



METER DATA MANAGEMENT V 2.2

5.6.3.3 MDM Manage Device De-Installation, Decommissioning and Retirement

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Brief Description

Business Process:	5.6.3.3 MDM.v2.2.Manage Device De-installation, Decommissioning and Retirement
Process Type:	Sub-Process
Parent Process:	5.6.3 MDM. v2.2.Manage Supplies/Devices
Sibling Processes:	5.6.3.1 MDM.v2.2.Manage Device and SP 5.6.3.2 MDM.v2.2.Manage Device Installation and Commissioning, 3.3.1.1 MDM.v2.2.Maintain Contact

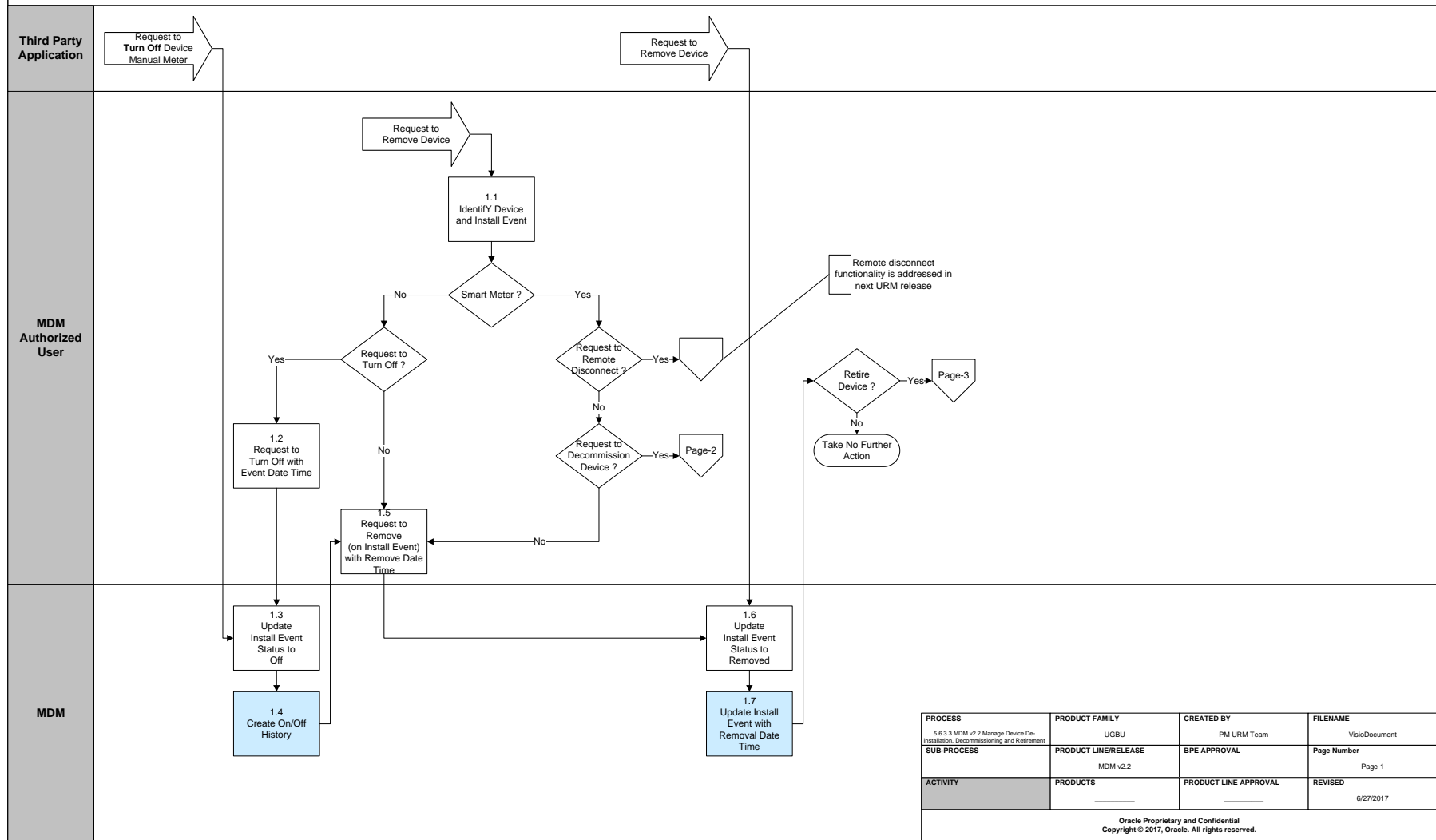
This process describes how devices are managed in MDM. This includes device removals and retiring a device. This process also includes device decommission. The process assumes that the device and service point has already been setup in MDM(See the sibling process listed above – 5.6.3.1 Manage Device and SP and 5.6.3.2.Manage Device Installation and Commissioning). De-installation, Decommissioning and Retirement can be initiated manually via user interface or automatically through a request from a third-party system.

Decommissioning 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. Decommissioning is 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. The 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

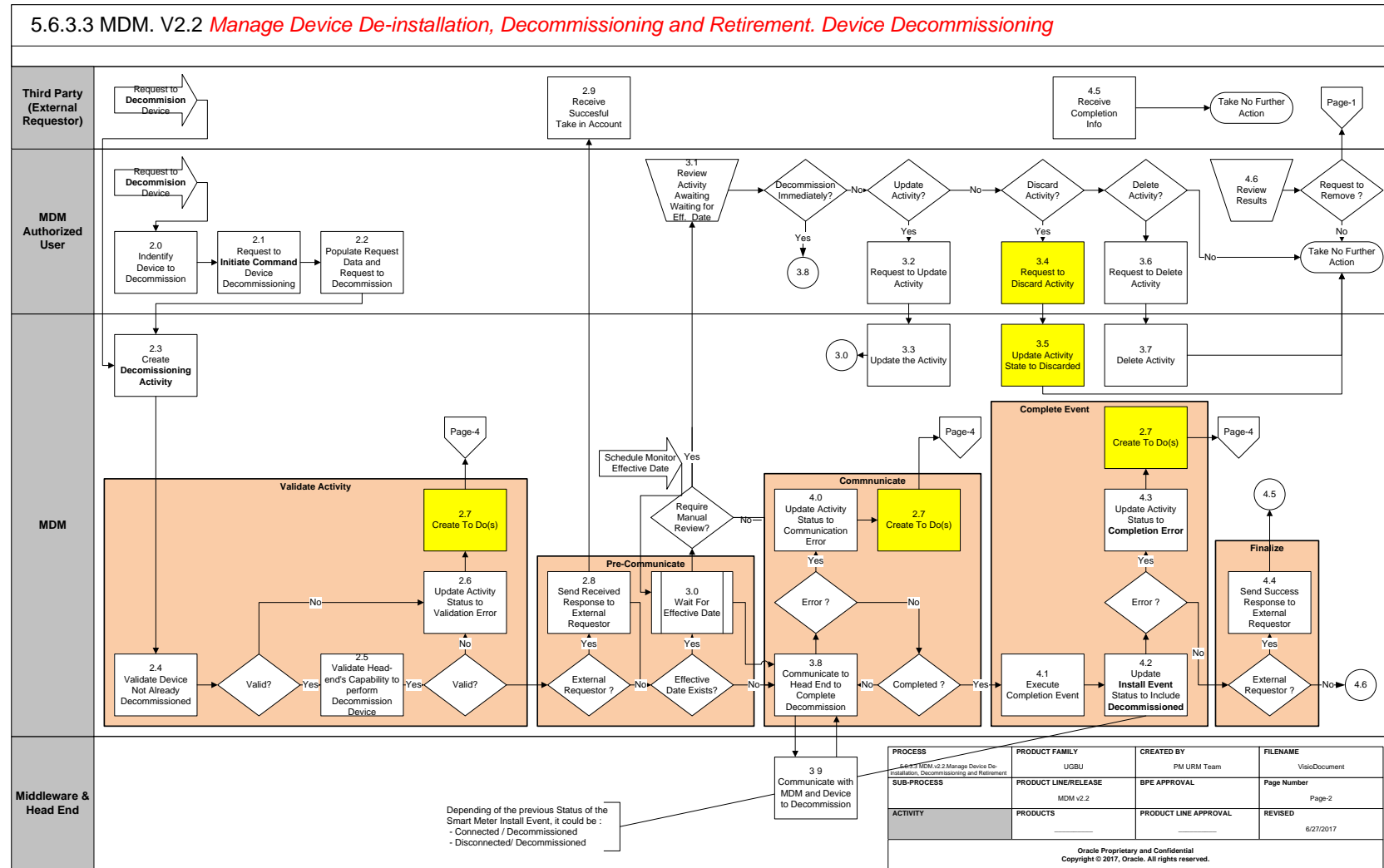
Business Process Model Page 1

5.6.3.3 MDM. V2.2 *Manage Device De-installation, Decommissioning and Retirement. Uninstall Device*

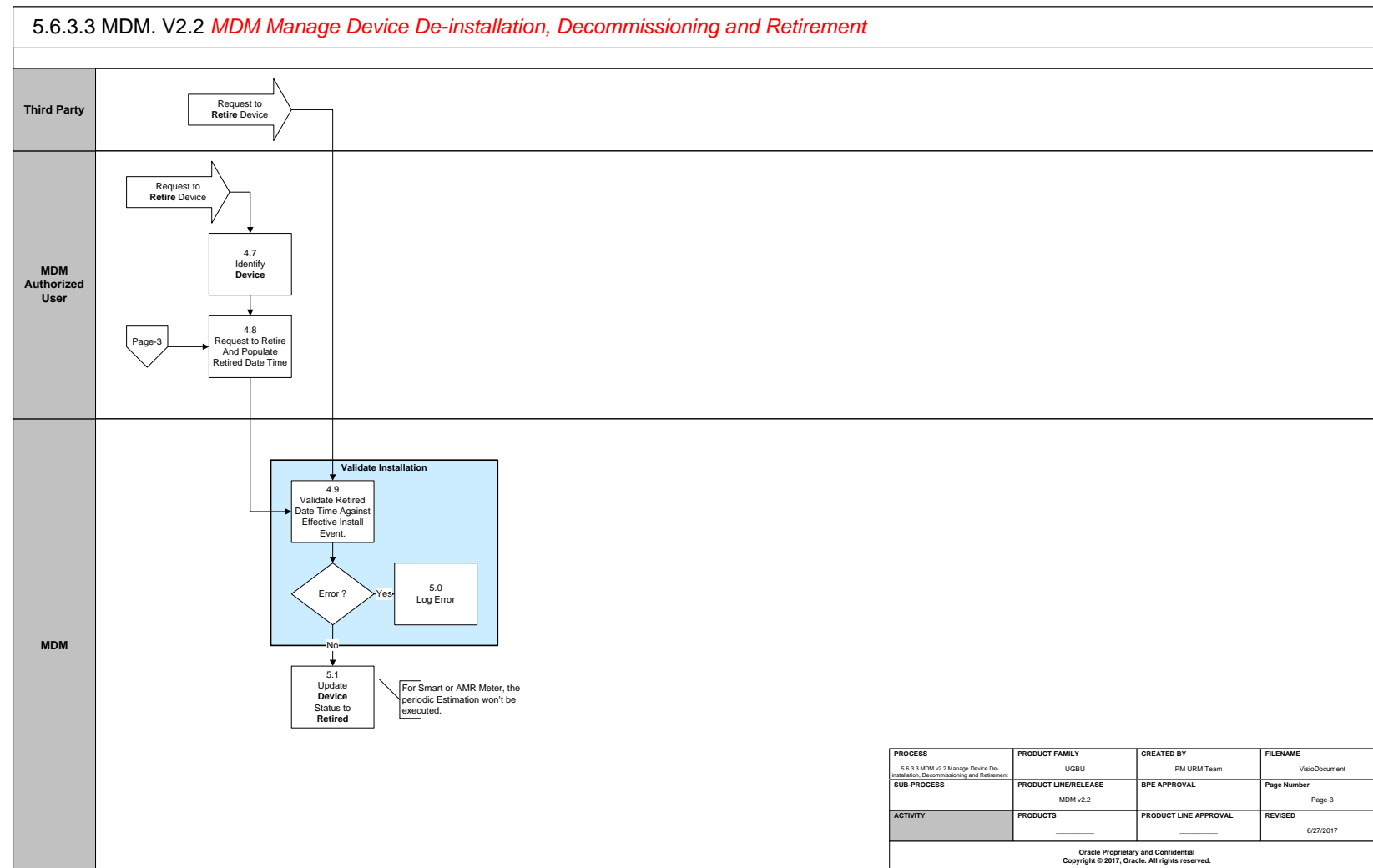


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Business Process Model Page 2

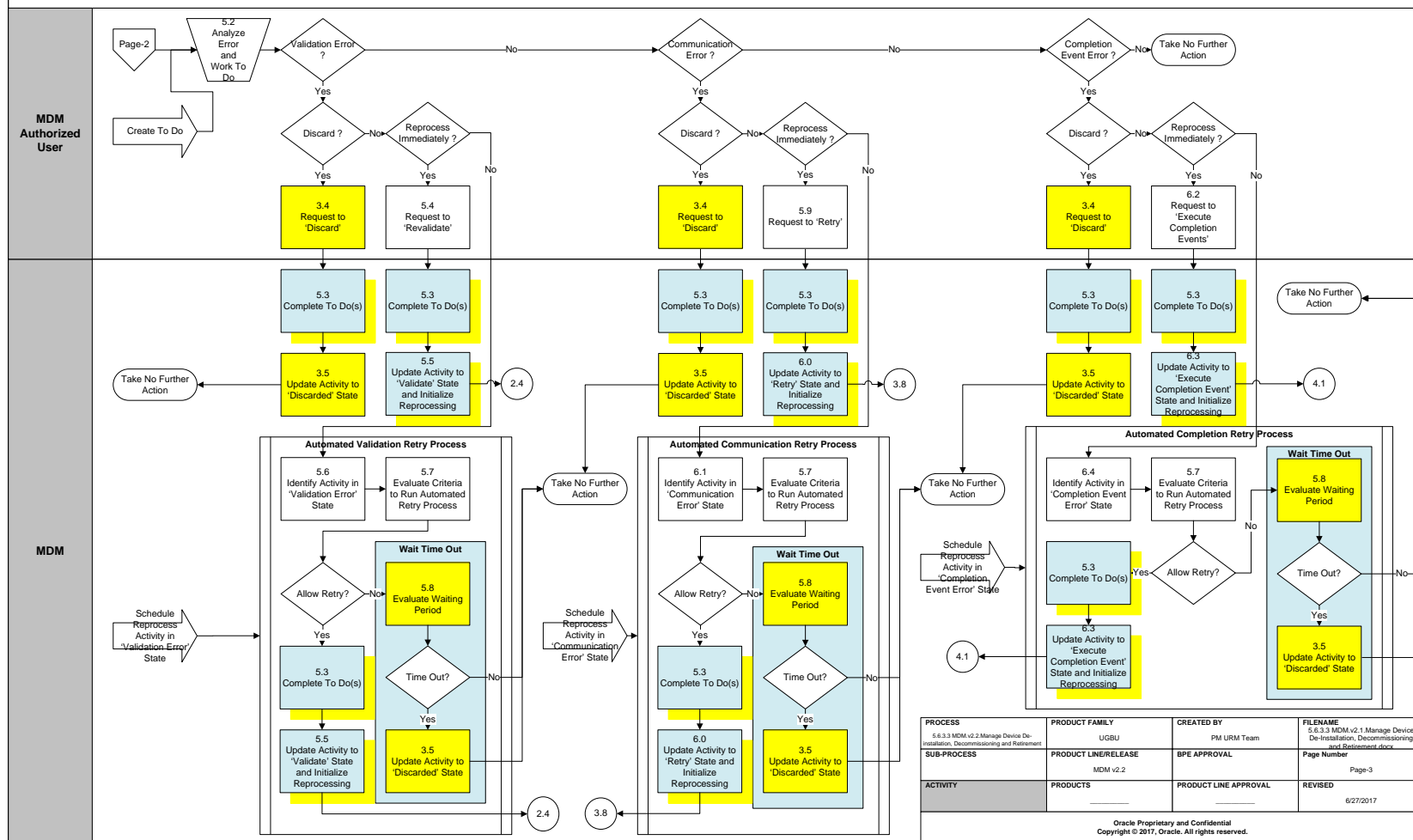


Business Process Model Page 3



Business Process Model Page 4

5.6.3.3 MDM V2.2 *Manage Device De-installation, Decommissioning and Retirement. Exception Process*



Detail Business Process Model Description

Process: Uninstall Event

1.1 Identify Device and Install Event

Actor/Role: MDM Authorized User

Description: The MDM Authorized User locates and identifies the device that needs to be removed.

1.2 Request to Turn Off with Event Date and Time

Actor/Role: MDM Authorized User

Description: The MDM Authorized User makes the request to update the status to turn off service at the service point.

1.3 Update Install Event Status to Off

Actor/Role: MDM

Description: The maintenance object for install event is updated to an **off** status.

Process Plug-in enabled (Y)	Available Algorithm(s):	D1-CHKHISEVT
Business Object (Y)	Business Object	D1-ManualMeterInstallEvent
Configuration required (Y)	Entities to Configure:	Device Service Point Install Event

1.4 Create On/Off History

Actor/Role: MDM

Description: The install event device on/off status is updated.

Process Plug-in enabled (Y)	Available Algorithm(s):	D1-CHKHISEVT
Business Object (Y)	Business Object	D1-ManualMeterInstallEvent
Configuration required (Y)	Entities to Configure:	Device
		Service Point
		Install Event

1.5 Request to Remove (on Install Event) with Remove Date Time

Actor/Role: MDM Authorized User

Description: The MDM Authorized User makes the request to remove the device on the SP

1.6 Update Install Event Status to Removed

Actor/Role: MDM

Description: The maintenance object for install event is updated to a remove status.

1.7 Update Install Event with Removal Date Time

Actor/Role: MDM

Description: The date and time for the Install Event will be updated.

Process: Decommission Smart Meter

2.0 Identify the Device

Actor/Role: MDM authorized User

Description: The MDM Authorized User identifies the device for decommissioning.

2.1 Request to Initial Command Device Commissioning

Actor/Role: MDM Authorized User

Description: The MDM Authorized User makes the command request to de commission the device.

2.2 Populate Request Data and Request to Decommission

Actor/Role: MDM Authorized User

Description: The authorized user populates the data and initiates the request to decommission the device.

2.3 Create Decommissioning Activity

Actor/Role: MDM

Description: MDM creates the maintenance object with the data provided. When the activity is created, MDM creates an Activity ID.

Business Object (Y)	Business Object	D1-DeviceDecommission
Configuration required (Y)	Entities to Configure:	Device
		Service Point
		Device Commission

Group: Validate Activity

2.4 Validate Device Not Already Decommissioned

Actor/Role: MDM

Description: MDM validates the device can be decommissioned

Process Plug-in enabled (Y)	Available Algorithm(s):	D1-VALDVCNAD
Business Object (Y)	Business Object	D1-DeviceDecommission

Group: Validate Activity

2.5 Validate Head End's Capability Perform Decommission Device

Actor/Role: MDM

Description: MDM validates the head end system ability to receive decommission commands and communicates with head end system.

Process Plug-in enabled (Y)	Available Algorithm(s):	<input type="text" value="D1-VHCPDCOMM"/>
Business Object (Y)	Business Object	<input type="text" value="D1-DeviceDecommission"/>
Configuration required (Y)	Entities to Configure:	<input type="text" value="Device"/>

Group: Validate Activity

2.6 Update Activity Status to Validation Error

Actor/Role: MDM

Description: MDM updates the status of the activity to Validation Error and creates a To Do Entry.

Process Plug-in enabled (Y)	Available Algorithm(s):	<input type="text" value="D1-VALDVCNAD"/>
Business Object (Y)	Business Object	<input type="text" value="D1-DeviceDecommission"/>

Group: Validate Activity

2.7 Create To Do Entry

Actor/Role: MDM

Description: Once the MDM system logs the errors, it creates a To Do entry for the Authorized User to allow Authorized User to review the problem and attempt to fix the error reported by system

Process Plug-in enabled (Y)	Available Algorithm(s):	<input type="text" value="D1-CTDEBOE"/>
Business Object (Y)	Business Object	<input type="text" value="D1-DeviceDecommission"/>

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

Group: Pre-Communicate

2.8 Send Received Response to External Requestor

Actor/Role: MDM

Description: During the pre-communication process, MDM sends a “received” response to a third-party system.

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

Business Object (Y) **Business Object**

2.9 Receive Successful Taken in Account

Actor/Role: Third Party (External Requestor)

Description: The third-party systems pre-communication process, MDM sends a receive response to a third-party system.

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

Business Object (Y) **Business Object**

Group: Pre-Communicate

3.0 Wait for Effective Date

Actor/Role: MDM

Description: MDM has a holding stage in the pre-communication process that looks at the effective date of the decommission request.

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

Business Object (Y) **Business Object**

Customizable process (Y)	Process Name
	D1-CRWT (Command Request Wait - Monitor)
	D1-OCWT (Outbound Communication Wait - Monitor)

3.1 Review Activity Waiting for Eff. Date

Actor/Role: MDM Authorized User

Description: MDM Authorized user waits for the effective date of the decommission request.

3.2 Request to Update Activity

Actor/Role: MDM Authorized User

Description: MDM Authorized User initiates the request to update the activity.

3.3 Update the Activity

Actor/Role: MDM

Description: MDM updates the activity.

3.4 Request to Discard Activity

Actor/Role: MDM Authorized User

Description: MDM Authorized User decides that the Activity cannot be used and manually makes a request to discard it.

Business Object (Y)	Business Object
	D1-DeviceDecommission

3.5 Update Activity State to Discarded

Actor/Role: MDM

Description: MDM updates the activity status to "Discarded".

3.6 Request to Delete Activity

Actor/Role: MDM Authorized User

Description: MDM Authorized User initiates the request to delete the activity.

3.7 Delete Activity

Actor/Role: MDM

Description: MDM deletes the activity.

Group: Communicate

3.8 Communicate to Head End to Complete Decommission: Group - Communicate

Actor/Role: MDM

Description: MDM creates an outbound communicates the head end system.

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

Business Object (Y) **Business Object**

Group: Communicate

4.0 Update Activity Status to Communication Error

Actor/Role: MDM

Description: MDM updates the activity status with a Communication Error if there is an issue connecting to the head end system.

Group: Complete Event

4.1 Execute Completion Event

Actor/Role: MDM

Description: During the complete event process, there is an MDM request to create the discard activity.

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

Business Object (Y) Business Object

Group: Complete Event
4.2 Update Install Event Status to Include Decommissioned

Actor/Role: MDM

Description: During the complete event process, the status of the install event is updated to decommission.

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

Business Object (Y) Business Object

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

Business Object (Y) Business Object

Group: Complete Event
4.3 Update Activity Status to Completion Error

Actor/Role: MDM

Description: During the complete event process, if there is an error to update the status to decommissioned, a status of completion error is created and a to do entry is created.

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

Business Object (Y) Business Object

Group: Finalize

4.4 Send Success Response to External Requestor

Actor/Role: MDM

Description: After the completion event, MDM goes into the Finalize process and sends a response to the external requestor.

4.5 Receive Completion Info

Actor/Role: Third Party (External Requestor)

Description: The third party system receives the completion information from the third-party system.

4.6 Review Results

Actor/Role: MDM Authorized User

Description: MDM Authorized User reviews the results and determines request to remove.

Process: Retire Device

4.7 Identify Device

Actor/Role: MDM Authorized User

Description: MDM Authorized User identifies the device to retire.

4.8 Request to Retire and Populate Retire Date Time

Actor/Role: MDM Authorized User

Description: MDM Authorized User populates the data and initiates the request to retire the device.

Group: Validate Installation

4.9 Validate Retired Date time Against Effective Install Event

Actor/Role: MDM

Description: MDM Authorized User populates the data and initiates the request to decommission the device.

Business Object (Y)	Business Object	<input type="text" value="D1-VALRETD"/>
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Group: Validate Installation

5.0 Log Error

Actor/Role: MDM

Description: MDM Authorized User populates the data and initiates the request to decommission the device.

Business Object (Y)	Business Object	<input type="text" value="D1-VALRETD"/>
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5.1 Update Device Status to Retired

Actor/Role: MDM

Description: MDM Authorized User populates the data and initiates the request to decommission the device.

5.2 Analyze Error and Work To Do

Actor/Role: MDM Authorized User

Description: MDM 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)	Business Object	<input type="text" value="D1-DeviceDecommission"/>
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5.3 Complete To Do(s)

Actor/Role: MDM

Description: MDM find all non-completed 'To Do' entries and completes them before reprocessing.

Process Plug-in enabled (Y)	Available Algorithm(s):	<input type="text" value="D1-GTDCBO (Generic To Do Completion for BOs)"/>
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Business Object (Y)	Business Object	<input type="text" value="D1-DeviceDecommission"/>
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5.4 Request to 'ReValidate'**Actor/Role:** MDM Authorized User**Description:** When the Activity is in 'Validation Error' state and MDM Authorized User has corrected the error, can manually make request to 'Revalidate'.

Business Object (Y)	Business Object	<input type="text" value="D1-DeviceDecommission"/>
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5.5 Update Activity to 'Validate' State and Initialize Reprocessing**Actor/Role:** MDM**Description:** MDM transitions the Activity to 'Revalidate' state and initializes reprocessing.

Process Plug-in enabled (Y)	Available Algorithm(s):	<input type="text" value="D1-RBOE (Retry BO in Error)"/>
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Business Object (Y)	Business Object	<input type="text" value="D1-DeviceDecommission"/>
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5.6 Identify Activity in 'Validation Error' State**Actor/Role:** MDM**Description:** MDM identifies all Device Decommission Activities in 'Validation Error' state.

Process Plug-in enabled (Y)	Available Algorithm(s):	<input type="text" value="D1-RBOE (Retry BO in Error)"/>
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Business Object (Y)	Business Object	<input type="text" value="D1-DeviceDecommission"/>
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Customizable process (Y)	Process Name	<input type="text" value="D1-CRERR (Command Request Error - Retry)"/>
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5.7 Evaluate Criteria to Run Automated Retry Process**Actor/Role:** 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)	Available Algorithm(s):	D1-RBOE (Retry BO in Error)
Business Object (Y)	Business Object	D1-DeviceDecommission
Customizable process (Y)	Process Name	D1-CRERR (Command Request Error – Retry)

Group: Automated Validation Retry Process

5.6 Identify Activity in ‘Validation Error’ State

Actor/Role: MDM

Description: MDM identifies all Device Decommission Activities in ‘Validation Error’ state.

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

Group: Automated Validation Retry Process

5.7 Evaluate Criteria to Run Automated Retry Process

Actor/Role: 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)	Available Algorithm(s):	D1-RBOE (Retry BO in Error)
Business Object (Y)	Business Object	D1-DeviceDecommission

Customizable process (Y)	Process Name	<input type="text" value="D1-CRERR (Command Request Error - Retry)"/>
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Group: Wait Time Out Process

5.8 Evaluate Waiting Period

Actor/Role: MDM

Description: 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)	Available Algorithm(s):	<input type="text" value="D1-WTTMOUT (Wait Time Out - Transition to Rejection)"/>
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Business Object (Y)	Business Object	<input type="text" value="D1-DeviceDecommission"/>
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Customizable process (Y)	Process Name	<input type="text" value="D1-CRERR (Command Request Error - Retry)"/>
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5.9 Request to 'Retry'

Actor/Role: MDM Authorized User

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

Business Object (Y)	Business Object	<input type="text" value="D1-DeviceDecommission"/>
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Group: Automated Communication Retry Process

6.0 Update Activity to 'Retry' State and Initialize Reprocessing

Actor/Role: MDM

Description: MDM transitions the Activity to 'Retry' state and initializes reprocessing.

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

Business Object (Y) **Business Object**

Group: Automated Communication Retry Process
6.1 Identify Activity in 'Communication Error' State

Actor/Role: MDM

Description: MDM identifies all Device Decommission Activities in 'Communication Error' state.

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

Business Object (Y) **Business Object**

Customizable process (Y) **Process Name**

6.2 Request to 'Execute Completion Events'

Actor/Role: MDM Authorized User

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

Business Object (Y) **Business Object**

6.3 Update Activity to 'Execute Completion Event' State and Initialize Reprocessing

Actor/Role: MDM

Description: MDM transitions the Activity to 'Execute Completion Event' state and initializes reprocessing.

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

Business Object (Y) **Business Object**

Group: Automated Completion Retry Process

6.4 Identify Activity in 'Completion Event Error' State

Actor/Role: MDM

Description: MDM identifies all Device Decommission Activities in 'Completion Event Error' state.

Process Plug-in enabled (Y)	Available Algorithm(s):	<input type="text" value="D1-RBOE (Retry BO in Error)"/>
Business Object (Y)	Business Object	<input type="text" value="D1-DeviceDecommission"/>
Customizable process (Y)	Process Name	<input type="text" value="D1-CRERR (Command Request Error - Retry)"/>

Document Control

Change Record

Date	Author	Version	Change Reference
08/20/2011	Giezelle Raynor	1	
09/08/2011	Ben Su	1.1	Updated based on changes to diagram
09/12/2011	Ben Su	1.2	Update exception section
09/15/2011	Galina Polonsky	1.2	Review
10/27/2011	Layne Nelson	1.2	Review
12/15/2011	Galina Polonsky	1.2	Minor Updates. Review
07/15/2015	Galina Polonsky	1.2	Minor Updates. Review, Approval

Attachments

How to Read and Understand Process Diagram .URM Standards. Notations



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