Oracle Utilities Network Management System Integration to Oracle Field Service

Release Notes

Release 24C

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Oracle Utilities Network Management System Integration to Oracle Field Service Release Notes

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Chapter 1

Preface

Welcome to the Oracle Utilities Network Management System Integration to Oracle Field Service Release Notes for release 24C.

The preface includes the following:

- Audience
- Documentation and Resources
- Documentation Accessibility
- Conventions
- Acronyms

Audience

This document is intended for anyone implementing the Oracle Utilities Network Management System integration to Oracle Field Service.

Documentation and Resources

For more information regarding this integration, foundation technology, and edge applications, refer to the following documents:

Product Documentation

Topic	Location
Oracle Utilities Network Management System Integration to Oracle Field Service documentation	https://docs.oracle.com/en/industries/energy-water/integrations-index.html
Oracle Utilities Network Management System documentation	https://docs.oracle.com/en/industries/energy-water/network-management-system/index.html
Oracle Field Service documentation	https://docs.oracle.com/en/cloud/saas/field-service/index.html

Additional Documentation

Resource	Location
Oracle Integration Cloud Service documentation	Refer to the OIC documentation at: https://docs.oracle.com/en/cloud/paas/integration-cloud/index.html
Oracle Support	Visit My Oracle Support at https://support.oracle.com regularly to stay informed about updates and patches. Refer to the *Certification Matrix for Oracle Utilities Products (Doc ID 1454143.1)* on My Oracle Support to determine if support for newer versions of the listed products is included. For more information, refer to the Oracle Utilities Integrations page at http://my.oracle.com/site/tugbu/productsindustry/productinfo/utilities/integration/index.htm
Oracle Technology Network (OTN) Latest versions of documents	http://www.oracle.com/technetwork/index.html
Oracle University for training opportunities	http://education.oracle.com/

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

Oracle customers have access to electronic support for the hearing impaired. Visit: http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs

Conventions

The following text conventions are used in this document:

Convention	Meaning
boldface	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
italic	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
`monospace`	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

Acronyms

The following terms are used in this document:

Term	Expanded Form
OUNMS/NMS	Oracle Utilities Network Management System
OFS	Oracle Field Service
OIC	Oracle Integration Cloud
OMA	Operations Mobile Application

Chapter 1

Release Notes

This release notes outline the information about the functionality in integrating Oracle Utilities Network Management System with Oracle Field Service. Each section includes a brief description of the feature, the steps to enable or start using the feature, and any tips or considerations.

The release notes focus on the following:

- Overview
- Supported Applications
- About Oracle Utilities Network Management System
- About Oracle Field Service
- About Oracle Integration Cloud
- Features Summary
- Configuration Changes
- Known Issues

Overview

This integration provides a solution for utilities to use the capabilities of Oracle Utilities Network Management System (NMS) and Oracle Field Service (OFS) for field-activities management. This pre-built integration represents significant business value for utilities that need to manage their field operations.

For more information about the functionality, refer to the *Oracle Utilities Network Management System Integration to Oracle Field Service Configuration Guide* included in this release. The documentation is available on Oracle Help Center.

The integration supports the following flows:

> **Note:** For the items marked with an asterisk (*), note that the deep link (integration) functionality is only available for iOS and Android versions of the OMA and OFS Mobile apps.

- Activity Management

  - **Initiate Create/Update/Cancel/Suspend activities** (Oracle Utilities Network Management System initiated)

  - Preassign Activities

  - **Activity Updates** from Oracle Field Service and update the change in Oracle Utilities Network Management System

  - **Event Details Update** (from Oracle Field Service to Oracle Utilities Network Management System)

  - **Failed Equipment Updates** (from Oracle Field Service to Oracle Utilities Network Management System)

  - **Attachments** (bi-directional)

  - **Pickup Work** (Oracle Field Service initiated)

- Resource Management

  - **Crew Create/Updates** from Oracle Field Service to Oracle Utilities Network Management System

  - **Crew Activate(Re-/De-)** from Oracle Field Service to Oracle Utilities Network Management System

  - **Crew Composition Info Requests** from Oracle Utilities Network Management System to Oracle Field Service

- Operations Mobile App

  - **Unrelated Pickup Work** (OMA integration)*

  - **Damage Reports** (OMA integration)*

  - **Switching Sheets** (OMA integration)*

- Administration Management

  - **Admin Field Data Sync** from Oracle Utilities Network Management System to Oracle Field Service

  - **Resources Crew Sync** from Oracle Field Service to Oracle Utilities Network Management System

The following diagram illustrates the business processes supported in this integration:
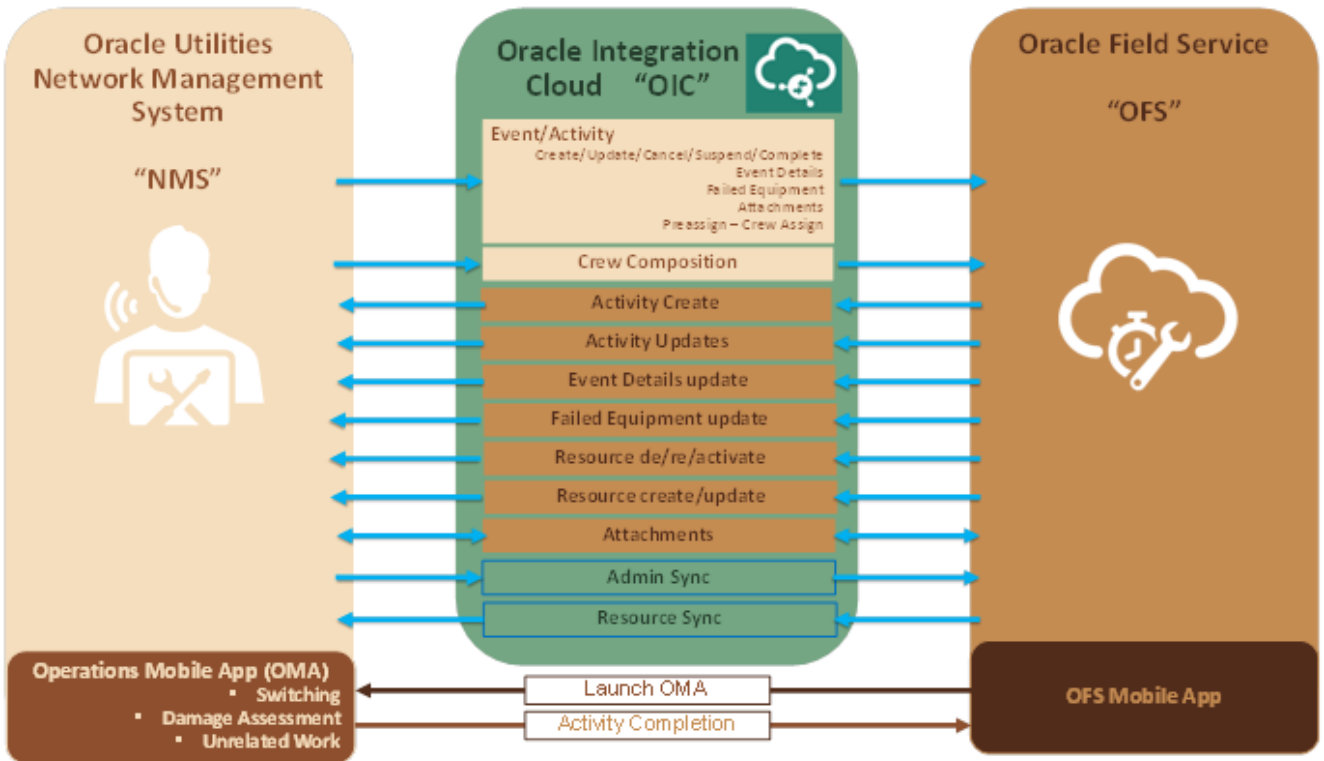
In this integration, Oracle Integration Cloud is used as a middleware to connect the applications. It uses REST APIs to facilitate communication between these two applications.

Supported Applications

The following table lists the supported application versions in this integration:

Supported Application	Version
Oracle Utilities Network Management System	V2.6.0.1.0 or higher
Oracle Integration Cloud	V24.10 and higher
Oracle Field Service	24C or higher

Refer to the *Certification Matrix for Oracle Utilities Products (Doc ID 1454143.1)* on My Oracle Support to determine if support for newer versions of the listed products is included.

About Oracle Utilities Network Management System

Oracle Utilities Network Management System processes trouble calls from the customers and analyzes those to determine the probable outage locations. It generates Estimated Restoration Times (ERTs) that can be provided back to the customers. In addition, it keeps a history of all customer calls that were entered in the system, as well as a history of all events that were known to affect a customer even if the customer did not call in.

In addition to responding to unplanned outages and non-outage problems, Oracle Utilities Network Management System helps a utility plan maintenance work or new construction that may affect existing customers. When Oracle Utilities Network Management System generates detailed switching plans, customers are informed about planned outages that impact them.

The Operations Mobile Application (OMA) is part of the Oracle Utilities Network Management System, providing crews with advanced GIS/Network schema, the ability to execute switching plans, and manage damage assessment reports while in the field using mobile devices.

About Oracle Field Service

Oracle Field Service is built on time-based, self-learning, and predictive technology, empowering to solve business problems while evolving the field service organization. It has various modules to choose, such as forecasting, routing, capacity, mobility, collaboration, core manage, smart location and customer communication. It leverages the performance pattern profiles to create optimal daily routes and schedules, and continues to learn as employee work patterns change over time.

About Oracle Integration Cloud

Oracle Integration Cloud is a unified platform to integrate the applications, automate processes and create applications.

Using integrations, connect the applications into a continuous business flow. The integrations can be quickly developed and activated between both the cloud and on-premises applications. The lookups help to match application-specific codes between the two applications. Oracle Integration Cloud provides graphical mapper where the user can map just by dragging and dropping between the applications.

Features Summary

New in 24C release are the following updates:

- Resource Crew Management
    - Crew Composition
    - Crew Management

This integration includes the following features

- Activity Management
- Activity Created (Pickup Work)
- Unrelated Pickup Work
- Damage Assessment
- Switching
- Event Details Updates
- Failed Equipment Updates
- 'Crew' Sync & Status Update
- Attachments
- Admin Sync

For a list of existing features, refer to the Oracle Utilities Network Management System Integration to Oracle Field Service Release Notes for release 24C. The complete documentation is available on the Oracle Energy and Water Integrations page on Oracle Help Center.

Resource Crew Management

Crew Composition

The Oracle Utilities Network Management System operator can request the crew composition from Oracle Field Service to get the crew member and vehicle data only using the NMS Web Workspace application crew info tool only. This is an asynchronous request, and the details will be shown when received.

Crew Management

Crew Sync, Update, and **Activation** features have been modified to update the Oracle Utilities Network Management System crew information only for Oracle Field Service resources that are designated with a resource type of Oracle Utilities Network Management System crew.

Activity Management

Activity Management integration will send status updates from Oracle Field Service to Oracle Utilities Network Management System. The following activities updates are supported in this flow:

- Activity Updated
- Activity Moved
- Activity Started
- Activity Suspended
- Activity Not Done
- Activity Cancelled
- Activity Completed

Any activity changes in Oracle Field Service will be synchronized to Oracle Utilities Network Management System and the corresponding event details will be updated.

The **Activity Management** feature also includes the following activity updates from Oracle Utilities Network Management System to Oracle Field Service:

- **Create/Update/Cancel activities**
- **Preassigned Activities** are also supported and provide the Oracle Utilities Network Management System operator with the ability to pre-assign crews to specific activities in the Oracle Utilities Network Management System, then pass the assignment information to Oracle Field Service, which would in turn dynamically assign the Oracle Field Service crew to the new activity, without the need to dispatcher involvement.

  Note that the support for standard trouble activities (switching and damage assessment activities) is not included in this release.

Activity Created (Pickup Work)

The Activity Created process will send activity creation requests (pickup orders) from Oracle Field Service to Oracle Utilities Network Management System.

Unrelated Pickup Work

This feature allows the field crew to create a pickup work request in the Operations Mobile App (OMA) for work unrelated to the current event. Navigation between OMA and the OFS Mobile app is facilitated via mobile deep links.

Damage Assessment

This feature allows the field crew to create Damage Reports in the Operations Mobile App (OMA). Navigation between OMA and the OFS Mobile app is facilitated via mobile deep links.

Switching

This feature allows the field crew to manage assigned switching sheet steps in the Operations Mobile App (OMA) for eligible events that include switching plans. Navigation between OMA and the OFS Mobile app is facilitated via mobile deep links.

Event Details Updates

The Event Details Updates process will send event details form data from Oracle Field Service to Oracle Utilities Network Management System.

Failed Equipment Updates

The Failed Equipment Updates feature retrieves the activity details information from Oracle Field Service and the parsed failed equipment data will be updated to Oracle Utilities Network Management System.

'Crew' Sync & Status Update

The **Crew Sync & Status Update** feature ensures that both systems, Oracle Field Service and Oracle Utilities Network Management System, use the same resource data when communicating. For any resource creation - and update(s) - changes in Oracle Field Service, the Crew Sync process will send a synchronization request to the Oracle Utilities Network Management System to ensure data consistency. This feature also triggers updates to Oracle Utilities Network Management System when a resource is activated/ deactivated in Oracle Field Service.

Attachments

The **Attachments** feature enables both the Operator and Field Crews to seamlessly attach and share documents and media pertinent to the event.

Examples: damage reports, photos of damaged equipment, offline notes, etc.

Admin Sync

This integration process is used to sync the Oracle Utilities Network Management System admin data to Oracle Field Service. The sync will ensure that both systems are using the same data when communicating. At a high-level, this Admin Sync process runs through 10 sub-processes to sync the following Oracle Field Service data:

- Event Category "PickList"
- FailedEquipment
- Phases
- Manufacturers
- CrewTypes - WorkSkills
- ControlZones
- WorkZones

Configuration Changes

This release needs the following configuration changes:

- Oracle Integration Cloud
- Oracle Field Service

Oracle Integration Cloud

To achieve the new changes a few properties have been added and two new lookups have been created. All of these must be customized according to the Oracle Utilities Network Management System and Oracle Field Service installation.

OUTL-BRT-NMS_OFSC_ConfigProps

- **ofsc.resourceType.crew**: Labels of the Oracle Field Service Resource Types that define a crew. This is a delimited string containing all the possible values. The delimiter value is defined in the ofsc.resourceType.delimiter property.

- **ofsc.resourceType.delimiter**: (OUTL-BRT-NMS_OFSC_ConfigProps) Delimiter that's used in the ofsc.resourceType.crew property as well as the crew member classes and vehicle types lookups.

- **ofsc.resourceType.bucket**: The label value of the Oracle Field Service Resource Type that defines a bucket.

OUTL-BRT-NMS_OFSC_CrewMemberClasses

Define the Oracle Field Service Resource Type Label or Codes are being targeted when requesting crew composition requests. The Crew Member Class that are allowed are defined in the Oracle Utilities Network Management System Admin Data and can be defined during project configuration.

Translation from Oracle Field Service labels to Oracle Utilities Network Management System crew member values.

The **ofs.crew.composition.crewmember** delimited property string defines all the Oracle Field Service resource types of labels that will be filtered as part of a crew member list. The value will be a concatenated list of the subsequent properties.

All subsequent properties will be used to translate from Oracle Field Service value into an accepted Oracle Utilities Network Management System value as defined in the admin data.

OUTL-BRT-NMS_OFSC_VehicleTypes

Define what's OFS Resource Type Label or Codes are being targeted when requesting crew composition requests. The Vehicle Types that are allowed are defined in the Oracle Utilities Network Management System Admin Data and can be defined during project configuration.

Translation from Oracle Field Service labels to Oracle Utilities Network Management System vehicle type values.

The **ofs.crew.composition.vehicle** delimited property string defines all the Oracle Field Service resource types of labels that will be filtered as part of a crew vehicle list. The value will be a concatenated list of the subsequent properties.

All subsequent properties will be used to translate from Oracle Field Service value into an accepted Oracle Utilities Network Management System value as defined in the admin data.

Oracle Field Service

The 24c release to return crew assistants need to be configured for the operator to assign crew members and vehicles to a crew.

Resource Types

As explained in the previous paragraphs: crews, crew members and vehicle types need to be configured to align with the properties set in Oracle Integration Cloud.

- Retrieve and update the 'crew' resource type(s) in ofsc.resourceType.crew

- Create all the crew member classes and vehicle types and update these values in the corresponding OUTL-BRT-NMS_OFSC_CrewMemberClasses and OUTL-BRT-NMS_OFSC_VehicleTypes lookups.

Activity Type

- Verify and create if needed an activity type with the feature "Teamwork" exist.

- Verify and create if needed the above activity type in the Add Activity screen for the dispatcher user type.

Known Issues

The issues known at the time of this integration release are:

Bug Number	Description
33275218	NMS-OFSC: IN ANDROID TAB AND IOS, ON CLICKING ACTIVITY LINK ACTIVITY BLOCKS, NO INFO TEXTBOXES LIKE SELECT TECHNICIAN ARE COMING AS IN CASE OF BROWSER