

IBM Software Group

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The New Transaction Store

WebSphere. software





Objectives

Provide an overview of the new transaction store capabilities planned for WDI 3.3, including:

- Limitations of transaction store in WDI 3.2
- Goals for transaction store in WDI 3.3
- Examples of new capabilities in WDI 3.3



Limitations of transaction store in WDI 3.2

- Stores EDI transactions only no XML or ADF
- Even for EDI, did not fully capture "key" info –
 problems with generic "any" trading partner
- For DT maps, limitations on duplicate interchange checking
- Inflexible database architecture limited ability to add new properties



WDI 3.2 transaction store limitations -- 1

Transaction store modelled on EDI, does not capture information for XML or ADF.

 TS tables specific to EDI, mirror structure of an EDI Interchange – envelope, group, and transaction tables



WDI 3.2 transaction store limitations – 2

For EDI, the transaction store did not capture "key" information, leading to problems with generic "ANY" trading partner.

- Key structure of TS tables based on trading partner ID
- Original assumption was that a given EDI interchange would resolve to a specific TP
- Introduction of generic trading partner and related concepts meant that multiple distinct EDI identifiers could map to a single TP ("ANY")
- Items such as sending TP id + qualifier, receiving id + qualifier are missing from keys
- Impact on various areas reporting, selecting, duplicate checking.



WDI 3.2 transaction store limitations -- 3

For DT, duplicate interchange checking was limited.

- DT updates to transaction store are done as mass update at the end of PERFORM TRANSFORM.
- Duplicate interchanges within a single PERFORM TRANSFORM are not detected.
- Key limitations may also confound duplicate checking.



WDI 3.2 transaction store limitations -- 4

Inflexible database architecture limited changes.

- TS database included fix-sized columns for specific EDI elements
- Database change required for new or expanded elements, for example EDIFACT/ISO 9735 V4.
- Some columns reused/redefined



Goals for WDI 3.3 Transaction Store

- Fix known problems!!!
- Add new features!!!
- Create flexible structure for future enchancements.
- Specifically:
 - Capture info & images for XML and ADF
 - Distinguish different "ANY" trading partners.
 - Correctly detect duplicate interchanges.
 - 4. Capture additional info, including EDI control elements and message properties, even when not used directly by WDI.



WDI 3.3 Transaction Store Goals - 1

Capture XML and ADF info and images

- New "DS" tables
- Flexible structure "attribute" tables store arbitrary keyword/value pairs – "document extension" table stores specific values in generic columns
- For EDI, old TS tables continue to be used with some changes
- XML and ADF info not captured for SR maps



WDI 3.3 Transaction Store Goals - 2

Distinguish "ANY" trading partners.

- Add ids and qualifiers as needed to existing TS tables.
- Populate these new columns for both SR and DT maps.
- Add new keywords to commands as needed, other related changes.



WDI 3.3 Transaction Store Goals - 3

Correctly detect duplicate interchanges.

- For DT, add new table synchronously updated during PERFORM TRANSFORM processing.
- For SR, expansion of existing TS tables keys resolves the issue.



WDI 3.3 Transaction Store Goals – 4

"Plan for the future" (and get caught up with recent past...)

- New "DS" tables better model the common features of XML/ADF/EDI.
- Miscellaneous existing columns expanded to handle expanded EDI elements
- Some "mapped" columns have been unmapped, similar small tweaks



Examples of new transaction store capabilities

- New PERFORM command options
- New records from PERFORM EXTRACT
- Need some details here....



Summary

- WDI 3.2 transaction store only handled EDI
- WDI 3.2 transaction store had several specific problems which limited usefulness
- WDI 3.3 addresses specific issues
- WDI 3.3 includes new table structure to facilitate future changes