**Oracle Utilities**
**Operational Device Management**

User Guide

Release 2.0.1 Service Pack 2

**E35353-04**

February 2014

ORACLE®

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# Contents

# Chapter 1

## Getting Started

This chapter provides information about Oracle Utilities Operational Device Management including the business processes supported by the application, how to start the application and understanding the user interface.

## About Oracle Utilities Operational Device Management

Oracle Utilities Operational Device Management provides functionality to handle large volumes of assets and to manage the receipt, installation, maintenance, tracking and removal of those assets.

The system supports the following business processes:

- Capturing device attributes and supporting any type of device

- Supporting integration with other utility applications requiring Device information and configuration

- Supporting detailed smart device attributes

- Supporting detailed location management and tracking of individual devices throughout their lifecycle

- Capturing device configurations, settings and calibrations

- Tracking firmware and firmware versions on smart devices

- Managing configuration between devices, components and software

- Validating devices at the time of receipt

- Scheduling and capturing data related to periodic inspection history over time

- Defining cycle information to schedule inspections

- Defining procedures to follow when performing inspections

- Using activities and work orders to track and manage the electronic or in-field maintenance of devices

- Creating work activity/work order document to be used in the field for inspection work

- Defining a work activity/work order life cycle

# Starting the Application

Use this procedure to start Oracle Utilities Operational Device Management.

1. Click the desktop icon or program menu option to start the Oracle Utilities Operational Device Management 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 menus and general rules for navigating the system.

The menu displays 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's configuration.

### Main Menu and Admin Menu

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 who have administrative privileges will be able to see this menu. The **Main** menu provides access to all other functions. The options displayed on each menu are based on the settings defined in your user profile. Your user profile also controls your access to different portals and dashboard zones.

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-side of the screen.

### Functional and Alphabetical Menus

The system supports two different menu styles for the **Admin** menu: alphabetical and functional.

- The functional menu groups menu options by function, such as Activity, Asset or Location.

- The alphabetical menu groups menu options by the first letter of the option name.

    **Note:** Switching the way that the menus are sorted is done by navigating to **Admin Menu** > **Installation Options** . This is a global change that affects all users.

    **Note:** The procedures 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.

### Access to Different Applications

The menu system provides access to both Oracle Utilities Application Framework functions and Oracle Utilities Operational Device Management functions. If you have additional Oracle applications installed, the menu system will provide 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, topics related to the base application are listed in the help contents panel under the appropriate heading.

### Menu Options

The following table lists base menu functions. Online documentation for all functions listed below is provided under the Oracle Utilities Operational Device Management option 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 under which they appear, or restrict access to the options for some or all users.

| Menu (Admin or Main) | Functional Menu | Menu Option |
| --- | --- | --- |
| Admin | Activity | Activity Type |
| Admin | Activity | Completion Event Type |
| Admin | Asset | Asset Type |
| Admin | Asset | Service History Type |
| Admin | BI Configuration | BI Configuration |
| Admin | BI Configuration | Bucket Configuration |
| Admin | Communication | Communication Type |
| Admin | Configuration | Configuration Type |
| Admin | General | Attachments |
| Admin | Location | Asset Location Type |
| Admin | Location | Contact Type |
| Admin | Location | Organization Type |
| Admin | Location | Storage Location Type |
| Main | Asset | Asset |
| Main | Asset | Service History |
| Main | Asset | Specification |
| Admin | Asset | Manufacturer |
| Main | Configuration Report | Configuration |
| Main | Configuration Report | Configuration Report |
| Main | Location | Asset Location |
| Main | Location | Storage Location |
| Main | Location | Contact |
| Main | Location | Organization |
| Main | 360 Search | |
| Main | Work Order | Work Order |
| Main | Work Order | Activity |

| Menu (Admin or Main) | Functional Menu | Menu Option |
| --- | --- | --- |
| Main | Work Order | Completion Event |
| Main | Work Order | Inbound Communication |
| Main | Asset Replication | Replication |
| Main | Asset Replication | Mass Asset Disposition Update |

### Navigating to Portals in Add or Edit Mode

Many menu options display a + sign before the option name. If you click the plus sign, rather than the option name, you will go directly to a screen that lets you add a new record. For example, if you click **Contact** + the system navigates to the Contact add/edit screen so you can begin creating a new contact. This is referred to as 'navigating to the portal in add mode.'

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 lets you select one from the list.) This is referred to as 'navigating to the portal in display mode.'

Once you have found the entity you want to work with, the system displays a maintenance portal listing all the actions you can take on that entity. The valid options will vary depending on the entity, your user privileges, and your system's configuration. Standard actions include **Edit**, **Duplicate**, and **Delete**. Valid actions also typically include changes to the entity's status.

# Chapter 2

## User Documentation

The Oracle Utilities Operational Device Management system includes functionality to manage assets, assets, components, service history, asset and component locations, organizations, contacts and specifications. The following sections provide more information on these concepts.

# 360 Degree Search

This section provides information about the **360 Degree Search** and on how to search using the **360 Degree Search** .

## About 360 Degree Search

The **360 Degree Search** feature allows users to search for assets, components, specifications, locations and contacts. Users can also search on other identifiers or characteristics as defined by your organization. Selecting a **Query Option** changes the search fields to present different options.

From the search results list, you can navigate to the selected portal to view data for the object.

## Working with 360 Degree Search

The following section provides information on tasks associated with searching the application using the 360 degree search.

## Searching Data Using the 360 Degree Search

Use this procedure to search for data using the **360 Degree Search** portal.

**1.** Select  **Main Menu** > **360 Search** .

**2.** Select a Query Option and enter your search criteria.

3. Click **Refresh**.

4. Click the link for the option you want to view.

   The corresponding portal opens for the object you selected.

# Attachments

The following sections provide information on concepts related to managing attachments.

## About Attachments

Attachments provide additional information to support records within the system.

Attachments can be any file, such as a photo, a document with instructions or specifications, a spreadsheet, or any other supporting documentation. Attachment files are added to individual records such as an asset, service history, location, completion event or specification. These can also be added through the **Attachments** portal for general access within the application.

Please refer to *Working with Attachments* for more information.

# Assets

The following sections provide information on concepts related to managing assets including the management of components, specifications and service history.

## Understanding Assets

Assets, components and service history are related in that a component is an asset that is installed on another asset. Service history is used to track and record the work that is done on assets and components while specifications are used to define attributes needed to provide information about assets.

## About Assets

An asset is an object in an infrastructure, such as a smart meter, poles, pipes, transformer or any other material item owned or managed by an organization.

Assets typically require tracking, inspection or work history. Your system may be configured with any number of asset fields depending upon your business requirements. The **Asset Type** limits the asset to attributes that only apply to assets of that type.

Asset disposition is the combination of the location and status of an asset. Throughout the lifecycle of an asset, the disposition changes as the asset is moved between locations and service statuses.

Asset information includes the following:

- **Activity History** provides a log of the activities that have been performed on the asset over its life.
- **Asset Disposition Detail** provides details regarding the status and location of the asset.

- **Asset Owned Attachments** are any attachments added to provide as reference information related to the asset. This information is available when activities are created for the asset.

- **Attached Components** provides a listing of any components that are attached to the asset.

- **Disposition History** provides a log of the status and location changes for the life of the asset. The disposition history is a complete record of where the asset has been and what has been done to the asset.

- The **Identification** section provides information such as the badge number or serial number for the asset, the pallet number that the asset was delivered on, a PO number, or other relevant identifying information.

- **Service History** provides a log of the service history that has been recorded over the life of the asset.

- **Settings** indicate the firmware settings for the asset such as the measurement type for the asset or the configuration.

- **Vendor** provides information such as the warranty for the asset, the vendor who sells it, or the part number used by the vendor to identify the asset.

# About Components

Components are devices or other objects that are attached to another device, usually an asset.

One of the most common examples of components are the faceplates that are often attached to smart meters. However, a component can be any tracked object attached to an asset.

Since they are always attached to another device, components cannot be installed at a location. However, they are received, tracked, maintained and inspected like any other device. Given this, activities and work orders can be created to perform these tasks on components.

Detaching components involves either moving the component to a new asset location or transferring to a storage location. The process within the system is to search for and select the component and then "detach" it from the asset where it currently resides.

# About Service History

Use service history to enter relevant information regarding service or maintenance on assets.

Service history can be used to record inspection feedback, pass/fail details, service logs, or other information regarding service on the asset.

Types of service history might include:

- Visual pole inspection

- Detailed pole inspection

- Smart meter test

- Battery replacement

Service history can be manually created or is automatically generated as the result of completion events being processed for activities. If the service history type has any schedule defined, a set schedule may also be established to create regular service history for repeated tasks such as inspection or regular maintenance.

Service history types linked to asset types control which service history can be created for assets.

# About Specifications

A specification is a written requirement that can describe the design details and/or the functional performance criteria required for a particular equipment, material, or product.

Specifications can be a set of procedures, careful handling instructions for hazardous or delicate materials, or any other set of attributes needed to provide information about assets or other entities.

Your system may be configured with any number of specification fields depending upon your business requirements. The value entered in the **Description** field will be displayed when this specification is searched. The **Asset Type** field ties the specification to the assets, of this type, that can reference the specification. When assets of this type are created, the specifications referencing the same asset type are available to be included as part of the asset definition.

A **Manufacturer** can also be specified when creating the specification. Typically the specification would have come from the manufacturer; otherwise this may simply be informational.

**Peer Specifications** are any specifications that are associated to the current specification by a relationship. For example, a smart meter specification might reference a firmware specification to show the relevant firmware for smart meters with specifications of that type. In the peer specifications section for the firmware specification, the smart meter specification would be listed with a link to that specification. This is useful, for example, when multiple devices use the same firmware. The same firmware specification can be referenced rather than having to enter the firmware information multiple times.

**Specification Owned Attachments** are any files that may have been attached to support the specification definition.

The **Configurations** portal manages the asset to component to firmware configurations that determine which versions are valid for which assets. **Configuration Reports** can be used to obtain details about the configurations and verify that the correct versions are in use.

## About Firmware

Firmware is software that is embedded in a piece of hardware. Devices such as smart meters, a network cards, or routers all have software that is programmed into special memory contained in the hardware itself. Manufacturers often release regular firmware updates to keep their hardware compatible with new connections, to improve performance, or to add additional features.

After a firmware is released from the vendor, new firmware may need to be tested and validated then either approved or rejected for roll out. The system provides the needed functionality to support validating and updating firmware versions as needed.

## Associating Firmware and Firmware Versions to Assets

In most business processes, firmware and firmware version is entered as part of the manufacturer settings when assets are created. This information appears in the **Settings** section on the asset. Also during asset creation, a basic business process would associate an asset specification to the asset to keep track of detailed manufacturer information which might also include the firmware. Attached, as a child to that specification, would be another specification that indicates the firmware versions that are available.

As firmware versions change the child specification is updated with new versions. These versions can then be tested and accepted or rejected using the lifecycle functionality on the specification.

Next, work orders and/or activities can be created to update the firmware version on the assets that are associated with those specifications. For example, your business process might require that you create an Asset Criteria Generator type work order to create a list of assets based on firmware as the selection attribute. The system would then apply the updates made via the work order to any assets that meet that criteria (ie, that have that firmware type or version).

## Firmware Management

You can use the system to manage firmware in the following ways:

- Create firmware groupings: Record firmware versions into groupings or "families" on specifications so that related versions can be easily managed together.

- Add firmware to assets: Use peer specifications to associate assets to these firmware groups.

- Review firmware: Review firmware distribution and status in the **Firmware Deployment** and **Firmware Version Dispositions** zones on specifications.

- Document firmware: Manage related release notes or manufacturer information by creating attachments directly on the specification.

- Test firmware: Track testing and roll out of new firmware versions including the ability to approve or reject firmware version deployments.

- Update firmware: Create work orders and/or activities to update firmware versions on assets.

- Reject firmware versions: After testing, set the firmware version to an inactive status to indicate that the firmware version cannot be used for assets.

### Firmware on Specifications

The **Firmware Deployment** section on specifications provides statistics on the number of assets that are on each version of the firmware that is applicable to the specification. Click the pie chart for a version to see the number of assets on that versions grouped by the asset state.

The **Firmware Versions** section lists the firmware that has been added via the specification. Use the **Add Firmware Version** link in the zone to add a new version. Click on one of the listed versions to open a screen with more details about the firmware. This screen can also be used to add attachments for the specific firmware version. For example, you might attach the release notes that were delivered with the firmware release. On this screen, the **Firmware Version Dispositions** section lists the assets that use the firmware version indicated, if any.

### Firmware Version Lifecycle

Statuses for firmware version updates can be managed on the specification by selecting the actions in the **Record Actions** section. Valid statuses include:

- Active Statuses

  - created

  - under testing

  - approved

- Intermittent Statuses

  - deprecated

  - quarantined

- Inactive Statuses

  - rejected

  - obsolete

If the firmware version is in an intermittent status, assets or components can reference that version. In general, these statuses are for documentation purposes. for example, an organization might use the **Deprecated** status to indicate that they do not want to roll out new meters on that version any longer, however, existing meters that are on that version are still valid. No assets or components can have the version associated if the version is in one of the inactive statuses.

This functionality works in conjunction with the valid configurations that can be set up for the asset or component. If the firmware version is placed in an inactive status, yet it is referenced as part of a configuration, the configuration will become invalid. Please refer to *About Configurations* for more information.

# About Manufacturer

Manufacturer defines attributes for product manufacturers.

The use of this portal depends heavily upon your business practices, however, in general the manufacturers listed can be associated to specifications which can then be included on assets or components to provide additional reference information related to those objects. The manufacturer usually provides firmware, firmware updates, and specification information for assets and components.

**Manufacturer Specifications** defines a list of asset specifications that belong to the manufacturer.

# Working with Assets

The following sections provide information on tasks associated with creating and updating assets and service history.

# Searching for Assets

Use this procedure to search for assets using the **Asset Search** portal.

Search for assets using the 360 degree search or by navigating to the **Asset** portal and completing a search.

1. Navigate to **Main Menu** > **Asset** > **Asset** to search for and select the appropriate asset.

2. Select from the **Query Option** drop-down list to select how you would like to enter search criteria.

   Base package search options include the following:

   - **Asset Information** - Search by the asset type, asset condition, physical location (address, city or postal code) or by the activity ID that created the asset.

   - **Asset ID** - You must know the specific Asset ID code to search by this option.

   - **Asset Disposition** - Search by the asset type and disposition status of the asset.

   - **Asset Specification** - Search by the asset type, disposition status and manufacturer of the asset.

3. Click **Refresh**.

4. In the search results list, click the **Asset** link for the asset you want to view.

   The **Asset** portal opens displaying all of the details of the selected asset.

# Creating an Asset Manually

Use this procedure to manually create a single asset in the system.

Defining an asset involves selecting an asset type then defining asset attributes. While this procedure describes the creation of a single asset, it is also possible to create multiple assets at one time using *asset replication*.

1. Navigate to **Main Menu** > **Asset** > **Asset +** .

2. Enter the effective date and time as the date and time when the asset should be considered valid in the system.

   This defaults to the current date and time, however, you can set this to a past date depending on how the asset needs to be handled.

3. Select the appropriate asset type to determine the base attributes of the asset.

To define this as a component, rather than an asset, select a component type instead of an asset type.

4. Select the appropriate asset or storage location.

   New assets are created with a status of **In Receipt** . This status and the location can be modified after the asset is created.

5. Click **OK**.

6. Select a specification to associate to the asset, if applicable, then click **Save**.

   Continue to disposition the asset by clicking the action buttons as appropriate.

   For example, you might select **Store** or **Change Location** to move the asset to a storage location or elsewhere.

# Replicating Assets

Use this procedure to create new asset records in batches.

A typical business process would involve receiving a large quantity of assets and entering them into the system as a batch using a CSV file upload. This type of task uses a replication activity to manage the creation of records.

1. Navigate to **Main Menu** > **Asset Replication** > **Replication** + .

2. Select the activity type for the replication and click **Ok**.

   The activity type defines standard parameters for the replication task. For example you may have types for smart meters vs. manual meters which would establish differences in the information used when the meters are added to the system.

3. Select the **Template Asset** to use when creating the new assets and click **Save**.

   The template asset is required as it establishes the general details for creation of the new assets.

   Assets are created within the system based upon the details specified.

   If after replicating the assets, the template is modified or updated, use the **Reapply** button to apply that same change on the replicated assets.

# Update the Disposition of a Group of Assets

Use this procedure to change the status and location for a batch of assets.

1. Navigate to **Main Menu** > **Asset Replication** > **Mass Asset Disposition Update** .

2. Search for assets according to the appropriate criteria.

   Options include selecting all assets that are in a certain state, all assets of a certain condition or assets by physical location. You can also select from characteristics or other identifiers. You can create combinations of criteria such as all assets of a certain type and that are in a particular status.

3. Click **Refresh**.

   A list of assets matching the selected criteria is displayed.

4. Select individual assets or check the box at the top of the column to select all assets.

5. Click **Change Disposition** to begin the disposition change.

   A pop-up window opens where you select the effective date and the new status and location for the assets.

6. Enter the date that the status and location change should occur.

   This defaults to the current date and time, however, you can set this to past date depending on how the assets need to be handled.

7. Enter the appropriate location where the assets will go when they are dispositioned.

8. Click **OK**.

   The assets are moved to the new status and location, and the disposition log on the individual asset records is updated with the change.

# Update the Disposition of a Single Asset

Use this procedure to update the status and location of an asset.

1. Navigate to **Main Menu** > **Asset** to search for and select the appropriate asset in display mode.

2. Click **Change Location** in the **Record Actions** section.

   To take the asset out of service, click the **Out of Service** button.

3. Update the effective date and time and enter the new location for the asset.

   The available locations depend upon the asset type and the current disposition of the asset.

4. Click **Save**.

   Note the change in the information in the **Asset Disposition Details** section. The new disposition status and location are indicated.

# Rejecting Assets

Use this procedure to reject assets.

You can only reject tracked assets that are in one of the following states: **In Receipt**, or **In Repair** .

1. Navigate to **Main Menu** > **Asset** > **Asset** to search for and select the appropriate asset in display mode.

2. Click the **Reject** button.

The asset is archived in **Rejected** status and cannot be dispositioned any further.

# Retiring Assets

Use this procedure to retire assets.

You can only retire tracked assets that are in one of the following states: **In Store**, or **In Repair**.

1. Navigate to **Main Menu** > **Asset** > **Asset** to search for and select the appropriate asset in display mode.

2. Click the **Retire** button.

The system updates the status of the asset as retired.

# Working with Components

The following sections provide information on tasks associated with creating and updating components.

# Creating Components

Use this procedure to manually create a component.

Defining a component involves selecting a component type asset type and then indicating the asset where the component is attached.

1. Navigate to **Main Menu** > **Asset** > **Asset +** .

2. Select an asset type that defines a component.

   When you select a component type asset type, the **Attached to Asset ID** field is displayed.

3. Enter the Asset ID where the component should be attached.

4. Click **Ok**.

5. Select a specification as applicable then click **Save**.

# Attaching a Component to an Asset

Use this procedure to attach an existing component to an asset.

1. Navigate to **Main Menu** > **Asset** > **Asset** .

2. Search for and select the appropriate component.

3. Click **Attach** in the **Record Actions** section.

   The option to attach the component is generally not available unless the component is in the necessary interim disposition.
   A window opens where you select the effective date and the Asset ID where the component is to be attached.

4. Click **Save**.

   The **Asset Disposition Detail** section and the **Disposition History** zone are updated with the status and location for the component.

# Detaching a Component from an Asset

Use this procedure to detach a component from an asset.

1. Navigate to **Main Menu** > **Asset** > **Asset** .

2. Search for and select the appropriate component.

3. Click **Detach** in the **Record Actions** section.

   A window opens where you select the effective date and the location where the component is to be stored when it is removed from the asset. For in/out service components you choose an asset location. For tracked components, you choose a storage location.

4. Click **Save**.

The **Asset Disposition Detail** section and the **Disposition History** zone are updated with the status and location for the component.

# Working with Service History

The following sections provide information on tasks associated with creating and maintaining service history.

## Searching for Service History

Use this procedure to search for service history.

1. Navigate to **Main Menu** > **Asset** > **Service History** .

2. Select from the **Query Option** field to select how you would like to enter search criteria.

   You can search by one of the following:

   - **Related Object** - Search by the service history type, asset ID or service history ID.

   - **Date** - Search by the type, creation date/time or effective date/time of service history.

3. Click **Refresh**.

4. In the search results list, click the **Service History** link for the service history you want to view.

The **Service History** portal opens displaying all of the details of the selected service history.

## Creating Service History

Use this procedure to create service history for an asset or component.

Service history might also be created automatically as the result of a completion event for an activity.

1. Navigate to **Main Menu** > **Asset** > **Service History** + .

2. Enter the ID for the asset that you are creating service history for.

3. Select the service history type.

   This list is limited by the service history types that are valid for the asset ID.

   Service history type determines the basic attributes that should be included on the service history such as category, whether the service is for inspection or maintenance, or any other criteria. It also sets a service schedule, if applicable.

4. Click **OK**.

5. Enter the effective date and time for the service history.

   This value can be set in the past if you are recording a service that occurred prior to the current date.

6. Enter the ID for the associated activity, if applicable.

7. Enter any comments as applicable.

8. Click **Save**.

# Working with Specifications

The following sections provide information on tasks associated to working with specifications.

## Defining Specifications

Use this procedure to define specifications.

1. Navigate to the **Specification** portal in edit mode.

2. Select a specification type.

   The "business object" determines the default fields that need to be filled in for the specification.

3. Fill in required information as needed and click **Save**.

## Adding or Updating Firmware Versions

Use this procedure to add new firmware versions or update existing firmware versions in the system. These can then be tested, approved or added to work records to be updated on assets.

A specification for the firmware must exist within the system

1. Navigate to the **Specification** portal in edit mode.

2. Search for and select the appropriate specification.

3. Click the **Add Firmware Version** link in the **Firmware Versions** section.

4. Confirm the firmware listed then enter the version, date, release note if any, and any other information as required by your business practices.

5. Click **Save**.

# Working with Manufacturer

The following sections provide information on tasks associated to working with manufacturers.

## Defining Manufacturers

Use this procedure to define manufacturers.

1. Navigate to the **Manufacturers** portal in edit mode.

2. Select a manufacturer type.

   The "business object" determines the default fields that need to be filled in for the manufacturer.

3. Fill in required information as needed and click **Save**.

# Locations

The following sections provide information on concepts related to managing locations.

## Understanding Locations

This section provides information about asset locations, storage locations, contacts and organizations.

Locations describe the physical location of assets or a hierarchy of assets. A location also describes what type of service it provides, the unit of measure used and whether assets can be installed or associated to that location. Valid locations might include service points, storerooms or other physical storage locations, real estate, vehicles or any other location as defined by your organization.

For example:

- A service point is the address where a meter is located. This type of location typically contains just one active asset and no stored assets.

- A storeroom or repair shop is a location where assets are physically stored. This type of location can be composed of a simple description ('Central Storage' or 'Repair') but might also have address information.

- A real estate location is typically an address or a building name.

- Vehicles or "fleet assets" are considered as storage locations within the system since if the asset is in transit and on a vehicle it is considered stored on that vehicle. A truck that contains assets 'in storage' will have a location with a single active asset and many stored assets.

Locations can be defined in hierarchies with parent and child locations. For example, a campus might be defined with one parent location with the buildings on the campus defined as child locations to that parent. The parent can define attributes or identifiers common to all child locations, however specific location information must be defined on each location individually.

A child location cannot be in active status if the parent location is active. It is also not possible to make a location inactive if it has associated assets or child locations.

## About Asset Locations

Asset locations define the physical location where assets are installed.

Valid asset locations might be service points, other locations for installed assets, or any other location as defined by your organization.

Asset locations are defined by the following:

- **Activity History** provides a log of the activities that have been performed on the asset over its life.

- **Asset History** provides a log of the assets that have been installed at this location.

- **Location Owned Attachments** - Any attachments added here are made available as reference information related to the asset location and are available when assets are installed at the location.

- **Criticality**: The criticality section captures information which defines the importance of the location in terms of the potential impact of having issues or problems at that location. For example, a hospital might have a high criticality rating since losing power there might result in deaths of patients. A city park would have a low criticality since there are few consequences if the lawns are not mowed on time.

# About Storage Locations

Storage locations define the physical location where assets or components are stored.

Valid storage locations might be storerooms, warehouses, receiving docks, retirement locations, vehicles, or any other location as defined by your organization.

Storage location details are defined by the following:

- **Current Activities** provides a summary of the activities that are currently associated to the location.
- **Assets Summary** provides statistics about the assets installed at the location.
- **Location Owned Attachments**. Any attachments added here are made available as reference information related to the asset location and are available when assets are installed at the location.

   **Note:**  Vehicles are considered as storage locations within the system since if the asset is in transit and on a vehicle it is considered stored on that vehicle.

# About Contacts

Contacts are usually individuals or business entities who should be contacted in reference to a service point, work or any other issues.

Contacts are referenced on locations to provide an associated person or business. The main attributes for contacts are managed in the **Contacts** portal.

# About Organizations

Organizations are used for categorization and reporting for locations.

For example, your reporting may include a hierarchy that groups locations by a structure of parent and child organizations.

A basic Organization record shows the organization type, whether the organization is active or inactive, a description and any parent organization or location if applicable. The main attributes for organizations are managed in the **Organizations** portal.

# Working with Locations

The following sections provide information on tasks associated to working with asset locations, storage locations, contacts and organizations.

# Creating an Asset Location

Use this procedure to create an asset location.

1. Navigate to  **Main Menu** >  **Location** >  **Asset Location** + .

2. Select a location type and click **Ok**.

   The location type sets the default fields that need to be filled in.

3. Fill in required information as needed and click **Save**.

Make sure that the **Location Disposition** is set to Active if you want to make the location available for reference on other records.

Enter a parent location or organization to establish the position of your new location in the location hierarchy.

Additional information typically includes an address and criticality information. The criticality section captures information which defines the importance of the location in terms of the potential impact of having issues or problems at that location. For example, a hospital might have a high criticality rating since losing power there might result in deaths of patients. A city park would have a low criticality since there are few consequences if the lawns are not mowed on time.

# Searching for Asset Locations

Search for asset locations using the 360 degree search or by navigating to the **Asset Location** portal and completing a search.

Use this procedure to search for asset locations using the **Asset Location Search** portal.

1. Navigate to **Main Menu** > **Location** > **Asset Location** .

2. Select from the **Query Option** drop-down list to select how you would like to enter search criteria.

   Base package search options include the following:

   • **Asset Location Information** - Search by the location type, physical location (address, city or postal code), or parent location of the asset. You can choose to also include inactive asset locations in your search.

   • **Identifier** - Search by the Identifier Type/Value or specific location ID of the asset location.

   • **Contact Name** - Search by the name of a point of contact.

3. Click **Refresh**.

4. In the search results list, click the **Location** link for the asset location you want to view.

   The **Asset Location** portal opens displaying all the details of the selected asset location.

# Creating a Storage Location

Use this procedure to create a storage location.

1. Navigate to **Main Menu** > **Location** > **Storage Location** + .

2. Select a location type and click **Ok**.

   The location type sets the default fields that need to be filled in.

3. Fill in required information as needed and click **Save**.

   Make sure that the **Location Disposition** is set to Active if you want to make the location available for reference on other records.

   Enter a parent location or organization to establish the position of your new location in the location hierarchy.

   Additional information typically includes an address, geo location coordinates and a contact, if applicable.

# Searching for Storage Locations

Search for storage locations using the 360 degree search or by navigating to the **Storage Location** portal and completing a search.

Use this procedure to search for storage locations using the **Storage Location Search** portal.

1. Navigate to **Main Menu** > **Location** > **Storage Location** .

2. Select from the **Query Option** drop-down list to select how you would like to enter search criteria.

   Base package search options include the following:

   - **Storage Location Information** - Search by the storage location type, storage location (address, city or postal code), or parent location. You can choose to also include inactive storage locations in your search.
   - **Identifier** - Search by the Identifier Type/Value or exact location ID of the storage location.
   - **Contact Name** - Search by the contact name.

3. Click **Refresh**.

4. In the search results list, click the **Location** link for the storage location you want to view.

   The **Storage Location** portal opens displaying all of the details of the selected storage location.

# Working with Contacts

The following sections provide information on tasks associated with creating, searching and updating contacts.

# Searching for Contacts

Search for contacts using the 360 degree search or by navigating to the **Contact** portal and completing a search.

Use this procedure to search for contacts using the **Contact Search** portal.

1. Navigate to **Main Menu** > **Location** > **Contact** .

2. Select from the **Query Option** drop-down list to select how you would like to enter search criteria.

   Base package search options include the following:

   - **Name** - Search by the contact name.
   - **Identifier** - Search by the Identifier Type/Value or ID of the contact.

3. Click **Refresh**.

4. In the search results list, click the **Contact** link for the contact you want to view.

The **Contact** portal opens displaying all of the details of the selected contact.

# Creating Contacts

Use this procedure to create a contact.

1. Navigate to **Main Menu** > **Location** > **Contact** + .

2. Select a contact type and click **Ok** .

The contact type usually determines whether this is a person or business, and also sets the default fields that need to be filled in for the contact.

3. Fill in required information as needed and click **Save**.

# Linking a Contact to a Storage Location

When a new storage location is created, a contact can be entered to link the location to the contact.

This is used for reporting and to provide a point of contact if needed when referencing the location.

# Working with Organizations

The following sections provide information on tasks associated with creating and maintaining organizations.

# Creating an Organization

Use this procedure to create an organization.

1. Navigate to **Main Menu** > **Location** > **Organization** + .

2. Select an organization type and click **Ok**.

   The organization type sets the default fields that need to be filled in.

3. Fill in required information as needed and click **Save**.

   Make sure that the **Organization Disposition** is set to Active if you want to make the organization available for reference on other records.

   Enter a parent location or organization to establish the position of your new organization in the location hierarchy.

# Searching for Organizations

Use this procedure to search for organizations using the **Organization Search** portal.

1. Navigate to **Main Menu** > **Location** > **Organization** .

2. Select from the **Query Option** drop-down list to select how you would like to enter search criteria.

   Base package search options include the following:

   • **Organization Information** - Search by the type, parent organization or description of the organization. You can also include inactive organizations in your search.

   • **Identifier** - Search by the Identifier Type/Value or ID of the organization.

   • **Contact Name** - Search by the name of a contact in this organization.

3. Click **Refresh**.

4. In the search results list, click the **Organization** link for the organization you want to view.

The **Organization** portal opens displaying all of the details of the selected organization.

# Linking an Organization to a Location

When a new asset or storage location is created, a parent organization can be entered to link the location to the organization.

This is used for reporting to establish a hierarchy of locations.

# Configuration Report

Configurations help organizations to define and maintain combinations of parameter values that are allowed or supported for assets or components.

# Understanding Configuration Report

This section provides information about configurations and configuration reports.

## About Configurations

A single asset or component may have many parameters and only certain combinations of parameter values that are allowed. Multiple assets and/or components may work together as a group with only certain combinations of settings that are allowed or supported.

Configurations document and manage the valid set ups for assets/and components. This includes a specification for each asset or component in the configuration as well as the valid value for each parameter, such as the firmware version of each asset.

Configuration reports can be generated to provide a summary of any currently installed configurations. These reports show whether the configuration in an installation is valid or invalid, they show the identifiers and values being used, and they display all of the assets/components and other elements that make up the installed configuration.

If a configuration is found to be invalid or in need of reconfiguration, work orders can be created based on configuration criteria. Configuration functionality can also be tied in with specifications to manage firmware version testing and upgrades.

### Configuration Statuses

Configurations also allow you to indicate a status for a particular status. Applicable statuses include:

- Pending
- Under Testing
- Rejected
- Approved
- Deprecated
- Obsolete

Use actions in the **Record Actions** section to transition the configuration to the appropriate status.

# About Configuration Reports

Configuration reports provide a summary of any currently installed configurations.

These reports show whether the configuration in an installation is valid or invalid, they show the identifiers and values being used, and they display all of the assets/components and other elements that make up the installed configuration.

Batch processing and the setting of the **Reporting Mode** field on a report determines when a configuration report is generated after it is submitted. If a report is set to generate one time, the report status is set to Pending after it is generated and it will not be updated again until a user manually submits the report. If the report is set to recur, the report is updated every time batch processing runs.

If the configuration is invalid, the configuration column is blank in the report results. Navigate to the configuration itself to review the set up. A button next to each configuration also allows you to generate a work order to correct, reconfigure, or otherwise maintain any of the configurations.

# Working with Configuration Report

The following sections provide information on tasks associated to working with configurations and configuration reports.

# Creating a Configuration

Use this procedure to create a configuration.

**1.** Navigate to **Main Menu** > **Configuration Report** > **Configurtion+** .

**2.** Select a configuration type and click **Ok**.

The configuration type sets the default fields that need to be filled in.

**3.** Fill in required information as needed and click **Save**.

Enter a useful description for the configuration then use the **Configuration Detail** section to indicate the specifics of the configuration. This will include information on assets and components along with their characteristics and identifiers as defined by your organization.

The specification that is chosen for the asset and/or component will determine the main firmware and other information for the configuration.

Add any related attachments in the **Configuration Owned Attachments** section.

# Creating a Configuration Report

Use this procedure to create a configuration report.

**1.** Navigate to **Main Menu** > **Configuration Report** > **Configuration Report** + .

**2.** Select a configuration report type and click **Ok** .

The configuration report type sets the default fields that need to be filled in.

**3.** Fill in required information as needed and click **Save**.

Enter a useful description for the configuration report and select a **Reporting Mode**. The reporting mode determines whether this is a recurring report, or a one time report.

Use the **Report Criteria** section to indicate the specifics of the assets, components, identifiers and characteristics that should determine filtering for the report.

4. After the report is created, click the **Submit** button to finalize the report.

   In most business practices you will wait for batch processing to run to generate the report. The report record includes a **Generate Report** action, however; it is recommended that this is not used for typical processing.

# Creating Work to Correct or Maintain Configurations

Use this procedure to create a work order from a configuration report.

1. Generate a configuration report.

2. In the **Report Results** section, click the **Create Work Order** button next to the configuration that needs attention.

   The system creates a work order with applicable information filled in. Finish creating and processing the work order according to your usual business practices.

# Asset Replication

The following sections provide information on managing asset replication and mass asset disposition.

Using asset replication functionality your organization can complete processes such as:

- Replicating assets in the same lot/pallet

- Selecting assets for testing or inspection

- Mass updating asset disposition such as rejecting or accepting a lot or pallet

# Understanding Asset Replication

This section provides information about managing asset replication and mass asset disposition.

# About Replication

As devices and other assets are received in large quantities, the **Asset Replication** portal allows for the receipt, inspection, storage and other processing of these assets in batches.

This processing creates new asset IDs, badge numbers and serial numbers for assets based on general information that is entered related to each batch. When a new replication event is created it is tied to a replication activity type to determine default settings and attributes for the replication. The actual asset information can be entered manually or uploaded via a CSV file.

Assets can then be moved between locations, or dispositioned using *Mass Asset Disposition Update*.

# About Mass Asset Disposition Update

The **Mass Asset Disposition Update** portal allows you to select assets by asset type, current disposition state or other common criteria to change the status and location of multiple assets at one time.

Asset disposition indicates where the asset is and what is being done to the asset. Mass Asset Disposition is aimed at moving many assets of the same type from one storage location to another storage location. In a mass disposition task, the target is always a single location. For example, if a pallet of meters has been received in the receiving storeroom, mass disposition can be used to move this batch of assets to a storage location. Once the appropriate assets are retrieved and selected, click the **Change Disposition** button to execute the change in one quick step.

# Working with Replication

The following sections provide information on tasks associated with replicating assets.

# Searching for Replication Records

Use this procedure to search for activity replication records using the **Replication Activity Search** portal.

1. Navigate to **Main Menu** > **Asset Replication** > **Replication** .

2. Select from the **Query Option** drop-down list to select how you would like to enter search criteria.

   Base package search options include the following:

   - **Replication Activity Related Object Search** - Search by activity type, status, work order ID that the activity belongs to, asset ID or location ID related to the replication task.

   - **Replication Activity Creation Info Search** - Search by the activity type, status, creation date/time or by the user who created the activity.

   - **Replication Activity ID Search** - Search by the activity ID.

3. Click **Refresh**.

4. In the search results list, click the **Activity** link for the replication activity you want to view.

The **Replication Activity** portal opens displaying all of the details of the selected replication activity.

# Replicating Assets

Use this procedure to create new asset records in batches.

A typical business process would involve receiving a large quantity of assets and entering them into the system as a batch using a CSV file upload. This type of task uses a replication activity to manage the creation of records.

1. Navigate to **Main Menu** > **Asset Replication** > **Replication** + .

2. Select the activity type for the replication and click **Ok**.

   The activity type defines standard parameters for the replication task. For example you may have types for smart meters vs. manual meters which would establish differences in the information used when the meters are added to the system.

3. Select the **Template Asset** to use when creating the new assets and click **Save**.

   The template asset is required as it establishes the general details for creation of the new assets.

Assets are created within the system based upon the details specified.

If after replicating the assets, the template is modified or updated, use the **Reapply** button to apply that same change on the replicated assets.

# Working with Mass Asset Disposition Update

The following sections provide information on tasks associated with using mass asset disposition update.

## Update the Disposition of a Group of Assets

Use this procedure to change the status and location for a batch of assets.

1. Navigate to **Main Menu** > **Asset Replication** > **Mass Asset Disposition Update** .

2. Search for assets according to the appropriate criteria.

   Options include selecting all assets that are in a certain state, all assets of a certain condition or assets by physical location. You can also select from characteristics or other identifiers. You can create combinations of criteria such as all assets of a certain type and that are in a particular status.

3. Click **Refresh**.

   A list of assets matching the selected criteria is displayed.

4. Select individual assets or check the box at the top of the column to select all assets.

5. Click **Change Disposition** to begin the disposition change.

   A pop-up window opens where you select the effective date and the new status and location for the assets.

6. Enter the date that the status and location change should occur.

   This defaults to the current date and time, however, you can set this to past date depending on how the assets need to be handled.

7. Enter the appropriate location where the assets will go when they are dispositioned.

8. Click **OK**.

   The assets are moved to the new status and location, and the disposition log on the individual asset records is updated with the change.

# Work Orders

The following sections provide information on concepts related to managing work orders, assets and completion events.

Work orders group and generate activities for work such as inspections, smart device software upgrades, battery replacements for smart devices, maintenance on assets and any other work as defined by your organization.

Work orders might also be created to manage a set of activities where the activities are manually linked to the work order. Completion events are used on activities to document and process the work that was done and to update data associated to the activity.

# Understanding Work Orders

The following sections provide information on concepts related to managing activities, work orders, completion events and inbound communication.

# About Work Orders

Work orders group similar activities and are used to generate activities to perform any kind of work such as inspection, install, replacement, upgrade, and other activities.

Work orders also provide summary information about the various activities and the assets that are being worked on those activities.

The **Asset**, **Specification**. **Address** and **Location Information** sections serve to select the assets that should be included on the work order. As many or as few of this criteria can be selected to narrow down the assets that are included for the work.

The **Activity Information** section defines the types of activities that are part of the work on the work order.

When creating a new work order, the **Activity Type** determines the default lead days and work window days for the activity if they are not specified. This information is used for scheduling when the activity information is sent to external systems.

### Work Order Templates

It is possible to create templates from most types of work orders so that the general work model can be reused. Work order templates can also be referenced for scheduled service history.

> **Note:** If a work order already has activities associated to it, a template cannot be created from that work order.

### Service History Exclusion Information

Service history exclusion information defines a service history type to exclude from activity generation based on whether or not the service history type has been performed within the number of days indicated.

If, for example, a visual inspection needs to be performed for an asset once a year, a work order with a service history exclusion of the type "Visual Inspection" and 365 history days would be specified. The system takes into account that the service history type has been performed within the time frame indicated and will not generate an activity for the asset.

### Activity Information

The **Activity Information** zone provides summary information regarding the activities that are included on the work order.

### Generating Activities

Once a work order is created with the appropriate activities designated for creation, you can generate activities by selecting the **Generate Activities** action or have activities generated by batch processing.

You can also generate activities from a closed work order by first reopening the work order using the **Open** button in the actions area.

It is possible to set work orders to generate activities for some work orders in batch processing, rather than being required to generate them manually. Service schedule work orders are work orders that were created from service history using a work order template. These work orders generate activities in batch processing automatically. For other types of work orders, users can choose whether or not the activities should be generated by batch processing by selecting the **Generate in Batch** button when completing the action to generate activities. If this option is selected, activities are not immediately generated and the work order stays in the Open state until batch processing runs.

**Completing Work Orders**

Work orders are automatically completed when every activity linked to the work order arrives at a final state based on the completion events for the activities.

# About Activities

Activities manage changes, work, inspections and other actions that are performed on assets and within the system.

As examples, activities may be created to update or create assets and locations, to create service history, to install or exchange devices, replace batteries or to upgrade firmware. They can also be used to create other activities. The benefit of using activities to process work is to keep a history of the work being done. This history can then be used for tracking and auditing.

Activities can be created "on the fly" or they can be grouped and managed using work orders. After a work order is created, users select **Generate Activities** on the work order record to create the associated activity records.

Activity types control the purpose and configuration of activities such as which completion events are required and sequence to execute completion events.

Completion events are used on activities to document and process the work that was done and to update data associated to the activity. For example, if a completion even moves an asset to a new disposition state, the state is not reflected until the completion event is processed.

Activities can be further grouped or tied together using work orders, though work orders are not required.

**Schedule Details Section**

Schedule details are details regarding the scheduling of the activity, usually in an external system. The work window indicates the time frame within which the activity can be scheduled and completed. The **Activity Disposition** field indicates the status that the activity is placed in when it is created.

**New Asset Section**

For replication activities, this section provides a summary of the assets that were created with the related record ID numbers.

**Completion Event**

Provides a log of the completion events that have been processed for the activity.

# About Completion Events

Completion events are used to execute business events within the application.

Completion events may, for example, be configured for several types of asset processing such as asset update, state transition, replication, service history, and activity creation. All activities have a set of required and optional completion events that can be executed to see the activity to completion.

The **Relationship Information** section shows any other system objects that are associated to the completed object. For example, if you are looking at the completion event for an activity, the relationship information shows the asset, any components, the location, service history, etc.

**Completion Event Owned Attachments**

Attachments added here are used as part of the completion event processing. For example, a completion event may be used to update a picture or other supporting file about an asset.

# About Inbound Communication

The **Inbound Communication** portal provides details related to the information received from an external system such as Oracle Utilities Meter Data Management.

Inbound communication events receive completion event information from the external system and then process the necessary transactions to see the activity or other event to completion. This applies when completing tasks such as installing or inspecting meters or upgrading firmware.

# Working with Activities

The following sections provide information on tasks associated to creating and updating activities.

# Searching for Activities

Use this procedure to search for activities using the **Activity Search** portal.

1. Navigate to **Main Menu** > **Work Order** > **Activity** .

2. Select from the **Query Option** drop-down list to select how you would like to enter search criteria.

   Base package search options include the following:

   - **Activity Related Object** - Search by the activity type, status, ID of the parent activity, ID of the work order that this activity belongs to, the asset ID, location ID, Contact ID or the specific ID of the activity.

   - **Activity Work Window** - Search by the activity type, status, creation date/time, activation date/time and the start and end date/time of the work window.

   - **Activity Location** - Search by the activity type or address where the activity is performed.

3. Click **Refresh**.

4. In the search results list, click the **Activity** link for the activity you want to view.

The **Activity** portal opens displaying all of the details of the selected activity.

# Creating Activities

Use this procedure to create an activity.

1. Navigate to **Main Menu** > **Work Order** > **Activity** + .

2. Select the appropriate activity type and click **Ok**.

   Activity type determines the business information required to create the activity. Typically your organization will have configured types for specific tasks such as replicating assets, installations, performing maintenance, or completing inspections.

3. Enter fields as required by your business process and save.

   Processing and completing activities is completed as a separate task.

# Processing and Completing Activities

Use this procedure to process and complete an activity.

For ad hoc and local activities, or activities that are not worked from an external system, it is necessary to process and complete the activity within the system after the activity has been physically completed. Activities should have already been generated from their respective work orders, as applicable.

**1.** Navigate to **Main Menu** > **Work Order** > **Activity** .

**2.** Search for and select the appropriate activity.

**3.** Locate the **Completion Event Tree**.

**4.** Click the **Add** icon next to the completion event type for the completion event that needs to be processed.

Some of the listed completion event types might be for completion events that are required or optional. You must process each of the required types. Your business processes determine whether or not you need to process the optional ones.

The completion event screen opens.

**5.** Fill in the completion event information as appropriate to your business processes and save.

The way that you fill in the fields depends upon the type of activity and the type of completion event.

**6.** Return to the activity record.

Depending on the type of completion event you may not automatically navigate back to the activity. For example, if the activity is to create service history, you might navigate to the service history screen, or you might navigate to the completion event record itself if the activity is for asset creation. Complete actions from the screen that the system opens, or select the hyperlink to the activity to return to the activity.

**7.** Click **Complete** in the **Record Actions** section.

The system processes the completion event and transits the activity as appropriate to the requirements established by the activity type. If there are any errors in processing these are noted on the activity and To Do Entries are created and sent as needed.

# Generating Activities from a Work Order

Use this procedure to generate activities from a work order.

A work order of any kind except service schedule type is created and in **Open** status.

**1.** Search for and select the appropriate work order.

**2.** Click the **Generate Activities** button.

The dialog to generate activities from the work order opens providing information on the number of activities that will be created and allowing you to verify whether you want to generate the activities immediately, or generate them in batch processing.

**3.** Click the **Ok** button.

The work order remains in **Open** status and the activities are created. The work order log is updated to reflect that the activities were created and the Activity information zone on the work order is also updated. Navigate to the individual activities to view details or continue processing.

If the system encounters any errors while generating activities, ToDo entries are created as designated by your system configuration.

**Note:** Service schedule type work orders do not have the button to generate in batch since they are automatically set to be generated by batch processing.

**Note:** You can also generate activities from a closed work order by first reopening the work order using the **Open** button in the actions area.

# Generating Activities in Batch Processing

Use this procedure to generate activities from a work order using batch processing.

A work order of any kind except service schedule type is created and in **Open** status.

1. Search for and select the appropriate work order.

2. Click the **Generate Activities** button.

   The dialog to generate activities from the work order opens providing information on the number of activities that will be created and allowing you to verify whether you want to generate the activities immediately, or generate them in batch processing.

3. Click the **Generate in Batch** button.

   The work order remains in **Open** status and the activities are scheduled to be created when batch processing runs.

   If the system encounters any errors while generating activities, ToDo entries are created as designated by your system configuration.

   **Note:** Service schedule type work orders do not have the button to generate in batch since they are automatically set to be generated by batch processing.

# Working with Work Orders

The following sections provide information on tasks associated to working with work orders, activities and completion events.

# Searching for Work Orders

Use this procedure to search for work orders using the **Work Order Search** portal.

1. Navigate to **Main Menu** > **Work Order** > **Work Order** .

2. Select from the **Query Option** drop-down list to select how you would like to enter search criteria.

   Base package search options include the following:

   - **Work Order Information** - Search by the work order description, business object, status, creation date/time or user who created.

   - **Work Order Identifier** - Search by the Identifier Type/Value or ID of the work order.

   - **Template Information** - Search by the description, template name or business object of the work order.

- **Service Schedule Information** - Search by the description, template name or business object, service history type or creation date/time of the service history for the work order.

3. Click **Refresh**.

4. In the search results list, click the **Work Order** link for the work order you want to view.

The **Work Order** portal opens displaying all of the details of the selected work order.

# Creating Work Orders

Use this procedure to create a work order.

1. Navigate to **Main Menu** > **Work Order** > **Work Order +** .

2. Select a work order type and click **Ok**.

   The "business object" determines which type of work order you are creating. Typically your organization will have configured types to upload new assets, perform maintenance or inspections, or to manage components.

3. Enter fields as required by your business process and save.

# Generating Activities from a Work Order

Use this procedure to generate activities from a work order.

A work order of any kind except service schedule type is created and in **Open** status.

1. Search for and select the appropriate work order.

2. Click the **Generate Activities** button.

   The dialog to generate activities from the work order opens providing information on the number of activities that will be created and allowing you to verify whether you want to generate the activities immediately, or generate them in batch processing.

3. Click the **Ok** button.

   The work order remains in **Open** status and the activities are created. The work order log is updated to reflect that the activities were created and the Activity information zone on the work order is also updated. Navigate to the individual activities to view details or continue processing.

   If the system encounters any errors while generating activities, ToDo entries are created as designated by your system configuration.

   **Note:** Service schedule type work orders do not have the button to generate in batch since they are automatically set to be generated by batch processing.

   **Note:** You can also generate activities from a closed work order by first reopening the work order using the **Open** button in the actions area.

# Generating Activities in Batch Processing

Use this procedure to generate activities from a work order using batch processing.

A work order of any kind except service schedule type is created and in **Open** status.

1. Search for and select the appropriate work order.

2. Click the **Generate Activities** button.

   The dialog to generate activities from the work order opens providing information on the number of activities that will be created and allowing you to verify whether you want to generate the activities immediately, or generate them in batch processing.

3. Click the **Generate in Batch** button.

   The work order remains in **Open** status and the activities are scheduled to be created when batch processing runs.

   If the system encounters any errors while generating activities, ToDo entries are created as designated by your system configuration.

   > **Note:** Service schedule type work orders do not have the button to generate in batch since they are automatically set to be generated by batch processing.

# Creating Work Order Templates

Create templates from work orders so that the general work model can be reused. Work order templates can also be referenced for scheduled service history.

> **Note:** If a work order already has activities associated to it, a template cannot be created from that work order.

1. Search for and select the appropriate work order

2. Click the **Make Template** button.

   The system creates the work order as a template. The template can be used to manage service history on assets or to otherwise reuse a general work model. Template names must be unique.

   > **Note:** Basic work orders cannot be used as templates.

# Working with Completion Events

The following sections provide information on tasks associated with creating and maintaining completion events.

# Searching for Completion Events

Use this procedure to search for completion events using the **Completion Event Search** portal.

1. Navigate to **Main Menu** > **Work Order** > **Completion Event**.

2. Select from the **Query Option** drop-down list to select how you would like to enter search criteria.

   Base package search options include the following:

   - **Completion Event ID** - Search by the ID of the completion event.

   - **Completion Event Related Object** - Search by the activity ID, location ID, asset ID, ID of the asset to which the completion event is attached to. You can also search by service history ID, inbound communication ID, creation date/time of the completion event.

**3.** Click **Refresh**.

**4.** In the search results list, click the **Completion Event** link for the completion event you want to view.

The **Completion Event** portal opens displaying all of the details of the selected completion event.

# Manually Creating Completion Events

Use this procedure to create a completion event manually.

Completion events are most often created upon successful receipt of inbound communications related to an activity or command, and are used to create or update data to reflect the effect of activity. However, completion events might be created manually to process ad hoc or local activities. Users can create completion events using the following procedure:

**1.** Navigate to **Main Menu** > **Work Order** > **Completion Event** + .

**2.** Search for or enter an **Activity ID**.

**3.** Select the **Completion Event Type**.

**4.** Click **Ok**.

**5.** Enter required information as needed and save.

# Working with Inbound Communication

The following sections provide information on tasks associated with creating and maintaining inbound communication.

# Searching for Inbound Communication

Use this procedure to search for inbound communication using the **Inbound Communication Search** portal.

**1.** Navigate to **Main Menu** > **Work Order** > **Inbound Communication** .

**2.** Select from the **Query Option** drop-down list to select how you would like to enter search criteria.

Base package search options include the following:

- **Contact Name** - Search by the name of the contact.

- **Location Information** - Search by the location type and address, parent location, location disposition or specific ID of the location where the activity took place.

- **Asset Information** - Search by the asset type, specification, asset condition or ID of the asset where the activity was performed.

- **Identifier** - Search by a custom identifier for the asset or activity.

- **Activity Identifier** - Search by a custom identifier for the activity.

**3.** Click **Refresh**.

**4.** In the search results list, click the **Inbound Communication** link for the inbound communication you want to view.

The **Inbound Communication** portal opens displaying all of the details of the selected inbound communication.

# Manually Creating an Inbound Communication

Use this procedure to create an inbound communication manually.

Inbound communications are most often created upon successful receipt of completed activities from an external system such as Oracle Utilities Meter Data Management. They are used to create or update data to reflect the effect of activity. Inbound communications might be created manually, however, to process ad hoc or local activities. Users can create inbound communications using the following procedure:

1. Navigate to **Main Menu** > **Work Order** > **Inbound Communication** + .

2. Select the appropriate communication type.

   Communication type determines the required fields that need to be entered to create the inbound communication.

3. Enter required information as needed and click **Save**.

# Chapter 3

# System Administration

The Oracle Utilities Operational Device Management administrative functionality allows you to create, manage, and maintain activity types, completion event types, asset types, component types, manufacturers, service history types, specifications, communication types, contact types, organization types, location types and attachments. The following sections provide more information on these concepts.

# Activity Administration

Activity administration involves creating and maintaining activity types and completion event types.

# Understanding Activity Administration

This section provides information about activity types and completion event types.

## About Activity Types

Activity types define the main attributes for activities of a certain type.

The business object indicated on the activity type determines base attributes for activities of the activity type. The category is used to distinguish activities for reporting purposes. To ensure that the correct completion events are processed for activities, valid completion event types must be associated to each activity type. Note that whether or not the completion event type is optional or required is set on the completion event type as it is listed on the activity type. Required indicates that a completion event of that type must be processed in order for the activity to be considered as complete.

Attachments provide additional information to support the record. This can be any file such as a photo, a document with instructions or specifications, a spreadsheet, or any other supporting documentation.

Default scheduling information can also be entered for scheduled and outbound activity types. The lead days and work window days are used primarily for scheduling integration with external systems. This section uses the following:

- **Activation Lead Days** - The activation lead days are used to default the activation date for the activity. The lead days are added to the activity creation date to establish this activation date.

- **Work Lead Days** – The work lead days are used to default the work window start date for the activity. This signifies the number of days after the activation date to start the work window.

- **Work Window Days** - The work window days are used to default the work window end date for the activity. This signifies the number of days after the work window start date to end the work window.

- **Activity Disposition** - The activity disposition indicates the default disposition status that the activity is placed in when it created; On Hold or Released. When activities are created in **On Hold** status, they need to be released before work can start or completion events can be processed.

### Outbound Activity Information

Additionally, the outbound activity information section provides the information that is needed to send the transaction to an external system.

### Identifiers

Identifiers are additional attributes, determined by your organization, that can be assigned to further characterize an entity. In particular, identifiers can be used to search for an object.

### Exception Handling

Information in the exception handling section determines how the system should process errors or other exceptions.

- **To Do Type and To Do Role** determine the follow up actions when an exception occurs.

- **Maximum Retries and Retry Frequency** define the maximum number of times the system tries to complete the transaction before failing and how frequently it should submit the retry attempts.

- **Discard Reason** determines what happens when the transaction fails. The default discard reason that is set here displays on the record for auditing.

# About Completion Event Types

Completion event types are used to define completion events.

For example, completion event types might be configured for several types of asset processing such as asset installation, asset removal, replication, service history creation, and activity creation.

Completion event types are referenced on activity types to indicate which completion events should be included as part of the lifecycle of activities of that type. As examples, this can affect when service history is created for an activity, and the disposition of the assets on an activity as the activity is processed.

Note that if you add activity types to the completion event type, you cannot set whether or not the completion event type is required for the activity type. Add the completion event type to the activity type using the **Activity Type** portal to also set the completion event types as optional or required.

# Working with Activity Administration

The following sections provide information on tasks associated with creating and maintaining asset types and service history types.

# Defining Activity Types

Use this procedure to define an activity type.

To maintain existing activity types, select **Admin Menu** > **Activity** > **Activity Type** , then use *standard actions* to edit or delete an activity type.

To define a new activity type, follow these steps:

1. Navigate to **Admin Menu** > **Activity** > **Activity Type** + .

2. Select the activity type business object.

3. Enter a name and meaningful description for the activity type.

4. Select the business object to use when creating activities of this type.

5. Select the category for the activity type. Base package categories include **Command Request**, **Device Event**, **Field Activity**, and **Replication**.

6. To add or remove completion event types for this activity type, click the + or – sign in the **Completion Event Types** section, select the completion event type and event relationship type (optional or required), and enter the execution sequence for each.

   Note that if you added activity types on the **Completion Event Type** the activity types will already be listed here. When you add here, you can set the completion event types as optional or required.

7. Specify activity schedule details for activities of this type in the **Activity Schedule Information** section.

   Activity schedule information applies only to outbound and scheduled activity types. For outbound activities the information is communicated to an external system where applicable. On scheduled activity types, the fields are informational only.

   a) Enter the activation lead days for activities of this type.

   b) Enter the work lead days for activities of this type.

   c) Enter the work windows days for activities of this type.

   d) Select the activity disposition for activities of this type.

8. Specify outbound activity information for activities of this type in the **Outbound Activity Information** section.

   Outbound activity information applies only to outbound activity types.

   a) Select the external system to which outbound communications based activities of this type are sent.

   b) To add or remove outbound message types for this activity type, click the + or – sign in the **Outbound Message** section, and select the outbound message type and usage (**Add**, **Cancel**, or **Update**) for each.

9. To add or remove attachments for this activity type, click the + or – sign in the **Attachments** section, select the attachment relationship type and search for and select the attachment for each.

10. To add or remove identifiers for this activity type, click the + or – sign in the **Identifiers** section, select the identifier type and enter the identifier value for each.

11. Specify exception handling details for activities of this type in the **Exception Handling** section.

    **a)** Select the **To Do Type** for To Do entries created as a result of errors related to activities of this type.

    **b)** Select the **To Do Role** for To Do entries created as a result of errors related to activities of this type.

    **c)** Enter the maximum number of retries for activities of this type.

    **d)** Enter the retry frequency for retry attempts for activities of this type.

    **e)** Select a discard reason for activities of this type.

**12.** Complete any remaining fields and sections and save.

Remaining fields and sections are based on the activity type business object.

**13.** Click **Save**.

Activities can now be created based on this activity type.

# Defining Completion Event Types

Use this procedure to define completion event types.

To maintain existing completion event types, select **Admin Menu** > **Activity** > **Completion Event Type** , then use *standard actions* to edit or delete a completion event type.

To define a new completion event type, follow these steps:

**1.** Select **Admin Menu** > **Activity** > **Completion Event Type+** .

**2.** Enter a name and meaningful description for the completion event type.

**3.** Search for and select the business object for the completion event type (if not populated).

**4.** To add or remove valid activity types for this completion event type, click the + or – sign in the **Valid Activity Types** section, and select the activity type.

Note that if you add activity types here, you cannot set whether or not the completion event type is required for the activity type. Add the completion event type to the activity type using the **Activity Type** portal to also set the completion event types as optional or required.

**5.** To add or remove identifiers for this completion event type, click the + or – sign in the **Identifiers** section, select the identifier type and enter the identifier value for each.

**6.** *Optional*. Specify completion event information in the **Completion Event Information** section.

This information is used to specify the type of asset, asset disposition, activity, service history, or data area and UI Map that completion events of this type will create or update. Note that this section applies only for completion event types that create or update master data, and does not apply to all completion events.

**7.** *Optional*. Enter inbound communication information for completion events of this type in the **Inbound Communication** section.

This information is used to create a completion event of this completion event type using information defined within an inbound communication's raw message. Note that this section applies only for completion event types whose completion events are created based on inbound communications and does not apply to all completion event types.

Refer to the embedded help ( ) for more information about this section.

**8.** *Optional*. Enter payload creation information in the **UI Payload Create Data Mover** section.

This is used when creating a completion event online. The XPath statements defined in this section are used to populate elements within the payload from the completion event business object. Note that this section applies only for completion event types whose completion events are created online and does not apply to all completion event types. The payload is the object being created or updated. For example, if the completion event is to create service history, the payload is "service history."

Refer to the embedded help ( ⓘ ) for more information about this section.

9. Complete any remaining fields and sections.

   Remaining fields and sections are based on the communication type business object.

10. Click **Save**.

Completion events can now be created based on this completion event type.

# Asset Administration

Asset administration involves creating and maintaining asset types, service history types, manufacturers and specifications.

# Understanding Asset Administration

This section provides information about asset types, service history types, manufacturers and specifications.

## About Asset Types

Asset types define the attributes for assets of a certain type.

The **Component Relationship** field determines whether or not the asset can have a component installed.

The **Valid Location Type** field defines a valid list of location types where assets or components of this type can be attached. This also determines the disposition status required for the location type when the asset or component type is attached.

**Valid Service History Types** defines a valid list of service history types that can apply for the asset or component. Service history is entered as a record of work, inspections or other service on the asset or component.

**Component Type** defines the attributes for components of a certain type. Components are installed on assets.

**Valid Attached To Asset Types** defines a valid list of asset types where components of this type can be attached. This also determines the disposition status required for the asset type when the component type is attached.

## About Service History Types

Service history types define the main attributes for service history of a certain type. The **Category** field establishes a classification for the service history type, such as maintenance or inspection.

The **Service Schedule** sets the template work order and time intervals that should be used to schedule work order generation. The **Initiation Date** indicates the first date that the generation is scheduled.

# Working with Asset Administration

The following sections provide information on tasks associated with creating and maintaining asset types and service history types.

## Defining Asset Types

Use this procedure to define asset types.

To maintain existing asset types, select **Admin Menu** > **Asset** > **Asset Type** , then use *standard actions* to edit, duplicate, or delete an asset type.

To define a new asset type, follow these steps:

1. Select **Admin Menu** > **Asset** > **Asset Type +** .

2. Select the asset type business object.

   Be sure to select an "Asset Type" business object when creating asset types.

3. Enter a name and a meaningful description for the asset type.

4. Select a component relationship for assets of this type (**Allowed** or **Not Allowed**).

5. Select the business object to use when creating assets of this type.

6. To add or remove valid location types for this asset type, click the + or – sign in the **Valid Location Types** section, and select the asset disposition and location type.

7. To add or remove valid service history types for this asset type, click the + or – sign in the **Valid Service History Types** section, and select the service history type.

8. Click **Save**.

You can now create assets based on the asset type.

## Defining Component Types

Use this procedure to define component types.

To maintain existing component types, select **Admin Menu** > **Asset** > **Asset Type** , then use *standard actions* to edit, duplicate, or delete a component type.

To define a new component type, follow these steps:

1. Select **Admin Menu** > **Asset** > **Asset Type+** .

2. Select the component type business object.

   Select a "Component Type" business object when creating component types.

3. Enter a name and a meaningful description for the component type.

4. Select the business object to use when creating components of this type.

5. To add or remove valid location types for this component type, click the + or – sign in the **Valid Location Types** section, and select the disposition and location type.

6. To add or remove valid asset types on which components of this type can be installed, click the + or – sign in the **Valid Attached to Asset Types** section, and select the disposition and asset type.

7. To add or remove valid service history types for this component type, click the + or – sign in the **Valid Service History Types** section, and select the service history type.

8. Click **Save**.

You can now create components based on the component type.

# Defining Service History Types

Use this procedure to define service history types.

To maintain existing service history types, select **Admin Menu** > **Asset** > **Service History Type** , then use *standard actions* to edit, duplicate, or delete a service history type.

To define a new service history type, follow these steps:

1. Select **Admin Menu** > **Asset** > **Asset Type+** .

2. Select the service history type business object.

3. Enter a name and a meaningful description for the service history type.

4. Select the business object to use when creating service histories of this type.

5. To add or remove service schedules for this asset type, click the + or – sign in the **Service Schedule** section, select the template work order and enter time intervals for each.

You can now create service histories based on the service history type.

# BI Configuration Administration

BI configuration administration involves creating, maintaining and working with Oracle Utilities Advanced Spatial and Operational Analytics configurations.

# Understanding BI Configuration Administration

This section provides information about requirements for defining Oracle Utilities Advanced Spatial and Operational Analytics configurations.

Please refer to the *Oracle Utilities Advanced Spatial and Operational Analytics* documentation for more information and the specific data mapping and metric reference guidelines for business intelligence.

## About BI Configuration

The BI Configuration portal holds information about the configuration tasks related to Oracle Utilities Advanced Spatial and Operational Analytics.

This is a display-only portal that provides a bird's eye view of the configuration for Oracle Utilities Advanced Spatial and Operational Analytics. The portal also provides links and guidelines for the areas that need configuration to successfully run the extract transfer and load processes from Oracle Utilities Advanced Spatial Analytics.

Users can leverage the reporting capabilities of Oracle Utilities Advanced Spatial and Operational Analytics to view various measures such as:

• How many Assets have failed acceptance testing

- How many Assets have been in store for a given period

- How many Assets have been installed for a given period

- and so on.

# About Bucket Configuration

Key performance indicators can be defined to measure the age of assets grouped into ranges, or buckets, which are defined in the **Bucket Configuration** portal.

Analysts can use these metrics to review the overall asset ages classified into various ranges, or buckets, such as 0 - 100 days, 100 - 300 days or more than 300 days, and so on.

Use the **Bucket Configuration** portal to define any one of three these types of age buckets:

- Asset age

- Asset installation age

- Asset in storage age

These buckets can be defined for a specific asset type or as a default set of buckets that will be applicable to all assets that do not have any specific buckets defined on the asset type.

# Communications Administration

Communications administration involves creating, maintaining and working with communication types.

# About Communication Types

Communication types define the information required for the system to receive messages from external systems.

### Communication Data Mapping

The Communication Data Mapping information is used to populate communication business object elements from information within the inbound communication's raw message.

- Source XPath defines source elements within the inbound communication business object. Note that a literal can be specified by using single quotes, for example 'W1BN' means move the string 'W1BN' to the target.

- Target XPath defines target elements within the inbound communication business object.

    **Maintenance tip**: The correct XPath values can most easily be obtained using the **View Schema** link for the appropriate business object or data area. For example, to obtain a target XPath element, open the **View Schema** dialog for the `W1-ActivityComplInboundComm` business object, then click on the **identifierValue** element, and, finally, copy the **XPath** value (`assetIdentifierInformation/identifierValue`) from the top of the view dialog.

- To support this strategy for the inbound communication's raw message XML, it will be prudent to create a data area that represents the schema of the inbound communication's raw message. Please note that the outermost node of this data area must be 'rawMessage' as this element identifies the data structure within the inbound communication business object that houses the raw message.

### Attachment Suppression

When a message is received from an external system, the message may contain attachment data which is very large. The substitution text entered in this section can be used in place of that large data in the completion event list on the inbound

communication. The attachment element xpath identifies the data to match it to the substitution text. This serves to prevent transfer delays in cases where large amounts of data might overload the browser.

# Working with Communication Types

The following sections provide information on tasks associated with creating and maintaining communication types.

# Defining Communication Types

Use this procedure to define communication types.

**Prerequisites**: You must create at least one communication type business object and related communication business object before you can create new communication types.

To maintain existing communication types, select **Admin Menu** > **Communication** > **Communication Type** , then use *standard actions* to edit or delete a communication type.

To define a new communication type, follow these steps:

**1.** Select **Admin Menu** > **Communication** > **Communication Type** + .

**2.** Select the appropriate **Communication Type Business Object** .

**3.** Enter a name and meaningful description for the communication type.

**4.** Search for and select the business object for the communication type (if not populated).

**5.** Specify exception handling details for communications of this type in the **Exception Handling** section.

    **a)** Select the **To Do Type** for To Do entries created as a result of errors related to communications of this type.

    **b)** Select the **To Do Role** for To Do entries created as a result of errors related to communications of this type.

    **c)** Enter the maximum number of retries for communications of this type.

    **d)** Enter the retry frequency for retry attempts for communications of this type.

    **e)** Select a discard reason for communications of this type.

**6.** Enter data mapping information for communications of this type.

This information is used to populate communication business object elements from information within the inbound communication's raw message.

- **Source XPath** defines source elements within the inbound communication business object. Note that a literal can be specified by using single quotes, for example 'W1BN' means move the string 'W1BN' to the target.

- **Target XPath** defines target elements within the inbound communication business object

**7.** Enter attachment suppression information.

This is used when a message is received from an external system that contains very large attachment data. This serves to prevent transfer delays in cases where large amounts of data might overload the browser.

- **Completion Event Substitution Text** defines the text to be displayed in place of large data in the completion event list on the inbound communication.

- **Attachment Element XPath** defines the data elements within the attachment for which substitution text should be displayed.

- **Substitution Text** defines the text used to replace the attachment data when the raw message is displayed.

**8.** Complete any remaining fields and sections.

Remaining fields and sections are based on the communication type business object.

**9.** Click **Save**.

Communications can now be created based on this communication type.

# Configuration Administration

Configuration administration involves creating, maintaining and working with configuration types.

## About Configuration Types

Configuration types define the information required for various asset configurations with other assets, components, firmware, and other aspects of a functioning configured system.

Configurations are referenced on specifications which are then referenced on assets and components to indicate the best way that these entities can work with the other entities that they are connected to in the field.

In general configuration classes define the types of connections that are being configured. The generic classes that are available include:

- Single Asset
- Asset/Component
- Asset to Asset
- Asset/Component to Asset
- Asset to Asset/Component
- Asset/Component to Asset/Component

## Working with Configuration Types

The following sections provide information on tasks associated with creating and maintaining configuration types.

## Defining Configuration Types

Use this procedure to define configuration types.

**Prerequisites**: You must have at least one configuration type business object before you can create new configuration types.

To maintain existing configuration types, select **Admin Menu** > **Configuration** > **Configuration Type** , then use *standard actions* to edit or delete a configuration type.

To define a new configuration type, follow these steps:

**1.** Select **Admin Menu** > **Configuration** > **Configuration Type** + .

**2.** Select the appropriate **Configuration Type Business Object** and click **OK**.

**3.** Enter a name and meaningful description for the configuration type.

4.  Search for and select the appropriate configuration class, category, business object, and any other fields as applicable to your business processes.

5.  Click **Save**.

Configurations can now be created based on this configuration type.

# Location Administration

Location administration involves creating, maintaining and working with locations.

# Understanding Location Administration

This section provides information about location types, contact types and organization types.

## About Contact Types

Contact types establish parameters for contact of a specific type.

Contacts are referenced on locations to provide an associated person or business. The main attributes for contacts are managed in the **Contacts** portal.

## About Organization Types

Organization types define the main attributes for organizations of a certain type.

Organizations are used for categorization and reporting for locations.

**Valid Parent Types**

Parent types define the set of valid location types and organization types that can be used to define a parent location or parent organization.

## About Storage Location Types

Storage location types define the details of storage locations of a certain type.

Valid locations might be storerooms, warehouses, receiving docks, or any other location as defined by your organization.

The **Class** field is used for reporting and by establishing general characteristics of the location, such as whether it is commercial or residential, a shop or warehouse, or any other possible categorization appropriate to your business.

## About Asset Location Types

Asset location types define the details of asset or component locations of a certain type.

Valid asset locations might be service points, other locations for installed assets, or any other location as defined by your organization.

Asset location types are defined by the following:

- **Class** – Used for reporting, the class establishes general characteristics of the location such as whether it is commercial or residential, a shop or warehouse, or any other possible categorization appropriate to your business.
- **Number of Assets Allowed** – Defines whether the location can accommodate just a single asset or multiple. For example, a parking lot where multiple poles are installed would have multiple service points whereas a single residence would only have one.
- **Service Type** – Defines the type of service that assets at the location can perform. Example service types might include natural gas, electric, disposal or water.

**Valid Parent Types**

Parent types define the set of valid parent locations and parent organizations that can be referenced on a location.

# Working with Location Administration

The following sections provide information on tasks associated to working with asset location types, storage location types, contact types and organization types.

# Defining Storage Location Types

Use this procedure to define storage location types.

To maintain existing storage location types, select **Admin Menu** > **Location** > **Storage Location Type** , then use *standard actions* to edit, duplicate, or delete a storage location type.

To define a new storage location type, follow these steps:

1. Select **Admin Menu** > **Location** > **Storage Location Type** .

2. Click the **Add** link in the **Storage Location Type List** zone.

   If your system supports more than one storage location type business object, you will be prompted to select a business object for this storage location type.

3. Enter a name and a meaningful description for the storage location type.

4. Select the class for the storage location type.

5. Select the business object to use when creating storage locations of this type.

6. To add or remove valid parent location/organization types for this storage location type, click the + or – sign in the **Valid Parent Location/Organization Types** section and select the location or organization type.

7. Click **Save**.

Now you can use this storage location type when creating storage locations.

# Defining Asset Location Types

Use this procedure to define asset location types.

To maintain existing asset location types, select **Admin Menu** > **Location** > **Asset Location Type** , then use *standard actions* to edit, duplicate, or delete an asset location type.

To define a new asset location type, follow these steps:

1. Select **Admin Menu** > **Location** > **Asset Location Type** .

2. Click the **Add** link in the **Asset Location Type List** zone.

   If your system supports more than one asset location type business object, you will be prompted to select a business object for this asset location type.

3. Enter a name and a meaningful description for the asset location type.

4. Select the class for the asset location type.

5. Select the business object to use when creating asset locations of this type.

6. Select the number of assets allowed at asset locations of this type (multiple or single).

7. Select the service type for the asset location type.

8. To add or remove valid parent location/organization types for this asset location type, click the + or – sign in the **Valid Parent Location/Organization Types** section and select the location or organization type.

9. Click **Save**.

Now you can use this asset location type when creating asset locations.

# Defining Organization Types

Use this procedure to define organization types.

To maintain existing organization types, select **Admin Menu** > **Location** > **Organization Type** , then use *standard actions* to edit, duplicate, or delete an organization type.

To define a new organization type, follow these steps:

1. Select **Admin Menu** > **Location** > **Organization Type** .

2. Click the **Add** link in the **Organization Type List** zone.

   If your system supports more than one organization type business object, you will be prompted to select a business object for this organization type.

3. Enter a name and a meaningful description for the organization type.

4. Select the class for the organization type.

5. Select the business object to use when creating organizations of this type.

6. To add or remove valid parent location/organization types for this organization type, click the + or – sign in the **Valid Parent Location/Organization Types** section and select the location or organization type.

7. Click **Save**.

Now you can use this organization type when creating organizations.

# Defining Contact Types

Use this procedure to define contact types.

To maintain existing contact types, select **Admin Menu** > **Location** > **Contact Type** , then use *standard actions* to edit, duplicate, or delete a contact type.

To define a new contact type, follow these steps:

1. Select **Admin Menu** > **Location** > **Contact Type** .

2. Click the **Add** link in the **Contact Type List** zone.

If your system supports more than one contact type business object, you will be prompted to select a business object for this contact type.

3. Enter a name and a meaningful description for the contact type.

4. Select the business object to use when creating contacts of this type.

5. Click **Save**.

Now you can use this contact type when creating contacts.

# Attachment Administration

Attachment administration involves creating, maintaining and viewing files that are attached within the system.

# About Attachments

Attachments provide additional information to support records within the system.

Attachments can be any file, such as a photo, a document with instructions or specifications, a spreadsheet, or any other supporting documentation. Attachment files are added to individual records such as an asset, service history, location, completion event or specification. These can also be added through the **Attachments** portal for general access within the application.

# Working with Attachments

The following sections provide information on tasks associated to creating and maintaining attachments.

# Creating an Owned Attachment from a Record

Use this procedure to upload owned attachments that are referenced from a specific record such as an asset, service history, location, completion event or specification.

1. Open any record that supports attachments.

   This includes asset, completion events, locations, and specifications.

2. Select the **Add Attachment** link in the **Owned Attachments** zone.

3. Choose the attachment format by selecting from the **Attachment Business Object** field and click **Ok**.

   This allows you to indicate whether the attachment is a spreadsheet, an image, video or audio, a text document, or any other file type available.

4. Enter the file name and click **Save**.

   The system navigates back to the main portal where you can upload the attachment file as a separate step.

5. Click the **Upload** button.

6. Browse to the attachment file and click **Upload**.

   Make sure that you select a file with the same file type that you selected when you initially created the attachment.

# Creating an Attachment from the Attachment Portal

Use this procedure to create an attachment from the **Attachment** portal for general access from within the application.

1. Navigate to the **Attachments** portal in edit mode.

2. Choose the attachment format by selecting from the **Attachment Business Object** field and click **Ok**.

   This allows you to indicate whether the attachment is a spreadsheet, an image, video or audio, a text document, or any other file type available.

3. Enter the file name and click **Save**.

   The system navigates back to the main portal where you can upload the attachment file as a separate step.

4. Click the **Upload** button.

5. Browse to the attachment file and click **Upload**.

   Make sure that you select a file with the same file type that you selected when you initially created the attachment.

# Viewing Attachments

Use this procedure to view an attachment that has been added to an individual record or in the **Attachments** portal.

1. Navigate to the record where the attachment was added.

   This could be the **Attachments** portal or an individual record such as an asset, service history, location, specification etc.

2. Click the link for the attachment.

3. Click the **View** button.

   A prompt is displayed to open or save the attachment.

# Editing Attachments

Use this procedure to edit an attachment that has been added to an individual record or in the **Attachments** portal. When you edit an attachment you can only change the **Attachment File Name**. If you need to replace the attachment file select the **Upload** button and browse to select a different file.

1. Navigate to the record where the attachment was added.

   This could be the **Attachments** portal or an individual record such as an asset, service history, location, specification etc.

2. Click the link for the attachment.

3. Click the **Edit** button.

4. Modify the attachment file name as needed.

# Replacing an Attachment File

Use this procedure to replace an attachment file that has been added to an individual record or in the **Attachments** portal. If you need to edit the attachment file name select the **Edit** button.

1. Navigate to the record where the attachment was added.

   This could be the **Attachments** portal or an individual record such as an asset, service history, location, specification etc.

2. Click the link for the attachment.

3. Click the **Upload** button.

4. Browse to and select the new file then click **Upload**.

   The new file is updated anywhere the attachment is referenced.

# Deleting Attachments

Use this procedure to delete an attachment that has been added to an individual record or in the **Attachments** portal.

1. Navigate to the record where the attachment was added.

   This could be the **Attachments** portal or an individual record such as an asset, service history, location, specification etc.

2. Click the delete icon.

3. Confirm that you want to delete the attachment.

   You can also delete the attachment by clicking the link and then selecting the **Delete** button.

# Chapter 4

# Reference Topics

This section provides reference information to support tasks.

# Glossary

Definitions of commonly used terms.

| | |
|---|---|
| activity | The lowest form of work; a task performed on or for an asset. |
| activity type | Defines the nature of the task to be performed on or for an asset. |
| ad hoc activity | An activity that is not created via an automated process and is intended to be worked immediately. Ad hoc activities are neither scheduled nor dispatched and are created manually within the system. |
| asset | Anything defined in the Asset module; generally meters and devices. |
| asset class | A way of grouping assets with common characteristics. |
| asset class type | A way of grouping asset classes with common characteristics. |
| asset inspection | Physical evaluation of an asset. |
| asset location | The physical location where an asset is installed. May also be referred to as a service point, but can be any other location related to assets. |
| asset receipt inspection | Physical evaluation of an asset when it is received from a shipment. |
| asset replication | Duplicating multiple assets at one time. |

| | |
|---|---|
| attached | Status or state indicating that a component is in use with an asset. |
| attachment | Documents that are independent of, yet give information about, a record. For example, you may wish to attach photos or documents related to assets. |
| communication component | A device that can be attached to a smart meter to connect the meter to the communication grid. |
| communication relay | A device that acts as a hub to allow other devices to communicate back to a main system. |
| complete | An action that finalizes the processing of a business entity and ends its lifecycle. |
| component | A trackable item that can be attached to an asset. |
| contact | The main information used to get in touch with a customer such as address and phone number. The contact is usually the individual who should be contacted in reference to a service point or other entity. |
| crew | The worker or workers that can be assigned to work on an activity. |
| criticality | A measure indicating the importance of an asset or asset location to the business. |
| dashboard | A portal that always appears on the desktop. Its zones contain tools and data used to complete common tasks. |
| disposition | The combination of the asset location and asset status. Also refers to the process of reviewing the state of an asset, handling it accordingly, then setting the status to match. |
| external ID | The reference number or ID for an entity as it is identified in an external system. |
| external system | An application or system separate from Oracle Utilities Operational Device Management that sends information to and receives information from Oracle Utilities Operational Device Management. |
| faceplate | A device that can be attached to a meter. |
| firmware | The software used to cause smart meters to function properly. |
| global positioning system | GPS. A navigation system based on a network of satellites that send out radio signals to pinpoint an entity's location. |
| 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. |
| in receipt | Status indicating that an asset or component has been received in a shipment. |
| in repair | Status indicating that an asset is being repaired. |
| in stores | Status indicating that an asset is being stored in a storeroom. |
| inbound communication | Information received from an external system. |
| in/out service asset | A stationary asset such as a pole or pipe which would only go in to service until it fails then it would be removed from service rather than being repaired or tracked. |
| installed | Status indicating that an asset or component is in use. |
| key performance indicators | Quantifiable measurements that provide information about asset performance, reliability or other factors. |
| lead days | A number of days prior to an event. |
| manual meter | A monitoring device that must be read and have its information recorded manually. |
| mass disposition update | The act of simultaneously updating multiple assets with status and location. |
| organization | Top level in the location hierarchy. |
| outbound activity | An activity that is sent to an external system. |
| pending | Status indicating that more work or actions need to be performed on an entity. |
| replication | To create a copy from a template. |
| retired | Status indicating that an asset has been removed from use. |
| service history | Information entered to capture inspections, service, or other actions performed on assets. |
| service point | A location where an asset can be installed for service. |
| smart meter | A monitoring device that sends and receives information electronically. |
| specification | Detailed descriptions of requirements, dimensions, materials, or other details about types of equipment. They are used within the system to provide guidelines on what is needed or how to perform work on assets. |

| | |
|---|---|
| storage location | The physical location where assets or other entities are stored. |
| tracked asset/component | An asset or component that has its status and location carefully monitored and recorded as it moves in and out of service or goes for maintenance or repair. |
| vehicle | A mobile storeroom. Vehicles are not considered assets in ODM, but rather as locations. |

# Standard Actions

Basic steps for performing standard actions on data maintained from the **Main** menu and the **Admin** menu.

## Standard Actions for Admin-Level Data Maintenance

Basic steps for performing standard actions on data maintained from the **Admin** menu.

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. |
| 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

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. |

| Action | Steps |
|--------|-------|
| | **3.** Click the **Edit** button in the **Record Actions** section. |
| | **4.** Enter your changes. Click 📝 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 📝 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. |
| | **5.** Type the log detail and click **Save**. |

# Base Package Objects

The following sections provide descriptions of the base attributes and valid statuses for the **Main Menu** portals. These attributes are based upon the maintenance objects which define these portals.

For detailed information on the related functionality, please refer to the specific sections for these objects in the *User Documentation* section of this guide.

# Base Package Activities

This section provides descriptions of the attributes used for activities as they are delivered in the base application.

**Maintenance Object**: W1-Act

### Ad Hoc Activity

Ad hoc activities are used to manage tasks that are not related to any external system and are not scheduled. They would typically be used when some action needs to be performed on the spot yet there should be a record kept that the action was

performed. In particular these can be used for asset replication to manage the receipt and/or creation of multiple assets at one time.

**Business Object**: W1-AdHocActivityCore

| Field | Description |
| --- | --- |
| Information | The information string showing the activity type, status, and significant status date related to the activity. |
| Activity Type | The activity type upon which the activity was based. |
| Status | The current state of the activity. Valid statuses include: <br><br> • Work in Progress <br><br> • Execute Completion Events <br><br> • Completion Error <br><br> • Completed <br><br> • Discarded |
| Parent Activity | Where applicable, parent/child activity relationships establish a hierarchy of tasks. This is mainly used for reporting. |
| Location | The physical location where the related asset is stored, installed or otherwise dispositioned. |
| Asset | The asset or component that will be worked on for the task. |
| Work Order | The related work order that references the activity. |
| Comments | Free-form text field were additional information can be entered. |

## Local/Scheduled Activity

Local or scheduled activities are similar to ad hoc activities in that they can be used for immediate tasks and are not shared with any external system. They have built in fields to capture scheduling information if needed. The scheduling information is generally informational only and is not tied to any system processing. The fields can be useful in providing an additional way to communicate times and dates for work.

**Business Object**: W1-LocalActivityCore

| Field | Description |
| --- | --- |
| Information | The information string showing the activity type, status, and significant status date related to the activity. |
| Activity Type | The activity type upon which the activity was based. |
| Status | The current state of the activity. Valid statuses include: <br><br> • Pending <br><br> • Validated <br><br> • Validation Error <br><br> • Work in Progress <br><br> • Execute Completion Events <br><br> • Completion Error <br><br> • Completed <br><br> • Discarded |
| Parent Activity | A related activity. This can be used, for example, if you are creating a follow-up activity to an existing activity. This field is informational only with no associated processing or validation. However, the activity detail section on the related asset will show all of the parent and child activities that reference the asset. |

| Field | Description |
|---|---|
| Location | Defaults to where the asset is currently stored or installed. |
| Asset | The asset being worked on for the activity. |
| Work Order | The associated work order, where applicable. |
| Comments | Free form text field to enter comments |
| Activation Date/Time | Used to default the activation date for the activity. The lead days are added to the activity creation date to establish this activation date. |
| Work Window Start Date/ Time | The beginning of the time frame within which the activity can be scheduled and completed. This signifies the number of days after the activation date to start the work window. |
| Work Window End Date/ Time | The end of the time frame within which the activity can be scheduled and completed. This signifies the number of days after the work window start date to end the work window. |
| Activity Disposition | The default disposition status that the activity is placed in when it created; On Hold or Released. When activities are created in **On Hold** status, they need to be released before work can start or completion events can be processed. |

### Outbound Activity

Outbound activities are used to send activities to an external system such as Oracle Utilities Mobile Workforce Management. These activities use the same fields as Local activities with additional statuses to manage the sending and receipt of the activities to and from the external system. Schedule details indicated on these activities is also sent and received from the external system.

**Business Object**: W1-OutboundActivityCore

| Field | Description |
|---|---|
| Status | The current state of the activity. Valid statuses include:<br><br>• Pending<br><br>• Validated<br><br>• Validation Error<br><br>• Sent<br><br>• Resend<br><br>• Send Error<br><br>• Execute Completion Events<br><br>• Completion Error<br><br>• Executed<br><br>• Completed<br><br>• Discarded |

# Base Package Assets

This section provides descriptions of the attributes used for assets as they are delivered in the base application.

**Maintenance Object**: W1-Asset

### In/Out Service Asset

In/Out of service assets are typically stationary, such as a pole or pipe. They stay in service until they fail and are then removed from service rather than being repaired or tracked. This type of asset will be recorded at an asset location with a disposition such as in service or out of service.

**Note:** This type of asset is not delivered out of the box, but can be used as a basis for creating in/out of service assets during implementation of custom business objects. Please refer to the configuration guide for more information.

**Business Object**: W1-InOutSvcAsset

| Field | Description |
|---|---|
| Information | The information string showing the asset type and disposition. |
| Asset Type | The asset type upon which the asset was based. |
| Status | The current state of the asset. Valid statuses include:<br><br>• In Service<br><br>• Out of Service |
| Specification | The related specification if applicable. |
| Asset Disposition | The current status of the asset. |
| Effective Date/Time | The date and time when the asset was placed in this disposition. |
| Location | The physical location of the asset. |

### Tracked Asset

Tracked assets have their status and location carefully monitored and recorded as they move in and out of service or go for maintenance or repair. This type of asset will be tracked at a storage location with a disposition such as in receipt, in stores, in repair, retired or rejected. If the tracked asset is installed, it is stored at an asset location.

Tracked assets use the same fields as in/out service assets only with more statuses and a status reason to more carefully track the asset as it moves from receiving to installation to repair, etc.

**Note:** This type of asset is not delivered out of the box, but can be used as a basis for creating tracked assets during implementation of custom business objects. Please refer to the configuration guide for more information.

**Business Object**: W1-TrackedAsset

| Field | Description |
|---|---|
| Status | The current state of the asset. Valid statuses include:<br><br>• In Receipt<br><br>• In Store<br><br>• Installed<br><br>• In Repair<br><br>• Retired<br><br>• Rejected |
| Status Reason | Indicates the purpose for any changes or updates to the asset disposition, as required. Depending on your system configuration, some statuses require a reason and some do not. |

**Smart Meter**

Smart meters are monitoring devices that send and receive information electronically.

**Business Object**: W2-SmartMeter

| Field | Description |
|---|---|
| Information | The information string showing the asset type and disposition. |
| Asset Type | The asset type upon which the asset was based. |
| Status | The current state of the smart meter. Valid statuses include:<br><br>• In Receipt<br><br>• In Store<br><br>• Installed<br><br>• In Repair<br><br>• Retired<br><br>• Rejected |
| Specification | The related specification if applicable. |
| Identification fields | Additional information about the meter such as badge number, serial number, pallet number and PO number to help further classify and identify the asset. |
| Settings fields | Firmware and configuration information for the meter. |
| Vendor fields | Details about the vendor or supplier of the asset including the part number and warranty information. |
| Asset Disposition Detail | Details regarding the status and location of the asset. |

**Manual Meter**

Manual meters are monitoring devices that must be read and have their information recorded manually.

Manual meters use the same fields and statuses as smart meters with the exception that they do not include or require firmware information.

**Business Object**: W2-ManualMeter

**Communication Component**

Communication components are devices that can be attached to a smart meter to connect the meter to the communication grid.

Communication components use the same fields and statuses and statuses as smart meters with the exception that they show status and create date. This information is needed to help identify when the component was installed on the meter.

**Business Object**: W2-CommunicationComponent

**Communication Relay**

Communication relays transmit messages between various points to facilitate communication between units.

Communication relays use the same fields and statuses and statuses as smart meters with the exception that they show status and create date. This information is needed to help identify when the component was installed on the meter.

**Business Object**: W2-CommunicationRelay

# Base Package Completion Events

This section provides descriptions of the attributes used for completion events as they are delivered in the base application.

**Maintenance Object**: W1-Cevt

Completion events are used to execute business events within the application. For example, completion events may be configured for several types of asset processing such as asset update, state transition, replication, service history and activity creation.

All completion events use the same set of fields:

| Field | Description |
|---|---|
| Information | The information string showing the completion event type, description, date and status. |
| Status | The current state of the completion event. Valid statuses include:<br><br>• Pending<br><br>• Executed<br><br>• Discarded<br><br>Once the completion event is in an executed state and does not have any errors, the event is considered complete. |
| Completion Event Type | The completion event type upon which the completion event was based. |
| Execution Sequence | Indicates the order in which the event should be processed with relationship to other completion events. |
| Inbound Communication | Information used to create a completion event for this completion event type using information defined within the inbound communication business object, or within its raw message. |
| Relationship Information | Shows any other system objects that are associated to the completed object. For example, if you are looking at the completion event for an activity, the relationship information shows the asset, any components, the location, service history, etc. |
| Event Information | Shows the date and time for execution of the completion event and any comments that should be included. |
| Payload Information | Payload is the object or information created as the result of a completion event. For example, if you have a completion event to create service history, the service history is the payload. |

### Create Activity

Use create activity completion events to process the creation of follow-up activities as the result of an activity.

**Business Object**: W1-CreActivityPayCmpEvt

### Create Asset

Use create asset completion events to process the creation of assets as the result of an activity.

**Business Object**: W1-CreAssetPayCmpEvt

### Create Asset Attachment

Use create asset attachment completion events to process the creation of attachments on assets as the result of an activity.

**Business Object**: W1-CreAssetAttachCmpEvt

**Create Location Attachment**

Use create location attachment completion events to process the creation of attachments on locations as the result of an activity.

**Business Object**: W1-CreNodeAttachCmpEvt


**Create Service History**

Use create service history completion events to process the creation of service history for assets as the result of an activity.

**Business Object**: W1-CreServiceHistoryPayCmpEvt


**Create Service History Attachment**

Use create service history attachment completion events to process the creation of attachments on service history as the result of an activity.

**Business Object**: W1-CreServiceHistoryAttCmpEvt


**General Asset Replication**

Use general asset replication completion events to process the creation of assets from an asset replication activity.

**Business Object**: W1-AssetReplicationComplEvent


**Replication Completion Event Type**

Use replication completion events to process the creation of assets from an asset replication activity.

**Business Object**: W1-ReplicationComplEventType


**Transition Asset**

Use transition asset completion events to process changes in status and/or location for assets as the result of an activity.

**Business Object**: W1-TrnAssetCmpEvent


**Update Asset**

Use update asset completion events to process the update of assets as the result of an activity.

**Business Object**: W1-UpdAssetPayCmpEvt


**Update Location**

Use update location completion events to process the update of locations as the result of an activity.

**Business Object**: W1-UpdNodePayCmpEvt


# Base Package Components

This section provides descriptions of the attributes used for components as they are delivered in the base application.

**Maintenance Object**: W1-Asset

### In/Out Service Component

In/Out of service components are typically stationary and stay in service until they fail and are then removed from service rather than being repaired or tracked. This type of component is either installed on an asset or out of service.

**Business Object**: W1-InOutSvcComponent

| Field | Description |
| --- | --- |
| Information | The information string showing the asset type and disposition. |
| Asset Type | The asset type upon which the asset was based. |
| Status | The current state of the component. Valid statuses include: <br><br> • Attached <br><br> • Out of Service |
| Specification | The related specification if applicable. |
| Asset Disposition | The current status of the asset. |
| Effective Date/Time | The date and time when the asset was placed in this disposition. |
| Location | The physical location of the asset. |
| Attached to Asset ID | Indicates the asset where the component is installed. |

### Tracked Component

Tracked components have their status and location carefully monitored and recorded as they move in and out of service or go for maintenance or repair. This type of component will be tracked at a storage location with a disposition such as in receipt, in stores, in repair, retired or rejected. When tracked component is installed, it is stored on an asset.

Tracked components use the same fields as in/out service components only with more statuses and a status reason to more carefully track the component as it moves from receiving to installation to repair, etc.

**Business Object**: W1-TrackedComponent

| Field | Description |
| --- | --- |
| Status | The current state of the component. Valid statuses include: <br><br> • In Receipt <br><br> • In Store <br><br> • Attached <br><br> • In Repair <br><br> • Retired <br><br> • Rejected |
| Status Reason | Indicates the purpose for any changes or updates to the component disposition, as required. Depending on your system configuration, some statuses require a reason and some do not. |

# Base Package Configurations

This section provides descriptions of the attributes used for configurations as they are delivered in the base application.

**Maintenance Object**: W1-Config

**Single Asset**

Configurations document and manage the valid set ups for assets/and components. This includes a specification for each asset or component in the configuration as well as the valid value for each parameter, such as the firmware version of each asset.

All configurations use the same set of fields:

**Business Object**: W1-SingleAssetConfig

| Field | Description |
| --- | --- |
| Information | The information string showing the configuration type, status, and significant status date related to the activity. |
| Configuration Type | The configuration type upon which the configuration was based. |
| Status | The current state of the activity. Valid statuses include:<br><br>• Pending<br><br>• Under Testing<br><br>• Rejected<br><br>• Approved<br><br>• Deprecated<br><br>• Obsolete |
| Configuration Detail | Indicates the assets, components, firmware and other elements in the setup of the configuration. |

**Asset/Component**

**Business Object**:W1-AssetCompConfig

**Asset to Asset**

**Business Object**: W1-AssetToAssetConfig

**Asset/Component to Asset**

**Business Object**: W1-AssetCompToAssetConfig

**Asset to Asset/Component**

**Business Object**: W1-AssetToAssetCompConfig

**Asset/Component to Asset/Component**

**Business Object**: W1-AssetCompToAssetCompConfig

# Base Package Configuration Reports

This section provides descriptions of the attributes used for configuration reports as they are delivered in the base application.

**Maintenance Object**:W1-Cfgrpt


## Single Asset

Configuration reports provide a summary of any currently installed configurations.

All configuration reports use the same set of fields:

**Business Object**: W1-SingleAssetCfgRpt

| Field | Description |
| --- | --- |
| Information | The information string showing the description, reporting mode, and status of the report. |
| Status | The current state of the activity. Valid statuses include:<br><br>• Pending<br><br>• Submitted<br><br>• Generate Report |
| Report Criteria | Indicates the assets, components, firmware, characteristics and other identifiers that the system will use to filter which configurations appear in the report. |
| Report Results | Provides the link to the actual report with a summary of the time and date that the report was generated. |


## Asset/Component

**Business Object**:W1-AssetCompCfgRpt


## Asset to Asset

**Business Object**: W1-AssetToAssetCfgRpt


## Asset/Component to Asset

**Business Object**: W1-AssetCompToAssetCfgRpt


## Asset to Asset/Component

**Business Object**: W1-AssetToAssetCompCfgRpt


## Asset/Component to Asset/Component

**Business Object**: W1-AssetCompToAssetCompCfgRpt

# Base Package Contacts

This section provides descriptions of the attributes used for contacts as they are delivered in the base application.

**Maintenance Object**: W1-Contact

### Business Contact

Use business contacts to define the main attributes for businesses that your organization works with or that are associated to locations.

**Business Object**: W1-Business

| Field | Description |
| --- | --- |
| Information | The information string showing the company name and phone number. |
| Company Name | The business name. |
| Business Phone | The business phone number. |
| Email | The primary business email address. |
| External ID | An identification number or code that can tie the contact to a related contact or person in an external system. This is used for integration. |
| Contact Type | The contact type upon which the contact was based. |

### Person Contact

Use person contacts to define the main attributes for individuals that your organization works with or that are associated to locations.

**Business Object**: W1-Person

| Field | Description |
| --- | --- |
| Information | The information string showing the company name and phone number. |
| Name | The contact name. |
| Home Phone | The contact home phone number. |
| Mobile Phone | The contact mobile phone number. |
| Email | The contact email address. |
| External ID | An identification number or code that can tie the contact to a related contact or person in an external system. This is used for integration. |
| Contact Type | The contact type upon which the contact was based. |

# Base Package Inbound Communication

This section provides descriptions of the attributes used for inbound communication as it is delivered in the base application.

**Maintenance Object**: W1-Comin

Use inbound communication to create a completion event using information defined within the raw message coming from an external system.

**Business Object**: W1-ActivityComplInboundComm

| Field | Description |
| --- | --- |
| Communication Type | The communication time that defines the base attributes for the inbound communication. |
| Initiating Activity ID | If the inbound communication is initiated by an activity, the ID is indicated here. |
| Completion Event Date/Time | Defines the date and time to execute the completion event. |
| Comments | Free-form text field to enter supporting notes. |
| Asset ID | The identifier for the related asset. |
| Attached to Asset ID | The identifier for the asset where the component is installed, if applicable. |
| Location ID | The identifier for the related location. |
| Service History ID | The identifier for the related service history. |
| Identifier Type and Value | The Asset, Component Asset, and Location can use user-defined identifiers to provide additional reference information. |
| Raw Message | The message that comes from the external system. This can be entered manually if needed to simulate the message coming from the external system or to force completion of messages from the external system. |

# Base Package Locations

This section provides descriptions of the attributes used for locations as they are delivered in the base application.

**Maintenance Object**: W1-Node

### Asset Location

Asset locations are used to indicate the physical location where assets or components are installed.

**Business Object**: W1-AssetLocation

| Field | Description |
| --- | --- |
| Location Type | The asset location type upon which the asset location is based. |
| Location Disposition | The current status of the location. Active or Inactive. |
| Description | A useful description of the location. |
| Parent Location/ Organization ID | The parent location or organization can be referenced to establish a hierarchy for reporting purposes. |
| Operation | User-defined value to provide categorization for the location. |
| Location Fields | Indicate the physical address for the location along with GPS information if applicable. The class is used for reporting and establishes general characteristics of the location such as whether it is commercial or residential, a shop or warehouse, or any other possible categorization appropriate to your business. |
| Criticality Fields | Define the importance of the location in terms of the potential impact of having issues or problems at that location. For example, a hospital might have a high criticality rating since losing power there might result in deaths of patients, while a city park would have a low criticality since there are few consequences if the lawns are not mowed on time. The Criticality Reason is used to specify a reason for the location's criticality rating (if applicable). |

**Storage Location**

Storage locations are used to indicate the physical location where assets or components are stored.

Storage locations use the same fields as Asset Locations with the exception that they do not include criticality fields.

**Business Object**: W1-StorageLocation

**Service Point**

Service points are asset locations used to define a specific service point such as commercial or residential, gas or electric.

**Business Object**: W2-ServicePoint

| Field | Description |
| --- | --- |
| Location Type | The asset location type upon which the service point is based. |
| Location Disposition | The current status of the location. Active or Inactive. |
| Description | A useful description of the service point. |
| Parent ID | Defines the parent location in a reporting hierarchy, if applicable. |
| External ID | Identification number used to associate the service point in an external system. |
| Contact | The primary contact associated to the service point. This is linked to the **Contacts** portal. |
| Life Support/Sensitive Load | Drop-down indicating whether the service point is critical, hazardous or sensitive. |
| Life Support Sensitive Load Detail | Free-form text field to provide additional detail about the sensitivity of the service point. |
| Asset Location | Drop-down indicating where the service point is actually located, such as whether it is interior or exterior, under the house or otherwise located. |
| Asset Location Detail | Free-form text field to provide additional detail about the actual location of the service point. |
| Disconnect Location | Drop-down indicating where the service point is disconnected. |
| SP Warning | Drop-down indicating any potential hazards at the service point such as there is a dog or the meter is in a confined space. |
| SP Instruction | Drop-down indicating any special instructions for the service point such as the technician needs to contact the customer. |
| SP Instruction Detail | Free-form text field to provide additional detail about the special instructions. |
| Key | Drop-down indicating whether there is a key needed for access and where it should be obtained. |
| Key ID | Free-form text field to provide additional detail or identification of the key. |
| Ok to Enter | Drop-down indicating whether entering the location is permitted. |
| Time Zone | Defines the time zone where the service point is located. |
| Location Fields | Indicate the physical address for the location along with GPS information if applicable. The class is used for reporting and establishes general characteristics of the location such as whether it is commercial or residential, a shop or warehouse, or any other possible categorization appropriate to your business. |

**Vehicle**

Vehicles are considered as storage locations within the system since if the asset is in transit and on a vehicle it is considered stored on that vehicle.

**Business Object**: W2-Vehicle

| Field | Description |
| --- | --- |
| Location Type | The storage location type upon which the vehicle is based. |
| Location Disposition | The current status of the vehicle. Active or Inactive. |
| Description | A useful description of the vehicle. |
| Crew | Free-form text field indicating the crew associated to the vehicle. |

# Base Package Manufacturers

This section provides descriptions of the attributes used for manufacturers as they are delivered in the base application.

**Maintenance Object**: W1-MANUF

**Business Object**: W1-Manufacturer

| Field | Description |
| --- | --- |
| Information | Provides the manufacturer name or code and a description. |
| Manufacturer Specifications | Any specifications that were provided by the manufacturer or that relate to the manufacturer can be linked in this section. |

# Base Package Organizations

This section provides descriptions of the attributes used for organizations as they are delivered in the base application.

**Maintenance Object**: W1-Node

**Business Object**: W1-Organization

| Field | Description |
| --- | --- |
| Organization Type | The organization type upon which the organization is based. |
| Organization Disposition | The status of the organization. Active or Inactive. |
| Description | A useful description of the organization. The description can be used as search criteria to help find records, so it is helpful if it contains text that would make the organization easy to find. |
| Parent Location/ Organization ID | The parent location or organization that can be referenced to establish a hierarchy for reporting purposes. |

# Base Package Service History

This section provides descriptions of the attributes used for service history as it is delivered in the base application.

**Maintenance Object**: W1-Svchst

Use service history to record inspection feedback, pass/fail details, service logs, or other information regarding service on the asset.

**Business Object**: W1-ServiceHistory

| Field | Description |
| --- | --- |
| Asset ID | The asset for which service history will be entered. |

| Field | Description |
|---|---|
| Service History Type | The service history type upon which the service history is based. |
| Effective Date/Time | The date applicable to the service history. Typically the date and time that the service was done. |
| Activity ID | The activity ID associated to the service that was completed, if applicable. |
| Comments | Free-form text field to enter notes. |

**Basic Test**

**Business Object**: W1-BasicTest

# Base Package Specifications

This section provides descriptions of the attributes used for specifications as they are delivered in the base application.

**Maintenance Object**: W1-Spec

Use specifications to provide the written requirements to describe the design details and/or the functional performance criteria for a particular equipment, material, or product.

All specifications use the same fields:

**Business Object**: W1-Specification

| Field | Description |
|---|---|
| Specification | Unique identifier for the specification. |
| Description | A useful description of the specification. This can be searched from other records. |
| Specification Class | Establishes a classification for the specification. |
| Asset Type | The asset type that uses the specification. |
| Manufacturer | The manufacturer that provided the specification or that is associated with the smart meter. Values are defined in the Manufacturer portal. |
| Identification fields | User-defined fields to provide further identification for the specification or smart meter. This could be a stock code or other identifying information. |
| Metrology Firmware Version fields | The software for the functionality of the smart meter. |
| NIC Firmware Version fields | The software for the network interface card in the smart meter. |

**Smart Meter Specification**

Smart meters are monitoring devices that send and receive information electronically.

**Business Object**: W2-SmartMeterSpecification

**Manual Meter Specification**

Manual meters are monitoring devices that must be read and have their information recorded manually.

**Business Object**: W2-ManualMeterSpecification

### Communication Component Specification

Communication components are devices that can be attached to a smart meter to connect the meter to the communication grid. Communication component specifications are most important for managing the firmware versions and updates for these devices.

**Business Object**: W2-CommunicatiSmaonComponentSpec

### Communication Relay Specification

Communication relays transmit messages between various points to facilitate communication between units. Communication relay specifications are most important for managing the firmware versions and updates for these devices.

**Business Object**: W2-CommunicationRelaySpec

### Firmware Specification

Firmware specifications define the software and software versions that is applicable to certain devices

**Business Object**: W2-FirmwareSpecification

### Child Specification/Firmware Version

Child specifications are referenced on specifications to indicate valid firmware versions.

**Maintenance Object**: W1-Childspec

**Business Object**: W2-FirmwareVersion

| Field | Description |
|---|---|
| Status | • Created<br>• Under Testing<br>• Rejected<br>• Approved<br>• Quarantined<br>• Deprecated<br>• Obsolete |

# Base Package Work Orders

This section provides descriptions of the attributes used for work orders as they are delivered in the base application.

**Maintenance Object**: W1-Workorder

### Basic Work Order

Use basic work orders to organize the simplest activities. These work orders cannot be used as templates for service history or recurring work.

**Business Object**: W1-BasicWorkOrder

| Field | Description |
|-------|-------------|
| Information | The information string showing the work order type, description and activity information. |
| Description | A useful description of the work order. Only a description is required when a new basic work order is created. The description can be used as search criteria to help find work orders, so it is helpful if it contains text that would make the work order easy to find. |
| Status | The current status of the work order. Open or Closed. |

## Asset Criteria Activity Generator

Use asset criteria activity generator work orders to create activities for tasks such as creating service history for assets based upon specified asset criteria.

**Business Object**: W1-AssetCriteriaActGenerator

| Field | Description |
|-------|-------------|
| Information | The information string showing the work order type, description and activity information. |
| Description | A useful description of the work order. |
| Status | Valid statuses include:<br><br>• Open<br><br>• Generate Activities<br><br>• Error<br><br>• Template<br><br>• Canceled<br><br>• Closed |
| Asset Information fields | Serves to select the assets that should be included on the activities created from the work order. |
| Specification Information fields | Serves to select the specification and/or manufacturer to be included on the activities created from the work order. |
| Address Information fields | Serves to select the physical address to be included on the activities created from the work order. |
| Activity Information fields | Defines the activity type and schedule days for activities created from the work order. |
| Location Information fields | Defines the location type, criticality, class, identifiers and characteristics for the location included on the activities created from the work order. |
| Service History Exclusion Information fields | Defines a service history type to exclude from activity generation based on whether or not the service history type has been performed within the number of days indicated. |

## Asset List Generator

Use asset list generator work orders to create activities for tasks such as creating or updating new assets in the system.

**Business Object**: W1-AssetListActGenerator

| Field | Description |
|-------|-------------|
| Information | The information string showing the work order type, description and activity information. |
| Description | A useful description of the work order. |
| Status | Valid statuses include:<br><br>• Open |

| Field | Description |
|---|---|
| | • Generate Activities |
| | • Error |
| | • Template |
| | • Canceled |
| | • Closed |
| Service History Type | Determines the type of service history that will be created for the assets created on the work order. |
| Service Schedule Work Order | Tied to the service history type, this determines the template work order that will be used to create the service history for the assets created on the work order. |
| Activity Information Fields | Defines the information for the activities created by the work order. When creating a new work order, the Activity Type determines the default lead days and work window days for the activity if they are not specified. This information is used for scheduling when the activity information is sent to external systems. |
| Asset List Information Fields | Defines the list of assets that will be created by the activities on the work order. When creating a new work order, this list can be uploaded via a CSV file. |

### Component List Generator

Use component list generator work orders to create activities for tasks such as creating or updating new component in the system.

**Business Object**: W1-CompnAssetListActGenerator

| Field | Description |
|---|---|
| Information | The information string showing the work order type, description and activity information. |
| Description | A useful description of the work order. |
| Status | Valid statuses include: |
| | • Open |
| | • Generate Activities |
| | • Error |
| | • Template |
| | • Canceled |
| | • Closed |
| Service History Type | Determines the type of service history that will be created for the assets created on the work order. |
| Service Schedule Work Order | Tied to the service history type, this determines the template work order that will be used to create the service history for the assets created on the work order. |
| Activity Information Fields | Defines the information for the activities created by the work order. When creating a new work order, the Activity Type determines the default lead days and work window days for the activity if they are not specified. This information is used for scheduling when the activity information is sent to external systems. |
| Component Asset List Information Fields | Defines the list of components that will be created by the activities on the work order. When creating a new work order, this list can be uploaded via a CSV file. |

### Component Criteria Activity Generator

Use component criteria activity generator work orders to create activities for tasks such as creating service history for components based upon specified component criteria.

**Business Object**: W1-CompnCriteriaActGenerator

| Field | Description |
|---|---|
| Information | The information string showing the work order type, description and activity information. |
| Description | A useful description of the work order. |
| Status | Valid statuses include:<br><br>• Open<br><br>• Generate Activities<br><br>• Error<br><br>• Template<br><br>• Canceled<br><br>• Closed |
| Attached to Asset Information | Serves to select the status of the asset where components are installed that should be included on the activities created from the work order. |
| Component Information fields | Serves to select the component type, disposition, condition, identifiers, and or characteristics for components that should be included on the activities created from the work order. |
| Specification Information fields | Serves to select the specification and/or manufacturer to be included on the activities created from the work order. |
| Address Information fields | Serves to select the physical address to be included on the activities created from the work order. |
| Activity Information fields | Defines the activity type and schedule days for activities created from the work order. |
| Location Information fields | Defines the location type, criticality, class, identifiers and characteristics for the location included on the activities created from the work order. |
| Service History Exclusion Information fields | Defines a service history type to exclude from activity generation based on whether or not the service history type has been performed within the number of days indicated. |

## Location Criteria Activity Generator

Use location criteria activity generator work orders to create activities to move assets between locations.

**Business Object**: W1-NodeCriteriaActGenerator

| Field | Description |
|---|---|
| Information | The information string showing the work order type, description and activity information. |
| Description | A useful description of the work order. |
| Status | Valid statuses include:<br><br>• Open<br><br>• Generate Activities<br><br>• Error<br><br>• Template<br><br>• Canceled<br><br>• Closed |
| Template Name | If the work order is used as a template, this indicates the name used to identify the template. |
| Service Schedule Status | Controls whether the work order template is active or inactive with respects to creating scheduled service history. |

| Field | Description |
|---|---|
| Asset Information fields | Serves to select the assets that should be included on the activities created from the work order. |
| Address Information fields | Serves to select the physical address to be included on the activities created from the work order. |
| Activity Information fields | Defines the activity type and schedule days for activities created from the work order. |
| Location Information fields | Defines the location type, criticality, class, identifiers and characteristics for the location included on the activities created from the work order. |

# Base Package Administrative Objects

This section provides information about the **Oracle Utilities Operational Device Management** objects on the **Administration Menu** as they are delivered in the base application.

Admin objects do not have a lifecycle or status. For detailed information on the related functionality, please refer to the specific sections for these objects in the *System Administration* section of this guide. You can also refer to the configuration guide for more details.

### Activity Type
Maintenance Object: W1-ACTTY

### Asset Type
Maintenance Object: W1-ASSETTYPE

### Bucket Configuration
Maintenance Object: W1-BKTCONFIG

### Completion Event Type
Maintenance Object: W1-CEVTT

### Child Specification
Maintenance Object: W1-CHILDSPEC

### Communication Type

Maintenance Object: W1-COMTY

### Configuration Type
Maintenance Object: W1-CONFIGTYP

### Contact Type

Maintenance Object: W1-CONTTYPE

### Node Type
Maintenance Object: W1-NODETYPE

**Service History Type**

Maintenance Object: W1-SVCHSTTY

# Chapter 5

# FAQs

Answers to commonly asked questions.

# How Do I...?

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

### Activities

**Q. How do I complete an activity?**

**A.** Refer to the instructions under *Processing and Completing Activities* to process and complete an activity.

**Q. How do I process a completion event?**

**A.** Refer to the instructions under *Processing and Completing Activities* to process a completion event.

### Assets

**Q. How do I retire an asset?**

**A.** Refer to the instructions under *Retiring Assets*.

**Q. How do I reject an asset?**

**A.** Refer to the instructions under *Rejecting Assets*.

**Q. How do I change the location of an asset?**

**A.** Changing the location of an asset involves updating the disposition. Refer to the instructions under *Update the Disposition of a Single Asset* for changing the location of an asset.

**Q. How do I schedule regular service history for an asset?**

**A.** Scheduled service history is set up on the service history type when it is configured. The system must also have an activity type configured with a completion event type to create service history. Next, there must be a template work order that references the activity type and the service history type that has the configured service history schedule. When the service schedule comes due, the system automatically generates a work order with activities to create service history. Refer to the instructions under *Defining Service History Types* for creating the service schedule on the service history type.

**Q. How do I record a delivery of assets?**

**A.** To record the delivery of a single asset, the asset would typically be created as a new asset in the system in **In Receipt** status. To record the delivery of multiple assets, use the Asset Replication functionality. Refer to the instructions under *Replicating Assets* for recording the delivery of multiple assets.

**Q. How do I approve or reject asset configurations?**

**A.** Refer to the guidelines under *About Configurations*.

**Q. How do I add or update firmware versions for assets?**

**A.** Refer to the guidelines under *About Specifications*.

**Attachments**

**Q. How do I update an attachment?**

**A.** Refer to the instructions under *Replacing an Attachment File* for updating an attachment.

**Components**

**Q. How do I install a component on an asset?**

**A.** Refer to the instructions under *Installing a Component on an Asset* to install a component on an asset.

**Q. How do I attach a component to an asset?**

**A.** Refer to the instructions under *Installing a Component on an Asset* to install a component on an asset.

**Q. How do I create service history for a component?**

**A.** Refer to the instructions under *Creating Service History* for creating service history for a component.

**Locations**

**Q. How do I associate a contact to a location?**

**A.** Refer to the instructions under *Linking a Contact to a Location* to associate a contact to a location.

**Q. How do I associate an organization to a location?**

**A.** Refer to the instructions under *Linking an Organization to a Location* to associate an organization to a location.

**Specifications**

**Q. How do I attach a specification to an asset?**

**A.** The allowed specifications for an asset are determined by the asset type so that when an asset is created or updated, only valid specifications are available on the drop-down. To attach a specification to an asset, select the specification from the list of valid options on the drop-down in the Specification field when creating or updating the asset. When adding multiple assets via asset replication, the specification is added as part of the batch record creation, depending on the template asset.

**Q. How do I add an attachment to a specification?**

**A.** Refer to the instructions under *Creating Owned Attachments* to add an owned attachment for a specification.

**Vehicles**

**Q. How do I create a vehicle?**

**A.** Vehicles are considered storage locations in Operational Device Management. You can create a vehicle by referring to the instructions under *Creating a Storage Location*.

**Work Orders**

**How do I generate activities for a work order?**

**A.** Some activities might be generated automatically by batch processing. To manually generate activities, search for and select the work order and click the **Generate Activities** button in the **Record Actions** section to manually generate activities for a work order.

**Q. How do I complete a work order?**

**A.** Work orders are automatically completed when every activity linked to the work order arrives at a final state based on the completion events for the activities.

**Q. How do I process a work order?**

**A.** Work orders are initially created in the **Open** state. To process a work order, generate activities and process them as detailed in *Processing and Completing Activities*. Work orders are automatically completed when every activity linked to the work order arrives at a final state based on the completion events for the activities.

**Q. How do I create a template from a work order?**

**A.** Search for and select the work order that you want to use as a template and click the **Make Template** button in the **Record Actions** section. Basic work orders cannot be used as templates.

# What's the Difference Between ...?

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

**Q. What's the difference between an asset and a component?**

**A.** Components are considered a type of asset. They are received and created within the system in the same way that assets are received and created. What defines a component is that it is based upon a component type asset type and it is installed on an asset when it is "in service".

**Q. What's the difference between an asset location and a storage location?**

**A.** An asset location is the physical location where assets or components can be installed, whereas storage locations are for receipt, storage, repair, retirement, transport (on vehicles) and other dispositioning.

**Q. What's the difference between an activity and a work order?**

**A.** Work orders group similar activities and are used to generate activities to perform any kind of work such as inspection, install, replacement, upgrade, and other activities. The activity is where the actual work is managed and processed through completion events.