



IBM Software Group

2006 B2B Customer Conference

B2B – Catch the Next Wave

B7: WDI 3.2 Transaction Store

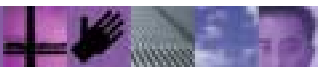
WebSphere. software

A horizontal decorative banner with various colorful and abstract patterns, including a yellow square, a green square, a red square, a starburst, a face, a globe, a cross, and a grid of circles.

ON DEMAND BUSINESS™

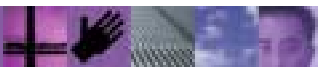
Objectives

- Describe the purpose and function of the Transaction Store
- List uses for the Transaction Store
- Describe how to activate and access the Transaction Store
- Compare and differentiate the features available in the Transaction Store Utility versus the Facility
- Explain popular Utility functions
- Discuss interactive navigation via WDI Client
- Point out Transaction Store performance tuning tips



What is the Transaction Store?

- Collection of real-time control information for EDI documents
- Provides status information
 - Translation status
 - Functional acknowledgment status
 - Network status
 - Expiry (store) status
- Repository for EDI images
 - Optionally controlled by Application Defaults profile
 - Needed for delayed enveloping
- EDI data can be processed or reprocessed from the Transaction Store
- Stored in a set of predefined DB2 tables; EDITSxx



Why use the Transaction Store?

- Generate reports on EDI processing
 - Canned reports available
 - Data extract
- Functional acknowledgement reconciliation
- Interactive views of document status
- Delay enveloping
- Delay back-end application translation
- Reprocess EDI transactions
- Audit control



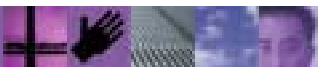
How to activate and access the Transaction Store

- Application Defaults profile transaction store enabling options
 - Save Information About All Documents
 - Save Information About Successfully Translated Documents
 - Save Information About Documents that Fail Translation
 - Do Not Save Information to the Transaction Store
 - Optionally save EDI images
- Access the Transaction store via
 - WDI Client
 - WDI Utility PERFORM commands
 - WDI for z/OS (Host) offers an interactive TSO or CICS interface, a.k.a. the Transaction Store Facility



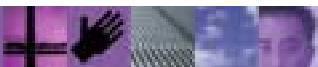
How to activate and access the Transaction Store (continued)

- Send/Receive processing uses specific commands to add transactions to the store
 - PERFORM TRANSLATE TO STANDARD
 - PERFORM ENVELOPE
 - PERFORM DEENVELOPE
 - PERFORM TRANSLATE TO APPLICATION
- Data Transformation requires extra settings on PERFORM TRANSFORM command to simulate above commands
 - PERFORM TRANSFORM WHERE ENVELOPE(N)
 - PERFORM TRANSFORM WHERE INTYPE(ST) DIR(S)
 - PERFORM TRANSFORM WHERE DEENVONLY(Y)
 - PERFORM TRANSFORM WHERE INTYPE(ST) DIR(R)



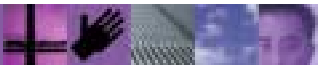
Utility and Facility features

- Documents can be processed from the Transaction Store via TSO, batch, or CICS
- Utility and Facility functions for processing from the Store -- not available from WDI Client
 - Envelope transactions
 - Envelope and send transactions
 - Receive and de-envelope transactions
 - Translate received transactions
 - Re-envelope transactions
 - Re-envelope and send transactions
 - Re-translate received transactions



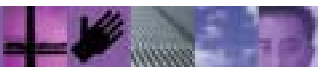
Utility and Facility features (continued)

- Utility and Facility functions for reporting or updating document status
 - Report transaction status
 - Update store status
 - Update network status
 - Report interchange/group status
 - Update interchange/group status
 - Envelope or Transaction Data extract
- The on-line Facility offers a host-based (green screen) interactive interface to search, (re)process, and report on documents



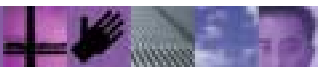
Popular Utility functions – Delayed enveloping

- Outbound delayed enveloping – allows user to bundle many documents together into minimum groups and interchanges
 - PEFRFORM TRANSLATE TO STANDARD, then later
 - PERFORM ENVELOPE
 - Default TRXSTAT = 21 Send translated
 - PEFFORM REENVELOPE to reprocess documents from the store
 - Default TRXSTAT =
 - 31 Envelope error
 - 41 Sent with errors
 - 42 Send request error
 - 43 Not sent network error
 - Need to add TRXSTAT appropriately to re-envelope documents that were already successfully processed, e.g. if in “enveloped” status:
 - PERFORM REENVELOPE WHERE TRXSTAT(30) INTCTLNO(3) TO(5) ...
 - CAUTION: Limit search criteria to prevent reprocessing of entire store



Popular Utility functions – Delayed translation

- Inbound delayed translation – allows user to translate many documents together
 - PERFORM DEENVELOPE, then later
 - PERFORM TRANSLATE TO APPLICATION
 - Default TRXSTAT = 70 Received
 - PERFORM RETRANSLATE TO APPLICATION to reprocess translated documents
 - Default TRXSTAT =
 - 72 Receive translated
 - 73 Receive translate error
 - Caution: Limit search criteria to prevent reprocessing of entire store



Popular Utility functions – Reporting

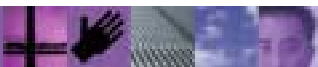
- Reporting functions

- PERFORM PRINT STATUS SUMMARY2 WHERE...

- Canned report with headings ready for printing
 - Consider FUNACKP(Y) to report pending documents
 - Consider TRXSTAT = 62 Transaction rejected
 - Consider TRXSTAT = 63 Transaction accepted with errors

- PERFORM TRANSACTION DATA EXTRACT

- Raw extract data for back-end application
 - Not printer ready – no headings
 - Utilize same options as above
 - Also allows extraction of EDI images along with FA image



Popular Utility functions – Reporting (continued)

- A trick to eliminate redundant reporting on same documents
 - Use recent HANDLE range to limit search, such as HANDLE (*-1) TO (*)
 - After report command, use PERFORM PURGE or PERFORM HOLD to mark transactions as having already been reported
 - PERFORM PURGE sets store status STSTAT = 4
Disadvantage: Transaction becomes eligible for removal
 - PERFORM HOLD set store status STSTAT = 1
Disadvantage: PERFORM RELEASE is needed to restore held transactions to their former status
 - Adding STSTAT(0) to report command will omit documents from next report by including only active documents in the report



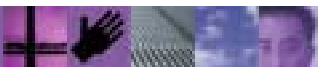
Interactive navigation via WDI Client

- Strongly recommend using WDI Client fix pack 17 or higher for Transaction Store Functional Area Renovation
- There are four views to this Functional Area
 - Transactions List window displays documents, one row per document, regardless of whether they have been enveloped or de-enveloped
 - Enveloped Transactions List window displays documents, one row per document, that have envelope information associated with them
 - Groups List window displays functional groups
 - Actions menu offers function to manually Acknowledge documents
 - Interchanges List window displays interchanges



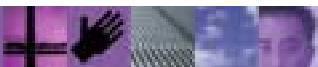
Interactive navigation via WDI Client (continued)

- Click on the desired tab to enter one of the four views
- Specify Selection Criteria to limit what is presented
- Double-click on a row to drill down to a specific viewer
- The Information presented by the viewer is relevant to the view
 - Transaction Viewer shows details of a document
 - Includes a tab for the transaction image
 - Enveloped Transaction Viewer shows the details of a document along with its associated envelope information
 - Includes a tab for the transaction image
 - Group Viewer shows details of a functional group
 - Interchange Viewer shows details of an interchange
- Image tab presents an image of the document
 - Right click on image to select Find command
 - Allows copy/paste of the image data



Interactive navigation via WDI Client (continued)

- Use Query Lists under File menu to customize document list windows
 - Saves commonly used queries
 - Saves customized selection criteria
 - Add, remove, or rearranges available columns
- Use Report Lists under File menu to access reports
 - Pending Functional Acknowledgements Report



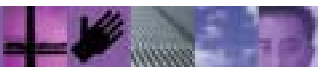
Performance tuning

- Maintain Transaction store tables on a regular basis
- PERFORM PURGE WHERE...
 - Marks documents for removal
- PERFORM REMOVE TRANSACTIONS WHERE...
 - Deletes documents from store
- WHERE option plays significant role in performance
 - HANDLE range always performs better than TRXDATE
 - Ex. mark for purge, then remove anything older than 30 days
 - PERFORM PURGE WHERE HANDLE (*-99999) TO (*-31) STSTAT(0)
 - PERFORM REMOVE TRANSACTIONS WHERE HANDLE (*-99999) TO (*-31)



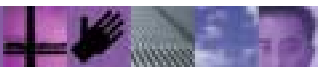
Performance tuning

- After clean-up, use DB2 Utilities
 - REORG
 - RUNSTAT
 - REBIND
- Applicable Transaction Store DB2 tables
 - EDITSAU, EDITSTH, EDITSTI, EDITSTU, EDITSEV, EDITSGP
- Data key for most tables are ever-ascending thus require REORG to free-up space after deletes
- Start by scheduling maintenance weekly, then more frequently as needed
- Keeping the table sizes down improves translation and query performance



Performance tuning

- Delayed enveloping and delayed translate to application degrades performance as compared to combined commands
 - Require search of transaction store to find documents
 - For example, rather than TRANSLATE TO STANDARD and then ENVELOPE, use TRANSLATE AND ENVELOPE
 - TRANSLATE AND ENVELOPE does not require search of transaction store
 - Same is true for DEENVELOPE and TRANSLATE TO APPLICATION
 - More efficient to use DEENVELOPE AND TRANSLATE



Summary

- We've covered the key features of the WDI Transaction Store and why to use it
- Shown how easy it is to activate
- We've covered popular utility functions to automate reporting and how to bundle documents
- And how to navigate interactively for real-time, on demand information
- Finally we've covered how to maintain the database and learned how easy it is to tune
- The key is staying on top of the data and monitoring its growth

