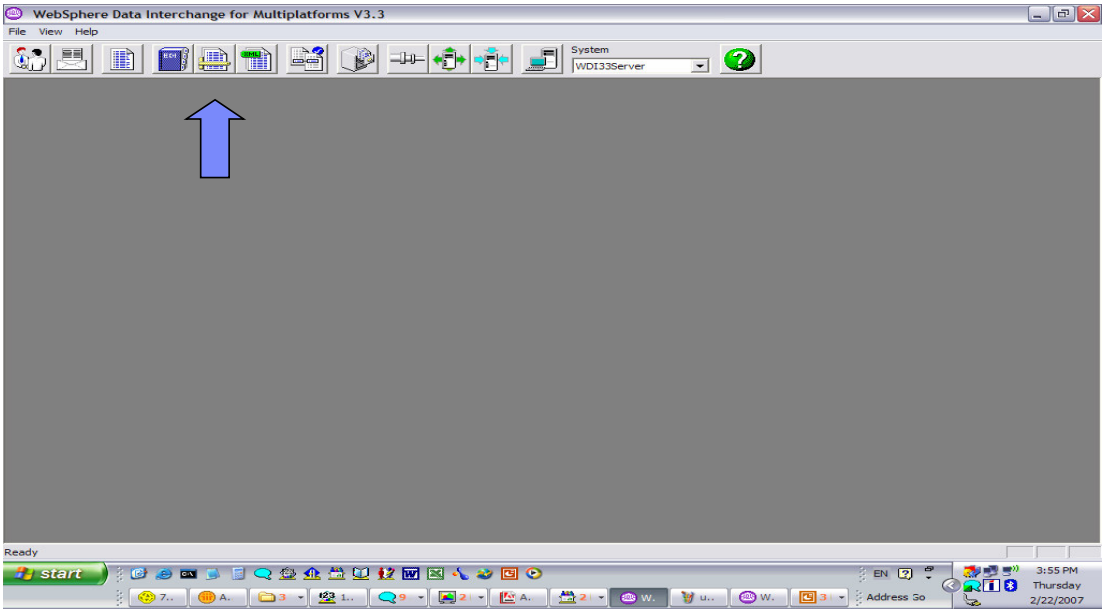
Data Formats

- Raw Data delimited example

"(201) 207-0109","Record 1 / N/A",12/20/2004,"AC149",$0.00,120,$0.00,$149.99,$11.94
"(201) 207-4445","Record 2 / N/A",12/20/2004,"NE300",$0.00,470,$30.80,$35.00,$0.00

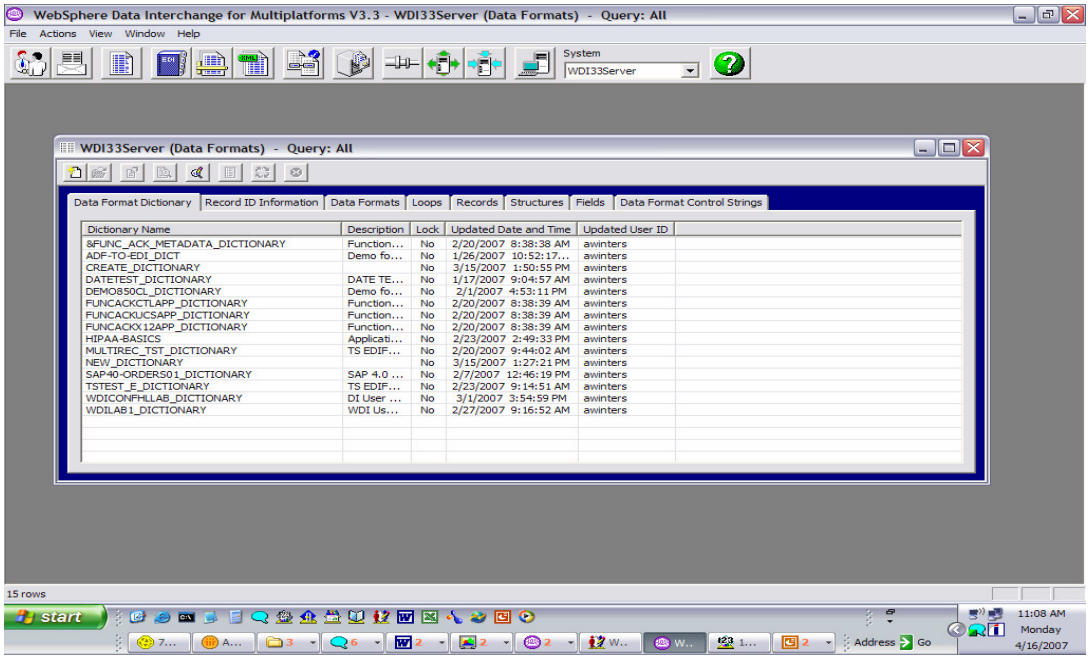
This is an example of Raw data comma delimited records.

Data Formats



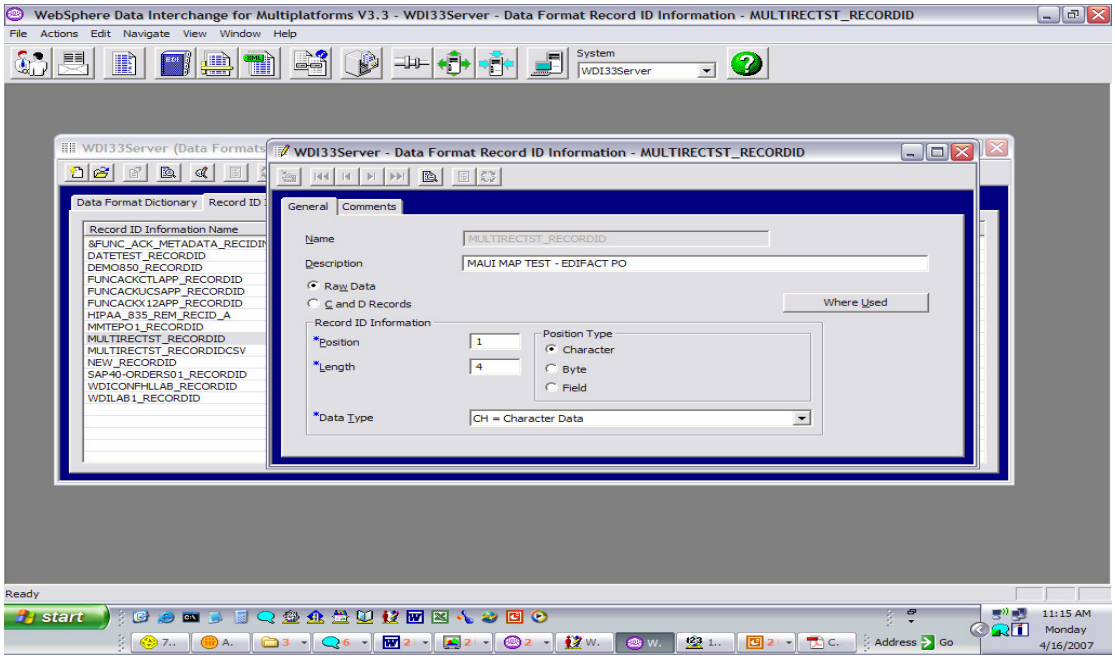
This is the location of the WebSphere Data Interchange (WDI) Client Data Formats Functional Area.

Data Formats



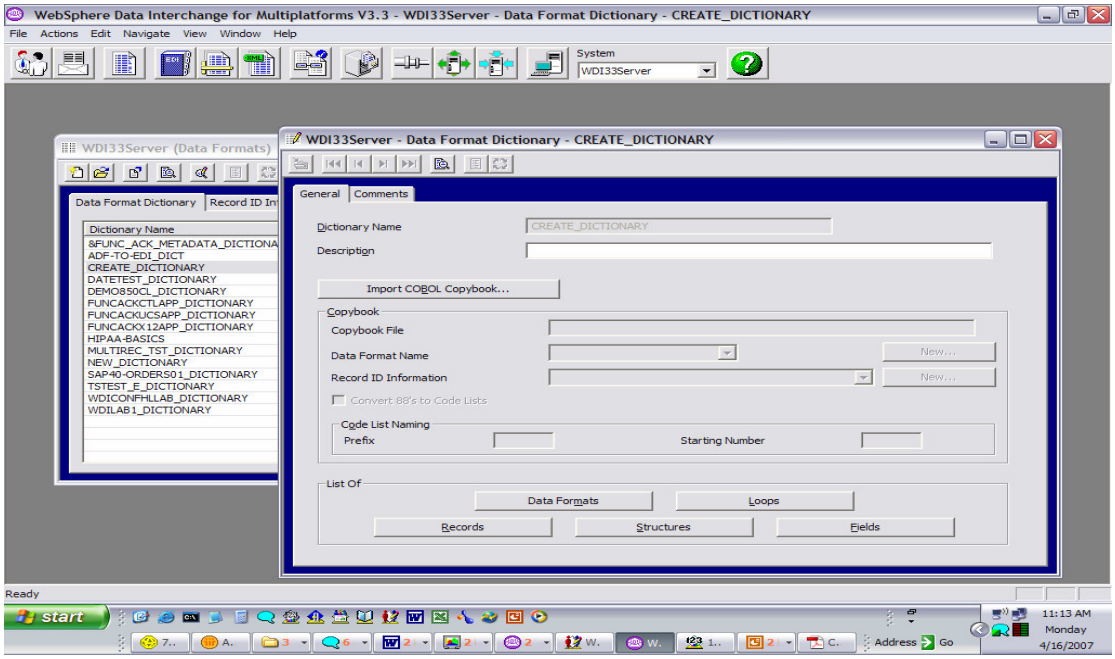
Components of Data formats are dictionary, record ID information, data formats, loops, records, structures, and fields. These are similar to Electronic Data Interchange (EDI) Standards components but describe your application data. The dictionary contains the component definitions for fields, structures, records, loops which allows you to re-use components within different data format definitions. Data format definitions contain records and loops. Loops contain records. Records contain fields and structures. And structures contain fields.

Data Formats



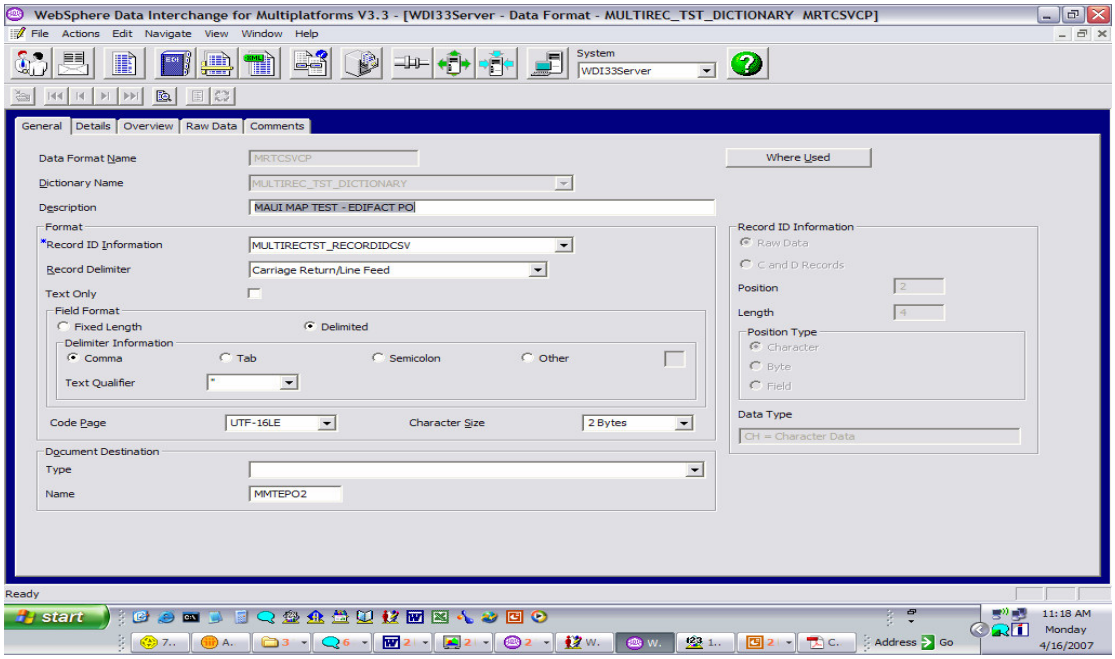
Raw data as opposed to C&D format is identified in the Record ID Information object.

Data Formats



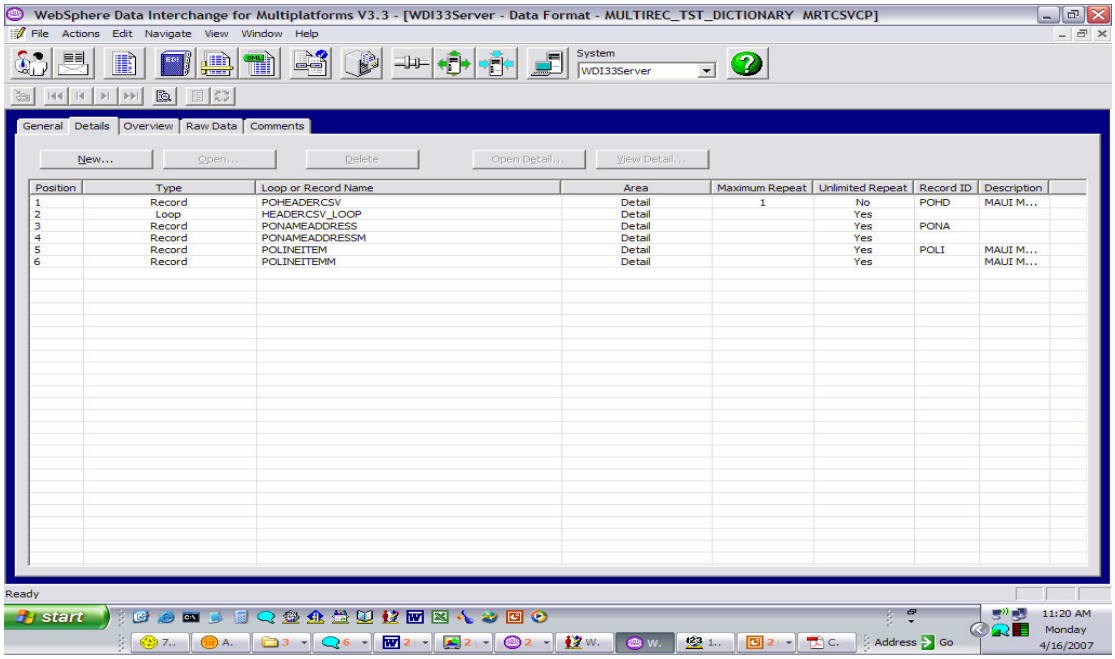
All components except for record ID information are available when selecting a specific Data Format Dictionary.

Data Formats



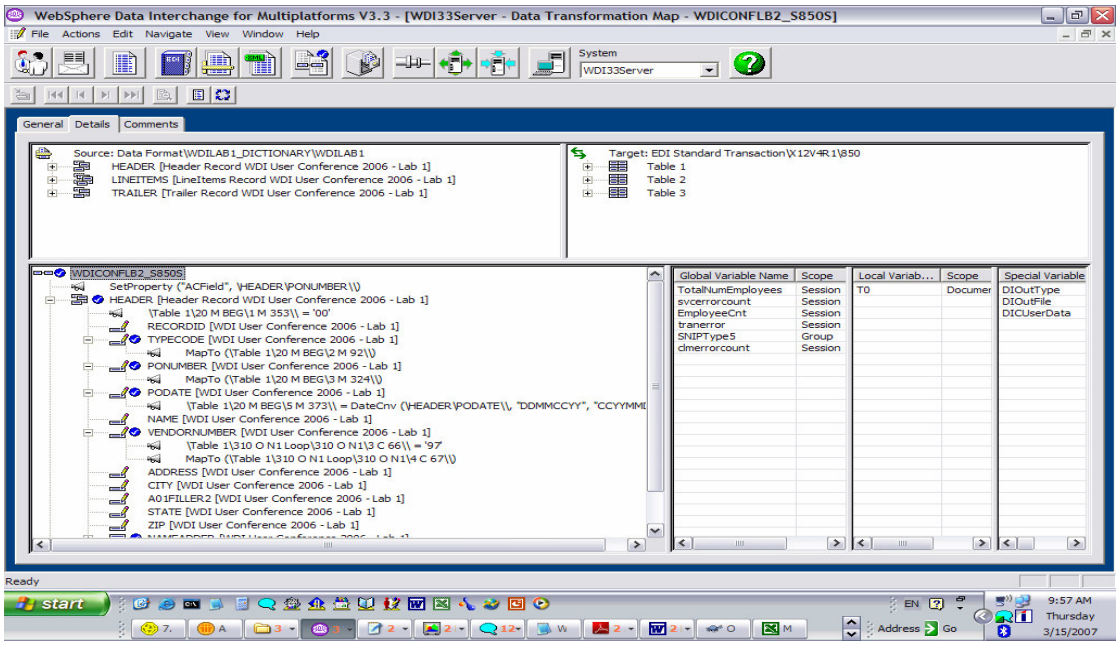
Raw data fixed and comma delimited is identified in the Data Format general tab.

Data Formats



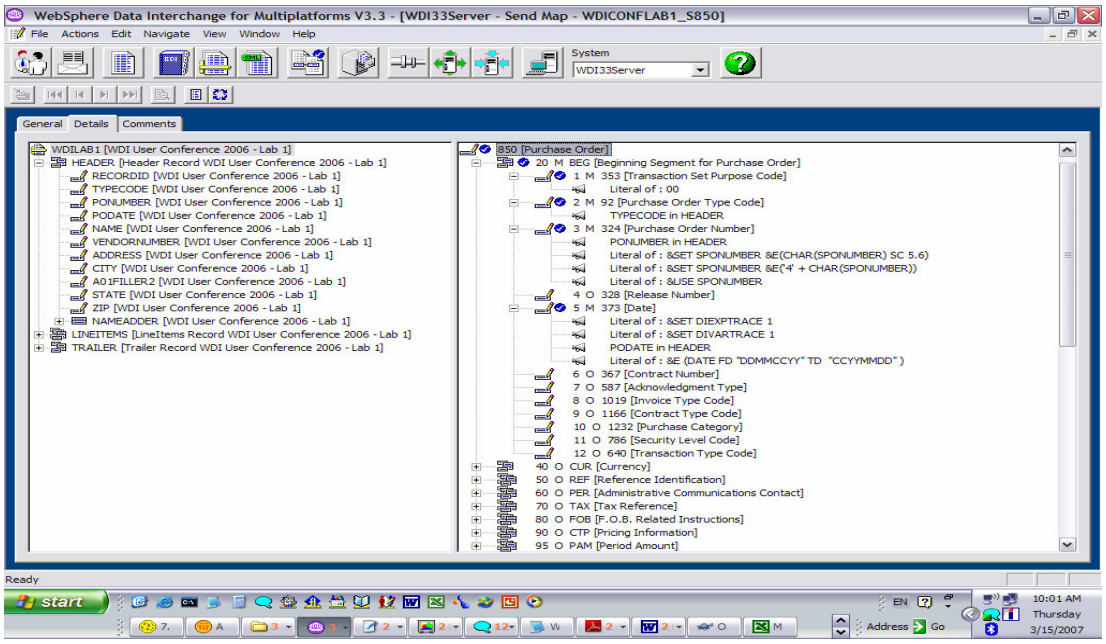
When all the components of the Data format have been defined, the data format can be used as a source or target document in mapping.

Data Formats



This is an example of a Data Transformation map. The source document is in the top left window and the target document is in the top right window. The mapping commands are in the bottom left window. This map is a application data format to EDI Standard map and is a source based map. The data format document definition contains all the record, structure and field definitions for this business document.

Data Formats



This is an example of a Send map. The source document is in the left window and the target document is in the right window. The mapping commands are in the target document on the right. This map is a application data format to EDI Standard map. The data format definition contains all the record, structure, and field definitions for this business document.

Data Formats

- Defining Data Formats
- Create Data Format Dictionary
  - Create Data Format Definitions or Document
    - Create Record definitions
      - Create Structures
        - Create Fields
      - Create Fields
    - Create Loops
  - Import Cobol Copybook
    - Imports records, structures, fields, creates code lists

The concepts for defining a data format are similar to EDI Standards. You Define a Data Format Dictionary. The Dictionary contains components for field, structure, record, and loop definitions. The data format definition contains record and loop definitions for the business document layout. Records can contain structures which contain fields and fields. All the components within a Data Format Dictionary can be copied, updated, and deleted and all components can be re-used in different business document definitions. For example a record can be used in 2 different data format definitions.

COBOL copybooks can be imported into a Data Format Dictionary. You can use this mechanism to create or update Data Format Record, structures, fields, and code lists. The imported Records, Structures, and Fields will be a part of the Data Format Dictionary into which they are imported. The Data Format Records can be used in a existing Data Format or a new Data Format.

Reference

- More information can be found in the WDI V3.3 Mapping Guide

More information can be found in the WebSphere Data Interchange Version 3.3 Mapping Guide.

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