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Oracle Utilities Smart Grid Gateway Adapter for Landis + Gyr

User's Guide

Release 2.1.0 Service Pack 3

E51074-03

May 2015

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Contents

Chapter 1

Oracle Utilities Smart Grid Gateway for Landis + Gyr

What's New

This section outlines the new features in Oracle Utilities Smart Grid Gateway Adapter for Landis+Gyr that are documented in this guide.

New Features in Version 2.1.0.3

Feature	For More Information
Demand Reset Command Added information related to the new "Demand Reset" smart meter command.	*About Demand Reset CommandsInitiating Demand Reset Commands*
Device Status Check Command Added information related to the "Device Status Check" smart meter command.	*About Device Status Check CommandsInitiating Device Status Check Commands*

Getting Started

This section provides an overview of Oracle Utilities Smart Grid Gateway.

About Oracle Utilities Smart Grid Gateway

Oracle Utilities Smart Grid Gateway acts as a link between hardware and software within smart grid infrastructures. It provides functionality for interfacing between Oracle Utilities products such as Oracle Utilities Customer Care and Billing

and Oracle Utilities Meter Data Management, and a variety of smart meter products. Use the Smart Grid Gateway to execute several meter commands, communicate with meters, and to view meter read information.

About Oracle Utilities Smart Grid Gateway for Landis+Gyr

The Oracle Utilities Smart Grid Gateway Adapter for Landis+Gyr provides functionality for interfacing between Oracle Utilities products such as Oracle Utilities Customer Care and Billing and Oracle Utilities Meter Data Management, and Landis+Gyr advanced metering systems.

Oracle Utilities Smart Grid Gateway for Landis+Gyr supports the following business processes:

- Loading of meter readings and events from Landis+Gyr meters

- Commissioning and decommissioning meters remotely

- Connecting and disconnecting meters remotely

- Reading meters on-demand

Starting the Application

Use this procedure to start Oracle Utilities Smart Grid Gateway.

1. Click the desktop icon or program menu option to start the Oracle Utilities Smart Grid Gateway server application.

2. Log in using your user ID and password.

3. If prompted, select a language.

4. Use the toolbar or menu bar (on the left edge of the screen) to select the function you want to perform.

Understanding the User Interface

For information about the main application toolbar, menu system, user setup and security, and user interface standards, see the System Wide Standards topic in the Oracle Utilities Application Framework Business Processes online help.

Menus and Navigation

This topic describes the Oracle Utilities Smart Grid Gateway menus and general rules for navigating the system.

Main Menu and Admin Menu

The Oracle Utilities Smart Grid Gateway menu is displayed on the left-hand side of the application screen. The menu is configurable, so the options that appear may vary based on your user profile and your system configuration. Your user profile also controls your access to different portals and dashboard zones.

By default, the system provides two menus: the Admin menu and the Main menu. The Admin menu provides access to functions used for setup and administration. Only users with administrative privileges can view this menu. The Main menu provides access to all other functions.

The Main Menu is displayed by default. Click the **Menu** icon in the main toolbar to display a list of available menus, then select the menu you want to use. The selected menu appears on the left-hand side of the screen.

Functional and Alphabetical Menus

The system supports two different menu styles: alphabetical and functional. The style used is specified on the Main tab of the Installation Options - Framework portal.

The functional menu groups menu options by the function, such as Device, Device Installation, and Usage Rules. Thus, to add a new Usage Rule, you would first click the Usage submenu, and then select the Usage Rule option.

The alphabetical menu groups menu options by the first letter of the option name. Thus, to add a new Usage Rule, you would first click the U submenu, and then select the Usage Rule option.

The procedures outlined in this documentation assume that you are using the functional menus. If you are using alphabetical menus instead, simply replace the functional submenu with the alphabetical submenu. For example, if the procedure instructs you to select:

Main Menu > **Usage** > **Usage Rule**

then you would instead select:

Main Menu > **U** > **Usage Rule**

The menu system provides access to Oracle Utilities Application Framework functions, Oracle Utilities Service and Measurement Data Foundation, and Oracle Utilities Smart Grid Gateway functions. If you have additional Oracle Utilities applications installed, the menu system provides access to functions for that application as well. Framework functions are described in the Framework online help; Framework help topics are listed under the appropriate Framework heading in the help contents panel. Likewise, Oracle Utilities Service and Measurement Data Foundation topics are listed in the help contents panel under the appropriate Oracle Utilities Service and Measurement Data Foundation heading.

Navigating to Portals in Add or Edit Mode

Most menu options display a + sign next to the option name. If you click the plus sign, rather than the option name, you will go directly to a screen that allows you to add a new record.

For example, if you click the plus sign next to the **Usage Rule** option, the system navigates to the Usage Rule add/edit screen so you can begin creating a new Usage Rule. This is referred to as 'navigating to the Usage Rule portal in add mode.' In this online help, using this option will be notated as **Usage Rule**+.

If you click the option name, rather than the + sign, the system navigates to a search portal, where you can select the entity you want to view or edit. (For admin-level data maintenance, the system navigates to a screen that lists the entities and allows you to select one from the list.) This is referred to as 'navigating to the Usage Rule portal in edit mode.' Once you have found the entity you want to work with, the system displays a maintenance portal listing all the actions you can perform on that entity. The valid options vary depending on the entity, your user privileges, and your system configuration. Standard actions typically include Edit, Duplicate, and Delete, but other actions may be available depending on the configuration of the entity. Valid actions also typically include changes to the entity's status.

Oracle Utilities Smart Grid Gateway Menu Options

Oracle Utilities Smart Grid Gateway does not include any base menu options that are not also part of Oracle Utilities Service and Measurement Data Foundation. Please refer to the Oracle Utilities Application Framework online documentation for descriptions of these menu options. Online documentation for all functions listed is provided under the corresponding topic on the online help contents panel.

> **NOTE:** An implementation can add or remove any of these functions from the menu system, change the menu option name or the submenus where they appear, or restrict access to the options for some or all users.

Meter Readings and Events

This section describes concepts and procedures related to meter activities such as searching and viewing initial measurement data and viewing device events.

Understanding Meter Readings and Events

This section contains concepts related to meter readings and events:

About Meter Readings and Events

The Oracle Utilities Smart Grid Gateway Adapter for Landis+Gyr supports import of meter reading and device event information for Landis+Gyr head-end systems. This enables the data to eventually be loaded into the applicable edge applications such as Oracle Utilities Meter Data Management or Oracle Utilities Customer Care and Billing.

Meter Readings consist of measurements taken from a device to show how much of the quantity measured was consumed.

Events refer to occurrences which take place relative to a meter. These can include power outages, power restorations, tampering alerts, command completions and other events.

Attributes used to define events include:

- **Device event type**

- **Date and time** of the event. For events with a duration such as a power outage, this is the start date and time of the duration. This value is not applicable to events with no duration, such as a tampering alert or power restoration.

- **End date and time** of the event. For events with a duration such as a power outage, this is the end date and time of the duration. This value is not applicable to events with no duration, such as a tampering alert or power restoration.

In addition, device events also reference details specific to the head-end system that sent the event, including the following:

- The **head-end system** (defined as a service provider in Oracle Utilities Smart Grid Gateway) from which the event was sent.

- **External ID** for the head-end system that sent the event.

- **External, head-end-specific name** for the event. This name is translated into a "standard" event name within Oracle Utilities Smart Grid Gateway.

- An **identifier** for the source of the event.

Refer to the Oracle Utilities Service and Measurement Data Foundation online help for more information about working with meter readings and events.

Working with Meter Readings and Events

This section describes common tasks related to working with meter readings and events:

Refer to the Oracle Utilities Service and Measurement Data Foundation online help for more information about working with meter readings and events.

Searching and Viewing Initial Measurement Data

Use this procedure to search for and view initial measurement data.

Use the Initial Measurement portal to view initial measurement data.
To view initial measurement data:

1. Select **Main Menu** > **Initial Measurement Data**.

2. Enter your search criteria.

Base package search options include measuring component/device, and initial measurement data identifier.

3. Click **Refresh**.

4. In the search results list, click the link for the initial measurement data you want to view.

   The measurement is then displayed in the Initial Measurement portal.

5. To view the service provider for the initial measurement data, click the Service Provider link.

6. To perform an action, click the appropriate button.

   The specific actions available for a measurement are based on the current status of the measurement, and the measurement business object. The statuses in which each action are allowed are listed in parentheses. Action options include the following:

Action	Description
Trace	Turns Trace On or Off (Allowed Status: All)
Edit	Allows user to edit the initial measurement. (Allowed Status: Pending, Error)
Delete	Deletes the initial measurement. (Allowed Status: Pending, Error)
Re-Process	(Allowed Status: Error)
Discard	Discards the initial measurement. (Allowed Status: Error, Exception)

Searching and Viewing Device Events

Use this procedure to search for device events on the Device Events Query portal.

1. Select **Main Menu** > **Communication** > **Device Event**.

2. Enter your search criteria.

   Base package search options include device and device event ID.

3. Click **Refresh**.

4. In the search results list, click the link for the device event you want to view or edit.

Meter Commands

This section describes concepts and procedures related to managing meter commands. This includes connect and disconnect commands, commission and decommission commands and on-demand readings.

Understanding Meter Commands

This section describes concepts related to meter commands.

About Remote Connect Commands

Remote connect commands are issued to connect a device installed at a service point. This allows the device to be connected remotely without any physical contact by someone in the field.

Attributes used to define remote connect commands include the following:

- **Parent Activity**: the parent activity (if any) for the command

- **Device ID**: identification number used by the utility for the device. Used to derive the device ID if the device ID is not provided

- **Command Effective Date/Time**: the date and time on which the command takes effect. Commands issued prior to this date and time remain in the "Waiting for Effective Date" status until this time, at which time the command is executed

- **Command Expiration Date/Time**: the date time when the command expires. The command cannot be executed after this date and time

- **Priority**: the priority for the command

- **Requester**: the application sending the command

- **Requester User**: the user who initiated the command

- **Requester Transaction ID**: an ID for the command, defined by the requester

- **Measurement Destination**: indicates the type of application to which measurements for the device are sent

- **Check for Future Disconnect**: flag that indicates whether or not to check for a future disconnect and fail the command if one is found

- **Retrieve Start Measurement**: flag that indicates whether to get the start measurement for the device prior to issuing the Connect command

About Remote Disconnect Commands

Remote disconnect commands are issues to disconnect or shut off a device install at a service point. This allows the device to be disconnected remotely without any physical contact by someone in the field.

Attributes used to define commands include the following:

- **Parent Activity**: the parent activity (if any) for the command

- **Device ID:** identification number used by the utility for the device. Used to derive the device ID if the device ID is not provided

- **Command Effective Date/Time:** the date and time on which the command takes effect. Commands issued prior to this date and time remain in the "Waiting for Effective Date" status until this time, at which time the command is executed

- **Command Expiration Date/Time:** the date time when the command expires. The command cannot be executed after this date and time

- **Priority:** the priority for the command

- **Requester:** the application sending the command

- **Requester User:** the user who initiated the command

- **Requester Transaction ID:** an identification number for the command, defined by the requester

- **Measurement Destination:** indicates the type of application to which measurements for the device are sent

- **Fail on Future Connect (check box):** flag that indicates whether or not to check for a future connect and fail the disconnect command if one is found

- **Retrieve Final Measurement:** flag that indicates whether to obtain the final measurement for the device prior to issuing the disconnect command

About Commission Commands

Commission commands are issued to establish communication between a device and the head-end system. The goal is to ensure connectivity has been established with the device, that any information needed to communicate with the device has

been defined in both Oracle Utilities Smart Grid Gateway and the head-end system, and that the device will begin capturing usage and events.

Attributes used to define a commission command include the following:

- **Parent Activity:** the parent activity (if any) for the command

- **Device ID:** identification number used by the utility for the device. Used to derive the device ID if the device ID is not provided

- **Command Effective Date/Time:** the date and time on which the command takes effect. Commands issued prior to this date and time remain in the "Waiting for Effective Date" status until this time, at which time the command is executed

- **Command Expiration Date/Time:** the date time when the command expires. The command cannot be executed after this date and time

- **Priority:** the priority for the command

- **Requester:** the application sending the command

- **Requester User:** the user who initiated the command

- **Requester Transaction ID:** an ID for the command, defined by the requester

About Decommission Commands

Decommission commands are activities that represent messages sent from Oracle Utilities Smart Grid Gateway to inform the head-end system when a device needs to be removed from a service point, 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.

Attributes used to define decommission commands include the following:

- **Parent Activity:** the parent activity (if any) for the command

- **Device ID:** identification number used by the utility for the device. Used to derive the device ID if the device ID is not provided

- **Command Effective Date/Time:** the date and time on which the command takes effect. Commands issued prior to this date and time remain in the "Waiting for Effective Date" status until this time, at which time the command is executed

- **Command Expiration Date/Time:** the date time when the command expires. The command cannot be executed after this date and time

- **Priority:** the priority for the command

- **Requester:** the application sending the command

- **Requester User:** the user who initiated the command

- **Requester Transaction ID:** an ID for the command, defined by the requester

About On-Demand Read Commands

On-demand read commands are issued to request an up-to-date reading from an installed device. These commands are not guaranteed to return immediately. In some cases, completing the command might require a person to manually read the device. The purposes are to check the operational status of the device and/or obtain a more recent reading than is currently available.

Attributes used to define commands include the following:

- **Parent Activity:** the parent activity (if any) for the command

- **Device ID:** identification number used by the utility for the device. Used to derive the device ID if the device's ID is not provided

- **Command Effective Date/Time:** the date and time on which the command takes effect. Commands issued prior to this date and time remain in the "Waiting for Effective Date" status until this time, at which time the command is executed

- **Command Expiration Date/Time:** the date time when the command expires. The command cannot be executed after this date and time

- **Priority:** the priority for the command

- **Requester:** the application sending the command

- **Requester User:** the user who initiated the command

- **Requester Transaction ID:** an ID for the command, defined by the requester

- **Measurement Destination:** the type of application to which measurements for the device are sent

- **Measurement Requested:** specifies the type of measurement the command should return (Initial or Final). Note: Final Measurements can only be retrieved if Oracle Utilities Meter Data Management is installed

- **Use existing measurements if found:** a flag that indicates if existing measurements for the device should be used if detected

- **Interval Start and End Date/Time:** the start and end date for interval measurements

About Device Status Check Commands

Device status check commands are issued to test whether a device is communicating with the network and to determine the connection status of the device. When possible, the command also determines any identifiable malfunctions.

Attributes used to define a device status check command include the following:

- **Parent Activity:** the parent activity (if any) for the command

- **Status:** the current status of the activity

- **Device:** the information string for the device (includes Device ID, Device Type, Head-End System, and Status)

- **Utility Device Identifier:** identification number used by the utility for the device. Used to derive the device ID if the device ID is not provided

- **Device Communication Status**: the current status of communication between the network and the device (returned by the command). Can be one of the following:
  - Active Device Communication Status for SGG (ACTIVE)
  - Unable to communicate with the meter (FAILED)
  - Meter found, communication not confirmed (PENDING)

- **Device Connection Status**: the current connection status of the device (returned by the command). Can be one of the following:
  - Device is connected (CONNECTED)
  - Device is disconnected (DISCONNECTED)
  - Waiting for manual arming before energizing (PENDING ARMING)

- **Device Functional Status**:the current functional state of the device (returned by the command). Can be one of the following:
  - Device functioning correctly (OPERATIONAL)
  - Device not functioning correctly (MALFUNCTIONED)
  - Unable to be determined (NOT DETERMINED)

- **Is Load Check Complete**: Indicates if a related load check communication is complete.

- **Effective Date/Time:** the date and time on which the command takes effect. Commands issued prior to this date and time remain in the "Waiting for Effective Date" status until this time, at which time the command is executed

- **Expiration Date/Time:** the date time when the command expires. The command cannot be executed after this date and time

- **Priority:** the priority for the command

- **Requester:** the application sending the command

- **Requester User:** the user who initiated the command

- **Requester Transaction ID:** an ID for the command, defined by the requester

- **Recipient:** the head-end service provider to which the command was issued

About Demand Reset Commands

Demand reset commands are issued to reset the demand measured on a meter. These commands are typically used when a device is disconnected, or when a device is at a location where a change in customer occurs. Demand reset commands also retrieves the most recent initial or final measurement for the measuring components impacted by this command.

Attributes used to define a demand reset command include the following:

- **Parent Activity:** the parent activity (if any) for the command

- **Status:** the current status of the activity

- **Device:** the information string for the device (includes Device ID, Device Type, Head-End System, and Status)

- **Utility Device Identifier:** identification number used by the utility for the device. Used to derive the device ID if the device ID is not provided

- **Event Date/Time**:

- **Measurement Destination**: specifies the intended destination for retrieved measurements. Options include:

  - Calling and Subscribing Edge Application

  - Calling Edge Application

  - Measurement Subscribing Edge Application

- **Measurement Requests Override**: specifies the type of measurement retrieved by the command. Options include:

  - Final Measurement

  - Initial Measurement

- **Measurements**: displays details about retrieved measurements

- **Effective Date/Time:** the date and time on which the command takes effect. Commands issued prior to this date and time remain in the "Waiting for Effective Date" status until this time, at which time the command is executed

- **Expiration Date/Time:** the date time when the command expires. The command cannot be executed after this date and time

- **Priority:** the priority for the command

- **Requester:** the application sending the command

- **Requester User:** the user who initiated the command

- **Requester Transaction ID:** an ID for the command, defined by the requester

- **Recipient:** the head-end service provider to which the command was issued

About Cancelling Commands

You can cancel a command if you find that the action is unnecessary or unneeded due to a business process change or other change in circumstances.

Attributes used to cancel a command include the following:

- **Parent Activity:** the parent activity (if any) for the command

- **Requester:** the application sending the command

- **Requester User:** the user who initiated the command

- **Recipient**: the recipient (defined as a service provider) of the command cancellation

- **Priority:** the priority for the command cancellation

- **Cancel Command:** the command to be cancelled

Working with Meter Commands

This section describes common tasks related to working with meter commands.

Initiating Remote Connect Commands

Use this procedure to initiate a remote connect command for a device.

Users initiate remote connect commands from the **Device** portal.

1. Select **Main Menu** > **Device** to navigate to the Device portal.

2. Search for and select the appropriate device.

3. Click the **Initiate Command** link in the **Device Activities** zone title bar.

4. Select "Remote Connect" from the **Available Commands** drop-down list.

   The system only shows commands that are available for the device based on how the device is configured (business objects, device type, the related head-end system, etc.).

5. Click **OK**.

6. Search for and select a parent activity for the command using the **Parent Activity ID** field, if applicable.

7. Enter bulk request information if applicable in the **External Bulk Request ID**, **Bulk Response**, and **Bulk Request Header** fields.

8. Enter a **Effective Date/Time** for the command.

   This is the date and time on which the command takes effect. Commands issued prior to this date and time remain in the "Waiting for Effective Date" status until this time, at which time the command is executed.

9. Enter a **Expiration Date/Time** for the command, if applicable.

   This is the date and time when the command expires. The command cannot be executed after this date and time.

10. Select the **Priority** for the command.

11. Select the **Requester** for the command. The requester is the application sending the command.

12. Search for and select a **Requester User**. This is the user who is initiating the command.

13. Enter a **Requester Transaction ID** for the command, if applicable.

14. Specify whether or not ("Yes" or "No") you would like to have the system check for a future disconnect and fail the command if one is found in the **Check for Future Disconnect** drop-down list.

15. Specify whether or not ("Yes" or "No") to retrieve a start measurement as part of this command in the **Retrieve Start Measurement** drop-down list.

16. Click **Save**.

    The new command is displayed in the **Activity** portal.

Initiating Remote Disconnect Commands

Use this procedure to initiate a disconnect command for a device.

Users initiate disconnect commands from the **Device** portal.

1. Select **Main Menu** > **Device** to navigate to the Device portal.

2. Search for and select the appropriate device.

3. Click the **Initiate Command** link in the **Device Activities** zone title bar.

4. Select "Remote Disconnect" from the **Available Commands** drop-down list.

   The system only shows commands that are available for the device based on how the device is configured (business objects, device type, the related head-end system, etc.).

5. Click **OK**.

6. Search for and select a parent activity for the command using the **Parent Activity ID** field, if applicable.

7. Enter bulk request information if applicable in the **External Bulk Request ID**, **Bulk Response**, and **Bulk Request Header** fields.

8. Enter a **Effective Date/Time** for the command.

   This is the date and time on which the command takes effect. Commands issued prior to this date and time remain in the "Waiting for Effective Date" status until this time, at which time the command is executed.

9. Enter a **Expiration Date/Time** for the command, if applicable.

   This is the date and time when the command expires. The command cannot be executed after this date and time.

10. Select the **Priority** for the command.

11. Select the **Requester** for the command. The requester is the application sending the command.

12. Search for and select a **Requester User**. This is the user who is initiating the command.

13. Enter a **Requester Transaction ID** for the command, if applicable.

14. Specify whether or not ("Yes" or "No") you would like to have the systemcheck for a future connect and fail the disconnect command if one is found in the **Check for Future Connect** drop-down list.

15. Specify whether or not ("Yes" or "No") to retrieve an end measurement as part of this command in the **Retrieve End Measurement** drop-down list.

16. Click **Save**.

    The new command is displayed in the **Activity** portal.

Initiating Commission Commands

Use this procedure to initiate a commission command for a device.

Users initiate commission commands from the **Device** portal.

1. Select **Main Menu** > **Device** to navigate to the Device portal.

2. Search for and select the appropriate device.

3. Click the **Initiate Command** link in the **Device Activities** zone title bar.

4. Select "Device Commissioning" from the **Available Commands** drop-down list.

   The system only shows commands that are available for the device based on how the device is configured (business objects, device type, the related head-end system, etc.).

5. Click **OK**.

6. Search for and select a parent activity for the command using the **Parent Activity ID** field, if applicable.

7. Enter bulk request information if applicable in the **External Bulk Request ID**, **Bulk Response**, and **Bulk Request Header** fields.

8. Enter a **Effective Date/Time** for the command.

   This is the date and time on which the command takes effect. Commands issued prior to this date and time remain in the "Waiting for Effective Date" status until this time, at which time the command is executed.

9. Enter a **Expiration Date/Time** for the command, if applicable.

   This is the date and time when the command expires. The command cannot be executed after this date and time.

10. Select the **Priority** for the command.

11. Select the **Requester** for the command. The requester is the application sending the command.

12. Search for and select a **Requester User**. This is the user who is initiating the command.

13. Enter a **Requester Transaction ID** for the command, if applicable.

14. Enter an **AMI Device Identifier Number** , if applicable.

15. Search for and select the **Service Point ID** for the command. This is the service point where the device to be commissioned is currently installed.

16. Specify whether or not ("Yes" or "No") you would like the command to execute in "registration-only" mode in the **Registration-Only Mode** drop-down list.

17. Specify whether or not ("Yes" or "No") you would like to have the system check for a future concurrent decommission command and fail the command if one is found in the **Check for Future Concurrent Decommissioning** drop-down list.

18. Click **Save**.

    The new command is displayed in the **Activity** portal.

Initiating Decommission Commands

Use this procedure to initiate a decommission command for a device.

Users initiate decommission commands from the **Device** portal.

1. Select **Main Menu** > **Device** to navigate to the Device portal.

2. Search for and select the appropriate device.

3. Click the **Initiate Command** link in the **Device Activities** zone title bar.

4. Select "Device Decommissioning" from the **Available Commands** drop-down list.

   The system only shows commands that are available for the device based on how the device is configured (business objects, device type, the related head-end system, etc.).

5. Click **OK**.

6. Search for and select a parent activity for the command using the **Parent Activity ID** field, if applicable.

7. Enter bulk request information if applicable in the **External Bulk Request ID**, **Bulk Response**, and **Bulk Request Header** fields.

8. Enter a **Effective Date/Time** for the command.

   This is the date and time on which the command takes effect. Commands issued prior to this date and time remain in the "Waiting for Effective Date" status until this time, at which time the command is executed.

9. Enter a **Expiration Date/Time** for the command, if applicable.

   This is the date and time when the command expires. The command cannot be executed after this date and time.

10. Select the **Priority** for the command.

11. Select the **Requester** for the command. The requester is the application sending the command.

12. Search for and select a **Requester User**. This is the user who is initiating the command.

13. Enter a **Requester Transaction ID** for the command, if applicable.

14. Enter an **AMI Device Identifier Number** , if applicable.

15. Specify whether or not ("Yes" or "No") you would like to have the system check for a future concurrent commission command and fail the command if one is found in the **Check for Future Concurrent Commissioning** drop-down list.

16. Click **Save**.

   The new command is displayed in the **Activity** portal.

Initiating On-Demand Read Commands

Use this procedure to initiate a on-demand read command for a device.

Users initiate on-demand read commands from the **Device** portal.

1. Select **Main Menu** > **Device** to navigate to the Device portal.

2. Search for and select the appropriate device.

3. Click the **Initiate Command** link in the **Device Activities** zone title bar.

4. Select "On-Demand Read Scalar" or "On-Demand Read Interval" from the **Available Commands** drop-down list.

   The system only shows commands that are available for the device based on how the device is configured (business objects, device type, the related head-end system, etc.).

5. Click **OK**.

6. Search for and select a parent activity for the command using the **Parent Activity ID** field, if applicable.

7. Enter bulk request information if applicable in the **External Bulk Request ID**, **Bulk Response**, and **Bulk Request Header** fields.

8. Enter a **Effective Date/Time** for the command.

   This is the date and time on which the command takes effect. Commands issued prior to this date and time remain in the "Waiting for Effective Date" status until this time, at which time the command is executed.

9. Enter a **Expiration Date/Time** for the command, if applicable.

   This is the date and time when the command expires. The command cannot be executed after this date and time.

10. Select the **Priority** for the command.

11. Select the **Requester** for the command. The requester is the application sending the command.

12. Search for and select a **Requester User**. This is the user who is initiating the command.

13. Enter a **Requester Transaction ID** for the command, if applicable.

14. Select the type of application to which the measurement for the device will be sent in the **Measurement Destination** drop-down list.

15. Specify the type of measurement the command should return (Initial or Final) in the **Measurement Requested Override** drop-down list.

   Note: Final Measurements can only be retrieved if Oracle Utilities Meter Data Management is installed.

16. Enter the start and end times for the reading in the **Interval Start Date/Time** and **Interval End Date/Time** fields. Applicable only for the "On-Demand Read Interval" command.

17. Click **Save**.

   The new command is displayed in the **Activity** portal.

Initiating Device Status Check Commands

Use this procedure to initiate a device status check command for a device.

Users initiate device status check commands from the **Device** portal.

1. Select **Main Menu** > **Device** to navigate to the Device portal.

2. Search for and select the appropriate device.

3. Click the **Initiate Command** link in the Device Activities zone title bar.

4. Select "Device Status Check" from the **Available Commands** drop-down list.

   The system only shows commands that are available for the device based on how the device is configured (business objects, device type, the related head-end system, etc.).

5. Click **OK**.

6. Search for and select a parent activity for the command using the **Parent Activity ID** field, if applicable.

7. Enter bulk request information if applicable in the **External Bulk Request ID**, **Bulk Response**, and **Bulk Request Header** fields.

8. Enter a **Effective Date/Time** for the command.

   This is the date and time on which the command takes effect. Commands issued prior to this date and time remain in the "Waiting for Effective Date" status until this time, at which time the command is executed.

9. Enter a **Expiration Date/Time** for the command, if applicable.

   This is the date and time when the command expires. The command cannot be executed after this date and time.

10. Select the **Priority** for the command.

11. Select the **Requester** for the command. The requester is the application sending the command.

12. Search for and select a **Requester User**. This is the user who is initiating the command.

13. Enter a **Requester Transaction ID** for the command.

14. Click **Save**.

    The new command is displayed in the **Activity** portal.

Initiating Demand Reset Commands

Use this procedure to initiate a demand reset command for a device.

Users initiate demand reset commands from the Device portal.

1. Select **Main Menu** > **Device** to navigate to the Device portal.

2. Search for and select the appropriate device.

3. Click the **Initiate Command** link in the Device Activities zone title bar.

4. Select "Demand Reset" from the **Available Commands** drop-down list.

    The system only shows commands that are available for the device based on how the device is configured (business objects, device type, the related head-end system, etc.).

5. Click **OK**.

6. Search for and select a **Parent Activity ID** for the command, if applicable.

7. Enter a **Effective Date/Time** for the command.

    This is the date and time on which the command takes effect. Commands issued prior to this date and time remain in the "Waiting for Effective Date" status until this time, at which time the command is executed.

8. Enter a **Expiration Date/Time** for the command, if appicalble.

    This is the date and time when the command expires. The command cannot be executed after this date and time.

9. Select the **Priority** for the command.

10. Select the **Requester** for the command. The requester is the application sending the command.

11. Search for and select a **Requester User**. This is the user who is initiating the command.

12. Enter a **Requester Transaction ID** for the command.

13. Select the type of application to which measurements for the device will be sent in the **Measurement Destination** drop-down list.

14. Specify the type of measurement the command should return (Initial or Final) in the **Measurement Requested Override** drop-down list. The default is Initial Measurement.

    Note: Final Measurements can only be retrieved if Oracle Utilities Meter Data Management is installed.

15. Click **Save**.

    The new command is displayed in the **Activity** portal.

16. Click **Save**.

Cancelling Commands

Use this procedure to cancel a command for a device.

Users cancel commands from the **Device** portal.

1. Select **Main Menu** > **Device** to navigate to the Device portal.

2. Search for and select the appropriate device.

3. Click the **Cancel Command** link in the Device Activities zone title bar.

4. Search for and select the parent activity for the command to cancel, if applicable.

5. Select the requesting system for the command to cancel. Requesting systems are defined as service providers.

6. Search for and select a requester user. This is the user who is canceling the command.

7. Select the recipient of the command cancellation. This is the external system (defined as a service provider) that will receive notification of the cancellation.

8. Select the priority for the command cancellation.

9. Search for and select the command to cancel.

    When searching for the command to cancel, the **Retrieve Command to Cancel** dialog automatically displays commands currently in the "Waiting" status. You can refresh this list by searching for and selecting a device and specifying the "On or Before Creation" date and time.

10. Click **Save**.

Reference Topics

This section provides reference information to support tasks.

Glossary

This glossary provides definitions of commonly used terms.

Command Effective Date/Time	The date and time when a device command becomes effective.
Command Expiration Date/Time	The date and time when a device command expires.
Commissioning	A command issued to establish communication between a device and the head-end system. The goal is to ensure connectivity has been established with the device, that any information needed to communicate with the meter has been defined in both Oracle Utilities Smart Grid Gateway and the head end system, and the meter will begin capturing usage and events.
Decommissioning	A command issued to inform the head-end system when a meter needs to be removed from a service point, so that no further reads or events will arrive from the meter. Decommissioning is invoked when a meter must be removed or deactivated. The goal is to stop any communication between the device and the head-end system.
Head-End System	A system that collects measurement data and meter events for eventual submission to the application. Many devices can communicate to the application through a single head-end system. A utility may have numerous head-end systems through which they communicate with devices.

On-Demand Read	A request for the most up-to-date reading from a particular meter. It is not guaranteed to return immediately; it could require a person to manually read the meter. The purposes are to check the meter's operational status and/or obtain a more recent reading than is currently available.
Payload	An upload component which contains measurements and meter events in a format specific to the head-end. Payloads are part of the initial upload of measurement data.
Remote Connect	A command issued when a meter needs to be connected at a service point.

Standard Actions for Admin-Level Data Maintenance

A standard set of maintenance portals are used to define objects that are maintained from the Admin menu. These portals use a common interface and support a set of standard actions for creating and maintaining objects.

The following quick reference table provides the basic steps for performing any of the standard actions.

Action	Steps
Add	Click the Add link in the list or search zone title bar. Provide all necessary information and click **Save**.
Edit	Select the object you want to edit from the list zone, then click the **Edit** icon. Enter your changes and click **Save**.
Delete	Select the object you want to delete from the list zone, then click the **Delete** icon. Confirm the deletion.
Duplicate	Select the object you want to duplicate from the list zone, then click the **Duplicate** icon. Key fields will be cleared in the new record. Complete all required fields and click **Save**.
Broadcast	Select the object you want to broadcast from the list zone, then click the **Broadcast** icon. The details and available actions for the selected object are displayed in the appropriate zones.
Activate or Deactivate	Select the object you want to activate or deactivate from the list zone, then click the **Broadcast** icon. Click **Activate** or **Deactivate** in the Actions zone. **NOTE:** These actions only apply to objects that support an Active and Inactive status, such as activity types. When such an object is deactivated, no new objects of this type can be created .
Sort	Click a column header in the list zone to resort by the values in that column. Click again to reverse the order (from ascending to descending or descending to ascending).
Filter	If a list zone supports filtering, a Filter icon is displayed in the list zone title bar (on the far right). Click the **Filter** icon, then select the field by which you want to filter and click **Refresh**.
View or add log entries	Click the **Log** tab to view log entries. To add an entry, click the **Add** link in the list zone title bar and provide the requested information.

Standard Actions for Data Maintenance

This topic provides the basic steps for performing standard actions on data maintained from the Main Menu.

NOTE: The system displays buttons for all valid actions, based on the object's current status, your user privileges, and your system's configuration. The following table provides instructions for performing all standard actions.

Action	Steps
Edit	From the Main Menu: 1. Select the option for the object you want to maintain. A query portal is displayed. 2. Enter search criteria to locate the object. The maintenance portal is displayed. 3. Click the **Edit** button in the Record Actions section. 4. Enter your changes. Click ⑦ to display field descriptions. 5. Click **Save**.
Delete	From the Main Menu: 1. Select the option for the object you want to delete. A query portal is displayed. 2. Enter search criteria to locate the object. The maintenance portal is displayed. 3. Click the **Delete** button in the Record Actions section. A confirmation dialog opens asking you to confirm the deletion of the record. Click **OK** to delete the object.
Duplicate	From the Main Menu: 1. Select the option for the object you want to duplicate. A query portal is displayed. 2. Enter search criteria to locate the object. The maintenance portal is displayed. 3. Click the **Duplicate** button in the Record Actions section. A new record is created and the Add/Edit screen is displayed. Key fields will be cleared in the new record. 4. Complete all required fields. Click ⑦ to display field descriptions. 5. Click **Save**.
View or add log entries	From the Main Menu: 1. Select the option for the object you want to manage log entries for. A query portal is displayed. 2. Enter search criteria to locate the object. The maintenance portal is displayed. 3. Click the **Log** tab. 4. To add a log entry, click the Add link in the Log zone title bar.

Action	Steps
	5. Type the log detail and click **Save**.

Viewing and Adding Log Entries

Use the Log tab to view or add log entries for the current object.

The log displays a list of user and system actions associated with an object, such as when it was created, last updated, or transitioned to different status. For each log entry, the system displays the date and time the action occurred, the user/system that initiated the action, the type of action, and related object, if any.

To create a new log entry, click the **Add Log Entry** link in the zone title, then enter log entry details and click **Save**. Your user ID is saved with the log entry.

FAQs

This section provides answers to commonly asked questions.

How Do I...?

This topic answers questions about how to perform day-to-day functions.

Q. How do I find initial measurement data?

A. Use the Initial Measurement portal to view initial measurement data. Please refer to the instructions under *Searching and Viewing Initial Measurement Data* for more detail.

Q. How do I review device events?

A. Use the Initial Measurement portal to view initial measurement data. Please refer to the instructions under *Searching and Viewing Device Events* for more detail.

Q. How do I initiate a meter command?

A. In general meter commands include connect or disconnect, commission or decommission or obtain an on-demand read.

Use this procedure to initiate a command for a meter.

1. Navigate to the Device portal in edit mode

2. Click the **Initial Command** link in the Device Activities zone title bar.

3. Select the command to initiate from the **Command Request BO** drop-down list.

4. Click **Save**.

5. Enter additional supporting information based on the command type.

- Command Effective date and time
- Command Expiration date and time
- Priority
- Requesting system
- Requester user
- Transaction ID

6. Complete any remaining fields.

Q. How do I initiate check the status of a device?

A.To check the status of the device, you simply navigate to the Device portal and review the contents of the Status field. It can be helpful to review this information before disconnecting or decommissioning a device.

What's the Difference Between ...?

This topic describes the difference between terms and concepts that are closely related.

Q. What's the difference between Oracle Utilities Service and Measurement Data Foundation and Oracle Utilities Smart Grid Gateway?

A. Oracle Utilities Service and Measurement Data Foundation provides shared functionality, including device management, device installation management, and Validation, Editing, and Estimation used by Oracle Utilities Meter Data Management, Oracle Utilities Smart Grid Gateway, and other Oracle Utilities products.

Q. What's the difference between a meter reading and an event?

A. Meter readings are measurements taken from a device to show how much of the quantity measured was consumed. Events refer to occurrences that take place relative to a meter such as power outages, tampering alerts, command completions and other events.

Q. What's the difference between a commission command and a connect command?

Use a commission command to establish communication between a device and the head-end system. The goal is to ensure that connectivity has been established with the device. A connect command is issued when a meter needs to be connected at a service point.

Q. What's the difference between a decommission command and a disconnect command?

Use a decommission command to remove a device from the head-end system. The goal is to ensure that the head-end system is informed that the device needs to be removed from a service point and no further communication occurs. connectivity has been established with the device. A connect command is issued when a meter needs to be connected at a service point.

Can I ...?

This topic answers questions about whether certain actions or configurations are permitted.

Q. Can I initiate a meter command for a meter that is not connected?

A. Yes. You can perform a remote connect to connect the meter.

Q. Can I commission meter that is not connected?

A. Yes. You can perform a remote connect after the meter is commissioned .