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**Title: eCoaching\_Generic\_Load**

**SSIS Detail Design Document**

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|  |  |  |
| --- | --- | --- |
| Last Revision | Last Review | Description |
| 8/14/2017 |  | TFS 7105 – Upgrade to SQL Server 2012 |

Prepared by: Susmitha Palacherla Date: 12/12/2016

Department, Location: Health Solutions Division

Approved by: Date:

**Change History Log**

| **Date** | **Change Description** | **Author** |
| --- | --- | --- |
| 4/11/2016 | 1.0 Initial revision. TFS 2470 | Susmitha Palacherla |
| 12/12/2016 | 2.0 Updates for TFS 4916. Adding an additional container for non-SEA Ad-hoc generic feeds where attributes will be included in the file. | Susmitha Palacherla |
| 8/14/2017 | 3.0 TFS 7105 – Upgrade to SQL Server 2012 | Susmitha Palacherla |
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# 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 Generic (General) feed(s) will be used for mass loading of general ecls 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 ‘Generic’ or general feeds 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 ‘Generic’ reports.

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **#** | **Metric/Report** | **Active Feed** | **Code** | **eCL Workflow** | **Entry** | **Coaching Reason** |
| 1 | Generic Report | Y | OTH | Indirect Coach | Feed | Current Coaching Initiatives |
| 2 | SEA Report | Y | SEA | Indirect Coach | Feed | CCO Processes and Procedures |

The file will have the following naming convention:

eCL\_Generic\_Feed\_XXX<YYYYMMDD>.csv

or

eCL\_Generic\_Feed\_XXX\_ZZZ<YYYYMMDD>.csv

<YYYYMMDD> represents the Year, Month and Day

where XXX is the 3 letter OTH Report Code for the generic report and \_ZZZ represents a specific Report Code and yyyymmdd is the date the file generated in year month day format.

## Module List

* SQL agent job
* SSIS Package
* Tables
* Procedures

## Software and Hardware Interfaces

### Software

* SQL Server 2012 SP3 Suite

### Hardware

* F3420-ECLDBD01 – Dev DB Server
* F3420-ECLDBT01 – Test DB Server
* F3420-ECLDBP01 – Prod Server
* [\\F3420-ECLDBD01\data\](file:///\\\\F3420-ECLDBD01\\data\\) - Dev File staging share
* [\\F3420-ECLDBT01\data\](file:///\\\\F3420-ECLDBT01\\data\\) - Test File staging share
* [\\VRIVSCORS01\BCC Scorecards\](file:///\\\\VRIVSCORS01\\BCC%20Scorecards\\) - Prod File staging share

## Users

* The first set of users for the Generic records loaded into the eCL database are the CCO Supervisors as all records have default state of ‘Pending Supervisor Review’ at the time of the load.
* After a Supervisor reviews the log, the logs goes to Pending Employee review and the Employee becomes the user.
* CCO Supervisors and Managers and specific HR staff will be able to access the logs from the historical Dashboards.

# Details



## Source Files

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

### File layout and Mappings

* + - 1. **SEA File**

|  |  |  |  |
| --- | --- | --- | --- |
| Element # | File Element | Staging table  [EC].[Generic\_Coaching\_Stage] | Destination table(s)  [EC].[Coaching\_Log]CL  [EC].[Coaching\_Log\_Reason]CLR |
|  | numReportID | Report\_ID | CL.numReportID |
|  | strReportCode | Report\_Code | CL.strReportCode  CLR.SubCoachingReasonID(Derived) |
|  | strFormType | Form\_Type | CL.SourceID(derived) |
|  | strSource | Source |
|  | strFormStatus | Form\_Status | CL.StatusID(Derived) |
|  | EventDate | Event\_Date | CL.EventDate |
|  | SubmittedDate | Submitted\_Date | CL.submittedDate |
|  | StartDate | Start\_Date | CL.StartDate |
|  | strSubmitterName | Submitter\_Name | CL.SubmitterID(Derived) |
|  | strSubmitterEmail |  |  |
|  | EmpID | CSR\_EMPID | CL.EmpID |
|  | strCSRSite | CSR\_Site | CL.SiteID(Derived) |
|  | strCoachReason\_Current\_Coaching\_Initiatives | strCoachReason\_Current\_Coaching\_Initiatives | CLR.CoachingReasonID (Derived) |
|  | txtDescription | TextDescription | CL.Description |
|  | strProgram | Program | CL.ProgramName |

* + - 1. **OTH File**

|  |  |  |  |
| --- | --- | --- | --- |
| Element # | File Element | Staging table  [EC].[Generic\_Coaching\_Stage] | Destination table(s)  [EC].[Coaching\_Log]CL  [EC].[Coaching\_Log\_Reason]CLR |
|  | numReportID | Report\_ID | CL.numReportID |
|  | strReportCode | Report\_Code | CL.strReportCode  CLR.SubCoachingReasonID(Derived) |
|  | numModuleID | Module\_ID | CL.ModuleID |
|  | strFormType | Form\_Type |  |
|  | numSourceID | Source\_ID | CL.SourceID |
|  | numisCSE | isCSE | CL.isCSE |
|  | numStatusID | Status\_ID | CL.StatusID |
|  | numCRID | CoachingReason\_ID | CLR.CoachingReasonID |
|  | numSubCRID | SubCoachingReason\_ID | CLR.SubCoachingReasonID |
|  | Value | Value | CLR.Value |
|  | EventDate | Event\_date | CL.EventDate |
|  | EmpID | CSR\_EMPID | CL.EmpID |
|  | LANID | CSR\_LANID | CL.Formname  CL.EmpLanID |
|  | SubmittedDate | Submitted\_Date | CL.SubmittedDate |
|  | StartDate | Start\_Date | CL.Start\_Date |
|  | SubmitterID | Submitter\_ID | CL.SubmitterID |
|  | txtDescription | TextDescription | CL.Description |
|  | EmailSent | EmailSent | CL.EmailSent |

## Module Details

### SQL agent job

* Production Instance : F3420-ECLDBP01
* Production Job: CoachingGenericLoad
* Production Package: [\\F3420-ECLDBP01\ssis\Coaching\Packages\Generic \_Coaching.dtsx](file:///\\\\VDENSSDBP07\\scorecard-ssis\\Coaching\\Training%20_Coaching.dtsx)
* Production Config File: Prod\_Generic\_Coaching.dtsConfig
* Owner: ecljobowner
* Run As: ECLProxy (ECL Credential using application service account VNGT\SVC-SQLECLP01
* Schedule: Tuesdays - On-demand
* Destination File Location: N/A

### SSIS Package

* + - 1. **Variables**

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

* + - 1. **Connection Manager Entries**
         1. Destinationdb
* Dev – F3420-ECLDBD01 DB – eCoachingdev
* Test - F3420-ECLDBT01 DB – eCoachingtest
* Prod - F3420-ECLDBP01 – eCoaching
  + - * 1. SEA\_File
* \\vrivscors01\bcc scorecards\Coaching\Generic\eCL\_Generic\_Feed\_OTH\_SEA\*.csv





* + - * 1. OTH\_File
* \\vrivscors01\bcc scorecards\Coaching\Generic\eCL\_Generic\_Feed\_OTH\*.csv





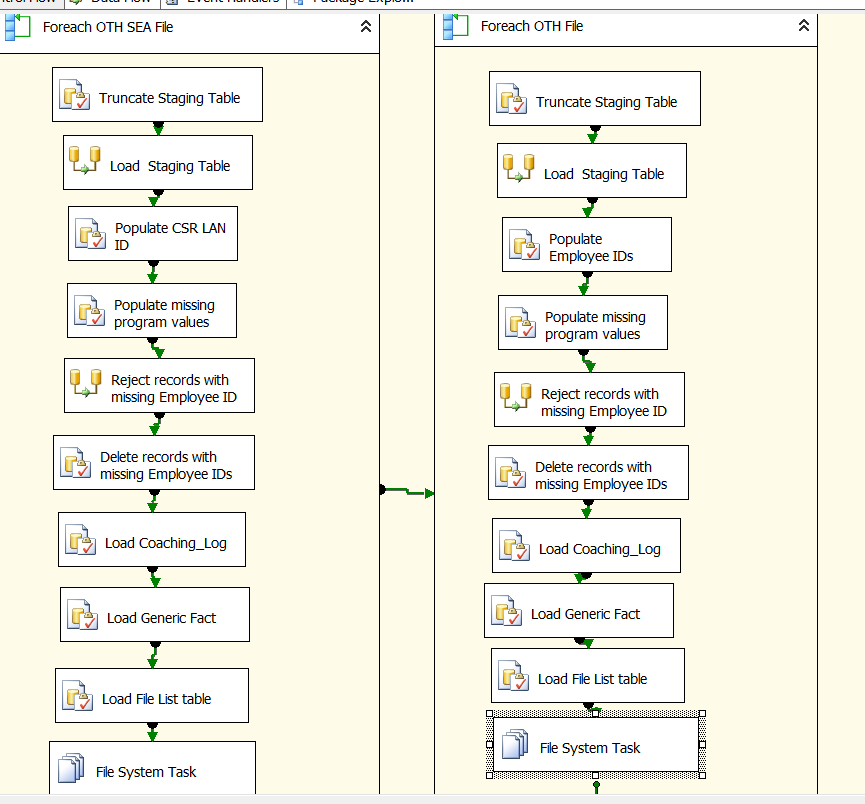


* + - * 1. SMTP Connection Manager

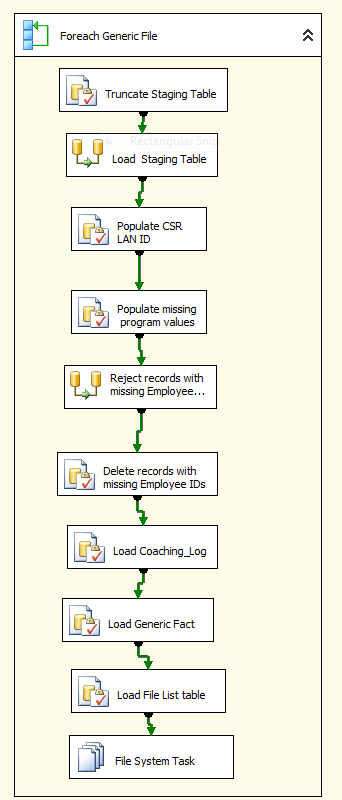
smtpout.gdit.com



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



* + - * 1. **Foreach OTH SEA File container**



**Workflow**

**For each SEA file in staging directory workflow**

Container: Foreach SEA file

Collection:

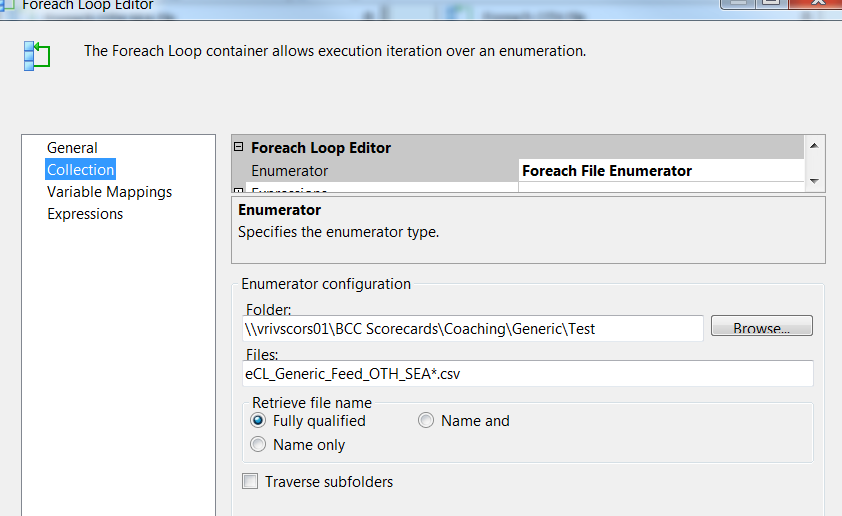
Enumerator: Foeeach file enumerator

Expression: Directory: @[User::FilePath]

Evaluates to: \\vrivscors01\BCC Scorecards\Coaching\Generic

Files: eCL\_Generic \_Feed\_OTH\_SEA\*.csv







**Summary of Steps**

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

**Details of Steps**

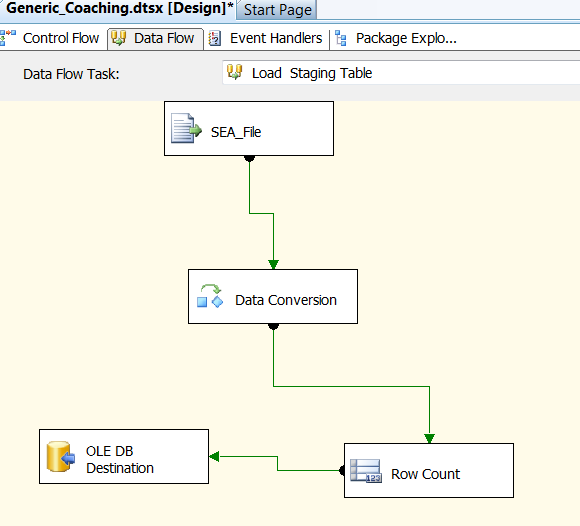
1. SQL task – Truncate Generic Staging table



Executes Truncate Table [EC].[Generic\_Coaching\_Stage]

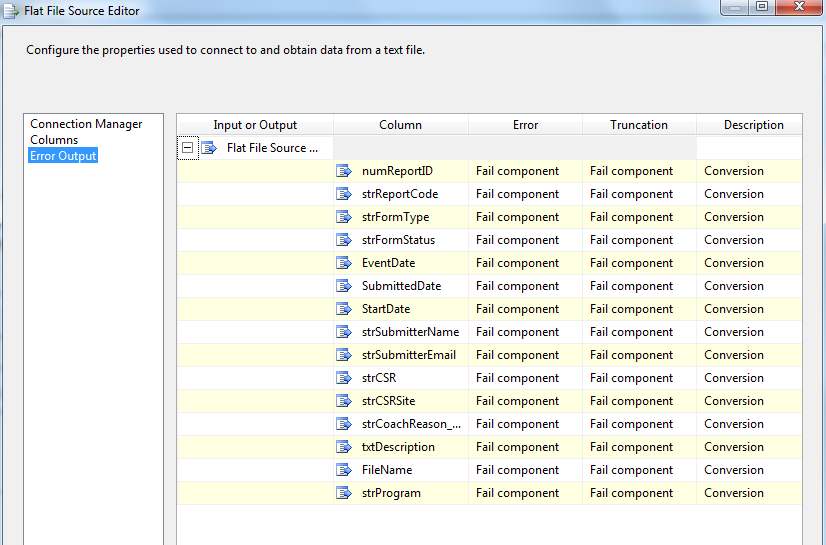
1. DFT: Load Generic staging table





1. Flat File source

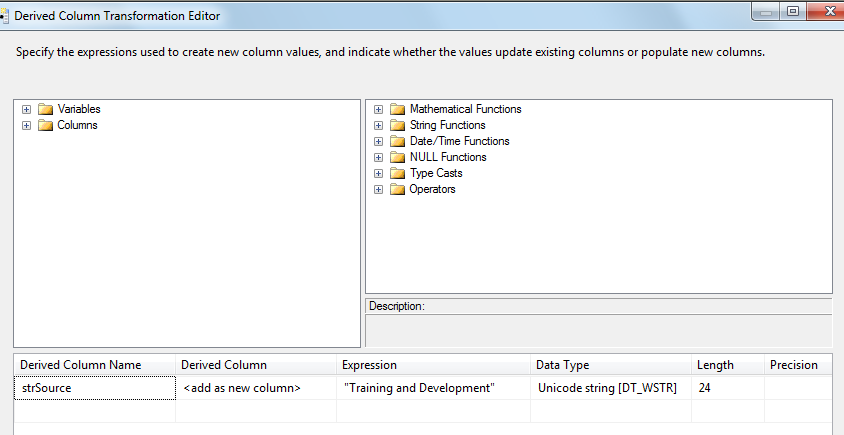




1. Data Conversion



1. Derived Column

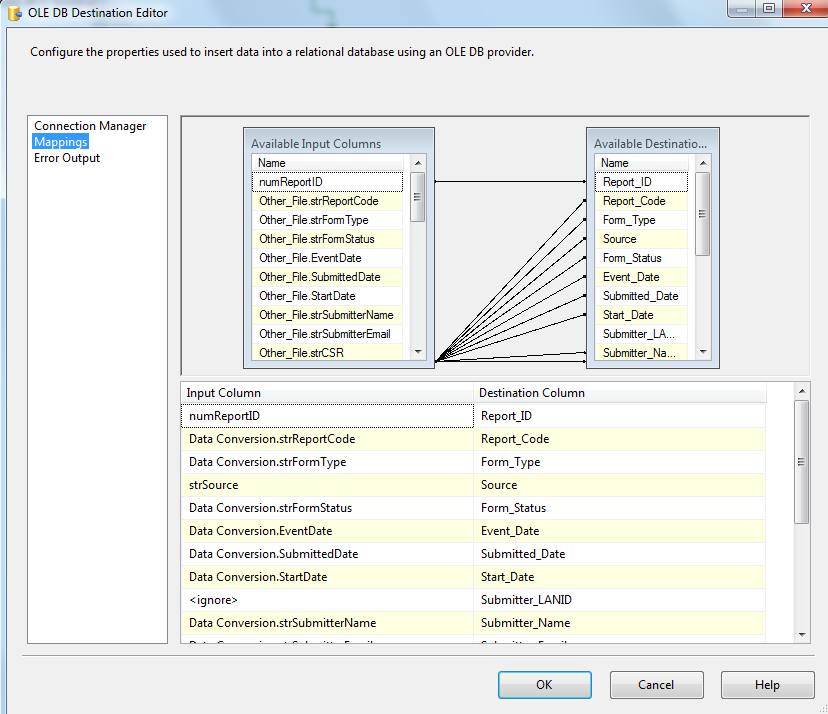


1. Row Count Transformation



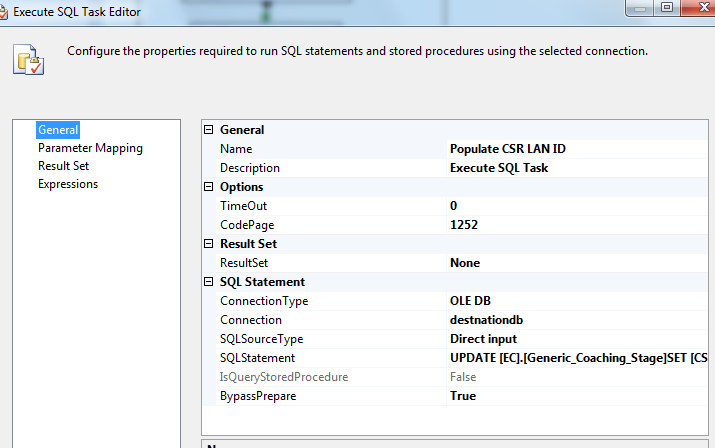
1. Oledb destination







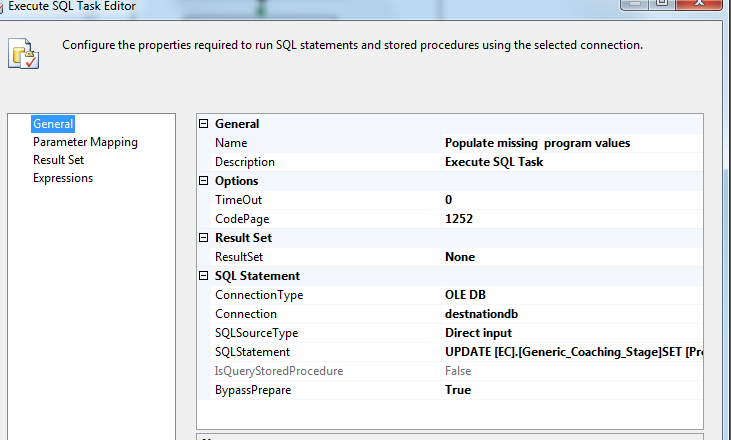
1. SQL Task: Populate CSR LAND ID



UPDATE [EC].[Generic\_Coaching\_Stage]

SET [CSR\_LANID]= [EC].[fn\_strEmpLanIDFromEmpID]([CSR\_EMPID])

1. SQL Task: Populate site and program values



UPDATE [EC].[Generic\_Coaching\_Stage]

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

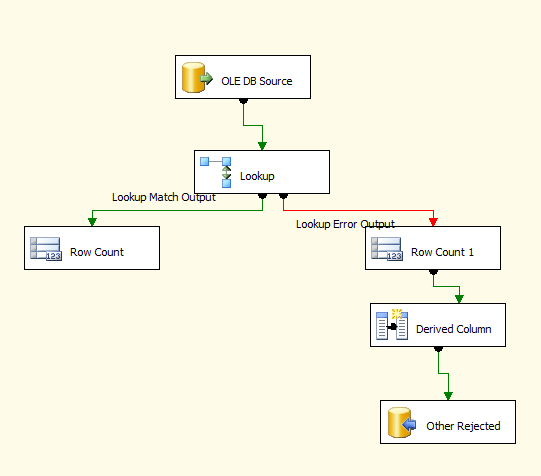
,[CSR\_Site] = H.[Emp\_Site]

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

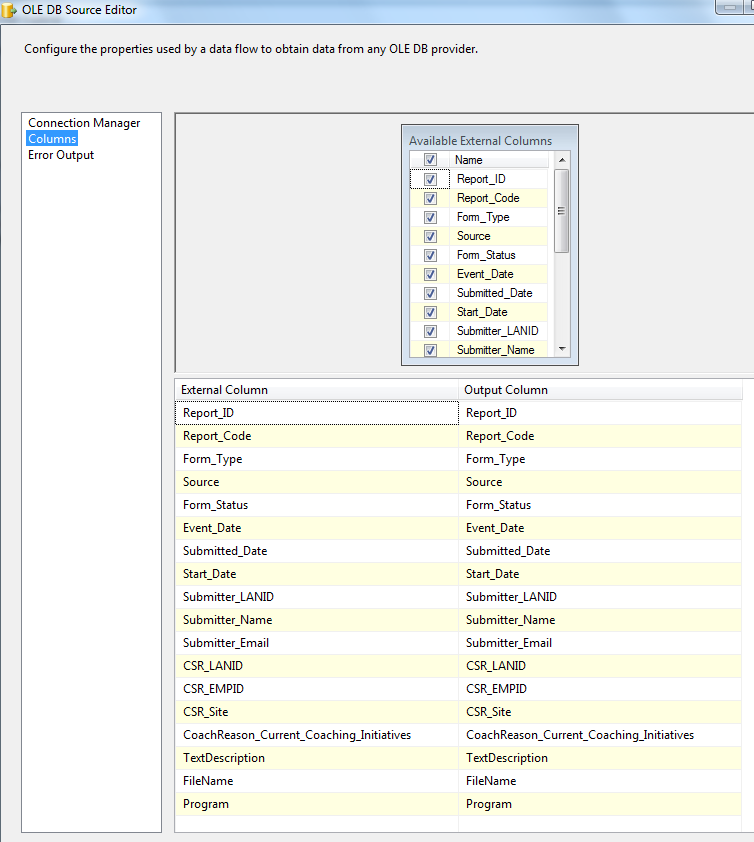
ON S.[CSR\_EMPID]=H.[Emp\_ID]

1. DFT: Reject Records with Missing Employee ID



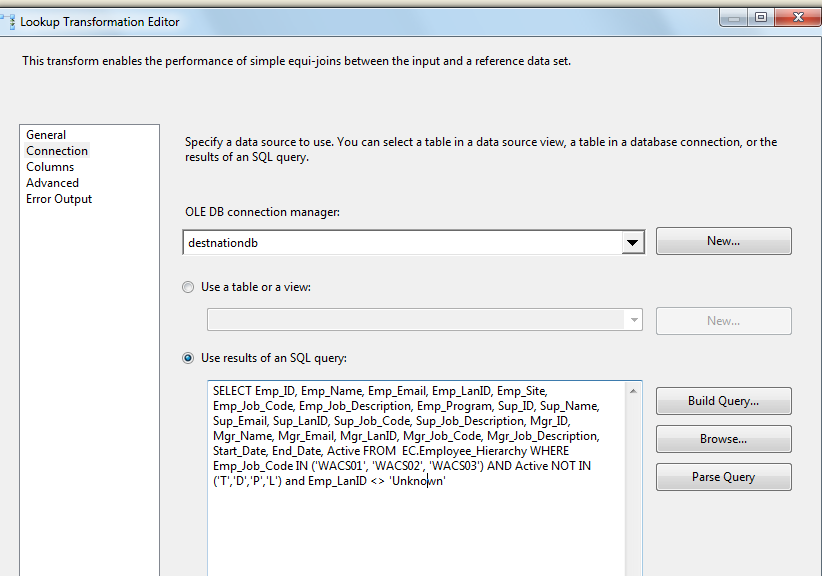


1. Oledb source



1. Lookup Transformation





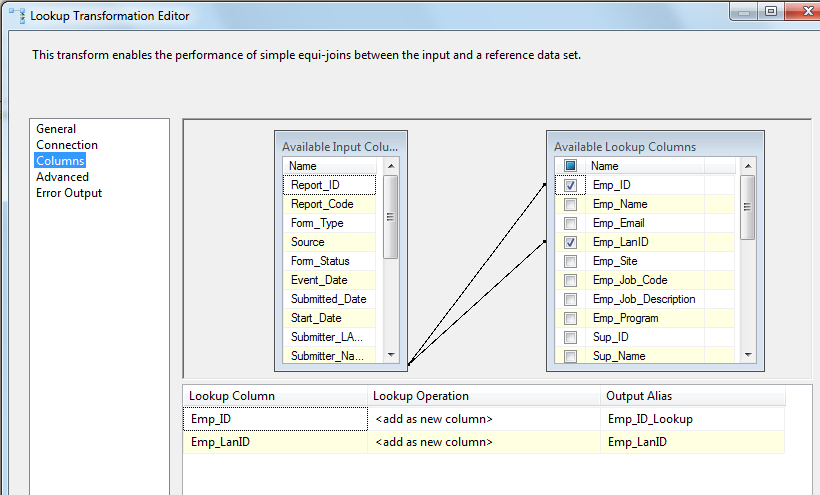
SELECT Emp\_ID, Emp\_Name, Emp\_Email, Emp\_LanID, Emp\_Site, Emp\_Job\_Code, Emp\_Job\_Description,

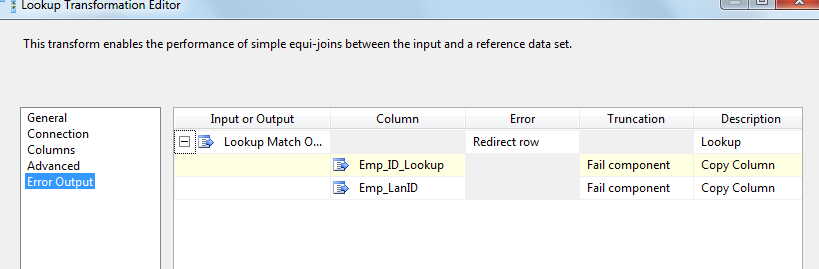
Emp\_Program, Sup\_ID, Sup\_Name, Sup\_Email, Sup\_LanID, Sup\_Job\_Code, Sup\_Job\_Description,

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'



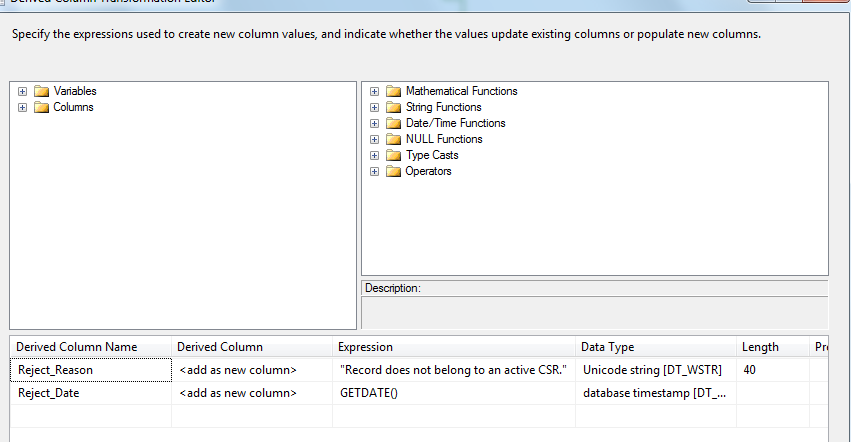
1. Lookup Match Output – Row Count Transformation to get Loaded Count



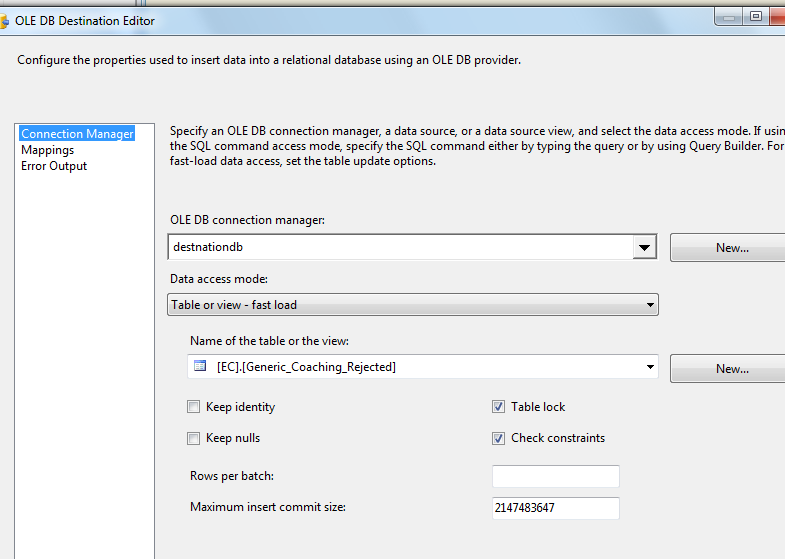
Lookup Transformation No Match Output – Row Count Transformation to get Rejected Count



Derived Column – To get Reject Reason and Reject Date



oledb destination – Write rejected records to Generic rejected table



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

DELETE FROM [EC].[Generic\_Coaching\_Stage]

WHERE [CSR\_EMPID] IS NULL OR [CSR\_EMPID] ='' OR [CSR\_LANID] = 'Unknown'

DELETE os FROM

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

ON os.CSR\_EMPID = 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



Executes Exec [EC].[sp\_InsertInto\_Coaching\_Log\_Generic]

1. SQl Task: Load Generic Fact table

INSERT INTO[EC].[Generic\_Coaching\_Fact]

([Report\_ID]

,[Report\_Code]

,[Form\_Type]

,[Source]

,[Form\_Status]

,[Event\_Date]

,[Submitted\_Date]

,[Start\_Date]

,[Submitter\_LANID]

,[Submitter\_Name]

,[Submitter\_Email]

,[CSR\_LANID]

,[CSR\_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\_LANID]

,S.[Submitter\_Name]

,S.[Submitter\_Email]

,S.[CSR\_LANID]

,S.[CSR\_Site]

,S.[Program]

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

,S.[TextDescription]

,S.[FileName]

FROM [EC].[Generic\_Coaching\_Stage]S LEFT OUTER JOIN [EC].[Generic\_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 Generic File List table







Executes the following sql

INSERT INTO [EC].[Generic\_FileList]

([File\_Name]

,[File\_LoadDate]

,[Count\_Staged]

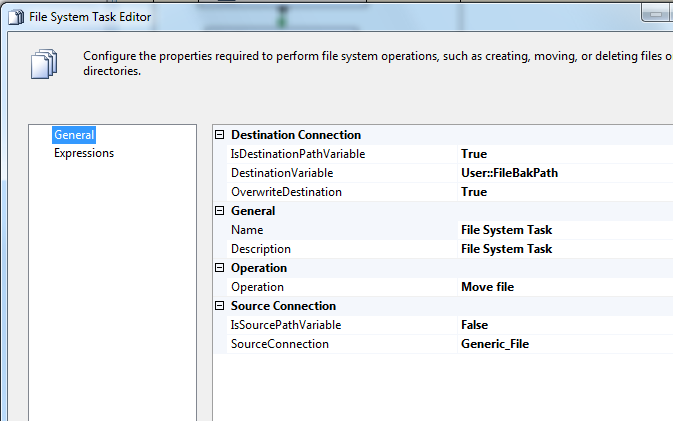
,[Count\_Loaded]

,[Count\_Rejected])

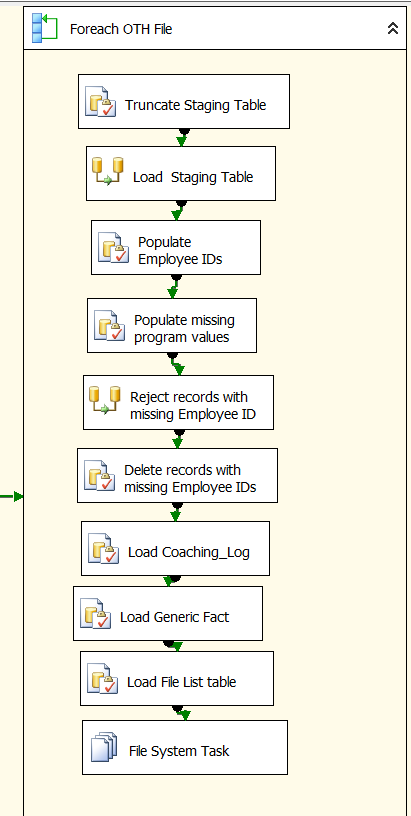
VALUES (?,GetDate(), ?, ?,?)

1. File System Task: Move file to backup folder





* + - * 1. **Foreach OTH SEA File container**



**Workflow**

**For each OTH file in staging directory workflow**

Container: Foreach OTHfile

Collection:

Enumerator: Foreach file enumerator

Expression: Directory: @[User::FilePath]

Evaluates to: \\vrivscors01\BCC Scorecards\Coaching\Generic

Files: eCL\_Generic \_Feed\_OTH\*.csv

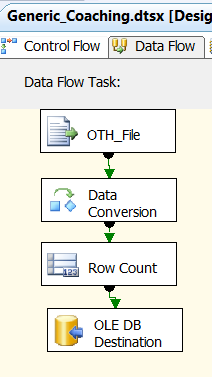
**Summary of Steps**

1. SQL task – Truncate Generic Staging table
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9. SQL task – Load File list table
10. File system task – Backup files to Backups directory

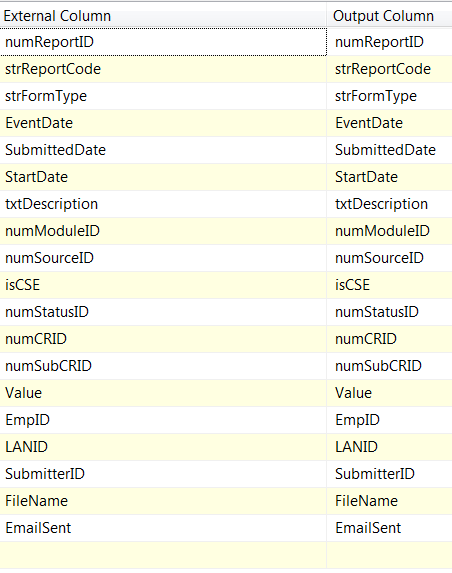
**Details of Steps**

1. SQL task – Truncate Generic Staging table – similar to SEA file
2. DFT: Load Generic staging table

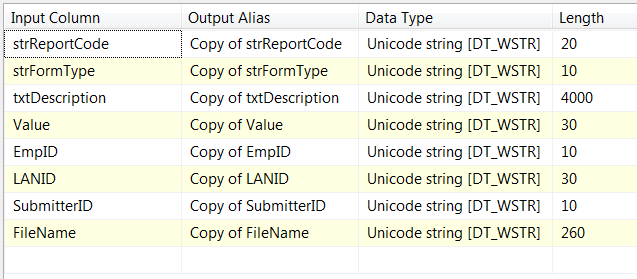




1. Flat File source



1. Data Conversion



1. Row Count Transformation



1. Oledb destination





1. SQL Task: Populate Employee Ids

UPDATE [EC].[Generic\_Coaching\_Stage]

SET [CSR\_LANID]= [EC].[fn\_strEmpLanIDFromEmpID]([CSR\_EMPID])

WHERE [CSR\_LANID] is NULL

UPDATE [EC].[Generic\_Coaching\_Stage]

SET [CSR\_EMPID]=[EC].[fn\_nvcGetEmpIdFromLanId] ([CSR\_LANID],Getdate())

WHERE [CSR\_EMPID] is NULL

1. SQL Task: Populate site and program values

UPDATE [EC].[Generic\_Coaching\_Stage]

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

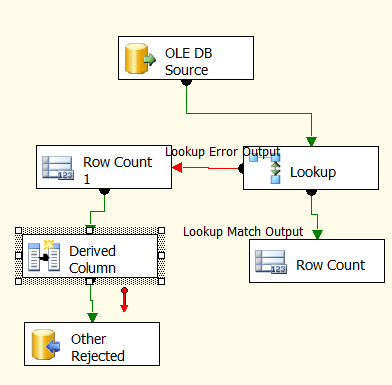
,[CSR\_Site] = H.[Emp\_Site]

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

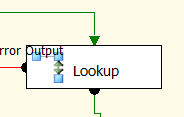
ON S.[CSR\_EMPID]=H.[Emp\_ID]

1. DFT: Reject Records with Missing Employee ID





1. Oledb source: Staging Table
2. Lookup Transformation



**Connection:** Use results of query

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,

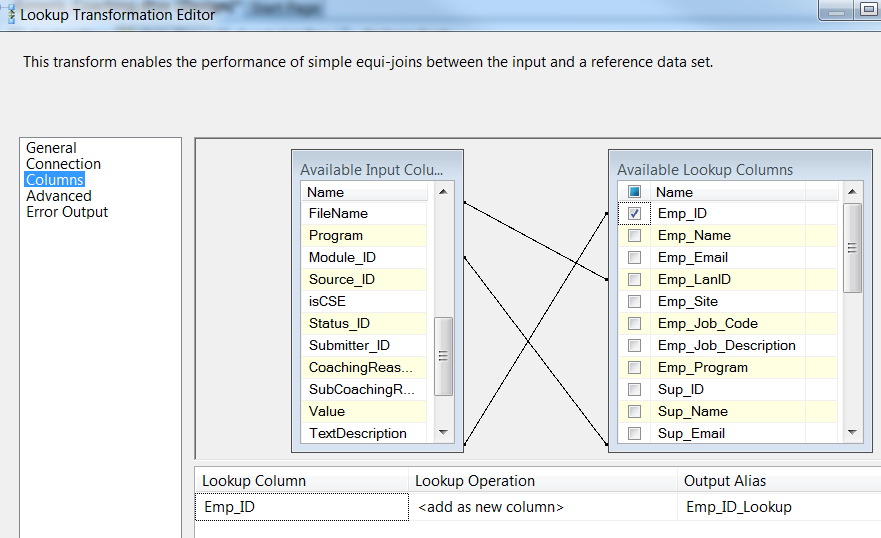
[EC].[fn\_intModuleIDFromempID](Emp\_ID) Module\_ID

FROM EC.Employee\_Hierarchy

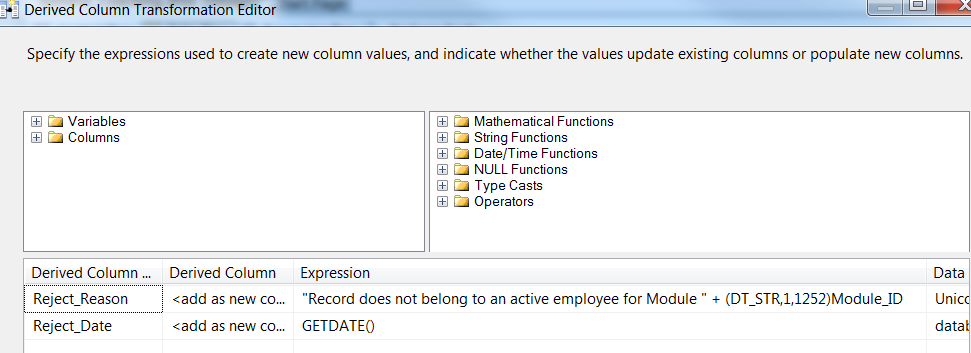
WHERE Emp\_Job\_Code IN ('WACS01', 'WACS02', 'WACS03','WACS40','WACQ02','WACQ03','WAC12',

'WIHD01','WIHD02','WIHD03','WIHD04','WTID13','WTTI02','WTTR12','WTTR13')

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



1. Lookup Match Output – Row Count Transformation to get Loaded Count
2. Lookup Transformation No Match Output – Row Count Transformation to get Rejected Count
3. Derived Column – To get Reject Reason and Reject Date



1. oledb destination – Write rejected records to Generic rejected table
2. SQL Task: Delete records with missing Employee ID from Staging table

DELETE FROM [EC].[Generic\_Coaching\_Stage]

WHERE [CSR\_EMPID] IS NULL OR [CSR\_EMPID] ='' OR [CSR\_LANID] = 'Unknown'

DELETE os

FROM [EC].[Generic\_Coaching\_Stage] os JOIN [EC].[Employee\_Hierarchy] eh

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

WHERE os.Module\_ID <> [EC].[fn\_intModuleIDFromempID](os.CSR\_EMPID)

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

GO

1. SQL Task: Load Coaching\_Log table



Executes Exec [EC].[sp\_InsertInto\_Coaching\_Log\_Generic]

1. SQl Task: Load Generic Fact table

INSERT INTO[EC].[Generic\_Coaching\_Fact]

([Report\_ID]

,[Report\_Code]

,[Module\_ID]

,[isCSE]

,[Form\_Type]

,[Source\_ID]

,[Status\_ID]

,[Event\_Date]

,[Submitted\_Date]

,[Start\_Date]

,[Submitter\_ID]

,[CSR\_EMPID]

,[CSR\_LANID]

,[CSR\_Site]

,[Program]

,[CoachingReason\_ID]

,[SubCoachingReason\_ID]

,[Value]

,[TextDescription]

,[FileName]

)

SELECT S.[Report\_ID]

,S.[Report\_Code]

,S.[Module\_ID]

,S.[isCSE]

,S.[Form\_Type]

,S.[Source\_ID]

,S.[Status\_ID]

,S.[Event\_Date]

,S.[Submitted\_Date]

,S.[Start\_Date]

,S.[Submitter\_ID]

,S.[CSR\_EMPID]

,S.[CSR\_LANID]

,S.[CSR\_Site]

,S.[Program]

,S.[CoachingReason\_ID]

,S.[SubCoachingReason\_ID]

,S.[Value]

,S.[TextDescription]

,S.[FileName]

FROM [EC].[Generic\_Coaching\_Stage]S LEFT OUTER JOIN [EC].[Generic\_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

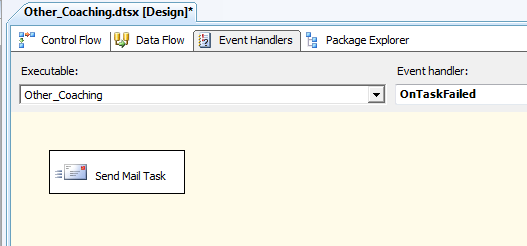
1. SQL Task: Load Generic File List table



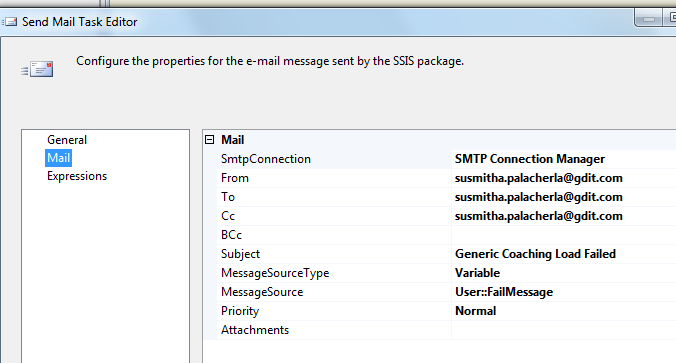
1. File System Task: Move file to backup folder
   * + 1. **Package Content(Event Handlers)**

Executables: Generic \_Coaching

EventHandler: OntaskFailed







### Tables

|  | **Table Name** | **Table Description** |
| --- | --- | --- |
| 1. | Generic\_Coaching\_Stage | Table used for staging the Generic records during the insert into Coaching\_Log table. |
| 2. | Generic\_Coaching\_Rejected | Table used for storing the rejected Generic 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. | Generic\_Coaching\_Fact | Table used for storing Generic source records loaded into the Coaching Log table. |
| 4. | Generic\_FileList | Table used for storing the Generic file names and Load dates. |

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

### Procedures

|  | **Procedure Name** | **Usage** |
| --- | --- | --- |
| 1. | sp\_InsertInto\_Coaching\_Log\_Generic | Load: Generic Data |

### Functions

|  | **FunctionName** | **Usage** |
| --- | --- | --- |
| 1. | fn\_intModuleIDFromEmpID | Load: Generic Data |

Reference Document for Objects and Code: eCoaching\_Generic\_Load\_Create