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Membership Batch Processes

Objectives

Upon successful completion of this chapter, you will be able to:

- Explain the workflow and relevant batch parameters for each of the following run file/batch processes:
  - Ercmcrunelig
  - Ercdsrunmid0
  - Ercdsrunmct0

Member Processing Eligibility

Member Processing Eligibility

▶ **Calculation defining member's valid range of time and events**

▶ **Eligibility calculated 2 ways:**
- Online from Subscriber/Member level eligibility events
- Through batch for high level eligibility changes:
  - Group or Subgroup termination

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MEPE, or Member Processing Eligibility, is the calculation of eligibility in Facets, and defines eligibility through a range of time and events. It includes calculating online eligibility as a result of subscriber or member level eligibility events, and calculating eligibility through batch for high level eligibility changes, such as termination of a group or subgroup.

For many Facets users, eligibility is a question of "On this specific day, can this individual have claims paid, receive services, have nurses follow his or her case, and add family members to his or her coverage?" The answer will either be Yes, this individual can (is able to), or No, this individual cannot (is not able to).

The individual's established eligibility determines the Yes or No responses on selected eligibility events, as well as on the eligibility date editing routine.

The **CMC_MEPE_PRCS_ELIG** table is the vehicle that creates and stores comprehensive eligibility through a combination of batch process and online processing. This enables online eligibility inquiries. It also increases the efficiency of batch eligibility processing, as processing calculates eligibility only for members acquiring a change in data affecting eligibility.

Depending on the trigger or calling application, this update takes place immediately online, or at another time through a batch process. The MEEA (Member Eligibility Action) table processes the batch triggers.

Eligibility Definitions

Eligibility Definitions

▶ **Eligibility Date Editing**

- Comparing one date against another to:
  - Verify Subscriber/Member eligibility

▶ **Eligibility Events (SBEL/MEEL)**

- Selectable milestones in Subscriber's/Member's coverage that set limits:
  - Select
  - Change
  - Terminate, etc.

Eligibility Definitions

▶ **CMC_MEPE_PRCS_ELIG**

- (ME)mber (P)rocessed (E)ligibility
  - Table defines member's eligibility over time range and events
  - Typically 3 rows per product represent:
    - Member's past eligibility
    - Member's current eligibility
    - Member's future eligibility

Explaining MEPE rows:

Initially, each member has at least three (3) separate rows in the **MEPE** table created online that cover the following eligibility events:

- Past eligibility events - The Past eligibility record represents a period of ineligibility from the system's low date (currently 1/1/1920) to the day prior to the Beginning Effective Date.
- Present eligibility events - The Present eligibility record represents the member's beginning effective date through the date the member reaches the subscriber/member/dependent Stop Age. The user defines Stop Age in the Administrative Information application. It may also represent a termination date entered by the MCO.
- Future eligibility events - The Future eligibility record represents an ineligible period for the member. The day following the member's Termination Date to the system's maximum date of 12/31/2199 defines the ineligible period.

When updating or modifying a member's eligibility in Facets through the Subscriber/Family or Enrollment applications, the system writes a row immediately (online) to MEPE reflecting the change.

Eligibility Date Editing Routine

Eligibility Date Editing Routine

▶ **Starts with Member's original effective date**
- Day agreement begins, not day coverage begins
  - Must be on or after Subscriber's Effective Date

▶ **Subscriber's Effective Date**
- Day the subscriber's agreement begins with MCO
  - Date does not include Waiting Period due to:
    - Plan requirements or
    - Pre-existing conditions

Eligibility Editing Routine

Eligibility Editing Routine

Eligibility Routine checks Member's Effective Date against Effective Dates of:

▶ Group

▶ Subgroup

▶ Plan

Members are not eligible for dates before Effective Dates of their Group, Subgroup, or Plan:

▶ MEME_ORIG_EFF_DT =>

▶ SBSB_ORIG_EFF_DT=>

▶ GRGR_ORIG_EFF_DT=>

▶ SBSG_EFF_DT=>

▶ SBCS_EFF_DT=>

▶ CSPI_EFF_DT=>

▶ PDPD_EFF_DT

Eligibility Editing Routine

► **Stop Ages**
  ▪ Member's eligible date range for coverage based on age
  ▪ Determines benefit end date for member based on birth date
    ▪ Stop Ages for:
      ▪ Subscribers, Spouses, Dependent Children, Students
► **Eligibility Event Changes**
  ▪ Reviews SBEL/MEEL table for changes: SL, TM, RI, CH, PE, SE, CB, CE
    ▪ Process determines if:
      ▪ Write new row, or
      ▪ Update/Delete row

Stop Ages:

- The range of dates a subscriber/member is eligible for coverage is based on age.
- The date range determines the day benefits end based on the member's birth date.
  ○ User can set Stop Ages for: Subscribers, Spouses, Dependent Children, or Students.

Eligibility Event Changes:

- Facets reviews the **SBEL/MEEL** table for changes such as SL, TM, RI, CH, PE, SE, CB, CE
  ○ The process determines if a new row gets written to the **MEPE** table, or if the row gets updated or deleted.

Batch Eligibility

Batch Eligibility

▶ **Process calculates eligibility for subset of members for entire membership base**

- Billing, Capitation, Reporting depend on current eligibility
- Triggers from CMC_MEEA_ELIG_ACT table alert batch process
- If defining Automatic Actions (Job ErCmcRunMcsa, Automatic Letters), job ErCmcRunElig may create MCSA and SYML rows
- Eligibility batch is multi-engine batch
  - ErCmcRunElig.xml
  - ErCmcProcElig.xml

The batch eligibility process calculates eligibility for a defined subset of members for a specific reason:

- Billing, Capitation, and Reporting are processes that depend on current eligibility.
- Triggers from the **CMC_MEEA_ELIG_ACT** table alert the batch process that changes have taken place.
- If the user defined automatic actions (Job ErCmcRunMcsa, Automatic Letters), job ErCmcRunElig may also create MCSA rows and SYML rows for warning and user-defined messages.
- Eligibility batch is a multi-engine batch:
  - ErCmcRunElig.xml
  - ErCmcProcElig.xml

ErCmcRunElig

ErCmcRunElig

▶ **When record changes at Group, Subgroup, or Class level, Group row written to MEEA table with MEEA_STS of 01**
  ▪ Triggers:
    ▪ Group – Effective / Termination Dates
    ▪ Subgroup - Effective / Termination Dates
    ▪ Class/Plan - Effective / Termination Dates of Plans and Products; Waiting Periods
    ▪ Administrative Information:
      ▪ Plan Stop Ages for subscribers, dependents;
      ▪ Student status
      ▪ Plan year begin dates
    ▪ Products – AIAI Effective / Termination Dates

When a user changes a record at either the group, subgroup, or class level, a group level row is written to the **MEEA** table with a MEEA_STS of 01 (Active/Awaiting Processing). Triggers include the following:

- Group
  o Effective and Termination dates
- Subgroup
  o Effective and Termination dates
- Class/Plan
  o Effective and Termination dates of Plans and Products
  o Waiting Periods
- Administrative Information
  o Plan Stop Ages for subscribers, dependents
  o Student status
  o Plan year begin dates
- Products
  o AIAI Effective and Termination dates

ErCmcRunElig - Step 2000

ErCmcRunElig – Step 2000

▶ **Pre-process Step**

- Each MEEA row with a MEEA_STS = 01 and MEEA_TYPE=GRGR updated to MEEA_STS=05
- CMC_ELPR_EL_PREPRO, CER_QWK0_WORK_QUE, CER_SENG_ENGINE truncated
- All MEEA rows with same GRGR_CK are grouped together
  - If one subscriber in group changes, row written to ELPR for group
- Depending on group size, QWK0 rows written to represent group or groups

Pre-process Step:

- Facets updates each MEEA row with a MEEA_STS = 01 and MEEA_TYPE=GRGR to a MEEA_STS=05.
- Truncated:
  - ○ CMC_ELPR_EL_PREPRO
  - ○ CER_QWK0_WORK_QUE
  - ○ CER_SENG_ENGINE
- Facets groups all MEEA rows with the same GRGR_CK together.
  - ○ If at least one subscriber in a group needs a change, a row is written to ELPR for that group.
- Depending on the size of the group, QWK0 rows are written to represent a group or groups.

ErCmcRunElig – Step 2000
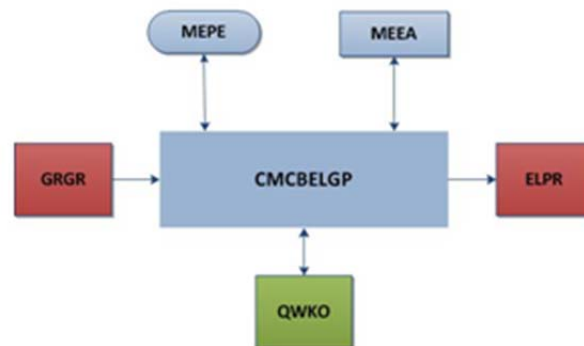
ErCmcRunElig - Step 3000

ErCmcRunElig – Step 3000

▶ **Multi-engine Step**

- Each QWK0 row read by engine for GRGR_CK
  - The QWK0_STS changes from 0 to 10
  - Row written to SENG to track engine's work
- Engine processes a subscriber needing eligibility calculated
  - MEEA_STS changes from 05 to 02
- Eligibility calculated for whole group
  - MEEA_STS changes from 02 to 03
- QWK0_STS changes from 10 to 99

Multi-engine Step:

- The engine reads each QWK0 row for the GRGR_CK and retrieves all the subscribers in that group.
- The engine writes a row to SENG and tracks work when the QWK0_STS changes from 0 to 10.
- The engine processes any subscriber needing eligibility calculated, and the MEEA_STS changes from 05 to 02.
- Eligibility calculates for the whole group and the MEEA_STS changes from 02 to 03.
- The QWK0_STS changes from 10 to 99.

ErCmcRunElig – Step 3000

ErCmcRunElig – Step 3000

ErCmcRunElig - Steps 4000 & 5000

ErCmcRunElig – Steps 4000 & 5000

▶ **Step 4000 is pre-process; repeat of Step 2000**
- ELPR truncated
- MEEA rows not processed get written to ELPR
- One QWK0 row created

▶ **Step 5000 is single-engine process; repeat of Step 3000**
- SENG truncated
- One engine created to process one QWK0 row

ErCmcRunElig.xml

ErCmcRunElig.xml

```xml
<Job>
  <ProcFile name="ErCmcProcElig"/>
    <Category name="Parameters">

<!--############################################################
# Job Level Overrides
#############################################################-->
        <!--<Item name="BypassStep">1000</Item>-->
        <!--<Item name="RestartStep">1000</Item>-->
        <!--<Item name="StopStep">1000</Item>-->
        <!--<Item name="RunDate">mm/dd/yyyy 00:00:00.000</Item>-->
        <!--<Item name="RunThruDate">mm/dd/yyyy 00:00:00.000</Item>-->
        <!--<Item name="SbElprMaxQueue">5000</Item>-->
        <!--<Item name="RebillImmediateOnly">N</Item>-->
    </Category>
    <Step number="2000">
    <Category name="Parameters">
```

continued…

ErCmcRunElig.xml
…continued

```xml
<!--############################>
# Step Level Overrides
############################-->
                <!--<Item name="EnginesTimesQueues">6</Item>-->
        </Category>
    </Step>
            <Step number="3000">
                <Category name="Parameters">
<!--############################>
    •   # Step Level Overrides
############################-->
                <!--<Item name="NumberOfEngines" commarea="Y">2</Item>-->
        </Category>
    </Step>
</Job>
```

RunFile Parameters

RunFile Parameters

▶ **RunThruDate – defines range of time**

▶ **RebillImmediateOnly - Parameter limits eligibility pre-processing**

▶ **SbElprMaxQueue - Parameter defines even unit of work**
- Example: Parameter set to 100
  - Pre-process determines 1000 Group A subscriber contrived keys
  - Creates 10 ELPR_ROWS based on SbElprMaxQueue set to 100
  - If use three engines, work gets distributed:
    - Engine 1: 3 ELPR_ROWS, 300 SBSB_CK
    - Engine 2: 3 ELPR_ROWS, 300 SBSB_CK
    - Engine 3: 4 ELPR_ROWS, 400 SBSB_CK

▶ **Restart Considerations**
- If job fails, restart in failed step

RunThruDate – Defines the range of time, starting with the RunDate and ending with the RunThruDate.

RebillImmediateOnly - This parameter limits eligibility pre-processing to consider members under billing entities scheduled for an immediate rebill (ReBill New Immediate). Set this parameter to a value of Y only when running this job prior to running billing for ReBill immediate requests. Otherwise this parameter should be set to N, which is the default value.

SbElprMaxQueue - This parameter defines an even unit of work assigned to one or many engines. For example, if this parameter is set to 100, the pre-process step determines the assignment of 1000 subscriber contrived keys for Group A. This creates 10 ELPR_ROWS based on the SbElprMaxQueue set to 100. If three engines handle the batch, the system distributes the work as follows:

- Engine 1: 3 ELPR_ROWS, 300 SBSB_CK
- Engine 2: 3 ELPR_ROWS, 300 SBSB_CK
- Engine 3: 4 ELPR_ROWS, 400 SBSB_CK

Restart Considerations:

- If the job fails, restart in the failed step

Run Control Display

Run Control Display

Step 2000

```
------------------------------------------------------------
|          R u n    C o n t r o l    D i s p l a y        |
------------------------------------------------------------
Total GRGR Rows Read...................... [56        ]
Total ELPR Rows Written................... [56        ]
Total ELPR Rows Read...................... [56        ]
Total QWK0 Rows Written................... [6         ]
------------------------------------------------------------
```

Step 3000

```
------------------------------------------------------------
|          R u n    C o n t r o l    D i s p l a y        |
------------------------------------------------------------
GRGR Read................................. [7         ]
SBSB Read................................. [80        ]
MEME Read................................. [169       ]
Prior MEPE................................ [7         ]
Bypassed MEPE............................. [1         ]
Deleted MEPE.............................. [1         ]
Inserted MEPE............................. [2         ]
Inserted MCSA............................. [2         ]
Inserted SYML............................. [0         ]
------------------------------------------------------------
```

Member ID Cards - ErCdsRunMid0.xml

ErCdsRunMid0.xml

```
<Job>
        <ProcFile name="ErCdsProcMid0"/>
        <Category name="Parameters">
<!--##################################################
# Job Level Overrides
##################################################-->
</Category>
<!--
####################################################
# Step 3000 Level Overrides
####################################################
######-->
        <Step number="3000">
        <Category name="Parameters">
        <!--<Item name="MemdEventCode">PRTD</Item>-->
        ### Uncomment this parameter to bypass all Event Codes ###
</Category>
</Step>
</Job>
```

ErCdsRunMid0.xml

▶ **Step takes 50 rows, processes, and determines if a group, subgroup, subscriber, or member request**
  - Requests found on CMC_MEIA_ID_ACT table

▶ **Member's eligibility information found for each request**
  - If member(s) are eligible, job creates information row on CDS_IDIN_ID_INDIC (ID card Indicative information) and CDS_IDPR_ID_PROV (ID card provider information)

The one step in this job takes up to 50 rows at a time, processes the rows, and determines if the rows are group, subgroup, subscriber, or member requests.
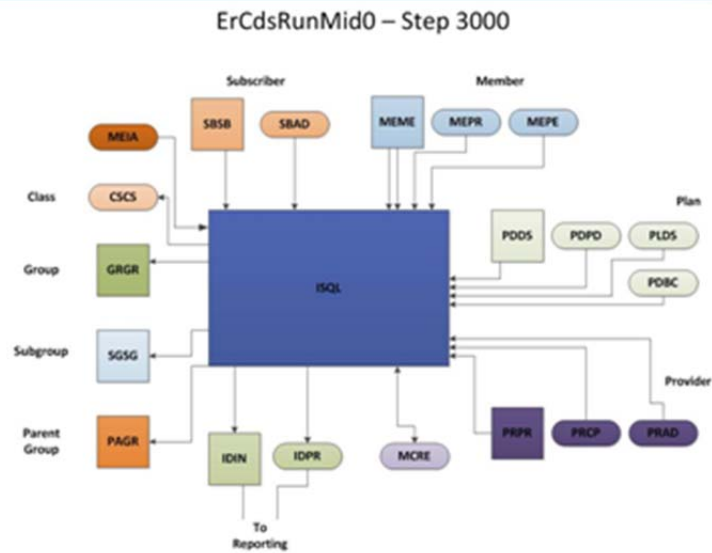
Requests are found on the **CMC_MEIA_ID_ACT** table. Member's eligibility information is found for each request.

If member(s) are eligible, this job creates a row of information on the CDS_IDIN_ID_INDIC (ID card Indicative information) and the CDS_IDPR_ID_PROV (ID card Provider information).

ErCdsRunMid0 - Step 3000

ErCdsRunMid0 – Step 3000

ErCdsRunMid0 – Step 3000

1. **Update status of 50 MEIA rows**
2. **Read one tagged MEIA rows, update status to 02**
3. **Determine request**
4. **Read all members**
5. **Determine member eligibility for ID card**
   - If No, write error
   - If Yes, create IDIN, ID card row, IDPR provider row
6. **Update MEIA status to 03**
7. **Get next tagged MEIA row or next group of 50 MEIA rows**

1. Update the status of the 50 MEIA rows tagged for processing from 01 to 05 that Facets created during the online application or MMS.
2. Read one tagged MEIA row and update the status to 02.
3. Determine who's request; i.e. from the online user, the MMS batch, or the automatic action request:

   - Group
   - Subgroup
   - Subscriber
   - Member

4. Read all members in a group or subgroup, if applicable.
5. Determine if each member is eligible to receive an ID card:

   - If No, write the error.
   - If Yes, create one IDIN, ID card row, and one IDPR provider row for each provider assigned to a member.

6. Update MEIA status to 03.
7. Get the next tagged MEIA row for processing, or get the next group of 50 MEIA rows to tag.

ID Card Reporting

ID Card Reporting

Sample output:


```
00000233  00  F  tr103pract01        Eff: 5/15/2010

Tessy  Barter                        PCP:  Feelgood, Tony

1085 Morris Avenue

Union, NJ 07083


                                     Group:    trgroup1

                                     Plan:     trdental

                                     Office Visit $0
```

Per Member Per Month / Eligible Member Count Batch

Eligible Member Count Batch

▶ **Calculates eligibility status for time frame**

▶ **Each month, a member is eligible for a specific time frame:**
  ▪ Row is written to CDS_MMCT_MEMBER_COUNT

▶ **Facets reports generated based on data collected; i.e.:**
  ▪ Provider Types
  ▪ Aging of the member population

This job calculates the members' eligibility as of a given date, and produces rows in the **MMCT** table for each month of data collected. The job produces data for the number of months specified prior to and including the date entered, and groups information in two different ways in the **CDS_MMCT_MEMBER_COUNT** table:

- The job arranges members in ACT0 rows by a unique group, category, class, plan, relation, gender, and age.
- The job arranges members in BND1 rows by a unique group, category, class, plan, relation, gender, and age band.

Eligible Member Count Batch

▶ **Two steps to batch process:**

- Step 3000
    - Row written to CDS_MEPA_PMPM_ACT for each group
- Step 4000
    - Processes 50 MEPA rows at a time:
        - Determines eligibility for given time period
        - Each month of eligibility, row written to CDS_MMCT_MEMBER_COUNT

The Eligible Member Count Batch process consists of two steps:

- Step 1 creates one MEPA row for each group (GRGR) existing on the database.
- Step 2 accepts up to 50 of these MEPA rows at a time, processes them, and determines the number of members eligible for a specified number of months up to a given date.

ErCdsRunMct0 - Step 3000

ErCdsRunMct0 – Step 3000

```
# Step 3000 Level Overrides
# IMPORTANT!!!:
# The following parameter inputs are needed to run this batch successfully:
# Item name="StartDate"
# Item name="NumberOfMonths"
# Item name="ClassProductCategory"
######################################################
<Step number="3000">
<Category name="Parameters">
<!--<Item name="StartDate">DD/MM/YYYY</Item>-->
<!--<Item name="NumberOfMonths">5</Item>-->
<!--<Item name="ClassProductCategory">M</Item>-->
<!--<Item name="MeprPcpType">MP</Item>-->
<!--<Item name="PcpTypeSplit">N</Item>-->
</Category>
</Step>
<!--######################################################-->
```

Step 3000:

- StartDate -Use this override to specify the date the count begins.
- NumberOfMonths -Indicate the number of months the job runs.
- ClassProductCategory -Enter the Class/Plan Product Category such as Medical, Dental, RX, etc.
- MeprPcpType -Specify the member's relationship to the provider using one of the PCP Types:
  o Medical Primary (MP)
  o Medical Gynecologist (MG)
  o Medical Vision (MV)
- PcpTypeSplit -If this parameter is set to Y, the data groups members according to PRPR_IDs and MEPR_PCP_TYPEs in the same group or subgroup.

ErCdsRunMct0 - Step 4000

ErCdsRunMct0 – Step 4000

Step 4000 Level Overrides

Note: If none entered, the following parameters will use respective default values

```
###############################################
<Step number="4000">
<Category name="Parameters">
<!--<Item name="MeprPcpType">MP</Item>-->
<!--<Item name="PcpTypeSplit">N</Item>-->
<!--<Item name="Bands">Y</Item>-->
```

Step 4000:

- MeprPcpType -Specify the member's relationship to the provider using one of the following PCP Types:
  o Medical Primary (MP)
  o Medical Gynecologist (MG)
  o Medical Vision (MV)
- PcpTypeSplit -If this parameter is set to Y, the data groups by members according to the PRPR_IDs and MEPR_PCP_TYPEs within the same group or subgroup.
- Bands - If this parameter is set to Y, data groups into age bands.

ErCdsRunMct0 - Run Control Display

ErCdsRunMct0 – Run Control Display

Step 3000

```
-----------------------------------------------------------------
|                        Run Control Display                    |
-----------------------------------------------------------------
MEPA's Created: 869
-----------------------------------------------------------------
-----------------------------------------------------------------
```

Step 4000

```
-----------------------------------------------------------------
|                        Run Control Display                    |
-----------------------------------------------------------------
Instance ID: 1022458
Groups Processed: 869
Months Requested: 3
Total Months Processed: 2607
MEPAs Completed: 869
Return Code : 0
-----------------------------------------------------------------
-----------------------------------------------------------------
```

ErCdsRunMct0 - Restart

ErCdsRunMct0 - Restart

▶ **Restart Considerations:**

- Restart if member count batch cycle ends
  - In step 3000, MEPA table truncated, rebuilt from GRGR
  - In step 4000, unprocessed MEPAs from a previous run get processed; no new MEPAs created

Restart Considerations:

- If the member count batch cycle ends unsuccessfully in either step, Facets restarts the entire job using the same parameters as those used in the unsuccessful run.
  - o If the job ends in step 3000, Facets truncates the **MEPA** table and rebuilds MEPAs from the GRGR.
  - o If the job ends in step 4000, Facets processes the unprocessed MEPAs from the previous run and does not create new MEPAs.

Check for Learning

1.

2.

Objective Summary

After completing this chapter, you are now able to:

- Explain the workflow and relevant batch parameters for each of the following run file/batch processes:
  - Ercmcrunelig
  - Ercdsrunmid0
  - Ercdsrunmct0

Coming Up

Coming Up

Next we will discuss:

► **External Claims Batch**