

Oracle Utilities Network Management System

Release Notes

Release 1.12.0.1

E55379-01

August 2014

Oracle Utilities Network Management System Release Notes

E55379-01

Copyright © 2014, Oracle and/or its affiliates. All rights reserved.

This software and related documentation are provided under a license agreement containing restrictions on use and disclosure and are protected by intellectual property laws. Except as expressly permitted in your license agreement or allowed by law, you may not use, copy, reproduce, translate, broadcast, modify, license, transmit, distribute, exhibit, perform, publish, or display any part, in any form, or by any means. Reverse engineering, disassembly, or decompilation of this software, unless required by law for interoperability, is prohibited.

The information contained herein is subject to change without notice and is not warranted to be error-free. If you find any errors, please report them to us in writing.

If this is software or related documentation that is delivered to the U.S. Government or anyone licensing it on behalf of the U.S. Government, the following notice is applicable:

U.S. GOVERNMENT END USERS: Oracle programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, delivered to U.S. Government end users are "commercial computer software" pursuant to the applicable Federal Acquisition Regulation and agency-specific supplemental regulations. As such, use, duplication, disclosure, modification, and adaptation of the programs, including any operating system, integrated software, any programs installed on the hardware, and/or documentation, shall be subject to license terms and license restrictions applicable to the programs. No other rights are granted to the U.S. Government.

This software or hardware is developed for general use in a variety of information management applications. It is not developed or intended for use in any inherently dangerous applications, including applications that may create a risk of personal injury. If you use this software or hardware in dangerous applications, then you shall be responsible to take all appropriate fail-safe, backup, redundancy, and other measures to ensure its safe use. Oracle Corporation and its affiliates disclaim any liability for any damages caused by use of this software or hardware in dangerous applications.

Oracle and Java are registered trademarks of Oracle and/or its affiliates. Other names may be trademarks of their respective owners.

Intel and Intel Xeon are trademarks or registered trademarks of Intel Corporation. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. AMD, Opteron, the AMD logo, and the AMD Opteron logo are trademarks or registered trademarks of Advanced Micro Devices. UNIX is a registered trademark of The Open Group.

This software or hardware and documentation may provide access to or information on content, products, and services from third parties. Oracle Corporation and its affiliates are not responsible for and expressly disclaim all warranties of any kind with respect to third-party content, products, and services. Oracle Corporation and its affiliates will not be responsible for any loss, costs, or damages incurred due to your access to or use of third-party content, products, or services.

Preface

These release notes provide an overview of the known issues in Oracle Utilities Network Management System Version 1.12.0.1.

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 1.12.0.1.

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 User's Guide*

Release Notes

- **Known Issues in Version 1.12.0.1**
- **Enhancements in Release 1.12.0.1**
- **De-Supported Integrations in Version 1.12.0.1**
- **De-Supported Platforms in Version 1.12.0.1**

Known Issues in Version 1.12.0.1

This section describes known issues in Oracle Utilities Network Management System Version 1.12.0.1.

No significant known issues at the time of this document.

Enhancements in Release 1.12.0.1

New and enhanced features in Oracle Utilities Network Management System Release 1.12.0.1.

Customer Self Service (CSS)

Support ERT Notifications

The NMS V1.12.0.1 service pack adds the ability for customers to request a notification (typically text message or e-mail) when the estimated restoration time (ERT) for their outage has changed significantly. A utility can configure how much the ERT needs to have changed from the previous ERT (*e.g.*, at least 60 minutes) and a maximum number of “ERT” notifications to be generated/sent.

This new notification is in addition to the existing notifications for when an outage begins or is restored that is affecting the customer. Those previous notifications were available as of NMS V1.11.0.4.

Signing up for and receiving these notifications also requires the use of Oracle Utilities Customer Self Service and Oracle Utilities Notification Center, which are separately-licensed products.

Distribution Management System Enhancements

Display Voltage Regulator Limits in Amps

Previously the voltage regulator ratings were displayed in terms of kVA. Because of that, it was difficult to compare the rating of the regulator to the loading on the device.

The NMS V1.12.0.1 service pack allows users to view the voltage regulator ratings in terms of amps rather than kVA. This feature will allow users to more easily compare the rating vs. the current actually passing through the device, thus leading to better operational decisions.

Fault Location Analysis Enhancements

Indicate Accuracy of Best FLA Prediction Compared to Actual Fault Location

When NMS receives a SCADA fault indication, the Fault Location Analysis (FLA) module can calculate the potential fault locations based on fault current and displays these locations in the NMS Viewer and FLA window. The user then can confirm, mark incorrect or correct the predicted fault location depending on real-world location.

If the user does indicate a corrected fault location, NMS V1.12.0.1 provides the user a percentage accuracy indication of the best predicted fault location compared to the actual fault location.

Fault Location, Isolation, and Service Restoration Enhancements

Time Window of FLISR Future Violations or Warnings

The NMS V1.12.0.1 service pack enhances FLISR to consider scaled load forecasts when generating solutions and present the load violations, if any, related to both real-time and “looking forward” into a configurable future window.

This helps the user to understand the possible post-restoration overloads and make better decisions on executing restoration plans generated by FLISR.

Feeder Load Management Enhancements

Display Details of Power Flow Non-Convergence Issues

Previously, whenever Power Flow failed to converge, the user wasn't able to view details about the nature of model errors or other reasons for Power Flow non-convergence.

The NMS V1.12.0.1 service pack provides details about the Power Flow solution results along with reasons for non-convergence. This information includes the details of each iteration, the severity of any errors, the associated devices, etc.

Model Management Enhancements

Allow User to Enter the Alias for Jumpers and Other Local Model Edits

Previously if the user added a jumper, tap generator, etc. there was no useful alias generated for this new device, and the user could not create/edit the alias to make it useful.

The NMS V1.12.0.1 service pack will provide a more useful default alias based on the device type and timestamp of when it was created. The user can also choose to manually assign a device alias of their creation instead.

NMS Training Simulator Enhancements

Support More Flexibility for Selecting and Specifying Calls and Power-offs

The original release of the NMS Training Simulator only supported two options for submitting calls. One required the use of Web Call Entry to enter calls for a specific customer and with specific clues. The other provided the ability to submit generic “No Lights” calls for a preconfigured % of downstream customers. Similarly, AMI power-offs could only be submitted for a preconfigured % of downstream customers. When using the preconfigured % option, there was no ability for a trainer to choose which specific customers should have simulated calls, or which specific meters should simulate power-offs.

With NMS V1.12.0.1, the trainer can select specific customers to have simulated calls or meter power-offs, by multi-selecting customers from either the Customer List or AMI Customer List respectively.

Support Simulated AMI Power-ups

The NMS V1.12.0.1 service pack adds the ability to simulate AMI power-ups as well as the previously-supported AMI power-offs. The functionality is supported via the AMI Customer List and supports multi-select. This enables a more complete training scenario option for utilities that have implemented AMI integration to NMS.

Support Ability to Varying Input Times for Calls and AMI Messages

The initial implementation of the NMS Training Simulator allowed recording of a group of customers or meters to indicate loss of power. However, the simulated calls or AMI power-offs would all be submitted at one time, which was not realistic. With NMS V1.12.0.1, an interval range can be specified such that for each simulated call, it will randomly pick a time within that interval range to wait before the next simulated call in that batch is submitted. A similar but different range can be specified for simulated AMI power-offs and power-ups.

Service Alert Enhancements

Support “Duration” Parameter on Outage Notifications

Previously in Service Alert, notifications related to outages were sent out as soon as the configured threshold was exceeded, or in the case of a specific customer, as soon as they were impacted. However, some utilities have requirements to notify management or regulators when there is an outage of a certain size and duration.

NMS V1.12.0.1 adds a Duration parameter such that Service Alert will hold onto the outage notification until the Duration time has elapsed. It will then check to see the outage is still unrestored, and if so, it will send out the notification as normal. This also allows the utility to set the Duration as a general delay factor to allow time for outages to repredict and group, if desired.

Multiple Selections of Accounts for Notification Parameters

NMS V1.12.0.1 adds the ability to select multiple accounts when configuring notifications to affect a specific customer. This allows a user such as an account rep to specify the type of desired notifications and who should receive them, then select multiple accounts at once as opposed to having to separately configure each notification.

Multiple Selections of Devices for Notification Parameters

NMS V1.12.0.1 adds the ability to select multiple devices when configuring notifications to affect a specific device. This allows a user such as an operations or maintenance manager to specify the type of desired notifications and who should receive them, then select multiple devices at once as opposed to having to separately configure each notification.

Expand Options for Configuration in Subject Line of Notifications

Previously in Service Alert, the Subject line of a notification primarily indicated the type of notification and control zone. The recipient had to open and read the notification to get any additional details. NMS V1.12.0.1 adds the ability to configure numerous other values within the Subject line, which can help the recipient decide in major events which notifications to open and read first. Additional options include:

1. Number of customers out (all, critical, or weighted)
2. Device type and alias
3. Switch plan #
4. Related event # and relationship type
5. Generic event fields
6. External ID

Expand Options for Configuration in Body of Notifications

Several items have been requested for inclusion in the body of Service Alert notifications. NMS V1.12.0.1 supports the following additional content for configuration as desired:

- Information from the CES_CUSTOMERS view
- Device attributes
- Partial restoration log information
- Cancellation reason (for cancelled outages or switch plans)

Support “Update” Trigger on Storm Notifications

Previously in Service Alert, notifications could be sent of a storm beginning or ending if the NMS Storm Management module was used to start or end a storm. NMS V1.12.0.1 adds the additional option to trigger a notification if the storm type or severity is changed.

Suggested Switching Enhancements

Suggested Switching Customer Constraint

NMS V1.12.0.1 enhances the Suggested Switching application to factor in the number of total and critical customers that would be impacted when determining the suggested switching plan for a certain scenario. The user can specify how heavily the impact to critical customers and total customers should be weighted in calculating plans. The generated candidate plans will display summary information about the numbers of customers who would experience a sustained or momentary outage as a result of that plan.

Allow a User to Select a Previously Generated Suggested Switching Plan

When Suggested Switching generates multiple candidate solutions, the user is able to select one of the solutions and create a new switching plan from it or append it to an open plan. However, if the user later decides that a different plans would be better, they must go back to the beginning of opening Suggested Switching, selecting objectives, constraints, weights, feeders, etc. NMS V1.12.0.1 allows a user to open a listing of previously-generated candidate plans and select one rather than having to regenerate all of the candidates again.

Web Call Entry Enhancements

Support Streamlined Meter Ping from Web Call Entry

Previously, a call-taker using Web Call Entry (WCE) did not have any ability to check the status of the meter when a customer calls and is not part of a known outage. There was no option from WCE to ping the customer's meter and no mechanism to get a timely response while the customer is still on the phone.

NMS V1.12.0.1 provides the ability for call-taker using WCE to ping a customer meter and receive a status that will dynamically update the WCE screen. This functionality requires the use of Oracle Utilities Smart Grid Gateway as the means for AMI integration.

Web Switching Enhancements

Add Standard Sorting and Filtering to Open Switch Sheet and Open Safety Document

When a user selects the Open Switch Sheet or Open Safety Document options, the resulting lists can be rather large and cumbersome to search for the desired switch sheet or safety document. NMS V1.12.0.1 adds a standard filter row along with Sort and Filter menus with preconfigured options. In addition, the windows for showing the Switch Sheets and Safety Documents can be left open as separate windows or docked within the main workspace.

Alter Safety Document Associations to Switching Sheets

NMS V1.12.0.1 adds the ability to disassociate safety documents from switching sheets. The disassociated documents will be converted into stand-alone safety documents. This enhancement will also introduce the ability for stand-alone safety documents to be associated to existing switching sheets. Lastly, the enhancement will add the ability for safety documents to be moved from one sheet to another based on whether a set of disassociation and association rules allow the change.

Track "Crew Clear" Status in Safety Document

NMS V1.12.0.1 adds the ability to indicate that one or more selected crews are clear of the area designated by the safety document. This allows the ability to enable/disable safety document transitions into certain statuses depending on whether all crews are reported clear.

Copy Data from a Switching Sheet into an Associated Safety Document

NMS V1.12.0.1 adds the ability to copy data from a switching sheet into an associated safety document. The data will then be retained with the document and will be carried along with the document if it is disassociated or associated to a new switching sheet.

Track Changes to Entry Fields within a Safety Document

Safety documents contain references to devices and crews that are tracked in the audit log if any are added or deleted, along with the safety document status transitions. However, there are other fields in the safety document such as Other Devices, Description, etc. that can be edited and there is no mechanism for the user to see if something was changed.

NMS V1.12.0.1 adds an Edit Log tab to the Audit Log to track these other edits to a safety document. The user and timestamp associated with the change will be captured, along with the status of the document at the time, the field that was changed, and the previous value..

Add Support for a Device Conditions Column on Steps Tab

NMS V1.12.0.1 adds the ability for a project to configure in a column to display the conditions (tag, note, ground, etc.) present on a device at the end of that step. This column would be editable to support changing the content from what is recorded by default.

Support the “Strikethrough” Font Effect for Redlined Switching Steps

NMS V1.12.0.1 adds the ability to generally specify the font type, size, style, and effects for fonts used in all NMS lists and tables. In particular, the strikethrough font effect will be used when comparing versions of switching sheets to more easily see steps that were deleted since an earlier version.

Support Printing or Emailing a Set of Switch Sheets

Previously if a user wanted to print out multiple switch sheets or email a group of switch sheets to another user, they would need to do so one at a time. Especially if they wanted to deviate from the default of what all to include (request, steps, external documents, impacted customers, etc.) or from the default format (PDF, HTML, etc.), doing them one at a time was time-consuming.

NMS V1.12.0.1 adds the ability to multi-select switch sheets from the Open Switch Sheet window and either print or email them all at once. There is a configurable limit on the maximum number to do at one time to avoid performance issues or the consequences of accidentally multi-selecting more than desired.

Easily Create a Safety Document of Desired Type Associated to a Switch Sheet

Previously a user could select recorded steps from a switch sheet such as tagging operations and create a resulting safety document of that type that was then associated to the switch sheet. However, there wasn't a more general capability of creating a safety document of a desired type.

NMS V1.12.0.1 adds the ability to create a new safety document from a switch sheet that will then be associated to that sheet, and select the desired safety document type. No step selection is required.

Support Adding Generic Tables to a Switch Sheet

The former Motif-based Switching Management supported the ability to configure in one or more additional tables to the switch sheet. Adding, editing, and removing of data was supported.

NMS V1.12.0.1 adds this ability to the Web Switching Management application. Changes to the table will be saved when the switch sheet is saved, and the table will be populated when the switch sheet is loaded.

Add Ability to Specify Additional Devices Used When Calculating Impacted Customers

When Switching Management calculates the customers impacted by a switch sheet, it only looks at the devices that are in the switch steps. The previous Motif version also allowed a user to specify other devices to use in calculating impacted customers. NMS V1.12.0.1 adds this capability into Web Switching Management as well.

Allow Multiple Safety Documents to Track a Single Ground

Safety documents previously required a separate ground condition in order to populate the Grounds list within the safety document. Each ground could therefore only appear in one safety document. However, crews sometime share grounds, such as if the ground is controlled via a switch of some sort instead of a moveable ground cable. NMS V1.12.0.1 relaxes that limitation and allow a set of safety documents to share one or more grounds.

Web Workspace Enhancements

Viewer Highlighting Options for De-energized and Over/Under Voltage

The initial NMS V1.12.0 release added the ability to show predicted de-energized segments with a different line style (*e.g.*, dash pattern). However, when a user is zoomed out that may not be as obvious, especially when compared to other dash options like underground segments.

NMS V1.12.0.1 provides Viewer highlighting options for predicted outage, confirmed de-energized, over-voltage and under-voltage with different colored “glows” similar to what was done for overloads initially in NMS V1.12.0. Each type of highlighting can be toggled on/off by the user via the Hide/Display options and saved in user preferences.

Have Attributes Window Update with Device Selection

Previously, the attributes of a device were presented as a formatted text within a single text panel. This made it harder to read and prevented the user from doing any sorting or filtering of the displayed attributes. Also, to then display attributes from another device meant bringing up the Control Tool for that device to select Attributes or right-clicking and selecting Attributes from the popup menu.

NMS V1.12.0.1 changes the display of attributes to a tabular list that has the standard filter row and supports clicking to sort. It also will dynamically update if you select a different device, making it much easier to review attributes of nearby devices.

Allow Operation of Tagged Devices with Associated Safety Document in Certain Status

Typically if a tag is defined to block operation, it will do so once placed. Alternatively, it is possible to define a safety document such that the tag will block in one status (*e.g.*, issued), but it will not block in any other safety document status.

NMS V1.12.0.1 supports the ability to define one status for a safety document such that the tag will NOT block operation, but if the safety doc is in any other status then the tag will block operation.

Support Shift Transfer (Relogin) Option

NMS V1.12.0.1 provides the ability to transfer an NMS session from one user to another, maintaining the same set of open windows. The authority will transition from the first user to the second one, and subsequent actions will be logged as having been done by the second user. The new user must be authorized to log in as the same role/user type that the original user logged in as. Also, the new user will not get their user preferences loaded - in order for the new user to get their user preferences they must log out so the windows close and then log in again.

Support Displaying Bounds of Authority in Viewer

NMS V1.12.0.1 provides the ability to “dim” portions of the network in the Viewer over which the user does not have authority. This functionality makes it easier for a user to see where they have subscribed and have authority over events, crews, and devices.

Support a Watermark Option to Indicate Current Environment

NMS V1.12.0.1 adds the ability for the Viewer to display a translucent watermark angled across each window/panel to indicate the current environment (Training, Test, Model, etc.). This will help to ensure a user does not inadvertently do an action in the production environment thinking that they are in a testing or training environment. The transparency of the watermark can be adjusted on a per-user basis or turned off entirely, and this can be saved as part of user preferences.

De-Supported Integrations in Version 1.12.0.1

- Oracle Utilities Analytics (OUA, formerly Oracle Business Intelligence for Utilities) 2.4.x, 2.5.0
- Oracle BI Discoverer 11.1.1.4

De-Supported Platforms in Version 1.12.0.1

For server components, the following platforms are deprecated that were supported in the previous NMS release:

- Oracle Linux 6.4 and earlier
- RedHat Enterprise Linux 6.4 and earlier

For the client side, the following platforms are deprecated that were supported in the previous NMS release:

- Oracle Linux 6.4