



IBM Software Group

IBM WebSphere® Data Interchange V3.3

T3 – X12 999 Acknowledgment



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Agenda

- Overview
- WDI V3.3 Enhancement
- X12 999 vs 997
- X12 997 Changes
- Validation Mapping Commands



X12 999 Acknowledgment

- Implementation Acknowledgment Transaction Set 999.
- Report validation errors when a message is validated against an implementation guideline.
- 997 used to report errors validating against the definition of the message published by the X12 standards bodies.
- The 999 will replace the 997 when used.



X12 999 Acknowledgment

- *Add support for ANSI X12 999 Acknowledgment*
Support sending, receiving, and reconciling an X12 999 acknowledgement instead of a 997.
 - Provide the Functional Acknowledgment Map for the 999 Acknowledgment.
 - Provide Validation Mapping Commands to support Validation for the 999 Acknowledgment.



X12 999 Acknowledgment

- Mapping WDI Client Functional Area:
 - ▶ New Map for X12 999 Functional Acknowledgment.
 - ▶ New Map for UNTDI Envelope Validation.
 - ▶ All WDI Functional Acknowledgment and Validation Maps have been updated.
 - ▶ All WDI Functional Acknowledgment and Validation Maps begin with the '&' character.



X12 999 Acknowledgment

WebSphere Data Interchange for Multiplatforms V3.3 - WDI33Server (Mapping) - Query: All

File Actions View Window Help

System: WDI33Server

WDI33Server (Mapping) - Query: All

| Map Name | Compile Required | Description | Lock | Updated Date |
|------------------|------------------|---|------|--------------|
| SDT_FA997V2R4 | Yes | Functional Acknowledgment 997 - X12V2R4 | No | 2/20/2007 |
| SDT_FA997V3R5 | Yes | Functional Acknowledgment 997 - X12V3R5 | No | 2/20/2007 |
| SDT_FA997V3R7 | Yes | Functional Acknowledgment 997 - X12V3R7 | No | 2/20/2007 |
| SDT_FA997V4R2 | Yes | Functional Acknowledgment 997 - X12V4R2 | No | 2/20/2007 |
| SDT_FA997V4R6 | Yes | Functional Acknowledgment 997 - X12V4R6 | No | 2/20/2007 |
| SDT_FA999V3R3 | Yes | Functional Acknowledgment 999 - UCSV3R3 | No | 2/20/2007 |
| SDT_FA999V5R1 | Yes | Implementation Guide Syntax Ack 999 - X12V5R1 | No | 2/20/2007 |
| SDT_FACONTROL | Yes | Functional Acknowledgment CONTROL - Prior to D94E | No | 2/20/2007 |
| SDT_FACONTROL94E | Yes | Functional Acknowledgment CONTROL - V2R1 [D94E] | No | 2/20/2007 |
| SDT_FACONTROL99A | Yes | Functional Acknowledgment CONTROL - V4R1 [D99A] | No | 2/20/2007 |
| SDT_TA1_ACK | Yes | WDI TA1 mapping | No | 2/20/2007 |

11 rows

11:13 PM Monday 3/5/2007

X12 999 Acknowledgment

WebSphere Data Interchange for Multiplatforms V3.3 - [WD133Server - Functional Acknowledgment Map - BDT_FA999V5R1]

Source: Data Format\BIFUNC_ACK_METADATA_DICTIONARY\BIFUNC_ACK_META

- INTERCHANGE_RESPONSE [Interchange Response Record]
 - GRP-REC_LOOP

Table 1

- 300 M AK1 [Functional Group Response Header]
- 300 O AK2 Loop [Transaction Set Response Header]
- 300 O AK2 [Transaction Set Response Header]
- 400 O BK3 Loop [Implementation Data Segment Note]
- 400 O BK3 [Implementation Data Segment Note]
- 500 O CTX [Context]
- 500 O BK4 Loop [Implementation Data Element Note]
- 800 M BK5 [Implementation Transaction Set Response Trailer]
- 900 M AK3 [Functional Group Response Trailer]

BDT_FA999V5R1

- WIDE Development Changes
 - Created 07/27/06 WD13.3 - Implementation Acknowledgment Transaction Set 999 X12V5R1
 - GrpLevelOnly = (StrComp(GetProperty("GRPLVFA"), "N") > 0)
 - INTERCHANGE_RESPONSE [Interchange Response Record]
 - GRP-REC_LOOP
 - GROUP_RESPONSE [Group Response Record]
 - MSG-REC_LOOP [Message Response Loop]
 - Qualify (GrpLevelOnly = 0 OR (GrpLevelOnly != 0 AND GrpError != 0))
 - MapTo (Table 1\300 O AK2 Loop ())
 - MESSAGE_RESPONSE [Message Response Record]
 - SEG-REC_LOOP [Data Segment Note Loop]
 - MESSAGE_RESPONSE_TRAILER [Message Response Record]
 - GROUP_RESPONSE_TRAILER [Message Response Record]

| Global Variable Name | Local Variable Name | Special Variable Name | Scope |
|----------------------|---------------------|-----------------------|-------|
| TotalNumEmployee | MsgType | DDOutType | De... |
| svccomcount | GrpError | DDOutFile | De... |
| EmployeeCnt | MsgOn | DDUserData | De... |
| tranerror | SyntaxCode | | |
| SHOPType5 | GrpLevelOnly | | |
| dnererrorcount | | | |

X12 999 Acknowledgment

The screenshot displays the WebSphere Data Interchange for Multiplatforms V3.3 interface. The main window shows a hierarchical tree view of the 'GRP-REC_LOOP' map. The tree structure includes:

- GRP-REC_LOOP
 - GROUP_RESPONSE [Group Response Record]
 - MSGREC_LOOP [Message Response Loop]
 - Qualify (GrpLevelOnly = 0 OR (GrpLevelOnly = 0 AND GrpError = 0))
 - MapTo (Table 1/300 O AK2 Loop())
 - MESSAGE_RESPONSE [Message Response Record]
 - SEGREC_LOOP [Data Segment Note Loop]
 - MapTo (Table 1/300 O AK2 Loop/400 O BK3 Loop())
 - DATA_SEGMENT_RECORD [Data Segment Note Record]
 - RECORD_ID [Raw Data Record Identification]
 - SEGMENT_TAG [Segment Tag]
 - SEGMENT_POS [Segment Position within Message]
 - LOOP_ID [Loop Identification]
 - SYNTAX_ERROR_CODE [Syntax Error Code]
 - MapTo (Table 1/300 O AK2 Loop/400 O BK3 Loop/400 O BK3/4 O 620())
 - SEG_CONTEXT_RECORD [Segment Context Record]
 - ELEREC_LOOP [Data Element Note Loop]
 - MESSAGE_RESPONSE_TRAILER [Message Response Record]
 - GROUP_RESPONSE_TRAILER [Message Response Record]

On the right side of the interface, there is a table with three columns: 'Global Variable Name', 'Local Variable Name', and 'Special Variable Name'. The table contains the following entries:

| Global Variable Name | Local Variable Name | Special Variable Name |
|----------------------|---------------------|-----------------------|
| TotalNumEmployee | MsgType | D3OutType |
| svccntamount | GrpError | D3OutFile |
| EmployeeCnt | MsgCh | D3UserData |
| trnerror | SyntaxCode | |
| SNPTtype5 | GrpLevelOnly | |
| dnerrorcount | | |

A red arrow points from the 'SYNTAX_ERROR_CODE' node in the tree view to the 'SyntaxCode' entry in the table.

X12 999 Acknowledgment

WebSphere Data Interchange for Multiplatforms V3.3 - [WDI33Server - Functional Acknowledgement Map - &DT_FA999V5R1]

File Actions Edit Navigate View Window Help

System: WDI33Server

General Details Comments

Source: Data Format:\BPUNC_ACK_METADATA\BPUNC_ACK_META
 INTERCHANGE_RESPONSE [Interchange Response Record]
 GRPHEC_LOOP

600 O K4 Loop [Implementation Data Element Note]
 600 O K4 [Implementation Data Element Note]
 1 M C030 [Position in Segment]
 2 O 725 [Data Element Reference Number]
 3 M 621 [Implementation Data Element Syntax Error Code]
 4 O 724 [Copy of Bad Data Element]
 700 O CTX [Context]
 1 M C998 [Context Identification]
 1 M 9999 [Context Name]
 2 O 9998 [Context Reference]

SEGREC_LOOP [Data Segment Note Loop]
 MapTo ((Table 1\300 O AK2 Loop\400 O K3 Loop\))
 DATA_SEGMENT_RECORD [Data Segment Note Record]
 SEG_CONTEXT_RECORD [Segment Context Record]
 ELEREC_LOOP [Data Element Note Loop]
 MapTo ((Table 1\300 O AK2 Loop\400 O K3 Loop\600 O K4 Loop\))
 DATA_ELEMENT_RECORD [Data Element Rules Record]
 RECORD_ID [Raw Data Record Identification]
 ERR_ELEMENT_POS [Erroneous Data Element Position]
 ERR_COMP_ELEMENT_POS [Erroneous Component Data Element Position]
 ERR_REP_ELEMENT_OCC [Repeating Element Occurrence]
 ELEMENT_REF [Data Element Reference Number]
 SYNTAX_ERROR_CODE [Syntax Error Code]
 MapTo ((Table 1\300 O AK2 Loop\400 O K3 Loop\600 O K4 Loop\600 O K4\3 M 621\))
 DATA_IMAGE [Copy of Bad Data Element]
 ELE_CONTEXT_RECORD [Element Context Record]
 MESSAGE_RESPONSE_TRAILER [Message Response Record]
 GROUP_RESPONSE_TRAILER [Message Response Record]

| Global Variable Name | Local Variable Name | Special Variable |
|----------------------|---------------------|------------------|
| TotalNumEmployee | MsgType | DIOutType |
| gverrorcount | GrpError | DIOutFile |
| EmployeeCnt | MsgOn | DIUserData |
| tranerror | SyntaxCode | |
| SNFTType5 | GrpLevelOnly | |
| Omerrorcount | | |

Ready

start

Address Go

1:23 PM
 Monday
 3/5/2007

X12 999 Acknowledgment

The screenshot displays the WebSphere Data Interchange (WDI) configuration interface for a Functional Acknowledgment Map. The window title is "WebSphere Data Interchange for Multiplatforms V3.3 - [WDI33Server - Functional Acknowledgment Map - BDT_FA999V5R1]".

Source: Data Format (BFLUNC_ACK_METADATA_DICTONARY) (BFLUNC_ACK_META)
Interchange Response Record: INTERCHANGE_RESPONSE
Graph: GRPHREC_LOOP

Map Structure (Right Panel):

- 300 O AK2 Loop [Transaction Set Response Header]
 - 300 O AK2 [Transaction Set Response Header]
 - 400 O IK3 Loop [Implementation Data Segment Note]
 - 400 O IK3 [Implementation Data Segment Note]
 - 500 O CTX [Context]
 - 600 O IK4 Loop [Implementation Data Element Note]
 - 600 O IK4 [Implementation Data Element Note]
 - 700 O CTX [Context]
 - 800 M IK5 [Implementation Transaction Set Response Trailer]
 - 900 M AK9 [Functional Group Response Trailer]

Map Structure (Left Panel):

- DATA_SEGMENT_RECORD [Data Segment Note Record]
 - SEG_CONTEXT_RECORD [Segment Context Record]
 - MapTo ((Table 1(300 O AK2 Loop/400 O IK3 Loop/500 O CTX/1))
 - RECORD_ID [Raw Data Record Identification]
 - TEXT [Context Text]
 - REFERENCE [Context Reference]
 - MapTo ((Table 1(300 O AK2 Loop/400 O IK3 Loop/500 O CTX/1 M C998/1 M 9998/1))
 - ELEREC_LOOP [Data Element Note Loop]
 - MapTo ((Table 1(300 O AK2 Loop/400 O IK3 Loop/600 O IK4 Loop/700 O CTX/1))
 - DATA_ELEMENT_RECORD [Data Element Rules Record]
 - ELE_CONTEXT_RECORD [Element Context Record]
 - MapTo ((Table 1(300 O AK2 Loop/400 O IK3 Loop/600 O IK4 Loop/700 O CTX/1 M C998/1 M 9998/1))
 - RECORD_ID [Raw Data Record Identification]
 - TEXT [Context Text]
 - MapTo ((Table 1(300 O AK2 Loop/400 O IK3 Loop/600 O IK4 Loop/700 O CTX/1 M C998/1 M 9998/1))
 - REFERENCE [Context Reference]
 - MapTo ((Table 1(300 O AK2 Loop/400 O IK3 Loop/600 O IK4 Loop/700 O CTX/1 M C998/2 O 9998/1))

Global Variable Table (Bottom Right):

| Global Variable Name | Local |
|----------------------|-------|
| TotalNumEmployee | MsgT |
| svcentercount | GrpEr |
| EmployeeCnt | MsgC |
| tranerror | Synta |
| SNPTType5 | GrpLe |
| dmerrorcount | |

The interface also shows a taskbar at the bottom with the Windows Start button, taskbar icons, and system tray information including the date (3/5/2007) and time (1:35 PM).

X12 999 Acknowledgment

WebSphere Data Interchange for Multiplatforms V3.3 - [WDI33Server - Functional Acknowledgment Map - @DT_FA999V5R1]

File Actions Edit Navigate View Window Help

System: WDI33Server

General Details Comments

Source: Data Format:\\$PLUNC_ACK_METADATA\DICTIONARY\PLUNC_ACK_META

- INTERCHANGE_RESPONSE [Interchange Response Record]
- GRPHEC_LOOP

500 O CTX [Context]

600 O IK4 Loop [Implementation Data Element Note]

800 M IK5 [Implementation Transaction Set Response Trailer]

1 M 717 [Transaction Set Acknowledgment Code]

2 O 618 [Implementation Transaction Set Syntax Error]

3 O 618 [Implementation Transaction Set Syntax Error]

4 O 618 [Implementation Transaction Set Syntax Error]

5 O 618 [Implementation Transaction Set Syntax Error]

6 O 618 [Implementation Transaction Set Syntax Error]

999 M AK9 [Functional Group Response Trailer]

GROUP_RESPONSE [Group Response Record]

MSG-REC_LOOP [Message Response Loop]

Qualify ((GrpLevelOnly = 0 OR (GrpLevelOnly != 0 AND GrpError != 0))

MapTo ((Table 1\300 O AK2 Loop\))

MESSAGE_RESPONSE [Message Response Record]

SEGREC_LOOP [Data Segment Note Loop]

MapTo ((Table 1\300 O AK2 Loop\400 O IK3 Loop\))

DATA_SEGMENT_RECORD [Data Segment Note Record]

SEG_CONTEXT_RECORD [Segment Context Record]

ELEREC_LOOP [Data Element Note Loop]

MESSAGE_RESPONSE_TRAILER [Message Response Record]

RECORD_ID [Raw Data Record Identification]

MESSAGE_ACK_CODE [Message Acknowledgment Code]

SYNTAX_ERROR_CODE [Syntax Error Code]

MapTo ((Table 1\300 O AK2 Loop\800 M IK5\2 O 618\))

SYNTAX_ERROR_CODE2 [Syntax Error Code]

SYNTAX_ERROR_CODE3 [Syntax Error Code]

SYNTAX_ERROR_CODE4 [Syntax Error Code]

SYNTAX_ERROR_CODE5 [Syntax Error Code]

| Global Variable Name | Local Variable Name | Special Variable |
|----------------------|---------------------|------------------|
| TotalNumEmployee | MsgType | D1OutType |
| svccomcount | GrpError | D1OutFile |
| EmployeeCnt | MsgOn | D1OutData |
| tranerror | SyntaxCode | |
| SHIPType5 | GrpLevelOnly | |
| cinemacount | | |

Ready

start

Address Go

1:25 PM Monday 3/5/2007

X12 999 Acknowledgment

- X12 997 Changes:
 - ▶ AK4 C030 composite add element 1686 Repeating Element Position. X12V4R2.
 - ▶ X12V4R4 code list for element 718 changed.
 - ▶ X12V4R6 Segment AK2 additional element 1705 populated from ST03 value.



X12 999 Acknowledgment

WebSphere Data Interchange for Multiplatforms V3.3.1 - [WDI33GBL - Validation Map - FATEST271]

File Actions Edit Navigate View Window Help

System: WDC33GBL

General Details Comments

FATEST271

- Table 1
 - FAErrorPath (1, 5001, 'B', 'BHT - TEST FAErrorPath Command and 11 Error Context', 'S', (Table 1)(20 M BHT))
 - ErrorContext("Context 1", Reference 1)
 - ErrorContext("Context 2", Reference 1)
 - ErrorContext("Context 3", Reference 1)
 - ErrorContext("Context 4", Reference 1)
 - ErrorContext("Context 5", Reference 1)
 - ErrorContext("Context 6", Reference 1)
 - ErrorContext("Context 7", Reference 1)
 - ErrorContext("Context 8", Reference 1)
 - ErrorContext("Context 9", Reference 1)
 - ErrorContext("Context 10", Reference 1)
 - ErrorContext("Context 11", Reference 1)
- Table 2
 - FAErrorPath (1, 5001, 'B', 'BHT01 - TEST FAErrorPath Command and 11 Error Context', 'E', (Table 1)(20 M BHT)(M 1005))
 - ErrorContext("Context 1", Reference 2)
 - ErrorContext("Context 2", Reference 2)
 - ErrorContext("Context 3", Reference 2)
 - ErrorContext("Context 4", Reference 2)
 - ErrorContext("Context 5", Reference 2)
 - ErrorContext("Context 6", Reference 2)
 - ErrorContext("Context 7", Reference 2)
 - ErrorContext("Context 8", Reference 2)
 - ErrorContext("Context 9", Reference 2)
 - ErrorContext("Context 10", Reference 2)
 - ErrorContext("Context 11", Reference 2)
 - FAErrorPath (1, 5001, 'B', 'HL - TEST FAErrorPath Segment Level with E specified', 'E', (Table 2)(30 M HL Loop)(10 M HL))
 - FAErrorPath (1, 5001, 'B', 'HL01 - TEST FAErrorPath Element Level with S specified', 'S', (Table 2)(10 M HL Loop)(30 M HL)(1 M 628))

| Global Variable Name | Scope | Data Type |
|----------------------|--------|-----------|
| SUB_PER_QUAL | Ses... | Character |
| sub_entitycode | Ses... | Character |
| sub_desc | Ses... | Character |
| StopSeq | Ses... | Character |
| SB_REF_ID | Ses... | Character |
| SB_MIDDLE | Ses... | Character |

| Local Variable Name | Scope | Data Type |
|---------------------|-------|-----------|
| tracet | Loop | Character |
| HL04value | Do... | Character |
| Element | Do... | Character |
| Situational | Do... | Character |
| Separator | Do... | Character |

| Special Variable Name | Scope | Data Type |
|-----------------------|-------|-----------|
| DOOutType | Do... | Character |
| DOOutFile | Do... | Character |
| DOUserData | Do... | Character |

Ready

start

1:42 PM Monday 3/5/2007

X12 999 Acknowledgment

- FAErrorPath (real level, real code, char facode, char text, char errType, path SourcePath)
 - The Data Transformation Component will create the FAError at the AMM position using the Source Path identified. If the Source Path is not found, the DTC will default to the current position.
- ErrorContext (char Text, char Reference)
 - The ErrorContext information will be associated with the previous FAError as a child of FAError which is a child of the AMM node. This indicates the user wants an ErrorContext associated with an FAError reported at the segment or element level, the ErrorContext must follow the FAError reported at the segment level. Up to 10 ErrorContext may be attached to the FAError.



X12 999 Acknowledgment

The screenshot displays the WebSphere Data Interchange (WDI) configuration interface. The main window shows a hierarchical tree of data segments and loops for an X12 999 Acknowledgment map. A red arrow points to the '1M 9999 [Context Name]' segment in the tree.

Source: Data Format\BFUNC_AOX_META\DATA_DICTIONARY\BFUNC_AOX_META
INTERCHANGE_RESPONSE [Interchange Response Record]
GRF-REC_LOOP

Tree Structure:

- 300 CHIR (Transaction Set Response Header)
 - 400 O BK3 Loop [Implementation Data Segment Note]
 - 400 O BK3 [Implementation Data Segment Note]
 - 500 O CTX [Context]
 - 1 M C998 [Context Identification]
 - 1 M 9999 [Context Name]
 - 2 O 9998 [Context Reference]
 - 2 O 721 [Segment ID Code]
 - 3 O 729 [Segment Position in Transaction Set]
 - 4 O 447 [Loop Identifier Code]
 - 5 O CTXN [Position in Segment]
 - 5 O CTXN [Position in Segment]

Global Variable Name Table:

| Global Variable Name | Local | Special Variable Name | Scope | Data Type |
|----------------------|-------|-----------------------|-------|-----------|
| TotalNumEmployee | MsgT | DDOutType | De... | Character |
| svolmorcount | GrpEr | DDOutFile | De... | Character |
| EmployeeCnt | MsgC | DDUserData | De... | Character |
| tranerror | Synta | | | |
| SHFTtype5 | GrpLc | | | |
| chmrcount | | | | |

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