

## Name of Solution:

Cloud Data Integration: Log error at field level

## Business Requirement:

Load error log table with column level errors data when a row contains errors in multiple columns.

## Supported Versions:

CDI, CDQ

## Description:

Many customers maintain common error tables to log errors encountered when processing data. Often errors are tracked at column level and when a particular row of data has issues in multiple columns then multiple rows have to be inserted into the error table. This can be achieved using IDMC CDI transformations (CDQ rule specification/Expression, Union, Joiner).

## Scenario:

Consider that when you are processing input data, if there are NULL values in the Input columns then, they have to be populated as errors in a separate flat file or table. For example, if there are NULL values for Email and Phone\_Number for a particular customer, then the output row to the error table should contain the Customer Name and an error message that says Invalid Email or Invalid Phone\_Number.

## Source Rows:

Name	Address	City	State	Phone_Number	Country	Email
Alan	Joshua	NewYork	NY	2012336654	USA	
John	Gates	NewYork	NY		USA	
Michael	Parkway	NewYork	NY		USA	MikeTracy@gmail.com

## Custom Error Table entries:

MT Name	Mapping Name	Source Name	Source_Key Value	Error Description
mt_test	m_test	STG_CUSTOMERS	Alan	Email is NULL
mt_test	m_test	STG_CUSTOMERS	John	Email is NULL
mt_test	m_test	STG_CUSTOMERS	John	Phone Number is NULL
mt_test	m_test	STG_CUSTOMERS	Michael	Phone Number is NULL

## Steps to implement the solution:

1. Import file to IDMC Org
  - a. Define the Project where the code is going to be imported
  - b. Define Source and Target connections
  - c. Define the Runtime Environment where the code is going to be executed
  - d. Import the file

**Import Assets**

Start an import job, review the assets from the input file, and resolve any error related to location, connections, or runtime environments.

Asset Name	Version	Mapping Name	Source	Target	Action
m_test	1	mapping.xml	version/customers_stg	version/customers_stg	Overwrite existing object
m_test	1	Mapping	Default/Columns_Level_Error_Loading	Default/Columns_Level_Error_Loading	Overwrite existing object
m_test	1	Mapper	Default/Columns_Level_Error_Loading	Default/Columns_Level_Error_Loading	Overwrite existing object
m_test	0	RIA Specification	Default/Columns_Level_Error_Loading	Default/Columns_Level_Error_Loading	Overwrite existing object

**Settings for In-Out Parameters, Sequence Generators and Shared Sequence Generators(Existing Assets)**

**Retain persisted values in the target**  
 This will ignore the values coming from the source environment.  
 **Reset persisted values to default values**  
 This will reset the persisted values in the target asset to the initial/default value.  
 **Overwrite the persisted values with source values**  
 This will overwrite the persisted values in the target environment from the source.

**Settings for In-Out Parameters, Sequence Generators and Shared Sequence Generators(New Assets)**

**Reset to default values**  
 This will create the new asset with the initial/default values as defined in the source.  
 **Retain persisted values**  
 This will create the new asset with the current values from the source.

**Review Locations**

The selected assets will be imported into the following projects. You can accept the default values or select different target locations.

Source Project 1:  Target Project 1:

**Review Connections**

Your connections will be mapped as shown below. You can accept the default values or select different target connections.

Source Connection 1:  Target Connection 1:

**Review Runtime Environments**

Your imported assets will use the following target runtime environments. You can accept the default values or select different target runtime environments.

Source Runtime Environment 1:  Target Runtime Environment 1:

2. Select the Source and Target objects in the mapping
3. Define the Source Object Name in the mapping task parameter

## Edit mt\_Column\_Level\_Logging

1 Definition

2 Input Parameters

3 Schedule

### Other Parameter Details

source\_name: \* ? 'Test\_Source\_Table'

4. Run the mapping task

Note: Source and Target Object/Connection could be parameterized to define it in the mapping task. Also if reusability is desired, field names and field mappings could be parameterized.