Oracle Utilities Network Management System

Release Notes

Release 2.4.0.0.0

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Contents

Preface

These release notes provide an overview of the features in Oracle Utilities Network Management System Version 2.4.0.0.0.

This preface contains these topics:

Audience

Release Notes is intended for anyone installing or using Oracle Utilities Network Management System Version 2.4.0.0.0.

Related Documents

For more information, see these Oracle documents:

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

Chapter 1

Release Notes

Enhancements in Version 2.4.0.0.0

New and enhanced features in Oracle Utilities Network Management System Version 2.4.0.0.0.

AVAILABILITY

Improve Support for WebLogic Clustering

The NMS MultiSpeak Adapter, which can be used for AMI, AVL, and SCADA integration, was previously limited to a single instance running at a site, which prevented a WebLogic Server running a MultiSpeak Adapter from supporting a clustered configuration. This limitation is now removed, allowing the MultiSpeak Adapter to be used in a WebLogic cluster. This was done by incorporating the WebLogic singleton service as part of the NMS MultiSpeak Adapter.

DISTRIBUTED ENERGY RESOURCE MANAGEMENT SYSTEM (DERMS)

Support Active Network Management Schemes

This feature adds a new Active Network Management Template switching sheet. Switching steps to be executed and criteria for the switching sheet to execute are defined in the template. When the criteria is met, then an Active Network Management Switching sheet is created and executed automatically, or in a manual mode depending on how it is configured. A possible use case is that if a substation transformer is overloaded, specific load can be curtailed, specific generation can be dispatched, or the network can be reconfigured automatically.

Support a Relieve Violations Objective

This feature adds a new optimization objective that will dispatch kW/kVAR from SCADA controllable DER to relieve violations on the system. The new real-time optimization can be configured to be in automatic mode or manual mode. Automatic mode will automatically execute the steps. Manual mode requires operator review prior to execution. This new objective has also been added to the study mode optimization tool.

Improve Support for Customer-Level DER

This feature adds the ability to store DER information in the customer model and display the details of the customer's DERs in the Customer List. The total count of DER units for a customer is displayed in the Customer List, with the ability to view the details of each DER (solar panel, battery, wind turbine, etc.). The NMS model processing will then aggregate the customer DERs at the service transformer level for DMS and DERMS analysis.

FEEDER LOAD MANAGEMENT (FLM)

Voltage Profile Graph for Feeder Load Management

This feature adds a new Voltage Profile Graph to Feeder Load Management. The graph shows voltages and distance from the source of supply nodes (service transformers) for each phase. It also shows bellwether voltage points with their measured readings.

Additional Configuration Options for Feeder Load Management Forecasts

This feature adds new configuration options for Feeder Load Management. Feeders can now be configured to have custom forecasting and choose the number of hours forecasted, number of peaks forecasted, and the ability to increase the frequency of intervals (30 minute or 15 minute instead of hourly). With this feature we have also enhanced the ability to process load and generation profiles that have a greater granularity (15 minute intervals instead of hourly).

OPERATIONS MOBILE APPLICATION (OMA)

Display Current Conductor Energization Status

OMA normally does not display conductor energization, but shows a fixed color or a nominal feeder color. This feature provides a refresh conductor as-operated energization function to OMA where an OMA user can request the server to send the latest as-operated energization status of conductors in the current map viewer window. The energization statuses supported include energized, de-energized, partially energized, grounded/earthed, parallel, and multi-feeder. The energized color can be based on the source feeder color or the phase color (for non-three phase conductors).

In addition to updating on user request, any control action done from that OMA user will also request a conductor energization update from the server.

Once the user pans/zooms the OMA window, only objects that were visible at the time of the as-operated energization status update will have as-operated status symbology. All other objects will have nominal status symbology until they are visible when a OMA as-operated energization refresh is requested or an OMA-initiated control action is taken.

Ability to Update Task Status While Offline

This feature allows OMA users to update their task status (active, en route, onsite, inactive) while offline and then their status is uploaded to the NMS server when the OMA app comes back online (store-and-forward).

User-Controllable Map Downloads

This feature allows OMA users to control what maps to download. Options supported include all maps, all maps needed within the extent of the current OMA display, all maps for the OMA user's currently assigned tasks, or all maps within a configurable radius of the user.

Self-instruct and Uninstruct a Switching Step

Previously an OMA user was only able to view switching sheets, view switching steps that were assigned to them, and perform (Complete/Abort/Fail) steps that were previously instructed to them. This feature allows a crew that was associated to a switching sheet to instruct a step to

themselves that was in a New or Uninstructed status. Steps that were Completed, Aborted, Failed, or already Instructed would not be able to be self-instructed. Likewise, if a step is assigned to another crew, the OMA user cannot instruct it to themselves.

In addition, a crew is able to uninstruct a step that has been instructed to themselves, when they do not have time or are otherwise unable to do it. This changes the step to an Uninstructed status.

Complete a Switching Sheet from OMA

This feature adds the ability for the OMA user to complete a switch sheet that is associated to them and for which all steps in the sheet are in a terminal status (Completed, Aborted, or Failed).

POWER FLOW (PF)

Use Wind Speed Telemetry at a DER to Calculate Weather Zone Wind Speed

This feature adds wind speed as a possible attribute of a Distributed Energy Resource (DER). It is stored and displayed as a SCADA measurement and can then be leveraged to calculate the wind speed for the overall weather zone containing the DER. The weather zone wind speed is used to forecast the generation from a wind turbine DER.

SCADA INTEGRATION

Additional Information in SCADA Control Request Dialog

Users desired additional context information when the confirmation dialog is displayed in NMS for sending a control request to a SCADA system. The dialog is now configured to also now display:

- Substation name
- Device name
- SCADA point name

WEB WORKSPACE (WW)

Update or Complete Multiple Events at Once with Same Details

This feature allows the ability to multi-select and update events with the same set of Event Details drop-down values and additional Operation Event Note. The user can select which drop-down lists should have their values copied to all selected events, and indicate whether the events should just be updated or actually completed. This should be helpful during storms or other major events where there are common conditions, cause, and action taken for many events.

Improve Support for Entering and Managing Hazards

This feature allows the ability to easily see reported hazards, track the investigation of them, manage their status, and close them out. The feature provides some better capability to create hazards based on call clues, display them on the Viewer, and manage them similar to how damage assessment are managed.

Work Agenda Condensed View Option

This feature allows the option to condense and summarize related events in the Work Agenda. This is offered via a new "Condensed View" checkbox on the Work Agenda. A summary row displays the statuses, devices, crews, etc. of the related events and targeting to the summary row in the Viewer will display a bounding area containing all of the related events. The user can then expand the summary row to drill into the individual related events.

Ability for User to Select from Predefined Color Schemes

Utilities use NMS in numerous locations, with varying amounts of ambient light. As a result, sometime a bright background of the NMS workspace is desirable and in other situations a darker background is preferred. This feature allows the user to choose from among predefined color schemes and have their selection apply to all subsequent launches of any NMS application from that client computer, until someone changes the color scheme selection again.

Event Information Consolidated into Event Details Tabs

Many different pieces of information associated with an event, such as customer and caller information, damage assessment, the log of actions on the event, fault location analysis and FLISR reports, etc. previously required launching separate windows to view. This information has now been consolidated into separate tabs within the Event Details window, rather than popping up separate windows. This allows a user to quickly toggle between tabs to view various information for an event rather than having to launch additional windows from menus.

Upgrading to Oracle Utilities Network Management System Version 2.4.0.0.0

The upgrade path to Oracle Utilities Network Management System Version 2.4.0.0.0 is a complete delivery of new binaries, libraries, and configuration files. There are identified migrations based upon your previous version of Oracle Utilities Network Management System, if any.

For details on supported platforms, refer to the installation documentation shipped with Oracle Utilities Network Management System Version 2.4.0.0.0.

Deprecated Platforms

The following platforms, which were supported in the previous NMS release, are deprecated:

- Oracle RDBMS 12.1.x
- Oracle Linux 6.x and Red Hat Enterprise Linux 6.x
- IBM AIX 6.x

Supported Platforms

For details regarding supported platforms, please see:

Oracle Utilities Network Management System Licensing Information User Manual

Also, please note that Oracle RDBMS 18c is currently NOT supported and is currently planned to be supported with Oracle Utilities Network Management System v2.4.0.1.