

**Oracle Utilities Customer Care and Billing  
Release 2.4.0**

Utility Reference Model

4.2.1.1a Read Meter

December 2015

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## 4.2.1.1a Read Meter

This section provides a description of the “Read Meter” business process. It includes:

- ♦ [Brief Description](#)
  - ♦ [Actors/Roles](#)
- ♦ [Business Process Diagrams](#)
  - ♦ [Read Meter Process Model - Page 1](#)
  - ♦ [Read Meter Process Model - Page 2](#)
- ♦ [Read Meter Detailed Process Model Description](#)
- ♦ [Meter Read Types](#)
- ♦ [Related Training](#)

## Brief Description

**Business Process:** Read Meter

**Process Type:** Sub-Process

**Parent Process:** 4.2.1 CC&B.Collect and Process Meter Read and Miscellaneous Charges

**Sibling Processes:**

- 4.2.2 CC&B.Manage Bill
- 5.3.2.1 CC&B.Manage Field Activities and Field Orders
- 4.2.1.2aCC&B. Load Meter Reads
- 4.2.1.3aCC&B.Validate Meter Reads
- 4.2.1.4 CC&B.Manage Consumption Data Reporting

This process describes the cyclical meter reading process for meter service points as well as how to add and change ad hoc meter reads. Most organizations read their meters in assign routes with specific schedules. In addition, there are times when re-reads are required for verification, are obtained as part of another task, submitted by the Customer, or entered by a CSR or Authorized User.

## Actors/Roles

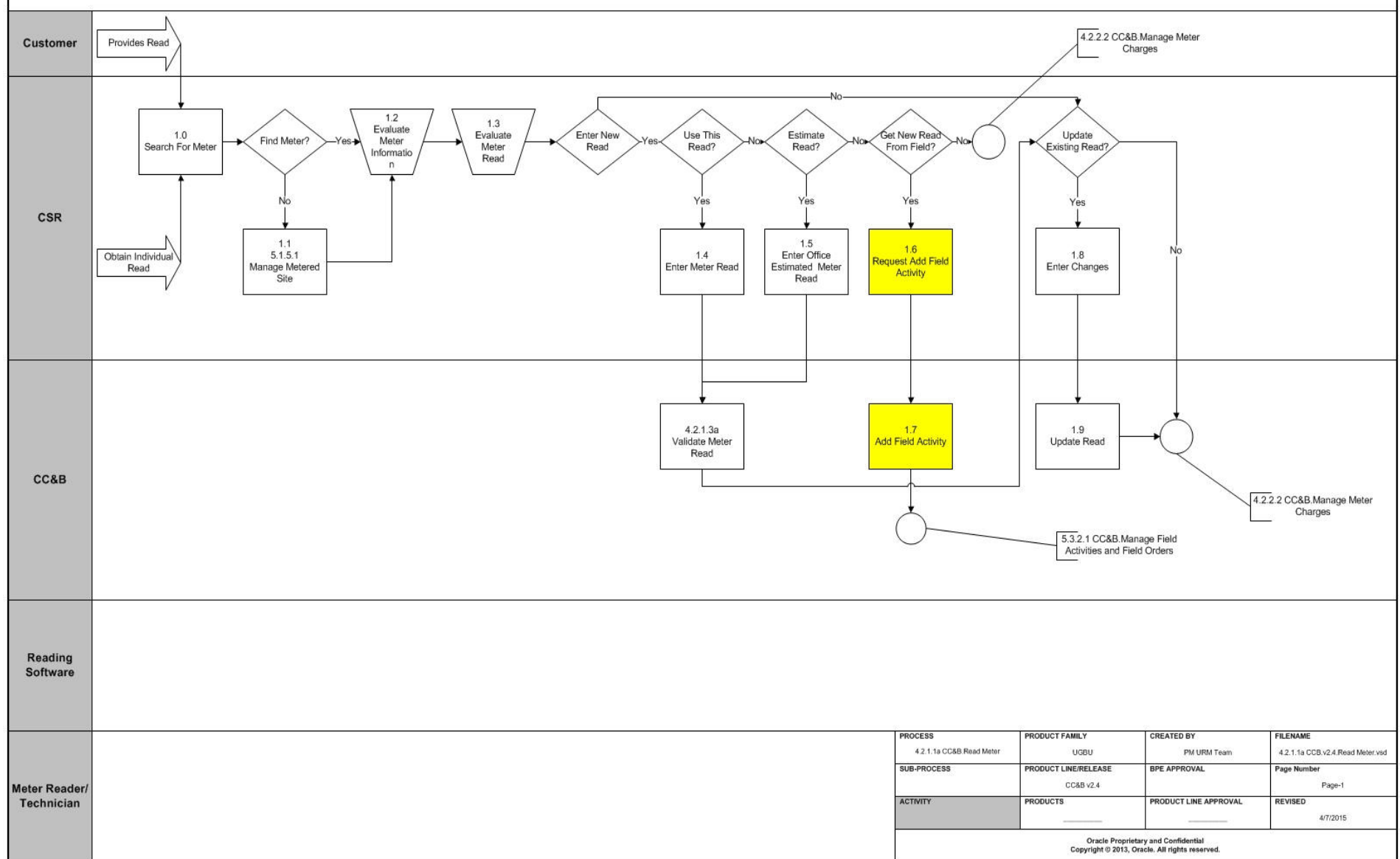
The Read Meter business process involves the following actors and roles:

- **CSR:** CSR or Authorized User of the Customer Care and Billing application.
- **CC&B:** The Customer Care and Billing application. Steps performed by this actor/role are performed automatically by the application, without the need for user initiation or intervention.
- **A/P A/R Software:** Accounts Payable or Accounts Receivable Software (General Ledger)
- **Meter Reader/Technician:** A technician is routed to the field to collect reads.

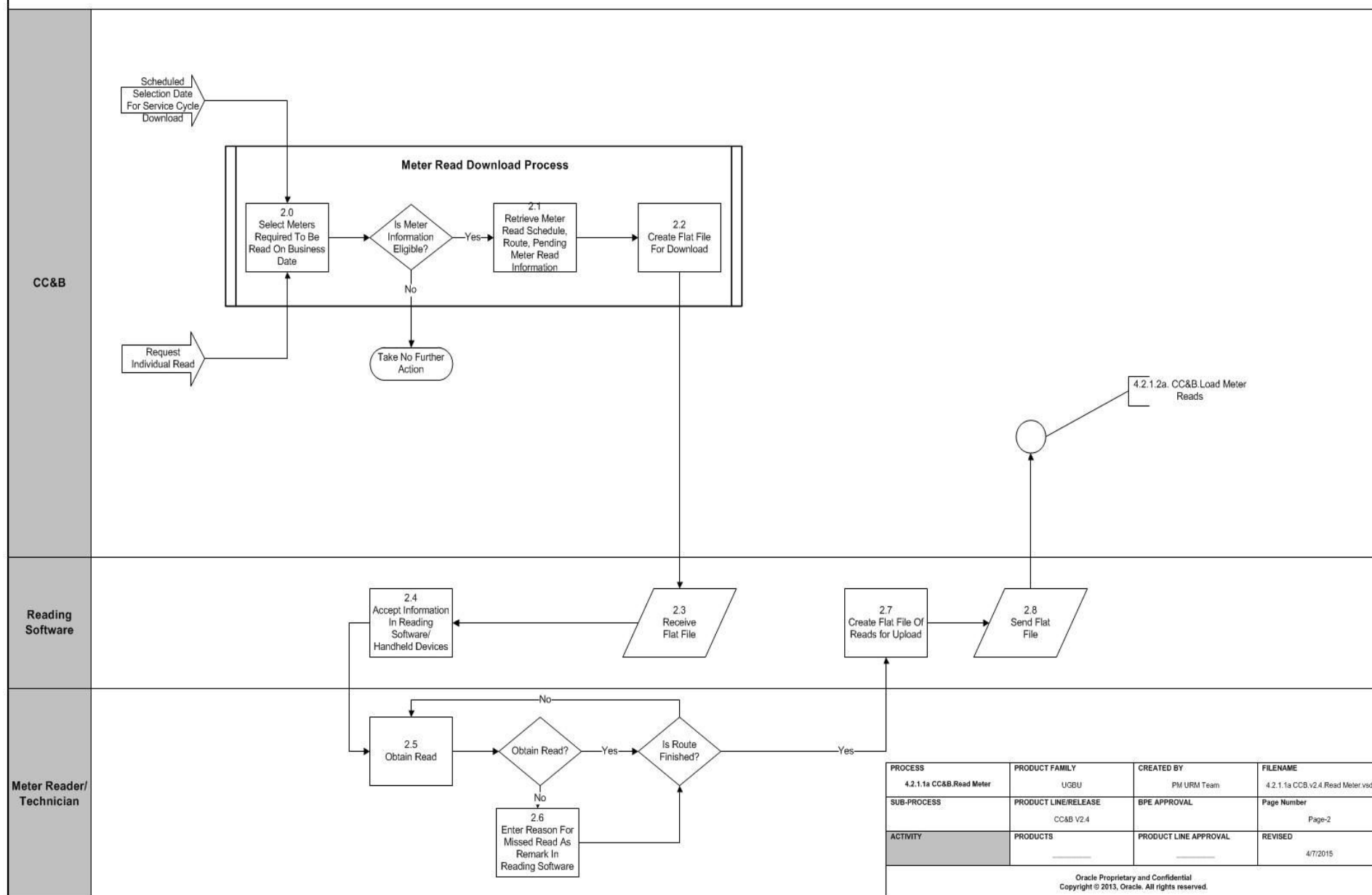
# Business Process Diagrams

## Read Meter Process Model - Page 1

### 4.2.1.1a CC&B v2.4 *Read Meter*



## Read Meter Process Model - Page 2

4.2.1.1a. CC&B v2.4 *Read Meter*



## Read Meter Detailed Process Model Description

This section provides a detailed description of the “Read Meter” business process, including:

- ♦ 1.0 Search for Meter
- ♦ 1.1 5.1.5.1 Manage Meter Site
- ♦ 1.2 Evaluate Meter Information
- ♦ 1.3 Evaluate Meter Read
- ♦ 1.4 Enter Meter Read
- ♦ 1.5 Enter Office Estimated Meter Read
- ♦ 1.6 Request Add Field Activity
- ♦ 1.7 Add Field Activity
- ♦ 1.8 Enter Changes
- ♦ 1.9 Update Read
- ♦ 2.0 Select Meters Required to Be Read on Business Date
- ♦ 2.1 Retrieve Read Schedule, Route, Pending Meter Read Information
- ♦ 2.2 Create Flat File for Download
- ♦ 2.3 Receive Flat File
- ♦ 2.4 Accept Downloaded Information in Reading Software/Handheld Devices
- ♦ 2.5 Obtain Read
- ♦ 2.6 Enter Reason for Missed Read as Remark in Reading Software
- ♦ 2.7 Create Flat File of Reads for Upload
- ♦ 2.8 Send Flat File

## 1.0 Search for Meter

**Reference:** [Read Meter Process Model - Page 1 on page 3](#) for the associated business process diagram.

**Actor/Role:** CSR

**Description:** The CSR or Authorized User searches for the Meter to enter a read. The read typically is provided by the Customer, exception processing, or a missed read during the meter read process. The Meter number or Badge Number as referenced in CC&B may be used to search for the Meter. Alternate search methods are used with the Meter/Item Search Notebook.

### 1.1 5.1.5.1 Manage Meter Site

**Reference:** [Read Meter Process Model - Page 1 on page 3](#) for the associated business process diagram.

**Actor/Role:** CSR

**Description:** If the Meter cannot be located in CC&B, the CSR or Authorized User, may add the meter to inventory in CC&B. Refer to 5.1.5.1. Manage Meter Site.

**Entities to Configure**

- Meter Type
- Meter Configuration Type
- Meter Model and Manufacturer

## 1.2 Evaluate Meter Information

**Reference:** [Read Meter Process Model - Page 1 on page 3](#) for the associated business process diagram.

**Actor/Role:** CSR

**Description:** The CSR or Authorized User reviews and validates meter type information including what consumption the meter measures, number of dials, meter constant or meter multiplier, and how the meter is used to calculate consumption.

## 1.3 Evaluate Meter Read

**Reference:** [Read Meter Process Model - Page 1 on page 3](#) for the associated business process diagram.

**Actor/Role:** CSR

**Description:** The CSR or Authorized User compares the read to be entered against read history for this meter as well as consumption trends for the service point. The CSR or Authorized User checks to see if other reads are already entered for the same time period and makes comparisons.

## 1.4 Enter Meter Read

**Reference:** [Read Meter Process Model - Page 1 on page 3](#) for the associated business process diagram.

**Actor/Role:** CSR

**Description:** The CSR or Authorized User accepts the read and enters the meter read information.

## 1.5 Enter Office Estimated Meter Read

**Reference:** [Read Meter Process Model - Page 1 on page 3](#) for the associated business process diagram.

**Actor/Role:** CSR

**Description:** The CSR or Authorized User enters the office-estimated meter read information.

## 1.6 Request Add Field Activity

**Reference:** [Read Meter Process Model - Page 1 on page 3](#) for the associated business process diagram.

**Actor/Role:** CSR

**Description:** It is determined a new read is required from the field. The CSR or Authorized User enters required information to obtain a new read. Refer to 4.2.2 Manage Bill.

### Entities to Configure

- Field Activity Type
- Field Activity Profile
- Field Service Controls

## 1.7 Add Field Activity

**Reference:** [Read Meter Process Model - Page 1 on page 3](#) for the associated business process diagram.

**Actor/Role:** CC&B

**Description:** The field activity is added in CC&B. Refer to 5.3.2.1 Manage Field Activities and Field Orders.

## 1.8 Enter Changes

**Reference:** [Read Meter Process Model - Page 1 on page 3](#) for the associated business process diagram.

**Actor/Role:** CSR

**Description:** The CSR or Authorized user examines an existing read to determine if updates are required. Based on business rules, typically the only field the CSR or Authorized User modifies is the Use on Bill flag field. It is recommended to maintain an audit trail of all reads entered. The best practices approach is to remove the use on bill flag on a particular read if it is incorrect or will not be used for billing. The CSR or Authorized User can enter a new read as needed.

## 1.9 Update Read

**Reference:** [Read Meter Process Model - Page 1 on page 3](#) for the associated business process diagram.

**Actor/Role:** CC&B

**Description:** CC&B is updated with changes for the read. Refer to 4.2.2 Manage Bill.

### Entities to Configure

- Meter Read Type
- Meter Read Remark
- Characteristics related to Meter Read
- Meter Read source
- Meter Read Instructions (Related to Premise)

- Meter Read warnings (Related to Premise)

#### Available Algorithms

- CI\_MREAD\_BO - Determine Meter Read BO. This algorithm is defined on the MO and allows a business object to be used.
- CI\_MeterReadAudit Meter Read Audit for Auditing Purpose only when Auditing is on.

#### Business Objects

- CI\_MeterReadAudit Meter Read Audit for Auditing Purpose only when Auditing is on

## 2.0 Select Meters Required to Be Read on Business Date

**Reference:** [Read Meter Process Model - Page 1 on page 3](#) for the associated business process diagram.

**Actor/Role:** CC&B

**Description:** The scheduled selection date is reached. This is the date read information is available to Field Operations staff for reading. Requests for off cycle reads are received and available to Field Operations staff.

## 2.1 Retrieve Read Schedule, Route, Pending Meter Read Information

**Reference:** [Read Meter Process Model - Page 1 on page 3](#) for the associated business process diagram.

**Actor/Role:** CC&B

**Description:** This process looks for all meter read cycle schedules with a scheduled selection date on or before the given business date with routes not yet generated. For each record found this process creates a Meter Read schedule route record for every route in the cycle. This process reviews all the Meter Read schedule route records flagged for download and creates a record for every meter in a given route flagged as available for download. The system also selects the service points in the meter read cycle for download. Refer to 4.2.1.5 Maintain Meter Read Schedule.

#### Entities to Configure

- Service Schedule
- Service Cycle

#### Process Names

- MSR - Create MR Schedule Routes. This process looks for all meter read cycle schedules with routes not generated. Route Records are created for every route in cycle
- MDS - Create Download Staging. This process creates download staging records for meters linked to every service point in route

## 2.2 Create Flat File for Download

**Reference:** [Read Meter Process Model - Page 1 on page 3](#) for the associated business process diagram.

**Actor/Role:** CC&B

**Description:** This process reads all records marked for download with a given Batch Control ID and run number, and creates the flat file for Field Operations' various meter read software applications.

#### Process Names

- MDL - Create Download Flat File

## 2.3 Receive Flat File

**Reference:** [Read Meter Process Model - Page 1 on page 3](#) for the associated business process diagram.

**Actor/Role:** Reading Software

**Description:** The reading software in Field Operations receives the flat file.

## 2.4 Accept Downloaded Information in Reading Software/Handheld Devices

**Reference:** [Read Meter Process Model - Page 1 on page 3](#) for the associated business process diagram.

**Actor/Role:** Reading Software

**Description:** Meter Read Information is downloaded to reading software and/or handheld devices in preparation for reading in the field.

## 2.5 Obtain Read

**Reference:** [Read Meter Process Model - Page 1 on page 3](#) for the associated business process diagram.

**Actor/Role:** Meter Reader/Technician

**Description:** A technician is routed to the field to collect reads.

## 2.6 Enter Reason for Missed Read as Remark in Reading Software

**Reference:** [Read Meter Process Model - Page 1 on page 3](#) for the associated business process diagram.

**Actor/Role:** Meter Reader/Technician

**Description:** At times it may not be possible to obtain the read from the customer's meter. An obstruction, clouded glass, or animal may prevent the reader the reader from getting the read. An entry is made in the reading software to communicate the reason the read was not obtained. Comments from the Meter Reader can trigger a Field Activity, Customer Contact or Bill Message. Refer to 4.2.1.2a Load Meter Reads

### Entities to Configure

- Field Activity Type
- Bill Message
- Customer Contact Class and Contact Type
- MR Remarks

### Available Algorithms

- MRRCRERESAM - This algorithm creates an Account Message to be placed on bill (Meter Read Remark Algorithm)
- MRRCRECC - This algorithm creates a Customer Contact from Meter Read Remark
- CI\_CREMRCSE - This algorithm creates a case from Meter Read Remark
- MRR-SIO - This algorithm creates M-SIO Meter - service investigation Field Activity
- MRRCREMRFA - Create "Re-read meter" field activity

### Process Names

- CI\_MREAD\_BO - Determine Meter Read BO
- MRRA - Background process read remark activation

## 2.7 Create Flat File of Reads for Upload

**Reference:** [Read Meter Process Model - Page 1 on page 3](#) for the associated business process diagram.

**Actor/Role:** Reading Software

**Description:** The reading software prepares a flat file containing reads and meter information for Upload to CC&B.

## 2.8 Send Flat File

**Reference:** [Read Meter Process Model - Page 1 on page 3](#) for the associated business process diagram.

**Actor/Role:** Reading Software

**Description:** Reading Software in Field Operations sends a flat file to CC&B for Upload to CC&B.

# Meter Read Types

The following meter read types are available:

Read Type	Description
Billing Force	Meter reads with this value are entered by a billing administrator who wants to force billing to bill a customer for a given amount of consumption.
Verified	A meter reader using a handheld device records meter reads with this value. The handheld device deems a read as “verified” if the meter reader typed the same dial reading in twice. Some organizations have their handhelds programmed to require the double entry of dial readings when the entered value is outside normative values (i.e., the resultant consumption fails high / low checks).
Regular	A meter reader using a handheld device records meter reads with this value. See the description for “verified” above for the difference between a “regular” and a “verified” reading.
Customer Read	A customer provides meter reads with this value.
System Prorate	Meter reads with this value are created by the system automatically when prorating normal cycle-based reads for use with an off-cycle start service or stop service.
Office Estimate	Meter reads with this value are informed guesses of consumption. These would be used when there was no real reading (i.e., a regular or verified reading), and the system was not allowed to estimate consumption (for whatever reason). This value is rarely used.
Service Provider Estimate	Meter reads with this value are estimates of consumption made by a 3rd party service provider, such as an MDMA, the distribution company, or an energy supply company.
System Estimate	The billing process creates meter reads with this value when a reading cannot be found and the service agreement allows estimation.
No Read	Meter reads with this value are entered to indicate that a read was purposefully not performed (for whatever reason - mad dog, nasty rose bush, deep snow, etc.). A read with this value is not a read at all; it's just an audit trail.

## Related Training

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

- Oracle Utilities UPK for Customer Care and Billing, Administrative Setup
- Oracle Utilities UPK for Customer Care and Billing, Rating and Billing
- Oracle Utilities UPK for Customer Care and Billing, Rating and Billing for Interval Data
- Oracle Utilities UPK for Customer Care and Billing, User Tasks
- Oracle Utilities UPK for Customer Care and Billing, Credit and Collections