



IBM Software Group

# ***IBM WebSphere® Data Interchange V3.3***

## ***Send/Receive Map Trace***



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This presentation is an overview of the Send Receive Map Trace.

## Agenda

- Describe the Send/Receive Trace
- Review Mapping commands
- Trace example
- What does this mean to YOU?



The presentation will describe the Send Receive map trace, how to get the trace, and how you can use the trace.

## What is the send receive Map Trace

- Traces a send or receive map execution
- Allows you to view the values of variables
- Allows you to view the results of expressions
- Writes messages to the PRTFILE during translation execution.



The Send Receive map trace allows you to trace variables and logical expressions during map execution. Some customers use the trace to trace variables and logic within their mapping. Development uses the trace for problem determination.

## Send Receive Map Trace

- Mapping commands on the mapping literal line.
  - ▶ DIVARTRACE
  - ▶ DIEXPTRACE
- Used with the &SET mapping command
- Activate with a non-zero value
  - ▶ &SET DIVARTRACE 1
  - ▶ &SET DIEXPTRACE 1
- De-activate with a zero value
  - ▶ &SET DIVARTRACE 0
  - ▶ &SET DIEXPTRACE 0
- Messages occur first before any other error messages.



The special WebSphere Data Interchange variable, DIVARTRACE, when given a nonzero value (&SET DIVARTRACE 1), causes

WebSphere Data Interchange to create a TRACE of all accesses to variables. When tracing is active, WebSphere Data Interchange will write

out message TR0410 to the PRTFILE for each variable access. The message will indicate the variable being accessed and its current value.

Tracing will remain active until the DIVARTRACE is given a zero value (&SET DIVARTRACE 0).

The variable, DIEXPTRACE, when given a nonzero value (&SET DIEXPTRACE 1), causes WebSphere Data Interchange to create a TRACE of the results of all expression evaluations. When tracing is active, WebSphere Data Interchange will write out message TR0411 to the PRTFILE for each

expression. The message will show the expression being evaluated and the result of the evaluation. Tracing will remain active until the IEXPTRACE is given a zero value (&SET DIEXPTRACE 0).

The TR0410 and TR0411 messages always occur as the first messages for a transaction. They are not merged with any other error messages for the transaction.

# TRACE Example

prtfile.txt - Notepad

```

Message: TR0405 Severity: 04
Application data received will be ignored. The raw data record passed could not be identified. Internal Trading
Partner ID and Data Format = MMT0001 - MMTHL7. Transaction code, mode, and function = 856 - ***TEST*** - SEND. Image of
application data = LOC 2 1 LD

Message: TR0405 Severity: 04
Application data received will be ignored. The raw data record passed could not be identified. Internal Trading
Partner ID and Data Format = MMT0001 - MMTHL7. Transaction code, mode, and function = 856 - ***TEST*** - SEND. Image of
application data = SEC 3 2 SC

Message: TR0405 Severity: 04
Application data received will be ignored. The raw data record passed could not be identified. Internal Trading
Partner ID and Data Format = MMT0001 - MMTHL7. Transaction code, mode, and function = 856 - ***TEST*** - SEND. Image of
application data = CAGE 4 3 CG

Message: TR0405 Severity: 04
Application data received will be ignored. The raw data record passed could not be identified. Internal Trading
Partner ID and Data Format = MMT0001 - MMTHL7. Transaction code, mode, and function = 856 - ***TEST*** - SEND. Image of
application data = ANIMAL5 4 AN

Message: TR0410 Severity: 04
A SAVE operation against variable DIVARTRACE yielded a value of 1 while processing segment id BSN which is segment 1
within the transaction.
Message: TR0410 Severity: 04
A SAVE operation against variable MAPID yielded a value of MMTHL7 while processing segment id BSN which is segment 1
within the transaction.
Message: TR0007 Severity: 04
Invalid date format. Internal Trading Partner ID and Data Format = MMT0001 - MMTHL7. Transaction handle, code, mode,
and function = 20070907113020050000 - 856 - ***TEST*** - SEND. Interchange, group and transaction control numbers =
000000254 - 274 - 0756. Current Loop-ID and repetitions = << N/A >>. Standard segment and field ID = BSN(001) - 2 - 1 -
3 - (003,000). Application field ID = HEADER - HDR-DATE. Data type and value = DT - 94300813. Expected format =
YYYYMMDD
Message: TR0026 Severity: 04
User detected error condition. Internal Trading Partner ID and Data Format = MMT0001 - MMTHL7. Transaction handle,
code, mode, and function = 20070907113020050000 - 856 - ***TEST*** - SEND. Interchange, group and transaction control
numbers = 000000254 - 274 - 0756. Current Loop-ID and repetitions = << N/A >>. Standard segment and field ID = CIT(025)
- 25 - 1 - 2 - (002,000). Error was detected by the expression = &ERR(1.1.0,"Variable itsazoo is not set let's set it")
Assigned error level, and error code = 1 - 1. Assigned error text = "Variable itsazoo is not set let's set it". Mapping
(Trading Partner Transaction) ID = MMTHL7.

FF0501 Interchange Control Number = 000000000000254.
FF0011 Transaction number 1 translated with errors.

FF0500 Data successfully enveloped for network IINB41 into file CSD230UT.txt.

```

Beginning of a Variable Trace

start

EN 11:52 AM Friday 9/7/2007

Send Receive Map Trace

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This is a section of the Send Receive Map trace.

# TRACE Example

```

prtfile.txt - Notepad
File Edit Format View Help

Message: TR0405 Severity: 04
Application data received will be ignored. The raw data record passed could not be identified. Internal Trading
Partner ID and Data Format = MMT0001 - MMTHL7. Transaction code, mode, and function = 856 - ***TEST*** - SEND. Image of
application data = LOC 2
1
1
Message: TR0405 Severity: 04
Application data received will be ignored. The raw data record passed could not be identified. Internal Trading
Partner ID and Data Format = MMT0001 - MMTHL7. Transaction code, mode, and function = 856 - ***TEST*** - SEND. Image of
application data = SEC 3
2
2
Message: TR0405 Severity: 04
Application data received will be ignored. The raw data record passed could not be identified. Internal Trading
Partner ID and Data Format = MMT0001 - MMTHL7. Transaction code, mode, and function = 856 - ***TEST*** - SEND. Image of
application data = CAGE 4
3
3
Message: TR0405 Severity: 04
Application data received will be ignored. The raw data record passed could not be identified. Internal Trading
Partner ID and Data Format = MMT0001 - MMTHL7. Transaction code, mode, and function = 856 - ***TEST*** - SEND. Image of
application data = ANIMAL5
4
4
MAPID variable
Message: TR0410 Severity: 04
A SAVE operation against variable DIVARTRACE yielded a value of 1 while processing segment id BSN which is segment 1
within the transaction.
Message: TR0410 Severity: 04
A SAVE operation against variable MAPID yielded a value of MMTHL7 while processing segment id BSN which is segment 1
within the transaction.
Message: TR0007 Severity: 04
Invalid date format. Internal Trading Partner ID and Data Format = MMT0001 - MMTHL7. Transaction handle, code, mode,
and function = 20070907113020050000 - 856 - ***TEST*** - SEND. Interchange, group and transaction control numbers =
000000254 - 274 - 0756. Current Loop-ID and repetitions = << N/A >>. Standard segment and field ID = BSN.(001) - 2 - 1 -
3 - (003.000). Application field ID = HEADER - HDR-DATE. Data type and value = DT - 94300813. Expected format =
YYYYMMDD.
Message: TR0026 Severity: 04
User detected error condition. Internal Trading Partner ID and Data Format = MMT0001 - MMTHL7. Transaction handle,
code, mode, and function = 20070907113020050000 - 856 - ***TEST*** - SEND. Interchange, group and transaction control
numbers = 000000254 - 274 - 0756. Current Loop-ID and repetitions = << N/A >>. Standard segment and field ID = CTT (025)
- 25 - 1 - 2 - (002.000). Error was detected by the expression = &ERR(1,1,0,"Variable itsazoo is not set let's set it")
Assigned error level, and error code = 1 - 1. Assigned error text = "Variable itsazoo is not set let's set it". Mapping
(Trading Partner Transaction) ID = MMTHL7.
FF0501 Interchange Control Number = 00000000000254.
FF0011 Transaction number 1 translated with errors.
FF0500 Data successfully enveloped for network IINB41 into file CSD230UT.txt.

```

This section of the trace identifies the variable MAPID is set to the value MMTHL7 on segment 1 of the transaction.

# TRACE Example

The screenshot displays the WebSphere Data Interchange Client Mapping functional area. The main window is titled "WDI33Server (Mapping) - Query: All". The "Send Maps" tab is active, showing a list of maps. The map "MMTHL7" is highlighted, and a red arrow points to it. Another red arrow points to the "Send Map MMTHL7" button above the table.

Map Name	Compile Required	Description	Lock	Updated
\$FUNCACK997V37	Yes	X12 997 Functional Acknowledgement Ver 3 Rel 7	No	2/20/20
\$FUNCACK997V37G	Yes	X12 997 Functional Acknowledgement Ver 3 Rel 7	No	2/20/20
\$FUNCACK999	Yes	UCS (999) Functional Acknowledgement	No	2/20/20
\$FUNCACK999G	Yes	UCS (999) Functional Acknowledgement	No	2/20/20
\$FUNCACKCONTRL	Yes	EDIFACT CONTRL Functional Acknowledgement	No	2/20/20
\$FUNCACKCONTRLG	Yes	EDIFACT CONTRL Functional Acknowledgement	No	2/20/20
\$FUNCACKCONTV21	Yes	EDIFACT CONTRL Functional Acknowledgement V2R1	No	2/20/20
\$FUNCACKCONTV21G	Yes	EDIFACT CONTRL Functional Acknowledgement V2R1	No	2/20/20
ADFFIXED	No	fixed to fixed map	No	5/29/20
MAP08FIXED	No	fixed to fixed map	No	5/29/20
MMTHL7	No	MAUI MAP TEST - HL7 - ADF Field Outbound	No	9/7/2007
TEST	Yes		No	3/1/2007
TEST6	Yes		No	3/2/2007
TS_TEST_EEDI_OUT	Yes	MAUI MAP TEST - EDIFACT PO1 - Outbound	No	2/23/20
WDICONFLAB1	No	Send Map X12V4R1(850) - WDI Conference 2006 Lab 1	No	3/1/2007
WDICONFLAB1_S850	Yes	Send Map X12V4R1(850) - WDI Conference 2006 Lab 1	No	3/1/2007

Open Mapping Functional Area

Address Go

12:02 PM  
Friday  
9/7/2007

Send Receive Map Trace

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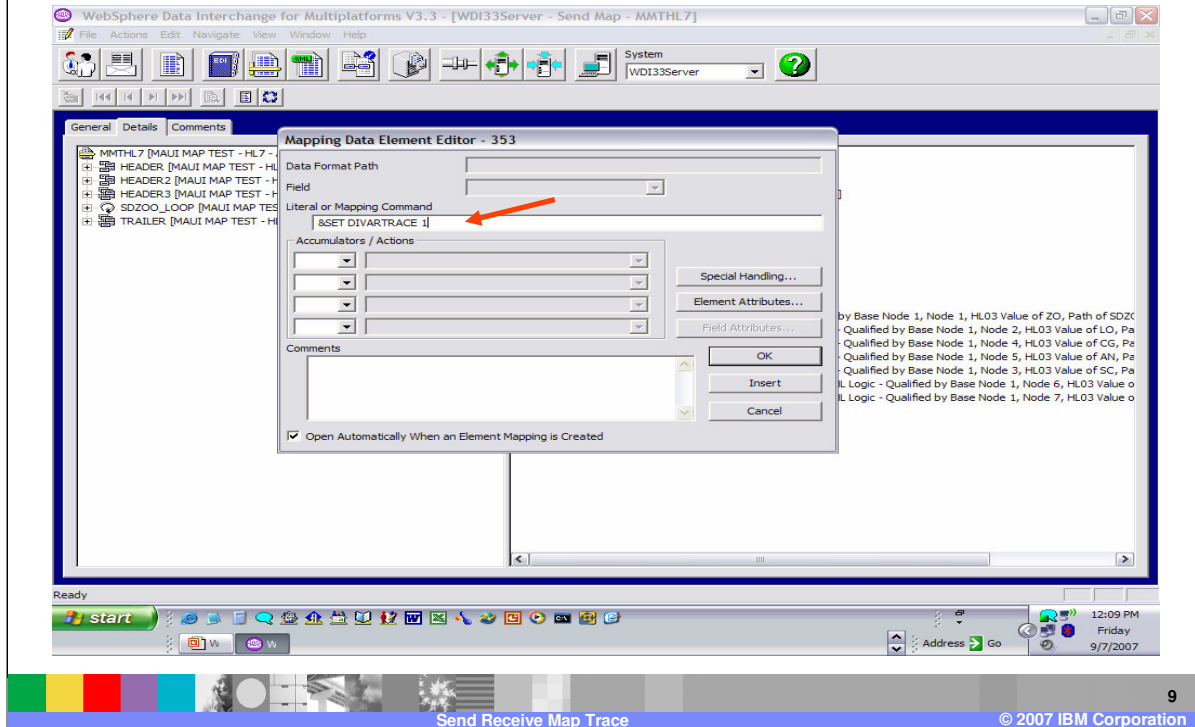
Send and Receive maps are located in the WebSphere Data Interchange Client Mapping functional area. The send maps are located on the Send Maps tab and the Receive maps are located on the Receive maps tab. Our example is using the Send map MMTHL7.

# TRACE Example

The trace statement identified Segment 1 of the transaction. The variable trace is activated with the literal &SET DIVARTRACE 1. The variable MAPID is being set to the value MMTHL7 and there is a matching trace statement in the prtf file for this variable.



# TRACE Example



The command to activate the trace is entered on the mapping literal line.

# TRACE Example

The screenshot displays the WebSphere Data Interchange for Multiplatforms V3.3 interface. The main window shows the configuration for a trace named 'MMTHL7'. The 'Application Control Fields' section is expanded, revealing a list of fields to be traced:

- 856 [Ship Notice/Manifest]
  - 20 M BSN [Beginning Segment for Ship Notice]
    - 1 M 353 [Transaction Set Purpose Code]
      - Literal of : &SET DIVARTRACE 1
      - HD2-TRANS-CODE in HEADER2
      - Literal of : &SET MAPID MMTHL7
      - Literal of : &SET DIVARTRACE 0
    - 2 M 396 [Shipment Identification] ← (indicated by an orange arrow)
    - 3 M 373 [Date]
    - 4 M 337 [Time]
    - 5 O 1005 [Hierarchical Structure Code]
  - 30 M HL Loop: Qualified by HL Logic - Qualified by Base Node 1, Node 1, HL03 Value of ZO, Path of SDZC
  - 30 M HL Loop Repeated: Qualified by HL Logic - Qualified by Base Node 1, Node 2, HL03 Value of LO, Pa
  - 30 M HL Loop Repeated: Qualified by HL Logic - Qualified by Base Node 1, Node 4, HL03 Value of CG, Pa
  - 30 M HL Loop Repeated: Qualified by HL Logic - Qualified by Base Node 1, Node 5, HL03 Value of AN, Pa
  - 30 M HL Loop Repeated: Qualified by HL Logic - Qualified by Base Node 1, Node 3, HL03 Value of SC, Pa
  - 30 M HL Loop Repeated: Qualified by Generic HL Logic - Qualified by Base Node 1, Node 6, HL03 Value o
  - 30 M HL Loop Repeated: Qualified by Generic HL Logic - Qualified by Base Node 1, Node 7, HL03 Value o
  - 260 M CTT [Transaction Totals]

The interface also shows a taskbar at the bottom with the date Friday, 9/7/2007, and the time 12:06 PM. The status bar at the bottom of the window reads 'Send Receive Map Trace' and '© 2007 IBM Corporation'.

Since the trace output could be many messages. It is best to only trace specific variables and logic where needed. Also it is not recommended that the trace be left active. This will impact map performance.

# TRACE Example

```

CSD23OUT.txt - Notepad
File Edit Format View Help
!SA*00* *00* *ZZ*MMT0001 *ZZ*MMT0001 *070907*1226*U*00200*000000259*0*T* : !
GS*SH*MMTHL7* *070907*1226*279*X*002001!
ST*856*0761!
BSN*00*131313131313*941207*1416*0001!
HL*-1**Z0*1!
PID*X***!ts a zoo!
MEA***0ZS!
HL*-1*-1*LO*1!
PID*X***Location!
HL*-1*-1*SC*1!
PID*X***Section!
REF*SC*0*-12345.988 SCALE 6.1!
REF*RD*0*-12345.988 ROUND 1!
REF*TU*0*-12345.988 TRUNC 4!
REF*SR*0*-12345.988 SCALE ROUND 6.0!
HL*-1*-1*CG*1!
PID*X***Case!
REF*SR*0*IFNODATAXX SCALE ROUND 2.4!
REF*TU*0*IFNODATAXX TRUNC 4!
REF*RD*0*IFNODATAXX ROUND 4!
REF*SC*0*IFNODATAXX SCALE 2.4!
HL*-1*-1*Z0*0!
PID*X***Animal!
REF*DT*0*123199123199 DATE MASK TO YYMMDD!
REF*IS*0*123199123199 IS TO ABCDEF - GHIJKL!
HL*-1*-1*Z0*0!
PID*X***Animal!
REF*DT*0*123199123199 DATE MASK TO YYMMDD!
REF*IS*0*123199123199 IS TO ABCDEF - GHIJKL!
HL*-1**Z0*1!
PID*X***!ts a zoo!
MEA***0ZS!
HL*-1*-1*LO*1!
PID*X***Location!
HL*-1*-1*SC*1!
PID*X***Section!
REF*SC*0*-12345.988 SCALE 6.1!
REF*RD*0*-12345.988 ROUND 1!
REF*TU*0*-12345.988 TRUNC 4!
REF*SR*0*-12345.988 SCALE ROUND 6.0!
HL*-1*-1*CG*1!
PID*X***Case!
REF*SR*0*IFNODATAXX SCALE ROUND 2.4!
REF*TU*0*IFNODATAXX TRUNC 4!
REF*RD*0*IFNODATAXX ROUND 4!
REF*SC*0*IFNODATAXX SCALE 2.4!
HL*-1*-1*Z0*0!
PID*X***Animal!
REF*DT*0*123199123199 DATE MASK TO YYMMDD!
REF*IS*0*123199123199 IS TO ABCDEF - GHIJKL!

```

In this example you will turn the variable trace and expression trace on for the REF mapping.

# TRACE Example

The screenshot shows the WebSphere Data Interchange for Multiplatforms V3.3 interface. The main window displays a tree view of a trace. The tree structure includes:

- MMTHL7 [MAUI MAP TEST - HL7 - ADF Field Qualification]
  - HEADER [MAUI MAP TEST - HL7 - ADF Field Qualification]
    - HEADER2 [MAUI MAP TEST - HL7 - ADF Field Qualification]
    - HEADER3 [MAUI MAP TEST - HL7 - ADF Field Qualification]
  - SDZOO\_LOOP [MAUI MAP TEST - HL7 - ADF Field Qualification]
  - TRAILER [MAUI MAP TEST - HL7 - ADF Field Qualification]

The right pane shows a detailed view of the selected element, '30 M HL Loop Repeated: Qualified by HL Logic - Qualified by Base Node 1, Node 5, HL03 Value of AN'. The tree structure in the right pane includes:

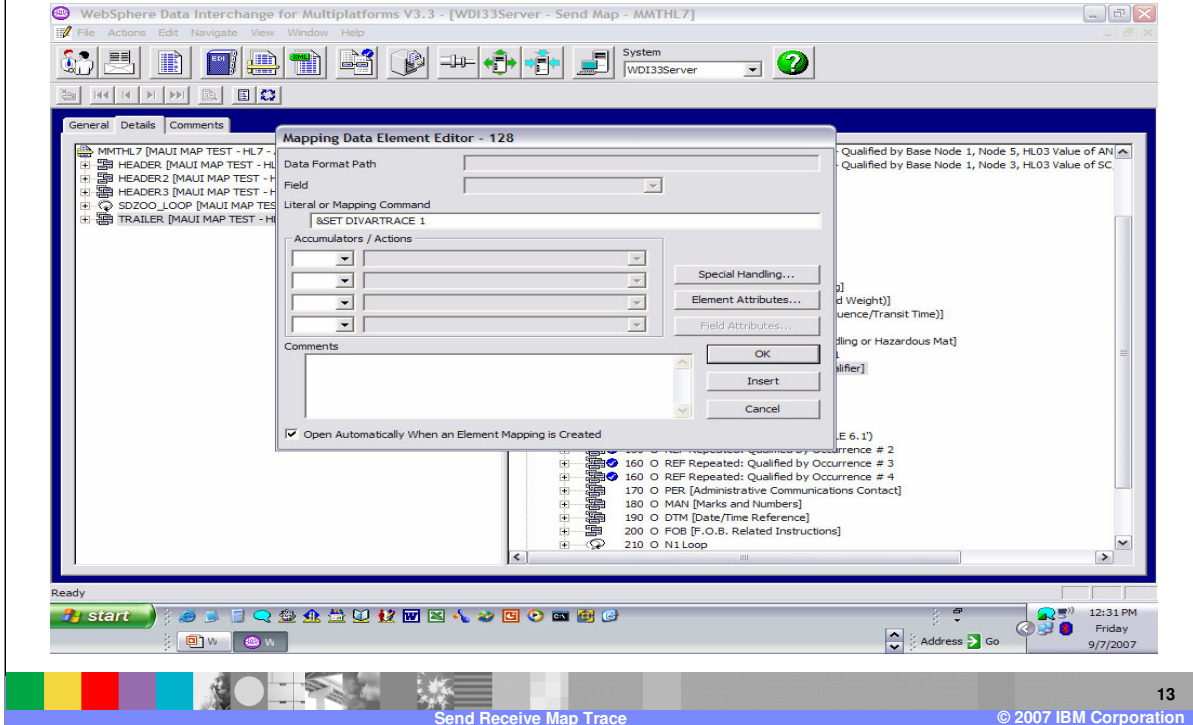
- 30 M HL Loop Repeated: Qualified by HL Logic - Qualified by Base Node 1, Node 5, HL03 Value of AN
  - 40 M HL [Hierarchical Level]
  - 50 O SN1 [Item Identification]
  - 60 O SLN [Subline Item Detail]
  - 70 O PRF [Purchase Order Reference]
  - 80 O PC4 [Item Physical Details]
  - 90 O PID: Qualified by Occurrence # 1
  - 100 O MEA [Measurements]
  - 110 O PKG [Marking, Packaging, Loading]
  - 120 O TD1 [Carrier Details (Quantity and Weight)]
  - 130 O TD5 [Carrier Details (Routing Sequence/Transit Time)]
  - 140 O TD3 [Carrier Details (Equipment)]
  - 150 O TD4 [Carrier Details (Special Handling or Hazardous Mat)]
  - 160 O REF: Qualified by Occurrence # 1
    - 1 M 128 [Reference Number Qualifier]
      - Literal of : SC
    - 2 C 127 [Reference Number]
      - Literal of : &USE scvar
    - 3 C 352 [Description]
      - Literal of : SE(var + ' SCALE 6, 1)
  - 160 O REF Repeated: Qualified by Occurrence # 2
  - 160 O REF Repeated: Qualified by Occurrence # 3
  - 160 O REF Repeated: Qualified by Occurrence # 4
  - 170 O PER [Administrative Communications Contact]
  - 180 O MAN [Marks and Numbers]
  - 190 O DTM [Date/Time Reference]
  - 200 O FOB [F.O.B. Related Instructions]
  - 210 O N1 Loop

A red text overlay in the center of the screenshot reads: "Double Click an element".

At the bottom of the screenshot, the text "Send Receive Map Trace" is visible on the left, and "© 2007 IBM Corporation" is visible on the right.

Double click the element where you want to activate the trace.

# TRACE Example



Enter the mapping command for the trace.

# TRACE Example

The screenshot displays the WebSphere Data Interchange for Multiplatforms V3.3 interface. The main window shows a tree view of the HL Loop configuration. The configuration includes various segments and their literals. A red arrow points to the 'Literal of: &SET DIEXPTRACE 1' field, which is highlighted in blue. The interface also shows a 'General' tab with a list of segments and their qualifications.

MMTHL7 [MAUI MAP TEST - HL7 - ADF Field Qualification]

- HEADER [MAUI MAP TEST - HL7 - ADF Field Qualification]
- HEADER2 [MAUI MAP TEST - HL7 - ADF Field Qualification]
- HEADER3 [MAUI MAP TEST - HL7 - ADF Field Qualification]
- SDZOO\_LOOP [MAUI MAP TEST - HL7 - ADF Field Qualification]
- TRAILER [MAUI MAP TEST - HL7 - ADF Field Qualification]

30 M HL Loop Repeated: Qualified by HL Logic - Qualified by Base Node 1, Node 5, HL03 Value of AN

- 30 M HL [Hierarchical Level]
- 40 O LIN [Item Identification]
- 50 O SN1 [Item Detail (Shipment)]
- 60 O SLN [Subline Item Detail]
- 70 O PRF [Purchase Order Reference]
- 80 O PO4 [Item Physical Details]
- 90 O PID: Qualified by Occurrence # 1
- 100 O MEA [Measurements]
- 110 O PKG [Marking, Packaging, Loading]
- 120 O TD1 [Carrier Details (Quantity and Weight)]
- 130 O TD5 [Carrier Details (Routing Sequence/Transit Time)]
- 140 O TD3 [Carrier Details (Equipment)]
- 150 O TD4 [Carrier Details (Special Handling or Hazardous Mat)]
- 160 O REF: Qualified by Occurrence # 1
- 1 M 126 [Reference Number Qualifier]
  - Literal of: SC
  - Literal of: &SET DIVARTRACE 1
  - Literal of: &SET DIEXPTRACE 1
- 2 C 127 [Reference Number]
  - Literal of: &USE scvar
- 3 C 352 [Description]
  - Literal of: &E(var + ' SCALE 6.1)
- 160 O REF Repeated: Qualified by Occurrence # 2
- 160 O REF Repeated: Qualified by Occurrence # 3
- 160 O REF Repeated: Qualified by Occurrence # 4
- 170 O PER [Administrative Communications Contact]
- 180 O MAN [Marks and Numbers]
- 190 O DTM [Date/Time Reference]

Ready

start

Address Go

12:32 PM Friday 9/7/2007

Send Receive Map Trace

14

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These 2 commands will activate the variable and logic or expression trace. You can move the mappings and place them where you want them by using the drag/drop action.

# TRACE Example

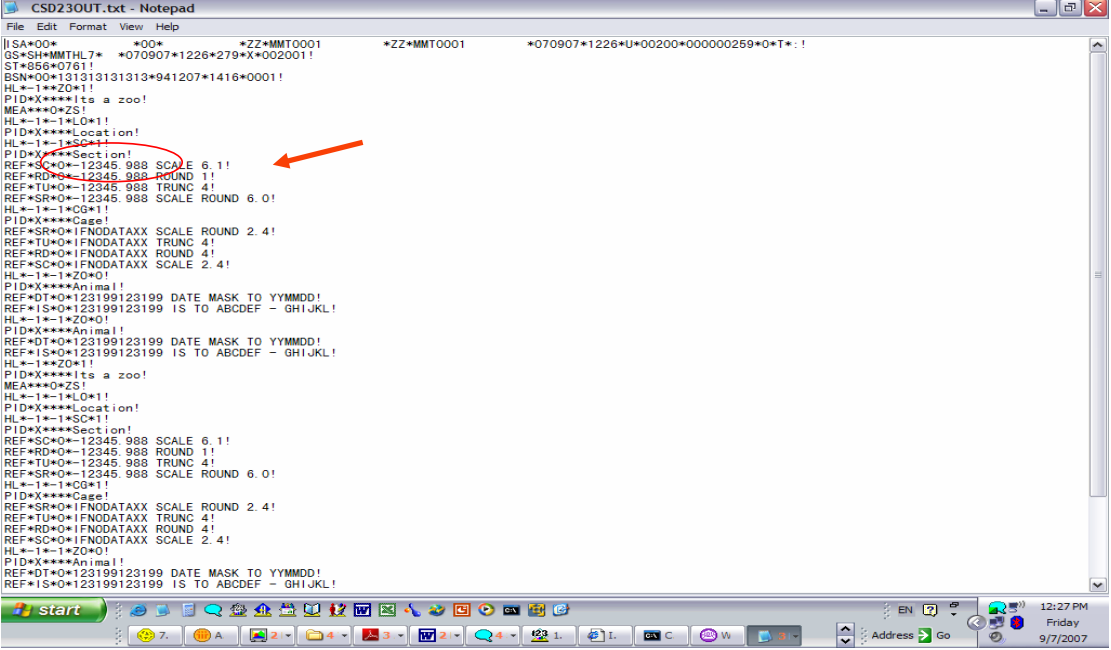
The screenshot displays the WebSphere Data Interchange for Multiplatforms V3.3 interface. The main window shows a trace log for the file MMTHL7. The log is organized into a tree view with the following segments:

- 90 O PID: Qualified by Occurrence # 1
- 100 O MEA [Measurements]
- 110 O PKG [Marking, Packaging, Loading]
- 120 O TD1 [Carrier Details (Quantity and Weight)]
- 130 O TD5 [Carrier Details (Routing Sequence/Transit Time)]
- 140 O TD3 [Carrier Details (Equipment)]
- 150 O TD4 [Carrier Details (Special Handling or Hazardous Mat)]
- 160 O REF: Qualified by Occurrence # 1
  - 1 M 128 [Reference Number Qualifier]
    - Literal of : SC
    - Literal of : 8SET DIVARTRACE 1
    - Literal of : 8SET DIEXPTRACE 1
  - 2 C 127 [Reference Number]
    - Literal of : 8USE scvar
  - 3 C 352 [Description]
    - Literal of : 8E(var + ' SCALE ROUND 6.1')
- 160 O REF Repeated: Qualified by Occurrence # 2
- 160 O REF Repeated: Qualified by Occurrence # 3
- 160 O REF Repeated: Qualified by Occurrence # 4
  - 1 M 128 [Reference Number Qualifier]
    - Literal of : 8E(var + ' SCALE ROUND 6.0')
    - Literal of : 8SET DIVARTRACE 0
    - Literal of : 8SET DIEXPTRACE 0
- 170 O PER [Administrative Communications Contact]
- 180 O MAN [Marks and Numbers]
- 190 O DTM [Date/Time Reference]
- 200 O FOB [F.O.B. Related Instructions]
- 210 O N1 Loop

A red arrow points to the 'REF Repeated: Qualified by Occurrence # 4' segment. The status bar at the bottom indicates 'Send Receive Map Trace' and '© 2007 IBM Corporation'.

You only want to trace the REF segment so be sure to turn the tracing off.

# TRACE Example



```
CSD23OUT.txt - Notepad
File Edit Format View Help
!SA*00* *00* *ZZ*MMT0001 *ZZ*MMT0001 *070907*1226*U*00200*000000259*O*T* : !
GS*SH*MMTHL7* *070907*1226*279*X*002001!
ST*856*0761!
BSN*00*131313131313*941207*1416*0001!
HL*-1**Z0*1!
PID*X***!ts a zoo!
MEA**0*ZS!
HL*-1*-1*LO*1!
PID*X***Location!
HL*-1*-1*SC*1!
PID*X***Section!
REF*SC*0*-12345.988 SCALE 6.1!
REF*RD*0*-12345.988 ROUND 1!
REF*TU*0*-12345.988 TRUNC 4!
REF*SR*0*-12345.988 SCALE ROUND 6.0!
HL*-1*-1*CG*1!
PID*X***Cage!
REF*SR*0*!FNODATAXX SCALE ROUND 2.4!
REF*TU*0*!FNODATAXX TRUNC 4!
REF*RD*0*!FNODATAXX ROUND 4!
REF*SC*0*!FNODATAXX SCALE 2.4!
HL*-1*-1*Z0*0!
PID*X***Animal!
REF*DT*0*123199123199 DATE MASK TO YYMMDD!
REF*IS*0*123199123199 IS TO ABCDEF - GHIJKL!
HL*-1*-1*Z0*0!
PID*X***Animal!
REF*DT*0*123199123199 DATE MASK TO YYMMDD!
REF*IS*0*123199123199 IS TO ABCDEF - GHIJKL!
HL*-1**Z0*1!
PID*X***!ts a zoo!
MEA**0*ZS!
HL*-1*-1*LO*1!
PID*X***Location!
HL*-1*-1*SC*1!
PID*X***Section!
REF*SC*0*-12345.988 SCALE 6.1!
REF*RD*0*-12345.988 ROUND 1!
REF*TU*0*-12345.988 TRUNC 4!
REF*SR*0*-12345.988 SCALE ROUND 6.0!
HL*-1*-1*CG*1!
PID*X***Cage!
REF*SR*0*!FNODATAXX SCALE ROUND 2.4!
REF*TU*0*!FNODATAXX TRUNC 4!
REF*RD*0*!FNODATAXX ROUND 4!
REF*SC*0*!FNODATAXX SCALE 2.4!
HL*-1*-1*Z0*0!
PID*X***Animal!
REF*DT*0*123199123199 DATE MASK TO YYMMDD!
REF*IS*0*123199123199 IS TO ABCDEF - GHIJKL!
```

You can see the value -12345.988 in the output.



# TRACE Example

```

Application data received will be ignored. The raw data record passed could not be identified. Internal Trading
Partner ID and Data Format = MMT0001 - MMTHL7. Transaction code, mode, and function = 856 - ***TEST*** - SEND. Image of
application data = ANIMAL5 4 AN

Message: TR0410 Severity: 04
A SAVE operation against variable DIVARTRACE yielded a value of 1 while processing segment id BSN which is segment 1
within the transaction.
Message: TR0410 Severity: 04
A SAVE operation against variable MAPID yielded a value of MMTHL7 while processing segment id BSN which is segment 1
within the transaction.
Message: TR0410 Severity: 04
A SAVE operation against variable DIVARTRACE yielded a value of 1 while processing segment id REF which is segment 9
within the transaction.
Message: TR0410 Severity: 04
A SAVE operation against variable DIEXPTRACE yielded a value of 1 while processing segment id REF which is segment 9
within the transaction.
Message: TR0410 Severity: 04
A USE operation against variable SCVAR yielded a value of 0 while processing segment id REF which is segment 9 within
the transaction.
Message: TR0410 Severity: 04
A USE operation against variable VAR yielded a value of -12345.988 while processing segment id REF which is segment 9
within the transaction.
Message: TR0411 Severity: 04
Expression &E(var + ' SCALE 6.1') yielded a value of -12345.988 SCALE 6.1 while processing segment id REF which is
segment 9 within the transaction.
Message: TR0410 Severity: 04
A USE operation against variable RDVAR yielded a value of 0 while processing segment id REF which is segment 10 within
the transaction.
Message: TR0410 Severity: 04
A USE operation against variable VAR yielded a value of -12345.988 while processing segment id REF which is segment 10
within the transaction.
Message: TR0411 Severity: 04
Expression &E(var + ' ROUND 1') yielded a value of -12345.988 ROUND 1 while processing segment id REF which is segment
10 within the transaction.
Message: TR0410 Severity: 04
A USE operation against variable TUVAR yielded a value of 0 while processing segment id REF which is segment 11 within
the transaction.
Message: TR0410 Severity: 04
A USE operation against variable VAR yielded a value of -12345.988 while processing segment id REF which is segment 11
within the transaction.
Message: TR0411 Severity: 04
Expression &E(var + ' TRUNC 4') yielded a value of -12345.988 TRUNC 4 while processing segment id REF which is segment
11 within the transaction.
1Audit Trail Report -DataInterchange Utility- Date: 07/09/07 Time: 12:38:08 Page: 00003

Message: TR0410 Severity: 04
A USE operation against variable SRVAR yielded a value of 0 while processing segment id REF which is segment 12 within
the transaction.
Message: TR0410 Severity: 04

```

From the trace you can see the trace being activated. The Save and Use operations are related to the variables being used and the Expression operations give the results of the logic. The value -12345.988 is being used for the variable 'var'.

# TRACE Example

```

prtfile.txt - Notepad
File Edit Format View Help
A USE operation against variable RDVAR yielded a value of 0 while processing segment id REF which is segment 10 within the transaction.
Message: TR0410 Severity: 04
A USE operation against variable VAR yielded a value of -12345.988 while processing segment id REF which is segment 10 within the transaction.
Message: TR0411 Severity: 04
Expression &E(var + ROUND 1') yielded a value of -12345.988 ROUND 1 while processing segment id REF which is segment 10 within the transaction.
Message: TR0410 Severity: 04
A USE operation against variable TUVAR yielded a value of 0 while processing segment id REF which is segment 11 within the transaction.
Message: TR0410 Severity: 04
A USE operation against variable VAR yielded a value of -12345.988 while processing segment id REF which is segment 11 within the transaction.
Message: TR0411 Severity: 04
Expression &E(var + TRUNC 4') yielded a value of -12345.988 TRUNC 4 while processing segment id REF which is segment 11 within the transaction.
1Audit Trail Report -DataInterchange Utility- Date: 07/09/07 Time: 12:38:08 Page: 00003
Message: TR0410 Severity: 04
A USE operation against variable SRVAR yielded a value of 0 while processing segment id REF which is segment 12 within the transaction.
Message: TR0410 Severity: 04
A USE operation against variable VAR yielded a value of -12345.988 while processing segment id REF which is segment 12 within the transaction.
Message: TR0411 Severity: 04
Expression &E(var + SCALE ROUND 6.0') yielded a value of -12345.988 SCALE ROUND 6.0 while processing segment id REF which is segment 12 within the transaction.
Message: TR0410 Severity: 04
A SAVE operation against variable DIVARTRACE yielded a value of 1 while processing segment id REF which is segment 34 within the transaction.
Message: TR0410 Severity: 04
A SAVE operation against variable DIEXPTRACE yielded a value of 1 while processing segment id REF which is segment 34 within the transaction.
Message: TR0410 Severity: 04
A USE operation against variable SCVAR yielded a value of 0 while processing segment id REF which is segment 34 within the transaction.
Message: TR0410 Severity: 04
A USE operation against variable VAR yielded a value of -12345.988 while processing segment id REF which is segment 34 within the transaction.
Message: TR0411 Severity: 04
Expression &E(var + SCALE 6.1') yielded a value of -12345.988 SCALE 6.1 while processing segment id REF which is segment 34 within the transaction.
Message: TR0410 Severity: 04
A USE operation against variable RDVAR yielded a value of 0 while processing segment id REF which is segment 35 within the transaction.
Message: TR0410 Severity: 04
A USE operation against variable VAR yielded a value of -12345.988 while processing segment id REF which is segment 35 within the transaction.
Message: TR0411 Severity: 04

```

This indicates the next iteration or next occurrence of the segment containing the trace activation.

## Send Receive Map Trace

- What does this mean to you?
  - ▶ Identify logic errors within your send and receive maps.



Using the map trace you can identify mapping logic issues and correct those issues.

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