Oracle Utilities Network Management System

Release Notes

Release 2.6.0.0.2

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Contents

Preface

These release notes provide an overview of the features in Oracle Utilities Network Management System Version 2.6.0.0.

This preface contains these topics:

- Audience
- Related Documents

Audience

Oracle Utilities Network Management System Release Notes is intended for anyone installing or using Oracle Utilities Network Management System Version 2.6.0.0.

Related Documents

For more information, see these Oracle documents:

- *Oracle Utilities Network Management System Adapters Guide*
- *Oracle Utilities Network Management System Advanced Distribution Management System Implementation Guide*
- *Oracle Utilities Network Management System Configuration Guide*
- *Oracle Utilities Network Management System OMS for Water User's Guide*
- *Oracle Utilities Network Management System Installation Guide*
- *Oracle Utilities Network Management System Licensing Information User Manual*
- *Oracle Utilities Network Management System Operations Mobile Application Installation and Deployment Guide*
- *Oracle Utilities Network Management System Quick Install Guide*
- *Oracle Utilities Network Management System Security Guide*
- *Oracle Utilities Network Management System User's Guide*

Chapter 1

Release Notes

Enhancements in Version 2.6.0.0

This chapter describes new and enhanced features in Oracle Utilities Network Management System Version 2.6.0.0, including:

AMI Integration Features

Support # Last Gasps Column in Work Agenda / Events List

This feature adds a new **# Last Gasps** column to the NMS **Work Agenda** and the **Flex Operations Events** list; the column's default position is to the left of the **# Powerups** column. It indicates the number of meters associated to the event from which gasps (unsolicited power-offs) were received.

Support Meter Type Column in AMI Customers List

This feature adds a new **Meter Type** column to the AMI Customers table in NMS and Flex Operations. It displays whatever meter type information is provided to NMS such as single-phase vs. multi-phase.

Distributed Energy Resource Management (DERMS) Features

Demand Response Pre-Planned Events

This feature adds a new web-interface to manage strategies (templates) and events for dispatch schedules controlling demand response devices. Thermostats and other demand response resources for supported head end systems will be modeled as controllable demand response devices in NMS that are grouped at the service transformer for each service provider.

Events are created from strategies. Each event/strategy will have a type. The type will indicate the purpose of the event and will have validation of program rules including scheduling restrictions and priority. With this initial release there will be three event types:

- Economic Event - Events that dispatch DER because the cost of dispatching DR is less expensive than generation. Economic events must be scheduled on a day-ahead basis.

- Reliability - Events intended to mitigate forecasted constraints on the grid. Reliability events must be scheduled on a day-ahead basis.

- Emergency - Events required to mitigate unforeseen grid constraints. Emergency events can be scheduled immediately and will cancel reliability or economic events that have already been scheduled if the same resources are being utilized.

A strategy manager will be able to create and manage a library of strategies. A strategy will consist of staged dispatch groupings. The strategy will have a header, which will reflect the area the strategy is affecting, the purpose of the strategy, and the type of the strategy. The strategy manager will be presented with a peak load forecast and a corresponding curve accounting for DR response for a peak-load day.

An event nominator will be able to select a strategy and create and nominate an event for scheduling. They will start from the strategy but can make modifications to the event based on forecasted system needs. They will be able to review a day ahead load forecast and corresponding forecast including the DR resources.

An event scheduler/manager will see a list of nominated events and will have the option to accept or reject each nominated event. After accepting an event the plan will be sent to Live Energy Connect (LEC) which will communicate to each of the involved demand response vendor head end systems.

Flex Operations Features

Support Flex Operations on Tablet-sized Devices

Flex Operations is now supported on tablet-sized devices such as Apple iPads, Android tablets, or Windows tablets. This includes support for touch interaction such as swiping and pinching to navigate tables, forms and the Map. Device responsiveness support includes the ability for Flex Operations to automatically change layout to support different screen sizes and screen orientations (landscape vs. portrait).

Minimum supported tablet specifications: 10.2" screen, minimum RAM 8GB.

Support Pinging AMI Meters from Flex Operations

Flex Operations supports selecting events from the Event list to confirm power status or select one or more rows in the AMI Customer List to ping for Power Status, Voltage, and Load-side connectivity, and the ability to view the Ping History for each of the ping types.

It also provides an AMI Requests tab to view and manage ping requests. The functionality is similar to the AMI pinging capability that exists in the Web Workspace client.

Operations Mobile Application (OMA) Features

Support Pinging AMI Meters from Operations Mobile Application

Operations Mobile Application (OMA) supports viewing the list of AMI customers associated to a crew's assigned event or to a device, and then be able to select one or more meters to ping. The same three ping types available in NMS of Power Status, Voltage, and Load-side connectivity are supported. The ping results are then viewed within the AMI Customer List. In addition, Ping History is available for all three ping types, similar to the AMI pinging capability that exists in the Web Workspace client.

Power Flow Features

Multi-limit Modeling for Capacitors

This feature adds the ability to model the position of capacitors based on multiple limits associated with it.

This feature adds support for normal and emergency limits for capacitors, and also adds support for a date range limit type. Previously, NMS only supported a single limit set. The limit types supported now are:

- Fixed
- Switched
- Voltage
- Current
- Time of day
- kVAr
- Temperature
- Date range

The emergency limit, if met, overrides the normal limit.

The normal control mode can be a combination of

- Up to three normal limits using the operator **AND**
- Or, two normal limits using the operator **OR**

PF Service Performance Enhancements

This feature improves the performance of the PowerFlow service (PFService), so that other enhancements related to DERMS and forecasting are feasible in NMS.

This feature reduces bottlenecks in the PFService and better leverages multi-core architecture on modern computing platforms.

PFService has been updated to work in a more multi-threaded fashion.

SCADA Features

Oracle Utilities Network Management System Version 2.6.0.0 provides many significant enhancements around SCADA. The main enhancements are described below.

Active Alarms Enhancements

This feature adds additional functionality to the alarm display:

- Automatically launching the Active Alarm Display when the user logs in and preventing it from being closed so the user is always aware of alarms in their areas of responsibility.

- Add the ability to open multiple Active Alarm Displays allowing the user to apply different filters to focus on types of alarms.

- Add a new tab to the Event Details to list all alarms associated with that event.

- Disabling audibles for alarms for a defined period.

Bulk Import-Export for SCADA

This feature adds the ability to bulk import configuration information for IEDs/RTUs with their points and device linkage, where applicable, and the export of an individual IED/RTU and its points.

Test Mode Commissioning Database

This feature adds the ability for testing of the connectivity and the functionality of a device before it is placed into service for monitoring and control. The user's machine will be placed in a safe environment for testing of communications and switching, leaving other users free to monitor and control the rest of the network.

Enhanced Quality Markers

This feature adds support for additional quality markers required for SCADA allowing devices to be shown as In Transit or that are in error. This includes per-phase support for un-ganged switching.

Integrating Trends With a Historian

This feature enhances the database to provide the ability for storing time series data to support new and future trending requirements. The operational historian is designed to be a short-term historian to only save data needed for operational actions and will initially store SCADA values and values that are calculated from them.

To visualize the trends, the trend window has been updated to support the displaying of two different types of measurements as well as providing real-time trend updates.

NMS-Live Energy Connect (LEC) Interface Enhancements

This feature adds the ability to define a stale control request ensuring controls that have been delayed for longer than a configurable time, for any reason, will not be sent to the field device.

FEP and IED Monitor Banners

This feature adds a statistics banner to the top of the IED and FEP Monitor screens providing users with the ability to quickly see the current status of IEDs and FEPs such as which are off scan or failed.

Improved Feedback from Control Failures

This feature improves the notifications from telecontrol failures to provide a warning dialog to the user that initiated the control that it has failed.

Protection from jittering inputs and alarms

This feature adds the ability to automatically detect jittering devices or analogs and pause any alarming with the device whilst it is in this state. By jittering, a device, usually faulty, is changing state rapidly and reporting these changes through the SCADA system. Once the device has been fixed, or if the cause of the jittering is removed, it also can be identified automatically and placed in a Recovering state before finally being marked as back in service if no further changes are reported after a period of time.

Storm Management (SM) Features

Support Concurrent Storm Conditions Affecting the Same Region

This feature adds support for defining storms in Storm Management such that the same region can be affected by more than one storm at a time. A selected control zone displays a dropdown list of storms impacting that control zone and the user can indicate which storm should be used to determine the lookup values for travel times, repair times, etc. Oracle Utilities Analytics will be modified to also accommodate support for multiple storms being associated with an outage.

System-Wide (SYS) Features

Support for Multiple Time Zones

This feature adds support for multiple time zones. The user is able to specify their time zone and see all dates and times displayed in the NMS applications relative to their time zone. This will improve the user experience for NMS instances that span multiple time zones, since previously all times always were displayed in the NMS server time.

Option for User Inactivity Logout

This feature adds the ability to configure a user inactivity timeout. If no interaction is done within an NMS application for a configured "warning" time limit, a warning dialog will display indicating that the user will shortly be logged out due to inactivity. If the user does not select to extend their session by the time a second configured "logout" limit is reached, the user is then logged out.

User Experience (UX) Features

Common Network Viewer for Flex Operations and Operations Mobile Application (OMA)

This feature provides a common look and feel for map user interaction for Flex Operations and Operations Mobile Application (OMA).

The Common Network Viewer improves the performance of map interactions such as panning and zooming, while also includes enhanced display of conductor highlights, phases, text annotations, map backdrops, and other network information.

User-configurable settings are stored with the User's profile in Flex Operations and set/stored at the device-level for OMA.
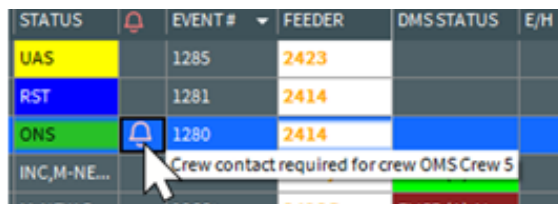
Most System Manager configuration is now managed in a single place, rather than across different files and file locations specific to each application, thus simplifying configuration and maintenance.

Improved Display of Notifications in Work Agenda

Traditionally, each configured "Notify" for a Work Agenda event generates a new separate "NFY" (Notify) row in the Work Agenda. This could clutter the Work Agenda.

In this release, a new, "In-Line Notify" feature eliminates the creation of additional Notify rows in the Work Agenda.

A new column in the Work Agenda shows events that have Notifys.

Mousing over the NFY indicator displays a tooltip continaing the notify text (if multiple notifys are associated with an event, the text for each notify is displayed on a new line in the tooltip). The User can easily acknowledge the event's notifys from the right-click menu.

Upgrading to Version 2.6.0.0

The upgrade path to Oracle Utilities Network Management System V2.6.0.0.0 will be a complete delivery of new binaries, libraries, and configuration files. There are identified migrations based upon your previous release of Oracle Utilities Network Management System, if any.

Known Issues in this Release

A version of Oracle Utilities Network Management System V2.6.0.0.0 for the Solaris platform will be available at a later date.

Supported Integrations

The following integrations are supported in this version of Oracle Utilities Network Management System.

> **Note**: Version numbers listed below are supported as of the v2.6.0.0.0. release (December 2022). Refer to the Certification Matrix for Oracle Utilities Products (Document ID 1454143.1) on My Oracle Support to determine if support for newer versions of the listed products have been added.

Oracle Utilities Product Integrations

- Oracle Utilities Network Management SystemV2.6.0.0.0 to Oracle Utilities Analytics V2.8.0.2+ (forthcoming)
- Oracle Utilities Network Management SystemV2.6.0.0.0 to Oracle Utilities Customer Care and Billing V2.8.0.x, V2.9.0.x
- Oracle Utilities Network Management SystemV2.6.0.0.0 to Oracle Utilities Customer Cloud Service 22A, 22B, 22C
- Oracle Utilities Network Management SystemV2.6.0.0.0 to Oracle Utilities Customer to Meter V2.9.0.x
- Oracle Utilities Network Management SystemV2.6.0.0.0 to Oracle Utilities Customer Smart Grid Gateway V2.4.0.x, V2.5.0.x
- Oracle Utilities Network Management SystemV2.6.0.0.0 to Oracle Field Service 22C, 22D+

Supported Platforms

For details regarding supported platforms, please see the *Oracle Utilities Network Management System Licensing Information User Manual* and the *Oracle Utilities Network Management System Quick Install Guide*.

Deprecated Platforms

- Solaris will no longer be offered for new implementations (existing customers still supported).