Oracle Utilities Meter Data Management Release 2.0.1

Utility Reference Model

5.3.3.1 Upload Events

February 2014

ORACLE

Oracle Utilities Meter Data Management Utility Reference Model 5.3.3.1

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Contents

Contents

Chapter 1

Overview **1-1**
Brief Description 1-2
Actors/Roles 1-2

Chapter 2

Detailed Business Process Model Description **2-1**
Business Process Diagrams 2-2
Upload Device Events Page 1 2-2
Upload Device Events Page 2 2-3
Upload Device Events Description 2-4
1.0 Communicate and Transform Meter Read Data to MDM Format 2-4
1.1 Determine Service Provider 2-4
1.2 Determine Device 2-5
1.3 Shift Date/Time to Standard 2-5
1.4 Identify Device Event Type and Processing Method 2-5
1.5 Create Event in Error State and Log Errors 2-6
1.6 Create To Do 2-6
1.7 Gather Device Event Requirements 2-6
1.8 Submit Request 2-7
1.9 Analyze Error and Work To Do 2-7
2.0 Request to Discard 2-7
2.1 Complete To Dos 2-7
2.2 Update Event to 'Discard' State 2-7
2.3 Request to Reprocess 2-8
2.4 Update Event status to 'Reprocessed' and Initialize Reprocessing 2-8
2.5 Identify Event Record in 'Error' State 2-8
Business Objects Lifecycle 2-9
D1-DeviceEventSeeder 2-9
Related Training 2-10

Chapter 1

Overview

This chapter provides a brief description of the Upload Device Events business process and associated process diagrams. This includes:

- **Brief Description**
    - **Actors/Roles**

Brief Description

Business Process: 5.3.1.1 Upload Device Events

Process Type: Sub-Process

Parent Process: 5.3.3 MDM Manage Events

Sibling Processes: 5.3.3.2 Manage Device Event

This process takes place when the events are sent from an AMI/AMR Head-End System to MDM or created manually by an Authorized User using MDM. MDM pre-processes the Events and validates them in preparation to be sent to subscribers.

Actors/Roles

The Upload Device Events business process involves the following actors and roles.

- **Third Party CIS Application:** The system that initiated the request to add or update a contact
- **MDM Authorized User:** An authorized user of the Meter Data Management application
- **MDM Application:** The Meter Data Management system

Chapter 2

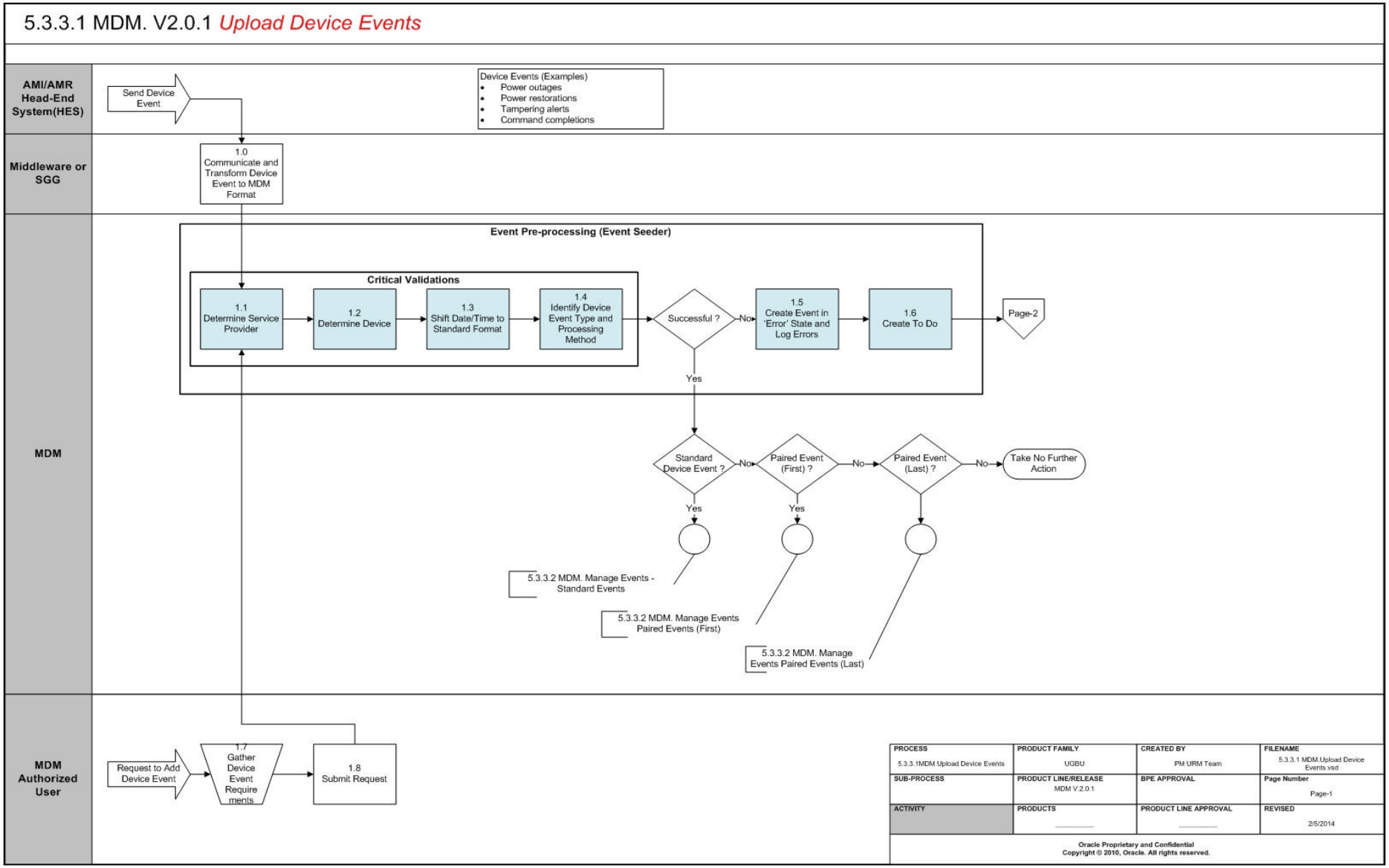
Detailed Business Process Model Description

This chapter provides a detailed description of the Upload Device Events business process. This includes:

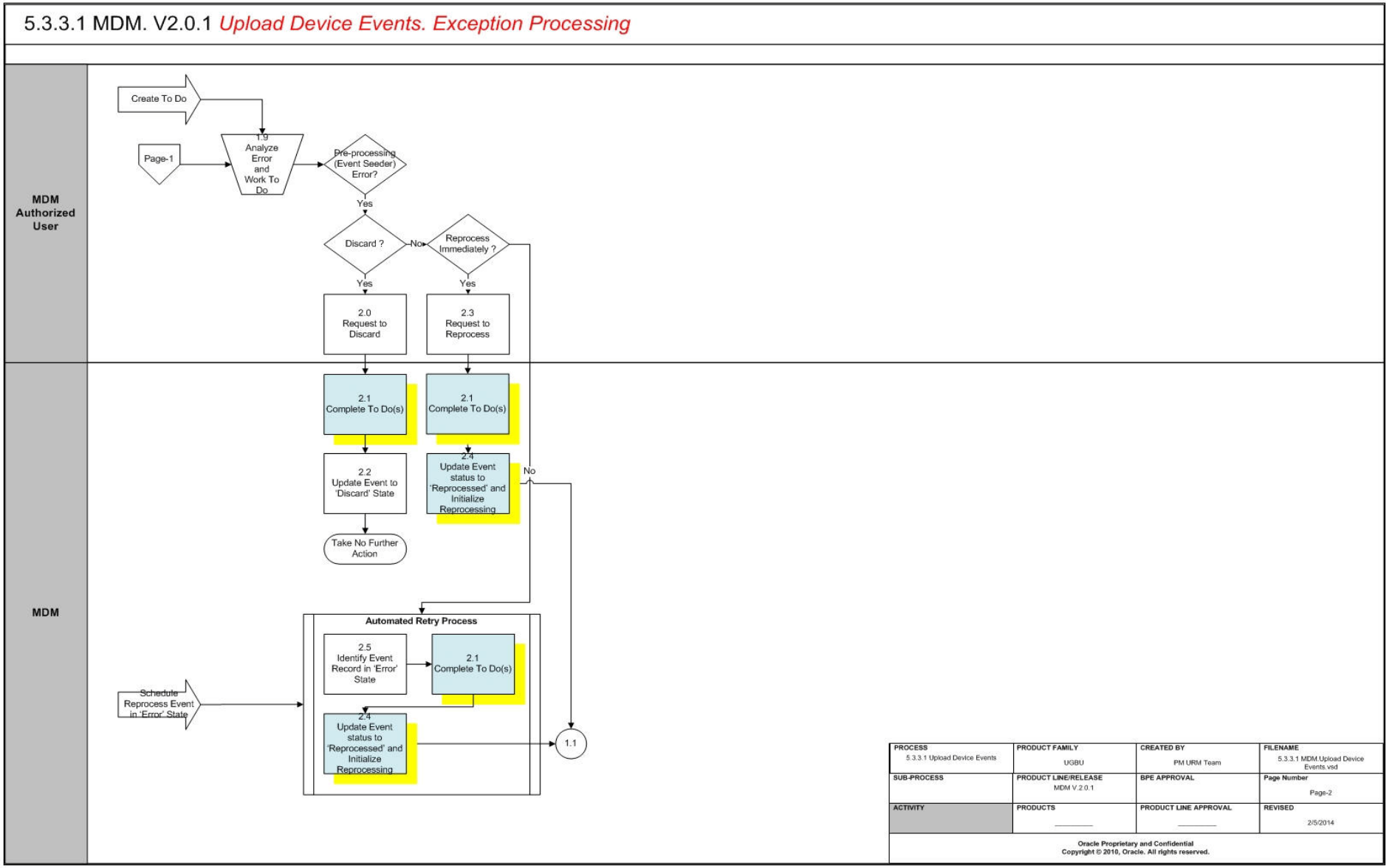
- **Business Process Diagrams**
  - **Upload Device Events Page 1**
  - **Upload Device Events Page 2**
- **Upload Device Events Description**
- **Business Objects Lifecycle**
  - **D1-DeviceEventSeeder**
- **Related Training**

Business Process Diagrams

Upload Device Events Page 1



Upload Device Events Page 2



Upload Device Events Description

This section includes detailed descriptions of the steps involved in the Upload Device Events business process, including:

- **1.0 Communicate and Transform Meter Read Data to MDM Format**
- **1.1 Determine Service Provider**
- **1.2 Determine Device**
- **1.3 Shift Date/Time to Standard**
- **1.4 Identify Device Event Type and Processing Method**
- **1.5 Create Event in Error State and Log Errors**
- **1.6 Create To Do**
- **1.7 Gather Device Event Requirements**
- **1.8 Submit Request**
- **1.9 Analyze Error and Work To Do**
- **2.0 Request to Discard**
- **2.1 Complete To Dos**
- **2.2 Update Event to 'Discard' State**
- **2.3 Request to Reprocess**
- **2.4 Update Event status to 'Reprocessed' and Initialize Reprocessing**
- **2.5 Identify Event Record in 'Error' State**

1.0 Communicate and Transform Meter Read Data to MDM Format

See **Upload Device Events Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: Middleware or SGG

Description: The Middleware is responsible for communication between the MDM and the various Head-End Systems (E.g. Echelon Head-End System, Landis & Gyr Head-End System). The Middleware receives the events from the Head-End Systems, transforms, and converts it into the format compatible with the MDM. It also adds the transformed data into a JMS Queue for further processing by the MDM.

Note: There is a different set of documentation to be provided for SGG as a middleware.

1.1 Determine Service Provider

See **Upload Device Events Page 1** on page 2-2 for the business process diagram associated with this activity.

Group: Event Pre-Processing (Event Seeder)

Group: Critical Validations

Actor/Role: MDM

Description: MDM initiates pre-processing of the Event received from Head-End System or created manually by MDM Authorized User. The primary goal of preprocessing raw data is to perform number of critical validations. MDM validates the Service Provider (Head-End System) based on the supplied elements.

Business Object	Available Algorithms
D1-DeviceEventSeeder	D1-SPRID

1.2 Determine Device

See **Upload Device Events Page 1** on page 2-2 for the business process diagram associated with this activity.

Group: Event Pre-Processing (Event Seeder)

Group: Critical Validations

Actor/Role: MDM

Description: MDM validates Device information

Business Object	Available Algorithms
D1-DeviceEventSeeder	D1-DEVICEID

1.3 Shift Date/Time to Standard

See **Upload Device Events Page 1** on page 2-2 for the business process diagram associated with this activity.

Group: Event Pre-Processing (Event Seeder)

Group: Critical Validations

Actor/Role: MDM

Description: MDM adjusts the Start Date/Time and End Date/Time, taking into consideration the Daylight Savings Time (DST).

Business Object	Available Algorithms
D1-DeviceEventSeeder	D1-SHEVTDTTM

1.4 Identify Device Event Type and Processing Method

See **Upload Device Events Page 1** on page 2-2 for the business process diagram associated with this activity.

Group: Event Pre-Processing (Event Seeder)

Group: Critical Validations

Actor/Role: MDM

Description: Application identifies the Device Event Type and determines processing method associated with identified event type.

Note: Examples of Event Types could be found in the list of Example Event Types located in the Attachments Section of current document.

Business Object	Available Algorithms
D1-DeviceEventSeeder	D1-DETBOID

1.5 Create Event in Error State and Log Errors

See **Upload Device Events Page 1** on page 2-2 for the business process diagram associated with this activity.

Group: Event Pre-Processing (Event Seeder)

Actor/Role: MDM

Description: If any of the critical validations fail the application creates event in the "Error" State and adds record in the log.

Business Object	Available Algorithms
D1-DeviceEventSeeder	D1-SETERRFLG

1.6 Create To Do

See **Upload Device Events Page 1** on page 2-2 for the business process diagram associated with this activity.

Group: Event Pre-Processing (Event Seeder)

Group: Critical Validations

Actor/Role: MDM

Description: Application creates a To Do entry for the Authorized User to analyze error.

Entities to Configure
To Do Type To Do Role

Business Object	Available Algorithms
D1-DeviceEventSeeder	D1-CREATTODO

1.7 Gather Device Event Requirements

See **Upload Device Events Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: MDM Authorized User

Description: MDM Authorized User gathers the Device Event information.

1.8 Submit Request

See **Upload Device Events Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: MDM Authorized User

Description: MDM Authorized User populates required event data and submits request to create Device Event using the Device Event Seeder screen.

1.9 Analyze Error and Work To Do

See **Upload Device Events Page 1** on page 2-2 for the business process diagram associated with this activity.

Actor/Role: MDM Authorized User

Description: MDM Authorized User analyzes the error and respective To Do to determine the corrective action.

Business Object
D1-DeviceEventSeeder

2.0 Request to Discard

See **Upload Device Events Page 2** on page 2-3 for the business process diagram associated with this activity.

Actor/Role: MDM Authorized User

Description: If MDM Authorized User decides that device event is not relevant, Authorized User requests to discard it.

Business Object
D1-DeviceEventSeeder

2.1 Complete To Dos

See **Upload Device Events Page 2** on page 2-3 for the business process diagram associated with this activity.

Actor/Role: MDM

Description: MDM automatically completes To Do entries

Business Object	Available Algorithms
D1-DeviceEventSeeder	D1-COMPDE-TD

2.2 Update Event to 'Discard' State

See **Upload Device Events Page 2** on page 2-3 for the business process diagram associated with this activity.

Actor/Role: MDM

Description: MDM transitions Event Seeder to Discard state indicating that it cannot be used further.

Business Object
D1-DeviceEventSeeder

2.3 Request to Reprocess

See **Upload Device Events Page 2** on page 2-3 for the business process diagram associated with this activity.

Actor/Role: MDM Authorized User

Description: MDM Authorized User requests to reprocess event after error is corrected.

Business Object	Available Algorithms
D1-DeviceEventSeeder	D1-DVENS

2.4 Update Event status to 'Reprocessed' and Initialize Reprocessing

See **Upload Device Events Page 2** on page 2-3 for the business process diagram associated with this activity.

Actor/Role: MDM

Description: MDM transition the seeder to 'Reprocessed' state and initializes reprocessing.

Business Object	Available Algorithms
D1-DeviceEventSeeder	D1-REPRDVCET

2.5 Identify Event Record in 'Error' State

See **Upload Device Events Page 2** on page 2-3 for the business process diagram associated with this activity.

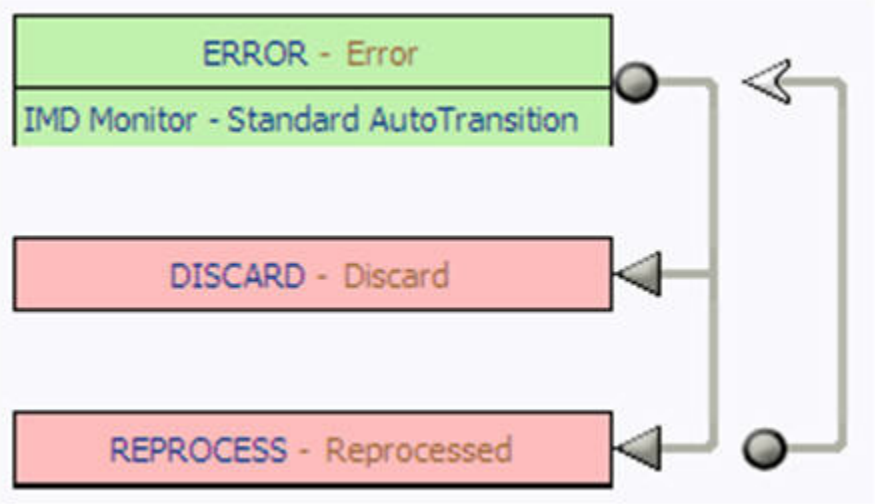
Actor/Role: MDM

Description: Application continuously monitors Event Seeder to identify seeder records in error state.

Business Object	Available Algorithms
D1-DeviceEventSeeder	D1-DVENS

Business Objects Lifecycle

D1-DeviceEventSeeder



Related Training

The following User Productivity Kit (UPK) modules provide training related to this business process:

- Oracle Utilities UPK for Meter Data Management User Tasks