

# Oracle Utilities Opower Digital Self Service - Transactions

## Configuration Guide

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# Getting Started

The Digital Self Service - Transactions web portal is a flexible web experience that allows utilities to provide their customers with a one-stop portal to manage their utility account, pay their bill, and start, stop, or transfer service. The web experience is delivered through a modular, mobile responsive design that allows customers to perform self-service transactions on a desktop or mobile device. This documentation reflects the most recent release of Digital Self Service - Transactions, which is listed as part of the [Release Readiness documentation](#).

This documentation focuses on the configuration preferences for the Oracle Utilities Opower Digital Self Service - Transactions, including features available as part of [Oracle Utilities Opower Digital Self Service - Transactions Cloud Service Product Overview](#). To configure Digital Self Service - Transactions, you must complete the following:

1. Configure authentication for Digital Self Service - Transactions. This procedure is described in the [Oracle Utilities Opower Digital Self Service - Transactions Authentication Configuration Guide](#).
2. Review the default messaging and product configurations available for Digital Self Service - Transactions. A table is provided in this documentation for each feature that has applicable default messaging and configuration options.
3. Review messaging and product configuration options available within the Opower Configuration Tool. You can access the tool at <https://configuration.opower.com/> and review the available options for the pages and widgets included in your Digital Self Service - Transactions web portal. Configurations available within Opower Configuration Tool can be completed directly by you and do not have to be requested through [My Oracle Support](#).
4. Provide any changes to the default messaging and product configurations, which are not available within Opower Configuration Tool, by submitting your request through [My Oracle Support](#). For more information on submitting requests, see "Contacting Your Delivery Team" on page 252.
5. Complete all required configuration tasks that can be accomplished using Oracle Utilities products. This documentation provides steps to complete these configuration tasks using Oracle Utilities Customer Care and Billing. However, many of these tasks can be completed with other applicable products such as Oracle Utilities Customer to Meter or Oracle Utilities Customer Cloud Service. Refer to your applicable product documentation for steps to complete the configuration using your Oracle Utilities product.

If you have purchased the Digital Self Service - Energy Management Cloud Service, refer to [Oracle Utilities Opower Digital Self Service - Energy Management Configuration Guide](#) for information on configuring the applicable add on features.

## Design and Configuration

Digital Self Service - Transactions allows for product configurations and customizations to meet the needs of each utility.

**Note:** If an element is not listed as a configuration, you should assume that it cannot be configured and would require a customization. Contact your Service Delivery Manager if you have questions about this process or would like to make a customization request.

## Global Design and Configuration

Configurations required broadly for Digital Self Service - Transactions include the following:

- **Digital Self Service - Transactions Integration APIs:** Digital Self Service - Transactions requires the Digital Self Service - Transactions Integration APIs, which include required objects to complete configurations through Oracle Utilities Customer Care and Billing or other applicable Oracle Utilities product. These APIs are packaged with the applicable Oracle Utilities product such as Customer Care and Billing. The full list of supported product versions and patch dependencies is documented on [My Oracle Support Document ID 2569793.1](#).
- **Digital Self Service - Energy Management:** If you have purchased the Digital Self Service - Energy Management Cloud Service, refer to [Oracle Utilities Opower Digital Self Service - Energy Management Configuration Guide](#) for information on configuring the applicable add on features. These features can include:
  - [Bill Comparison](#)
  - [Bill Forecast](#)
  - [Highest Energy Use Days](#)
  - [Home Energy Analysis](#)
  - [Neighbor Comparison](#)
  - [Next Best Action](#)
  - [Rate Comparison, Rate Details, and Rate Simulator](#), which also require the Rates Engagement Cloud Service
  - [Ways to Save](#)

- [Tips Light](#)
- [Frequently Asked Questions](#)
- [Energy Use Overview](#) - The Energy Use Overview is hidden from the Your Utility Use features by default, since Billing Trends provides a similar user experience. If you choose to display the Energy Use Overview as part of the Your Utility Use features, include this configuration requirement along with your other Digital Self Service - Transactions configuration selections.
- **Analytics:** Digital Self Service - Transactions supports integration with Google Analytics to analyze web traffic. You must provide Oracle Utilities with your Google Analytics tracking ID to support this integration.

In addition to the Digital Self Service - Transactions product-specific configuration options, the following configuration details apply to the Oracle Utilities Opower platform of products:

- **Color Palette:** Oracle Utilities uses the utility branding guidelines to configure colors including the primary color, efficient neighbors color, and the You color. These colors are applied across all Oracle Utilities Opower products to provide a consistent look and feel. Utilities provide colors as part of the utility branding guidelines in the [Oracle Utilities Opower Platform Configuration Guide](#).
- **Fonts:** Oracle Utilities recommends using the default fonts. Non-default fonts are supported only for embedded widget deployments. Requests by the utility for non-default fonts must meet all applicable font licensing requirements and support any required character sets. Licensing requirements may require the utility to transfer font license ownership to Oracle Utilities.

## Initial Configurations

The following general configurations are required as part of your Digital Self Service - Transactions configuration. To help you get started, a configuration checklist is provided for initial Digital Self Service - Transactions configuration.

**Note:** This documentation provides steps to complete these configuration tasks using Oracle Utilities Customer Care and Billing. However, many of these tasks can be completed with other applicable products such as Oracle Utilities Customer to Meter or Oracle Utilities Customer Cloud Service. Refer to your applicable product documentation for steps to complete the configuration using your Oracle Utilities product. Additionally, this documentation assumes that you know how to create the various objects listed below as well as modify or create master configurations. For

additional details on these tasks, refer to the applicable [Oracle Utilities Documentation](#).

## Configuration Checklist

This documentation provides comprehensive configuration steps to fully configure Digital Self Service - Transactions. The following checklist summarizes the configurations that are required for initial configuration. Completing these configurations can be helpful when first configuring the product, such as for setting up feature and user acceptance testing.

This initial configuration checklist can also be reviewed in [PDF form](#).

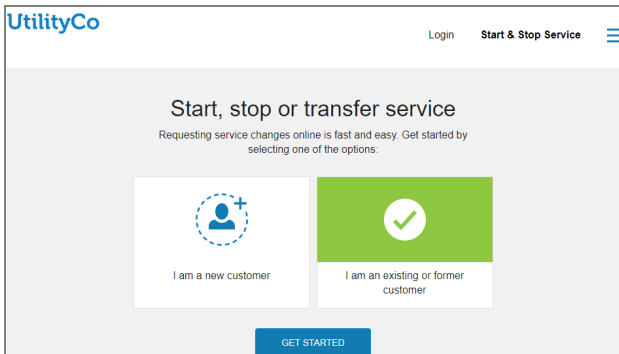
Configuration	Complete
<b>Install required Oracle Utilities product patches</b>  The full list of supported product versions and patch dependencies is documented on <a href="#">My Oracle Support Document ID 2569793.1</a> , which requires My Oracle Support access.	
<b>Link Services to a Cloud Account</b>  The Digital Self Service - Transactions Cloud Service must be linked to a cloud account, as described in "Link Services to a Cloud Account" on page 9.	
<b>Complete Environment Connection</b>  Digital Self Service - Transactions requires environments for development, user testing, and production purposes. These requirements are described in "Environment Connection Information" on page 13. As part environment configuration, a user must be available in your Oracle Utilities system which can invoke the Inbound Web Services that support Digital Self Service - Transactions, including the ability to perform both read and update actions. This user account must be granted proper permissions through methods such as enrolling the user as a member of the <code>ALL_SERVICES</code> user group.	
<b>Complete Network Configuration</b>	

Configuration	Complete
<p>Digital Self Service - Transactions requires a real-time secure connection to an Oracle Customer Information System including Oracle Utilities Customer Care and Billing, Oracle Utilities Customer to Meter, or Oracle Customer Cloud Service system. The network configuration requirements are described in "Networking Configuration" on page 15.</p>	
<p><b>Complete Feature Configuration</b></p> <p>Configure the Oracle Utilities products to enable Digital Self Service - Transactions as part of the general feature configuration, as described in "Feature Configuration" on page 10.</p>	
<p><b>Support Multiple Divisions</b></p> <p>Multi-jurisdictional Utilities can configure multiple divisions in Digital Self Service - Transactions to provide unique experiences to customers that belong to different divisions and states, as described in "Supporting Multiple Divisions" on page 11.</p>	
<p><b>Complete Key Oracle Utilities Product Configurations</b></p> <p>Digital Self Service - Transactions relies on various configurations within your Oracle Utilities products, as described in "Key Configurations" on page 13.</p>	
<p><b>Complete Manage Web Account Requirements</b></p> <p>Manage Web Account configuration includes defining the identifiers used by customers to connect and verify their web account and utility accounts, creating person contacts to support web users, and defining invite guest user tasks and alerts. These processes are described in "Configuring Manage Web Account Requirements" on page 201</p>	
<p><b>Configure Automatic Payments</b></p> <p>A unique automatic payment source must exist for every entity such</p>	



Configuration	Complete
<p>as a bank, credit card company, or bill payment service that is available to customers as the source of the funds when they sign up for automatic payments. A self-service task must also be configured to support automatic payments. For initial configuration, ensure that at a minimum a properly configured Auto Pay Source Type exists that uses ACH-NACHA as the Auto Pay Route Type. To configure automatic payments, refer to "Automatic Payments" on page 82.</p> <div style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <p><b>Note:</b> Automatic payment configuration also includes steps to support same day enrollment. This option is not required for initial configuration.</p> </div>	
<p><b>Configure the Budget Billing Script</b></p> <p>Ensure that the script used for budget billing is configured, which is described as part configuration in "Budget Billing" on page 86.</p>	
<p><b>Review Alert and Notification Configuration</b></p> <p>Locate and review the default alert and notification configuration, as described in "Alerts and Notifications" on page 175.</p>	
<p><b>Define Service Date Restrictions</b></p> <p>A calendar is displayed to customers to select when to complete a particular service request. You must define restrictions to these dates for reasons such as holidays by configuring the work calendar, as described in "Defining Service Date Restrictions" on page 118.</p>	
<p><b>Create a Simple Residential Campaign</b></p> <p>Campaigns are used to present a series of questions to customers as one of the steps within the start service process. To create a simple residential campaign, refer to "Creating Start Service Campaigns" on page 120 and use the provided example configurations.</p>	

Configuration	Complete
<p><b>Select Your Simple Residential Campaign</b></p> <p>Configure the self-service master configuration to define the information retrieved for a new residential service request along with which pieces of information are required and which are used to identify a customer. To complete these steps, refer to "Configuring New Service Information and Requirements" on page 125.</p>	
<p><b>Configure Authentication</b></p> <p>Authentication ensures that an individual is recognized and granted an appropriate level of access to Digital Self Service - Transactions. This procedure is described in the <a href="#">Oracle Utilities Opower Digital Self Service - Transactions Authentication Configuration Guide</a>. As you complete this process, ensure that at least one user has been added. This user account is used later in the initial configuration process to log in to Digital Self Service - Transactions.</p>	
<p><b>Connect an Account to Digital Self Service - Transactions</b></p> <p>Determine an account in your Oracle Utilities product, including the applicable account ID, that can be used to connect to a user account that was configured when completing authentication configuration.</p> <div style="border: 1px solid black; border-radius: 10px; padding: 10px; margin: 10px 0;"> <p><b>Note:</b> It is recommended to select an account with at least 6 months of recent bills.</p> </div> <p>You can then complete the steps below to connect the account in Digital Self Service - Transactions:</p> <ol style="list-style-type: none"> <li>1. Open the landing page for your Digital Self Service - Transactions Web Portal.</li> <li>2. Select <b>Start &amp; Stop Service</b>. The Start, Stop, or Transfer Service options are displayed.</li> <li>3. Select <b>I am an existing or former customer</b> and select <b>Get Started</b>. You are prompted to log in to your web account.</li> </ol>	



4. Provide the email and password to log in to a user account you created as part of configuring authentication in the previous checklist step. The user account you log in to is the user account that is connected to the customer account in your Oracle Utilities product using the steps below.
5. Provide the account number you retrieved using your Oracle Utilities product.
6. Complete the identity verification questions by entering the appropriate customer identifiers for the main account holder.
7. After you complete connecting the account, return to the Overview page, and verify that the total due matches the current balance in your Oracle Utilities product for the account.

**Confirm Successful Configuration**

At this point in the process, initial configuration of Digital Self Service - Transactions is complete. Browsing and testing of features can begin, including features such as:

**Note:** For more information on the features listed below, see the [Oracle Utilities Opower Digital Self Service - Transactions Cloud Service Product Overview](#).

- **Overview Dashboard:** Review account balance information, bill information and announcements, and usage and bill trends.
- **Billing and Payment:** Review the view bill, billing and payment history, manage billing, and make a payment through ACH-

Configuration	Complete
<p>NACHA autopay.</p> <ul style="list-style-type: none"> <li>▪ <b>Start, Stop, and Transfer Service:</b> Access the options to start, stop, or transfer service.</li> <li>▪ <b>Notifications:</b> Review and configure billing communications.</li> <li>▪ <b>Manage Web Account:</b> Review and configure web login details, connected accounts, and guest user accounts and invitations.</li> </ul> <p>The next steps to continue and complete your Digital Self Service - Transactions configuration can be taken by reviewing the features and configuration options described at "Design and Configuration" on page 2.</p>	

## Link Services to a Cloud Account

When the Digital Self Service - Transactions Cloud Service is ordered, the point of contact defined on the ordering document is sent an automated email message directing them to add their subscriptions to a cloud account.

By default, when adding your Digital Self Service - Transactions subscription to a cloud account, the default identity domain of that account is selected as the employee identity management for the Cloud Service for your initial pre-production environments.

From the automated email message, select one of the applicable options to either create a new cloud account or activate the services into an existing cloud account. Complete all steps to link your Digital Self Service - Transactions services to a cloud account.

Consider how you intend to configure authentication for Digital Self Service - Transactions by reviewing the options below prior to linking the service to a cloud account, as the activation is permanent once completed.

### **OAuth Mode with Oracle Cloud Infrastructure Identity and Access Management**

The following service linking options are available when utilizing OAuth mode.

#### **Default Identity Domain in a Dedicated Cloud Account**

By choosing a new cloud account, or if Digital Self Service - Transactions is the only service for an existing cloud account you choose, you can continue to utilize the default identity domain as the identity management for Digital Self Service - Transactions Implementation and Stage environments as part of your Digital Self Service - Transactions subscription.

This domain grants your employees and implementation partners access to Digital Self Service - Transactions to perform implementation and user testing activities in the same authentication mode your customers have access to in the production environment.

### **Dedicated Identity Domain in a Shared Cloud Account**

If the desired cloud account hosts additional Oracle services or you plan to host additional services in the future, you must follow the steps to [create a new identity domain](#) that can be dedicated to Digital Self Service - Transactions Implementation and Stage environments in this cloud account. As part of this process you must provide your identity domain URL to the Oracle Utilities Delivery Team. See "Contacting Your Delivery Team" on page 252 for methods to securely share this information.

This domain grants your employees and implementation partners access to Digital Self Service - Transactions to perform implementation and user testing activities in the same authentication mode your customers have access to in the production environment.

Oracle Utilities converts this domain to an [Oracle Apps identity domain](#) when Digital Self Service - Transactions is provisioned.

### **Single Sign-On Mode in a Dedicated or Shared Cloud Account**

If you intend to support authentication to Digital Self Service - Transactions in [Single Sign-On mode](#), you can continue to utilize the default identity domain as the identity management for your Digital Self Service - Transactions Implementation and Stage environments as part of your Digital Self Service - Transactions subscription regardless of it being shared with other Cloud Services.

This domain grants your employees and implementation partners access to Digital Self Service - Transactions to perform implementation and user testing activities in the same authentication mode your customers have access to in the production environment.

### **Feature Configuration**

You must configure your Oracle Utilities products to enable Digital Self Service - Transactions as part of the general feature configuration. If you previously used Oracle Utilities Customer Self Service, configurations for that product related to line of business verification fields and links for self-service users to person or account records are removed. These configurations are replaced with applicable Digital Self Service - Transactions configurations, along with additional configurations that support Digital Self Service - Transactions.

## To configure Feature Configuration

1. Log in to Customer Care and Billing.
2. From the **Admin** menu, select **General**, select **Feature Configuration**, and select **Search**. The Feature Configuration search is displayed.
3. In the **Description** field, type **General System Configuration** and select **Search**. The General System Configuration is displayed.
4. Within the **Options** table, locate the **Option Type** of **Is CX Installed**, ensure the **Value** column has the value of **Y**. This ensures that Digital Self Service - Transactions configurations are enabled.

FEATURE TYPE

DESCRIPTION

OPTIONS

	OPTION TYPE	SEQUENCE	VALUE	DETAILED DESCRIPTION
<input type="checkbox"/>	<input type="text" value="Is CX Installed"/>	<input type="text" value="1"/>	<input type="text" value="Y"/>	Indicates whether CX layer is installed and should be enabled. This is used to hide some sections from Self-Service master configuration. Valid values are 'Y' and 'N'.

## Supporting Multiple Divisions

Multi-jurisdictional Utilities can configure multiple divisions in Digital Self Service - Transactions to provide unique experiences to customers that belong to different divisions and states. Supporting multiple divisions ensures that service agreements and premises match the account's CIS division, which supports segmenting data by CIS division. For more information on applying segmentation to Digital Self Service - Transactions, see the [Oracle Utilities Opower Configuration Tool User Guide](#).

**Note:** In addition to the configuration steps listed below, you must also request Oracle Utilities to enable multiple division support. When submitting your request, indicate whether divisions must be enabled for start, stop, and transfer service. The request must also provide a list of operating companies with their associated divisions for each one of your applications as needed. For information on creating a service request for this update, see "Contacting Your Delivery Team" on page 252.

## To support multiple divisions

1. Log in to Customer Care and Billing.
2. From the **Admin** menu, select **General**, select **Feature Configuration**, and select **Search**. The Feature Configuration search is displayed.
3. In the **Description** field, type **General System Configuration** and select **Search**. The General System Configuration is displayed.

4. Within the **Options** table, locate the **Option Type** of **Multi Division Master Config Script**, ensure the **Value** column has the value of **C1MultDvConf**. Select **Save** if any changes were made.
5. From the **Admin** menu, select **General**, select **Characteristic Type**, and select **Search**. The **Characteristic Type** page is displayed.
6. Modify the **C1-OPCO** characteristic type to define your divisions as described below:
  - **Characteristic Type**: Enter **C1-OPCO** to modify this characteristic type.
  - **Description**: Provide a descriptive value to identify the characteristic, such as **Operating Divisions**.
  - **Type of Char Value**: **Pre-defined Value**.
  - **Allow Search by Value**: **Allowed**.
  - **Custom**: Select this option.
  - Add characteristic value rows for each division. For each row created, the **Characteristic Value** acts as the programmatic name, and the **Description** acts as a more descriptive name for the division. For example, valid values could be **E-Div** and **Eastern Division**.
  - From the **Characteristic Entities** tab, create rows for the following **Characteristic Entities**:
    - **CIS Division**
    - **Extendable Lookup**
7. Select **Save** to save the changes to the **C1-OPCO** characteristic type.
8. A **CIS Division** must be created in the **CIS Division List** for each division characteristic type created previously in these steps. Repeat this process for each division.
  - a. From the **Admin** menu, select **General**, select **CIS Division**, and select **Add**. The **Main** page is displayed to define the **CIS Division**.
  - b. Take note of the **ID** field for any applicable divisions, these values are required later in these steps.
  - c. In addition to the required fields, ensure that the **Effective Dated Characteristics** area includes a row for the applicable characteristic type. From the example provided above, the **Characteristic Type** is defined as **Operating Divisions** (the description of the characteristic type) and the **Value** is defined as **E-DIV** (the characteristic value of one of the divisions).
  - d. Select **Save** to create the **CIS Division**.
9. From the **Admin** menu, select **General**, and then select **Extendable Lookup**. The **Extendable Lookup Query** page is displayed.
10. In the **Business Object** field, enter **C1-SelfServiceIntegration** and select **Search**. The **C1-SelfServiceIntegration Business Object** is displayed.
11. Select the **Self-Service Integration** link. The **Extendable Lookup Value List** is displayed.

12. Create a row in the list for each supported division. Select **Add** to create a new row and complete the following configurations:
- **Value:** The first value must match the **ID** value defined in the CIS Division List which was created previously in these steps.
  - **Description:** An identifying description for the division, such as Easter Division.

### Key Configurations

Digital Self Service - Transactions relies on various configurations within your Oracle Utilities products. The table below provides some configurations that are important to support the initial configuration of Digital Self Service - Transactions and provides some examples of common values for these configurations. Work with your Oracle Utilities Delivery Team, as described at "Contacting Your Delivery Team" on page 252, to provide the values in your system for each configuration listed below:

Configuration	Example Values
Service Type	<ul style="list-style-type: none"> <li>▪ "E": "ELEC"</li> <li>▪ "G": "GAS"</li> <li>▪ "W": "WATER"</li> <li>▪ "WW": "WASTE_WATER"</li> </ul>
Bill Route Type	<ul style="list-style-type: none"> <li>▪ EMAIL</li> <li>▪ POSTAL</li> <li>▪ EBILL</li> </ul>
Customer Class	<ul style="list-style-type: none"> <li>▪ RESIDENTIAL</li> <li>▪ RES</li> <li>▪ COMMERCIAL</li> <li>▪ COM</li> </ul>
Country	USA
Time zone	US/Pacific

### Environment Connection Information

All required environment connection information must be provided to Oracle Utilities. The following environments are required:

- **IMP:** The implementation or development environment.
- **UAT:** The user acceptance testing or systems integration testing environment.



- **PROD:** The production environment.

Each environment listed above must be able to connect to the following components:

- **Customer Care and Billing or Customer to Meter:** Digital Self Service - Transactions uses Customer Care and Billing or Customer to Meter APIs, also referred to as Inbound Web Services (IWS), to retrieve applicable data from the on-premise application. To support this connection, you must provide the load balancer IP address and port number for the host of the IWS.

An IWS running on a load balancer must be capable of returning an XML document without any authentication when retrieved using the cURL command `curl -v -k https://[IP] :`

`[Port]/ouaf/webservices/WXGetSelfServiceDropdowns?wsdl`. This capability must be tested and confirmed before sending applicable details.

- **File Manager:** File manager stores client files on the utility's WebDav server. To support a connection to file manager, you must provide the IP address as well as applicable credentials for the WebDav server.
- **Bill Download:** Bill download retrieves client bills from a utility specific URL. To support bill download, you must provide the IP address of this service, and any authentication if applicable. For more information on this integration, refer to the [Oracle Utilities Opower Digital Self Service - Transactions Bill Download Integration Guide](#).

In summary, the following information for all environments and components must be provided:

	<b>Customer Care and Billing or Customer to Meter IWS Host</b>	<b>File Manager WebDav Host</b>	<b>Bill Download Service</b>
IMP	IP address and port:  Credentials:	IP address and port:  Credentials:	IP address and port:  Credentials (if applicable):

	<b>Customer Care and Billing or Customer to Meter IWS Host</b>	<b>File Manager WebDav Host</b>	<b>Bill Download Service</b>
UAT	IP address and port:  Credentials:	IP address and port:  Credentials:	IP address and port:  Credentials (if applicable):
PROD	IP address and port:  Credentials:	IP address and port:  Credentials:	IP address and port:  Credentials (if applicable):

**Networking Configuration**

Digital Self Service - Transactions requires a real-time connection to an Oracle Customer Information System including Oracle Utilities Customer Care and Billing, Oracle Utilities Customer to Meter, or Oracle Customer Cloud Service system. The supported networking configurations are provided below.

**Prerequisites**

The following prerequisites are applicable to both mTLS and private endpoint networking configuration options:

- **Ports:** Oracle Utilities recommends all network traffic between Digital Self Service - Transactions and external Customer Integrated Systems goes through port 443, which is the standard port for HTTPS. Support is also available for ports within the range of 5000 to 26000. Configurations using ports other than 443 must be requested

as a service request, as described in "Contacting Your Delivery Team" on page 252.

- **Certificates:** Certificates are required for Digital Self Service - Transactions. Target hosts, including development, test, and production environments must have a valid, publicly-trusted SSL certificate.

### Supporting mTLS Configuration

The Mutual Transport Layer Security (mTLS) authentication protocol is supported. For mTLS-based connectivity, Digital Self Service - Transactions acts as an API client which needs to exchange certificates with a Utility system that acts as an API server.

A Utility must provide a valid certificate, which is signed using a proper Certificate Authority. Digital Self Service - Transactions verifies the Utility certificate at run-time as part of an mTLS hand shake.

As part of this mTLS handshake Oracle Utilities provides a certificate to the utility. The Utility must install the certificate with their Customer Care and Billing or Customer to Meter system, and verify the certificate at run-time as part of mTLS hand shake. There are various options to install the certificate with the Customer Care and Billing or Customer to Meter System. A common configuration is to install on a network device such as a load balancer which supports the Customer Information Systems. A Utility must work with their networking team to determine the correct installation of the certificate with their Customer Information System.

After networking configuration is complete for both Oracle Utilities and the Utility, the mTLS handshake can be verified. If coordination of this testing is required, create a service request, as described in "Contacting Your Delivery Team" on page 252

### Supporting Private Endpoint Configuration

An Oracle Cloud Infrastructure Cloud Account Administrator must setup the required networking objects in the utility's Oracle Cloud Infrastructure tenancy to establish a secure connection between the Oracle Utilities network supporting Digital Self Service - Transactions, and the utility's network.

**Note:** The procedures provided below offer high-level guidance to configure your Oracle Cloud Infrastructure networking components for Digital Self Service - Transactions. Refer to the [Oracle Cloud Infrastructure documentation](#) for additional details on how to create networking components.

## Prerequisites

- **Oracle Cloud Infrastructure Cloud Account:** An administrative level cloud account for Oracle Cloud Infrastructure is required.
- **Tenancy Setup:** A tenancy must be available, and the tenancy must use the Ashburn region. This requirement is met if your tenancy is configured with Ashburn as its home region. If a different home region is used, ensure the tenancy is subscribed to the Ashburn region.

## Create a Compartment

Within your Oracle Cloud Infrastructure tenancy that uses the Ashburn region, you must create a compartment that contains all the other objects necessary for your networking connection. Documentation on managing and creating compartments is available at [Managing Compartments](#). When creating the compartment, take note of the name you use for the compartment as it is used in other parts of this setup.

## Create a Policy

A new policy must be added to the tenancy, which allows the required private endpoint and reverse connection endpoints to be created. Documentation on creating policies is available at [Managing Policies](#). The following requirements must be met when creating the policy:

- **Default Policies:** A new policy is created to support Digital Self Service - Transactions, default policies are not modified.
- **Compartment:** Ensure that the policy is created within the compartment you created earlier.
- **Policy Statement:** Use the **Customize (Advanced)** option to create the policy. The following policy statement must be used:

```
Allow service ORACLE_INDUSTRY_SAAS to use network-security-  
groups in [compartmentName]  
Allow service ORACLE_INDUSTRY_SAAS to use subnets in  
compartment [compartmentName]  
Allow service ORACLE_INDUSTRY_SAAS to use vnics in compartment  
[compartmentName]  
Allow service ORACLE_INDUSTRY_SAAS to inspect work-requests in  
compartment [compartmentName]
```

Replace [compartmentName] with the name of your compartment.

## Create a Virtual Cloud Network

A Virtual Cloud Network (VCN) must be created. Documentation on creating VCNs is available at [Overview of VCNs and Subnets](#). The following requirements must be met when creating a VCN:

- **Region:** Ensure that the VCN is created in the Ashburn region.
- **Compartment:** Ensure that the VCN is created within the compartment you created earlier.
- **CIDR Block:** This is the size of the VCN that is created. A range of IP addresses is provided. Contact your Oracle Utilities Delivery Team to determine an appropriate IP address range for your Class Inter-Domain Routing (CIDR) block.

## Create a Route Table

A route table must be created, which is responsible for routing traffic to the Customer Information System. Documentation on creating route tables is available at [Route Tables](#). The following requirements must be met when creating a route table:

- **Default Route Tables:** A new route table is created to support Digital Self Service - Transactions, default route tables are not modified.
- **Compartment:** Ensure that the route table is created within the compartment you created earlier.
- **VCN:** Ensure that the route table is created within the VCN you created earlier.
- **Route Rules:** Use the **+ Another Route Rule** option to create route rules for the route table. Create a rule for each CIDR that requires routing. Be aware of the following when creating the route rules:
  - **Target Type:** Determine if your system uses a dynamic routing gateway or local peering gateway to select the proper target type. Local peering gateways can be used if the Customer Information system is hosted in OCI.
  - **Destination CIDR:** Use the CIDR block range defined when creating a VCN.

## Create a Security List

A security list must be created, which contains egress rules to the CIDRs for the Customer Information System. Documentation on creating security lists is available at [Security Lists](#). The following requirements must be met when creating a security list:

- **Compartment:** Ensure that the security list is created within the compartment you created earlier.
- **Egress Rules:** Use the **+ Another Egress Rule** option to create egress rules for the security list. Be aware of the following when creating the egress rules:

- **Stateless or Stateful:** Egress rules are defined as stateful by default since most connections are stateful.
- **Destination CIDR:** Use the CIDR block range defined when creating a VCN.
- **Source Port Range:** Use the default that accepts all ports.
- **Destination Port Range:** Provide the ports that will accept the connections. A range of ports can be provided.

## Create a Subnet

The final network object that must be created is a regional subnet for the private endpoint and the reverse connection endpoint to be created. Documentation on creating subnets is available at [Overview of VCNs and Subnets](#). The following requirements must be met when creating a security list:

- **Region:** Ensure that the subnet is created in the Ashburn region.
- **VCN:** Ensure that the subnet is created within the VCN you created earlier.
- **Compartment:** Ensure that the subnet is created within the compartment you created earlier.
- **Subnet Type:** The subnet must be created as a regional subnet.
- **CIDR Block:** Provide the CIDR block used when creating the VCN. It is recommended to end this block with `/28`, which translates to 16 IP addresses.
- **Route Table:** Ensure that the route table created earlier is selected for this subnet.
- **Subnet Access:** The subnet must be created as a private subnet.
- **DNS Resolution:** Use the default, which has the **Use DNS Hostnames in this Subnet** option selected.
- **DNS Label:** Be aware that there is a 15-character limit for the DNS label.
- **DNS Domain Name:** Use the default read only configuration.
- **DHCP Options Compartment:** Select the compartment you created earlier.
- **Security Lists:** Select the security list you created earlier.

## Configuring Authentication

After completing the networking configuration above, the next step is to configure authentication to make calls to the Oracle Utilities customer system webservices endpoint.

Digital Self Service - Transactions supports the following methods of authentication:

- "Basic Authentication" on page 19
- "Oauth 2.0 Authentication" on page 21

### Basic Authentication

Basic authentication uses the following syntax:

```
curl -k -v -u [username]:[password] 'https://[host]:[port]/[api]'
```

- The `[username]` and `[password]` are the credentials for the user account created as part of the **Complete Environment Connection** step in the checklist provided in the "Configuration Checklist" on page 4.
- The `host` is the IP address of the server hosting the API.
- The `port` is the port used for the API, which can be excluded if the default port is used.
- The `api` is the syntax required to call the API and is dependent on the API being used, such as `CXGetCCBAalerts`.

### Verifying API Connection for Basic Authentication

You can verify that the API can be reached from the subnet that was created. This verification confirms that the networking configuration is accurate and that the API is functioning as expected.

From the subnet that was created, create a basic Oracle Linux instance and upload your public key. Once the instance has completed provisioning, log on to the instance using the private key. Documentation on creating instances is available at [Creating an Instance](#).

From the instance, verification is completed by calling an API using a Linux `curl` command. The first test is performed in anonymous mode and the basic syntax is as follows:

```
curl -k -vvv 'https://[host]:[port]/[api]'
```

- The `host` is the IP address of the server hosting the API.
- The `port` is the port used for the API, which can be excluded if the default port is used.
- The `api` is the syntax required to call the API and is dependent on the API being used. Test the following API endpoints:
  - `CXGetCCBAalerts`: Test this endpoint by including `ouaf/webservices/CXGetCCBAalerts?wsdl`
  - `F1-HealthCheck`: Test this endpoint by including `ouaf/webservices/F1-HealthCheck?wsdl`

Example calls are provided below, which can be modified for relevant host and port information. The first call returns a list of available alerts to display, as defined in the self-service master configuration.

```
curl -k -vvv  
'https://123.4.5.6:789/ouaf/webservices/CXGetCCBAalerts?wsdl'
```

This second call returns a code of 200 when the call is a success.

```
curl -k -vvv 'https://123.4.5.6:789/ouaf/webservices/F1-HealthCheck?wsdl'
```

If the API calls do not return the expected successful results, troubleshooting can begin by confirming the URLs for the calls are correct, including host and port information. If the URLs are correct, consider the following when verifying the API connection with anonymous calls:

- If anonymous calls to both API endpoints fail, then the issue is most likely related to the network setup. Confirm networking configurations including the security list and the routing configuration as the next troubleshooting step.
- If only one anonymous call fails but another one succeeds, then this issue is most likely that the service for the failed API endpoint call is not running on Customer Care and Billing.

If both anonymous calls succeed you can continue your testing with authenticated calls. Example calls are provided below, which can be modified for relevant user, host, port, and API information.

```
curl -k -v -u admin:passwordexample  
'https://123.4.5.6:789/ouaf/webservices/CXGetCCBAAlerts?wsdl'
```

```
curl -k -v -u admin:passwordexample  
'https://123.4.5.6:789/ouaf/webservices/F1-HealthCheck?wsdl'
```

If both authenticated calls fail, then the issue is most likely an error with the provided credentials, or the user is not a member of `ALL_SERVICES` group in Customer Care and Billing.

After API connection is verified, the next step is to test with the Fully Qualified Domain Name (FQDN) if a FQDN is used.

### Oauth 2.0 Authentication

Oauth 2.0 is an authorization protocol which requires the following values:

- The `URL` is the URL of the token endpoint that provides the access token in exchange for `clientId:clientSecret`.
- The `clientId` is a public identifier for the Digital Self Service - Transactions application.
- The `clientSecret` is the secret that matches the application's `clientId`.
- The `grantType` value must be defined as `client_credentials`.
- The `scopes` are any scopes required to define access to specific APIs.



## Verifying API Connection for OAuth Authentication

You can verify that the API can be reached from the subnet that was created. This verification confirms that the networking configuration is accurate and that the API is functioning as expected.

Example calls are provided below, which can be modified for relevant host and port information.

Get the access token:

```
curl --request POST \  
--url 'https://[yourDomain]/oauth/token' \  
--header 'content-type: application/x-www-form-urlencoded' \  
--data grant_type=client_credentials \  
--data client_id=[clientID] \  
--data client_secret=[clientSecret]
```

Make a call to the webservice endpoint:

```
curl --request POST \  
--url https://[host]:[port]/ouaf/webservices/CXGetCCBAAlerts \  
--header 'authorization: Bearer [accessToken]'
```

After API connection is verified, the next step is to test with the Fully Qualified Domain Name (FQDN) if a FQDN is used.

## Required Information

Be aware that the following information is needed by Oracle Utilities to complete the networking configuration:

- Tenancy Name
- Tenancy OCID
- The compartment name
- The compartment OCID
- VCN Name
- VCN OCID
- The DNS of the VCN
- The CIDR Range of the VCN
- The subnet name
- The OCID of the subnet
- The CIDR range of the subnet

- The IPs of the servers hosting the APIs
- The domain of the APIs, if the APIs are accessed using a FQDN

### Supporting Oracle Utilities Customer Cloud Service Configuration

If you use Oracle Utilities Customer Cloud Service as your Customer Information System, the networking configuration is configured and maintained by Oracle Utilities. A support request can be created to confirm support of this network configuration, as described in "Contacting Your Delivery Team" on page 252.

## Overview Dashboard

The Overview dashboard introduces customers to information about their account and energy use. The following features are available for configuration.

- **Announcements:** Announcements provide important information to the customer as part of their billing information highlighted on the Overview dashboard. Complete self-service configuration for announcements, as described at "Configuring Announcements" on page 23.
- **Bill Trends:** The bill trends graph displays insight into a customer's energy use and costs trends. Review all feature configuration options as part of the billing configurations listed at "Billing Trends Configuration Options" on page 27.
- **Recommended Tips and Next Best Action banners:** The Overview dashboard can include the Digital Self Service - Energy Management add on features Recommended Tips (also referred to as Tips Light) and Next Best Actions. Refer to [Oracle Utilities Opower Digital Self Service - Energy Management Configuration Guide](#) for information on configuring these features.

### Configuring Announcements

The announcements displayed to a customer along with their billing information on the Overview dashboard depend on the configuration of self-service alerts and their component objects.

**Note:** Customers also receive important alerts and notifications related to their account. For more information on configuring those alerts and notifications, see "Notifications" on page 163.

#### **Outstanding balance.**

The amount of \$903.01 is outstanding on your account.

< 2 of 3 >

The following self-service alerts are examples of announcements that can be configured in the base product. The scripts used by these announcements must be configured to return applicable information for the customers of a Utility:

- **Active Pay Arrangement/Pay Plan:** Checks if the account has an active pay arrangement service agreement or pay plan. Supported with the `C1-PAPPAlert` script.
- **Budget Enrollment:** Checks if the account is currently on a budget plan. Supported with the `WX-NtfyBudg` script.
- **Highlight Open Service Tasks:** Checks if the account has a non-final service task for a task type that requires an alert. The alert header and description are defined on the service task type. Supported with the `C1-OpenTaskA` script.
- **Highlight Pending One Time Payments:** Checks if the account has pending one-time payment service tasks. Supported with the `C1-SchOTPay` script.
- **Highlight Pending Start/Stop:** Checks if the account has a pending start or pending stop service agreement. Supported with the `C1-PendStSpA` script.
- **Outstanding Balance:** Retrieves the account outstanding balance to display in self-service. Supported with the `C1-AcctCurrB` script.
- **Prepay Biller Information:** Checks if the available prepaid balance is below the threshold specified on the prepay biller task type for the account's prepaid service. Supported with the `C1-PPBAlert` script.

**Note:** This documentation provides steps to complete these configuration tasks using Oracle Utilities Customer Care and Billing. However, many of these tasks can be completed with other applicable products such as Oracle Utilities Customer to Meter or Oracle Utilities Customer Cloud Service. Refer to your applicable product documentation for steps to complete the configuration using your Oracle Utilities product. Additionally, this documentation assumes that you know how to create the various objects listed below as well as modify or create master configurations. For additional details on these tasks, refer to the applicable [Oracle Utilities Documentation](#).

To create additional alert types for announcements:

Complete the following steps to create additional alert types for announcements.

1. Log in to Customer Care and Billing as a user with edit access for the CC&B Self-Service Integration master configuration.
2. If the alert types available with the base product do not cover all your announcement use cases, create any additional necessary objects. When defining your master

configuration this can include:

- **Alert Type:** The alert announcements that are displayed such as outstanding balance announcements. From the **Admin** menu, select **Database**, select **Lookup**, and select **Search**. Search for **WX\_CCB\_ALERT\_TYPE\_FLG**, which is the lookup table to modify if you need to add additional alert types.
- **Script:** The script that determines when to display an announcement and details for the announcement such as message text. Refer to the previous list for the applicable alert scripts provided with the base product.

**Note:** If you add additional alert types, be aware that the applicable scripts must use the data area WX-SSAlerts as its schema. Each alert may return the header description, icon, description, hyperlink, date, and priority to the self-service application.

3. From the **Admin** menu, select **General**, and select **Master Configuration**. From the **Master Configuration** zone, select the **Edit** option for the **CC&B Self-Service Integration** master configuration. The master configuration is displayed.
4. From the **Self-Service Alerts** zone, include all required alerts for the announcements available in Digital Self Service - Transactions. You can use the demo Self-Service Integration master configuration as a starting point, or create your own master configuration and add applicable alerts. To include additional alerts, click the plus icon and then define the following:
  - **Alert Type:** Select the applicable alert. For example, to include pending start or stop service announcements, select **Highlight Pending Start/Stop**.
  - **Script:** Search for and select the applicable alert script. For example, to support pending start or stop service announcements, use **C1-PendStSpA**.
5. Click **Save** to save the master configuration changes.

To modify announcement text:

If required, you can modify the header and description text displayed within the announcements to the customer. The scripts provided with the base product define a set of steps to determine which self-service messages supply the text content for the announcement. For example:

1. From the **Admin** menu, select **System**, select **Script**, and select **Search**.
2. Type the script name, in this example **C1-AcctCurrB** and then click **Search**. The outstanding balance script is returned.

3. From the **Step** tab, review the steps to determine what messages can be displayed for the alert. Make a note of any applicable messages. In this example, one of the messages that can be displayed is 11847.
4. To modify the text, from the **Admin** menu, select **System**, select **Message**, and select **Search**.
5. In the **Description** field type `self-service` and click **Search** to return self-service messages.
6. From this list select message **11847** and select the **Details** tab.
7. Use the **Customer Specific Message Text** field to provide your custom notification text, which overrides the default message text for the notification.
8. Click **Save** to save your message changes.

## Billing

Digital Self Service - Transactions includes billing features such as viewing a bill, reviewing bill trends, reviewing payment history, and additional features for customers to learn more about their bill.

**Note:** For program enrollment configuration options related to Manage Billing, see "Program Enrollment" on page 56. For Digital Self Service - Energy Management billing feature configuration, see [Bill Comparison](#) and [Bill Forecast](#).

Digital Self Service - Transactions offers multiple ways for the users to pay their bills online. Utilities can choose to enable or disable any of these options for their customers, as well as further configure payment options.

- **Billing Trends:** The Bill trends graph displays insight into a customer's energy use and costs trends. Review all feature configuration options listed at "Billing Trends Configuration Options" on page 27.
- **Financial History:** Customers can view a record of posted bills and payments received:
  - Review all feature configuration options listed at "Financial History Configuration Options" on page 30.
  - Complete feature and message configuration, as described at "Configuring Financial History Messaging and Behavior" on page 39.
- **Bill Details:** The summary of a customer's current bill includes new charges, bill due date, previous balance, and any applicable payments or adjustments. Review all feature configuration options listed at "Bill Details Configuration Options" on page 34.

- **Bill Breakdown:** Additional breakdown of bill charges provides comprehensive billing information such current bill charges broken down by premises, fuel or resource type, and service point. Review all feature configuration options listed at "Bill Breakdown Configuration Options" on page 36.
- In addition to the billing configurations listed above, be aware the configuration to allow customers to download bills is described in [Oracle Utilities Opower Digital Self Service - Transactions Bill Download Integration Guide](#).

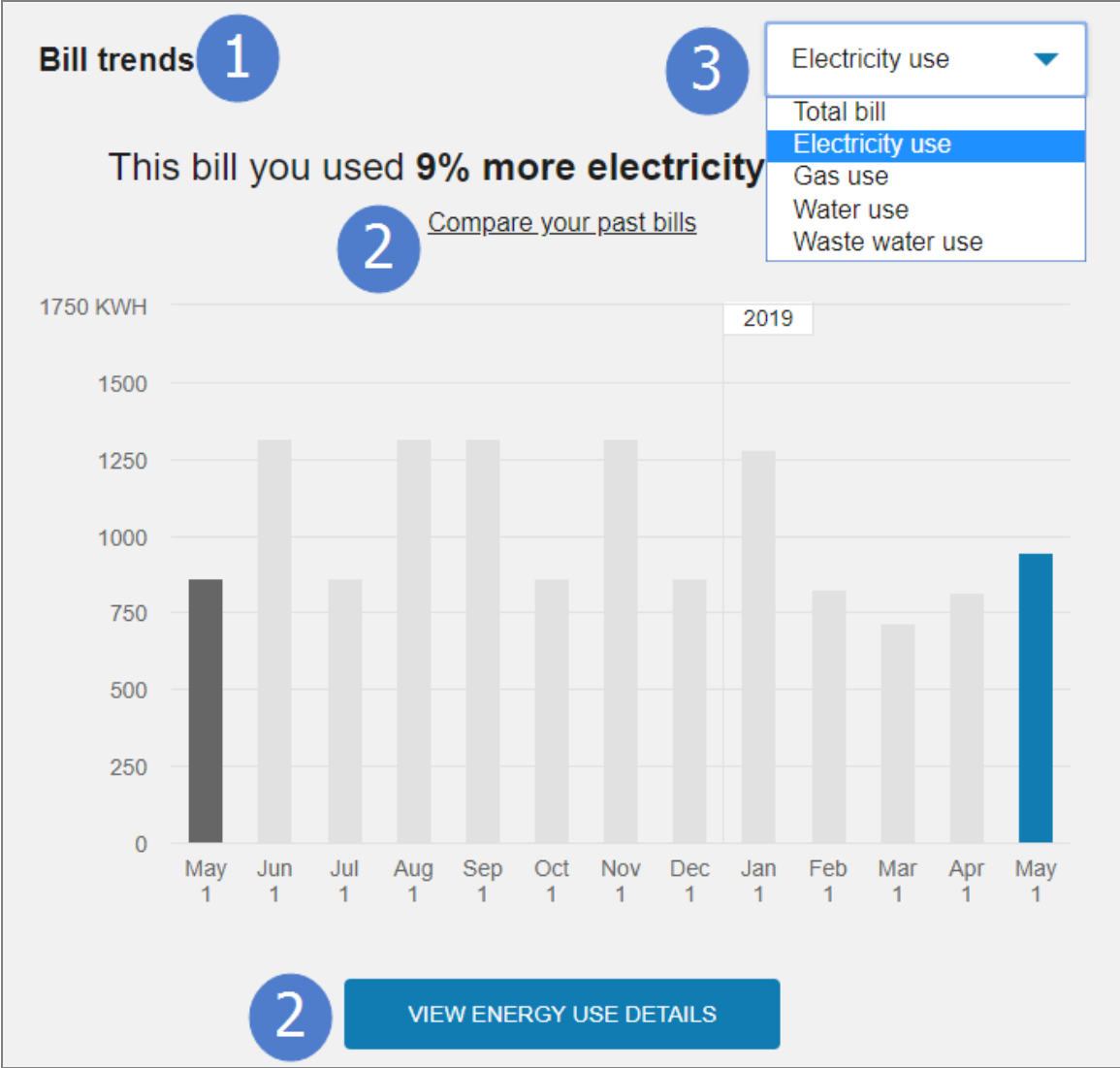
## Reviewing Billing Configuration Options

Digital Self Service - Transactions includes billing features such as viewing a bill, reviewing bill trends, reviewing payment history, and additional features for customers to learn more about their bill. Use the tables below to review all billing feature configuration options which can be submitted as a request using [My Oracle Support](#).

**Note:** You can use the Opower Configuration Tool to implement certain configurations for Digital Self Service - Transactions. This can include user experience configurations, interface messages and formats, branding configurations, and other configurations relevant to Digital Self Service - Transactions. To review if any configurations listed below are available with the Opower Configuration Tool, access the tool at <https://configuration.opower.com/> and review the available options for the pages and widgets included in your Digital Self Service - Transactions web portal.

## Billing Trends Configuration Options

The Bill trends graph displays insight into a customer's energy use and costs trends. The following image shows a standard example of bill trends and indicates the primary configuration options.



Use the table below to review all available configuration options.

Image Number	Configuration Option
1	<p><b>Title Display</b></p> <p>The title for the bill trends graphs.</p> <p><b>Default:</b> Display the title.</p>
2	<p><b>Include Links to Digital Self Service - Energy Management</b></p>

Image Number	Configuration Option
	<p><b>Features</b></p> <p>The bill trends graph can include links to Digital Self Service - Energy Management features, within insight messages and buttons, for utilities that purchase the Digital Self Service - Energy Management Cloud Service. For example, this includes links for customers to compare their bills or view energy use details.</p> <p><b>Default:</b> Show links to Digital Self Service - Energy Management features</p>
Not Depicted	<p><b>Include External Links</b></p> <p>The bill trends graph links to Digital Self Service - Energy Management features can instead link to external resources when required. External links can be provided for the following scenarios:</p> <ul style="list-style-type: none"> <li>▪ View energy use details for total bill</li> <li>▪ View energy use details for electricity</li> <li>▪ View energy use details for gas</li> <li>▪ View energy use details for water</li> <li>▪ View energy use details for wastewater</li> <li>▪ View bill comparison for total bill</li> <li>▪ View bill comparison for electricity</li> <li>▪ View bill comparison for gas</li> <li>▪ View bill comparison for water</li> <li>▪ View bill comparison for wastewater</li> </ul> <p><b>Default:</b> Do not use external links</p>
3	<p><b>Service Types and Service Agreements Organization</b></p> <p>Customers with multiple service agreements and service types view bill trends for a particular service type by selecting the service type from a drop-down list. Service agreements can be grouped by service type or listed individually.</p> <p><b>Default:</b> Service agreements are listed individually</p>



## User Experience Variations

The user experience varies for customers depending upon their service types, available data, costs, and locale. Note that the following list indicates the primary user experience variations, not all possible variations.

- **No bills:** Customers that do not yet have billing information available are presented a message to check back later after enough billing data is available. The following is an example no bills message:

*Check back later for a closer look at your energy use. After your first few bills, you'll get some insights into your energy use that can help you save more.*

- **Only one bill:** Customers that do not yet have billing information available are presented a message to check back later after enough billing data is available. The following is an example only one bill message:

*A closer look at your energy use - coming soon! Check back in after your next bill for insights into your energy use that can help you save more.*

- **Less than 13 months of bills:** The bill comparison uses the prior month's bill as opposed to the prior year bill which is used for users with at least 13 months of billing data.

## Financial History Configuration Options

Customers can view a record of posted bills and payments received. The following image shows a standard example of financial history.

# Billing and payment history 1

All transactions ▼ All dates ▼ Clear 2 ↓ Download history

i You can only download files up to a year old. 7

Date	Activity	Amount
Oct 15, 2022 <span>▼</span>	Bill posted <span>4</span>	-\$8.70 <span>6</span> <span>↓</span>
	Gas service	\$41.30
	Adjustment	-\$50.00
	<span>5</span> <b>Total bill</b>	<b>-\$8.70</b>
	<a href="#">View bill details</a>	
Sep 23, 2018 <span>▶</span>	Payment received <span>3</span>	-\$38.00 <span>6</span> <span>↓</span>
Sep 12, 2018 <span>▶</span>	Bill posted	\$38.00 <span>↓</span>
Sep 12, 2018 <span>▶</span>	Bill posted	<span>↓</span>

Use the table below to review all available configuration options. In addition to the options listed below, Opower Configuration Tool can be used to configure messaging and feature behavior, as described in "Configuring Financial History Messaging and Behavior" on page 39.

**Note:** In addition to the configurations listed below, financial history depends on the tender types configured using products such as Oracle Utilities Customer Care and Billing. Ensure that the tender types supported for your implementation are configured as the descriptions for these tender types are retrieved and displayed as part of the payment methods in the financial history.

Image Number	Configuration Option
Not Depicted	<p><b>Records Per Page</b></p> <p>The number of financial history records that are displayed per page. Customers can scroll through each page to view all applicable financial history.</p> <p><b>Default:</b> 15 financial history records</p>
Not Depicted	<p><b>Maximum Lookback</b></p> <p>How much historical financial history customers can review.</p> <p><b>Default:</b> Five years</p>
1	<p><b>Title</b></p> <p><b>Default:</b> Billing &amp; payment history</p>
2	<p><b>Billing and Payment Full History Download</b></p> <p>Customers can select to download all financial history as a comma separated value (CSV) file. All available history can be included in the download, or up to a specific number of months of data can be included. For example, to allow only up to two years of data, provide 24 months as the required value. In this scenario, the most recent 24 months of data is included in the download. In addition to defining the length of data that can be downloaded, the ability to download data in this format can also be fully disabled.</p> <p><b>Default:</b> Include all available billing and payment history</p>
Not Depicted	<p><b>Billing and Payment History Download File Fields</b></p> <p>Define the fields included and their order in the financial history files when a customer selects to download the information.</p> <p><b>Default:</b> Date, Label, Amount, Currency, Currency Code, Bill ID, and Payment ID</p>

Image Number	Configuration Option
Not Depicted	<p><b>Scheduled Payment Message</b></p> <p><b>Default:</b> Scheduled payment</p>
3	<p><b>Payment Received Message</b></p> <p><b>Default:</b> Payment Received</p>
Not Depicted	<p><b>Payment Cancelled Message</b></p> <p><b>Default:</b> Payment Cancelled</p>
4	<p><b>Bill Posted Message</b></p> <p><b>Default:</b> Bill Posted</p>
5	<p><b>Total Bill Message</b></p> <p><b>Default:</b> Total Bill</p>
6	<p><b>Bill Download Availability Period</b></p> <p>Define the number of months individual bill downloads remain available. When customers view their billing history, the bill download button is automatically disabled for any bills older than the defined period. For example, if the default of 12 months is used for this value, the bill download button is disabled for all bills greater than a year old.</p> <p><b>Default:</b> 12 months</p>
7	<p><b>Bill Download Availability Message</b></p> <p>Define a message regarding the specific time frame during which bill downloads are accessible. It is recommended that this message reflect the configuration defined using the Bill Download Availability Period option.</p> <p><b>Default:</b> "You can only download files up to a year old"</p>

Image Number	Configuration Option
Not Depicted	<p><b>Bill Download Error Message</b></p> <p>Define a message to explain to customers when an error occurs during a bill download request.</p> <p><b>Default:</b> “Sorry this file could not be downloaded, please try again”</p>

### User Experience Variations

The user experience varies for customers depending upon their service types, available data, costs, and locale. Note that the following list indicates the primary user experience variations, not all possible variations.

- No bill history:** Customers that do not yet have billing information available are presented with a message to check back later after enough billing data is available. The following is an example no bills message:

*Check back later for a closer look at your energy use. After your first few bills, you'll get some insights into your energy use that can help you save more.*

### Bill Details Configuration Options

The summary of a customer's current bill includes new charges, bill due date, previous balance, and any applicable payments or adjustments. The following image shows a standard example of the bill summary.

## Bill Details 1

Posted November 1, 2019

---

<b>Previous Balance</b>	<b>\$715.58</b>
<b>Payment Towards Previous Balance</b> <span style="float: right; border: 1px solid blue; border-radius: 50%; width: 30px; height: 30px; display: flex; align-items: center; justify-content: center; color: white; font-weight: bold; font-size: 1.2em;">2</span>	<b>\$0.00</b>

---

**Past Due** **\$715.58**  
 Please pay this balance right away

**New Charges** **\$290.87**  
[See details in module below](#)

---

**Total**
\$1,006.45

---

[View bill \(PDF\)](#)

MAKE A PAYMENT

Due November 18, 2019

Use the table below to review all available configuration options.

Image Number	Configuration Option
1	<p><b>Title</b></p> <p><b>Default:</b> Bill Details</p>

Image Number	Configuration Option
2	<p><b>Previous Payment Message</b></p> <p>Credit amounts are presented with alternative wording and colors to indicate the credit.</p> <p><b>Default:</b> Payment towards previous balance</p>

### User Experience Variations

The user experience varies for customers depending upon their service types, available data, costs, and locale. Note that the following list indicates the primary user experience variations, not all possible variations.

- **No bills:** Customers that do not have billing information available are presented a message that their bill is not ready, along with links to set up automatic payments and account preferences. The following is an example no bills message:

*Check back later for a closer look at your energy use. After your first few bills, you'll get some insights into your energy use that can help you save more.*

- **Negative balance:** Customers with a credit balance are presented with alternative wording and colors to indicate that they have a credit rather than a charge. For example, the total balance can be displayed as *Total credit balance (no balance due)*.
- **Adjustments and corrections:** Adjustments or corrections are displayed as applicable, separate line items. These values can support both debits and credits, and the amounts are presented with alternative wording and colors to indicate the credit. The example image for the bill summary includes credit adjustments and corrections.

### Bill Breakdown Configuration Options

Additional breakdown of bill charges provides comprehensive billing information such current bill charges broken down by premises, fuel or resource type, and service point. The following image shows a standard example of the bill breakdown feature.

## Breakdown of new charges **1**

1900 Great Dane Dr, San Francisco, CA, 94103

**Electric residential rate** **\$85.24**

**Apr 1 - May 1** 30 days

**Apr 2 - May 1**

Service charge	\$15.00
166.36 kWh at \$0.134 per kWh peak usage	\$22.29
552.12 kWh at \$0.03029 per kWh off peak usage	\$16.72
143.00 kWh at \$0.06783 per kWh mid peak usage	\$9.70
PCA 861.48 kWh at \$0.00547 per kWh	\$4.71
Energy total	\$53.42
City sales tax 11.5%	\$7.87
State sales tax 7.5%	\$8.78
County sales tax 0.25%	\$0.17
<b>Total charges</b>	<b>\$85.24</b>

Service ID: 9949136356 **2**

Rate Plan: Electric residential time of use (on/off/mid) **3**

**Total new charges** **4** **\$85.24**

[View bill \(PDF\)](#)

Use the table below to review all available configuration options.



Image Number	Configuration Option
1	<b>Title</b> <b>Default:</b> Breakdown of new charges
2	<b>Service ID</b> <b>Default:</b> Service ID: [ServiceID]
3	<b>Rate Plan</b> <b>Default:</b> Rate Plan: [RatePlanName]
4	<b>Total of New Charges Message</b> <b>Default:</b> Total new charges

### User Experience Variations

The user experience varies for customers depending upon their service types, available data, costs, and locale. Note that the following list indicates the primary user experience variations, not all possible variations.

- **No bills:** Customers that do not yet have billing information available are presented a message that their bill is not ready, along with links to set up automatic payments and account preferences. The following is an example no bills message:

*Check back later for a closer look at your energy use. After your first few bills, you'll get some insights into your energy use that can help you save more.*

- **Multiple premises on account:** Customers with multiple premises see their services and related charges grouped by premise. The total is aggregated across all premises.
- **Non-premise charges:** Charges that are not associated with a specific premise are grouped as other charges. This commonly includes items such as construction or consulting charges, charity payments, and so on.

### Configuring Billing

Self-service options are available to the customer to view a bill, review bill trends, and review payment history.

## Configuring Financial History Messaging and Behavior

**Note:** This documentation provides steps to complete configuration tasks using the Opower Configuration Tool. For more information on using the Opower Configuration Tool, refer to the [Oracle Utilities Opower Configuration Tool User Guide](#).

### Billing and payment history 1

All transactions ▼ All dates ▼ Clear 2 [Download history](#)

i You can only download files up to a year old. 7

Date	Activity	Amount
Oct 15, 2022 <span>▼</span>	Bill posted <span>4</span>	-\$8.70 <span>6</span> <a href="#">↓</a>
	Gas service	\$41.30
	Adjustment	-\$50.00
<span>5</span>	<b>Total bill</b>	<b>-\$8.70</b>
	<a href="#">View bill details</a>	
Sep 23, 2018 <span>▶</span>	Payment received <span>3</span>	-\$38.00 <span>6</span>
Sep 12, 2018 <span>▶</span>	Bill posted	\$38.00 <a href="#">↓</a>
Sep 12, 2018 <span>▶</span>	Bill posted	<a href="#">↓</a>

To configure Financial History messaging and behavior:

1. From the Opower Configuration Tool, select **Widgets**, and then select **Financial History**. The configurations for Financial History are displayed.

2. To configure text and messages of the Financial History feature:
  - a. Select **Text (locale)**, where **locale** is the language locale you are configuring.
  - b. Text and messages are included for the text used throughout the various experiences of the Financial History features. For example, the **Title** configuration within the Billing History area allows for the definition of the top title for the Financial History area.
  - c. Select **Save Changes** to save any changes to the default text and messages. Text and messages that are directly available are updated in the preview, while text and messages in secondary locations may not be directly highlighted in the preview.
3. To configure the behavior of the Financial History feature:
  - a. Select **Functionality**.
  - b. Make any required configuration changes. For example, the **Download File Fields** option allows you to define the fields included and their order in the financial history files when a customer selects to download the information. The help text provided with configurations can provide additional explanation of each available option, including the available fields for the Download File Fields option.
  - c. Select **Save Changes** to save any changes to the default configurations. Certain configurations that are directly available are updated in the preview, while some configurations may not be directly highlighted in the preview.
4. Refer to the [Oracle Utilities Opower Configuration Tool User Guide](#) for steps to publish configuration changes.

## Payments

Digital Self Service - Transactions offers multiple ways for the users to pay their bills online. Utilities can choose to enable or disable any of these options for their customers, as well as further configure payment options.

- **One-Time Payments:** Customers can make one-time payments for a single account or multiple accounts for which they have authorized access for:
  - Review all feature configuration options listed at "Reviewing Payment Configuration Options" on page 41.
  - Complete self-service task configuration and payment configuration, as described at "Configuring Payments" on page 52.
- **Automatic Payments:** Customers can enroll in automatic payments to choose preferred payments settings to pay for utility bills automatically when their bill is due. For configurations related to automatic payments, refer to "Program Enrollment" on page 56.

- **Charity Contributions:** Customers make charitable contributions when paying their bill. For requirements to create and define charitable contributions, refer to "Charity Contributions" on page 87.
- **Manage Bank Accounts:** Customers can manage their Automated Clearing House payments directly from within Digital Self Service - Transactions by adding and managing bank accounts.
  - Review all feature configuration options listed at "Manage Bank Accounts Configuration Options" on page 50.
  - Complete self-service task configuration and master configuration updates, as described at "Configure Bank Account Management" on page 55.

### Reviewing Payment Configuration Options

Use the tables below to provide all feature configuration inputs to your Oracle Utilities Delivery Team as a request using [My Oracle Support](#).

**Note:** You can use the Opower Configuration Tool to implement certain configurations for Digital Self Service - Transactions. This can include user experience configurations, interface messages and formats, branding configurations, and other configurations relevant to Digital Self Service - Transactions. To review if any configurations listed below are available with the Opower Configuration Tool, access the tool at <https://configuration.opower.com/> and review the available options for the pages and widgets included in your Digital Self Service - Transactions web portal.

### General Payment Configuration Options

Use the table below to review the payment configuration options that apply broadly to the user experiences for interacting with payments.

Image Number	Configuration Option
Not Depicted	<p><b>Enable Restrictions for Cash-Only Accounts</b></p> <p>Payment options can be restricted and hidden for cash-only accounts to prevent customers with cash-only accounts from attempting to submit payments. This general restriction support can be enabled by requesting the update using <a href="#">My Oracle Support</a>.</p> <p>If you request to enable restrictions on cash-only accounts, you can</p>

Image Number	Configuration Option
	<p>also enable restrictions on the following features by using the Opower Configuration Tool. The Opower Configuration Tool allows you to make the following configuration choices directly:</p> <ul style="list-style-type: none"> <li>▪ Account Balance Overview: You can enable cash-only messages. If enabled, cash-only accounts are shown a message about their cash-only status and are prohibited from submitting payments using Digital Self Service - Transactions.</li> <li>▪ Manage Bank Accounts: You can enable cash-only restrictions. If enabled, cash-only accounts are shown a message about their cash-only status and are prohibited from adding bank accounts using Digital Self Service - Transactions.</li> </ul> <p><b>Default:</b> Disable restrictions for cash-only accounts</p>

**Select Accounts Configuration Options**

The following image shows a standard example of selecting accounts for one-time payments and indicates the primary configuration option.

Current Account: Account Holder ▼

## Select account(s) for payment 1

**Amount selected to be charged:**  
 \$26.41  
 From 1 account

[CONFIRM ACCOUNTS](#)

[▼ Hide search options](#)

Street address

City

State

Zip code

[SEARCH](#) [Reset All](#)

*Displaying 0-3 accounts of 28 accounts.* ◀ 0 of 3 ▶

<input type="checkbox"/> ACCOUNTS	DUE DATE	AMOUNT DUE
<input checked="" type="checkbox"/> ▶ first	Feb 2, 2024	\$26.41
<input type="checkbox"/> ▶ second	N/A	-\$226.41
<input type="checkbox"/> ▶ third	Feb 2, 2018	\$1,226.41

◀ 0 of 3 ▶

Use the table below to review all available configuration options.

Image Number	Configuration Option
1	<p><b>Title</b></p> <p><b>Default:</b> Select account(s) for payment</p>

Image Number	Configuration Option
Not Depicted	<p><b>Offer One-Time Payments</b></p> <p>One-time payments can be hidden if the utility does not want to offer this feature to customers.</p> <p><b>Default:</b> Enable one-time payments</p>

**Payment Summary Configuration Options**

The following images show a standard example of payment summary.

Current Account: Account Holder ▼

## Payment Summary 1

---

**Contact Information** 2

Current account selected: #11110000 **Account Holder**, 3 addresses

ACCOUNTS	DUE DATE	AMOUNT DUE	PAYMENT
▶ first	Feb 2, 2024	\$26.41	<span style="color: #0070c0;">!</span> <input style="width: 80px;" type="text" value="\$10"/> <span style="float: right;">🗑️</span>
▶ 0436499609	Feb 3, 2017	\$123.45	<span style="color: #4caf50;">✓</span> <input style="width: 80px;" type="text" value="\$123.45"/> <span style="float: right;">🗑️</span>

[+ Add Account](#)

---

**Charitable contribution** 3 [Open ▶](#)

We partner with a number of charities. Make your tax-deductible donation today.

---

**Payment Date** 4

📅 ✓

---

**Payment method** 5

Bank of America, NA - 8257  
 Chase, NA - 7890  
 Wells Fargo, NA - 3000  
 Use a new payment method 6

---

2 accounts selected

<b>Subtotal:</b>	\$133.45
<b>Charities:</b>	\$1,234.56
<b>Total Payment:</b>	<b>\$1,368.01</b>

CANCEL
CONTINUE

Use the table below to review all available configuration options.



Image Number	Configuration Option
1	<p><b>Title</b></p> <p><b>Default:</b> Payment Summary</p>
2	<p><b>Payment Information Section Title</b></p> <p><b>Default:</b> Contact Information</p>
3	<p><b>Charitable Contributions Section Title</b></p> <p><b>Default:</b> Charitable Contribution</p>
3	<p><b>Charitable Contributions Section Explanation</b></p> <p><b>Default:</b> We partner with a number of charities. Make your tax-deductible donation today.</p>
4	<p><b>Payment Date Section Title</b></p> <p><b>Default:</b> Payment Date</p>
5	<p><b>Payment Methods Section Title</b></p> <p><b>Default:</b> Payment Method</p>
6	<p><b>Enable Customers to Save Payment Methods</b></p> <p>The utility can determine if they want to allow customers to save their payment methods.</p> <p><b>Default:</b> Enable payment method saving</p>

**Payment Review Configuration Options**

The following images show a standard example of payment review.

Current Account: Account Holder ▼

## Review your payment 1

Does everything look OK? Click edit to make any changes or submit your payment when you are ready.

Payment method	Payment date	Payment amount
Wells Fargo, NA - 3000	N/A	\$2,479.12

Payment breakdown 2 [Edit](#)

Account nickname	Account number	Payment amount
first	5436499601	\$10.00
	0436499609	\$1,234.56

Charitable Donation 3

Charities	Account number	Payment amount
Wikipedia	5540577470	\$1,234.56

I agree with the [Terms of Use](#) 4

CANCEL
PAY NOW

Use the table below to review all available configuration options.


Image Number	Configuration Option
1	<p><b>Review Title</b></p> <p><b>Default:</b> Review your payment</p>
2	<p><b>Payment Breakdown Section Title</b></p> <p><b>Default:</b> Payment breakdown</p>
3	<p><b>Charitable Donations Label</b></p> <p><b>Default:</b> Charitable Donation</p>
4	<p><b>Terms of Use</b></p> <p>Clearing house payment terms of use can be included during payment</p>

Image Number	Configuration Option
	<p>review, which requires customers to accept the terms of use before submitting payment. If this option is enabled, an applicable terms of use message must also be provided.</p> <p><b>Default:</b> Disabled</p>

**Payment Confirmation Configuration Options**

The following images show a standard example of payment confirmation.

Current Account: Account Holder ▼



## 1 Thank you for your payment.

Confirmation number: 88091700222340

For historical records, see [billing and payment history](#)

Payment method	Payment date	Payment amount
Wells Fargo, NA - 3000	N/A	\$2,479.12

### Payment breakdown 2

Account nickname	Account number	Payment amount
first	5436499601	\$26.41
	0436499609	\$123.45

### Charitable Donation 3

Charities	Account number	Payment amount
Wikipedia	5540577470	\$100.00

BACK TO OVERVIEW

Use the table below to review all available configuration options.

Image Number	Configuration Option
1	<b>Confirmation Title</b>

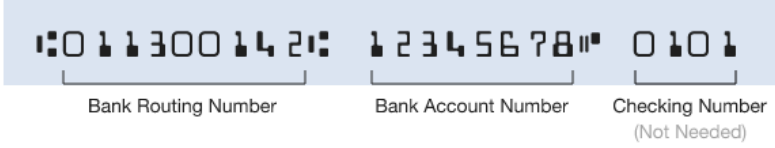
Image Number	Configuration Option
	<b>Default:</b> Thank you for your payment
2	<b>Payment Breakdown Section Title</b> <b>Default:</b> Payment breakdown
3	<b>Charitable Donations Label</b> <b>Default:</b> Charitable Donation
Not Depicted	<b>Email Confirmation Message</b> A message that informs the customer that an email confirmation of the payment will also be sent to the customer. If enabled, this email must be configured and supported by the utility and the default confirmation message displayed on the interface can be reviewed below. <b>Default:</b> Do not show the email confirmation message <b>Default Confirmation Message:</b> We will email you a confirmation when your payment has processed

**Manage Bank Accounts Configuration Options**

The following images show a standard example of manage back accounts.

# Manage Bank Account 1

Add a new bank account Close ▲



The diagram shows a routing number **10113001421** with a bracket underneath labeled "Bank Routing Number". To its right is a bank account number **12345678** with a bracket underneath labeled "Bank Account Number". To the right of that is a checking number **0101** with a bracket underneath labeled "Checking Number (Not Needed)".

You have only one active bank account

▶ Wells Fargo Bank 🗑️

Use the table below to review all available configuration options.

Image Number	Configuration Option
1	<p><b>Manage Bank Account Title</b></p> <p><b>Default:</b> Manage Bank Account</p>
2	<p><b>Routing Number Verification</b></p> <p>Customers must enter a routing number to add a new bank account.</p>

Image Number	Configuration Option
	<p>The number a customer enters is verified that it only includes numbers, and uses a default of nine digits.</p> <p><b>Default:</b> Verify routing number format and require nine digits.</p>
2	<p><b>Account Number Requirements</b></p> <p>Customers must enter an account number to add a new bank account. The number a customer enters is verified that it only includes numbers, and meets minimum and maximum lengths.</p> <p><b>Default:</b> Enforce account number format and require a minimum of six digits and a maximum of 17 digits.</p>

### User Experience Variations

The user experience varies for customers depending upon their service types, available data, costs, and locale. Note that the following list indicates the primary user experience variations, not all possible variations.

- **Credit Card Payments:** Credit card payments are not supported for one-time payments for multiple accounts. Customers can use the single account payments to pay by a credit card if the utility has set up the required third-party payment vendor.
- **Cash-Only Accounts:** The ability to submit payments can be restricted for cash-only accounts. If these restrictions are enabled, messages are displayed to replace payment options for cash-only accounts. Refer to the configuration inputs listed in to enable restrictions for cash-only accounts.

### Configuring Payments

Complete the steps provided below to configure payment features.

**Note:** Customers can also enroll in automatic payments. For requirements to configure the related automatic payment sources, see "Automatic Payments" on page 82.

**Note:** This documentation provides steps to complete these configuration tasks using Oracle Utilities Customer Care and Billing. However, many of these tasks can be completed with other applicable products such as Oracle Utilities Customer to Meter or Oracle Utilities Customer Cloud Service. Refer to your applicable product documentation for steps to complete the configuration using your Oracle Utilities product. Additionally, this documentation assumes that you know how to create the various objects listed below as well as modify or create master configurations. For additional details on these tasks, refer to the applicable [Oracle Utilities Documentation](#).

### Configure Payment Methods

The following configurations enable customers to pay their bills through payment options such as a checking or savings account.

**Note:** The steps below assist in completing payment method configuration through Oracle Utilities. If you use third-party payment processing providers for certain types of payments, these configurations must be completed in a separate Third-Party Payment Processing Integration master configuration. For more information on completing third-party payment processing integration, refer to the *Oracle Utilities Customer Care and Billing Business User Guide*.

To configure payment methods:

1. Log in to Customer Care and Billing as a user with edit access for the CC&B Self-Service Integration master configuration.
2. From the **Admin** menu, select **General**, and select **Master Configuration**. From the **Master Configuration** zone, select the **Edit** option for the **CC&B Self-Service Integration** master configuration. The master configuration is displayed.
3. From the **Payment Processing Information** zone, define the following payment processing details:
  - **Accepted Payment Types:** Click the plus icon to add any accepted payment methods such as checking withdrawal, savings withdrawal, and so on. Select an applicable tender type for each payment type.

Oracle Utilities recommends adding a **Checking Withdrawal** and **Savings Withdrawal** payment type at minimum. Additional payment types depend on whether payments are processed directly through Oracle Utilities systems or



third-party payment processing providers.

- **Accepted Credit Card Types:** The requirement to add credit card types to the master configuration is dependent upon how credit card payments are processed. Oracle Utilities recommends supporting credit card payments through a third-party payment processing provider such as Paymentus. Refer to your third-party payment processing provider documentation for requirements to configure credit card payments, as well as the *Oracle Utilities Customer Care and Billing Business User Guide*.
  - **One Time Payment Sources:** To support payments through Oracle Utilities web self-service, make the following selections. From the **One Time Payment Trigger** drop-down list select **Web Self-Service**. From the **Characteristic Type** drop-down list select **One Time Payment Source**. From the **Characteristic Value** drop-down list select **Web Self-Service**.
4. From the **Scripts** zone, configure the applicable scripts:
    - Select the plus icon to add a new processing script. From the **Processing Type** drop-down list select **One Time Payment Creation**, and in the **Script** field type `C1-AddOTPay`. Review and modify `C1-AddOTPay` as needed. This script can support single account and multiple account payments.
    - To enable verification as to whether a payment is a duplicate payment, click the plus icon to add a new processing script. From the **Processing Type** drop-down list select **Check Duplicate Payment**, and in the **Script** field type `C1ChDupPay` or select your custom script for checking for duplicate payments. Review and modify script `C1ChDupPay` to meet your specific requirements.
  5. From the **Self-Service Tasks** zone, click the plus icon to add a new self-service task. From the **Service Task** drop-down list select **One Time Payment**, and then from the **Service Task Type** drop-down list select **One Time Payment Task**. The default configuration for one-time payments is required for Digital Self Service - Transactions, ensure that the self-service task objects have not been modified from the base product installation.

Customer contacts track the creation of self-service tasks to aid customer service representatives in reviewing tasks created for an account, and are configured using **Customer Contact Class** and **Customer Contact Type**. In addition to selecting applicable customer contacts with these options, review "Logging Self-Service Tasks" on page 247 for more information on configuring customer contacts.

6. Click **Save** to save the self-service master configuration changes.

## Configure Bank Account Management

The following configurations enable customers to manage bank accounts available to them in Digital Self Service - Transactions to pay their bills.

To configure support for customers managing bank account information

1. Log in to Customer Care and Billing.
2. Create a self-service task type to support saved bank account payments. To begin this task, from the **Menu**, select **Self-Service**, select **Self-Service Task Type**, and then select **Add**. The Select Business Object dialog box opens.
3. From the **Service Task Type Business Object** drop-down list, select **Self-Service Payment Options Task Type**, and then click **OK**. The Self-Service Payment Options Task Type dialog box opens.
4. Define all required information for the self-service task type. Refer to the help documentation provided with your Customer Care and Billing system for full details on all components. High-level requirements include:
  - **Service Task Type and Description:** The name and description of the self-service task type within Customer Care and Billing. For this example the Service Task Type is defined as **PAYOPTS - NACHA** and the Description is **Payment Options Task**.
  - **Related Transaction Object:** Self-Service Payment Options Task
  - **Service Task Type Status:** Active
  - **Service Task Class:** Self-Service
  - **Web Debit Account Validation:** Yes
  - **Wait Timeout Threshold (Minutes):** Provide a value
  - **Wait Timeout To Do Type :** Web Debit Account Validation Error
  - **Wait Timeout To Do Role:** System Default Role
5. Select **Save** to create the self-service task type.
6. Add the new self-service task type to your master configuration. From the **Admin** menu, select **General**, and select **Master Configuration**. From the **Master Configuration** zone, select the **Edit** option for the **CC&B Self-Service Integration** master configuration. The master configuration is displayed.
7. From the **Self-Service Tasks** zone, select the plus icon to add a new self-service task and complete the following configurations:
  - **Service Task:** Payment Options
  - **Service Task Type:** Payment Options Task
8. Click **Save** to save the master configuration changes.

## Program Enrollment

Digital Self Service - Transactions provides several programs that a utility can offer to their customers.

- **Manage Billing:** Customers can enroll in programs to manage the payment of their utility bills and review their enrollment status. Review all feature configuration options listed at "Manage Billing Configuration Options" on page 57.
- **Paperless Billing:** Customers can enroll in paperless billing to opt-out of receiving a paper bill and receive all billing through email and within Digital Self Service - Transactions billing features.
  - Review all feature configuration options listed at "Paperless Billing Configuration Options" on page 60.
  - Create any required notification types and bill route types, as described at "Paperless Billing" on page 79.
- **Automatic Payments:** Customers can enroll in automatic payments to choose preferred payments settings to pay for utility bills automatically when their bill is due.
  - Review all feature configuration options listed at "Automatic Payments Configuration Options" on page 62.
  - Create any required automatic payment sources, as described at "Automatic Payments" on page 82.
- **Payment Arrangement:** Customers with unpaid balances can enroll in payment arrangement plans. Interested customers can enroll in the program and select from available payment options. The payment options break the unpaid balance down into equal payments over a specified number of bills. The following configurations are available:
  - Review all feature configuration options listed at "Payment Arrangement Configuration Options" on page 65.
  - Complete self-service task configuration, as described at "Configuring Program Enrollment" on page 78.
- **Budget Billing:** Customers can enroll in the budget billing program to receive fixed bills throughout the year to avoid fluctuations in their bills. The following configurations are available:
  - Review all feature configuration options listed at "Budget Billing Configuration Options" on page 69.
  - Complete self-service task configuration, as described at "Configuring Program Enrollment" on page 78.
- **Charity Contributions:** Customers can enroll in charitable contributions which are processed during their normal billing cycle. The following configurations are available:

- Review all feature configuration options listed at "Charity Contributions Configuration Options" on page 73
- Complete all charitable donation configurations, as described at "Charity Contributions" on page 87.
- **Payment Extensions:** Eligible customers can enroll in payment extensions to extend the due date of their bills. The following configurations are available:
  - Review all feature configuration options listed at "Payment Extensions Configuration Options" on page 74.
  - Complete all payment extension configurations, as described at "Payment Extensions" on page 91.
- **Preferred Payment Date:** Eligible customers can choose a payment date for their utility bill. The following configurations are available:
  - Review all feature configuration options listed at "Preferred Payment Date Configuration Options" on page 77.
  - Complete all preferred payment date configurations, as described in "Preferred Payment Date" on page 93.

## Reviewing Program Enrollment Configuration Options

Use the tables below to review all available configuration options which can be submitted as a request using [My Oracle Support](#).

**Note:** You can use the Opower Configuration Tool to implement certain configurations for Digital Self Service - Transactions. This can include user experience configurations, interface messages and formats, branding configurations, and other configurations relevant to Digital Self Service - Transactions. To review if any configurations listed below are available with the Opower Configuration Tool, access the tool at <https://configuration.opower.com/> and review the available options for the pages and widgets included in your Digital Self Service - Transactions web portal.

## Manage Billing Configuration Options

The following image shows a standard example of the Manage Billing options that present program enrollment options.

# Manage billing 1

- Paperless Billing** 2  
Ditch the paper with emailed bills Enrolled >
- Automatic Payments** 3  
Automate your bill payments 7 Enrolled >
- Payment Arrangement** 4  
Pay off an outstanding balance in manageable pieces Not Enrolled >
- Budget Billing** 5  
Even out your bills 8 Not Enrolled >
- Charity Contributions** 6  
Charity Auto-Pay Not Enrolled >
- Payment Extensions** 9  
Allow extra time to pay your bill Enrolled >

### Set your billing preferences

- Preferred Payment Date** 10  
Pick the date your utility bill is due each month >

Use the table below to review all available configuration options.

Image Number	Configuration Option
1	Title

Image Number	Configuration Option
	<b>Default:</b> Manage Billing
2	<b>Paperless Billing Title</b> <b>Default:</b> Paperless Billing
2	<b>Paperless Billing Description</b> <b>Default:</b> Ditch the paper with emailed bills
3	<b>Automatic Payments Title</b> <b>Default:</b> Automatic Payments
3	<b>Automatic Payments Description</b> <b>Default:</b> Automate your bill payments
4	<b>Payment Arrangement Title</b> <b>Default:</b> Payment Arrangement
4	<b>Payment Arrangement Description</b> <b>Default:</b> Pay off an outstanding balance in manageable pieces
5	<b>Budget Billing Title</b> <b>Default:</b> Budget Billing
5	<b>Budget Billing Description</b> <b>Default:</b> Even out your bills
6	<b>Charity Contributions Title</b> <b>Default:</b> Charity Contributions

Image Number	Configuration Option
6	<b>Charity Contributions Description</b> Default: Charity Auto-Pay
7	<b>Enrolled Status</b> Default: Enrolled
8	<b>Not Enrolled Status</b> Default: Not Enrolled
9	<b>Payment Extensions Title</b> Default: Payment Extensions
10	<b>Preferred Payment Date Title</b> Default: Preferred Payment Date
10	<b>Preferred Payment Date Description</b> Default: Pick the date your utility bill is due each month

**Paperless Billing Configuration Options**

The following image shows a standard example of Paperless Billing.

**Paperless Billing** 1

Ditch the paper and receive your bills via email.

**How it works** 2

You'll get your bill delivered to your inbox, faster than you would normally receive it in the mail. And if you want a paper copy of your bill, you can always print one out from your online account.

**Send to your primary email address:** 3

jdoe@example.com

ENROLL

Use the table below to review all available configuration options.

<b>Image Number</b>	<b>Configuration Option</b>
Not Depicted	<p><b>Disable Paperless Billing Enrollment</b></p> <p>Paperless billing enrollment can be hidden from "Manage Billing Configuration Options" on page 57 if the utility does not want to offer this program to customers.</p> <p><b>Default:</b> Enable Paperless Billing Enrollment</p>
Not Depicted	<p><b>Bill Route Types</b></p> <p>To support paperless billing enrollment, you must provide Oracle Utilities with the bill route types that support paper billing and paperless billing. A bill route type is also required for dual billing if dual bill enrollment is enabled. Provide the bill route type name defined in your system, along with the type of billing enrollment that it supports.</p> <p><b>Default:</b> None</p>
1	<p><b>Title</b></p> <p><b>Default:</b> Paperless Billing</p>
1	<p><b>Explanation</b></p> <p><b>Default:</b> Ditch the paper and receive your bills via email.</p>
2	<p><b>How it Works Section Title</b></p> <p><b>Default:</b> How it works</p>
2	<p><b>How it Works Description</b></p> <p><b>Default:</b> You'll get your bill delivered to your inbox, faster than you would normally receive it in the mail. And if you want a paper copy of your bill, you can always print one out from your online account.</p>
3	<p><b>Enrollment Section Title</b></p> <p><b>Default:</b> Send to your primary email address:</p>



Image Number	Configuration Option
Not Depicted	<p><b>Enable Dual Bill Enrollment</b></p> <p>Customers can be allowed to enroll in paperless billing while also retaining the option to receive paper bills as well. Customers who enroll in paperless billing then have the option to remain enrolled in paper bills as well, or opt-out of paper bills.</p> <p><b>Default:</b> Disable dual bill enrollment</p>

**Automatic Payments Configuration Options**

The following image shows a standard example of Paperless Billing and indicates the primary configuration options.

**Automatic Payments** 1

Never worry about missing a bill payment.

**How it works** 2

Once you choose your preferred payment settings, you'll be automatically charged each bill period when the bill is due—no need to log in or worry about when your bill is due.

**Frequently asked questions** 3

- ▶ When will this go into effect?
- ▶ How does the "maximum" payment setting work?

**How would you like to set up automatic payments?** 4

Credit Card 5

Bank account / Debit card 6

Use the table below to review all available configuration options.

Image Number	Configuration Option
Not Depicted	<p><b>Disable Automatic Payments Enrollment</b></p> <p>Automatic payment enrollment can be hidden from See "Manage Billing Configuration Options" on page 57. if the utility does not want to offer this program to customers.</p> <p><b>Default:</b> Enable Automatic Payment Enrollment</p>
Not Depicted	<p><b>Disable Enrollment Methods</b></p> <p>You can define if credit cards and bank accounts are eligible methods for automatic payments.</p> <p><b>Default:</b> Credit card and bank accounts are both eligible</p>
1	<p><b>Title</b></p> <p><b>Default:</b> Automatic Payments</p>
1	<p><b>Explanation</b></p> <p><b>Default:</b> Never worry about missing a bill payment.</p>
2	<p><b>How it Works Section Title</b></p> <p><b>Default:</b> How it works</p>
2	<p><b>How it Works Description</b></p> <p><b>Default:</b> Once you choose your preferred payment settings, you'll be automatically charged each bill period when the bill is due—no need to log in or worry about when your bill is due.</p>
3	<p><b>Frequently Asked Questions Title</b></p> <p><b>Default:</b> Frequently asked questions</p>
3	<p><b>Frequently Asked Question and Answer 1</b></p>

Image Number	Configuration Option
	<p><b>Default:</b> When will this go into effect?</p> <p>Your automatic payment settings will be applied to your next bill.</p> <p>How does the “maximum” payment setting work? If an unexpectedly high bill comes along, you won't be charged higher than the "Maximum" amount.</p>
3	<p><b>Frequently Asked Question and Answer 2</b></p> <p><b>Default:</b> How does the “maximum” payment setting work?</p> <p>If an unexpectedly high bill comes along, you won't be charged higher than the "Maximum" amount.</p>
4	<p><b>Enrollment Section Title</b></p> <p><b>Default:</b> How would you like to set up automatic payments?</p>
5	<p><b>Credit Card Enrollment</b></p> <p>To support credit card payments, you must select a third-party payment provider to process credit card payments.</p> <p><b>Default:</b> Credit card payments are disabled</p>
6	<p><b>Bank Account or Debit Card Enrollment</b></p> <p>Payment processing using bank accounts or debit cards can be implemented through Oracle Utilities or a third-party payment provider. You must notify Oracle Utilities if all payment processing is implemented through a third-party payment provider.</p> <p><b>Default:</b> Payments using bank accounts or debit cards are processed using Customer Care and Billing or other applicable Oracle Utilities product.</p>
Not Depicted	<p><b>Third-Party Payment Processing Title</b></p>

Image Number	Configuration Option
	<p>If all automatic payments are supported through the third-party payment vendor Paymentus, the enrollment area references the Paymentus site to complete all automatic payment enrollment.</p> <p><b>Default:</b> Automatic payments are powered by Paymentus</p>
Not Depicted	<p><b>Third-Party Payment Processing Message</b></p> <p>If all automatic payments are supported through the third-party payment vendor Paymentus, the enrollment area references the Paymentus site to complete all automatic payment enrollment.</p> <p><b>Default:</b> On the Paymentus site, you can enroll using either your bank account or credit card.</p>
Not Depicted	<p><b>Disable Maximum Payment Amount</b></p> <p>Maximum payment amounts allow customers to define a maximum value that an automatic payment can be.</p> <p><b>Default:</b> Enable a maximum payment amount</p>
Not Depicted	<p><b>Message for Enrollment Errors</b></p> <p>A contact support message is displayed when a customer's enrollment attempt for automatic payments fails.</p> <p><b>Default:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Title:</b> If the problem persists, contact support:</li> <li>▪ <b>Phone Number:</b> Telephone 555-987-6543</li> <li>▪ <b>Help Message and Link:</b> Online Help <a href="http://UtilityCo.com/DSS-Support">UtilityCo.com/DSS-Support</a></li> </ul>

**Payment Arrangement Configuration Options**

The following image shows a standard example of Payment Arrangement.

# Payment arrangement 1

Payment arrangement spreads out an unpaid balance over future bills, so you can pay it off in manageable amounts.

## How it works 2

Your previously unpaid balance is divided into smaller amounts, and then added to new bills in equal installments.

## What you'll get 3

Smaller amounts to pay off at a time.

## Frequently asked questions 4

- ▶ [How does Payment arrangement affect my bill?](#)
- ▶ [Who is eligible for Payment arrangement?](#)

## Plan details 5

Pay arrang. - Regulated debt

**Remaining balance**      **\$68.00**

Start date              07/11/2023

Initial amount        \$68.00

Monthly amount      \$22.67

Remaining payments      3

Enrolled

Use the table below to review all available configuration options.

**Note:** In addition to the required information listed below, Payment Arrangement requires a utility name, utility customer support email address, and utility customer support telephone number. Utilities provide these inputs as part of the [Oracle Utilities Opower Platform Configuration Guide](#).

Image Number	Configuration Option
Not Depicted	<p><b>Disable Payment Arrangement Programs</b></p> <p>Payment arrangement programs can be hidden from "Manage Billing Configuration Options" on page 57 if the utility does not want to offer these programs to customers.</p> <p><b>Default:</b> Enable Payment Arrangement Programs</p>
Not Depicted	<p><b>Disable Online Enrollment</b></p> <p>Customers can be required to call in to the applicable utility</p>

Image Number	Configuration Option
	<p>support contact to enroll in payment arrangement programs. Customers can view their active payment arrangement if they are enrolled, but online enrollment is disabled.</p> <p><b>Default:</b> Enable Online Enrollment</p>
1	<p><b>Title</b></p> <p><b>Default:</b> Payment Arrangement</p>
1	<p><b>Explanation</b></p> <p><b>Default:</b> Payment arrangement spreads out an unpaid balance over future bills, so you can pay it off in manageable amounts.</p>
2	<p><b>How it Works Section Title</b></p> <p><b>Default:</b> How it works</p>
2	<p><b>How it Works Section Description</b></p> <p><b>Default:</b> Your previously unpaid balance is divided into smaller amounts, and then added to new bills in equal installments.</p>
3	<p><b>Additional Details Section Title</b></p> <p><b>Default:</b> What you'll get</p>
2	<p><b>Additional Details Section Details</b></p> <p><b>Default:</b></p> <ul style="list-style-type: none"> <li>▪ Smaller amounts to pay off at a time.</li> <li>▪ Continued power, even with partially unpaid bills</li> </ul>
4	<p><b>Frequently Asked Questions Title</b></p> <p><b>Default:</b> Frequently asked questions</p>

Image Number	Configuration Option
4	<p><b>Frequently Asked Question and Answer 1</b></p> <p><b>Default:</b> How does Payment arrangement affect my bill?</p> <p>Payment Arrangement add the payment amount you selected to your regular monthly bill. Because this increases your overall payment each month, it is important that you select the payment plan that fits within your budget. If you need help deciding what plan to choose, contact us at [PhoneNumber].</p>
4	<p><b>Frequently Asked Question and Answer 2</b></p> <p><b>Default:</b> Who is eligible for Payment arrangement?</p> <p>The general requirement for eligibility is:</p> <ul style="list-style-type: none"> <li>▪ Two most recent payments are on time.</li> <li>▪ No more than three late payments in the last 12 months.</li> </ul> <p>However, we recognize that each situation is different. Contact us at [PhoneNumber] to discuss additional options.</p>
Not Depicted	<p><b>Message for Ineligible Customers</b></p> <p>Customers who are ineligible to enroll in the program are displayed an applicable ineligibility message rather than an option to enroll. For information on how eligibility is defined, see the steps described at "Payment Arrangements" on page 81.</p> <p><b>Default:</b> For more information, contact us at [UtilityEmailLink].</p>
5	<p><b>Display Service Agreement Type</b></p> <p>Information about the service agreement type can be displayed as part of the enrollment status in payment arrangements. This can provide additional context to customers and customer service representatives.</p> <p><b>Default:</b> Hide service agreement type.</p>
5	<p><b>Display Service Agreement Numbers</b></p>

Image Number	Configuration Option
	<p>The service agreement numbers can be displayed as part of the enrollment status in payment arrangements. This can provide additional context to customers and customer service representatives. Service agreement types must also be configured to be displayed to additionally display the service agreement numbers as well.</p> <p><b>Default:</b> Hide service agreement numbers</p>

**Budget Billing Configuration Options**

The following image shows a standard example of Budget Billing.



## Budget Billing 1

Budget Billing evens out your utility bills into fixed payments, so you know exactly what you'll owe each month.

### How it works 2

The Budget Billing program averages your utility bills from the previous 12 months and divides them into equal monthly payments.

To settle any differences between your monthly payments and actual use, you may receive a true-up charge or credit at the end of the year.

### What you'll get 3

- Zero bill fluctuation, even during periods of higher use.
- Easier-to-manage monthly expenses.
- No monthly fees—this service is completely free.

Budget Billing is only available to customers that have been with UtilCo for at least 12 months.

### Frequently asked questions 4

- ▶ [How is Budget Billing calculated?](#)
- ▶ [What is a "true-up"?](#)
- ▶ [Understanding your monthly statement](#)

The screenshot shows a utility bill interface. At the top, it says "Your monthly bill 5" followed by "\$ 20.20". Below this, a note states: "You will pay \$20.20 each bill period with a true-up payment every 12 periods." At the bottom, there is a green checkmark icon next to the word "Enrolled" and a button labeled "UNENROLL".

Use the table below to review all available configuration options.

Image Number	Configuration Option
Not Depicted	<p><b>Disable Budget Billing Enrollment</b></p> <p>Budget billing enrollment can be hidden from "Manage Billing Configuration Options" on page 57 if the utility does not want to offer this program to customers.</p> <p><b>Default:</b> Enable Budget Billing Enrollment</p>

Image Number	Configuration Option
1	<p><b>Title</b></p> <p><b>Default:</b> Budget Billing</p>
1	<p><b>Explanation</b></p> <p><b>Default:</b> Budget Billing evens out your utility bills into fixed payments, so you know exactly what you'll owe each month.</p>
2	<p><b>How it Works Section Title</b></p> <p><b>Default:</b> How it works</p>
2	<p><b>How it Works Section Description</b></p> <p><b>Default:</b> The Budget Billing program averages your utility bills from the previous 12 months and divides them into equal monthly payments.</p> <p>To settle any differences between your monthly payments and actual use, you may receive a true-up charge or credit at the end of the year.</p>
3	<p><b>Additional Details Section Title</b></p> <p><b>Default:</b> What you'll get</p>
3	<p><b>Additional Details Section Details</b></p> <p><b>Default:</b></p> <ul style="list-style-type: none"> <li>▪ Zero bill fluctuation, even during periods of higher use.</li> <li>▪ Easier-to-manage monthly expenses.</li> <li>▪ No monthly fees—this service is completely free.</li> </ul> <p>Budget Billing is only available to customers that have been with [UtilityName] for at least 12 months.</p>
4	<p><b>Frequently Asked Questions</b></p>

Image Number	Configuration Option
	<p><b>Default: How is Budget Billing calculated?</b></p> <p>Your Budget Billing amount is based on the average of your utility bills from the previous 12 months. We will continue to read your meter each month, and your monthly bill will show exactly how much you're using.</p> <p>At the end of the 12 month period, we will true-up your account so any differences between the estimated amount and actual usage can be settled.</p> <p><b>What is a "true-up"?</b></p> <p>A "true-up" is when we settle any differences between your Budget Billing amount and your actual usage. If you have an outstanding balance, you will receive a separate bill. If you have a credit, the amount will be applied to your next billing cycle.</p> <p>In addition to settling any differences, a new Budget Billing amount will be calculated based on your usage from the most current 12 months. This makes sure your Budget Billing amount reflects your actual usage as accurately as possible.</p> <p><b>Understanding your monthly statement</b></p> <p>Once enrolled in Budget Billing, your monthly bill will show three amounts:</p> <p>Budget Billing amount - your bill amount as a Budget Billing enrollee.</p> <p>Usage amount - what you would pay based on your actual usage.</p> <p>Deferred amount - the cumulative different between your usage amount and your Budget Billing amount.</p> <p>Over the course of a year, your Deferred amount would increase or decrease, sometimes even showing a credit. This amount is used to recalculate your Budget Billing amount during true-up.</p>
5	<p><b>Payment Section Title</b></p> <p><b>Default:</b> Your monthly bill</p>

Image Number	Configuration Option
5	<p><b>Payment Section Message</b></p> <p><b>Default:</b> You will pay [Currency] [TotalBudgetAmount] each bill period with a true-up payment every [MonthsForTrueUp] periods.</p>
Not Depicted	<p><b>Message for Ineligible Customers</b></p> <p>Customers who are ineligible to enroll in the program are displayed an applicable ineligibility message rather than an option to enroll.</p> <p><b>Default:</b> For more information, contact us at [UtilityEmailLink].</p>

### Charity Contributions Configuration Options

The following image shows a standard example of Charity Contributions.

#### Charity Contributions

1

Select to enroll or make changes to your contribution.

**CHARITY**

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**World Central Kitchen** ✔  
World Central Kitchen is a not-for-profit non-governmental organization devoted to providing meals in the wake of natural disasters.  
<https://wck.org>

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**American Civil Liberties Union** ✔  
The American Civil Liberties Union is a nonprofit organization whose stated mission is "to defend and preserve the individual rights and liberties guaranteed to every person in this country by the Constitution and laws of the United States".  
<https://www.aclu.org/>

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**Greenpeace**  
Greenpeace is a global, independent campaigning organization that uses peaceful protest and creative communication to expose global environmental problems and promote solutions that are essential to a green and peaceful future.

Use the table below to review all available configuration options.

Image Number	Configuration Option
Not Depicted	<p><b>Enable Charity Contributions Enrollment</b></p> <p>Charity contribution enrollment can be enabled as part of "Manage Billing Configuration Options" on page 57 if the utility wants to offer this program to customers.</p> <p><b>Default:</b> Disable Charity Contributions</p>
1	<p><b>Title</b></p> <p><b>Default:</b> Charity Contributions</p>
1	<p><b>Explanation</b></p> <p><b>Default:</b> Select to enroll or make changes to your contribution.</p>

**User Experience Variations**

The user experience varies for customers depending upon their service types, available data, costs, and locale. Note that the following list indicates the primary user experience variations, not all possible variations.

- **All Automatic Payments Through Paymentus:** If the third-party payment vendor Paymentus is configured to handle all automatic payments, customers are provided a message automatic payment enrollment through the Paymentus site.
- **Automatic Payment Methods:** Utilities can configure which methods are allowed for automatic payment enrollment. If only a single method is enabled, the customer is shown the single applicable method rather than being presented a choice between credit card and bank account.
- **Ineligible Customers:** Customers who are ineligible to enroll in programs including budget billing, automatic payments, and payment arrangements are displayed an applicable ineligibility message rather than an option to enroll.

**Payment Extensions Configuration Options**

The following image shows a standard example of Payment Extensions.

## Payment Extensions 1

A payment extension provides more time to pay your bill. Participation depends on the status of your account.

### How it works 2

A short-term payment extension allows you extra time to pay your bill, however you cannot schedule this payment past your next bill date. Short-term payment extensions are available for residential and small commercial customers.

### What you'll get 3

- An extension of you due date, your payment can be received anytime up to the due date
- No monthly fees—this service is completely free as long as you ake your payment on time

This is where the Utility may put disclaimer information about the plan. This will be a catch-all for anything extra that the Utility wants to add.

### Frequently asked questions

- ▶ [How is the payment extension calculated?](#) 4
- ▶ [Who is eligible?](#)
- ▶ [What is the maximum length of extension?](#)

### Extension Details

Length of extension	10 Day(s)
Amount to be paid	\$389.89
Due date	04/01/2021

To cancel or change, please call us at 1-800-UTIL-COS.

Use the table below to review all available configuration options.

Image Number	Configuration Option
Not Depicted	<b>Enable Payment Extension Enrollment</b> Payment Extension enrollment can be enabled as part of "Manage Billing Configuration Options" on page 57 if the utility wants to offer this program to customers. If Payment Extension is enabled, complete all payment extension configurations, as described at "Payment Extensions" on page 91. <b>Default:</b> Disable Payment Extensions
1	<b>Title</b> <b>Default:</b> Payment Extensions
1	<b>Explanation</b>

Image Number	Configuration Option
	<p><b>Default:</b> A payment extension provides more time to pay your bill. Participation depends on the status of your account.</p>
2	<p><b>How it Works Section Title</b></p> <p><b>Default:</b> How it works</p>
2	<p><b>How it Works Description</b></p> <p><b>Default:</b> A short-term payment extension allows you extra time to pay your bill, however you cannot schedule this payment past your next bill date. Short-term payment extensions are available for residential and small commercial customers.</p>
3	<p><b>What You'll Get Section Title</b></p> <p><b>Default:</b> What You'll Get</p>
3	<p><b>What You'll Get Section Description</b></p> <p><b>Default:</b></p> <ul style="list-style-type: none"> <li>▪ An extension of you due date, your payment can be received anytime up to the due date</li> <li>▪ No monthly fees—this service is completely free as long as you make your payment on time</li> </ul>
4	<p><b>Frequently Asked Questions</b></p> <p><b>Default: How is the payment extension calculated?</b></p> <p>The Payment Extension option is a short-term extension of the due date for the full payment of your past-due balance.</p> <p><b>Who is eligible?</b></p> <p>Payment extensions are only available for residential customers.</p> <p><b>What is the maximum length of extension?</b></p>

Image Number	Configuration Option
	Payment extensions can only be granted for a maximum of two (2) weeks from date of arrangement.

**Preferred Payment Date Configuration Options**

The following image shows a standard example of Preferred Payment Date enrollment.

**Preferred Payment Date 1**

With the preferred due date program, residential customers can pick the date their utility bill is due each month, such as the 1st or 15th.

**How it works 2**

Our Preferred Due Date option lets you request a billing due date that fits with your cash flow. It's a program that works well for those on a fixed income or whose paychecks come at specific times during the month.

**Frequently asked questions 3**

- ▶ [Who is eligible?](#)
- ▶ [When does it take effect?](#)

**Preferred due date**

Your due date for John Smith is 16th of every month

**Choose a new day of the month**

Due date:  of every month

[CONTINUE](#)

Use the table below to review all available configuration options.

Image Number	Configuration Option
Not Depicted	<p><b>Enable Preferred Payment Date Enrollment</b></p> <p>Preferred Payment Date enrollment can be enabled as part of "Manage Billing Configuration Options" on page 57 if the utility wants to offer this program to customers.</p> <p><b>Default:</b> Disable Preferred Payment Date</p>
1	<p><b>Title</b></p> <p><b>Default:</b> Preferred Payment Date</p>



Image Number	Configuration Option
1	<p><b>Explanation</b></p> <p><b>Default:</b> With the preferred due date program, residential customers can pick the date their utility bill is due each month, such as the 1st or 15th.</p>
2	<p><b>How it Works Section Title</b></p> <p><b>Default:</b> How it works</p>
2	<p><b>How it Works Description</b></p> <p><b>Default:</b> Our Preferred Due Date option lets you request a billing due date that fits with your cash flow. It's a program that works well for those on a fixed income or whose paychecks come at specific times during the month.</p>
3	<p><b>Frequently Asked Questions</b></p> <p><b>Default: Who is eligible?</b></p> <p>You must be current on your account (zero balance). Customers with an active payment arrangements or other payment programs who are current on their accounts are also eligible.</p> <p><b>When does it take effect?</b></p> <p>When you switch to Preferred Due Date, your first bill will cover either a longer or shorter time period to allow for the schedule adjustment, and therefore may be a little higher or lower than your typical bill.</p>

**Configuring Program Enrollment**

Complete the following steps to configure self-service tasks for program enrollment features.

**Note:** This documentation provides steps to complete these configuration tasks using Oracle Utilities Customer Care and Billing. However, many of these tasks can

be completed with other applicable products such as Oracle Utilities Customer to Meter or Oracle Utilities Customer Cloud Service. Refer to your applicable product documentation for steps to complete the configuration using your Oracle Utilities product. Additionally, this documentation assumes that you know how to create the various objects listed below as well as modify or create master configurations. For additional details on these tasks, refer to the applicable [Oracle Utilities Documentation](#).

### Program Enrollment Self-Service Alerts

The following configurations enable customer alerts for self-service tasks and define discard reasons for your self-service tasks, which are further defined in the configuration steps.

To configure program enrollment self-service alerts:

1. Log in to Customer Care and Billing as a user with edit access for the CC&B Self-Service Integration master configuration.
2. From the **Admin** menu, select **General**, and select **Master Configuration**. From the **Master Configuration** zone, select the **Edit** option for the **CC&B Self-Service Integration** master configuration. The master configuration is displayed.
3. From the **Self-Service Alerts** zone, click the plus icon to add a new alert and define the alert as follows:
  - **Alert Type:** Highlight Open Service Task
  - **Priority:** Type a priority value that is applicable for your list of alerts
  - **Script:** C1-OpenTaskA
4. Click **Save** to save the master configuration changes.
5. You must define valid discard reasons for self-service tasks. From the **Admin** menu, select **Database**, select **Lookup**, and select **Search**. The Field Name Search dialog box opens.
6. In the **Field Name** type `C1_CUSTREQ_DISCARD_RSN_FLG` and click **Search**. The discard reasons are displayed.
7. Add all required discard reasons for your self-service tasks. Refer to the help documentation provided with your Customer Care and Billing system for more information on these requirements.

### Paperless Billing

You must create the required notification type to enable customers to receive their paperless bill through email. If the option of dual billing is enabled, which allows

customers to receive both a paperless bill and a paper copy, a notification type must be created to support this scenario as well.

**Note:** All available bill routing must be supported with an applicable bill route type. To support dual billing, you must create a bill route type that supports sending bills by email and a postal address.

#### To create notification types for paperless billing

1. Log in to Customer Care and Billing as a user with access to create notification types.
2. From the **Admin** menu, select **Customer**, select **Notification Type**, and then select **Add**. The Notification Type dialog box opens.
3. Provide the following required information for the notification type:
  - **Notification Type:** The internal name used to identify the notification type.
  - **Description:** Additional information to describe the purpose of the notification type.
  - **Subscription/Push:** Select **Subscription**.
  - **Allowed Recipient:** Select the type of account access required to receive the notification.
  - **Notification Controlled By:** Select **Bill Route**.
  - **Bill Route Type:** Select the appropriate bill route type.
    - For a paperless bill notification type, select the bill route type that sends bills by email.
    - For a dual billing notification type, select the bill route type that was created to support sending bills by email and a postal address.
  - **Contact Class:** If required, you can apply a customer contact class to create records of when customers receive a notification. These records can be used by Customer Service Representatives to review the notifications a customer has received.
  - **Person Contact Types:** Select a person contact type that supports email notifications.
  - **Algorithms:** If required for a notification, search for and apply suppression criteria algorithm to ensure that a notification is suppressed for a customer based on some condition. For example, the algorithm **C1-NT-BQ-RTE** suppresses a notification if the account's person contact does not use the same bill route type as the notification type.
  - **Delivery Types:** Select **Email**.
4. Click **Save** to create the new notification type. Repeat these steps for each required notification type.

## Payment Arrangements

You must configure the processing for payment arrangements to enable customers to request payment arrangements to pay off their outstanding debt.

To configure payment arrangement self-service processing:

1. Log in to Customer Care and Billing as a user with edit access for the CC&B Self-Service Integration master configuration.
2. Create a payment arrangement service task type. To begin this task, from the **Menu**, select **Self-Service**, select **Self-Service Task Type**, and then select **Add**. The Select Business Object dialog box opens.

**Note:** You can view demo self-service task types provided with Customer Care and Billing, such as PA-3INSTLMNT, to see an example self-service task type.

3. From the **Service Task Type Business Object** drop-down list, select **Payment Arrangement Task Type**, and then click **OK**. The Payment Arrangement Task Type Maintenance dialog box opens.
4. Define all required information for the self-service task type. Refer to the help documentation provided with your Customer Care and Billing system for full details on all components. High-level requirements include:
  - **Service Task Type and Description:** The name and description of the self-service task type within Customer Care and Billing.
  - **Related Transaction Object:** Payment Arrangement Task
  - **Service Task Type Status:** Active
  - **Service Task Class:** Self-Service
  - **Payment Arrangement Information:**
    - **Installments:** The number of installments for the payment arrangement.
    - Create all required debt class, CIS division, and Service Agreement type combinations for your payment arrangement. Refer to the help documentation provided with your Customer Care and Billing system for more information on these requirements.
5. If alerts are to be displayed in Digital Self Service - Transactions to customers with payment arrangements, select the **Customer Alert Required** checkbox and define the following:
  - **Alert Message Category:** Self-Service Messages
  - **Alert Header Message Number:** 11816
  - **Alert Description Message Number:** 11842

6. Click **Save** to create the self-service task type. You can repeat these steps if you require additional payment arrangement self-service task types.
7. Add all payment arrangement self-service task types to your master configuration and ensure that customer eligibility is defined. From the **Admin** menu, select **General**, and select **Master Configuration**. From the **Master Configuration** zone, select the **Edit** option for the **CC&B Self-Service Integration** master configuration. The master configuration is displayed.
8. From the **Payment Arrangement Service Task Types** zone, click the plus icon to include a payment arrangement self-service task type. From the **Service Task Type** drop-down list, select the payment arrangement self-service task type you created earlier in this procedure.
9. To define customer eligibility, from the **Scripts** zone, click the plus icon to add a new processing script. From the **Processing Type** drop-down list select **Pay Arrangement Eligibility**, and in the **Script** field type `C1-PAEligib1`. Review and modify `C1-PAEligib1` as needed to implement your preferred eligibility strategy.
10. Click **Save** to save the master configuration changes.

### Automatic Payments

A unique automatic payment source must exist for every entity such as a bank, credit card company, or bill payment service that is available to customers as the source of the funds when they sign up for automatic payments.

To configure automatic payment sources:

1. Log in to Customer Care and Billing as a user with access to create automatic payment sources.
2. From the **Admin** menu, select **Financial**, select **Auto Pay Source Type**, and select **Search**. The Auto Pay Source Search page is displayed.
3. Review the available automatic payment sources to confirm all applicable payment sources are available. For more information on creating automatic payment sources, refer to the *Oracle Utilities Customer Care and Billing Business User Guide*. Save any new or modified automatic payment sources.

If you are completing the configuration checklist available at "Configuration Checklist" on page 4, ensure that at a minimum a properly configured ACH-NACHA Auto Pay Source Type exists that is defined as follows:

- **Tender Source:** AUTOPAY
- **Extract Batch:** C1-APACH
- **Auto Pay Date Calculation Algorithm:** APAY-DTCALC

- **Web Debit Acct Validation Algorithm:** Select the algorithm you have created to define this validation with the applicable financial entity.
4. From the **Admin** menu, select **Financial**, and select **Tender Type**. The Tender Type page is displayed.
  5. Modify the **External Type** as follows:
    - For checking accounts, select **Checking Debit Prenotification**.
    - For savings accounts, select **Savings Debit Prenotification**.
  6. Select **Save** to save your Tender Type changes.
  7. From the **Admin** menu, select **General**, select **Feature Configuration**, and select **Add**. The Feature Configuration page is displayed.
  8. Define the feature configuration as follows:
    - **Feature Name:** FINCONF
    - **Feature Type:** Financial Transaction Options
    - **Description:** Feature configuration for checking and savings accounts pre-notification.
  9. Create options for checking and savings accounts:
    - Checking accounts:
      - **Option Type:** Prenotification Tender Type - Checking
      - **Value:** Provide the tender type used for checking accounts.
    - Savings accounts:
      - **Option Type:** Prenotification Tender Type - Savings
      - **Value:** Provide the tender type used for savings accounts.
  10. Select **Save** to create the new feature configuration.

To configure automatic payment self-service tasks:

A self-service task must be configured to support automatic payments.

1. Log in to Customer Care and Billing
2. From the **Admin** menu, select **General**, and select **Master Configuration**. From the **Master Configuration** zone, select the **Edit** option for the **CC&B Self-Service Integration** master configuration. The master configuration is displayed.
3. From the **Self-Service Tasks** zone, select the plus icon to add a new self-service task, and then make the following selections:
  - **Service Task:** Auto Pay Setup
  - **Service Task Type:** Automatic Payment Setup Type
  - **Customer Contact Class** and **Customer Contact Type:** Customer contacts track the creation of self-service tasks to aid customer service representatives in reviewing tasks created for an account. In addition to selecting applicable customer contacts with these options, review "Logging Self-Service Tasks" on page 247 for more information on configuring customer contacts.

4. Click **Save** to save any changes to the master configuration.

#### To configure automatic payment eligibility

You can control which customers can enroll in automatic payments by configuring the automatic payments eligibility.

1. Log in to Customer Care and Billing.
2. From the **Admin** menu, select **General**, and select **Master Configuration**. From the **Master Configuration** zone, select the **Edit** option for the **CC&B Self-Service Integration** master configuration. The master configuration is displayed.
3. In the **Auto Pay** zone, complete the following configurations:
  - **Number of Months** and **Number of Cancelled Payments**: Enter the maximum number of cancelled payments for the previous number of months defined that a customer can have and still be eligible for auto pay. For example, if both of these options are set to a value of 4, then a customer who has five cancelled payments in the previous four months is ineligible to enroll in automatic payments.
  - **Eligibility Script**: Enter the script that contains the processing logic to be used to determine whether an account is eligible for auto pay. The script `C1AutoPayElg` can be used for this purpose if it meets your needs. Review and modify the script `C1AutoPayElg` as needed to implement your preferred eligibility business rules.

The script `C1AutoPayElg` checks for cancelled payments within the previous **Number of Months** specified. The day of the month used is taken from today's date, with corrections for days of the month that are not valid. For example, if today is December 31, then three months in the past would start from September 30 due to the difference in number of days for these months.

4. Select **Save** to save any changes to the master configuration.

#### To support same day unenrollment from automatic payments:

You can allow customers to unenroll from automatic payments on the same day that they complete enrollment. If this configuration is not completed, customers cannot unenroll in the program on the same day that they enrolled.

1. Log in to Customer Care and Billing.
2. From the **Admin** menu, select **System**, select **Script**, and select **Search**. The Script Search page is displayed.
3. Search for the script **WX-ProcApay** to open the script.
4. Click **Duplicate** to make a copy of the script. When you are prompted to name the copy, type **CM-ProcApay** and click **OK**. The new script `CM-ProcApay` is displayed.

5. From the **Step** tab, expand step 30 and modify the code that prevents unenrolling on the same day as enrolling from automatic payments. Locate the following code in this step:

```
if ("xs:date(WX-RETAPDET/results
[autoPayId=$accountAutoPayId]/startDate) = xs:date
($processDate)")
// cancellation of an autopay created on the same day is not
allowed
terminate with error (11115, 11140 %1="$accountAutoPayId");
else
// set effective autopay record's end date = process date - 1
day
move "xs:date($processDate) - xs:dayTimeDuration('P1D')" to
"WX-Account/accountAutopay[last()]/endDate";
end-if;
```

Completely replace this code with the following code:

```
move "xs:date($processDate) - xs:dayTimeDuration('P1D')" to
"WX-Account/accountAutopay[last()]/endDate";
```

6. Click **Save** to save your changes.
7. From the **Admin** menu, select **System**, select **Script**, and select **Search**. The Script Search page is displayed.
8. Search for the script **WX-SetApay** to open the script.
9. Click **Duplicate** to make a copy of the script. When you are prompted to name the copy, type **CM-SetApay** and click **OK**. The new script CM-SetApay is displayed.
10. From the **Step** tab, modify the steps to replace all references of **WX-ProcApay** with **CM-ProcApay**. This requires modifications to step 10 and step 20. For example, in step 20 modify the move steps to reference CM-ProcApay, and you can also modify the comment to refer to CM-ProcApay.
11. Click **Save** to save your changes.
12. From the **Data Area** tab, modify the reference **WX-ProcApay** service script to refer to **CM-ProdApay**.
13. From the **Admin** menu, select **System**, select **Algorithm Type**, and select **Search**. The Algorithm Type Search is displayed.
14. Search for the algorithm type **WX-SETAPAY** to open the algorithm type.



15. Click **Duplicate** to make a copy of the algorithm type. When you are prompted to name the copy, type **CM-SETAPAY** and click **OK**. The new algorithm type **CM-SETAPAY** is displayed.
16. In the **Plug-in Script** field type **CM-SetApay** to modify the plug-in script.
17. Click **Save** to save your changes.
18. From the **Admin** menu, select **System**, select **Algorithm**, and select **Add**. The **Algorithm** page is displayed.
19. Define the algorithm as follows:
  - **Algorithm Code:** CM-SETAPAY
  - **Algorithm Type:** CM-SETAPAY
  - **Effective Date:** Select an applicable effective date for your automatic payment program.
20. Click **Save** to create the new algorithm.
21. From the **Admin** menu, select **System**, select **Business Object**, and select **Search**. The **Business Object Search** is displayed.
22. Search for the algorithm type **WX-AutoPayTask** to open the **Business Object**.
23. From the **Lifecycle** tab, select **Process Auto Pay Setup**, and modify the algorithm to use **CM-SETAPAY**.
24. Click **Save** to save your changes.

## Budget Billing

You must configure the self-service alerts for customers enrolled in budget billing.

To configure budget billing self-service alerts:

1. Log in to Customer Care and Billing as a user with edit access for the CC&B Self-Service Integration master configuration.
2. Review the budget billing definition for your master configuration. From the **Admin** menu, select **General**, and select **Master Configuration**. From the **Master Configuration** zone, select the **Edit** option for **CC&B Self-Service Integration**. The master configuration is displayed.
3. The following details define budget billing enrollment:
  - **Self-Service Alerts:** The Budget Enrollment alert type defines the alerts and notifications for budget billing. Review and modify the default **WX-NtfyBudg** as required.
  - **Scripts:** The Budget Eligibility processing type uses the **CX-BudgetElg** script to determine eligibility. Review and modify this script as required.
  - **Self-Service Tasks:** The Budget Request service task uses the **BUDGET** self-service task to define the messaging of budget billing. Review and modify this self-service task as required.

4. Click **Save** to save any changes to the master configuration.

### Charity Contributions

You must create and configure the support for charitable organization contributions, which includes steps such as creating charitable accounts, defining applicable service agreements, and defining the collection class for charitable contributions.

To define an account as a charitable organization:

**Note:** The steps provided below assume that accounts are already available in your environment and only cover the steps to define the account as a charitable organization in Digital Self Service - Transactions.

1. Log in to Customer Care and Billing as a user with access to create or modify accounts.
2. From **Menu**, select **Customer Information**, select **Account**, and then select **Search**. The Account Search is displayed.
3. Provide applicable search criteria to locate an account and select the applicable **Search** option. Search results are displayed.
4. Select an account to open the account.
5. From the **Characteristics** tab, define the account as a charitable organization by completing the following configurations:
  - **Characteristic Type:** Is Charity Account
  - **Characteristic Value:** Y
6. Select **Save** to save the changes to the account.

To create a service agreement type for a charitable organization:

**Note:** Configurations of particular importance to charitable organizations are highlighted in the steps below.

1. Log in to Customer Care and Billing as a user with access to create or modify service agreements.
2. From the **Admin** menu, select **Customer**, select **SA Type**, and then select **Add**. The SA Type options are displayed.
3. From the **Main** tab, provide all required information, including the following charity specific details:
  - **Distribution Code:** Select an applicable distribution code such as Payable - Charity

- **Service Type:** Miscellaneous Service
  - **Payment Segment Type:** Charity payment
  - **Payment Priority:** Charitable donations are commonly defined with the lowest payment priority
  - **Delinquent Pay Priority:** Charitable donations are commonly defined with the lowest delinquent payment priority
4. From the **Adj Profile** tab, from the **Adjustment Type Profile** search for and select CHARITY.
  5. From the **C & C** tab, from the **Debt Class** search for and select CHAR.
  6. From the **Characteristic** tab, provide all required information:
    - **Characteristic Type:** Service Category
    - **Sequence:** 1
    - **Characteristic Value:** NP
  7. From the **Algorithms** tab, provide all required information:
    - **System Event:** SA Creation
    - **Sequence:** 10
    - **Algorithm:** C1-SACR-AT
  8. After you have completed all other mandatory requirements to create an SA Type, select **Save** to create the SA Type.

To configure collection class control:

1. Log in to Customer Care and Billing as a user with access to create or modify collection class controls.
2. From the **Admin** menu, select **Credit & Collection**, select **Collection Class Control**, and then select **Search**. The Collection Class Control search is displayed.
3. Provide applicable search criteria to locate a collection class control that uses a charitable contribution debt class, and select the applicable **Search** option. Search results are displayed.
4. Select a collection class control to review and modify the collection class control.
5. Review and modify the collection class control as required for the charitable contribution debt class. Collection class controls for charitable contributions typically apply the lowest priority and use algorithms to restrict charitable contributions for customers that are on payment arrangement plans.
6. Select **Save** to save any changes for the collection class control.

To create default contribution amounts with start options:

**Note:** Creating start options to support default contribution amounts is an optional configuration. Start options can allow you to use the same default amounts for all charitable organizations that use the same SA Type. If start options are not used, default contribution amounts can be defined as part of the master configuration.

1. Log in to Customer Care and Billing as a user with access to create or modify service agreement start options.
2. From the **Admin** menu, select **Customer**, select **SA Type Start Option**, and then select **Add**. The SA Type Start Options details are displayed.
3. From the Main tab, provide all required information, including the following specific details:
  - **SA Type:** CHARITY
  - **Contrib Amount:** Provide the amount that acts as the amount a customer can select to contribute. To provide customers with the ability to manually enter their own amount, use a value of \$0.
4. Complete all other required configurations for the SA Type Start Option, and then select **Save** to create the SA Type Start Option.
5. Repeat this process to create all default contribution amounts to make available to customers enrolling in charitable contributions.

To create a self-service task type for charitable donations:

1. Log in to Customer Care and Billing as a user with access to create or modify self-service task types.
2. From **Menu**, select **Self-Service**, select **Self-Service Task Type**, and select **Add**. The Select Business Object dialog box opens.
3. From the **Service Task Type Business Object** drop-down list, select **Charity Contribution Enrollment Task Type**, and then select **OK**. Additional configuration requirements are displayed.
4. Complete all required information, including:
  - **Service Task Type:** Provide a descriptive name for the new self-service task type
  - **Related Transaction Object:** Charity Contribution Enrollment Task
  - **Service Task Class:** Self-Service
5. Select **Save** to create the new self-service task type.

To configure charitable contributions master configuration:

1. Log in to Customer Care and Billing as a user with edit access for the CC&B Self-Service Integration master configuration.
2. From the **Admin** menu, select **General**, and select **Master Configuration**. From the **Master Configuration** zone, select the **Edit** option for the **CC&B Self-Service Integration** master configuration. The master configuration is displayed.
3. From the **Charity Auto Pay** zone complete the following configurations for each charitable donation:
  - **Account ID:** Select the account that you created earlier to represent the charitable organization.
  - **Charity Name:** Provide the name for the charity. This name is the charity name shown on the charitable donation enrollment option displayed to customers.
  - **Message Category** and **Message Number:** Select the applicable message category and number for the message that provides further description for the charitable organization. This message is the description shown on the charitable donation enrollment option displayed to customers.
  - **Restrict Account to CIS Division:** Select the checkbox to make the charitable donations available to the CIS division that you select.
  - **CIS Division:** Select the applicable CIS division for the charitable donation.
  - **Use Start Option:** Select this checkbox to enable start options to determine the contribution options presented to customers. Creating start options is an optional step covered in a procedure above. All start options defined for the charitable organization SA Type are displayed to customers for selection. If you enable start options, the Amount and Allow Custom Contribution Amount options cannot be defined.
  - **Amount:** If start options are not enabled, provide a value for the contribution amount presented to customers. You can click the plus icon to include multiple contribution amounts to select from.
  - **Allow Custom Contribution Amount:** If start options are not enabled, select this checkbox to allow customers to manually enter their own contribution amount.
4. From the **Self-Service Tasks** zone, click the plus icon to add in a self-service task for charitable donations and complete the following:
  - **Service Task:** Charity Auto Pay
  - **Service Task Type:** Select the self-service task type you create earlier.
  - **Customer Contact Class** and **Customer Contact Type:** Customer contacts track the creation of self-service tasks to aid customer service representatives in reviewing tasks created for an account. In addition to selecting applicable

customer contacts with these options, review "Logging Self-Service Tasks" on page 247 for more information on configuring customer contacts.

5. Select **Save** to save all your master configuration changes.

To synchronize your Customer to Meter environment:

**Note:** The following steps are required only if you have a Customer to Meter environment, they are not required for Customer Care and Billing.

1. Log in to Customer to Meter as a user with edit access for extendable lookups.
2. From the **Admin** menu, select **General**, and select **Extendable Lookup**. The Extendable Lookup Query is displayed.
3. In the **Business Object** field, type **X1-C2MSATypeMapping** and select **Search**. The Business Object is displayed in the search results.
4. Select the **C2M SA Type Mapping Values** to open the extendable lookup.
5. Select **Add** to add a new value. The Extendable Lookup dialog box opens.
6. Complete all required information, including the **SA Type** which must be defined as the SA Type created for charitable organizations.
7. Select **Save** to create the new entry.

### Payment Extensions

You must create and configure the support for payment extensions, which includes steps such as verifying payment extension supporting objects have been installed, creating payment extension self-service task types, and defining customer class support for payment extensions in the master configuration.

To verify payment extension supporting objects and grace periods

1. Log in to Customer Care and Billing.
2. From the **Admin** menu, select **General**, and select **Extendable Lookup**. The Extendable Lookup Query page is displayed.
3. In the **Business Object** field enter **C1-CSSContextLookup** and select **Search**. Select the **CSS Context Values** link in the applicable search results. The Extendable Lookup Value List is displayed.
4. Confirm that the **Payment Extension Enrollment Indicator** is included in the list. This confirms that the proper packages to support payment extensions have been installed.
5. From the **Admin** menu, select **Credit & Collection**, and select **Pay Method**. The Pay Method page is displayed.

6. Review the pay methods and modify the **Grace Days** for any pay method you plan to configure as available for payment extensions. The value defines the number of days that the payment extensions are extended by. Select **Save** to save any changes to the grace days for pay methods.
7. From the **Admin** menu, select **Database**, select **Lookup**, and select **Search**. The Field Name Search dialog box is displayed.
8. In the **Field Name** field, enter the following lookup table names to review their configurations:
  - **PP\_STAT\_FLG**: This lookup defines the payment extension enrollment states for customers. Customer service representatives can review this state to determine a customer's enrollment in payment extensions, such as active or broken. Review and confirm all applicable states for your payment extension program are configured.
  - **PAYMENT\_EXTENSION\_TYPE\_FLG**: This lookup defines the types of payment extensions that are supported, which includes extending a full bill balance and extending a past due bill balance. Define these options as **Active** to enable the payment extension type.
  - **PAYMENT\_EXTENSION\_STATUS\_FLG**: This lookup defines the payment extension enrollment statuses that are displayed for customers, such as enrolled or unenrolled. Review and confirm all applicable statuses for your payment extension program are configured.

#### To create self-service task types and configure the master configuration

1. Log in to Customer Care and Billing as a user with edit access for the CC&B Self-Service Integration master configuration.
2. Create self-service task types for the types of payment extensions that are to be offered to eligible customers. Digital Self Service - Transactions can support full balance extensions and past due extensions, which each require their own self-service task type. The following steps provide an example of creating a full balance extension self-service task type. From **Menu**, select **Self-Service**, select **Self-Service Task Type**, and select **Add**. The Select Business Object dialog box opens.
3. Select **Payment Extension Task Type** from the drop-down list, and select **OK**.
4. Complete the following configurations for the self-service task type:
  - **Service Task Type**: `FB_PE`
  - **Description**: Full Balance Extension
  - **Related Transaction Object**: Payment Extension Task
  - **Self Service Task Type Status**: Active
  - **Service Task Class**: Self-Service

- **Pay Method:** Select an applicable pay method for the payment extension. The grace days for the pay methods were defined in the previous procedure above.
  - **Extension Amount Script:** Use the default **Determine Payment Extension Amount** script. This script can be modified if the payment extension amount offered to customers needs to be modified.
  - **Pay Plan Type:** Select the pay plan types that are eligible for the payment extension type.
5. Select **Save** to create the self-service task type.
  6. To support past due extensions, repeat the steps above to create an additional self-service task type. For **Service Task Type** enter **PD\_PE** and for **Description** enter **Past Due Extension**. The other options can use the same values as the Full Balance Extension, or modifications to options such as the Pay Method and Pay Plan Types can be made.
  7. From the **Admin** menu, select **General**, and select **Master Configuration**. From the **Master Configuration** zone, select the **Edit** option for the **CC&B Self-Service Integration** master configuration. The master configuration is displayed.
  8. From the **Payment Extensions** zone, in the **Payment Extension Processing Script** enter **C1ProcPmtExt**.
  9. Select the plus icon to add a customer class that supports payment extensions. Complete the following configurations for each customer class added:
    - **Customer Class:** The set of customers supported for payment extensions, such as Residential or Commercial.
    - **Payment Extension Eligibility Script:** **C1PayExtElg**
    - **Service Task Type and Payment Extension Type Eligibility Script:** Include any of the supported payment extension self-service task types created previously, including Full Balance Extensions and Past Due Extensions, that are to be supported for the customer class. Additional eligibility scripting can be included if required for a particular customer class and payment extension type.
  10. Select **Save** to save all master configuration changes.

### Preferred Payment Date

You must create and configure the support for preferred payment dates, which includes steps such as verifying preferred payment date supporting objects have been installed, configuring preferred payment date options, and defining supporting objects.

#### To verify preferred payment date supporting objects

1. Log in to Customer Care and Billing.
2. From the **Admin** menu, select **Database**, select **Lookup**, and select **Search**. The Field Name Search dialog box is displayed.



3. In the **Field Name** field, enter **WX\_BO\_SSTASK\_TYPE\_FLG** and select Search to review the lookup table.
4. Confirm that there is an entry for C1PD with the description of Preferred Pay Date, and that the status is listed as active.

#### To create preferred payment date options

There are two ways a utility can offer a preferred due date program, customers can either be offered to extend their current due date by a certain number of days or they can choose from a list of available due dates that have been set by the utility. Configuration for both options is provided below, but you can select to only configure the option that is to be made available to customers.

1. Log in to Customer Care and Billing.
2. To offer customers the ability to extend their current due date by a certain number of days, from the **Admin** menu, select **General**, select **Characteristic Type**, and select **Add**. The Characteristic Type is displayed.
3. In the **Characteristic Type** field, type **DTDOV** and hit enter. If the characteristic type already exists, applicable information is filled in, which can be confirmed or modified using the steps below. If instead a search dialog box is displayed, you must create the new characteristic type, using the steps below.
4. Define the DTDOV characteristic type as follows:
  - **Characteristic Type:** DTDOV
  - **Description:** Override DAYS TILL DUE
  - **Type of Char Value:** Predefined Value
  - **Allow Search by Char Val:** Not Allowed
  - **Characteristic Value and Descriptions:** Add an entry for each extension to make available to customers. For example, to offer customers to extend their payment date by ten days, enter **10** as the **Characteristic Value**, and enter a **Description** such as **10 days after your current due date**. The description defines the explanation that is shown to the customer selecting the option, and the characteristic value defines the offset. Add one or more options for customers to choose from, ensuring the description and value for each option are consistent.
5. For the DTDOV characteristic type, select the **Characteristic Entities** tab, and from **Characteristic Entity**, select **Account**.
6. Select **Save** to save all changes to DTDOV to create the supporting characteristic type for extending a customer's current due date by a certain number of days.
7. To offer customers the ability to extend their current due date by selecting a different day, from the **Admin** menu, select **General**, select **Characteristic Type**, and select **Add**. The Characteristic Type is displayed.

8. In the **Characteristic Type** field, type **DAYOV** and hit enter. If the characteristic type already exists, applicable information is filled in, which can be confirmed or modified using the steps below. If instead a search dialog box is displayed, you must create the new characteristic type, using the steps below.
9. Define the DAYOV characteristic type as follows:
  - **Characteristic Type:** DAYOV
  - **Description:** Override DUE DAY
  - **Type of Char Value:** Predefined Value
  - **Allow Search by Char Val:** Not Allowed
  - **Characteristic Value and Descriptions:** Add an entry for each day of the month option to make available to customers. For example, to offer customers to modify their due date to be the first day of the month, enter **1** as the **Characteristic Value**, and enter a **Description** such as **1st day of the month**. The description defines the explanation that is shown to the customer selecting the option, and the characteristic value defines the day of the month. Add one or more options for customers to choose from, ensuring the description and value for each option are consistent.
10. For the DAYOV characteristic type, select the **Characteristic Entities** tab, and from **Characteristic Entity**, select **Account**. Select the plus icon to add another Characteristic Entity row, and select **Order**.
11. Select **Save** to save all changes to DAYOV to create the supporting characteristic type for changing a customer's current due date by selecting a particular day of the month.

#### To define required algorithms, self-service tasks, and master configurations

Complete the steps below to configure the other required objects that support preferred payment date options.

1. Log in to Customer Care and Billing.
2. From the **Admin** menu, select **System**, select **Algorithm Type**, and select **Search**. The Algorithm Type Search dialog box opens.
3. In the **Algorithm Type** field, enter **C1DUEDATEORD**, and select **Search**. The Algorithm Type options are displayed for **C1DUEDATEORD**.
4. Ensure that the algorithm type has the following definitions:
  - **Algorithm Type:** C1DUEDATEORD
  - **Algorithm Entity:** Customer Class - Override Due Date
  - **Program Type:** Plug-in Script
  - **Plug-in Script:** C1DUEDATEORD

- **Parameters:** Ensure that the **Required** checkbox is cleared for each type of due date modification. Selecting this option would make it mandatory for a customer to select a preferred payment date, which is not a recommended configuration.
- 5. Select **Save** to save any changes to the algorithm type.
- 6. From the **Admin** menu, select **System**, select **Algorithm**, and select **Add**.  
The Algorithm options are displayed.
- 7. Define the algorithm as described below:
  - **Algorithm Code:** ZZDUEDATEORD
  - **Description:** Override due date using account characteristics
  - **Algorithm Type:** C1DUEDATEORD
  - **Parameters:** By selecting the C1DUEDATEORD algorithm type, the following parameters are automatically created, which must be configured for the preferred payment date options you choose to support:
    - **Account Characteristic Type for Due Days Extension:** To allow customers to pick a preferred payment date by extending a certain number of days, in the **Value** field, enter **DTDOV**, which you created earlier in this procedure.
    - **Account Characteristic Type for Due Day of the Month:** To allow customers to pick a preferred payment date by selecting a day of the month, in the **Value** field, enter **DAYOV**, which you created earlier in this procedure.
- 8. From the **Admin** menu, select **Customer**, select **Customer Class**, and select **Search**.  
The Customer Class Search dialog box opens.
- 9. Select **Search** to return a list of all customer classes. From the search results, select a customer class that supports the preferred payment date options, such as a residential customer class. The Customer Class options are displayed for the customer class you select.
- 10. From the **Controls** tab, select the plus icon to create a new system event and define it as follows:
  - **System Event:** Override Due Date. Be aware that only a single Override Due Date system event can be supported for a customer class.
  - **Sequence Number:** Define an applicable priority for the event, with lower numbers having higher priority compared to other system events.
  - **Algorithm:** ZZDUEDATEORD
- 11. Create a preferred pay date self-service task type. To begin this task, from the **Menu**, select **Self-Service**, select **Self-Service Task Type**, and then select **Add**. The Select Business Object dialog box opens.
- 12. From the **Service Task Type Business Object** drop-down list, select **Preferred Pay Date Task Type**, and then click **OK**. The Preferred Pay Date Task Type Maintenance dialog box opens.

13. Define all required information for the self-service task type. Refer to the help documentation provided with your Customer Care and Billing system for full details on all components. High-level requirements include:
  - **Service Task Type and Description:** The name and description of the self-service task type within Customer Care and Billing. For this example the Service Task Type is defined as **Preferred Pay Date**.
  - **Related Transaction Object:** Preferred Pay Date Task
  - **Service Task Type Status:** Active
  - **Service Task Class:** Self-Service
14. Select **Save** to create the self-service task type.
15. Add the preferred pay date self-service task type to your master configuration and ensure that customer eligibility is defined. From the **Admin** menu, select **General**, and select **Master Configuration**. From the **Master Configuration** zone, select the **Edit** option for the **CC&B Self-Service Integration** master configuration. The master configuration is displayed.
16. From the **Preferred Pay Date** zone, complete the following configurations:
  - **Preferred Pay Date Eligibility Script:** C1PrefPdElg
  - **Service Task Type:** Preferred Pay Date
  - **Eligible Customer Class:** Select the plus icon to add a row for all applicable customer classes, such as residential customers.
17. Click **Save** to save the master configuration changes.

## Start, Stop, and Transfer Service

Digital Self Service - Transactions offers self-service options to the customer to start, stop, or transfer utility service. These options quickly walk the customer through the process and requirements to complete their service transaction. Utilities can configure these processes using the following options:

- Choose the version of Start, Stop, and Transfer Service to enable for your clients. By default, the Classic version is enabled, which provides all functionality available with 23A and earlier releases. To enable Start, Stop, and Transfer Service features introduced in 23B, submit a request using [My Oracle Support](#) to enable this version of the features.
- Review all feature configuration options listed at "Reviewing Start, Stop, and Transfer Service Configuration Options" on page 98.
- Complete the steps to configure self-service tasks for start, stop, and transfer service requests listed at "Configuring Start, Stop, and Transfer Service Requests" on page 117.

## Reviewing Start, Stop, and Transfer Service Configuration Options

Use the tables below to review all available configuration options. The following images show standard examples of steps in start, stop, and transfer service requests, and indicate the primary configuration options which can be submitted as a request using [My Oracle Support](#).

**Note:** You can use the Opower Configuration Tool to implement certain configurations for Digital Self Service - Transactions. This can include user experience configurations, interface messages and formats, branding configurations, and other configurations relevant to Digital Self Service - Transactions. To review if any configurations listed below are available with the Opower Configuration Tool, access the tool at <https://configuration.opower.com/> and review the available options for the pages and widgets included in your Digital Self Service - Transactions web portal.

### Landing Page

The screenshot shows the UtilityCo landing page for service requests. At the top left is the UtilityCo logo, and at the top right is a hamburger menu icon. The main heading is "View service requests". Below this is a card for "Pending service requests" with a blue circle containing the number 5 and a right-pointing arrow. The card text says "View the status of pending service requests". Below this is a section titled "1 Start, stop or transfer service" with the subtext "Requesting service changes online is fast and easy. Get started by selecting one of the options:". There are three service options, each in a white card with a blue icon and a blue circle with a number: "2 Transfer service" (with a double-headed arrow icon) with the text "Move your service from one location to another."; "3 Stop service" (with a circle and slash icon) with the text "Moving out of our territory? Stop your service with us."; and "4 Add service" (with a house and plus icon) with the text "Add additional service location to your current account.". At the bottom center is a grey button labeled "GET STARTED".

# Stop Service Meter Selection

**UtilityCo**

Overview    Billing & Payment    **Start & Stop Service**    Your Energy Use

1 Service Details    2 Contact Info    3 Review & Submit

**i** If you are stopping an account with a remaining balance, a final bill will be sent to you.

## Select meters to stop

**Addressee and meters** [COLLAPSE ALL](#)

- 2019 Replicant St., Los Angeles, CA 90001
  - Electricity, 1102321290000-E
  - Natural Gas, 100002129382-NG
- 6**  680 Folsom St., Fl 3, San Francisco, CA 94107
  - Electricity, 1102321290000-E
  - Natural Gas, 100002129382-NG
  - Water, 1102321290000-W

[BACK](#) [NEXT](#)

# Stop Service Address Confirmation



1 Service Details

2 Contact Info

3 Review & Submit

**i** If you are stopping an account with a remaining balance, a final bill will be sent to you.

## Confirm your stop service addresses

### Addresses and meters

[EXPAND ALL](#)

- ▶ 2019 Replicant St., Los Angeles, CA 90001
- ▶ 475 Sansome St., FI 15, San Francisco, CA 94701
- ▼ 680 Folsom St., FI 3, San Francisco, CA 94107
  - Electricity, 1102321290000-E
  - Natural Gas, 100002129382-NG
  - Water, 1102321290000-W
- ▶ 1999 2nd Ave., FI 1 New York, NY 10011
- ▶ 2007 Plane Eight St., Los Angeles, CA 90001
- ▶ 1000 Kricfalusi Way, Los Angeles, CA 90001
- ▶ 1000 6th Ave., FI 1 New York, NY 10019
- ▶ 100 5th Ave., Los Angeles, CA 90011
- ▶ Hiro Way., Los Angeles , CA 90011
- ▶ Wonersh, Guildford GU5 0ST, UK

**7**

Viewing 10 of 20 addresses

[Show all](#) < 1 of 2 >

[BACK](#)

[NEXT](#)

## Start Service Verify Identity

### Verify your identity

**First Name** (required)



**Last Name** (required)

**i Please add one or more forms of ID**

Providing multiple forms of ID can speed up the verification process and may also help you to avoid a deposit.

**Social Security Number** (required)

**Employer Identification Number**

**Driving License**

**Birthdate**

For example: 4 28 1980

8

Month

Day

Year

**Phone number** (required)

Type



**Email** (required)

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**Start Service Customize Your Account Preferences**

# Customize your account preferences

## Mailing address



Same as new service address:

5805 Owens Dr., Pleasanton, CA, 94588



### Paperless Billing

9

Ditch the paper and receive your bills via email.

Email: john.doe@oracle.com



### Automatic Payments

10

Never worry about missing a bill payment.

## Recurring Payment Amount



Pay full amount due



Pay up to a maximum of:

\$500

## Add a new bank account

Bill

Joel

Checking

122101191



Wells Fargo Bank

987654321

987654321

1:0 1 1 300 1 4 2: 1 2 3 4 5 6 7 8 11 0 1 0 1

# Start Service Request Information Review

Login Sign Up Start & Stop Service 

1 Service Details    2 Verify Identity    3 Contact Info    4 Account Setup    5 Review & Submit

**11** ⓘ A deposit may be needed to start this service. If so, a customer care representative will follow up with a phone call.

## Review your information

### Start Service Details

<b>Start Service Address</b>	680 Folsom Street, San Francisco, CA, 94107	<a href="#">EDIT</a>
<b>Start Service Date</b>	Dec 17, 2016	<a href="#">EDIT</a>

### Identity

<b>Name</b>	Ana Cruickshank	<a href="#">EDIT</a>
<b>Social Security Number</b>	*****9501	

### Contact Information

<b>Phone Number</b>	925-521-6691	<a href="#">EDIT</a>
<b>Mailing Address</b>	680 Folsom Street, San Francisco, CA, 94107	

### Web Account Information

<b>Email</b>	ana.cruickshank@gmail.com	<a href="#">EDIT</a>
<b>Password</b>	*****	

I agree to the [terms and conditions](#)

**12**




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[SUBMIT](#)

## Pending Requests

### Pending service requests 13

A requested change to your service is awaiting processing. If you need to make a change to your pending requests, contact (123) 456-7890.

REQUEST	ADDRESS	SERVICE	DATE OF CHANGE	SERVICE AGREEMENT
 Stop	703 Weis Road San Mateo CA 94404	Electric Service	06/29/2020	0515360264
 Stop	701 Weis Road San Mateo CA 94404	Electric Service	06/29/2020	0518849641
 Start	17 Salem St San Francisco CA 95404	Electric Service	12/10/2020	0518930121

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## Start, Stop, and Transfer Service Classic Configuration Options

Use the table below to review all available configuration options for the Start, Stop, and Transfer Service Classic features. Certain configurations can also be completed using the Opower Configuration Tool. For general steps to access the tool for the Start, Stop, and Transfer Service Classic features, see "Configuring Messaging and Behavior" on page 147.

Image Number	Configuration Option
1	<b>Introductory Title</b> <b>Default:</b> Start, stop, or transfer service
1	<b>Introductory Subtitle</b> <b>Default:</b> Requesting service changes online is fast and easy.
1	<b>Introductory Message</b> <b>Default:</b> Get started by selecting one of the options:
2	<b>Transfer Service Message</b> Existing customers are presented an option to transfer their service to a different address.

Image Number	Configuration Option
	<p><b>Defaults:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Label:</b> Transfer service</li> <li>▪ <b>Sublabel:</b> Move your service from one location to another.</li> </ul>
3	<p><b>Stop Service Message</b></p> <p>Existing customers are presented an option to stop their current service.</p> <p><b>Defaults:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Label:</b> Stop service</li> <li>▪ <b>Sublabel:</b> Moving out of our territory? Stop your service with us.</li> </ul>
4	<p><b>Add Service Message</b></p> <p>Existing customers are presented an option to add additional service for their account.</p> <p><b>Defaults:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Label:</b> Add service</li> <li>▪ <b>Sublabel:</b> Add additional service location to your current account.</li> </ul>
Not Depicted	<p><b>Disable Self-Service Options</b></p> <p>Self-service options are available to the customer to start, stop, or transfer utility service.</p> <div style="border: 1px solid black; border-radius: 10px; padding: 10px; margin: 10px 0;"> <p><b>Note:</b> Start service cannot be disabled.</p> </div> <p><b>Default:</b> Start, stop, and transfer self-service are all enabled</p>
5	<p><b>Pending Requests Banner</b></p> <p>A banner is displayed to customers with pending requests, which</p>

Image Number	Configuration Option
	<p>customers can click to navigate to and view pending requests. You can choose to disable the banner and instead display pending requests directly on the start, stop, and transfer request landing page.</p> <p><b>Defaults:</b> A banner is displayed which customers can click to navigate to and view pending requests.</p>
Not Depicted	<p><b>New Customer Notification</b></p> <p>Customers who are starting service for the first time with a utility can be presented with an applicable message. The default messaging highlights a credit check requirement for new customers.</p> <p><b>Default:</b> Since you are applying to UtilityCo for the first time, you will need to complete this form to start service at a new location. By submitting this form, you will give UtilityCo permission to perform credit check on you to determine if a deposit is required.</p>
Not Depicted	<p><b>Residential Customer Requirements</b></p> <p>Residential customers that select to start a new service are displayed a message about the required information that they need to start service.</p> <p><b>Defaults:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Label:</b> What you will need</li> <li>▪ <b>List Item:</b> SSN or driver's license</li> </ul>
Not Depicted	<p><b>Commercial Customer Requirements</b></p> <p>Commercial customers that select to start a new service are displayed a message about the required information that they need to start service.</p> <p><b>Defaults:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Label:</b> What you will need</li> <li>▪ <b>List Item:</b> Tax ID or social security number</li> </ul>

Image Number	Configuration Option
Not Depicted	<p><b>Address Search Title</b></p> <p><b>Default:</b> Please enter the address where you'd like to start service</p>
Not Depicted	<p><b>Premise Search Tip</b></p> <p>The premise search tip provides customers guidance about how they should format their address to quickly find the premise they are looking for. If the premise search tip is enabled, the message for the tip must be provided to Oracle Utilities.</p> <p><b>Default:</b> Disabled</p>
Not Depicted	<p><b>Premise Search Wildcard Configuration</b></p> <p>When customers provide a premise address to start service, the results returned can account for differences between what the customer enters and how the address information is stored in the system. You can choose to enable additional wildcard rules to be applied automatically to the search to improve the search results. Using the default, which disables these additional wildcard rules, is recommended if enabling additional wildcard rules does not improve the search results.</p> <p><b>Default:</b> Disabled</p>
Not Depicted	<p><b>State Selection Filtering</b></p> <p>The states that are available in the State drop-down list can be configured. It is recommended to list only those states serviced by the utility.</p> <p><b>Default:</b> All US states are available for selection</p>
Not Depicted	<p><b>Default State</b></p> <p>A default state can be automatically displayed in the State drop-down list without customer selection. This is recommended only when a vast majority of premises fall within a single state.</p> <p><b>Default:</b> None</p>

Image Number	Configuration Option
Not Depicted	<p><b>Help Message for New Service</b></p> <p>A help message is displayed for customers who do not receive relevant results when they search for their address.</p> <p><b>Defaults:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Title:</b> Don't see your address?</li> <li>▪ <b>Label:</b> Please check that you've entered the correct address. For further assistance, call us.</li> </ul>
Not Depicted	<p><b>Help Message for Service Date Selection</b></p> <p>A help message is displayed when customers are using the calendar selector to choose service dates.</p> <p><b>Default:</b> You don't need to be there. Since this address has a smart meter, we can turn off your service remotely.</p> <p>Service will stop between 6am-9am on your selected day.</p>
Not Depicted	<p><b>Help Message for New Address Questions</b></p> <p>A help message is displayed for customers adding a new address to help explain why certain information is being requested.</p> <p><b>Default:</b> This information will help us set up the correct service for this address.</p>
Not Depicted	<p><b>Help Message for Identity Verification Questions</b></p> <p>A help message is displayed for customers answering identity verification questions.</p> <p><b>Defaults:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Title:</b> Please add one or more forms of ID</li> <li>▪ <b>Label:</b> Providing multiple forms of ID can speed up the verification process, and may also help you to avoid a deposit</li> </ul>
6	<b>Allowed Stop Service Level</b>



Image Number	Configuration Option
	<p>Customers can select to stop service for their account. Stopping service can also be extended to allow customers to stop service for a particular premise of an account, and a particular service agreement for a premise.</p> <p><b>Default:</b> Allow customers to stop service for an account, or a premise for an account.</p>
Not Depicted	<p><b>Service Type Identifier</b></p> <p>When selecting to stop service, the service type identifier can display the meter ID or service agreement ID associated with a particular service.</p> <p><b>Defaults:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Status:</b> Display Meter ID</li> <li>▪ <b>Label:</b> Meter</li> </ul>
7	<p><b>Number of Records to Display Per Page for Stop Service Requests</b></p> <p>Customers with multiple addresses are presented with multiple pages to navigate through if the number of addresses is greater than the limit per page. This limit can help ensure the display does not become too cumbersome and difficult to use.</p> <p><b>Default:</b> 10 records per page.</p>
8	<p><b>Birth Date for Start Service Identity Verification</b></p> <p>Provides a dedicated birth date field during identity verification which can be used for identity verification with a third-party identity check service.</p> <p><b>Default:</b> Disabled.</p>
9	<p><b>Paperless Billing Enrollment When Starting Service</b></p> <p>Customers can enroll in paperless billing as part of their new</p>

Image Number	Configuration Option
	<p>account activation process. If this enrollment option is enabled when starting service, along with the enabled selection a utility must also provide the bill route type used in Customer Care and Billing that supports paperless billing. This bill route type is defined as part of "Paperless Billing" on page 79 configuration.</p> <p><b>Default:</b> Disabled.</p>
10	<p><b>ACH Automatic Payment Enrollment When Starting Service</b></p> <p>Customers can enroll in ACH automatic payments as part of their new account activation process.</p> <p><b>Default:</b> Disabled</p>
11	<p><b>Start Service Deposit Message</b></p> <p>A message is displayed for customers starting service to alert them that a deposit may be required.</p> <p><b>Default:</b> A deposit may be needed to start this service. If so, a customer care representative will follow up with a phone call</p>
12	<p><b>Terms and Conditions Link</b></p> <p>The review and submit step for starting, stopping, or transferring service includes a link to a terms and conditions page.</p> <p><b>Default:</b> No link, a link must be provided.</p>
Not Depicted	<p><b>Confirmation Message</b></p> <p>A message is displayed confirming the customer's request is completed. A confirmation number is also supplied by default.</p> <p><b>Default:</b> Confirmation Number: [ConfirmationNumber]</p>
Not Depicted	<p><b>Completion Link</b></p> <p>A link is provided as part of the request confirmation page, which is commonly directed to an overview or introductory utility page.</p>

Image Number	Configuration Option
	<p><b>Default:</b> No link, a link must be provided.</p>
Not Depicted	<p><b>Automatic Account Linking for Start Service</b></p> <p>Allows web users and accounts to be automatically linked when service is started. It is recommended to enable automatic account linking when guest user features are enabled in Digital Self Service - Transactions. For additional guest user configurations, see "Manage Web Account" on page 191.</p> <p><b>Default:</b> Disabled.</p>
13	<p><b>Pending Service Requests Title</b></p> <p><b>Default:</b> Pending Service Requests</p>
14	<p><b>Pending Service Requests Message</b></p> <p><b>Default:</b> A requested change to your service is awaiting processing. If you need to make a change to your pending requests, contact (123) 456-7890.</p>
Not Depicted	<p><b>Define Customer Class Codes</b></p> <p>By default, Customer Care and Billing uses customer class code "R" for Residential customer, and "C" for Commercial customers.</p> <p>Provide Oracle Utilities with the customer class codes used in your Customer Care and Billing environment for customer classes such as residential and commercial customers. This information is required to complete internal mapping to support the Start service experience.</p> <p>If a Utility needs to extend their campaign questions for Start Stop Transfer service beyond what is defined in Customer Care and Billing, they must submit these additional questions to Oracle Utilities. Typically Utilities will use this option for questions that require date picker which is not currently supported in Customer Care and Billing. Below is a list of questions types that can be added to the campaign in Digital Self Service - Transactions.</p>

Image Number	Configuration Option
	<p>Currently the supported question types are:</p> <p>TEXT</p> <p>RADIO Button</p> <p>DROPDOWN</p> <p>DATE (text field with date picker)</p> <p>TEL (telephone)</p> <p><b>Default:</b> R for residential customers, C for commercial customers.</p>
Not Depicted	<p><b>Additional Campaign Question Definitions</b></p> <p>Campaign questions for Start, Stop, Transfer service that cannot be defined in Customer Care and Billing can be submitted for creation. A common scenario for this type of request is for questions that require date selection. The list of questions types that can be added to the campaign in Digital Self Service - Transactions include:</p> <ul style="list-style-type: none"> <li>▪ Text</li> <li>▪ Radio Button</li> <li>▪ Dropdown</li> <li>▪ Date (text field with date selection)</li> <li>▪ Tel (telephone)</li> </ul> <p>In addition to the question type, the full information on the question including all messages and other text must be provided.</p> <p><b>Default:</b> None</p>
Not Depicted	<p><b>Segmentation of Campaign Questions</b></p> <p>Campaign questions can be segmented based on the service point of a given premise. To define this style of segmentation, a list of all service types with a list of questions that apply to each one must be provided.</p> <p><b>Default:</b> None</p>

Image Number	Configuration Option
Not Depicted	<p><b>Non-Premise Pending Requests</b></p> <p>Pending requests that apply to a service agreement are displayed to customers, including requests specific to a premise such as a start service request as well as requests such as enrolling in payment arrangements which are not tied to a specific premise. Non-premise pending requests can be hidden, which limits displaying pending requests to requests directly related with starting, stopping, or transferring service.</p> <p><b>Default:</b> Non-premise and premise requests are displayed to customers.</p>
Not Depicted	<p><b>Supporting Service Agreements for Pending Requests</b></p> <p>Pending requests can be hidden from users based on the service agreement. To hide requests related to a type of service agreement, provide Oracle Utilities the service agreement type value for each service agreement type to hide.</p> <p><b>Default:</b> Display all pending requests regardless of service agreement type.</p>
Not Depicted	<p><b>Pending Request Entries Per Page</b></p> <p>Customers with multiple pending requests can click links to view each applicable page of pending requests for their account. Each page includes a defined number of pending requests.</p> <p><b>Default:</b> 5</p>
Not Depicted	<p><b>Support Mailing Address Validation</b></p> <p>Customers can edit the mailing address in account preferences. Mailing address validation can be enabled to highlight to customers when the address provided is not valid. If support for mailing address validation is requested, additional configuration must be completed as described in "Configuring Mailing Address Validation" on page 146.</p> <p><b>Default:</b> Disabled.</p>

## Start, Stop, and Transfer Service Configuration Options

Use the table below to review all available configuration options for the Start, Stop, and Transfer Service features. Certain configurations can also be completed using the Opower Configuration Tool. For general steps to access the tool for the Start, Stop, and Transfer Service Classic features, see "Configuring Messaging and Behavior" on page 147.

**Note:** By default, Start, Stop, and Transfer Service Classic is enabled. In addition to the configurations listed below, you must request to enable Start, Stop, and Transfer Service, as instructed in "Start, Stop, and Transfer Service" on page 97.

Image Number	Configuration Option
Not Depicted	<p><b>Disable Self-Service Options</b></p> <p>Self-service options are available to the customer to start, stop, or transfer utility service.</p> <div style="border: 1px solid black; padding: 5px; margin: 10px 0;"> <p><b>Note:</b> Start service cannot be disabled.</p> </div> <p><b>Default:</b> Start, stop, and transfer self-service are all enabled</p>
Not Depicted	<p><b>Premise Search Wildcard Configuration</b></p> <p>When customers provide a premise address to start service, the results returned can account for differences between what the customer enters and how the address information is stored in the system. You can choose to enable additional wildcard rules to be applied automatically to the search to improve the search results. Using the default, which disables these additional wildcard rules, is recommended if enabling additional wildcard rules does not improve the search results.</p> <p><b>Default:</b> Disabled</p>
Not Depicted	<p><b>Show Meter IDs for Stop Service</b></p> <p>When selecting to stop service the meter ID can be displayed for</p>

Image Number	Configuration Option
	<p>all services.</p> <p><b>Default:</b> Hide the meter IDs</p>
Not Depicted	<p><b>Automatic Account Linking for Start Service</b></p> <p>Allows web users and accounts to be automatically linked when service is started. It is recommended to enable automatic account linking when guest user features are enabled in Digital Self Service - Transactions. For additional guest user configurations, see "Manage Web Account" on page 191.</p> <p><b>Default:</b> Disabled.</p>
Not Depicted	<p><b>Define Customer Class Codes</b></p> <p>By default, Customer Care and Billing uses customer class code "R" for Residential customer, and "C" for Commercial customers.</p> <p>Provide Oracle Utilities with the customer class codes used in your Customer Care and Billing environment for customer classes such as residential and commercial customers. This information is required to complete internal mapping to support the Start service experience.</p> <p><b>Default:</b> R for residential customers, C for commercial customers.</p>
Not Depicted	<p><b>Additional Question Types</b></p> <p>Questions for Start, Stop, Transfer Service that cannot be defined in Customer Care and Billing can be submitted for creation. For example, conditional question defined in Customer Care and Billing do not explicitly support TEL (telephone) type, but support to override those conditional questions can be provided. The list of questions types that can be added to the campaign in Digital Self Service - Transactions include:</p> <ul style="list-style-type: none"> <li>▪ Text</li> <li>▪ Radio Button</li> <li>▪ Dropdown</li> <li>▪ Date (text field with date selection)</li> </ul>

Image Number	Configuration Option
	<ul style="list-style-type: none"> <li>▪ Datetime (text field with datetime selection)</li> <li>▪ Tel (telephone)</li> </ul> <p>In addition to the question type, the full information on the question including all messages and other text must be provided.</p> <p><b>Default:</b> None</p>
Not Depicted	<p><b>Support Mailing Address Validation</b></p> <p>Customers can edit the mailing address in account preferences. Mailing address validation can be enabled to highlight to customers when the address provided is not valid. If support for mailing address validation is requested, additional configuration must be completed as described in "Configuring Mailing Address Validation" on page 146.</p> <p><b>Default:</b> Disabled.</p>

### User Experience Variations

The user experience varies for customers depending upon their service types, available data, costs, and locale. Note that the following list indicates the primary user experience variations, not all possible variations.

- **New or Existing Customers:** The start service for new utility customers must collect information about the customer to create and validate an Oracle Utilities account record. Once the account is created, the account must be linked to the customer's Digital Self Service - Transactions web account. Once these processes are complete, customers can then choose to add, stop, or transfer their utility service as applicable.
- **Feature Versions:** The Start, Stop, and Transfer Service features are similar to the default Classic version but offer additional capabilities for third-party identity or credit check integration, duplicate customer prevention, co-applicant processing, individual start service selection, and customer deposit assessment.

### Configuring Start, Stop, and Transfer Service Requests

Complete the steps provided below to configure self-service tasks for start, stop, and transfer service requests. Digital Self Service - Transactions offers two options for Start, Stop, and Transfer Service features. The Classic version provides all functionality available with 23A and earlier releases, along with continued support in current releases.



Starting with 23B, Start, Stop, and Transfer Service provides a separate set of features for these service requests. The Classic terminology in this documentation is used to distinguish the features originally released prior to 23B.

**Note:** This documentation provides steps to complete these configuration tasks using Oracle Utilities Customer Care and Billing. However, many of these tasks can be completed with other applicable products such as Oracle Utilities Customer to Meter or Oracle Utilities Customer Cloud Service. Refer to your applicable product documentation for steps to complete the configuration using your Oracle Utilities product. Additionally, this documentation assumes that you know how to create the various objects listed below as well as modify or create master configurations. For additional details on these tasks, refer to the applicable [Oracle Utilities Documentation](#).

## Start, Stop, and Transfer Service Classic Configurations

The following configurations are required for the Start, Stop, and Transfer Service Classic features.

### Defining Service Date Restrictions

A calendar is displayed to customers to select when to complete a particular service request. You must define restrictions to these dates for reasons such as holidays by configuring the work calendar.

To define service date restrictions:

1. Log in to Customer Care and Billing.
2. From the **Admin** menu, select **General**, select **Work Calendar**, and then select **Search**. The Work Calendar Search dialog box opens.
3. Click **Search** to return a list of all existing work calendars. Select an applicable calendar. For this example, select the **BANK** work calendar.
4. Define the work days by selecting the checkbox for each applicable work day.
5. Define all required holidays for the calendar by adding an item for each continuous holiday. You must provide a start date, start time, end date, end time, and a descriptive name for the holiday.
6. Click **Save** to save all your changes for the work calendar.
7. With a work calendar defined, you can also define the lead time required when customers select to start, stop, or transfer service. From the **Admin** menu, select **General**, and select **Master Configuration**. From the **Master Configuration** zone,

select the **Edit** option for the **CC&B Self-Service Integration** master configuration. The master configuration is displayed.

8. From the **Stop Service Information** zone, define the following for each group of customers:
  - **Work Calendar:** The calendar used to define holidays and work days, which you reviewed and modified as needed earlier in this procedure. The work calendar applies to all customer classes.
  - **Customer Class:** The group of customers that the rules below apply to. For example, to create rules for your residential customers select **Residential**. If you also have other groups of customers such as commercial customers, you must define an entry for that customer class and select **Commercial**. An entry is required for each customer class you support even if the rules are identical for each group.
  - **Cut Off Time:** Select a time of day in which a customer must make a start, stop, or transfer service request to consider only the lead days. If a customer creates a request after the cut off time, the request cannot be made for lead days plus one additional day.
  - **Lead Days:** Select the applicable number of working, lead days for all requests.
  - **Max Stop Days In Future:** Select how many days in the future a customer can select from when requesting their service request. This includes weekends and holidays.
  - **Allowed Stop Level:** Select whether a customer can make a start, stop, or transfer request for an account, a premise for an account, or a service agreement for a premise.
    - **Service Agreement:** The customer can select to stop service at all levels including an entire service agreement, an entire premise, or an account.
    - **Premise:** The customer can select to stop service for an entire premise or an account.
    - **Account:** The customer can select to stop service only for an account.

Stop Service Information ⓘ

WORK CALENDAR

	CUSTOMER CLASS	CUTOFF TIME ⓘ	LEAD DAYS ⓘ	MAX STOP DAYS IN FUTURE	ALLOWED STOP LEVEL
+	Commercial	02:00AM	3	30	Service Agreement
+	Residential	02:00AM	3	30	Service Agreement

9. Click **Save** to save your changes to the master configuration.

## Configuring Self-Service Tasks

You must configure self-service tasks to support customer start and stop service requests.

To configure self-service tasks:

1. Log in to Customer Care and Billing.
2. From **Menu**, select **Self-Service**, select **Self-Service Task Type**, and select **Add**. The **Select Business Object** dialog box opens.
3. From the **Service Task Type Business Object** drop-down list, select **DSS Start/Stop Task Type** and click **OK**. The **Maintenance** page opens.
4. Complete the following information for the self-service task type:
  - **Service Task Type:** C1-START-STOP
  - **Description:** DSS Transactions Start Stop
  - **Related Transaction Object:** Start/Stop Request Task (C1-StartStopRequestTask)
  - **Service Task Type Status:** Active
  - **Service Task Class:** Self-Service
5. Click **Save** to create the self-service task type.
6. From the **Admin** menu, select **General**, and select **Master Configuration**. From the **Master Configuration** zone, select the **Edit** option for the **CC&B Self-Service Integration** master configuration. The master configuration is displayed.
7. From the **Self-Service Task** zone, click the plus icon to add an entry. From the **Service Task** drop-down list select **Start/Stop Service Request**, and from the **Service Task Type** drop-down list select the self-service task type you created earlier in this procedure **DSS Transactions Start Stop (C1-START-STOP)**.
8. From the **Script** zone, click the plus icon to add an entry. From the **Processing Type** drop-down list select **Start Service Criteria**, and in the **Script** field include the default `C1-StrSvcCri` script. Review this default script to ensure it meets your requirements for the start and stop service tasks.
9. Click **Save** to save your changes to the master configuration.

## Creating Start Service Campaigns

Campaigns are used to present a series of questions to customers as one of the steps within the start service process. You can define whether these questions are required or optional, the type of response the customer must provide, and any applicable default values for selection. The steps below are high-level, refer to your Oracle Utilities Customer Care and Billing documentation for additional information on creating campaigns.

To create a start service campaign:

1. Log in to Customer Care and Billing.
2. From **Menu**, select **Sales and Marketing**, select **Campaign**, and then select **Add**. The options to create a campaign are displayed.
3. From the **Main** tab, define general details for the campaign such as the default customer contact types, the default contact class, and how accounts can be used as part of the start service campaign. In the **Campaign** drop-down list, select **OUCSS-RESSVC**. In the **Description** field type **Example Self-Service Residential**.

If you are completing the configuration checklist available at "Configuration Checklist" on page 4, use the following configuration:

- **Campaign Status:** Active
- **Default Person/Business:** Person
- **Default Customer Class:** Residential
- **Order Open Option:** Main
- **Allow Order Compl W/O Package:** Ensure the checkbox is selected.
- **Premise Usage:** Required
- **Account Usage:** Optional - Existing Account Only

The screenshot shows the 'Campaign' configuration form with the following fields and values:

- CAMPAIGN:** EXAMPLE ELEC
- DESCRIPTION:** DSS - Residential Elec
- CAMPAIGN STATUS:** Active
- DEFAULT PERSON/BUSINESS:** Person
- PREMISE USAGE:** Required
- DEFAULT PERSON CONTACT TYPE 1, 2, 3:** (Empty)
- DEFAULT PREMISE TYPE:** (Empty)
- DEFAULT PREMISE GEO TYPE:** (Empty)
- DEFAULT CUSTOMER CLASS:** Residential
- ACCOUNT USAGE:** Optional - Existing Account Only
- DEFAULT ACCT MANAGEMENT GROUP:** (Empty)
- DEFAULT HOLD TO DO ROLE:** (Empty)
- ORDER OPEN OPTION:** Main
- ORDER COMPL NAVIGATION OPTION:** (Empty)
- ALLOW ORDER COMPL W/O PACKAGE:**
- ORDER COMPL W/O PACKAGE LABEL:** Res Add Service
- LONG DESCRIPTION:** (Empty)

4. From the **Questions & Misc Fields** tab, define the list of questions included in the campaign. Click the plus icon to add a new question or the trash can icon to remove a question. You can define whether these questions are required or optional, the type of response the customer must provide, and any applicable default values for selection.

If a question is defined to accept a characteristic type of response, the characteristic

can be related to the Account, Order, Person, or Premise characteristics. For example, if a premise characteristic entity is chosen with a type of household size, customers are presented with various household size options to select from. Additionally, a premise characteristic is created on the customer's premise to record their household size answer.

If your question cannot be created with the options in Customer Care and Billing, refer to "Reviewing Start, Stop, and Transfer Service Configuration Options" on page 98 for submitting these questions to Oracle Utilities for creation.

If you are completing the configuration checklist available at "Configuration Checklist" on page 4, use the following configuration to create one simple question:

- **Prompt on Order:** Are you an owner or renter?
- **Brief Description:** Are you an owner or renter?
- **Sequence:** 10
- **Applicability:** Required
- **Type of Response:** Characteristic
- **Characteristic Entity:** Order
- **Characteristic Type:** C2MOWNRT

The screenshot shows the 'Campaign' configuration page with the 'Questions & Misc Fields' tab selected. The main content area displays a configuration form for a question. The question text is 'Are you an owner or renter?'. The configuration fields are: PROMPT ON ORDER (text area), BRIEF DESCRIPTION (text input), SEQUENCE (input field with value 10), APPLICABILITY (dropdown menu with 'Required' selected), TYPE OF RESPONSE (dropdown menu with 'Characteristic' selected), CHARACTERISTIC ENTITY (dropdown menu with 'Order' selected), and CHARACTERISTIC TYPE (input field with 'C2MOWNRT' and a search icon). The top navigation tabs are 'Main', 'Questions & Misc Fields', 'Algorithms', and 'Package'.

5. From the **Algorithms** tab,
6. From the **Packages** tab, click the **Go To Package** icon for any configured package to review the various service agreement options that a customer can be assigned to through the start service process. The Package options are displayed:
  - From the **Main** tab, review and configure general details about the package. If you are completing the configuration checklist available at "Configuration Checklist" on page 4, use the following configuration:

- **Campaign:** Select the campaign you are creating as part of this process.
- **Description:** Initial configuration package.
- **Status:** Active
- From the **SAs to Create** tab, review, add, and remove service agreements as applicable. If you are completing the configuration checklist available at "Configuration Checklist" on page 4, do not create a service agreement.
- From the **Eligibility** tab, review and configure the logic used to determine whether the package is implemented for a customer who chooses to start service. Customer inputs through the campaign questions can be used as fields for this logic. For example, a package can be eligible for the customer if they select that they are a senior citizen and would like to be started on a standard rate plan. Campaigns must have packages configured so that all combinations of possible customer answers support the selection of an eligible package for starting service.

If you are completing the configuration checklist available at "Configuration Checklist" on page 4, use the following configuration:

- **Sequence:** 10
- **Description:** Initial config eligibility
- **If Group Is True:** Eligible
- **If Group Is False:** Ineligible
- **Criteria Field:** Select **Algorithm** in the drop-down list, and select the C1-ORD-GETCC Algorithm
- **Criteria Comparison:** Select = in the drop-down list, and type R in the text field
- **If True:** Group is True
- **If False:** Group is False
- **If Insufficient Data:** Group is False

The screenshot shows the 'Campaign' configuration page with the 'Questions & Misc Fields' tab selected. The page includes a search bar for the campaign name (EXAMPLE ELEC), a list of questions and misc fields, and various configuration options like sequence, applicability, and response type.

Field	Value
CAMPAIGN	EXAMPLE ELEC
QUESTIONS & MISC FIELDS	1 of 1
PROMPT ON ORDER	Are you an owner or renter?
BRIEF DESCRIPTION	Are you an owner or renter?
SEQUENCE	10
APPLICABILITY	Required
TYPE OF RESPONSE	Characteristic
CHARACTERISTIC ENTITY	Order
CHARACTERISTIC TYPE	C2MOWNRT
DEFAULT CHAR VALUE	

- Click **Save** to save any package changes.
- 7. From the **Algorithms** tab, apply any required algorithms, such as algorithms that determine customer eligibility for a campaign. If you are completing the configuration checklist available at "Configuration Checklist" on page 4, define a **Campaign Eligibility** event that uses the `C1-ELIGIBLE` algorithm.
- 8. Click **Save** to create your start service campaign.

#### To display the available service types for a premise

Complete the following configurations to display the available service point types at a premise and determine the service agreements to start.

1. Log in to Customer Care and Billing.
2. From the **Admin** menu, select **System**, select **Algorithm**, and then select **Add**. The Algorithm page is displayed.
3. Define an algorithm as follows:
  - **Algorithm Code**: Provide a descriptive name for the algorithm code which is referenced later when defining eligibility criteria
  - **Description**: Provide a description for the algorithm
  - **Algorithm Type**: `C1-ELIGSPTY`
  - **SP Types to Check**: Include the service point types the algorithm validates
  - **SP Types to Ignore**: Include the service point types the algorithm can ignore
4. Click **Save** to create the new algorithm.
5. From **Menu**, select **Sales and Marketing**, select **Campaign**, and then select **Search**. Select the campaign created in the previous steps.
6. Navigate to the **Package** information, and from the **Eligibility** tab navigate to the applicable eligibility criteria group, select the plus icon to create a new eligibility criteria row:
  - **Sequence**: Modify the sequence as necessary to process the new eligibility criteria in the correct order
  - **Criteria Field**: Select **Algorithm** in the drop-down list, and then type the Algorithm Code name you created previously in this procedure
  - **Criteria Comparison**: Select `=` in the drop-down list, and then type `TRUE` in the text field
  - **If True**: Check Next Condition
  - **If False**: Group is False
  - **If Insufficient Data**: Group is False
7. Click **Save** to update your package.

## Displaying Campaign Questions Based on Customer Service Point Type

As part of creating start service campaigns, you can define which questions are shown to customers based on their applicable service point types. This optional configuration allows you to display only those questions that are applicable to a customer. For example, you can prompt customers with electricity service to select their preferred electricity service rate plan, while hiding this prompt for customers who only have water or wastewater service. To support this configuration, you must provide

### To retrieve customer service point types

1. Log in to Customer Care and Billing.
2. From the **Admin** menu, select **Geographic**, select **Service Point Type**, and then select **Search**. A Service Point Type List is displayed.
3. Collect the values in the **SP Type** column for applicable service point types.
4. Review the campaign questions that you created in the steps above to create a start service campaign. Include a mapping of each service point type value that applies for each campaign question.
5. Provide the campaign question to service point type mapping information to Oracle Utilities. For information on providing this information, see "Contacting Your Delivery Team" on page 252.

## Configuring New Service Information and Requirements

You must configure your self-service master configuration to define the information retrieved for a new residential service request along with which pieces of information are required and which are used to identify a customer.

### To configure New Service Information and Requirements:

1. Log in to Customer Care and Billing as a user with edit access for the CC&B Self-Service Integration master configuration.
2. From the **Admin** menu, select **General**, and select **Master Configuration**. From the **Master Configuration** zone, select the **Edit** option for the **CC&B Self-Service Integration** master configuration. The master configuration is displayed.
3. From the **New Service Information** zone, in the **Start Service Campaigns** area click the plus icon to include a start service campaign.
4. From the **Customer Class** drop-down list select **Residential**, and from the **Campaign** drop-down list select the **Example Self-Service Residential** campaign you created to support the start service workflows. If you are completing the configuration checklist available at "Configuration Checklist" on page 4, select the campaign you created for those steps.



- From the **New Customer Identifiers** area, click the plus icon to add a new customer identifier. These identifiers are presented to customers when they select to start service.
- Select the **Allow As A Primary Identifier** checkbox to configure an identifier as a primary identifier of a customer, which must be capable of uniquely identifying a customer. If multiple identifiers are defined as the primary identifier, the identifier with the lowest **Sequence** value is used as the primary identifier.
- Select whether each identifier is required to be completed by the customer or is an optional identifier that the customer can leave blank when starting service. An example of customer identifiers is shown below.

New Customer Identifiers						
	PERSON/BUSINESS	SEQUENCE	ID TYPE	FORMAT DESCRIPTION	ALLOW AS A PRIMARY IDENTIFIER	REQUIRED/OPTIONAL
+	Business	10	Employer identification number	99-9999999	<input checked="" type="checkbox"/>	Required
+	Person	10	Drivers license		<input checked="" type="checkbox"/>	Optional
+	Person	20	Social security number	999-99-9999	<input checked="" type="checkbox"/>	Optional

- Click **Save** to save your master configuration changes.

## Defining Phone Contact Types

Customers can maintain phone numbers for their Digital Self Service - Transactions account. To ensure that phone types can be located and displayed within Digital Self Service - Transactions, ensure that the word **phone** is included within either the phone contact type or phone contact type description.

**Note:** Various contact types are supported for users of Digital Self Service - Transactions. Creating person contact types for web users is described in "Creating a Person Contact Type for Web Users" on page 204.

### To define phone contact types

- Log in to Customer Care and Billing.
- From the **Admin** menu, select **Customer**, select **Person Contact Type**, and select **Search**. The Person Contact Type List is displayed.
- Locate a person contact type for phone numbers that is used for Digital Self Service - Transactions, and select the **Edit** button. The Person Contact Type page is displayed.
- If the **Person Contact Type** code does not include **phone**, update the **Description** to include **phone** as part of the description.
- Select **Save** to save your changes.

## Supporting Back-to-Back Stop and Start Service Requests

By default, a start service request cannot be initiated if there is still an active service on the premise, such as an active service for a previous resident. You can enable support for these types of start service requests, often referred to as back-to-back requests, which initiates a stop service request for the active service for the premise.

### To support back-to-back stop and start service requests

1. Log in to Customer Care and Billing.
2. From the **Admin** menu, select **System**, select **Algorithm**, and then select **Search**. The Algorithm Search dialog box opens.
3. In the **Algorithm Code** field, type `C1-VASTSTPRQ` and select **Search**. The `C1-VASTSTPRQ` algorithm is displayed.
4. From the Allow Back-to-Back row of the table, modify the **Value** column to be defined as **Y**.
5. Select **Save** to save your changes.

## Supporting ACH Automatic Payment Enrollment During Start Service Requests

Customers can be provided with the option to enroll in ACH automatic payments during their start service request. If the customer has opted into the program, an automatic payment self-service task is generated after their utility billing account is established. Automatic payment enrollment performed during a start service request follows the same NACHA business rules configured for general automatic payments, which are described at "Automatic Payments" on page 82.

## Start, Stop, and Transfer Service Configurations

The following configurations are required for the Start, Stop, and Transfer Service features.

### Configuring Self-Service Tasks

You must configure self-service tasks to support customer start and stop service requests. Self-service tasks are used to support starting new service, adding services, stopping services, and transferring service, and the same self-service task can be used for each of these tasks. You can also create separate self-service tasks for any of these tasks to configure unique processing for those tasks.

### To configure self-service tasks

1. Log in to Customer Care and Billing.
2. From **Menu**, select **Self-Service**, select **Self-Service Task Type**, and select **Add**. The Select Business Object dialog box opens.
3. From the **Service Task Type Business Object** drop-down list, select **Self-Service Start/Stop/Transfer Task Type** and click **OK**. The Maintenance page opens.
4. Complete the following information for the self-service task type:
  - **Service Task Type**: Provide a name to identify the self-service task type object such as START-STOP-TRANSFER-TASK.
  - **Description**: Provide a description for the self-service task type, which can include the types of tasks the object supports.
  - **Related Transaction Object**: Self-Service Start/Stop/Transfer Task (C1-SSStartStopXferServiceTask)
  - **Service Task Type Status**: Active
  - **Service Task Class**: Self-Service
5. Click **Save** to create the self-service task type. Repeat these steps for any additional self-service task types for the supported tasks.

### Configuring the Action Methods

You must configure action methods to support customer start and stop service requests. Action methods are used to support starting new service, adding services, stopping services, and transferring service, and a separate action method is required for each of these tasks.

### To configure action methods

1. Log in to Customer Care and Billing.
2. From **Admin** menu, select **System**, select **Action Method**, and select **Add**. The Select Business Object dialog box opens.
3. From the **Action Method Business Object** drop-down list, select **Self-Service SST Action Method** and click **OK**. The Action Method page is displayed
4. Complete the following information for the action method:
  - **Action Method**: Provide a descriptive name such as Start-Service-Action-Method.
  - **Action Method Role**: Select the applicable role for the type of task you are creating an action method for. For example, when creating an action method for starting new service, select **Self-Service New Service**.
  - **Description**: Provide a brief description, such as Start New Service Action Method.

- **Detailed Description:** Provide a more detailed description about the action method as applicable.
  - **Self-Service Task Type:** Select the applicable self-service task type for the type of task you are creating an action method for, which is created by completing "Configuring Self-Service Tasks" on page 127 above.
  - **Customer Service Request Type:** Select the applicable customer service request type for the type of task you are creating an action method for, which is created by completing "Configuring Customer Service Request Types" on page 129.
  - **Override Details:** Define and overrides that are required for the action method.
5. Click **Save** to create the action method. Repeat these steps until separate action methods are available for start new service, add service, stop service, and transfer service.

### Configuring Customer Service Request Types

You must configure customer service request types to support customer start and stop service requests. Customer service request types are used to support starting new service, adding services, stopping services, and transferring service, and a separate customer service request type is required for each of these tasks. The steps to create a customer service request type for each task is provided below. Additional customer service request types may be required if overrides are needed based on CIS division or customer class.

#### To configure a customer service request type for starting new service

1. Log in to Customer Care and Billing.
2. From the **Admin** menu, select **Customer**, select **Customer Service Request Type**, and then select **Add**. The Select Business Object dialog box opens.
3. Select From the **Customer Service Request Type Business Object** drop-down list, select **Self-Service New Service Request Type**, then select **OK**. The Customer Service Request Type page is displayed.
4. Provide the following information:
  - **Customer Service Request Task Type:** Provide a name to identify the customer service request task type object such as NEW-SERVICE-CUSTOMER-SERVICE-REQUEST.
  - **Description:** Provide a brief description, such as Start New Service Customer Service Request Task Type.
  - **Detailed Description:** Provide a more detailed explanation of the object as required.
  - **Customer Service Request Business Object:** Start Service Request

- **CS Request Person Business Object:** C1-CustSvcRequestPerson
  - **CS Request Account Business Object:** C1-CustSvcRequestAccount
  - **CS Request Premise Business Object:** C1-CustSvcRequestPremise
  - **CS Request Start SA Business Object:** C1-StartServiceRequestSA
5. The configuration of the following controls varies depending on the business rules of the utility. For additional information on how these controls are used, refer to the *New Service Operations* topic *Oracle Utilities Customer Care and Billing User Guide*. Refer to the [Customer Care and Billing product library](#).
- **Check for Existing Person Algorithm:** Implement utility-specific rules to check if the main customer already exists. If the record exists, then the customer cannot proceed with the transaction. This prevents the creation of duplicate records.
  - **Person Controls:** Define the controls for an individual main customer. These configurations are required to support residential customers:
    - **Identifier Types:** Configure the identifiers that are defined for the main customer. Multiple identifiers can be defined. The configuration of these identifiers must match the Line of Business Verification Fields for Match Identifier if used for Account linking.
      - **Sequence:** Determines the order in which a person control is used within the system.
      - **ID Type:** Select the type of identification that corresponds to a Person Identifier Type, such as Driver's license.
      - **Allow as Primary Identifier:** Select this checkbox to define this ID Type as eligible to be the primary ID. This must match the Allow as Primary setting on the Person Identifier Type.
      - **Required/Optional:** Select whether the ID Type is required or optional.
      - **Format:** Set the formatting guide for this ID Type. This only applies to the number of digits and delimiters.
    - **Should Prompt For ID:** Defines the rule for capturing identifiers for the main customer. If the **Algorithm** option is selected, you must implement utility-specific rules to determine if identifiers are captured using an algorithm and then select the applicable algorithm.
    - **Perform ID/Credit Check:** Select this checkbox to perform an ID or credit check for the main customer and the co-applicant. If selected, you must implement utility-specific rules to perform these checks using algorithms and then select the applicable algorithms.
    - **Prompt For Date Of Birth:** Select this checkbox to request the main customer and the co-applicant's date of birth when starting new service. If selected, you can also select **Store Date Of Birth On Person** to save the date of birth information provided. Storing this information can be done if date of birth is

used as identifying information. If the date of birth is stored, you must also define the characteristic type used to store the information with the **Date of Birth Characteristic Type** field. This must match the Line of Business Verification Fields Date of Birth Characteristic Type if used for account linking.

- **Start Service Eligibility Algorithm:** Implement utility-specific rules within an algorithm to determine if a customer is eligible to start new service. Select the applicable algorithm that defines these rules.
- **Display Paperless Billing Enrollment:** Select this checkbox to display paperless billing enrollment as part of a start service request. If selected, you must also configure the following:
  - **Paperless Bill Route Type:** Select the bill route type used for paperless billing.
  - **Postal Bill Route Type:** Select the bill route type for postal billing.
- **Autopay Usage:** Select this checkbox to display autopay enrollment as part of a start service request. If selected, Autopay Service Task Type: Applicable if Autopay Usage is enabled. This must match the Auto Pay Setup Self-Service Task in the Customer Care and Billing Self-Service Master Configuration. Autopay enrollment during a start service request follows the same business rules configured for general automatic payments as described in "Automatic Payments" on page 82.
- **Display Other Persons:** Defines the rule for capturing co-applicant information. If selected, the following options are available:
  - **Search For Person Algorithm:** Implement utility-specific rules to check if the co-applicant already exists in Customer Care and Billing. If an exact match is found, then the existing record is used. If no match is found, then a new record is created. If an ambiguous or partial match is found, then the co-applicant cannot be used in the transaction.
  - **Collect ID:** Select this checkbox to store identification information for the co-applicant. If selected, use **Identifier Types** to configure the identifiers that are defined for the main customer. Multiple identifiers can be configured:
    - **Sequence:** Determines the order in which a person control is used within the system.
    - **ID Type:** Select the type of identification that corresponds to a Person Identifier Type, such as Driver's license.
    - **Allow as Primary Identifier:** Select this checkbox to define this ID Type as eligible to be the primary ID. This must match the Allow as Primary setting on the Person Identifier Type.

- **Required/Optional:** Select whether the ID Type is required or optional.
  - **Format:** Set the formatting guide for this ID Type. This only applies to the number of digits and delimiters.
- **Account Relationship Types:** Define the options for the relationship types that the co-applicant can select. These can include options such as Family Member or Employee.
- **Other Person Eligibility:** Defines the rule for determining if a matching co-applicant is eligible or not.
  - If set to **ID Check**, then an ID or credit check is part of the eligibility check.
  - If set to **Algorithm**, you must implement utility-specific rules to determine if a matching co-applicant is eligible or not, and select the algorithm in **Other Person Eligibility Algorithm**.
- **Ineligible Other Person Processing:** Defines the rule for determining if an ineligible matching co-applicant is rejected or submitted for further review.
  - If set to **Reject**, then the co-applicant cannot be used in the transaction.
  - If set to **Review**, then the co-applicant can be used in the transaction but is not automatically added to the account. Further review and processing is required. You must implement utility-specific processing if ineligible matching co-applicant is accepted for further review, and select the algorithm in **Ineligible Other Person Processing Algorithm**.
- **Default Financially Responsible:** Select this checkbox to define co-applicants as financially responsible by default.
- **Default Third Party Guarantor:** Select this checkbox to define co-applicants as a third party guarantor by default.
- **Default Receives Copy of Bill:** Select this checkbox to define co-applicants as receiving a copy of the utility bill by default.
- **Default Receives Collection And Overdue Notices:** Select this checkbox to define co-applicants as receiving collection and overdue notices by default.
- **Default Allow Communication Preference:** Select this checkbox to define co-applicants as modifying communication preferences by default.
- **Business Controls:** Define the controls for accounts that manage business entities. These configurations are required to support non-residential customers:

- **Identifier Types:** Configure the identifiers that are defined for the main customer for a business. Multiple identifiers can be defined. The configuration of these identifiers must match the Line of Business Verification Fields for Match Identifier if used for Account linking.
  - **Sequence:** Determines the order in which a person control is used within the system.
  - **ID Type:** Select the type of identification that corresponds to a Person Identifier Type, such as Driver's license.
  - **Allow as Primary Identifier:** Select this checkbox to define this ID Type as eligible to be the primary ID. This must match the Allow as Primary setting on the Person Identifier Type.
  - **Required/Optional:** Select whether the ID Type is required or optional.
  - **Format:** Set the formatting guide for this ID Type. This only applies to the number of digits and delimiters.
- **Should Prompt For ID:** Defines the rule for capturing identifiers for the main customer of the business. If the **Algorithm** option is selected, you must implement utility-specific rules to determine if identifiers are captured using an algorithm and then select the applicable algorithm.
- **Perform ID/Credit Check:** Select this checkbox to perform an ID or credit check for the main customer and the co-applicant of the business. If selected, you must implement utility-specific rules to perform these checks using algorithms and then select the applicable algorithms.
- **Start Service Eligibility Algorithm:** Implement utility-specific rules within an algorithm to determine if a customer is eligible to start new service. Select the applicable algorithm that defines these rules.
- **Display Paperless Billing Enrollment:** Select this checkbox to display paperless billing enrollment as part of a start service request. If selected, you must also configure the following:
  - **Paperless Bill Route Type:** Select the bill route type used for paperless billing.
  - **Postal Bill Route Type:** Select the bill route type for postal billing.
- **Autopay Usage:** Select this checkbox to display autopay enrollment as part of a start service request. If selected, Autopay Service Task Type: Applicable if Autopay Usage is enabled. This must match the Auto Pay Setup Self-Service Task in the Customer Care and Business Self-Service Master Configuration. Autopay enrollment during a start service request follows the same business rules configured for general automatic payments as described in "Automatic Payments" on page 82.



- **Display Other Persons:** Defines the rule for capturing co-applicant information. If selected, the following options are available:
  - **Search For Person Algorithm:** Implement utility-specific rules to check if the co-applicant already exists in Customer Care and Billing. If an exact match is found, then the existing record is used. If no match is found, then a new record is created. If an ambiguous or partial match is found, then the co-applicant cannot be used in the transaction.
  - **Collect ID:** Select this checkbox to store identification information for the co-applicant. If selected, use **Identifier Types** to configure the identifiers that are defined for the main customer. Multiple identifiers can be configured:
    - **Sequence:** Determines the order in which a person control is used within the system.
    - **ID Type:** Select the type of identification that corresponds to a Person Identifier Type, such as Driver's license.
    - **Allow as Primary Identifier:** Select this checkbox to define this ID Type as eligible to be the primary ID. This must match the Allow as Primary setting on the Person Identifier Type.
    - **Required/Optional:** Select whether the ID Type is required or optional.
    - **Format:** Set the formatting guide for this ID Type. This only applies to the number of digits and delimiters.
  - **Account Relationship Types:** Define the options for the relationship types that the co-applicant can select. These can include options such as Family Member or Employee.
  - **Other Person Eligibility:** Defines the rule for determining if a matching co-applicant is eligible or not.
    - If set to **ID Check**, then an ID or credit check is part of the eligibility check.
    - If set to **Algorithm**, you must implement utility-specific rules to determine if a matching co-applicant is eligible or not, and select the algorithm in **Other Person Eligibility Algorithm**.
  - **Ineligible Other Person Processing:** Defines the rule for determining if an ineligible matching co-applicant is rejected or submitted for further review.
    - If set to **Reject**, then the co-applicant cannot be used in the transaction.
    - If set to **Review**, then the co-applicant can be used in the transaction but is not automatically added to the account. Further review and

processing is required. You must implement utility-specific processing if ineligible matching co-applicant is accepted for further review, and select the algorithm in **Ineligible Other Person Processing Algorithm**.

- **Default Financially Responsible:** Select this checkbox to define co-applicants as financially responsible by default.
- **Default Third Party Guarantor:** Select this checkbox to define co-applicants as a third party guarantor by default.
- **Default Receives Copy of Bill:** Select this checkbox to define co-applicants as receiving a copy of the utility bill by default.
- **Default Receives Collection And Overdue Notices:** Select this checkbox to define co-applicants as receiving collection and overdue notices by default.
- **Default Allow Communication Preference:** Select this checkbox to define co-applicants as modifying communication preferences by default.
- **Common Service Controls:** Define the controls for validating the service start date:
  - **Work Calendar:** Select the applicable calendar that is used for validating the service start date.
  - **Lead Days:** Enter the applicable number of working, lead days for the start service requests.
  - **Cutoff Time:** Select a time of day in which a customer must make a start service request to consider only the lead days. If a customer creates a request after the cut off time, the request cannot be made for lead days plus one additional day.
  - **Time Zone:** Select the applicable time zone used for validating the service start date.
  - **Maximum Start Days In Future:** Select how many days in the future a customer can select from when requesting their service request. This includes weekends and holidays.
- **Deposit Required:** Defines the rule for assessing a deposit. If Algorithm is selected, you must define the following configurations which are used for calculating the deposit and creating the deposit service agreement:
  - **Deposit Required Algorithm:** Implement utility-specific rules to determine if deposit is required and select the applicable algorithm.
  - **CIS Division:** Select the applicable CIS division.
  - **SA Type:** Select the applicable service agreement type.
  - **Start Option:** Select the applicable start option.

- **Allow Bill in Full:** Select this checkbox to allow customers to pay their bill in one lump sum. If this option is selected, installment amount settings are ignored.
- **Minimum Installment Amount:** Enter a minimum installment amount to enable customers to pay their bill in installments.
  - **Number of Installments:** If a minimum installment amount is provided and Allow Bill in Full is cleared, enter the number of installments each bill is broken down into for payment.
- **Start Level:** Defines whether service is started for an entire premise or is done for individual services. If you select **Individual Services**, you must select algorithms to validate the service points with the **Validate Service Points to Start Algorithm** options. This validation is completed prior to performing question and response processing.
- **Validate Services to Start Algorithm:** Implement utility-specific rules to validate the services that are started. This validation is completed after performing question and response processing.
- **Determine Services To Start Algorithm:** Implement utility-specific rules to retrieve the services that are started for the service points at the premise. This processing is completed prior to performing question and response processing.
- **Process Services To Start Algorithm:** Implement utility-specific rules to process the services that are started for the service points at the premise. This processing is completed when finalizing the start service request.
- **Create Customer Contact:** Define the controls for creating a customer contact on finalization of the start service request. If you select Yes to create a customer contact, you must define the following:
  - **Customer Contact Class:** Select the class for the customer contacts that are created when starting new service.
  - **Customer Contact Type:** Select the customer contact type for the customer contacts that are created when starting new service. The customer contact type selected must require Person, Account, and Premise as these are used on creation of the customer contact. The entity relationship should be set to Person and Account Only.

6. Click **Save**.

7. For the configuration of Questions, Service Eligibility, and Response-related updates, refer to the embedded help in Customer Care and Billing or the *Questions and Response Processing* topic in the *Oracle Utilities Customer Care and Billing User Guide*. Refer to the [Customer Care and Billing product library](#).

## To configure a customer service request type for adding services

1. Log in to Customer Care and Billing.
2. From the **Admin** menu, select **Customer**, select **Customer Service Request Type**, and then select **Add**. The Select Business Object dialog box opens.
3. Select From the **Customer Service Request Type Business Object** drop-down list, select **Self-Service Add Service Request Type**, then select **OK**. The Customer Service Request Type page is displayed.
4. Provide the following information:
  - **Customer Service Request Task Type:** Provide a name to identify the customer service request task type object such as ADD-SERVICE-CUSTOMER-SERVICE-REQUEST.
  - **Description:** Provide a brief description, such as Add Service Customer Service Request Task Type.
  - **Detailed Description:** Provide a more detailed explanation of the object as required.
  - **Customer Service Request Business Object:** Start Service Request
  - **CS Request Person Business Object:** C1-CustSvcRequestPerson
  - **CS Request Account Business Object:** C1-CustSvcRequestAccount
  - **CS Request Premise Business Object:** C1-CustSvcRequestPremise
  - **CS Request Start SA Business Object:** C1-StartServiceRequestSA
5. The configuration of the following controls varies depending on the business rules of the utility. For additional information on how these controls are used, refer to the *Add Service Operations* topic within the *Oracle Utilities Customer Care and Billing User Guide*. Refer to the [Customer Care and Billing product library](#).
  - **Person Controls:** Define the controls for an individual main customer. These configurations are required to support residential customers:
    - **Identifier Types:** Configure the identifiers that are defined for the main customer. Multiple identifiers can be defined. The configuration of these identifiers must match the Line of Business Verification Fields for Match Identifier if used for Account linking.
      - **Sequence:** Determines the order in which a person control is used within the system.
      - **ID Type:** Select the type of identification that corresponds to a Person Identifier Type, such as Driver's license.
      - **Allow as Primary Identifier:** Select this checkbox to define this ID Type as eligible to be the primary ID. This must match the Allow as Primary setting on the Person Identifier Type.
      - **Required/Optional:** Select whether the ID Type is required or optional.

- **Format:** Set the formatting guide for this ID Type. This only applies to the number of digits and delimiters.
- **Should Prompt For ID:** Defines the rule for capturing identifiers for the main customer. If the **Algorithm** option is selected, you must implement utility-specific rules to determine if identifiers are captured using an algorithm and then select the applicable algorithm.
- **Perform ID/Credit Check:** Select this checkbox to perform an ID or credit check for the main customer and the co-applicant. If selected, you must implement utility-specific rules to perform these checks using algorithms and then select the applicable algorithms.
- **Prompt For Date Of Birth:** Select this checkbox to request the main customer and the co-applicant's date of birth when starting new service. If selected, you can also select **Store Date Of Birth On Person** to save the date of birth information provided. Storing this information can be done if date of birth is used as identifying information. If the date of birth is stored, you must also define the characteristic type used to store the information with the **Date of Birth Characteristic Type** field. This must match the Line of Business Verification Fields Date of Birth Characteristic Type if used for account linking.
- **Start Service Eligibility Algorithm:** Implement utility-specific rules within an algorithm to determine if a customer is eligible to start new service. Select the applicable algorithm that defines these rules.
- **Business Controls:** Define the controls for accounts that manage business entities. These configurations are required to support non-residential customers:
  - **Identifier Types:** Configure the identifiers that are defined for the main customer for a business. Multiple identifiers can be defined. The configuration of these identifiers must match the Line of Business Verification Fields for Match Identifier if used for Account linking.
    - **Sequence:** Determines the order in which a person control is used within the system.
    - **ID Type:** Select the type of identification that corresponds to a Person Identifier Type, such as Driver's license.
    - **Allow as Primary Identifier:** Select this checkbox to define this ID Type as eligible to be the primary ID. This must match the Allow as Primary setting on the Person Identifier Type.
    - **Required/Optional:** Select whether the ID Type is required or optional.
    - **Format:** Set the formatting guide for this ID Type. This only applies to the number of digits and delimiters.
- **Should Prompt For ID:** Defines the rule for capturing identifiers for the main customer of the business. If the **Algorithm** option is selected, you must

implement utility-specific rules to determine if identifiers are captured using an algorithm and then select the applicable algorithm.

- **Perform ID/Credit Check:** Select this checkbox to perform an ID or credit check for the main customer and the co-applicant of the business. If selected, you must implement utility-specific rules to perform these checks using algorithms and then select the applicable algorithms.
- **Start Service Eligibility Algorithm:** Implement utility-specific rules within an algorithm to determine if a customer is eligible to start new service. Select the applicable algorithm that defines these rules.
- **Common Service Controls:** Define the controls for validating the service start date:
  - **Work Calendar:** Select the applicable calendar that is used for validating the service start date.
  - **Lead Days:** Enter the applicable number of working, lead days for the start service requests.
  - **Cutoff Time:** Select a time of day in which a customer must make a start service request to consider only the lead days. If a customer creates a request after the cut off time, the request cannot be made for lead days plus one additional day.
  - **Time Zone:** Select the applicable time zone used for validating the service start date.
  - **Maximum Start Days In Future:** Select how many days in the future a customer can select from when requesting their service request. This includes weekends and holidays.
- **Deposit Required:** Defines the rule for assessing a deposit. If Algorithm is selected, you must define the following configurations which are used for calculating the deposit and creating the deposit service agreement:
  - **Deposit Required Algorithm:** Implement utility-specific rules to determine if deposit is required and select the applicable algorithm.
  - **CIS Division:** Select the applicable CIS division.
  - **SA Type:** Select the applicable service agreement type.
  - **Start Option:** Select the applicable start option.
  - **Allow Bill in Full:** Select this checkbox to allow customers to pay their bill in one lump sum. If this option is selected, installment amount settings are ignored.
  - **Minimum Installment Amount:** Enter a minimum installment amount to enable customers to pay their bill in installments.
    - **Number of Installments:** If a minimum installment amount is provided and Allow Bill in Full is cleared, enter the number of installments each bill

is broken down into for payment.

- **Start Level:** Defines whether service is started for an entire premise or is done for individual services. If you select **Individual Services**, you must select algorithms to validate the service points with the **Validate Service Points to Start Algorithm** options. This validation is completed prior to performing question and response processing.
  - **Validate Services to Start Algorithm:** Implement utility-specific rules to validate the services that are started. This validation is completed after performing question and response processing.
  - **Determine Services To Start Algorithm:** Implement utility-specific rules to retrieve the services that are started for the service points at the premise. This processing is completed prior to performing question and response processing.
  - **Process Services To Start Algorithm:** Implement utility-specific rules to process the services that are started for the service points at the premise. This processing is completed when finalizing the add service request.
  - **Create Customer Contact:** Define the controls for creating a customer contact on finalization of the add service request. If you select **Yes** to create a customer contact, you must define the following:
    - **Customer Contact Class:** Select the class for the customer contacts that are created when adding new service.
    - **Customer Contact Type:** Select the customer contact type for the customer contacts that are created when adding new service. The customer contact type selected must require Person, Account, and Premise as these are used on creation of the customer contact. The entity relationship should be set to Person and Account Only.
6. Click **Save**.
  7. For the configuration of Questions, Service Eligibility, and Response-related updates, refer to the embedded help in Customer Care and Billing or the *Questions and Response Processing* topic in the *Oracle Utilities Customer Care and Billing User Guide*. Refer to the [Customer Care and Billing product library](#).

#### To configure a customer service request type for stopping services

1. Log in to Customer Care and Billing.
2. From the **Admin** menu, select **Customer**, select **Customer Service Request Type**, and then select **Add**. The Select Business Object dialog box opens.
3. Select From the **Customer Service Request Type Business Object** drop-down list, select **Self-Service Stop Service Request Type**, then select **OK**. The Customer Service Request Type page is displayed.

4. Provide the following information:
  - **Customer Service Request Task Type:** Provide a name to identify the customer service request task type object such as STOP-SERVICE-CUSTOMER-SERVICE-REQUEST.
  - **Description:** Provide a brief description, such as Stop Service Customer Service Request Task Type.
  - **Detailed Description:** Provide a more detailed explanation of the object as required.
  - **Customer Service Request Business Object:** Stop Service Request
  - **CS Request Person Business Object:** C1-CustSvcRequestPerson
  - **CS Request Account Business Object:** C1-CustSvcRequestAccount
  - **CS Request Premise Business Object:** C1-CustSvcRequestPremise
  - **CS Request Stop SA Business Object:** C1-StopServiceRequestSA
5. The configuration of the following controls varies depending on the business rules of the utility. For additional information on how these controls are used, refer to the *Stop Service Operations* topic in the *Oracle Utilities Customer Care and Billing User Guide*. Refer to the [Customer Care and Billing product library](#).
  - **Common Service Controls:** Define the controls for validating the stop start date:
    - **Work Calendar:** Select the applicable calendar that is used for validating the service stop date.
    - **Lead Days:** Enter the applicable number of working, lead days for the stop service requests.
    - **Cutoff Time:** Select a time of day in which a customer must make a stop service request to consider only the lead days. If a customer creates a request after the cut off time, the request cannot be made for lead days plus one additional day.
    - **Time Zone:** Select the applicable time zone used for validating the service stop date.
    - **Maximum Stop Days In Future:** Select how many days in the future a customer can select from when requesting their service request. This includes weekends and holidays.
    - **Determine Services To Stop Algorithm:** Implement utility-specific rules to retrieve the services that are stopped for the service points at the premise. This processing is completed prior to performing question and response processing.
    - **Process Services To Stop Algorithm:** Implement utility-specific rules to process the services that are stopped for the service points at the premise. This processing is completed when finalizing the stop service request.



- **Stop Level:** Defines whether service is stopped for an entire premise, an account, or for service agreements. If you select **SA**, you can select **Require SAs At Same SP To Behave Together** to validate that all service agreements at the same service point are selected to stop together.
  - **Validate Services to Stop Algorithm:** Implement utility-specific rules to validate the services that are stopped. This validation is completed after performing question and response processing.
  - **Create Customer Contact:** Define the controls for creating a customer contact on finalization of the stop service request. If you select **Yes** to create a customer contact, you must define the following:
    - **Customer Contact Class:** Select the class for the customer contacts that are created when stopping service.
    - **Customer Contact Type:** Select the customer contact type for the customer contacts that are created when stopping service. The customer contact type selected must require Person, Account, and Premise as these are used on creation of the customer contact. The entity relationship should be set to Person and Account Only.
6. Click **Save**.
  7. For the configuration of Questions, Service Eligibility, and Response-related updates, refer to the embedded help in Customer Care and Billing or the *Questions and Response Processing* topic in the *Oracle Utilities Customer Care and Billing User Guide*. Refer to the [Customer Care and Billing product library](#).

#### To configure a customer service request type for transferring services

1. Log in to Customer Care and Billing.
2. From the **Admin** menu, select **Customer**, select **Customer Service Request Type**, and then select **Add**. The Select Business Object dialog box opens.
3. Select From the **Customer Service Request Type Business Object** drop-down list, select **Self-Service Transfer Service Request Type**, then select **OK**. The Customer Service Request Type page is displayed.
4. Provide the following information:
  - **Customer Service Request Task Type:** Provide a name to identify the customer service request task type object such as TRANSFER-SERVICE-CUSTOMER-SERVICE-REQUEST.
  - **Description:** Provide a brief description, such as Transfer Service Customer Service Request Task Type.
  - **Detailed Description:** Provide a more detailed explanation of the object as required.
  - **Customer Service Request Business Object:** Transfer Service Request

- **CS Request Person Business Object:** C1-CustSvcRequestPerson
  - **CS Request Account Business Object:** C1-CustSvcRequestAccount
  - **CS Request Premise Business Object:** C1-CustSvcRequestPremise
  - **CS Request Start SA Business Object:** C1-StartServiceRequestSA
  - **CS Request Stop SA Business Object:** C1-StopServiceRequestSA
5. The configuration of the following controls varies depending on the business rules of the utility. For additional information on how these controls are used, refer to the *Transfer Service Operations* topic in the *Oracle Utilities Customer Care and Billing User Guide*. Refer to the [Customer Care and Billing product library](#).
- **Person Controls:** Define the controls for an individual main customer. These configurations are required to support residential customers:
    - **Start Service Eligibility Algorithm:** Implement utility-specific rules within an algorithm to determine if a customer is eligible to start new service. Select the applicable algorithm that defines these rules.
  - **Business Controls:** Define the controls for accounts that manage business entities. These configurations are required to support non-residential customers:
    - **Start Service Eligibility Algorithm:** Implement utility-specific rules within an algorithm to determine if a customer is eligible to start new service. Select the applicable algorithm that defines these rules.
  - **Common Service Controls:** Define the controls for validating the service start date:
    - **Work Calendar:** Select the applicable calendar that is used for validating the service start date.
    - **Lead Days:** Enter the applicable number of working, lead days for the start service requests.
    - **Cutoff Time:** Select a time of day in which a customer must make a start service request to consider only the lead days. If a customer creates a request after the cut off time, the request cannot be made for lead days plus one additional day.
    - **Time Zone:** Select the applicable time zone used for validating the service start date.
    - **Maximum Start Days In Future:** Select how many days in the future a customer can select from when requesting their service request. This includes weekends and holidays.
  - **Deposit Required:** Defines the rule for assessing a deposit. If Algorithm is selected, you must define the following configurations which are used for calculating the deposit and creating the deposit service agreement:
    - **Deposit Required Algorithm:** Implement utility-specific rules to determine if deposit is required and select the applicable algorithm.

- **CIS Division:** Select the applicable CIS division.
- **SA Type:** Select the applicable service agreement type.
- **Start Option:** Select the applicable start option.
- **Allow Bill in Full:** Select this checkbox to allow customers to pay their bill in one lump sum. If this option is selected, installment amount settings are ignored.
- **Minimum Installment Amount:** Enter a minimum installment amount to enable customers to pay their bill in installments.
  - **Number of Installments:** If a minimum installment amount is provided and Allow Bill in Full is cleared, enter the number of installments each bill is broken down into for payment.
- **Start Level:** Defines whether service is started for an entire premise or is done for individual services. If you select **Individual Services**, you must select algorithms to validate the service points with the **Validate Service Points to Start Algorithm** options. This validation is completed prior to performing question and response processing.
- **Validate Services to Start Algorithm:** Implement utility-specific rules to validate the services that are started. This validation is completed after performing question and response processing.
- **Determine Services To Start Algorithm:** Implement utility-specific rules to retrieve the services that are started for the service points at the premise. This processing is completed prior to performing question and response processing.
- **Process Services To Start Algorithm:** Implement utility-specific rules to process the services that are started for the service points at the premise. This processing is completed when finalizing the add service request.
- **Create Customer Contact:** Define the controls for creating a customer contact on finalization of the start service request. If you select **Yes** to create a customer contact, you must define the following:
  - **Customer Contact Class:** Select the class for the customer contacts that are created when adding new service.
  - **Customer Contact Type:** Select the customer contact type for the customer contacts that are created when adding new service. The customer contact type selected must require Person, Account, and Premise as these are used on creation of the customer contact. The entity relationship should be set to Person and Account Only.
- **Stop Service Controls:** Define the controls for validating the stop start date:
  - **Work Calendar:** Select the applicable calendar that is used for validating the service stop date.

- **Lead Days:** Enter the applicable number of working, lead days for the stop service requests.
- **Cutoff Time:** Select a time of day in which a customer must make a stop service request to consider only the lead days. If a customer creates a request after the cut off time, the request cannot be made for lead days plus one additional day.
- **Time Zone:** Select the applicable time zone used for validating the service stop date.
- **Maximum Stop Days In Future:** Select how many days in the future a customer can select from when requesting their service request. This includes weekends and holidays.
- **Determine Services To Stop Algorithm:** Implement utility-specific rules to retrieve the services that are stopped for the service points at the premise. This processing is completed prior to performing question and response processing.
- **Process Services To Stop Algorithm:** Implement utility-specific rules to process the services that are stopped for the service points at the premise. This processing is completed when finalizing the stop service request.
- **Stop Level:** Defines whether service is stopped for an entire premise, an account, or for service agreements. If you select **SA**, you can select **Require SAs At Same SP To Behave Together** to validate that all service agreements at the same service point are selected to stop together.
- **Validate Services to Stop Algorithm:** Implement utility-specific rules to validate the services that are stopped. This validation is completed after performing question and response processing.
- **Create Customer Contact:** Define the controls for creating a customer contact on finalization of the stop service request. If you select **Yes** to create a customer contact, you must define the following:
  - **Customer Contact Class:** Select the class for the customer contacts that are created when stopping service.
  - **Customer Contact Type:** Select the customer contact type for the customer contacts that are created when stopping service. The customer contact type selected must require Person, Account, and Premise as these are used on creation of the customer contact. The entity relationship should be set to Person and Account Only.

6. Click **Save**.

7. For the configuration of Questions, Service Eligibility, and Response-related updates, refer to the embedded help in Customer Care and Billing or the *Questions and*

*Response Processing* topic in the *Oracle Utilities Customer Care and Billing User Guide*. Refer to the [Customer Care and Billing product library](#).

## Disabling Back-to-Back Stop and Start Service Requests

By default, a start service request can be initiated if there is still an active service on the premise, such as an active service for a previous resident. Often referred to as back-to-back requests, when supported, starting service initiates a stop service request for the active service for the premise. You can disable the support for these types of start service requests if this type of scenario is handled through other processing.

### To disable support for back-to-back stop and start service requests

1. Log in to Customer Care and Billing.
2. From the **Admin** menu, select **System**, select **Business Object**, and then select **Search**. The Business Object Query dialog box opens.
3. Enter `C1-SSStartStopXferServiceTask` in the **Business Object** field and select **Search**. The applicable business object is displayed in the search results.
4. Select the link in the description column to open the object.
5. From the **Algorithm** tab make the following updates:
  - **Business Object System Event:** Validation
  - **Sequence:** Provide an applicable value.
  - **Algorithm:** `C1SSVBTBSVC`
6. Click **Save**.

## Configuring Mailing Address Validation

Customers can edit the mailing address in account preferences. Mailing address validation can be enabled to highlight to customers when the address provided is not valid. This configuration is applicable to all versions of the Start, Stop, and Transfer service features.

### To configure mailing address validation

1. Log in to Customer Care and Billing.
2. From the **Admin** menu, select **Feature Configuration**, and then select **Search**. The Feature Configuration Search dialog box opens.
3. In the **Feature Type** field, select **General System Configuration**, and then select **Search**.
4. Open the **General System Configuration**.
5. Select the plus icon, from the **Option Type** select **Address Validation Self-Service Script** and define the following:

- **Sequence:** 1
  - **Value:** C1-ValAddr
6. Select the plus icon, from the **Option Type** select **Allow Address Validation** and define the following:
    - **Sequence:** 1
    - **Value:** Y
  7. From the **Admin** menu, select **System**, select **Algorithm**, and then select **Search**. The Algorithm Search dialog box opens.
  8. In the **Algorithm Code** field, type F1-ORAGEOCD and select **Search**. The F1-ORAGEOCD algorithm is displayed. Review and modify algorithm as needed.
  9. From the **Geocoding JNDI Data Source** row of the table, modify the **Value** column to be defined as GEOSAMPL.
  10. Mailing address validation must also be enabled by Oracle Utilities. Request this support by providing the input as part of "Reviewing Start, Stop, and Transfer Service Configuration Options" on page 98.

### Configuring Messaging and Behavior

**Note:** This documentation provides steps to complete configuration tasks using the Opower Configuration Tool. For more information on using the Opower Configuration Tool, refer to the [Oracle Utilities Opower Configuration Tool User Guide](#).

To configure Start, Stop, and Transfer Service messaging and behavior:

1. From the Opower Configuration Tool, select **Widgets**, and then select the applicable widget:
  - **Sst** (widget-sst): The configurations to support existing customers using Start, Stop, and Transfer Service Classic features.
  - **Sst** (widget-sst-on-loginforkpage): The configurations to support new customers using Start, Stop, and Transfer Service Classic features.
  - **Sst Enhanced** (widget-sst-enhanced): The configurations to support existing customers using Start, Stop, and Transfer Service features.
  - **Sst Enhanced** (widget-sst-enhanced-on-loginforkpage): The configurations to support new customers using Start, Stop, and Transfer Service features.
2. To configure text and messages of the feature:
  - a. Select **Text (locale)**, where **locale** is the language locale you are configuring.
  - b. Text and messages are included for the text used throughout the various experiences of the Start, Stop, and Transfer features. For example, from the

**General** tab, the **Address Line Placeholder** configuration allows for the definition of the input field for customers to enter their address.

- c. Select **Save Changes** to save any changes to the default text and messages. Text and messages that are directly available are updated in the preview, while text and messages in secondary locations may not be directly highlighted in the preview.
3. To configure the behavior of the feature:
  - a. Select **Functionality**.
  - b. Make any required configuration changes. For example, from the **Basic** tab, the **Service States** options allow you to define which states are supported for utilities that configure multiple CIS divisions (see "Supporting Multiple Divisions" on page 11). The help text provided with configurations can provide additional explanation of each available option.
  - c. Select **Save Changes** to save any changes to the default configurations. Certain configurations that are directly available are updated in the preview, while some configurations may not be directly highlighted in the preview.
4. Refer to the [Oracle Utilities Opower Configuration Tool User Guide](#) for steps to publish configuration changes.
5. Repeat these steps for each Start, Stop, and Transfer Service widget that you require to configure. This can include configuring a single widget if only the authenticated experience is used, or configuring two widgets if both authenticated and unauthenticated experiences are used. It would be unexpected to configure both versions of the features, since only one version of the features can be enabled at a time for customers.

## Service Appointments

Self-service options are available to the customer customers to schedule and manage appointments easily and effectively.

### Configuring Service Appointments

The Service Appointments feature allows customers to schedule and manage appointments easily and effectively through the self-service portal.

**Note:** This documentation provides steps to complete these configuration tasks using Oracle Utilities Customer Care and Billing. However, many of these tasks can be completed with other applicable products such as Oracle Utilities Customer to Meter or Oracle Utilities Customer Cloud Service. Refer to your applicable product

documentation for steps to complete the configuration using your Oracle Utilities product. Additionally, this documentation assumes that you know how to create the various objects listed below as well as modify or create master configurations. For additional details on these tasks, refer to the applicable [Oracle Utilities Documentation](#).

### To configure a self-service task type

Complete the following steps to define the self-service task for service appointments.

1. Log in to Customer Care and Billing.
2. From **Menu**, select **Self-Service**, select **Self-Service Task Type**, and select **Add**. The Select Business Object page is displayed.
3. From the **Service Task Type Business Object** drop-down list, select **Manage Appointment Service Task Type**, and then select **OK**. The Manage Appointment Service Task Type Maintenance page is displayed.
4. Define the following required information for the self-service task type:
  - **Service Task Type**: Provide a name for the object such as ServiceAppointment
  - **Related Transaction Object**: Manage Appointment Service Task
  - **Description**: Provide a descriptive name for the object such as Service Appointment
  - **Service Task Type Status**: Active
  - **Self Service Task Type**: Self-Service
5. Select **Save** to create the self-service task type.

### To configure a Field Task Types for applicable service types

The service types that are included in the list of Service Appointment options for customers must have applicable Field Task Types defined for them. Additionally, those Field Task Types must be defined to require appointments.

1. Log in to Customer Care and Billing.
2. From the **Admin** menu, select **General**, and select **Extendable Lookup**. The Extendable Lookup Query page is displayed.
3. In the **Business Object** field, type `D1-FieldTaskTypeLookup` and then select the **Search**. Select the **Field Task Type** link in the search results, and the Extendable Lookup page is displayed.
4. For every Field Task Type that is to be available as an option for customers in Service Appointments:



- a. Select the **Edit** option for the Field Task Type. The configuration for the field task type is displayed.
- b. From the **Appointment Option** drop-down list, select **Required**.
- c. Select **Save**.

### To configure self-service integration

1. Log in to Customer Care and Billing.
2. Access the applicable appointment scheduling options:
  - For implementations with a single CIS Division:
    - a. From the **Admin** menu, select **General**, and select **Master Configuration**. From the **Master Configuration** zone, select the **Edit** option for the **CC&B Self-Service Integration** master configuration. The master configuration is displayed.
  - For implementation with multiple CIS Divisions:
    - From the **Admin** menu, select **General**, and select **Extendable Lookup**. The Extendable Lookup Query page is displayed.
    - In the **Business Object** field, type `C1-SelfServiceIntegration` and then select the **Search**. Select the applicable link in the search results, and the Extendable Lookup page is displayed.
    - Select the Edit option for the CIS Division being updated.
3. In the **Appointment Scheduling** section, define the following information:
  - **Default Service Task Type**: Select the self-service task type created in "To configure a self-service task type" on page 149.
  - Add an entry for every **Service Point Type** and their applicable **Field Task Types** that are eligible for scheduling through Service Appointments. For example, a Trim a tree Field Task Type can be an applicable service for electricity Service Points.
4. Select **Save**.

### To define alerts for need to schedule service appointments

Alerts can be displayed in Digital Self Service - Transactions to notify customers when there is a Field Activity that requires an appointment to be scheduled.

**Note:** For additional information on a Digital Self Service - Transactions alerts and notifications configuration, see "Alerts and Notifications" on page 175.

1. Log in to Customer Care and Billing.
2. From the **Admin** menu, select **General**, and select **Master Configuration**. From the **Master Configuration** zone, select the **Edit** option for the **CC&B Self-Service Integration** master configuration. The master configuration is displayed.
3. From the **Digital Self Service Alerts** zone, add the following new alert:
  - **Alert Category:** FA Appointment Alerts
  - **Alert Type:** FA Appointment Required
  - **Priority:** Define an applicable priority
  - **Alert Severity:** Define an applicable severity
  - **Script:** X1AppntAlert
4. Click **Save** to save the master configuration changes.

### To configure the Date Format

1. Log in to Customer Care and Billing.
2. From the **Admin** menu, select **General**, select **Display Profile**, and select **Search**. The Display Profile page is displayed.
3. From the **Display Profile**, enter applicable information to search for the system user used for the Digital Self Service - Transactions to Customer Care and Billing integration. Select **Search** to display user results.
4. Select the Display Profile for the applicable user to display the configuration.
5. Verify or update the following information:
  - **Date Format:** MM-dd-yyyy
  - **Time Format:** hh:mma
6. Select **Save** to apply any changes.

### Configuring Service Appointments Messaging and Behavior

**Note:** This documentation provides steps to complete configuration tasks using the Opower Configuration Tool. For more information on using the Opower Configuration Tool, refer to the [Oracle Utilities Opower Configuration Tool User Guide](#).

### To configure Service Appointments messaging and behavior:

1. From the Opower Configuration Tool, select **Widgets**, and then select **Field Activity Appointments**. The configurations for Service Appointments are displayed.

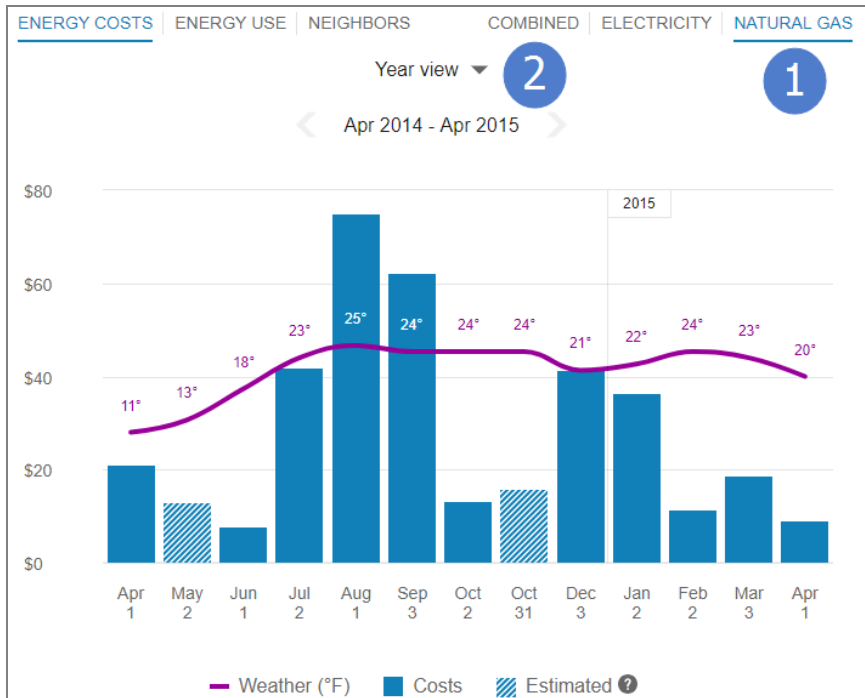
2. To configure text and messages of the Service Appointments feature:
  - a. Select **Text (locale)**, where **locale** is the language locale you are configuring.
  - b. Text and messages are included for the text used throughout the various experiences of the Service Appointment features. For example, the **New Appointment Message SubText Primary Content** configuration allows for the definition of the message provided along with the option to schedule a new service appointment. This can be used to provide important information on the types of service appointments that can be made, and how other events such as an emergency gas leak should be handled.
  - c. Select **Save Changes** to save any changes to the default text and messages. Text and messages that are directly available are updated in the preview, while text and messages in secondary locations such as error messages may not be directly highlighted in the preview.
3. To configure the behavior of the Service Appointments feature:
  - a. Select **Functionality**.
  - b. Make any required configuration changes. For example, the **Look Ahead Days** option allows you to define the default number of days ahead of the current date to initially display available appointment times. The help text provided with configurations can provide additional explanation of each available option.
  - c. Select **Save Changes** to save any changes to the default configurations. Certain configurations that are directly available are updated in the preview, while some configurations may not be directly highlighted in the preview.
4. Refer to the [Oracle Utilities Opower Configuration Tool User Guide](#) for steps to publish configuration changes.

## Data Browser

The Data Browser is an interactive tool that allows customers to visualize and explore their energy use trends and costs, and make comparisons to useful benchmarks, such as weather and similar homes. Use the images and tables below to review the available configuration options.

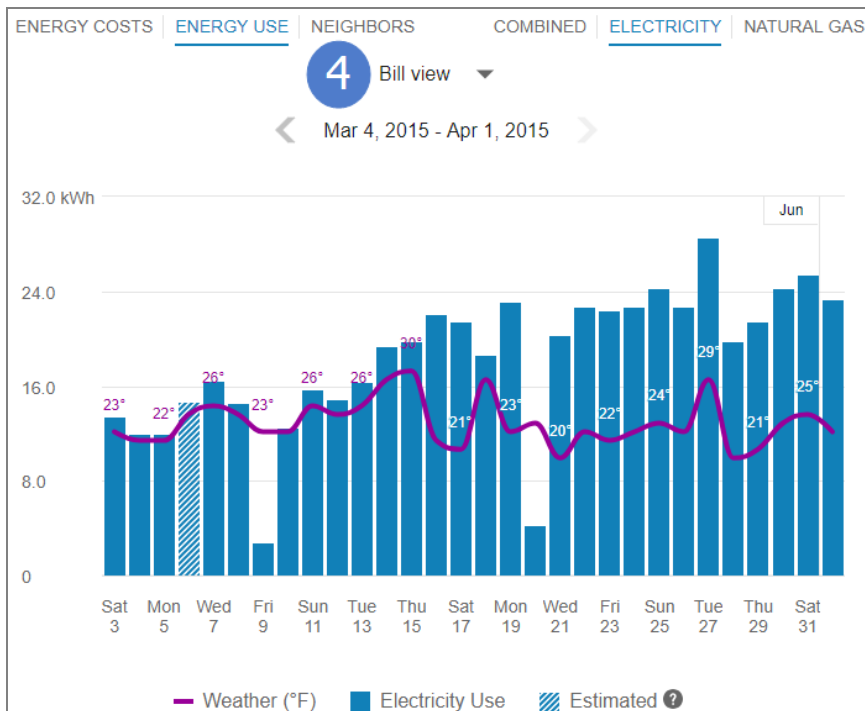
## Energy Costs View

The image below is an example of the Energy Costs view and its primary configuration options.

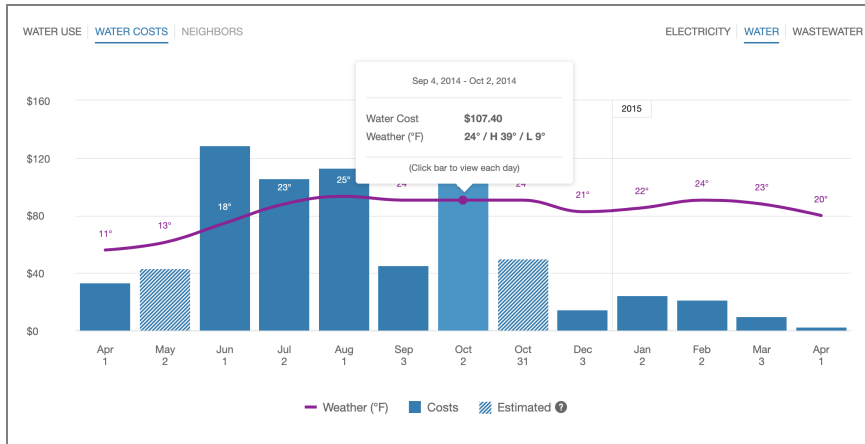


## Energy Use View

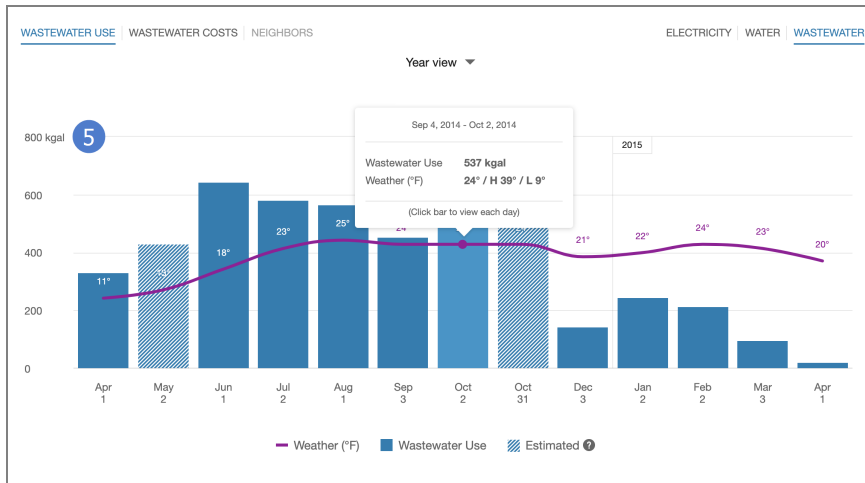
The image below is an example of the Energy Use view and its primary configuration options.



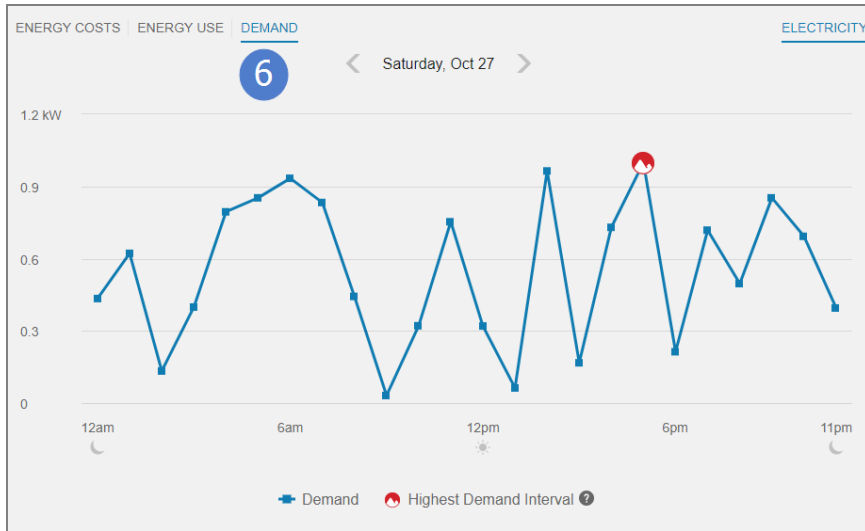
## Water or Wastewater Costs View



## Water or Wastewater Use View

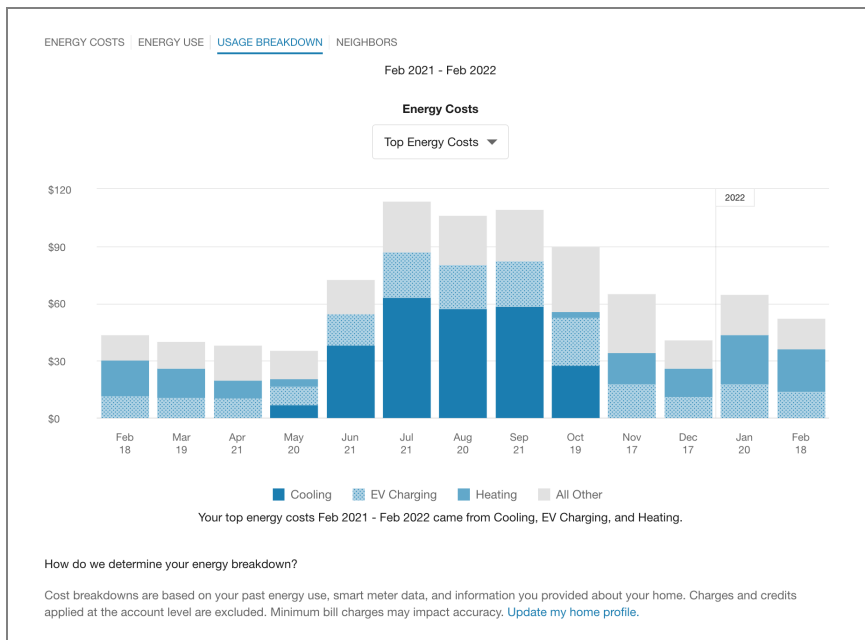


## Demand View



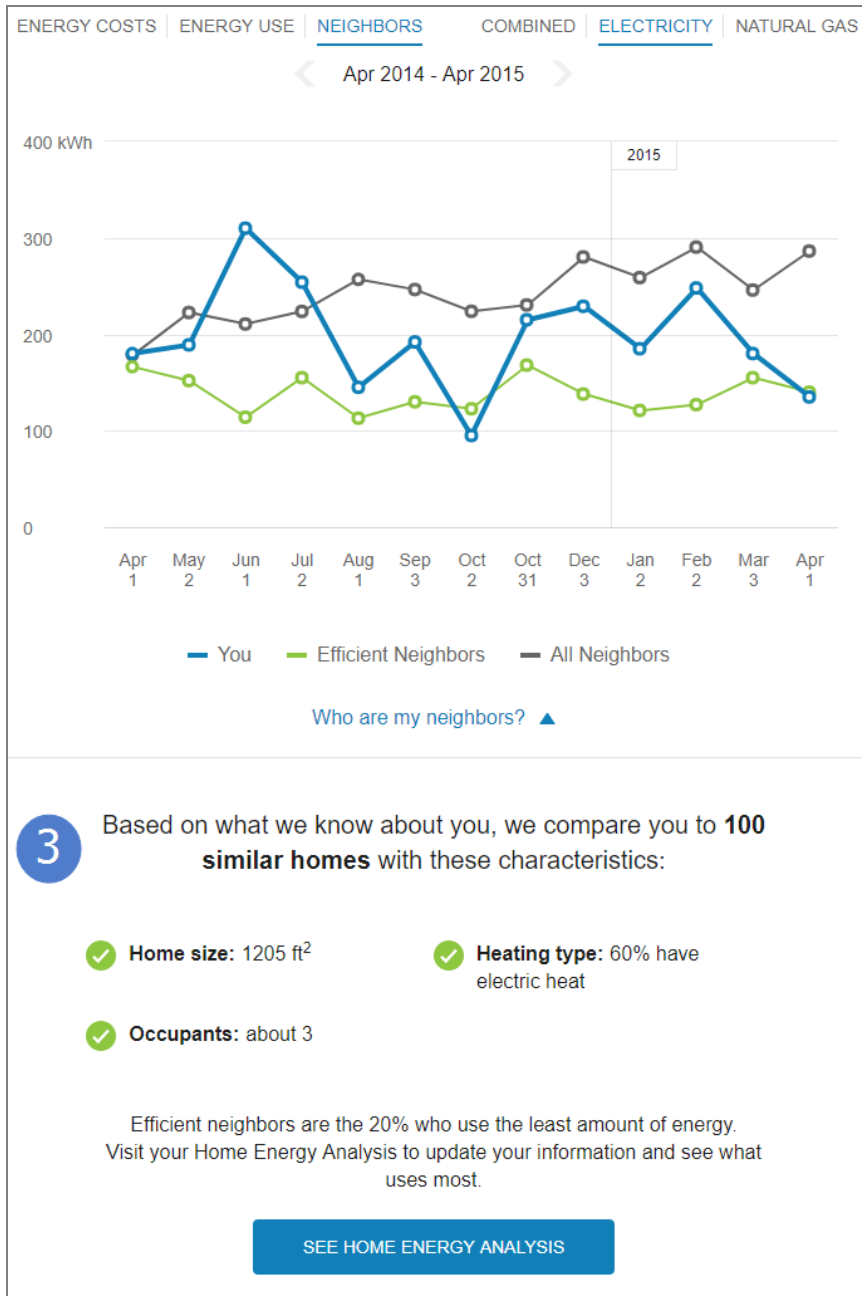
## Usage Breakdown View

The image below is an example of the Usage Breakdown view.



## Neighbors View

The image below is an example of the Neighbors view and its primary configuration options.



## Configuration Options

For each element listed in the table, indicate the desired configuration in the Input Value column. If you do not provide an input for optional configurations, the default will be used.

Configuration Option	Input Value
<p><b>Graph / View Display and Order (not depicted)</b></p> <p>Utilities can choose which graphs or views to display, and the order in which to display them.</p> <p><b>Default:</b> The following views are displayed in the order listed as long as there is sufficient data: Energy Costs, Energy Use, and Neighbors.</p> <p>The <a href="#">Usage Breakdown</a> view is hidden by default.</p>	<p><b>Required</b></p> <p>Choose one of the following:</p> <p>Use the default.</p> <p>Work with your Delivery Team to choose the views to display and the order.</p>
<p><b>Tooltip Explanation Link for Estimated Reads (not depicted)</b></p> <p>Utilities can provide a URL to include as an explanation link for estimated reads.</p> <p><b>Default:</b> No link provided.</p>	<p><b>Optional</b></p> <p>Choose one of the following:</p> <p>Use the default.</p> <p>Provide a URL.</p>
<p><b>1. Default Fuel or Resource Type Selected</b></p> <p>Utilities can choose which fuel or resource type to be selected by default.</p> <p><b>Default:</b> Display electric data as default.</p>	<p><b>Optional</b></p> <p>Choose one of the following:</p> <p>Display electric data as the default.</p> <p>Display gas data as the default.</p> <p>Display combined fuel (electric and gas) as the default.</p> <p>Display water as the default.</p> <p>Display</p>



Configuration Option	Input Value
	wastewater as the default.
<p><b>2. Combined Fuel View</b></p> <p>For dual fuel customers with electricity and gas service, a combined fuel view combines the energy use for gas and electricity into a single "units" value. When combined fuel view is enabled, applicable tooltips also display combined totals. Combined view also includes billing insights for a customer's energy costs.</p> <p><b>Default:</b> Hide the combined fuel view.</p>	<p><b>Optional</b></p> <p>Choose one of the following:</p> <p>Use the default.</p> <p>Display combined fuel view.</p>
<p><b>3. Dynamic or Static Number of Neighbors Language</b></p> <p>Determines the language used to describe the number of neighbors that the customer is being compared to. A static estimate may be used.</p> <p><b>Default:</b> Language describing number of neighbors is calculated dynamically.</p>	<p><b>Optional</b></p> <p>Choose one of the following:</p> <p>Use the default.</p> <p>Use the following number as the static estimate.</p>
<p><b>3. "Neighbors" Terminology</b></p> <p>"Neighbors" terminology can be replaced by "Similar Homes" terminology.</p> <p><b>Default:</b> Use "Neighbors" terminology.</p>	<p><b>Optional</b></p> <p>Choose one of the following:</p> <p>Use the default option.</p> <p>Use "Similar Homes" terminology.</p>
<p><b>4. Default Time View</b></p> <p>The Bill view can be displayed by default for customers with AMI data. Customers without AMI data can only use the Year</p>	<p><b>Optional</b></p> <p>Choose one of the following:</p>

Configuration Option	Input Value
<p>view.</p> <p><b>Default:</b> Display the Year view as the initial view. Customers with AMI data can then select to see the Bill view or Day view.</p>	<p>Display Year view as the default.</p> <p>Display Bill view as the default for customers with AMI data.</p>
<p><b>5. Water and Wastewater Units of Measure</b></p> <p>Customers viewing their water or wastewater use are presented the values in an applicable unit of measure. This unit of measure is represented on the Y axis of the view as well as in any applicable tooltips.</p> <p><b>Default:</b> kgal (kilogallons)</p>	<p><b>Optional</b></p> <p>Choose one of the following:</p> <p>Use the default option.</p> <p>Provide the unit of measure for water and wastewater use.</p>
<p><b>6. Demand View</b></p> <p>The Demand view visualizes demand (kW) and reactive power (kVAR) data for commercial and industrial customers.</p> <p><b>Default:</b> Disable Demand View</p>	<p><b>Optional</b></p> <p>Choose one of the following:</p> <p>Use the default option.</p> <p>Enable Demand View.</p>
<p><b>Costs Footer or Disclaimer (not depicted)</b></p> <p>A brief message displayed below the views that display a customer's costs. Depending on the service types for the customer, this can include Energy Costs, Water Costs, and Wastewater Costs.</p> <p><b>Default:</b> None</p>	<p><b>Optional</b></p> <p>Choose one of the following:</p> <p>Use the default option.</p>

Configuration Option	Input Value
	<p>Display a footer or disclaimer. Provide a short message to include in the footer or disclaimer.</p>
<p><b>Use Footer or Disclaimer (not depicted)</b></p> <p>A brief message displayed below the views that display a customer's use. Depending on the service types for the customer, this can include Energy Use, Water Use, and Wastewater Use.</p> <p><b>Default:</b> None</p>	<p><b>Optional</b></p> <p>Choose one of the following:</p> <p>Use the default option.</p> <p>Display a footer or disclaimer. Provide a short message to include in the footer or disclaimer.</p>
<p><b>Neighbors Footer or Disclaimer (not depicted)</b></p> <p>A brief message displayed below the Neighbors view.</p> <p><b>Default:</b> None</p>	<p><b>Optional</b></p> <p>Choose one of the following:</p> <p>Use the default option.</p> <p>Display a footer or disclaimer. Provide a short message to include in the footer or disclaimer.</p>

Configuration Option	Input Value
<p><b>Demand Footer or Disclaimer (not depicted)</b></p> <p>A brief message displayed below the Demand view.</p> <p><b>Default:</b> None</p>	<p><b>Optional</b></p> <p>Choose one of the following:</p> <p>Use the default option.</p> <p>Display a footer or disclaimer. Provide a short message to include in the footer or disclaimer.</p>
<p><b>Peak Time Rebates Annotation (not depicted)</b></p> <p>Peak event days and hours are highlighted with icons and tooltips. The tooltips display details regarding the credits the customer earned by participating in a peak event.</p> <p><b>Default:</b> Disabled</p>	<p><b>Optional</b></p> <p>Choose one of the following:</p> <p>Use the default.</p> <p>Enable Peak Time Rebate Annotation.</p>
<p><b>Peak Time Rebates Annotation Learn More Link (not depicted)</b></p> <p>Utilities can provide a URL to include as a Learn More link for Peak Time Rebates annotations.</p> <p><b>Default:</b> None</p>	<p><b>Optional</b></p> <p>Choose one of the following:</p> <p>Use the default.</p> <p>Provide a URL.</p>

**User Experience Variations**

The user experience of this feature may vary for customers and utilities depending on their service types (gas, electricity, dual fuel, and so on), available data, costs, locale, and other factors. For more information, see [Data Browser](#) in the *Digital Self Service - Energy Management Cloud Services Overview*. You can also visit the related pages (such as [Energy Costs View](#) and [Energy Use View](#)) for additional user experience variations. For

more information, see [Data Browser](#) in the *Digital Self Service - Transactions Cloud Services Overview*. You can also visit the related pages (such as [Energy Costs View](#) and [Energy Use View](#)) for additional user experience variations.

## Green Button

The Green Button allows customers to export their billing data into CSV or XML format. It is typically located beneath the [Data Browser](#). When a customer clicks the Green Button link, a **Download my data** section displays and allows the customer to choose between downloading their data in CSV or XML format.

## Green Button Example

The images below show examples of the Green Button feature's behavior. Typically the Green Button is displayed under the Data Browser.



When a customer clicks the Green Button link, a **Download my data** section displays and allows the customer to choose from different options. The options displayed vary depending on whether the customer has billing data or AMI data. The example below displays options for customers who have AMI data.

## Configuration Options

There are no configuration options specific to Green Button.

## User Experience Variations

The user experience of the feature may vary for customers and utilities depending upon their service types (gas, electricity, dual fuel, and so on), available data, costs, locale, and other factors. For more information, see [Green Button](#) in the *Digital Self Service Energy Management Cloud Services Overview Guide* and go to the User Experience Variations section.

## Notifications

Customers can review and modify their notifications, alerts, and communications for their account, as well as define the contact methods for each applicable communication. To configure the available alerts and notifications included with Digital Self Service - Transactions, you must complete the following tasks:

- **Alerts and Notifications:** Alert and notifications provide important information to the customer directly from the Digital Self Service - Transactions web portal.
  - Review all feature configuration options listed in "Notifications Configuration Options" on page 164.
  - Complete alert configuration as described in "Configuring Notifications" on page 175.
- **Account Notifications:** Account notification preferences can include contact methods, bill delivery, and billing and payment alerts that are sent to the specified contacts.
  - Review all feature configuration options listed at "Account Notifications Configuration Options" on page 167.
  - Complete self-service task configuration, as described at "Account Notifications" on page 179.

- Complete outbound notification configurations, as described at "Configuring Outbound Notifications" on page 181.
- **Energy Use Communications:** Energy use communications can include Behavioral Load Shaping emails, Home Energy Reports, Weekly Energy Updates, and High Bill Alerts. Review all feature configuration options listed at "Energy Use Communications Configuration Options" on page 170.
- **Outage Notifications:** Outage notifications can provide important alerts to customers when there is a service outage.
  - Review all feature configuration options listed at "Outage Configuration Options" on page 172.
  - You must integrate your Kubra Notifi Alerts and Preferences Management solution with your applicable Oracle Utilities product to support outage notifications, such as Oracle Utilities Customer Care and Billing. Refer to the applicable third-party Kubra documentation for steps to integrate your Kubra system with Oracle Utilities. Additionally, you must work with your Oracle Utilities Delivery Team to provide applicable security keys and URL paths for your Kubra system.

## Notifications Configuration Options

Use the tables below to review all feature configuration options alerts and notifications features, including the alerts and notifications highlighted on the Overview Dashboard which can be submitted as a request using [My Oracle Support](#).

**Note:** You can use the Opower Configuration Tool to implement certain configurations for Digital Self Service - Transactions. This can include user experience configurations, interface messages and formats, branding configurations, and other configurations relevant to Digital Self Service - Transactions. To review if any configurations listed below are available with the Opower Configuration Tool, access the tool at <https://configuration.opower.com/> and review the available options for the pages and widgets included in your Digital Self Service - Transactions web portal.

## Alerts and Notifications

Customers are presented with all active alerts and notifications for their account.

Current account:

Elliot, Gina



# Alerts & Notifications 1

▲ Your bill is past due for 16 days. [View bill](#)

< 1 of 1 >

Use the table below to review all available configuration options.

Image Number	Configuration Option
1	<p><b>Title</b></p> <p><b>Default:</b> Alerts &amp; Notifications</p>
Not Depicted	<p><b>Error Message Title</b></p> <p>An error message is displayed when errors prevent the display alerts and notifications</p> <p><b>Default:</b> We're sorry, but something went wrong.</p>
Not Depicted	<p><b>Error Message Details</b></p> <p><b>Default:</b> We're unable to retrieve your information right now.</p>



Image Number	Configuration Option
Not Depicted	<p><b>Error Message Additional Details</b></p> <p><b>Default:</b> Please try again later.</p>
Not Depicted	<p><b>No Alerts Title</b></p> <p>A message is displayed for customers that have no active alerts or notifications.</p> <p><b>Default:</b> You don't have any alerts or notifications right now.</p>
Not Depicted	<p><b>No Alerts Details</b></p> <p><b>Default:</b> When you receive alerts or notifications, you'll see them here.</p>
Not Depicted	<p><b>No Alerts Additional Details</b></p> <p><b>Default:</b> Return to overview.</p>

**User Experience Variations**

The user experience varies for customers depending upon their service types, available data, costs, and locale. Note that the following list indicates the primary user experience variations, not all possible variations.

- **Customers Enrolled in Payment Extensions:** Alerts related to the due date of a customer's bill are impacted when a customer enrolls in payment extensions. When a customer enrolls in payment extensions, past due notifications are hidden for the customer. Alerts that relate to the due date such as Bill due today and Bill due in future are modified to reflect the due date of the payment extension.

**Alerts and Notifications on the Overview Dashboard**

Critical alerts that are defined with high severity are displayed at the top of the Overview Dashboard, along with a single non-critical notification or a summary of all non-critical notifications.

Your bill is past due for 16 days. [View bill](#)

Current account:

Elliot, Gina

Due Oct 16

**\$166.00**

You have multiple scheduled payments. [View Details](#)

**Your Account** #9940491655

1900 Great Dane Dr, San Francisco, CA, 94103

Paperless Billing Not enrolled  
 Automatic Payments Enrolled

Use the table below to review all available configuration options.

Image Number	Configuration Option
Not Depicted	<p><b>Loading Message</b></p> <p><b>Default:</b> Loading notifications</p>
Not Depicted	<p><b>Multiple Notifications</b></p> <p>Customers with more than one non-critical notification see a summary notification on the Overview Dashboard with the total number of non-critical alerts, along with a link to the Notification Center to view all alerts and notifications.</p> <p><b>Default:</b> You have [NumberOfNotifications] more notifications</p>

**Account Notifications Configuration Options**

The following image shows a standard example of Account Notifications and indicates the primary configuration option.

# Manage account notifications 1

## Contact methods 2

 (322) 543-6545 <span>Primary</span>	<span>3</span>	<a href="#">Remove</a> <a href="#">Edit</a>
 test@test.com <span>Primary</span>		<a href="#">Remove</a> <a href="#">Edit</a>
 (111) 111-1111 <span>4</span>		<a href="#">Remove</a> <a href="#">Edit</a>

[+ Add contact method](#)

## Bill Delivery 5

Mailing Address 500 Guerrero St 45 San Francisco CA, 94103 [Edit](#)

6 [Enroll in paperless billing](#)

## Notification preferences 7

Manage how you would like to receive alerts and notifications. Standard notifications require at least one contact.

Service Advisory

**Bill Due**

DAYS BEFORE

8

Send to (111) 111-1111 [Remove](#)

[Add another contact method](#)

Bill Ready

Bill Routing Email

Late Payment

Use the table below to review all available configuration options.

Image Number	Configuration Option
1	<p><b>Title</b></p> <p><b>Default:</b> Manage account notifications</p>
2	<p><b>Contacts Section Title</b></p> <p><b>Default:</b> Contact methods</p>
3	<p><b>Add Contact Method Message</b></p> <p><b>Default:</b> Add contact method</p>
Not Depicted	<p><b>Create Contact Method Section Title</b></p> <p>A section is displayed to customers when they select to add a contact method.</p> <p><b>Default:</b> Create a new contact method</p>
Not Depicted	<p><b>Edit Contact Method Section Title</b></p> <p>A section is displayed to customers when they select to edit a contact method.</p> <p><b>Default:</b> Edit contact method</p>
4	<p><b>Phone Format</b></p> <p>Locale format used to display customer telephone numbers.</p> <p><b>Default:</b> United States format (XXX) XXX-XXXX</p>
5	<p><b>Bill Delivery Section Title</b></p> <p><b>Default:</b> Bill Delivery</p>
6	<p><b>Paperless Billing Enrollment Message</b></p> <p>A link is displayed for customers who are not enrolled in paperless</p>

Image Number	Configuration Option
	<p>billing. Customers enrolled in paperless billing are presented with the applicable paperless contact method listed for their bill delivery.</p> <p><b>Default:</b> Enroll in Paperless Billing</p>
7	<p><b>Preferences Section Title</b></p> <p><b>Default:</b> Notification preferences</p>
7	<p><b>Alerts Section Explanation</b></p> <p><b>Default:</b> Manage how you would like to receive alerts and notifications. Standard notifications require at least one contact.</p>
8	<p><b>Notification Types</b></p> <p><b>Default:</b> Bill Due, Bill Ready, Bill Routing, Late Payment</p>

**Energy Use Communications Configuration Options**

The following image shows a standard example of Energy Use Communications.

## Set your energy use communication preferences

### Energy use communication recipients

Create and edit contact details for recipients of your account's communications and alerts.

▼ **Charlie Bishop (default)**

[EDIT](#)

EMAIL

cspouse@myemail.com

SMS

(408) 123-1234

VOICE

(408) 123-1234

[+ CREATE A NEW RECIPIENT](#)

### Energy use communications

Select how you and/or other recipients would like to receive the following communications and alerts.

#### Home Energy Reports

Personalized reports on your home's energy use.

#### Primary mailing address

Mail

#### Charlie Bishop

Email

#### Weekly energy updates

Reports that come at least monthly to compare your usage to your neighbors.

#### Charlie Bishop

Email

#### High usage alerts

#### Charlie Bishop

Email  SMS  Voice

Energy Use Communications options are available through the Digital Self Service - Energy Management Cloud Service. For more information on configuring Digital Self Service - Energy Management, see the [Oracle Utilities Opower Digital Self Service - Energy Management Configuration Guide](#).

## User Experience Variations

The user experience varies for customers depending upon their service types, available data, costs, and locale. Note that the following list indicates the primary user experience variations, not all possible variations.

- **Energy Use Communications:** Communications and alerts are displayed or hidden for all customers based on the utility level support for a product. This means that if a utility does not have a product, such as Peak Time Rebates, all communications and alerts for that product are hidden from all customers. Additionally, Home Energy Reports are only shown to customers that are recipients of Home Energy Reports.

## Outage Configuration Options

The following image shows a standard example of Outage notifications and indicates the primary configuration options.

## Notification Types

The notification types shown below are available when integrating with Customer Care and Billing notification preferences to support outage notifications.

### Notification preferences

Manage how you would like to receive alerts and notifications. Standard notifications require at least one contact.



#### Service Advisory

Send to (111) 111-1111 [Edit](#)

[Add another contact method](#)



This notification is standard and requires at least one contact.



#### Bill Due

DAYS BEFORE

Send to (111) 111-1111 [Remove](#)

[Add another contact method](#)



Bill Ready



Bill Routing Email



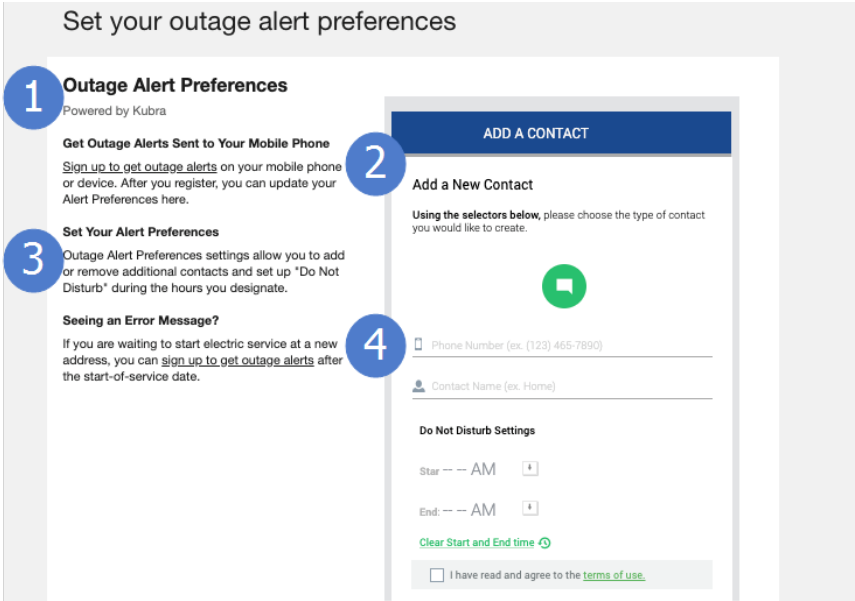
Late Payment

Use the table below to review all available configuration options.

Image Number	Configuration Option
1	<p><b>Notification Types</b></p> <p><b>Default:</b> Bill Due, Bill Ready, Bill Routing, Late Payment</p> <p>Refer to "Account Notifications Configuration Options" on page 167 for information on configuring notification types for outage notifications.</p>

**Kubra Integration Features**

The experience shown below is available when integrating your Kubra Notifi Alerts and Preferences Management solution with your applicable Oracle Utilities product to support outage notifications, such as Oracle Utilities Customer Care and Billing. Refer to the applicable third-party Kubra documentation for steps to integrate your Kubra system with Oracle Utilities. Additionally, you must work with your Implementation Team to provide applicable security keys and URL paths for your Kubra system.



Use the table below to review all available configuration options.



Image Number	Configuration Option
1	<p><b>Title</b></p> <p><b>Default:</b> Outage Alert Preferences</p>
1	<p><b>Subtitle</b></p> <p><b>Default:</b> Powered by Kubra</p>
2	<p><b>Sign-up Section Title</b></p> <p><b>Default:</b> Get Outage Alerts Sent to Your Mobile Phone</p>
2	<p><b>Sign-up Section Explanation</b></p> <p><b>Default:</b> Sign up to get outage alerts on your mobile phone or device. After you register, you can update your Alert Preferences here.</p>
3	<p><b>Set Your Preferences Section Title</b></p> <p><b>Default:</b> Set Your Alert Preferences</p>
3	<p><b>Set Your Preferences Section Explanation</b></p> <p><b>Default:</b> Outage Alert Preferences settings allow you to add or remove additional contacts and set up "Do Not Disturb" during the hours you designate.</p>
4	<p><b>Errors Section Title</b></p> <p><b>Default:</b> Seeing an Error Message?</p>
4	<p><b>Errors Section Explanation</b></p> <p><b>Default:</b> If you are waiting to start electric service at a new address, you can sign up to get outage alerts after the start-of-service date.</p>
Not	<p><b>Sign-up Link</b></p>

Image Number	Configuration Option
Depicted	<p>A link can be provided to allow customers to sign up for outage notifications.</p> <p><b>Default:</b> None</p>
Not Depicted	<p><b>Errors Link</b></p> <p>A link can be provided to allow customers to learn about errors related to outage notifications.</p> <p><b>Default:</b> None</p>

## Configuring Notifications

Notifications are defined using Digital Self Service - Transactions self-service master configuration. The inclusion of the applicable Digital Self Service - Transactions Integration APIs packaged with Customer Care and Billing and Customer to Meter, provides a base configuration for all alerts and notifications within the master configuration. Oracle Utilities recommends using the default configuration, which is described below.

**Note:** This documentation provides steps to complete these configuration tasks using Oracle Utilities Customer Care and Billing. However, many of these tasks can be completed with other applicable products such as Oracle Utilities Customer to Meter or Oracle Utilities Customer Cloud Service. Refer to your applicable product documentation for steps to complete the configuration using your Oracle Utilities product. Additionally, this documentation assumes that you know how to create the various objects listed below as well as modify or create master configurations. For additional details on these tasks, refer to the applicable [Oracle Utilities Documentation](#).


## Alerts and Notifications

Alerts and notifications provide important information to the customer such as an outstanding balance notice, program enrollment status, open service tickets, general announcements, or pending start or stop service requests.

Current account: Elliot, Gina



## Alerts & Notifications 1

 Your bill is past due for 16 days. [View bill](#)

< 1 of 1 >

To review alerts and notifications configuration and log account access events:

The steps below guide you in locating and reviewing the default alerts and notifications configuration. You can also review the supporting objects listed in the steps below to review additional details about the alert and notification configuration. The steps below also enable the logging of account access events by customers. This information is required for alerts and notifications to determine the last login for a customer, which impacts which alerts and notifications to display to the customer.

### Notes:

- For steps to define alerts for guest user invitations, see "Defining Invite Guest User Tasks, Roles, and Alerts" on page 205.
  - For steps to define alerts for need to schedule service appointments, see "Configuring Service Appointments" on page 148.
1. Log in to Customer Care and Billing as a user with edit access for the CC&B Self-Service Integration master configuration.
  2. From the **Admin** menu, select **General**, and select **Master Configuration**. From the **Master Configuration** zone, select the **Edit** option for the **CC&B Self-Service Integration** master configuration. The master configuration is displayed.

3. From the **Digital Self Service Alerts** zone, review the alert and notification configuration, including:
  - **Alert Category:** Alerts and notifications are grouped by alert categories, which also determines the script that processes the alerts and notifications. The alert categories are defined in the `CX_CCB_ALERT_TYPE_FLG` lookup table.
  - **Alert Type:** Alerts and notifications are defined as an applicable alert type. You can use the Alert Type drop-down list to review the alert types that are available for an alert category.
  - **Priority:** Alerts and notifications with a lower priority are shown higher in the list of alerts and notifications for a customer. For example, if two alerts are available for a customer, one with priority 10 and one with priority 15, the alert with priority 10 is shown higher in the list and followed by the alert with priority 15.
  - **Severity:** For critical alerts, a severity of High configures the critical alert to be displayed on the Overview Dashboard.
  - **Script:** A script is available for each alert category that defines how the alerts and notifications are processed:
    - **CX-AccAlert:** This script supports account status alerts.
    - **CX-DueAlert:** This script supports bill due alerts and notifications.
    - **CX-PayAlert:** This script supports payment status alerts and notifications.
    - **CXInvAlert:** This script supports invite guest user alerts and notifications.
4. From the **Log Self-Service Access** zone, ensure the following configurations are defined to log account access events:
  - **Log Self-Service Access Script:** `C1-CSSCreCC`
  - **Customer Contact Class** and **Customer Contact Type:** Customer contacts track the creation of self-service tasks to aid customer service representatives in reviewing tasks created for an account. In addition to selecting applicable customer contacts with these options, review "Logging Self-Service Tasks" on page 247 for more information on configuring customer contacts.
5. Click **Save** to save the master configuration changes.

### General Announcements

All general announcements messages are configured using the Opower Configuration Tool. Up to two general announcements can be displayed simultaneously, one urgent and one notification. Multiple messages can be configured with effective and expiration dates, allowing you to plan and schedule important communications efficiently.

**Note:** This documentation provides steps to complete configuration tasks using the Opower Configuration Tool. For more information on using the Opower

Configuration Tool, refer to the [Oracle Utilities Opower Configuration Tool User Guide](#).

### To configure general announcements messaging and behavior:

1. From the Opower Configuration Tool, select **Widgets**, and then select **Toast Notification**. The configurations for Toast Notification are displayed.
2. To configure text and messages related to general announcements:
  - a. Select **Text (locale)**, where **locale** is the language locale you are configuring.
  - b. From the **Announcement Message** tab, select **Add New Announcements** to create a new announcement message and complete the following configurations:
    - i. **Key**: The first field is automatically assigned a key value, which is used later to link it to your general announcement functionality.
    - ii. **Text**: Include the text and content that is displayed as part of the banner.
  - c. Select **Add New Announcements** to create as many messages as required for separate banners.
  - d. Select **Save Changes** to save any changes to the default text and messages.
3. To configure the behavior of the general announcements:
  - a. Select **Functionality**.
  - b. From the **General Announcements** tab, select **Add New General Announcements** to create a new announcement banner and complete the following configurations:
    - i. The first value is an automatically generated value for the banner. You can use the default value.
    - ii. **Key**: Type the key value created previously in the procedure when creating the message for the banner.
    - iii. **Effective At** and **Expires At**: Provide date and time values that define when a general announcement is first displayed and then hidden from view, respectively. The values must be provided in YYYY-MM-DD HH:mm format. Be aware that only one urgent and one regular general announcement can be displayed at a time, so ensure that general announcements with the same severity use different time ranges.
    - iv. **Enabled**: Set to **Yes** to display the general announcement for the defined time range.
    - v. **Severity**: Set to either Urgent or Regular. Urgent general announcements are given top priority and appear prominently at the beginning of the notifications list. Regular general announcements are displayed alongside other notifications without heightened priority.

- c. Select **Save Changes** to save any changes to the default configurations. Certain configurations that are directly available are updated in the preview, while some configurations may not be directly highlighted in the preview.
4. Refer to the [Oracle Utilities Opower Configuration Tool User Guide](#) for steps to publish configuration changes.

### Account Notifications

The account notification options, which define preferences for outbound notifications, available to a customer depend on the configuration of notification types, service tasks, and suppression criteria, which are further defined in the configuration steps. Preferences for the following notification types are included in the base product:

- **Push Notifications:** Utilities can configure if customers can opt-out of push notifications, which include:
  - **Marketing Communication Preferences:** Applies to communications about initiatives your business may market to customers. It is recommended that marketing and communication preferences allow opt-out to comply with CAN-SPAM laws and regulations.
  - **Credit and Collections Preferences:** Applies to customers whose accounts enter the collections process.
  - **Service Advisory:** Applies to communications about service disruptions.
- **Subscription Notifications:** Subscription notifications require explicit enrollment from the customer to be received, which include:
  - **Prepaid Billing New Charge Notification:** Applies to customers on prepaid service and is sent out each time a new bill segment is calculated.
  - **Prepaid Billing Payment Request Notification:** Applies to customers on prepaid service and is sent out when the customer's prepaid balance drops below a calculated minimum threshold.
  - **Late Payment Notification:** Sent to customers if no payments are received after the last bill's due date has passed.
  - **Payment Received Notification:** Sent to customers each time a payment is received.
  - **Bill Due Notification:** Sent to customers a designated number of days before the last bill's due date.
  - **Bill Ready Notification:** Sent to customers when their bill is ready.

**Note:** This documentation provides steps to complete these configuration tasks using Oracle Utilities Customer Care and Billing. However, many of these tasks can be completed with other applicable products such as Oracle Utilities Customer to

Meter or Oracle Utilities Customer Cloud Service. Refer to your applicable product documentation for steps to complete the configuration using your Oracle Utilities product. Additionally, this documentation assumes that you know how to create the various objects listed below as well as modify or create master configurations. For additional details on these tasks, refer to the applicable [Oracle Utilities Documentation](#). To deliver these notifications to customers through outbound delivery such as email or SMS, refer to the Outbound Notification Configuration Guide.

**To configure account notifications:**

Complete the following steps to define notifications and support billing and payment notifications in Digital Self Service - Transactions.

1. Log in to Customer Care and Billing as a user with edit access for the CC&B Self-Service Integration master configuration.
2. If the notifications available with the base product do not cover all your notification use cases, create any additional necessary objects. When defining your master configuration, this can include:
  - **Notification Type:** The notifications that are displayed such as late payment notices and bill due notices. From the **Admin** menu, select **Database**, select **Lookup**, and select **Search**. Search for C1\_NF\_SSTASK\_TYPE\_FLG, which is the lookup table to modify if you need to add additional notification types.
  - **Service Task Type:** The notifications for Digital Self Service - Transactions require service tasks that store the notification preferences or manage the timing of when a notification is sent. The business objects C1-NotifyTaskType and C1-PPBPaymentNotifyTaskType support the notifications available with the base product.
  - **Suppression Criteria:** The scripts that define when to hide a notification from a customer. From the **Admin** menu, select **System**, select **Script**, and select **Add** to create a new script. You can also select **Search** to review the available scripts. The script C1-CkSuppPPB provides an example suppression criteria script.

**Note:** If you add additional notification types, be aware that the script WX-NotfPref compiles the list of notifications for self-service applications, which are then made available through the WXSetNotificationPreferences inbound web service. For additional information on the integration of notification

management, refer to the *Oracle Utilities Customer Self Service Implementation Guide*.

3. From the **Admin** menu, select **General**, and select **Master Configuration**. From the **Master Configuration** zone, select the **Edit** option for the **CC&B Self-Service Integration** master configuration. The master configuration is displayed.
4. From the **Notification Service Tasks** zone, include all required notifications that are to be available in a customer's account preferences. You can use the demo Self-Service Integration master configuration as a starting point, or create your own master configuration and add applicable notifications. To include additional notifications, click the plus icon and then define the following:
  - **Template-Based Notification Type** and **Service Task Type**: Select the notification and applicable notification task. For example, to include bill due notifications select Bill Due Notification and Bill Due Notification Task respectively.
  - **Suppression Criteria**: If required for a notification, search for and apply suppression criteria to a notification to ensure that only a defined set of customers receive the notification. For example, notifications related to prepaid billing should only be available for customers with prepaid service, which is supported through the service script C1-CkSuppPPB.
5. Click **Save** to save the master configuration changes.

To deliver notifications to customers through outbound delivery, such as email or SMS, refer to "Configuring Outbound Notifications" on page 181.

### Configuring Outbound Notifications

When a customer enrolls in account notifications through Digital Self Service - Transactions they are setting a preference within the Oracle Utilities customer system to opt-in to the respective type of transactional notification on the respective channel. In the Customer Care and Billing outbound notification integration, outage notifications are based on a trigger directly from the Oracle Network Management System.

**Note:** Outbound notifications that are based on a trigger and are related to authentication are sent by Oracle Identity and Access Management and thus are not part of the notification configuration covered below.



**Note:** This documentation provides steps to complete these configuration tasks using Oracle Utilities Customer Care and Billing. However, many of these tasks can be completed with other applicable products such as Oracle Utilities Customer to Meter or Oracle Utilities Customer Cloud Service. Refer to your applicable product documentation for steps to complete the configuration using your Oracle Utilities product. Additionally, this documentation assumes that you know how to create the various objects listed below as well as modify or create master configurations. For additional details on these tasks, refer to the applicable [Oracle Utilities Documentation](#).

## Requirements

The utility must configure and integrate an external system with their customer integrated system to deliver outbound notifications for the defined account notifications. Oracle recommends integrating with Oracle Responsys and Oracle Integration Cloud, which are licensed separately from Oracle Utilities Digital Self Service - Transactions Cloud Service, to support outbound notification delivery.

All utilities, regardless of their chosen external system, must first complete "Customer System Configuration" on page 182. Utilities using a third-party external system must follow the steps provided in [Outgoing Messages](#). Utilities integrating with Oracle Responsys and Oracle Integration Cloud must complete the configurations described in "Oracle Responsys Configuration" on page 190 and "Oracle Integration Cloud Configuration" on page 190.

**Customer Integrated System:** Integration is required with an Oracle Utilities Customer Care and Billing, Oracle Utilities Customer to Meter, or Oracle Utilities Customer Cloud Service system. For version requirements when integrating with third-party external systems, refer to the [Oracle Utilities Opower Digital Self Service - Transactions Cloud Service Product Overview](#). The minimum version requirements when integrating with Oracle Responsys and Oracle Integration Cloud are listed below:

- Oracle Utilities Customer Cloud Service 22A
- Oracle Utilities Customer Care and Billing 2.9
- Oracle Utilities Customer to Meter 2.9

## Customer System Configuration

### Configuring a Message Sender

The message sender configuration connects your customer integration system to the Notification Hub in Oracle Integration Cloud or your third-party external outbound delivery

system. The steps below describe the process for integration with Notification Hub in Oracle Integration Cloud. For steps to configure a message sender for your third-party external outbound delivery system, refer to the applicable [Oracle Utilities Documentation](#) for your customer integration system.

### To add a message sender

1. Log in to Customer Care and Billing as a user with permissions to add message senders.
2. From the **Admin** menu, select **Message Sender**, and select **Add**.
3. On the **Main** tab, complete the following configurations to set up the message sender
  - **Message Sender:** NOTIFS
  - **Description:** CCB Notifications Sender
  - **Invocation Type:** Real-time
  - **Message Class:** RTJSONSNDR
  - **Active:** Selected
  - **MSG Encoding:** UTF-8 message encoding
4. On the **Context** tab, complete the following configurations to set up the message sender:
  - **Add a context type:** HTTP Login Password where the Context Value is the password to Oracle Integration Cloud or your third-party external system.
  - **Add a context type:** HTTP Login User where the Context Value is the username used to log in to Oracle Integration Cloud or your third-party external system.
  - **Add a context type:** HTTP Method where the Context Value is POST.
  - **Add a context type:** HTTP Timeout where the Context Value is 60.
  - **Add a context type:** HTTP URL 1 where the Context Value is the URL to your Oracle Integration Cloud instance or your third-party external system.
5. Save all configuration changes.

### Configuring an External System

The external system configuration connects your customer integration system to the Notification Hub in Oracle Integration Cloud or your third-party external outbound delivery system. The steps below describe the process for integration with Notification Hub in Oracle Integration Cloud. For steps to configure your third-party external outbound delivery system, refer to the applicable [Oracle Utilities Documentation](#) for your customer integration system.

### To add an external system

1. Log in to Customer Care and Billing as a user with permissions to add External Systems.

2. From the **Admin** menu, select **External System**, and select **Add**. From the available list, select the **Notification Hub**.
3. Complete the following configurations to set up the external system
  - **External System:** NOTIF\_HUB
  - **Description:** Notification Hub
  - **Outbound Message Type:** C1-TMPLNTRQ
  - **Processing Method:** Real-time
  - **Message Sender:** NOTIFS per your message sender configuration above.
  - **Date/Time Format:** XSD
4. Save all configuration changes.

### Understanding Template-Based Data Algorithms

Template Data algorithms are included with your Oracle Utilities customer integrated system. These algorithms gather recipient data required to populate common notifications related to their account. After the data is parsed from your Oracle Utilities customer integrated system, the data is passed either to your third-party external system, or through your Oracle integration and merged with the respective Responsys campaign that will be sent to the recipient.

The following algorithms are referenced when configuring Individual Push Notification and Subscription Notification Types:

- **Bill Information Template Data (C1BILLINFTMP):** Includes parameters specific to a customer's billing information such as bill due date, balance, and so on. This algorithm supports the default messages for:
  - **Bill Due Notification:** Sent to customers a designated number of days before the last bill's due date.
  - **Late Payment Notification:** Sent to customers if no payments are received after the last bill's due date has passed.
  - **Bill Ready Notification:** Sent to customers when their bill is ready.
- **Budget Notification Template Data (C1BUDNFTMPD):** Includes parameters to build outbound notifications that notify customers of changes to their account's budget details. Refer to the Detailed Description for the Budget Notification Template Data (C1BUDNFTMPD) algorithm in your customer integrated system for further information on what details are extracted by this algorithm.
- **Collection Notification Template Data (C1COLLNFTMP):** Includes parameters specific to a customer who is in the collections process such as arrears amount, arrears date, and so on. This algorithm supports the default messages for:
  - **Collections Entered Notification:** Intended to be sent to customers as the first step in a collections process.

- **Guest Notification Template Data (C1GUESTNTFTD):** Includes parameters to inform a guest or account holder about an invitation. This algorithm supports the default messages for:
  - **Guest Invited:** Sent to a recipient who is being invited to an account.
  - **Guest Accepted:** Sent to the account holder who invited a guest to their account when the guest has accepted.
- **Outage Notification Template Data (C1OUTNTFTD):** Includes parameters to build outbound notifications to confirm information provided to the utility through a web form such as reporting an outage.
  - **Report Issue Confirmation:** Sent to a recipient who reported a service issue online.
- **Payment Information Template Data (C1PAYINFTMPD):** Includes parameters to build outbound notifications that notify customers of payments made to their account. Refer to the Detailed Description for the Payment Information Notification Template Data algorithm in your customer integrated system for further information on what details are extracted by this algorithm.

Algorithms can be cloned and modified if your organization wishes to enhance the base scripts with additional parameters or create new algorithms. For example, new algorithms can be created to send these other common notifications related to a customer's account.

- **Prepaid Billing New Charge Notification:** Applies to customers on prepaid service and is sent out each time a new bill segment is calculated.
- **Prepaid Billing Payment Request Notification:** Applies to customers on prepaid service and is sent out when the customer's prepaid balance drops below a calculated minimum threshold.

### Configuring Notifications

This solution utilizes template-based notification types only, and the following Notification Type Business Objects are included in the base product:

- Message-Based Notification Type (legacy)
- Template-Based Individual Push Notification Type
- Template-Based Parent Push Notification Type
- Template-Based Subscription Notification Type

### About Push Notification Types

Parent Push Notification Types are logical groupings of notifications. All individual push notifications require a Parent Notification type.

When customer is enrolled in a parent notification, they receive all related notifications. Similarly, if a customer is unenrolled from a parent notification, they do not receive the related notifications.

Utilities can configure whether a Parent Notification allows opt-out by the customer. The steps below outline creating a parent notification that prohibits opt-out for self-service account updates. This is intended to group all notifications your customers receive regarding their Digital Self Service - Transactions online account.

## Creating a Self-Service Updates Notification Type

### To create a Parent Push Notification Type

1. Log in to Customer Care and Billing as a user with permissions to add Notification Types.
2. From the **Admin** menu, select **Notification Type**, and select **Add**. From the available list, select the **Template-Based Parent Push Notification Type**. The configuration options are displayed.
3. Complete the following configurations to set up the notification type:
  - **Notification Type:** Self-Service Updates
  - **Description:** Applies to communications you may send to customers about their account.
  - **Allow Opt Out:** No
  - **Allowed Recipient:** Any Person on Account with Allow Preference
  - **Person Contact Types:** Email
  - **Delivery Types:** Email
4. Save all configuration changes.

### To create an Individual Push Notification Type:

1. Log in to Customer Care and Billing as a user with permission to add Notification Types.
2. From the **Admin** menu, select **Notification Type**, and select **Add**. From the available list, select the **Template-Based Individual Push Notification Type**. The configuration options are displayed.
3. Complete the following configurations to set up the notification type:
  - **Notification Type:** Guest Accepted
  - **Description:** Sent when a guest accepts an invitation to an account.
  - **Parent Notification Type:** Self-Service Updates
  - **Template Data Algorithms:**
    - **Sequence:** 10
    - **Algorithm:** C1GUESTNTFTD

- **Delivery Types:**
  - **Delivery Type:** Email
  - **Language:** English
  - **Template Name:** Guest Accepted - Email. This template name must match the template name for the respective campaign configured in your Responsys instance, or the resource used in your third-party external system.

4. Save all configuration changes.

Repeat the steps to create additional Individual Push Notification Types that should be part of your Self-Service Updates Parent Notification Type on the respective channels.

To create a Subscription Notification Type:

1. Log in to Customer Care and Billing as a user with permission to add Notification Types.
2. From the **Admin** menu, select **Notification Type**, and select **Add**. From the available list, select the **Template-Based Subscription Notification Type**. The configuration options are displayed.
3. Complete the following configurations to set up the notification type:
  - **Notification Type:** Guest Invited
  - **Description:** Invites a guest to link account online.
  - **Allowed Recipient:** Any Person on Account with Allow Preference
  - **Template Data Algorithms:**
    - **Sequence:** 10
    - **Algorithm:** C1GUESTNTFTD
  - **Person Contact Types:** Email
  - **Delivery Types:**
    - **Delivery Type:** Email
    - **Language:** English
    - **Template Name:** Guest Invited - Email. This template name must match the template name for the respective campaign configured in your Responsys instance, or the resource used in your third-party external system.
  - Add an additional **Delivery Type:** SMS
    - **Language:** English
    - **Template Name:** Guest Invited - SMS. This template name must match the template name for the respective campaign configured in your Responsys instance, or the resource used in your third-party external system.
4. Save all configuration changes.

Repeat the steps to create additional Subscription Notification Types such as Bill Due and Late Payment on the respective channels.

## Creating Notification Types for Collections

### To create a Parent Push Notification Type for Collections

1. From the **Admin** menu, select **Notification Type**, and select **Add**. From the available list, select the **Template-Based Parent Push Notification Type**. The configuration options are displayed.
2. Complete the following configurations to set up the notification type:
  - **Notification Type:** Collection Notices
  - **Description:** Send collection notices through digital channels.
  - **Allow Opt Out:** No
  - **Allowed Recipient:** Any Person on Account with Allow Preference
  - **Person Contact Types:** Email, SMS
  - **Delivery Types:** Email, SMS
3. Save all configuration changes.

### To create an Individual Push Notification Type for Collections

1. Log in to Customer Care and Billing as a user with permission to add Notification Types.
2. From the **Admin** menu, select **Notification Type**, and select **Add**. From the available list, select the **Template-Based Individual Push Notification Type**. The configuration options are displayed.
3. Complete the following configurations to set up the notification type:
  - **Notification Type:** Send First Collection Notice
  - **Description:** Sent as the first step of a collections process.
  - **Parent Notification Type:** Collection Notices
  - **Template Data Algorithms:**
    - **Sequence:** 10
    - **Algorithm:** C1COLLNFTMP
  - **Delivery Types:**
    - **Delivery Type:** Email
    - **Language:** English
    - **Template Name:** Collections Entered - Email. This template name must match the template name for the respective campaign configured in your Responsys instance, or the resource used in your third-party external system.
  - Add an additional **Delivery Type:** SMS
    - **Language:** English

- **Template Name:** Collections Entered - SMS. This template name must match the template name for the respective campaign configured in your Responsys instance, or the resource used in your third-party external system.

4. Save all configuration changes.

Repeat the steps to create additional Individual Push Notification Types that should be part of your Collection Notices Parent Notification Type on the respective channels, if needed.

#### To apply customer contacts

If required, you can apply a customer contact to create records of when customers receive notifications. These records can be used by Customer Service Representatives to review the notifications a customer has received.

1. Log in to Customer Care and Billing.
2. From **Menu**, select **Self-Service**, select **Self-Service Task Type**, and select **Search**.
3. Click the **Edit** option for the Late Payment Notification Task.
4. From the **Contact Class** drop-down list, select an applicable contact class. New customer contact classes can be created from the **Admin** menu.
5. From the **Contact Type** drop-down list, select an applicable contact type. New Customer contact types can be created from the **Admin** menu.
6. Click **Save** to save your changes to the notification task.

#### Notification Preferences Configuration

Ensure notification preferences have been configured in accordance with "Configuring Notifications" on page 175. If utilizing the guest feature available with Digital Self Service - Transactions, create a script to suppress the Guest Invite subscription notification type you created above.

From the **Admin** menu, select **System**, select **Script**, and select **Add** to create a new script. You can also select **Search** to review the available scripts.

#### Self Service Master Configuration

##### Guest Notifications

The following Invite Guest master configurations must be in place for the feature to work end-to-end. Refer to "Configuring Manage Web Account Requirements" on page 201 for more information on defining invite guest user tasks, roles, and alerts.

- Invite Guest User Service Task Type
- New Customer Identifiers



- Line of Business Verification Fields
- Link Self Service User

### To configure guest user invitation notification types

1. Log into Customer Care and Billing
2. From the **Admin** menu, select **General**, and select **Master Configuration**. From the Master Configuration zone, select the **Edit** option for the **CC&B Self-Service Integration** master configuration. The master configuration is displayed.
3. From the **Guest User Invitation Notification Types** zone, select the **Notification Types** configured for the following guest events:
  - Confirm Acceptance
  - Invite User
4. Save all configuration changes.

### Collection Process Template Configuration

The following configurations must be in place to send email or SMS notifications as part of a collections process.

### To configure the collection process template

1. Log into Customer Care and Billing
2. From the **Admin** menu, select **General**, and select **Collection Process Template** then select **Search**.
3. Search for your existing collection process templates. Or select **Add** in the previous step to build a new template.
4. **Add** a new event in sequence: CN-1ST-EMAIL
5. Define the **Event Sequence**: 10
6. Define the **Days After Process Creation**: 0
7. Save all configuration changes.

### Oracle Responsys Configuration

If you deliver outbound communications through the recommended Oracle integrations, you must configure Oracle Responsys to support outbound delivery. Refer to the [Oracle Responsys documentation](#) for more information. If you deliver outbound communications with another third-party delivery system, refer to the third-party vendor documentation.

### Oracle Integration Cloud Configuration

If you deliver outbound communications through the recommended Oracle integrations, you must configure the Oracle Integration Cloud integration. Refer to [Notifications Hub](#)

[Configuration Guide](#) for more information on this integration and end-to-end testing. If you deliver outbound communications with another third-party delivery system, refer to the third-party vendor documentation.

## Manage Web Account

Digital Self Service - Transactions allows customers to manage their utility web account using the following options.

- **Manage Web Account:** Customers can manage their web account, including linking utility accounts to their web account.
  - Review all feature configuration options listed at "Manage Web Account Configuration Options" on page 191.
  - Complete all account preference configurations, as described at "Configuring Manage Web Account Requirements" on page 201.

### Reviewing Manage Web Account Configuration Options

Use the table below to review all feature configuration options which can be submitted as a request using [My Oracle Support](#).

**Note:** You can use the Opower Configuration Tool to implement certain configurations for Digital Self Service - Transactions. This can include user experience configurations, interface messages and formats, branding configurations, and other configurations relevant to Digital Self Service - Transactions. To review if any configurations listed below are available with the Opower Configuration Tool, access the tool at <https://configuration.opower.com/> and review the available options for the pages and widgets included in your Digital Self Service - Transactions web portal.

### Manage Web Account Configuration Options

The following image shows a standard example of Manage Web Account, along with an example of the options displayed when a customer selects to add a guest user.

### Manage web login and connected utility accounts

Update your web login information and add or remove utility accounts you would like to manage online.

**Web login details**

Name	Multi Account	<a href="#">Edit</a>
Email	multi_account@oracle.com	<a href="#">Edit</a>
Username	multi_account@oracle.com	
Password	.....	<a href="#">Edit</a> <b>1</b>

**Connected accounts** [+ Connect new account](#)

**Multi1** [Unlink Account](#)

12345 sanity-01, OH, 12345  
Account # 2562882254

[+ Add guest user](#)

**Restricted** [Unlink Account](#)

6203-A Demo St., Uniontown, OH, 44001  
Account # 3284234335

[+ Add guest user](#)

## Add a Guest User

### Add a guest user **2**

**First name** **3**

**Last name**

**Email address**

**Confirm email address**

**Access level**  
Account Holder

**Access details**

- View the account's energy use and history
- Make payments, view billing history, and change billing programs
- Start, stop, or add service to properties on the account

**Reminder** **4**

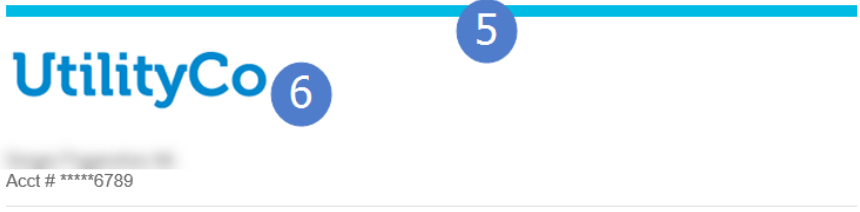
When you add a guest to your account they will have access to your billing information.

[CANCEL](#) [ADD GUEST USER](#)

## Guest User Email Notifications

When guest users are invited to an account, email notifications are sent. This includes an email to the guest user notifying them of the invitation, and later an email to the account owner when the guest user accepts the invitation and has been added to their account.

Email Notification Sent to the Guest User



**[Account Owner] invited you to their UtilityCo account**



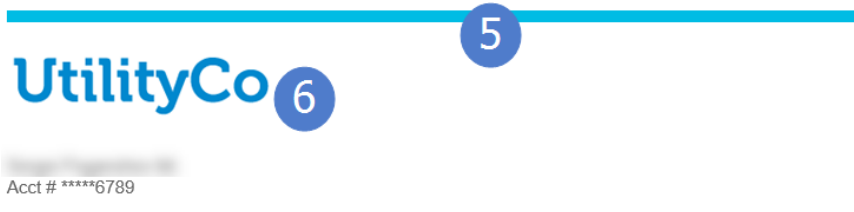
You've been invited to be a guest on [name's] UtilityCo account. Click the Accept button to get started.



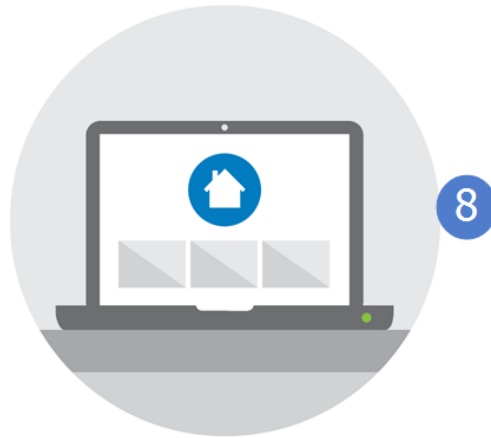
Utility Company, 1234 Main Street, Anytown, USA  
Copyright 2020 Oracle. All rights reserved.  
You received this email because [Name] invited you to their account.

11

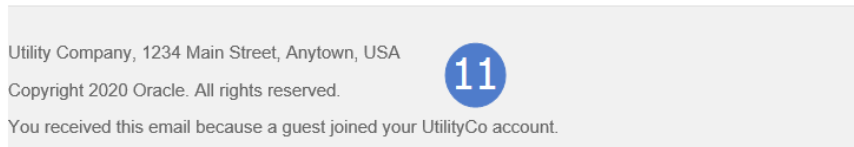
Email Notification Sent to the Account Owner



7 [Guest] joined your UtilityCo account



9 Login to modify their access, make a payment, or view your usage.



Use the table below to review all available configuration options.

Image Number	Configuration Option
Not Depicted	<b>Authentication Mode</b> Authentication mode is required based on the authentication

Image Number	Configuration Option
	<p>integration per utility. In particular, it is used to decide whether to show or hide the Edit email and password link to an external identity management page. See Utility IDM Page below for additional information.</p> <p><b>Default:</b> oauth</p>
1	<p><b>Change Password</b></p> <p>A flag to show or hide the EDIT button on the Password section.</p> <p><b>Default:</b> true</p>
Not Depicted	<p><b>Change Email</b></p> <p>Customers may change their email address by providing their current password and a new email address. The customer will receive a verification request to the new email address provided. Until the customer verifies their new email address, the original email address will be used for notifications and the new address will be displayed in a pending state. Note: this configuration is only supported when utilities support unique usernames.</p> <p><b>Default:</b> False</p>
Not Depicted	<p><b>Utility IDM Page</b></p> <p>When integrated with a third-party identity provider, an absolute URL to the utility's identity management page can be configured so customers can modify their settings.</p> <p><b>Default:</b> None</p>
Not Depicted	<p><b>Available Guest Roles</b></p> <p>Customers can add guest users to their utility account. The customer adding a guest user must also define the level of access to grant to the guest user by selecting the role for the guest user.</p>

Image Number	Configuration Option
	<p>You must provide the list of roles that can be assigned to guest users by the main account holder. The following information must be provided for each role:</p> <ul style="list-style-type: none"> <li>▪ The role name that is displayed to customers when selecting the role to apply for a guest user. In the example image shown in See "Add a Guest User" on page 192.</li> <li>▪ The Web User Account Role code used as part of the process "To define guest user roles" on page 209.</li> <li>▪ The list of permissions available for the role. Each role can have manage permissions for any of the following areas: <ul style="list-style-type: none"> <li>▪ Payments</li> <li>▪ Paperless Billing</li> <li>▪ Automatic Payments</li> <li>▪ Payment Arrangement</li> <li>▪ Payment Extension</li> <li>▪ Budget Billing</li> <li>▪ Start, Stop, and Transfer Service</li> <li>▪ Account Preferences</li> <li>▪ Contact Us</li> <li>▪ Charity Autopay</li> <li>▪ Preferred Due Date</li> </ul> </li> </ul> <p><b>Default:</b> None</p>
2	<p><b>Add a Guest User Title</b></p> <p>Default: Add a Guest User</p>
3	<p><b>Add a Guest User Input Headings</b></p> <p><b>Defaults:</b></p> <ul style="list-style-type: none"> <li>▪ First name</li> <li>▪ Last name</li> <li>▪ Email address</li> <li>▪ Confirm email address</li> </ul>

Image Number	Configuration Option
	<ul style="list-style-type: none"> <li>▪ Access level</li> </ul>
4	<p><b>Add a Guest User Tip</b></p> <p>Customers see a tip message as they enter details for their guest and initiate the invitation process, which can be used to provide additional guidance on the process.</p> <p><b>Default:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Title:</b> Reminder</li> <li>▪ <b>Message:</b> When you add a guest to your account they will have access to your billing information.</li> </ul>

Use the table below to review all available configuration options for the guest user email notifications.

Image Number	Configuration Option
Not Depicted	<p><b>From Name</b></p> <p>The name that appears in the “From” line in all email communications can be altered.</p> <p><b>Default:</b> The utility name is used as the "From" name.</p>
Not Depicted	<p><b>From Address</b></p> <p>The name that appears in the “From” line in all email communications can be altered. For example: donotreply@utilityco.com.</p> <p>After the request is received, to complete your email setup, your utility's email authorization and authentication settings (SPF and DKIM records) must be configured with inputs provided by Oracle Utilities.</p> <p><b>Default:</b> The utility must provide a "From" email address.</p>



Image Number	Configuration Option
5	<p><b>Banner Color</b></p> <p>The color of the banner near the top of the email notifications.</p> <p><b>Default:</b> Aqua</p>
6	<p><b>Logo</b></p> <p>The utility logo displayed near the top of the email notifications.</p> <p><b>Default:</b> UtilityCo</p>
7	<p><b>Heading Message</b></p> <p>The main heading message displayed in the email notifications.</p> <p><b>Defaults:</b></p> <ul style="list-style-type: none"> <li>▪ Invitation Emails to Guests: [Account Owner] invited you to their [Utility Name] account</li> <li>▪ Guest Joined Emails to Owners: [Guest] joined your [Utility Name] account</li> </ul>
7	<p><b>Heading Message Color</b></p> <p><b>Default:</b> dark grey</p>
8	<p><b>Message Illustration</b></p> <p>The graphical illustration displayed in the body of the email notification.</p> <p><b>Default:</b> Computer screen with home icon</p>
9	<p><b>Email Body Message</b></p> <p>The message in the body of the email.</p> <p><b>Defaults:</b></p> <ul style="list-style-type: none"> <li>▪ Invitation Emails to Guests: You've been invited to be a guest on</li> </ul>

Image Number	Configuration Option
	<p>[Account Owner] [Utility Name] account. Click the Accept button to get started.</p> <ul style="list-style-type: none"> <li>▪ Guest Joined Emails to Owners: [Guest] joined your [Utility Name] account. Login to modify their access, make a payment, or view your usage.</li> </ul>
9	<p><b>Email Body Message Color</b></p> <p><b>Default:</b> light grey</p>
10	<p><b>Button Colors</b></p> <p>The colors of the user action button.</p> <p><b>Defaults:</b> Aqua button with white text</p>
Not Depicted	<p><b>Button Link</b></p> <p>The login button on the email notification directs users to the Digital Self Service - Transactions home page.</p> <p><b>Default:</b> Digital Self Service - Transactions home page</p>
11	<p><b>Footer</b></p> <p>The content displayed in the bottom footer of the email notification.</p> <p><b>Default:</b> UtilityCo content is used as a default which must be replaced with Utility-specific content.</p>
Not Depicted	<p><b>Alternate Template</b></p> <p>Utilities may use an alternate email template that they have customized to meet the communication needs to guests and account owners. In this case, the utility must provide the raw HTML files they prefer to use for their email communications and is responsible for ensuring the templates have been tested and render correctly across mail clients. Oracle Utilities does not host assets such as images for</p>

Image Number	Configuration Option
	<p>custom templates.</p> <p>The following variables are supported for use in the HTML file.</p> <ul style="list-style-type: none"> <li>▪ <code>{{inviter.anonAccountId}}</code></li> <li>▪ <code>{{inviter.fullName}}</code></li> <li>▪ <code>{{inviter.firstName}}</code></li> <li>▪ <code>{{inviter.lastName}}</code></li> <li>▪ <code>{{year}}</code></li> <li>▪ <code>{{invitee.fullName}}</code></li> <li>▪ <code>{{invitee.firstName}}</code></li> <li>▪ <code>{{invitee.lastName}}</code></li> </ul> <p><b>Default:</b> UtilityCo template as depicted above.</p>
Not Depicted	<p><b>Name Separation in Guest Invitations</b></p> <p>When Use Name Separator is configured in the customer information system (see "To send guest user invitations from the account owner" on page 211), the following variables return the name of the account owner.</p> <ul style="list-style-type: none"> <li>▪ <code>{{inviter.fullName}}</code></li> <li>▪ <code>{{inviter.firstName}}</code></li> <li>▪ <code>{{inviter.lastName}}</code></li> </ul> <p><b>Default:</b> The variables listed above return the first and last name of the web user that is inviting a guest user.</p>

### User Experience Variations

The user experience varies for customers depending upon their usage, service types, available data, costs, and locale. The following list indicates the primary user experience variations. Note that the list below does not represent all possible variations.

- **Unique email:** By default, customers will register for web accounts with their email address. When a unique email is used, customers register, login, and reset their password with their email address instead of a unique username, and only one web user can be associated with an email address. When a unique email is used for login,

customers have the ability to change their password through Web Login Details.

- **Unique username:** Alternately, utilities can enable users to register, login, and reset their password with a unique username instead of a unique email address. When a unique username is used for login, customers also have the ability to change the email address associated with their web account and their password through Web Login Details.
- **Third-party Identity Provider:** If authentication is configured using a third-party identity provider, customers cannot edit their web login information directly within Digital Self Service - Transactions. In this authentication scenario, an **Edit email and password** option is provided, which redirects the customer to an external site to change their credentials as required by the third-party identity provider.

## Configuring Manage Web Account Requirements

Manage Web Account configuration includes defining the identifiers used by customers to connect and verify their web account and utility accounts, creating person contacts to support web users, and defining invite guest user tasks and alerts.

**Note:** This documentation provides steps to complete these configuration tasks using Oracle Utilities Customer Care and Billing. However, many of these tasks can be completed with other applicable products such as Oracle Utilities Customer to Meter or Oracle Utilities Customer Cloud Service. Refer to your applicable product documentation for steps to complete the configuration using your Oracle Utilities product. Additionally, this documentation assumes that you know how to create the various objects listed below as well as modify or create master configurations. For additional details on these tasks, refer to the applicable [Oracle Utilities Documentation](#).

## Defining Account Verification and Account Connection Identifiers

Customers can link their web account for Digital Self Service - Transactions to utility accounts using approved identifiers. Groups of identifiers can be defined to provide customers options to verify and connect their accounts. For example, identifiers can be created to require a social security number, along with one of multiple phone numbers for the customer, to verify account connection.

To define account verification and account connection identifiers:

Complete the following steps to define the accepted identifiers that customers can use for account verification and connection:

1. Log in to Customer Care and Billing as a user with edit access for the CC&B Self-Service Integration master configuration.
2. From **Menu**, select **Self-Service**, select **Self-Service Task Type**, and select **Add**. The Select Business Object dialog box opens.
3. From the **Service Task Type Business Object** drop-down list, select **Account Verification Task Type (AND/OR)**, and then select **OK**. The Account Verification Task Type dialog box opens.
4. Complete the following information for the self-service task type:
  - **Service Task Type:** ACCOUNT-VERIFY-AND-OR
  - **Description:** Account Verify (and/or)
  - **Related Transaction Object:** Account Verification Task (AND/OR)
  - **Service Task Type Status:** Active
  - **Service Task Class:** Self-Service
5. To confirm the self-service task type has been created, from **Menu**, select **Self-Service**, select **Self-Service Task Type**, and select **Search**. Confirm the new self-service task is in the list, as shown below.

Self-Service Task Type

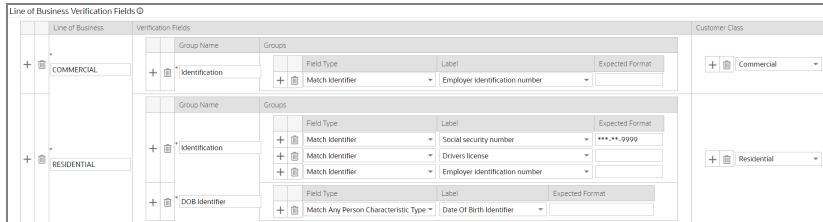
Main

Self-Service Task Type List

	SERVICE TASK TYPE	DESCRIPTION	STATUS	ACTIVATE / DEACTIVATE	EDIT	DUPLICATE	DELETE
1	ACCOUNT VERIFICATION TASK	Verify Account (AND/OR)	Active	Deactivate			
2	ACCTVERIFY	Account Verification Task	Active	Deactivate			
3	APAYSETUP	Automatic Payment Setup Task	Active	Deactivate			
4	BILLDUE	Bill Due Notification Task	Active	Deactivate			
5	BILLREADY	Bill Ready Notification Task	Active	Deactivate			
6	BUDGET	Budget Billing Setup Task	Active	Deactivate			
7	CX-INVITEGUESTUSER	Invite Guest User	Active	Deactivate			
8	FIELD-ACT-REQUEST	Field Activity Request	Active	Deactivate			

6. From the **Admin** menu, select **General**, and select **Master Configuration**. From the **Master Configuration** zone, select the **Edit** option for the **CC&B Self-Service Integration** master configuration. The master configuration is displayed.
7. From the **Self-Service Tasks** zone, select the plus icon to add a new self-service task and select the account verification task type created earlier:
  - **Service Task:** Account Verification (AND/OR)
  - **Service Task Type:** Account Verify (and/or)
  - **Customer Contact Class** and **Customer Contact Type:** Customer contacts track the creation of self-service tasks to aid customer service representatives in reviewing tasks created for an account. In addition to selecting applicable customer contacts with these options, review "Logging Self-Service Tasks" on page 247 for more information on configuring customer contacts.

8. From the **Line of Business Verification Fields** zone, click the plus icon to add each applicable classification of accounts. This typically includes one for **Commercial** or **Industrial** customers, and one for **Residential** customers, as shown in the example below. The following steps must be completed for each line of business you define.



9. Define the verification fields for each line of business. This includes creating one or more groups which contain one or more verification fields:
  - **Groups:** Define a group to create an identity verification requirement. A customer must provide at least one verification field from each group to successfully connect an account. For example, one group can include a social security number requirement, and a second group can include multiple customer phone numbers that a customer can select from to provide. This configuration would make the social security number required, while allowing some flexibility on which phone number a customer can use.
  - **Verification Fields:** Define the verification fields for each group. Within a group, all verification fields are valid options for customers to use to meet that group identity requirement. If there is a single verification field in a group, that verification field is required. By comparison, if a group has four verification fields, a customer must provide at least one of the four verification fields to meet that groups identify requirement.
    - To define a verification field, use the appropriate **Field Type** and **Label**, which determines the values that a customer is prompted for when providing the identifying information. For example, a Field Type of **Match Identifier** and a Label of **Driver's license** prompts customers to provide a driver's license ID for verification.
    - If you require only part of an ID to be entered for verification purposes, use the **Expected Format** field to specify the parts of the ID that need to be entered. Use **9** as a placeholder for digits and **A** as placeholder for letters. For example, to specify that only the last four digits of a social security number need to be entered, specify a Expected Format value of **\*\*\*-\*\*-9999**. Be aware of the following when configuring an Expected Format:
      - The Field Type must be Match Identifier for the Expected Format to be applied.

- The application does not validate the Expected Format, therefore it is important to ensure the Expected Format value is compatible with the ID.
  - Alphanumeric placeholders are not supported.
10. Configure any applicable **Customer Class** for each line of business as required to support self-service transaction logging.
  11. Click **Save** to save the master configuration changes.

### Creating a Person Contact Type for Web Users

Person contact types are required to support web users of Digital Self Service - Transactions.

**Note:** Various contact types are supported for users of Digital Self Service - Transactions. Defining phone contact types for users is described in "Defining Phone Contact Types " on page 126.

To create person contacts for web users

1. Log in to Customer Care and Billing.
2. From the **Admin** menu, select **Customer**, select **Person Contact Type**, and select **Add**. The Person Contact Type page is displayed.
3. Complete the following information to create the person contact type for Digital Self Service - Transactions:
  - **Person Contact Type:** The internal identifier of the person contact type. This example uses DSSUserEmail.
  - **Description:** The internal description of the person contact type. This example uses DSS User Email.
  - **Contact Routing:** Self-Service User
  - **Format Algorithm:** C1-VALEMFMT
  - **Allow Do Not Disturb:** Define whether do not disturb information can be collected for users.

- **Allow Person Contact Status: Allowed**

Person Contact Type

---

**Main** ⓘ

PERSON CONTACT TYPE: DSSUSEREMAIL

DESCRIPTION:

DETAILED DESCRIPTION:

CONTACT ROUTING:

FORMAT ALGORITHM:

ALLOW DO NOT DISTURB:

ALLOW PERSON CONTACT STATUS:

INITIAL PERSON CONTACT STATUS:

4. Select **Save** to create the person contact type.
5. From the **Admin** menu, select **General**, and select **Master Configuration**. From the **Master Configuration** zone, select the **Edit** option for the **CC&B Self-Service Integration** master configuration. The master configuration is displayed.
6. From the **Link Self Service User** zone, in **Web User Person Contact Type** enter the person contact type identifier you created earlier. For this example, enter **DSSUserEmail**.
7. Select **Save** to save the master configuration changes.

### Defining Invite Guest User Tasks, Roles, and Alerts

Customers can invite guest users to access their utility account. You must define the tasks, roles, and alerts that support guest user invitations.

**Note:** Guest user accounts use the same identifiers that are defined as part of "Configuring New Service Information and Requirements" on page 125.



To define an invite guest user self-service task type:

1. Log in to Customer Care and Billing.
2. From **Menu**, select **Self-Service**, select **Self-Service Task Type**, and select **Add**. The Select Business Object dialog box opens.
3. From the **Service Task Type Business Object** drop-down list, select **Web User Invitation Task Type** and click **OK**. The Maintenance page opens.
4. Complete the following information for the self-service task type:
  - **Service Task Type:** CX-INVITEGUESTUSER
  - **Description:** Invite Guest User
  - **Related Transaction Object:** CX-WebUserInvitationTask
  - **Service Task Type Status:** Active
  - **Service Task Class:** Self-Service

SERVICE TASK TYPE	CX-INVITEGUESTUSER
DESCRIPTION	Invite Guest User
BUSINESS OBJECT	Web User Invitation Task Type
RELATED TRANSACTION OBJECT	CX-We Web User Invitation Task
SERVICE TASK TYPE STATUS	Active
SERVICE TASK CLASS	Self-Service
DETAILED DESCRIPTION	

Save Cancel

5. Click **Save** to create the self-service task type.
6. From the **Admin** menu, select **General**, and select **Master Configuration**. From the **Master Configuration** zone, select the **Edit** option for the **CC&B Self-Service Integration** master configuration. The master configuration is displayed.
7. From the **Self-Service Tasks** zone, click the plus icon to add an entry. From the **Service Task** drop-down list select **Invite Guest** user, and from the **Service Task Type** drop-down list select the **Invite Guest User** self-service task type you created earlier in this procedure.

Customer contacts track the creation of self-service tasks to aid customer service representatives in reviewing tasks created for an account, and are configured using **Customer Contact Class** and **Customer Contact Type**. In addition to selecting applicable customer contacts with these options, review "Logging Self-Service Tasks" on page 247 for more information on configuring customer contacts.

8. From the **Link Self Service User** zone, complete the following configurations to apply the required scripts and definitions to manage guest users and process guest user invitations:

- **Account Relationship Type:** Select the applicable account relationship type for your environment.
- **Manage Guests Service Script:** `CXMngGstUsr`
- **Process Invitation Service Script:** `CXPrCInvite`
- **Receives Copy of Bill:** Ensure that this checkbox is selected to support guest user accounts.
- **Bill Route Type:** Select whether guest users receive bills through email or a postal address. The most common configuration for guest users is to receive bills through email.
- **Bill Address Source:** Select the applicable address source for guest users that provides the address for the bill route type selected above.
- **Verify Guest User Identifiers:** Select one of the following options depending on whether guest users can complete their guest user access creation through self-service or must call the utility for support:
  - **Create Person Automatically:** Guest users without applicable person contact types can accept invitations and have the person contact type automatically created.
  - **Verify Identifiers Manually:** Guest users without applicable person contact types can accept invitations and then receive a message to contact the utility to complete the guest user creation process.
- **Web User Account Role:** Select a default role to be applied during guest invitation in the event that the role that was selected for the guest invitation would modify the guest user from a financially responsible role to a non-financially responsible role. In this scenario, this default role is applied to the guest account. If no default role is defined using this configuration, the role selected in the guest user invitation is used regardless of financial responsibility changes.
- **Update Guest User Role Script:** Select the script `CXGURo1UpElg` to confirm that the financial responsibility of a guest user account is not changed due to a user role update. Any user role updates that change a guest user's financial responsibility are prohibited. If you do not define a script, all user role updates are allowed regardless to changes in financial responsibility for the guest user account.
- **Revoke Guest User Access Script:** Select the script `CXRvGuAccess` to enable self-service removal of guest users. If a guest user account is defined as financially responsible for the account, the removal is prohibited and the guest user or main account holder must contact the utility. If you do not define a script, all guest user removals are allowed.
- **Allow Duplicate Web User Email:** Select this checkbox to allow multiple accounts to use the same email address.

- **Allow Non-Main Person:** By default, this option is cleared and Digital Self Service - Transactions requires a single web user to be associated with a single person in the system. In this scenario, a customer can only connect to accounts where they are defined as the main person. Oracle Utilities recommends this approach along with a single person in the system being associated with a single customer.

The Allow Non-Main Person option, when selected, allows a web user to connect to accounts where they are not the main person through the use of the main person's identifiers. Any persons connected in this manner are treated as guest users on the account. This can allow for scenarios such as multiple units of an apartment building having their accounts, each of which have different persons, connected to a single web user. While this method can support this behavior, Oracle Utilities instead recommends using the standard invite guest user features provided with Digital Self Service - Transactions to allow additional users to connect their accounts and perform required account management.

- **Allow Secondary Person:** Select this checkbox to allow secondary persons already linked to the account in Customer to Meter to connect the account to their web user using their own person identifiers. These secondary persons can complete a connection without requiring the main account holder to send a guest invite. By default, this option is cleared, and only main account holders can connect their account without being invited.
- **Connect Account Service Script:** Customized connect account logic can be supported by including the script `CXConAccount`. This script is provided as a basic example script and can be modified to meet business requirements for the account connection process. By default, this option is blank, and the base functionality for account connections is used.
- **Skip Phone Verification For New User:** Select this checkbox to skip phone number validation as part of the guest users invite acceptance process. By default, this option is cleared, and guest users must validate their phone number to accept an invite.

**Link Self Service User**

Web User Person Contact Type: CM-CSSUSREM 🔍 CSS User Email

Account Relationship Type: Self Service

Manage Guests Service Script: CXMngGstUsr 🔍 Manage Guest User

Process Invitation Service Script: CXPrInvite 🔍 Process Invitation

Receives Copy of Bill:

Bill Route Type: Email

Bill Address Source:

Verify Guest User Identifiers: Create Person Automatically

Web User Account Role: Account Holder

Update Guest User Role Script:  🔍

Revoke Guest User Access Script:  🔍

Allow Duplicate Web User Email:

Allow Non-Main Person:

Allow Secondary Person:

Connect Account Service Script: CXConAccount 🔍 Connect Account

Skip Phone Verification for New User:

9. Click **Save** to save the master configuration changes.

#### To define guest user roles

The available guest user roles provided as part of "Manage Web Account Configuration Options" on page 191 must be defined as described below.

1. Log in to Customer Care and Billing.
2. From the **Admin** menu, select **General**, and select **Extendable Lookup**. The Extendable Lookup Query is displayed.
3. In the **Business Object** field, type **C1-WebUserAccountRoleLookup** and select **Search**. The Business Object is displayed in the search results.
4. Select the **Web User Account Role** to open the extendable lookup.
5. Complete the following configurations for each role:
  - a. Select **Add** to add a new role. The Extendable Lookup dialog box opens.
  - b. Complete all required information, including the following:
    - **Web User Account Role:** The identifier code for the guest user role. This must match the code provided as an input with "Manage Web Account Configuration Options" on page 191
    - **Description:** The name of the guest user role that is displayed in Digital Self Service - Transactions.
    - **Status:** Active
    - **Account Relationship Type:** Select the applicable account relationship type for the guest user role. If this configuration is left blank, the master configuration determines the default account relationship type.

- **Financially Responsible:** Select this checkbox if the guest user role is financially responsible for the account.
- c. Select **Save** to create the new entry.

#### To define alerts for guest user invitations

Alerts can be displayed in Digital Self Service - Transactions to notify customers that they have been sent an invitation to be a guest user on another utility account.

**Note:** These alerts are available if the user invited as a guest already has a web login with the utility. An email is also sent for all guest user invitations, which allows users without a web login to create the required web login as part of accepting the guest access.

1. Log in to Customer Care and Billing.
2. From the **Admin** menu, select **General**, and select **Master Configuration**. From the **Master Configuration** zone, select the **Edit** option for the **CC&B Self-Service Integration** master configuration. The master configuration is displayed.
3. From the **Digital Self Service Alerts** zone, add the following new alert:
  - **Alert Category:** Invite Alerts
  - **Alert Type:** Pending invitation
  - **Priority:** 20
  - **Alert Severity:** Medium
  - **Script:** CXInvAlert
4. Click **Save** to save the master configuration changes.

#### To define outbound notifications for guest user invitations

Email notifications are sent when guest users are invited to an account. This includes an email to the guest user notifying them of the invitation, and an email to the account owner when the guest user accepts the invitation and has been added to their account.

Digital Self Service - Transactions supports the following methods of delivering these guest notifications:

- Digital Self Service - Transactions sends the outbound notifications. To enable to send guest notifications for your customers, you must contact your Oracle Utilities Delivery Team, as described in "Contacting Your Delivery Team" on page 252 and provide the minimum following inputs depending on your preferred template approach:

- If using the default templates, provide:
  - desired logo in PNG format
  - utility name
  - primary color
  - Digital Self Service - Transactions portal URL
  - desired utility physical address
  - desired customizations such as text or a preferred message illustration file, in PNG format, based on the configuration options described in "Guest User Email Notifications" on page 192.
- If using alternate templates, provide HTML files as described in the **Alternate Template** section from "Reviewing Manage Web Account Configuration Options" on page 191.
- An external system sends the outbound notifications. Refer to the "Guest Notifications" on page 189 and "Collection Process Template Configuration" on page 190 to send guest notifications through an external system.

#### To send guest user invitations from the account owner

Account owners can provide multiple users with the permissions to invite guests to the account. If one of these users then invites a new guest, by default, the user who invited the guest is mentioned in the invitation communications rather than the account owner. To ensure that the account owner is always listed in guest invitation communications, follow the steps below to define the character used as a separator for person accounts.

**Note:** If this optional step is completed, refer to "Guest User Email Notifications" on page 192 for information on the guest invitation variables that return the name of the account owner.

1. Log in to Customer Care and Billing.
2. From the **Admin** menu, select **Installation Options**. The Installation Options are displayed.
3. From the **Person** tab select **Use Name Separator**.
4. In the **Person Name Separator Character** field, enter your supported character.
5. Click **Save** to save the changes.

## Help Center

The help center provides customers with options to answer questions they have about their utility bill or service. Customers can also act on common customer tasks.

- **We're Here to Help:** Customers are presented with various methods to receive customer support or learn more on how to complete tasks on their own using Digital Self Service - Transactions. Review all configuration options listed at "We're Here to Help" on page 212
- **Ask a Question:** Customers can submit support questions from a list of topics.
  - Review all configuration options listed at "Ask us a Question" on page 213.
  - Create question topics for customers to select from and complete, as described at "Creating Questions for Customers to Submit" on page 219.
- **Do it Yourself Online:** Customers looking to complete certain tasks can review the available actions they can do online. Review all configuration options listed at "Do it Yourself Online" on page 215.
- **Other Ways to Get in Touch:** Applicable phone, email, and mail support contact information is available to customers when they select the other ways to get in touch link. Review all configuration options listed at "Other Ways to Get in Touch" on page 218

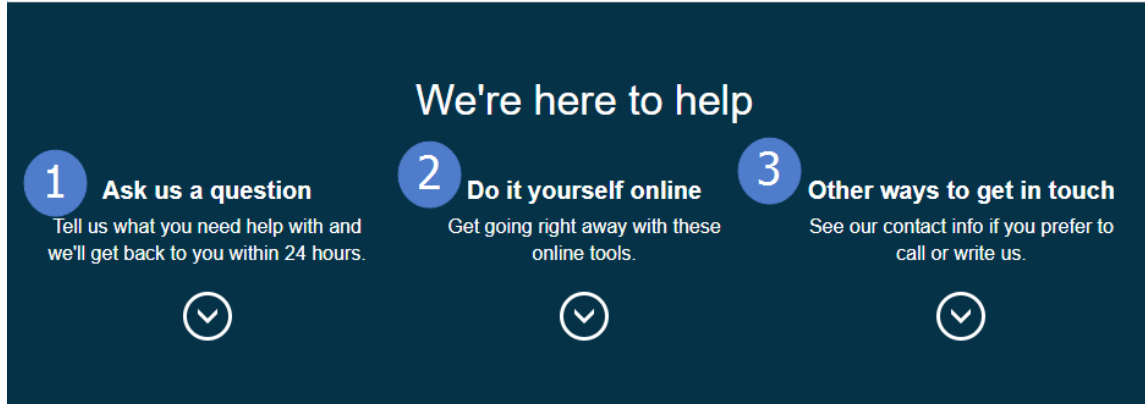
## Reviewing Help Center Configuration Options

Use the tables below to review all feature configuration options which can be submitted as a request using [My Oracle Support](#).

**Note:** You can use the Opower Configuration Tool to implement certain configurations for Digital Self Service - Transactions. This can include user experience configurations, interface messages and formats, branding configurations, and other configurations relevant to Digital Self Service - Transactions. To review if any configurations listed below are available with the Opower Configuration Tool, access the tool at <https://configuration.opower.com/> and review the available options for the pages and widgets included in your Digital Self Service - Transactions web portal.

### We're Here to Help

Customers are presented with various methods to receive customer support or learn more on how to complete tasks on their own using Digital Self Service - Transactions.



Use the table below to review all available configuration options.

Image Number	Configuration Option
1	<p><b>Ask a Question Link</b></p> <p><b>Default:</b> Ask us a question</p> <p>Tell us what you need help with and we'll get back to you within 24 hours.</p>
2	<p><b>Do it Yourself Online Link</b></p> <p><b>Default:</b> Do it yourself online</p> <p>Get going right away with these online tools.</p>
3	<p><b>Other Ways to Get in Touch Link</b></p> <p><b>Default:</b> Other ways to get in touch.</p> <p>See our contact info if you prefer to call or write us.</p>

### Ask us a Question

Customers can submit support questions from a list of topics. Attachments can be included with a customer's question to provide additional information, such as a picture of a broken meter or an image of an issue they are having with their online utility account.



# Ask us a question 1

Select a topic ▼

Enter your question. If this is about a specific account or property, please include the account number or address.

+ Attach file or photo

SEND

View your question history.

Use the table below to review all available configuration options.

Image Number	Configuration Option
1	<p><b>Ask us a Question Title</b></p> <p><b>Default:</b> Ask us a question</p>
Not Depicted	<p><b>File Storage Location</b></p> <p>A file storage location is required to support customers uploading attachments for their questions. Oracle Utilities supports using a file storage server which supports WebDAV for this purpose. Contact the Oracle Utilities Delivery Team for methods in which to securely share the information requested below.</p> <p>Provide the storage location information for your file storage server that supports WebDav:</p> <ul style="list-style-type: none"> <li>▪ URL of the file storage server, including the host and port number.</li> <li>▪ Username (client ID) used to access the file storage server.</li> <li>▪ Password (client secret) used to access the file storage server.</li> </ul> <p><b>Default:</b> None</p>

<b>Image Number</b>	<b>Configuration Option</b>
Not Depicted	<p><b>File Size Limit</b></p> <p>A maximum file size can be defined for attachments added by customers. Include the file size unit, such as bytes, kilobytes, or megabytes, with the file size limit.</p> <p><b>Default:</b> None</p>
Not Depicted	<p><b>Supported File Extensions</b></p> <p>Supported file types for customer attachments must be provided. Provide all applicable, supported file extensions, such as png, jpg, pdf, and so on.</p> <p><b>Default:</b> None</p>
Not Depicted	<p><b>Support Self-Signed Certificates</b></p> <p>Highlight file storage servers that use self-signed certificates to ensure the file storage server is trusted. File storage servers that use trusted certificate authorities are trusted without this additional configuration.</p> <p><b>Default:</b> Disabled</p>
Not Depicted	<p><b>Enable Periodic Requests</b></p> <p>If the connection to the file storage server is dropped frequently due to inactivity, periodic requests can be enabled to ensure an active connection is maintained.</p> <p><b>Default:</b> Disabled</p>

**Do it Yourself Online**

Customers looking to complete certain tasks can review the available actions they can do online. This list highlights features available with Digital Self Service - Transactions that customers can complete themselves.

# Do it yourself online **1**

## Billing & Payments **2**

Sign up for Auto-Pay

Sign up for Paperless Billing

Sign up for Balanced Bills

Set up a Payment Arrangement

## **3** Service & Accounts

Start, stop, or transfer service

Update your contact info

Update your password

Use the table below to review all available configuration options.

Image Number	Configuration Option
1	<b>Do it Yourself Online Title</b> <b>Default:</b> Do it yourself online
2	<b>Billing and Payments Section Title</b> <b>Default:</b> Billing & Payments
2	<b>Billing and Payments Section Links</b> Links to various billing and payment tasks are presented to the customer. A maximum of four links can be shown. Links can be removed or different links can be included, which require the text and URL for the link. <b>Defaults:</b> <ul style="list-style-type: none"><li>▪ Sign up for Auto Pay</li><li>▪ Sign up for Paperless Billing</li><li>▪ Sign up for Balanced Bills</li><li>▪ Set up a Payment Arrangement</li></ul>

Image Number	Configuration Option
3	<p><b>Service and Accounts Section Title</b></p> <p><b>Default:</b> Service &amp; Accounts</p>
3	<p><b>Service and Accounts Section Links</b></p> <p>Links to various service and accounts tasks are presented to the customer. A maximum of four links can be shown. Links can be removed or different links can be included, which require the text and URL for the link.</p> <p><b>Defaults:</b></p> <ul style="list-style-type: none"> <li>▪ Start, stop, or transfer service</li> <li>▪ Update your contact info</li> <li>▪ Update your password</li> </ul>
Not Depicted	<p><b>Additional Do it Yourself Section</b></p> <p>A third column can be added to link to additional customer self-service tasks of a utility's choosing. A section title is required, along with applicable text and URLs for each link. A maximum of four links can be included.</p> <p><b>Default:</b> None</p>

## Other Ways to Get in Touch

Applicable phone, email, and mail support contact information is available to customers when they select the other ways to get in touch link.

### Other ways to get in touch

**Phone** **1**

**Power outage center**  
Available 24/7  
+1 (888) 888-8888

**Customer service center**  
Monday-Sat, 7am to 9pm  
+1 (888) 888-8888

**Email** **2**

**Customer Help**  
help@utilco.com

**Billing & Payment**  
billing@utilco.com

**Mail** **3**

**UtilCo**  
1234 Union St  
San Francisco, CA, 94607

Use the table below to review all available configuration options.

Image Number	Configuration Option
1	<p><b>Phone Information</b></p> <p>One or more telephone numbers that customers can call for customer support. If multiple phone numbers are to be displayed, it is recommended to provide the support category to distinguish between them. The telephone number and the hours of operation can also be supplied.</p> <p><b>Default:</b> None, phone information must be provided.</p>
2	<p><b>Email Information</b></p> <p>One or more email contacts that customers can use to request customer support. If multiple email contacts are to be displayed, it is recommended to provide the support category to distinguish between them.</p> <p><b>Default:</b> None, email information must be provided.</p>
3	<p><b>Mailing Address Information</b></p> <p>One or more mailing addresses that customers can send letters to for</p>

Image Number	Configuration Option
	<p>customer support. If multiple mailing addresses are to be displayed, it is recommended to provide the support category to distinguish between them.</p> <p><b>Default:</b> None, mailing address information must be provided.</p>

## Creating Questions for Customers to Submit

Campaigns and forms are used to create questions that customers can ask in the Contact Us section. The campaign and form create the structure of what a customer must include when sending a question to a utility. Refer to your Oracle Utilities Customer Care and Billing documentation for additional information on creating campaigns and forms.

**Note:** This documentation provides steps to complete these configuration tasks using Oracle Utilities Customer Care and Billing. However, many of these tasks can be completed with other applicable products such as Oracle Utilities Customer to Meter or Oracle Utilities Customer Cloud Service. Refer to your applicable product documentation for steps to complete the configuration using your Oracle Utilities product. Additionally, this documentation assumes that you know how to create the various objects listed below as well as modify or create master configurations. For additional details on these tasks, refer to the applicable [Oracle Utilities Documentation](#).

### To create a campaign for a customer question:

Each question displayed to a customer in the Ask a Question drop-down list must have an applicable campaign. Use the steps below to create a question, and all applicable customer inputs for that question, and repeat these steps to create each required question.

1. Log in to Customer Care and Billing.
2. From **Menu**, select **Sales and Marketing**, select **Campaign**, and then select **Add**. The options to create a campaign are displayed.
3. From the **Main** tab, complete the following information for the question. All fields not mentioned below are not utilized for question topics and can use default values.

- **Campaign:** An internal name for the campaign, for example, Report a Gas Leak.
  - **Description:** An internal description to provide additional explanation to internal audiences of the purpose of the campaign.
  - **Campaign Status:** Set to **Active**. This status does not affect the functionality of the questions used for the campaign, but defining as Active can help clarify to internal users that the campaign is being actively used.
4. From the **Questions & Misc. Fields** tab, complete the following information for the first customer input for a question. All fields not mentioned below are not utilized for customer input and can use default values.
    - **Prompt on Order:** The informational text displayed to customers for the customer input. For example, the first customer input for reporting a gas leak could be: **The closest intersection of the leak, if the leak is not at your home.**
    - **Sequence:** The relative order in which the customer input is displayed for the question. The lower values are shown higher towards the top of the question. You can use increments of 10 to allow for inserting additional customer inputs at a later time.
    - **Applicability:** Defines if the customer must provide an input. Select **Required** if a customer must provide an input, and select **Optional** if the input can be skipped.
    - **Type of Response:** Select **Characteristic** to define how the customer input is captured.
      - **Characteristic Entity:** Characteristic type response can be related to the Account, Order, Person, or Premise characteristics.
      - **Characteristic Type:** Click the search icon to view a list of available characteristic types to choose from. When selecting a characteristic, be aware of the Type of Char Value:
        - **Predefined Value:** A drop-down list with the available values is presented to the customer to select from.
        - **Adhoc Value:** A free form text field is presented to the customer.
      - **Default Char:** This is not utilized and can keep the default value.
  5. From the **Questions & Misc. Fields** tab, click the plus icon to add another customer input for the question. Complete all information for the customer input as described in the previous step. Repeat this process until all inputs for a question are created.
  6. From the **Algorithms** tab, in the **System Event** drop-down list, select **Campaign Eligibility**. Within the **Algorithm** field, select **C1-ELIGIBLE**.

To create a form for a customer question:

After a campaign is created for a question, it must be mapped to a form, which must be created as a self-service task type. Use the steps below to create a form for a customer question, and repeat these steps to create a form for each question.

1. Log in to Customer Care and Billing.
2. From **Menu**, select **Self-Service**, select **Self-Service Task Type**, and then select **Add**. The Select Business Object dialog box opens.
3. From the drop-down list select **Form Task Type** and click **OK**. The Form Task Type dialog box opens.
4. From the **Main** area, complete the following information:
  - **Service Task Type**: The internal name for the form.
  - **Description**: The name of the question displayed to customers in the Ask a Question drop-down list. It must be short and descriptive.
  - **Related Transaction Object**: Select **Form Task**.
  - **Service Task Type Status**: Select **Active**. This status does not affect the functionality of the question, but defining as active can help clarify to internal users that the form is being actively used.
  - **Service Task Class**: Select **Self Service**.
5. From the **Form Task Type Details** area, complete the following information:
  - **Form Type**: Select **Forms - Issues**.
  - **Allow Update Criteria Script**: Keep the default, which includes no criteria script.
  - **Campaign**: Select the campaign that you created for a question.
6. From the **Notification Information** area, complete the following information:
  - **Update Notification and Close Notification**: Define how notifications are delivered to customers when there is an update to their question, or the question has been closed, respectively. This includes selecting a delivery type such as email or SMS, and selecting messages that provide the notification subject and text. The script **C1-BillDueMg** provides an example script that is intended to be used for bill due notifications, and can be reviewed here for the general structure and technique to create this type of notification script.
  - **Retry Information**: If you have defined a notification delivery configuration that identifies unsuccessful notifications, you can also define the retry frequency and maximum number of retries. You can keep the default, which does not attempt any retries for update or close notifications.
7. From the **Customer Close Reasons** area, keep the default. Only Customer Service Representatives are capable of closing customer questions.
8. From the **Alert Information** area, keep the default.
9. Click **Save** to create the new form.

#### To include customer questions in Digital Self Service - Transactions

After the campaign and form objects are created for questions, the applicable forms can be included in your self-service master configuration to include the questions as part of Digital Self Service - Transactions.



1. Log in to Customer Care and Billing as a user with edit access for the CC&B Self-Service Integration master configuration.
2. From the **Admin** menu, select **General**, and select **Master Configuration**. From the **Master Configuration** zone, select the **Edit** option for the **CC&B Self-Service Integration** master configuration. The master configuration is displayed.
3. From the **Forms** zone, ensure that **Forms - Issue** is included as a **Form Type**. If it is not included, click the plus icon and add this form type.
4. Click the plus icon in the **Service Task Type** area, and select the form used for a customer question. Repeat this step to include all forms that are mapped to customer questions.
5. Click **Save** to save the master configuration changes.

## Outages

Self-service options are available to the customer to view outages applicable to them, report a problem or outage with their utility service, and view a service outage map.

- **My Outages:** The My Outages feature provides customers with personalized information about the outages affecting their service addresses. Complete required configurations, as described at "Configuring My Outages" on page 225.
- **Report Outages:** The service reporting options walk the customer through the process and collect information needed by utilities to efficiently troubleshoot service issues.
  - Review all configuration options listed at "Report Outages Configuration Options" on page 223 "We're Here to Help" on page 212
  - Complete required configurations, as described at "Configuring Report Outages" on page 228.
- **Outage Map:** The Outage Map provides information on all outage events affecting the service territory. While outages can be planned, outages are also frequently unplanned and require quick communication and configuration. For this purpose, it is recommended to complete Outage Map configuration through the use of the Opower Configuration Tool, which is described in "Configuring the Outage Map" on page 234.

## Reviewing Report Outages Configuration Options

Use the tables below to review all feature configuration options which can be submitted as a request using [My Oracle Support](#).

## Report Outages Configuration Options

The service reporting options walk the customer through the process and collect information needed by utilities to efficiently troubleshoot service issues.

## Report Outages Landing Page

The screenshot shows the UtilityCo website's 'Report Outage' landing page. At the top left is the UtilityCo logo. To its right are navigation links for 'Login', 'Start & Stop Service', and 'Outages'. A language dropdown menu is set to 'English'. A dark blue header bar contains the text 'Report Outage'. The main content area has a light gray background and is titled 'What is the problem?'. It features two white boxes: the first with a house and meter icon labeled 'Outage at my serviced location', and the second with a traffic cone icon labeled 'Outage in my community'. Below these is a section for 'Identifying an emergency' with instructions on what to do if there is a gas leak or downed power lines, including the phone number 1-800-UTIL-COS. A 'NEXT' button is at the bottom.


English ▼

UtilityCo


Login Start & Stop Service **Outages** ☰

**Report Outage**

### What is the problem?



Outage at my serviced location



Outage in my community

**Identifying an emergency**

Do you smell gas, see downed power lines or suspect another emergency situation?

Leave the area immediately & call 911 or call UtilityCo at 1-800-UTIL-COS.

NEXT

## Report Outages Details

Report Outage
Outage Map

Outage Details
Contact Details
Review & Submit

### Provide details about the outage

\*All fields are required unless 'optional' is stated

1

Street

Cross Street

City

State

Use the table below to review all available Report Outages configuration options.

Image Number	Configuration Option
1	<p><b>Service Issue Questions</b></p> <p>Customers are prompted to answer questions on the service issue being reported for individual service. The questions and responses are configurable.</p> <div style="border: 1px solid #ccc; padding: 10px; margin: 10px 0;"> <p><b>Note:</b> While the questions depicted in the referenced image are for community outages, the individual service outage experience is similar.</p> </div> <p><b>Defaults:</b></p> <ul style="list-style-type: none"> <li>■ Problem Description</li> </ul>

Image Number	Configuration Option
	<ul style="list-style-type: none"> <li>▪ Cause of Problem</li> <li>▪ Description</li> <li>▪ Additional Information</li> </ul>
1	<p><b>Community Outage Questions</b></p> <p>Users are prompted to answer questions on the service issue being reported for a community outage. The questions and responses are configurable.</p> <p><b>Defaults:</b></p> <ul style="list-style-type: none"> <li>▪ Problem Description</li> <li>▪ Cause of Problem</li> <li>▪ Description</li> <li>▪ Additional Information</li> </ul>
Not Depicted	<p><b>Confirmation Notification</b></p> <p>Customers can receive an email notification including the information they submitted to the utility as confirmation of their reporting an issue. To receive this notification, the customer must enter an email address in the Contact Details step. If no email is provided, no email is sent.</p> <p><b>Default:</b> No confirmation notification</p>

**Configuring Outages**

Self-service options are available to the customer to view outages applicable to them, report a problem or outage with their utility service, and view a service outage map.

**Configuring My Outages**

The My Outages feature provides customers with personalized information about the outages affecting their service addresses. Examples of the My Outages features are provided below.

## My outages

See details of outages affecting your premises. To view all active outages, go to [Outage Map](#).

2 premise(s) with an outage.



7489-A Demo St.  
CA 94501  
3655460977

Estimated restoration	Status	Cause	First reported
Nov 17th, 01:42PM PST	New unacknowledged event	Trouble Call	Nov 1st, 02:18AM PDT



7489-A Demo St.  
CA 94501  
3655460977

Estimated restoration	Status	Cause	First reported
Nov 17th, 12:36PM PST	New unacknowledged event	Non-outage	Nov 16th, 05:45AM PST

Don't see your outage? [Report outage](#)

**Note:** This documentation provides steps to complete these configuration tasks using Oracle Utilities Customer Care and Billing. However, many of these tasks can be completed with other applicable products such as Oracle Utilities Customer to Meter or Oracle Utilities Customer Cloud Service. Refer to your applicable product documentation for steps to complete the configuration using your Oracle Utilities product. Additionally, this documentation assumes that you know how to create the various objects listed below as well as modify or create master configurations. For additional details on these tasks, refer to the applicable [Oracle Utilities Documentation](#).

### To configure outage information retrieval

Complete the following steps to define the processing logic for reported outages.

1. Log in to Customer Care and Billing as a user with edit access for the **CC&B Self-Service Integration** master configuration.
2. From the **Admin** menu, select **General**, and select **Master Configuration**. From the **Master Configuration** zone, select the **Edit** option for the **CC&B Self-Service Integration** master configuration. The master configuration is displayed.

3. From the **Outage** zone, for **Job History Processing Script**, type `CMRetJobHsy`.  
Review and modify `CMRetJobHsy` as needed.
4. Select **Save** to save your master configuration changes.

## Configuring My Outages Messaging and Behavior

**Note:** This documentation provides steps to complete configuration tasks using the Opower Configuration Tool. For more information on using the Opower Configuration Tool, refer to the [Oracle Utilities Opower Configuration Tool User Guide](#).

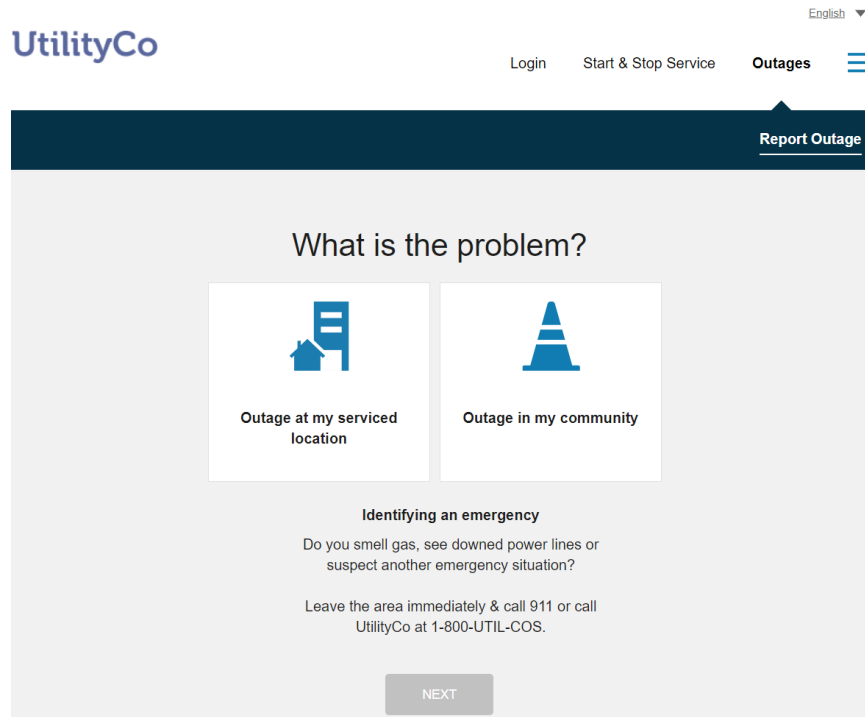
To configure My Outages messaging and behavior:

1. From the Opower Configuration Tool, select **Widgets**, and then select **Current Outages**. The configurations for Current Outages are displayed.
2. To configure text and messages of the My Outages feature:
  - a. Select **Text (locale)**, where **locale** is the language locale you are configuring.
  - b. Text and messages are included for the text used throughout the various experiences of the My Outages features. For example, the **Estimated Restoration** configuration allows for the definition of the label for the estimated restoration time message.
  - c. Select **Save Changes** to save any changes to the default text and messages. Text and messages that are directly available are updated in the preview, while text and messages in secondary locations may not be directly highlighted in the preview.
3. To configure the behavior of the My Outages feature:
  - a. Select **Functionality**.
  - b. Make any required configuration changes. For example, the **Date Time Format** option allows you to define how date and time information is formatted. The help text provided with configurations can provide additional explanation of each available option.
  - c. Select **Save Changes** to save any changes to the default configurations. Certain configurations that are directly available are updated in the preview, while some configurations may not be directly highlighted in the preview.
4. Refer to the [Oracle Utilities Opower Configuration Tool User Guide](#) for steps to publish configuration changes.

## Configuring Report Outages

The service reporting options walk the customer through the process and collect information needed by utilities to efficiently troubleshoot service issues. Examples of the Report Outages features are provided below.

Report Outages Landing Page:



Report Outages Details:

Report Outage    Outage Map

---

Outage Details      Contact Details      Review & Submit

---

## Provide details about the outage

\*All fields are required unless 'optional' is stated

**1**

Street

Cross Street

City

State

**Note:** This documentation provides steps to complete these configuration tasks using Oracle Utilities Customer Care and Billing. However, many of these tasks can be completed with other applicable products such as Oracle Utilities Customer to Meter or Oracle Utilities Customer Cloud Service. Refer to your applicable product documentation for steps to complete the configuration using your Oracle Utilities product. Additionally, this documentation assumes that you know how to create the various objects listed below as well as modify or create master configurations. For additional details on these tasks, refer to the applicable [Oracle Utilities Documentation](#).

### To configure report an outage processing

Complete the following steps to set up the processing logic for reported outages.

1. Log in to Customer Care and Billing as a user with edit access for the **CC&B Self-Service Integration** master configuration.
2. From the **Admin** menu, select **General**, and select **Master Configuration**. From the Master Configuration zone, select the **Edit** option for the **CC&B Self-Service Integration** master configuration. The master configuration is displayed.
3. From the **Outage** zone, for **Report an Outage Processing Script**, type `CMReportOtg`. Review and modify the `CMReportOtg` script as needed.



4. For **Service Type**, select **Electric**. Be aware that only one service type can be configured for Outages support at a time.
5. Select **Save** to save your master configuration changes.

#### To configure the outage type

Complete the following steps to define the outage types that customers can report.

1. Log in to Customer Care and Billing as a user with edit access for the **CC&B Self-Service Integration** master configuration.
2. From **Admin** menu, select **Outage Call Type**, and select **Add**.
3. Complete the following information to configure a property outage:
  - a. **Main:**
    - **Outage Call Type:** DSS - Property
    - **Description:** Property Outage
    - **Related Transaction BO:** Outage Call with Premise
    - **Service Task Type Status:** Active
  - b. **Outage Call Details:**
    - **Premise Required:** Enabled
    - **Number of Outages Codes:** 3
  - c. **Outage Group Codes:** Click the Add icon once for each definition described below:
    - **First Group Code:**
      - **Sequence:** 1
      - **Outage Group Code Characteristic Type:** Power
      - **Default Value:** All Power Out
    - **Second Group Code:**
      - **Sequence:** 2
      - **Outage Group Code Characteristic Type:** Cause
      - **Default Value:** Unselected
    - **Third Group Code:**
      - **Sequence:** 3
      - **Outage Group Code Characteristic Type:** Description
      - **Default Value:** Unselected
4. Select **Save** to create the property outage type.
5. From **Admin** menu, select **Outage Call Type**, and select **Add**. Complete the following information to configure a public outage:
  - a. **Main:**
    - **Outage Call Type:** DSS - Public
    - **Description:** Public Outage

- **Related Transaction BO:** Outage Call without Premise
  - **Service Task Type Status:** Active
- b. **Outage Call Details:**
- **Premise Required:** Disabled
  - **Number of Outages Codes:** 3
- c. **Outage Group Codes:** Click the Add icon once for each definition described below:
- **First Group Code:**
    - **Sequence:** 1
    - **Outage Group Code Characteristic Type:** Power
    - **Default Value:** All Power Out
  - **Second Group Code:**
    - **Sequence:** 2
    - **Outage Group Code Characteristic Type:** Cause
    - **Default Value:** Unselected
  - **Third Group Code:**
    - **Sequence:** 3
    - **Outage Group Code Characteristic Type:** Description
    - **Default Value:** Unselected
6. Select **Save** to create the public outage type.
  7. From the **Admin** menu, select **General**, and select **Master Configuration**. From the Master Configuration zone, select the **Edit** option for the **CC&B Self-Service Integration** master configuration. The master configuration is displayed.
  8. From the **Outage** zone complete the following definitions:
    - **Property Outage Call Type:** Property Outage
    - **Public Outage Call Type:** Public Outage.
  9. Select **Save** to save the master configuration changes.

#### To configure self-service task

Complete the following steps to define the self-service tasks that support Report Outages.

1. Log in to Customer Care and Billing as a user with edit access for the **CC&B Self-Service Integration** master configuration.
2. From the **Admin** menu, select **General**, and select **Master Configuration**. From the **Master Configuration** zone, select the **Edit** option for the **CC&B Self-Service Integration** master configuration. The master configuration is displayed.
3. From **Menu**, select **Self-Service**, select **Self-Service Task Type**, and select **Add**. The Select Business Object dialog box opens.
4. From the **Service Task Type Business Object** drop-down list, select **Report Outage Task Type** and click **OK**. The Maintenance page opens.

5. Complete the following information for the self-service task type:
  - **Service Task Type:** REPORTOUTAGE
  - **Description:** Report Outage
  - **Related Transaction Object:** Report Outage Task
  - **Service Task Type Status:** Active
6. Select **Save** to create the self-service task type.
7. From the **Admin** menu, select **General**, and select **Master Configuration**. From the **Master Configuration** zone, select the **Edit** option for the **CC&B Self-Service Integration** master configuration. The master configuration is displayed.
8. Navigate to the **Outage** zone. From the **Service Task Type** drop-down list, select the self-service task type Report Outage that you created earlier in this procedure.
9. Select **Save** to save the master configuration changes.

#### To configure the account lookup identifier

Complete these steps to configure account lookup identifiers:

1. Log in to Customer Care and Billing as a user with edit access for the **CC&B Self-Service Integration** master configuration.
2. From the **Admin** menu, select **General**, and select **Master Configuration**. From the **Master Configuration** zone, select the **Edit** option for the **CC&B Self-Service Integration** master configuration. The master configuration is displayed.
3. Navigate to the **Outage** zone. From the **ID Type** drop-down list, select the appropriate identifier.
4. Select **Save** to save the master configuration changes.

#### To configure notification preference enrollment option for outage reporting

Complete the following steps to configure the notifications that support outage reporting.

1. Log in to Customer Care and Billing as a user with edit access for the **CC&B Self-Service Integration** master configuration.
2. From the **Admin** menu, select **General**, and select **Master Configuration**. From the **Master Configuration** zone, select the **Edit** option for the **CC&B Self-Service Integration** master configuration. The master configuration is displayed.
3. Navigate to the **Outage** zone. From the **Notification Type** drop-down list, select **Outage**.
4. From the **Email Contact Type** select the **Primary Email** option and from **SMS Contact Type** select **Cell Phone**.
5. Select **Save** to save the master configuration changes.

### To configure the CIS Division

Complete the following steps to define the CIS divisions that support Report Outages.

1. Log in to Customer Care and Billing as a user with edit access for the **CC&B Self-Service Integration** master configuration.
2. From the **Admin** menu, select **General**, and select **Master Configuration**. From the **Master Configuration** zone, select the **Edit** option for the **CC&B Self-Service Integration** master configuration. The master configuration is displayed.
3. Navigate to the **Outage** zone. From the **CIS Division** drop-down list, select the appropriate CIS Division.
4. Select **Save** to save the master configuration changes.

### To configure outbound confirmation notifications

If enabling all default notification capabilities, Oracle Utilities recommends that you create an Individual Push notification type for outage confirmation notifications and associate it with the Self-Service Updates parent notification type. The base algorithm associated with outage confirmation notifications is `C1OUTNTFTD`. For additional information, refer to "Configuring Outbound Notifications" on page 181.

## Configuring Report Outages Messaging and Behavior

**Note:** This documentation provides steps to complete configuration tasks using the Opower Configuration Tool. For more information on using the Opower Configuration Tool, refer to the [Oracle Utilities Opower Configuration Tool User Guide](#).

### To configure Report Outages messaging and behavior:

1. From the Opower Configuration Tool, select **Widgets**, and then select **Report Outage**. The configurations for Report Outage are displayed.
2. To configure text and messages of the Report Outages feature:
  - a. Select **Text (locale)**, where **locale** is the language locale you are configuring.
  - b. Text and messages are included for the text used throughout the various experiences of the Report Outages features. For example, the **Zip Placeholder** configuration allows for the definition of the placeholder text in the field that prompts for a zip code.
  - c. Select **Save Changes** to save any changes to the default text and messages. Text and messages that are directly available are updated in the preview, while

text and messages in secondary locations may not be directly highlighted in the preview.

3. To configure the behavior of the Report Outages feature:
  - a. Select **Functionality**.
  - b. Configurations are included in sections that reflect the components and supporting information used for Report Outages, such as **Fields for account lookup** and **Format for contact information fields**.
  - c. Make any required configuration changes. For example, the **Fields for account lookup** options allow you to define which fields are used to confirm the account for a customer. You can select Add New to include an additional field and then use one of the allowed field values, such as **ssn** to include a field for social security number. The help text provided with configurations can provide additional explanation of each available option.
  - d. Select **Save Changes** to save any changes to the default configurations. Certain configurations that are directly available are updated in the preview, while some configurations may not be directly highlighted in the preview.
4. Refer to the [Oracle Utilities Opower Configuration Tool User Guide](#) for steps to publish configuration changes.

## Configuring the Outage Map

The Outage Map provides information on all outage events affecting the service territory. The Opower Configuration Tool (see [Oracle Utilities Opower Configuration Tool User Guide](#)) can be used to configure the messaging and experience of the Outage Map for customers. Examples of the Outage Map features are provided below.

Outage Summary:

The screenshot displays the Oracle Utilities Opower Outage Map interface. At the top, there are navigation tabs for 'My Outages', 'Report Outage', and 'Outage Map'. Below the navigation is a search bar with the placeholder text 'Search an address or location'. The main content area is split into two columns. The left column contains an 'Outage Summary' section with the following information: '2 current outages', '60 customers affected', a 'VIEW SUMMARY LIST' link, and a 'Last updated: 10/26/2022, 1:10 AM EDT' timestamp. Below this are two buttons: 'REPORT OUTAGE' and 'MANAGE OUTAGE NOTIFICATIONS'. At the bottom of the left column is a link for 'Identifying an emergency' with a 'Details' dropdown. The right column features a map showing a service area boundary and a red marker with the number '19'. A 'Map Markers' legend is overlaid on the map, showing a red circle with a '#' for 'Number of customers affected by an outage' and a blue circle with a lightning bolt for 'Planned outage'. A warning message is displayed on the map: 'Extreme winter weather today through Thursday morning is bringing ice and local outages. Here's how to stay safe during an outage and other winter energy tips.' with a 'See more' link.

Outage Details:

Search an address, city, county, or zip

**Outage affecting 41 customers**

Estimated restoration  
**October 26 at 5:23 AM**

Status  
outage does not have an associated crew

Cause

First reported  
October 26 at 1:03 AM

**Outage affecting 19 customers**

Estimated restoration  
**October 26 at 5:24 AM**

Status  
outage does not have an associated crew

Cause

First reported  
October 26 at 1:04 AM

Last updated: 10/26/2022, 1:10 AM  
information is typically updated every 15 minutes

### Outage List:

## Outage summary list

View active outages by county or zip below or see them in the [map view](#)

**2** current outages

**60** customers affected

Last updated: 10/26/2022, 1:10 AM  
information is typically updated every 15 minutes

View by:  County  Zip

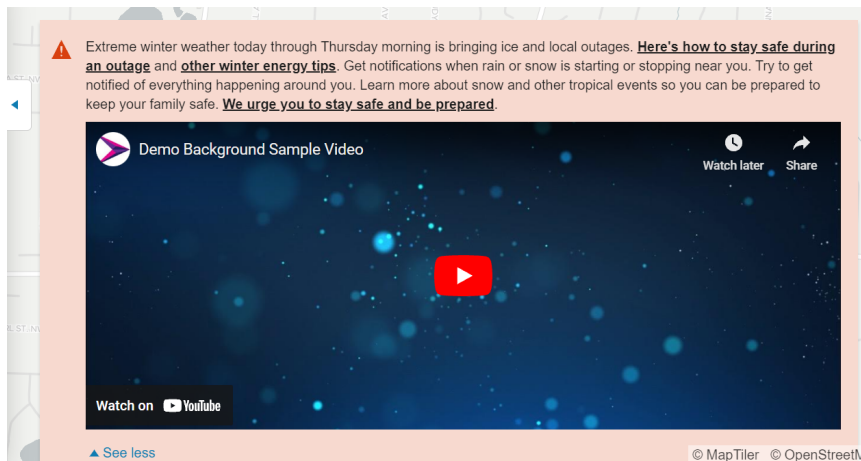
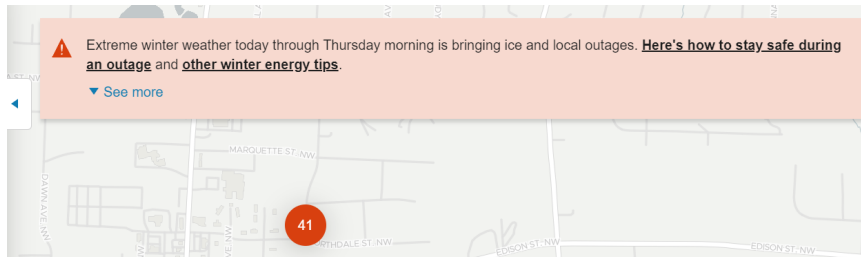
Search for county

COUNTY	CUSTOMERS AFFECTED	CUSTOMERS SERVED
<b>Stark</b>	60	35150
<b>Summit</b>	0	365
<b>Wayne</b>	0	27

< 1 of 1 >

## Alert Banners:

The examples below show alert banners displayed on an outage map, including an expanded view of an alert banner with embedded video.



## To configure the Outage Map:

1. From the Opower Configuration Tool, select **Widgets**, and then select **Outage Map**. The configurations for Outage Map are displayed.
2. To configure text and messages included on the Outage Map:
  - a. Select **Text (locale)**, where **locale** is the language locale you are configuring.
  - b. Text and messages are included in categories such as **Map** for text included on the main Outage Map, and **General** for text used throughout the various experiences of the Outage Map. For example:
    - The Map configurations allow for the definition of the title displayed for the Outage Map legend. They also include the Alert banner configurations for defining the outage banner messaging and media content.
    - The General configurations allow for the definition of the summary information for the outage.
  - c. Select **Save Changes** to save any changes to the default text and messages. Text and messages that are directly available in the Outage Map are updated in

the preview, while text and messages in secondary locations may not be directly highlighted in the preview.

3. To configure the behavior of the Outage Map:
  - a. Select **Functionality**.
  - b. Configurations are included in categories that reflect the components of the Outage Map, such as **Map** and **List**.
  - c. Make any required configuration changes. The help text provided with configurations can provide additional explanation of each available option. For example:
    - The Map options allow you to define the initial map location coordinates. Supplying a set of coordinates defines the Outage Map to display at those coordinates upon initial display. You can also use the **Display alert banner** option to show or hide a banner during an outage.
    - The Details options allow you to show or hide various information related to the outage including the cause and the status of the outage.
  - d. Select **Save Changes** to save any changes to the default configurations. Certain configurations that are directly available in the Outage Map are updated in the preview, while some configurations may not be directly highlighted in the preview.
4. Refer to the [Oracle Utilities Opower Configuration Tool User Guide](#) for steps to publish configuration changes.

## Website Navigation

The website navigation allows customers to access the content throughout Digital Self Service - Transactions.

**Note:** You can use the Opower Configuration Tool to implement certain configurations for Digital Self Service - Transactions. This can include user experience configurations, interface messages and formats, branding configurations, and other configurations relevant to Digital Self Service - Transactions. To review if any configurations listed below are available with the Opower Configuration Tool, access the tool at <https://configuration.opower.com/> and review the available options for the pages and widgets included in your Digital Self Service - Transactions web portal.

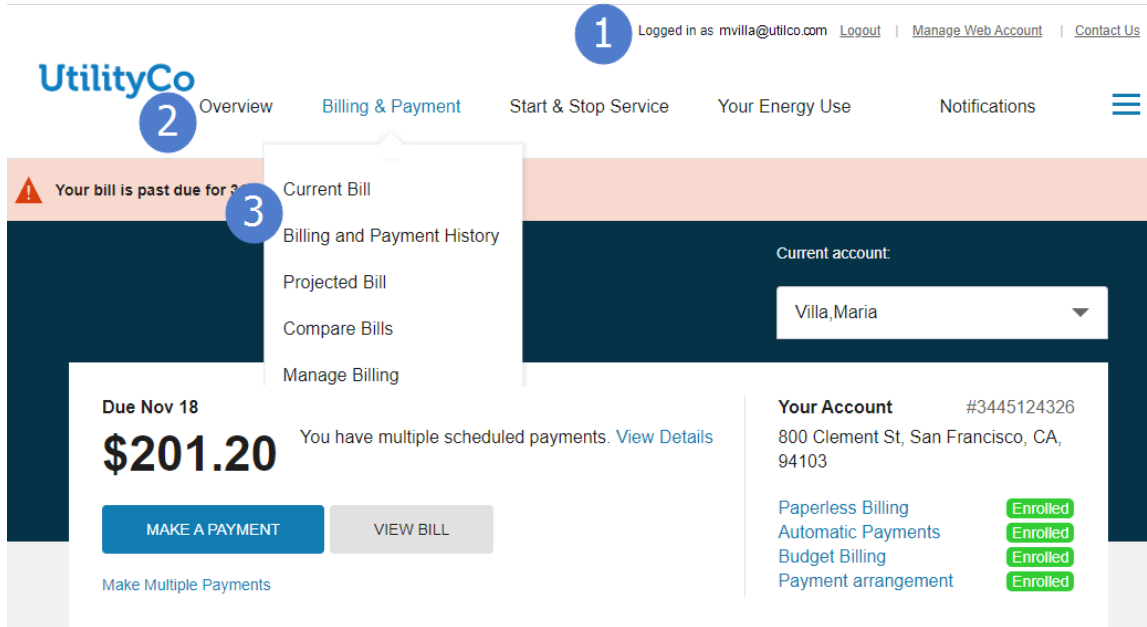
## Main Navigation Menus and Account Selector

The main navigation menus displayed across the top of the screen allow customers to access the main content categories for the site, as well as other commonly accessed resources such as account information and utility contact information.



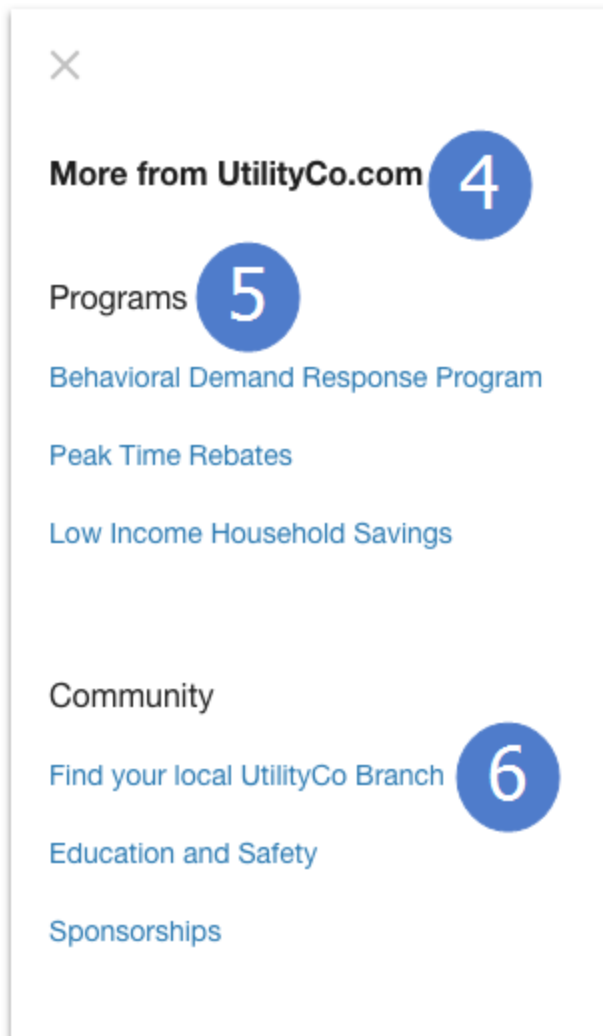
Customers can use the **Current account** drop-down list to select the utility account they want to view. In addition to the Overview Dashboard, the account selector is available on all applicable areas of Digital Self Service - Transactions portal such as Billing and Payment and the Alerts and Notifications.

The following image shows a standard example of the main navigation menus and the account selector and indicates the primary configuration options.



## Secondary Navigation Menu

The secondary menu is displayed when users click the menu button displayed with three horizontal lines, which is also referred to as a hamburger menu. The following image shows a standard example of the website navigation items within the secondary menu and indicates the primary configuration options.



## Reviewing Navigation Configuration Options

Use the table below to review all website navigation configuration options which can be submitted as a request using [My Oracle Support](#).

Image Number	Configuration Option
1	<p><b>Top Menu</b></p> <p>The top menu navigation displays user account information for authenticated users, as well as links to the user's account preferences and a utility contacts page.</p> <p><b>Default:</b> No top menu displayed.</p>
2	<p><b>Main Navigation Menus</b></p> <p>The main navigation menus displayed across the top of the page. Customers can interact with each menu to select from a list of linked menu items.</p> <p>To maintain a good user experience, it is recommended to include no more than 2 menus in addition to the default menus. Contact your Oracle Utilities Delivery Team for any updates to the default menu names.</p> <p><b>Default:</b> Menus and links as shown in the example image above and in any supplied demonstration environments.</p>
3	<p><b>Main Menu Items</b></p> <p>The linked items that are included in each menu of the main menu.</p> <p><b>Default:</b> No main menu items provided.</p> <div style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <p><b>Note:</b> If you provide updates to the default, provide the names and links for each additional main menu item. Clearly specify the main menu for each item.</p> </div>
Not Depicted	<p><b>Account Selector Account Search Requirements</b></p> <p>An account search is available for customers with multiple accounts if the number of accounts is greater than or equal to a configurable threshold.</p> <p><b>Default:</b> Five or more accounts.</p>

Image Number	Configuration Option
4	<p><b>Secondary Menu Title</b></p> <p>The title of the secondary menu.</p> <p><b>Default:</b> More from UtilityCo.com</p>
5	<p><b>Secondary Menu Categories</b></p> <p>The categories that group links in the secondary menu. It is recommended that these categories are closely related to the main menus and navigation for the utility.</p> <p><b>Default:</b> None.</p>
6	<p><b>Secondary Menu Items</b></p> <p>The linked items that are included in each category of the secondary menu.</p> <p><b>Default:</b> None.</p> <div style="border: 1px solid black; padding: 10px; margin-top: 10px;"> <p><b>Note:</b> If you provide updates to the default, provide the names and links for each secondary menu item. Clearly specify the category for each item.</p> </div>

## Reviewing Account Selector Configuration Options

Use the table below to review all account selector configuration options which can be submitted as a request using [My Oracle Support](#).

Image Number	Configuration Option
Not Depicted	<p><b>Account Selector Account Search Requirements</b></p> <p>An account search is available for customers with multiple accounts if the number of accounts is greater than or equal to a configurable</p>

Image Number	Configuration Option
	<p>threshold.</p> <p><b>Default:</b> Five or more accounts.</p>

## User Experience Variations

The user experience varies for customers depending upon their service types, available data, costs, and locale. Note that the following list indicates the primary user experience variations, not all possible variations.

- **Responsive Menus:** The responsive design of Digital Self Service - Transactions allows the menu layout to adjust based on the user's screen size. For smaller screen sizes, the options displayed across the top are instead displayed within a single menu, which then provides the full list of menu options. The main navigation links are displayed above the secondary menu title and all other categories.
- **Digital Self Service - Energy Management:** Digital Self Service - Energy Management features are an optional add-on, available through the Oracle Utilities Opower Digital Self Service - Energy Management Cloud Service. If this Cloud Service is not included as an add on to your Digital Self Service - Transactions web portal, all applicable navigation items for Digital Self Service - Energy Management features are hidden.
- **Account Search:** An account search is available for customers with multiple accounts if the number of accounts is greater than or equal to a configurable threshold. This allows customers with a large number of accounts to search for a particular account rather than having to browse through the full list of accounts.

## Customer Support

Customer Service Representatives (CSRs) with the proper permissions can use their Oracle Utilities product, such as Customer Care and Billing, to access the Digital Self Service - Transactions Web Portal. You can configure CSR support masquerading capabilities and logging of self-service tasks:

- Review all configuration options listed at "Reviewing Customer Support Configuration Options" on page 243.

- Configure CSR Masquerading, including configuring the redirection target, granting CSR user access, and configuring the masquerading acknowledgment prompt message, as described at See "Configuring CSR Masquerading" on page 244..
- Configure logging of self-service tasks to allow CSRs to see what transactions have been performed on a customer's account, as described at "Logging Self-Service Tasks" on page 247.

## Reviewing Customer Support Configuration Options

Use the tables below to review all feature configuration options which can be submitted as a request using [My Oracle Support](#).

**Note:** You can use the Opower Configuration Tool to implement certain configurations for Digital Self Service - Transactions. This can include user experience configurations, interface messages and formats, branding configurations, and other configurations relevant to Digital Self Service - Transactions. To review if any configurations listed below are available with the Opower Configuration Tool, access the tool at <https://configuration.opower.com/> and review the available options for the pages and widgets included in your Digital Self Service - Transactions web portal.

### Masquerading Session Banner

When CSR users are masquerading as a customer, a banner at the top of the Digital Self Service - Transactions Web Portal indicates that the CSR is masquerading as a customer. Use the table below to review all available configuration options.

Image Number	Configuration Option
Not Depicted	<p><b>Masquerading Banner</b></p> <p>The masquerading banner indicates the customer account that is being accessed, along with a link to close the masquerading session.</p> <p><b>Default:</b> You are masquerading as [username] . Close the session.</p>

### CSR Entitlements

CSR users can perform various actions when masquerading as a customer. Certain actions require entitlement configuration to enable for CSR users. Use the table below to review all available configuration options.

Image Number	Configuration Option
Not Depicted	<p><b>Tooltip</b></p> <p>A disabled link and tooltip is displayed on actions that are disabled for CSR users.</p> <p><b>Default:</b> Unavailable during masquerade session.</p>
Not Depicted	<p><b>CSR Entitlements</b></p> <p>You can grant CSR users access to certain actions during a masquerade session. CSR entitlements are combined with the user's general permissions. This means that CSR users have access to functional areas only when the user they are masquerading as also has permissions to access that functional area. You must provide the list of entitlements that can be assigned to CSR users, including each entitlement name.</p> <p>Entitlements are global and apply to all CSR users. Available entitlements can grant access to the following areas:</p> <ul style="list-style-type: none"> <li>▪ Third-party payments</li> <li>▪ Third-party auto-payment program</li> <li>▪ Third-party user management</li> <li>▪ Partner resources</li> </ul> <p><b>Default:</b> None. CSR users are not permitted to make payments using third-party payment providers, access third-party identity providers, or access integrated partner resources.</p>

## Configuring CSR Masquerading

A CSR can log in to their Oracle Utilities product and search for a specific customer, and then view the Digital Self Service - Transactions Web Portal as that customer. If a customer has a question about the Digital Self Service - Transactions Web Portal or their energy use, this allows the CSR to reference what the customer can see. This process is also referred to as masquerading.

You must complete the following configurations to allow CSR users to support customers through masquerading.

**Note:** This documentation provides steps to complete these configuration tasks using Oracle Utilities Customer Care and Billing. However, many of these tasks can be completed with other applicable products such as Oracle Utilities Customer to Meter or Oracle Utilities Customer Cloud Service. Refer to your applicable product documentation for steps to complete the configuration using your Oracle Utilities product. Additionally, this documentation assumes that you know how to create the various objects listed below as well as modify or create master configurations. For additional details on these tasks, refer to the applicable [Oracle Utilities Documentation](#).

To configure redirection targets and grant masquerading access to CSRs:

You must complete the following configurations to support CSR masquerading.

**Note:** In addition to the steps below, for on-premises Oracle Utilities products, you must generate a public key on the host system for your Oracle Utilities product. This includes steps such as verifying the key, exporting and verifying the certificates, extracting the public key and key ID, and restarting your Oracle Utilities product. For additional information on these requirements, refer to the Oracle Utilities Customer Care and Billing Security Guide available on [Oracle Utilities Documentation](#). When this process is complete, you must also provide the public key to Oracle Utilities to enable authorization of masquerading sessions.

1. Log in to Customer Care and Billing.
2. From the **Admin** menu, select **General**, and select **Master Configuration**. From the **Master Configuration** zone, select the **Edit** option for the **Redirection Targets** master configuration. The master configuration is displayed.
3. Complete the following configurations:
  - **Redirection Target:** Digital Self Service
  - **Key Store Alias:** Provide the key store alias you created when generating your public key.
  - **Redirection URL:** The Digital Self Service - Transactions Web Portal URL to open when a masquerading session is started. The required syntax is `https://dss-[utilityCode]-[tier].opower.com` for testing tiers or `https://dss-[utilityCode].opower.com` for the production, customer-facing tier. For these URLs, [utilityCode] is the three-to-four character, alphanumeric code for your utility, and [tier] is the environment tier for your configuration when defining for testing tiers. For example, a syntactically valid



redirection URL for the production environment of a client with the client code util is `https://dss-util.opower.com`.

- **Security URL:** The URL for the security endpoint which is used to obtain the grant code for a user to connect to the redirection URL. The format for this URL is `[redirectionURL]/webcenter/edge/apis/identity-management-v1/cws/v1/auth/[utilityCode]/csr/login/callback`, where `[redirectionURL]` is the Redirection URL specified above, and `[utilityCode]` is the three-to-four character, alphanumeric code for your utility.
  - **Security Context Algorithm:** Populate CCB to DSS Context
4. Click **Save** to save the changes to the master configuration.
  5. From the **Admin** menu, select **Security**, select **Application Service**, and select **Search**. The Application Service Search opens.
  6. In the **Application Service** text box, type `F1-REDIRECT` and select **Search**. The application service is displayed.
  7. From the **Application Security** tab, review the user groups listed in the **User Groups Linked** and the **User Groups not Linked** zones. You can complete the following configurations:
    - **User Groups Linked:** To remove a group of users CSR masquerading access, select **Deny Access** for the user group. The user group is moved to the User Groups not Linked zone.
    - **User Groups not Linked:** To add a group of users CSR masquerading access, select **Grant Access** for the user group. The user group is moved to the User Groups Linked zone.
    - To locate user accounts, select the description link for a user group to view the users included in the user group. You can also use the **Use to Show User Groups with Specific User** search options to determine which user groups a user is a member of.
  8. Save your application service changes.

To configure the location where CSRs can start a masquerading session:

By default, CSRs can start a masquerading session by accessing the Web User Summary zone in the Oracle Utilities products. You can configure a different location within your Oracle Utilities product to provide the link that allows CSRs to start a masquerading session. This configuration is optional. If you modify the default location, be aware that the steps to masquerade provided in the [Oracle Utilities Opower Digital Self Service - Transactions CSR Guide](#) use the default location. You can also choose to add additional portal locations from which the masquerading link is available.

1. Log in to Customer Care and Billing.
2. From the **Admin** menu, select **System**, select **Zone**, and then select **Search**. The Zone Search is displayed.
3. In the **Zone** text box, type **C1-WEBUSRSUM** and select **Search**. The zone is displayed.
4. From the **Portal** tab, for the default configuration, you can search for the portal that provides the masquerade link for CSR users. Rather than modifying the default configuration, you can also click the plus icon to add additional portals, which then provides additional masquerade entry links for CSR users based on the portal you select.
5. Select **Save** to save your zone changes.

To configure the masquerading acknowledgment prompt message:

When a CSR user selects to begin a masquerading session, an acknowledgment prompt is displayed that explains the implications of masquerading as a customer. A CSR user must confirm their intention to masquerade to continue. You can configure the message supplied for the masquerading acknowledgment prompt.

1. Log in to Customer Care and Billing.
2. From the **Admin** menu, select **System**, select **Messages**, and select **Search**.
3. In the **Message Category** field type **11130** and click **Search** to return messages for the category.
4. From this list select message **10105** and select the **Details** tab.
5. Use the **Customer Specific Message Text** field to provide your custom notification text, which overrides the default message text for the notification.
6. Click **Save** to save your message changes.

## Logging Self-Service Tasks

Customer contacts allow CSRs to see what transactions have been performed on a customer's account. Customer contacts can be created for self-service actions that customers perform using the Digital Self Service - Transactions Web Portal, including:

- Login to account
- Enroll in budget billing
- Create start, stop, or transfer service requests
- Create an account verification request
- Invite guest users
- Enroll in autopay
- Schedule a one-time payment

**Note:** This documentation provides steps to complete these configuration tasks using Oracle Utilities Customer Care and Billing. However, many of these tasks can be completed with other applicable products such as Oracle Utilities Customer to Meter or Oracle Utilities Customer Cloud Service. Refer to your applicable product documentation for steps to complete the configuration using your Oracle Utilities product. Additionally, this documentation assumes that you know how to create the various objects listed below as well as modify or create master configurations. For additional details on these tasks, refer to the applicable [Oracle Utilities Documentation](#).

To configure customer contact creation for self-service tasks:

You must complete the following configurations to create customer contacts for self-service tasks completed for a customer account.

1. Log in to Customer Care and Billing.
2. From the **Admin** menu, select **General**, and select **Master Configuration**. From the **Master Configuration** zone, select the **Edit** option for the **CC&B Self-Service Integration** master configuration. The master configuration is displayed.
3. From the **Self-Service Tasks** zone, select an applicable **Customer Contact Class** and **Customer Contact Type**. To define customer contacts to track when a customer logs in to their account, see "Alerts and Notifications" on page 175.
4. Click **Save** to save the changes to the master configuration.
5. For each self-service task that uses customer contacts, the supporting Business Objects must also be configured to trigger customer contact creation. This requires modifying the lifecycle of the applicable Business Objects, and including the required algorithm, **C1-CRECCLOG**, to trigger customer contact creation. After accessing a Business Object, select the **Lifecycle** tab to configure the lifecycle states.
  - Include the **C1-CRECCLOG** algorithm on the Complete and Error lifecycle states for the **WX-AccountVerifyTask** (Account Verification Task) Business Object.
  - Include the **C1-CRECCLOG** algorithm on the **PROCESS-REQ** lifecycle state for the **C1-StartStopRequestTask** (Start/Stop Request Task) Business Object.
  - Include the **C1-CRECCLOG** algorithm on the Pending lifecycle state for all other Business Objects, including:
    - **CX-AccountVerifyTask** (Account Verification Task AND/OR)
    - **C1-BudgetTask** (Budget Task)
    - **CX-WebUserInvitationTask** (Web User Invitation Task)
    - **WX-AutoPayTask** (Automatic Payment Setup Task)
    - **WX-OneTimePayTask** (One Time Payment Task)

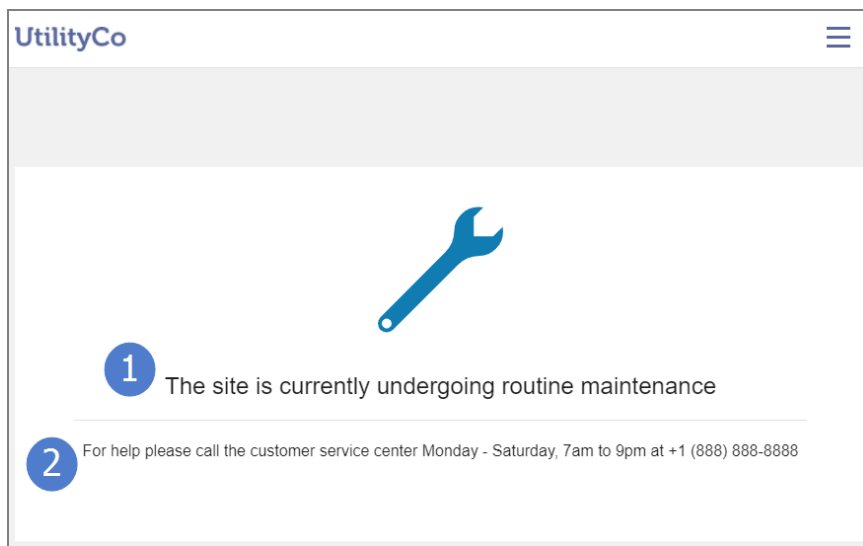
## Chat for Customer Support

Genesys chat service is a third-party service that requires a separate service agreement and contracting with the third-party Genesys chat vendor prior to integration with Digital Self Service - Transactions.

## Automatic Maintenance Mode

Digital Self Service - Transactions can automatically display a maintenance page when Oracle Utilities Customer Care and Billing is unavailable and automatically resumes normal operation when Oracle Utilities Customer to Meter becomes available again. When enabled, the maintenance page content can be configured to display a custom message.

The following image shows a standard example of the maintenance message and indicates the primary configuration options which can be submitted as a request using [My Oracle Support](#).



Use the table below to review all available configuration options.

Image Number	Configuration Option
Not Depicted	<b>Automatic Maintenance Mode</b> Digital Self Service - Transactions can automatically display a maintenance page when Customer Care and Billing is unavailable and automatically resumes normal operation when Oracle Utilities

Image Number	Configuration Option
	<p>Customer to Meter becomes available again.</p> <p><b>Default:</b> Disabled</p>
1	<p><b>Maintenance Message</b></p> <p>An error message is displayed when Digital Self Service - Transactions is unavailable due to Customer Care and Billing or Customer to Meter being unavailable.</p> <p><b>Default:</b> None</p>
2	<p><b>Maintenance Support Message</b></p> <p>A support resources message is displayed when Digital Self Service - Transactions is unavailable due to Customer Care and Billing or Customer to Meter being unavailable. This message can highlight customer support resources such as a customer support phone number, email address, or other contact information.</p> <p><b>Default:</b> None</p>

## Language Selection

You can choose to enable a language selection drop-down list to allow customers to select either English or Spanish. To enable language selection you must complete the configurations described below.

### Enable Language Selection and Default Languages

To enable a language selection drop-down list for your customers, you must contact Oracle Utilities, as described in "Contacting Your Delivery Team" on page 252.

In addition to enabling language selection you can also determine how Digital Self Service - Transactions selects a language for a customer. By default, Digital Self Service - Transactions attempts to detect a customer's language setting in the browser they use to access the Web Portal. If the browser language matches one of the supported languages, that language is displayed to the customer when using Digital Self Service - Transactions automatically.

Alternatively, you can request Oracle Utilities to define Digital Self Service - Transactions to use the preferred language of a customer as defined in their associated person object in Customer Care and Billing. This language setting is part of the correspondence information for a person record.

## Define Translated Messages

Language packs are available for supported languages, which includes Spanish. You must install these language packs to provide the translated content for Digital Self Service - Transactions Web Portal. If you have modified any default messaging in Digital Self Service - Transactions, you must provide applicable translated content to Oracle Utilities for your customized messaging. The general steps to translate your customized message content are provided below.

**Note:** The steps below assume you already have your Digital Self Service - Transactions message content created in a language that acts as the source of the custom messages.

### To translate customized messages for Digital Self Service - Transactions

1. Log in to Customer Care and Billing.
2. Define a new language for the language to support in Digital Self Service - Transactions. Support is currently available for English and Spanish. For information defining a language, refer to the *Customer Care and Billing Administrative User Guide* available in the [Customer Care and Billing Documentation](#).
3. Run the `F1_Lang` process for the source language and the new language to be supported, which is likely English and Spanish respectively. This process creates the required tables and entries for the newly supported language, using the source language for the initial content.
4. From the **Switch Language** zone on the right, select the language to translate content for in the drop-down list and select **Refresh**. If the Switch Language zone is not available, review the **Portal Preferences** for **Dashboard** to ensure that Switch Language is displayed.
5. Navigate to and review the various configurations you defined for Digital Self Service - Transactions, and modify any text into the applicable translated material for the new language.

# Contacting Your Delivery Team

Your Oracle Utilities Delivery Team is the group responsible for assisting your deployment of Digital Self Service - Transactions. Contact your Delivery Team if you have any questions about your program products and implementation. Open a service request in My Oracle Support to coordinate configuration of Digital Self Service - Transactions features.

## To request changes to default product and message configurations:

1. Review the tables provided in this documentation for each feature that has applicable configuration options.
2. Provide any changes to the default product and message configurations listed for each feature by submitting your request through [My Oracle Support](#).
  - a. Go to [My Oracle Support](#). Click **Cloud Support** and log in.
  - b. Click the **Create Service Request** button and follow the prompts to complete the Service Request.