

## **Oracle Utilities Notifications Hub**

Also applicable to:

Oracle Utilities Customer Cloud Service

Oracle Utilities Customer to Meter

Oracle Utilities Customer Care and Billing Cloud Service

Release Notes

Release 22C

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Oracle Utilities Notifications Hub Release Notes

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# Preface

Welcome to the Oracle Utilities Notifications Hub integration release notes.

The preface includes the following:

- [Audience](#)
- [Documentation and Resources](#)
- [Updates to Documentation](#)
- [Documentation Accessibility](#)
- [Conventions](#)
- [Acronyms](#)

# Audience

This document is intended for anyone implementing the Oracle Utilities Customer Cloud Service integration to Oracle Utilities Network Management System.

## Documentation and Resources

For more information regarding this integration, foundation technology and the edge applications, refer to the following documents:

### Product Documentation

Topic	Location
Oracle Utilities Notifications Hub integration documentation	<a href="https://docs.oracle.com/en/industries/utilities/integrations-index.html">https://docs.oracle.com/en/industries/utilities/integrations-index.html</a>
Oracle Utilities Customer Cloud Service documentation	<a href="https://docs.oracle.com/en/industries/utilities/customer-cloud-service/">https://docs.oracle.com/en/industries/utilities/customer-cloud-service/</a>
Oracle Utilities Customer Care and Billing documentation	<a href="https://docs.oracle.com/en/industries/energy-water/ccb/">https://docs.oracle.com/en/industries/energy-water/ccb/</a>
Oracle Utilities Customer to Meter documentation	<a href="https://docs.oracle.com/en/industries/energy-water/c2m/">https://docs.oracle.com/en/industries/energy-water/c2m/</a>
Oracle Utilities Network Management System documentation	<a href="https://docs.oracle.com/cd/E72219_01/documentation.html">https://docs.oracle.com/cd/E72219_01/documentation.html</a>
Oracle Responsys documentation	<a href="https://docs.oracle.com/en/cloud/saas/marketing/responsys.html">https://docs.oracle.com/en/cloud/saas/marketing/responsys.html</a>

### Additional Documentation

Resource	Location
Oracle Integration Cloud Service documentation	Refer to the OIC documentation at: <a href="https://docs.oracle.com/en/cloud/paas/integration-cloud/index.html">https://docs.oracle.com/en/cloud/paas/integration-cloud/index.html</a>
Oracle Support	<p>Visit My Oracle Support at <a href="https://support.oracle.com">https://support.oracle.com</a> regularly to stay informed about updates and patches.</p> <p>Refer to the <i>Certification Matrix for Oracle Utilities Products (Doc ID 1454143.1)</i> on My Oracle Support to determine if support for newer versions of the listed products is included.</p> <p>For more information, refer to the Oracle Utilities Integrations page at <a href="http://my.oracle.com/site/tugbu/productsindustry/productinfo/utilities/integration/index.htm">http://my.oracle.com/site/tugbu/productsindustry/productinfo/utilities/integration/index.htm</a></p>
Oracle University for training opportunities	<a href="http://education.oracle.com/">http://education.oracle.com/</a>

# Updates to Documentation

The complete Oracle Utilities Notifications Hub documentation set is available from Oracle Help Center at <https://docs.oracle.com/en/industries/utilities/index.html>.

Visit [My Oracle Support](#) for additional and updated information about the product.

## Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc>.

### Access to Oracle Support

Oracle customers have access to electronic support for the hearing impaired. Visit: <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info> or <http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs>

## Conventions

The following text conventions are used in this document:

Convention	Meaning
<b>boldface</b>	Boldface type indicates graphical user interface elements associated with an action, or terms defined in text or the glossary.
<i>italic</i>	Italic type indicates book titles, emphasis, or placeholder variables for which you supply particular values.
monospace	Monospace type indicates commands within a paragraph, URLs, code in examples, text that appears on the screen, or text that you enter.

## Acronyms

The following terms are used in this document:

Term	Expanded Form
OUCCS/CCS	Oracle Utilities Customer Cloud Service
OUCCB/CCB	Oracle Utilities Customer Care and Billing
OUC2M/C2M	Oracle Utilities Customer to Meter
OUNMS	Oracle Utilities Network Management System
OIC	Oracle Integration Cloud

# Chapter 1

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## Release Notes

This release notes outline information about the new and improved functionality in the Oracle Utilities Notifications Hub integration (Release 22C). Each section includes a brief description of the feature, the steps to enable or start using the feature, and any tips or considerations to consider.

**Important!** This integration is also applicable to the following:

- Oracle Utilities Customer Cloud Service (CCS)
- Oracle Utilities Customer to Meter (C2M)
- Oracle Utilities Customer Care and Billing Cloud Service (CCBCS)

Please note that this integration applies to any Oracle product that includes Oracle Utilities Customer Care and Billing.

The release notes include the following:

- [Overview of the Integration](#)
- [About Oracle Utilities Customer Cloud Service](#)
- [About Oracle Utilities Customer to Meter](#)
- [About Oracle Utilities Customer Care and Billing](#)
- [About Oracle Utilities Network Management System](#)
- [About Oracle Responsys](#)
- [About Oracle Cloud Infrastructure](#)
- [About Oracle Integration Cloud](#)
- [Supported Applications](#)
- [Features Summary](#)
- [Known Issues](#)

# Overview of the Integration

The Oracle Utilities Notifications Hub integration enables outbound, Oracle Utilities Customer Cloud Service-related and Oracle Utilities Network Management System (Outage)-related messages to be sent to customers via Oracle Responsys. The primary systems involved are Oracle Utilities Network Management System (NMS), Oracle Utilities Customer Cloud Service (CCS), Oracle Integration Cloud (OIC), and Oracle Responsys. In addition, Oracle Utilities Notifications Hub can be leveraged by other on-premises and cloud applications to send domain-specific messaging.

For any outage-related events (such as Outage Scheduled/Started, ERT updates, etc.) created in Oracle Utilities Network Management System, notification messages will be created for all accounts affected by a specific outage. Next, the integration will leverage customer account channel preferences from Oracle Utilities Customer Cloud Service to enrich and assemble the outage notification message content based on the desired target channels. The messages will then be sent to Oracle Responsys, where based on a previously configured e-mail and/or SMS campaigns, outage communications will be distributed to affected customers.

A separate synchronization process is used to update Oracle Utilities Network Management System's notification preferences (account-level), based on the account notification preferences specified in Oracle Utilities Customer Cloud Service.

For any Oracle Utilities Customer Cloud Service-related events (Bill Due/Past Due, Collection/Disconnect Warning, etc.), the integration will fetch outbound notification messages from Oracle Utilities Customer Cloud Service queues and send the complete messages to Oracle Responsys for distribution to customers' preferred channels, based on pre-configured email and/or SMS Campaigns.

To enable customer opt-outs for notifications without logging into a self-service portal or contacting the call center to modify their enrollment preference, this integration supports unsubscribe links for transactional emails. Additionally, version 22B includes enhancements to Customer Contacts to process event data, such as delivered/opened from Oracle Responsys and update the status on the Customer Contact record in Oracle Utilities Customer Cloud Service.

This integration can be leveraged to:

- Send outage notifications/updates to customers across multiple channels.
- Send customer-related notifications to customers across multiple channels.
- Obtain customer notification and delivery preferences from Oracle Utilities Customer to Meter (notifications preferences/types, delivery channels).
- Utilize campaign management in Oracle Responsys, to create and customize e-mail/SMS campaigns based on utilities' needs.
- Create a Customer Contact log for both inbound and outbound contacts.
- Support Customer Unsubscribe(s) for Email Preferences.

The integration supports the following flows:

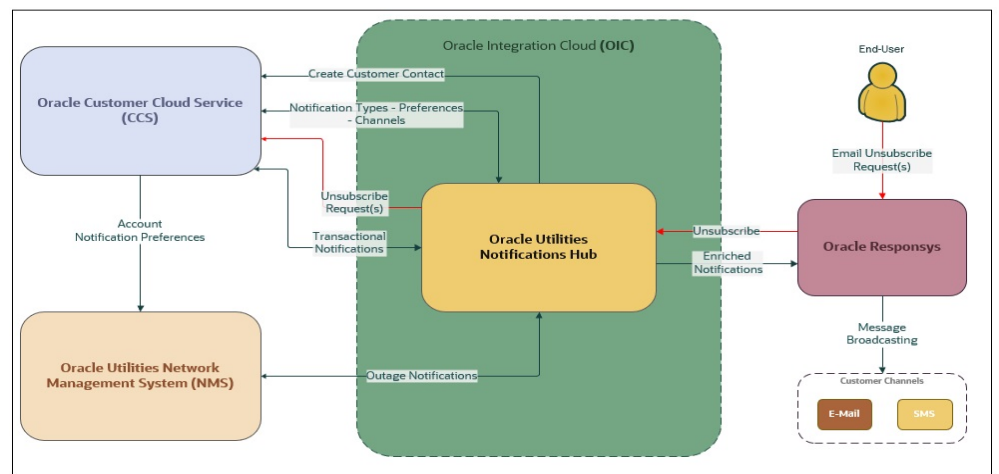
- Pass contact notification preferences (Oracle Utilities Customer Cloud Service Initiated)
- Get outage notifications from Oracle Utilities Network Management System (Oracle Integration for Cloud-initiated)



- Link channels from Oracle Utilities Customer Cloud Service to Notification Oracle Integration for Cloud Flow (Oracle Integration for Cloud-initiated)
- Send notifications to Oracle Responsys (Oracle Integration for Cloud-initiated)
- Oracle Integration for Cloud flow for Oracle Utilities Customer Cloud Service Notifications (Oracle Utilities Customer Cloud Service-initiated)
- Create Customer Contact in CCB for Notifications (OIC-initiated)
- Unsubscribe from Email Preferences (OIC-initiated)
- 

For more information about the functionality, refer to the *Oracle Utilities Notifications Hub Configuration Guide* included in this release.

The following diagram illustrates the business processes that are supported in this integration product.



In this integration Oracle Integration Cloud is used as a middleware to connect the applications. It uses SOAP and REST APIs to facilitate communication between these two applications.

## About Oracle Utilities Customer Cloud Service

Oracle Utilities Customer Cloud Service is a customer care, service order, metering and billing solution. The solution is designed to cater for utilities of all sizes, supports one to many utilities' service types, and handles the complexities associated with a utility's processes.

## About Oracle Utilities Customer to Meter

Oracle Utilities Customer to Meter (C2M) brings together market-leading customer care and metering in a one solution, running on one database, accessed through one screen-to deliver connected operations and more valuable connections with your customers.

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## About Oracle Utilities Customer Care and Billing

Oracle Utilities Customer Care and Billing is a central repository for customer information - such as, name, address, phone number, and so on which manages all aspects of the utility customer lifecycle including service connections, trouble calls, and outages.

Oracle Utilities Customer Care and Billing also supports sending notifications and the maintenance of communication preference for notification types owned by Oracle Utilities Customer Care and Billing and other edge applications, such as Oracle Utilities Network Management System.

## About Oracle Utilities Network Management System

Oracle Utilities Network Management System processes trouble calls from customers and analyzes them to determine probable outage locations. It can generate estimated restoration times (ERTs) that can then be provided back to customers.

Oracle Utilities Network Management System also keeps a history of all of the customer calls that were entered in the system, as well as a history of all events that were known to affect a customer even if the customer did not call in. In addition to responding to unplanned outages and non-outage problems, Oracle Utilities Network Management System can help a utility plan maintenance work or new construction that may impact existing customers. When the detailed switching plans are generated in Oracle Utilities Network Management System, information can be provided to customers about planned outages that will impact them.

## About Oracle Responsys

Oracle Responsys Campaign Management is a cross-channel campaign management platform that delivers advanced intelligence at scale so you can create personalized messages based on the individual interests and preferences of customers and prospects.

## About Oracle Cloud Infrastructure

Oracle Cloud Infrastructure is a set of complementary cloud services that enable you to build and run a wide range of applications and services in a highly available hosted environment. Oracle Cloud Infrastructure (OCI) offers high-performance compute capabilities (as physical hardware instances) and storage capacity in a flexible overlay virtual network that is securely accessible from your on-premises network.

## About Oracle Integration Cloud

Oracle Integration Cloud is a unified platform to integrate the applications, automate processes, and create applications.

Using Process Builder, the business processes can be rapidly designed, automated, and managed in the cloud. Using integrations connect the applications into a continuous

business flow. The applications that are on cloud and on-premises can be integrated using Oracle Integration Cloud. The lookups help to match application specific codes between the two applications.

Integration Insights and Stream Analytics helps to simplify and extract business metrics and create custom dashboards.

## Supported Applications

The following lists the supported application versions in this integration:

Supported Application Name	Version
Oracle Utilities Customer to Meter	V2.9.0.1.0 or higher
Oracle Utilities Customer Cloud Service	22C or higher
Oracle Integration Cloud	V22.1.3.0.0 or higher
Oracle Utilities Network Management System	V2.5.0.1.7 or higher
Oracle Responsys	22A or higher
OCI Streaming	N/A

Refer to the *Certification Matrix for Oracle Utilities Products (Doc ID 1454143.1)* on My Oracle Support to determine if support for newer versions of the listed products is included.

## Features Summary

The following enhancements are included in this release:

- [Account Notification Preferences Update](#)
- [Get Outage Notifications from NMS](#)
- [Customer Notifications from CCS](#)
- [Link Communication Channels from CCS to Notifications OIC Flow](#)
- [Send Notifications to Oracle Responsys](#)
- [Create Customer Contact in Customer Care and Billing for Notifications](#)
- [Unsubscribe from Email Preferences](#)

### Account Notification Preferences Update

This integration will provide Account Notification Preferences from Oracle Utilities Customer Cloud Service to Oracle Utilities Network Management System. It compiles a list of communication preferences based on notifications type for each customer account in Oracle Utilities Customer Cloud Service, and in turn, updates the Oracle Utilities Network Management System system of records with the latest information.

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## Get Outage Notifications from NMS

This integration is initiated by Oracle Integration Cloud, and it will obtain outage-related notification messages from Oracle Utilities Network Management System, perform data transformation, then publish the notifications in the initial stream - before message formatting and notifications preferences can be applied.

## Customer Notifications from CCS

This integration enables Oracle Utilities Customer Cloud Service to send customer-related notifications to Oracle Integration Cloud, which in turn, transforms the notification request in a standard message format, and adds it to the target stream. The latter will be responsible for sending the collection of all notifications to various customer channels (email/SMS).

## Link Communication Channels from CCS to Notifications OIC Flow

This integration enhances the notification messages with the appropriate channel information from Oracle Utilities Customer Cloud Service. Both outage and customer related notifications in the source queue are linked to the respective account's channel information from Oracle Utilities Customer Cloud Service. The combined (enriched) notification is published to a target stream to be processed by the Send Notifications to Oracle Responsys integration.

## Send Notifications to Oracle Responsys

This integration processes the enriched queue (target stream) of outage and customer related notification messages, then sends the list to one or more Oracle Responsys instances, which in turn distributes the customer-bound messages across multiple channels.

## Create Customer Contact in Customer Care and Billing for Notifications

This integration enhances the Customer Contact functionality (Oracle Utilities Customer Cloud Service) by processing event data for dispatched customer notifications (delivered/opened) from Oracle Responsys, and then updating the appropriate status on the Customer Contact record in Oracle Utilities Customer Cloud Service.

## Unsubscribe from Email Preferences

This integration provides support for unsubscribe links (transactional emails) that enables customer opt-outs for notifications without logging into a self-service portal or contacting the call center to modify their enrollment preference. All relevant unsubscribe requests from Oracle Responsys (end-user initiated) are processed via Oracle Utilities Notifications Hub and the appropriate email preferences are updated in Oracle Utilities Customer Cloud Service.

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## Known Issues

The following table lists the known issues at the time of this integration release:

<b>Bug Number</b>	<b>Description</b>
34520587	NOTIFICATIONS_CUSTOMER CONTACT_CCB TRIGGERED CUSTOMER CONTACT RECORD DOES NOT HAVE CONTACT INFORMATION DISPLAYED
34533957	CCB NOTIFICATION OUTBOUND MESSAGE FOR DOES NOT RETURN TIMEZONE