

# **Oracle Utilities Analytics Dashboards for Mobile Workforce Analytics**

Metric Reference Guide

Release 2.5.0.0.2

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# Preface

This document describes the Mobile Workforce Analytics metrics (such as dashboards, analyses, and subject areas) available in Oracle Utilities Analytics Dashboards. These metrics are used in 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 Mobile Workforce Management and Oracle Real-Time Scheduler.

## Related Documents

For more information, see the following documents:

- *Oracle Utilities Analytics for Oracle Utilities Extractors and Schema and Oracle Utilities Analytics Dashboards Installation Guide*
- *Oracle Utilities Analytics for Oracle Utilities Extractors and Schema and Oracle Utilities Analytics Dashboards Quick Install Guide*
- *Oracle Utilities Analytics for Oracle Utilities Extractors and Schema and Oracle Utilities Analytics Dashboards Release Notes*
- *Oracle Utilities Analytics for Oracle Utilities Extractors and Schema and Oracle Utilities Analytics Dashboards User's Guide*
- *Oracle Utilities Analytics for Oracle Utilities Extractors and Schema and Oracle Utilities Analytics Dashboards Administration Guide*

**See Also:**

- Oracle Utilities Mobile Workforce 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

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<b>Notation</b>	<b>Indicates</b>
<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 2.5.0.0.2, provides analysis of and data from Oracle Mobile Workforce Management/ Oracle Real-Time Scheduler 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 activities, emergency events, map data, and other geographical information.

Mobile Workforce Analytics includes metrics that help customers with a mobile workforce to monitor and measure the activities distribution, emergency response time, travel distance deviation, etc.

This chapter describes the Mobile Workforce Analytics' content in the following dashboards:

- **Overview**
- **Activities**
- **Appointments**
- **Emergencies**
- **Travel**
- **Crew**

**Note:** The Service Area and Crew Hierarchy values have to be configured in the Oracle Mobile Workforce Management/ Oracle Real-Time Scheduler application to view the data in Oracle Utilities Analytics Dashboards. For more information on how these hierarchies and various other dimensions are populated, see *Oracle Utilities Extractors and Schema for Oracle Utilities Mobile Workforce Management Data Mapping Guide*.

## Overview

The Overview dashboard gives a snapshot of various key performance indicators (KPIs) of the service organization. The dashboard provides you with a quick update on crew utilization, activity management, emergency and appointment response rate, and other details at various mobile worker hierarchy levels.

To access this dashboard:

1. Go to the **Home** page.
2. Select **Dashboards > Mobile Workforce Analytics > Overview**.

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

- **Overview - KPI**
- **Overview - Crew**
- **Overview - Activities**

## Overview - KPI

The Overview - KPI dashboard page provides you with a quick update on the status of how the service organization is doing overall on its key performance indicators.

### Utilization Rate

Property	Details
Description	This analysis shows the utilization rate (time spent working/total resource time) for the selected time period. The two views display data for month and year respectively.
Purpose	Business users can analyze the utilization rate which represents the wrench time of the service organization.
Representation	The gauge shows the percentage, using different colors to denote how the business users perceive the calculated result. The needle movement in the gauge towards yellow or red indicates a need to pay more attention on the productive/ non-productive time. Hover over the gauge for specific values. <b>Note:</b> The ranges for green, yellow, and red can be customized.
Drill Down	The gauge drills down to the <b>Performance</b> dashboard page for granular details.
Source Object	Crew Task Fact
OBIEE Subject Area	MWM - Crew Task
Metrics	Utilization Rate

### Activity Completion Rate

Property	Details
Description	This analysis shows the activity completion rate (activities completed / total scheduled activities) for the selected time period. The two views display data for month and year respectively.
Purpose	Business users can analyze the rate at which activities are completed by the mobile workers.



Property	Details
Representation	The gauge shows the percentage, using different colors to denote how the business users perceive the calculated result. The needle movement in the gauge towards yellow or red indicates a need to pay more attention on the crew performance in completing the activities. Hover over the gauge for specific values. <b>Note:</b> The ranges for green, yellow, and red can be customized.
Drill Down	The gauge drills down to the <b>Activities Distribution</b> dashboard page for more details.
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	Activity Completion Rate

### First Pass Completion Rate

Property	Details
Description	This analysis shows the first pass completion rate (percentage of activity completion in first attempt from total completed activities) for the selected time period. The views display the data for the month and year respectively.
Purpose	Business users can analyze the success rate of activity completion attempts.
Representation	The gauge shows the percentage, using different colors to denote how the business users perceive the calculated result. The needle movement in the gauge towards yellow or red indicates a need to pay more attention on the completion attempts. Hover over the gauge for specific values. <b>Note:</b> The ranges for green, yellow, and red can be customized.
Drill Down	The gauge drills down to the <b>Multi-Attempt Activities</b> dashboard page for more details.
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	First Pass Completion Rate

### On Time Appointments Rate

Property	Details
Description	This analysis shows the on time appointment rate (percentage of appointments that were kept on time) for the selected time period. The views display the data for the month and year respectively.

Property	Details
Purpose	Business users can analyze if the mobile workers met the meeting appointments as per the schedule.
Representation	The gauge shows the percentage, using different colors to denote how the business users perceive the calculated result. The needle movement in the gauge towards yellow or red indicates a need to pay more attention because the mobile workers have been missing appointment time. Hover over the gauge for specific values. <b>Note:</b> The ranges for green, yellow, and red can be customized.
Drill Down	The gauge drills down to the <b>Missed Appointments</b> dashboard page for more details.
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	On Time Appointments Rate

## Overview - Crew

The Overview - Crew dashboard page provides a bird's eye view of the service organization performance, punctuality, and effectiveness of travel distance estimation process.

### Non Productive Time

Property	Details
Description	This analysis shows the non-productive time as a percentage of total time for all mobile workers or crews. The data is shown for the previous three months.
Purpose	Business users can get insight into the usage of crew time and identify any major difference when compared to the previous months.
Representation	The bar graph shows the non-productive time for the previous three months. The X-axis represents the calendar month. The Y-axis represents the percentage of non-productive time. Hover over the bars for specific values.
Drill Down	Click the graph bars to drill down to the <b>Performance</b> dashboard page for more details
Source Object	Crew Task Fact
OBIEE Subject Area	MWM - Crew Task
Metrics	Percentage of Non-Productive Time

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## % On Time Shifts

Property	Details
Description	This analysis shows the percentage of shifts on time (shifts which do not have either late logon or early log off). The data is shown for the previous three months.
Purpose	Business users can get insight into how the shifts are maintained over the previous three months. They can compare the percentages of on-time shifts with that of the previous months.
Representation	The gauge shows the percentage, using different colors to denote how the business users perceive the calculated result. The colors yellow or red indicate a need to pay more attention on the shifts that have either late logon or early log off. Hover over the bar for specific values. <b>Note:</b> The ranges for green, yellow, and red can be customized.
Drill Down	The gauge drills down to the <b>Shift Timeliness</b> dashboard page for specific shift details.
Source Object	Completed Shift Fact
OBIEE Subject Area	MWM - Completed Shift
Metrics	Percentage of On-Time Shifts

## Overtime

Property	Details
Description	This analysis shows overtime as a percentage of regular hours, for the previous three months.
Purpose	Business users can get insight into how the shifts are maintained over the previous three months. They can compare the percentages of each month with that of the previous months.
Representation	The gauge shows the percentage, using different colors to denote how the business users perceive the calculated result. The needle movement in the gauge towards yellow or red indicates a need to pay more attention to the crew utilization and work assignment. Hover over the gauge for specific values. <b>Note:</b> The ranges for green, yellow, and red can be customized.
Drill Down	The gauge drills down to the <b>Crew Overtime</b> dashboard page for overtime details.
Source Object	Completed Shift Fact
OBIEE Subject Area	MWM - Completed Shift
Metrics	Overtime Percentage

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## Travel

Property	Details
Description	This analysis shows the estimated travel distance and actual travel distance for the previous three months.
Purpose	Business users can analyze the total miles that were estimated and the actual miles travelled by the crew. The analysis highlights mobile workers that are not following the recommended travel routes, and helps in planning the travel for other tasks and enhancing the estimation techniques.
Representation	The bar graph compares the estimated distance with that of the actual distance the mobile worker or crew traveled. The X-axis represents the month. The Y-axis represents the total distance. Hover over the bars for specific values.
Drill Down	The graph bars drill down to the <b>Travel Distance</b> dashboard page for specific travel distance details.
Source Object	Completed Shift Fact
OBIEE Subject Area	MWM - Completed Shift
Metrics	Estimated Total Travel Distance, Actual Total Travel Distance

## Overview - Activities

The Overview - Activities dashboard page provides a bird's eye view of the activities, appointments, emergencies, and their response times at various service area hierarchy levels.

### Activities Scheduled and Completed

Property	Details
Description	This analysis shows the number of activities scheduled and completed in the previous three months.
Purpose	Business users can analyze the rate of receiving and completing the activities in each month, and also the status of activities.
Representation	The bar graph compares the scheduled activities with that of the completing activities. The X-axis represents the month. The Y-axis represents the number of activities. Hover over the bars for specific values.
Drill Down	The graph bars drill down to the <b>Activities Distribution</b> dashboard page for specific details.
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	Number of Scheduled Activities, Number of Completed Activities

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## Emergencies - % of Total Activities

Property	Details
Description	This analysis shows the number of emergencies handled in a month. The data is shown for the previous three months.
Purpose	Business users can analyze the emergency count over the last three months and identify the rate at various levels of service area hierarchy. They can also identify the number of emergencies in a month.
Representation	The gauge shows the percentage, using different colors to denote how the business users perceive the calculated result. The colors yellow or red indicate a higher level of emergency activities, and need to pay more attention to the emergencies coming up during the shifts. Hover over the bar for specific values. <b>Note:</b> The ranges for green, yellow, and red can be customized.
Drill Down	The gauge drills down to the <b>Daily Emergencies</b> dashboard page for specific details.
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	Percentage of Emergency Activities

## Emergencies - Missed Response Time Target

Property	Details
Description	This analysis shows the percentage of emergencies that missed service level agreement (SLA) for a specific activity type. The data is shown for the previous three months.
Purpose	Business users can analyze why the emergencies missed the SLA. They can identify the reason and also compare the numbers with previous months.
Representation	The bar graph shows the emergencies that missed the target time. The X-axis represents the month. The Y-axis represents the percentage of missed emergencies. Hover over the bars for specific values.
Drill Down	The bar gauge drills down to the <b>Emergency Response Analysis</b> dashboard page for specific details.
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	Percentage of emergencies that missed SLA

---

## Average Appointment Close Rate

Property	Details
Description	This analysis shows the appointment close rate (percentage of total scheduled appointments which were closed) for the previous three months.
Purpose	Business users can analyze the rate at which scheduled appointments were met and closed. Higher percentages will mean more and more appointments are met on time.
Representation	The gauge shows the percentage, using different colors to denote how the business users perceive the calculated result. The needle movement in the gauge towards yellow or red indicates that appointments are missed, and need to pay more attention on the crew appointment management. Hover over the gauge for specific values. <b>Note:</b> The ranges for green, yellow, and red can be customized.
Drill Down	The gauge drills down to the <b>Appointments</b> dashboard page for specific details.
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	Average Appointment Close Rate

## Activities

The Activities dashboard provides key performance indicators (KPIs) for the service organization activities. It provides statistics on various issues to help the organization monitor the activity completion progress.

To access this dashboard:

1. Go to the **Home** page.
2. Select **Dashboards > Mobile Workforce Analytics > Activities**.

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

- **Activities Distribution**
- **Multi-Attempt Activities**
- **Deviations**
- **Canceled and Incomplete**
- **Activities Map**
- **Activity Details**

## Activities Distribution

The Activities Distribution dashboard page provides a snapshot of the activity distribution based on the selection criteria. Activity distribution can be monitored for each service category and at various service area hierarchy levels.

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## Activities Scheduled vs Completed

Property	Details
Description	This analysis displays the count of activities (both scheduled and completed) for the previous 15 months.
Purpose	Scheduled activities in a month are the number of activities scheduled to be completed in that month, and completed activities are the number of activities completed in that month. Using this data, business users can analyze the work load balance.
Representation	<p>The bar graph shows the comparison between the scheduled and completed activities in each month, for the previous 15 months. The X-axis represents the month and year. The Y-axis represents the number of activities. Hover over the bars for specific values.</p> <p>The table shows the number of scheduled and completed activities, along with the percentage of completion per each month.</p>
Drill Down	The <b>Month</b> column link drills down to the <b>Activity Details</b> dashboard page for specific details in that month.
Source Object	Field Activities Fact
OBIEE Subject Area	MWM - Field Activities
Metrics	Scheduled and completed activity counts

## Completed Activities Distribution

Property	Details
Description	This analysis shows the percentage of completed activities by service category for the selected month.
Purpose	Business users can analyze the category in which most of the activities were completed, and that with minimum completions to take necessary actions.
Representation	<p>The pie chart shows the distribution of completed activities categorized under the selected service category.</p> <p>The <b>Service Category</b> drop down in the table slices the data by various service categories.</p> <p>The table displays a list of completed activities by the selected service category and activity types within the service area hierarchy.</p>
Drill Down	The <b>Number of Activities</b> column link drills down to the <b>Activity Details</b> dashboard page for specific details in that month.
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	Number of Activities, Percentage of Total Completed Activities

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## Multi-Attempt Activities

The Multi-Attempt dashboard page focuses on the activities that were completed in more than one attempt (the activity was either 'postponed' or 'suspended').

### Multi-Attempt Activities

Property	Details
Description	This analysis shows the percent of activities in each service category that were completed in more than one attempt. The data is shown for the selected month.
Purpose	Business users can analyze the service category in which most of the activities were completed with multiple attempts and which has higher number of attempts, and evaluate the reasons for the same.
Representation	<p>The pie chart shows the distribution of multi-attempt activities across various service categories.</p> <p>The <b>Service Category</b> drop down filters the data per the selected service category.</p> <p>The table displays a list of completed activities and the number of attempts for each activity completed. The data is categorized by service category (selected in the pie chart) and activity types within the service area hierarchy.</p>
Drill Down	<p>The pie chart segments show the master-detail interaction with the table in this analysis. Clicking on a specific segment refreshes the table to show the data for the specific Service Category.</p> <p>The <b>Number of Activities</b> column link drills down to the <b>Activity Details</b> dashboard page for granular details.</p>
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	Number of Activities, Number of Attempts

## Deviations

The Deviations dashboard page provides a snapshot of activity work duration across various duration deviation buckets and service categories. The distribution can also be viewed at different service area hierarchy levels and can be useful in analyzing how well the company is estimating work durations.

### Duration Deviation Distribution

Property	Details
Description	This analysis shows the percentage of completed activities across various work duration deviation buckets per month. Each activity is associated with a duration deviation bucket.



Property	Details
Purpose	Business users can analyze the whether or not the mobile workers are completing the activities in the allocated time frame.
Representation	The pie chart shows the distribution of work duration deviations in the selected month. It shows master-detail implementation in the <b>Duration Deviation by Service Category</b> analysis on the same dashboard page.
Drill Down	No drill down
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	Count of completed activities by work duration deviation

### Duration Deviation Trend

Property	Details
Description	Deviation is the difference between the estimated duration and actual duration. This analysis shows the number of activities per month per work duration deviation bucket, for the previous 15 months.
Purpose	Business users can analyze the trend at which activities are completed within their estimated work durations.
Representation	The stacked bar graph shows the number of activities against each duration deviation bucket. The X-axis represents the month and year. The Y-axis represents the number of activities. Hover over the bars for specific values.
Drill Down	No drill down
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	Count of Completed Activities by Work Duration Deviation

### Duration Deviation by Service Category

Description	<p>This analysis shows the percentage of completed activities' duration deviations across various service categories. The data is shown for the selected month.</p> <p><b>Note:</b> The data is broadcast from the deviation duration bucket selected in the <b>Duration Deviation Distribution</b> analysis on the same dashboard page.</p>
Purpose	Business users can analyze the trend at which types of activities are deviating from their duration estimates.

Representation	<p>The first <b>Work Duration Deviation</b> drop down filters the activities by selected duration deviation bucket and this selection is applicable only for the pie chart. The selection is applicable only for the pie chart.</p> <p>The pie chart shows the distribution of activities in various service categories for the selected work duration deviation bucket.</p> <p>The second <b>Work Duration Deviation</b> filters the activities by selected duration deviation bucket and this selection is applicable only for the table.</p> <p>The <b>Service Category</b> drop down filters the data by the selected service categories in the hierarchy.</p> <p>The table displays a list of completed activities filtered by the selected service category within each activity type.</p>
Drill Down	The <b>Number of Activities</b> column link drills down to the <b>Activity Details</b> dashboard page for specific details.
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	Number of Activities

## Canceled and Incomplete

The Canceled and Incomplete dashboard page provides a snapshot of how many activities are being canceled or made incomplete, and the reasons for the same. The analyses can be viewed at difference service area hierarchy levels.

### Canceled Activities Percentage

Description	This analysis shows the percentage of activities that were canceled in the selected month.
Purpose	Business users can analyze the number of canceled activities.
Representation	<p>The gauge shows the percentage of canceled activities in the selected month, using different colors to denote how the business users perceive the calculated result. The needle movement in the gauge towards yellow or red indicates a need to pay more attention to cancelations.</p> <p><b>Note:</b> The ranges for green, yellow, and red can be customized.</p>
Drill Down	No drill down
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	% of Activities Canceled

---

## Canceled Activities by Reason

Description	This analysis shows the distribution of activities that were canceled for various reasons. The data is shown for the selected month.
Purpose	Business users can analyze the scenarios for activities being canceled for a specific reason.
Representation	The pie chart shows the percentage of cancelled activities per reason. The top 5 reasons are shown in separate segments and the rest are combined into one segment.
Drill Down	No drill down
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	% of activities canceled against each reason

## Incomplete Activities Percentage

Description	This analysis shows the percentage of activities that were not completed and marked incomplete for various reasons. The data is shown for the selected month.
Purpose	Business users can analyze and identify the reasons for activities being incomplete in the scheduled time.
Representation	The gauge shows the percentage of incomplete activities in the selected month, using different colors to denote how the business users perceive the calculated result. The needle movement in the gauge towards yellow or red indicates a need to pay more attention to incomplete activities. <b>Note:</b> The ranges for green, yellow, and red can be customized.
Drill Down	No drill down
Source Object	Crew Task Fact
OBIEE Subject Area	MWM - Crew Task
Metrics	% of Incomplete Activities

## Incomplete Activities by Reason

Description	This analysis shows the distribution of incomplete activities against reason. The data is shown for the selected month.
Purpose	Business users can analyze the scenarios for activities being incomplete in the assigned time line.
Representation	The pie chart shows the percentage of incomplete activities per each incomplete reason bucket. The top 5 reasons are shown in separate segments and the rest are combined into one segment.
Drill Down	No drill down

Source Object	Crew Task Fact
OBIEE Subject Area	MWM - Crew Task
Metrics	% of Incomplete Activities

## Activities Map

The Activities Map dashboard page provides a spatial representation of completed activities and their distribution as per work duration deviation buckets. In addition, for each postal code, a mini pie chart displays the work duration deviations of the activities in that postal code.

### Activities

Description	This analysis provides a geographical view to quickly identify the count of activities in a specific region, and the work duration deviations for those activities. The data is shown for the selected month.
Purpose	Using this map view, business users can view activity volumes in postal codes and their work duration deviations.
Representation	<p>The color-coded region on the map shows the postal code of that geographical region and the number of completed activities per month in that postal code. The postal codes are colored based on the number of activities, which can be configured by the user in the legend.</p> <p>The map also shows pie charts, one per postal code. Each pie chart displays the number of activities in the respective work duration buckets. The work duration link drills down to show lower level details.</p> <p>The table shows the number of activities against each activity type that are categorized under each service category. The data is shown per postal code.</p>
Drill Down	<p>The <b>Postal Code</b> link broadcasts the region details and drills down to the <b>Multi-Attempt Activities, Deviations, and Canceled and Incomplete</b> dashboard pages for granular details.</p> <p>The <b>Number of Activities</b> column link drills down to the <b>Activity Details</b> dashboard page for more details.</p>
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	Activities Count

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## Activity Details

The Activity Details dashboard page displays the details of activities, such as activity type, mobile worker or crew that worked on the activity, number of attempts, work duration deviation, and more.

### Activity Details

Description	This analysis shows a list of activities against each activity type grouped under respective service category and service area. For each activity, the mobile worker or crew that was assigned that activity, the work duration deviation, the number of attempts, and the status are also shown. The data is shown at the day level of the selected month.
Purpose	Business users can use this detail-level analysis to navigate back to the source Oracle Utilities Mobile Workforce Management/ Oracle Real-Time Scheduler system and view specific details pertaining to an activity on the <b>MWM Activity</b> page.
Representation	The table displays the details of activities, such as activity type, mobile worker or crew, number of attempts, work duration deviation, and status. It also shows the service category and service area.
Drill Down	The <b>Activity</b> column link drills back to the <b>Activity</b> page in the Oracle Utilities Mobile Workforce Management system for more details about the selected activity.
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	Number of attempts

## Appointments

The Appointments dashboard provides key performance indicators (KPIs) for the activities scheduled as appointments. The dashboard provides a snapshot of number of appointments scheduled, closed, and missed. These metrics help in identifying issues with meeting appointment times.

To access this dashboard:

1. Go to the **Home** page.
2. Select **Dashboards > Mobile Workforce Analytics > Appointments**.

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

- **Appointments**
- **Missed Appointments**
- **Appointments Map**
- **Appointment Details**

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## Appointments

The Appointments dashboard page provides a monthly analysis on the appointments scheduled and closed.

### Appointments Scheduled and Closed

Description	This analysis displays the number of appointments scheduled and closed in each month, for the previous months.
Purpose	Business users can view their levels of appointments.
Representation	<p>The bar graph shows the scheduled appointments in a month and those that were closed in that month. The X-axis represents the month and year. The Y-axis represents the number of appointments. The line on the graph shows the 15-month average of the scheduled appointments closed in a month. Hover over the bars for specific details.</p> <p><b>Note:</b> If the data available is less than that of 15 months, the total number is still divided by 15.</p> <p>The table shows the number of appointments scheduled and closed in each month, and also the percentage of appointments closed in the respective month.</p>
Drill Down	The <b>Month</b> column link drills down to the <b>Appointment Details</b> dashboard page for granular details.
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	Number of Appointments

## Missed Appointments

The Missed Appointments dashboard page provides a snapshot of appointments missed due to various reasons.

### Missed Appointments

Description	This analysis shows the number of missed appointments in each lateness category. The data is shown for each month, for the previous 15 months.
Purpose	Business users can analyze the missed appointments in each lateness bucket and identify the reasons behind missing them.
Representation	<p>Use the slider to select the lateness category for which to view the details. The lateness categories can be customized.</p> <p>The bar graph shows the number of appointments missed in each month. The X-axis represents the month and year. The Y-axis represents the number of appointments missed. Hover over the bars for specific details.</p>
Drill Down	The graph bars drill down to the <b>Appointment Details</b> dashboard page for granular details.

Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	Missed Appointments

### Missed Appointments by Activity Type

Description	This analysis shows the distribution of missed appointments by activity type. The data is shown for the selected month.
Purpose	Business users can identify the reasons behind an appointment being missed.
Representation	The pie chart shows the distribution of missed appoints categorized under each activity type.
Drill Down	No drill down
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	Number of Appointments Missed

### Crews with Most Missed Appointments

Description	This analysis shows the mobile workers or crews with the highest number of missed appointments. The data is shown for the selected month.
Purpose	Business users can identify the mobile workers or crews that continuously miss appointments.
Representation	The table shows the total number of appointments, late appointments, and the percentage of late appointments for a mobile worker or crew in the selected month. The mobile workers or crews are ranked based on the highest number of missed appointments.
Drill Down	No drill down
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	Total number of appointments, Number of late appointments, Late appointments percentage

### Postal Codes with Most Missed Appointments

Description	This analysis shows the postal codes with highest number of missed appointments. The data is shown for the selected month.
Purpose	Business users can identify the reasons postal codes with more missed appointments.

Representation	The table shows the total number of appointments, late appointments, and the percentage of late appointments for a postal code in the selected month. The postal codes are ranked based on the highest number of missed appointments.
Drill Down	No drill down
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	Total number of appointments, Number of late appointments, Late appointments percentage

## Appointments Map

The Appointments Map dashboard page provides a geographic view of the location of appointments by postal code, a mini pie chart of the lateness categories for the postal code, and number of appointments being scheduled each day of the week.

### Appointments Map

Description	This analysis provides a geographical view to analyze the number of completed appointments in a specific postal code and lateness buckets associated with them. The data is shown for the selected month.
Purpose	Using this map view, business users can view the appointment volumes in postal codes, and in each postal code, the lateness categories.
Representation	<p>The color-coded region on the map shows the postal code of that geographical region, the total number of appointments and the number of missed appointments in that postal code. The postal codes are colored based on the number of appointments, which can be configured by the user in the legend.</p> <p>The map also shows pie charts, one per postal code. Each pie chart displays the lateness bucket information at postal code and indicates whether the appointments were missed or were met on time.</p>
Drill Down	The <b>Postal Code</b> link drills down to the <b>Appointments</b> and <b>Missed Appointments</b> dashboard pages for more details.
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	Number of completed appointments, Appointment count by lateness bucket



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## Appointments by Day of Week

Description	This analysis shows the total number of completed appointments for each day of the week, for the selected month, further sliced as per appointment time buckets. <b>Note:</b> The appointment time windows are user-defined in the Extendable Lookup for Appointment Time of Day.
Purpose	Business users can identify the days when customers prefer appointments. This helps them in planning the resources.
Representation	The horizontal stacked bar graph shows the number of appointments completed in each day of the week and in a appointment time window. The X-axis represents the number of appointments. The Y-axis represents the day of the week. Hover over the bars for specific values.
Drill Down	No drill down
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	Number of Appointments

## Appointment Details

The Appointment Details dashboard page displays the details of appointment activities, such as activity type, mobile worker or crew, status, SLA status, etc.

### Appointment Details

Description	This analysis shows a list of appointments with associated details, such as mobile worker or crew, time of day, SLA status, and more. It displays all appointments in the selected month. The data is shown at the daily level of the selected month.
Purpose	Business users can use this detail-level analysis to navigate back to the source Oracle Utilities Mobile Workforce Management/ Oracle Real-Time Scheduler system and view specific details pertaining to appointments on the <b>MWM Activity</b> page.
Representation	The table displays the details of appointment activities, such as activity type, mobile worker or crew, status, whether the SLA was met or not, and the SLA status. It also shows the service category and service area.
Drill Down	The <b>Activity</b> column link drills back to the <b>Activity</b> page in the Oracle Utilities Mobile Workforce Management system for more details about the selected activity.
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	<no measures>

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## Emergencies

The Emergencies dashboard provides key performance indicators (KPIs) for activities classified as emergencies. The dashboard provides a snapshot of the number and location of emergencies and how the service organization responds to them. These metrics help to manage emergencies.

A spatial analysis also been included to show the geographical distribution of the where the various emergencies arose. Users can also drill back to the source Oracle Utilities Mobile Workforce Management/ Oracle Real-Time Scheduler application for further details about a specific activity.

To access this dashboard:

1. Go to the **Home** page.
2. Select **Dashboards > Mobile Workforce Analytics > Emergencies**.

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

- **Emergencies**
- **Daily Emergencies**
- **Emergency Response Analysis**
- **Emergency Response Time**
- **Emergency Details**

## Emergencies

The Emergencies dashboard page provides a geographical distribution of emergencies, monthly trend of emergencies, and yearly trend of average percentage of emergencies.

### Emergencies

Description	This analysis provides a geographical view of the number of emergencies by postal codes. The data is shown for the selected month.
Purpose	Using the map view, business users can view the volume of emergencies in specific postal codes, and also identify which areas have more concentration of emergencies. The tabular view can be used to monitor the number of emergencies and the response time.
Representation	The color-coded region on the map shows the postal code of that geographical region, the total number of emergencies in that postal code, and the average response time in minutes for that postal code. The postal codes are colored based on the number of emergencies that can be configured by the user in the legend.  The tables display the total number of emergency activities for the service area hierarchy, service category, and postal code.

Drill Down	<p>The <b>Number of Emergencies</b> column link drills down to the <b>Emergency Details</b> dashboard page for granular details.</p> <p>The <b>Postal Code</b> link on the map's pop-up window have the master-detail interaction with the <b>Emergencies by Month</b> and the <b>Average Percentage of Emergencies Per Month</b> analyses on the same dashboard page.</p> <p>Clicking on a specific postal code value refreshes the two analyses to show the data for the specific postal code.</p>
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	Number of Emergencies

### Emergencies by Month

Description	<p>This analysis shows the emergency activity distribution against each activity type and postal code. The data is shown for each month, for the previous 15 months.</p> <p><b>Note:</b> The postal code for which the data is shown on this analysis can also be broadcast from the <b>Emergencies</b> analysis on the same dashboard page.</p>
Purpose	Business users can identify the trend in the number of emergencies by postal code and how they are distributed across activity types.
Representation	<p>Use the slider to display the data per postal code.</p> <p>The bar graph shows the number of emergencies grouped under each activity type in each month. The X-axis represents the month and year. The Y-axis represents the number of emergencies. Hover over the bars for specific values.</p>
Drill Down	The graph bars drill down to the <b>Daily Emergencies</b> dashboard page for the respective activity type details.
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	Number of Emergencies

### Average Percentage of Emergencies Per Month

Description	<p>This analysis provides the average percentage of emergencies of the total number of activities, per month, per postal code, for the current year and previous two years.</p> <p><b>Note:</b> The postal code for which the data is shown on this analysis can also be broadcast from the <b>Emergencies</b> analysis on the same dashboard page.</p>
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Purpose	Business users can identify the trend in the number of emergencies and how they are distributed across postal codes.
Representation	Use the slider to display the data per postal code.  The bar graph shows the average percentage of emergencies per month. The X-axis represents the year. The Y-axis represents the average percentage of emergencies. Hover over the bars for specific values.
Drill Down	No drill down
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	Number of Emergencies

## Daily Emergencies

The Daily Emergencies dashboard page provides a daily analysis on the emergencies dealt with.

### Daily Emergencies

Description	This analysis shows the number of emergencies on each day of the selected month, broken down by activity type.
Purpose	Business users can identify the daily trend in the number of emergencies and how they are distributed across activity types.
Representation	The stacked bar graph shows the number of emergencies in each activity type on each day of the selected month. The X-axis represents the day of the month. The Y-axis represents the number of emergencies. Hover over the bars for specific values.  The table displays the daily view of the number of emergencies against each activity type grouped under specific service categories.
Drill Down	The <b>Number of Emergencies</b> column link drills down to the <b>Emergency Details</b> dashboard page for specific details.
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	Number of Emergencies

## Emergency Response Analysis

The Emergency Response Analysis dashboard page helps to understand out of all emergencies, how many are handled on time, are late, and also the distribution per lateness categories.

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## Emergency Response Met vs Missed

Description	This analysis shows the emergencies for the selected period as either missed or met SLA. The user defines whether or not the SLA status was “Met” or “Missed” on the Extendable Lookup for Response Time Deviation in the “SLA Status” field.
Purpose	Business users get a snapshot of the percentage of emergency activities that missed the SLA. They can initiate corrective actions if this is larger.
Representation	The pie chart shows the distribution of emergencies per the SLA status.
Drill Down	The pie chart drills down to the <b>Emergency Details</b> dashboard page for granular details.
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	% of emergency responses which met/missed the SLA

## Emergency Response Trend

Description	This analysis shows the percentage of emergencies whose response time overshoot the SLA.
Purpose	Business users can identify any trends in the emergency responses overshooting the SLA. They can initiate corrective actions if a large percentage of emergency responses do not meet the SLA.
Representation	The bar graph shows the percentage of emergencies of the total emergencies whose SLA was missed, for the previous 15 months. The X-axis represents the month and year. The Y-axis represents the percentage of emergencies that missed the SLA out of the total emergencies. Hover over the bars for specific details.
Drill Down	The graph bars drill down to the <b>Emergency Details</b> dashboard page for specific details.
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	% of emergency responses which missed the SLA

## Emergency Responses - On Time or Early

Description	This analysis shows the emergencies that are either being on time or early sliced by the time. The data is shown for the selected month.
Purpose	Business users can identify the reasons for responses being on time or early and try to implement similar scenarios in other situations as well.
Representation	The pie chart shows the emergency responses grouped under various response time buckets.

Drill Down	No drill down
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	% of timely emergency responses sliced by time buckets

### Emergency Responses - Late

Description	This analysis shows emergencies whose response time was missed, per lateness bucket, for the selected month. The emergency lateness buckets are configurable.
Purpose	Business users can identify the time buckets with most delayed emergency responses and start analyzing deeper to determine the root causes.
Representation	The pie chart shows the emergency responses grouped under lateness buckets.
Drill Down	No drill down
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	% of late emergency responses sliced by time buckets

## Emergency Response Time

The Emergency Response Time dashboard page gives a detailed insight into time related metrics about emergency responses, such as response time trends, top mobile workers or crews, and postal areas with high response time, response times by day of week.

### Emergency Responses Missed By Activity Type

Description	This analysis shows the percentage of emergency responses that missed the SLA, sliced by the activity type. The data is shown for the selected month.
Purpose	Business users can identify the activity types with a high percentage of the emergency responses missing the SLA.
Representation	The pie chart shows the distribution of emergency responses that missed SLA, grouped by activity type.
Drill Down	No drill down
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	% Emergencies Missing SLA by Activity Type

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## Emergency Response Time - By Day Of The Week

Description	This analysis shows how emergency response time varies with different days of the week. The data is shown for the selected month.
Purpose	Business users can identify which days of the week have higher response times.
Representation	<p>The stacked bar shows the total response time in four stacks - each stack indicating a specific usage time bucket (the amount of time spend from creation to dispatch, from dispatch to enroute, from enroute to start, and from start to completion).</p> <p>The X-axis represents the day of the week. The Y-axis represents the response time in minutes. Hover over the bars for the average of each stack for each week day.</p>
Drill Down	No drill down
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	Response Time

## Top 10 Crews with Highest Average Emergency Response Time

Description	This analysis shows the top 10 mobile workers or crews with the highest average response time across all emergencies they attended in the selected month.
Purpose	Business users can identify the crews with highest average response time and investigate further on why their response times are on the higher side.
Representation	The bar graph shows the mobile workers or crews with the highest average response times. The X-axis represents the mobile worker or crew. The Y-axis represents the response time in minutes. Hover over the bars for specific details.
Drill Down	No drill down
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	Crew with Highest Average Response Time

## Top 10 Postal Codes with Highest Average Emergency Response Time

Description	This analysis shows the top 10 postal codes with the highest average response time across all emergencies that arose in those postal areas.
Purpose	Business users can identify the postal codes with the highest average response time and analyze the specific reasons for mobile workers or crews not meeting SLAs in those areas.

Representation	The bar graph shows the postal codes with the highest response times. The X-axis represents the postal code. The Y-axis represents the response time in minutes. Hover over the bars for specific details.
Drill Down	No drill down
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	Postal Codes with Highest Average Response Time

### Response Time Trend

Description	This analysis gives a snapshot of how the average response time for emergencies is trending for a specific activity type over the last 15-month period.
Purpose	Business users can analyze the trends in monthly average response time for all emergencies.
Representation	The line graph shows the monthly average response time for the selected month and previous 14 months. It also shows moving average of the average response time.  The X-axis represents the month and year. The Y-axis represents the response time in minutes. Hover over the lines for specific details.
Drill Down	No drill down
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	Average Response Time, Moving Response Time

## Emergency Details

The Emergency Details dashboard page shows a list of emergencies with detailed information.

### Emergency Details

Description	This analysis shows the emergency activity details and the status of SLA for each emergency.
Purpose	Business users can use this detail-level analysis to navigate back to the source Oracle Utilities Mobile Workforce Management/ Oracle Real-Time Scheduler system and view specific details pertaining to emergencies on the <b>MWM Activity</b> page.
Representation	The table displays the details of emergency activities, such as the time from creation to dispatch, dispatch to enroute, response time to complete, enroute to onsite, and the total response time. Along with the response time deviation, it also displays the SLA status of the emergencies grouped by activity type and service category.



Drill Down	The <b>Activity</b> column link drills back to the <b>Activity</b> page in the Oracle Utilities Mobile Workforce Management system for more details about the selected activity.
Source Object	Field Activity Fact
OBIEE Subject Area	MWM - Field Activity
Metrics	Creation to Dispatch, Dispatch to Enroute, Response Time to Complete, Enroute to On Site, Total Response Time

## Travel

The Travel dashboard gives an overview of the travel patterns of the service organization, from both a travel distance and a travel duration standpoint.

To access this dashboard:

1. Go to the **Home** page.
2. Select **Dashboards > Mobile Workforce Analytics > Travel**.

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

- **Travel Distance**
- **Distance Deviation Comparison**
- **Travel Time**
- **Travel Details**

## Travel Distance

The Travel Distance dashboard page helps to analyze how good are the estimates for the travel distance for the various activities carried out by the mobile workers or crews. The page also provides details about mobile workers or crews associated with deviation distributed across deviation categories.

### Average Distance per Vehicle per Shift

Description	This analysis shows the average distance traveled per vehicle in a shift, along with the estimated distance in each month, for the selected month and previous 14 months.
Purpose	Business users can analyze the difference in the estimated distance and the actual distance traveled by vehicles.
Representation	The bar graph displays both the estimated and actual distance traveled. The X-axis represents the month and year. The Y-axis represents the average distance per vehicle. Hover over the bars for specific values.
Drill Down	No drill down
Source Object	Completed Shift Fact
OBIEE Subject Area	MWM - Completed Shift
Metrics	Average Distance Traveled per vehicle per shift (Actual/Estimate)

## Travel Distance Deviation Distribution

Description	This analysis shows the percentage of crew shifts that are associated with each of the travel distance deviation buckets (which represent the difference between the planned and actual travel routes). The data is shown for the selected month. Travel distance deviation buckets are configurable.
Purpose	Business users can analyze if the mobile workers or crews are following the planned travel routes.
Representation	The pie chart shows the distribution of crew shifts with deviation across various travel distance deviation buckets.  $\% \text{ of Total} = (\text{Number of Crew Shifts in Deviation Category} / \text{Total Number of Crew Shifts}) * 100$
Drill Down	The link on each of the pie slices have the master-detail interaction with the <b>Top 10 Crews</b> analysis on the same dashboard page.  Clicking on a specific pie slice will refresh the <b>Top 10 Crews</b> analysis to show the data for the specific travel distance deviation bucket.
Source Object	Completed Shift Fact
OBIEE Subject Area	MWM - Completed Shift
Metrics	Percentage of crew shifts in each distance deviation bucket

## Top 10 Crews

Description	This analysis shows the top 10 mobile workers or crews with the most travel duration deviation in the selected deviation bucket. <b>Note:</b> The deviation bucket for which the data is shown on this report can also be broadcast from the <b>Travel Distance Deviation Distribution</b> analysis on the same dashboard page.
Purpose	Business users can identify the mobile workers or crews with the highest travel distance deviations.
Representation	User the slider to view the details for a particular month.  The bar graph displays the number of shifts completed by each mobile worker or crew in each travel distance deviation bucket. The X-axis represents mobile worker or crew name. The Y-axis represents the total number of shifts. Hover over the bars for specific details.
Drill Down	No drill down
Source Object	Completed Shift Fact
OBIEE Subject Area	MWM - Completed Shift
Metrics	Number of Activities

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## Distance Deviation Comparison

The Distance Deviation Comparison dashboard page compares the travel distance deviation between mobile workers or crews.

### Distance Deviation Comparison

Description	This analysis compares the percentage of the travel distance deviation between the two selected mobile workers or crews, for the current month and previous 14 months.
Purpose	Business users can do a comparative study between mobile workers or crews based on their travel distance deviations.
Representation	The bar graph compares the deviations in distance traveled by different mobile workers or crews in each month, for the previous 15 months. The X-axis represents the month and year. The Y-axis represents the percentage of deviation. Hover over the bars for specific values.
Drill Down	No drill down
Source Object	Completed Shift Fact
OBIEE Subject Area	MWM - Completed Shift
Metrics	Percentage of Travel Distance Deviation

## Travel Time

The Travel Time dashboard page provides insight into the key metric related to mobile worker or crew travel time, such as actual vs estimate comparison, deviation distribution, top mobile workers or crews with deviation, etc.

### Travel Time Estimate Vs Actual

Description	This analysis compares the estimated travel time and actual travel incurred in the various crew shifts per month, for the previous 15 months.
Purpose	This analysis helps business users to do a comparative trend analysis between the estimated travel time and actual travel time.
Representation	The bar graph shows the estimated and actual travel time in each month. The Y-axis represents the month and year. The Y-axis represents the travel time in hours. Hover over the bars for more details.
Drill Down	No drill down
Source Object	Crew Task Fact
OBIEE Subject Area	MWM - Crew Task
Metrics	Actual Travel Time, Estimated Travel Time

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## Travel Duration Deviation

Description	This analysis shows the percentage of activities that fall within each of the travel time duration deviation buckets. The data is shown for the selected month.
Purpose	Business users can identify the duration deviation buckets where most of activities are concentrated. This helps to understand the margin by which duration estimates are going off.
Representation	<p>The pie chart shows the distribution of activities across various travel duration deviation buckets.</p> <p>The table displays the number of activities associated with each travel duration deviation bucket and also the mobile worker or crew details.</p>
Drill Down	<p>The <b>Number of Activities</b> column link drills down to the <b>Travel Details</b> dashboard page for specific details.</p> <p>The link on each of the pie slices have the master-detail interaction with the <b>Top 10 Crews</b> and <b>Top 10 Postals</b> analyses on the same dashboard page.</p> <p>Clicking on a specific pie slice will refresh the <b>Top 10 Crews</b> and <b>Top 10 Postals</b> analyses to show the data for the specific travel duration deviation bucket.</p>
Source Object	Crew Tasks Fact
OBIEE Subject Area	MWM - Crew Tasks
Metrics	Number of Activities, % of Total

## Top 10 Crews

Description	<p>This analysis shows the top 10 mobile workers or crews with the highest number of activities in the selected travel duration deviation bucket. The data is shown for the selected month.</p> <p><b>Note:</b> The travel duration deviation bucket for which the data is shown on this analysis can also be broadcast from the <b>Travel Duration Deviation</b> analysis on the same dashboard.</p>
Purpose	Business users can identify the top 10 mobile workers or crews who deviate the most on the travel duration.
Representation	<p>Use the slider to select the required travel duration deviation bucket.</p> <p>The bar graph shows the number of activities for the mobile worker or crew in the selected travel duration deviation bucket. The X-axis represents the mobile worker or crew name. The Y-axis represents the number of activities. Hover over the bars for specific values.</p>
Drill Down	The graph bars drill down to the <b>Travel Details</b> dashboard page for specific details about the crew shifts.
Source Object	Crew Task Fact

OBIEE Subject Area	MWM - Crew Task
Metrics	Number of Activities

## Top 10 Postals

Description	<p>This analysis shows the top 10 postal codes with the highest number of activities in the selected travel duration deviation bucket. The data is shown for the selected month.</p> <p><b>Note:</b> The travel duration deviation bucket for which the data is shown on this analysis can also be broadcast from the <b>Travel Duration Deviation</b> analysis on the same dashboard.</p>
Purpose	Business users can identify the top 10 postal codes with the most travel duration deviations.
Representation	<p>Use the slider to select the required travel duration deviation bucket.</p> <p>The bar graph shows the number of activities in a postal code in the selected travel duration deviation bucket. The X-axis represents the postal code. The Y-axis represents the number of activities. Hover over the bars for specific values.</p>
Drill Down	The graph bars drill down to the <b>Travel Details</b> dashboard page for specific details about the crew shifts.
Source Object	Crew Task Fact
OBIEE Subject Area	MWM - Crew Task
Metrics	Number of Activities

## Travel Details

The Travel Details dashboard page shows list of shifts with detailed travel information.

### Travel Details

Description	This analysis displays the crew and crew shift details, and their respective travel details for the selected month.
Purpose	Business users can use this detail-level analysis to view specific details pertaining to each shift, such as travel time, deviation etc. Users can also navigate back to the source Oracle Utilities Mobile Workforce Management/ Oracle Real-Time Scheduler system and view specific details pertaining to shifts on the <b>MWM Crew Shift</b> page.
Representation	The table displays details, such as shift, the service area, estimated and actual travel durations and distances, and also duration deviations (if any) for a particular activity.
Drill Down	The <b>Crew</b> and <b>Crew Shift</b> column links drill back to the <b>Crew Shift</b> page in the Oracle Utilities Mobile Workforce Management system for more details about the selected activity.

Source Object	Crew Task Fact
OBIEE Subject Area	MWM - Crew Task
Metrics	Estimated Travel Time, Actual Travel Time, Deviation

## Crew

The Crew dashboard helps users to analyze the key metrics related to mobile workers or crews, such as productive time, utilization, timing comparison, shift timeliness, idle time, etc. Users can also drill back to the source Oracle Utilities Mobile Workforce Management/ Oracle Real-Time Scheduler system for further details about a specific mobile worker or crew, shift, or activity.

To access this dashboard:

1. Go to the **Home** page.
2. Select **Dashboards > Mobile Workforce Analytics > Crew**.

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

- **Performance**
- **Productivity Analysis**
- **Crew Comparison**
- **Shift Timeliness**
- **Top N - Shift Timeliness**
- **Least Productive Time**
- **Most Productive Time**
- **Most Idle Time**
- **Crew Overtime**
- **Idle Time Details**
- **Shift Details**
- **Overtime Details**

## Performance

The Performance dashboard page provides details about mobile worker's or crews' productivity.

### Productive Vs Non Productive Time

Description	This analysis compares the productive and non productive time, for each month, at the highest level of crew hierarchy. The data is displayed for the previous 15 months.
Purpose	Business users can identify the trends in productive and non productive time, and then initiate actions to bring up any low utilization percentage.

Representation	<p>The bar graph shows the mobile worker's or crew's productivity time and non productivity time in each month. The X-axis represents the month and year. The Y-axis represents the time in hours. Hover over the bars for specific values.</p> <p>The table shows the productive time, non-productive time, utilization percentage, and the status of each mobile worker or crew. Mobile workers or crews are grouped under various crew hierarchy level. The data is displayed for each month.</p>
Drill Down	The graph bars drill down to the <b>Productivity Analysis</b> dashboard page for granular details.
Source Object	Crew Task Fact
OBIEE Subject Area	MWM - Crew Task
Metrics	Productive Time, Non-Productive Time, Utilization Percentage

## Productivity Analysis

The Productivity Analysis dashboard page provides distribution details of the productive and non-productive time of mobile workers or crews.

### Productive Time

Description	This analysis shows the distribution of productive time spent by the mobile workers or crews across various productive time usage buckets.
Purpose	Business users can identify the time buckets where most of the productive time is spent.
Representation	<p>The pie chart shows the distribution of productive time of various mobile workers or crews across various time buckets.</p> <p>The table shows the average time per mobile worker or crew, total duration, percentage of total productive time, and the percentage of total time for each productive time usage bucket.</p>
Drill Down	The pie slices and the <b>Time Bucket</b> column link drill down to the <b>Activity Details</b> dashboard page for more details.
Source Object	Crew Task Fact
OBIEE Subject Area	MWM - Shift Overview
Metrics	Average Time per Crew, Total Duration, Percentage of Total Productive Time, Percentage of Total Time

### Non-Productive Time

Description	This analysis shows the distribution of non-productive time spent by the mobile workers or crews across various non-productive time usage buckets.
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Purpose	Business users can identify the non-productive time usage buckets where most of the non-productive time is spent. They can then focus on the corrective actions to minimize the non-productive time in those time buckets.
Representation	<p>The pie chart shows the distribution of non-productive time of various mobile workers or crews across various non-productive time usage buckets.</p> <p>The table shows the average time per mobile worker or crew, total duration, percentage of total non-productive time, and the percentage of total time for each non-productive time usage bucket.</p>
Drill Down	The pie slices and the <b>Time Bucket</b> column link drill down to the <b>Activity Details</b> dashboard page for more details.
Source Object	Crew Task Fact
OBIEE Subject Area	MWM - Shift Overview
Metrics	Average Time per Crew, Total Duration, Percentage of Total Non-Productive Time, Percentage of Total Time

## Crew Comparison

The Crew Comparison dashboard page enables the user to compare mobile workers or crews across the various time usage buckets.

### Crew Comparison

Description	This analysis presents the total time spent by a mobile worker or crew in each time usage bucket across the various crew hierarchy levels.
Purpose	Business users can compare the productivity between the selected mobile workers or crews in various time usage buckets. They can identify the slots where the mobile workers or crews spent the maximum time.
Representation	<p>The table shows the time spent in each time usage bucket by each mobile worker or crew in the crew hierarchy.</p> <p>The <b>Crew-1</b> and <b>Crew-2</b> drop down lists enable the selection of two specific mobile workers or crews.</p> <p>The bar graph shows the comparison of time spent by the two selected mobile workers or crews against each time usage bucket. The X-axis represents the time usage bucket. The Y-axis represents the time in hours. Hover over the bars for specific details.</p>
Drill Down	No drill down
Source Object	Crew Task Fact
OBIEE Subject Area	MWM - Crew Task
Metrics	Time in Minutes for Selected Crew



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## Shift Timeliness

The Shift Timeliness dashboard page provides details about late starting or early ending shifts.

### Late Shift Start - Trend

Description	This analysis shows the distribution of late shift start across various late log-on time buckets, for the previous 15 months. Late shift buckets are configurable.
Purpose	Business users can analyze any trends in the late log-on habits of shifts. They can also identify the late log-on time buckets that have more concentration and focus on the corrective actions there.
Representation	The stacked bar graph shows the number of late shift starts in various shift buckets. The X-axis represents the month and year. The Y-axis represents the total number of shifts. Hover over the bars for specific details.
Drill Down	The graph bars and the <b>Month</b> column link drill down to the <b>Shift Details</b> dashboard page for specific details about the shifts in that lateness bucket.
Source Object	Completed Shift Fact
OBIEE Subject Area	MWM - Completed Shift
Metrics	Shift Count

### Early Shift Finish - Trend

Description	This analysis shows the distribution of shifts that finish early across various early log-off time buckets, for the previous 15 months. Early shift finish buckets are configurable.
Purpose	Business users can analyze any trends in the early log-off habits of the crew shifts. They can also identify which early log-off time buckets with more concentration and focus on the corrective actions there.
Representation	The stacked bar graph shows the number of shifts that finish early in various early shift finish buckets. The X-axis represents the month and year. The Y-axis represents the total number of shifts. Hover over the bars for specific details.
Drill Down	The graph bars and the <b>Month</b> column link drill down to the <b>Shift Details</b> dashboard page for specific details about the shifts in that lateness bucket.
Source Object	Completed Shift Fact
OBIEE Subject Area	MWM - Completed Shift
Metrics	Shift Count

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## Top N - Shift Timeliness

The Top N - Shift Timeliness dashboard page provides details about the top N mobile workers or crews who either start their shift late or finish their shift early.

### Top N Crews with Most Late Shift Start

Description	This analysis shows the top N mobile workers or crews with the most number of shifts with a late start. The data is displayed for the selected month.
Purpose	Business users can analyze the percentage of shifts with late start and identify the mobile workers or crews responsible.
Representation	<p>The bar graph shows the top N mobile workers or crews with the most late shift starts. The X-axis represents the mobile worker or crew, while the Y-axis represents the percentage of total shifts. Hover over the bars for specific details.</p> <p>Use the slider to view the details for each mobile worker or crew.</p> <p>The pie chart shows the distribution of late shifts for the selected mobile worker or crew across the lateness categories.</p> <p>The table displays the total number of shifts, shifts with late start, and the percentage of total for each of the top N mobile workers or crews ranked based on the number shifts with a late start.</p>
Drill Down	<p>The pie chart slices drill down to the <b>Shift Details</b> dashboard page for specific details about the shifts in that lateness bucket.</p> <p>The <b>Shifts with Late Start</b> column link drills down to the <b>Shift Details</b> dashboard page for specific details.</p>
Source Object	Completed Shift Fact
OBIEE Subject Area	MWM - Completed Shift
Metrics	Total Number of Shifts (for the crew), Shifts with Late Start, Percentage of Total

### Top N Crews with Most Early Shift Finish

Description	This analysis shows the top N mobile workers or crews with the most number of shifts with an early finish. The data is displayed for the selected month.
Purpose	Business users can analyze the percentage of shifts with early finishes and identify the mobile workers or crews responsible.

Representation	<p>The bar graph shows the top N mobile workers or crews with the most early finish shifts. The X-axis represents the mobile worker or crew, while the Y-axis represents the percentage of total shifts. Hover over the bars for specific details.</p> <p>Use the slider to view the details for each mobile worker or crew.</p> <p>The pie chart shows the distribution of early shift finishes for the selected mobile worker or crew across the early shift finish categories.</p> <p>The table displays the total number of shifts, shifts with early finish, and the percentage of total for each of the top N mobile workers or crews ranked based on the number shifts with early finish.</p>
Drill Down	<p>The pie chart slices drills down to the <b>Shift Details</b> dashboard page for specific details about the shifts in that lateness bucket.</p> <p>The <b>Shifts with Early Finish</b> column link drills down to the <b>Shift Details</b> dashboard page for specific details.</p>
Source Object	Completed Shift Fact
OBIEE Subject Area	MWM - Completed Shift
Metrics	Total Number of Shifts (for the crew), Shifts with Early Finish, Percentage of Total

## Least Productive Time

The Least Productive Time dashboard page provides details about mobile workers or crews with least productive time.

### Crew with Least Productive Time

Description	<p>“Productive time” is the time spent in a shift on the time usage buckets that are considered productive (configured in Oracle Utilities Mobile Workforce Management).</p> <p>This analysis shows the top N mobile workers or crews ranked based on the least productive time. The data is displayed for the selected month.</p>
Purpose	Business users can identify the top mobile workers or crews with the least productive time.

Representation	<p>The graph shows the mobile worker or crew productivity as a percentage of total. The X-axis represents the mobile worker or crew. The Y-axis represents the percentage of total shifts. It also displays the average productive time across mobile workers or crews. Hover over the bars for specific details.</p> <p>Productive Time as % of Total = (Productive Time / Total Time) * 100</p> <p>The table displays the productive time for each mobile worker or crew and the respective percentage of total shifts. The crews are ranked based on the amount of productive time.</p>
Drill Down	No drill down
Source Object	Crew Task Fact
OBIEE Subject Area	MWM - Crew Task
Metrics	Productive Time, % of Total, Average Percentage of Productive Time

### Non-Productive Time

Description	This analysis shows the distribution of non-productive time for the mobile worker or crew selected in the <b>Crew with Least Productive Time</b> analysis on the same dashboard page.
Purpose	Business users can identify the non-productivity of a specific mobile worker or crew and identify the time usage buckets where the mobile worker or crew spent most of the non-productive time.
Representation	<p>Use the slider to select the specific mobile worker or crew.</p> <p>The pie chart shows how the non-productivity of the selected mobile worker or crew is distributed across various non-productive time usage buckets (such as idle, log off, log on, POU, or travel).</p>
Drill Down	No drill down
Source Object	Crew Task Fact
OBIEE Subject Area	MWM - Crew Task
Metrics	Percentage of Non-Productive Time spent in each time bucket

### Most Productive Time

The Most Productive Time dashboard page provides details about mobile workers or crews with the most productive time.

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## Crew with Most Productive Time

Description	<p>“Productive time” is the time spent in a shift on the time usage buckets that are considered productive (configured in the Oracle Utilities Mobile Workforce Management system).</p> <p>This analysis shows the top N mobile workers or crews ranked based on the most productive time. The data is displayed for the selected month.</p>
Purpose	Business users can identify the top mobile workers or crews with the most productive time.
Representation	<p>The graph shows the mobile worker or crew productivity as a percentage of total. The X-axis represents the mobile worker or crew. The Y-axis represents the percentage of total. It also displays the average productive time across mobile workers or crews. Hover over the bars for specific details.</p> <p><math display="block">\text{Productive Time as \% of Total} = (\text{Productive Time} / \text{Total Time}) * 100</math></p> <p>The table displays the productive time for each mobile worker or crew and the respective percentage of total. The crews are ranked based on the productive time.</p> <p>The pie chart shows how the productivity of the selected mobile worker or crew is distributed across various time usage buckets (such as wait, POU, idle, or break).</p>
Drill Down	No drill down
Source Object	Crew Task Fact
OBIEE Subject Area	MWM - Crew Task
Metrics	Productive Time, % of Total, Average Percentage of Productive Time

## Most Idle Time

The Most Idle Time dashboard page provides a snapshot of mobile workers or crews with the most idle time.

### Crew with Most Idle Time

Description	This analysis shows the top N mobile workers or crews with the longest idle time in the selected crew hierarchy.
Purpose	Business users can identify the top mobile workers or crews with the most idle time and investigate why these crews are spending more idle time.

Representation	<p>The bar graph shows the mobile worker or crew idle time as a percentage of total time. The X-axis represents the mobile worker or crew. The Y-axis represents the percentage of total time. It also displays the average idle time for the respective mobile worker or crew. Hover over the bars for specific values.</p> <p>The table displays the idle time for each mobile worker or crew and the respective percentage of total. The mobile workers or crews are ranked based on the longest idle time.</p>
Drill Down	The graph bars drill down to the <b>Idle Time Details</b> dashboard page for granular details.
Source Object	Crew Task Fact
OBIEE Subject Area	MWM - Crew Task
Metrics	Idle Time, Idle Time as % Total

## Crew Overtime

The Crew Overtime dashboard page provides details about any overtime put in by a mobile worker or crew.

### Top N Most Overtime

Description	This analysis shows the top N mobile workers or crews/crew types with most overtime hours for the selected period.
Purpose	Business users can identify the mobile worker or crew/crew type that had the most overtime hours in that month. They can analyze the reason for the overtime.
Representation	<p>The <b>Select Top N</b> drop down displays the data by mobile worker or crew/crew type.</p> <p>The bar graph shows the overtime amounts for various mobile workers or crews/crew types. The X-axis represents the mobile worker or crew/crew type. The Y-axis represents the overtime in hours. It also shows the average overtime for the mobile workers or crews/crew types. Hover over the bars for specific values.</p> <p>The table displays the overtime amount, the planned shift duration, actual duration, the actual shift duration, and the overtime as a percentage of regular hours for the selected mobile worker or crew/crew type.</p>
Drill Down	The <b>Overtime Duration (Hrs)</b> column link drills down to the <b>Overtime Details</b> dashboard page for specific details.
Source Object	Completed Shift Fact
OBIEE Subject Area	MWM - Completed Shift
Metrics	Overtime Duration, Planned Duration, Actual Duration, Overtime as % of Regular

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## Overtime Trend

Description	This analysis displays the summary of monthly overtime and planned hours for the previous 15 months.
Purpose	Business users can analyze the trends in overtime duration across the 15-month period.
Representation	<p>The line graph shows the trend in overtime duration against the planned duration. The X-axis represents the month and year. The Y-axis represents the time in hours. Hover over the lines for specific values.</p> <p>The table displays the overtime duration, planned duration, actual duration, and the total number of shifts for each month.</p>
Drill Down	The <b>Month</b> column link drills down to the <b>Overtime Details</b> dashboard page for granular details.
Source Object	Completed Shift Fact
OBIEE Subject Area	MWM - Completed Shift
Metrics	Overtime Hrs, Planned Hrs

## Idle Time Details

The Idle Time Details dashboard page shows the idle time details for each crew shift.

### Idle Time Details

Description	This analysis displays the details for each crew shift with their idle time and total shift time for each day for the selected month.
Purpose	Business users can use this detail-level analysis identify the specific details of the crew with most idle time. Users can also navigate back to the source Oracle Utilities Mobile Workforce Management/ Oracle Real-Time Scheduler system and view specific details pertaining to overtime duration on the MWM <b>Crew</b> or <b>Activity</b> pages.
Representation	The table displays details such as idle time, total shift time, and idle time as a percentage of the total for each mobile worker or crew/crew type.
Drill Down	The <b>Crew</b> , <b>Shift ID</b> , and <b>Activity ID</b> column links drill back to the <b>Crew</b> , <b>Crew Shift</b> , or <b>Activity</b> pages in the Oracle Utilities Mobile Workforce Management system for more details about the selected mobile worker or crew.
Source Object	Crew Task Fact
OBIEE Subject Area	MWM - Crew Task
Metrics	Idle Time, Total Shift Time, Percentage of Total

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## Shift Details

The Shift Details dashboard page displays the shift details.

### Shift Details

Description	This analysis displays the log-on log-off details for each shift along with indicators for late start and early finish for the selected month.
Purpose	Business users can use this detail-level analysis to navigate back to the source Oracle Utilities Mobile Workforce Management/ Oracle Real-Time Scheduler system and view specific details pertaining to shifts on the MWM <b>Crew Shift</b> page.
Representation	The table displays details such as late start, early finish, log on and log off cities, and log on and log off postal codes for each shift.
Drill Down	The <b>Crew Shift</b> column link drills back to the <b>Crew Shift</b> page in the Oracle Utilities Mobile Workforce Management system for more details about the selected crew shift.
Source Object	Completed Shift Fact
OBIEE Subject Area	MWM - Completed Shift
Metrics	Late Start, Early Finish

## Overtime Details

The Overtime Details dashboard page displays the overtime details for each crew.

### Overtime Details

Description	This analysis displays the overtime details for each mobile worker or crew in the crew hierarchy. The data is displayed for the selected month.
Purpose	Business users can use this detail-level analysis to view crew level overtime details at day level.
Representation	The table displays details, such as planned shift duration, actual shift duration, overtime duration, and percentage of planned duration for each mobile worker or crew in the crew hierarchy.
Drill Down	No drill down
Source Object	Completed Shift Fact
OBIEE Subject Area	MWM - Completed Shift
Metrics	Planned Duration, Actual Duration, Overtime Duration, Percentage of Planned Duration