Oracle Utilities Network Management System

Release Notes

Release 2.6.0.1.0

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Oracle Utilities Network Management System Release Notes, Release 2.6.0.1.0

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Contents

Preface

These release notes provide an overview of the features in Oracle Utilities Network Management System Version 2.6.0.1.

This preface contains these topics:

Audience

Oracle Utilities Network Management System Release Notes is intended for anyone installing or using Oracle Utilities Network Management System Version 2.6.0.1.

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 Grid Edge DERMS Installation and Deployment 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 Outage Management System for Water User Guide*
- *Oracle Utilities Network Management System Quick Install Guide*
- *Oracle Utilities Network Management System Security Guide*
- *Oracle Utilities Network Management System User Guide*

Chapter 1

Release Notes

The Release Notes for Oracle Utilities Network Management System Version 2.6.0.1 include the following sections.

Enhancements in Version 2.6.0.1

This chapter describes new and enhanced features in Oracle Utilities Network Management System Version 2.6.0.1, including:

Grid Edge Distributed Energy Resource Management (DERMS)

Demand Response Pre-Planned Events

This feature continues to be enhanced to provide updated functionality for **Demand Response** events. Changes that were added in this release support:

- Managing events and strategies in separate applications.
- Providing per-hour savings for an event and stage.
- Preventing editing when an event is in progress.
- Modify and update the details displayed in the event stages.
- Automatically updating the event status to **In Progress** when the event time is reached.
- Sending cancellations to all in-progress and planned stages when an event is canceled after it has begun.
- Generating events more than a day ahead.
- Allowing users to subscribe to event update notifications
- Additional strategy types for Load Reduction, Maximum Capacity and Maximum Reduction.

Fault Location Analysis

Pruning FLA Predictions Based on Protective Devices

This feature allows the NMS authorized user to use new filter options available in the FLA report to prune FLA predicted locations:

- A filter allows pruning out locations beyond fuses.
- A filter allows pruning out locations that are not downstream of predicted or real outages.
- Another option allows restoring all predicted locations.

Flex Operations

Support Selection and Filtering of Favorite Crews for Login Duration

This feature supports the Flex Ops user creating *favorite crews* during their login session and being able to filter the crew list to only show their favorites. This should enable users to more easily find the crews that they are working with during their shift. The favorite crew designation will be cleared upon logout as the Flex Ops user may be working with different crews during their next shift.

Navigate from Event and Symbols in Map to Associated Events and Crews

This feature supports being able to click on one or more event or crew symbols in the **Viewer** and have the **Flex Operations Events** list and/or **Crews** list filtered to only show the selected events/crews. If an event is selected that is part of a condensed events view, then the lead event is shown and can be expanded as usual.

Support Camera Function When Running on a Tablet

When using Flex Ops on a tablet, the user can now use the camera to take photos or videos and add them to an event or damage assessment, similar to what is already supported with the Operations Mobile Application (OMA).

High Availability

Implement New High Availability Scripting to Replace Site Guard

The **Oracle Site Guard** option used to help orchestrate failover from a primary NMS site to a backup NMS site (Disaster Recovery) has been replaced with an NMS internal (simplified script based) mechanism.

Operations Mobile Application (OMA)

OMA-OFS Integration

Integration has been added between the NMS Operations Mobile Application (OMA) and Oracle Field Service (OFS) enterprise mobile solution. An OFS user can select options to bring a running OMA application to the foreground on their same device with context such as a switching sheet to be executed or an event that needs damage assessment, or target the OMA map to specified coordinates. The user can then perform their tasks in OMA and once done, return to the OFS activity from which they launched OMA. This allows OMA and OFS to complement each other with a seamless user experience.

OMA User Experience (UX) enhancements

Several enhancements have been done to improve the OMA user experience, including more use of slide-out context menus to replace or complement rows of action icons and other improvements to common workflows. Additional effort has been done to improve the device-responsiveness of OMA to display better on different resolution of devices and changing screen orientations.

Power Flow

Temperature Controls for Capacitors

This feature adds temperature as one of the limit types supported by PF to model the behavior of a capacitor. This allows PF to determine if a capacitor is ON or OFF using weather data and the capacitor's ON/OFF temperature threshold.

Consideration of LVC Status for Capacitor's State Estimation

This feature allows PF to have a more accurate modeling of SCADA-controlled capacitors that have a Local Voltage Control (LVC).

In case of loss of communication to SCADA or SCADA suspect data, NMS will take into consideration the last known status of the capacitor's LVC in order to determine whether to use normal or emergency limits for the state estimation of the capacitor.

Furthermore, in addition to the Local/Remote status, the LVC status would also have an impact on the capacitor bank's control authorization. If a capacitor bank is not authorized for remote control, it will not receive commands from NMS via the SCADA and it will not be part of the set of options available to VoltVAr Optimization (VVO); VVO would treat them as fixed capacitors.

PFService Performance Enhancements

This feature allows the new FLMService to multi-thread real-time FLM and forecast FLM tasks so that multiple islands can be solved simultaneously. This is a continuation of an enhancement that was part of NMS 2.6.0.0.

Load Profile Adapter to Support Aggregation

This feature adds the ability to aggregate individual meter details to service point transformers, where these are supplied instead of transformer data, before ingestion through the Load Profile Adapter.

Network Optimization Tool

Permissible Voltage Set Point Range for Regulators

This feature allows a project to configure a permissible voltage set point range for each voltage regulator and LTC (Load Tap Changer). It would ensure that the Network Optimization Tool does not recommend a voltage set point for voltage regulators or LTCs outside of the physical limit of the device.

SCADA

NMS v2.6.0.1.0 provides many significant enhancements around SCADA. The main enhancements are described below.

Alarms Enhancements

There are three new features that add additional functionality to the alarm display:

The first feature allows users to freeze an individual alarm display to manage a set of alarms, preventing further alarms from being added to that list whilst also allowing users to manage and remove the alarms as they are processed. In addition, users will be able to freeze individual alarms, adding them to a dedicated Frozen Alarms display, ensuring they stay immediately visible to the user, who can again process them from this display.

The second feature incorporates an **Alarm Shelving** option. With Alarm Shelving, users are able to apply some pre-configured shelving rules to the alarm display for all users. Designed to be used during large network events, such as storms, where lower-level alarms can be shelved during the event allowing users to concentrate on the most important alarms. Shelved alarms will still be processed by the system and, when shelving is removed, all standing alarms will be returned to the main alarm displays.

The third feature allows users to acknowledge the page of visible alarms in the alarm display.

Linking Single Bit Digitals

This feature allows the connection of single input bits with the SCADA Configuration to support scenarios where IED/RTU wiring is not contiguous for multi-bit inputs.

Commissioning

There are two new features that add additional functionality to the commissioning process.

The first feature enhances commissioning to include a dedicated alarm display where the relevant alarms can be raised and viewed when commissioning devices. These alarms will not be visible to other users and not be stored after the commissioning is completed.

The second feature adds some further checks to the commissioning tool ensuring that only points associated with devices can be commissioned, providing warnings where necessary, performing integrity scans when points are removed from Test Mode and adding support for devices or measurements that either don't currently exist or are in the Pending Construction state.

Secured Connection Between NMS and LEC

This feature adds the ability to secure the connection between NMS and Flex SCADA and the LEC instance which performs the Front-End Processing (FEP) functionality, using secure keys.

IED Logging

This feature allows users to open a view onto the IED logs provided by LEC. The logs can be viewed and filtered to particular IEDs and/or FEPs. The user will also be able to save filters for future use.

IED Import Improvements

This feature adds the ability to both define a template to apply to an IED when it is being imported and to specify a FEP that the imported IED should be attached to.

IED Force Polling

This feature adds the ability to force poll IEDs for their current values when running applications such as FLISR.

Trend Display

This feature extends the existing trend features to add more capabilities to the displayed trends. This will include:

- Supporting trends for multiple devices.
- Supporting adding and removing trends to existing displays.
- Supporting saving trends to be viewed at a later date.

Suggested Switching

Address Suggested Switching Gaps

This feature allows addressing multiple Suggested Switching gaps according to our customers. It includes:

- Better determination of tiers of restoration switches.
- Better identification of transfer buses.
- Ability to run Substation Suggested Switching on low side breakers of power transformers.
- Consideration of non-load break tie switches for Suggested Switching solutions.

User Experience (UX)

Add More Support for Right-Click Navigation to a Device in the Viewer

This feature adds right-click and menu options to tabular displays in Web Workspace and Flex Operations to be able to navigate to that row's device in the Viewer/map. This should be available in customer and call lists, switch steps, summaries, and so on. These navigation options were previously available in some tables, but it should now be configured for all tables by default.

Copy Tabular Rows, Cells and Columns to Clipboard

Tabular displays now allow a Web Workspace or Flex Ops user to select and copy to the clipboard a selected single cell or column, or one or more rows (with or without column headers). This facilitates copying and pasting information into another NMS field such as a comment, or into a spreadsheet for analysis.

Web Switching (WSW)

Enhanced Return Step Options in Switching

Previously Switching had a single **Return to Nominal** option as well as options to copy steps as *go-backs*. Now 3 options are supported:

- **Mirror Restoration steps:** This is the current *go-back* logic that does the inverse operations in the inverse order. It does not require selecting the steps and will exclude any comment and No-op steps. Steps will be automatically pasted in a new **Mirror Restoration** block.
- **Return to Previous steps:** Return the model to the way it was prior to the first step in the sheet being executed. It will attempt to keep as many customers energized as possible. Steps will be pasted in a new **Return to Previous** block.
- **Return to Nominal steps:** This is the existing **Return to Nominal** option to generate steps to return devices to their nominal states. It can differ from the **Return to Previous** option if there are earlier steps that put devices in their nominal status. This option creates a new **Return to Nominal** block with the steps.

Web Workspace (WW)

Common Network Viewer for NMS Web Workspace

This feature adds an option to use in the desktop Web Workspace application the same Common Network Viewer (CNV) originally developed in NMS v2.6.0.0 for Flex Operations and OMA. The previous Web Workspace Viewer will continue to be supported in 2.6.0.1 since there are a small number of functions that the Web Workspace Viewer supports that are not yet available in the Common Network Viewer. The legacy Web Workspace Viewer will be completely removed in a future service pack or release.

The Common Network Viewer improves the performance of map interactions such as panning and zooming, while also including enhanced display of conductor highlights, phases, text annotations, and other network information. Much of the Viewer configuration for Web Workspace, Flex Operations, and OMA can be managed in a single place, rather than across different files and file locations specific to each application, thus simplifying configuration and maintenance.

Upgrading to Version 2.6.0.1

The upgrade path to Oracle Utilities Network Management System V2.6.0.1.0 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 V2.6.0.1.0 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 V2.6.0.1.0 release (August 2023). 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 SystemV2.6.0.1.0 to Oracle Utilities Analytics V2.8.0.2+ (forthcoming)
- Oracle Utilities Network Management SystemV2.6.0.1.0 to Oracle Utilities Customer Care and Billing V2.8.0.x, V2.9.0.x
- Oracle Utilities Network Management SystemV2.6.0.1.0 to Oracle Utilities Customer Cloud Service 23A, 23B, 23C
- Oracle Utilities Network Management SystemV2.6.0.1.0 to Oracle Utilities Customer to Meter V2.9.0.x
- Oracle Utilities Network Management SystemV2.6.0.1.0 to Oracle Utilities Customer Smart Grid Gateway V2.4.0.x, V2.5.0.x
- Oracle Utilities Network Management SystemV2.6.0.1.0 to Oracle Field Service 23B, 23C+

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).