



IBM Software Group

IBM WebSphere® Data Interchange V3.3

PERFORM Command and its Options



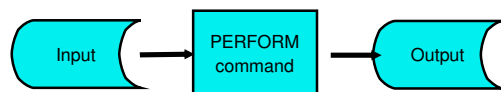
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This presentation describes the batch command language of WebSphere Data Interchange Server, commonly called the PERFORM command.

WDI Command Processor

- WebSphere Data Interchange uses a command language to drive the WDI Utility. The command language consists of PERFORM statements, WHERE clauses, and SELECTING clauses.
- The server performs functions in a number of areas.



WebSphere Data Interchange uses a command language to drive the WDI Utility. The WDI Utility is a batch method of executing translation. The command language consists of PERFORM statements, WHERE clauses, and SELECTING clauses. The PERFORM statement has a “command” which directs WDI what to do, and the WHERE and SELECTING clauses use “keywords” to tailor the specific request.

The server performs functions in a number of functional areas.

WDI Command Processor

The PERFORM command is represented in the text as follows:

```
PERFORM COMMAND  
SELECTING KEYWORD(value)  
WHERE KEYWORD(value)
```



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```
PERFORM COMMAND  
SELECTING KEYWORD(value)  
WHERE KEYWORD(value)
```

An example might be

```
PERFORM TRANSLATE TO APPLICATION WHERE FILEID(INDATA)
```

TRANSLATE TO APPLICATION is the *COMMAND* which tells WDI to translate EDI data to application format data, and *FILEID(INDATA)* tells WDI that the EDI input is defined with the logical file definition (DDNAME) of *INDATA*.

WDI Translation

Feature and Function of Translator

- Deenveloping of EDI headers and transactions
- Enveloping of EDI headers around transactions
- Functional Acknowledgment generation on input
- Functional Acknowledgment Reconciliation on receipt of 997
- Delayed Enveloping in conjunction with Document Store
- Delayed Translation in conjunction with Document Store
- Context based identification of map with EDI data
- Customization of delimiters and such by Trading Partner,
via TP Usage or Map Rule
- API for custom solutions
- Data Field exits for DT maps
- Variety of user exits for Send / Receive maps



Translation in WDI has a number of features and functions in the translation area. Each can be accomplished thru execution of a command.

WDI Command Processor

Translation commands

DEENVELOPE
DEENVELOPE AND TRANSLATE
PROCESS
RECEIVE
RECEIVE AND DEENVELOPE
RECEIVE AND PROCESS
RECEIVE AND SEND
RECEIVE AND TRANSLATE
RETRANSLATE TO APPLICATION
TRANSLATE TO APPLICATION
ENVELOPE
ENVELOPE AND SEND
RCVFILE AND SEND
REENVELOPE
REENVELOPE AND SEND
TRANSLATE AND ENVELOPE
TRANSLATE AND SEND
TRANSLATE TO STANDARD

These are the “commands” available in the Translation command group.

WDI Monitoring

Statistics Capture

Management Reporting

records usage by TP as translation occurs

Transaction Store Service

records data about transactions

Statistical Reporting

Optional Records

Transaction Data Extracts

provides data record with translation information

Trading Partner Capability

provides data record with Trading Partner usage info

Network Activity Analysis

provides data record with Network usage info

In the WDI Monitoring group there are “statistics capture” commands and “statistics reporting” commands. This is further described in the Management Reporting feature of WDI in the WDI Programmers Reference manual.

WDI Command Processor

Management Reporting commands

REMOVE STATISTICS
RESET STATISTICS
UPDATE STATISTICS
NETWORK ACTIVITY DATA EXTRACT
TRADING PARTNER PROFILE DATA EXTRACT
TRADING PARTNER CAPABILITY DATA EXTRACT
TRANSACTION ACTIVITY DATA EXTRACT

These are the PERFORM commands for the WDI Monitoring group.

WDI Administration

Export / Import function

Provides a means of extracting metadata from WDI

- EDI Standards,
- XML DTDs
- Data Formats,
- Maps,
- Map Rules,
- Trading Partner definitions,
- Profile specifications



The Export / Import group commands are used to extract and deploy WDI mapping objects. The extractions are in a WDI proprietary format and can be saved for backup and disaster recovery processes, or can be used to deploy the objects from a test system to production.

WDI objects include EDI standards, XML objects, Data Formats, Trading Partners, etc.

WDI Command Processor

Export / Import commands

EXPORT
IMPORT

Communications commands

RECVFILE
RESTART RECEIVE
RESTART SEND
SEND
SENDFILE

Miscellaneous commands

PROCESS NETWORK ACKS
QUERY
RECONSTRUCT
RECONSTRUCT AND SEND
CLOSE MAILBOX
DELETE PROFILE
QUERY PROFILE



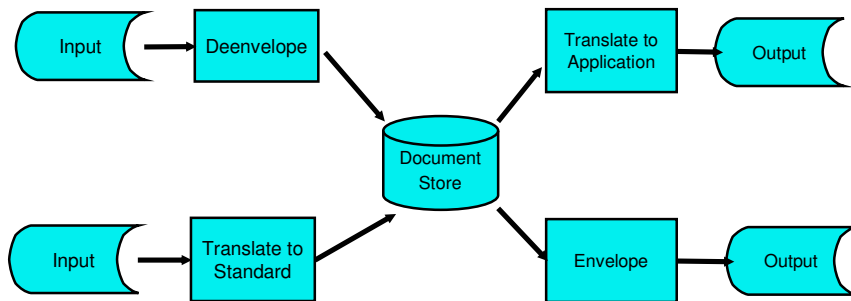
The Export / Import group commands are used to export (build a flat file object) and to import (restore the WDI format) into the WDI database.

The Communications group commands are used during data receipt and transmission. The Miscellaneous group commands are used in ad hoc situations.

WDI Document Store

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 translators store images of ADF, XML, and EDI data.

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



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

WDI Administration

Document Store features

- Functional acknowledgments
- Replay of incoming processing
- Resend of outgoing translations
- Maintenance of operational data

Event Log features

- Error recording



The Document Store group are the commands used to manage Document Store. Document Store is populated during translation and is used for functions like replay / resend of data to an external business partner – that is, after errors have been discovered, and for functional acknowledgment reconciliation. It also has an extract capability which can be used for reporting.

The Event Log is populated when WDI encounters selected errors during processing.

WDI Command Processor

Document Store commands

- HOLD
- PURGE
- RELEASE
- REMOVE TRANSACTIONS
- UNPURGE
- UPDATE STATUS
- ENVELOPE DATA EXTRACT
- TRANSACTION DATA EXTRACT

Event Log

- LOAD LOG ENTRIES
- REMOVE LOG ENTRIES
- UNLOAD LOG ENTRIES



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WDI Command Processor

Print / Reports

- PRINT
- PRINT ACKNOWLEDGMENT IMAGE
- PRINT ACTIVITY SUMMARY
- PRINT EVENT LOG
- PRINT STATUS SUMMARY
- PRINT STATUS SUMMARY2
- PRINT TRANSACTION DETAILS
- PRINT TRANSACTION IMAGE



The Print group are PERFORM statements for which WDI will produce a predetermined report or printout. The reports use data collected by Management Reporting, Document Store, and in the Event Log

WDI Command Processor

TRANSFORM command

You can use this command to translate data in any format to any other format defined in your WebSphere Data Interchange system. This command uses data transformation maps to translate the data.

Syntax

TRANSFORM

CLEARFILE(clear specified file contents)
DICTIONARY(input dictionary name)
DOCUMENT(input data document name)
IFCC(override condition codes)
INFILE(input data file name)
INTYPE(input data file type)
MAPID(map name)
OUTFILE(output data file name)
OUTLEN(maximum output record length)
OUTTYPE(output data file type)
SETCC(condition codes)
SYNTAX(input data syntax type)
TRACELEVEL(trace level)
XMLEBCDIC(EBDCDIC indicator)
XMLVALIDATE(XML validation indicator)
XMLDTPATH(XML DTD path)

**Typical
command and
options
available**

TRANSFORM command example

Transform the MQSeries queue file PURCH1 and output the results in file PURCHTRN.

```
PERFORM TRANSFORM  
WHERE INFILE(PURCH1)INTYPE(MQ)SYNTAX(X)OUTFILE(PURCHTRN)
```



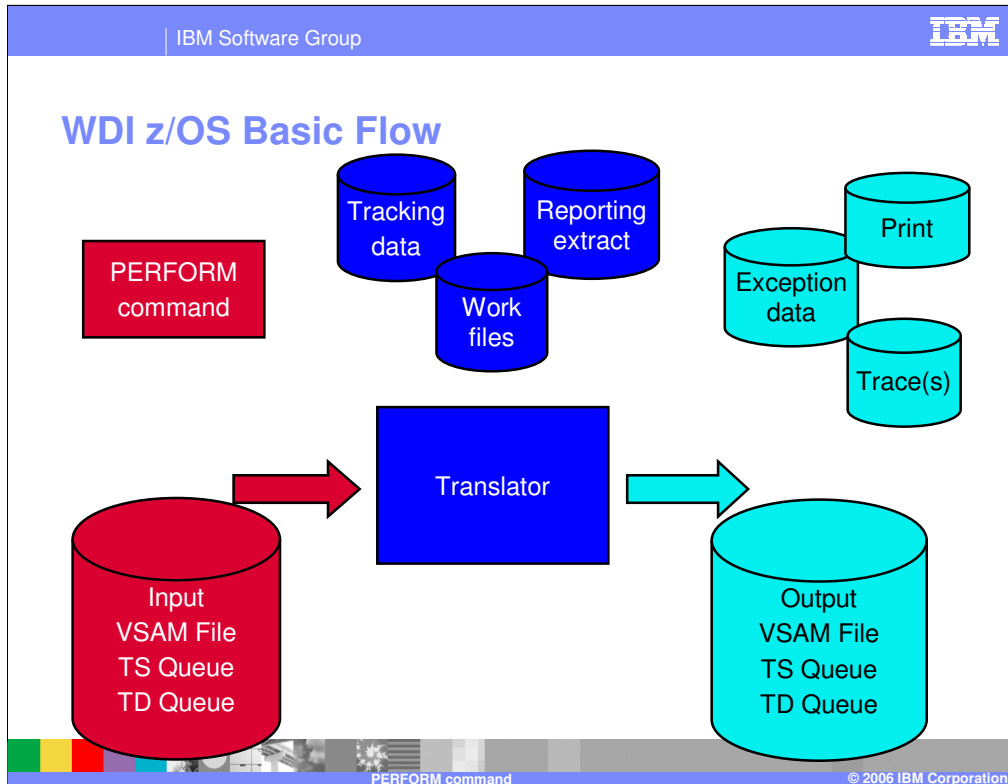
Each command is document in the WDI Utility commands manual. A typical format shows the command and the keyword options available for that command. An example is also shown. This is the TRANSFORM command. This command is used to direct WDI to use the DT translator when translating data.

WDI z/OS Batch JCL

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.

```
//RUNDI EXEC PGM=IKJEFT01,DYNAMNBR=20,REGION=0M,COND=(0,NE)
//STEPLIB DD DSN=DB98.DSNEXIT,DISP=SHR DB2
// DD DSN=DB98.DSNLOAD,DISP=SHR DB2
// DD DSN=EDI.V3R2MCD.SEDLMD1,DISP=SHR FVT
// DD DSN=EDI.SNA131.LOADLIB,DISP=SHR EXPEDITE
// DD DSN=EDI.XMLV1R4.SIXMMOD1,DISP=SHR XML4C_PARSER
// DD DSN=MO65.SCSOANLE,DISP=SHR MOSERIES
//SYSPRINT DD SYSOUT=*
//EDIQUERY DD DSN=RPOPE.TE51.EDIQUERY,DISP=MOD
//FFSTRAK DD DSN=RPOPE.TE51.TRACK,DISP=MOD
//FFSEXCP DD DSN=RPOPE.TE51.EXCPT,DISP=MOD,DCB=BUFNO=20
//EDIPAGE DD DSN=&&EDIPAGE,DISP=(NEW,DELETE),
// DCB=(RECFM=V,BLKSIZE=32760),
// UNIT=SYSDA,SPACE=(CYL,(20,300))
//EDIWORK DD DSN=&&EDIWORK,DISP=(NEW,DELETE),
// DCB=(RECFM=V,BLKSIZE=32760),
// UNIT=SYSDA,SPACE=(CYL,(20,300))
//EDITTRC DD SYSOUT=* DT TRACE
//EDITRAC DD DSN=RPOPE.TE51.DITRACE,DISP=SHR
//XMLWORK DD DSN=RPOPE.TE62.XMLWORK,DISP=OLD
//XMLERR DD SYSOUT=*
//XMLTRC DD SYSOUT=*
//XMLEXCP DD DSN=RPOPE.TE62.XMLEXCP,DISP=OLD
//XMLDICT DD DSN=RPOPE.TE62.XMLDICT,DISP=SHR XML PP PDS
//XMLDIDS DD DSN=RPOPE.TE62.XMLDIDS,DISP=SHR XML DTD PDS
//ADDFILE DD DSN=RPOPE.P8010717.APPLN,DISP=SHR P8010717
//QDATA DD DSN=RPOPE.TE51.QDATA,DISP=MOD,DCB=BUFNO=20
//SYSIN DD *
PERFORM TRANSFORM WHERE
DICTIONARY(CA_DMV_14970) DOCUMENT(CA_DMV_14970DF)
SYNTAX(D) INFILE(ADDFILE) OUTFILE(QDATA)
PAGEsthRESHOLD(1000) PAGE(Y)
TRACELEVEL(C1)
/*
```

In z/OS, JCL is used to tell the operating system to execute WDI. This is the JCL for a typical jobstep which would execute WDI. The PERFORM statement is shown at the bottom. It is data to WDI and tells WDI how to interact with the other DD statements.



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

PERFORM considerations

- Multiple PERFORM statements can be specified in a single command (SYSIN) file in the JCL
- While your input can include more than one PERFORM statement, the WebSphere Data Interchange Utility handles each statement separately. It verifies the syntax of each statement and processes it before verifying and processing the next statement. If a nonzero (error) return code is generated for a statement, processing stops with the incorrect statement.
- Return codes can be manipulated with the IFCC and SETCC keywords



In conclusion, a few other points about PERFORM statements can be made.

- 1) The WDI Utility can interpret multiple perform statements in one execution. They can follow each other and will be executed in that order.
- 2) When multiple commands are presented, an error in a command will terminate the sequence.
- 3) If desired, selected return codes of a command can be changed to other values using the IFCC and SETCC keywords.

Summary

See the WDI Version 3 Release 3 **Utility Commands and File Formats Reference** manual, SC23-5873-00 for a complete explanation of each command and each keyword.



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