Details of SR Raised For DATE Column Issue

Problem Description  
---------------------------------------------------  
I am trying to push data from a csv file. First issue, The csv file columns are configured to certain datatype but when imported in object storage and used in dataflow all the columns are considered as varchar. Second, I am able to change the datatype of the column as integer & date just by defining it as integer & date in expression. A target table is created in the target DB with respective datatypes for the columns. For a particular date datatype column i have defined it as DATE datatype in Target table. When i assign it in OCIDI dataflow it shows the datatype as DATETIME, this leads to a warning during validation and sometimes the task might fail. So, i pushed the file with default varchar datatype into a table in DB with columns as varchar datatype and created another table with same structure and defined the particular date column as TIMESTAMP datatype in both source and target. Now i am able to get the data but it is like "27-09-24 12:00:00.000000000 AM". I used an expression TO\_TIMESTAMP(EXPRESSION\_1.FU\_TABLE\_DATA\_LOADED\_RECORDS.LOADED\_DATE, 'DD-MM-YYYY') to define the date format.but it did not work.

Hello,  
  
Our service team is asking for the following information:  
1.what is the target database type?  
  
2. if you could share any sample source data which you are trying to convert and screenshot of expression used.

Hi,  
1. Target DB is Oracle DB  
2.This is the expression used TO\_DATE(EXPRESSION\_1.FU\_TABLE\_DATA\_LOADED\_RECORDS.LOADED\_DATE, 'DD-MM-YYYY')

It is expected behavior that all columns in the CSV file will be treated as varchar.  
  
The service team is asking the following:  
  
Is the task failing when the `TO\_DATE` expression is used and the target Oracle DB column is type `DATE` ?

Hi,  
First the target tables in DB has a column of DATE datatype but when it is viewed inside OCIDI it is showing as DATETIME. So when i use TO\_DATE expression and map it to the Date column (which is DATE in DB and considered as DATETIME in OCIDI) the task is getting failed.

Hello Jagadeesh,  
  
Based on sample data provided, the TO\_TIMESTAMP format should be:  
  
--> TO\_TIMESTAMP('27-09-24 12:00:00.000000000 AM', 'yy-MM-dd HH:mm:ss.SSSSSSSSS\' \'a')  
  
Please refer to the date format documentation for formatting date:  
  
--> <https://docs.oracle.com/en-us/iaas/data-integration/using/using-operators.htm#operator-expression:~:text=Converts%20an%20expr%20of%20VARCHAR%20to%20a%20value%20of%20TIMESTAMP%2C%20based%20on%20the%20format_string%20and%20the%20optional%20localeStr%20provided>.

Hi,  
I am already using Timestamp and i have no issues with datatype being timestamp. I have issue when i use TO\_DATE and "First the target tables in DB has a column of DATE datatype but when it is viewed inside OCIDI it is showing as DATETIME. So when i use TO\_DATE expression and map it to the Date column (which is DATE in DB and considered as DATETIME in OCIDI) the task is getting failed."

Hello,  
  
Thank you for the update.  
  
Could you kindly provide the task run key for failed task ?  
  
The service team is working on your issue.

[Date column Issue.docx](https://4iappssolutions-my.sharepoint.com/:w:/r/personal/jothiprasath_m_4iapps_com/_layouts/15/Doc.aspx?sourcedoc=%7BFDED6A59-343F-40FF-B779-CDEE7281BADD%7D&file=Document%202.docx&action=editnew&mobileredirect=true&wdNewAndOpenCt=1728974064232&ct=1728974064815&wdOrigin=TEAMS-MAGLEV.p2p_ns.rwc&wdPreviousSessionSrc=HarmonyWeb&wdPreviousSession=84f15a2b-6005-4a0c-8f32-63497da6cd46&cid=d20075c3-e935-4397-ac31-bd1301983aeb&wdExp=TEAMS-TREATMENT&wdhostclicktime=1729771079848&web=1) refer this doc for the task

The task executed successfully.  
  
I ahve attached a document. The document contains the steps followed by me, Initially I followed those steps and encountered an error. But now when I try to recreate the steps it's working. The warning displayed in the document made the task to fail. I don't how the task is executing successfully this time. Is there any internal issue??  
  
I have one more question why is the datatype showing as DATETIME in the target operator when its datatype is DATE in the DB table level???

Hello,  
  
Some drivers interpret DATE types as DATETIME due to differences in how various databases handle date/time fields. ( eg to avoid truncating any time information during transformations.)  
  
  
I have asked our service on more information regarding the mapping, but i do not have an update as of now.

Hi,  
I want an workaround for that. And since the task failed for me due to mismatch of datatype,as of now, i am using timestamp dataype. When i try to remove the time by formatting Timestamp datatype to ''DD-MM-YYYY'. It is not working. Please do the needful.

Hello,  
  
I have received the following clarification"  
  
"  
The date format being used is invalid. DIS does not support Oracle date and time formatting. For detailed information, please refer to the documentation for Expression Operator Date & Time Functions:  
  
https://docs.oracle.com/en-us/iaas/data-integration/using/using-operators.htm#:~:text=Converts%20an%20expr%20of%20VARCHAR%20to%20a%20value%20of%20TIMESTAMP%2C%20based%20on%20the%20format\_string%20and%20the%20optional%20localeStr%20provided].  
  
Based on the sample provided, your dates and timestamps should be formatted as follows:  
\* {\*}Timestamps{\*}:  
TO\_TIMESTAMP('27-09-24 12:00:00.000000000 AM', 'yy-MM-dd HH:mm:ss.SSSSSSSSS\' \'a')  
  
\* {\*}Dates{\*}:  
TO\_DATE('27-09-24', 'yy-MM-dd')  
  
Note that Oracle \*{{DATE}}\* types include a time component, whereas DIS \*{{DATE}}\* types do not; thus, DIS loads them as {{{}\*DATETIME\*{}}}. Mapping a \*{{DATE}}\* expression to \*{{DATETIME}}\* in the Target Operator may trigger a validation warning about type mismatch. This warning is informational and can be ignored. Alternatively, you can select \*{{DATETIME}}\* as the expression type to avoid the warning."

KEYS POINTS:

The clarification you've received is regarding an issue with the date and timestamp formatting you're using in a Data Integration Service (DIS) pipeline, which does not support Oracle's specific date and time formatting. Here's a breakdown of the key points from the message:

### **1. Date Format Issue**

* The format you're currently using to represent dates and timestamps is considered invalid in DIS. This is because DIS doesn't support Oracle's formatting directly.

### **2. Timestamps Format**

* For timestamps (date and time together), the correct format that DIS expects is:

sql

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TO\_TIMESTAMP('27-09-24 12:00:00.000000000 AM', 'yy-MM-dd HH:mm:ss.SSSSSSSSS\' \'a')

This means:

* + **'27-09-24'** represents the date (in the format 'yy-MM-dd').
  + **'12:00:00'** is the time in hours, minutes, and seconds (24-hour format).
  + **'.000000000'** adds the nanosecond part of the timestamp.
  + **'AM'** represents the time period (AM/PM).

### **3. Dates Format**

* For dates without the time component, DIS requires a simpler format:

sql

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TO\_DATE('27-09-24', 'yy-MM-dd')

* + Here, the date format is **'yy-MM-dd'** (year-month-day).
  + The output from TO\_DATE is just a date, without any time component.

### **4. DATE vs. DATETIME**

* Oracle's **DATE** type includes both a date and a time component, but DIS **DATE** types only represent dates, with no time component.
* When loading Oracle's **DATE** types into DIS, they are treated as **DATETIME** (which includes both date and time).
* Mapping a **DATE** to **DATETIME** in the DIS pipeline may cause a **type mismatch warning**, which is just informational and can be ignored.
* If you'd prefer to avoid the warning, you can map the expression to **DATETIME** directly.

### **What This Means for You:**

* Use the recommended formats for both dates and timestamps in your pipeline expressions.
* If you get a type mismatch warning when mapping Oracle's **DATE** type to DIS **DATETIME**, you can either ignore it or explicitly map it to **DATETIME**.

You can refer to the [Oracle Documentation](https://docs.oracle.com/en-us/iaas/data-integration/using/using-operators.htm) for further details on how DIS handles date and time functions.

Hi,  
  
I got your point. I am facing this issue when i try to import a csv file data into an existing table in db. Right now i am using create new entity and moving the data from file to a temporary table in DB (all columns will be in Varchar datatype). Then i add expression and move the data by changing the datatype as required. So, i can achieve the result as required.  
  
I am using this as an alternate approach to achieve the result but i want an easy way.