**CCS**

**24B**

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

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## Brief Description

**Business Process:** 5**.6.3.3 CCS.Manage Device De-installation, Decommissioning and Removal**

**Process Type: Sub-Process**

**Parent Process: 5.6.3 CCS.Manage Supplies/Devices**

**Sibling Processes: 5.6.3.1 CCS. Manage Tracked Assets and Devices**

**5.6.3.2 CCS.Manage Device Installation and Commissioning, 3.3.1.1 CCS.Maintain Contact**

This process describes how devices are managed in CCS(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 CCS(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 CCS(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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## Business Process Model Page 5



## Business Process Model Page 6



## Detail Business Process Model Description

[**1.0**](#_Business_Process_Model_4) **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**](#_Business_Process_Model_4) **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**](#_Business_Process_Model_4) **Evaluate Device Configuration and Service Point Group: Update Install Event**

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

**Description:**

CCS(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**](#_Business_Process_Model_4) **Update Install Event On/Off Status Group: Update Install Event**

**Actor/Role:** CCS(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**](#_Business_Process_Model_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**](#_Business_Process_Model_4) **Analyze Device Decommission Status**

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

**Description:**

The CSR or Authorized User determines the Decommission status.

[**1.6**](#_Business_Process_Model_4) **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**](#_Business_Process_Model_4) **Demand Reset Group: Update Install Event**

**Actor/Role:** CCS - MDM

**Description:**

CCS-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.**](#_Business_Process_Model_4)**8 Disconnect Device Group: Update Install Event**

**Actor/Role:** CCS(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:** CCS(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**](#_Business_Process_Model_1) **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**](#_Business_Process_Model_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**](#_Business_Process_Model_1) **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**](#_Business_Process_Model_1) **Create Remote Disconnect Activity in ‘Pending’ Status**

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

**Description:**

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

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

|  |
| --- |
| D1-DETACTTYP - 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**](#_Business_Process_Model_1) **Perform Validations and Update Activity To 'Validate' Status Group: Validation**

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

**Description:**

CCS(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**](#_Business_Process_Model_1) **Update Activity to ‘Validation Error’ State Group: Validation**

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

**Description:**

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

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

|  |
| --- |
| D1-RemoteDisconnect |

[**2.6**](#_Business_Process_Model_1) **Create To Do Group: Validation**

**Group: Communicate**

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

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

**Description:**

CCS(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**](#_Business_Process_Model_1) **Update Activity To ‘Waiting For Effective Date’ Status**

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

**Description:**

CCS(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**](#_Business_Process_Model_1) **Wait For Effective Date**

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

**Description:**

CCS(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**](#_Business_Process_Model_1) **Update Activity To ‘Connection Ready’ Status**

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

**Description:**

CCS(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**](#_Business_Process_Model_1) **Communicate to Complete Disconnection Group: Communicate**

**Group: Perform Command**

**Actor/Role:** CCS(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**](#_Business_Process_Model_1) **Communicate with Device for Disconnection Group: Perform Command**

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

**Description:**

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

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

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

|  |
| --- |
| D1-RemoteDisconnect |

[**3.2**](#_Business_Process_Model_1) **Update Activity ‘Communication Error’ State Group: Communicate**

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

**Description:**

CCS(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 Error) |

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

|  |
| --- |
| D1-RemoteDisconnect |

[**3.3**](#_Business_Process_Model_1) **Update Activity ‘Communication In Progress’ Status Group: Communicate**

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

**Description:**

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

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

|  |
| --- |
| D1-CHKCHILD - Check Children Communications |

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

|  |
| --- |
| D1-RemoteDisconnect |

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

[**3.4**](#_Business_Process_Model_1) **Update Activity to ‘Execute Completion Event’ Group: Execute Completion Event**

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

**Description:**

CCS(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-RemoteDisconnect |
| D1-DisconnectDevice |
| D1-CreateIMD |

[**3.5**](#_Business_Process_Model_1) **Execute Completion Event ‘Create IMD’ Group: Execute Completion Event**

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

**Description:**

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

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

|  |
| --- |
| D1-CREIMD (Create IMD) |

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

|  |
| --- |
| D1-CreateIMD |
| D1-CompletionEvent |

[**3.6**](#_Business_Process_Model_1) **Update Activity to Waiting for Measurement State Group: Execute Complete Event(s)**

**Group: Retrieve Final Measurements**

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

**Description:**

CCS(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**](#_Business_Process_Model_1) **Update Activity with Final IMD Group: Execute Complete Event(s)**

**Group: Retrieve Final Measurements**

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

**Description:**

For Create IMD Completion executed, CCS(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**](#_Business_Process_Model_1) **Identify Existing Scalar Measurement Group: Execute Complete Event(s)**

**Group: Retrieve Final Measurements**

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

**Description:**

CCS(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**](#_Business_Process_Model_1) **Monitor IMD Availability within Allowable Period Group: Execute Complete Event(s)**

**Group: Retrieve Final Measurements**

**Group: Automated Wait Time Monitor Process**

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

**Description:**

CCS(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](#_Business_Process_Model_1) **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:** CCS(MDM)

**Description:**

CCS(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**](#_Business_Process_Model_1) **Execute Disconnect Device Group: Execute Complete Event(s)**

**Group: Disconnect**

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

**Description:**

CCS(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**](#_Business_Process_Model_1) **Update Activity to ‘Completion Event Error’ State Group: Execute Complete Event(s)**

**Group: Disconnect**

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

**Description:**

CCS(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**](#_Business_Process_Model_1) **Update Install Event to ‘Disconnected/Commissioned’ Status‘**

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

**Description:**

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

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

|  |
| --- |
| D1-SmartMeterInstallEvent |

[**4.4**](#_Business_Process_Model_1) **Update Remote Disconnect Activity to ‘Completed’ Status**

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

**Description:**

CCS(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**](#_Business_Process_Model_1) **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**](#_Business_Process_Model_1) **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.**](#_Business_Process_Model_1)**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.**](#_Business_Process_Model_1)**8 Update Activity**

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

**Description:**

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

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

|  |
| --- |
| D1-RemoteDisconnect |

[**4.**](#_Business_Process_Model_1)**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:** CCS(MDM)

**Description:**

CCS(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**](#_Business_Process_Model_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**](#_Business_Process_Model_1) **Delete Activity**

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

**Description:**

CCS(MDM) updates removes activity that was created.

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

|  |
| --- |
| D1-RemoteDisconnect |

[**5.3**](#_Business_Process_Model_6) **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**](#_Business_Process_Model_6) **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**](#_Business_Process_Model_6) **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**](#_Business_Process_Model_6) **Create Decommissioning Activity in ‘Pending’ Status**

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

**Description:**

CCS(MDM) creates the maintenance object with the data provided. When the activity is created, CCS(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-DETACTTYP - Determine Activity Type |

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

|  |
| --- |
| D1-DeviceDecommission |

**Inbound Web Service(s):**

|  |
| --- |
| D1-DeviceDecommissioning |

[**5.7**](#_Business_Process_Model_6) **Perform Validations and Update Activity To 'Validate' Status Group: Validation**

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

**Description:**

CCS(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 |
| 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 |

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

|  |
| --- |
| D1-DeviceDecommission |

[**5.8**](#_Business_Process_Model_6) **Update Activity to ‘Validation Error’ State Group: Validation**

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

**Description:**

CCS(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**](#_Business_Process_Model_6) **Create To Do Group: Validation**

**Group: Communicate**

**Group: Complete Event**

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

**Description:**

CCS(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-DeviceDecommission |

[**6.0**](#_Business_Process_Model_6) **Update Activity To ‘Waiting For Effective Date’ Status**

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

**Description:**

CCS(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**](#_Business_Process_Model_6) **Wait for Effective Date Group: Pre-communicate**

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

**Description:**

CCS(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**](#_Business_Process_Model_6) **Update Activity To ‘Communication In Progress’ Status Group: Communicate**

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

**Description:**

CCS(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**](#_Business_Process_Model_6) **Communicate to Complete Decommissioning Group: Communicate**

**Group: Perform Command**

**Actor/Role:** CCS(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**](#_Business_Process_Model_6) **Communicate with Device to Decommission Group: Perform Command**

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

**Description:**

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

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

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

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

|  |
| --- |
| D1-DeviceDecommission |

[**6.5**](#_Business_Process_Model_6) **Update Activity ‘Communication Error’ State Group: Communicate**

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

**Description:**

CCS(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) |
| 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 |

[**6.6**](#_Business_Process_Model_6) **Execute Completion Event Group: Complete Event**

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

**Description:**

CCS(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**](#_Business_Process_Model_6) **Update Install Event to ‘Disconnected/Decommissioned’ Status‘Group: Complete Event**

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

**Description:**

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

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

|  |
| --- |
| D1-SmartMeterInstallEvent |
| D1-DeviceDecommission |

[**6.8**](#_Business_Process_Model_6) **Update Activity to ‘Completion Event Error’ State Group: Complete Event**

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

**Description:**

CCS(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**](#_Business_Process_Model_6) **Complete Decommission Activity**

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

**Description:**

CCS(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**](#_Business_Process_Model_6) **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**](#_Business_Process_Model_6) **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**](#_Business_Process_Model_6) **Update Activity**

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

**Description:**

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

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

|  |
| --- |
| D1-DeviceDecommission |

[**7.4**](#_Business_Process_Model_6) **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**](#_Business_Process_Model_6) **Update Activity to ‘Discarded’ State Group: Automated Retry Process**

**Group: Wait Time Out**

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

**Description:**

CCS(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-DeviceDecommission |

[**7.6**](#_Business_Process_Model_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**](#_Business_Process_Model_6) **Delete Activity**

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

**Description:**

CCS(MDM) updates removes activity that was created.

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

|  |
| --- |
| D1-DeviceDecommission |

[**7.8**](#_Business_Process_Model_7) **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**](#_Business_Process_Model_7) **Complete To Do(s) Group: Automated Retry Process**

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

**Description:**

CCS(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**](#_Business_Process_Model_7)**.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**](#_Business_Process_Model_7) **Update Activity to ‘Validate’ State and Initialize Reprocessing Group: Automated Validation Retry Process**

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

**Description:**

CCS(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**](#_Business_Process_Model_7) **Identify Activity in ‘Validation Error’ State Group: Automated Validation Retry Process**

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

**Description:**

CCS(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**](#_Business_Process_Model_7) **Evaluate Waiting Period Group: Automated Retry Process**

**Group: Wait Time Out**

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

**Description:**

CCS(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**](#_Business_Process_Model_7) **Evaluate Criteria to Run Automated Retry Process Group: Automated Retry Process**

**Actor/Role:** CCS(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.

**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.**](#_Business_Process_Model_7)**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’.

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

|  |
| --- |
| D1-RemoteDisconnect |

[**8.6**](#_Business_Process_Model_7) **Update Activity to ‘Retry’ State and Initialize Reprocessing Group: Automated Communication Retry Process**

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

**Description:**

CCS(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-RemoteDisconnect |

[**8.7**](#_Business_Process_Model_7) **Identify Activity in ‘Communication Error’ State Group: Automated Communication Retry Process**

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

**Description:**

CCS(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 |

[**8.**](#_Business_Process_Model_7)**9 Update Activity to Execute Completion Event State and Initialize Reprocessing Group: Automated Completion Retry Process**

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

**Description:**

CCS(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**](#_Business_Process_Model_7) **Identify Activity in ‘Completion Event Error’ State Group: Automated Completion Retry Process**

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

**Description:**

CCS(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**](#_Business_Process_Model_7) **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**](#_Business_Process_Model_7) **Update Activity to ‘Waiting for Measurement’ State and Initialize Reprocessing Group: Automated Retrieve Measurement Retry Process**

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

**Description:**

CCS(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**](#_Business_Process_Model_7) **Identify Activity in ‘Wait Expired’ State Group: Automated Retrieve Measurement Retry Process**

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

**Description:**

CCS(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.**](#_Business_Process_Model_8)**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**](#_Business_Process_Model_8) **Complete To Do(s) Group: Automated Retry Process**

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

**Description:**

CCS(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**](#_Business_Process_Model_8) **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**](#_Business_Process_Model_8) **Update Activity to ‘Validate’ State and Initialize Reprocessing Group: Automated Validation Retry Process**

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

**Description:**

CCS(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**](#_Business_Process_Model_8) **Identify Activity in ‘Validation Error’ State Group: Automated Validation Retry Process**

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

**Description:**

CCS(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**](#_Business_Process_Model_8) **Evaluate Waiting Period Group: Automated Retry Process**

**Group: Wait Time Out**

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

**Description:**

CCS(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-DeviceDecommission |

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

|  |
| --- |
| D1-CREDW (Activity Wait Periodic Monitor) |

[**10.0**](#_Business_Process_Model_8) **Evaluate Criteria to Run Automated Retry Process Group: Automated Retry Process**

**Actor/Role:** CCS(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.

**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) |

[**10.1**](#_Business_Process_Model_8) **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’.

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

|  |
| --- |
| D1-DeviceDecommission |

[**10.2**](#_Business_Process_Model_8) **Update Activity to ‘Retry’ State and Initialize Reprocessing Group: Automated Communication Retry Process**

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

**Description:**

CCS(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**](#_Business_Process_Model_8) **Identify Activity in ‘Communication Error’ State Group: Automated Communication Retry Process**

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

**Description:**

CCS(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.**](#_Business_Process_Model_8)**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**](#_Business_Process_Model_8) **Update Activity to Execute Completion Event State and Initialize Reprocessing Group: Automated Retrieve Measurement Retry Process**

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

**Description:**

CCS(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**](#_Business_Process_Model_8) **Identify Activity in ‘Completion Event Error’ State Group: Automated Retrieve Measurement Retry Process**

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

**Description:**

CCS(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) |

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

|  |
| --- |
| D1-DeviceDecommission |

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

|  |
| --- |
| D1-CRERR (Command Request Error – Retry) |

[**10.7**](#_Business_Process_Model_9) **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**](#_Business_Process_Model_9) **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**](#_Business_Process_Model_9) **Evaluate Device and Removal Type Group: Remove Smart/Manual Meters from Service Point**

**Group: Remove Component from Service Point**

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

**Description:**

CCS(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 |
| D1-SmartMeterInstallEvent |

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

|  |
| --- |
| Extendable Lookup: W1-AssetDisposition |
| Asset Type |
| Out of Service Location Type |

**Inbound Web Service(s):**

|  |
| --- |
| D1-InstallEvent |

[**11.0**](#_Business_Process_Model_9) **Update Install Event Status to ‘Removed’ with Removal type as ‘Physical Removal’ Group: Remove Smart/Manual Meters from Service Point**

**Actor/Role:** CCS(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**](#_Business_Process_Model_9) **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:** CCS (ODM)

**Description:**

CCS (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-BDGNOVAL - Validate Badge Number |
| W2-SRLNOVAL - Validate Serial Number |
| W2-VALCONFIG - Validate Configuration |

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

|  |
| --- |
| W1-AssetType |
| W1-TrackedAsset |
| W1-Item |
| W2-ManualMeter |
| W2-SmartMeter |

**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 |

[**11.2**](#_Business_Process_Model_9) **Update Install Event Status to ‘Removed’ with Removal type as ‘Office Removal’ Group: Remove Smart/Manual Meters from Service Point**

**Actor/Role:** CCS(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 |

[**11.3**](#_Business_Process_Model_9) **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**](#_Business_Process_Model_9) **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**](#_Business_Process_Model_9) **Update Asset(Component) to In Store Status and Update Disposition Group: Detach Component**

**Group: Remove Component from Service Point**

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

**Description:**

CCS (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**](#_Business_Process_Model_9) **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**](#_Business_Process_Model_9) **Update Install Event Status to ‘Removed’ with Remove Date and Time Group: Remove Component from Service Point**

**Actor/Role:** CCS(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**](#_Business_Process_Model_9) **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**](#_Business_Process_Model_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-CCS-5633-001-Turn-Off-And-Remove-Scalar-Device | 4 |
| 2 | URM-CCS-5633-002-Turn-Off-Remove-And-Retire-Scalar-Device | 2 |

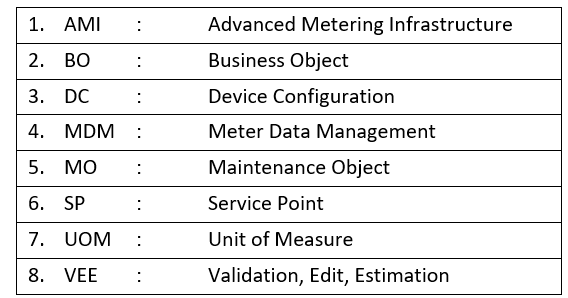
## Document Control

**Change Record**

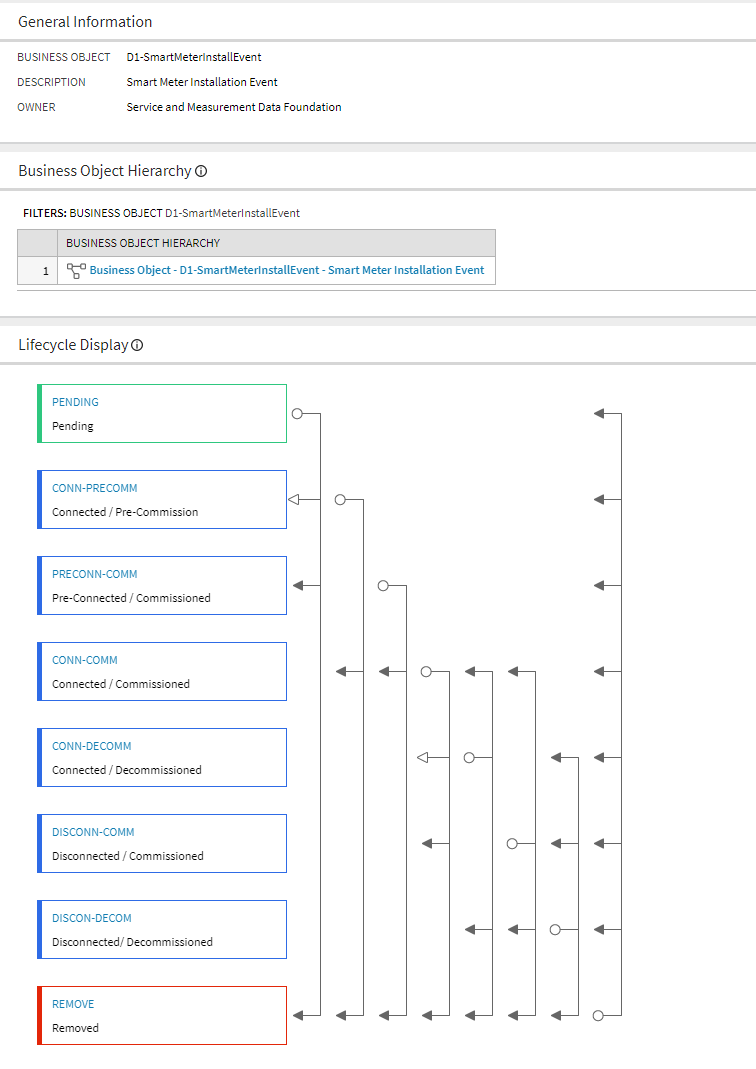
| Date | Author | Version | Change Reference |
| --- | --- | --- | --- |
|  |  |  |  |
| 10/01/019 | Jerry Chick | 0.1 | Initial Version |
| 10/14/2019 | Satya Kalavala | 0.2 | Updated format |
| 10/13/2024 | Kunal Nerkar |  | Updated Document and Visio for CCS 24B |
| 10/20/2024 | Ashish Shukla |  | Reviewed |
| 12/17/2024 | Galina Polonsky |  | Reviewed, Approved |

## Attachments

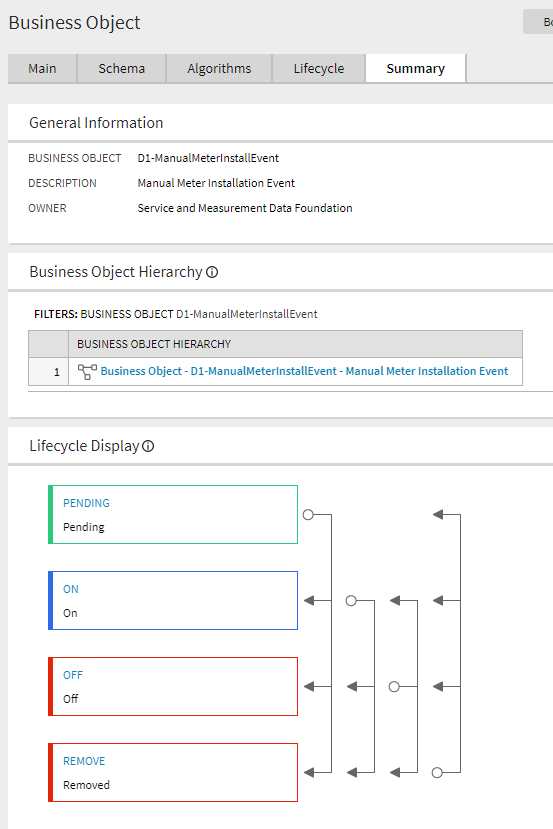
### Acronyms & Definitions



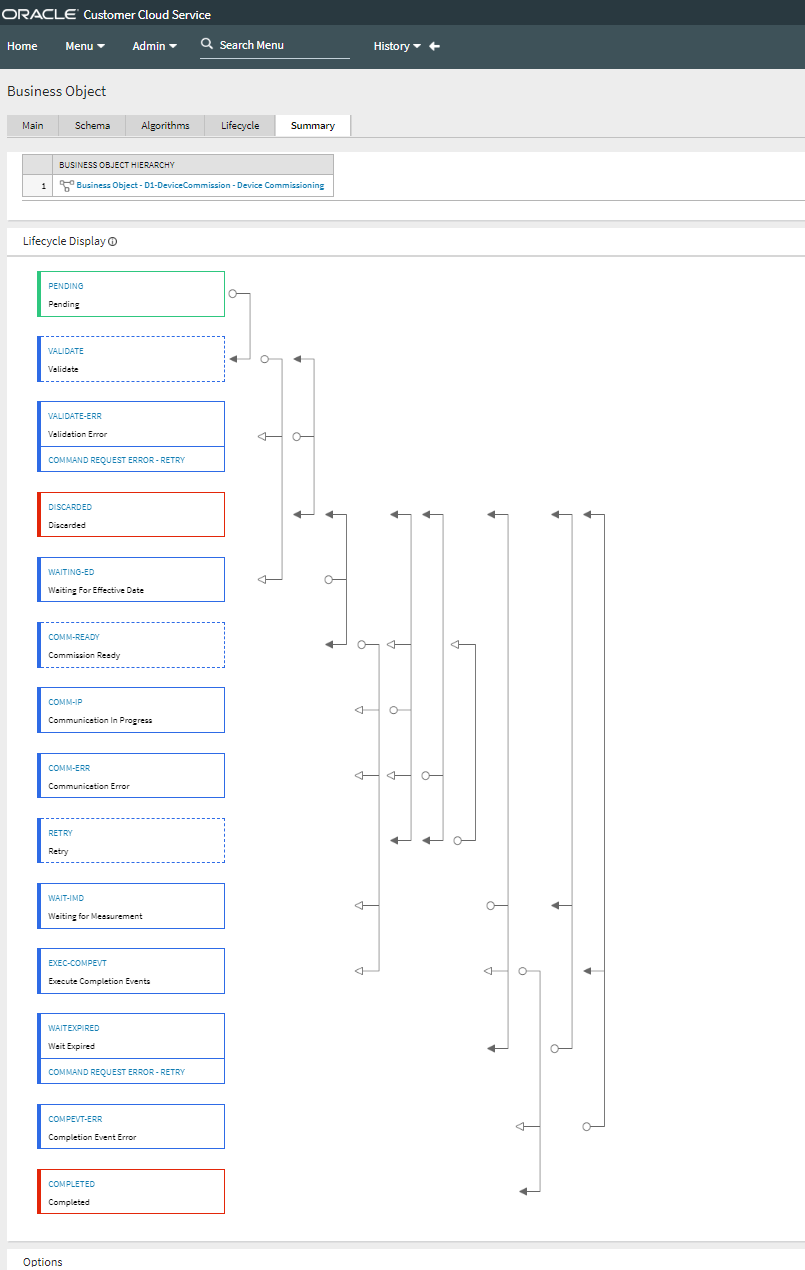
### Smart Meter Install Event BO - Lifecycle



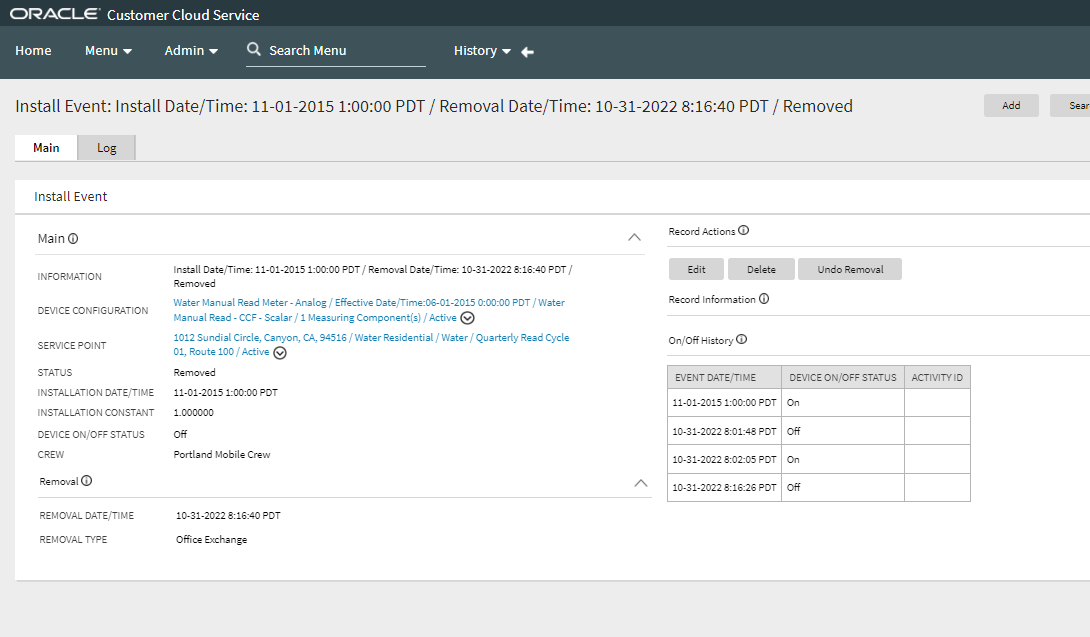
### Manual Meter Install Event BO – Lifecycle

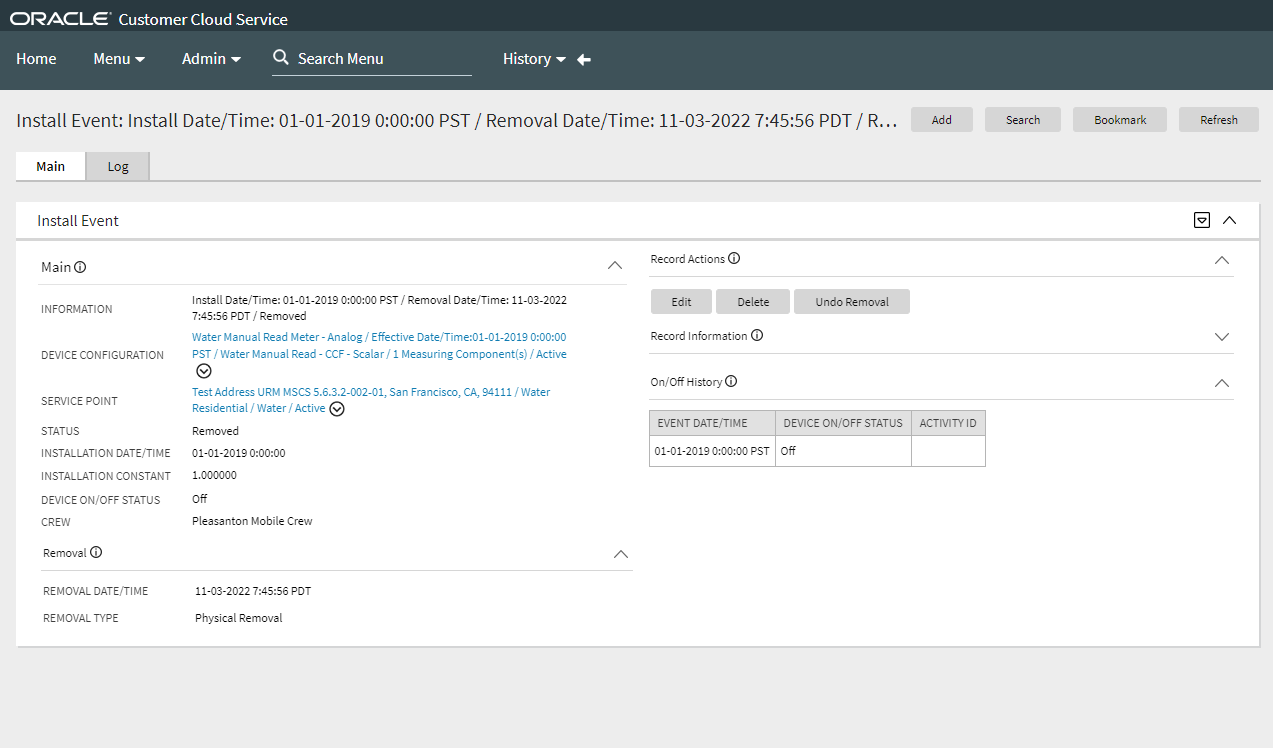


### Device Commission BO - Lifecycle

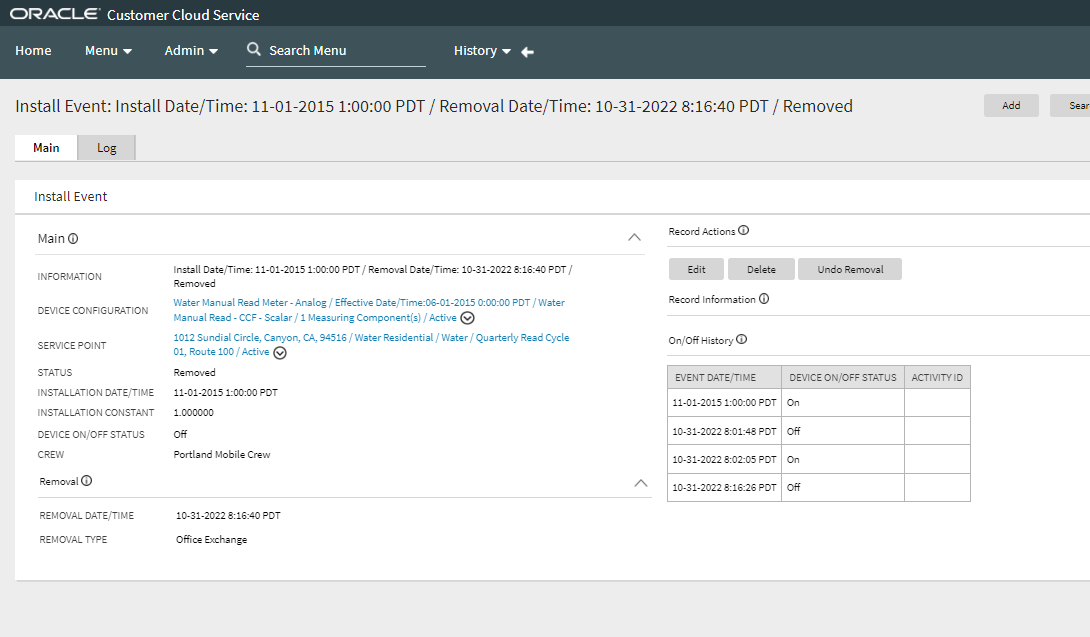


### Install Event – Remove Device from Service Point



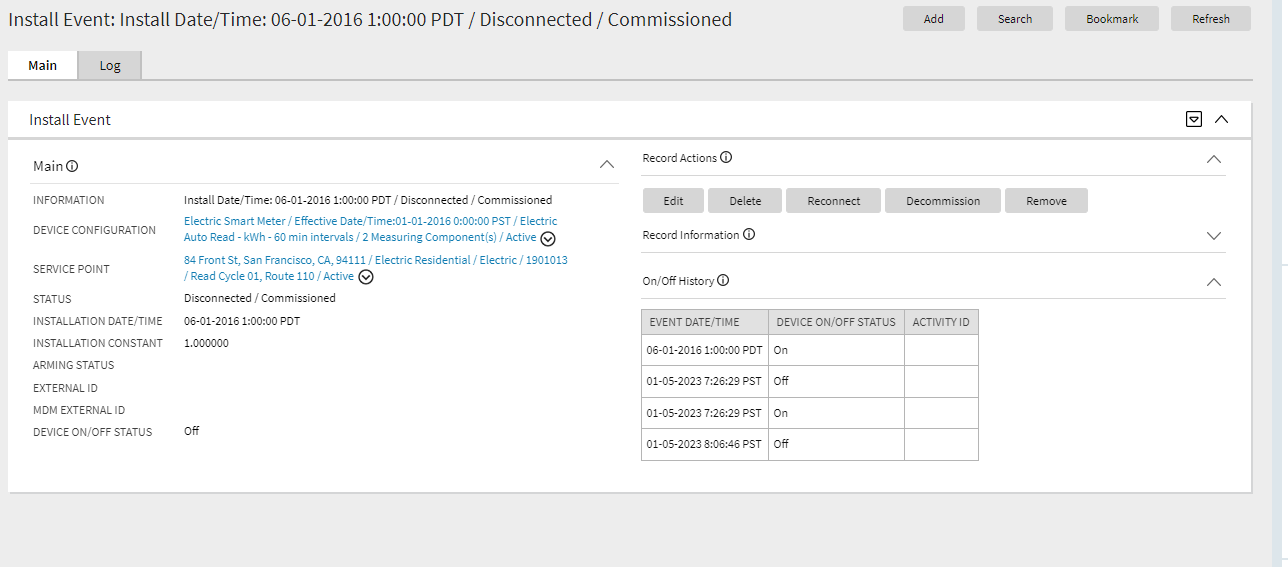


### Install Event - Details\_On\_Off\_History

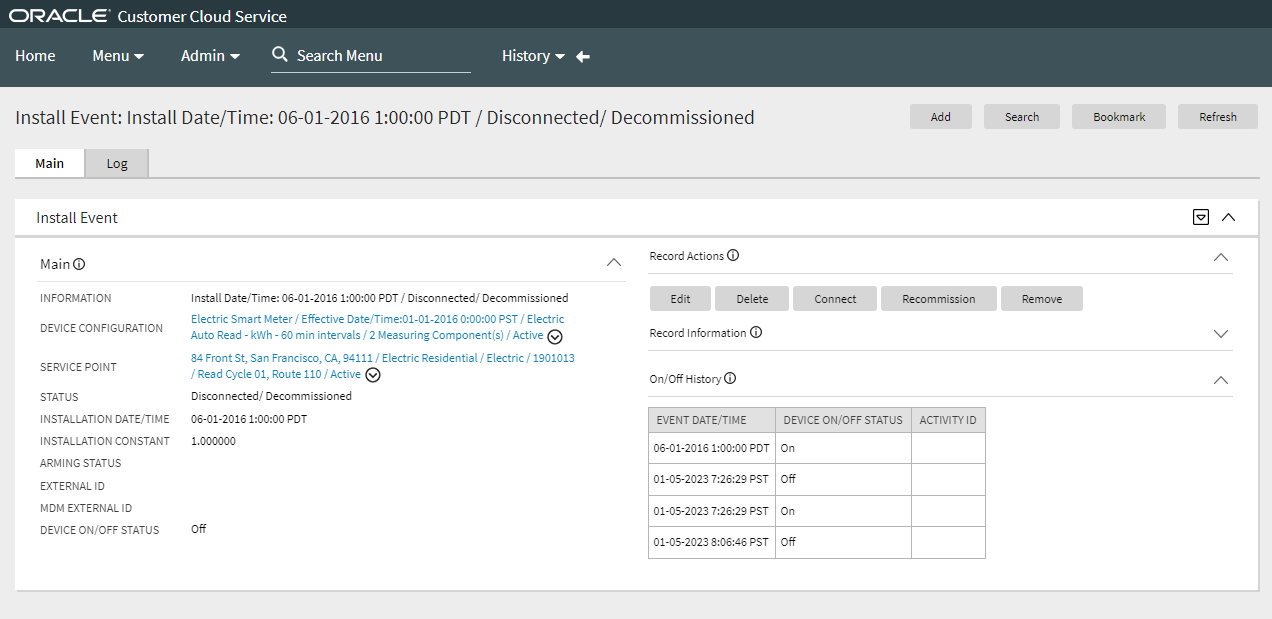


### Install Event- Device Disconnect / Device Decommission

Install event- Device Disconnect



Install Event- Device Decommission



### 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 |