



C2M.v2.7.MDM

5.6.4.1 C2M.MDM Synchronize Master Data

Creation Date: Dec 10, 2015

Last Updated: February 11, 2020

ORACLE®

Copyright © 2020, Oracle. All rights reserved.

This document is provided for information purposes only and the contents hereof are subject to change without notice. This document is not warranted to be error-free, nor subject to any other warranties or conditions, whether expressed orally or implied in law, including implied warranties and conditions of merchantability or fitness for a particular purpose. We specifically disclaim any liability with respect to this document and no contractual obligations are formed either directly or indirectly by this document. This document may not be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without our prior written permission. Oracle, JD Edwards, PeopleSoft, and Siebel are registered trademarks of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective owners.

Contents

BRIEF DESCRIPTION	4
BUSINESS PROCESS MODEL PAGE 1	5
BUSINESS PROCESS MODEL PAGE 2	6
BUSINESS PROCESS MODEL PAGE 3	7
BUSINESS PROCESS MODEL PAGE 4	8
BUSINESS PROCESS MODEL PAGE 5	9
DETAIL BUSINESS PROCESS MODEL DESCRIPTION	11
TEST DOCUMENTATION RELATED TO THE CURRENT PROCESS	65
DOCUMENT CONTROL	66
ATTACHMENTS	67
<i>F1-Sync Request BO Lifecycle</i>	67
<i>D1-SyncRequestSeeder BO Lifecycle</i>	67
<i>D1-InitialSyncRequestContact BO Lifecycle</i>	67
<i>D1-OngoingSyncRequestContact BO Lifecycle</i>	67
<i>Sync Seeder Master Configuration</i>	67
<i>Master Data Synchronization Configuration Master Configuration</i>	68

Brief Description

Business Process: 5.6.4.1 C2M.MDM.Synchronize Master Data
Process Type: Process
Parent Process:
Sibling Processes:

This process is initiated when an Authorized User adds or updates CCB master data. Master data that triggers the process includes Person, Account, Service Agreement, Service Point (non-C2M implementation only), Premise (non-C2M implementation only), Bill Cycle, Contract Option and Contract Option Event.

When data is added or updated the configuration of the maintenance object determines if objects of this type are synchronized, if they are a sync request is created. The sync request determines whether or not the details that have been added or changed require synchronization. If not the sync request is discarded. If however synchronization is required, in a Customer to Meter implementation an inbound sync request is created. In a non-Customer to Meter implementation, when synchronization is required, a message is sent to MDM through the Integration layer, when the message is received by MDM an inbound sync request is created.

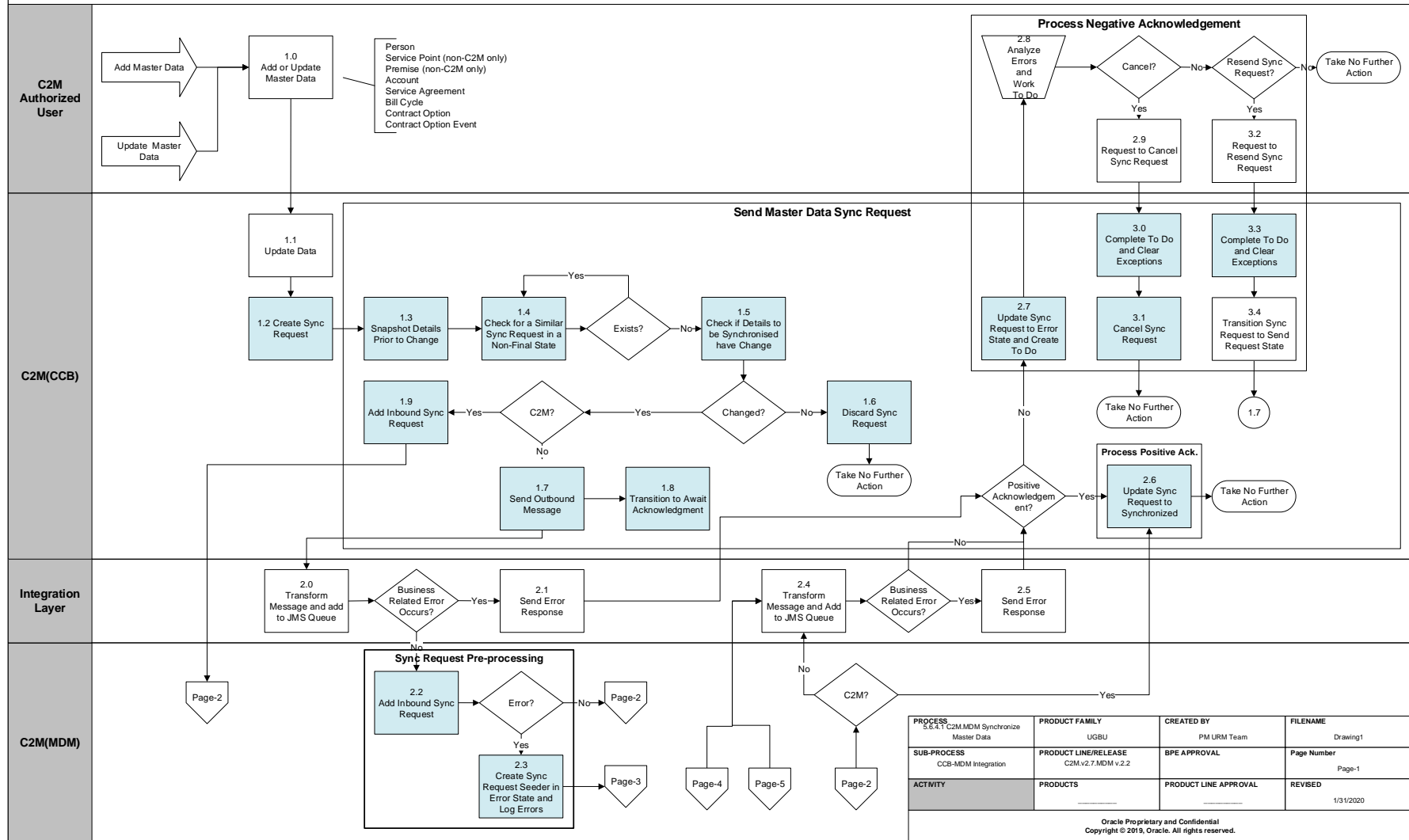
The inbound sync request determines the MDM object to be added or updated, transforms any codes and identifiers, and adds or updates the MDM data. When the inbound sync request is completed the sync request is also completed. In a non-Customer to Meter implementation, MDM sends a positive acknowledge message to CCB to trigger the completion of the CCB sync request.

There are two variants of the synchronization process: initial load, which can be used for data migration, and ongoing synchronization, for normal operation.

Note: This document is based on the Person – Contact synchronization process however the processing of initial sync and ongoing sync is similar for all master data objects.

Business Process Model Page 1

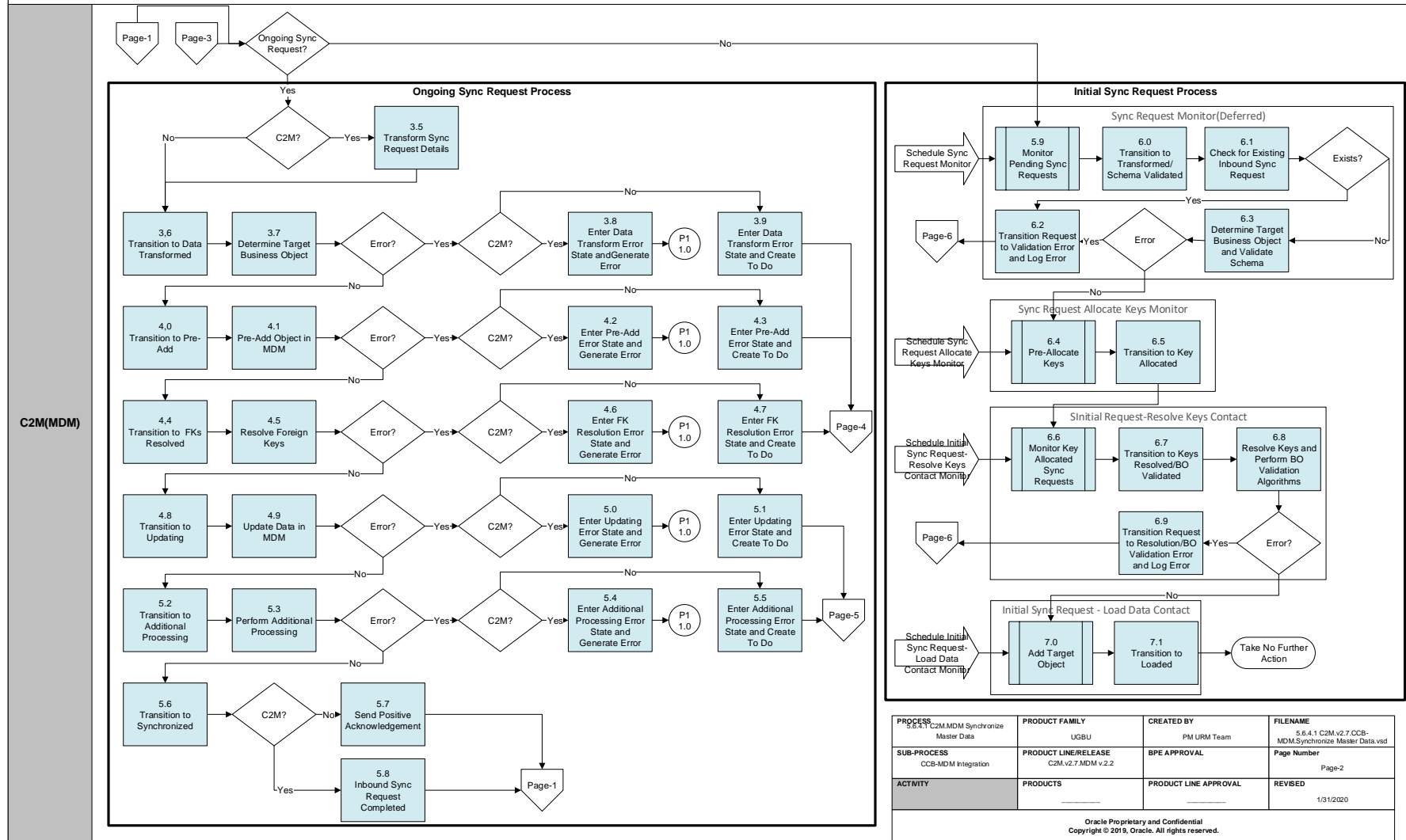
5.6.4.1 C2M.v2.7.MDM Synchronize Master Data



PROCESS 5.6.4.1 C2M.MDM Synchronize Master Data	PRODUCT FAMILY UGBU	CREATED BY PM URM Team	FILENAME Drawing1
SUB-PROCESS CCB-MDM Integration	PRODUCT LINE/RELEASE C2M.v2.7.MDM v2.2	BPE APPROVAL	Page Number Page-1
ACTIVITY	PRODUCTS	PRODUCT LINE APPROVAL	REVISED 1/31/2020

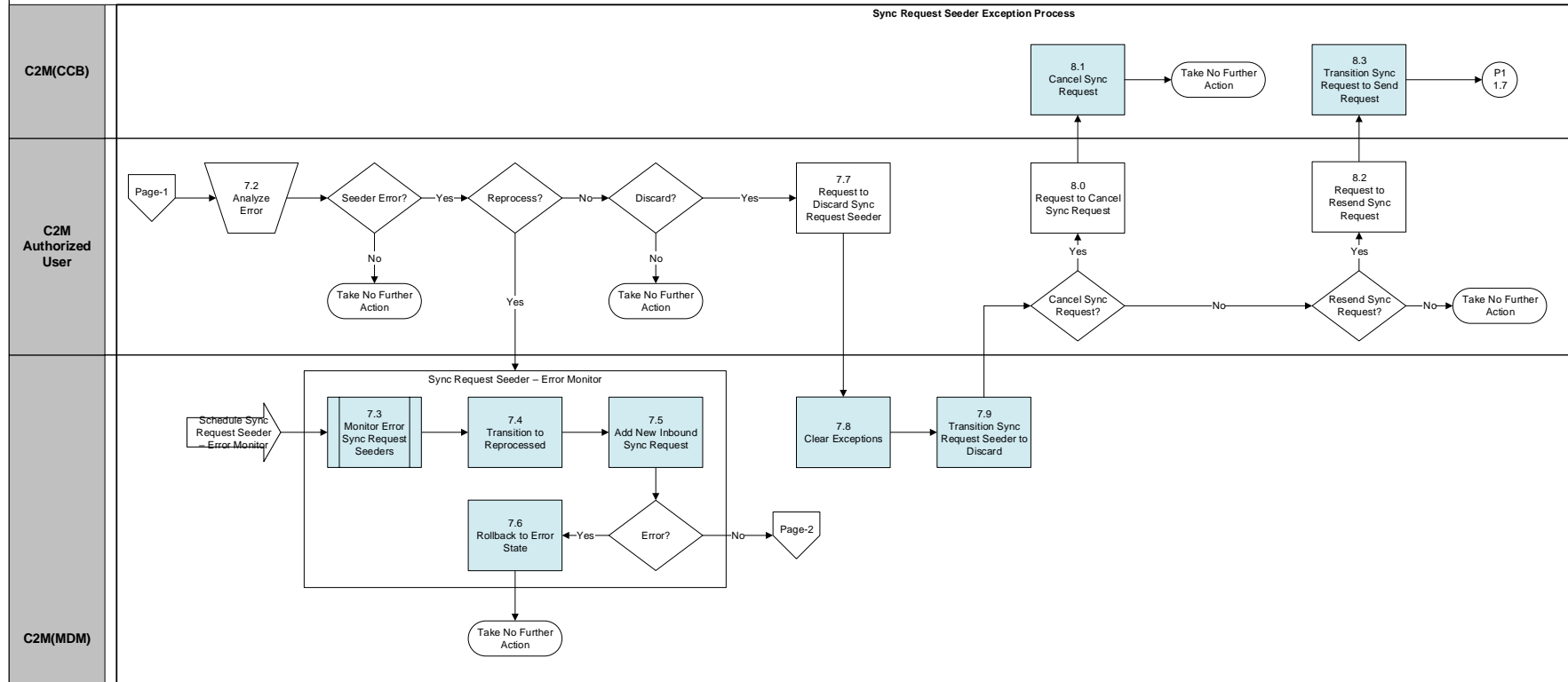
Business Process Model Page 2

5.6.4.1 C2M.v2.7.MDM Synchronize Master Data



Business Process Model Page 3

5.6.4.1 C2M.v2.7.MDM Synchronize Master Data - Sync Request Seeder Exception Process

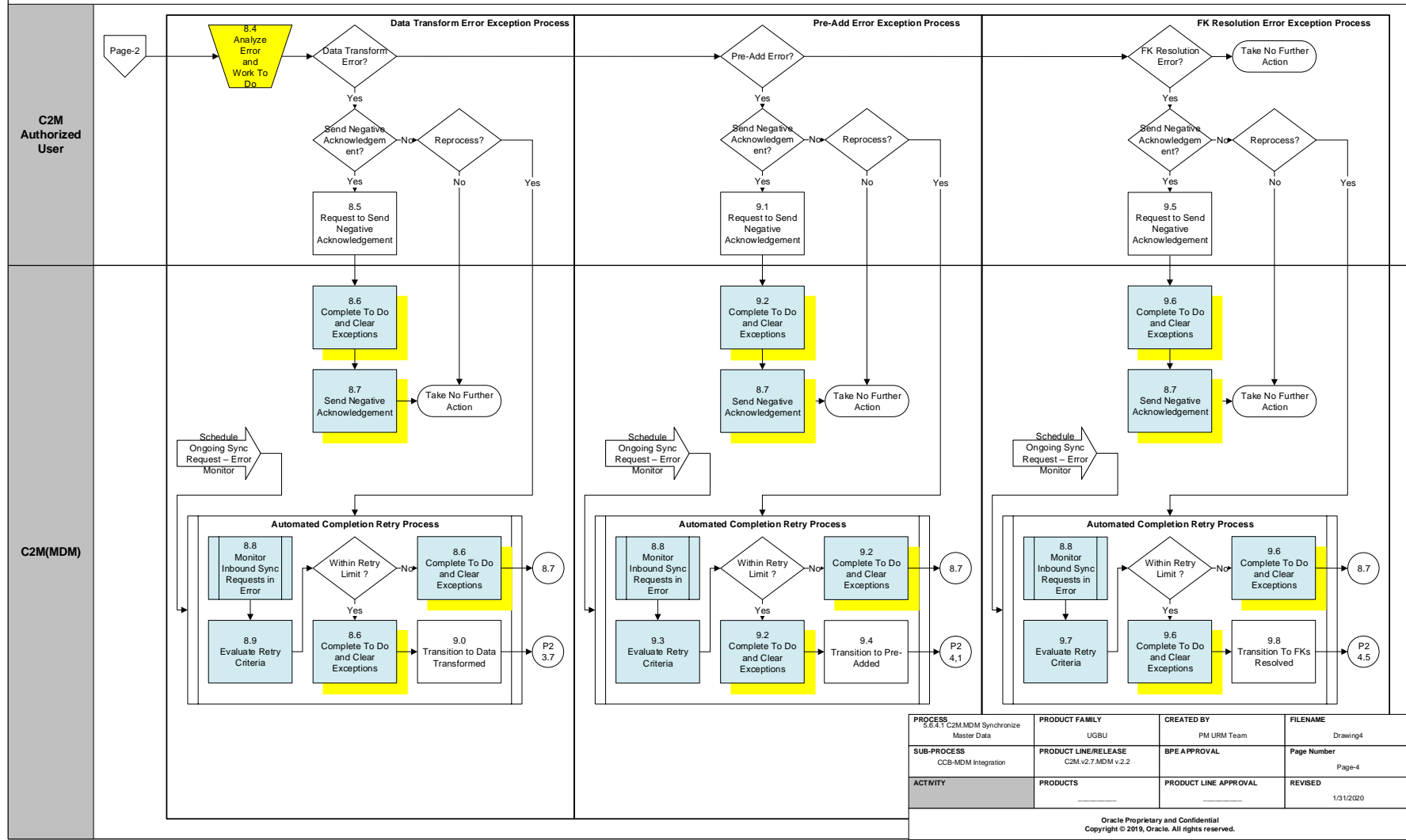


PROCESS 5.6.4.1 C2M.MDM Synchronize Master Data	PRODUCT FAMILY UGBU	CREATED BY PM URM Team	FILENAME 5.6.4.1 C2M.v2.7.CCB-MDM.Synchronize Master Data.vsd
SUB-PROCESS CCB-MDM Integration	PRODUCT LINE/RELEASE C2M.v2.7.MDM v.2.2	BPE APPROVAL	Page Number Page-3
ACTIVITY	PRODUCTS	PRODUCT LINE APPROVAL	REVISED 1/31/2020

Oracle Proprietary and Confidential
Copyright © 2019, Oracle. All rights reserved.

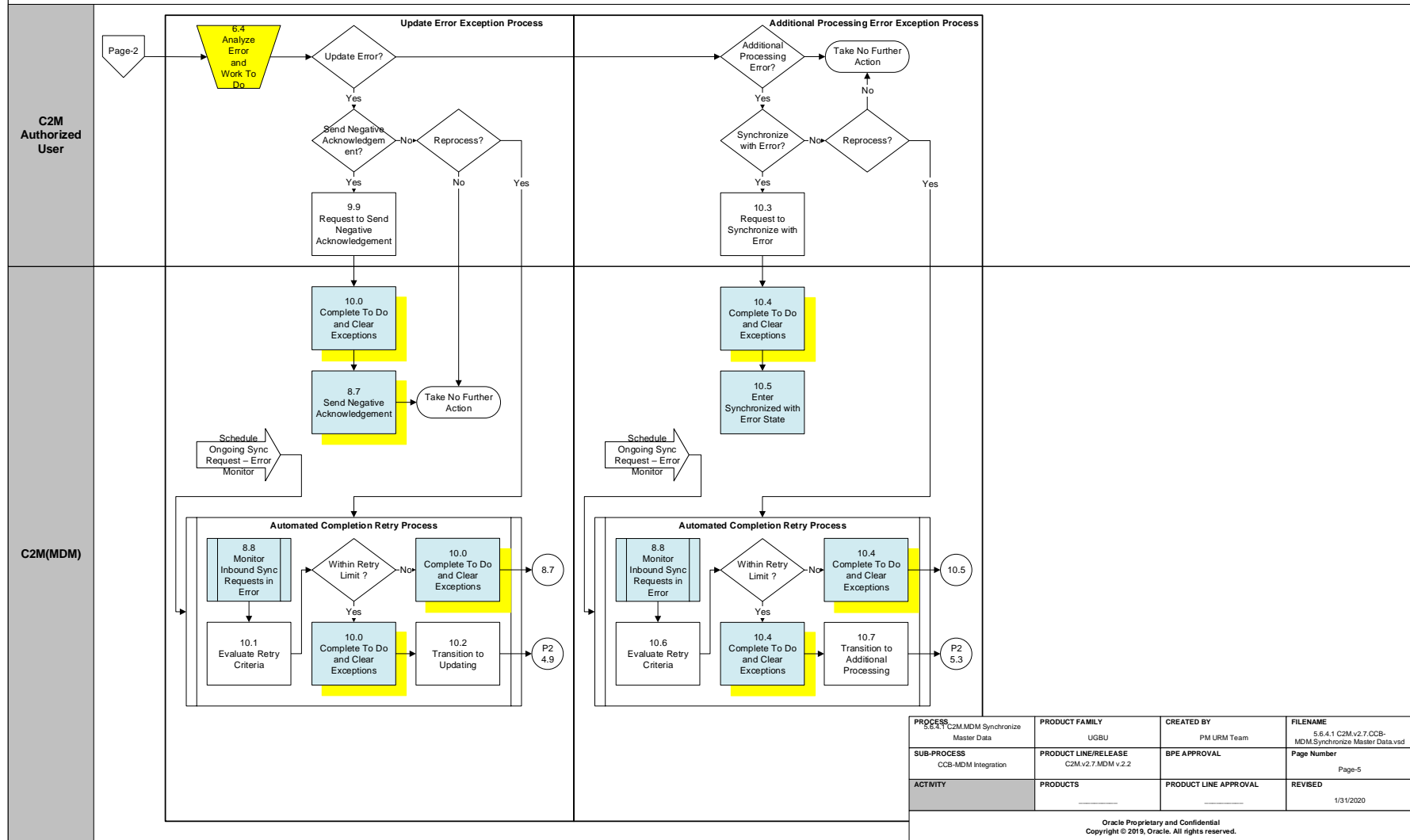
Business Process Model Page 4

5.6.4.1 C2M.v2.7.MDM *Synchronize Master Data - Ongoing Sync Request Exception Process*



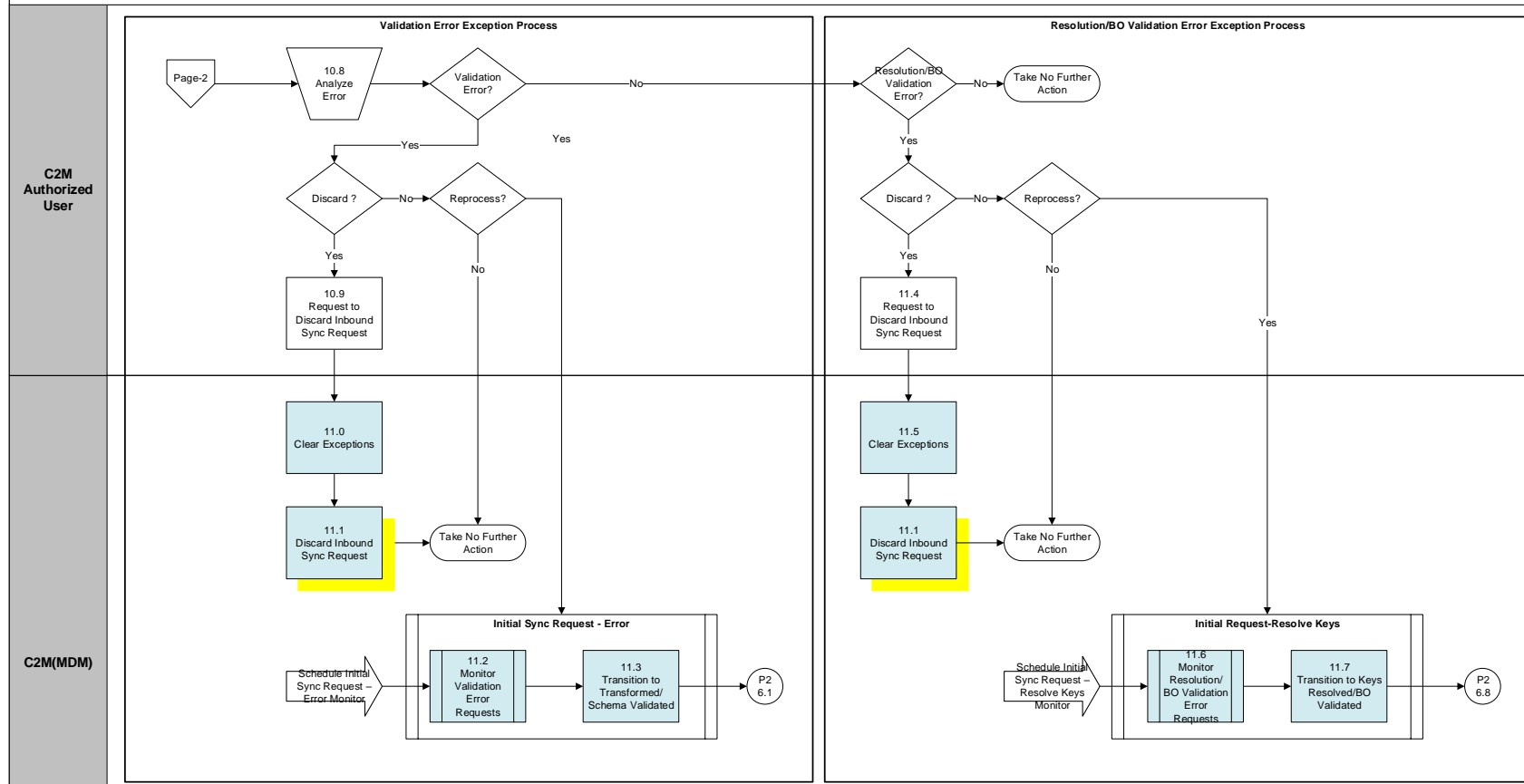
Business Process Model Page 5

5.6.4.1 C2M.v2.7.MDM *Synchronize Master Data -Ongoing Sync Request Exception Process*



Business Process Model Page 6

5.6.4.1 C2M.v2.7.MDM *Synchronize Master Data - Initial Load Sync Request Exception Process*



PROCESS 5.6.4.1 C2M.MDM Synchronize Master Data	PRODUCT FAMILY UGBU	CREATED BY PM URM Team	FILENAME 5.6.4.1 C2M.v2.7.CCB-MDM.Synchronize Master Data.vsd
SUB-PROCESS CCB-MDM Integration	PRODUCT LINE/RELEASE C2M.v2.7.MDM v2.2	BPE APPROVAL	Page Number Page-6
ACTIVITY	PRODUCTS	PRODUCT LINE APPROVAL	REVISED 1/31/2020

Oracle Proprietary and Confidential
Copyright © 2019, Oracle. All rights reserved.

Detail Business Process Model Description

1.0 Add or Update Master Data

Actor/Role: C2M Authorized User

Description: C2M Authorized User adds or updates CCB master data. That is a Person, Account, Service Agreement, Service Point (non-C2M implementation only), Premise (non-C2M implementation only), Bill Cycle, Contract Option or Contract Option Event.

Configuration required (Y/N) **Entities to Configure:**

1.1 Update Data

Actor/Role: C2M(CCB)

Description: The data is updated in the system.

1.2 Create Sync Request

Actor/Role: C2M(CCB)

Description: When an object that is set up for synchronisation is added or updated, an audit algorithm on the object's maintenance object is performed. The standard base algorithm loops through each of the sync request business objects set up as an option ("Sync Request BO") in the maintenance object. For each option it checks if there is an existing sync request with the business object that is related to the object that has been changed and is in the initial state. If no sync request is found, a sync request is created for the business object recorded as a maintenance object option and related to the object that is being added or updated. Note there are other base product audit algorithms that create sync requests for related objects, for example an algorithm that creates service point related sync requests for each service point related to a premise that is being changed. This algorithm obtains the sync request business objects from algorithm's parameters.

Process Plug-in enabled

Available Algorithm(s):

F1-GCHG-CDCP (Generic Change Data Capture)
CI_PREMCD CSP (Premise Change Data Capture (SP-Based))
CI_PREMCD CSP (Premise Change Data Capture (SP-Based))
X1-ACCTDCSA (C2M Account Change Data Capture (SA-Based))
CI_ACCTDCSA (Account Change Data Capture (SA-Based))

Business Object**Business Object**

C1-MDM2PersonSyncRequest (MDM2 Person Sync Request)
C1-MDM2SPSyncRequest (MDM2 SP Sync Request)
C1-MDM2SASyncRequest (MDM2 SA Sync Request)
C1-MDM2BillCycleSyncRequest (MDM2 Bill Cycle Sync Request)
C1-MDM2ContractOptSyncRequest (MDM2 Contract Option Sync Request)
C1-MDM2ContrOptEvtSyncRequest (MDM2 Contract Option Event Sync Request)

Configuration required**Entities to Configure:**

Maintenance Object (Person)
Maintenance Object (Service Point – non-C2M only)
Maintenance Object (Premise – non-C2M only)
Maintenance Object (Service Agreement)
Maintenance Object (Account)
Maintenance Object (Bill Cycle)
Maintenance Object (Contract Option)
Maintenance Object (Contract Option Event)

Group: Send Master Data Sync Request**1.3 Snapshot Details Prior to Change****Actor/Role:** C2M(CCB)**Description:** When a Sync Request is created, the Source System and the Initial Snapshot details are populated in the Sync Request. The Initial Snapshot records the value of the details to be synchronized prior to the add or update.

In a Customer to Meter implementation the Source System is set to the "Our Name in their System" field of the External System recorded in the Master Configuration "Customer to Meter Configuration" (BO: X1-C2MMasterConfiguration). In a non Customer to Meter implementation the Source System is set to the "Our Name in their System" field of the External System recorded as an option in the Sync Request's Business Object.

The Initial Snapshot is obtained using a Business Object, Data Area and Script recorded in the parameters of the algorithm that captures the Initial Snapshot (X1-CMDM2PRI or CI_CMDM2PRI). The Business Object is used to read the object that has been added or updated, this is then moved to the Data Area, then if a Script is defined, the Script is performed passing in the Data Area and updating the Data Area with the result, finally the Data Area is moved to the Sync Request's Initial Snapshot. The Business Object, Data Area and Script can vary depending on details in the object. For example when a Person is being synchronized these values can be configured to be the same for all person objects or these values can differ based on the Person or Business indicator. The Business Object, Data Area and Script that are used are recorded in the Sync Request and used later to populate the Final Snapshot.

Process Plug-in enabled	Available Algorithm(s):	<table border="1"> <tr><td>C1-SYNREQPRE (Sync Request - Pre-Processing Algorithm) (non-C2M)</td></tr> <tr><td>X1-SETSYNCCSS (Set Sync Request Source System) (C2M)</td></tr> <tr><td>CI_CMDM2PRI (Capture MDM2 Person-Based Initial Snapshot) (non-C2M)</td></tr> <tr><td>X1-CMDM2PRI (Capture Person-Based Initial Snapshot) (C2M)</td></tr> </table>	C1-SYNREQPRE (Sync Request - Pre-Processing Algorithm) (non-C2M)	X1-SETSYNCCSS (Set Sync Request Source System) (C2M)	CI_CMDM2PRI (Capture MDM2 Person-Based Initial Snapshot) (non-C2M)	X1-CMDM2PRI (Capture Person-Based Initial Snapshot) (C2M)		
C1-SYNREQPRE (Sync Request - Pre-Processing Algorithm) (non-C2M)								
X1-SETSYNCCSS (Set Sync Request Source System) (C2M)								
CI_CMDM2PRI (Capture MDM2 Person-Based Initial Snapshot) (non-C2M)								
X1-CMDM2PRI (Capture Person-Based Initial Snapshot) (C2M)								
Business Object	Business Object	<table border="1"> <tr><td>C1-MDM2PersonSyncRequest (MDM2 Person Sync Request)</td></tr> <tr><td>C1-MDM2SPSyncRequest (MDM2 SP Sync Request)</td></tr> <tr><td>C1-MDM2SASyncRequest (MDM2 SA Sync Request)</td></tr> <tr><td>C1-MDM2BillCycleSyncRequest (MDM2 Bill Cycle Sync Request)</td></tr> <tr><td>C1-MDM2ContractOptSyncRequest (MDM2 Contract Option Sync Request)</td></tr> <tr><td>C1-MDM2ContrOptEvtSyncRequest (MDM2 Contract Option Event Sync Request)</td></tr> </table>	C1-MDM2PersonSyncRequest (MDM2 Person Sync Request)	C1-MDM2SPSyncRequest (MDM2 SP Sync Request)	C1-MDM2SASyncRequest (MDM2 SA Sync Request)	C1-MDM2BillCycleSyncRequest (MDM2 Bill Cycle Sync Request)	C1-MDM2ContractOptSyncRequest (MDM2 Contract Option Sync Request)	C1-MDM2ContrOptEvtSyncRequest (MDM2 Contract Option Event Sync Request)
C1-MDM2PersonSyncRequest (MDM2 Person Sync Request)								
C1-MDM2SPSyncRequest (MDM2 SP Sync Request)								
C1-MDM2SASyncRequest (MDM2 SA Sync Request)								
C1-MDM2BillCycleSyncRequest (MDM2 Bill Cycle Sync Request)								
C1-MDM2ContractOptSyncRequest (MDM2 Contract Option Sync Request)								
C1-MDM2ContrOptEvtSyncRequest (MDM2 Contract Option Event Sync Request)								
Configuration required	Entities to Configure:	<table border="1"> <tr><td>Master Configuration: X1-C2MMasterConfiguration (Customer to Meter Configuration) (C2M)</td></tr> <tr><td>Business Object Option: Inactive Algorithm - C1-SYNREQPRE (C2M)</td></tr> </table>	Master Configuration: X1-C2MMasterConfiguration (Customer to Meter Configuration) (C2M)	Business Object Option: Inactive Algorithm - C1-SYNREQPRE (C2M)				
Master Configuration: X1-C2MMasterConfiguration (Customer to Meter Configuration) (C2M)								
Business Object Option: Inactive Algorithm - C1-SYNREQPRE (C2M)								

Group: Send Master Data Sync Request

1.4 Check for a Similar Sync Request in a Non-Final State

Actor/Role: C2M(CCB)

Description: Check if there is a related Sync Request and if there is remain in the Pending state. This ensures that earlier changes are made first. A related Sync Request is one with the same Business Object code related to the same object.

Process Plug-in enabled	Available Algorithm(s):	F1-WAITRELSR (Wait For Related Sync To Complete)
		F1-TRN-DF-NS (Generic Business Object Status Monitor)

Business Object	Business Object	C1-MDM2PersonSyncRequest (MDM2 Person Sync Request)
		C1-MDM2SPSyncRequest (MDM2 SP Sync Request)
		C1-MDM2SASyncRequest (MDM2 SA Sync Request)
		C1-MDM2BillCycleSyncRequest (MDM2 Bill Cycle Sync Request)
		C1-MDM2ContractOptSyncRequest (MDM2 Contract Option Sync Request)
		C1-MDM2ContrOptEvtSyncRequest (MDM2 Contract Option Event Sync Request)

Configuration required	Entities to Configure:	Business Object State Option: Allow Manual Monitor - Y (non C2M)
-------------------------------	-------------------------------	--

Customizable process	Process Name:	F1-SYNRQ (Sync Request Monitor)
-----------------------------	----------------------	---------------------------------

Group: Send Master Data Sync Request

1.5 Check if Details to be Synchronized have Changed

Actor/Role: C2M(CCB)

Description: Populate the Final Snapshot in the Sync Request and compare this to the Initial Snapshot. The Final Snapshot records the value of the details to be synchronized after the add or update. If the Final and Initial Snapshots are not different transition the Sync Request to the Discarded state.

F1-TRN-DF-NS (Generic Business Object Status Monitor)

Process Plug-in enabled**Available Algorithm(s):**

C1-CMDM2PRF (Capture MDM2 Person-Based Final Snapshot)
F1-COMPSNAPS (Compare Initial and Final Snapshots)

Business Object**Business Object**

C1-MDM2PersonSyncRequest (MDM2 Person Sync Request)
C1-MDM2SPSyncRequest (MDM2 SP Sync Request)
C1-MDM2SASyncRequest (MDM2 SA Sync Request)
C1-MDM2BillCycleSyncRequest (MDM2 Bill Cycle Sync Request)
C1-MDM2ContractOptSyncRequest (MDM2 Contract Option Sync Request)
C1-MDM2ContrOptEvtSyncRequest (MDM2 Contract Option Event Sync Request)

Group: Send Master Data Sync Request**1.6 Discard Sync Request****Actor/Role:** C2M(CCB)

Description: In a non-Customer to Meter implementation, for a Person - Contact synchronizations auto-transition any Usage Transactions which are "Awaiting Data Sync" and are related to a Service Agreement whose Account's main customer is the Person. A Usage Transaction is "Awaiting Data Sync" if on the usage's Business Object there is a "State Condition" (F1SC) business object state option for the usage's current state with a value of "Awaiting Data Synch" (C1AS).

Process Plug-in enabled**Available Algorithm(s):**

C1-TRANUSGPR (Transition Related Usage Requests from Person Sync) (non C2M)

Business Object	Business Object	C1-MDM2PersonSyncRequest (MDM2 Person Sync Request)
		C1-MDM2SPSyncRequest (MDM2 SP Sync Request)
		C1-MDM2SASyncRequest (MDM2 SA Sync Request)
		C1-MDM2BillCycleSyncRequest (MDM2 Bill Cycle Sync Request)
		C1-MDM2ContractOptSyncRequest (MDM2 Contract Option Sync Request)
		C1-MDM2ContrOptEvtSyncRequest (MDM2 Contract Option Event Sync Request)

Configuration required	Entities to Configure:	Business Object State Option: Required Element – discardReason
		Business Object State Option: Inactive Algorithm - C1-TRANUSGPR (C2M)

Group: Send Master Data Sync Request
1.7 Send Outbound Message

Actor/Role: C2M(CCB)

Description: In a non-Customer to Meter implementation create an outbound message with details copied from the Sync Request. The Outbound Message's External System and Outbound Message Type are obtained from options on the Sync Request's Business Object.

Process Plug-in enabled	Available Algorithm(s):	C1-CR-OUTMSG (Create Outbound Message)
		F1-TRN-DF-NS (Generic Business Object Status Monitor)

Business Object	Business Object	C1-MDM2PersonSyncRequest (MDM2 Person Sync Request)
		C1-MDM2SPSyncRequest (MDM2 SP Sync Request)
		C1-MDM2SASyncRequest (MDM2 SA Sync Request)
		C1-MDM2BillCycleSyncRequest (MDM2 Bill Cycle Sync Request)
		C1-MDM2ContractOptSyncRequest (MDM2 Contract Option Sync Request)
		C1-MDM2ContrOptEvtSyncRequest (MDM2 Contract Option Event Sync Request)

Group: Send Master Data Sync Request
1.8 Transition to Await Acknowledgment

Actor/Role: C2M(CCB)

Description: Transition to the Await Acknowledgement state.

Process Plug-in enabled	Available Algorithm(s):	F1-AT-RQ (Transition to Default Next Status (Script))
Business Object	Business Object	C1-MDM2PersonSyncRequest (MDM2 Person Sync Request) C1-MDM2SPSyncRequest (MDM2 SP Sync Request) C1-MDM2SASyncRequest (MDM2 SA Sync Request) C1-MDM2BillCycleSyncRequest (MDM2 Bill Cycle Sync Request) C1-MDM2ContractOptSyncRequest (MDM2 Contract Option Sync Request) C1-MDM2ContrOptEvtSyncRequest (MDM2 Contract Option Event Sync Request)

Group: Send Master Data Sync Request
1.9 Add Inbound Sync Request

Actor/Role: C2M(CCB)

Description: In a Customer to Meter implementation an Inbound Sync Request is created. The business object of the Inbound Sync Request is obtained from the "Seeder Sync Request Master Configuration" Master Configuration (BO: D1-SeederSyncMasterConfig) using the External System and Initial Load indicator recorded on the Sync Request and the target Maintenance Object. In the Inbound Sync Request: the Sync Request's identifier is recorded as the external reference.

Process Plug-in enabled	Available Algorithm(s):	X1-SENDPESY (Synchronize Person) F1-TRN-DF-NS (Generic Business Object Status Monitor)
--------------------------------	--------------------------------	---

Business Object**Business Object**

C1-MDM2PersonSyncRequest (MDM2 Person Sync Request)
C1-MDM2SPSyncRequest (MDM2 SP Sync Request)
C1-MDM2SASyncRequest (MDM2 SA Sync Request)
C1-MDM2BillCycleSyncRequest (MDM2 Bill Cycle Sync Request)
C1-MDM2ContractOptSyncRequest (MDM2 Contract Option Sync Request)
C1-MDM2ContrOptEvtSyncRequest (MDM2 Contract Option Event Sync Request)

Configuration required**Entities to Configure:**

Business Object State Option: Inactive Algorithm - C1-CR-OUTMSG
Master Configuration: D1-SeederSyncMasterConfig (Seeder Sync Request Master Configuration)

2.0 Process, Transform Message, Add to JMS Queue**Actor/Role:** Integration Layer**Description:** Integration layer transforms the request message and adds it to the JMS queue.**2.1 Send Error Response****Actor/Role:** Integration Layer**Description:** Integration layer sends an error response to CCB if an error occurs during the transformation of the message received from CCB.**Group: Sync Request Pre-processing****2.2 Add Inbound Sync Request****Actor/Role:** C2M(MDM)**Description:** Prior to the creation of the Inbound Sync Request its Business Object is obtained from the Master Configuration "Seeder Sync Request Master Configuration" (BO: D1-SeederSyncMasterConfig) using the External System, Maintenance Object and Initial Load indicator in the Inbound Sync Request. If a Business Object is not obtained from the Master Configuration an exception is added and an Inbound Sync Request Seeder will be created in its initial state of "Error".**Process Plug-in enabled****Available Algorithm(s):**

D1-DETSYNRBO (Determine Sync Request BO)

Business Object	Business Object	D1-SyncRequestSeeder (Sync Request Seeder)
------------------------	------------------------	--

Configuration required	Entities to Configure:	Master Configuration: D1-SeederSyncMasterConfig (Seeder Sync Request Master Configuration)
-------------------------------	-------------------------------	--

Group: Sync Request Pre-processing

2.3 Create Sync Request Seeder in Error State and Log Errors

Actor/Role: C2M(MDM)

Description: MDM creates an inbound sync request seeder in the Error state and log entries for each exception.

Process Plug-in enabled	Available Algorithm(s):	D1-SETCLEXCP (Set Clear Exception Flag to true)
		F1-AT-RQJ (Transition to Default Next Status (Java))
		D1-ADDLOGSE (Add MO Log for Sync Request Seeder)

Business Object	Business Object	D1-SyncRequestSeeder (Sync Request Seeder)
		D1-InboundSyncRequestError (Inbound Sync Request Error)

2.4 Process, Transform Message, Add to JMS Queue

Actor/Role: Integration Layer

Description: Integration layer transforms the response message and adds it to the JMS queue.

2.5 Send Error Response

Actor/Role: Integration Layer

Description: Integration layer sends an error response to CCB if an error occurs during the transformation of the message received from MDM.

Group: Send Master Data Sync Request

Group: Process Positive Ack.

2.6 Update Sync Request to Synchronized

Actor/Role: C2M(CCB)

Description: Transition the Sync Request to the Synchronized state.

In a non-Customer to Meter implementation, auto-transition any Sync Request in a non-final state related to the same object that was added or updated (that is performs the monitor algorithms of the Sync Request's current state). Note this is intended to transition Sync Requests in the Pending state that have been waiting to be processed.

Also in a non-Customer to Meter implementation for a Person - Contact synchronizations auto-transition any Usage Transactions which are "Awaiting Data Sync" and are related to a Service Agreement whose Account's main customer is the Person. A Usage Transaction is "Awaiting Data Sync" if on the usage's Business Object there is a "State Condition" (F1SC) business object state option for the usage's current state with a value of "Awaiting Data Synch" (C1AS).

Process Plug-in enabled	Available Algorithm(s):	C1-TRANRELSY (Transition Sync Requests with same MO and PKs) C1-TRANUSGPR (Transition Related Usage Requests from Person Sync) (non C2M)
Business Object	Business Object	C1-MDM2PersonSyncRequest (MDM2 Person Sync Request) C1-MDM2SPSyncRequest (MDM2 SP Sync Request) C1-MDM2SASyncRequest (MDM2 SA Sync Request) C1-MDM2BillCycleSyncRequest (MDM2 Bill Cycle Sync Request) C1-MDM2ContractOptSyncRequest (MDM2 Contract Option Sync Request) C1-MDM2ContrOptEvtSyncRequest (MDM2 Contract Option Event Sync Request)
Configuration required	Entities to Configure:	Business Object State Option: Inactive Algorithm - C1-TRANUSGPR (C2M)

Group: Send Master Data Sync Request

Group: Process Negative Acknowledgement

2.7 Update Sync Request to Error State and Create To Do

Actor/Role: C2M(CCB)

Description: The Sync Request is updated to the Error State and a To Do entry is created.

Process Plug-in enabled	Available Algorithm(s):	Algorithm Type: F1-TDCREATE (Generic To Do Entry Creation)						
Business Object	Business Object	<table border="1"> <tr> <td>C1-MDM2PersonSyncRequest (MDM2 Person Sync Request)</td> </tr> <tr> <td>C1-MDM2SPSyncRequest (MDM2 SP Sync Request)</td> </tr> <tr> <td>C1-MDM2SASyncRequest (MDM2 SA Sync Request)</td> </tr> <tr> <td>C1-MDM2BillCycleSyncRequest (MDM2 Bill Cycle Sync Request)</td> </tr> <tr> <td>C1-MDM2ContractOptSyncRequest (MDM2 Contract Option Sync Request)</td> </tr> <tr> <td>C1-MDM2ContrOptEvtSyncRequest (MDM2 Contract Option Event Sync Request)</td> </tr> </table>	C1-MDM2PersonSyncRequest (MDM2 Person Sync Request)	C1-MDM2SPSyncRequest (MDM2 SP Sync Request)	C1-MDM2SASyncRequest (MDM2 SA Sync Request)	C1-MDM2BillCycleSyncRequest (MDM2 Bill Cycle Sync Request)	C1-MDM2ContractOptSyncRequest (MDM2 Contract Option Sync Request)	C1-MDM2ContrOptEvtSyncRequest (MDM2 Contract Option Event Sync Request)
C1-MDM2PersonSyncRequest (MDM2 Person Sync Request)								
C1-MDM2SPSyncRequest (MDM2 SP Sync Request)								
C1-MDM2SASyncRequest (MDM2 SA Sync Request)								
C1-MDM2BillCycleSyncRequest (MDM2 Bill Cycle Sync Request)								
C1-MDM2ContractOptSyncRequest (MDM2 Contract Option Sync Request)								
C1-MDM2ContrOptEvtSyncRequest (MDM2 Contract Option Event Sync Request)								
Configuration required	Entities to Configure:	<table border="1"> <tr> <td>To Do Type (F1-SYNRQ)</td> </tr> <tr> <td>To Do Role</td> </tr> <tr> <td>Characteristic Type (F1-TODO)</td> </tr> </table>	To Do Type (F1-SYNRQ)	To Do Role	Characteristic Type (F1-TODO)			
To Do Type (F1-SYNRQ)								
To Do Role								
Characteristic Type (F1-TODO)								

Group: Process Negative Acknowledgement

2.8 Analyze Errors and Work To Do

Actor/Role: C2M Authorized User

Description: A user is assigned the To Do entry and analyses the Sync Request related error.

Group: Process Negative Acknowledgement

2.9 Request to Cancel Sync Request

Actor/Role: C2M Authorized User

Description: An Authorized User opts to cancel the Sync Request.

Group: Send Master Data Sync Request

Group: Process Negative Acknowledgement

3.0 Complete To Do and Clear Exceptions

Actor/Role: C2M(CCB)

Description: Any To Do entries related to the Sync Request are completed and the Sync Request's exceptions are removed.

Process Plug-in enabled	Available Algorithm(s):	F1-TODOCOMPL (Generic To Do Completion)
		F1-SYNRCLREX (Clear Exceptions on Sync Request)
Business Object	Business Object	C1-MDM2PersonSyncRequest (MDM2 Person Sync Request)
		C1-MDM2SPSyncRequest (MDM2 SP Sync Request)
		C1-MDM2SASyncRequest (MDM2 SA Sync Request)
		C1-MDM2BillCycleSyncRequest (MDM2 Bill Cycle Sync Request)
		C1-MDM2ContractOptSyncRequest (MDM2 Contract Option Sync Request)
		C1-MDM2ContrOptEvtSyncRequest (MDM2 Contract Option Event Sync Request)

Group: Send Master Data Sync Request

Group: Process Negative Acknowledgement

3.1 Cancel Sync Request

Actor/Role: C2M(CCB)

Description: The Sync Request is transitioned to the Cancelled state.

Business Object	Business Object	C1-MDM2PersonSyncRequest (MDM2 Person Sync Request)
		C1-MDM2SPSyncRequest (MDM2 SP Sync Request)
		C1-MDM2SASyncRequest (MDM2 SA Sync Request)
		C1-MDM2BillCycleSyncRequest (MDM2 Bill Cycle Sync Request)
		C1-MDM2ContractOptSyncRequest (MDM2 Contract Option Sync Request)
		C1-MDM2ContrOptEvtSyncRequest (MDM2 Contract Option Event Sync Request)
Configuration required	Entities to Configure:	Business Object State Option: Required Element - cancelReason
		Business Object State Option: State Transition UI Map - F1-SyncReqCancelReasonInput

Group: Process Negative Acknowledgement

3.2 Request to Resend Sync Request

Actor/Role: C2M Authorized User

Description: An Authorized User opts to resend the Sync Request to MDM.

Group: Send Master Data Sync Request

Group: Process Negative Acknowledgement

3.3 Complete To Do and Clear Exceptions

Actor/Role: C2M(CCB)

Description: Any To Do entries related to the Sync Request are completed and the Sync Request's exceptions are removed.

Process Plug-in enabled	Available Algorithm(s):	F1-TODOCOMPL (Generic To Do Completion)
		F1-SYNRCLREX (Clear Exceptions on Sync Request)
Business Object	Business Object	C1-MDM2PersonSyncRequest (MDM2 Person Sync Request)
		C1-MDM2SPSyncRequest (MDM2 SP Sync Request)
		C1-MDM2SASyncRequest (MDM2 SA Sync Request)
		C1-MDM2BillCycleSyncRequest (MDM2 Bill Cycle Sync Request)
		C1-MDM2ContractOptSyncRequest (MDM2 Contract Option Sync Request)
		C1-MDM2ContrOptEvtSyncRequest (MDM2 Contract Option Event Sync Request)

Group: Send Master Data Sync Request

Group: Process Negative Acknowledgement

3.4 Transition Sync Request to Send Request

Actor/Role: C2M(CCB)

Description: The Sync Request is transitioned to the Send Request state.

Group: Ongoing Sync Request Process

3.5 Transform Sync Request Details

Actor/Role: C2M(MDM)

Description: In a Customer to Meter implementation, when an ongoing Inbound Sync Request is created the values in the data being synchronised that are codes are transformed from the CCB code to the MDM code. The Extendable Lookup C2M Mapping Field Values (BO: X1-CCBMDM-MDMCCB-Lookup) is used to transform the codes. Note if no corresponding MDM code is found for a CCB code, no error occurs the untransformed CCB code is used as the MDM code (if this is a problem the error will occur then the object is added or updated later in the synchronisation process).

Process Plug-in enabled	Available Algorithm(s):	X1-TRNCONFLD (Translate Contact-related fields)
Business Object	Business Object	D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request) D1-OngoingSyncRequestContact (Contact Ongoing Sync Request) D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request) D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request) D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request) D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)
Configuration required	Entities to Configure:	Extendable Lookup: X1-CCBMDM-MDMCCB-Lookup (C2M Mapping Field Values)

Group: Ongoing Sync Request Process

3.6 Transition to Data Transformed

Actor/Role: C2M(MDM)

Description: The Inbound Sync Request is transitioned to the Data Transformed state. Note in a non Customer to Meter implementation a monitor process can optionally be used.

Process Plug-in enabled	Available Algorithm(s):	F1-AT-RQJ (Transition to Default Next Status (Java))
		D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request) D1-OngoingSyncRequestContact (Contact Ongoing Sync Request) D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request) D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request) D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request)

Business Object	Business Object	D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)
------------------------	------------------------	--

Customizable process	Process Name:	D1-SIOPE (Ongoing Sync Request - Pending) (non C2M – Optional)
-----------------------------	----------------------	--

Group: Ongoing Sync Request Process
3.7 Determine Target Business Object

Actor/Role: C2M(MDM)

Description: Determines the Business Object to be used to add or update the object in the target application. The Business Object is obtained from a transactional business object recorded on the target object's type. The type is obtained from the data being synchronized recorded in the sync request. The Business Object that is determined is recorded in the Inbound Sync Request.

Process Plug-in enabled	Available Algorithm(s):	F1-AT-RQJ (Transition to Default Next Status (Java))
		D1-DETTARGCN (Determine Sync Request Target BO – Contact)
		D1-SETTRANDT (Setup Transformed Data)

Business Object	Business Object	D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request)
		D1-OngoingSyncRequestContact (Contact Ongoing Sync Request)
		D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request)
		D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request)
		D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request)
		D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)

Group: Ongoing Sync Request Process**3.8 Enter Data Transform Error State and Generate Error****Actor/Role:** C2M(MDM)**Description:** In a Customer to Meter implementation terminate with an error. The error message is retrieved from the latest exception log entry in the Inbound Sync Request.**Process Plug-in enabled****Available Algorithm(s):**

X1-SYNCERROR (Raise Sync Request Error)

Business Object**Business Object**

D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request)

D1-OngoingSyncRequestContact (Contact Ongoing Sync Request)

D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request)

D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request)

D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request)

D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)

Group: Ongoing Sync Request Process**3.9 Enter Data Transform Error State and Create To Do****Actor/Role:** C2M(MDM)**Description:** In a non Customer to Meter implementation create a To Do entry. The To Do Type and Role are obtained from algorithm parameters. The error message is retrieved from the latest exception log entry in the Inbound Sync Request. A log entry is added to the Inbound Sync Request with a reference to the new To Do Entry.**Process Plug-in enabled****Available Algorithm(s):**

D1-TDCREATE (Sync Request To Do Entry Creation)

D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request)

D1-OngoingSyncRequestContact (Contact Ongoing Sync Request)

D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request)

Business Object**Business Object**

D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request)
D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request)
D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)

Group: Ongoing Sync Request Process**4.0 Transition to Pre-Added State****Actor/Role:** C2M(MDM)**Description:** The Inbound Sync Request is transitioned to the Pre-Added state.**Business Object****Business Object**

D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request)
D1-OngoingSyncRequestContact (Contact Ongoing Sync Request)
D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request)
D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request)
D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request)
D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)

Group: Ongoing Sync Request Process**4.1 Pre-Add Object in C2M(MDM)****Actor/Role:** C2M(MDM)

Description: Checks if the object being synchronized already exists in MDM and if not adds a skeleton record with the minimum of details. The Master Configuration "Seeder Sync Request Master Configuration" (Business Object: D1-SeederSyncMasterConfig) is used to obtain the details required to find an existing record in MDM using the identifier of the CCB object being synchronised. Prior to adding a skeleton record any foreign keys in the skeleton record are resolved, that is CCB identifiers are converted to the corresponding MDM identifier. Information record in the Master Configuration "Master Data Synchronization Configuration" (Business Object: F1-SyncCfgBO) is used in resolving any foreign keys. Note the target object's business object should have an "Synchronization Add BO" option that records the Business Object to be used to add the skeleton record.

Process Plug-in enabled**Available Algorithm(s):**

F1-AT-RQJ (Transition to Default Next Status (Java))
D1-SR-PREADD (Sync Request Pre-Add Data)

Business Object**Business Object**

D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request)
D1-OngoingSyncRequestContact (Contact Ongoing Sync Request)
D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request)
D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request)
D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request)
D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)

Configuration required**Entities to Configure:**

Master Configuration: D1-SeederSyncMasterConfig (Seeder Sync Request Master Configuration)
Master Configuration: F1-SyncCfgBO (Master Data Synchronization Configuration)

Group: Ongoing Sync Request Process**[4.2](#) Enter Pre-Add Error State and Generate Error****Actor/Role:** C2M(MDM)**Description:** In a Customer to Meter implementation terminate with an error. The error message is retrieved from the latest exception log entry in the Inbound Sync Request.**Process Plug-in enabled****Available Algorithm(s):**

X1-SYNCERROR (Raise Sync Request Error)

D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request)
D1-OngoingSyncRequestContact (Contact Ongoing Sync Request)
D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request)
D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request)
D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request)

Business Object**Business Object**

D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)

Group: Ongoing Sync Request Process**4.3 Enter Pre-Add Error State and Create To Do****Actor/Role:** C2M(MDM)

Description: In a non Customer to Meter implementation create a To Do entry. The To Do Type and Role are obtained from algorithm parameters. The error message is retrieved from the latest exception log entry in the Inbound Sync Request. A log entry is added to the Inbound Sync Request with a reference to the new To Do Entry.

Process Plug-in enabled**Available Algorithm(s):**

D1-TDCREATE (Sync Request To Do Entry Creation)

Business Object**Business Object**

D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request)

D1-OngoingSyncRequestContact (Contact Ongoing Sync Request)

D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request)

D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request)

D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request)

D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)

Group: Ongoing Sync Request Process**4.4 Transition to FKs Resolved****Actor/Role:** C2M(MDM)

Description: The Inbound Sync Request is transitioned to the FKs Resolved state

Business Object**Business Object**

D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request)
D1-OngoingSyncRequestContact (Contact Ongoing Sync Request)
D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request)
D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request)
D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request)
D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)

Group: Ongoing Sync Request Process**4.5 Resolve Foreign Keys**

Actor/Role: C2M(MDM)

Description: The foreign keys in the data being synchronized are converted from identifiers to a CCB object to the identifier of the corresponding object in MDM. The identifiers are converted using the Master Configuration "Master Data Synchronization Configuration" (Business Object: F1-SyncCfgBO). The Inbound Sync Request is updated with the converted values.

Process Plug-in enabled**Available Algorithm(s):**

F1-AT-RQJ (Transition to Default Next Status (Java))
D1-RESKEYFAL (Resolve Keys - Ongoing Sync)

Business Object**Business Object**

D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request)
D1-OngoingSyncRequestContact (Contact Ongoing Sync Request)
D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request)
D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request)
D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request)
D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)

Configuration required**Entities to Configure:**

Master Configuration: F1-SyncCfgBO (Master Data Synchronization Configuration)
--

Group: Ongoing Sync Request Process**4.6 Enter FK Resolution Error State and Generate Error****Actor/Role:** C2M(MDM)**Description:** In a Customer to Meter implementation terminate with an error. The error message is retrieved from the latest exception log entry in the Inbound Sync Request.**Process Plug-in enabled****Available Algorithm(s):**

X1-SYNCERROR (Raise Sync Request Error)

Business Object**Business Object**

D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request)
D1-OngoingSyncRequestContact (Contact Ongoing Sync Request)
D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request)
D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request)
D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request)
D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)

Group: Ongoing Sync Request Process**4.7 Enter FK Resolution Error State and Create To Do****Actor/Role:** C2M(MDM)**Description:** In a non Customer to Meter implementation create a To Do entry. The To Do Type and Role are obtained from algorithm parameters. The error message is retrieved from the latest exception log entry in the Inbound Sync Request. A log entry is added to the Inbound Sync Request with a reference to the new To Do Entry.**Process Plug-in enabled****Available Algorithm(s):**

D1-TDCREATE (Sync Request To Do Entry Creation)

Business Object**Business Object**

D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request)
D1-OngoingSyncRequestContact (Contact Ongoing Sync Request)
D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request)
D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request)
D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request)
D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)

Group: Ongoing Sync Request Process**4.8 Transition to Updating****Actor/Role:** C2M(MDM)**Description:** The Inbound Sync Request is transitioned to the Updating state**Business Object****Business Object**

D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request)
D1-OngoingSyncRequestContact (Contact Ongoing Sync Request)
D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request)
D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request)
D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request)
D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)

Group: Ongoing Sync Request Process**4.9 Update Data in MDM****Actor/Role:** C2M(MDM)**Description:** The target object in MDM is updated with the transformed detailed in the Inbound Sync Request.**Process Plug-in enabled****Available Algorithm(s):**

F1-AT-RQJ (Transition to Default Next Status (Java))
D1-SR-UPDDAT (Sync Request Update Data)

Business Object

Business Object

D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request)
D1-OngoingSyncRequestContact (Contact Ongoing Sync Request)
D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request)
D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request)
D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request)
D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)

Group: Ongoing Sync Request Process

5.0 Enter Updating Error State and Generate Error

Actor/Role: C2M(MDM)

Description: In a Customer to Meter implementation terminate with an error. The error message is retrieved from the latest exception log entry in the Inbound Sync Request.

Process Plug-in enabled

Available Algorithm(s):

X1-SYNCEERROR (Raise Sync Request Error)
--

Business Object

Business Object

D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request)
D1-OngoingSyncRequestContact (Contact Ongoing Sync Request)
D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request)
D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request)
D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request)
D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)

Group: Ongoing Sync Request Process

5.1 Enter Updating Error State and Create To Do

Actor/Role: C2M(MDM)

Description: In a non Customer to Meter implementation create a To Do entry. The To Do Type and Role are obtained from algorithm parameters. The error message is retrieved from the latest exception log entry in the Inbound Sync Request. A log entry is added to the Inbound Sync Request with a reference to the new To Do Entry.

Process Plug-in enabled	Available Algorithm(s):	D1-TDCREATE (Sync Request To Do Entry Creation)
--------------------------------	--------------------------------	---

Business Object	Business Object	D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request)
		D1-OngoingSyncRequestContact (Contact Ongoing Sync Request)
		D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request)
		D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request)
		D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request)
		D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)

Group: Ongoing Sync Request Process

5.2 Transition to Additional Processing

Actor/Role: C2M(MDM)

Description: The Inbound Sync Request is transitioned to the Additional Processing state

Business Object	Business Object	D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request)
		D1-OngoingSyncRequestContact (Contact Ongoing Sync Request)
		D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request)
		D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request)
		D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request)
		D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)

Group: Ongoing Sync Request Process

5.3 Perform Additional Processing

Actor/Role: C2M(MDM)

Description: Any implementation specific additional processing is performed.

Process Plug-in enabled	Available Algorithm(s):	F1-AT-RQJ (Transition to Default Next Status (Java))
--------------------------------	--------------------------------	--

Business Object	Business Object	D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request)
		D1-OngoingSyncRequestContact (Contact Ongoing Sync Request)
		D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request)
		D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request)
		D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request)
		D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)

Group: Ongoing Sync Request Process

5.4 Enter Additional Processing Error State and Generate Error

Actor/Role: C2M(MDM)

Description: In a Customer to Meter implementation terminate with an error. The error message is retrieved from the latest exception log entry in the Inbound Sync Request.

Process Plug-in enabled	Available Algorithm(s):	X1-SYNCERROR (Raise Sync Request Error)
--------------------------------	--------------------------------	---

Business Object**Business Object**

D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request)
D1-OngoingSyncRequestContact (Contact Ongoing Sync Request)
D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request)
D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request)
D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request)
D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)

Group: Ongoing Sync Request Process**5.5 Enter Additional Processing Error State and Create To Do****Actor/Role:** C2M(MDM)

Description: In a non Customer to Meter implementation create a To Do entry. The To Do Type and Role are obtained from algorithm parameters. The error message is retrieved from the latest exception log entry in the Inbound Sync Request. A log entry is added to the Inbound Sync Request with a reference to the new To Do Entry.

Process Plug-in enabled**Available Algorithm(s):**

D1-TDCREATE (Sync Request To Do Entry Creation)

Business Object**Business Object**

D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request)
D1-OngoingSyncRequestContact (Contact Ongoing Sync Request)
D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request)
D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request)
D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request)
D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)

Group: Ongoing Sync Request Process**5.6 Transition to Synchronized****Actor/Role:** C2M(MDM)

Description: The Inbound Sync Request is transitioned to the Synchronized state

Business Object**Business Object**

D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request)
D1-OngoingSyncRequestContact (Contact Ongoing Sync Request)
D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request)
D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request)
D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request)
D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)

Group: Ongoing Sync Request Process**5.7 Send Positive Acknowledgement****Actor/Role:** C2M(MDM)

Description: If this is not a Customer to Meter implementation an outbound message is sent to CCB to indicate that the synchronization has been successful. The outbound message's External System is obtained from the Inbound Sync Request. The Outbound Message Type is obtained from the "Outbound Message Type" option of the Inbound Sync Request's Business Object. The details of the message include the Inbound Sync Request's external reference identifier (this is the identifier of the CCB Sync Request). Note in CCB the absence of any exception details in the message indicates that the synchronization was successful. A log entry is added to the Inbound Sync Request with a reference to the outbound message (if the outbound message is set up to persist).

Process Plug-in enabled**Available Algorithm(s):**

D1-CREPOSACK (Create Positive Acknowledgement)

Business Object**Business Object**

D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request)
D1-OngoingSyncRequestContact (Contact Ongoing Sync Request)
D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request)
D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request)
D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request)
D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)

Group: Ongoing Sync Request Process

5.8 Inbound Sync Request Completed

Actor/Role: C2M(MDM)

Description: In a Customer to Meter implementation no outbound message is created instead the processing of the Inbound Sync Request ends and the process returns to the Sync Request.

Business Object

Business Object

D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request)
D1-OngoingSyncRequestContact (Contact Ongoing Sync Request)
D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request)
D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request)
D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request)
D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)

Configuration required

Entities to Configure:

Business Object State Option: Inactive Algorithm - D1-CREPOSACK

Group: Initial Sync Request Process

5.9 Monitor Transition Pending Sync Requests

Actor/Role: C2M(MDM)

Description: The batch process “Sync Request Monitor (Deferred)” (Batch Control: F1-SYSRQ) monitors initial Inbound Sync Requests that are Pending and invokes their monitor algorithms.

Business Object	Business Object	D1-InitialSyncRequestContact (Contact Initial Sync Request)
		D2-InitialSyncRequestDynOpt (Dynamic Option Initial Sync Request)
		D2-InitialSyncRequestDynOptEvt (Dynamic Option Event Initial Sync Request)
		D2-InitialSyncRequestUS (Usage Subscription Initial Sync Request)
		D1-InitialSyncRequestSP (Service Point Initial Sync Request)

Customizable process	Process Name:	F1-SYSRQ (Sync Request Monitor (Deferred))
-----------------------------	----------------------	--

Group: Initial Sync Request Process**[6.0](#) Transition to Transformed/Schema Validated****Actor/Role:** C2M(MDM)**Description:** The Inbound Sync Request is transitioned to the Transformed/Schema Validated state.

Process Plug-in enabled	Available Algorithm(s):	F1-AT-RQJ (Transition to Default Next Status (Java))
--------------------------------	--------------------------------	--

Business Object	Business Object	D1-InitialSyncRequestContact (Contact Initial Sync Request)
		D2-InitialSyncRequestDynOpt (Dynamic Option Initial Sync Request)
		D2-InitialSyncRequestDynOptEvt (Dynamic Option Event Initial Sync Request)
		D2-InitialSyncRequestUS (Usage Subscription Initial Sync Request)
		D1-InitialSyncRequestSP (Service Point Initial Sync Request)

Group: Initial Sync Request Process**[6.1](#) Check for Existing Inbound Sync Request****Actor/Role:** C2M(MDM)**Description:** Check if there is another Inbound Sync Request for the same External System, Maintenance Object and primary key. If there is the Inbound Sync Request is transitioned to the Validation Error state.

Process Plug-in enabled	Available Algorithm(s):	D1-CHKSREXST (Check Inbound Sync Request existence)
--------------------------------	--------------------------------	---

Business Object**Business Object**

D1-InitialSyncRequestContact (Contact Initial Sync Request)
D2-InitialSyncRequestDynOpt (Dynamic Option Initial Sync Request)
D2-InitialSyncRequestDynOptEvt (Dynamic Option Event Initial Sync Request)
D2-InitialSyncRequestUS (Usage Subscription Initial Sync Request)
D1-InitialSyncRequestSP (Service Point Initial Sync Request)

Group: Initial Sync Request Process**6.2 Transition Request to Validation Error and Log Error****Actor/Role:** C2M(MDM)**Description:** The error is record in the Inbound Sync Request as an exception and the Inbound Sync Request is transitioned to the Validation Error state.**Business Object****Business Object**

D1-InitialSyncRequestContact (Contact Initial Sync Request)
D2-InitialSyncRequestDynOpt (Dynamic Option Initial Sync Request)
D2-InitialSyncRequestDynOptEvt (Dynamic Option Event Initial Sync Request)
D2-InitialSyncRequestUS (Usage Subscription Initial Sync Request)
D1-InitialSyncRequestSP (Service Point Initial Sync Request)

Group: Initial Sync Request Process**6.3 Determine Target Business Object and Validate Schema****Actor/Role:** C2M(MDM)**Description:** Determine the Business Object to be used to add or update the object in MDM and validate the details to be synchronized using this Business Object.**Process Plug-in enabled****Available Algorithm(s):**

D1-DETTARGCN (Determine Sync Request Target BO - Contact)
D1-SETTRANDT (Setup Transformed Data)
D1-VALSCHTRU (Validate Schema)

Business Object**Business Object**

D1-InitialSyncRequestContact (Contact Initial Sync Request)
D2-InitialSyncRequestDynOpt (Dynamic Option Initial Sync Request)
D2-InitialSyncRequestDynOptEvt (Dynamic Option Event Initial Sync Request)
D2-InitialSyncRequestUS (Usage Subscription Initial Sync Request)
D1-InitialSyncRequestSP (Service Point Initial Sync Request)

Group: Initial Sync Request Process**6.4 Pre-Allocate Keys****Actor/Role:** C2M(MDM)

Description: The batch process “Sync Request Allocate Keys Monitor” (Batch Control: F1- F1-SAKRQ) monitors initial Inbound Sync Requests that are in the Transformed/Schema Validated state and pre-allocates the target objects key. The process then invokes the monitor algorithms for the Inbound Sync Request’s current state.

Business Object**Business Object**

D1-InitialSyncRequestContact (Contact Initial Sync Request)
D2-InitialSyncRequestDynOpt (Dynamic Option Initial Sync Request)
D2-InitialSyncRequestDynOptEvt (Dynamic Option Event Initial Sync Request)
D2-InitialSyncRequestUS (Usage Subscription Initial Sync Request)
D1-InitialSyncRequestSP (Service Point Initial Sync Request)

Customizable process**Process Name:**

F1-SAKRQ (Sync Request Allocate Keys Monitor)

Group: Initial Sync Request Process**6.5 Transition to Key Allocated****Actor/Role:** C2M(MDM)

Description: The Inbound Sync Request is transitioned to the Key Allocated state.

Process Plug-in enabled**Available Algorithm(s):**

F1-AT-RQJ (Transition to Default Next Status (Java))

Business Object**Business Object**

D1-InitialSyncRequestContact (Contact Initial Sync Request)
D2-InitialSyncRequestDynOpt (Dynamic Option Initial Sync Request)
D2-InitialSyncRequestDynOptEvt (Dynamic Option Event Initial Sync Request)
D2-InitialSyncRequestUS (Usage Subscription Initial Sync Request)
D1-InitialSyncRequestSP (Service Point Initial Sync Request)

Group: Initial Sync Request Process**6.6 Monitor Key Allocated Sync Requests****Actor/Role:** C2M(MDM)**Description:** The batch process “Initial Request-Resolve Keys Contact” (Batch Control: D1-SIKCN) monitors initial Inbound Sync Requests that are in the Key Allocated state and invokes their monitor algorithms.**Business Object****Business Object**

D1-InitialSyncRequestContact (Contact Initial Sync Request)
D2-InitialSyncRequestDynOpt (Dynamic Option Initial Sync Request)
D2-InitialSyncRequestDynOptEvt (Dynamic Option Event Initial Sync Request)
D2-InitialSyncRequestUS (Usage Subscription Initial Sync Request)
D1-InitialSyncRequestSP (Service Point Initial Sync Request)

Customizable process**Process Name:**

D1-SIKCN (Initial Request-Resolve Keys Contact)

Group: Initial Sync Request Process**6.7 Transition to Keys Resolved/BO Validated****Actor/Role:** C2M(MDM)**Description:** The Inbound Sync Request is transitioned to the Keys Resolved/BO Validated state.**Process Plug-in enabled****Available Algorithm(s):**

F1-AT-RQJ (Transition to Default Next Status (Java))

Business Object**Business Object**

D1-InitialSyncRequestContact (Contact Initial Sync Request)
D2-InitialSyncRequestDynOpt (Dynamic Option Initial Sync Request)
D2-InitialSyncRequestDynOptEvt (Dynamic Option Event Initial Sync Request)
D2-InitialSyncRequestUS (Usage Subscription Initial Sync Request)
D1-InitialSyncRequestSP (Service Point Initial Sync Request)

Group: Initial Sync Request Process**6.8 Resolve Keys and Perform Validation Algorithms****Actor/Role:** C2M(MDM)

Description: Any foreign keys in the data to be synchronized are converted from an identifier of a CCB record to the identifier of the corresponding MDM record. Information recorded in the Master Configuration "Master Data Synchronization Configuration" (Business Object: F1-SyncCfgBO) is used to do this conversion. After the foreign keys have been resolved the data to be synchronized is validated using the target object's validation algorithms.

Process Plug-in enabled**Available Algorithm(s):**

D1-RESKEYTRU (Resolve Keys - Initial Sync)
D1-VALSYNCBO (Perform BO Validation)

Business Object**Business Object**

D1-InitialSyncRequestContact (Contact Initial Sync Request)
D2-InitialSyncRequestDynOpt (Dynamic Option Initial Sync Request)
D2-InitialSyncRequestDynOptEvt (Dynamic Option Event Initial Sync Request)
D2-InitialSyncRequestUS (Usage Subscription Initial Sync Request)
D1-InitialSyncRequestSP (Service Point Initial Sync Request)

Configuration required**Entities to Configure:**

Master Configuration: F1-SyncCfgBO (Master Data Synchronization Configuration)
--

Group: Initial Sync Request Process**6.9 Transition Request to Resolution/BO Validation Error and Log Error****Actor/Role:** C2M(MDM)

Description: The error is record in the Inbound Sync Request as an exception and the Inbound Sync Request is transitioned to the Resolution/BO Validation Error state.

Process Plug-in enabled	Available Algorithm(s):	D1-GENTRIETR (Skip Monitoring for Key Resolution Error before Initial Iteration)
--------------------------------	--------------------------------	--

Business Object	Business Object	D1-InitialSyncRequestContact (Contact Initial Sync Request)
		D2-InitialSyncRequestDynOpt (Dynamic Option Initial Sync Request)
		D2-InitialSyncRequestDynOptEvt (Dynamic Option Event Initial Sync Request)
		D2-InitialSyncRequestUS (Usage Subscription Initial Sync Request)
		D1-InitialSyncRequestSP (Service Point Initial Sync Request)

Group: Initial Sync Request Process

7.0 Add Target Object

Actor/Role: C2M(MDM)

Description: The batch process “Initial Sync Request - Load Data Contact” (Batch Control: D1-SILCN) adds the target object for the initial Inbound Sync Requests that are in the Keys Resolved/BO Validated state. The Inbound Sync Requests are then transitioned to the next default state.

Business Object	Business Object	D1-InitialSyncRequestContact (Contact Initial Sync Request)
		D2-InitialSyncRequestDynOpt (Dynamic Option Initial Sync Request)
		D2-InitialSyncRequestDynOptEvt (Dynamic Option Event Initial Sync Request)
		D2-InitialSyncRequestUS (Usage Subscription Initial Sync Request)
		D1-InitialSyncRequestSP (Service Point Initial Sync Request)

Customizable process	Process Name:	D1-SILCN (Initial Sync Request - Load Data Contact)
-----------------------------	----------------------	---

Group: Initial Sync Request Process

7.1 Transition to Loaded

Actor/Role: C2M(MDM)

Description: The Inbound Sync Request enters the Loaded state.

Business Object	Business Object
	D1-InitialSyncRequestContact (Contact Initial Sync Request)
	D2-InitialSyncRequestDynOpt (Dynamic Option Initial Sync Request)
	D2-InitialSyncRequestDynOptEvt (Dynamic Option Event Initial Sync Request)
	D2-InitialSyncRequestUS (Usage Subscription Initial Sync Request)
	D1-InitialSyncRequestSP (Service Point Initial Sync Request)

Group: Sync Request Seeder Exception Process

7.2 Analyze Error

Actor/Role: C2M Authorized User

Description: A user analyzes the seeder Inbound Sync Request related error and performs the necessary actions to resolve the error.

Group: Sync Request Seeder Exception Process

7.3 Monitor Error Sync Request Seeders

Actor/Role: C2M(MDM)

Description: The batch process “Sync Request Seeder - Error” (Batch Control: F1- D1-SRSDE) monitors seeder Inbound Sync Requests that are in the Error state and invokes their monitor algorithms.

Business Object	Business Object
	D1-SyncRequestSeeder (Sync Request Seeder)
	D1-InboundSyncRequestError (Inbound Sync Request Error)

Customizable process	Process Name:
	D1-SRSDE (Sync Request Seeder - Error)

Group: Sync Request Seeder Exception Process

7.4 Transition to Reprocessed

Actor/Role: C2M(MDM)

Description: The seeder Inbound Sync Request is transitioned to the Reprocessed state. Any exceptions recorded on the Inbound Sync Request are removed.

Process Plug-in enabled	Available Algorithm(s):	D1-SETCLEXCP (Set Clear Exception Flag to true)
		F1-AT-RQJ (Transition to Default Next Status (Java))
		D1-CLEAREXC (Sync Request Clear Exception)
Business Object	Business Object	D1-SyncRequestSeeder (Sync Request Seeder)
		D1-InboundSyncRequestError (Inbound Sync Request Error)

Group: Sync Request Seeder Exception Process

7.5 Add New Inbound Sync Request

Actor/Role: C2M(MDM)

Description: The seeder Inbound Sync Request enters the Reprocessed state and attempts to create a new Inbound Sync Request with the same details as the seeder Inbound Sync Request. During the creation of the new Inbound Sync Request the Business Object is obtained from the Master Configuration "Seeder Sync Request Master Configuration" (BO: D1-SeederSyncMasterConfig) using the External System, Maintenance Object and Initial Load indicator copied from the seeder to the new Inbound Sync Request.

Process Plug-in enabled	Available Algorithm(s):	D1-SR-CRSEED (Instantiate a Sync Request Seeder)
		D1-SETCMPIND (Set Composite Indicator Value)
		D1-REPRINSY (Reprocess Inbound Sync Request)
		D1-DETSYNRBO (Determine Sync Request BO)
Business Object	Business Object	D1-SyncRequestSeeder (Sync Request Seeder)
		D1-InboundSyncRequestError (Inbound Sync Request Error)
Configuration required	Entities to Configure:	Master Configuration: D1-SeederSyncMasterConfig (Seeder Sync Request Master Configuration)

Group: Sync Request Pre-processing

7.6 Rollback to Error state**Actor/Role:** C2M(MDM)**Description:** If an error occurs when attempting to add a new Inbound Sync Request the processing that has been performed is rolled back, that is a new Inbound Sync Request is not created and the seeder Inbound Sync Request returns to the Error state.**Group: Sync Request Seeder Error Exception Process****7.7 Request to Discard Sync Request Seeder****Actor/Role:** C2M Authorized User**Description:** User opts to discard the seeder Inbound Sync Request.**Group: Sync Request Seeder Error Exception Process****7.8 Clear Exceptions****Actor/Role:** C2M(MDM)**Description:** The exceptions recorded in the Inbound Sync Request are removed.

Process Plug-in enabled	Available Algorithm(s):	D1-CLEAREXC (Sync Request Clear Exception)
Business Object	Business Object	D1-SyncRequestSeeder (Sync Request Seeder)
		D1-InboundSyncRequestError (Inbound Sync Request Error)

Group: Sync Request Seeder Error Exception Process**7.9 Transition Sync Request Seeder to Discard****Actor/Role:** C2M(MDM)**Description:** Inbound Sync Request Seeder enters the Discard state. The Inbound Sync Request is updated to indicate that it should be excluded from future checks for duplicate Inbound Sync Requests.

Process Plug-in enabled	Available Algorithm(s):	D1-SETCMPIND (Set Composite Indicator Value)
--------------------------------	--------------------------------	--

Business Object**Business Object**

D1-SyncRequestSeeder (Sync Request Seeder)
D1-InboundSyncRequestError (Inbound Sync Request Error)

Group: Sync Request Seeder Error Exception Process**8.0 Request to Cancel Sync Request****Actor/Role:** C2M Authorized User**Description:** A user opts to cancel the Sync Request that is in the Awaiting Acknowledgement state.**Group: Sync Request Seeder Error Exception Process****8.1 Cancel Sync Request****Actor/Role:** C2M(CCB)**Description:** The Sync Request is transitioned from the Awaiting Acknowledgement state to the Cancelled state.**Business Object****Business Object**

C1-MDM2PersonSyncRequest (MDM2 Person Sync Request)
C1-MDM2SPSyncRequest (MDM2 SP Sync Request)
C1-MDM2SASyncRequest (MDM2 SA Sync Request)
C1-MDM2BillCycleSyncRequest (MDM2 Bill Cycle Sync Request)
C1-MDM2ContractOptSyncRequest (MDM2 Contract Option Sync Request)
C1-MDM2ContrOptEvtSyncRequest (MDM2 Contract Option Event Sync Request)

Configuration required**Entities to Configure:**

Business Object State Option: Required Element - cancelReason
Business Object State Option: State Transition UI Map - F1-SyncReqCancelReasonInput

Group: Sync Request Seeder Error Exception Process**8.2 Request to Resend Sync Request****Actor/Role:** C2M Authorized User**Description:** A user opts to resend to MDM the Sync Request that is in the Awaiting Acknowledgement state.

Group: Sync Request Seeder Error Exception Process**8.3 Transition Sync Request to Send Request****Actor/Role:** C2M(CCB)**Description:** The Sync Request is transitioned from the Awaiting Acknowledgement state to the Send Request state.**Business Object****Business Object**

C1-MDM2PersonSyncRequest (MDM2 Person Sync Request)
C1-MDM2SPSyncRequest (MDM2 SP Sync Request)
C1-MDM2SASyncRequest (MDM2 SA Sync Request)
C1-MDM2BillCycleSyncRequest (MDM2 Bill Cycle Sync Request)
C1-MDM2ContractOptSyncRequest (MDM2 Contract Option Sync Request)
C1-MDM2ContrOptEvtSyncRequest (MDM2 Contract Option Event Sync Request)

Group: Data Transform Error Exception Process**8.4 Analyze Errors and Work To Do****Actor/Role:** C2M Authorized User**Description:** A user is assigned the To Do entry and analyses the Inbound Sync Request related error.**Group: Data Transform Error Exception Process****8.5 Request to Send Negative Acknowledgement****Actor/Role:** C2M Authorized User**Description:** A user opts to send a negative acknowledgement to CCB for an Inbound Sync Request that is in the Data Transform Error state.**Group: Data Transform Error Exception Process****8.6 Complete To Do and Clear Exceptions****Actor/Role:** C2M(MDM)**Description:** For an Inbound Sync Request in the Data Transform Error state any related To Do entries are completed and the Inbound Sync Request's exceptions are removed.

Process Plug-in enabled**Available Algorithm(s):**

D1-GENTRITTR (Skip Monitoring for Validation Error after Initial Iteration)
D1-TODOCOMPL (Generic To Do Completion)
D1-CLEAREXCP (Sync Request Clear Exception)

Business Object**Business Object**

D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request)
D1-OngoingSyncRequestContact (Contact Ongoing Sync Request)
D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request)
D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request)
D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request)
D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)

Group: Data Transform Error Exception Process**8.7 Send Negative Acknowledgement****Actor/Role:** C2M(MDM)**Description:** If this is not a Customer to Meter implementation an outbound message is sent to CCB to indicate that the synchronization has not been successful.**Process Plug-in enabled****Available Algorithm(s):**

D1-CRENEGACK (Create Negative Acknowledgement)
--

Business Object**Business Object**

D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request)
D1-OngoingSyncRequestContact (Contact Ongoing Sync Request)
D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request)
D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request)
D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request)
D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)

Configuration required**Entities to Configure:**

Business Object Option: Inactive Algorithm - D1-CRENEGACK (C2M)

Group: Data Transform Error Exception Process**8.8 Monitor Inbound Sync Requests in Error****Actor/Role:** C2M(MDM)**Description:** The batch process "Ongoing Sync Request - Error" (Batch Control: D1-SIOER) monitors Inbound Sync Requests that are in one of the error states and invokes their monitor algorithms.**Business Object****Business Object**

D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request)
--

D1-OngoingSyncRequestContact (Contact Ongoing Sync Request)

D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request)

D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request)
--

D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request)

D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)
--

Customizable process**Process Name:**

D1-SIOER (Ongoing Sync Request - Error)

Group: Data Transform Error Exception Process**8.9 Evaluate Retry Criteria****Actor/Role:** C2M(MDM)**Description:** If the period of time indicated in the "To Do Retry Frequency" business object state option of the Inbound Sync Request in the Data Transform Error state has elapsed check if the count of retries is greater than the "To Do Maximum Retries" business object state option.**Process Plug-in enabled****Available Algorithm(s):**

D1-GENTRDVLE (Sync Request Transition Determinant for Validation Error)

D1-SETCLEXCP (Set Clear Exception Flag to true)

D1-TODORETRY (Sync Request Retry for To Do's)

D1-TRANTONEG (Do Not Clear Exceptions and Transition to Negative State)

Business Object**Business Object**

D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request)
D1-OngoingSyncRequestContact (Contact Ongoing Sync Request)
D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request)
D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request)
D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request)
D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)

Configuration required**Entities to Configure:**

Business Object State Option: To Do Maximum Retries
Business Object State Option: To Do Retry Frequency

Group: Data Transform Error Exception Process**9.0 Transition to Data Transformed****Actor/Role:** C2M(MDM)**Description:** Transition the Inbound Sync Request to the Data Transformed state.**Group: Pre-Add Error Exception Process****9.1 Request to Send Negative Acknowledgement****Actor/Role:** C2M Authorized User**Description:** A user opts to send a negative acknowledgement to CCB for an Inbound Sync Request that is in the Pre-Add Error state.**Group: Pre-Add Error Exception Process****9.2 Complete To Do and Clear Exceptions****Actor/Role:** C2M(MDM)**Description:** For an Inbound Sync Request in the Pre-Add Error state any related To Do entries are completed and the Inbound Sync Request's exceptions are removed.

Process Plug-in enabled**Available Algorithm(s):**

D1-GENTRITTR (Skip Monitoring for Validation Error after Initial Iteration)
D1-TODOCOMPL (Generic To Do Completion)
D1-CLEAREXCP (Sync Request Clear Exception)

Business Object**Business Object**

D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request)
D1-OngoingSyncRequestContact (Contact Ongoing Sync Request)
D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request)
D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request)
D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request)
D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)

Group: Pre-Add Error Exception Process**9.3 Evaluate Retry Criteria****Actor/Role:** C2M(MDM)**Description:** If the period of time indicated in the "To Do Retry Frequency" business object state option of the Inbound Sync Request in the Pre-Add Error state has elapsed check if the count of retries is greater than the "To Do Maximum Retries" business object state option.**Process Plug-in enabled****Available Algorithm(s):**

D1-GENTRDVLE (Sync Request Transition Determinant for Validation Error)
D1-SETCLEXCP (Set Clear Exception Flag to true)
D1-TODORETRY (Sync Request Retry for To Do's)
D1-TRANTONEG (Do Not Clear Exceptions and Transition to Negative State)

Business Object**Business Object**

D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request)
D1-OngoingSyncRequestContact (Contact Ongoing Sync Request)
D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request)
D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request)
D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request)
D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)

Configuration required**Entities to Configure:**

Business Object State Option: To Do Maximum Retries
Business Object State Option: To Do Retry Frequency

Group: Pre-Add Error Exception Process**9.4 Transition to Pre-Added****Actor/Role:** C2M(MDM)**Description:** Transition the Inbound Sync Request to the Pre-Added state.**Group: FK Resolution Error Exception Process****9.5 Request to Send Negative Acknowledgement****Actor/Role:** C2M Authorized User**Description:** A user opts to send a negative acknowledgement to CCB for an Inbound Sync Request that is in the FK Resolution Error state.**Group: FK Resolution Error Exception Process****9.6 Complete To Do and Clear Exceptions****Actor/Role:** C2M(MDM)**Description:** For an Inbound Sync Request in the FK Resolution Error state any related To Do entries are completed and the Inbound Sync Request's exceptions are removed.**Process Plug-in enabled****Available Algorithm(s):**

D1-GENTRITTR (Skip Monitoring for Validation Error after Initial Iteration)
D1-TODOCOMPL (Generic To Do Completion)
D1-CLEAREXCP (Sync Request Clear Exception)

Business Object**Business Object**

D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request)
D1-OngoingSyncRequestContact (Contact Ongoing Sync Request)
D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request)
D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request)
D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request)
D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)

Group: FK Resolution Error Exception Process**9.7 Evaluate Retry Criteria****Actor/Role:** C2M(MDM)**Description:** If the period of time indicated in the "To Do Retry Frequency" business object state option of the Inbound Sync Request in the FK Resolution Error state has elapsed check if the count of retries is greater than the "To Do Maximum Retries" business object state option.**Process Plug-in enabled****Available Algorithm(s):**

D1-GENTRDVLE (Sync Request Transition Determinant for Validation Error)
D1-SETCLEXCP (Set Clear Exception Flag to true)
D1-TODORETRY (Sync Request Retry for To Do's)
D1-TRANTONEG (Do Not Clear Exceptions and Transition to Negative State)

Business Object**Business Object**

D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request)
D1-OngoingSyncRequestContact (Contact Ongoing Sync Request)
D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request)
D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request)
D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request)
D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)

Configuration required**Entities to Configure:**

Business Object State Option: To Do Maximum Retries
Business Object State Option: To Do Retry Frequency

Group: FK Resolution Error Exception Process

9.8 Transition to FKs Resolved

Actor/Role: C2M(MDM)

Description: Transition the Inbound Sync Request to the FKs Resolved state.

Group: Update Error Exception Process

9.9 Request to Send Negative Acknowledgement

Actor/Role: C2M Authorized User

Description: A user opts to send a negative acknowledgement to CCB for an Inbound Sync Request that is in the Updating Error state.

Group: Update Error Exception Process

10.0 Complete To Do and Clear Exceptions

Actor/Role: C2M(MDM)

Description: For an Inbound Sync Request in the Updating Error state any related To Do entries are completed and the Inbound Sync Request's exceptions are removed.

Process Plug-in enabled

Available Algorithm(s):

D1-GENTRITTR (Skip Monitoring for Validation Error after Initial Iteration)
D1-TODOCOMPL (Generic To Do Completion)
D1-CLEAREXCP (Sync Request Clear Exception)

Business Object

Business Object

D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request)
D1-OngoingSyncRequestContact (Contact Ongoing Sync Request)
D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request)
D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request)
D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request)
D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)

Group: Update Error Exception Process**10.1 Evaluate Retry Criteria****Actor/Role:** C2M(MDM)**Description:** If the period of time indicated in the "To Do Retry Frequency" business object state option of the Inbound Sync Request in the Update Error state has elapsed check if the count of retries is greater than the "To Do Maximum Retries" business object state option.**Process Plug-in enabled****Available Algorithm(s):**

D1-GENTRDVLE (Sync Request Transition Determinant for Validation Error)
D1-SETCLEXCP (Set Clear Exception Flag to true)
D1-TODORETRY (Sync Request Retry for To Do's)
D1-TRANTONEG (Do Not Clear Exceptions and Transition to Negative State)

Business Object**Business Object**

D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request)
D1-OngoingSyncRequestContact (Contact Ongoing Sync Request)
D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request)
D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request)
D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request)
D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)

Configuration required**Entities to Configure:**

Business Object State Option: To Do Maximum Retries
Business Object State Option: To Do Retry Frequency

Group: Update Error Exception Process**10.2 Transition to Data Updating****Actor/Role:** C2M(MDM)**Description:** Transition the Inbound Sync Request to the Updating state.

Group: Additional Processing Error Exception Process**10.3 Request to Synchronize with Error****Actor/Role:** C2M Authorized User**Description:** A user opts to the Synchronized with Error state which will send a positive acknowledgement to CCB.**Group: Additional Processing Error Exception Process****10.4 Complete To Do and Clear Exceptions****Actor/Role:** C2M(MDM)**Description:** For an Inbound Sync Request in the Additional Processing Error state any related To Do entries are completed and the Inbound Sync Request's exceptions are removed.**Process Plug-in enabled****Available Algorithm(s):**

D1-GENTRITTR (Skip Monitoring for Validation Error after Initial Iteration)

D1-TODOCOMPL (Generic To Do Completion)

D1-CLEAREXCP (Sync Request Clear Exception)

Business Object**Business Object**

D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request)

D1-OngoingSyncRequestContact (Contact Ongoing Sync Request)

D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request)

D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request)

D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request)

D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)

Group: Additional Processing Error Exception Process**10.5 Enter Synchronized with Error State****Actor/Role:** C2M(MDM)**Description:** If this is not a Customer to Meter implementation a positive acknowledgement is sent to CCB indicating that the synchronization has been completed. The outbound message's External System is obtained from the Inbound Sync Request. The Outbound Message Type is obtained from the "Outbound Message Type" option of the Inbound Sync Request's Business Object. The details of the message include the Inbound Sync Request's external reference identifier (this is the identifier of the CCB Sync Request). Note in CCB the absence of any exception details in the message

indicates that the synchronization was successful. A log entry is added to the Inbound Sync Request with a reference to the outbound message (if the outbound message is set up to persist).

Process Plug-in enabled	Available Algorithm(s):	D1-CREPOSACK (Create Positive Acknowledgement)
Business Object	Business Object	D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request) D1-OngoingSyncRequestContact (Contact Ongoing Sync Request) D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request) D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request) D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request) D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)
Configuration required	Entities to Configure:	Business Object Option: Inactive Algorithm - D1-CREPOSACK (C2M)

Group: Additional Processing Error Exception Process

10.6 Evaluate Retry Criteria

Actor/Role: C2M(MDM)

Description: If the period of time indicated in the "To Do Retry Frequency" business object state option of the Inbound Sync Request in the Additional Processing Error state has elapsed check if the count of retries is greater than the "To Do Maximum Retries" business object state option.

Process Plug-in enabled	Available Algorithm(s):	D1-GENTRDVLE (Sync Request Transition Determinant for Validation Error) D1-SETCLEXCP (Set Clear Exception Flag to true) D1-TODORETRY (Sync Request Retry for To Do's) D1-TRANTONEG (Do Not Clear Exceptions and Transition to Negative State)
		D2-InboundBillCycleSyncRequest (Inbound Bill Cycle Sync Request) D1-OngoingSyncRequestContact (Contact Ongoing Sync Request) D2-OngoingSyncRequestDynOpt (Dynamic Option Ongoing Sync Request)

Business Object**Business Object**

D2-OngoingSyncRequestDynOptEvt (Dynamic Option Event Ongoing Sync Request)
--

D2-OngoingSyncRequestUS (Usage Subscription Ongoing Sync Request)

D1-OngoingSyncRequestSP (Service Point Ongoing Sync Request)
--

Configuration required**Entities to Configure:**

Business Object State Option: To Do Maximum Retries

Business Object State Option: To Do Retry Frequency

Group: Additional Processing Error Exception Process**10.7 Transition to Additional Processing****Actor/Role:** C2M(MDM)**Description:** Transition the Inbound Sync Request to the Additional Processing state.**Group: Validation Error Exception Process****10.8 Analyze Error****Actor/Role:** C2M Authorized User**Description:** A user analyses an error related to a initial load Inbound Sync Request and if required performs the necessary actions to resolve the error.**Group: Validation Error Exception Process****10.9 Request to Discard Inbound Sync Request****Actor/Role:** C2M Authorized User**Description:** A user opts to discard an Inbound Sync Request that is in the Validation Error state.**Group: Validation Error Exception Process****11.0 Clear Exceptions****Actor/Role:** C2M(MDM)**Description:** Remove exceptions from an Inbound Sync Request in the Validation Error state.

Process Plug-in enabled	Available Algorithm(s):	D1-GENTRITTR (Skip Monitoring for Validation Error after Initial Iteration)
		D1-CLEAREXCP (Sync Request Clear Exception)

Business Object	Business Object	D1-InitialSyncRequestContact (Contact Initial Sync Request)
		D2-InitialSyncRequestDynOpt (Dynamic Option Initial Sync Request)
		D2-InitialSyncRequestDynOptEvt (Dynamic Option Event Initial Sync Request)
		D2-InitialSyncRequestUS (Usage Subscription Initial Sync Request)
		D1-InitialSyncRequestSP (Service Point Initial Sync Request)

Group: Validation Error Exception Process

11.1 Discard Inbound Sync Request

Actor/Role: C2M(MDM)

Description: The Inbound Sync Request enters the Discarded state.

Business Object	Business Object	D1-InitialSyncRequestContact (Contact Initial Sync Request)
		D2-InitialSyncRequestDynOpt (Dynamic Option Initial Sync Request)
		D2-InitialSyncRequestDynOptEvt (Dynamic Option Event Initial Sync Request)
		D2-InitialSyncRequestUS (Usage Subscription Initial Sync Request)
		D1-InitialSyncRequestSP (Service Point Initial Sync Request)

Group: Validation Error Exception Process

11.2 Monitor Validation Error Requests

Actor/Role: C2M(MDM)

Description: The batch process "Initial Sync Request - Error" (Batch Control: D1-SIIER) monitors Inbound Sync Requests that are in the Validation Error state and invokes their monitor algorithms.

Business Object	Business Object	D1-InitialSyncRequestContact (Contact Initial Sync Request)
		D2-InitialSyncRequestDynOpt (Dynamic Option Initial Sync Request)
		D2-InitialSyncRequestDynOptEvt (Dynamic Option Event Initial Sync Request)
		D2-InitialSyncRequestUS (Usage Subscription Initial Sync Request)
		D1-InitialSyncRequestSP (Service Point Initial Sync Request)
Customizable process	Process Name:	D1-SIIER (Initial Sync Request - Error)

Group: Validation Error Exception Process**[11.3](#) Transition to Transformed/Schema Validated****Actor/Role:** C2M(MDM)**Description:** Remove an Inbound Sync Request's exceptions and transition the Inbound Sync Request to the Transformed/Schema Validated state.

Process Plug-in enabled	Available Algorithm(s):	D1-GENTRDVLE (Sync Request Transition Determinant for Validation Error)
		D1-SETCLEXCP (Set Clear Exception Flag to true)
		F1-AT-RQJ (Transition to Default Next Status (Java))
		D1-GENTRITTR (Skip Monitoring for Validation Error after Initial Iteration)
		D1-CLEAREXCP (Sync Request Clear Exception)

Business Object	Business Object	D1-InitialSyncRequestContact (Contact Initial Sync Request)
		D2-InitialSyncRequestDynOpt (Dynamic Option Initial Sync Request)
		D2-InitialSyncRequestDynOptEvt (Dynamic Option Event Initial Sync Request)
		D2-InitialSyncRequestUS (Usage Subscription Initial Sync Request)
		D1-InitialSyncRequestSP (Service Point Initial Sync Request)

Group: Resolution/BO Validation Error Exception Process

11.4 Request to Discard Inbound Sync Request

Actor/Role: C2M Authorized User

Description: A user opts to discard an Inbound Sync Request that is in the Resolution/BO Validation Error state.

Group: Resolution/BO Validation Error Exception Process

11.5 Clear Exceptions

Actor/Role: C2M(MDM)

Description: Remove exceptions from an Inbound Sync Request in the Resolution/BO Validation Error state.

Process Plug-in enabled	Available Algorithm(s):	D1-CLEAREXCP (Sync Request Clear Exception)
Business Object	Business Object	D1-InitialSyncRequestContact (Contact Initial Sync Request)
		D2-InitialSyncRequestDynOpt (Dynamic Option Initial Sync Request)
		D2-InitialSyncRequestDynOptEvt (Dynamic Option Event Initial Sync Request)
		D2-InitialSyncRequestUS (Usage Subscription Initial Sync Request)
		D1-InitialSyncRequestSP (Service Point Initial Sync Request)

Group: Resolution/BO Validation Error Exception Process

11.6 Monitor Resolution/BO Validation Error Requests

Actor/Role: C2M(MDM)

Description: The batch process "Initial Request-Resolve Keys Contact" (Batch Control: D1-SIKCN) monitors Inbound Sync Requests that are in the Resolution/BO Validation Error state and invokes their monitor algorithms.

Business Object	Business Object	D1-InitialSyncRequestContact (Contact Initial Sync Request)
		D2-InitialSyncRequestDynOpt (Dynamic Option Initial Sync Request)
		D2-InitialSyncRequestDynOptEvt (Dynamic Option Event Initial Sync Request)
		D2-InitialSyncRequestUS (Usage Subscription Initial Sync Request)
		D1-InitialSyncRequestSP (Service Point Initial Sync Request)
Customizable process	Process Name:	D1-SIKCN (Initial Request-Resolve Keys Contact)

Group: Resolution/BO Validation Error Exception Process
11.7 Transition to Keys Resolved/BO Validated

Actor/Role: C2M(MDM)

Description: Remove an Inbound Sync Request's exceptions and transition the Inbound Sync Request to the Keys Resolved/BO Validated state.

Process Plug-in enabled	Available Algorithm(s):	D1-GENTRDKRE (Sync Request Transition Determinant for Key Resolution Error)
		D1-SETCLEXCP (Set Clear Exception Flag to true)
		F1-AT-RQJ (Transition to Default Next Status (Java))
		D1-CLEAREXCP (Sync Request Clear Exception)

Business Object	Business Object	D1-InitialSyncRequestContact (Contact Initial Sync Request)
		D2-InitialSyncRequestDynOpt (Dynamic Option Initial Sync Request)
		D2-InitialSyncRequestDynOptEvt (Dynamic Option Event Initial Sync Request)
		D2-InitialSyncRequestUS (Usage Subscription Initial Sync Request)
		D1-InitialSyncRequestSP (Service Point Initial Sync Request)

Test Documentation related to the Current Process

ID	Document Name	Test Type

Document Control

Change Record

Date	Author	Version	Change Reference
11/01/2015	Srinivas Rao Kanteti	1	Initial Draft
11/15/2015	Galina Polonsky	1	Reviewed
06/26/2015	Angus Mackenzie	2	Altered for C2M
10/5/2016	Chetan Raut	2.1	Updated product and actor names to reflect C2M changes.
10/15/2017	Galina Polonsky	1	Reviewed
6/5/2019	Satya Kalavala		Updated format for v2.7
1/31/2020	Antonio Napoli		Changed Filename, Process name as per URM formatting in this document and Visio

Attachments

F1-Sync Request BO Lifecycle



F1-Sync Request BO
Lifecycle

D1-SyncRequestSeeder BO Lifecycle



D1-SyncRequestSee
der BO Lifecycle

D1-InitialSyncRequestContact BO Lifecycle



D1-InitialSyncReques
tContact BO Lifecycle

D1-OngoingSyncRequestContact BO Lifecycle



D1-OngoingSyncReq
uestContact BO Lifec

Sync Seeder Master Configuration



Sync Seeder Master
Configuration

Master Data Synchronization Configuration Master Configuration



Master Data
Synchronization Conf