Oracle Utilities Network Management System

Release Notes

Release 2.6.0.2.0

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Oracle Utilities Network Management System Release Notes, Release 2.6.0.2.0

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Contents

Preface

These release notes provide an overview of the features in Oracle Utilities Network Management System Release 2.6.0.2.0.

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 Release 2.6.0.2.0.

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 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 Release 2.6.0.2.0 include the following sections.

Enhancements in Release 2.6.0.2.0

This chapter describes new and enhanced features in Oracle Utilities Network Management System Release 2.6.0.2.0, including:

Automated Metering Infrastructure (AMI)

Add Ability to Adjust Outage Start Time Based on AMI Last Gasps

This feature adds an option for Oracle Utilities Network Management System to potentially update an outage start time to be later for certain outage types, based on AMI last gasps received for the outage. It behaves similar to an existing option to be able to

adjust outage restore times to be earlier based on AMI restoration power-up messages. For this new feature, sometimes a utility will "pre-create" an outage event where a crew is going to disconnect power, so that any calls or AMI will group to the existing event with the already-assigned crew rather than create a new event that might get assigned a different crew. Since the actual outage interruption may begin later than the event creation, this feature adjusts the start time to be later, when meters start to report the actual loss of power.

Distributed Energy Resource Management (DERMS)

Demand Response Pre-Planned Events

Several new features are added that:

- Improve the display of substation and feeders included in the stage of an event.
- Add additional trend lines to the Forecast and Monitor graph. These trends provide information to support different views on the data to help users understand the current and as-planned reductions expected to be received.
- Allow users to search for one or more devices and either create a new stage with them, or add them to an existing stage.
- Allow users to select which days particular strategies can be run on.

Support for Automatic and Manual Event Types

This feature adds additional support for events that either automatically generate stages to support the event objective or allow users the ability to manually create their own stages. It also allows a user to change an automatic event to a manual event type, prevents parameters from being edited or the type from being changed after the event is Submitted, and allows saving an event as a new strategy..

7 Day Forecast

This feature provides a new 7-day forecast option that will run alongside the current 24-hour Feeder Load Management forecast option and will be used by default when the FLM forecast is not available. This longer-term forecast is based on the kVA model for generating the forecast.

Health Check Support

This feature provides the ability to monitor and display details on the current connection status of devices under each Head End System (HES)/Aggregator. Users can view the latest information from each HES/Aggregator to get an understanding on the current capabilities of each HES/Aggregator should an event need to be called.

Alerts

This feature provides an alerting mechanism to users that highlights potential communication or other types of failures. The alerting has warning and alert levels and will, where appropriate, manage the resending of communication messages to ensure they reach the end system.

Event Prioritization

This feature allows users to prioritize the event types configured in the system. As events with higher or lower priorities are created, users will be made aware of any overlapping events and warned that lower priority events will be removed to support the new higher priority event.

Support the Native Generation of Event Impacts

This feature adds the ability to define and calculate the expected reduction or increase to be applied during an event for a pre-defined group of devices within Oracle Utilities Edge DERMS natively. The ability to import the impact from an external system will continue to be supported.

Nominally, this data will be uploaded annually and will support defining the data through several variables such as device groupings, temperature, control levels and non-responsive device values (NRD). Devices will then be assigned to these groups via the enrollment or update process.

As events are created, these values will then be used to calculate the impact of the selected devices in the pre, during and post phases.

Calculation of Device Availability

This feature adds the capability to calculate whether a device could be used within any upcoming events based on its previous usage and program rules. The ability to import the device capability from an external system will continue to be supported.

Defining the availability will include the importing and defining of several Program Rules which will define information such as:

- The number of times a device can be used
- Duration between usage
- Specific times in a day the program can be run
- Whether it can be run on weekdays, weekends and/or holidays

These values will then be used to identify if a device can be part of an event or not. In addition, to support emergency type events, some of these rules can be overridden by the user to ensure the target of the event can be met.

Feeder Load Tools in Flex Operations for DERMS Users

This feature adds a Feeder Load Management tool in Flex Operations that includes graphs, alerts and forecast accuracy to improve the user experience for the Edge DERMS user.

DERMS Optimization Engine and DER Scheduling

This feature includes a new optimization engine that extends the capabilities of Grid DERMS to pre-authorize 3rd-party DER day-ahead generation schedules.

The optimization engine is capable of generating optimized near-real-time and day-ahead schedules for utility-managed DER such as Battery Energy Storage System (BESS) and electric vehicles (EVs) charging stations, taking into consideration the forecasted grid conditions and the 3rd-party schedules.

This feature also includes a new user interface to follow up the DER schedules' execution.

Battery Energy Storage System (BESS) Modeling Extension

This feature extends the existing model for BESS in Oracle Utilities Network Management System to include new parameters and technical attributes that provide the DERMS optimization engine with more real-time and static data that can be used for the optimization of BESS units.

Electric Vehicle Supply Equipment (EVSE) Modeling Extension

This feature extends the existing model for EVSE and EV charging stations. In turn, this extends the DERMS optimization engine's capability to optimize EVSE and charging stations based on technical specs and applicable smart charging mode.

Use Imported Load and Generation Forecasts

This feature adds the ability of Oracle Utilities Network Management System to load and store generation and load forecasts from alternate sources. Oracle Utilities Network Management System can be configured to use alternate forecasts for a certain period and then use the normal scheme for the remainder of the Power Flow forecasts.

This feature includes several screen enhancements that allow the authorized user to select which type of forecast they want to use for different applications in study mode: Power Flow, Suggested Switching, Optimization and Feeder Load Management.

Flex Operations

Abnormal Device Summary in Flex Operations

This feature adds the Abnormal Device Summary tabular display to Flex Operations. It shows devices with one or more phases in an off-nominal status, indicates the current and nominal statuses of the phases and when the device was operated to be abnormal.

Outages Summary in Flex Operations

This feature adds the Outages Summary portion of the Trouble Summary to Flex Operations. It shows the tree table of the control zone hierarchy with columns for key details such as customers served, customers out, number of calls, number of service outages, and so on. In addition, trend graphs are available to show key trends such as number of calls, number of outage events, and # of customers out.

Call Entry in Flex Operations

This feature adds most of the Web Call Entry functionality to the Flex Operations client, both as an option for full Flex Operations users and for a new Flex Call Taker user type. It supports searching for a customer via different characteristics (name, address, account number, and so on), entering in a trouble call with clue drop-down lists and comments, scheduling an appointment, requesting callbacks, and viewing call or event history for that customer.

In addition, this feature adds an indicator if the customer has been disconnected, for example due to non-payment, and that disconnect status has been sent to Oracle Utilities Network Management System as part of a CIS update and stored in the Oracle Utilities Network Management System database. This would allow the call-taker to avoid submitting a power out call if a disconnected customer calls to complain about loss of power, and instead inform the customer about the disconnect.

Print or Email Calls from Selected Events in Flex Operations

This feature supports being able to select one or more events in the Flex Operations Event List and then print or email a PDF of all associated calls for the events. It includes a summary of the event as a header and then the details for each call associated to the event.

Add Ability to See Customer Event History and Call History in Flex Operations

This feature allows a user to select a customer from a tabular list such as the Event Details Calls or Customers lists, the Switching Impacted Customers list, and so on, and then view the event history or call history for that customer based on what is in the Oracle Utilities Network Management System database. This is similar to the event and call history available from Flex Call Entry.

Feeder Load Management Dashboard Refresh

This feature adds a modernized and optimized version of the Feeder Load Management dashboard to Flex Operations. This dashboard presents the data of the original Feeder Load Management dashboard in a more graphical and easier-to-use way.

SCADA

Oracle Utilities Network Management System V2.6.0.2.0 provides many significant enhancements around SCADA. The main enhancements are described below.

Alarms Comments and Attachments

This feature allows attachments to be added to the alarm configuration that are then available to the user to view when the alarm is generated and available to view in any of the Alarm Displays. The attachments are limited to those types currently supported by Oracle Utilities Network Management System and allowed via project configuration. Users are also allowed to add notes to an alarm which can be viewed and updated at a later date.

Additional Protocol Support

This feature adds support for the following two protocols:

- IEC-104
- Modbus

This includes protocol-specific configuration for each protocol. Users are able to define, as well as import and export, devices that use these protocols within Flex SCADA.

Commissioning

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

- The first is an enhancement to the Import/Export functionality that extends the devices that can be imported to either an individual FEP or multiple FEPS. This allows the full SCADA system configuration to be defined or exported in a single operation.
- The second enhancement supports the automatic importing of updated configuration through an API call. Through a user created script, the API can be called to insert the new configuration providing it passes the validation checks.

SCADA Control User Role

This feature adds the ability to define which users will have access to limited SCADA-related functionality without requiring either the SCADA Maintenance or SCADA Commissioning user roles. Initially, this gives access for privileged users to view and control Front End Processors (FEPs) and Remote Terminal Units (RTUs)/Intelligent Electronic Devices (IEDs) directly from the Network Display.

Calculation Engine

This feature allows privileged users access to the Flex SCADA Calculation Engine. The Calculation Engine is a highly-performant feature that allows calculation to be defined and calculated in a real-time manner, reflecting actual changes as they happen. The engine supports various Logical, Algebraic, and other functions, as well as access to device attributes, to build simple or complex calculations and store them within measurements on devices.

Dynamic Limits

This feature allows the limits applied to measurements to be calculated dynamically based on user-defined calculations. Calculations are based on simple logical or numerical functions, and include the ability to use device attributes.

A further feature allows users the ability to view any limits higher than normal to be displayed on the network display for information.

Trend Display

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

- Creating simple calculated trends based on pre-defined functions
- Exporting the raw values for the displayed trends
- Supporting a lighter background for trend printing

User Experience (UX)

Right-click a Tag and Open Associated Safety Document or Switching Sheet

This feature increases user efficiency by providing one-click access from a tag in the Common Network Viewer to the step or action in the associated safety document, switching sheet, event Steps tab, or Miscellaneous Log that caused the tag to be placed.

Option to Show Assigned Crews in the Common Network Viewer

Previously, unless AVL was being used to display actual crew locations, crews were only able to be shown in the Common Network Viewer once they were en route or onsite at the event device. This feature adds an option to toggle on display of assigned crew locations as well, so a crew symbol is shown at all device locations where that crew has an active assignment. The assigned crew symbol is distinct to easily distinguish it from the standard crew symbols. Additionally, the crew status is added to the mouse-over text for a crew so that it is easier to determine if the crew is still en route or is onsite.

Web Switching

Block the Removal of Configured Tag Types When Safety Conditions are on a Device

This feature blocks the user if they attempted to remove certain tag types or other conditions while there is any safety document associated to the device. This benefits utilities who create a separate safety document for each crew rather than listing multiple crews in a safety document, and therefore rather than requiring every crew to have a "clear" status in a safety document before removing tags, it would require that each safety document that references a tag be released before the tag or tags could be removed. Previously a tag could only be associated to a single safety document and that one document being issued would prevent tag removal, but this conceptually allows multiple safety documents to each prevent the removal of the tag.

Support Execute Only Mode for Switching sheets

This feature allows one or more operators to do actions on switching steps (crew ready, instruct, complete, etc.) while another user has the sheet in Edit mode and is creating/ editing steps. This execute-only mode allows a Web Switching user do similar functions to what an Operations Mobile Application user can already do with their assigned switching steps. The benefit of this is that a supervisor can be building out the complete switching sheet of steps to perform while an operator is executing the initial steps with the crews.

Improve Switching Sheet Audit Log

This feature improves the audit log for a switching sheet. Previously it mainly tracked sheet status changes (for example, New ' Requested ' Prepared ' Reviewed…). Now it also tracks changes to the Request tab such as dates, description, or other fields, changes to individual steps, and several other changes.

Web Trouble

Add Ability to Set Restore Time When Moving Event to Incomplete

This feature prompts the user to enter a restore time when moving one or more selected events to the Incomplete status. It defaults to the current time, which matches the previous behavior of always using the current time, but it provides the flexibility to back-date the restore time.

Add Menu Options to Release all Events Assigned to a Crew

Previously, it was possible to release all crews from an event with a single action, but a crew could only be released from one of its assigned or active events at a time. This new feature allows releasing the crew from all associated events (assigned, en route, or onsite) with a single action. This can be helpful at the end of the crew's shift.

Add Ability to See Customer Event History and Call History in Web Workspace

This feature allows a user to select a customer from a tabular list such as the Event Details Calls or Customers lists, Switching Impacted Customers list, and so on, and bring up the event history or call history for that customer based on what is in the Oracle Utilities Network Management System database. This is similar to the event and call history available from Web Call Entry.

Web Workspace

Add Optional Clue Code Drop-downs to Create Event Window

This feature allows a user to select from clue code drop-down list options in the Create Event window. The resulting event would then be created with the appropriate clues based on the drop-down selections. This allows the created event to be able to be sorted or filtered based oaefn those clues.

Upgrading to Release 2.6.0.2.0

The upgrade path to Oracle Utilities Network Management System V2.6.0.2.0 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 V2.6.0.2.0 for the Solaris platform will be available at a later date, targeted around the end of 2024.

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 V2.6.0.2.0 release (October 2024). 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 System V2.6.0.2.0 to Oracle Utilities Analytics V2.9.0.1+ (forthcoming)
- Oracle Utilities Network Management System V2.6.0.2.0 to Oracle Utilities Analytics Insights 24B+
- Oracle Utilities Network Management System V2.6.0.2.0 to Oracle Utilities Customer Care and Billing V2.8.0.x, V2.9.0.x
- Oracle Utilities Network Management System V2.6.0.2.0 to Oracle Utilities Customer Cloud Service 24A, 24B, 24C
- Oracle Utilities Network Management System V2.6.0.2.0 to Oracle Utilities Customer to Meter V2.9.0.x
- Oracle Utilities Network Management System V2.6.0.2.0 to Oracle Utilities Customer Smart Grid Gateway V2.4.0.x, V2.5.0.x
- Oracle Utilities Network Management System V2.6.0.2.0 to Oracle Utilities Digital Asset Cloud Service 24B+
- Oracle Utilities Network Management System V2.6.0.2.0 to Oracle Field Service

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

- This will be the final release that will be supported on the Solaris SPARC platform. Solaris will no longer be supported starting with the next major release.