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**Title: eCoaching\_Quality\_Other\_Load**

**SSIS Detail Design Document**

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|  |  |  |
| --- | --- | --- |
| Last Revision | Last Review | Description |
| 2/5/2017 |  | TFS 5903 to update the Description value for NPN files |

Prepared by: Susmitha Palacherla Date: 6/11/2016

Department, Location: Health Solutions Division

Approved by: Date:

**Change History Log**

| **Date** | **Change Description** | **Author** |
| --- | --- | --- |
| 6/11/2016 | 1.0 Initial revision. CTC Feed per TFS 2268 | Susmitha Palacherla |
| 7/15/2016 | 2.0 Updates for HFC and KUD Feeds per TFS 3179 & 3186 | Susmitha Palacherla |
| 8/2/2016 | 3.0 Updates for KUD feed per TFS 3179 | Susmitha Palacherla |
| 9/7/2016 | 4.0 Update to Description derived column expression in CTC files when any of the 4 text fields are NULL (2.2.2.3.1 step II b) | Susmitha Palacherla |
| 2/5/2017 | 5.0 Updates for NPN feed per TFS 5903 | Susmitha Palacherla |
|  |  |  |
|  |  |  |

Contents

[1. Overview 4](#_Toc430607349)

[1.1 Project Description 4](#_Toc430607350)

[1.2 Document Scope 4](#_Toc430607351)

[1.3 Source Files 4](#_Toc430607352)

[1.4 Module List 6](#_Toc430607353)

[1.5 Software and Hardware Interfaces 6](#_Toc430607354)

[1.5.1 Software 6](#_Toc430607355)

[1.5.2 Hardware 6](#_Toc430607356)

[1.6 Users 6](#_Toc430607357)

[2. Details 6](#_Toc430607358)

[2.1 Source Files 6](#_Toc430607361)

[2.2 Module Details 7](#_Toc430607362)

[2.2.1 SQL agent job 7](#_Toc430607363)

[2.2.2 SSIS Package 7](#_Toc430607364)

[2.2.3 Tables 82](#_Toc430607365)

[2.2.4 Procedures 82](#_Toc430607366)

[2.2.5 Functions 82](#_Toc430607367)

# Overview

## Project Description

The coaching process is a standard process to facilitate consistent communication when a performance opportunity or reinforcement exists. It provides a method to make a determination of whether coaching is needed, when to initiate coaching and verification that the performance issue has been addressed. The Quality\_Other feed(s) will be used for mass loading of ecls from the Quality system that would have normally been submitted through the User Interface into the database. Utilizing the eCL work-flow, items can be tracked from start to finish to verify if items have been addressed.

## Document Scope

This document describes the load of the ‘Quality\_Other’ feeds (Related to Quality systems but not directly based on the actual evalautions) that will be used to mass load ecls into the database. Once the reports are loaded into the database the logs are tracked through the workflow like any Coaching log entered from the web interface.

## Source Files

The table below shows the attributes for the ‘Quality\_Other’ reports.

Files have a naming convention eCL\_Quality\_Feed\_**xxx**yyyymmdd.csv where xxx is the 3 letter Report code.

Files are staged at [\\VRIVSCORS01\BCC Scorecards\Coaching\Quality\_Other\](file:///\\VRIVSCORS01\BCC%20Scorecards\Coaching\Generic\)

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **#** | **Metric/Report** | **Active Feed** | **Code** | **eCL Workflow** | **Entry** | **Coaching Reason** |
| 1 | Coach the coach | Y | CTC | Acknowledgement only | Feed | Coaching |
| 2 | Kudos | Y | KUD | Acknowledgement only | Feed | Recognition |
| 3 | High CSAT | Y | HFC | Acknowledgement only | Feed | Quality |
| 3. | National Producer Number | Y | NPN | Pending Supervisor Review | Feed | Current Coaching Initiatives |

## Module List

* SQL agent job
* SSIS Package
* Tables
* Procedures

## Software and Hardware Interfaces

### Software

* SQL Server 2008 R2 SP1 Suite

### Hardware

* VRIVFSSDBT02\SCORD01,1437 – Dev DB Instance
* VRIVFSSDBT02\SCORT01,1438 – Test DB Instance
* VDENSSDBP07\SCORP01 – Prod DB Instance
* [\\VRIVSCORS01\BCC Scorecards\](file:///\\VRIVSCORS01\BCC%20Scorecards\) - File staging share

## Users

* The first set of users for the Quality\_Other records loaded into the eCL database are the CCO Supervisors and their immediate supervisors. Logs are loaded at pending Acknowledgement status and can be acknowledged by either the Supervisor (owner) or Manager of the Supervisor first.
* CCO Supervisors and Managers and specific HR staff will be able to access the logs from the historical Dashboards.

# Details



## Source Files

eCL\_Quality\_Feed\_xxxyyyymmdd.csv is the naming convention for the feed where xxx is the 3 letter Report code.

Source system: NA

* Staging location: [\\vrivscors01\BCC Scorecards\Coaching\Quality\](file:///\\vrivscors01\BCC%20Scorecards\Coaching\Quality\)
* File name eCL\_Quality\_Feed\_xxxyyyymmdd.csv
* Frequency: Ad-hoc
* File arrival time: NA
* Destination Table: Coaching\_Log and Coaching\_Log\_Reason

## Module Details

### SQL agent job

* Production Instance : VDENSSDBP07\SCORP01
* Production Job: QualityOtherCoaching
* Production Package: [\\VDENSSDBP07\scorecard-ssis\Coaching\Quality\_Other \_Coaching.dtsx](file:///\\VDENSSDBP07\scorecard-ssis\Coaching\Training%20_Coaching.dtsx)
* Production Config File: Prod\_Quality\_Other\_Coaching.dtsConfig
* Owner: jobs\_admin
* Run As: BccScrdSQLAgent
* Schedule: Fridays On-demand
* Destination File Location: N/A

### SSIS Package

* + - 1. **Variables**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Scope** | **DataType** | **Value** |
| FilebakPath | Quality\_Other\_Coaching | String | \\vrivscors01\BCC Scorecards\Coaching\ Quality\Backups |
| FileNum | Quality\_Other\_Coaching | Int32 | 0 |
| FilePath | Quality\_Other\_Coaching | String | \\vrivscors01\BCC Scorecards\Coaching\Quality\ |
| varDBName | Quality\_Other\_Coaching | String | Dev |
| varFileName | Quality\_Other\_Coaching | String |  |
| FailMessage | Quality\_Other\_Coaching | String | Quality Other Coaching Load failed in Dev |
| StagedCount | Quality\_Other\_Coaching | Int32 | 0 |
| RejectedCount | Quality\_Other\_Coaching | Int32 | 0 |
| LoadedCount | Quality\_Other\_Coaching | Int32 | 0 |
|  |  |  |  |

* + - 1. **Connection Manager Entries**
         1. Destinationdb
* Dev - VRIVFSSDBT02\SCORD01,1437) DB – eCoachingdev
* Prod - VDENSSDBP07\SCORP01 DB – eCoaching



* + - * 1. CTC\_File
* \\vrivscors01\bcc scorecards\Coaching\Quality\eCL\_Quality\_Feed\_\*.csv





* + - * 1. NonCTC\_File
* \\vrivscors01\bcc scorecards\Coaching\Quality\eCL\_Quality\_Feed\_\*.csv



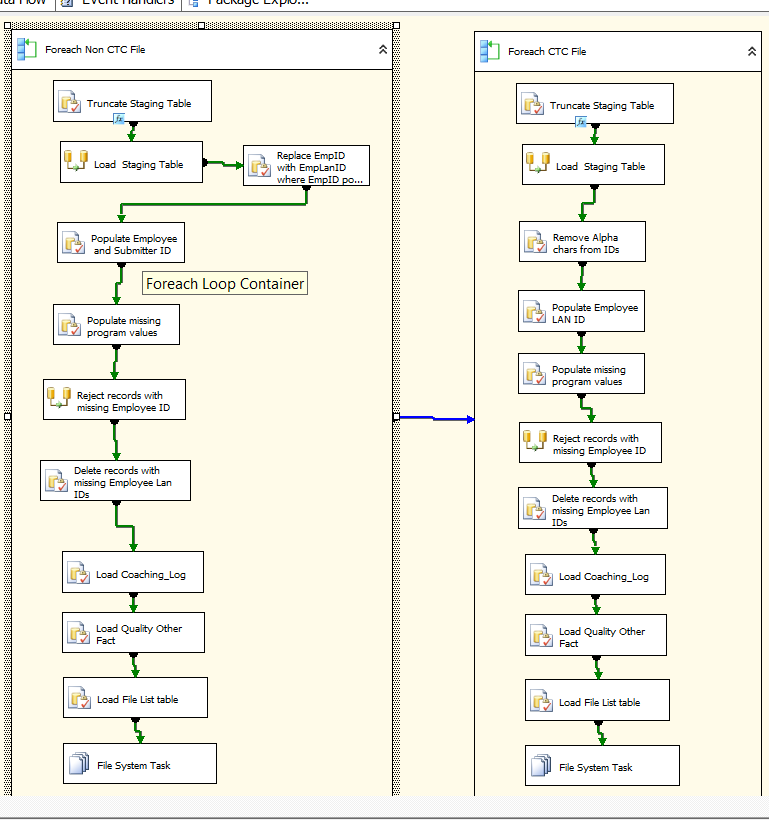


* + - * 1. SMTP Connection Manager

smtpout.gdit.com



* + - 1. **Package Content(Control Flow)**



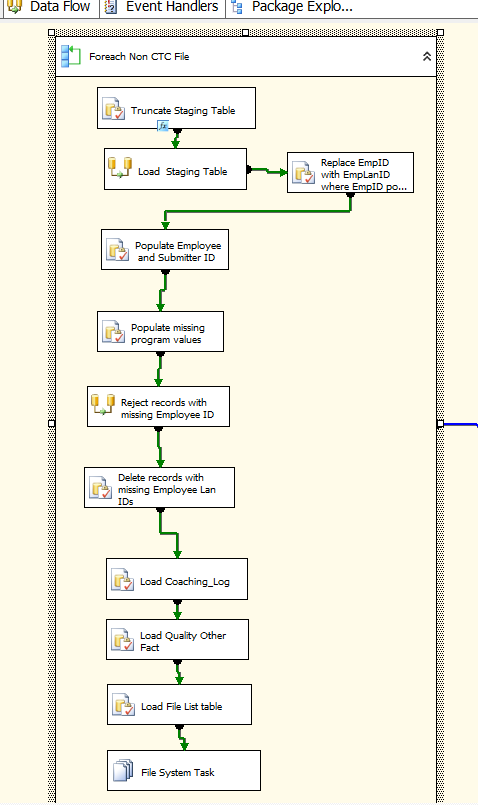
**Workflow**

* + - * 1. **For each NonCTC file in Staging directory Workflow**

Container: Foreach Loop

Folder: \\vrivscors01\BCC Scorecards\Coaching\Quality\_Other

Files: eCL\_Quality\_Feed\_\*.csv



**Container properties to set**

1. Fail Package on failure- False
2. Fail Parent on failure- False
3. Maximum Error count – 0
4. Event handlers – System Variables – Propagate - False

**Summary of Steps**

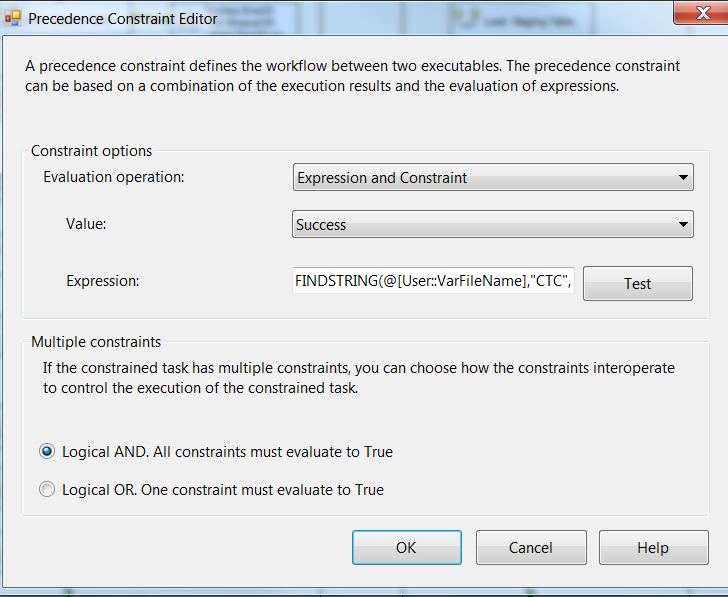
1. SQL task – Truncate Quality\_Other Staging table
2. DFT – Stage Quality\_Other Staging table
3. SQL task - Replace EmpID with Emp Lan ID
4. SQL task – Populate Employee and Submitter Ids
5. SQL Task – Populate missing Program Values
6. DFT Rejected records with missing Employee attributes
7. SQL task – Delete records with missing employee ID from Staging table
8. SQL task Load coaching\_Log and Coaching\_Log\_Reason tables
9. SQL task – Load Quality\_Other Fact table
10. SQL task – Load File list table
11. File system task – Backup files to Backups directory

**Details of Steps**

1. SQL task – Truncate Quality\_Other Staging table



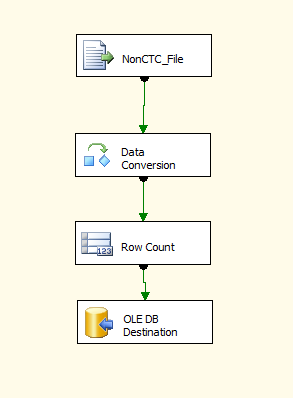
Executes Truncate Table [EC].[Quality\_Other\_Coaching\_Stage]



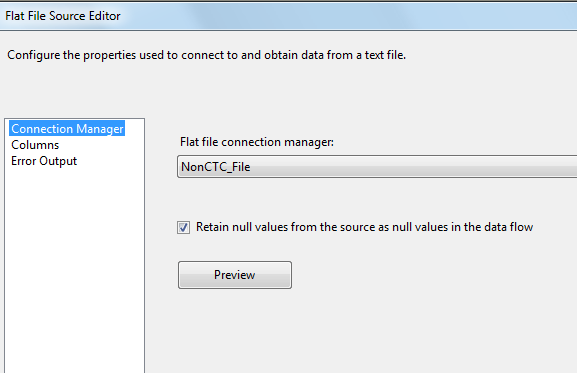
FINDSTRING(@[User::VarFileName],"CTC",1 ) == 0

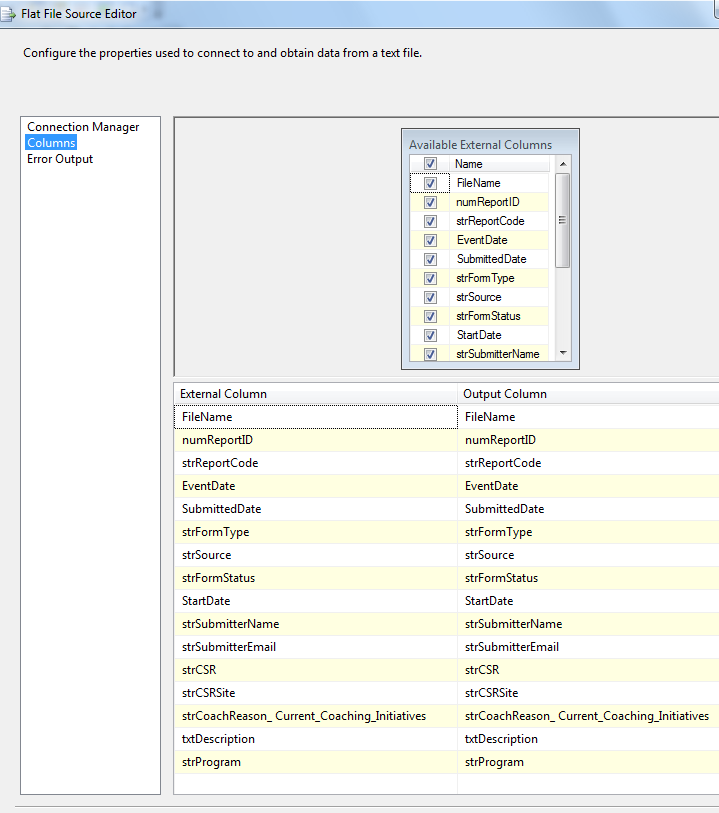
1. DFT: Load Quality\_Other staging table



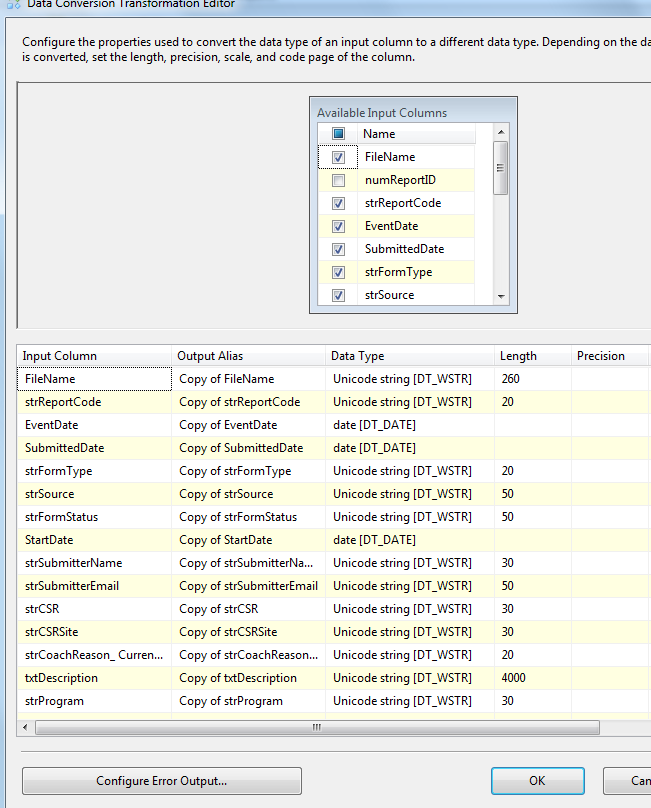


1. Flat File source





1. Data Conversion

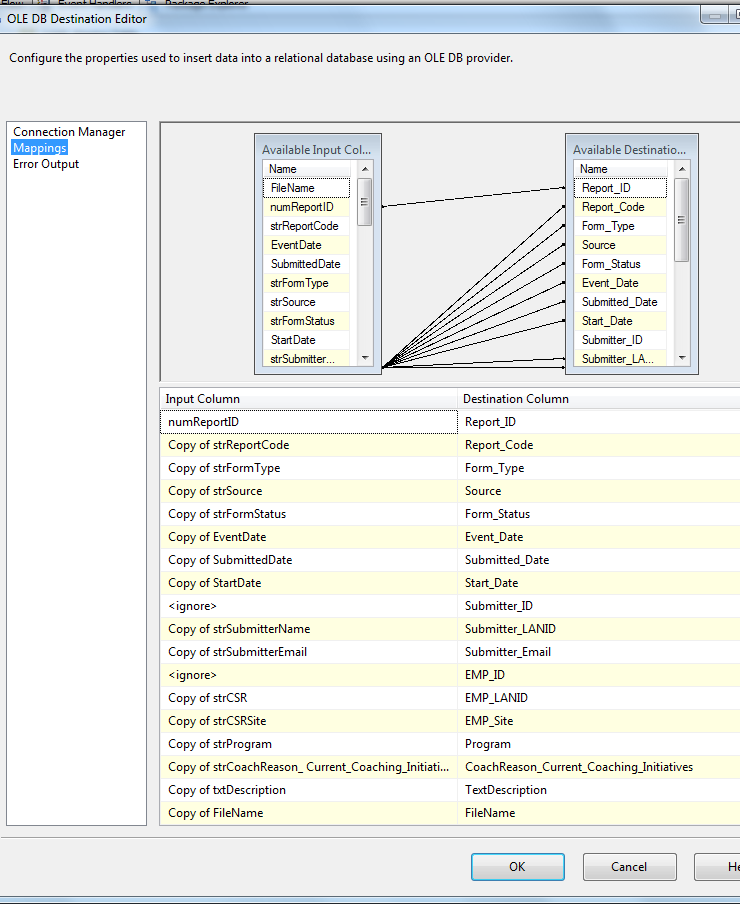


1. Row Count Transformation

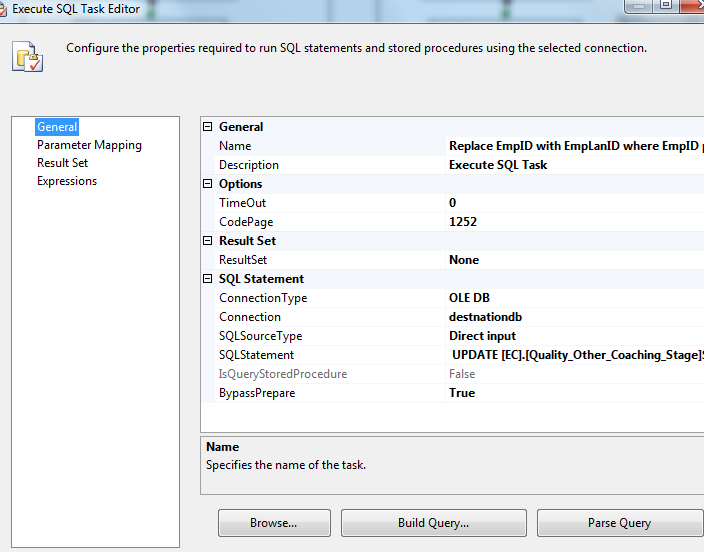


1. Oledb destination





1. SQL Task: Replace Emp Ids with Emp lan Ids

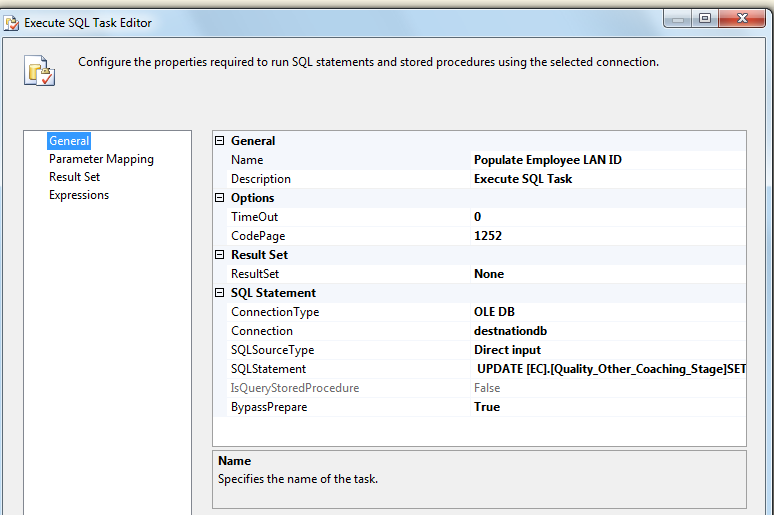


UPDATE [EC].[Quality\_Other\_Coaching\_Stage]

SET [Emp\_LANID]= [EC].[fn\_strEmpLanIDFromEmpID]([Emp\_LanID])

WHERE NOT ISNULL([Emp\_LANID],' ') like '%.%'

1. SQL Task: Populate Employee and submitter Ids



UPDATE [EC].[Quality\_Other\_Coaching\_Stage]

SET [EMP\_ID]= [EC].[fn\_nvcGetEmpIdFromLanId] ([EMP\_LANID],[Submitted\_Date])

UPDATE [EC].[Quality\_Other\_Coaching\_Stage]

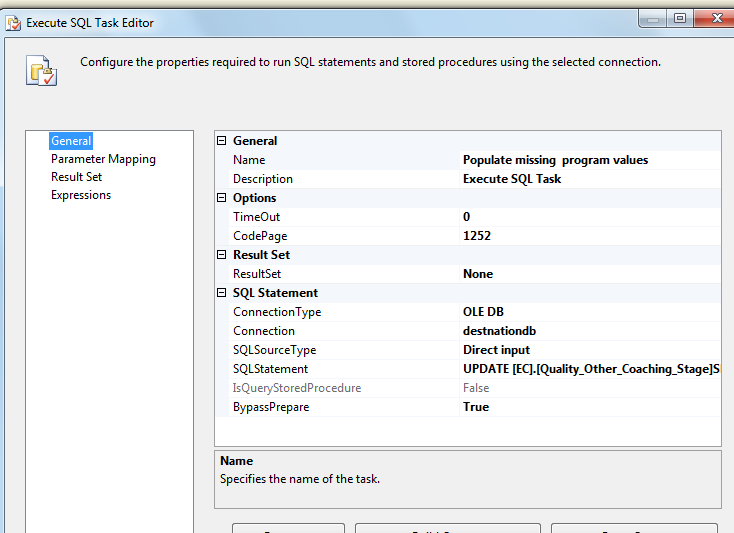
SET [EMP\_ID]= ''

WHERE [EMP\_ID]='999999'

UPDATE [EC].[Quality\_Other\_Coaching\_Stage]

SET [Submitter\_ID]= '999999'

1. SQL Task: Populate site and program values



UPDATE [EC].[Quality\_Other\_Coaching\_Stage]

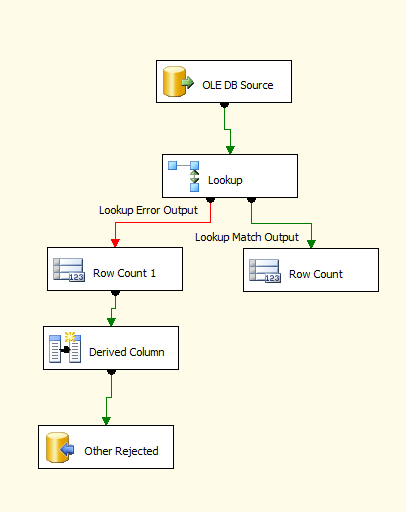
SET [Program]= H.[Emp\_Program]

FROM [EC].[Quality\_Other\_Coaching\_Stage]S JOIN [EC].[Employee\_Hierarchy]H

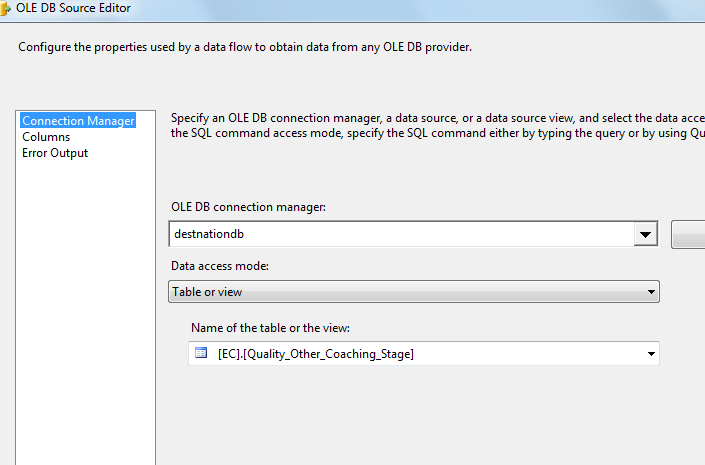
ON S.[EMP\_ID]=H.[Emp\_ID]

1. DFT: Reject Records with Missing Employee ID



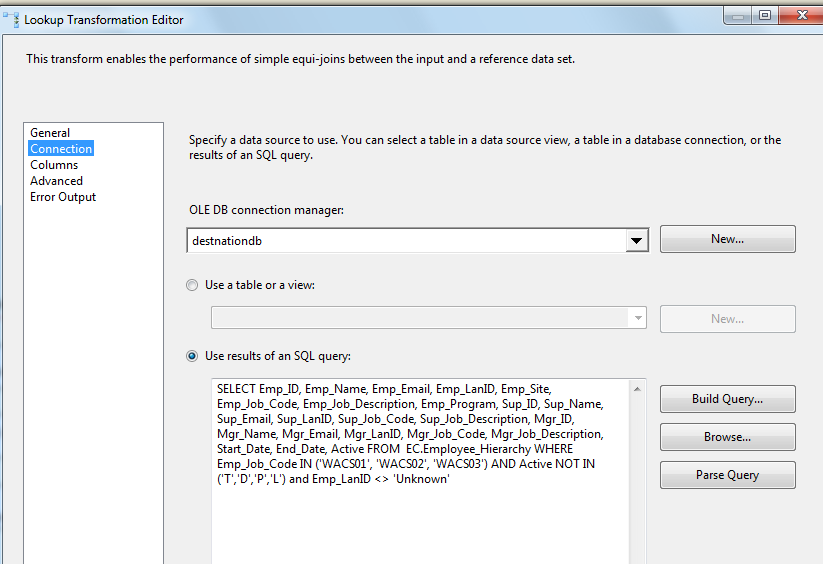


1. Oledb source



1. Lookup Transformation(CSR Module)





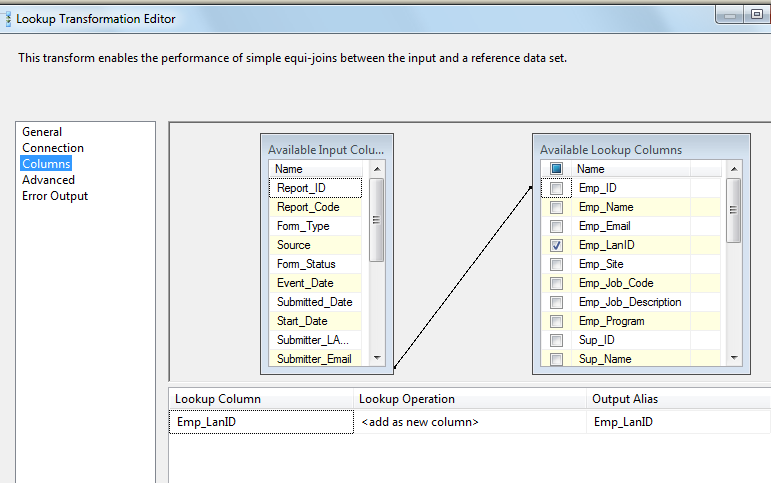
SELECT Emp\_ID, Emp\_Name, Emp\_Email, Emp\_LanID, Emp\_Site, Emp\_Job\_Code, Emp\_Job\_Description,

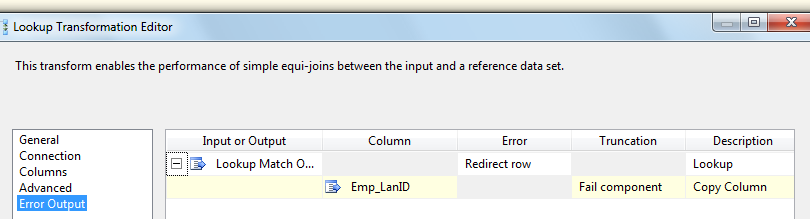
Emp\_Program, Sup\_ID, Sup\_Name, Sup\_Email, Sup\_LanID, Sup\_Job\_Code, Sup\_Job\_Description,

Mgr\_ID, Mgr\_Name, Mgr\_Email, Mgr\_LanID, Mgr\_Job\_Code, Mgr\_Job\_Description, Start\_Date, End\_Date, Active

FROM EC.Employee\_Hierarchy

WHERE Emp\_Job\_Code IN ('WACS01', 'WACS02', 'WACS03')

AND Active NOT IN ('T','D','P','L') and Emp\_LanID <> 'Unknown' 



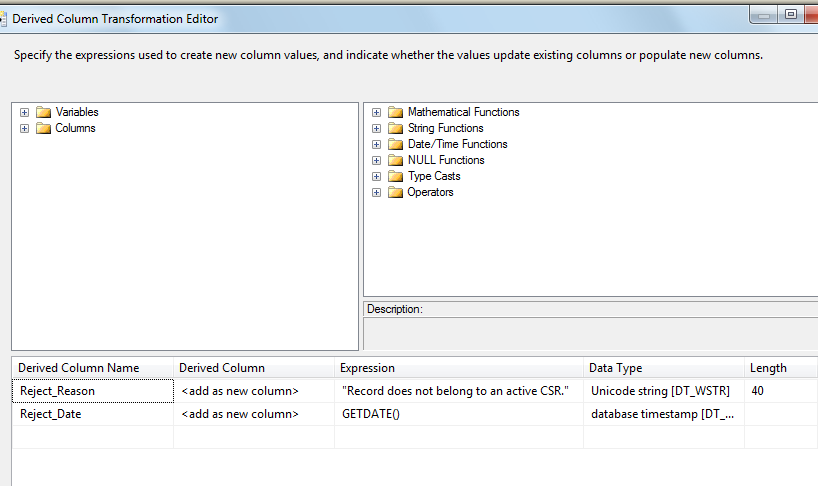
1. Lookup Match Output – Row Count Transformation to get Loaded Count



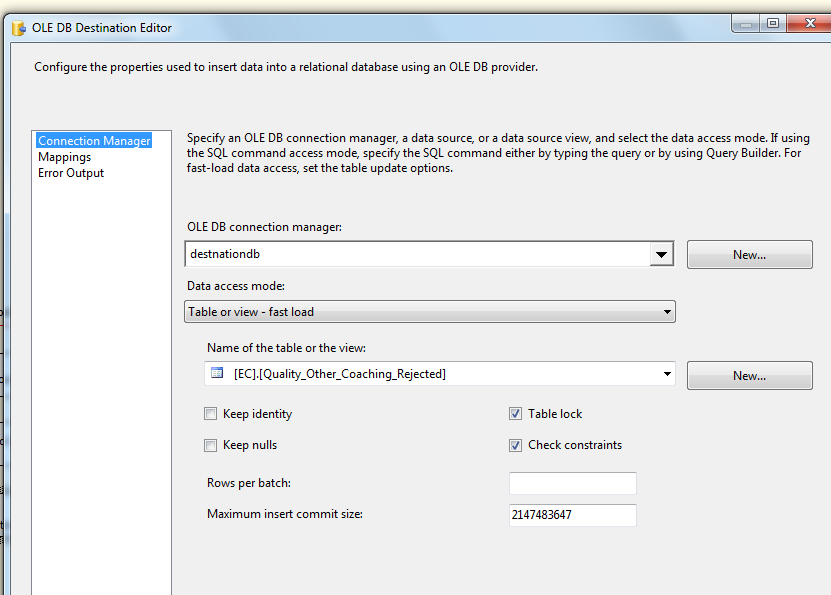
Lookup Transformation No Match Output – Row Count Transformation to get Rejected Count



Derived Column – To get Reject Reason and Reject Date



oledb destination – Write rejected records to Quality\_Other rejected table



1. SQL Task: Delete records with missing Employee ID from Staging table

DELETE FROM [EC].[Quality\_Other\_Coaching\_Stage]

WHERE [EMP\_ID] IS NULL OR [EMP\_ID]='' OR [EMP\_LANID] = 'Unknown'

Delete os FROM

[EC].[Quality\_Other\_Coaching\_Stage] os JOIN [EC].[Employee\_Hierarchy] eh

ON os.Emp\_ID = eh.Emp\_ID

WHERE eh.Emp\_Job\_Code not in ( 'WACS01', 'WACS02', 'WACS03')

OR Active in ('T','D','L','P')

GO

1. SQL Task: Load Coaching\_Log table



Exec [EC].[sp\_InsertInto\_Coaching\_Log\_Quality\_Other]

1. SQl Task: Load Quality\_Other Fact table

INSERT INTO [EC].[Quality\_Other\_Coaching\_Fact]

([Report\_ID]

,[Report\_Code]

,[Form\_Type]

,[Source]

,[Form\_Status]

,[Event\_Date]

,[Submitted\_Date]

,[Start\_Date]

,[Submitter\_ID]

,[Submitter\_LANID]

,[Submitter\_Email]

,[EMP\_ID]

,[EMP\_LANID]

,[EMP\_Site]

,[Program]

,[CoachReason\_Current\_Coaching\_Initiatives]

,[TextDescription]

,[FileName])

(

SELECT S.[Report\_ID]

,S.[Report\_Code]

,S.[Form\_Type]

,S.[Source]

,S.[Form\_Status]

,S.[Event\_Date]

,S.[Submitted\_Date]

,S.[Start\_Date]

,S.[Submitter\_ID]

,S.[Submitter\_LANID]

,S.[Submitter\_Email]

,S.[EMP\_ID]

,S.[EMP\_LANID]

,S.[EMP\_Site]

,S.[Program]

,S.[CoachReason\_Current\_Coaching\_Initiatives]

,S.[TextDescription]

,S.[FileName]

FROM [EC].[Quality\_Other\_Coaching\_Stage]S LEFT OUTER JOIN [EC].[Quality\_Other\_Coaching\_Fact]F

ON S.[Report\_ID]= F.[Report\_ID]

AND S.Report\_Code = F.Report\_Code

WHERE F.[Report\_ID] IS NULL AND F.Report\_Code IS NULL

)

GO

1. SQL Task: Load Quality\_Other File List table

INSERT INTO [EC].[Quality\_Other\_FileList]

([File\_Name]

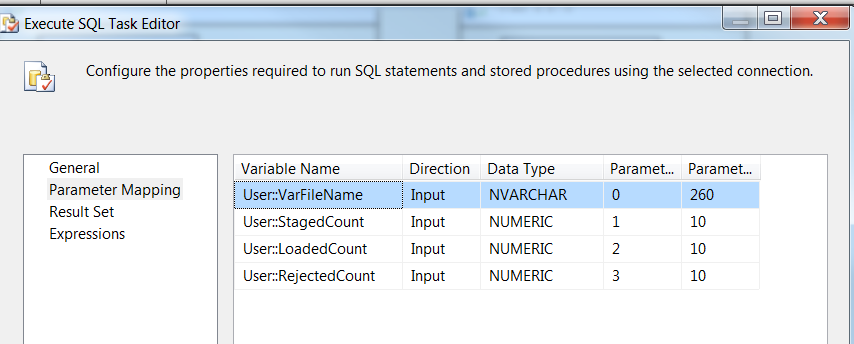
,[File\_LoadDate]

,[Count\_Staged]

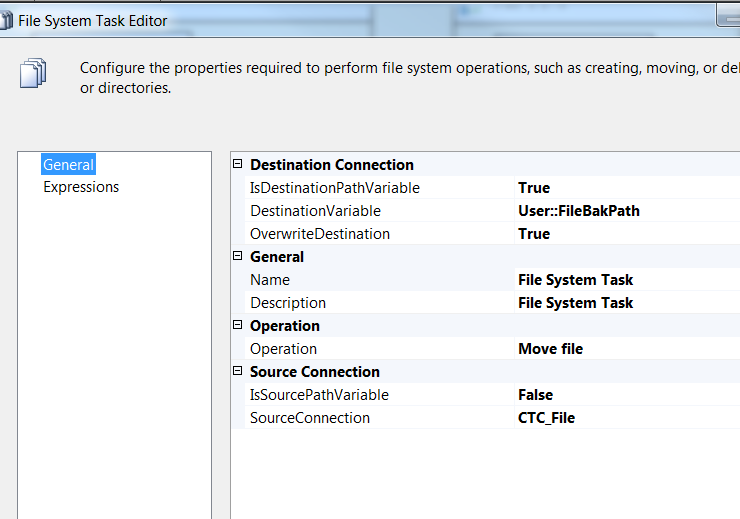
,[Count\_Loaded]

,[Count\_Rejected])

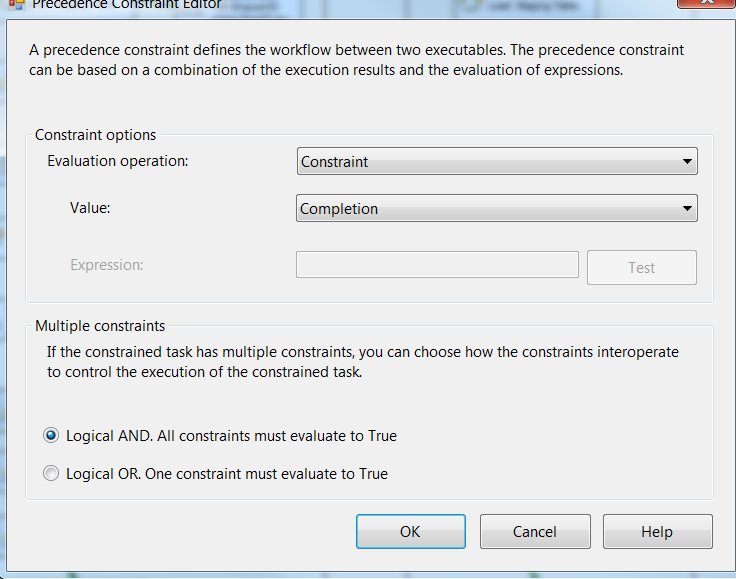
VALUES (?,GetDate(), ?, ?,?)



1. File System Task: Move file to backup folder



Precedence Constraint between Non-CTC and CTC containers



* + - * 1. **For each CTC file in Staging directory Workflow**

**Container properties to set**

1. Fail Package on failure- True
2. Fail Parent on failure- False
3. Maximum Error count – 1
4. Event handlers – System Variables – Propagate - True

Container: Foreach Loop

Folder: \\vrivscors01\BCC Scorecards\Coaching\Quality\_Other

Files: eCL\_Quality\_Feed\_\*.csv









**Summary of Steps**

1. SQL task – Truncate Quality\_Other Staging table
2. DFT – Stage Quality\_Other Staging table
3. SQL task – Remove alpha chars from IDs
4. SQL task – Populate Employee Lan ID
5. SQL Task – Populate missing Program Values
6. DFT Rejected records with missing Employee attributes
7. SQL task – Delete records with missing employee ID from Staging table
8. SQL task Load coaching\_Log and Coaching\_Log\_Reason tables
9. SQL task – Load Quality\_Other Fact table
10. SQL task – Load File list table
11. File system task – Backup files to Backups directory

**Details of Steps**

1. SQL task – Truncate Quality\_Other Staging table



Executes Truncate Table [EC].[Quality\_Other\_Coaching\_Stage]



FINDSTRING(@[User::VarFileName],"CTC",1 ) > 1

1. DFT: Load Quality\_Other staging table





1. Flat File source





1. Derived column



(DT\_STR,4000,1252)((ISNULL(ProblemText) ? "Problem: N/A|" : ProblemText + "|") + (ISNULL(BehaviorText) ? "Behavior: N/A|" : BehaviorText + "|") + (ISNULL(ResultText) ? "Result: N/A|" : ResultText + "|") + (ISNULL(FollowUpText) ? "Follow Up: N/A|" : FollowUpText))

1. Data Conversion



1. Row Count Transformation



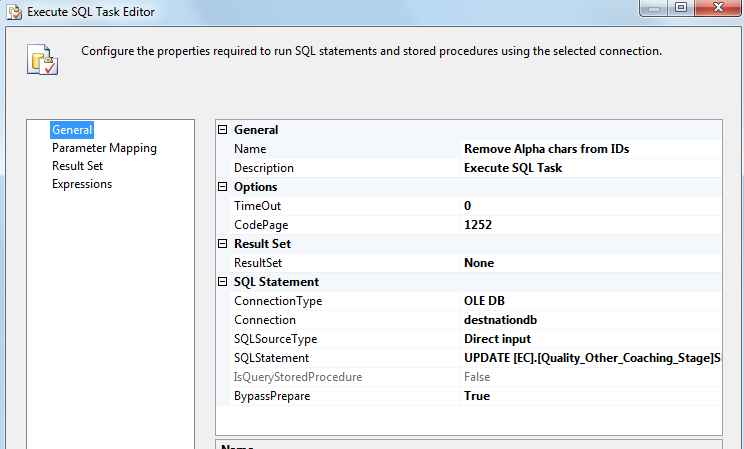
1. oledb destination







1. SQL Task: Remove alpha characters from IDs

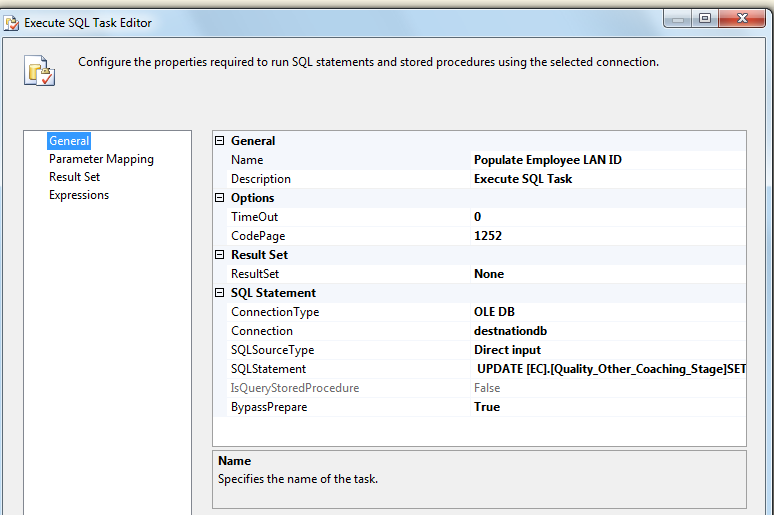


UPDATE [EC].[Quality\_Other\_Coaching\_Stage]

SET [Submitter\_ID]= [EC].[RemoveAlphaCharacters](REPLACE(LTRIM(RTRIM([Submitter\_ID])),' ','')),

[Emp\_ID]= [EC].[RemoveAlphaCharacters](REPLACE(LTRIM(RTRIM([Emp\_ID])),' ',''))

1. SQL Task: Populate Employee lan ID



UPDATE [EC].[Quality\_Other\_Coaching\_Stage]

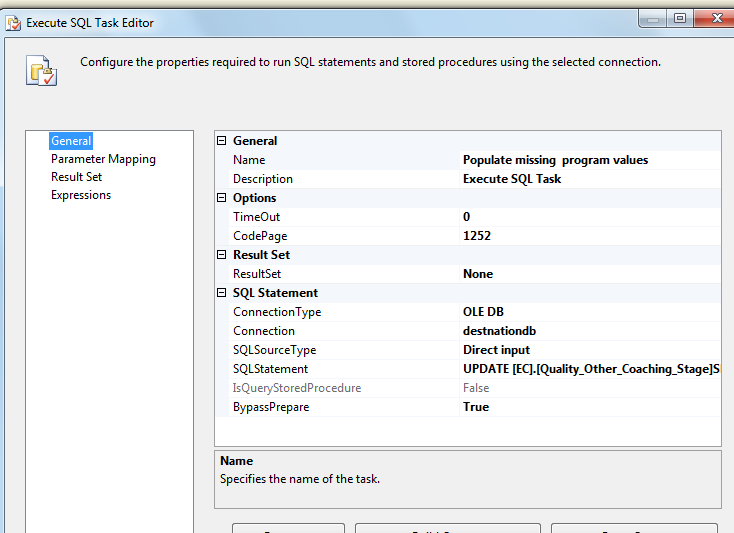
SET [Emp\_LANID]= [EC].[fn\_strEmpLanIDFromEmpID](EH.[Emp\_ID])

FROM [EC].[Employee\_Hierarchy]EH JOIN [EC].[Quality\_Other\_Coaching\_Stage]S

ON EH.Emp\_ID = S.EMP\_ID

WHERE EH.[Active]='A'

1. SQL Task: Populate site and program values



UPDATE [EC].[Quality\_Other\_Coaching\_Stage]

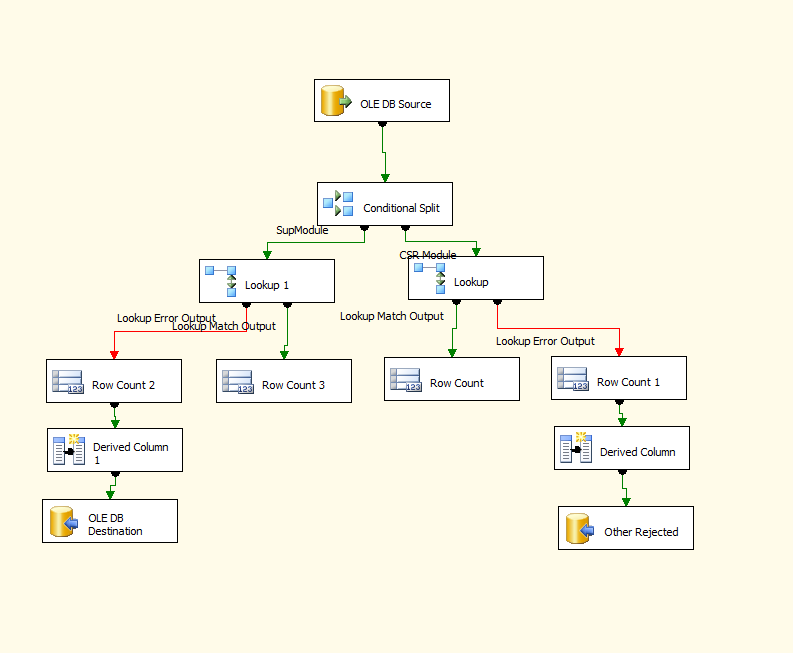
SET [Program]= H.[Emp\_Program]

FROM [EC].[Quality\_Other\_Coaching\_Stage]S JOIN [EC].[Employee\_Hierarchy]H

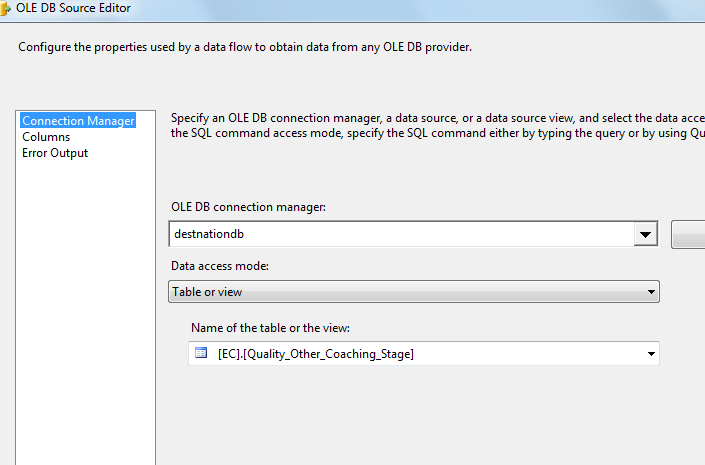
ON S.[EMP\_ID]=H.[Emp\_ID]

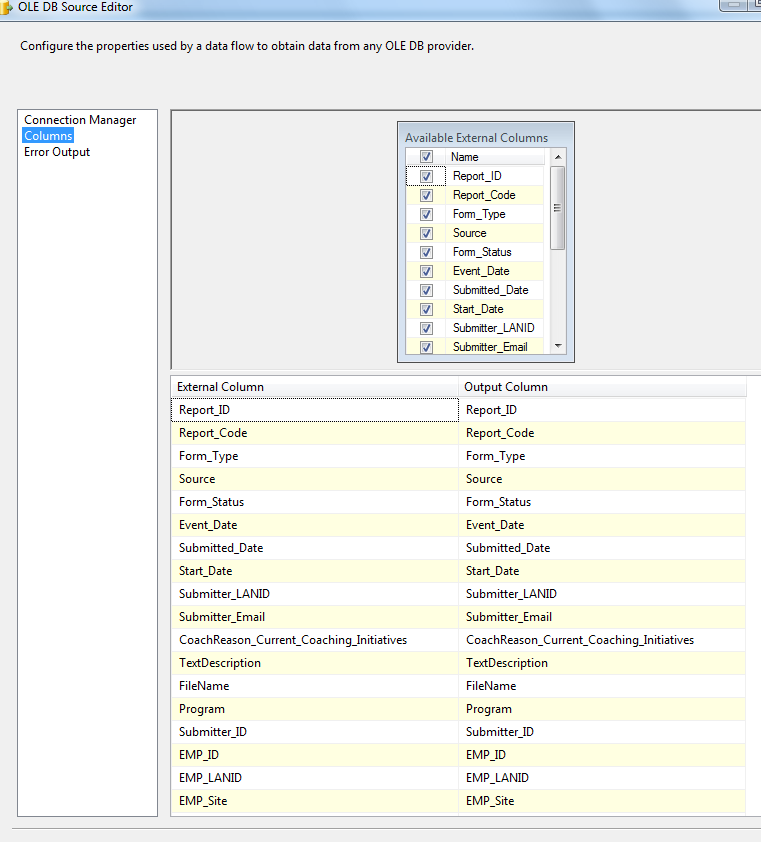
1. DFT: Reject Records with Missing Employee ID



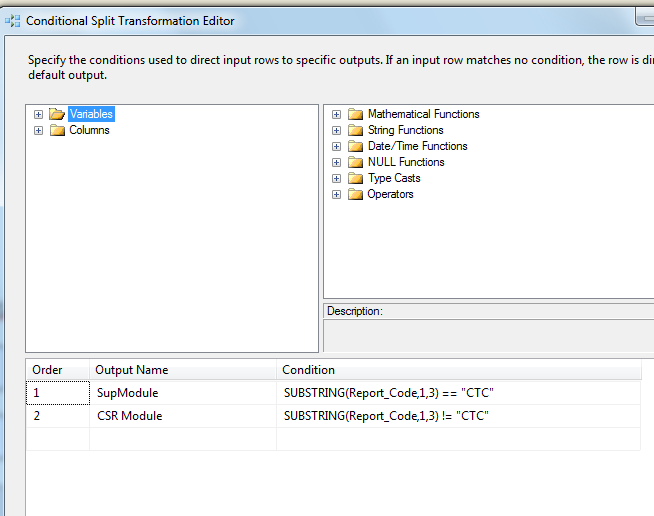


1. Oledb source



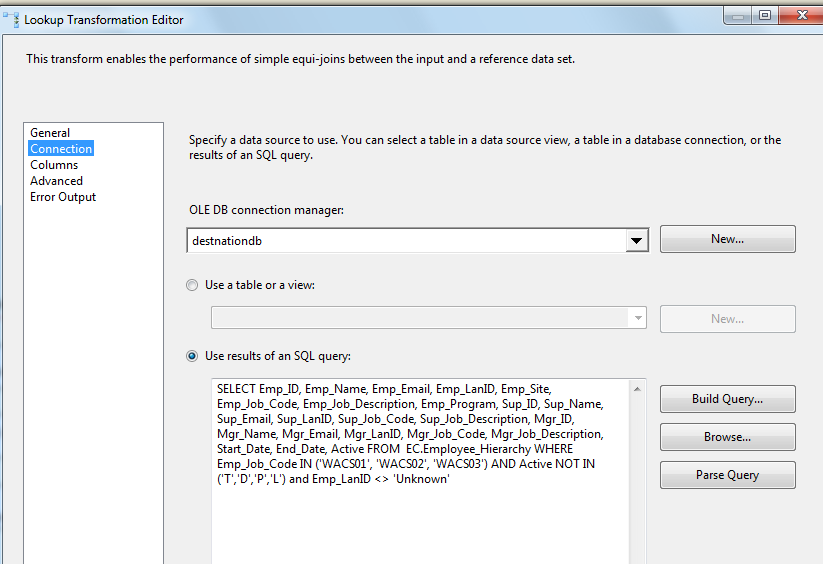


1. Conditional Split



1. Lookup Transformation(CSR Module)





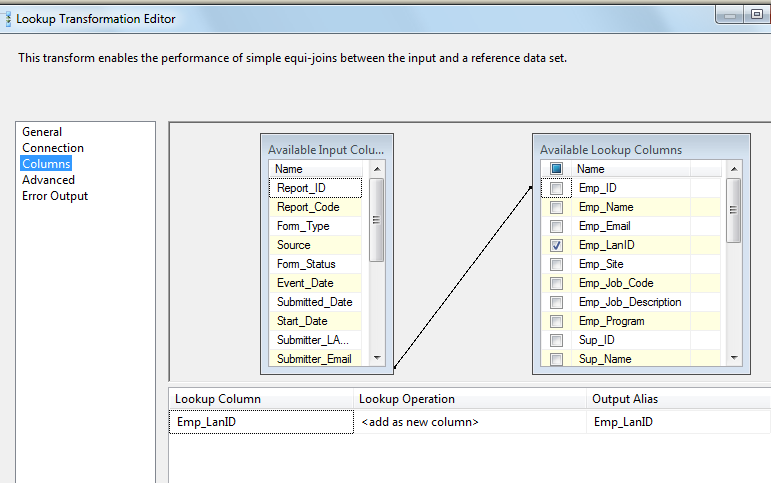
SELECT Emp\_ID, Emp\_Name, Emp\_Email, Emp\_LanID, Emp\_Site, Emp\_Job\_Code, Emp\_Job\_Description,

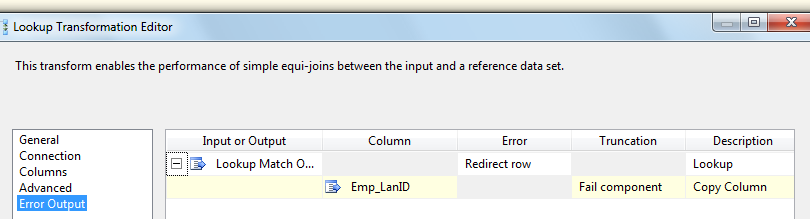
Emp\_Program, Sup\_ID, Sup\_Name, Sup\_Email, Sup\_LanID, Sup\_Job\_Code, Sup\_Job\_Description,

Mgr\_ID, Mgr\_Name, Mgr\_Email, Mgr\_LanID, Mgr\_Job\_Code, Mgr\_Job\_Description, Start\_Date, End\_Date, Active

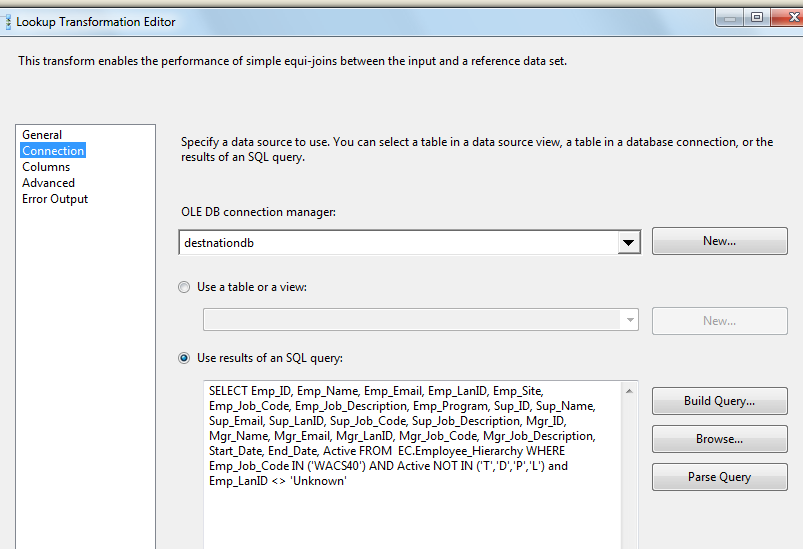
FROM EC.Employee\_Hierarchy

WHERE Emp\_Job\_Code IN ('WACS01', 'WACS02', 'WACS03')

AND Active NOT IN ('T','D','P','L') and Emp\_LanID <> 'Unknown' 



Lookup1 Transformation (Sup Module)



SELECT Emp\_ID, Emp\_Name, Emp\_Email, Emp\_LanID, Emp\_Site, Emp\_Job\_Code, Emp\_Job\_Description,

Emp\_Program, Sup\_ID, Sup\_Name, Sup\_Email, Sup\_LanID, Sup\_Job\_Code, Sup\_Job\_Description,

Mgr\_ID, Mgr\_Name, Mgr\_Email, Mgr\_LanID, Mgr\_Job\_Code, Mgr\_Job\_Description, Start\_Date, End\_Date, Active

FROM EC.Employee\_Hierarchy

WHERE Emp\_Job\_Code IN ('WACS40')

AND Active NOT IN ('T','D','P','L') and Emp\_LanID <> 'Unknown'

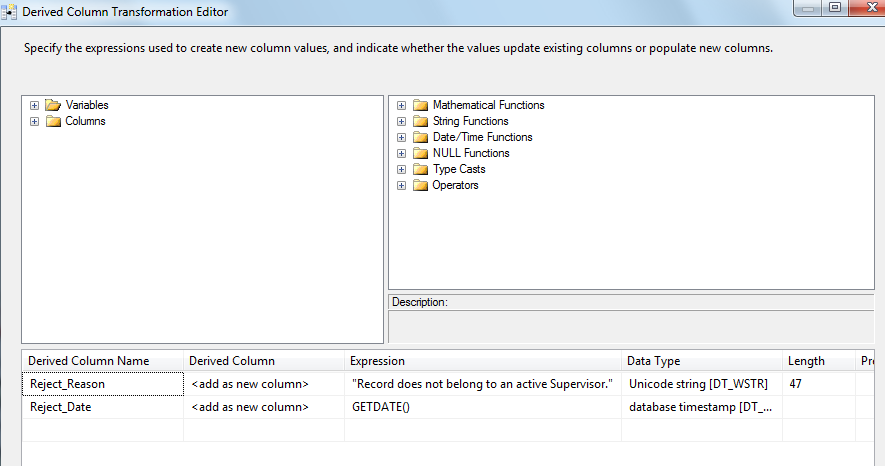
1. Lookup Match Output – Row Count Transformation to get Loaded Count



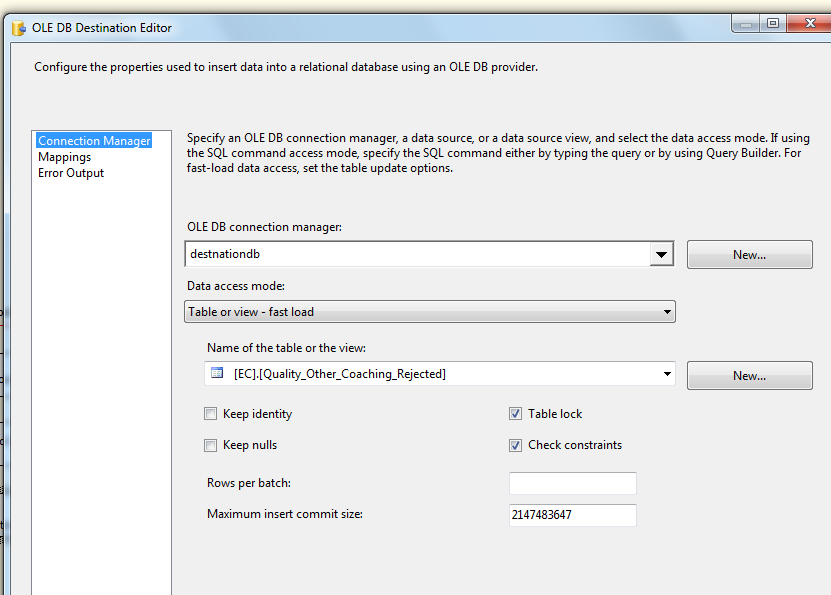
Lookup Transformation No Match Output – Row Count Transformation to get Rejected Count



Derived Column – To get Reject Reason and Reject Date



oledb destination – Write rejected records to Quality\_Other rejected table



1. SQL Task: Delete records with missing Employee ID from Staging table

DELETE FROM [EC].[Quality\_Other\_Coaching\_Stage]

WHERE [EMP\_LANID] IS NULL OR [EMP\_LANID]='' OR [EMP\_LANID] = 'Unknown'

Delete os FROM

[EC].[Quality\_Other\_Coaching\_Stage] os JOIN [EC].[Employee\_Hierarchy] eh

ON os.Emp\_ID = eh.Emp\_ID

WHERE (os.Report\_Code like 'CTC%' AND eh.Emp\_Job\_Code <> 'WACS40')

OR Active in ('T','D','L','P')

GO

1. SQL Task: Load Coaching\_Log table



Exec [EC].[sp\_InsertInto\_Coaching\_Log\_Quality\_Other]

1. SQl Task: Load Quality\_Other Fact table

INSERT INTO [EC].[Quality\_Other\_Coaching\_Fact]

([Report\_ID]

,[Report\_Code]

,[Form\_Type]

,[Source]

,[Form\_Status]

,[Event\_Date]

,[Submitted\_Date]

,[Start\_Date]

,[Submitter\_ID]

,[Submitter\_LANID]

,[Submitter\_Email]

,[EMP\_ID]

,[EMP\_LANID]

,[EMP\_Site]

,[Program]

,[CoachReason\_Current\_Coaching\_Initiatives]

,[TextDescription]

,[FileName])

(

SELECT S.[Report\_ID]

,S.[Report\_Code]

,S.[Form\_Type]

,S.[Source]

,S.[Form\_Status]

,S.[Event\_Date]

,S.[Submitted\_Date]

,S.[Start\_Date]

,S.[Submitter\_ID]

,S.[Submitter\_LANID]

,S.[Submitter\_Email]

,S.[EMP\_ID]

,S.[EMP\_LANID]

,S.[EMP\_Site]

,S.[Program]

,S.[CoachReason\_Current\_Coaching\_Initiatives]

,S.[TextDescription]

,S.[FileName]

FROM [EC].[Quality\_Other\_Coaching\_Stage]S LEFT OUTER JOIN [EC].[Quality\_Other\_Coaching\_Fact]F

ON S.[Report\_ID]= F.[Report\_ID]

AND S.Report\_Code = F.Report\_Code

WHERE F.[Report\_ID] IS NULL AND F.Report\_Code IS NULL

)

GO

1. SQL Task: Load Quality\_Other File List table







Executes the following sql

INSERT INTO [EC].[Quality\_Other\_FileList]

([File\_Name]

,[File\_LoadDate]

,[Count\_Staged]

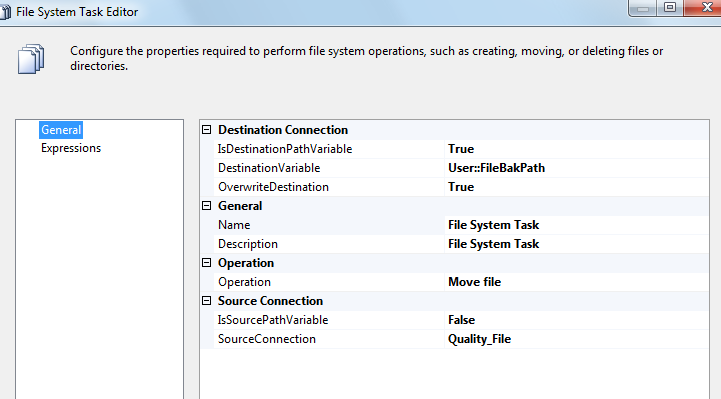
,[Count\_Loaded]

,[Count\_Rejected])

VALUES (?,GetDate(), ?, ?,?)

1. File System Task: Move file to backup folder





* + - 1. **Package Content(Event Handlers)**

Executables: Quality\_Other \_Coaching

EventHandler: OntaskFailed







### Tables

|  | **Table Name** | **Table Description** |
| --- | --- | --- |
| 1. | Quality\_Other\_Coaching\_Stage | Table used for staging the Quality\_Other records during the insert into Coaching\_Log table. |
| 2. | Quality\_Other\_Coaching\_Rejected | Table used for storing the rejected Quality\_Other records during the insert into Coaching\_Log table. Logs are rejected when an incoming Lan ID does not exist in the Employee\_Hierarchy table. |
| 3. | Quality\_Other\_Coaching\_Fact | Table used for storing Quality\_Other source records loaded into the Coaching Log table. |
| 4. | Quality\_Other\_FileList | Table used for storing the Quality\_Other file names and Load dates. |

Table structure and details in document: eCoaching\_Database\_DD.docx

### Procedures

|  | **Procedure Name** | **Usage** |
| --- | --- | --- |
| 1. | sp\_InsertInto\_Coaching\_Log\_Quality\_Other | Load: Quality\_Other Data |

### Functions

|  | **FunctionName** | **Usage** |
| --- | --- | --- |
| 1. |  |  |