



**C2M v2.9**

## **5.6.3.3 Manage Device De-Installation, Decommissioning and Removal**

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## Brief Description

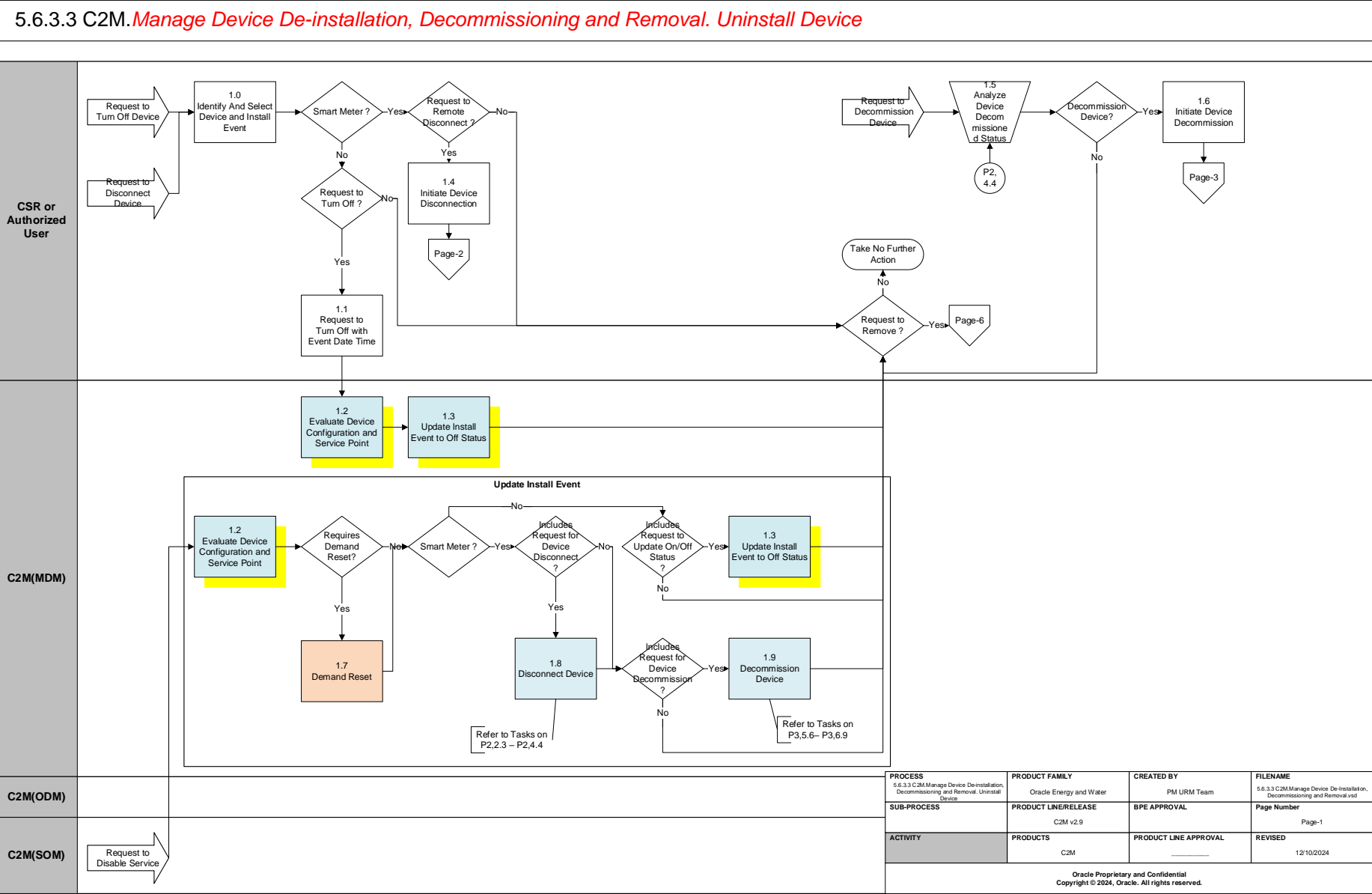
<b>Business Process:</b>	<b>5.6.3.3 C2M.Manage Device De-installation, Decommissioning and Removal</b>
<b>Process Type:</b>	<b>Sub-Process</b>
<b>Parent Process:</b>	<b>5.6.3 C2M.Manage Supplies/Devices</b>
<b>Sibling Processes:</b>	<b>5.6.3.1 C2M. Manage Tracked Assets and Devices</b> <b>5.6.3.2 C2M.Manage Device Installation and Commissioning, 3.3.1.1 C2M.Maintain Contact</b>

This process describes how devices are managed in C2M(MDM). This includes device de-installation and removal. This process also includes device decommission and disconnection. The process assumes that the device and service point has already been setup in C2M(MDM)( See the sibling process listed above – 5.6.3.1 Manage Tracked Assets and Devices and 5.6.3.2.Manage Device Installation and Commissioning).

Decommissioning and Disconnection is a command issued to inform the head-end system when a device is being removed from the AMI network, so that no further reads or events will arrive from the device. These commands are invoked when a device must be removed or deactivated. The goal is to stop any communication between the device and the head-end system.

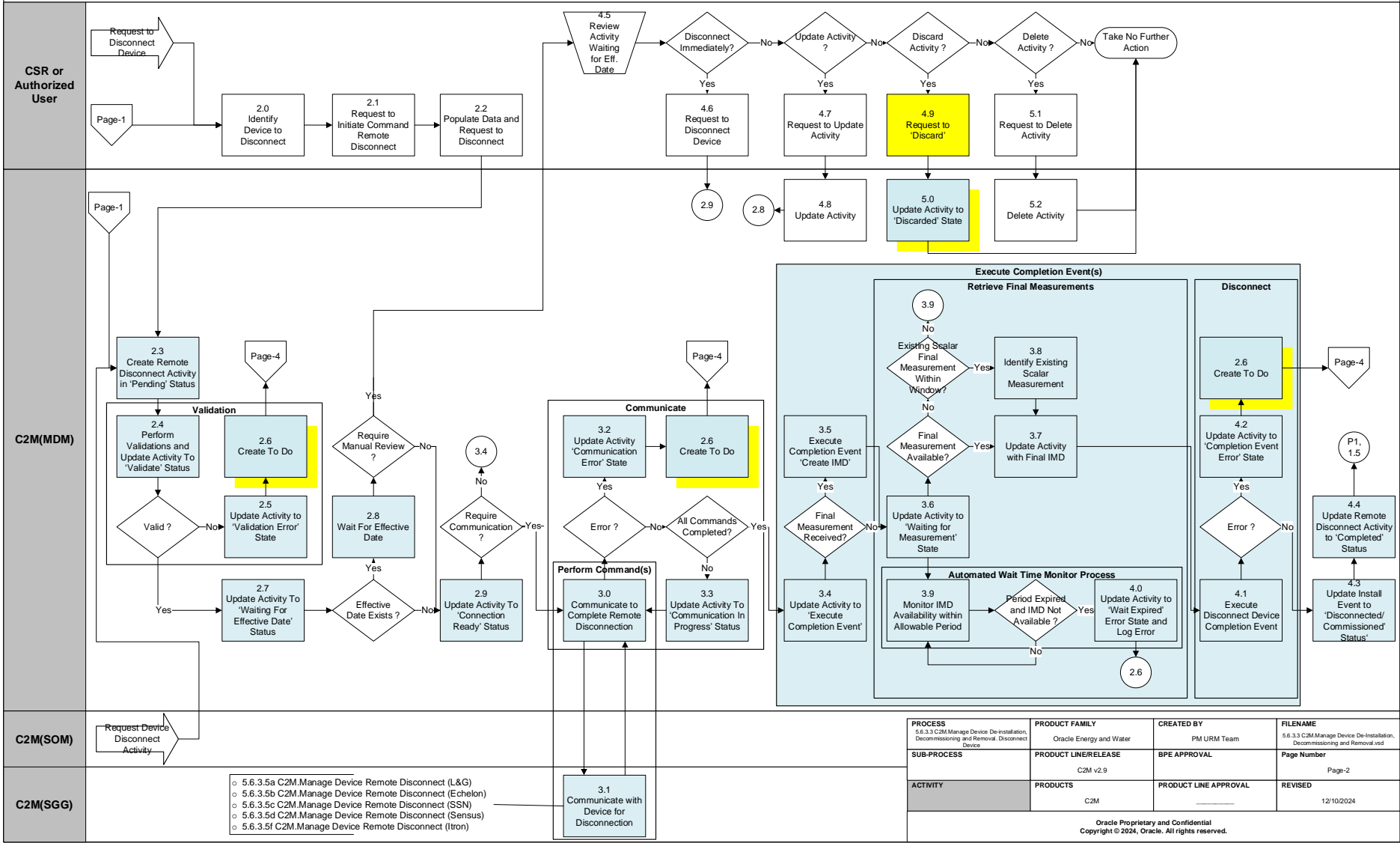
**Note:** Current document represents complete process for Device Decommissioning and Disconnection. The C2M(MDM) as an application provides ability to initiate command, orchestrate processing and record results. However, the actual communication with any Head End System requires integration with Head End system(s) that could be implemented by using Oracle SGG or any other similar software or custom development

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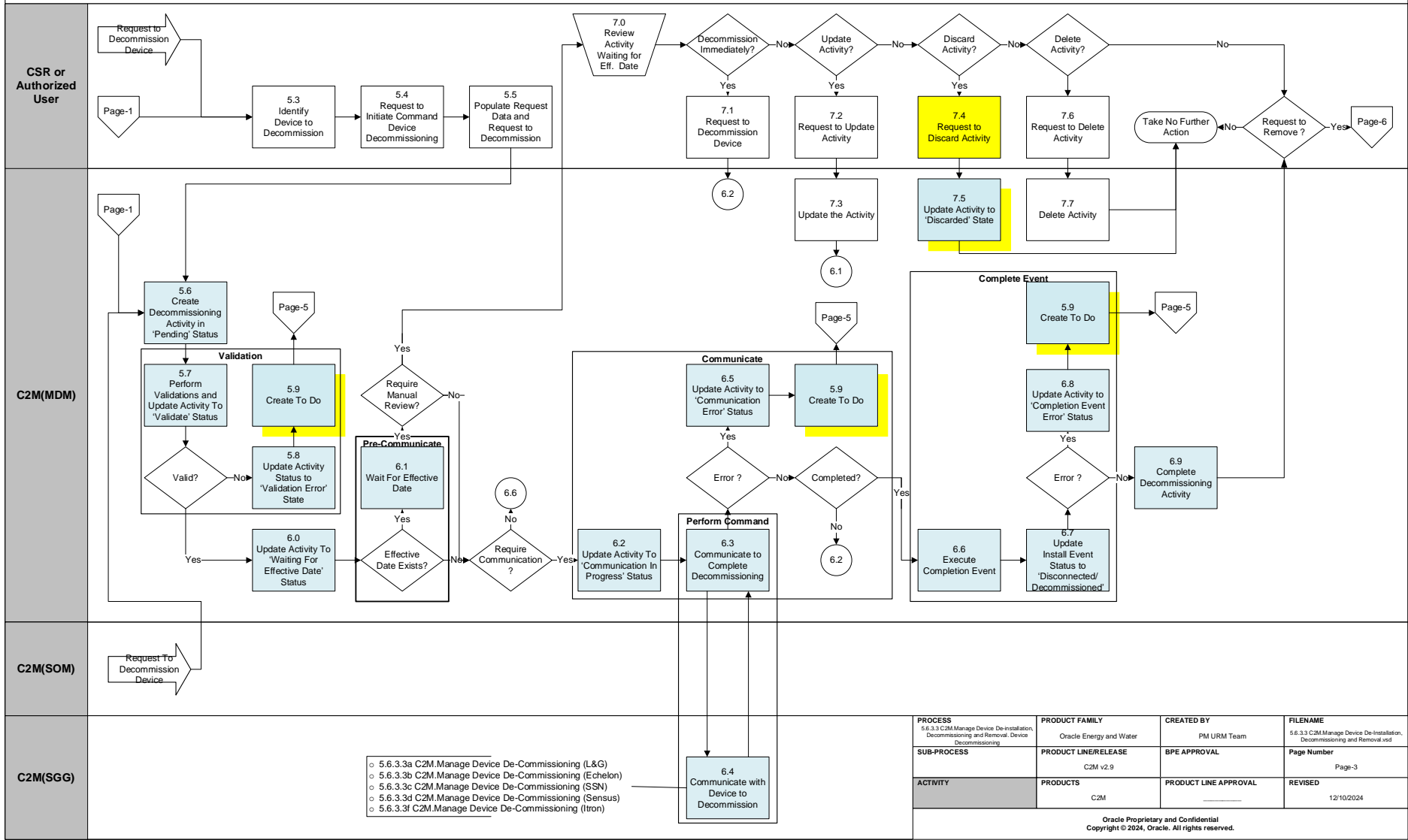
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5.6.3.3 C2M.Manage Device De-installation, Decommissioning and Removal. Disconnect Device



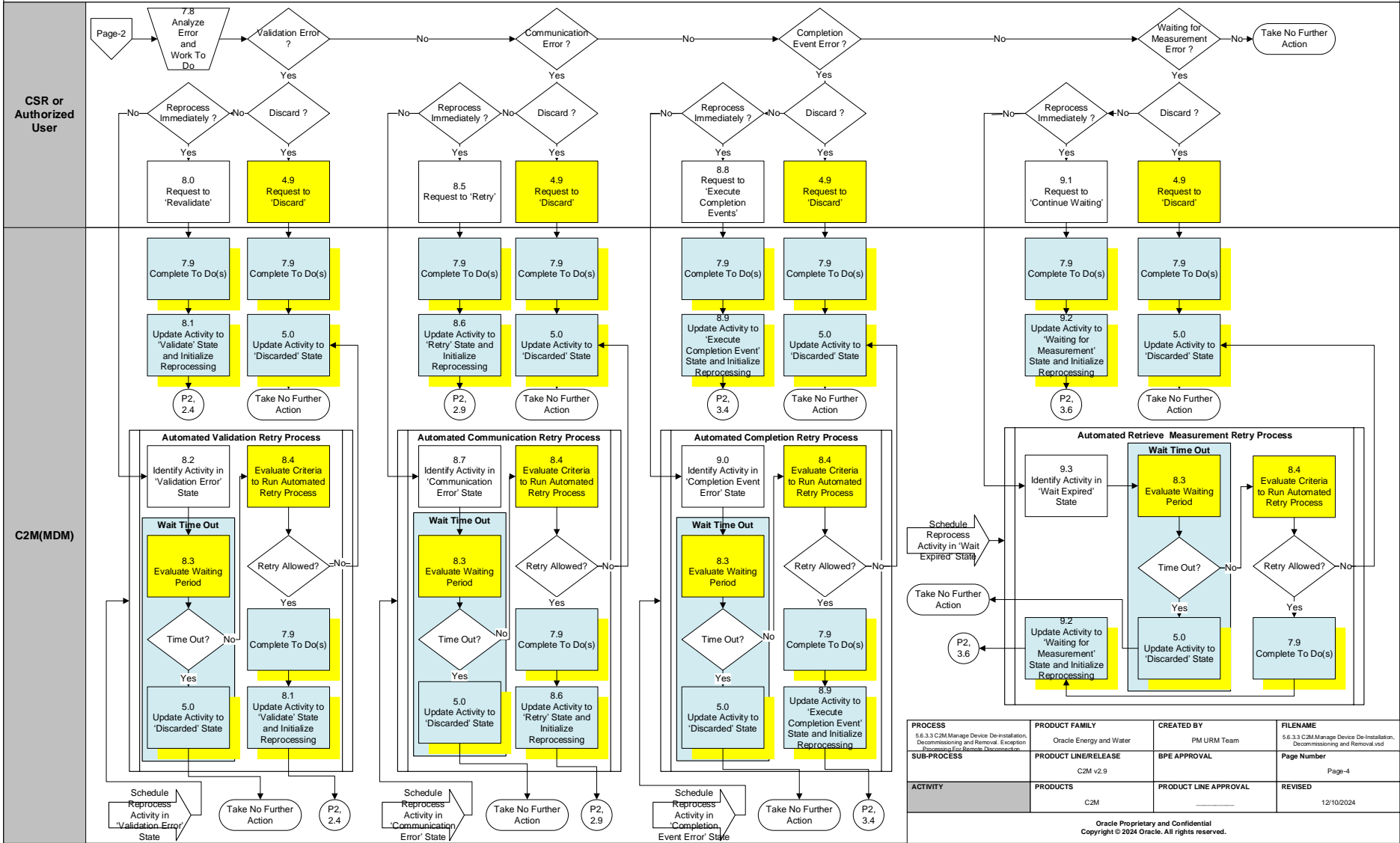
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5.6.3.3 C2M.Manage Device De-installation, Decommissioning and Removal. Device Decommissioning



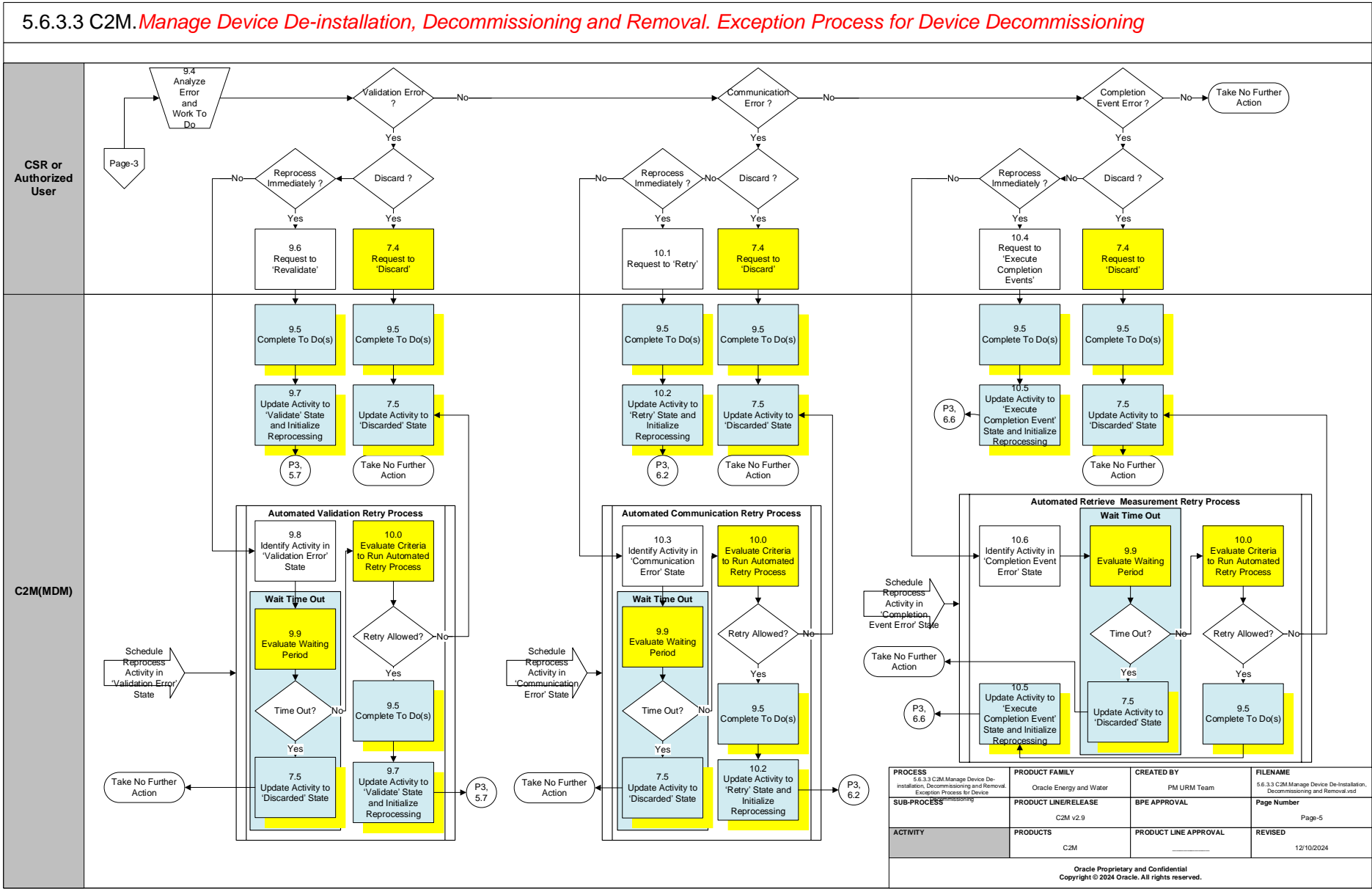
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5.6.3.3 C2M.Manage Device De-installation, Decommissioning and Removal. Exception Processing For Remote Disconnection

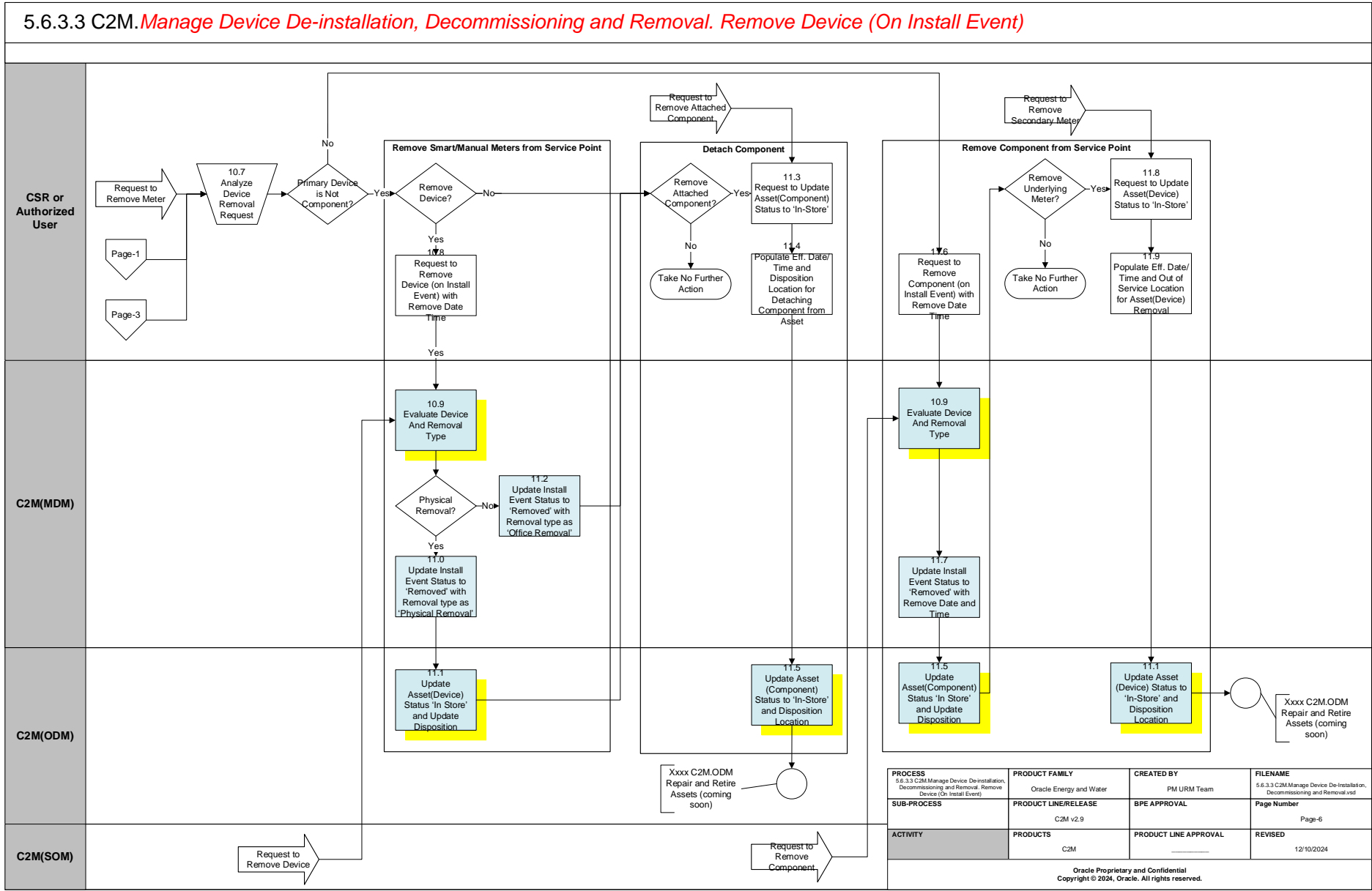




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## Detail Business Process Model Description

### 1.0 Identify Device and Install Event

**Actor/Role:** CSR or Authorized User

**Description:**

The CSR or Authorized User locates and identifies the device that needs to be removed.

### 1.1 Request to Turn Off with Event Date and Time

**Actor/Role:** CSR or Authorized User

**Description:**

The CSR or Authorized User makes the request to update the status to turn off service at the service point.

### 1.2 Evaluate Device Configuration and Service Point Group: Update Install Event

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) checks to see if the meter type and service point type match.

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

D1-CHKHISEVT - Validate the On/Off History Based on Install Event's Status
D1-DEVCFGVAL - Validate the Device Configuration
D1-VALDVSPT - Meter Service Point Type Category Validation
D1-VALIERMDT - Validate Removal Information
D1-VALMTREQT - Meter Equipment Validation
D1-VALRMAFIN - Validate Removal Date/Time is on or after Installation Date/Time
D1-VALSPDCTZ - Validate Service Point and Device Configuration Time Zones
D1-VALITSPT - Item Service Point Type Category Validation

**Business Object (Y/N)**

**Business Object**

D1-ItemInstallEvent
D1-CommComponentInstallEvent
D1-ManualMeterInstallEvent
D1-SmartMeterInstallEvent

**Inbound Web Service(s):**

D1-InstallEvent
-----------------

**1.3 Update Install Event On/Off Status Group: Update Install Event**

**Actor/Role:** C2M(MDM)

**Description:**

The maintenance object for install event is updated to an **off** status and log of the history is maintained.

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

D1-CHKHISEVT - Validate the On/Off History Based on Install Event's Status
D1-ONHISTVAL - Validate the On/Off History Based on Previous On/Off Event
D1-CRONOFHIS - Create On/Off History Based on Status

**Business Object (Y)**                      **Business Object**

D1-ItemInstallEvent
D1-ManualMeterInstallEvent
D1-SmartMeterInstallEvent

**1.4 Initiate Device Disconnection**

**Actor/Role:** CSR or Authorized User

**Description:**

The Authorized User will select the Remote Disconnect Command, populate the required data and initiates appropriate activity to make a request for device disconnect.

**1.5 Analyze Device Decommission Status**

**Actor/Role:** CSR or Authorized User

**Description:**

The CSR or Authorized User determines the Decommission status.

**1.6 Initiate Device Decommission**

**Actor/Role:** CSR or Authorized User

**Description:**

The Authorized User will select the Device Decommission Command, populate the required data and initiates appropriate activity to make a request for device Decommission.

**1.7 Demand Reset Group: Update Install Event**

**Actor/Role:** C2M - MDM

**Description:**

C2M-MDM analyzes if there is a need for Demand Reset for Scalar meters.

**Customizable process Y**

**Process Name:**

Custom Process

**Note:** This is a custom process suggested for demand reset of scalar meters.

**1.8 Disconnect Device Group: Update Install Event**

**Actor/Role:** C2M(MDM)

**Description:**

On the Install Event, the request for Remote Disconnect is initiated.

**Process Plug-in enabled (Y)**

**Available Algorithm(s):**

D1-CRONOFHIS - Create On/Off History Based on Status

**Business Object (Y/N)**

**Business Object**

D1-RemoteDisconnect

**Note:** The request to update the Disconnect Status also updated the On/Off history for a Smart Meter

**1.9 Decommission Device Group: Update Install Event**

**Actor/Role:** C2M(MDM)

**Description:**

On the Install Event, the request for decommission is initiated.

**Process Plug-in enabled (Y)**

**Available Algorithm(s):**

D1-CRONOFHIS - Create On/Off History Based on Status

**Business Object (Y/N)**

**Business Object**

D1-DeviceDecommission

**2.0 Identify Device to Disconnect**

**Actor/Role:** CSR or Authorized User

**Description:**

CSR or Authorized User analyzes the requirements and identifies the device to be disconnected.

**2.1 Request to Initiate Command Remote Disconnect**

**Actor/Role:** CSR or Authorized User

**Description:**

The Authorized User will select the Remote Disconnect Command and populate the data acquired during analyzing the requirements.

**2.2 Populate Data and Request to Disconnect**

**Actor/Role:** CSR or Authorized User

**Description:**

CSR or Authorized User populates the needed data based on analysis and selects the appropriate activity to make a request for device disconnect.

**2.3 Create Remote Disconnect Activity in 'Pending' Status**

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) creates the maintenance object with the data provided. When the activity is created, C2M(MDM) creates an Activity ID in Pending Status.

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

D1-DEACTTYP - Determine Activity Type
D1-DMRRD - Defaults the Measurement Requested field Remote Disconnect
D1-ACSDT - Adjust Service Time or Set Effective Time
D1-DDR - Determine Device and Recipient
D1-SETREMESD - Set Retrieve Final Measurement Flag to true
D1-GINPVAL - Common Input Validation
D1-VALMDEST - Validate Measurement Destination
D1-MDRFMVAL - Measurement Fields for Retrieve Final Measurement Validation
D1-VCUTSR - Validate Cut Service Restrictions

**Business Object (Y/N)**

**Business Object**

D1-RemoteDisconnect
---------------------

**2.4 Perform Validations and Update Activity To 'Validate' Status Group: Validation**

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) updates the activity to Validate state and performs validation on Head-End system compatibility, Disconnection status, external requestor, command eligibility and device registration.

**2.5 Update Activity to 'Validation Error' State Group: Validation**

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) updates the status to 'Validation Error' if any of the validations fail.

**Business Object (Y/N)**

**Business Object**

D1-RemoteDisconnect
---------------------

**2.6 Create To Do Group: Validation**

**Group: Communicate**

**Group: Event Completion Event(s) (Disconnect)**

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) attempts to create a To Do entry using the To Do type and role specified by the first and second algorithm parameters.

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

D1-CTDEBOE (Create To Do Entry for BO in Error)
---

**Business Object (Y/N)**      **Business Object**

D1-RemoteDisconnect
---------------------

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

D1-VALACTTDI - Validate Activity Type and Transition to Error State If Invalid
D1-VALDVCNDC - Validate Device Not Already Disconnected
D1-VALDEVMCS - Validate that Device has appropriate Measuring Component
D1-CHKCMDELG - Check Device Command Eligibility
D1-VHCPODRD - Validate Head-End's Ability to Perform On-Demand Read Disconnect
D1-VALHECPRD - Validate Head-End's Ability to Perform Disconnect
D1-ACTDISCON - Check for Existing Active Disconnect Command Request
D1-CHKCONNCR - Check for Concurrent Connect Command Request
D1-VALEXTREQ - Validate External Requester
D1-CUTSR - Cut Service Restrictions

**Business Object (Y/N)**      **Business Object**

D1-RemoteDisconnect
---------------------

**2.7 Update Activity To 'Waiting For Effective Date' Status**

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) acknowledges to External Requester of the received data.

Process Plug-in enabled (Y/N)	Available Algorithm(s):	D1-RRER ( Send Received Response to External Requester)
Business Object (Y/N)	Business Object	D1-RemoteDisconnect

**2.8 Wait For Effective Date**

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) transitions the activity to a state configured with a transition condition of F1OK when the activity's effective date time is reached (process date time >= effective date time). If the activity's effective date time is not provided, the application initiates execution of the command and transitions - the activity to a state configured with a transition condition of F1OK without waiting.

Process Plug-in enabled (Y/N)	Available Algorithm(s):	D1-WAITEFFDT (Wait for Effective Date)
Business Object (Y/N)	Business Object	D1-RemoteDisconnect

**2.9 Update Activity To 'Connection Ready' Status**

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) transitions the activity to 'Connection Ready' status. This is a transitory state that initiates outbound communication with head end system.

Process Plug-in enabled (Y/N)	Available Algorithm(s):	D1-CRDOC - Create Remote Disconnect Outbound Communication D1-CDCROC - Create Disconnect Results Outbound based on Completion Flag D1-CODROCD - Create On-Demand Read for Final Measurement D1-CODRSRTOB - Create On Demand Read Results (Scalar) Outbound based on Completion Flag
Business Object (Y/N)	Business Object	D1-RemoteDisconnect

**3.0 Communicate to Complete Disconnection Group: Communicate**



**Group: Perform Command**

**Actor/Role:** C2M(MDM)

**Description:**

Application creates outbound communication.

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

D1-CRDOC - Create Remote Disconnect Outbound Communication
D1-CDCROC - Create Disconnect Results Outbound based on Completion Flag
D1-CODROCD - Create On-Demand Read for Final Measurement
D1-CODRSRTOB - Create On Demand Read Results (Scalar) Outbound based on Completion Flag

**Business Object (Y/N)**      **Business Object**

D1-RemoteDisconnect
---------------------

**3.1 Communicate with Device for Disconnection Group: Perform Command**

**Actor/Role:** C2M(SGG)

**Description:**

Head-End communicates with C2M(MDM) via Middleware on one-side and with Device on the other side to communicate the Disconnection Instructions/Information between C2M(MDM) and Devices. Depending on headend system, please refer to below URM's for more details:

- 5.6.3.5a C2M.Manage Device Remote Disconnect (L&G)
- 5.6.3.5b C2M.Manage Device Remote Disconnect (Echelon)
- 5.6.3.5c C2M.Manage Device Remote Disconnect (SSN)
- 5.6.3.5d C2M.Manage Device Remote Disconnect (Sensus)
- 5.6.3.5f C2M.Manage Device Remote Disconnect (Itron)

**Business Object (Y/N)**      **Business Object**

D1-RemoteDisconnect
---------------------

**3.2 Update Activity 'Communication Error' State Group: Communicate**

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) send a response to the initiator of the device disconnection request.

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

D1-RRDBOERR (Retry Remote Disconnect BO in
--

<b>Business Object (Y/N)</b>	<b>Business Object</b>	Error)
		D1-RemoteDisconnect

### 3.3 Update Activity 'Communication In Progress' Status Group: Communicate

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) updates the status to 'Communication in Progress' if any of the existing child communication are not complete.

<b>Process Plug-in enabled (Y/N)</b>	<b>Available Algorithm(s):</b>	
		D1-CHKCHILD - Check Children Communications
<b>Business Object (Y/N)</b>	<b>Business Object</b>	
		D1-RemoteDisconnect

**Note:** Some headend require more than 1 communication, so need to check if all children communication is completed.

### 3.4 Update Activity to 'Execute Completion Event' Group: Execute Completion Event

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) transitions all completion events associated to the current activity Business Object (BO) to their executed state.

<b>Process Plug-in enabled (Y/N)</b>	<b>Available Algorithm(s):</b>	
		D1-EXCMPEVTS (Execute Completion Events)
<b>Business Object (Y/N)</b>	<b>Business Object</b>	
		D1-RemoteDisconnect
		D1-DisconnectDevice
		D1-CreateIMD

### 3.5 Execute Completion Event 'Create IMD' Group: Execute Completion Event

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) Executes Create IMD completion Event, if measurements are requested by head end.

<b>Process Plug-in enabled (Y/N)</b>	<b>Available Algorithm(s):</b>	
		D1-CREIMD (Create IMD)
<b>Business Object (Y/N)</b>	<b>Business Object</b>	
		D1-CreateIMD
		D1-CompletionEvent

### **3.6 Update Activity to Waiting for Measurement State Group: Execute Complete Event(s)** **Group: Retrieve Final Measurements**

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) updates the status to 'Waiting for Measurement'.

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

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

**Business Object (Y/N)**      **Business Object**

D1-RemoteDisconnect
---------------------

### **3.7 Update Activity with Final IMD Group: Execute Complete Event(s)** **Group: Retrieve Final Measurements**

**Actor/Role:** C2M(MDM)

**Description:**

For Create IMD Completion executed, C2M(MDM) creates a new IMD list entry in finalized status.

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

D1-RMVCE (Retrieve Measurements via Completion Events)
--

D1-MSRMTVAL - Validate Start or End Measurement
---

**Business Object (Y/N)**      **Business Object**

D1-RemoteDisconnect
---------------------

### **3.8 Identify Existing Scalar Measurement Group: Execute Complete Event(s)** **Group: Retrieve Final Measurements**

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) retrieves final measurements and stores as Meter Read on Activity.

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

D1-RFINSC - Retrieve Scalar Final Measurements
--

D1-RSINIMS - Retrieve Scalar Initial Measurements
---

**Business Object (Y/N)**      **Business Object**

D1-RemoteDisconnect
---------------------

### **3.9 Monitor IMD Availability within Allowable Period Group: Execute Complete Event(s)**

**Group: Retrieve Final Measurements****Group: Automated Wait Time Monitor Process****Actor/Role:** C2M(MDM)**Description:**

C2M(MDM) monitors if the IMD measurement becomes available in allowable window period.

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

D1-WFMTO ( Wait for Measurement Time Out)

**Business Object (Y/N)**      **Business Object**

D1-RemoteDisconnect

**Customizable process (N)**      **Process Name**

D1-CREDW (Activity Wait Periodic Monitor)

**4.0 Update Activity to 'Wait Expired' Error State and Log Error** **Group: Execute Complete Event(s)****Group: Retrieve Final Measurements****Group: Automated Wait Time Monitor Process****Actor/Role:** C2M(MDM)**Description:**

C2M(MDM) updates the Install Event to have a status of Wait Expired.

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

D1-CTDEBOE (Create To Do Entry for BO in Error)

**Business Object (Y/N)**      **Business Object**

D1-RemoteDisconnect

**4.1 Execute Disconnect Device** **Group: Execute Complete Event(s)****Group: Disconnect****Actor/Role:** C2M(MDM)**Description:**

C2M(MDM) transitions all completion events associated to the current activity Business Object (BO) to their executed state.

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

D1-DISCDEV (Disconnect Device)

**Business Object (Y/N)**      **Business Object**

D1-DisconnectDevice

**4.2 Update Activity to 'Completion Event Error' State** **Group: Execute Complete Event(s)****Group: Disconnect**

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) updates the Install Event to have a status of Completion Event Error.

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

D1-CTDEBOE (Create To Do Entry for BO in Error)

**Business Object (Y/N)**      **Business Object**

D1-RemoteDisconnect

**4.3 Update Install Event to 'Disconnected/Commissioned' Status'**

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) updates the Install Event status to Disconnected/Commissioned status

**Business Object (Y/N)**      **Business Object**

D1-SmartMeterInstallEvent

**4.4 Update Remote Disconnect Activity to 'Completed' Status**

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) complete Disconnect activity.

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

D1-PASSPA - Pass Parent Activity
D1-UPAEDT - Update Parent Activity's Event Date Time
D1-LOCKBULK - Lock Bulk Header
D1-PREPBULK - Prepare Bulk Response
D1-SRCNTEA - Send Remote Connect Notification to Edge Application
D1-SFMTEA - Send Final Measurement to Edge Application
X1-CRELVYADJ - Create Levy Adjustment Completion Event
D1-COMOUTTD - Complete Outstanding To Do

**Business Object (Y/N)**      **Business Object**

D1-RemoteDisconnect

**4.5 Review Activity waiting for Eff. Date**

**Actor/Role:** CSR or Authorized User

**Description:**

CSR or Authorized User reviews when required for manual Effective Date.

**4.6 Request to Disconnect Device**

**Actor/Role:** CSR or Authorized User

**Description:**

The CSR or Authorized User makes the request to update an existing device disconnect activity.

**Business Object (Y/N)                      Business Object**

D1-RemoteDisconnect

**4.7 Request to Update Activity**

**Actor/Role:** CSR or Authorized User

**Description:**

The CSR or Authorized User makes the request to update an existing device disconnect activity.

**Business Object (Y/N)                      Business Object**

D1-RemoteDisconnect

**4.8 Update Activity**

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) accepts the changes made by the user for the device disconnect activity.

**Business Object (Y/N)                      Business Object**

D1-RemoteDisconnect

**4.9 Request to 'Discard'**

**Actor/Role:** CSR or Authorized User

**Description:**

CSR or Authorized User when reviews the Activity in current state and decides that the Activity cannot be used, can manually make a request to discard it.

**Business Object (Y/N)                      Business Object**

D1-RemoteDisconnect

**5.0 Update Activity to 'Discarded' State Group: Automated Retry Process**

**Group: Wait Time Out**

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) transitions Activity to 'Discarded' state indicating that it cannot be used further. However, it remains in the system.

**Process Plug-in enabled (Y/N)**

**Available Algorithm(s):**

D1-COOC - Cancel Outstanding Outbound Communication
D1-COCE - Cancel Outstanding Completion Events
D1-FAILPA - Fail Parent Activity
D1-PREPBULK - Prepare Bulk Response
D1-PCANRSN - Populate Cancel Reason
D1-FRER - Send Fail Response to External Requester
D1-CFCMDSIM - Create Service Issue Monitor from Failed Command
D1-COMOUTTD - Complete Outstanding To Do

**Business Object (Y/N)**

**Business Object**

D1-RemoteDisconnect
---------------------

**5.1 Request to Delete Activity**

**Actor/Role:** CSR or Authorized User

**Description:**

The CSR or Authorized User makes the request to delete an existing device disconnect activity.

**5.2 Delete Activity**

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) updates removes activity that was created.

**Business Object (Y/N)**

**Business Object**

D1-RemoteDisconnect
---------------------

**5.3 Identify Device to Decommission**

**Actor/Role:** CSR or Authorized User

**Description:**

CSR or Authorized User analyzes the requirements and identifies the device to be Decommissioned.

**5.4 Request to Initiate Command Device Decommissioning**

**Actor/Role:** CSR or Authorized User

**Description:**

The Authorized User will select the Device Decommissioning command and populate the data acquired during analyzing the requirements.

**5.5 Populate Data and Request to Decommission**

**Actor/Role:** CSR or Authorized User

**Description:**

CSR or Authorized User populates the needed data based on analysis and selects the appropriate activity to make a request for device Decommission.

**5.6 Create Decommissioning Activity in 'Pending' Status**

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) creates the maintenance object with the data provided. When the activity is created, C2M(MDM) creates an Activity ID in Pending Status.

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

D1-DDR - Determine Device and Recipient
D1-GINPVAL - Common Input Validation
D1-DETTACTYP - Determine Activity Type

**Business Object (Y/N)**                      **Business Object**

D1-DeviceDecommission
-----------------------

**Inbound Web Service(s):**

D1-DeviceDecommissioning
--------------------------

**5.7 Perform Validations and Update Activity To 'Validate' Status Group: Validation**

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) updates the activity to Validate state and performs validation on Head-End system compatibility, Decommissioning status, external requestor, command eligibility and device registration.

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

D1-VALACTTDI - Validate Activity Type and Transition to Error State If Invalid
D1-VALDVCNDD - Validate Install Event Status for Decommission
D1-CHKCMDELG - Check Device Command Eligibility



Business Object (Y/N)	Business Object	D1-VHCPDCOMM - Validate Head-end's Capability to perform Decommission Device
		D1-CACTDCOMM - Check for Existing Active Decommissioning Command Request
		D1-CHKFCOMM - Check for Concurrent Commissioning Command Request
		D1-VALEXTREQ - Validate External Requester
		D1-DeviceDecommission

**5.8 Update Activity to ‘Validation Error’ State Group: Validation**

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) updates the status to ‘Validation Error’ if any of the validations fail.

Process Plug-in enabled (Y/N)	Available Algorithm(s):	D1-CTDEBOE - Create To Do Entry for BO in Error
		D1-ALLOWCTRP - Allow Child to Transition Parent Activity
Business Object (Y/N)	Business Object	D1-DeviceDecommission

**5.9 Create To Do Group: Validation**

Group: Communicate

Group: Complete Event

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) attempts to create a To Do entry using the To Do type and role specified by the first and second algorithm parameters.

Process Plug-in enabled (Y/N)	Available Algorithm(s):	D1-CTDEBOE (Create To Do Entry for BO in Error)
		D1-DeviceDecommission
Business Object (Y/N)	Business Object	D1-DeviceDecommission

**6.0 Update Activity To ‘Waiting For Effective Date’ Status**

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) acknowledges to External Requester of the received data.

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

D1-RRER ( Send Received Response to External Requester)
D1-WAITEFFDT - Wait for Effective Date
D1-ALWCTRPDD - Allow Child to Transition Parent Activity Based On Effective Date

**Business Object (Y/N)**      **Business Object**

D1-DeviceDecommission
-----------------------

#### **6.1 Wait for Effective Date Group: Pre-communicate**

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) transitions the activity to a state configured with a transition condition of F1OK when the activity's effective date time is reached (process date time >= effective date time). If the activity's effective date time is not provided, the application initiates execution of the command and transitions - the activity to a state configured with a transition condition of F1OK without waiting.

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

D1-WAITEFFDT (Wait for Effective Date)
D1-ALWCTRPDD - Allow Child to Transition Parent Activity Based on Effective Date

**Business Object (Y/N)**      **Business Object**

D1-DeviceDecommission
-----------------------

#### **6.2 Update Activity To 'Communication In Progress' Status Group: Communicate**

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) transitions the activity to 'Communication In Progress' status. This state that initiates outbound communication with head end system.

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

D1-CHKCHILD - Check Children Communications
D1-EVLRESDER - Evaluate Device's Head-End System Deregistration Status
D1-CDCOBC - Create Decommission Outbound Communication for Activities

**Business Object (Y/N)**      **Business Object**

D1-DeviceDecommission
-----------------------

**6.3 Communicate to Complete Decommissioning Group: Communicate**  
**Group: Perform Command**

**Actor/Role:** C2M(MDM)

**Description:**

Application creates outbound communication.

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

D1-CHKCHILD - Check Children Communications
D1-EVLRESDER - Evaluate Device's Head-End System Deregistration Status
D1-CDCOBC - Create Decommission Outbound Communication for Activities

**Business Object (Y/N)**      **Business Object**

D1-DeviceDecommission
-----------------------

**6.4 Communicate with Device to Decommission Group: Perform Command**

**Actor/Role:** C2M(SGG)

**Description:**

Head-End communicates with C2M(MDM) via Middleware on one-side and with Device on the other side to communicate the Decommissioning Instructions/Information between C2M(MDM) and Devices.

Depending on headend system, please refer to below URM's for more details:

- 5.6.3.3a C2M.Manage Device De-Commissioning (L&G)
- 5.6.3.3b C2MM.Manage Device De-Commissioning (Echelon)
- 5.6.3.3c C2M.Manage Device De-Commissioning (SSN)
- 5.6.3.3d C2M.Manage Device De-Commissioning (Sensus)
- 5.6.3.3f C2M.Manage Device De-Commissioning (Itron)

**Business Object (Y/N)**      **Business Object**

D1-DeviceDecommission
-----------------------

**6.5 Update Activity 'Communication Error' State Group: Communicate**

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) send a response to the initiator of the device Decommission request.

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

D1-RBOE (Retry BO in Error)
-----------------------------

**Business Object (Y/N)****Business Object**

D1-CTDEBOE - Create To Do Entry for BO in Error
D1-ALLOWCTRP - Allow Child to Transition Parent Activity

D1-DeviceDecommission
-----------------------

**6.6 Execute Completion Event Group: Complete Event****Actor/Role:** C2M(MDM)**Description:**

C2M(MDM) transitions all completion events associated to the current activity Business Object (BO) to their executed state.

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

D1-EXCMPEVTS (Execute Completion Events)
--

**Business Object (Y/N)****Business Object**

D1-DeviceDecommission
-----------------------

D1-DecommissionDevice
-----------------------

**6.7 Update Install Event to 'Disconnected/Decommissioned' Status' Group: Complete Event****Actor/Role:** C2M(MDM)**Description:**

C2M(MDM) updates the Install Event status to Disconnected / Decommissioned status

**Business Object (Y/N)****Business Object**

D1-SmartMeterInstallEvent
---------------------------

D1-DeviceDecommission
-----------------------

**6.8 Update Activity to 'Completion Event Error' State Group: Complete Event****Actor/Role:** C2M(MDM)**Description:**

C2M(MDM) updates the Install Event to have a status of Decommission.

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

D1-CTDEBOE (Create To Do Entry for BO in Error)
D1-ALLOWCTRP - Allow Child to Transition Parent Activity

**Business Object (Y/N)****Business Object**

D1-DeviceDecommission
-----------------------

**6.9 Complete Decommission Activity**

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) complete Decommission activity.

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

D1-PASSPA - Pass Parent Activity
D1-UPAEDT - Update Parent Activity's Event Date Time
D1-LOCKBULK - Lock Bulk Header
D1-PREPBULK - Prepare Bulk Response
D1-SRER - Send Success Response to External Requester
X1-CRELVYADJ - Create Levy Adjustment Completion Event
D1-COMOUTTD - Complete Outstanding To Do
D1-ENDDTTM - Populate End Date/Time

**Business Object (Y/N)**

**Business Object**

D1-DeviceDecommission
-----------------------

**7.0 Review Activity Waiting for Eff. Date**

**Actor/Role:** CSR or Authorized User

**Description:**

CSR or Authorized User reviews when required for manual Effective Date.

**7.1 Request to Decommission Device**

**Actor/Role:** CSR or Authorized User

**Description:**

The CSR or Authorized User makes the request to update an existing device decommission activity.

**Business Object (Y/N)**

**Business Object**

D1-DeviceDecommission
-----------------------

**7.2 Request to Update Activity**

**Actor/Role:** CSR or Authorized User

**Description:**

The CSR or Authorized User makes the request to update an existing device decommission activity.

Business Object (Y/N)	Business Object
	D1-DeviceDecommission

**7.3 Update Activity**

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) accepts the changes made by the user for the device decommission.

Business Object (Y/N)	Business Object
	D1-DeviceDecommission

**7.4 Request to 'Discard'**

**Actor/Role:** CSR or Authorized User

**Description:**

CSR or Authorized User when reviews the Activity in current state and decides that the Activity cannot be used, can manually make a request to discard it.

Business Object (Y/N)	Business Object
	D1-DeviceDecommission

**7.5 Update Activity to 'Discarded' State Group: Automated Retry Process**

**Group: Wait Time Out**

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) transitions Activity to 'Discarded' state indicating that it cannot be used further. However, it remains in the system.

Process Plug-in enabled (Y/N)	Available Algorithm(s):
	D1-COOC - Cancel Outstanding Outbound Communication
	D1-COCE - Cancel Outstanding Completion Events
	D1-FAILPA - Fail Parent Activity
	D1-PREPBULK - Prepare Bulk Response
	D1-PCANRSN - Populate Cancel Reason
	D1-FRER - Send Fail Response to External Requester
	D1-CFCMDSIM - Create Service Issue Monitor from Failed Command
	D1-COMOUTTD - Complete Outstanding To Do

Business Object (Y/N)	Business Object
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D1-DeviceDecommission

**7.6 Request to Delete Activity**

**Actor/Role:** CSR or Authorized User

**Description:**

The CSR or Authorized User makes the request to delete an existing device decommission activity.

**7.7 Delete Activity**

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) updates removes activity that was created.

**Business Object (Y/N)**                      **Business Object**

D1-DeviceDecommission

**7.8 Analyze Error and Work To Do**

**Actor/Role:** CSR or Authorized User

**Description:**

CSR or Authorized User analyzes the error logged and respective 'To Do' created to determine the corrective action. User performs work to resolve the error.

**Business Object (Y/N)**                      **Business Object**

D1-RemoteDisconnect

**7.9 Complete To Do(s) Group: Automated Retry Process**

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) find all non-completed 'To Do' entries and completes them before reprocessing.

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

D1-GTDCBO (Generic To Do Completion for BOs)

**Business Object (Y/N)**                      **Business Object**

D1-RemoteDisconnect

**8.0 Request to 'Revalidate'**

**Actor/Role:** CSR or Authorized User

**Description:**

When the Activity is in 'Validation Error' state and CSR or Authorized User has corrected the error, can manually make request to 'Revalidate'.

**Business Object (Y/N)****Business Object**

D1-RemoteDisconnect

**8.1 Update Activity to 'Validate' State and Initialize Reprocessing Group: Automated Validation Retry Process****Actor/Role:** C2M(MDM)**Description:**

C2M(MDM) transitions the Activity to 'Revalidate' state and initializes reprocessing.

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

D1-RBOE (Retry BO in Error)

**Business Object (Y/N)****Business Object**

D1-RemoteDisconnect

**8.2 Identify Activity in 'Validation Error' State Group: Automated Validation Retry Process****Actor/Role:** C2M(MDM)**Description:**

C2M(MDM) identifies all activities related to Device disconnection in 'Validation Error' state.

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

D1-RBOE (Retry BO in Error)

**Business Object (Y/N)****Business Object**

D1-RemoteDisconnect

**Customizable process (Y/N)****Process Name**

D1-CRERR (Command Request Error - Retry)

**8.3 Evaluate Waiting Period Group: Automated Retry Process****Group: Wait Time Out****Actor/Role:** C2M(MDM)**Description:**

C2M(MDM) evaluates the waiting period to ensure that the Activity does not stay in its current state for too long. On the expiration of the wait time, it transitions the Activity to 'Discard' State.

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

D1-WTTMOUT (Wait Time Out - Transition to Rejection)

**Business Object (Y/N)****Business Object**

D1-RemoteDisconnect

**Customizable process (Y/N)****Process Name**



D1-CREDW (Activity Wait Periodic Monitor)

**8.4 Evaluate Criteria to Run Automated Retry Process Group: Automated Retry Process**

**Actor/Role:** C2M(MDM)

**Description:**

Batch process is configured for this automated retry process. Batch parameters govern whether the processing is further restricted by maintenance object, batch code, command request type, business object, status, etc. Currently, the Batch process used for reprocessing the Activity is “Command Request Error – Retry (D1-CRERR)”. This batch process invokes monitoring rules associated with the current state of Activity.

<b>Process Plug-in enabled (Y/N)</b>	<b>Available Algorithm(s):</b>	<div>D1-RBOE (Retry BO in Error)</div>
<b>Business Object (Y/N)</b>	<b>Business Object</b>	<div>D1-RemoteDisconnect</div>
<b>Customizable process (Y/N)</b>	<b>Process Name</b>	<div>D1-CRERR (Command Request Error – Retry)</div>

**8.5 Request to ‘Retry’**

**Actor/Role:** CSR or Authorized User

**Description:**

When the Activity is in ‘Communication Error’ state and CSR or Authorized User has corrected the error, can manually make request to ‘Retry’.

<b>Business Object (Y/N)</b>	<b>Business Object</b>	<div>D1-RemoteDisconnect</div>
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**8.6 Update Activity to ‘Retry’ State and Initialize Reprocessing Group: Automated Communication Retry Process**

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) transitions the Activity to ‘Retry’ state and initializes reprocessing.

<b>Process Plug-in enabled (Y/N)</b>	<b>Available Algorithm(s):</b>	<div>D1-RBOE (Retry BO in Error)</div>
<b>Business Object (Y/N)</b>	<b>Business Object</b>	<div>D1-RemoteDisconnect</div>

**8.7 Identify Activity in ‘Communication Error’ State Group: Automated Communication Retry Process**

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) identifies all activities related to Device disconnect in ‘Communication Error’ state.

Process Plug-in enabled (Y/N)	Available Algorithm(s):	D1-RBOE (Retry BO in Error)
Business Object (Y/N)	Business Object	D1-RemoteDisconnect
Customizable process (Y/N)	Process Name	D1-CRERR (Command Request Error – Retry)

**8.8 Request to ‘Execute Completion Events’**

**Actor/Role:** CSR or Authorized User

**Description:**

When the Activity is in ‘Completion Event Error’ state and CSR or Authorized User has corrected the error, can manually make request to ‘Execute completion events’.

Business Object (Y/N)	Business Object	D1-RemoteDisconnect
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**8.9 Update Activity to Execute Completion Event State and Initialize Reprocessing Group: Automated Completion Retry Process**

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) transitions the Activity to ‘Execute Completion Event’ state and initializes reprocessing.

Process Plug-in enabled (Y/N)	Available Algorithm(s):	D1-RBOE (Retry BO in Error)
Business Object (Y/N)	Business Object	D1-RemoteDisconnect

**9.0 Identify Activity in ‘Completion Event Error’ State Group: Automated Completion Retry Process**

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) identifies all activities related to Device disconnection in ‘Completion Event Error’ state.

Process Plug-in enabled (Y/N)	Available Algorithm(s):	D1-RBOE (Retry BO in Error)
Business Object (Y/N)	Business Object	D1-RemoteDisconnect
Customizable process (Y/N)	Process Name	D1-CRERR (Command Request Error – Retry)

**9.1 Request to 'Continue Waiting'****Actor/Role:** CSR or Authorized User**Description:**

When the Activity is in 'Completion Event Error' state and CSR or Authorized User has corrected the error, can manually make request to 'Execute completion events'.

**Business Object (Y/N)****Business Object**

D1-RemoteDisconnect

**9.2 Update Activity to 'Waiting for Measurement' State and Initialize Reprocessing Group: Automated Retrieve Measurement Retry Process****Actor/Role:** C2M(MDM)**Description:**

C2M(MDM) transitions the Activity to 'Execute Completion Event' state and initializes reprocessing.

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

D1-RBOE (Retry BO in Error)

**Business Object (Y/N)****Business Object**

D1-RemoteDisconnect

**9.3 Identify Activity in 'Wait Expired' State Group: Automated Retrieve Measurement Retry Process****Actor/Role:** C2M(MDM)**Description:**

C2M(MDM) identifies all activities related to Device disconnection in 'Completion Event Error' state.

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

D1-RBOE (Retry BO in Error)

**Business Object (Y/N)****Business Object**

D1-RemoteDisconnect

**Customizable process (Y/N)****Process Name**

D1-CRERR (Command Request Error – Retry)

**9.4 Analyze Error and Work To Do****Actor/Role:** CSR or Authorized User**Description:**

CSR or Authorized User analyzes the error logged and respective 'To Do' created to determine the corrective action. User performs work to resolve the error.

**Business Object (Y/N)****Business Object**

D1-DeviceDecommission

**9.5 Complete To Do(s) Group: Automated Retry Process****Actor/Role:** C2M(MDM)**Description:**

C2M(MDM) find all non-completed 'To Do' entries and completes them before reprocessing.

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

D1-GTDCBO (Generic To Do Completion for BOs)

**Business Object (Y/N)**      **Business Object**

D1-DeviceDecommission

**9.6 Request to 'Revalidate'****Actor/Role:** CSR or Authorized User**Description:**

When the Activity is in 'Validation Error' state and CSR or Authorized User has corrected the error, can manually make request to 'Revalidate'.

**Business Object (Y/N)**      **Business Object**

D1-DeviceDecommission

**9.7 Update Activity to 'Validate' State and Initialize Reprocessing Group: Automated Validation Retry Process****Actor/Role:** C2M(MDM)**Description:**

C2M(MDM) transitions the Activity to 'Revalidate' state and initializes reprocessing.

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

D1-RBOE (Retry BO in Error)

**Business Object (Y/N)**      **Business Object**

D1-DeviceDecommission

**9.8 Identify Activity in 'Validation Error' State Group: Automated Validation Retry Process****Actor/Role:** C2M(MDM)**Description:**

C2M(MDM) identifies all activities related to Device decommission in 'Validation Error' state.

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

D1-RBOE (Retry BO in Error)

**Business Object (Y/N)**      **Business Object**

D1-DeviceDecommission

**Customizable process (Y/N)**      **Process Name**

D1-CRERR (Command Request Error - Retry)

**9.9 Evaluate Waiting Period Group: Automated Retry Process**  
**Group: Wait Time Out**

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) evaluates the waiting period to ensure that the Activity does not stay in its current state for too long. On the expiration of the wait time, it transitions the Activity to 'Discard' State.

<b>Process Plug-in enabled (Y/N)</b>	<b>Available Algorithm(s):</b>	D1-WTTMOUT (Wait Time Out - Transition to Rejection)
<b>Business Object (Y/N)</b>	<b>Business Object</b>	D1-DeviceDecommission
<b>Customizable process (Y/N)</b>	<b>Process Name</b>	D1-CREDW (Activity Wait Periodic Monitor)

**10.0 Evaluate Criteria to Run Automated Retry Process Group: Automated Retry Process**

**Actor/Role:** C2M(MDM)

**Description:**

Batch process is configured for this automated retry process. Batch parameters govern whether the processing is further restricted by maintenance object, batch code, command request type, business object, status, etc. Currently, the Batch process used for reprocessing the Activity is "Command Request Error - Retry (D1-CRERR)". This batch process invokes monitoring rules associated with the current state of Activity.

<b>Process Plug-in enabled (Y/N)</b>	<b>Available Algorithm(s):</b>	D1-RBOE (Retry BO in Error)
<b>Business Object (Y/N)</b>	<b>Business Object</b>	D1-DeviceDecommission
<b>Customizable process (Y/N)</b>	<b>Process Name</b>	D1-CRERR (Command Request Error - Retry)

**10.1 Request to 'Retry'**

**Actor/Role:** CSR or Authorized User

**Description:**

When the Activity is in 'Communication Error' state and CSR or Authorized User has corrected the error, can manually make request to 'Retry'.

<b>Business Object (Y/N)</b>	<b>Business Object</b>	D1-DeviceDecommission
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**10.2 Update Activity to 'Retry' State and Initialize Reprocessing Group: Automated Communication Retry Process**

**Actor/Role:** C2M(MDM)**Description:**

C2M(MDM) transitions the Activity to 'Retry' state and initializes reprocessing.

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

D1-RBOE (Retry BO in Error)

**Business Object (Y/N)**      **Business Object**

D1-DeviceDecommission

**10.3 Identify Activity in 'Communication Error' State Group: Automated Communication Retry Process****Actor/Role:** C2M(MDM)**Description:**

C2M(MDM) identifies all activities related to Device decommission in 'Communication Error' state.

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

D1-RBOE (Retry BO in Error)

**Business Object (Y/N)**      **Business Object**

D1-DeviceDecommission

**Customizable process (Y/N)**      **Process Name**

D1-CRERR (Command Request Error – Retry)

**10.4 Request to 'Execute Completion Events'****Actor/Role:** CSR or Authorized User**Description:**

When the Activity is in 'Completion Event Error' state and CSR or Authorized User has corrected the error, can manually make request to 'Execute completion events'.

**Business Object (Y/N)**      **Business Object**

D1-DeviceDecommission

**10.5 Update Activity to Execute Completion Event State and Initialize Reprocessing Group: Automated Retrieve Measurement Retry Process****Actor/Role:** C2M(MDM)**Description:**

C2M(MDM) transitions the Activity to 'Execute Completion Event' state and initializes reprocessing.

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

D1-RBOE (Retry BO in Error)

**Business Object (Y/N)**      **Business Object**

D1-DeviceDecommission
-----------------------

**10.6 Identify Activity in ‘Completion Event Error’ State Group: Automated Retrieve Measurement Retry Process**

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) identifies all activities related to Device decommission in ‘Completion Event Error’ state.

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

D1-RBOE (Retry BO in Error)
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**Business Object (Y/N)**      **Business Object**

D1-DeviceDecommission
-----------------------

**Customizable process (Y/N)**      **Process Name**

D1-CRERR (Command Request Error – Retry)
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**10.7 Analyze Device Removal Request**

**Actor/Role:** CSR or Authorized User

**Description:**

The CSR or Authorized User initiates the request to remove the device on the SP

**10.8 Request to Remove Device (on Install Event) with Remove Date Time Group: Remove Smart/Manual Meters from Service Point**

**Actor/Role:** CSR or Authorized User

**Description:**

The CSR or Authorized User makes the request to remove the device linked with the SP (from install event).

**10.9 Evaluate Device and Removal Type Group: Remove Smart/Manual Meters from Service Point**  
**Group: Remove Component from Service Point**

**Actor/Role:** C2M(MDM)

**Description:**

C2M(MDM) performs validations to checks to see if the meter is eligible to be removed from service point.

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

D1-VALIERMDT - Validate Removal Information
D1-VALOFFEXC - Validate Office Exchange
D1-VALRMAFIN - Validate Removal Date/Time is on or after Installation Date/Time

**Business Object (Y/N)**      **Business Object**

D1-ItemInstallEvent
D1-CommComponentInstallEvent
D1-ManualMeterInstallEvent

Configuration required (Y)	Entities to Configure	D1-SmartMeterInstallEvent
		Extendable Lookup: W1-AssetDisposition
		Asset Type
		Out of Service Location Type
Inbound Web Service(s):		D1-InstallEvent

**11.0 Update Install Event Status to ‘Removed’ with Removal type as ‘Physical Removal’ Group: Remove Smart/Manual Meters from Service Point**

**Actor/Role:** C2M(MDM)

**Description:**

The maintenance object for install event is updated to Removed status and log of the install event is maintained.

Process Plug-in enabled (Y)	Available Algorithm(s):	D1-SUPPALERT - Suppression Alert
		D1-DMTREQMT - Detach Meter Equipment
		D1-UPDRMVDTM - Clear Install Event's Removal Information
		D1-UDMTREQMT - Undo Detach Meter Equipment
Business Object (Y)	Business Object	D1-ItemInstallEvent
		D1-ManualMeterInstallEvent
		D1-SmartMeterInstallEvent

**11.1 Request to Update Asset(Device) Status to ‘In-Store’ and Update Disposition Group: Remove Smart/Manual Meters from Service Point**  
**Group: Remove Component from Service Point**

**Actor/Role:** C2M (ODM)

**Description:**

C2M (ODM) updates Asset(Device) Status to ‘In Store’ and Disposition location

Process Plug-in enabled (Y)	Available Algorithm(s):	W1-ASTATTVAL - Asset Attribute Validations
		W1-ASTDPNAUD - Asset Current Disposition Validation
		W2-BDGNVAL - Validate Badge Number
		W2-SRLNOVAL - Validate Serial Number



<b>Business Object (Y)</b>	<b>Business Object:</b>	W2-VALCONFIG - Validate Configuration
		W1-AssetType
		W1-TrackedAsset
		W1-Item
		W2-ManualMeter
<b>Configuration required (Y)</b>	<b>Entities to Configure</b>	W2-SmartMeter
		Extendable Lookup: W1-AssetDisposition
		Extendable Lookup: X1-ODMMDM-MDMODM- Lookup
<b>Scripts</b>		W1-AsTyInDpn
		W2-BdgAstInf
		X1-ODMMDMVM
		X1-OM-MO-VM

### **11.2 Update Install Event Status to 'Removed' with Removal type as 'Office Removal' Group: Remove Smart/Manual Meters from Service Point**

**Actor/Role:** C2M(MDM)

**Description:**

The maintenance object for install event is updated to Removed status and log of the install event is maintained.

<b>Process Plug-in enabled (Y)</b>	<b>Available Algorithm(s):</b>	D1-SUPPALERT - Suppression Alert
		D1-DMTREQMT - Detach Meter Equipment
		D1-UPDRMVDTM - Clear Install Event's Removal Information
		D1-UDMTREQMT - Undo Detach Meter Equipment
<b>Business Object (Y)</b>	<b>Business Object</b>	
		D1-ItemInstallEvent
		D1-ManualMeterInstallEvent
		D1-SmartMeterInstallEvent

### **11.3 Request to Update Asset(Component) Status to 'In-Store' Group: Detach Component**

**Actor/Role:** CSR or Authorized User

**Description:**

The CSR or Authorized User makes the request to remove the component attached to the device.

**11.4 Populate Eff. Date/Time and Disposition Location for Detaching Component from Asset Group: Detach Component**

**Actor/Role:** CSR or Authorized User

**Description:**

The CSR or Authorized User Populate the effective Date/Time and Disposition Location for Detaching Component from Asset (Device).

**11.5 Update Asset(Component) to In Store Status and Update Disposition Group: Detach Component**

**Group: Remove Component from Service Point**

**Actor/Role:** C2M (ODM)

**Description:**

C2M (ODM) updates Asset (Component) Status to In Store and Disposition location

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

W2-CMPATTVLD - Communication Component Enter Attached Validation
W1-ASTATTVAL - Asset Attribute Validations
W1-ASTDPNAUD - Asset Current Disposition Validation
W2-BDGNOVAL - Validate Badge Number
W2-SRLNOVAL - Validate Serial Number
W2-VALCONFIG - Validate Configuration

**Business Object (Y)**      **Business Object:**

W2-CommunicationRelay
W2-CommunicationComponent

**Configuration required (Y)**      **Entities to Configure**

Extendable Lookup: W1-AssetDisposition
Extendable Lookup: X1-ODMMDM-MDMODM-Lookup

**Scripts**

W1-AsTyInDpn
W2-BdgAstInf
X1-ODMMDMVM
X1-OM-MO-VM

**11.6 Request to Remove Component (on Install Event) with Remove Date Time Group: Remove Component from Service Point**

**Actor/Role:** CSR or Authorized User

**Description:**

The CSR or Authorized User makes the request to remove the component (from install event) linked to the service point.

**11.7 Update Install Event Status to 'Removed' with Remove Date and Time Group: Remove Component from Service Point**

**Actor/Role:** C2M(MDM)

**Description:**

The maintenance object for install event is updated to Removed status with removal date/time and log of the install event is maintained.

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

D1-SUPPALERT - Suppression Alert
D1-UPDRMVDTM - Clear Install Event's Removal Information

**Business Object (Y)**      **Business Object**

D1-CommComponentInstallEvent
------------------------------

**11.8 Request to Update Asset(Device) Status to 'In-Store' Group: Remove Component from Service Point**

**Actor/Role:** CSR or Authorized User

**Description:**

The CSR or Authorized User initiates the request to Update Asset(Device) Status to 'In-Store'

**11.9 Populate Eff. Date/Time and Out of Service Location for Asset(Device) Removal Group: Remove Component from Service Point**

**Actor/Role:** CSR or Authorized User

**Description:**

The CSR or Authorized User Populate the effective Date/Time and Disposition Location for removing Asset(Device) from attached Component.

Test Assets related to the Current Process

Testing Asset Sr.No	Use Case	No Of Data sets
1	URM-C2M-5633-001-Turn-Off-And-Remove-Scalar-Device	4
2	URM-C2M-5633-002-Turn-Off-Remove-And-Retire-Scalar-Device	2

# Document Control

## Change Record

Date	Author	Version	Change Reference
10/01/019	Jerry Chick	0.1	Initial Version
10/14/2019	Satya Kalavala	0.2	Updated format
03/13/2024	Kunal Nerkar		Created New C2M v2.9
03/20/2024	Ashish Shukla		Reviewed
12/17/2024	Galina Polonsky		Reviewed, Approved

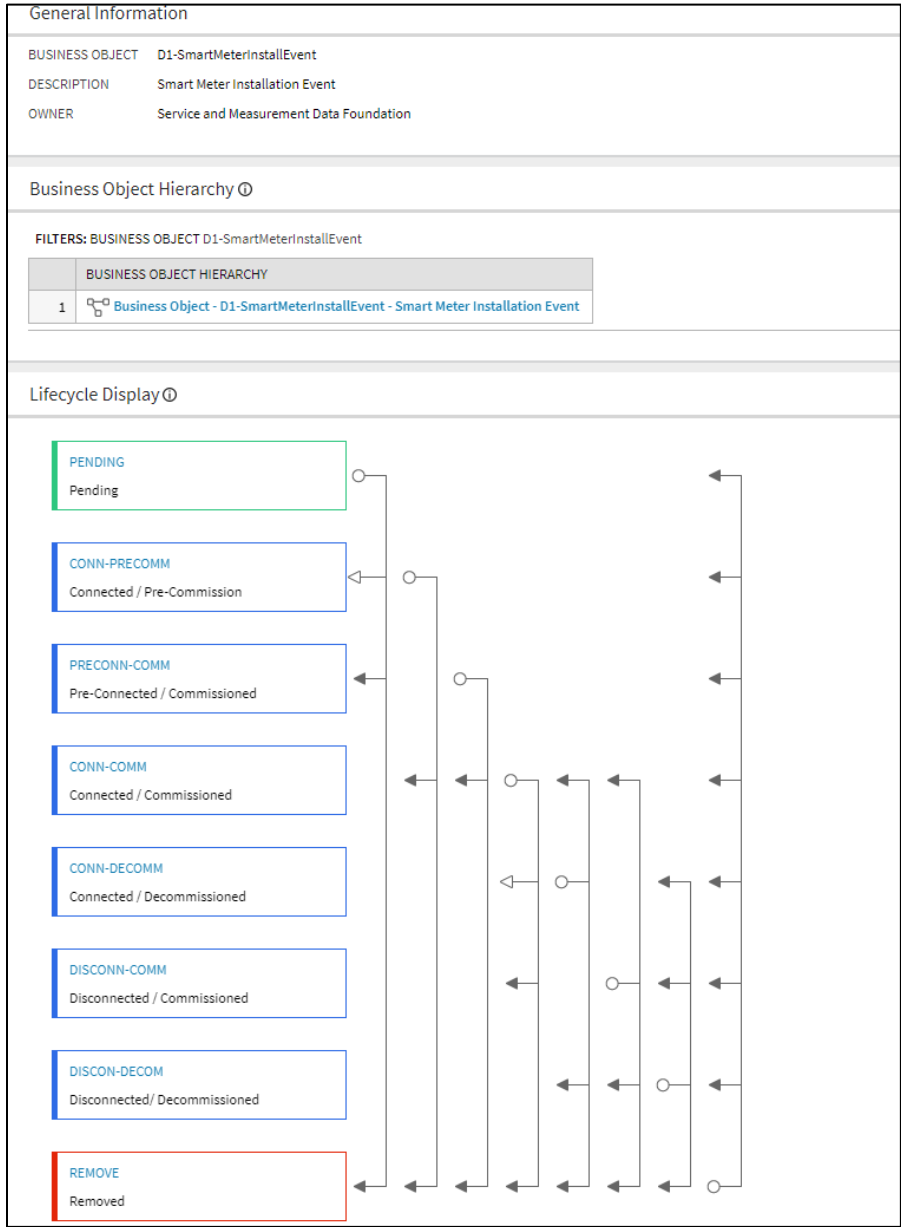
---

## Attachments

### Acronyms & Definitions

1.	AMI	:	Advanced Metering Infrastructure
2.	BO	:	Business Object
3.	DC	:	Device Configuration
4.	MDM	:	Meter Data Management
5.	MO	:	Maintenance Object
6.	SP	:	Service Point
7.	UOM	:	Unit of Measure
8.	VEE	:	Validation, Edit, Estimation

Smart Meter Install Event BO - Lifecycle



Manual Meter Install Event BO – Lifecycle

Business Object

Main

Schema

Algorithms

Lifecycle

Summary

General Information

BUSINESS OBJECT

D1-ManualMeterInstallEvent

DESCRIPTION

Manual Meter Installation Event

OWNER

Service and Measurement Data Foundation

Business Object Hierarchy

FILTERS: BUSINESS OBJECT D1-ManualMeterInstallEvent

BUSINESS OBJECT HIERARCHY

1

Business Object - D1-ManualMeterInstallEvent - Manual Meter Installation Event

Lifecycle Display

PENDING

Pending

ON

On

OFF

Off

REMOVE

Removed

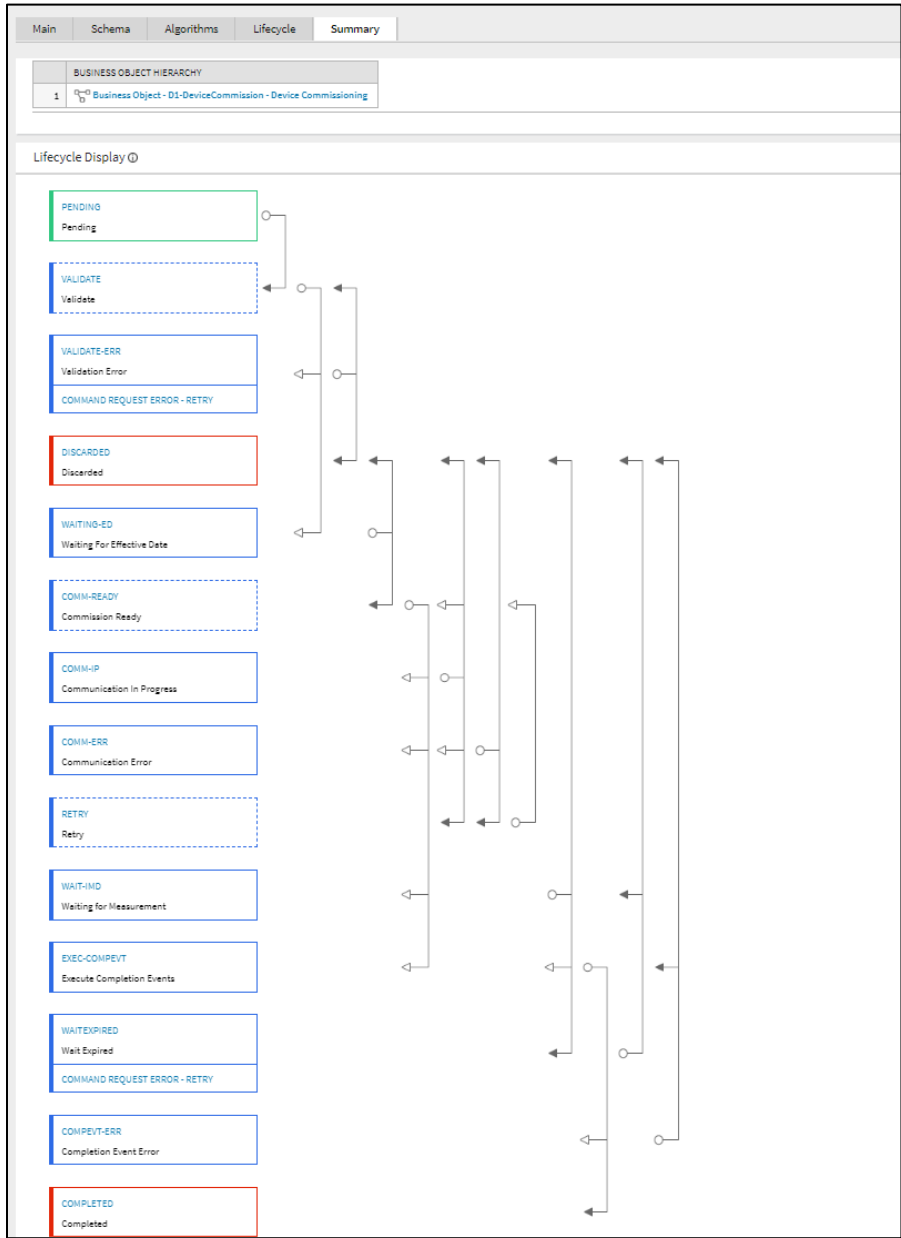
48

5.6.3.3 C2M.Manage Device De-Installation, Decommissioning and Removal

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Device Commission BO - Lifecycle



Install Event – Remove Device from Service Point

Install Event: Install Date/Time: 11-01-2015 1:00:00 PDT / Removal Date/Time: 10-31-2022 8:16:40 PDT / Removed

MainLog

Install Event

Main ⓘ

INFORMATION

Install Date/Time: 11-01-2015 1:00:00 PDT / Removal Date/Time: 10-31-2022 8:16:40 PDT / Removed

DEVICE CONFIGURATION

Water Manual Read Meter - Analog / Effective Date/Time:06-01-2015 0:00:00 PDT / Water Manual Read - CCF - Scalar / 1 Measuring Component(s) / Active ⓘ

SERVICE POINT

1012 Sundial Circle, Canyon, CA, 94516 / Water Residential / Water / Quarterly Read Cycle 01, Route 100 / Active ⓘ

STATUS

Removed

INSTALLATION DATE/TIME

11-01-2015 1:00:00 PDT

INSTALLATION CONSTANT

1.000000

DEVICE ON/OFF STATUS

Off

CREW

Portland Mobile Crew

Removal ⓘ

REMOVAL DATE/TIME

10-31-2022 8:16:40 PDT

REMOVAL TYPE

Office Exchange

Record Actions ⓘ

EditDeleteUndo Removal

Record Information ⓘ

On/Off History ⓘ

EVENT DATE/TIME	DEVICE ON/OFF STATUS	ACTIVITY ID
11-01-2015 1:00:00 PDT	On	
10-31-2022 8:01:48 PDT	Off	
10-31-2022 8:02:05 PDT	On	
10-31-2022 8:16:26 PDT	Off	

Install Event: Install Date/Time: 01-01-2019 0:00:00 PST / Removal Date/Time: 11-03-2022 7:45:56 PDT / R...

MainLog

Install Event

Main ⓘ

INFORMATION

Install Date/Time: 01-01-2019 0:00:00 PST / Removal Date/Time: 11-03-2022 7:45:56 PDT / Removed

DEVICE CONFIGURATION

Water Manual Read Meter - Analog / Effective Date/Time:01-01-2019 0:00:00 PST / Water Manual Read - CCF - Scalar / 1 Measuring Component(s) / Active ⓘ

SERVICE POINT

Test Address URM MSCS 5.6.3.2-002-01, San Francisco, CA, 94111 / Water Residential / Water / Active ⓘ

STATUS

Removed

INSTALLATION DATE/TIME

01-01-2019 0:00:00

INSTALLATION CONSTANT

1.000000

DEVICE ON/OFF STATUS

Off

CREW

Pleasanton Mobile Crew

Removal ⓘ

REMOVAL DATE/TIME

11-03-2022 7:45:56 PDT

REMOVAL TYPE

Physical Removal

Record Actions ⓘ

EditDeleteUndo Removal

Record Information ⓘ

On/Off History ⓘ

EVENT DATE/TIME	DEVICE ON/OFF STATUS	ACTIVITY ID
01-01-2019 0:00:00 PST	Off	

Install Event - Details\_On\_Off\_History

Install Event: Install Date/Time: 11-01-2015 1:00:00 PDT / Removal Date/Time: 10-31-2022 8:16:40 PDT / Removed

MainLog

Install Event

Main ⓘ

INFORMATION

Install Date/Time: 11-01-2015 1:00:00 PDT / Removal Date/Time: 10-31-2022 8:16:40 PDT / Removed

DEVICE CONFIGURATION

Water Manual Read Meter - Analog / Effective Date/Time:06-01-2015 0:00:00 PDT / Water Manual Read - CCF - Scalar / 1 Measuring Component(s) / Active ✓

SERVICE POINT

1012 Sundial Circle, Canyon, CA, 94516 / Water Residential / Water / Quarterly Read Cycle 01, Route 100 / Active ✓

STATUS

Removed

INSTALLATION DATE/TIME

11-01-2015 1:00:00 PDT

INSTALLATION CONSTANT

1.000000

DEVICE ON/OFF STATUS

Off

CREW

Portland Mobile Crew

Removal ⓘ

REMOVAL DATE/TIME

10-31-2022 8:16:40 PDT

REMOVAL TYPE

Office Exchange

Record Actions ⓘ

EditDeleteUndo Removal

Record Information ⓘ

On/Off History ⓘ

EVENT DATE/TIME	DEVICE ON/OFF STATUS	ACTIVITY ID
11-01-2015 1:00:00 PDT	On	
10-31-2022 8:01:48 PDT	Off	
10-31-2022 8:02:05 PDT	On	
10-31-2022 8:16:26 PDT	Off	

Install Event- Device Disconnect / Device Decommission

Install event- Device Disconnect

Install Event: Install Date/Time: 06-01-2016 1:00:00 PDT / Disconnected / Commissioned

Add

Search

Bookmark

Refresh

Main

Log

Install Event

Main

INFORMATION

Install Date/Time: 06-01-2016 1:00:00 PDT / Disconnected / Commissioned

DEVICE CONFIGURATION

Electric Smart Meter / Effective Date/Time:01-01-2016 0:00:00 PST / Electric Auto Read - kWh - 60 min intervals / 2 Measuring Component(s) / Active

SERVICE POINT

84 Front St, San Francisco, CA, 94111 / Electric Residential / Electric / 1901013 / Read Cycle 01, Route 110 / Active

STATUS

Disconnected / Commissioned

INSTALLATION DATE/TIME

06-01-2016 1:00:00 PDT

INSTALLATION CONSTANT

1.000000

ARMING STATUS

EXTERNAL ID

MDM EXTERNAL ID

DEVICE ON/OFF STATUS

Off

Record Actions

Edit

Delete

Reconnect

Decommission

Remove

Record Information

On/Off History

EVENT DATE/TIME	DEVICE ON/OFF STATUS	ACTIVITY ID
06-01-2016 1:00:00 PDT	On	
01-05-2023 7:26:29 PST	Off	
01-05-2023 7:26:29 PST	On	
01-05-2023 8:06:46 PST	Off	

Install Event- Device Decommission

Install Event: Install Date/Time: 06-01-2016 1:00:00 PDT / Disconnected/ Decommissioned

Add

Search

Bookmark

Refresh

Main

Log

Install Event

Main

INFORMATION

Install Date/Time: 06-01-2016 1:00:00 PDT / Disconnected/ Decommissioned

DEVICE CONFIGURATION

Electric Smart Meter / Effective Date/Time:01-01-2016 0:00:00 PST / Electric Auto Read - kWh - 60 min intervals / 2 Measuring Component(s) / Active

SERVICE POINT

84 Front St, San Francisco, CA, 94111 / Electric Residential / Electric / 1901013 / Read Cycle 01, Route 110 / Active

STATUS

Disconnected/ Decommissioned

INSTALLATION DATE/TIME

06-01-2016 1:00:00 PDT

INSTALLATION CONSTANT

1.000000

ARMING STATUS

EXTERNAL ID

MDM EXTERNAL ID

DEVICE ON/OFF STATUS

Off

Record Actions

Edit

Delete

Connect

Recomission

Remove

Record Information

On/Off History

EVENT DATE/TIME	DEVICE ON/OFF STATUS	ACTIVITY ID
06-01-2016 1:00:00 PDT	On	
01-05-2023 7:26:29 PST	Off	
01-05-2023 7:26:29 PST	On	
01-05-2023 8:06:46 PST	Off	

**Miscellaneous. Related Web Services**

System supports communicating with the external system via RESTful services or via SOAP services. In both cases, the system uses an object called inbound web service (IWS) to store the configuration. A web service class is used to distinguish whether the IWS is used for REST or SOAP.

**Inbound Web Services:**

D1-DeviceConfiguration - Device Configurations	REST
D1-DeviceDecommissioning - Device Decommissioning	SOAP
W1-AssetLocation - Operational Device Asset Location	SOAP
W1-TrackedAsset - Operational Device Tracked Asset	SOAP
D1-InstallEvent -Install Events	REST