

[SAP Table][SAP OpenHub]Repro issue in SAP system

Last updated by | Veena Pachauri | Mar 8, 2023 at 11:23 PM PST

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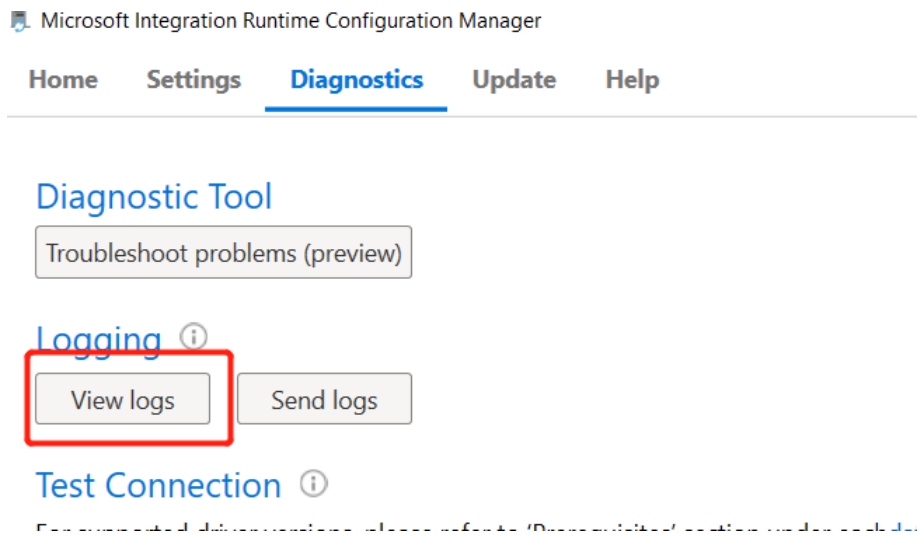
Issue

When executing copy activity or previewing data, we get any exception which thrown by SAP side, the related exception should belongs to `SAP.Middleware.Connector`, for example, `SAP.Middleware.Connector.RfcAbapRuntimeException`

Or we get exception like "Input string was not in a correct format" or any other exception related to data parsing.

In this case, we need to repro this issue in SAP side to see how to fix it in SAP.

Steps



1. Repro this issue in ADF side, then check SHIR log

For suggested diagnostic steps, please refer to 'Recommended' section under each de...

2. Search for the message start with "Start GetReadTableFunction" like below:

Event Viewer (Local) > Custom Views > Windows Logs > Applications and Services Logs > Connectors - Integration Runtime

Level	Date and Time	Source	Event ID	Task Ca...
Information	6/22/2022 4:41:27 PM	Integra...	30000	None
Information	6/22/2022 4:41:27 PM	Integra...	30000	None
Information	6/22/2022 4:41:27 PM	Integra...	30000	None
Information	6/22/2022 4:41:27 PM	Integra...	30000	None
Information	6/22/2022 4:41:27 PM	Integra...	30000	None
Information	6/22/2022 4:41:27 PM	Integra...	30000	None
Information	6/22/2022 4:41:27 PM	Integra...	30000	None
Information	6/22/2022 4:41:27 PM	Integra...	30000	None
Information	6/22/2022 4:41:26 PM	Integra...	30000	None
Information	6/22/2022 4:41:26 PM	Integra...	30000	None
Warning	6/22/2022 4:41:26 PM	Integra...	30000	None
Warning	6/22/2022 4:41:26 PM	Integra...	30000	None
Information	6/22/2022 4:41:26 PM	Integra...	30000	None
Information	6/22/2022 4:41:26 PM	Integra...	30000	None
Information	6/22/2022 4:41:26 PM	Integra...	30000	None
Information	6/22/2022 4:41:26 PM	Integra...	30000	None
Warning	6/22/2022 4:41:25 PM	Integra...	30000	None
Warning	6/22/2022 4:41:25 PM	Integra...	30000	None
Information	6/22/2022 4:41:25 PM	Integra...	30000	None
Information	6/22/2022 4:41:25 PM	Integra...	30000	None

Event 30000, Integration Runtime (Self-hosted) Connectors

General Details

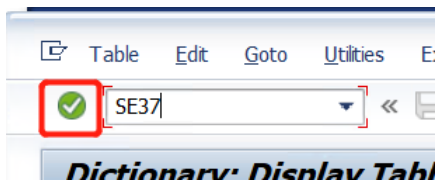
TraceComponentId: TransferClientLibrary
 TraceMessageId: ExecuteSapRfc
 @logId: Warning
 jobId: 00000000-0000-0000-000000000000
 activityId: 00000000-0000-0000-000000000000
 eventId: ExecuteSapRfc
 message: Start GetReadTableFunction /SAPDS/RFC_READ_TABLE2 with fields CHANGEDTIME,DESCRIPTION,ID,NAME Option NAME EQ 'TINA' skipRows 0 rowcount 10 batchSize 0

3. Record all the value be mentioned in the log:

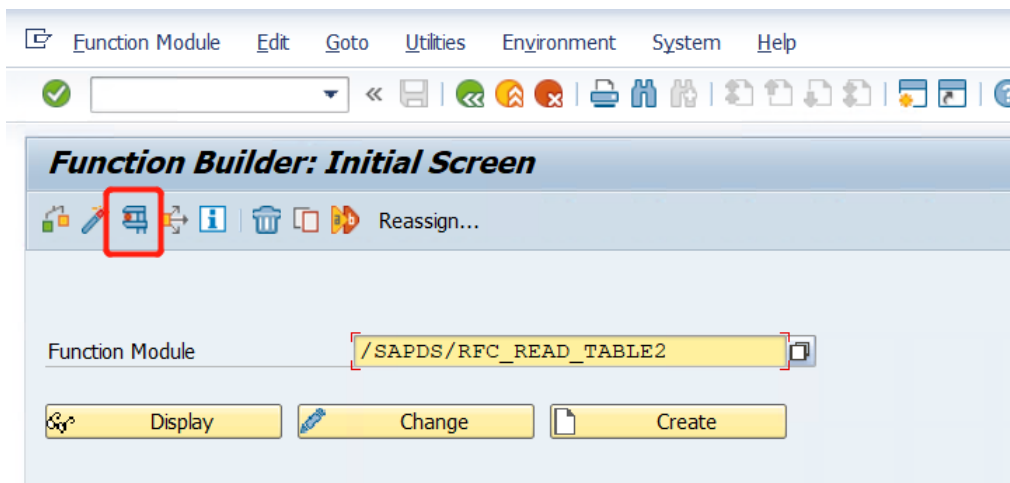
"Start GetReadTableFunction <FunctionModuleName> with fields <fieldsList> Option <options> skipRows <skipRowsCount> rowcount <rowCount>"

4. Go to SAP GUI

5. Go to SE37



6. Input <FunctionModuleName> we get from step 3 -> execute



7. Test the execution, fill the value, left as empty if no value for related parameter.

QUERY_TABLE -> table name we put in dataset

DELIMITER -> sapDataColumnDelimiter we put in copy source

ROWSKIPS -> <skipRowsCount> we get from step 3

ROWCOUNT -> <rowCount> we get from step 3

OPTIONS -> <options> we get from step 3

FIELDS -> <fieldsList> we get from step 3

Test for function group /SAPDS/RS_BASIS
 Function module /SAPDS/RFC_READ_TABLE2
 Uppercase/Lowercase ☐
 RFC target sys:

Import parameters	Value
QUERY_TABLE	ZSOURCEDEMO
DELIMITER	
NO_DATA	
ROWSKIPS	0
ROWCOUNT	10

Tables	Value
OPTIONS	1 Entry
FIELDS	4 Entries
TBLOUT128	0 Entries
TBLOUT512	0 Entries
TBLOUT2048	0 Entries
TBLOUT8192	0 Entries
TBLOUT30000	0 Entries

8. How to fill OPTIONS:

OPTIONS	0 Entries
FIELDS	0 Entries

Fill the value and back after finished:

Structure Editor: Change **OPTIONS** from Entry 1

Column Entry New Line Double Line Metadata

0 Entries

TEXT

[NAME EQ 'TINA']

9. The way to fill FIELDS:

Tables	Value
OPTIONS	1 Entry
FIELDS	0 Entries
TBLOUT128	0 Entries
TBLOUT512	0 Entries

Structure Editor: Change FIELDS from Entry 1

0 Entries

FIELDNAME	OFFSET	LENGTH	T	FIELDTEXT
CHANGEDTIME	000000	000000		

Structure Editor: Change FIELDS from Entry 1

0 Entries

FIELDNAME	OFFSET	LENGTH	T	FIELDTEXT
DESCRIPTION	000000	000000		
CHANGEDTIME	000000	000000		

Structure Editor: Change FIELDS from Entry 1



0 Entries

FIELDNAME	OFFSET	LENGTH	T	FIELDTEXT
NAME	000000	000000		
ID	000000	000000		
DESCRIPTION	000000	000000		
CHANGEDTIME	000000	000000		

Back after finished:

10. Execute the Function Module:








Test Function Module: Initial Screen

 Debugging
  Test data directory

Test for function group /SAPDS/RS_BASIS
 Function module /SAPDS/RFC_READ_TABLE2
 Uppercase/Lowercase ☐

RFC target sys:

Import parameters	Value
QUERY_TABLE	ZSOURCEDEMO
DELIMITER	
NO_DATA	
ROWSKIPS	0
ROWCOUNT	10

Tables	Value
OPTIONS	 1 Entry
FIELDS	 4 Entries
TBLOUT128	 0 Entries
TBLOUT512	 0 Entries
TBLOUT2048	 0 Entries
TBLOUT8192	 0 Entries
TBLOUT30000	 0 Entries

11. If previous copy activity failed with SAP.Middleware.Connector related exception, customer should be able to replicate the issue without any ADF service involved.

If previous copy activity failed with "Input string was not in a correct format" or some other data related issue, then move to the next step to collect the required data.

12. Collect the values in FIELDS and collect the value in TBLOUTXXX according to the value of "OUT_TABLE". "OUT_TABLE" will told us which table contains the

Import parameters	Value
QUERY_TABLE	ZSOURCEDEMO
DELIMITER	
NO_DATA	
ROWSKIPS	0
ROWCOUNT	10

Export parameters	Value
OUT_TABLE	TBLOUT128








Tables	Value
OPTIONS	 1 Entry
FIELDS	 4 Entries
TBLOUT128	 0 Entries
TBLOUT512	 0 Entries
TBLOUT2048	 0 Entries
TBLOUT8192	 0 Entries
TBLOUT30000	 0 Entries

table data. 

FIELDS data example:

Structure Editor: Display FIELDS from Entry 1

Column Entry Metadata

4 Entries

FIELDNAME	OFFSET	LENGTH	T	FIELDTEXT
NAME	000000	000020	C	
ID	000021	000006	S	2 byte integer (signed)
DESCRIPTION	000028	000050	C	
CHANGEDTIME	000079	000006	T	

TBLOUTXXX data example:

Structure Editor: Display TBLOUT128 from Entry 1

Column Entry Metadata

1 Entry

WA			
INA	1	1	063128

Resolution

If we are able to repro this issue in SAP side, customer could try to contact his SAP Support to see whether they can apply some SAP note to fix the issue.

Another workaround is that customer could write a custom RFC instead of use this default one.

https://supportability.visualstudio.com/AzureDataFactory/_wiki/wikis/AzureDataFactory/640905/-SAP-Table-SAP-OpenHub-Repro-issue-in-SAP-system