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

**SSIS Detail Design Document**

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|  |  |  |
| --- | --- | --- |
| Last Revision | Last Review | Description |
| 12/28/2017 |  | TFS 7854 – Encryption related changes for feed files and staging tables |

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 |
| 2/8/2017 | 5.1 Updates from V&V for NPN feed per TFS 5903 | Susmitha Palacherla |
| 8/14/2017 | 6.0 TFS 7105 – Upgrade to SQL Server 2012 | Susmitha Palacherla |
| 12/28/2017 | 7.0 TFS 7854 – Encryption related changes for feed files and staging tables | 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 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.

Encrypted Files are staged at [\\f3420-ecldbp01\data\Coaching\Quality\_Other\Encrypt\_Out](\\\\f3420-ecldbp01\\data\\Coaching\\Quality_Other\\Encrypt_Out) until loaded. Encrypted files have naming convention eCL\_Quality\_Feed\_xxxyyyymmdd.csv.zip.encrypt

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

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **#** | **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 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
* [\\F3420-ECLDBP01\data\](\\\\F3420-ECLDBP01\\data\\) - Prod 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: [\\f3420-ecldbp01\data\Coaching\Quality\_Other\Dencrypt\_Out](\\\\f3420-ecldbp01\\data\\Coaching\\Quality_Other\\Dencrypt_Out)
* 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 : F3420-ECLDBP01
* Production Job: CoachingQualityOtherLoad
* Production Package: [\\F3420-ECLDBP01\ssis\Coaching\Packages\Quality\_Other \_Coaching.dtsx](file:///\\F3420-ECLDBP01\ssis\Coaching\Packages\Quality_Other%20_Coaching.dtsx)
* Production Config File: Prod\_Quality\_Other\_Coaching.dtsConfig
* Owner: ecljobowner
* Run As: ECLProxy (ECL Credential using application service account VNGT\SVC-SQLECLP01
* Schedule: Daily 10 PM EST
* Destination File Location: N/A

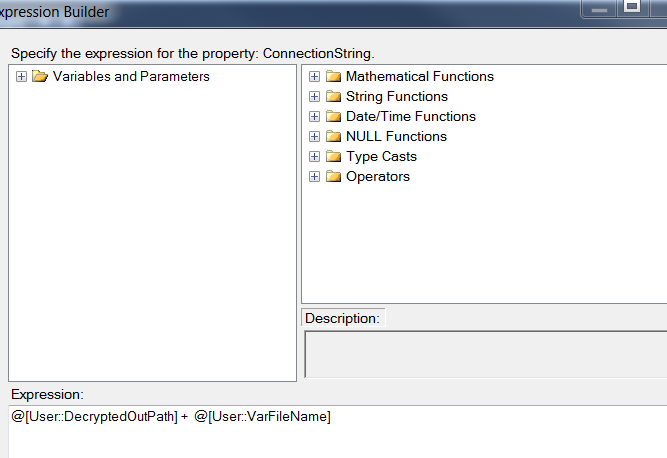
### SSIS Package

* + - 1. **Variables**

|  |  |  |  |
| --- | --- | --- | --- |
| **Name** | **Scope** | **DataType** | **Value** |
| DecryptedOutPath | Quality\_Other\_Coaching | String | \\f3420-ecldbp01\data\coaching\QUALITY\Decrypt\_out\ |
| DecryptInPath | Quality\_Other\_Coaching | String | \\f3420-ecldbp01\data\coaching\QUALITY\Decrypt\_in\ |
| EncryptedBackupPath | Quality\_Other\_Coaching | String | \\f3420-ecldbp01\data\coaching\QUALITY\Backups\ |
| EncryptedOutPath | Quality\_Other\_Coaching | String | \\f3420-ecldbp01\data\coaching\QUALITY\Encrypt\_out\ |
| EncryptInPath | Quality\_Other\_Coaching | String | \\f3420-ecldbp01\data\coaching\QUALITY\Encrypt\_in\ |
| varDBName | Quality\_Other\_Coaching | String | Dev |
| FailMessage | Quality\_Other\_Coaching | String | "Quality Other Coaching Load of file \"" + @[User::VarFileName] + "\" failed in " + @[User::VarDBName]+"." |
| StagedCount | Quality\_Other\_Coaching | Int32 | 0 |
| RejectedCount | Quality\_Other\_Coaching | Int32 | 0 |
| LoadedCount | Quality\_Other\_Coaching | Int32 | 0 |
| varFileName | Quality\_Other\_Coaching | String |  |
| varEncryptedFileName | Quality\_Other\_Coaching | String |  |
| varFailedFile | Quality\_Other\_Coaching | String |  |
|  |  |  |  |

* + - 1. **Connection Manager Entries**
         1. Destinationdb
* Dev – F3420-ECLDBD01 DB – eCoachingdev
* Test - F3420-ECLDBT01 DB – eCoachingtest
* Prod - F3420-ECLDBP01 – eCoaching
  + - * 1. CTC\_File

Expression: @[User::DecryptedOutPath] + @[User::VarFileName]



* + - * 1. NonCTC\_File

Expression: @[User::DecryptedOutPath] + @[User::VarFileName]

* + - * 1. Failed\_File

Expression: @[User::DecryptedOutPath]+ @[User::varFailedFile]

* + - * 1. Encrypted\_File

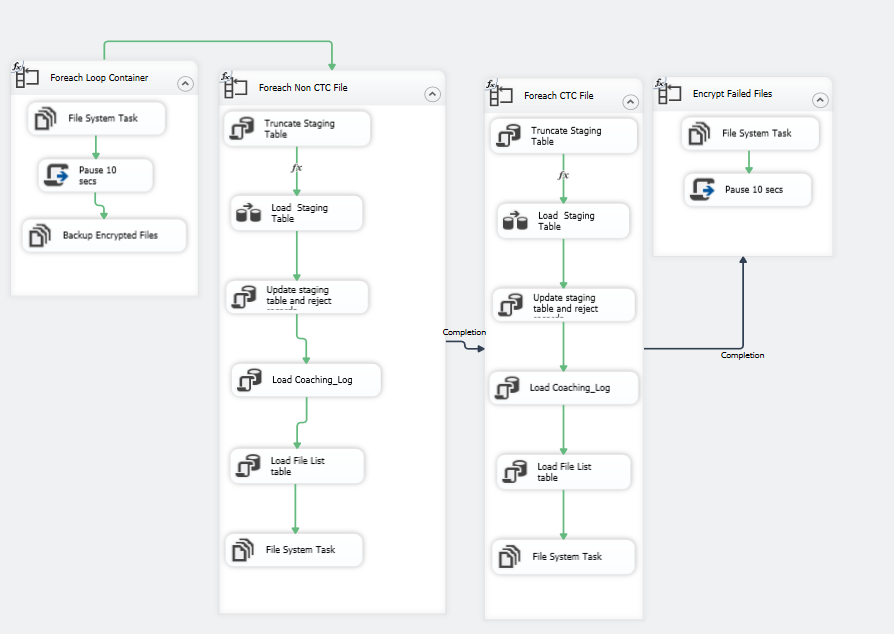
Expression: @[User::EncryptedOutPath] + @[User::varEncryptedFileName]

* + - * 1. SMTP Connection Manager

smtpout.gdit.com



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



**Workflow**

* + - * 1. **Decrypt Encrypted Files**

**Summary of Steps**

1. File system task – Decrypt files
2. Script task - Pause 10 seconds
3. File system task – Backup encrypted files

**Details**

Container: For each File Loop

Folder: \\f3420-ecldbp01\data\coaching\Quality\Encrypt\_out\

Files: eCL\*ETS\_\*.encrypt

Retrieve file name: Name and Extension

1. File system task – Decrypt files



1. Script task- Pause 10 secs



public void Main()

{

// TODO: Add your code here

// Sleep for 10 seconds (\*1000)

System.Threading.Thread.Sleep(10000);

Dts.TaskResult = (int)ScriptResults.Success;

}

1. File System task – Backup Encrypted files

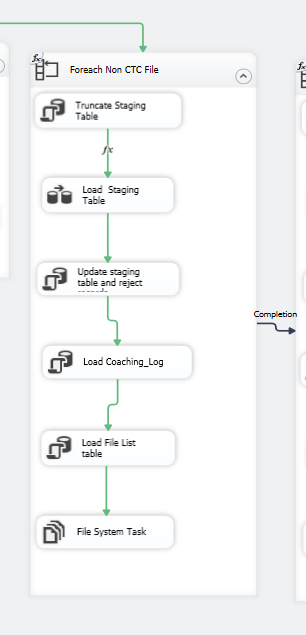


* + - * 1. **For each NonCTC file in Staging directory Workflow**

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**

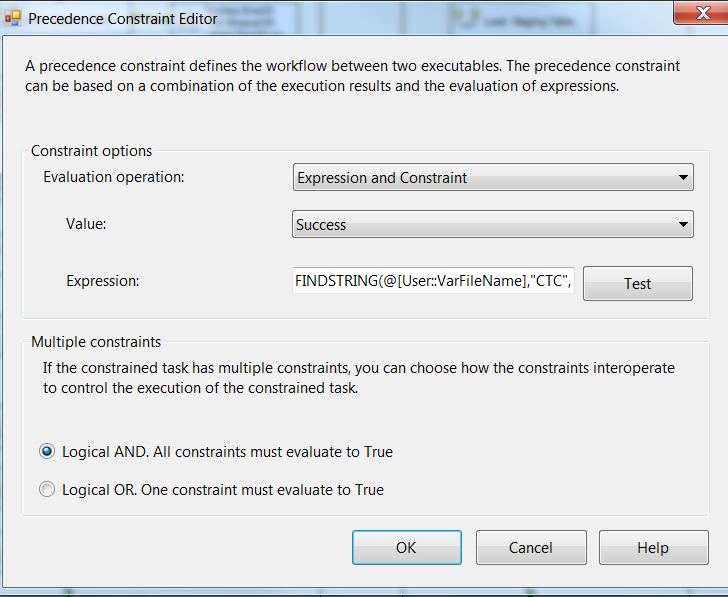
1. SQL task – Truncate Quality\_Other Staging table
2. DFT –Load Quality\_Other Staging table
3. SQL task – Update Staging table and Reject Records
4. SQL task Load coaching\_Log and Coaching\_Log\_Reason tables
5. SQL task – Load File list table
6. File system task – Backup files to Backups directory

**Details of Steps**

1. SQL task – Truncate Quality\_Other Staging table



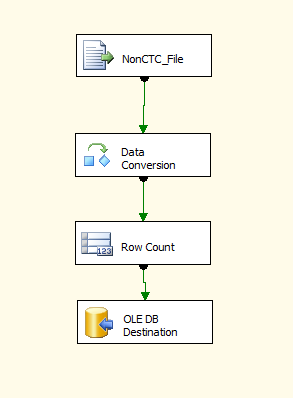
Executes Truncate Table [EC].[Quality\_Other\_Coaching\_Stage]



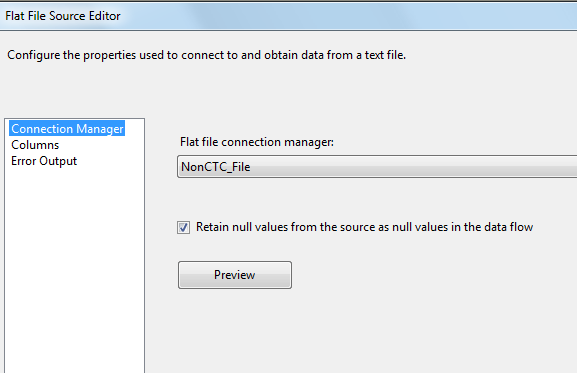
FINDSTRING(@[User::VarFileName],"CTC",1 ) == 0

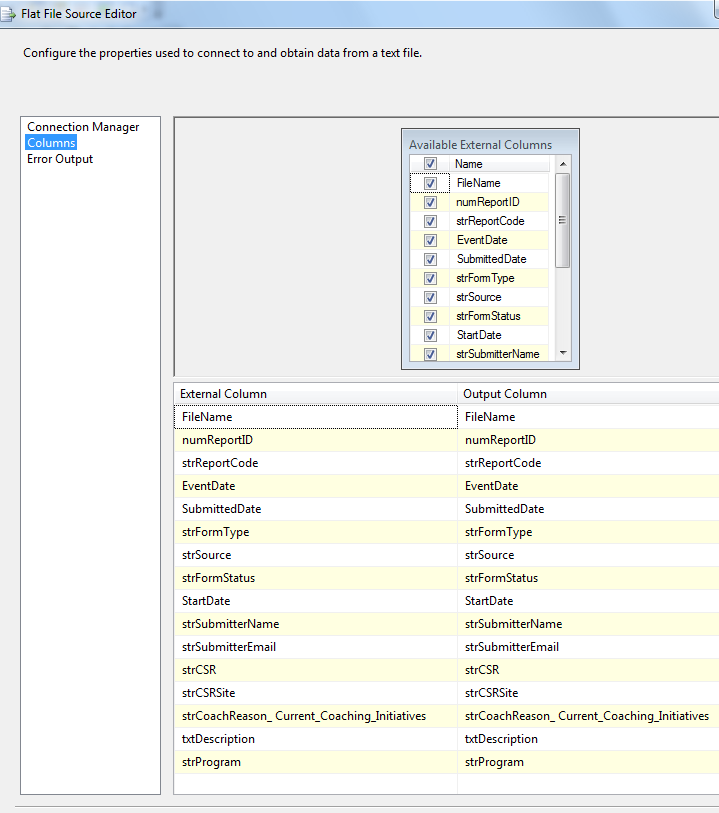
1. DFT: Load Quality\_Other staging table



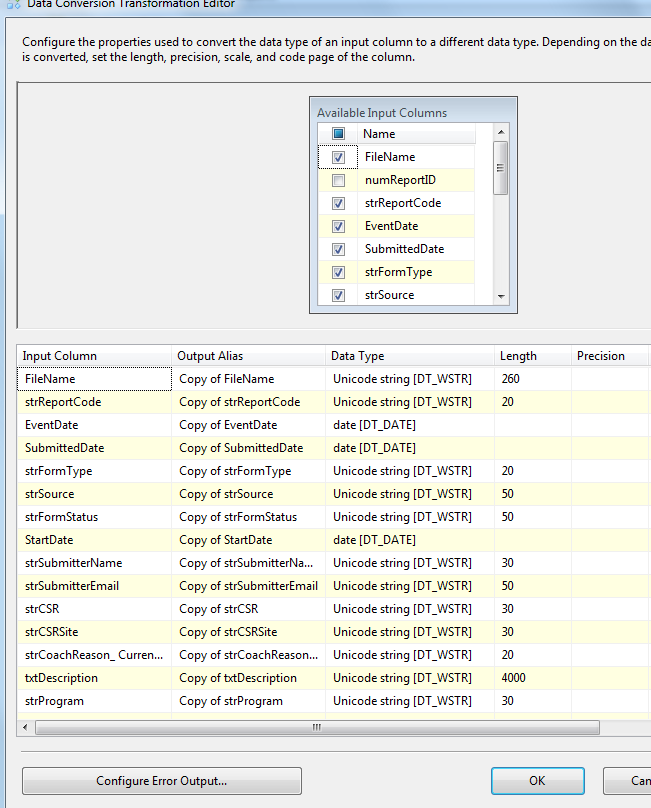


1. Flat File source





1. Data Conversion

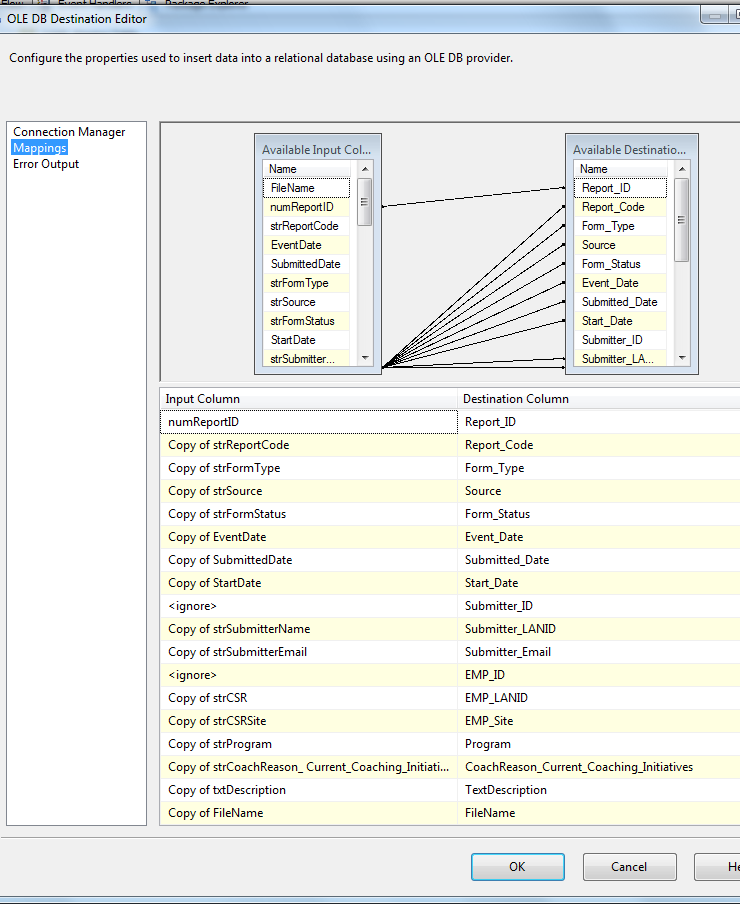


1. Row Count Transformation



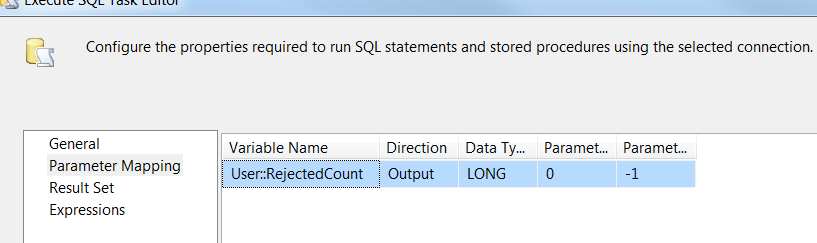
1. Oledb destination





1. SQL Task: Update Staging table and Reject Records

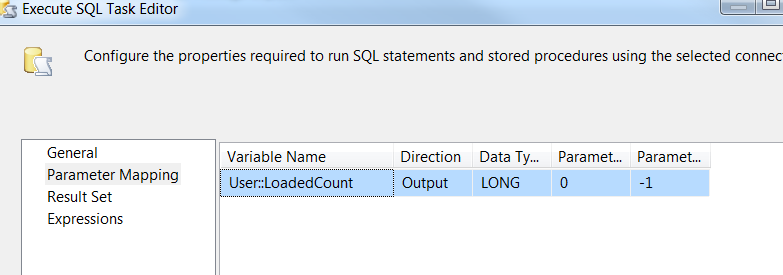
Exec [EC].[sp\_Update\_Quality\_Other\_Coaching\_Stage] ? output



1. SQL Task: Load Coaching\_Log table



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



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

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

([File\_Name]

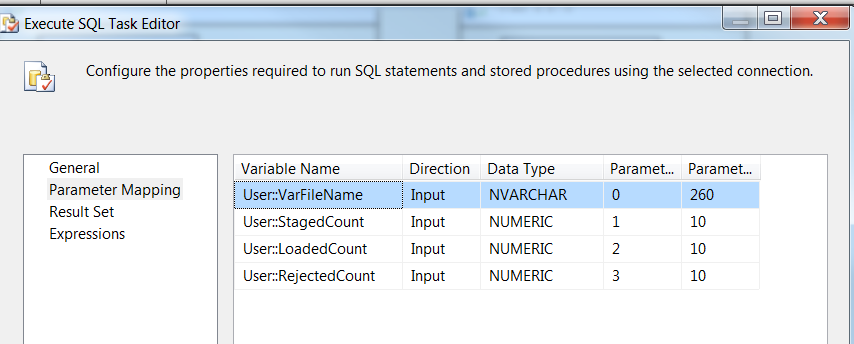
,[File\_LoadDate]

,[Count\_Staged]

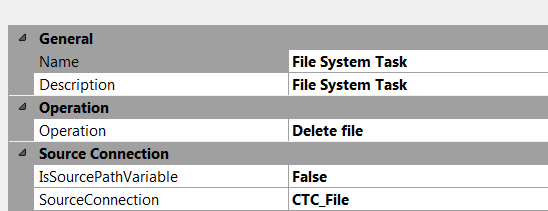
,[Count\_Loaded]

,[Count\_Rejected])

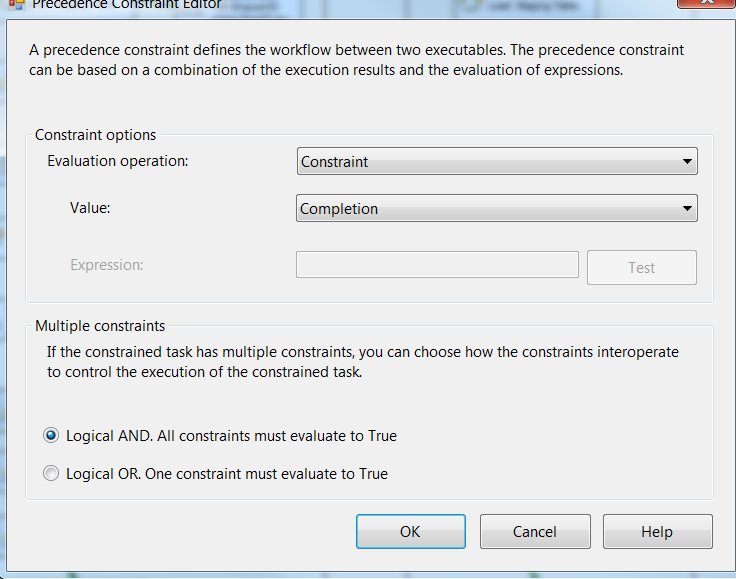
VALUES (?,GetDate(), ?, ?,?)



1. File System Task: Delete Files



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 – Load Quality\_Other Staging table
3. SQL task – Update Staging table and Reject Logs
4. SQL task Load Coaching\_Log and Coaching\_Log\_Reason tables
5. SQL task – Load File list table
6. File system task – Delete loaded file

**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: Update Staging table and reject logs

Exec [EC].[sp\_Update\_Quality\_Other\_Coaching\_Stage] ? output



1. SQL Task: Load Coaching\_Log table



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

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: Delete loaded file





* + - * 1. **For each Failed File ( Encrypt failed files)**

**Summary of Steps**

1. File system task – Encrypt failed files
2. Script task - Pause 10 seconds

**Details**

Container: For each File Loop

Precedence Constraint - Completion

Folder: \\f3420-ecldbp01\data\coaching\ETS\Decrypt\_out\

Files: eCL\*.csv

Retrieve file name: Name and Extension

1. File system task – Encrypt files



1. Script task- Pause 10 secs



public void Main()

{

// TODO: Add your code here

// Sleep for 10 seconds (\*1000)

System.Threading.Thread.Sleep(10000);

Dts.TaskResult = (int)ScriptResults.Success;

}

* + - 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 |
| 2. | sp\_Update\_Quality\_Other\_Coaching\_Stage | Load: Quality\_Other Data |

### Functions

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