

# **Oracle Utilities Analytics Dashboards for Operational Device Analytics**

Metric Reference Guide

Release 2.5.1

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# Preface

This document describes the Oracle Utilities Operational Device Analytics metrics (such as dashboards, analyses, and subject areas) available in Oracle Utilities Analytics. These metrics are used in the pre-built analyses, and/or available for customers to use via OBIEE Answers in building new analyses or extending existing analyses.

## Audience

This guide is intended for all users of Oracle Utilities Analytics Dashboards for Oracle Utilities Operational Device Management.

## Related Documents

For more information, see the following documents:

- *Oracle Utilities Analytics Installation Guide*
- *Oracle Utilities Analytics Quick Install Guide*
- *Oracle Utilities Analytics Release Notes*
- *Oracle Utilities Analytics User's Guide*
- *Oracle Utilities Analytics Administration Guide*

**See Also:**

- Oracle Utilities Operational Device Management Documentation Library

## Notational Conventions

The following notational conventions are used in this document:

<b>Notation</b>	<b>Indicates</b>
<b>boldface</b>	Graphical user interface elements associated with an action, terms defined in text, or terms defined in the glossary
<i>italic</i>	Book titles, emphasis, or placeholder variables for which you supply particular values
monospace	Commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter

# Chapter 1

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## Dashboard Content Reference

Oracle Utilities Analytics, Release 2.5.1, provides analysis of and data from Oracle Utilities Operational Device Management using Oracle Business Intelligence Enterprise Edition built-in metrics. Non-spatial analytics, information that is not tied to geography, is represented in a series of dashboards showing tables, bar graphs, pie charts, and gauges. Spatial analytics, or information that is geographically related, use OBIEE integrated Map Viewer technology to represent events, weather data, map data, and other geographical information.

Oracle Utilities Operational Device Analytics includes metrics which analyze handling large volumes of devices and managing the receipt, installation, maintenance, tracking and removal of those devices.

This chapter describes the Oracle Utilities Operational Device Analytics' content in the following dashboards:

- **Overview**
- **Device Attributes**
- **Installed Devices**
- **Repair and Testing**
- **Storeroom Inventory**

### Overview

The Overview dashboard consists of a collection of answers that provide a high level view into the key metrics related to operational devices. Users can monitor the warranty status, service history type distribution, disposition distribution, and device rejection volumes. Users can also identify what types of devices are high on stock, which device types are installed on the field for longer periods, and which type of devices spend a lot of time in repair.

To access this dashboard:

1. Go to the **Home** page.
2. Select **Dashboards > Operational Device Analytics > Overview**.

The dashboard includes the following analyses. The data for current calendar year and month is displayed by default. You may modify the criteria per requirement.

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## Warranty Status

Property	Details
Description	This analysis shows the percentage of devices that are in warranty. The data is shown for the current month and previous two months.
Purpose	This analysis shows the percentage of assets that are within warranty for that month. Business users need to take appropriate measures, such as replacing those devices, prevent them from failures, etc, to ensure devices are compliant.
Representation	The bar graph shows the warranty compliance as a percentage. The X-axis represents the month. The Y-axis represents the warranty compliance. Hover over the bars for specific values.
Drill Down	The graph drills down to the <b>Warranty</b> dashboard page in the <b>Device Attributes</b> dashboard for specific warranty details.
Source Object	Operational Device Snapshot Fact
OBIEE Subject Area	ODM - Operational Device Snapshot
Metrics	Warranty Status (% Devices within Warranty)

## Service History Type Distribution

Property	Details
Description	<p>All services performed on devices like inspection service, maintenance service, etc, are captured as “service histories”. Service histories are grouped based on their service history types.</p> <p>This analysis shows the distribution of service histories by service history type for the selected month.</p>
Purpose	A device can be associated with different service histories in a month. This analysis shows the distribution of various service histories based on their types. The data is shown for the selected month. This can help them to identify the major types of service histories they focus upon.
Representation	The pie chart shows the distribution of each service history type as a percentage of total number of service histories.
Drill Down	The pie chart drills down to the <b>Inspection History</b> dashboard page for more specific details.
Source Object	Service History Fact
OBIEE Subject Area	ODM - Service History
Metrics	% of Service History Type

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## Top 10 Device Types with Highest Average Installed Age

Property	Details
Description	This analysis shows the top 10 device types that have the highest average installed age as of the selected month.
Purpose	Business users can identify the device types that are installed in the field for a relatively longer period.
Representation	The bar graph shows the top 10 device types with highest average install age. X-axis represents the device types. Y-axis represents the average installed device age (in months) in the selected month. Hover over the bars for specific details.
Drill Down	The graph bars drill down to the <b>Installed Devices</b> dashboard for more specific details.
Source Object	Operational Device Snapshot Fact
OBIEE Subject Area	ODM - Operational Device Snapshot
Metrics	Average Installed Asset Age

## Top 10 Device Types with Most Inventories

Property	Details
Description	“Inventory” consists of spare devices which can replace the installed devices in case of defects or failures.  This report shows the top 10 device types in the inventory.
Purpose	Business users can get an insight into the device types that are ample in the inventory. They can focus on maintaining inventory for other device types.
Representation	The bar graph shows the top 10 device types with highest number of devices in the inventory. The X-axis represents the device types. The Y-axis represents the device count. Hover over the bars for specific details.
Drill Down	The graph bars drill down to the <b>Storeroom Inventory</b> dashboard for more specific details.
Source Object	Operational Device Snapshot Fact
OBIEE Subject Area	ODM - Operational Device Snapshot
Metrics	Inventories

## Top 10 Device Types with Longest Average Time In Repair

Property	Details
Description	This analysis shows the top 10 device types having the longest average time in repair. The data is shown for the selected calendar month.

Property	Details
Purpose	The utilities companies are aware of the device types that cost most time to repair. If these are critical devices, customers can consider reserve more inventories for them. Otherwise, customers can think about substitutes with shorter time in repair.
Representation	The bar graph shows the top 10 device types that have the longest average time in repair. The X-axis shows the device types. The Y-axis represents the average time in days. Hover over the bars for specific details.
Drill Down	The graph bars drill down to the <b>Repair</b> dashboard page in the <b>Repair and Testing</b> dashboard for more specific details.
Source Object	Operational Device Snapshot Fact
OBIEE Subject Area	ODM - Operational Device Snapshot
Metrics	Average Time in Repair

## Disposition Distribution

Property	Details
Description	<p>“Disposition” refers to the status of an asset. It can be used to keep track of an asset during its entire life cycle. A device can be in any of the following disposition states: in receipt, in store, rejected, installed, in repair, or retired.</p> <p>This analysis shows the distribution of assets by different disposition states in the selected month.</p>
Purpose	Business users can analyze the disposition of all the devices in the selected month and take appropriate measures. For example: if more number of devices are in “in repair” state, it might be an alarming situation for the customer.
Representation	<p>The <b>View By</b> drop down slices the data by excluding installed devices or including installed devices.</p> <p>The pie chart shows the distribution of various disposition states for assets in the selected month.</p>
Drill Down	The pie chart drills down to the <b>Storeroom Inventory</b> or <b>Installed Devices</b> dashboards respectively for more specific details.
Source Object	Operational Device Snapshot Fact
OBIEE Subject Area	ODM - Operational Device Snapshot
Metrics	Total Assets



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## Rejection Volume

Property	Details
Description	<p>A device is rejected when it fails acceptance tests.</p> <p>This analysis shows the number of failed tests for each month over a period of three months.</p>
Purpose	<p>Business users can compare and see the trend at which devices are getting rejected in the last three months. If there is an increase in the rejection, appropriate measures are taken, such as choosing another device manufacturer.</p>
Representation	<p>The bar graph shows the devices that got rejected in each month. The data is shown for previous three months. The X-axis represents the calendar month. The Y-axis represents the device count. Hover over the bars for specific values.</p>
Drill Down	<p>The graph drills down to the <b>Acceptance Testing</b> dashboard page for more specific details.</p>
Source Object	<p>Operational Device Snapshot Fact</p>
OBIEE Subject Area	<p>ODM - Operational Device Snapshot</p>
Metrics	<p>Failed Tests</p>

## Device Attributes

The Device Attributes dashboard helps users to analyze the key metrics related to device warranties and the inspections carried out on them. The analyses included in this dashboard help users to understand the warranty expiration trend over the next 15 months, inspection history trends, and the top device types and manufacturers with high success rates.

A spatial analysis also been included to show the geographical distribution of the various firmware versions. Users can also drill back to the source Oracle Utilities Operational Device Management application for further details about a specific device or location.

To access this dashboard:

1. Go to the **Home** page.
2. Select **Dashboards > Operational Device Analytics > Device Attributes**.

The dashboard provides the following dashboard pages. The data for current calendar year and month is displayed by default. You may modify the criteria per requirement.

- **Warranty**
- **Inspection History**
- **Firmware**
- **Warranty Details**

## Warranty

The Warranty dashboard page focuses on the device warranty details.

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## Warranty Expiration Analysis

Property	Details
Description	This analysis shows the number of devices whose warranty would expire in the next 15 months.
Purpose	This analysis shows how many devices are going to expire in the next 15 months. Business users need to take appropriate measures, such as replacing those devices, prevent them from failures, etc, and ensure the devices are compliant.
Representation	<p>The bar graph shows the number of devices nearing their expiration dates. The X-axis represents the month. The Y-axis represents the count of devices with expiring warranty. Hover over the bars for respective values.</p> <p>The table shows the number of devices with expiring warranty in a particular month. It also displays the device type, manufacturer, and model for each of the device.</p>
Drill Down	<p>The graph drills down to the <b>Warranty Details</b> dashboard page for more specific details.</p> <p>The <b>Devices with Expiring Warranty</b> column link drills down to the <b>Warranty Details</b> dashboard page for more specific details.</p>
Source Object	Operational Device Fact
OBIEE Subject Area	ODM - Operational Device
Metrics	Devices Expiring

## Inspection History

The Inspection History dashboard page focuses on data related to periodic inspection history over time.

### Inspection History Trend

Property	Details
Description	<p>All services performed on devices, such as inspection service, maintenance service, etc, are captured in Oracle Utilities Operational Device Management as “service histories”.</p> <p>This analysis shows the trend in service history inspections for previous 15 months.</p> <p>Success Rate = (Number of Passed Inspections / Total Number of Inspections) * 100</p>
Purpose	This analysis helps the business users to understand the trend in the number of device inspections that are being carried out successfully. If there is a decline in the number of successful inspections, then it would indicate a need to take corrective action against a particular type of device or manufacturer.

Property	Details
Representation	<p>The bar graph shows the number of inspections recorded in each month, in the previous 15 months. It also shows the number of inspections that passed in a particular month. The X-axis represents the month. The Y-axis represents the service histories. Hover over the bars for specific values.</p> <p>The table shows the total inspections recorded in a month, for the previous 15 months. Also, it displays the inspections that passed, failed, and the success rate for each month.</p> <p>The <b>Month Year</b> column link and the X-axis broadcasts the month details to the <b>Top 10 Device Types with Highest Success Rates</b> and <b>Top 10 Manufacturers with Highest Success Rates</b> analyses on the same dashboard page.</p>
Drill Down	No drill down
Source Object	Service History Fact
OBIEE Subject Area	ODM - Service History
Metrics	Total Inspections, Success Rate

### Top 10 Device Types with Highest Success Rates

Property	Details
Description	This analysis shows the top 10 device types with the highest rate of successful inspections. The data is based on the month selected in the <b>Inspection History Trend</b> analysis.
Purpose	Business users can identify the best performing device types. They can recommend the utility company to utilize more of these types of devices to avoid any usage issues.
Representation	<p>The <b>Month Year</b> drop down filters the data for the success rates in the respective month.</p> <p>The table shows the total number of inspections carried out on the devices grouped by their device type, in the selected month. Also, it displays the number of inspections that passed, failed, and the success rate for each device type.</p> <p>Rank = Rank (Success Rate)</p>
Drill Down	No drill down
Source Object	Service History Fact
OBIEE Subject Area	ODM - Service History
Metrics	Total Inspections, Success Rate

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## Top 10 Manufacturers with Highest Success Rates

Property	Details
Description	This analysis shows the top 10 device types with highest rate of successful inspections. The data is based on the month selected in the <b>Inspection History Trend</b> analysis.
Purpose	Business users can identify the manufacturers whose devices are performing well. They can recommend the utility company to utilize more of these types of devices to avoid any usage issues.
Representation	<p>The <b>Month Year</b> drop down filters the data for the success rates in the respective month.</p> <p>The table shows the total number of inspections carried out on the devices grouped by their manufacturer, in the selected month. Also, it displays the number of inspections that passed, failed, and the success rate for each manufacturer.</p> <p>Rank = Rank (Success Rate)</p>
Drill Down	No drill down
Source Object	Service History Fact
OBIEE Subject Area	ODM - Service History
Metrics	Total Inspections, Success Rate

## Firmware

The Firmware dashboard page provides an overview about the firmware installed in various devices.

### Firmware Distribution

Property	Details
Description	<p>This analysis provides an insight into the geographic distribution of various types of firmware versions installed across devices. It has both spatial and non-spatial representation of the data.</p> <p>The data is shown till the last sync date (the date when the data was last loaded into the system).</p>
Purpose	Business users can view the device volumes for each firmware version across various geographic areas. In situations where a particular area has a lot of devices with an older firmware version, necessary steps can be taken to ensure that the latest firmware version is installed.

Property	Details
Representation	<p>The <b>View By</b> drop down slices the data by different types of firm-ware.</p> <p>The color-coded region on the map shows the postal code where the selected firmware type is installed. The postal code shows the master-detail implementation in the pie chart and table.</p> <p>The pie chart shows the distribution of various firmware versions as a percentage of total number of devices. The data is shown for the postal code selected on the map and for the selected firmware type.</p> <p>The <b>Postal Code</b> drop down lists the various postal codes on the map.</p> <p>The table shows the distribution of various firmware versions and the number of devices using the firmware version The data is shown for the postal code selected on the map and the selected firmware type.</p>
Drill Down	No drill down
Source Object	Operational Device Fact
OBIEE Subject Area	ODM - Operational Device
Metrics	Devices

## Warranty Details

The Warranty Details dashboard page provides detailed information about devices and their warranties.

## Warranty Details

Property	Details
Description	This analysis shows a list of first 100 devices with expiring warranties sorted in the ascending order of their expiration dates. The data is displayed for the selected month.
Purpose	The devices at the top of the list are the ones nearing their expiration dates. Business users can identify such devices and take necessary measures.
Representation	The table displays the type of device, its manufacturer, model number, location, its parent location hierarchy, and expiration date for each of the devices.
Drill Down	The <b>Device</b> column link drills back to the <b>Asset</b> page and the <b>Location</b> column link drills back to the <b>Location</b> page in the Oracle Utilities Operational Device Management system.
Source Object	Operational Device Fact
OBIEE Subject Area	ODM - Operational Device
Metrics	No measures

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## Installed Devices

The Installed Devices dashboard helps users analyze key metrics related to the devices installed on the field, like the average installed age of the devices and the replacement capability for the installed devices. Users can also drill back to the source Oracle Utilities Operational Device Management system for further details about a specific device or location.

To access this dashboard:

1. Go to the **Home** page.
2. Select **Dashboards > Operational Device Analytics > Installed Devices**.

The dashboard provides the following dashboard pages. The data for current calendar year and month is displayed by default. You may modify the criteria per requirement.

- **Overview**
- **Installed Age**
- **Installed Details**

### Overview

The Overview dashboard page focuses on the device states at any given point in time.

### Installed vs Available

Property	Details
Description	<p>A device is “available” if it's disposition is “in-store”, indicating that the device is available to be installed.</p> <p>This analysis shows the 15-month trend of the device counts that are installed and the devices that are available. It indicates the replacement capability of the utility.</p>
Purpose	<p>Business users can analyze the trend of their installed devices as against the device available in-store. This will show the utility's capacity to replace any faulty device installed on the field. This would be a key factor in improving customer satisfaction and also the ability the accurately track usage.</p> <p>For example: If 10 devices installed at various customer locations become dysfunctional, there should be at least 10 devices available in the storeroom to replace them. It is not a good sign if the replacement capacity is less.</p>
Representation	<p>The bar graph shows the trend in available devices and installed devices. The X-axis represents the months. The Y-axis represents the device count. Hover over the bars for specific values.</p> <p>The table shows the installed and available devices in each month. It also shows the replacement capability per installed device, which is the capacity to replace installed devices in case of repair.</p> <p>Replacement Capability per Installed Device = Available Devices / Installed Devices</p> <p><b>Note:</b> If the number of installed devices is zero, then replacement capability per installed device is same as the number of available devices.</p>

Property	Details
Drill Down	No drill down
Source Object	Operational Device Snapshot Fact
OBIEE Subject Area	ODM - Operational Device Snapshot
Metrics	Installed Devices, Available Devices, % Installed

## Installed Age

The Installed Age dashboard page provides a snapshot of the devices based on the installed age.

### Devices by Installed Age

Property	Details
Description	<p>“Installed age” indicates the duration a device has been installed on the field.</p> <p>This analysis shows the number of devices sliced by the various installed age buckets. The data is shown for the selected month.</p>
Purpose	<p>This analysis helps customers to get an insight into the installed ages of devices of various device types. It provides an indication of how long the devices have been installed on the field.</p> <p>The information is also shown model wise. It helps to decide if the older devices that are installed for very long duration should be replaced with newer ones.</p>
Representation	<p>The bar graph shows various age buckets and the installed devices count for each of the buckets. The X-axis represents the installed age. The Y-axis represents the device count. Hover over the bars for respective values.</p> <p>The <b>Installed Age</b> drop down slices the data by various age buckets, such as 0-30 days, 31-60 days, 61-89 days, and &gt;90 days.</p> <p>The table displays the number of installed devices and the average installed age (in days) for the selected month. It also shows the model and manufacturer details for each of the device.</p>
Drill Down	The <b>Installed Devices</b> column link drills down to the <b>Installed Details</b> dashboard page for more specific details.
Source Object	Operational Device Snapshot Fact
OBIEE Subject Area	ODM - Operational Device Snapshot
Metrics	Installed Devices, Average Installed Age (In Days)

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## Installed Details

The Installed Details dashboard page provides detailed information about devices and their installed ages.

### Installed Device Details

Property	Details
Description	This analysis shows a list of top 100 devices sorted by their installed ages. The data is displayed for the selected month.
Purpose	Business users can analyze the top 100 best performing devices and determine the device types, manufacturers, and models producing better devices with maximum installed ages.
Representation	The table displays the type of device, its manufacturer, model number, address, and installed age (in days) for each of the devices. It also shows the rank for each device.
Drill Down	The <b>Device</b> column link drills back to the <b>Asset</b> page in the Oracle Utilities Operational Device Management system. The <b>Address</b> column link drills back to the <b>Location</b> page in the Oracle Utilities Operational Device Management system.
Source Object	Operational Device Snapshot Fact
OBIEE Subject Area	ODM - Operational Device Snapshot
Metrics	Installed Age (In Days)

## Repair and Testing

The Repair and Testing dashboard helps users to analyze key metrics related to the acceptance and the failure of devices. The analyses included in this dashboard help users to understand the trend in the rejection of devices and the top device types and manufacturers with high device rejections. The analyses also provide insight into the average duration before failure and the device repair time trends.

To access this dashboard:

1. Go to the **Home** page.
2. Select **Dashboards > Operational Device Analytics > Repair and Testing**.

The dashboard provides the following dashboard pages. The data for current calendar year and month is displayed by default. You may modify the criteria per requirement.

- **Acceptance Testing**
- **Device Failure**
- **Repair**

### Acceptance Testing

All devices once received by the utility will undergo sampling-based testing for their acceptance. These “in-receipt” devices are then moved to the appropriate storerooms. The Acceptance Testing dashboard page focuses on these details.



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## Rejection Volume

Property	Details
Description	<p>A device is rejected when it fails acceptance tests.</p> <p>This analysis shows the trend in devices that failed the tests (rejected) in each month, for previous 15 months.</p>
Purpose	<p>Rejection of more devices would mean that another set of devices will have to be received from the respective manufacturers, demanding additional time of efforts. Business users can analyze the trend in device rejections and suggest possible measures to prevent them.</p>
Representation	<p>The bar graph shows the number of devices rejected in each month, for previous 15 months. The X-axis represents the month. The Y-axis represents the number of devices that got rejected. Hover over the bars for specific values.</p> <p>The table shows the total number of devices that are available in the utility as of that month and the number of devices that were rejected. The data is displayed for previous 15 months.</p>
Drill Down	No drill down
Source Object	Asset Location Fact
OBIEE Subject Area	ODM - Asset Location
Metrics	Total Devices

## Top 10 Device Types with Highest Rejection Volume

Property	Details
Description	<p>A device is rejected when its fails the acceptance test conducted when the device is first received by the utility.</p> <p>This analysis shows the top 10 device types where rejections are the most in the selected month.</p>
Purpose	<p>Business users can analyze the reason for the high rejections among these device types and then take appropriate measures to reduce them.</p>
Representation	<p>The bar graph shows the number of devices against each device type that failed the acceptance testing in the selected month. The X-axis represents the device type. The Y-axis represents the device count. Hover over the bars for specific values.</p> <p>The table shows the total number of devices and the devices that got rejected against each device type. The data is shown for the selected month. The device types are ranked based on the highest rejections.</p>
Drill Down	The <b>Devices Rejected</b> column link drills down to the <b>Device Failure</b> dashboard page for more specific details.
Source Object	Asset Location Fact

Property	Details
OBIEE Subject Area	ODM - Asset Location
Metrics	Devices Rejected, Total Devices

### Top 10 Manufacturers with Highest Rejection Volume

Property	Details
Description	<p>A device is rejected when it fails the acceptance test conducted when the device is first received by the utility.</p> <p>This analysis shows the top 10 manufacturers of the devices that are rejected the most in the selected month.</p>
Purpose	Business users can analyze the reason for the high rejections among these manufacturer's devices and then take appropriate measures to reduce them.
Representation	<p>The bar graph shows the number of devices against each manufacturer that failed the acceptance testing in the selected month. The X-axis represents the manufacturer. The Y-axis represents the device count. Hover over the bars for specific values.</p> <p>The table shows the total number of devices and the devices that got rejected against each manufacturer. The data is shown for the selected month. The manufacturers are ranked based on the highest device rejections.</p>
Drill Down	The <b>Devices Rejected</b> column link drills down to the <b>Device Failure</b> dashboard page for more specific details.
Source Object	Asset Location Fact
OBIEE Subject Area	ODM - Asset Location
Metrics	Devices Rejected, Total Devices

### Device Failure

The Device Failure dashboard page provides a snapshot of the devices that failed during its life cycle.

### Average Months Before Failure

Property	Details
Description	A device can fail at several points during its life cycle. This analysis shows the average number of months that the devices were operational before it failed. The data is shown for the previous 15 months.
Purpose	Business users can determine how long a device generally stays operational before failure.

Property	Details
Representation	<p>The bar graph shows the average months before failure of a device for a particular month. The X-axis represents the calendar month. The Y-axis represents the number of months. Hover over the bars for specific values.</p> <p>The X-axis label broadcasts the data to the <b>Top 10 Models with Lowest Average Months Before Failure</b> analysis on the same page.</p>
Drill Down	No drill down
Source Object	Asset Location Fact
OBIEE Subject Area	ODM - Asset Location
Metrics	Months Before Failure, Quantity, Average Months Before Failure

### Top 10 Models with Lowest Average Months Before Failure

Property	Details
Description	<p>This analysis indicates the average number of months a device was operational before it failed. It lists the top 10 models of those devices that have lowest average months before failure.</p> <p>Average Months Before Failure = Months Before Failure / Count</p> <p>The data is based on the month selected in the <b>Average Months Before Failure</b> analysis.</p>
Purpose	Business users can determine the worst performing device models, considering how short these devices generally stay operational before failure.
Representation	<p>The <b>Month Year</b> drop down filters the data for the respective month.</p> <p>The table shows the number of failures and average months before failure for the available device types. It also displays the manufacturer and model details for each of the device types.</p>
Drill Down	No drill down
Source Object	Asset Location Fact
OBIEE Subject Area	ODM - Asset Location
Metrics	Avg Months Before Failure, Number of Failures

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## Repair

The Repair dashboard page focuses on the devices that are in repair state.

### Average Time in Repair

Property	Details
Description	<p>This analysis shows the trend in average number of days a device was being repaired. This data is shown for the previous 15 months.</p> <p>Average Time in Repair = Prior Disposition Duration / Number of Devices (where Prior Disposition = In-Repair)</p>
Purpose	<p>Business users can analyze the reason for devices to be in repair state for long. They can propose solutions to reduce the average repair time.</p>
Representation	<p>The bar graph shows the average number of days a device was in repair state in the previous 15 months. The data is displayed on a monthly basis. The X-axis represents the month. The Y-axis represents the number of days. Hover over the bars for specific values.</p>
Drill Down	No drill down
Source Object	Asset Location Fact
OBIEE Subject Area	ODM - Asset Location
Metrics	Average Time in Repair

### Repair Backlog Trend

Property	Details
Description	<p>This analysis shows backlog trend of the devices in repair state. The data is shown for previous 15 months.</p>
Purpose	<p>Business users can compare the current month's details with those of the previous 15 months. If there is a consistent increase in the number of devices in repair, month on month, it might be an alarming situation to the utility.</p>
Representation	<p>The bar graph shows the month-on-month comparison of the devices in repair. The X-axis represents the month and year. The Y-axis represents the number of devices. Hover over the bars for specific values.</p>
Drill Down	No drill down
Source Object	Operational Device Snapshot Fact
OBIEE Subject Area	ODM - Operational Device Snapshot
Metrics	Repair Device Count

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# Storeroom Inventory

The Storeroom Inventory dashboard helps users to analyze the key metrics related to the devices available in storerooms. The analyses included in this dashboard help users to understand the trends about the inventory stocks, device receipt volume, and the device usage volume. The analyses also provide a detailed insight into the aging of inventory by looking into their age distribution, 15 month trend, and the top storerooms with aging inventory. Users can drill back to the source Oracle Utilities Operational Device Management system for further details about a specific device or location.

To access this dashboard:

1. Go to the **Home** page.
2. Select **Dashboards > Operational Device Analytics > Storeroom Inventory**.

The dashboard provides the following dashboard pages. The data for current calendar year and month is displayed by default. You may modify the criteria per requirement.

- **Overview**
- **Inventory Age**
- **Storeroom Details**

## Overview

The Overview dashboard page provides a snapshot of the inventory status.

## Devices in Storage

Property	Details
Description	This analysis shows the monthly trend in the number of devices available in storerooms. The data is shown for the last 15 months.
Purpose	If an installed device becomes defective (repaired or retired) it needs to be replaced with another device available in the storerooms. Business users can analyze the storeroom inventory and record the availability of spare devices which can replace the installed devices in case of defects.
Representation	<p>The bar graph shows the number of devices available in the storeroom. The data is shown per month, for previous 15 months. The X-axis represents the month. The Y-axis represents the number of devices in store. Hover over the bars for specific values.</p> <p>The table displays the number of devices in the storeroom, the devices installed, and the replacement capability per installed device. The data is displayed for the previous 15 months.</p> <p>Replacement Capability per Installed Device = <math>\frac{\text{In Store Devices}}{\text{Installed Devices}}</math></p> <p><b>Note:</b> If the number of installed devices is zero, then replacement capability per installed device is same as the number of in store devices.</p>
Drill Down	No drill down
Source Object	Operational Device Snapshot Fact

Property	Details
OBIEE Subject Area	ODM - Operational Device Snapshot
Metrics	Devices In Storage, Devices Installed, Replacement Capability

### Receipt Volume

Property	Details
Description	This analysis shows the monthly trend of number of devices received by the utility. These devices may or maybe not moved into storerooms based on the results of the acceptance tests that are done. The data is displayed for previous 15 months.
Purpose	Business users can analyze how many devices were received in shipment and will be subjected for acceptance testing.
Representation	The bar graph shows the number of devices received in a shipment per month, in the previous 15 months. The X-axis represents the year and month. The Y-axis represents the number of devices. Hover over the bars for specific values.
Drill Down	No drill down
Source Object	Asset Location Fact
OBIEE Subject Area	ODM - Asset Location
Metrics	Number of Devices Received

### Usage Volume

Property	Details
Description	This analysis shows the quantity of devices that are moved from the storerooms and installed in the field. The data is displayed for each month, for previous 15 months.
Purpose	Business users can analyze trends in the quantity of devices that are being installed on the field.
Representation	The bar graph shows the number of devices in use (installed). The X-axis represents the year and month. The Y-axis represents the number of devices. Hover over the bars for specific values.
Drill Down	No drill down
Source Object	Asset Location Fact
OBIEE Subject Area	ODM - Asset Location
Metrics	Number of Devices Installed

## Top 10 Highest Inventories

Property	Details
Description	This analysis shows a list of top 10 device models with high inventory stock. The models are ranked based on the replacement capability. The data is displayed for the selected month.
Purpose	Business users can identify the device models that are ample in the inventory. They can focus on maintaining inventory for other models.
Representation	<p>The table displays the model and manufacturer details of the devices available in store and installed at customer location. It also shows the replacement capability if an installed device becomes defective. The models are ranked based on the replacement capability.</p> <p>Replacement Capability Per Installed Device = In Store / Installed  <b>Note:</b> If the number of installed devices is zero, then replacement capability per installed device is same as the in store devices.</p> <p>Rank = Rank (Replacement Capability Per Installed Device)</p>
Drill Down	The <b>In Stores</b> column link drills down to the <b>Inventory Age</b> and <b>Storeroom Details</b> dashboard pages for respective details. The <b>Installed</b> column link drills down to the <b>Installed Age</b> and <b>Installed Details</b> dashboard pages.
Source Object	Operational Device Snapshot Fact
OBIEE Subject Area	ODM - Operational Device Snapshot
Metrics	Installed, In Store, Replacement Capability Per Installed Device

## Top 10 Lowest Inventories

Property	Details
Description	This analysis shows a list of top 10 device models with low inventory stock. The models are ranked based on the replacement capability. The data is displayed for the selected month.
Purpose	Business users can identify the device models that are very low on stock. They can focus on maintaining inventory for these models.
Representation	<p>The table displays the model and manufacturer details of the devices available in store and installed at customer location. It also shows the replacement capability if an installed device becomes defective. The models are ranked based on the replacement capability.</p> <p>Replacement Capability Per Installed Device = In Store / Installed  <b>Note:</b> If the number of installed devices is zero, then replacement capability per installed device is same as the number of in store devices.</p> <p>Rank = Rank(1/Replacement Capability Per Installed Device)</p>

Property	Details
Drill Down	The <b>In Stores</b> column link drills down to the <b>Inventory Age</b> and <b>Storeroom Details</b> dashboard pages for respective details. The <b>Installed</b> column link drills down to the <b>Installed Age</b> and <b>Installed Details</b> dashboard pages for respective details.
Source Object	Operational Device Snapshot Fact
OBIEE Subject Area	ODM - Operational Device Snapshot
Metrics	Installed, In Store, Replacement Capability Per Installed Device

## Inventory Age

The Inventory Age dashboard page focuses on the inventory age of the devices.

### Inventory by Age Monthly Trend

Property	Details
Description	<p>The “inventory by age” indicates how long the devices were kept in storeroom.</p> <p>This analysis shows a monthly trend of inventory for previous 15 months. For a given month it shows the inventory stock classified by the various in store age buckets.</p>
Purpose	Business users can analyze the trend in which devices are moving in and out of inventory. More inventories will mean more devices are available for installing at new locations or for replacing the defective installed devices. And, too much aging inventory would mean maintenance costs can possibly increase.
Representation	<p>The stacked bar graph shows the number of devices available in inventory. They are categorized by various in store age buckets (such as 0-30, 31-60, 61-90, &gt;90 days). X-axis represents the month and year. Y-axis represents the devices in store. Hover over the bars for values.</p> <p>The X-axis label broadcasts the data to the <b>Inventory by Age</b> analysis on the same page.</p>
Drill Down	No drill down
Source Object	Operational Device Snapshot Fact
OBIEE Subject Area	ODM - Operational Device Snapshot
Metrics	In Store device count sliced by in store age buckets



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## Inventory by Age

Property	Details
Description	This analysis shows the inventory distribution sliced by various age buckets in the selected month. The data is based on the month selected in the <b>Inventory by Age Monthly Trend</b> analysis.
Purpose	In situations where devices are retained for longer in the storeroom, business users can analyze the reasons for their retention. Aging inventory would mean maintenance costs can possibly increase.
Representation	The pie chart shows the distribution of devices in store as percentage of the overall total sliced across various age buckets.
Drill Down	No drill down
Source Object	Operational Device Snapshot Fact
OBIEE Subject Area	ODM - Operational Device Snapshot
Metrics	In store device count sliced by in store age buckets

## Top 10 Storerooms by Inventory

Property	Details
Description	This analysis shows the top 10 storerooms with maximum inventory stock. It also shows the device counts sliced by the in store age buckets in those storerooms. The data is displayed for the selected month.
Purpose	Business users can identify the storerooms with maximum unutilized devices in the respective inventory age buckets. They can propose business suggestions on moving the devices from these storerooms to those with fewer devices.
Representation	<p>The bar graph shows the number of devices in a storeroom in various age buckets. The X-axis represents the rank of the storeroom. The Y-axis represents the device count across storerooms. Hover over the bars for specific values.</p> <p>The table shows the total number of devices in a storeroom for each of the in store age bucket. The storerooms are ranked based on the number of devices in store.</p>
Drill Down	The <i>age bucket</i> column link drills down to the <b>Storeroom Details</b> dashboard page for specific device details.
Source Object	Operational Device Snapshot Fact
OBIEE Subject Area	ODM - Operational Device Snapshot
Metrics	Total device count in a storeroom, In store device count in each age bucket

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## Storeroom Details

The Storeroom Details dashboard page provides detailed information about devices in storerooms and their inventory ages.

### Storeroom Details

Property	Details
Description	This analysis shows a list of top 100 devices sorted by their in store ages. The data is displayed for the selected month.
Purpose	The devices at the top of the list are the ones with highest in store age in the specific storeroom. Business users can analyze the reason for retaining those devices in the storeroom for such longer periods.
Representation	The table displays the device type, manufacturer, and model details of the devices in each storeroom. It also shows the inventory age (in days) of each device. It shows the rank for each device based on the inventory age.
Drill Down	The <b>Device</b> column link drills back to the <b>Asset</b> page in the Oracle Utilities Operational Device Management system. The <b>Address</b> column link drills back to the <b>Location</b> page in the Oracle Utilities Operational Device Management system.
Source Object	Operational Device Snapshot Fact
OBIEE Subject Area	ODM - Operational Device Snapshot
Metrics	Inventory Age (In Days)