Application Guide for Oracle Self-Service E-Billing (Business Edition)

Version 6.1.1

April 2013

Contents

1 What's New in This Release

What's New in Application Guide for Oracle Self-Service E-Billing (Business Edition), Version 6.1.1

Table 1 lists changes described in this version of the documentation to support this release of the software.

Table 1. New Product Features in Application Guide for Oracle Self-Service E-Billing (Business Edition), Version 6.1.1

Topic	Description
"Managing a Profile" on page 38	Modified topic. Added the option to choose additional bill-ready notification methods when Digital Access Information System (DAISY) file format is enabled for a user.
"Managing Email Notifications" on page 51	Modified topic. Added the new notification type for a bill-ready notification with a DAISY file format attachment.
"Overview of Customer Service Representative Use Cases" on page 231 "Enrolling the Bootstrap User as the Initial CSR Administrator" on page 232 "Enrolling a CSR Administrator" on page 234 "Resetting a CSR Password" on page 239	Modified topics. Updated the enrollment use cases to add steps for enrolling the bootstrap administrator. The bootstrap administrator is no longer preconfigured with Oracle Self-Service E-Billing.

What's New in Application Guide for Oracle Self-Service E-Billing (Business Edition), Version 6.1

Table 2 lists changes described in this version of the documentation to support this release of the software.

Table 2. New Product Features in Application Guide for Oracle Self-Service E-Billing (Business Edition), Version 6.1

Topic	Description
"Logging In to the Billing and Payment Application" on page 47	Modified topic. Added an alternate scenario for prompting users to enter a new email address if they previously had undeliverable notifications.
"Creating a One-Time Payment" on page 69	Modified topic. Updated for Web services.

Table 2. New Product Features in Application Guide for Oracle Self-Service E-Billing (Business Edition), Version 6.1

Topic	Description
“Viewing Payment Activity” on page 81	Modified topic. Updated for Web services.
Chapter 7, “Managing Analytic Batch Reports”	New chapter. Describes the new use cases for scheduling analytic reports in batch mode and viewing a list of the completed, pending, failed, and scheduled analytical batch reports.

2 Enrolling and Managing Users

This chapter describes user types, enrollment use cases, and user notification options for Oracle Self-Service E-Billing. It includes the following topics:

About User Characteristics

Table 3 describes the work roles associated with Oracle Self-Service E-Billing user profiles.

Table 3. User Characteristics

User Profile	Description
B2B Customer	
B2B Customer Telco Administrator (Administrator User)	Associated with a single company or parent company. Might or might not have a service agreement associated with his or her user account. Responsible for managing all B2B users in his or her company including enrollment, registration, and access control by means of roles and permissions or user assignment into billing or business hierarchies. The telco administrator has a superset of all B2B user roles and permissions including access to the root node of all company hierarchies and account information. Can create new hierarchies and assign any company user to provide access to billing data. Might submit a dispute or service request on behalf of the company. (PAB and CAB) (Self-Enroll and CSR Enroll).
B2B Customer Cost Center Manager (Manager User)	Associated with a single company or parent company. Might or might not have a service agreement associated with his or her user account. Responsible for viewing, analyzing, and paying invoices for all company accounts, and managing the budget, spend, and usage patterns of a group of users to company, account, or group levels of hierarchy. This user can create new hierarchies for the information he or she can access and can assign other company users to provide access to billing data. Manages his or her own profile and manages his or her own personal address book. Might submit a dispute or service request on behalf of the company. (Administrator Enroll).
B2B Customer Subscriber (Subscriber User)	Associated with a single company and typically with a single service agreement within that company within a hierarchy by the Telco administrator or cost center manager. He or she manages his or her own profile and personal address book, and has view-only access to information. (Administrator or Manager Enroll).
Service Provider	
Provider CSR Administrator (Super CSR)	Responsible for managing CSR users and monitoring the productivity and effectiveness of the CSR users.
Provider CSR (CSR User)	Responsible for handling calls in the call center. Provider CSR users are rated on the number of calls they handle, how quickly they resolve most issues, and the number of call-backs they make for a given case. Provider CSRs are part-time or full-time employees with medium to high turnover.
Provider Quality Assurance (QA User)	Responsible for reviewing and approving the quality and accuracy of the billing data before accepting the data for presentation to the customer online. The QA user views the data in the same manner as the customer users to validate that the statements, details, amount due, and other characteristics of the bill are accurate and complete.

Table 3. User Characteristics

User Profile	Description
Provider IT Administrator (System User)	Responsible for managing all provider users, loading periodic billing data, maintaining the connections to external systems such as billing, A/R, and payment systems. Responsible for maintaining registration and enrollment of all other provider users. Responsible for running batch jobs that load billing data, synchronize databases, send notifications, and purge old data.
Provider, Integrator, or Global Services Developer	Responsible for setting up the seed data in the application, customizing the application's appearance, process flows, statement layout, and report content. Can create custom defined hierarchies and hierarchy business object link targets.

Viewing and Managing Company Profiles

This use case is for CSRs to view the profile of a company or organization. Table 4 lists and describe the features of the Business Manage Company Profile use case.

Table 4. Viewing and Managing Company Profiles

Feature	Description
Name	Viewing and Managing Company Profiles
Functional Area	Object Management Framework
Primary User	Business administrator, manager, and subscriber
Standard Features	None

Main Path for Viewing and Managing Company Profiles

The following path describes the Viewing and Managing Company Profiles use case:

- The user selects Company Profile.

  Oracle Self-Service E-Billing displays the current company profile including:

  - Company name (text box)
  - Number of billing accounts
  - Number of service agreements (assets)
  - Total number of enrolled users for company.
  - Number of enrolled users by role (administrators, managers, subscribers, other user roles)
  - Link to Manage Company Users page (administrator only)

Viewing and Managing Company Users

This use case is for the business administrator to manage the profiles of users to whom the administrator has access. The administrator can search for and view a list of users, edit (once the user has enrolled), delete, and reactivate users. Table 5 lists and describes the feature of the Viewing and Managing Company Users use case.

Table 5. Viewing and Managing Company Users

Feature	Description
Name	Viewing and Managing Company Users
Feature Area	User Management
Primary User	Business administrator, CSR (Impersonation)
Preconditions	■ The Billing and Payment application has been deployed. ■ A customer service representative has created an administrator for the company. ■ Statements have been loaded into Oracle Self-Service E-Billing using the ETL process.
Trigger	The administrator clicks My Account, Company, and then Users.
Prompts	Search for Company Users: ■ First Name ■ Last Name ■ Role (Select (default), Administrator, Manager, or Subscriber) ■ Status (Select (default), Active, Initiated, or Locked) ■ User ID
Buttons	■ Import New Users ■ Add New User ■ Submit
Page Tabs	■ Profile ■ Contacts ■ Users (Active) ■ Settings

Table 5. Viewing and Managing Company Users

<table>
<tr><th>Feature</th><th>Description</th></tr>
<tr><td>Active Hyperlinks (Breadcrumbs)</td><td>My Account. Displays the Dashboard.
Company. Displays the Company Profile page.</td></tr>
<tr><td>Page Content</td><td>Page Title: Users

Modules:
Search for Company Users
Company Users (With the number of users)
Paging Elements (If needed):
Page X of Total
Paging arrow buttons
Columns (All columns are sortable except Actions):
User ID
Name
Role (Administrator, Manager, or Subscriber)
Status:
Initiated. The administrator has added the user, but the user has not yet enrolled.
Active. The user is enrolled and is active.
Locked. The user has been locked out.
Last Login (Date and time when the user last logged in.)
Date Created (Date and time when the user was created.)
Actions:
Delete. The administrator can delete a user with any status (initiated, active, or locked). Deleting a user unassigns any account or service number that the user was assigned to (applied to the billing hierarchy), cancels any scheduled payments, removes any recurring payments scheduled, and removes any payment accounts. An administrator cannot delete his or her own profile.
Edit. The administrator can change a user’s profile information, such as last name. This option is only available for users who are active.
Reactivate. The administrator can reactivate a locked user. This action triggers the enrollment email to the user.</td></tr>
</table>

Main Path for Viewing and Managing Company Users

The following path describes the Viewing and Managing Company Users use case:

- The user selects My Account, Company, and then Users.

  Oracle Self-Service E-Billing displays a list of all company users (with paging elements) and profile data in tabular format.

Alternate Paths for Viewing and Managing Company Users

Alternate paths can occur when viewing and managing company users.

The User Enters Query Parameters to Narrow Search Results

1. The user selects or chooses search criteria on the Users page:
   - First Name
   - Last Name
   - Role (Administrator, Manager, or Subscriber)
   - Status (Active, Initiated, or Locked)
   - User ID
2. The user clicks Submit.

   Oracle Self-Service E-Billing displays the customer information in tabular format.

The User Edits a User’s Profile

1. The user clicks Edit for a particular user.

   Oracle Self-Service E-Billing displays the Edit Company User page.
2. The user edits the necessary fields (the first and last name, email address, and role fields are editable).
3. The user clicks Update to save the changes.

   Oracle Self-Service E-Billing displays the Users page with the updated information.

The User Deletes a User

1. The user clicks Delete for a particular user.

   Oracle Self-Service E-Billing displays the delete confirmation page and prompts the user to confirm the action.
2. The user clicks Delete to verify the user deletion.

   Oracle Self-Service E-Billing deletes company user and returns to the updated user list results page.

The User Reactivates a Locked User

- The user clicks Reactivate for a particular (locked) user.

  Oracle Self-Service E-Billing reactivates the user and sends an enrollment email notification.

Enrolling a Company User (Administrator or Subscriber)

This use case is for the administrator to enroll (add) company users who are administrators or subscribers.

Table 6 lists and describes the features of the Enrolling a Company User (Administrator or Subscriber) use case.

Table 6. Enrolling a Company User (Administrator or Subscriber)

Function	Description
Name	Enrolling a Company User (Administrator or Subscriber)
Feature Area	Enrollment
Primary Users	Business administrator user, CSR (impersonator)
Preconditions	■ The Billing and Payment application has been deployed. ■ A customer service representative has created an administrator for the company. ■ Statements have been loaded into Oracle Self-Service E-Billing using the ETL process.
Trigger	Company's administrator clicks Company, and then Users.
Prompts	Assign Service Agreement page: Search for service number.
Page Tabs	Add New User, Assign Service Agreement, and Verify Company User Pages ■ Profile ■ Contacts ■ Users (Active) ■ Settings
Active Hyperlinks (Breadcrumbs)	Add Company User, Assign Service Agreement, and Assign Service Agreement Verification pages ■ **My Account.** Displays the dashboard. ■ **Company.** Displays the Company page. ■ **Users.** Displays the Users page. Assign Service Agreement page only ■ **Add Company User.** Displays the Add Company User page.

Table 6. Enrolling a Company User (Administrator or Subscriber)

Function	Description
Page Titles	Page Titles: ■ Add Company User ■ Assign Service Agreement ■ Verify Company User

Page Content	Page Title: Add Company User
	■ Attributes:
	  ■ First Name
	  ■ Last Name
	  ■ User Name
	  ■ Role (Administrator, Manager, or Subscriber)
	  ■ Email Address
	  ■ Confirm Address
	■ Buttons:
	  ■ Next
	  ■ Cancel
	Page Title: Assign Service Agreement
	■ Paging Elements (If needed):
	  ■ Page X of Total
	  ■ Paging arrow buttons
	■ Attributes:
	  ■ Radio button (for choosing a service number)
	  ■ Service Number
	  ■ Account Number
	■ Radio Buttons:
	  ■ Yes (Assign a service agreement)
	  ■ No (Do not assign a service agreement)
	■ Buttons:
	  ■ Next
	  ■ Back
	  ■ Cancel

Table 6. Enrolling a Company User (Administrator or Subscriber)

Function	Description

Page Content, continued	Page Title: Verify Company User
	■ Attributes:
	  ■ First Name
	  ■ Last Name
	  ■ User Name
	  ■ Role (Read-only)
	  ■ Email Address
	  ■ Confirm Email
	  ■ Service Number (Read-only or states: *Not Applicable if the user chose not to assign a service agreement*)
	■ Navigational Buttons:
	  ■ Submit
	  ■ Back
	  ■ Cancel

Configuration Points	■ The number of characters in a user name. ■ The number of characters in the temporary password that Oracle generated (the validation code).
Notes	■ Oracle Self-Service E-Billing-generated validation codes cannot contain the following characters a, A, e, E, 3, o, O, 0, i, I, 1, u, U, y, Y, $, @, !, * ■ Each account that has been created is set to inactive state and expires within four hours; only a CSR administrator can reset the account. ■ Oracle Self-Service E-Billing cannot reuse the validation code for 30 days after the code is initially created. ■ This use case generates a welcome email notification.

Main Path for Enrolling a Company User (Administrator or Subscriber)

The following path describes the Administrator Enrolls a Company User (Administrator or Subscriber) use case:

1. The administrator clicks Add New User on the Users page.
2. On the Add New User page, the administrator enters the following information for the new user:
   - First Name
   - Last Name

- User Name
- Email Address
- Confirm Address

3. The administrator selects a role (Administrator or Subscriber) and clicks Next.
4. Oracle Self-Service E-Billing validates the information on the form for the following:
   - Formatting
   - Completeness
   - Matching email and confirm email
   - User name requirements

   Oracle Self-Service E-Billing displays the Assign Service Agreement page.
5. The administrator can choose to assign a service agreement (yes or no). If the administrator selects no, then no changes occur and the administrator clicks Next. If the administrator selects yes, then:
   a. Ajax displays the new screen where the administrator can enter a service agreement number or search for one by entering the wildcard character (%) only or a partial number and the wildcard anywhere in the search pattern. The administrator clicks Find.

      Oracle Self-Service E-Billing displays the available service agreements for the selection criteria.
   b. The administrator selects the radio button next to the service number, and then clicks Next.

      Oracle Self-Service E-Billing displays the Verify Company User form.
6. The administrator can make any changes necessary to the following user information and then click Submit:
   - First Name
   - Last Name
   - User Name
   - Email Address
   - Confirm Email
7. Oracle Self-Service E-Billing validates the information on the form for the following:
   - Formatting
   - Completeness
   - Matching email and confirm email
   - User name requirements

8 Oracle Self-Service E-Billing sends the user a welcome email notification to inform the user that he or she has been enrolled and must follow the enclosed link to complete the enrollment process. Oracle Self-Service E-Billing displays the number of records successfully imported on the Import Users page. The message on the Company, Users screen after enrollment states:

User (user name) enrollment has been initiated and an email notification has been sent to the user's email address supplied during the enrollment process.

Alternate Paths for Enrolling a Company User (Administrator or Subscriber)

The following alternate paths can occur in this use case.

The Administrator Clicks Cancel on Any Page

- The administrator clicks Cancel.

  Oracle Self-Service E-Billing displays the User page.

The Administrator Clicks Back on Any Page

- The administrator clicks Back.

  Oracle Self-Service E-Billing displays the previous page in the use case.

Exceptions for Enrolling a Company User (Administrator or Subscriber)

The following exceptions can occur in this use case:

One of the Form Fields is Left NULL When Submitted

Oracle Self-Service E-Billing displays the populated Enrollment form with the following error message: *Please provide a value for ****.*

The User Name Field Does Not Meet the Form Validation When Submitted

Oracle Self-Service E-Billing displays the populated Enrollment form with the following error message: *Please provide a user name that is eight characters in length.*

The Email Address Does Not Have at Least One Valid Character Preceding the at Sign (@) Preceding the Period and Following the Period

Oracle Self-Service E-Billing displays the populated Enrollment form with the following error message: *Please provide a valid email address.*

Enrolling a Company User (Manager)

This use case is for the administrator to enroll (add) company users who are managers.

Table 7 lists and describes the features of the Enrolling a Company User (Manager) use case.

Table 7. Enrolling a Company User (Manager)

Function	Description
Name	Enrolling a Company User (Manager)
Feature Area	Enrollment
Primary User	Business administrator user, CSR (impersonator)
Preconditions	■ The Billing and Payment application has been deployed. ■ A customer service representative has created an administrator for the company. ■ Statements have been loaded into Oracle Self-Service E-Billing using the ETL process.
Trigger	Company's administrator clicks Company, and then Users.
Prompts	Assign Service Agreement page: Search for service number Assign Account Access page: Search for Account Number
Page Tabs	Add New User, Assign Service Agreement, Assign Account Access, and Verify Company User pages: ■ Profile ■ Contacts ■ Users (Active) ■ Settings
Active Hyperlinks (Breadcrumbs)	Add Company User, Assign Service Agreement, Assign Account Access, and Assign Service Agreement Verification pages: ■ **My Account.** Displays the Dashboard. ■ **Company.** Displays the Company page. ■ **Users.** Displays the Users page. Assign Service Agreement and Assign Account Access pages ■ **Add Company User.** Displays the Add Company User page.
Page Titles	Page Titles: ■ Add Company User ■ Assign Service Agreement ■ Assign Account Access ■ Verify Company User

Table 7. Enrolling a Company User (Manager)

Function	Description

Page Content - Add Company User Page	Page Title: Add Company
	■ Attributes:
	  ■ First Name
	  ■ Last Name
	  ■ User Name
	  ■ Role (Administrator, Manager, or Subscriber)
	  ■ Email Address
	  ■ Confirm Address
	■ Buttons:
	  ■ Next
	  ■ Cancel

Page Content - Assign Service Agreement Page	Page Title: Assign Service Agreement page
	■ Paging Elements (If needed):
	  ■ Page X of Total
	  ■ Paging arrow buttons
	■ Attributes:
	  ■ Radio button (for choosing a service number)
	  ■ Service Number
	  ■ Account Number
	■ Radio Buttons:
	  ■ Yes
	  ■ No
	■ Buttons:
	  ■ Next
	  ■ Back
	  ■ Cancel

Table 7. Enrolling a Company User (Manager)

Function	Description

Page Content - Assign Account Access Page	Page Title: Assign Account Access
	■ Paging Elements (If needed):
	  ■ Page X of Total
	  ■ Paging arrow buttons
	■ Attributes:
	  ■ Radio button (for choosing an account number)
	  ■ Account Number
	■ Radio Buttons:
	  ■ Yes
	  ■ No
	■ Buttons:
	  ■ Next
	  ■ Back
	  ■ Cancel

Page Content - Verify Company User Page	Page Title: Verify Company User
	■ Attributes:
	  ■ First Name
	  ■ Last Name
	  ■ User Name
	  ■ Role (Read-only)
	  ■ Email Address
	  ■ Confirm Email
	  ■ Service Number (Read-only or states: *Not Applicable if the user chose not to assign a service agreement*)
	  ■ Account Number (Read-only or states: *Not Applicable if the user chose not to assign an account*)
	■ Buttons:
	  ■ Submit
	  ■ Back
	  ■ Cancel

Table 7. Enrolling a Company User (Manager)

Function	Description
Configuration Points	■ The number of characters in a user name ■ The number of characters in the temporary password that Oracle generated (the validation code).
Rules	■ Oracle Self-Service E-Billing-generated validation codes cannot contain the following characters: a, A, e, E, 3, o, O, 0, i, I, 1, u, U, y, Y, $, @, !, * ■ Each account that has been created is set to inactive state and expires within four hours; only a CSR administrator can reset the account. ■ Oracle Self-Service E-Billing cannot reuse the validation code for 30 days after the code is initially created. ■ This use case generates a welcome email notification.

Main Path for Enrolling a Company User (Manager)

The following path describes the Administrator Enrolls a Company User (Manager) use case:

1. The administrator clicks Add New User on the Users page.
2. On the Add New User page, the administrator enters the following information for the new user:
   - First Name
   - Last Name
   - User Name
   - Email Address
   - Confirm Address
3. The administrator selects the Manager role and clicks Next.
4. Oracle Self-Service E-Billing validates the information on the form for the following:
   - Formatting
   - Completeness
   - Matching email and confirm email
   - User name requirements

   Oracle Self-Service E-Billing displays the Assign Service Agreement page.
5. The administrator can choose to assign a service agreement (yes or no). If the administrator selects no, then no changes occur and the administrator clicks Next. If the administrator selects yes, then:

   a. Ajax displays the new screen where the administrator enters a service agreement number or searches for one by entering the wildcard character (%) only or a partial number and the wildcard anywhere in the search pattern. The administrator clicks Find.

      Oracle Self-Service E-Billing displays the available service agreements for the selection criteria.

   b. The administrator selects the radio button next to the service number, and then clicks Next.

      Oracle Self-Service E-Billing displays the Assign Account Access page.

6. The administrator can choose to assign account access to the manager (yes or no). If the administrator selects no, then no changes occur and the administrator clicks Next. If the administrator selects yes, then:

   a. Ajax displays the new screen where the administrator can enter an account number or search for one by entering the wildcard character (%) only or a partial number and the wildcard anywhere in the search pattern. The administrator clicks Find.

      Oracle Self-Service E-Billing displays the available account numbers for the selection criteria.

   b. The administrator selects the radio button next to the account number, and then clicks Next.

      Oracle Self-Service E-Billing displays the Verify Company User form.

7. The administrator can make any changes necessary to the following user information and then click Submit:

   - First Name
   - Last Name
   - User Name
   - Email Address
   - Confirm Email

8. Oracle Self-Service E-Billing validates the information on the form for the following:

   - Formatting
   - Completeness
   - Matching email and confirm email
   - User name requirements

- Oracle Self-Service E-Billing sends the user a welcome email notification to inform the user that he or she has been enrolled and must follow the enclosed link to complete the enrollment process. Oracle Self-Service E-Billing displays the number of records successfully imported on the Import Users page. Oracle Self-Service E-Billing displays the following message on the Users screen after enrollment: *User (user name) enrollment has been initiated and an email notification has been sent to the user's email address supplied during the enrollment process.*

Alternate Paths for Enrolling a Company User (Manager)

The following alternate paths can occur in this use case.

The Administrator Clicks Cancel on Any Page

- The administrator clicks Cancel.

  Oracle Self-Service E-Billing displays the User page.

The Administrator Clicks Back on Any Page

- The administrator clicks Back.

  Oracle Self-Service E-Billing displays the previous page in the use case.

Exceptions for Enrolling a Company User (Manager)

Exceptions can occur in this use case.

One of the Form Fields is Left NULL When Submitted

Oracle Self-Service E-Billing displays the populated Enrollment form with the following error message: *Please provide a value for ****.*

The User Name Field Does Not Meet the Form Validation When Submitted

Oracle Self-Service E-Billing displays the populated Enrollment form with the following error message: *Please provide a user name that is eight characters in length.*

The Email Address Does Not Have at Least One Valid Character Preceding the at Sign (@) Preceding the Period and Following the Period

Oracle Self-Service E-Billing displays the populated Enrollment form with the following error message: *Please provide a valid email address.*

Enrolling Multiple Users

This use case is for the business administrator to enroll multiple B2B users at one time (also called bulk enrollment). Table 8 lists and describes the feature of the Enrolling Multiple Users use case.

Table 8. Enrolling Multiple Users

Feature	Description
Name	Enrolling Multiple Users
Feature Area	User Management
Description	This use case lets an administrator enroll multiple users in Oracle Self-Service E-Billing at one time.
Primary User	Business administrator, CSR (impersonation)

Table 8. Enrolling Multiple Users

Feature	Description
Preconditions	■ Oracle Self-Service E-Billing application has been deployed. ■ A customer service representative has created an administrator for the company. ■ Statements have been loaded into the Oracle Self-Service E-Billing using the ETL load process
Trigger	An administrator logs in to the Billing and Payment Application and selects My Account, Company, and then Users.
Attributes	None
Buttons	Users page: ■ Import Users Import Users page: ■ Import ■ Cancel
Page Tabs	Users and Import Users pages: ■ Profile ■ Contacts ■ Users (Active) ■ Settings
Active Hyperlinks (Breadcrumbs)	■ **My Account.** Displays the Dashboard. ■ **Company.** Displays the Company Profile page. ■ **Users**. Displays the Users page.

Table 8. Enrolling Multiple Users

Feature	Description
Page Content	Page Title: Import Users Paging Elements (If needed): ■ Page X of Total ■ Paging arrow buttons Attributes: ■ File Description of the input CSV file structure required for importing. Columns (All columns are sortable except Reason): ■ User ID ■ Role (Administrator, Manager, or Subscriber) ■ First Name ■ Last Name ■ Reason (Why the user cannot be enrolled in the system.)

Table 8. Enrolling Multiple Users

Feature	Description
CSV Input File Requirements	The CSV input file for enrolling multiple users requires the following attributes in the sequence shown, for each business user you want to enroll: ■ User Name - Required ■ First Name - Required ■ Last Name - Required ■ Role - Required (Administrator, Manager, Subscriber) ■ Email Address - Required ■ Service Agreement Number (Optional). If the service agreement number is known and provided, then you can add it along with the account where it is located in the billing hierarchy using a pipe delimiter, for example: SSID|AID Consolidator model users only: The Billing ID is required. Add it using a pipe delimiter, for example: SSID|AID|BID ■ Account Number (Optional, for manager administrators only). If a manager administrator owns multiple accounts, then you can list them sequentially, delimited by a semi-colon, for example: AID1;AID2;AID3 Consolidator model users only: The Billing ID is required. Add it using a pipe delimiter, for example: AA1|BBID;AA2|BBID;AA3|BBID
Rules	■ Oracle Self-Service E-Billing-generated validation codes cannot contain the following characters: a, A, e, E, 3, o, O, 0, i, I, 1, u, U, y, Y, $, @, !, * ■ Each account that has been created is set to inactive state and expires within four hours; only a CSR administrator can reset the account. ■ Oracle Self-Service E-Billing cannot reuse the validation code for 30 days after the code is initially created. ■ This use case generates a welcome email notification.

Main Path for Enrolling Multiple Users

The following path describes enrolling multiple users:

1 The administrator clicks Import on the Users page.

Oracle Self-Service E-Billing displays the Import Users form.

2 The administrator clicks Browse to search for the CSV input file created for this purpose. For details on the input file format, see Table 8 on page 27. The administrator clicks Import.

3 Oracle Self-Service E-Billing verifies the information for:

- Formatting
- Completeness
- User name requirements

4 If all users are imported successfully, then Oracle Self-Service E-Billing displays the following success message on the Users page: *(Number of Users) Company Users Imported Successfully.*

5 Oracle Self-Service E-Billing sends each user a welcome email notification to inform the user that he or she has been enrolled and must follow the enclosed link to complete the enrollment process. If one or more users cannot be imported, then an exception occurs.

Alternate Paths for Enrolling Multiple Users

Alternate paths can occur with this use case.

The Administrator Selects Cancel

The user clicks Cancel and Oracle Self-Service E-Billing displays the Users page.

Exceptions for Enrolling Multiple Users

Exceptions can occur with this use case when there are problems with the data in the input CSV file used for importing. For each user that cannot be imported for enrollment due to missing or invalid data, Oracle Self-Service E-Billing displays the user ID, role, first and last name, and the reason (data issue) in tabular format on the Import Users page, and displays the total number of invalid users.

The following exceptions can occur with this use case.

A User Name in the Input CSV File Has an Invalid Length

On the Import Users page, Oracle Self-Service E-Billing displays the user ID, role, first name, last name, and following reason why the user record cannot be imported: User Name Invalid Length.

A First Name is Missing From the Input CSV File

On the Import Users page, Oracle Self-Service E-Billing displays the user ID, role, first name, last name, and following reason why the user record cannot be imported: First Name Missing.

A Role in the Input CSV File is Undefined in Oracle Self-Service E-Billing

On the Import Users page, Oracle Self-Service E-Billing displays the user ID, role, first name, last name, and following reason why the user record cannot be imported: Role Undefined.

The Email Address Does Not Have at Least One Valid Character Preceding the at Sign (@) Preceding the Period and Following the Period

On the Import Users page, Oracle Self-Service E-Billing displays the user ID, role, first name, last name, and following reason why the user record cannot be imported: Invalid Email Format.

A Service Agreement Number in the Input CSV File is Invalid

On the Import Users page, Oracle Self-Service E-Billing displays the user ID, role, first name, last name, and following reason why the user record cannot be imported: Invalid Service Agreement Number.

An Account Number in the Input CSV File is Invalid

On the Import Users page, Oracle Self-Service E-Billing displays the user ID, role, first name, last name, and following reason why the user record cannot be imported: Invalid Account Number.

Setting the Password and Security Question

All users must create a password, security question, and answer.

Table 9 lists and describes the Setting the Password and Security Question use case functions.

Table 9. Setting the Password and Security Question

Function	Description
Name	Setting the Password and Security Question
Feature Area	Enrollment
Primary User	Consumer user
Precondition	A B2B user has been provided a user name by the administrator. The consumer must have completed the Self-Enrollment and received the email generated by that use case.

Table 9. Setting the Password and Security Question

Function	Description
Trigger	The user clicks the HTTPS request sent in an email notification.
Configuration Points	■ The number of characters in a password. The Payment Card Industry (PCI) Data Security Standard requires a minimum of eight characters. ■ The complexity of the password. ■ The number of questions for the security question. ■ The list of security questions.

Main Path for Setting the Password and Security Question

The following path describes setting a password and security question:

1. Oracle Self-Service E-Billing displays a form to the user where he or she must enter the following information:
   - User Name
   - Password - The password length and contents are configurable. By default, the password length is eight characters and it must contain at least:
     - One uppercase character
     - One lowercase character
     - One number
     - No spaces
     - Special characters are valid

     The password cannot be the same as the user name.

     The password cannot be the same as the previously entered password.
   - Confirm Password; must be the same as the previously entered password.
   - Select a security question. The list of security questions is configurable. By default, the list contains the following:
     - Best friend's name from childhood?
     - The name of the boy or girl you first kissed?
     - The place where you first met your spouse/significant other?
     - What is the make or model type of your first car?
     - What was the name of the school you attended in first grade?
   - Security Answer
     - Form box size of 30 to be consistent with others.

- The minimum length of a security question is one character, and cannot be the space character. The minimum length is configurable.
- The maximum length of the answer is 100 characters.
- Oracle Self-Service E-Billing trims leading and trailing spaces and does not include these in the calculation of minimum and maximum lengths.
- Spaces within the answer are valid.
- Special characters are valid and enhance the security level of the answer.

2 The user clicks Submit.

3 Oracle Self-Service E-Billing validates the information on the form for the following:

- Formatting
- Completeness
- User name and validation code within HTTPS request match in Oracle Self-Service E-Billing.
- The account has not expired. The default time limit is four hours, which is configurable.
- Password requirements

4 Oracle Self-Service E-Billing sets the status flag in the database indicating this is an active user.

The Login page appears and the following success message appears: *Your security credentials have been accepted, please login to access your billing information.*

Alternate Paths for Setting the Password and Security Question

The User Clicks Cancel

The user clicks Cancel and the Login screen appears.

Exceptions for Setting the Password and Security Question

The following exceptions can occur with this use case.

The Account Flag for Validation has Expired

Oracle Self-Service E-Billing displays a message that states:

Please contact a customer service representative at xxx-xxx-xxxx to have your account reactivated, as too much time has elapsed since you initiated the enrollment process.

One of the Form Fields is Left NULL When Submitted

Oracle Self-Service E-Billing displays the populated Enrollment form with the following error message: *Please provide a value for* ****

The Password or Confirm Password Does Not Meet the Requirements

Oracle Self-Service E-Billing displays the prepopulated Enrollment form with the following error message: *Please provide a valid password and confirm password.*

The Password and Confirm Passwords are Not Exactly the Same

Oracle Self-Service E-Billing displays the prepopulated Enrollment form with the following error message: *Please provide a valid password and confirm password.*

The Password is the Same as the User Name

Oracle Self-Service E-Billing displays the prepopulated Enrollment form with the following error message: *Please provide a valid password and confirm password.*

Resetting a Password

With this use case, a user can reset his or her password for the Oracle Self-Service E-Billing application.

Table 10 lists and describes the Resetting a Password use case functions.

Table 10. Resetting a Password

Function	Description
Name	Resetting a Password
Feature Area	Authentication and Enrollment
Primary User	B2B user, CSR administrator (super or normal privileges)
Precondition	The user must be currently enrolled in the Oracle Self-Service E-Billing application.
Trigger	The user clicks the Forgot Password link on the Login Page.
Configuration Points	■ The number of times the account number, user name, and service number are incorrect. ■ The number of times the security question, security answer are incorrect. ■ The number of characters in a password. The Payment Card Industry (PCI) Data Security Standard requires a minimum of eight characters. ■ The complexity of the password.

Main Path for Resetting a Password

The following path describes how a user resets a password:

1. Oracle Self-Service E-Billing displays the Forgot Password form, and the user enters the user name.

2 The user clicks Next.

3 Oracle Self-Service E-Billing validates the form information for:

- Formatting
- Completeness

Oracle Self-Service E-Billing validates the User ID and determines whether it is a B2B customer.

4 Oracle Self-Service E-Billing displays another Forgot Password form where the user enters the email address.

5 The user clicks Next

6 Oracle Self-Service E-Billing validates the form information for:

- Formatting
- Completeness

Oracle Self-Service E-Billing validates the user name and email address.

After the user makes the maximum number of attempts, the account is locked and Oracle Self-Service E-Billing displays an error message.

7 Oracle Self-Service E-Billing displays a security answer and answer form. The following security questions appear in a drop down list:

- Best friend's name from childhood?
- The name of the boy or girl you first kissed?
- The place where you first met your spouse/significant other?
- What is the make or model type of your first car?
- What was the name of the school you attended in first grade?

8 The user selects the security question. Oracle Self-Service E-Billing displays the Security Answer box.

9 The user provides the security answer.

- The answer must be an exact match.
- The answer is case-sensitive.

10 The user clicks Next. Oracle Self-Service E-Billing validates:

- The form information for completeness.
- The security answer and answer. After the maximum number of attempts by the user, the account is locked and the end-user receives an error message.

11 Oracle Self-Service E-Billing displays a Reset Password form with the following values:

- Password - The password length and contents are configurable. By default, the password length is eight characters and it must contain at least:
  - One uppercase character
  - One lowercase character

- One number
- No spaces
- Special characters are valid
- The password cannot be the same as the user name.
- The password cannot be the same as the previously entered password.

- Confirm Password - Must be the same as the password entered in the previous field.

12 The user clicks Next.

13 Oracle Self-Service E-Billing validates the form information for:

- Formatting
- Completeness
- Password Requirements
- Password and Confirmed Password. After the maximum number of attempts by the user, the account is locked and the end-user receives an error message.

The Login page appears displaying the following success message: *Please log in to the application using your new personal password you have just created.*

Alternate Paths for Resetting a Password

The user clicks Cancel on any of the forms and the Login Page reappears.

Exceptions for Resetting a Password

The following exceptions can occur with this use case.

One of the Form Fields is Left NULL When Submitted

Oracle Self-Service E-Billing displays the populated Reset Password form with the following error message: *Please provide a value for ****.*

The User Name is Not Valid

Oracle Self-Service E-Billing displays the populated Reset Password form with the following error message: *The information you have provided does not currently match our system records, please try again, or call customer service at: xxx-xxx-xxxx.*

After the Maximum Number of Attempts, a User Does Not Enter the Correct Account Number or User Name

Oracle Self-Service E-Billing displays the Login page with the following error message: *Please contact your customer self service representative at xxx-xxx-xxxx to get your account reactivated.*

The Security Question or the Security Answer Does Not Match What Was Previously Entered

Oracle Self-Service E-Billing displays the populated security question form with the following error message: *The information you have provided does not currently match our system records, please try again, or call customer service at: xxx-xxx-xxxx*

After the Maximum Number of Attempts, a User Does Not Enter the Correct Security Question or Security Answer

Oracle Self-Service E-Billing displays the Login page with the following error message: *Please contact your customer self service representative at xxx-xxx-xxxx to get your account reactivated*.

The Password or Confirm Password Does Not Meet the Requirements

Oracle Self-Service E-Billing displays the prepopulated Enrollment form with the following error message: *Please provide a valid password and confirm password.*

The Password and Confirm Passwords are Not Exactly the Same

Oracle Self-Service E-Billing displays the prepopulated Enrollment form with the following error message: *Please provide a valid password and confirm password.*

The Password is the Same as the User Name

Oracle Self-Service E-Billing displays the prepopulated Enrollment form with the following error message: *Please provide a valid password and confirm password.*

After the Maximum Number of Attempts, a User Does Not Enter a Valid Password or Confirm Password

Oracle Self-Service E-Billing displays the Login page with the following error message: *Please contact your customer self service representative at xxx-xxx-xxxx to get your account reactivated.*

Managing a Profile

In this use case, consumer users can view their current profile information and can modify their personal information, password, and security question.

Table 11 describes the Managing a Profile use case functions.

Table 11. Managing a Profile

Function	Description
Name	Managing a Profile
Feature Area	User Management.
Description	Lets end users view and modify their current profile information.
User	Consumer user, CSR administrator. The CSR administrator can have super or normal privileges.

Table 11. Managing a Profile

Function	Description
Trigger	The user clicks the My Accounts tab and then the Personal subtab.
Prerequisites	The consumer user is currently enrolled in Oracle Self-Service E-Billing.
Active Links (Breadcrumbs)	■ **My Account.** Redisplays the Profile Details page. ■ **Personal.** Redisplays the Profile Details page.
Sub-Navigational Bar	■ User Profile (Active) ■ Notifications ■ Contacts ■ Preferences
Page Names	■ Profile Details ■ Change Password ■ Change Security Question

Table 11. Managing a Profile

Function	Description
Page Contents - Profile Details Page	Profile Details page Buttons: ■ Update ■ Reset Text: ■ Personal Information ■ Mailing Address ■ Contact Information ■ Email Address ■ Asterisk (*) Required Fields Data: User ID Prompts: ■ First Name ■ Middle Name ■ Last Name ■ (If Digital Access Information System (DAISY) file format is enabled for the user) Additional Bill Ready Notification - Check box ■ Address Line 1 ■ Address Line 2 ■ Address Line 3 ■ Zip Code ■ City ■ Country (Select from list) ■ State (Select from list) ■ Home Phone Number ■ Mobile Phone Number ■ Mobile Service Provider (Select from list) ■ Email Address ■ Confirm Email Address Links: ■ Change Password ■ Change Security Question

Table 11. Managing a Profile

Function	Description
Page Contents - Change Password Page	Change Password page Module: Change Password Buttons: ■ Submit ■ Cancel Prompts: ■ Old Password ■ New Password (The password cannot be the same as the previously entered password.) ■ Confirm Password Text: Asterisk (*) Required Fields

Table 11. Managing a Profile

Function	Description

Page Contents - Change Security Question Page	Change Security Question page
	Module: Enter Security Question and Answer
	Buttons:
	■ Submit
	■ Cancel
	Prompts:
	■ Security Question (Select from the following configurable list)
	  ■ Best friend's name from childhood?
	  ■ The name of the boy or girl you first kissed?
	  ■ The place where you first met your spouse/significant other?
	  ■ What is the make or model type of your first car?
	  ■ What was the name of the school you attended in first grade?
	■ Security Answer
	Text: Asterisk (*) Required Fields

Configuration Points	■ If Web services are configured, then the data displayed comes from your external CRM application. If Web services are not configured, then the Oracle Self-Service E-Billing database provides the data. ■ The number of characters in a password. The Payment Card Industry (PCI) Data Security Standard requires a minimum of seven characters. ■ The complexity of the password. ■ The number of questions for the security question. ■ The list of security questions.

Main Path for Managing a Profile

1. The user clicks the My Accounts tab and then the Personal subtab.
2. The user can do any of the following:
   - The user changes the editable profile information, then clicks Update.

     Oracle Self-Service E-Billing validates the form information for formatting and completeness and then displays the updated user information with the following message: *Success Message - Your profile information has been updated successfully.*

- The user clicks the Change Password link to display the Change Password page, enters his or her old password, new password, reenters the new password and then clicks Submit.

  The password must be eight configurable characters by default and must meet the following criteria:

  - Must contain at least one uppercase character.
  - Must contain at least one lowercase character.
  - Must contain at least one number.
  - Spaces are not valid.
  - Special characters are valid and enhance the security level of the password.

  Oracle Self-Service E-Billing validates the form information for formatting, completeness, and password requirements, then generates an email indicating the password has been reset, and sends it to the email address in Oracle Self-Service E-Billing. The following message appears: *Success Message - Your password has been reset.*

- The user clicks the Change Security Question link to display the Change Security Question page, selects a security question from the list, enters a security answer, and then clicks Submit. The security answer must meet the following criteria:

  - The minimum length is one character.
  - The maximum length is 100 characters. Oracle Self-Service E-Billing trims leading and trailing spaces and does not include these in the calculation of minimum and maximum lengths.
  - Spaces are valid.
  - Special characters are valid and enhance the security level of the answer.

  Oracle Self-Service E-Billing validates the information on the form for formatting and completeness, and then displays the following message: *Success Message - Your security question and answer have been reset.*

Alternate Paths for Managing a Profile

Alternate paths can occur in this use case.

The User Clicks Reset on the Manage Profile Page

The page refreshes with the original settings.

The User Clicks Cancel on the Change Password Page

The Manage Profile page appears.

The User Clicks Cancel on the Change Security Question Page

The Manage Profile page appears.

Exceptions for Managing a Profile

The following exceptions can occur with this use case.

One of the Form Fields is an Empty String When Submitted

Oracle Self-Service E-Billing displays the Change Password form with the following error message: *Please provide a value for ****.*

The Password or Confirm Password Does Not Meet the Requirements

Oracle Self-Service E-Billing displays the Change Password form with the following error message: *Please provide a valid password and confirm password.*

The Password and Confirm Passwords are Not Exactly the Same

Oracle Self-Service E-Billing displays the prepopulated Change Password form with the following error message: *Please provide a valid password and confirm password.*

If No Question is Selected or if the Security Answer Provided is an Empty String, then the Following Occurs

Oracle Self-Service E-Billing displays the Change Security Question Form with the following error message: *Please select a question and a valid answer for the question selected.*

Setting a Preferred Language

In this use case, end users can set a personal language preference. Setting a preferred language displays all screen text, attributes, error messages, and email notifications in the preferred language for that user each time he or she logs in.

Oracle Self-Service E-Billing is preconfigured with U.S. English only; you must localize your implementation to provide additional languages. For information about localization, see *Implementation Guide for Oracle Self-Service E-Billing*. If Oracle Self-Service E-Billing is localized and a user has not selected a preferred language, then the Billing and Payment application displays in the language configured as the default.

Table 12 lists and describes the Setting a Preferred Language use case functions.

Table 12. Setting a Preferred Language

Function	Description
Name	Setting a Preferred Language
Feature Area	User Management
User	End user, administrator user
Preconditions	The user is currently enrolled and logged into Oracle Self-Service E-Billing.

Table 12. Setting a Preferred Language

Function	Description
Trigger	End user clicks the My Account tab, Personal subtab, and the Preferences page tab, or clicks Language.
Page Content	Page title: Change Language Attribute: Language Buttons: ■ Submit ■ Cancel
Page Tabs	■ User Access ■ Notifications ■ Contacts ■ Preferences
Configuration Points	Oracle Self-Service E-Billing is preconfigured with U.S. English only; you must localize your implementation to provide additional languages.

Main Path for Setting a Preferred Language

The following path describes this use case:

1. The user clicks the My Account tab, Personal subtab, and the Preferences page tab, or clicks Language.
2. On the Preferences page, the user selects a language and clicks Submit.
3. Oracle Self-Service E-Billing displays the Billing and Payment application in the chosen language and stores this preference as part of the user's profile.

   Each time the user logs in, Oracle Self-Service E-Billing uses the preferred language.

Alternate Paths for Setting a Preferred Language

The following alternate path can occur in this use case.

The User Clicks Cancel

Oracle Self-Service E-Billing displays the User Access page.

Exceptions for Setting a Preferred Language

No exceptions can occur with this use case.

Setting Account Lockout Status

In this use case, various triggers cause an account to lock and prevent the user from logging in to Oracle Self-Service E-Billing.

Table 13 lists and describes the Set Account Lockout Status use case functions.

Table 13. Setting Account Lockout Status

Function	Description
Name	Setting Account Lockout Status
Functional Area	Login and Authentication
Primary Users	End user, CSR administrator (Super or Normal Privileges)
Preconditions	The user is currently enrolled in Oracle Self-Service E-Billing.
Trigger	■ On the Login page a user makes the maximum number of attempts to log in to the application. This counter is stored in the database, so time is not relevant. ■ In the Resetting a Password use case, when a user to enter his or her user name, account number, or service number. This is a counter that must be stored in the database, so time is not relevant. ■ In the Resetting a Password use case, when a user makes the maximum number of attempts to enter his or her security answer or security answer. This counter is stored in the database, so time is not relevant.
Configuration Points	■ Number of incorrect entries on the Login page ■ Number of incorrect entries on the Resetting a Password flow - Password ■ Number of incorrect entries on the Resetting a Password flow - Security Question
Rules	The value set in the database must be unique for each trigger point.

Main Path for Setting Account Lockout Status

The following path describes the Set Account Lockout Status use case:

1. Oracle Self-Service E-Billing displays the Login page with the following error message: *Please contact your customer self service representative at xxx-xxx-xxxx to get your account reactivated.*
2. Oracle Self-Service E-Billing sets the status flag in the database indicating this account has been locked for one of the reasons described in Table 13.

Logging In to the Billing and Payment Application

In this use case the user logs in to the Billing and Payment application in Oracle Self-Service E-Billing. Table 14 lists and describes the features.

Table 14. Logging In to the Billing and Payment Application

Feature	Description
Name	Logging In to the Billing and Payment Application
Functional Area	User Management
Primary Users	Business administration user, business manager user, business subscriber user, consumer primary user
Trigger	The user navigates to the login page by entering the URL into a supported browser or the user follows a link from service provider’s landing page available to all anonymous users.

Table 14. Logging In to the Billing and Payment Application

Feature	Description
Standard Features	■ Validation of the user name and password input. ■ Authentication of user name and password. ■ Change language link. ■ Enroll as a new user link. ■ Disclaimer text and standard footer links.

Configuration Points	■ Validation rules for user name and password may be changed to suit a specific service provider's requirements:
	  ■ User name: (Default) The user's telephone number alternative is first initial and full last name (non-phone user login)
	  ■ Password: (Default) must be at least 6 characters. It must contain at least one uppercase letter, one lowercase letter, and one number (to comply with Sarbanes-Oxley guidelines.)
	■ Oracle Self-Service E-Billing can be configured to force users to change their password at first login if the user name and password have been created by a CSR or a company administrator.
	■ Change Language: The default is U.S. English. The application can be localized.
	■ Parameters might be passed through the URL with a secure token that contains the preferred language, currency, and market segment information to personalize the user's experience. For example, if a user has changed the language preference on the service provider's consumer portal page, then present the login screen in the same language, if available, and set it for the remainder of the user's session until changed by the user within the application.
	■ Ability to bypass the login screen to leverage single sign-on (SSO) applications (for example, Siebel CRM, Oracle Identity Manager, CA SiteMinder or third-party application).

Main Path for Logging In to the Billing and Payment Application

1. The user enters the URL into a supported browser or follows a link from service provider's landing page available to all anonymous users.
2. At the Login page, the user enters his or her user name and password, and then clicks Submit.
3. Oracle Self-Service E-Billing authenticates the user and displays the dashboard.

Alternate Paths for Logging In to the Billing and Payment Application

Alternate paths can occur in this use case.

Oracle Self-Service E-Billing Determines that the Customer's Login Credentials are Invalid

The UI displays the message: *The login information you have entered does not match what was captured during the enrollment process. Please re-enter your login information*.

Oracle Self-Service E-Billing Prompts the User to Enter a Valid Email Address Due to Undeliverable Notifications

1. After successfully logging in, Oracle Self-Service E-Billing displays the following message: *We are unable to confirm delivery of email notifications using the address in your personal profile. Please enter the email address you would like to receive billing related notifications.*
2. The user enters a new email address, enters the email address again to confirm, and then clicks Submit.
3. Oracle Self-Service E-Billing verifies that email addresses match and are valid, prompting the user to reenter if necessary.
4. The following message displays: *An email notification has been sent to the email address you have supplied. Please follow the link in the message to complete the validation.*
5. The user clicks the link provided in the email message, which returns them to the Login screen where a message states: *Thank you! Your email address has been successfully verified.*

The User Selects Change Language

Oracle Self-Service E-Billing provides a screen to set a preferred language. Oracle Self-Service E-Billing is preconfigured for U.S. English only.

The User Selects the Enroll Tab

Oracle Self-Service E-Billing runs the Enrollment use case.

Exceptions for Logging In to the Billing and Payment Application

The following exceptions can occur in this use case.

The User Does Not Click the Verification Link in Email After Entering a New Email Address

If the user entered a new email address in the alternate scenario where they had undeliverable notifications, or if he or she does not click the validation link in the new notification they receive, then that alternate scenario repeats.

Using the Timeout Feature

In this use case, a user who is logged in to Oracle Self-Service E-Billing is automatically logged out after being idle for a specific time configured by the administrator. The default time is 15 minutes. Table 15 lists and describes the features.

Table 15. Using the Timeout Feature

Feature	Description
Name	Timeout
Functional Area	User Management
Primary User	Consumer primary user, business administrator user, business manager user, business subscriber user.
Trigger	The user is inactive.
Configuration Points	The service provider might configure the timeout idle period.
Standard Features	■ Timeout message: *Your session has been inactive for a period of time, and to ensure maximum protection of your personal information, we ask you to sign back into the application.* ■ This page contains a link to the Login page.
Alternate Paths	None

Main Path for Using the Timeout Feature

1. The user's session becomes idle.
2. Oracle Self-Service E-Billing times the amount of inactivity and logs out the user from the application after a specified period of time (the default is 15 minutes).
3. When the user selects an action in the application, Oracle Self-Service E-Billing responds with a timeout logout page with a message and link to log back in.

Logging Out

This use case applies when the user exits the application and ends the session. Table 16 lists and describes the features.

Table 16. Logging Out

Feature	Description
Name	Logging Out
Functional Area	User Management
Primary User	Business administration, business manager, business subscriber, consumer primary user

Table 16. Logging Out

Feature	Description
Trigger	The user logs out using the global navigation bar.
Configuration Points	Message text
Logout Confirmation	Logout message: *You have successfully logged out.*
Standard Features	■ Logout message: *You have successfully logged out. To ensure maximum protection of your personal information, it is recommended that you close your internet browser. Click here to Login.* ■ Link to Login page.

Main Path for Logging Out

1. The user's session ends.
2. Oracle Self-Service E-Billing displays a logout message and provides a link to the login page.
3. The user clicks the link to log in again.

Alternate Paths for Logging Out

The user session reaches the timeout period.

Managing Email Notifications

Users can configure personal event-based notification preferences that control the delivery of email messages. Users can receive email notifications for events, such as when a new bill is ready for viewing online or confirmation of a payment.

Notification can be generated by a batch process following an event, called *batch notifications*, or generated in response to a user action within Oracle Self-Service E-Billing, called *instant notifications*. For instructions on configuring a Notifier job, see *Administration Guide for Oracle Self-Service E-Billing*.

Table 17 lists the features and descriptions of the available email notifications.

Table 17. Managing Email Notifications

Feature	Description
Name	Managing Email Notifications
Functional Area	Notifications
Primary User	Business user or consumer user
Trigger	User options: My Account, Personal, Notifications

Table 17. Managing Email Notifications

Feature	Description
Roles and Permissions	This use case can be performed by users with the following roles and permissions: ■ A user’s personal notification settings can only be manually modified by the user who set them. ■ The Oracle Self-Service E-Billing administrator can override the user’s notification preferences, which can be set at the Oracle Self-Service E-Billing level. ■ The Oracle Self-Service E-Billing administrator can configure any single notification type to be required for all users. This notification can be set at the Oracle Self-Service E-Billing level if the notification is available as a user-configured option. ■ All users receive notifications for accounts for which they have access. ■ Notifications are controlled by individual user preferences. If an administrator selects payment notification, then the administrator receives notifications for all accounts to which the administrator has access. If a notification preference is deactivated, then no notifications are made to the user. These notifications include notifications that are generated from the user’s own actions.
Notification Types	Email notification types are as follows: ■ **Bill Ready.** Informs a user that his or her bills are ready for viewing online. ■ **Bill Ready with PDF Attachment.** Informs a user that his or her bills are ready for viewing in the attached PDF file. ■ **Bill Ready with DAISY Attachment.** Informs a user that his or her bills are ready for listening in the attached audio file. ■ **Enrollment (B2B User)**. Informs a B2B user that he or she has been enrolled by a company administrator and that he or she must log in to complete the enrollment process. ■ **Enrollment (B2C User).** Confirms that the consumer user has successfully enrolled and that he or she must log in to complete the enrollment process. ■ **Enrollment (CSR User).** Confirms that the CSR user has successfully enrolled and that he or she must log in to complete the enrollment process. ■ **Enrollment (CSR Administrator User).** Confirms that the CSR administrator has successfully enrolled and that he or she must log in to complete the enrollment process.

Table 17. Managing Email Notifications

Feature	Description
Notification Types, continued	■ **Enrollment (ORG Administrator User).** Confirms that the ORG administrator has successfully enrolled and that he or she must log in to complete the enrollment process. ■ **Enrollment (Migrated B2B User).** Confirms that the migrated B2B user has successfully enrolled and that he or she must log in to complete the enrollment process. ■ **Enrollment (Migrated B2C User).** Confirms that the migrated B2C user has successfully enrolled and that he or she must log in to complete the enrollment process. ■ **Enrollment (Migrated CSR User).** Confirms that the migrated CSR user has successfully enrolled and that he or she must log in to complete the enrollment process. ■ **Job Alert Success.** Confirms that a batch job was successful. ■ **Job Alert Failure.** Notifies the administrator that a batch job failed. ■ **Recurring Payment Confirmation.** Confirms that the user has been successfully enrolled in the automated bill payment program. ■ **Recurring Payment Configuration Update.** Confirms that the user's recurring payment configuration has been updated. ■ **Recurring Payment Delete.** Confirms that the user's recurring payment configuration has been deleted. ■ **Quick Payment.** Confirms that the user submitted a one-time payment. ■ **Quick Payment Failure.** Notifies the user that a one-time payment failed. ■ **Payment Due.** Reminds the user that a payment is due in a configurable number of days in advance of the due date.

Table 17. Managing Email Notifications

Feature	Description
Notification Table	■ **Payment Scheduled.** Informs a user that a scheduled payment is due. ■ **Payment Success.** Confirms that a payment has been completed successfully. ■ **Payment Failure.** Notifies a user that a payment transaction failed to process successfully. ■ **Payment Threshold.** Notifies a user that the amount due exceeds the threshold he or she set for automated payment. ■ **Credit Card Expiration.** Notifies a user that his or her credit card for payment is about to expire. ■ **Payment Account Create.** Confirms that a payment account was successfully created. ■ **Payment Account Update.** Confirms that a payment account was successfully updated. ■ **Payment Account Delete.** Confirms that a payment account was successfully deleted. ■ **Batch Report Ready.** Notifies the user that a report is ready for viewing. ■ **Login Password Changed.** Confirms that a password as been changed successfully. ■ **End User Account Reactivated.** Notifies an end-user that his or her suspended account has been reactivated. ■ **CSR User Account Reactivated.** Notifies a CSR user that his or her suspended account has been reactivated. ■ **Migrated End-User Account Reactivated.** Notifies a migrated end-user that his or her account has been reactivated. ■ **Migrated CSR User Account Reactivated.** Notifies a migrated CSR user that his or her account has been reactivated. ■ **Password Expired.** Notifies a user that his or her password has expired.
Standard Features	■ Form validation. ■ Batch processing of notifications. ■ Instant processing of notifications (not in scope). **NOTE:** For notifications that might typically require instant notification, such as User Enrollment, handle as a batch notification, when possible. ■ API for instant notifications excludes consolidation of messages.

Table 17. Managing Email Notifications

Feature	Description
Configuration	■ The message content for a notification is configurable. ■ The service provider can configure any notification to be required for all users, for example, bill notification.
Notification Consolidation	■ If a notification is generated by a user's action, then there is one email for each user action. ■ When a payment is made for multiple accounts, a single notification must have all account information for the scheduled payment. Notification is sent for each event, not for each account. ■ Multiple batch notifications are consolidated by notification type to avoid multiple emails for a user. Consolidation occurs on an account basis so that all account activity by multiple users is consolidated into a single notification.
Personal Notification Preferences	Send an email if: ■ My bill is ready for viewing. ■ My payment is due in X days. ■ My payment was submitted. ■ My recurring payment is set up or modified. ■ My recurring payment is less than the total amount due (threshold exceeded). ■ My payment was made successfully. ■ My payment failed. ■ My credit card is about to expire.

Main Path for Managing Email Notifications

For details about managing email notifications, see *Implementation Guide for Oracle Self-Service E-Billing*.

3 Statement Presentment

This chapter includes use cases for viewing both business and consumer account statements. It includes the following topics:

Viewing the Dashboard

In this use case the user views the dashboard displayed when he or she logs in to the Billing and Payment application in Oracle Self-Service E-Billing. Table 18 lists and describes the features.

Table 18. Logging In

Feature	Description
Name	Logging In
Functional Area	Statement Presentment
Primary Users	Business administration user, business manager user, business subscriber user, consumer primary user
Trigger	The user successfully logs in to the Billing and Payment application.

Main Path for Viewing the Dashboard

- The user successfully logs in to the Billing and Payment application. Oracle Self-Service E-Billing displays the dashboard overview of their billing using the following settings:
  - The user’s role (permissions).
  - The user’s assignment in the hierarchy (for data access).
  - The language preference set by the user.

Alternate Paths for Viewing the Dashboard

There is one alternate path when viewing the Dashboard.

No Billing Data is Loaded for the Current Billing Period

If there is no billing information available for the current billing period, then the dashboard displays information from the previous billing period by default.

Viewing a Billing Summary

Use the Viewing a Billing Summary use case to allow a user to view a summary of recent charges for all accounts in a company. Table 19 lists and describes the features.

Table 19. Viewing a Billing Summary

Feature	Description
Name	Viewing a Billing Summary
Functional Area	Business Reporting (Tree View Report)
Primary User	Business administrator user, business manager user, and business subscriber user.
Trigger	The user selects the Business Statement tab
Configuration Points	Columns displayed in the report can be changed to match a specific service provider’s requirements.

Main Path for Viewing a Billing Summary

- The user selects the Statement tab. The UI displays the Billing Summary report with the following columns:
  - Type
  - Number
  - Description
  - Monthly Charges
  - Usage Charges
  - Credits
  - Other Charges
  - Taxes
  - Total

Alternate Paths for Viewing a Billing Summary

The following alternate paths apply to Billing Summary.

The Current Hierarchy Node Context is an Account or the Current Company Contains Only One Account

Oracle Self-Service E-Billing displays the Statement Summary view.

Report Default is the Current Period

The user might change to another single period, where the to and from dates are in the same period, or to different to and from aggregation periods.

Company Trend Report Version (Compare Periods)

The user selects the T link at the end of a row and the UI displays a trend report with columns for each period up to the number of periods available online.

Expand and Contract Hierarchy Tree Levels Keeping the Columns Constant

Expands or contracts the company, account, and service agreement level.

Drill-Down Through Hyperlinks to Other Reports

The account number links to the Statement Summary view. The service agreement number links to the Service Summary view.

Viewing a Statement Summary

Use the Viewing a Statement Summary use case to allow a user to view a bill summary. Table 20 lists and describes the features of the Statement Summary use case.

Table 20. Viewing a Statement Summary

Feature	Description
Name	Viewing a Statement Summary
Functional Area	Statement
Primary User	Business administrator, business manager, business subscriber, consumer primary user
Trigger	■ The user selects the Statement tab. ■ The user selects an account number link in a report.

Table 20. Viewing a Statement Summary

Feature	Description
Standard Features	■ Printer-friendly view ■ Download CSV, PDF, or XML
Configuration Points	Report Threshold Value for Batch Mode. Determines the number of result set lines above which a report must process in batch mode instead of as an online download. You can set values for each type of download file: ■ **CSV**. The maximum number of output lines. ■ **PDF**. A percentage of the CSV threshold value (Default is 10%). ■ **XML**. A percentage of the CSV threshold value (Default is 20%). For example, if the CSV report threshold is set to 3,000 result set lines, then a PDF threshold value set at 10% must process in batch mode when there are 300 or more result set lines in the CSV file.

Main Path for Viewing a Statement Summary

- The user selects the Statement tab and the Account Number link.

Alternate Paths for Viewing a Statement Summary

The following alternate paths apply to the Statement Summary.

The User Selects a Different Account Number

The UI displays the bill summary for the selected account for the current period.

The User Selects a Different Statement Period

Oracle Self-Service E-Billing displays the bill summary for the current account for the selected period.

The User Selects a Previous Balance Link

The UI displays the previous period bill summary for the current account.

The User Selects the Total Current Charges Link

The UI displays the account summary.

Viewing an Account Summary

Use the Viewing an Account Summary use case to allow a user to view a summary of the account-level and service agreement-level charges. Table 21 lists and describes the features of the Account Summary use case.

Table 21. Viewing an Account Summary

Feature	Description
Name	Viewing an Account Summary
Functional Area	Statement
Primary User	Business administrator, business manager, business subscriber, consumer primary user
Trigger	The user drills down from Statement Summary.
Standard Features	■ Printer-friendly view ■ Download CSV or XML
Configuration Points	Report Threshold Value for Batch Mode. Determines the number of result set lines above which a report must process in batch mode instead of as an online download. You can set values for each type of download file: ■ **CSV**. The maximum number of output lines. ■ **XML**. A percentage of the CSV threshold value (Default is 20%). For example, if the CSV report threshold is set to 3,000 result set lines, then an XML threshold value set at 20% must process in batch mode when there are 600 or more result set lines in the CSV file.

Main Path for Viewing an Account Summary

The user selects the Statements tab and the account Summary link.

Alternate Paths for Viewing an Account Summary

The following alternate paths apply to View Account Summary.

The User Selects a Different Account Number from a List

The UI displays the Statement Summary for the selected account for the current period.

The User Selects a Different Statement Period

The UI displays the Statement Summary for the current account for the selected period.

The User Selects the Total Current Charges Link

The UI displays the Account Summary.

Viewing a Service Summary

The Viewing a Service Summary use case is used so that a user can view a summary of charges for a single service agreement. This is both a business and consumer use case. Table 22 lists and describes the features.

Table 22. Viewing a Service Summary

Feature	Description
Name	Viewing a Service Summary
Functional Area	Statement
Primary User	Business administrator, business manager, business subscriber, consumer primary user
Trigger	A user selects a service agreement number in Billing Summary, Statement Summary, and Account Summary.
Standard Features	■ Printer-friendly view ■ Download CSV or XML
Configuration Points	Report Threshold Value for Batch Mode. Determines the number of result set lines above which a report must process in batch mode instead of as an online download. You can set values for each type of download file: ■ **CSV**. The maximum number of output lines. ■ **XML**. A percentage of the CSV threshold value (Default is 20%). For example, if the CSV report threshold is set to 3,000 result set lines, then an XML threshold value set at 20% must process in batch mode when there are 600 or more result set lines in the CSV file.

Main Path for Viewing a Service Summary

The user selects the Statements tab and the Service Summary link.

Alternate Paths for Viewing a Service Summary

The following alternate paths apply to Service Summary.

The User Selects a Different Service Agreement Number

The UI displays the Service Summary for the selected service agreement number and current period.

The User Selects a Different Bill Date

The UI displays the Service Summary for the current service agreement number for the selected period.

The User Selects the Total Usage Charges Link

The UI displays the Usage Summary for the current service agreement and current period.

The User Selects a Usage Type

This path has the following usage types:

- **Usage Type 1 (Voice).** Links to Voice Detail Report for the current service agreement and current period.
- **Usage Type 2 (Messages).** Links to Messages Detail Report for the current service agreement and current period.
- **Usage Type 3 (Data).** Links to Data Detail Report for the current service agreement and current period.
- **Usage Type n.** Links to N Detail Report for the current service agreement and current period.

Viewing a Usage Type Summary

Use the Viewing a Usage Type Summary use case to allow a user to view the Usage Type breakdown for each Service Type (voice, messages, and data). Table 23 lists and describes the features.

Table 23. Viewing a Usage Type Summary

Feature	Description
Name	Viewing a Usage Type Summary.
Functional Area	Statement.
Primary User	Business administrator user, business manager user, and business subscriber user, consumer primary user.
Trigger	The user selects a total usage charges on the Service Summary page.

Table 23. Viewing a Usage Type Summary

Feature	Description
Standard Features	■ Printer-friendly view ■ Download CSV or XML
Configuration Points	Report Threshold Value for Batch Mode. Determines the number of result set lines above which a report must process in batch mode instead of as an online download. You can set values for each type of download file: ■ **CSV**. The maximum number of output lines. ■ **XML**. A percentage of the CSV threshold value (Default is 20%). For example, if the CSV report threshold is set to 3,000 result set lines, then an XML threshold value set at 20% must process in batch mode when there are 600 or more result set lines in the CSV file.

Main Path for Viewing a Usage Type Summary

The user selects Total Usage Charges in Service Summary. The UI displays the Usage Summary for the current service agreement and current period.

Alternate Paths for Viewing a Usage Type Summary

The following alternate paths apply to View Usage Summary.

The User Selects a Different Service Agreement Number

The UI displays the Usage Summary for the selected service agreement number and current period.

The User Selects a Different Bill Date

The UI displays the Usage Summary for the current service agreement number for the selected period.

The User Selects a Different Usage Type

Oracle Self-Service E-Billing displays the Usage Summary for the current service agreement number for the selected period and usage type.

The User Selects a Usage Type Total Link

This path has the following usage types:

- Usage Type 1 (voice) links to Voice Detail Report for the current service agreement and current period.
- Usage Type 2 (messages) links to Messages Detail Report for the current service agreement and current period.

- Usage Type 3 (data) links to Data Detail Report for the current service agreement and current period.
- Usage Type n links to N Detail Report for the current service agreement and current period.

Viewing Usage Details

Use the Viewing Usage Details use case to allow a user to view the details of usage transactions. Table 24 lists and describes the features.

Table 24. Viewing Usage Detail

Feature	Description
Name	Viewing Usage Details
Functional Area	Statement
Primary User	Business administrator, business manager, business subscriber, consumer primary user
Trigger	The user selects a service type link in Service Summary or a usage type total charges link in Usage Summary.
Standard Features	■ Printer-friendly view ■ Download CSV or XML
Configuration Points	Report Threshold Value for Batch Mode. Determines the number of result set lines above which a report must process in batch mode instead of as an online download. You can set values for each type of download file: ■ **CSV**. The maximum number of output lines. ■ **XML**. A percentage of the CSV threshold value (Default is 20%). For example, if the CSV report threshold is set to 3,000 result set lines, then an XML threshold value set at 20% must process in batch mode when there are 600 or more result set lines in the CSV file.

Main Path for Viewing Usage Details

1. The user selects the Statement tab, the Usage Detail link, and then the Total Cost link in the Usage summary.
2. The UI displays the Usage Detail screen.

Alternate Paths for Viewing Usage Details

The following alternate paths apply to View Usage Detail.

The User Selects a Different Service Agreement Number

Oracle Self-Service E-Billing displays the Usage Summary for the selected service agreement number and current period.

The User Selects a Different Bill Date

Oracle Self-Service E-Billing displays the Usage Summary for the current service agreement number for the selected period.

Sort Ascending or Descending by Selecting Column Header Link

The user selects the header link. Oracle Self-Service E-Billing sorts the column in ascending order. The user again selects the header link. Oracle Self-Service E-Billing sorts the column in descending order.

Search for String in Any Column Including Notes Text

The user selects an attribute and enters a search string with or without wildcards according to the following specifications:

- **String no wildcards.** Exact match string.
- **String with end asterisk.** Starts with string.
- **String with front asterisk.** Ends with string.
- **String with front and end asterisk.** Contains string.

Oracle Self-Service E-Billing returns all records that match the search criteria.

The User Selects the Contact Link Icon (Not in Sample Views)

The UI displays the Corporate or Personal Contact list entry. The contact link appears only if the number is in contact list.

The User Selects a Tariff Link (Such as Weekend Calls or Peak Calls)

The UI displays the Categorize Transaction report for the current service agreement, period, and selected record.

Categorizing Transactions

Use the Categorizing Transactions use case to enable a user to view all available transaction details and to change the category, add a note, or dispute the transaction. Table 25 lists and describes the features.

Table 25. Categorizing Transactions

Feature	Description
Name	Categorizing Transactions
Functional Area	Statement, Split-Billing, and Dispute
Primary User	Business administrator, business manager, business subscriber, consumer primary user
Trigger	The user selects tariff type link on Usage Detail.
Standard Features	■ Printer Friendly ■ Download (CSV)

Main Path for Categorizing Transactions

- The user selects the Tariff Type link on the Usage Detail page.

  Oracle Self-Service E-Billing displays the Categorize Transaction view with all available attributes and values.

Alternate Paths for Categorizing Transactions

The following alternate paths apply to this use case.

The User Selects Contact Link Icon (Not in Sample Views) Next to Contact Name

The UI displays the Corporate or Personal Contact list entry.

The User Changes the Category and Selects Submit

Oracle Self-Service E-Billing updates the category for the record.

The User Adds a Text Note and Selects Submit

Oracle Self-Service E-Billing adds the text to the transaction record and the UI displays a note icon in the Usage Details report.

The User Selects the Dispute Link

The UI displays the Dispute Transaction page.

Disputing a Transaction

Use the Dispute a Transaction use case to allow a user to dispute a specific transaction.

Main Path for Disputing a Transaction

1. The user selects the dispute link on the Categorize Transaction page. The UI displays the Disputes page with the following data:
   - Account Number
   - Transaction Date
   - Posting Date
   - Dispute Number
   - Description
   - Amount
   - Actions: Submit; Cancel
   - Reason for Dispute
2. The user enters text for a specific dispute and clicks Submit. The UI displays the Disputes Page 3 confirmation:
   - Information from previous page (full text of dispute)
   - Actions: Print this page
3. Oracle Self-Service E-Billing saves the dispute details.

Alternate Path for Disputing a Transaction

Alternate paths can occur with this use case.

The User Selects a Link to Print the Page

The UI displays a page without navigation. The user uses the browser print function to print the page.

Exceptions for Disputing a Transaction

Alternate paths can occur with this use case.

Invalid Field

The Card Member enters an invalid field and the UI displays an error message.

4 Payment Use Cases

Business users can perform payment functions such as completing a single online payment for one or more billing accounts, scheduling regular account payments, updating payment account information, and viewing all payment activity within a user-specified time period. This chapter includes the following topics:

Creating a One-Time Payment

A business user can create a single online payment for one or more billing accounts. If the payment is for multiple billing accounts, then the payment is transacted as a single payment, but information such as the amount applied to each account is annotated to the transaction for A/R for reconciliation. A user can create a payment account (credit card or bank account) when creating a one-time payment for future one-time payments or recurring payments. Table 26 lists and describes the functions.

Table 26. Creating a One-Time Payment

Function	Description
Name	Create One-Time Payment
Feature Area	Payment
Description	Lets a user make a payment against their billing account.
Primary User	Business user
Triggers	■ The user clicks the Payments tab and the One-Time Payment menu option. ■ The user clicks the Make a Payment quick link.
Page Titles	■ One-Time Payment ■ Make One-Time Payment ■ Confirm One-Time Payment ■ Payment Summary

Table 26. Creating a One-Time Payment

<table>
<tr><th>Function</th><th>Description</th></tr>
<tr><td>Page Content: One Time Payment Page</td><td>Page Title: One-Time Payment Page:

Modules:
Search By
Select Billing Accounts (Number of Items)

Search By Module:

Button - Go (for Search By)
Prompts:
Account Number
Statement Date Between (From and To date fields with pop-up calendars)
Due Date Between (From and To date fields with pop-up calendars)
Last Payment Date (From and To date fields with pop-up calendars)
Amount Due Range (From and To amounts)

Select Billing Accounts (Number of Items) Module:

Buttons:
Next (to select a billing account)
Reset (to deselect a billing account)
Columns (All columns are sortable):
Billing Account Number
Statement Date
Due Date
Recurring Payment
Last Payment Date (Displays the real-time data if Web services are enabled.)
Statement Amount (Currency Code)
Current Amount Due (Currency Code)
Check box next to each billing account
Label: Total
Data:
Total of Statement Amounts (Currency Code)
Total of Current Amount Due (Currency Code)
</td></tr>
</table>

Table 26. Creating a One-Time Payment

Function	Description

Page Content: Make One-Time Payment Page	Make One-Time Payment Page:
	■ Module: Select Billing Accounts (*Number of Items*)
	■ Buttons:
	  ■ Next (to make the payment)
	  ■ Cancel (to display the One-Time Payment screen)
	■ Prompt:
	  ■ Payment Amount
	■ Columns (All columns are sortable):
	  ■ Billing Account Number
	  ■ Due Date
	  ■ Recurring Payment
	  ■ Statement Amount (*Currency Code*)
	  ■ Current Amount Due (*Currency Code*) (Displays the real-time amount if Web services are enabled.)
	  ■ Payment Amount
	■ Label: Total
	■ Data:
	  ■ Total of Statement Amounts (*Currency Code*)
	  ■ Total of Current Amount Due (*Currency Code*)

Page Content: One-Time Payment Page - Select Payment Options	One Time Payment Page - Select Payment Options: Modules: ■ Manage One-Time Payment ■ Payee Details ■ Add Bank Account ■ Add Credit Card

Table 26. Creating a One-Time Payment

Function	Description

Page Content: One-Time Payment Page - Select Payment Options, continued	Manage One-Time Payment Module:
	■ Buttons:
	  ■ Submit (to submit the payment)
	  ■ Back (to cancel the payment and return to the Make One-Time Payment page)
	■ Text - * Required Fields
	The Payment Date will be automatically populated with today's date and the text field is disabled. The text field will be enabled if the user checks Save this information to my payment account or selects an alternate payment method.
	■ Prompts:
	  ■ Payment Date (Select one)
	  ■ Select Payment Method
	    ❑ Use Saved Payment Account (Select one)
	    ❑ Enter New Payment Information (Select one)
	Payee Details Module:
	■ Prompts:
	  ■ Payee (Select one)
	  ■ Payee Account (Select one)
	Add Bank Account Module:
	■ Prompts:
	  ■ Bank Name
	  ■ Routing Number
	  ■ Account Number
	  ■ Account Type (Checking or Savings)

Table 26. Creating a One-Time Payment

Function	Description

Page Content: One-Time Payment Page - Select Payment Options, continued	Add Credit Card Module:
	■ Prompts:
	  ■ Credit Card Number
	  ■ Name on Credit Card
	  ■ Credit Card Type (AMEX, Discover, MasterCard, or Visa)
	  ■ Expiration Date (MM/YYYY)
	  ■ CW Code (The CVV Code is used for Validation purpose only.)
	  ■ Country (United States)
	  ■ Address Line 1
	  ■ Address Line 2
	  ■ City
	  ■ State (Choose from list)
	  ■ Postal Code
	  ■ (Check Box) Save this information in my payment accounts

Table 26. Creating a One-Time Payment

Function	Description

Page Content: Confirm One-Time Payment Page	Confirm One-Time Payment Page:
	■ Modules:
	  ■ Payment Date
	  ■ Selected Billing Accounts (*Number of Items*)
	Payment Date Module:
	■ Buttons:
	  ■ Confirm (to confirm and submit the payment)
	  ■ Cancel (to cancel the payment and return to the One-Time Payment page)
	■ Data:
	  ■ Payment Date
	  ■ Payment Account
	  ■ Payee
	  ■ Payee Account
	Selected Billing Accounts (*Number of Items*) Module:
	■ Columns (All columns are sortable):
	  ■ Billing Account Number
	  ■ Due Date
	  ■ Recurring Payment
	  ■ Statement Amount (*Currency Code*)
	  ■ Current Amount Due (*Currency Code*) (Displays the real-time amount if Web services are enabled.)
	  ■ Payment Amount
	■ Label: Total
	■ Data:
	  ■ Total of Statement Amounts (*Currency Code*)
	  ■ Total of Current Amount Due (*Currency Code*)

Table 26. Creating a One-Time Payment

Function	Description

Page Content: Payment Summary Page	Payment Summary Page:
	■ Module: Payment Information (*Number of Items*)
	■ Columns:
	  ■ Account Number
	  ■ Due Date
	  ■ Payment Account
	  ■ Amount Due (*Currency Code*) (Displays the real-time amount if Web services are enabled.)
	  ■ Payment Amount (*Currency Code*)

Configuration Points	■ If Web services are configured, then Oracle Self-Service E-Billing displays the Last Payment Date and Current Amount Due on a billing account retrieved from external payment transactions. ■ Max Pay Thresholds are configurable by payment application. ■ Paging shows 25 billing accounts at a time. This value is configurable.
Rules	■ One-time payments can take place immediately (future date not required). ■ Process Failed payments appear on the Payment Activity view after payment has been processed by the billing system. ■ Payment processing is assumed to occur only on business days. Payment processing blackout dates are configurable. ■ After a payment is scheduled, the status appears as Scheduled on the Payment Activity view. After the payment is processed, the status changes to Processed. For status definitions, see "Oracle Self-Service E-Billing displays a message with the validation error (card number digits, invalid routing number, and so on)." on page 90. ■ Oracle Self-Service E-Billing is preconfigured to support North American ACH and VeriSign payment gateways.

Main Path for Creating a One-Time Payment

1 The user clicks the Payments tab.

Oracle Self-Service E-Billing displays the One-Time Payment page listing the billing account statements for the user.

2 The user can optionally search for one or more accounts. The user enters a particular account number or a statement, due date, last payment, or amount due date range, then click Go.

Oracle Self-Service E-Billing displays the list of selected account statements in tabular format.

3. The user selects all, one, or multiple billing accounts for which to make payment and clicks Next.

   Oracle Self-Service E-Billing displays the Make One-Time Payment page.

4. For each account, the business user can enter a different payment amount from the one shown.
5. The user clicks Next.

   Oracle Self-Service E-Billing displays the One-Time Payment page with the Make One-Time Payment and Payee Details modules.

6. The user enters a payment date or selects one from the calendar.
7. The user chooses to use either a saved payment account or enter a new payment method. For a saved payment account, the user selects the account. For a new payment method, the user specifies whether it is a bank account or a credit card, then enters or selects the information prompted. The user has the option to save the new payment account information or make an instant payment and not save the account information (the default).
8. The user clicks Submit.

   Oracle Self-Service E-Billing displays the Confirm One-Time Payment page.

9. The user verifies the one-time payment information and clicks Confirm.

   The Payment Summary page appears with the message: *Thank you for your payment. It is currently being processed and your Payment ID is (Payment ID). Please review the Payment Activity screen for an updated status in the next 24 hours.*

Alternate Path for Creating a One-Time Payment

The following alternate paths can occur in this use case:

- The account has a recurring payment setup. The following warning message appears: *You selected one or more accounts with a recurring payment. More than one payment to your account may result. Do you wish to continue? Payments are already made for the following Billing Accounts: Account Numbers. Continuing will result in duplicate payments.*
- The user enters a partial amount to be paid. The following warning message appears: *For one or more Billing Accounts, payment amount entered is less than the due amount. Do you want to continue?*
- The user enters a payment amount in the wrong format. The following message appears: *Enter a valid amount in the format #,##0.00*.
- The user can use the Reset button to change entries.
- The user enters an amount greater than the current amount due. Oracle Self-Service E-Billing displays the following warning message: *For one or more Billing Accounts, payment amount entered is greater than the due amount. Do you want to continue?*
- Oracle Self-Service E-Billing limits the transaction to the total amount due. This value is configurable.

Exceptions for Creating a One-Time Payment

The following exceptions can occur in this use case:

- The user cancels the transaction and Oracle Self-Service E-Billing returns the user to the initial One-Time Payment screen.
- Oracle Self-Service E-Billing cannot find the billing account and displays the following message: *Billing account not found. Oracle Self-Service E-Billing receives Automated Clearing House (ACH) failure.*
- Oracle Self-Service E-Billing displays the following payment failure message: *Your bank account could not be verified. Please review the bank account information you provided and try again. Oracle Self-Service E-Billing does not perform the transaction.*

Setting Up and Managing Recurring Payments

Users can use this use case to pay monthly charges automatically and set up an automatic recurring payment to a payee at regular intervals for a user-specified amount. The user can edit any recurring payment that is still active. The changes are applied to all future payments. The user can also decide whether to apply the changes to the next outgoing scheduled payment.

The user can cancel a recurring payment, which stops any future automatic payments. If a recurring payment is canceled, then the user has the option to cancel any payments that are already scheduled. The user can cancel the scheduled payment or only the future payments in the recurring payment definition. Table 27 lists and describes the functions.

Table 27. Setting Up and Managing Recurring Payments

Function	Description
Name	Set Up and Manage Recurring Payments
Feature Area	Payment
Description	Lets a user set up and manage recurring payments against their associated billing accounts.
Users	Business user
Trigger	The user selects Payments, Recurring Payment menu option.
Configurations	Scheduled Payment Sidebar has a display default of 10 most recent scheduled payments. This limit can be configurable.
Standard Features	■ Multiple payment accounts ■ Email notification of payment event ■ Paging ■ Sorting

Main Path for Setting Up and Managing Recurring Payments

The following path describes setting up and managing recurring payments.

Viewing Recurring Payments

1. The Recurring Payment page is displayed.
2. Display Recurring Payments.

   The recurring payments previously created by the user are displayed with the following column headings:

   - Billing Account Number
   - Amount Type (Total amount due, Total amount within X threshold, Fixed amount)
   - Pay Interval (A number of days before due date, a specific day of the month (values entered when the recurring payment was created).
   - Effective Period (Until canceled, a specific number of payments, or until a date)
3. The user can choose from the following options:
   - Delete selected recurring payment (for one billing account at a time).
   - Edit selected recurring payment (for one billing account at a time).
   - Add recurring payment (continue with use case main path).

Adding a Recurring Payment

The user selects Add Recurring Payment from the Recurring Payments page.

1. Select Billing Accounts.

   The user selects multiple billing accounts to which a new recurring payment is applied.
2. Select Payment Account.

   Field of payment accounts previously saved by the user (payment accounts created by other users are not displayed). The user has an option to create a new payment account.
3. Select Pay Amount Options:
   - Total Amount Due (Default)
   - Total Amount Within Threshold (The user enters the threshold amount and receives a notification if the amount due exceeds the threshold).
   - Fixed Amount (The user enters a fixed amount.)
4. Payment Date. The user selects an option and enters a value:
   - The number of business days before due date (The default is two days before the due date.)
   - On a specific day of every month

5 Effective Period.

The user defines the effective duration of the recurring payment, defining a value for X where specified.

- Until Canceled (Default)
- For X payments
- Until date X (Text box and popup calendar)

6 The user selects Save.

The Recurring Payment Confirmation page appears.

7 The user can modify the selected accounts.

8 The user clicks Confirm to save the recurring payment

Oracle Self-Service E-Billing displays a confirmation message and adds the recurring payment to the list of scheduled recurring payments.

Alternate Paths for Setting Up and Managing Recurring Payments

Alternate paths can occur when setting up and managing recurring payments.

New Payment Account

1 Oracle Self-Service E-Billing takes user to Payment Accounts page and New Payment Account functionality. Both bank and credit card accounts are permitted for recurring payments.

2 User enters a one time payment for an account that already has a scheduled recurring payment.

3 Oracle Self-Service E-Billing displays a notification that a recurring payment already exists for this account. Oracle Self-Service E-Billing notifies the user that if the payment is scheduled, then a double payment could occur.

4 The user selects option to confirm or cancel payment.

Search for Billing Account (Business Only)

The user can sort and filter the list of billing accounts by:

- Billing Account Number
- Due Amount
- Due Date

Viewing and Editing Recurring Payments

This path is identical to the main path with the following exceptions:

- Recurring payments can only be edited one-at-a-time. Group editing of a recurring payment is not in scope.

- Information for the user prior to editing a recurring payment: After editing a recurring payment, any scheduled payment is canceled. A new payment is scheduled in its place using the new recurring payment options.
- Editing recurring payments includes restrictions. The limitations are as follows:
  - Payment Amount: A recurring payment cannot change from Total Amount to Fixed Amount (or vice-versa).
  - Payment Date: A recurring payment cannot change from X Days Before Due Date to On the X Day of Every Month (or vice-versa).
  - Present the user only with available edit options.
  - A new recurring payment must be created if an edit option is wanted but not available.

Canceling Recurring Payments

The user can cancel a recurring payment, which stops any future automatic payments. If a recurring payment is canceled, then the user has the option to cancel any payments that are already scheduled. The user decides whether to cancel the scheduled payment or just the future payments in the recurring payment definition.

Upcoming Scheduled Payments (Business Only)

The business user can view a list of upcoming payments for multiple accounts from the Scheduled Payments sidebar (left). This Schedule Payment list represents all upcoming scheduled payments for all accounts for the current user.

Roles and Permissions - Viewing Payment Activity

Any user with permission to view payment activity must be able to view any payment made against any billing account to which the user has access. This includes check payments posted through the mail.

Administrator Roles

The administrator user might experience performance delays when dealing with large numbers of accounts.

Viewing Payment Activity

A business user can use this use case to view a list of all payments activity for a configurable time period. Scheduled payments appear in payment activity and can be canceled prior to being processed. Payment activity can be searched or filtered. A business user can view detail for multiple accounts. The user can edit scheduled payments from the Payment Activity view. Table 28 lists and describes the functions.

Table 28. Viewing Payment Activity

Function	Description
Name	Viewing Payment Activity
Feature Area	Payment.
Description	Lets a user view transactional history for their associated billing accounts.
Primary User	B2B user, CSR User
Trigger	The user clicks the Payments tab and the Payment Activity menu option.
Standard Features	■ Edit or cancel a scheduled payment. ■ Sorting and Paging. ■ Search or Filter (Search for a payment, or filter by type, account, status, or date range).

Table 28. Viewing Payment Activity

Function	Description

Page Content - Payment Activity Page	■ Modules:
	  ■ Search By
	  ■ List of Payment Transactions (*Number of Items*)
	Search By Module:
	■ Prompts:
	  ■ Account Number
	  ■ Payment Type (All, CSR Updated, Recurring, One-Time, CSR Initiated. Web services can also pass in the following payment types: Mail In, Lock box, Kiosk, and Via Phone)
	  ■ Status (All, Canceled, Failed, Failed Authorization, Paid, Processed, Returned, Scheduled)
	  ■ Payment Transactions (From and To date fields with pop-up calendars)
	■ Button - View
	List of Payment Transactions (*Number of Items*) Module:
	■ Columns:
	  ■ Billing Account
	  ■ Payment Type
	  ■ Amount (*Currency Code*)
	  ■ Status
	  ■ Payment Scheduled Date
	  ■ Payment Transaction Date
	  ■ Actions (Not available for payment transactions from an external source using Web services.)
	    ❑ **Edit.** Edit scheduled payments
	    ❑ **Cancel.** Cancel scheduled payments
	    ❑ **View Details.** View transaction details for initiated payments.

Table 28. Viewing Payment Activity

Function	Description

Page Content - Payment Details Page	Payment Details Page:
	■ Modules:
	  ■ Payment Information
	  ■ (*Number of Items*)
	Payment Information Module:
	■ Data:
	  ■ Account Number
	  ■ Payment Type
	  ■ Payment Scheduled Date
	  ■ Payment Transaction Date
	  ■ Payment Amount
	  ■ Payment Account
	  ■ Status
	  ■ Date Created
	  ■ Date Modified
	(*Number of Items*) Module:
	■ Button - Back
	■ Columns:
	  ■ Account
	  ■ Statement Date
	  ■ Statement Number
	  ■ Amount Due
	  ■ Due Date
	  ■ Amount Paid

Table 28. Viewing Payment Activity

Function	Description

Page Content - Edit One-Time Payment Page	Edit One-Time Payment Page:
	■ Modules:
	    ■ Edit One-Time Payment
	    ■ Accounts Selected for Payment (*Number of Items*)
	Edit One-Time Payment Module:
	■ Buttons:
	    ■ Submit
	    ■ Cancel
	■ Prompt: Payment Date (with popup calendar)
	Accounts Selected for Payment (*Number of Items*) Module:
	■ Data:
	    ■ Account Number
	    ■ Payment Account
	    ■ Due Date
	    ■ Amount Due (*Currency Code*)
	    ■ Payment Date
	    ■ Total (payment amount total)
	■ Prompt: Payment Amount (Displays editable amount)
	■ Text:
	    ■ Total
	    ■ *Required Fields

Table 28. Viewing Payment Activity

Function	Description

Page Content - Confirm One-Time Payment Page	Modules:
	■ Payment Date
	■ Accounts Selected for Payment (*Number of Items*)
	Payment Date Module:
	■ Buttons:
	  ■ Submit
	  ■ Cancel
	■ Data: Payment Date
	Accounts Selected for Payment (*Number of Items*) Module:
	■ Buttons:
	  ■ Submit
	  ■ Cancel
	■ Data:
	  ■ Account Number
	  ■ Payment Account
	  ■ Due Date
	  ■ Amount Due (*Currency Code*)
	  ■ Payment Amount (*Currency Code*)
	  ■ Total (of payment amounts)
	■ Text: Total

Page Content - Manage One-Time Payment Page	■ Button: Back ■ Text: Success Message Your selected billing account is updated successfully.

Table 28. Viewing Payment Activity

Function	Description

Page Content - Cancel One-Time Payment Page	Cancel One-Time Payment Page:
	■ Modules:
	  ■ Cancel One-Time Payment
	  ■ Payment Information (*Number of Items*)
	Cancel One-Time Payment Module:
	■ Buttons:
	  ■ Submit
	  ■ Cancel
	■ Text: You are about to cancel the payment. Do you wish to continue?
	Payment Information (*Number of Items*) Module:
	■ Columns:
	  ■ Account Number
	  ■ Payment Amount
	  ■ Due Date
	  ■ Amount Due (*Currency Code*)
	  ■ Payment Date
	  ■ Payment Amount (*Currency Code*)

Page Content - Cancel Payment Confirmation Page	Cancel Payment Confirmation Page: ■ Button: Back ■ Text: Your selected payment was canceled successfully.
Configuration Points	■ When Web services are configured, payments external to Oracle Self-Service E-Billing are retrieved. ■ Configurable values for payment source when A/R reconciliation jobs are set up include: Online Check, Online Credit, Offline Check, and Offline Credit. ■ Number of month’s history presented. ■ Initial sort order for each column (ascending or descending).

Main Path for Viewing Payment Activity

The following path describes the Viewing Payment Activity use case:

- The user clicks the Payment tab, and the selects the Payment Activity menu option.

  Oracle Self-Service E-Billing displays the Payment Activity screen showing all scheduled one-time and recurring payments.

Alternate Paths

The following alternate paths can occur with this use case.

The User Views Details for a Payment

- On the Payment Details page, the user clicks the View Details link for a payment.

  Oracle Self-Service E-Billing displays the Payment Details page showing detailed information about the payment and accounts.

The User Edits a Scheduled Payment

1. On the Payment Details page, the user clicks the Edit link for a scheduled payment.
2. The user can edit the payment date and amount fields only, including on recurring payments that are scheduled.

   In case of multiple accounts grouped in one payment transaction, the user can change the amount for each billing account. When editing a scheduled payment from the Payment Activity view, the user is restricted from adding or removing a billing account from the scheduled payment.
3. The user clicks Submit.
4. The Manage One-Time Payment page appears with the following message: *Your selected billing account is updated successfully.*

   Oracle Self-Service E-Billing uses the date of this edit as the last modified date.

The User Cancels a Scheduled Payment

1. On the Payment Details page, the user clicks the Cancel link for a scheduled payment.

   Oracle Self-Service E-Billing displays the following question: You are about to cancel the payment. Do you wish to continue?
2. The user verifies the payment information shown and clicks Submit (or clicks Cancel to return to the Payment Activity page).
3. Oracle Self-Service E-Billing displays the Cancel Payment Confirmation page.

Managing Payment Accounts

A business user can use this use case to add, edit, or delete payment account information. Table 29 lists and describes the functions.

Table 29. Managing Payment Accounts

Function	Description
Name	Manage Payment Accounts.
Feature Area	Payments.
Description	Lets the user add, edit, or delete payment account information.
Users	Business user
Trigger	The user selects Payments, and then Accounts menu option.
Standard Features	■ Form validation for Bank (Checking) Account or Credit Card. ■ Email notifications for payment account actions.
Payment Account Deletion	■ When a payment account is deleted, the user is warned that all recurring payment setups created for this payment account will be deleted. ■ When a payment account is deleted, the users are prompted to confirm that they want to delete all the scheduled payments against this payment account.
Credit Card Expiration	■ If this credit card has expired, then the user is not allowed to create a recurring payment against this credit card. ■ If this credit card expires after creating a recurring payment, then the recurring payment setup is not deleted.
Roles and Permissions	This use case can be performed by users with the following roles and permissions: ■ Payment Account Access: Any business user who has permission to perform a business payment account function requires access to all

Main Path for Managing Payment Accounts

The following path describes managing payment accounts.

Adding a Credit Card Account

1 The user selects the Payment Account subtab from the Manage Recurring Payments tab.

2 Oracle Self-Service E-Billing displays a list of existing payment accounts and the ability to add, edit, or delete those accounts.

3 The user selects to a add credit card account.

4 Oracle Self-Service E-Billing displays the form to add a credit card account that contains the following fields:

- Payment Account Name
- Credit Card Number
- Name on Credit Card
- Credit Card Type
- Expiration Date
- Card Verification Code (CVV)
- Address Line 1
- Add Address Line 2
- City
- State
- Zip Code
- Country
- Payee

5 The user saves the form.

6 Oracle Self-Service E-Billing validates the information and updates the list of payment accounts.

Alternate Paths

Alternate paths can occur in this use case.

Adding a New Bank Account

1 Oracle Self-Service E-Billing displays screen to add a bank account that contains the following information.

- Payment Account Name
- Account Type
- Bank Name
- Account Number
- Routing Number
- Payee
- Diagram of a check identifying the location of the bank account and routing

2 User enters the information and saves the form.

3 Oracle Self-Service E-Billing validates the information as being correct and updates the list of payment accounts.

Editing an Account

1. Oracle Self-Service E-Billing displays the edit account screen containing credit card or bank account editable fields showing the current information for the specified account.
2. User enters the information and saves the form.
3. Oracle Self-Service E-Billing validates the information and updates the list of payment accounts.

Deleting an Account

1. Oracle Self-Service E-Billing displays a message to ensure the user wants to delete the account. If the account is in use by the recurring payment feature, then the following message appears:

   This payment account is currently in use by a recurring payment. To avoid cancellation of the recurring payment and all future payments, select Cancel and select a new payment method for the recurring payment.

2. Oracle Self-Service E-Billing displays a confirmation screen.
3. Oracle Self-Service E-Billing deletes the account and redisplays the screen.
4. Oracle Self-Service E-Billing deletes any recurring payments still associated with the payment account.
5. Oracle Self-Service E-Billing is unable to validate payment information.
6. Oracle Self-Service E-Billing displays a message with the validation error (card number digits, invalid routing number, and so on).

5 Split-Bill Detail Transactions

This chapter describes how transactions apply split-billing rules. It includes the following topics:

Split-Bill Detail Transactions

During the ETL data load, Oracle Self-Service E-Billing uses split-billing rules to categorize business and personal expenses. Table 30 lists and describes features of the Business Split-Bill Detail Transactions use case.

Table 30. Split-Bill Detail Transactions

Feature	Description
Name	Split-Bill Detail Transactions
Feature Area	Split-Billing
Primary User	Oracle Self-Service E-Billing
Trigger	ETL loading of statement data source
Preconditions	None
Alternate Paths	If no rules are set in Oracle Self-Service E-Billing, then all detail transactions are set to the default category, Business. Depending on the customer's requirements, the default could beset to a personal or a custom category at the time of deployment.
Exception Paths	None
Post conditions	All detail transactions in the statement users is split between business and personal expenses.
Note	The service provider defines rules, which are applied in the same order for all companies and organizations.

Main Path for Split-Bill Detail Transactions

Oracle Self-Service E-Billing applies split-billing rules to the details transaction within each service agreement.

1. Oracle Self-Service E-Billing reads the transaction detail.

2 Oracle Self-Service E-Billing determines whether the bill number is in the Personal Address Book (PAB) or the Corporate Address Book (CAB).

3 If the bill number is in the PAB, then Oracle Self-Service E-Billing sets the CDR as a Personal Transaction. If the bill number is in the CAB, then Oracle Self-Service E-Billing sets the CDR as a Business Transaction.

4 If there are more CDRs to evaluate, then the use case begins again.

Managing Corporate Contacts (CAB)

In this use case, an administrator user manages the organization's corporate contacts list by adding, editing, and deleting entries. To make online Business statements more readable, contact names can be displayed alongside the called or caller phone numbers (B numbers). Table 31 lists and describes the features of the Business Manage Corporate Contacts use case.

Table 31. Manage Corporate Contacts (CAB)

Feature	Description
Name	Manage Corporate Contacts (also known as Corporate Address Book or CAB)
Feature Area	PAB and CAB
Primary User	Business administrator user
Trigger	The user selects My Account, Corporate, Contacts.
Configuration Points	■ UI field validation ■ The number of contact attributes and validation rules can be increased or decreased to suite the service provider's requirements.
Rules	■ Alias or Name might be substituted for phone numbers in both statement and report views. ■ Only one Corporate Contact List for each Company.

Main Path for Managing Corporate Contact Lists

The user selects Create and then Process. The UI displays the organization's complete Contacts List with the following required fields:

- Alias (or Nickname)
- First Name
- Last Name
- Phone Number

This selection makes available the following actions:

- Add Contact

- Edit Contact
- Delete Contact
- Search Contact
- Import Contact List
- Print Contact List
- Download (CSV) Contacts

Alternate Paths for Managing Corporate Contact Lists

The following alternate paths apply to Managing Corporate Contact Lists.

Add Contact Entry

The UI displays a blank contact entry form. The user enters the information and submits the form. Oracle Self-Service E-Billing creates a Contact List entry. The UI displays the updated Corporate Contacts list.

Edit Contact Entry

The user selects the Edit link for the contact to be updated. The UI displays the populated contact form. The user changes the attributes and settings and selects Submit. Oracle Self-Service E-Billing updates the contact entry in the Corporate Contact list

Delete Contact Entry

The user selects the Delete link for the contact to be deleted. The UI displays a page requesting user to confirm the delete operation and the user confirms. Oracle Self-Service E-Billing deletes the entry from the Corporate Contact list.

Search Contact Entry

The user selects a contact attribute from the list and enters a search string (the default is an exact match. Wild cards can be used for starts with and ends with, and contains using asterisks before, after, or around the search string.

The user selects Search to submit the query. The UI displays the contacts in the Contact List that match the search criteria. The user selects Clear to reset the search parameters. The UI displays all the contacts in the Corporate Contact List.

Import Contacts List

The user selects Import. The UI prompts the user to enter a file name or browse for a file name. The user enters or selects the file name and then selects Import. Oracle Self-Service E-Billing loads the information from the file into the Corporate Contacts List.

Print Contact List

The user selects Print. The UI displays a printer-friendly version of the Corporate Contacts List with paging removed. The user selects Print on the browser to output the Contacts List to a printer device.

Managing Personal Contacts (PAB)

In this use case, users can manage their own personal contact list by adding, editing and deleting entries. To make online statements more readable, contact names can be displayed beside the caller or the called phone numbers. Table 32 lists and describes the features of the Business Manage Personal Contacts use case.

Table 32. Manage Personal Contacts

Feature	Description
Name	Business Manage Personal Contacts in the Personal Address Book (PAB).
Feature Area	PAB and CAB.
Primary User	Business administration user, manager user, and subscriber user
Trigger	The user selects My Account, Personal, Contacts menu option.
Configuration Points	■ UI field validation. ■ The number of contact attributes and validation rules can be increased or decreased to suite the service provider's requirements.
Rules	■ Alias or Name can be displayed beside phone numbers in both statement and report views. ■ Only one Personal Contact List for each user.

Main Path for Managing Personal Contacts

Oracle Self-Service E-Billing displays the user's complete Contacts List with the following required fields:

- Alias (or Nickname)
- First Name
- Last Name
- Number
- Business or Personal Contact Category. The default is Personal.

The action makes available the following actions:

- Add Contact
- Edit Contact
- Delete Contact

- Search Contact
- Print Contact List
- Download (CSV) contacts

Alternate Paths for Managing Personal Contacts

Alternate paths can occur in the Managing Personal Contacts use case.

Add Contact Entry

The UI displays a blank contact entry form. The user enters the information and submits the form. Oracle Self-Service E-Billing creates a Contact List entry. The UI displays the updated Contacts list.

Edit Contact Entry

The user selects Edit for the contact to be updated. The UI displays the populated contact form. The user changes the attributes and settings and selects Submit. Oracle Self-Service E-Billing updates the contact entry in the Contact list.

Delete Contact Entry

The user selects Delete for the contact to be deleted. The UI displays a page requesting the user to confirm the delete operation and the user confirms. Oracle Self-Service E-Billing deletes the entry from the User's Contact list. Oracle Self-Service E-Billing updates and displays the Contact list.

Search Contact Entry

The user selects a contact attribute from the list and enters a search string. The default is an exact match. Wild cards can be used for *starts with*, *ends with*, and *contains* using asterisks before after or around the search string.

The user selects Search to submit the query. The UI displays the contacts in the Contact List that match the search criteria. The user selects Clear to reset the search parameters. The UI displays all the contacts in the Contact List.

Print Contact List

The user selects Print. The UI displays a printer-friendly version of the Contacts List with paging removed. The user selects the Print option on the browser to output the Contacts List to a printer.

6 Analytic Reports

This chapter describes the reports that analyze payment data in hierarchies. Users who are logged in to the business hierarchy can view reports that detail costs and spending. Users who are logged in to the billing hierarchy can view billing reports. This chapter includes the following topics:

Reporting on the Billing Hierarchy

The Oracle Self-Service E-Billing has three levels with the following node types:

- A single company node
- One-to-many billing accounts
- One-to-many service agreements for a single billing account

Figure 1 shows the relationships in a billing reporting hierarchy.

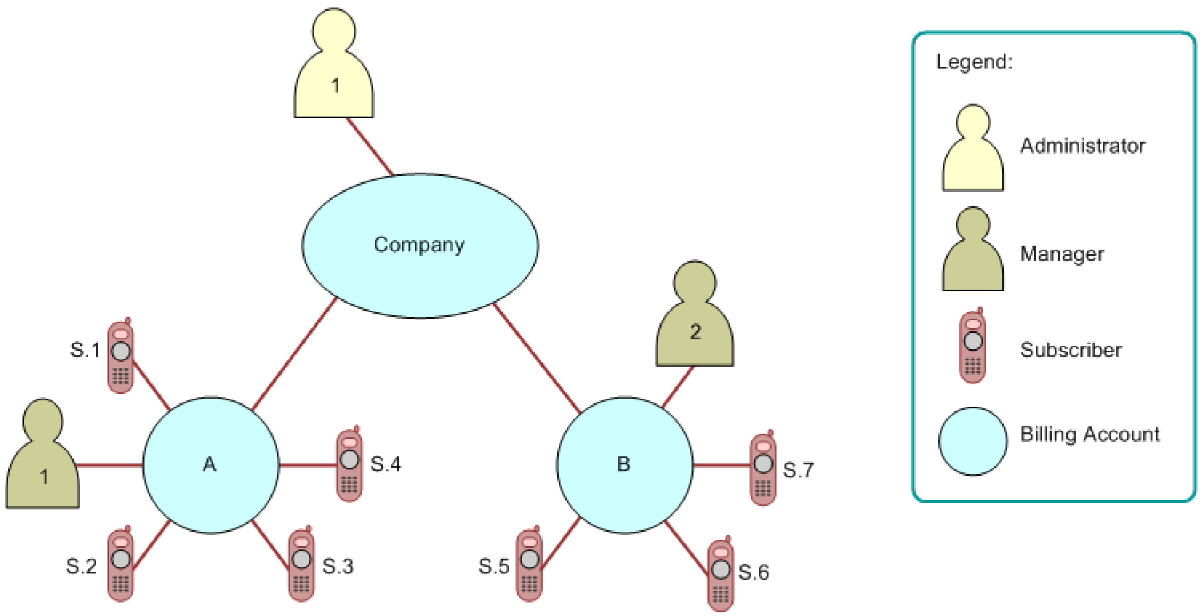

Figure 1. Relationships in a Billing Reporting Hierarchy

Administrator Privileges

Administrators can only be associated with the company node to which they have full access control.

Administrators can assign managers to billing accounts and service agreements. If a manager is assigned to both an account and service agreement within the same node, then the manager is represented only at the billing account. This is referred to as being promoted.

Administrators can assign subscribers to service agreements at either of the following locations:

- **The Company Setting page**. If an administrator assigns a user to either a billing account or service agreement on the Company Setting page, then it grants the user the privilege to access that information on the Company Settings page and within the billing hierarchy.
- **A Hierarchy page**. If an administrator adds a user to a billing account or a service agreement using the hierarchy functionality, then this grants the privilege to view this information here only (and not on the Company Settings page).

Administrators can choose any location within the hierarchy to perform analytic reporting; this location is referred to as the hierarchy report context. Using the hierarchy example shown in Figure 1, choosing reports would yield the following report content:

- If an administrator chooses the default company node from that hierarchy report context, then the selected report would include information from the following accounts:
  - Account A, service agreements 1-4
  - Account B, service agreements 5-7

  Only administrators can view these reports in shared mode.

- If an administrator chooses billing account node A from that hierarchy report context, then the selected report would include information from account A, service agreements 1-4. Only the administrator and manager 1 would be able to view these reports in shared mode.
- If an administrator chooses service agreement S.1 from that hierarchy report context, then the selected report would include information from service agreement S.1. The administrator, manager 1, and subscriber S.1 would be able to view these reports in shared mode.

Manager Privileges

You can associate managers with billing accounts only. A manager can access hierarchy billing information from that point only.

Managers can assign subscribers to service agreements that have been previously enrolled by an administrator at the following pages:

- **The Company Setting page**. If an administrator assigns a user to a service agreement on the Company Setting page, then it grants the user the privilege to access that information on the Company Settings page and within the billing hierarchy.
- **A Hierarchy page**. If an administrator adds a user to a service agreement using the hierarchy functionality, then this grants the privilege to view this information here only (and not on the Company Settings page).

Managers can also select a service agreement for analytic reporting. Using the hierarchy example shown in Figure 1, choosing reports would yield the following report content:

- If a manager chooses the billing account node A from that hierarchy report context, then the selected report would include information from account A, service agreements 1-4. The administrator and manager 1 can view these reports in shared mode.
- If a manager chooses service agreement S1 from that hierarchy report context, then the report would include information from service agreement 1. The administrator, manager 1, and subscriber S.1 can view these reports in shared mode.

Subscriber Privileges

Subscribers can only be associated with a service agreement, and their access control is from that point only.

Subscribers are assigned to a service agreement by either a manager or administrator, and they must have been previously enrolled by an administrator. A limited number of analytic billing report types are available to subscribers.

Reporting on the Business Hierarchy

Business hierarchies can have the following properties and relationships:

- One or more levels.
- Only one root node.
- One-to-many group nodes and sub-group nodes.

- One-to-many service agreements for each group node.

The administrator, manager, and subscriber privileges for business hierarchies are the same as those described for billing hierarchies in "Reporting on the Billing Hierarchy" on page 97.

Figure 2 shows the relationships in a business reporting hierarchy:

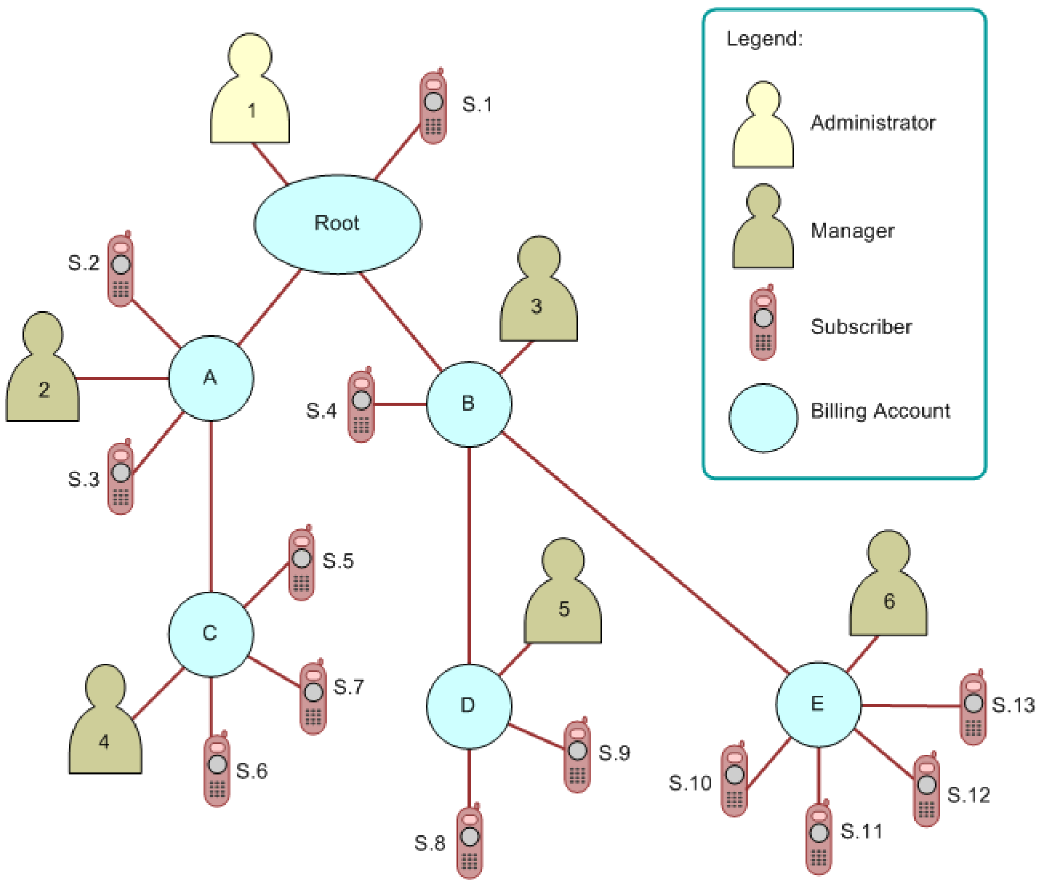

Figure 2. Relationships in a Business Hierarchy

Virtual Nodes

A virtual node is created when the same user is assigned to two or more group or sub-group nodes for hierarchy display purposes only. For example, if the same user is assigned to both manager positions three and five in Figure 2, then the hierarchy displays a virtual root node and group nodes B and D, which the user can now select for his or her hierarchy report context.

Hierarchy Versioning of Shared Reports

Using the hierarchy example shown in Figure 2, hierarchy versioning of shared reports would behave as follows:

- If group node C is removed, then any reports created from this location would be promoted to group node A where user 1 and 2 would have access to them.
- If group node D is removed, then any reports created from this location would be promoted to group node B where user 1 and 3 would have access to them.
- If group node B is removed, then any reports created from group nodes B, D, and E would be promoted to the root node where only user 1 would have access to them.

Hierarchy Versioning of Private Reports

Using the hierarchy example shown in Figure 2, hierarchy versioning of private reports would behave as follows:

- If group node C is removed, then any reports created from this location would be promoted to group node A, though user 1 and 2 would not have access to them.
- If group node D is removed, then any reports created from this location would be promoted to group node B, though user 1, 2, and 3 would not have access to them.
- If group node B is removed, then any reports created from group nodes D, E, and B would be promoted to the root node but no one would have access to them. If user 5, who created the reports in group node D, were reassigned to group node B, then user 5 would have access to those reports.

Group Summary

In this use case, the user views total fees for the current cost center. This report is only available when Business Hierarchy is selected. Table 33 lists and describes the functions.

Table 33. Group Summary Report

Function	Description
Name	Group Summary Report
Trigger	■ Business Reports List ■ Report drop-down
Standard Features	None
Configuration Points	None

Main Path for Group Summary Report

The following path describes the Group Summary Report use case:

1. The user selects the Group Summary Report from the List of Business Reports.
2. Oracle Self-Service E-Billing determines query parameters, using the report context or the default values, and it displays the Group Summary report.

Alternate Paths for Group Summary Report

Alternate paths can occur in this use case.

The Current Hierarchy Node Context is Not a Group and the Default Report for the Current Object is Displayed

Oracle Self-Service E-Billing forwards the user to the proper report view.

The User Changes the Period (Default is the Current Period)

The user changes the period to one of the following:

- Another single period (from and to are the same period)
- Different to and from aggregation periods

Drill-Down Through Hyperlinks to Other Reports

Oracle Self-Service E-Billing displays the default report for the object type link selected using the current hierarchy context (type, name, and period) to display the report view.

Exceptions for Group Summary Report

The following exceptions can occur with this use case.

The User Encounters an Error

Oracle Self-Service E-Billing invokes the error message use case.

Group Spending

In this use case, the user views total fees for the current group (cost center).

Table 34. Group Spending

Function	Description
Name	Group Spending
Trigger	■ Business Reports List ■ Report drop-down
Chart	Default Chart Type, Bar (user selectable), X axis: Group, Y axis: Total Value

Table 34. Group Spending

Function	Description
Standard Features	■ Printer-friendly view ■ Download CSV or XML
Configuration Points	Report Threshold Value for Batch Mode. Determines the number of result set lines above which a report must process in batch mode instead of as an online download. You can set values for each type of download file: ■ **CSV**. The maximum number of output lines. ■ **XML**. A percentage of the CSV threshold value (Default is 20%). For example, if the CSV report threshold is set to 3,000 result set lines, then an XML threshold value set at 20% must process in batch mode when there are 600 or more result set lines in the CSV file.

Main Path for Group Spending

The following path describes the Group Spending use case:

- The user selects the Group Spending report from the List of Business Reports.

  Oracle Self-Service E-Billing determines query parameters, using the report context or the default values, and it displays the Group Summary report.

  Group Spending report.

Alternate Paths for Group Spending

Alternate paths can occur in this use case.

The Current Hierarchy Node Context is Not a Group and the Default Report for the Current Object is Displayed

Oracle Self-Service E-Billing forwards the user to the proper report view.

The User Changes the Period (Default is Current Period)

The user changes the period to one of the following:

- Another single period (to and from are the same period)
- Different to and from aggregation periods

Group Trend Report Version (Compare Periods)

1. The user selects the T link at the end of a row.
2. Oracle Self-Service E-Billing displays a trend report with columns for the row selected:

- Period 1
- Period 2
- Period 3
- Period n. (Up to the number of periods available online)

NOTE: The group trend report comparison can expand and contract the company and account levels, but does not expand to the service agreement level.

Drill-Down Through Hyperlinks to Other Reports

Oracle Self-Service E-Billing displays the default report for the object type link selected using the current hierarchy context (type, name, and period) to display the report view.

The User Selects the Printer-Friendly Action

Oracle Self-Service E-Billing invokes the Printer-Friendly use case.

The User Selects the Download Action (CSV or XML)

Oracle Self-Service E-Billing downloads the report in the selected format.

Exceptions for Group Spending

The following exceptions can occur with this use case.

The User Encounters an Error

Oracle Self-Service E-Billing invokes the error message use case.

Statement Billing Overview

Users can use this use case to view the charge types summarized by invoice. Table 35 lists and describes the functions.

Table 35. Statement Billing Overview

Function	Description
Trigger	■ Billing Reports List ■ Report Drop-down ■ Account Billing Details
Query Parameters	**Report Selection Criteria and Custom Tab** ■ Hierarchy Name and Position ■ Period Range **Report Selection Criteria Only** Report.
Report Content	The Statement Billing Overview report contains the following fields: ■ Invoice ■ Invoice Charges ■ Usage Charges ■ Adjustments ■ Discounts ■ Other Charges and Credits ■ Taxes ■ Total Value Except for the first column, totals for all pages, including those not displayed, are displayed in the footer at the bottom of each page.
Chart	None
Business Rules	None

Table 35. Statement Billing Overview

Function	Description
Standard Features	■ Printer-friendly view ■ Download CSV or XML
Configuration Points	Report Threshold Value for Batch Mode. Determines the number of result set lines above which a report must process in batch mode instead of as an online download. You can set values for each type of download file: ■ **CSV**. The maximum number of output lines. ■ **XML**. A percentage of the CSV threshold value (Default is 20%). For example, if the CSV report threshold is set to 3,000 result set lines, then an XML threshold value set at 20% must process in batch mode when there are 600 or more result set lines in the CSV file.

Main Path for Statement Billing Overview

The following path describes the Statement Billing Overview use case:

1. The user selects the Invoice Billing Details report from the List of Billing Reports.
2. Oracle Self-Service E-Billing determines query parameters, using the report context or the default values, and it displays a tabular report.

Alternate Paths for Statement Billing Overview

Alternate paths can occur in this use case.

The User Modifies the Query Parameters

- The user changes any of the query parameters on the Report tab or his or her hierarchy context position and selects Display to run the report.

  Oracle Self-Service E-Billing regenerates the report for the scope of selected reporting period and hierarchy context position.

The User Drills-Down and Selects an Invoice

Oracle Self-Service E-Billing invokes the Contract Billing Overview use case for the selected invoice number.

The User Selects the Printer-Friendly Action

Oracle Self-Service E-Billing invokes the Printer-Friendly use case.

The User Selects the Download Action

Oracle Self-Service E-Billing downloads the report.

Exceptions for Statement Billing Overview

The following exceptions can occur with this use case.

The User Encounters an Error

Oracle Self-Service E-Billing invokes the error message use case.

Service Billing Overview

This report tracks monthly summary charge information over a user-defined reporting period for a selected billing contract in a billing or group hierarchy. The Service Billing report analyzes trends and identifies anomalies. Table 36 lists and describes the use case functions.

Table 36. Service Billing Overview

Function	Description
Name	Service Billing Overview
Trigger	■ Report List ■ Drill-down: Service Billing Overview (from a higher level in the hierarchy) ■ Drill-down: Group Spending Report ■ Report Drop-down
Chart	Default Chart Type: Bar (user might select another type): ■ X axis: Reporting Period ■ Y axis: User-defined value
Standard Features	■ Printer-friendly view ■ Download CSV or XML
Configuration Points	Report Threshold Value for Batch Mode. Determines the number of result set lines above which a report must process in batch mode instead of as an online download. You can set values for each type of download file: ■ **CSV**. The maximum number of output lines. ■ **XML**. A percentage of the CSV threshold value (Default is 20%). For example, if the CSV report threshold is set to 3,000 result set lines, then an XML threshold value set at 20% must process in batch mode when there are 600 or more result set lines in the CSV file.

Main Path for Service Billing Overview

The following path describes the Service Billing Overview use case:

1. The user selects the report from the List of Billing Reports.
2. Oracle Self-Service E-Billing determines query parameters, using the report context or the default values, and it displays the Service Billing Overview report.
3. Oracle Self-Service E-Billing returns:
   - Bar Chart
   - Summary tabular report

Alternate Paths for Service Billing Overview

Alternate paths can occur in this use case.

A User Selects the Month Total Value Link to Drill into the Group Spending Report for the Month that corresponds to the Row Selected

The Result Set Returns More than 20 Chart Bars

The user receives a message that the chart was suppressed because of this condition.

The User Selects the Printer-Friendly Action

Oracle Self-Service E-Billing removes graphics and navigation and displays a printer friendly view.

The User Selects the Download Action (CSV or XML)

Oracle Self-Service E-Billing downloads report content in the selected format.

Exceptions for Statement Billing Overview

None.

Account Billing Trend

This use case tracks monthly summary charge information over a user-defined reporting period for a selected billing account in a billing or group hierarchy. The Account Billing trend report analyzes trends and identifies anomalies. Table 37 lists and describes the use case functions.

Table 37. Account Billing Trend Report

Function	Description
Name	Account Billing Trend Report
Trigger	■ Report List ■ Drill-down: Service Billing Overview ■ Drill-down: Account Billing Detail ■ Report drop-down
Chart	Default Chart Type Bar: ■ X axis: Reporting Period ■ Y axis: User defined value
Standard Features	■ Printer-friendly view ■ Download CSV or XML
Configuration Points	Report Threshold Value for Batch Mode. Determines the number of result set lines above which a report must process in batch mode instead of as an online download. You can set values for each type of download file: ■ **CSV**. The maximum number of output lines. ■ **XML**. A percentage of the CSV threshold value (Default is 20%). For example, if the CSV report threshold is set to 3,000 result set lines, then an XML threshold value set at 20% must process in batch mode when there are 600 or more result set lines in the CSV file.

Main Path for Account Billing Trend

The following path describes the Account Billing Trend use case:

1 The user selects the report from the List of Billing Reports.

2 Oracle Self-Service E-Billing determines query parameters, using the report context or the default values, and it displays the report.

3 Oracle Self-Service E-Billing returns:

- Bar Chart
- Summary tabular report

Alternate Paths for Account Billing Trend

Alternate paths can occur in this use case.

The User Modifies the Query Parameters

1. The user chooses one of the following periods:
   - Single period
   - From one period to another period for data aggregation
2. The user changes any of the query parameters on the Report tab or his or her hierarchy context position and selects Display to execute report.
3. Oracle Self-Service E-Billing regenerates the report for the scope of selected reporting period and hierarchy context position.

The User Selects a Peer Node Name from a List

Oracle Self-Service E-Billing displays the report for the selected node.

Drill-Down To Service Billing Overview

The user clicks a value in the tabular report to run the report for the reporting period on which the user clicked.

The User Selects the Printer-Friendly Action

Oracle Self-Service E-Billing invokes the Printer-Friendly use case.

The User Selects the Download Action (CSV or XML)

Oracle Self-Service E-Billing downloads a report in the selected format.

Exceptions for Account Billing Trend

The following exceptions can occur with this use case.

The User Encounters an Error

Oracle Self-Service E-Billing invokes the error message use case.

Business Rules

Maximum Period Ranges: If the date range spans more than 20 reporting periods, then the chart display is suppressed.

Service Billing Trend

This report tracks monthly summary charge information over a user-defined reporting period for a selected billing contract in a billing or group hierarchy. The Service Billing Trend report analyzes trends and identifies anomalies.

Table 38 lists and describes the use case functions.

Table 38. Service Billing Trend

Function	Description
Name	Service Billing Trend Report
Trigger	■ Report List ■ Drill-down: Service Billing Overview ■ Report Drop-down
Chart	Chart Type Bar: ■ Y axis: User defined value ■ Y axis: Total Value
Standard Features	■ Printer-friendly view ■ Download CSV or XML
Configuration Points	Report Threshold Value for Batch Mode. Determines the number of result set lines above which a report must process in batch mode instead of as an online download. You can set values for each type of download file: ■ **CSV**. The maximum number of output lines. ■ **XML**. A percentage of the CSV threshold value (Default is 20%). For example, if the CSV report threshold is set to 3,000 result set lines, then an XML threshold value set at 20% must process in batch mode when there are 600 or more result set lines in the CSV file.

Main Path for Configuring Service Billing Trend

The following path describes the Configuring Service Billing Trend use case:

1. The user selects the report from the List of Billing Reports.
2. Oracle Self-Service E-Billing determines query parameters, using the report context or the default values, and it displays the report.
3. Oracle Self-Service E-Billing returns:
   - Bar Chart
   - Summary tabular report

Alternate Paths for Service Billing Trend

Alternate paths can occur in this use case.

Change Report Selection Criteria

The user changes any of the query parameters on the Report tab or his or her hierarchy context position and clicks display to execute the report.

The Result Set Returns More than 20 Chart Bars

The user receives a message that the chart was suppressed because of this condition.

The User Selects the Printer-Friendly Action

Oracle Self-Service E-Billing invokes the Printer-Friendly use case.

The User Selects the Download Action (CSV or XML)

Oracle Self-Service E-Billing downloads the report in the selected format.

Exceptions for Service Billing Trend

The following exceptions can occur with this use case.

The User Encounters an Error

Oracle Self-Service E-Billing invokes the error message use case.

Service Details

The user can use this use case to view contract call detail information. Table 39 lists and describes the use case functions.

Table 39. Service Details

Function	Description
Name	Service Details
Chart	None
Triggers	■ Billing Reports List ■ Service Billing Overview ■ Report Drop-down
Business Rules	None

Table 39. Service Details

Function	Description
Standard Features	■ Printer-friendly view ■ Download CSV, PDF, or XML
Configuration Points	Report Threshold Value for Batch Mode. Determines the number of result set lines above which a report must process in batch mode instead of as an online download. You can set values for each type of download file: ■ **CSV**. The maximum number of output lines. ■ **PDF**. A percentage of the CSV threshold value (Default is 10%). ■ **XML**. A percentage of the CSV threshold value (Default is 20%). For example, if the CSV report threshold is set to 3,000 result set lines, then a PDF threshold value set at 10% must process in batch mode when there are 300 or more result set lines in the CSV file.

Main Path for Service Details

The following path describes the Service Detail use case:

1. The user selects the Service Billing Overview from the List of Billing Reports.
2. Oracle Self-Service E-Billing determines query parameters, using the report context or the default values, and it displays a tabular report.

Alternate Paths for Service Details

Alternate paths can occur in this use case.

The User Modifies the Query Parameters

- The user changes any of the query parameters on the Report tab or his or her hierarchy context position and selects Display to execute report.

  Oracle Self-Service E-Billing regenerates the report for the scope of selected reporting period and hierarchy context position.

The User Customizes the Report

1. The user selects reporting period range context.
2. The user specifies report filters (one for each column).
3. The user specifies visible or hidden and column order.

The User Selects the Printer-Friendly Action

Oracle Self-Service E-Billing invokes the Printer-Friendly use case.

The User Selects the Download Action (CSV or XML)

Oracle Self-Service E-Billing downloads the report in the selected format.

Exceptions for Service Details

The following exceptions can occur with this use case.

The User Encounters an Error

Oracle Self-Service E-Billing invokes the error message use case.

Total Cost by Plan

The user can use this use case to view the total cost of all plans for all billing accounts associated with the user. Table 40 lists and describes the use case functions.

Table 40. Total Cost by Plan

Function	Description
Name	Total Cost by Plan
Chart	Type: Pie, Slices: Plan
Trigger	■ List of Billing Reports ■ Report drop-down
Business Rule	If the grand Total for the report is equal to 0, then the chart is suppressed.
Standard Features	■ Printer-friendly view ■ Download CSV, PDF, or XML
Configuration Points	Report Threshold Value for Batch Mode. Determines the number of result set lines above which a report must process in batch mode instead of as an online download. You can set values for each type of download file: ■ **CSV**. The maximum number of output lines. ■ **PDF**. A percentage of the CSV threshold value (Default is 10%). ■ **XML**. A percentage of the CSV threshold value (Default is 20%). For example, if the CSV report threshold is set to 3,000 result set lines, then a PDF threshold value set at 10% must process in batch mode when there are 300 or more result set lines in the CSV file.
Rules	■ The slices on the pie chart denote Plan. ■ If any chart slice is less than 5%, then the data is aggregated to make a bigger slice labeled Other.

Main Path for Total Cost by Plan

The following path describes the Total Cost by Plan use case:

1. The user selects the Total Cost by Plan report from the List of Billing Reports.
2. Oracle Self-Service E-Billing determines query parameters, using the report context or the default values, and it displays one of the following reports:
   - Tabular report
   - Chart

Alternate Paths for Total Cost by Plan

Alternate paths can occur in this use case.

The User Modifies the Query Parameters

The user changes any of the query parameters on the Report tab or his or her hierarchy context position and selects Display to execute report.

Oracle Self-Service E-Billing regenerates the report for the scope of selected reporting period and hierarchy context position.

The User Selects the Printer-Friendly Action

Oracle Self-Service E-Billing invokes the Printer-Friendly use case.

The User Selects the Download Action (CSV, PDF, or XML)

Oracle Self-Service E-Billing downloads the report in the selected format.

Exceptions for Total Cost by Plan

The following exceptions can occur with this use case.

The User Encounters an Error

Oracle Self-Service E-Billing invokes the error message use case.

Service Spending Trend

This report tracks monthly summary charge information over a user defined reporting period range for a selected billing contract in a billing or group hierarchy. The Service Spending Trend report analyzes trends and identifies anomalies. Table 41 lists and describes the use cases.

Table 41. Service Spending Trend

Function	Description
Trigger	■ Report List ■ Drill-down: Contract Billing Overview Report ■ Report Drop-down
Chart	Chart Type: Bar: ■ Y axis: User defined value ■ Y axis: Total Value
Standard Features	■ Printer-friendly view ■ Download CSV or XML
Configuration Points	Report Threshold Value for Batch Mode. Determines the number of result set lines above which a report must process in batch mode instead of as an online download. You can set values for each type of download file: ■ **CSV**. The maximum number of output lines. ■ **XML**. A percentage of the CSV threshold value (Default is 20%). For example, if the CSV report threshold is set to 3,000 result set lines, then an XML threshold value set at 20% must process in batch mode when there are 600 or more result set lines in the CSV file.

Main Path for Service Spending Trend

The following path describes the Service Spending Trend:

1. The user selects the report from the List of Billing Reports.
2. Oracle Self-Service E-Billing determines query parameters, using the report context or the default values, and it displays the report.
3. Oracle Self-Service E-Billing returns the report type selected:
   - Bar Chart
   - Summary tabular report

Alternate Paths for Service Spending Trend

Alternate paths can occur in this use case.

Change Report Selection Criteria

The user changes any of the query parameters on the Report tab or his or her hierarchy context position and clicks display to execute the report.

The Result Set Returns More than 20 Chart Bars

The user receives a message that the chart was suppressed because of this condition.

The User Selects the Printer-Friendly Action

Oracle Self-Service E-Billing invokes the Printer-Friendly use case.

The User Selects the Download Action (CSV or XML)

Oracle Self-Service E-Billing downloads the report in the selected format.

Exceptions for Service Spending Trend

The following exceptions can occur with this use case.

The User Encounters an Error

Oracle Self-Service E-Billing invokes the error message use case.

Account Billing Overview

A user can use this use case to view an overview of all billing accounts associated with the user.

Table 42 lists and describes the functions.

Table 42. Account Billing Overview Report

Function	Description
Name	Account Billing Overview Report
Trigger	■ Billing Reports List ■ Report Drop-down
Chart	Default Chart Type: Bar (A user might select an alternative chart type.) ■ X axis: Billing Account ■ Y axis: Total Value

Table 42. Account Billing Overview Report

Function	Description
Standard Features	■ Printer-friendly view ■ Download CSV, PDF, or XML
Configuration Points	Report Threshold Value for Batch Mode. Determines the number of result set lines above which a report must process in batch mode instead of as an online download. You can set values for each type of download file: ■ **CSV**. The maximum number of output lines. ■ **PDF**. A percentage of the CSV threshold value (Default is 10%). ■ **XML**. A percentage of the CSV threshold value (Default is 20%). For example, if the CSV report threshold is set to 3,000 result set lines, then a PDF threshold value set at 10% must process in batch mode when there are 300 or more result set lines in the CSV file.

Main Path for Configuring Account Billing Overview

The following path describes the Configuring Account Billing Overview use case:

1. The user selects the Account Billing Overview report from the List of Billing Reports.
2. Oracle Self-Service E-Billing determines query parameters, using the report context or the default values, and it displays one of the following reports:
   - Tabular Report
   - Chart

Alternate Paths for Configuring Account Billing Overview

Alternate paths can occur in this use case.

The User Modifies the Query Parameters

1. The user modifies the following parameters:
   - Hierarchy Type and.
   - Hierarchy Name or.
   - Period (Single period or the to and from period for data aggregation
2. The user changes any of the query parameters on the Report tab or his or her hierarchy context position and selects Display to execute report.
3. Oracle Self-Service E-Billing regenerates the report for the scope of selected reporting period and hierarchy context position.

The User Selects a Peer Node Name from a List

Oracle Self-Service E-Billing displays the report for the selected node.

The user drills-down and selects a link to get additional details

- **For a Billing account.** Oracle Self-Service E-Billing invokes the Contract Billing Overview use case for the selected billing account.
- **A Row Total.** Oracle Self-Service E-Billing invokes the Account Billing Details use case for the selected number.

The User Drills-Down and Selects the Hyperlink T at the End of a Row

The Account Billing Trend report is generated where the hierarchy context position is changed to the object of the row on which the user selected and the report is run with all the same parameters from the report previously ran.

The User Selects an Alternative Chart Type

Available chart types are as follows:

- Vertical Bar Chart
- Pie Chart (proportional)

The User Selects the Printer-Friendly Action

Oracle Self-Service E-Billing invokes the Printer-Friendly use case.

The User Selects the Download Action (CSV, XML or PDF)

Oracle Self-Service E-Billing downloads the report.

Exceptions for Configuring Account Billing Overview

The following exceptions can occur with this use case.

The User Encounters an Error

Oracle Self-Service E-Billing invokes the error message use case.

Business Rule

If there are more than 20 Billing Accounts in the result set, then the chart is suppressed.

Group Spending Trend

This report tracks monthly summary charge information over a user-defined reporting period for a selected group in a group hierarchy. The Group Spending Trend report analyzes trends and identifies anomalies. Table 43 lists and describes the use case functions.

Table 43. Group Spending Trend Report

Function	Description
Name	Group Spending Trend Report
Trigger	■ Report List ■ Drill-down: Group Spending Trend Report (from a higher level in the hierarchy) ■ Drill-down: Group Spending Report ■ Report Drop-down
Chart	Default Chart Type: Bar (user might select another type): ■ X axis: Reporting Period ■ Y axis: User defined value
Standard Features	■ Printer-friendly view ■ Download CSV or XML
Configuration Points	Report Threshold Value for Batch Mode. Determines the number of result set lines above which a report must process in batch mode instead of as an online download. You can set values for each type of download file: ■ **CSV**. The maximum number of output lines. ■ **XML**. A percentage of the CSV threshold value (Default is 20%). For example, if the CSV report threshold is set to 3,000 result set lines, then an XML threshold value set at 20% must process in batch mode when there are 600 or more result set lines in the CSV file.

Main Path for Configuring Group Spending Trend

The following path describes the Configuring Group Spending Trend use case:

1. The user selects the report from the List of Billing Reports.
2. Oracle Self-Service E-Billing determines query parameters, using the report context or the default values, and it displays the report.
3. Oracle Self-Service E-Billing returns:
   - Bar Chart
   - Summary tabular report

Alternate Paths for Configuring Group Spending Trend

Alternate paths can occur in this use case.

The User Selects the Month Total Value Link

The Month Total Value link drills into Group Spending report for the month that corresponds to the selected row.

The Result Set Returns More than 20 Chart Bars

The user receives a message that the chart was suppressed because of this condition.

The User Selects the Printer-Friendly Action

Oracle Self-Service E-Billing removes graphics and navigation and displays a printer friendly view.

The User Selects the Download Action (CSV or XML)

Oracle Self-Service E-Billing downloads the report in the selected format.

Exceptions for Configuring Group Spending Trend

None.

7 Managing Analytic Batch Reports

This chapter describes use cases for creating and managing analytic batch reports. It includes the following topics:

Creating Analytic Batch Reports

This use case lets users schedule reports to run in a single occurrence or generate a reports regularly over a period of time. Users can choose the reporting period, when to run the reports, the download file formats, and whether to share the reports with other users with the same hierarchy privileges.

Table 44 lists and describes the use case functions.

Table 44. Creating Batch Reports

Function	Description
Name	Creating Analytic Batch Reports
Primary User	B2B and B2C users.
Trigger	The user navigates to the Analytics tab in either a billing or business hierarchy, selects a standard or custom report, then clicks Batch Request.
Active Hyperlinks (Breadcrumbs)	■ **Analytics.** Displays the standard reports for either billing or business. ■ **Billing Reports or Business Reports.** Displays the standard reports for billing or the standard reports for business for the selected hierarchy. ■ **Batch Request.** Displays the Create Batch Report screen.

Table 44. Creating Batch Reports

Function	Description
Page Titles	Page Titles ■ Create Batch Report ■ Confirm Batch Report
Prompts	Create Batch Report page: ■ **Batch Report Name.** The user enters a report name. ■ **Share With Others**. Clicking this option lets users share the report with others who have privileges for the hierarchy. ■ Select Report Options: – ■ **Period Range.** The user selects the range of billing periods to report on. – – ❑ **From.** The options for the start of the range are: Prior (default), Latest, or a particular billing period. – – ❑ **To.** The options for the end of the range are: Latest (default) or a particular billing period. – ■ **Chart Type.** The user selects the chart type for the report: Bar (Default) or Pie. ■ **Select Download File Types.** The user can choose to generate the report in HTML, CSV, XML, and PDF (if available) file formats. ■ Select Report Generation Date: – ■ **Single occurrence.** A one-time report (default). – ■ **Select Day of the Week to Run Weekly.** The user selects the day of the week. – ■ **Select Day of the Week to Run Bi-weekly.** The user selects the day of the week. – ■ **Schedule a Specific Day Within the Month.** The user selects a day of the month, from the 1st to the 31st. If the user selects a day that does not appear in a month, then the report generates on the last day of the month.

Table 44. Creating Batch Reports

Function	Description
Prompts, continued	■ Select Effective Period (If not a single occurrence report) ■ **Until canceled.** The report will continue to generate until the user changes the schedule. ■ **Set Maximum Number of Times to Run Report.** The user specifies a number. ■ **Until Date.** The user enters a date or selects one from the popup calendar. Confirm Batch Report page: None
Page Content	Create Batch Report page: ■ Attributes: ■ Report Details: ❏ Company Name ❏ Hierarchy Name or Group Name ❏ Position ❏ Report Name ■ Buttons: ■ **Next.** Oracle Self-Service E-Billing performs a verification check on the form data and displays the Confirm Batch Report page. ■ **Back.** This button displays the selected report. Confirm Batch Report page: ■ Attributes: ■ Report Details: ❏ Company Name ❏ Hierarchy Name or Group Name ❏ Position ❏ Report Name

Table 44. Creating Batch Reports

Function	Description
Page Content, continued	■ Selected Report Options ❑ Batch Report Name ❑ Marked for (Private or Public) ❑ Period Range ❑ Chart Type ❑ File Type Options ❑ Generation Date ❑ Effective Period (If not a single occurrence report) ■ Buttons: ■ **Submit.** This button submits the batch report request and displays the Scheduled Billing Reports page. ■ **Cancel.** This button cancels the batch request and redisplays the selected report. ■ **Printer Friendly.** This button displays print view of the report request.
Configuration Points	None
Business Rules	■ The current B2B hierarchical position context is used for reporting criteria. ■ The current bill period range (single period) is used as the default criteria.

Main Path for Creating Batch Reports

The following path describes the creating batch reports use case:

1. The user clicks the Analytics tab, clicks the link for a standard (or custom) billing report, then clicks the Batch Request tab.

   Oracle Self-Service E-Billing displays the Create Batch Report page.

2. The user specifies a report name in the Batch Report Name field.
3. The user clicks or leaves blank the Share With Others option.

   This option lets users share the report with others who have the hierarchy privileges.

4. The user selects the to and from billing-period ranges.
5. The user selects the chart type.
6. The user selects the download file types.
7. The user specifies the report generation date.

8 If this is not a single occurrence report, then the user selects the effective period.

9 The user clicks Next.

Oracle Self-Service E-Billing validates the information on the form and displays the Confirm Batch Report screen.

10 The user verifies the information on the Confirm Batch Report screen and clicks Submit.

Oracle Self-Service E-Billing displays the Scheduled Billing Reports page showing the newly scheduled report.

Alternate Paths for Creating Batch Reports

There are alternate paths for this use case.

The User Clicks Cancel at the Confirm Batch Report Screen

The user clicks the Cancel button at the Confirm Batch Report screen; Oracle Self-Service E-Billing displays the selected report.

Exceptions for Creating Batch Reports

Exceptions can occur in this use case.

The Form is Incomplete

The user does not fill out all of the options within the form.

The User Encounters an Error

The user encounters a system error.

Viewing Completed Billing Batch Reports

This use case lets users display a list of the billing batch reports that have run successfully and can be downloaded.

Table 45 lists and describes the use case functions.

Table 45. Viewing Completed Billing Batch Reports

Function	Description
Name	Viewing Completed Billing Batch Reports
Primary User	B2B and B2C users
Trigger	The user clicks the Analytics tab and then clicks Batch Reports.
Active Hyperlinks (Breadcrumbs)	■ **Analytics.** Displays the standard reports. ■ **Batch Reports.** Displays the Completed Billing Reports page.

Table 45. Viewing Completed Billing Batch Reports

Function	Description
Page Title	Completed Billing Reports
Prompts	None

Page Content	Completed Billing Reports page:
	Header:
	■ Completed Billing Reports (*Number of Items*)
	■ Report Details:
	  ■ Report Name (A hyperlink that displays the report in HTML.)
	  ■ User ID
	  ■ Position
	  ■ Request Date (Default sort, most recent first.)
	  ■ Run Date
	  ■ Private
	  ■ Actions (CSV, XML, PDF, View Selection Criteria, and Delete Report icons. Only the formats selected for report generation appear here.)
	Paging Elements:
	■ Page x of Total (if needed)

Configuration Points	All columns are sortable except for the Actions column.
Business Rules	The current B2B billing hierarchical position context is used for viewing the generated reports.

Main Path for Viewing Completed Billing Batch Reports

The following path describes the viewing completed batch reports use case:

1. The user clicks the Analytics tab.
2. The user clicks Batch Reports.

   Oracle Self-Service E-Billing displays the Completed Billing Reports page showing the billing batch reports that have run and are available for downloading.

Alternate Paths for Viewing Completed Billing Batch Reports

There are no alternate paths for this use case.

Exceptions for Viewing Completed Billing Batch Reports

Exceptions can occur in this use case.

The User Encounters an Error

The user encounters a system error.

Viewing Pending Billing Batch Reports

This use case lets users display a list of the billing batch reports that have been requested and are still in the queue to be generated.

Table 46 lists and describes the use case functions.

Table 46. Viewing Pending Billing Batch Reports

Function	Description
Name	Viewing Pending Billing Batch Reports
Primary User	B2B and B2C users
Trigger	The user clicks the Analytics tab, Batch Reports, and then the Pending tab.
Active Hyperlinks (Breadcrumbs)	■ **Analytics.** Displays the standard reports. ■ **Batch Reports.** Displays the Completed Billing Reports page.
Page Title	Pending Billing Reports
Prompts	None
Page Content	Header: ■ Pending Billing Reports (*Number of Items*) Report Details: ■ Report Name ■ User ID ■ Position ■ Request Date (Default sort, oldest first.) ■ Private ■ Actions (View Selection Criteria and Delete Report icons) Paging Elements: ■ Page x of Total (if needed)
Configuration Points	All columns are sortable except for the Actions column.
Business Rules	The current hierarchical position is used for viewing the generated reports.

Main Path for Viewing Pending Billing Batch Reports

The following path describes the viewing pending batch reports use case:

1. The user clicks the Analytics tab.
2. The user clicks Batch Reports.
3. The user clicks the Pending tab.

   Oracle Self-Service E-Billing displays the Pending Billing Reports page showing the billing batch reports that are waiting in the queue to be generated.

Alternate Paths for Viewing Pending Billing Batch Reports

There are no alternate paths for this use case.

Exceptions for Viewing Pending Billing Batch Reports

Exceptions can occur in this use case.

The User Encounters an Error

The user encounters a system error.

Viewing Failed Billing Batch Reports

This use case lets users display a list of the billing batch reports that failed.

Table 47 lists and describes the use case functions.

Table 47. Viewing Failed Billing Batch Reports

Function	Description
Name	Viewing Failed Billing Batch Reports
Primary User	B2B and B2C users
Trigger	The user clicks the Analytics tab, Batch Reports, and then the Failed tab.
Active Hyperlinks (Breadcrumbs)	■ **Analytics.** Displays the standard reports. ■ **Batch Reports.** Displays the Completed Billing Reports page.
Page Title	Failed Billing Reports
Prompts	None

Table 47. Viewing Failed Billing Batch Reports

Function	Description
Page Content	Header: ■ Failed Billing Reports (*Number of Items*) Report Details: ■ Report Name ■ User ID ■ Position ■ Request Date (Default sort, most recent first.) ■ Run Date ■ Private ■ Actions (View Selection Criteria and Delete Report icons) Paging Elements: ■ Page x of Total (if needed)
Configuration Points	All columns are sortable except for the Actions column.
Business Rules	The current hierarchical position is used for viewing the generated reports.

Main Path for Viewing Failed Billing Batch Reports

The following path describes the viewing failed batch reports use case:

1. The user clicks the Analytics tab.
2. The user clicks Batch Reports.
3. The user clicks the Failed tab.

   Oracle Self-Service E-Billing displays the Failed Billing Reports page showing the billing batch reports that failed when run.

Alternate Paths for Viewing Failed Billing Batch Reports

There are no alternate paths for this use case.

Exceptions for Viewing Failed Billing Batch Reports

Exceptions can occur in this use case.

The User Encounters an Error

The user encounters a system error.

Viewing Scheduled Billing Batch Reports

This use case lets users display a list of the billing batch reports that are scheduled to run.

Table 48 lists and describes the use case functions.

Table 48. Viewing Scheduled Billing Batch Reports

Function	Description
Name	Viewing Scheduled Billing Batch Reports
Primary User	B2B and B2C users
Trigger	The user clicks the Analytics tab, Batch Reports, and then the Scheduled tab.
Active Hyperlinks (Breadcrumbs)	■ **Analytics.** Displays the standard reports. ■ **Batch Reports.** Displays the Completed Billing Reports page.
Page Title	Scheduled Billing Reports
Prompts	None
Page Content	Header: ■ Scheduled Billing Reports (*Number of Items*) Report Details: ■ Report Name ■ User ID ■ Position ■ Private ■ Period Range ■ File Types (HTML, CSV, XML, and PDF) ■ Actions (View Selection Criteria and Delete Report icons) Paging Elements: ■ Page x of Total (if needed)
Configuration Points	All columns are sortable except File Types and Actions.
Business Rules	The current hierarchical position is used for viewing the generated reports.

Main Path for Viewing Scheduled Billing Batch Reports

The following path describes the viewing scheduled batch reports use case:

1. The user clicks the Analytics tab.
2. The user clicks Batch Reports.

3 The user clicks the Scheduled tab.

Oracle Self-Service E-Billing displays the Scheduled Billing Reports page showing the billing batch reports that are scheduled to run.

Alternate Paths for Viewing Scheduled Billing Batch Reports

There are no alternate paths for this use case.

Exceptions for Viewing Scheduled Batch Reports

Exceptions can occur in this use case.

The User Encounters an Error

The user encounters a system error.

Viewing Completed Business Batch Reports

This use case lets users display a list of the business batch reports that have run successfully and can be downloaded.

Table 49 lists and describes the use case functions.

Table 49. Viewing Completed Business Batch Reports

Function	Description
Name	Viewing Completed Business Batch Reports
Primary User	B2B and B2C users
Trigger	The user selects a business hierarchy from the Hierarchy tab, clicks the Analytics tab and then clicks Batch Reports.
Active Hyperlinks (Breadcrumbs)	■ **Analytics.** Displays the standard reports. ■ **Batch Reports.** Displays the Completed Business Reports page.
Page Title	Completed Business Reports
Prompts	None

Table 49. Viewing Completed Business Batch Reports

Function	Description

Page Content	Completed Business Reports page
	Header:
	■ Completed Business Reports (*Number of Items*)
	■ Report Details:
	  ■ Report Name (A hyperlink that displays the report in HTML.)
	  ■ User ID
	  ■ Group Name
	  ■ Position
	  ■ Request Date (Default sort, most recent first.)
	  ■ Run Date
	  ■ Private
	  ■ Actions (CSV, XML, PDF, View Selection Criteria, and Delete Report icons. Only the formats selected for report generation appear here.)
	Paging Elements:
	■ Page x of Total (if needed)

Configuration Points	All columns are sortable except for the Actions column.
Business Rules	The current business hierarchical position is used for viewing the generated reports.

Main Path for Viewing Completed Business Batch Reports

The following path describes the viewing completed business batch reports use case:

1. The user selects a business hierarchy from the Hierarchy tab.
2. The user clicks the Analytics tab.
3. The user clicks Batch Reports.

   Oracle Self-Service E-Billing displays the Completed Business Reports page showing the business batch reports that have run and are available for downloading.

Alternate Paths for Viewing Completed Business Batch Reports

There are no alternate paths for this use case.

Exceptions for Viewing Completed Business Batch Reports

Exceptions can occur in this use case.

The User Encounters an Error

The user encounters a system error.

Viewing Pending Business Batch Reports

This use case lets users display a list of the business batch reports that have been requested and are still in the queue to be generated.

Table 50 lists and describes the use case functions.

Table 50. Viewing Pending Business Batch Reports

Function	Description
Name	Viewing Pending Business Batch Reports
Primary User	B2B and B2C users
Trigger	The user selects a business hierarchy from the Hierarchy tab, clicks the Analytics tab, Batch Reports, and then the Pending tab.
Active Hyperlinks (Breadcrumbs)	■ **Analytics.** Displays the standard reports. ■ **Batch Reports.** Displays the Completed Business Reports page.
Page Title	Pending Business Reports
Prompts	None
Page Content	Header: ■ Pending Business Reports (*Number of Items*) Report Details: ■ Report Name ■ User ID ■ Group Name ■ Position ■ Request Date (Default sort, oldest first.) ■ Private ■ Actions (View Selection Criteria and Delete Report icons) Paging Elements: ■ Page x of Total (if needed)
Configuration Points	All columns are sortable except for the Actions column.
Business Rules	The current business hierarchical position is used for viewing the generated reports.

Main Path for Viewing Pending Business Batch Reports

The following path describes the viewing pending business reports use case:

1. The user selects a business hierarchy from the Hierarchy tab.
2. The user clicks the Analytics tab.
3. The user clicks Batch Reports.
4. The user clicks the Pending tab.

   Oracle Self-Service E-Billing displays the Pending Business Reports page showing the business batch reports that are waiting in the queue to be generated.

Alternate Paths for Viewing Pending Business Batch Reports

There are no alternate paths for this use case.

Exceptions for Viewing Pending Business Batch Reports

Exceptions can occur in this use case.

The User Encounters an Error

The user encounters a system error.

Viewing Failed Business Batch Reports

This use case lets users display a list of the business batch reports that failed.

Table 51 lists and describes the use case functions.

Table 51. Viewing Failed Business Batch Reports

Function	Description
Name	Viewing Failed Business Batch Reports
Primary User	B2B and B2C users
Trigger	The user selects a business hierarchy from the Hierarchy tab, clicks the Analytics tab, Batch Reports, and then clicks the Failed tab.
Active Hyperlinks (Breadcrumbs)	■ **Analytics.** Displays the standard reports. ■ **Batch Reports.** Displays the Completed Business Reports page.
Page Title	Failed Business Reports
Prompts	None

Table 51. Viewing Failed Business Batch Reports

Function	Description
Page Content	Header: ■ Failed Business Reports (*Number of Items*) Report Details: ■ Report Name ■ User ID ■ Group Name ■ Position ■ Request Date (Default sort, most recent first.) ■ Run Date ■ Private ■ Reason ■ Actions (View Selection Criteria and Delete Report icons) Paging Elements: ■ Page x of Total (if needed)
Configuration Points	All columns are sortable except for the Actions column.
Business Rules	The current business hierarchical position is used for viewing the generated reports.

Main Path for Viewing Failed Business Batch Reports

The following path describes the viewing failed batch reports use case:

1. The user selects a business hierarchy from the Hierarchy tab.
2. The user clicks the Analytics tab.
3. The user clicks Batch Reports.
4. The user clicks the Failed tab.

   Oracle Self-Service E-Billing displays the Failed Business Reports page showing the business batch reports that failed when run.

Alternate Paths for Viewing Failed Business Batch Reports

There are no alternate paths for this use case.

Exceptions for Viewing Failed Business Batch Reports

Exceptions can occur in this use case.

The User Encounters an Error

The user encounters a system error.

Viewing Scheduled Business Batch Reports

This use case lets users display a list of the business batch reports that are scheduled to run.

Table 52 lists and describes the use case functions.

Table 52. Viewing Scheduled Business Batch Reports

Function	Description
Name	Viewing Scheduled Business Batch Reports
Primary User	B2B and B2C users
Trigger	The user selects a business hierarchy from the Hierarchy tab, clicks the Analytics tab, Batch Reports, and then clicks the Scheduled tab.
Active Hyperlinks (Breadcrumbs)	■ **Analytics.** Displays the standard reports. ■ **Batch Reports.** Displays the Completed Business Reports page.
Page Title	Scheduled Business Reports
Prompts	None
Page Content	Header: Scheduled Business Reports (*Number of Items*) Report Details: ■ Report Name ■ User ID ■ Group Name ■ Position ■ Private ■ Period Range ■ File Types (HTML, CSV, XML, and PDF) ■ Actions (View Selection Criteria and Delete Report icons) Paging Elements: ■ Page x of Total (if needed)
Configuration Points	All columns are sortable except File Types and Actions.
Business Rules	The current business hierarchical position is used for viewing the generated reports.

Main Path for Viewing Scheduled Business Batch Reports

The following path describes the viewing scheduled business batch reports use case:

1. The user selects a business hierarchy from the Hierarchy tab.
2. The user clicks the Analytics tab.
3. The user clicks Batch Reports.
4. The user clicks the Scheduled tab.

   Oracle Self-Service E-Billing displays the Scheduled Business Reports page showing the business batch reports that are scheduled to run.

Alternate Paths for Viewing Scheduled Business Batch Reports

There are no alternate paths for this use case.

Exceptions for Viewing Scheduled Business Batch Reports

Exceptions can occur in this use case.

The User Encounters an Error

The user encounters a system error.

8 Top X Reports

This chapter describes use cases that are used to generate reports on the greatest expenses or most frequent activities, called Top X reports. It includes the following topics:

Highest Spending Services

This use case lets the user generate a report showing which service agreements have the highest total charges, independent of usage type.

Table 53 lists and describes the use case functions.

Table 53. Highest Spending Services

Function	Description
Name	Highest Spending Services
Feature Area	Analytics
Description	The user views a report showing which service agreements have the highest total charges, independent of usage type.
Primary User	Administrator, manager, and subscriber; CSR administrator and user.

Table 53. Highest Spending Services

Function	Description
Trigger	■ The user clicks the Analytics tab, and then clicks the Top X Reports subtab. A report list appears and the user selects the hyperlink for Highest Spending Services. ■ The user selects Highest Spending Services from the Top X Report drop-down list.
Prompts	Report Selection Criteria Period Range (Default: Current period.) ■ The user selects a start and end reporting period. Number of Results: ■ Default: 10 ■ The user can select the number of resulting report query rows to view from the following preconfigured values: 10, 25, 50, or 100. Drop-down List: ■ Highest Spending Services (Default) ■ Most Expensive Calls ■ Longest Calls ■ Most Frequently Called Numbers ■ Most Frequently Called Destinations ■ Most Frequently Called Countries
Page Tabs	■ Report (Active) ■ Batch Request
Active Hyperlinks (Breadcrumbs)	■ **Analytics.** Displays the list of Standard reports. ■ **Top X Reports.** Displays the list of Top X reports.
Report Content	Page Title: Highest Spending Services Header: ■ Report Details ■ Number of items

Table 53. Highest Spending Services

Function	Description
Report Content, continued	Columns: ■ Service Number (With a hyperlink to the Highest Spending Services by Service Agreement report). ■ Name ■ Account Number ■ Total Charges. Sorted highest to lowest, with a hyperlink on the letter T to the Service Billing Trend report for the service agreement. Total Row: ■ Total (literal) ■ Number of calls ■ Total charges
Business Rules	■ The current hierarchical position context is used for reporting criteria. ■ The current bill period range (single period) is used as the default criteria.
Standard Features	■ Printer-friendly view ■ Download CSV or XML
Configuration Points	■ Report Threshold Value for Batch Mode. Determines the number of result set lines above which a report must process in batch mode instead of as an online download. You can set values for each type of download file: ■ **CSV**. The maximum number of output lines. ■ **XML**. A percentage of the CSV threshold value (Default is 20%). For example, if the CSV report threshold is set to 3,000 result set lines, then an XML threshold value set at 20% must process in batch mode when there are 600 or more result set lines in the CSV file.

Table 53. Highest Spending Services

Function	Description
Configuration Points, continued	■ All report detail table columns are sortable and display in descending order (highest to lowest); you can change the default sort order to ascending.
Note	■ Drill-down links are for the selected service agreement. ■ Oracle Self-Service E-Billing calculates the total charge for each service agreement and returns the number of results selected. ■ If the report result set is less than the number of results selected, then the available data set displays. ■ If there are ties in the total charge amounts, then Oracle Self-Service E-Billing returns service agreements from lowest to highest until it equals the total number requested (10, 25 50, or 100). ■ Users can submit a batch request for this report.

Main Path for Using Highest Spending Services

The following path describes the Highest Spending Services use case:

1. The user selects the Highest Spending Services report from the List of Top X Reports or from the drop-down list of reports.
2. Oracle Self-Service E-Billing displays the top ten records of the Highest Spending Services report for the current period and hierarchy position.

Alternate Paths for Highest Spending Services

Alternate paths can occur in this use case.

The User Specifies Query Parameters

The user enters start and ending report dates or selects a new number of results.

Oracle Self-Service E-Billing retrieves the report data for the selected criteria and user hierarchy position and displays the Highest Spending Services report.

The User Selects the Download Action (CSV or XML)

Oracle Self-Service E-Billing downloads a report in the selected format.

The User Selects the Printer-Friendly Action

Oracle Self-Service E-Billing displays the print page.

Exceptions for Highest Spending Services

Exceptions can occur in this use case.

The User Encounters an Error

Oracle Self-Service E-Billing invokes the error message use case.

Highest Spending Services by Service Agreement

This use case lets the user generate a report showing which service agreements have the highest total charges, independent of usage type, by service number.

Table 54 lists and describes the use case functions.

Table 54. Highest Spending Services by Service Agreement

Function	Description
Name	Highest Spending Services by Service Agreement
Feature Area	Analytics
Description	The user views a report showing which service agreements have the highest total charges, independent of usage type, by service number.
Primary User	Administrator, manager, and subscriber; CSR administrator and user.
Trigger	The user clicks a service number hyperlink on the Highest Spending Services report.
Prompts	None
Page Tabs	Report (Active)
Active Hyperlinks (Breadcrumbs)	■ **Analytics.** Displays the list of Standard reports. ■ **Top X Reports.** Displays the list of Top X reports. ■ **Highest Spending Services.** Displays the Highest Spending Services report.

Table 54. Highest Spending Services by Service Agreement

Function	Description
Report Content	Page Title: Highest Spending Services by Service Agreement Paging Elements (If needed): ■ Page X of Total ■ Paging arrow buttons Header: ■ Report Details ■ Number of items Columns: ■ Service Number ■ Name ■ Account Number ■ Date ■ Time ■ Usage Type ■ Volume ■ Total Charges (Sorted highest to lowest) Total Row: ■ Total (literal) ■ Total charges
Business Rules	The current hierarchical position and current bill period range (single period) selected on the Highest Spending Services Report apply on this drill-down report.
Standard Features	■ Printer-friendly view ■ Download CSV or XML

Table 54. Highest Spending Services by Service Agreement

Function	Description
Configuration Points	■ Report Threshold Value for Batch Mode. Determines the number of result set lines above which a report must process in batch mode instead of as an online download. You can set values for each type of download file: ■ **CSV**. The maximum number of output lines. ■ **XML**. A percentage of the CSV threshold value (Default is 20%). For example, if the CSV report threshold is set to 3,000 result set lines, then an XML threshold value set at 20% must process in batch mode when there are 600 or more result set lines in the CSV file. ■ All report detail table columns are sortable (except for service number, name, and account columns) and display in descending order (highest to lowest); you can change the default sort order to ascending.
Note	This report uses paging elements if the number of results exceeds the threshold set for the page view.

Main Path for Using Highest Spending Services by Service Agreement

The following path describes the Highest Spending Services by Service Agreement use case:

1. The user clicks the Service Number hyperlink on the Highest Spending Services report.
2. Oracle Self-Service E-Billing displays the Highest Spending Services by Service Agreement report for the selected service number.

Alternate Paths for Highest Spending Services by Service Agreement

Alternate paths can occur in this use case.

The User Selects the Download Action (CSV or XML)

Oracle Self-Service E-Billing downloads a report in the selected format.

The User Selects the Printer-Friendly Action

Oracle Self-Service E-Billing displays the print page.

Exceptions for Highest Spending Services by Service Agreement

An exception can occur in this use case.

The User Encounters an Error

Oracle Self-Service E-Billing invokes the error message use case.

Most Expensive Calls

This use case lets the user view a report showing the most expensive calls. Table 55 lists and describes the use case functions.

Table 55. Most Expensive Calls

Function	Description
Name	Most Expensive Calls
Feature Area	Analytics
Description	The user views a report showing the most expensive calls.
Primary User	Administrator, manager, and subscriber; CSR administrator and user.
Trigger	■ The user clicks the Analytics tab, and then clicks the Top X Reports subtab. A report list appears and the user selects the hyperlink for Most Expensive Calls. ■ The user selects Most Expensive Calls from the Top X Report drop-down list.
Prompts	Report Selection Criteria Period Range (Default: Current period.) ■ The user selects a start and end reporting period. Number of Results ■ Default: 10 ■ The user can select the number of resulting report query rows to view from the following preconfigured values: 10, 25, 50, or 100. Drop-down List: ■ Highest Spending Services ■ Most Expensive Calls (Default) ■ Longest Calls ■ Most Frequently Called Numbers ■ Most Frequently Called Destinations ■ Most Frequently Called Countries
Page Tabs	■ Report (Active) ■ Batch Request
Active Hyperlinks (Breadcrumbs)	■ **Analytics.** Displays the list of Standard reports. ■ **Top X Reports.** Displays the list of Top X reports.

Table 55. Most Expensive Calls

Function	Description
Report Content	Page Title: ■ Most Expensive Calls Header: ■ Report Details ■ Number of items Columns: ■ Date ■ Time ■ Service Number ■ Name ■ Number Called ■ Category (With hyperlink) ■ Type (With hyperlink) ■ Tariff ■ Destination ■ Volume ■ Total Charges Total Row: ■ Total
Business Rules	■ The current hierarchical position context is used for reporting criteria. ■ The current bill period range (single period) is used as the default criteria.
Standard Features	■ Printer-friendly view ■ Download CSV or XML

Table 55. Most Expensive Calls

Function	Description
Configuration Points	Report Threshold Value for Batch Mode. Determines the number of result set lines above which a report must process in batch mode instead of as an online download. You can set values for each type of download file: ■ **CSV**. The maximum number of output lines. ■ **XML**. A percentage of the CSV threshold value (Default is 20%). For example, if the CSV report threshold is set to 3,000 result set lines, then an XML threshold value set at 20% must process in batch mode when there are 600 or more result set lines in the CSV file.
Note	■ If the report result set is less than the number of results selected, then the available data set displays. ■ Users can submit a batch request for this report.

Main Path for Using Most Expensive Calls

The following path describes the Most Expensive Calls use case:

1. The user selects the Most Expensive Calls report from the List of Top X Reports or from the drop-down list of reports.
2. Oracle Self-Service E-Billing displays the top ten records of the Most Expensive Calls report for the current period and hierarchy position.

Alternate Paths for Using Most Expensive Calls

Alternate paths can occur in this use case.

The User Specifies Query Parameters

The user enters start and ending report dates or selects a new number of results.

Oracle Self-Service E-Billing retrieves the report data for the selected criteria and user hierarchy position and displays the Most Expensive Calls report.

The User Selects the Download Action (CSV or XML)

Oracle Self-Service E-Billing downloads a report in the selected format.

The User Selects the Printer-Friendly Action

Oracle Self-Service E-Billing displays the print page.

Exceptions for Using Most Expensive Calls

An exception path can occur in this use case.

The User Encounters an Error

Oracle Self-Service E-Billing invokes the error message use case.

Longest Calls

The user can use this use case to view a report showing the longest calls. Table 56 lists and describes the use case functions.

Table 56. Longest Calls

Function	Description
Name	Longest Calls
Feature Area	Analytics
Description	The user views a report showing the longest calls.
Primary User	Administrator, manager, and subscriber; CSR administrator and user.
Triggers	■ The user clicks the Analytics tab, and then clicks the Top X Reports subtab. A report list appears and the user selects the hyperlink for Longest Calls. ■ The user selects Longest Calls from the Top X Report drop-down list.
Prompts	Report Selection Criteria Period Range (Default: Current period) ■ The user selects a start and end reporting period. Number of Results: ■ Default: 10 ■ The user can select the number of resulting report query rows to view from the following preconfigured values: 10, 25, 50, or 100. Drop-down List: ■ Highest Spending Services ■ Most Expensive Calls ■ Longest Calls (Default) ■ Most Frequently Called Numbers ■ Most Frequently Called Destinations ■ Most Frequently Called Countries

Table 56. Longest Calls

Function	Description
Page Tabs	■ Report (Active) ■ Batch Request
Active Hyperlinks (Breadcrumbs)	■ **Analytics.** Displays the list of Standard reports. ■ **Top X Reports.** Displays the list of Top X reports.
Report Content	Page Title: ■ Longest Calls Header: ■ Report Details ■ Number of items Columns: ■ Date ■ Time ■ Service Number ■ Name ■ Number Called ■ Category (With a hyperlink) ■ Type (With a hyperlink) ■ Tariff ■ Destination ■ Volume ■ Total Charges Total Row: ■ Total
Business Rules	■ The current hierarchical position context is used for reporting criteria. ■ The current bill period range (single period) is used as the default criteria.
Standard Features	■ Printer-friendly view ■ Download CSV or XML

Table 56. Longest Calls

Function	Description
Configuration Points	Report Threshold Value for Batch Mode. Determines the number of result set lines above which a report must process in batch mode instead of as an online download. You can set values for each type of download file: ■ **CSV**. The maximum number of output lines. ■ **XML**. A percentage of the CSV threshold value (Default is 20%). For example, if the CSV report threshold is set to 3,000 result set lines, then an XML threshold value set at 20% must process in batch mode when there are 600 or more result set lines in the CSV file.
Note	■ If the report result set is less than the number of results selected, then the available data set displays. ■ Users can submit a batch request for this report.

Main Path for Using Longest Calls

The following path describes the Longest Calls use case:

1. The user selects the Longest Calls report from the List of Top X Reports or from the drop-down list of reports.
2. Oracle Self-Service E-Billing displays the top ten records of the Longest Calls report for the current period and hierarchy position.

Alternate Paths for Using Longest Calls

Alternate paths can occur in this use case.

The User Specifies Query Parameters

The user enters start and ending report dates.

Oracle Self-Service E-Billing retrieves the report data for the selected date range and user hierarchy position and displays the Longest Calls report.

The User Selects the Printer-Friendly Action

Oracle Self-Service E-Billing displays the print page.

The User Selects the Download Action (CSV or XML)

Oracle Self-Service E-Billing downloads a report in the selected format.

Exceptions for Using Longest Calls

Exceptions can occur in this use case.

The User Encounters an Error

Oracle Self-Service E-Billing invokes the error message use case.

Most Frequently Called Numbers

The user can use this use case to view the most frequently called numbers. Table 57 lists and describes the use case functions.

Table 57. Most Frequently Called Numbers

Function	Description
Name	Most Frequently Called Numbers
Feature Area	Analytics
Description	The user views a list of the most frequently called numbers.
Preconditions	The user has successfully enrolled and authenticated in Oracle Self-Service E-Billing.
Primary User	Administrator, manager, and subscriber; CSR administrator and user.
Triggers	■ The user clicks the Analytics tab, and then clicks the Top X Reports subtab. A report list appears and the user selects the hyperlink for Most Frequently Called Numbers. ■ The user selects Most Frequently Called Numbers from the Top X Report drop-down list.
Prompts	Report Selection Criteria Period Range (Default: Current period) ■ The user selects a start and end reporting period. Number of Results: ■ Default: 10 ■ The user can select the number of resulting report query rows to view from the following preconfigured values: 10, 25, 50, or 100. Drop-down List: ■ Highest Spending Services ■ Most Expensive Calls ■ Longest Calls ■ Most Frequently Called Numbers (Default) ■ Most Frequently Called Destinations ■ Most Frequently Called Countries

Table 57. Most Frequently Called Numbers

Function	Description
Page Tabs	■ Report (Active) ■ Batch Request
Active Hyperlinks (Breadcrumbs)	■ **Analytics.** Displays the list of Standard reports. ■ **Top X Reports.** Displays the list of Top X reports.
Report Content	Page Title: Most Frequently Called Numbers Header: ■ Report Details ■ Number of items Columns: ■ Number called (With a hyperlink to the Most Frequently Called Number by Service Agreement report) ■ Number of calls (Sorted highest to lowest) ■ Volume ■ Total Charges. Total Row: ■ Total (literal) ■ Number of calls ■ Total charges
Business Rules	■ The current hierarchical position is used for reporting criteria. ■ The current bill period (single period) is the default range.
Standard Features	■ Printer-friendly view ■ Download CSV or XML

Table 57. Most Frequently Called Numbers

Function	Description
Configuration Points	■ Report Threshold Value for Batch Mode. Determines the number of result set lines above which a report must process in batch mode instead of as an online download. You can set values for each type of download file: ■ **CSV**. The maximum number of output lines. ■ **XML**. A percentage of the CSV threshold value (Default is 20%). For example, if the CSV report threshold is set to 3,000 result set lines, then an XML threshold value set at 20% must process in batch mode when there are 600 or more result set lines in the CSV file. ■ All report detail table columns are sortable and display in descending order (highest to lowest); you can change the default sort order to ascending.
Rules	■ Drill-down links are for the selected number called. ■ Oracle Self-Service E-Billing calculates the total number of calls made to a number called and returns the number of results selected. ■ If the report result set is less than the number of results selected, then the available data set displays. ■ If there are ties in the total number of calls to a called number, then Oracle Self-Service E-Billing returns service agreements from lowest to highest until it equals the total number requested (10, 25 50, or 100). ■ The user can submit a batch request for this report.

Main Path for Using Most Frequently Called Numbers

The following path describes the Most Frequently Called Numbers use case:

1. The user selects the Most Frequently Called Numbers report from the List of Top X Reports or from the drop-down list of reports.
2. Oracle Self-Service E-Billing displays the top ten records of the Most Frequently Called Numbers report for the current period and hierarchy position.

Alternate Paths for Most Frequently Called Numbers

Alternate paths can occur in this use case.

The User Specifies Query Parameters

1. The user enters start and ending report dates or selects a new number of results.

2 Oracle Self-Service E-Billing retrieves the report data for the selected criteria and user hierarchy position and displays the Most Frequently Called Numbers report.

The User Selects the Download Action (CSV or XML)

Oracle Self-Service E-Billing downloads a report in the selected format.

The User Selects the Printer-Friendly Action

Oracle Self-Service E-Billing displays the print page.

Exceptions for Most Frequently Called Numbers

Exceptions can occur in this use case.

The User Encounters an Error

Oracle Self-Service E-Billing invokes the error message use case.

Most Frequently Called Number by Service Agreement

The user can use this use case to view a list of most frequently called number by service agreement. Table 58 lists and describes the use case functions.

Table 58. Most Frequently Called Number by Service Agreement

Function	Description
Name	Most Frequently Called Number by Service Agreement
Feature Area	Analytics
Description	The user views a list of service agreements by the selected (most frequently) called number.
Preconditions	The user has successfully enrolled and authenticated in Oracle Self-Service E-Billing.
Primary User	Administrator, manager, and subscriber; CSR administrator and user.
Trigger	The user clicks a number called hyperlink on the Most Frequently Called Numbers report.
Page Tabs	Report (Active)
Active Hyperlinks (Breadcrumbs)	■ **Analytics.** Displays the list of Standard reports. ■ **Top X Reports.** Displays the list of Top X reports. ■ **Most Frequently Called Numbers**. Displays the Most Frequently Called Numbers report.

Table 58. Most Frequently Called Number by Service Agreement

Function	Description
Report Content	Page Title: Most Frequently Called Number by Service Agreement Paging Elements (If needed): ■ Page X of Total ■ Paging arrow buttons Header: ■ Report Details ■ Number of items Columns: ■ Number Called ■ Service Number (With a hyperlink to the Most Frequently Called Number by Service Agreement Details report) ■ Number of calls (Sorted highest to lowest) ■ Volume ■ Total Charges. Total Row: ■ Total (literal) ■ Number of calls ■ Volume ■ Total charges
Business Rules	■ The current hierarchical position and current bill period range (single period) selected on the Most Frequently Called Numbers report apply on this drill-down report.
Standard Features	■ Printer-friendly view ■ Download CSV or XML

Table 58. Most Frequently Called Number by Service Agreement

Function	Description
Configuration Points	■ Report Threshold Value for Batch Mode. Determines the number of result set lines above which a report must process in batch mode instead of as an online download. You can set values for each type of download file: ■ **CSV**. The maximum number of output lines. ■ **XML**. A percentage of the CSV threshold value (Default is 20%). For example, if the CSV report threshold is set to 3,000 result set lines, then an XML threshold value set at 20% must process in batch mode when there are 600 or more result set lines in the CSV file. ■ All report detail table columns are sortable and display in descending order (highest to lowest); you can change the default sort order to ascending.
Rules	Drill-down links are for the selected number called and service agreement.

Main Path for Using Most Frequently Called Number by Service Agreement

The following path describes the Most Frequently Called Number by Service Agreement use case:

1. The user clicks the Number Called hyperlink on the Most Frequently Called Number report.
2. Oracle Self-Service E-Billing displays the Most Frequently Called Number by Service Agreement report for the selected number called.

Alternate Paths for Most Frequently Called Number by Service Agreement

Alternate paths can occur in this use case.

The User Selects the Download Action (CSV or XML)

Oracle Self-Service E-Billing downloads a report in the selected format.

The User Selects the Printer-Friendly Action

Oracle Self-Service E-Billing displays the print page.

Exceptions for Most Frequently Called Number by Service Agreement

Exceptions can occur in this use case.

The User Encounters an Error

Oracle Self-Service E-Billing invokes the error message use case.

Most Frequently Called Number by Service Agreement Details

The user can use this use case to view service details for an individual service agreement selected on the Most Frequently Called Number by Service Agreement report. Table 59 lists and describes the use case functions.

Table 59. Most Frequently Called Number by Service Agreement Details

Function	Description
Name	Most Frequently Called Number by Service Agreement Details
Feature Area	Analytics
Description	The user views service details for an individual service agreement.
Preconditions	The user has successfully enrolled and authenticated in Oracle Self-Service E-Billing.
Primary User	Administrator, manager, and subscriber; CSR administrator and user.
Trigger	The user clicks a service number hyperlink on the Most Frequently Called Number by Service Agreement report.
Page Tabs	Report (Active)
Active Hyperlinks (Breadcrumbs)	■ **Analytics.** Displays the list of Standard reports. ■ **Top X Reports.** Displays the list of Top X reports. ■ **Most Frequently Called Numbers**. Displays the Most Frequently Called Numbers report. ■ **Service Agreement**. Displays the Most Frequently Called Number by Service Agreement report.

Table 59. Most Frequently Called Number by Service Agreement Details

Function	Description
Report Content	Page Title: Most Frequently Called Number by Service Agreement Details Paging Elements (If needed): ■ Page X of Total ■ Paging arrow buttons Header: ■ Report Details ■ Number of items Columns: ■ Number Called ■ Service Number ■ Date ■ Time ■ Volume ■ Destination ■ Tariff ■ Total Charges. Total Row: ■ Total (literal) ■ Volume ■ Total charges
Business Rules	■ The current hierarchical position and current bill period range (single period) selected on the Most Frequently Called Numbers report apply on this drill-down report.

Table 59. Most Frequently Called Number by Service Agreement Details

Function	Description
Standard Features	■ Printer-friendly view ■ Download CSV or XML
Configuration Points	■ Report Threshold Value for Batch Mode. Determines the number of result set lines above which a report must process in batch mode instead of as an online download. You can set values for each type of download file: ■ **CSV**. The maximum number of output lines. ■ **XML**. A percentage of the CSV threshold value (Default is 20%). For example, if the CSV report threshold is set to 3,000 result set lines, then an XML threshold value set at 20% must process in batch mode when there are 600 or more result set lines in the CSV file. ■ All report detail table columns are sortable except for the Number Called Column and Service Number.

Main Path for Using Most Frequently Called Number by Service Agreement Details

The following path describes the Most Frequently Called Number by Service Agreement Details use case:

1. The user clicks the Service Number hyperlink on the Most Frequently Called Number by Service Agreement report.
2. Oracle Self-Service E-Billing displays the Most Frequently Called Number by Service Agreement Details report for the selected service number.

Alternate Paths for Most Frequently Called Number by Service Agreement Details

Alternate paths can occur in this use case.

The User Selects the Download Action (CSV or XML)

Oracle Self-Service E-Billing downloads a report in the selected format.

The User Selects the Printer-Friendly Action

Oracle Self-Service E-Billing displays the print page.

Exceptions for Most Frequently Called Number by Service Agreement Details

Exceptions can occur in this use case.

The User Encounters an Error

Oracle Self-Service E-Billing invokes the error message use case.

Most Frequently Called Destinations

The user can use this use case to view a report showing a list of the most frequently called destinations. Table 60 lists and describes the use case functions.

Table 60. Most Frequently Called Destinations

Function	Description
Name	Most Frequently Called Destinations
Feature Area	Analytics
Description	The user views a list of the destinations most frequently called.
Preconditions	The user has successfully enrolled and authenticated in Oracle Self-Service E-Billing.
Primary User	Administrator, manager, and subscriber; CSR administrator and user.
Triggers	■ The user clicks the Analytics tab, and then clicks the Top X Reports subtab. A report list appears and the user selects the hyperlink for Most Frequently Called Destinations. ■ The user selects Most Frequently Called Destinations from the Top X Report drop-down list.
Prompts	Report Selection Criteria Period Range (Default: Current period.) ■ The user selects a start and end reporting period. Number of Results ■ Default: 10 ■ The user can select the number of resulting report query rows to view from the following preconfigured values: 10, 25, 50, or 100. Drop-down List: ■ Highest Spending Services ■ Most Expensive Calls ■ Longest Calls ■ Most Frequently Called Numbers ■ Most Frequently Called Destinations (Default) ■ Most Frequently Called Countries

Table 60. Most Frequently Called Destinations

Function	Description
Page Tabs	■ Report (Active) ■ Batch Request
Active Hyperlinks (Breadcrumbs)	■ **Analytics.** Displays the list of Standard reports. ■ **Top X Reports.** Displays the list of Top X reports.
Report Content	Page Title: Most Frequently Called Destinations Header: ■ Report Details ■ Number of items Columns: ■ Destination (With a hyperlink to the Most Frequently Called Destination by Service Number report) ■ Country ■ Number of Calls (sorted highest to lowest) ■ Volume ■ Total Charges. Total Row: ■ Total (literal) ■ Number of Calls ■ Total charges
Business Rules	■ The current hierarchical position is used for reporting criteria. ■ The current bill period (single period) is the default range.
Standard Features	■ Printer-friendly view ■ Download CSV or XML

Table 60. Most Frequently Called Destinations

Function	Description
Configuration Points	■ Report Threshold Value for Batch Mode. Determines the number of result set lines above which a report must process in batch mode instead of as an online download. You can set values for each type of download file: ■ **CSV**. The maximum number of output lines. ■ **XML**. A percentage of the CSV threshold value (Default is 20%). For example, if the CSV report threshold is set to 3,000 result set lines, then an XML threshold value set at 20% must process in batch mode when there are 600 or more result set lines in the CSV file. ■ All report detail table columns are sortable and display in descending order (highest to lowest); you can change the default sort order to ascending.
Rules	■ Drill-down links are for the destination selected. ■ Oracle Self-Service E-Billing calculates the total number of calls made to a destination and returns the number of results selected. ■ If the report result set is less than the number of results selected, then the available data set displays. ■ If there are ties in the total number of calls to a destination, then Oracle Self-Service E-Billing returns service agreements from lowest to highest until it equals the total number requested (10, 25 50, or 100). ■ The user can submit a batch request for this report.

Main Path for Using Most Frequently Called Destinations

The following path describes the Most Frequently Called Destinations use case:

1. The user selects the Most Frequently Called Destinations report from the List of Top X Reports or from the drop-down list of reports.
2. Oracle Self-Service E-Billing displays the top ten records of the Most Frequently Called Destinations report for the current period and hierarchy position.

Alternate Paths for Most Frequently Called Destinations

Alternate paths can occur in this use case.

The User Specifies Query Parameters

1. The user enters start and ending report dates or selects a new number of results.

2 Oracle Self-Service E-Billing retrieves the report data for the selected criteria and user hierarchy position and displays the Most Frequently Called Destinations report.

The User Selects the Download Action (CSV or XML)

Oracle Self-Service E-Billing downloads a report in the selected format.

The User Selects the Printer-Friendly Action

Oracle Self-Service E-Billing displays the print page.

Exceptions for Most Frequently Called Destinations

An exception can occur in this use case.

The User Encounters an Error

Oracle Self-Service E-Billing invokes the error message use case.

Most Frequently Called Destination by Service Agreement

The user can use this use case to view a report showing a list of service agreements for the most frequently called destination. Table 61 lists and describes the use case functions.

Table 61. Most Frequently Called Destination by Service Agreement

Function	Description
Name	Most Frequently Called Destination by Service Agreement
Feature Area	Analytics
Description	The user views a list of service agreements associated with the most frequently called destination.
Preconditions	The user has successfully enrolled and authenticated in Oracle Self-Service E-Billing.
Primary User	Administrator, manager, and subscriber; CSR administrator and user.
Trigger	The user clicks the hyperlink for a destination on the Most Frequently Called Destinations report.
Page Tabs	Report (Active)
Active Hyperlinks (Breadcrumbs)	■ **Analytics.** Displays the list of Standard reports. ■ **Top X Reports.** Displays the list of Top X reports. ■ **Most Frequently Called Destinations.** Displays the Most Frequently Called Destinations report.

Table 61. Most Frequently Called Destination by Service Agreement

Function	Description
Report Content	Page Title: Most Frequently Called Destination by Service Agreement Paging Elements (If needed): ■ Page X of Total ■ Paging arrow buttons Header: ■ Report Details ■ Number of items Columns: ■ Destination ■ Country ■ Service Number (With a hyperlink to the Most Frequently Called Destination by Service Number Details report) ■ Number of Calls (sorted highest to lowest) ■ Volume ■ Total Charges. Total Row: ■ Total (literal) ■ Number of Calls ■ Volume ■ Total charges
Business Rules	■ The current hierarchical position and period range selected on the Most Frequently Called Destinations report apply on this drill-down report.
Standard Features	■ Printer-friendly view ■ Download CSV or XML

Table 61. Most Frequently Called Destination by Service Agreement

Function	Description
Configuration Points	■ Report Threshold Value for Batch Mode. Determines the number of result set lines above which a report must process in batch mode instead of as an online download. You can set values for each type of download file: ■ **CSV**. The maximum number of output lines. ■ **XML**. A percentage of the CSV threshold value (Default is 20%). For example, if the CSV report threshold is set to 3,000 result set lines, then an XML threshold value set at 20% must process in batch mode when there are 600 or more result set lines in the CSV file. ■ All report detail table columns are sortable (except for the number called column) and display in descending order (highest to lowest); you can change the default sort order to ascending.
Rules	Drill-down links are for the destination and selected service agreement.

Main Path for Using Most Frequently Called Destination by Service Agreement

The following path describes the Most Frequently Called Destination by Service Agreement use case:

1. The user clicks the Destination hyperlink on the Most Frequently Called Destinations report.
2. Oracle Self-Service E-Billing retrieves the report data and displays a tabular report for the selected destination.

Alternate Paths for Most Frequently Called Destination by Service Agreement

Alternate paths can occur in this use case.

The User Selects the Download Action (CSV or XML)

Oracle Self-Service E-Billing downloads a report in the selected format.

The User Selects the Printer-Friendly Action

Oracle Self-Service E-Billing displays the print page.

Exceptions for Most Frequently Called Destination by Service Agreement

An exception can occur in this use case.

The User Encounters an Error

Oracle Self-Service E-Billing invokes the error message use case.

Most Frequently Called Destination by Service Agreement Details

The user can use this use case to view a report showing service details for an individual service agreement. Table 62 lists and describes the use case functions.

Table 62. Most Frequently Called Destination by Service Agreement Details

Function	Description
Name	Most Frequently Called Destination by Service Agreement Details
Feature Area	Analytics
Description	The user views service details for a list of service agreements.
Preconditions	The user has successfully enrolled and authenticated in Oracle Self-Service E-Billing.
Primary User	Administrator, manager, and subscriber; CSR administrator and user.
Trigger	The user clicks a service number hyperlink on the Most Frequently Called Destination by Service Agreement report.
Page Tabs	Report (Active)
Active Hyperlinks (Breadcrumbs)	■ **Analytics.** Displays the list of Standard reports. ■ **Top X Reports.** Displays the list of Top X reports. ■ **Most Frequently Called Destinations.** Displays the Most Frequently Called Destinations report. ■ **Service Agreement**. Displays the Most Frequently Called Destination by Service Agreement report.

Table 62. Most Frequently Called Destination by Service Agreement Details

Function	Description
Report Content	Page Title: Most Frequently Called Destination by Service Agreement Details Paging Elements (If needed): ■ Page X of Total ■ Paging arrow buttons Header: ■ Report Details ■ Number of items Columns: ■ Destination ■ Country ■ Service Number ■ Date ■ Time ■ Number Called ■ Volume ■ Tariff ■ Total Charges Total Row: ■ Total (literal) ■ Number of Calls ■ Volume ■ Total charges
Business Rules	The current hierarchical position and period range selected on the Most Frequently Called Destinations report apply on this drill-down report.

Table 62. Most Frequently Called Destination by Service Agreement Details

Function	Description
Standard Features	■ Printer-friendly view ■ Download CSV or XML
Configuration Points	■ Report Threshold Value for Batch Mode. Determines the number of result set lines above which a report must process in batch mode instead of as an online download. You can set values for each type of download file: ■ **CSV**. The maximum number of output lines. ■ **XML**. A percentage of the CSV threshold value (Default is 20%). For example, if the CSV report threshold is set to 3,000 result set lines, then an XML threshold value set at 20% must process in batch mode when there are 600 or more result set lines in the CSV file. ■ All report detail table columns are sortable (except for the Destination, Country, and Service Number columns) and display in descending order (highest to lowest); you can change the default sort order to ascending.

Main Path for Using Most Frequently Called Destination by Service Agreement Details

The following path describes the Most Frequently Called Destination by Service Agreement Details use case:

1. The user clicks the Service Number hyperlink on the Most Frequently Called Destination by Service Agreement report.
2. Oracle Self-Service E-Billing displays the Most Frequently Called Destination by Service Agreement Details report for the selected service number.

Alternate Paths for Most Frequently Called Destination by Service Agreement Details

Alternate paths can occur in this use case.

The User Selects the Download Action (CSV or XML)

Oracle Self-Service E-Billing downloads a report in the selected format.

The User Selects the Printer-Friendly Action

Oracle Self-Service E-Billing displays the print page.

Exceptions for Most Frequently Called Destination by Service Agreement Details

An exception can occur in this use case.

The User Encounters an Error

Oracle Self-Service E-Billing invokes the error message use case.

Most Frequently Called Countries

The user can use this use case to view a list of countries called most often. Table 63 lists and describes the use case functions.

Table 63. Most Frequently Called Countries

Function	Description
Name	Most Frequently Called Countries
Feature Area	Analytics
Description	The user views a list of the countries most frequently called.
Preconditions	The user has successfully enrolled and authenticated in Oracle Self-Service E-Billing.
Primary User	Administrator, manager, and subscriber; CSR administrator and user.
Triggers	■ The user clicks the Analytics tab, and then clicks the Top X Reports subtab. A report list appears and the user selects the hyperlink for Most Frequently Called Countries. ■ The user selects Most Frequently Called Countries from the Top X Report drop-down list.

Table 63. Most Frequently Called Countries

Function	Description
Prompts	Report Selection Criteria Period Range (Default: Current period.) ■ The user selects a start and end reporting period. Number of Results: ■ Default: 10 ■ The user can select the number of resulting report query rows to view from the following preconfigured values: 10, 25, 50, or 100. Drop-down List: ■ Highest Spending Services ■ Most Expensive Calls ■ Longest Calls ■ Most Frequently Called Numbers ■ Most Frequently Called Destinations ■ Most Frequently Called Countries (Default)
Page Tabs	■ Report (Active) ■ Batch Request
Active Hyperlinks (Breadcrumbs)	■ **Analytics.** Displays the list of Standard reports. ■ **Top X Reports.** Displays the list of Top X reports.

Table 63. Most Frequently Called Countries

Function	Description
Report Content	Page Title: Most Frequently Called Countries Header: ■ Report Details ■ Number of items Columns: ■ Country (With a hyperlink to the Most Frequently Called Country by Service Number report) ■ Number of Calls (sorted highest to lowest) ■ Volume ■ Total Charges. Total Row: ■ Total (literal) ■ Number of Calls ■ Total charges
Business Rules	■ The current hierarchical position is used for reporting criteria. ■ The current bill period (single period) is the default range.
Standard Features	■ Printer-friendly view ■ Download CSV or XML

Table 63. Most Frequently Called Countries

Function	Description
Configuration Points	■ Report Threshold Value for Batch Mode. Determines the number of result set lines above which a report must process in batch mode instead of as an online download. You can set values for each type of download file: ■ **CSV**. The maximum number of output lines. ■ **XML**. A percentage of the CSV threshold value (Default is 20%). For example, if the CSV report threshold is set to 3,000 result set lines, then an XML threshold value set at 20% must process in batch mode when there are 600 or more result set lines in the CSV file. ■ All report detail table columns are sortable and display in descending order (highest to lowest); you can change the default sort order to ascending.
Rules	■ Drill-down links are for the country selected. ■ Oracle Self-Service E-Billing calculates the total number of calls made to a country and returns the number of results selected. ■ If the report result set is less than the number of results selected, then the available data set displays. ■ If there are ties in the total number of calls to a country, then Oracle Self-Service E-Billing returns service agreements from lowest to highest until it equals the total number requested (10, 25 50, or 100). ■ The user can submit a batch request for this report.

Main Path for Using Most Frequently Called Countries

The following path describes the Most Frequently Called Countries use case:

1. The user selects the Most Frequently Called Countries report from the List of Top X Reports or from the drop-down list of reports.
2. Oracle Self-Service E-Billing displays the top ten records of the Most Frequently Called Countries report for the current period and hierarchy position.

Alternate Paths for Most Frequently Called Countries

Alternate paths can occur in this use case.

The user enters start and ending report dates or selects a new number of results.

Oracle Self-Service E-Billing retrieves the report data for the selected criteria and user hierarchy position and displays the Most Frequently Called Countries report.

The User Selects the Download Action (CSV or XML)

Oracle Self-Service E-Billing downloads a report in the selected format.

The User Selects the Printer-Friendly Action

Oracle Self-Service E-Billing displays the print page.

Exceptions for Most Frequently Called Destinations

An exception can occur in this use case.

The User Encounters an Error

Oracle Self-Service E-Billing invokes the error message use case.

Most Frequently Called Country by Service Agreement

The user can use this use case to view a report showing a list of service agreements for the most frequently called country. Table 64 lists and describes the use case functions.

Table 64. Most Frequently Called Country by Service Agreement

Function	Description
Name	Most Frequently Called Country by Service Agreement
Feature Area	Analytics
Description	The user views a list of service agreements associated with the most frequently called country.
Preconditions	The user has successfully enrolled and authenticated in Oracle Self-Service E-Billing.
Primary User	Administrator, manager, and subscriber; CSR administrator and user.
Trigger	The user clicks a country hyperlink on the Most Frequently Called Countries report.
Page Tabs	Report (Active)
Active Hyperlinks (Breadcrumbs)	■ **Analytics.** Displays the list of Standard reports. ■ **Top X Reports.** Displays the list of Top X reports. ■ **Most Frequently Called Countries.** Displays the Most Frequently Called Countries report.

Table 64. Most Frequently Called Country by Service Agreement

Function	Description
Report Content	Page Title: Most Frequently Called Country by Service Agreement Paging Elements (If needed): ■ Page X of Total ■ Paging arrow buttons Header: ■ Report Details ■ Number of items Columns: ■ Country ■ Service Number (With a hyperlink to the Most Frequently Called Country by Service Number Details report) ■ Number of Calls (sorted highest to lowest) ■ Volume ■ Total Charges. Total Row: ■ Total (Literal) ■ Number of Calls ■ Volume ■ Total charges
Business Rules	■ The current hierarchical position and period range selected on the Most Frequently Called Countries report apply on this drill-down report.
Standard Features	■ Printer-friendly view ■ Download CSV or XML

Table 64. Most Frequently Called Country by Service Agreement

Function	Description
Configuration Points	■ Report Threshold Value for Batch Mode. Determines the number of result set lines above which a report must process in batch mode instead of as an online download. You can set values for each type of download file: ■ **CSV**. The maximum number of output lines. ■ **XML**. A percentage of the CSV threshold value (Default is 20%). For example, if the CSV report threshold is set to 3,000 result set lines, then an XML threshold value set at 20% must process in batch mode when there are 600 or more result set lines in the CSV file. ■ All report detail table columns are sortable (except for the country column) and display in descending order (highest to lowest); you can change the default sort order to ascending.
Rules	Drill-down links are for the country and the selected service agreement.

Main Path for Using Most Frequently Called Country by Service Agreement

The following path describes the Most Frequently Called Country by Service Agreement use case:

1. The user clicks the Country hyperlink on the Most Frequently Called Countries report.
2. Oracle Self-Service E-Billing retrieves the report data and displays a tabular report for the selected country.

Alternate Paths for Most Frequently Called Country by Service Agreement

Alternate paths can occur in this use case.

The User Selects the Download Action (CSV or XML)

Oracle Self-Service E-Billing downloads a report in the selected format.

The User Selects the Printer-Friendly Action

Oracle Self-Service E-Billing displays the print page.

Exceptions for Most Frequently Called Country by Service Agreement

An exception can occur in this use case.

The User Encounters an Error

Oracle Self-Service E-Billing invokes the error message use case.

Most Frequently Called Country by Service Agreement Details

The user can use this use case to view a report showing a list of service details for the most frequently called country. Table 65 lists and describes the use case functions.

Table 65. Most Frequently Called Country by Service Agreement Details

Function	Description
Name	Most Frequently Called Country by Service Agreement Details
Feature Area	Analytics
Description	The user views a list of service details for an individual service agreement.
Preconditions	The user has successfully enrolled and authenticated in Oracle Self-Service E-Billing.
Primary User	Administrator, manager, and subscriber; CSR administrator and user.
Trigger	The user clicks a service number hyperlink on the Most Frequently Called Country by Service Agreement report.
Page Tabs	Report (Active)
Active Hyperlinks (Breadcrumbs)	■ **Analytics.** Displays the list of Standard reports. ■ **Top X Reports.** Displays the list of Top X reports. ■ **Most Frequently Called Countries.** Displays the Most Frequently Called Countries report. ■ **Service Agreement.** Displays the Most Frequently Called Country by Service Agreement report.

Table 65. Most Frequently Called Country by Service Agreement Details

Function	Description
Report Content	Page Title: Most Frequently Called Country by Service Agreement Paging Elements (If needed): ■ Page X of Total ■ Paging arrow buttons Header: ■ Report Details ■ Number of items Columns: ■ Country ■ Service Number ■ Date ■ Time ■ Number Called ■ Volume ■ Tariff ■ Destination ■ Total Charges Total Row: ■ Total (Literal) ■ Volume ■ Total charges
Business Rules	■ The current hierarchical position and period range selected on the Most Frequently Called Countries report apply on this drill-down report. ■ Drill-down links are for the country and the selected service agreement.

Table 65. Most Frequently Called Country by Service Agreement Details

Function	Description
Standard Features	■ Printer-friendly view ■ Download CSV or XML
Configuration Points	■ Report Threshold Value for Batch Mode. Determines the number of result set lines above which a report must process in batch mode instead of as an online download. You can set values for each type of download file: ■ **CSV**. The maximum number of output lines. ■ **XML**. A percentage of the CSV threshold value (Default is 20%). For example, if the CSV report threshold is set to 3,000 result set lines, then an XML threshold value set at 20% must process in batch mode when there are 600 or more result set lines in the CSV file. ■ All report detail table columns are sortable (except for the country and service number columns) and display in descending order (highest to lowest); you can change the default sort order to ascending.

Main Path for Using Most Frequently Called Country by Service Agreement Details

The following path describes the Most Frequently Called Country by Service Agreement Details use case:

1. The user clicks the Service Number hyperlink on the Most Frequently Called Country by Service Agreement report.
2. Oracle Self-Service E-Billing displays the Most Frequently Called Country by Service Agreement Details report for the selected service number.

Alternate Paths for Most Frequently Called Country by Service Agreement

Alternate paths can occur in this use case.

The User Selects the Download Action (CSV or XML)

Oracle Self-Service E-Billing downloads a report in the selected format.

The User Selects the Printer-Friendly Action

Oracle Self-Service E-Billing displays the print page.

Exceptions for Most Frequently Called Country by Service Agreement Details

An exception can occur in this use case.

The User Encounters an Error

Oracle Self-Service E-Billing invokes the error message use case.

9 Cost and Budget Management Reports

This chapter describes use cases for generating reports on managing costs and budgets, and specifying settings for cost and budget reports. It includes the following topics:

Group Budget Report

The user can use this use case to view budgeted amounts against actual charges incurred over a period of time. This is a sum of all charges, including taxes and rounding, if any, for all groups below the current selected hierarchy position. The Group Budget Report is only available when the user is in Business Hierarchy.

A *Group* is defined as the folder that is directly under the current hierarchy position and has at least one or more account nodes under it or its sub-folders

Table 66 lists and describes the Group Budget Report use case.

Table 66. Group Budget Report

Function	Description
Name	Group Budget Report
Triggers	■ Cost Management ■ Budget Reports
Primary Users	Manager and administrator only
Business Rules	■ If there are more than 20 groups in the result set, then the chart is suppressed. ■ The Group Budget Report appears only if the user is in a business hierarchy. This report does not appear if the user is in a billing hierarchy or if the node is in service. ■ The report must display a list of sub groups or contracts in this particular business group. ■ If there is missing budget or charge data for a particular group or contract, then it is ignored (for example, if the budget is zero then the variance will have a negative number).

Table 66. Group Budget Report

Function	Description
Chart	Chart Type, Comparison Bar: ■ X axis: Sub Groups or contracts belonging to the Group (The Immediate Child Nodes). ■ Y axis: Current Period Actual Charges and Current Period Budget.
Standard Features	■ Printer-friendly view ■ Download CSV or XML
Configuration Points	Report Threshold Value for Batch Mode. Determines the number of result set lines above which a report must process in batch mode instead of as an online download. You can set values for each type of download file: ■ **CSV**. The maximum number of output lines. ■ **XML**. A percentage of the CSV threshold value (Default is 20%). For example, if the CSV report threshold is set to 3,000 result set lines, then an XML threshold value set at 20% must process in batch mode when there are 600 or more result set lines in the CSV file.

Main Path for Using Group Budget Report

The following path describes the Group Budget Report use case:

1. The user selects the Budget report from the report list.
2. Oracle Self-Service E-Billing determines query parameters, using the report context or the default values, and it displays one of the following reports:
   - Tabular Report
   - Chart

Alternate Paths

Alternate paths can occur in this use case.

The User Modifies the Query Parameters

- The user changes any of the query parameters on the Report tab or his or her hierarchy position and selects Display to execute report.

  Oracle Self-Service E-Billing regenerates the report for the scope of selected reporting period and current hierarchy position.

The User Drills-Down and Selects the Link for a Group

The application recursively invokes the same report for the selected group, or if there are no more groups under the selected group, it then invokes the Service Budget Report use case for the selected group.

Service Budget Report

The user can use this use case to view budgeted amounts against actual charges incurred over a period of time. This is a sum of all charges, including taxes and rounding, if any, for all groups below the current selected hierarchy position. Table 67 lists and describes the use case functions.

Table 67. Service Budget Report

Function	Description
Name	Service Budget Report
Primary Users	Manager and administrator only
Business Rule	If there are more than 20 groups in the result set, then the chart does not display.
Standard Features	■ Printer-friendly view ■ Download CSV or XML
Configuration Points	Report Threshold Value for Batch Mode. Determines the number of result set lines above which a report must process in batch mode instead of as an online download. You can set values for each type of download file: ■ **CSV**. The maximum number of output lines. ■ **XML**. A percentage of the CSV threshold value (Default is 20%). For example, if the CSV report threshold is set to 3,000 result set lines, then an XML threshold value set at 20% must process in batch mode when there are 600 or more result set lines in the CSV file.
Triggers	■ Cost Management ■ Budget Report ■ Available in both Billing and Business Hierarchy contexts.
Chart	Chart displays the Contract period budget for each Contract: ■ X Axis: Contract Number. ■ Y axis: Current Period Actual Charges and Current Period Budget.

Main Path for Using Service Budget Report

The following path describes the Service Budget Report use case:

1. The user selects the Cost Management tab.

2 Oracle Self-Service E-Billing displays the Budget Reports, Budget Management, Cost Reallocation and Re-Bill subtabs.

3 The user selects the Budget Reports tab.

4 The user selects Service Budget Report.

5 Oracle Self-Service E-Billing determines query parameters, using the report context or the default values, and it displays one of the following reports:

   - Tabular Report
   - Chart

Alternate Paths

Alternate paths can occur in this use case.

The User Modifies the Query Parameters

- The user changes any of the query parameters on the Report tab or his or her hierarchy position and selects Display to execute report

  Oracle Self-Service E-Billing regenerates the report for the scope of selected reporting period and current hierarchy position.

The User Drills-Down and Selects the Link for a Group

Oracle Self-Service E-Billing recursively invokes the same report for the selected group, or if there are no more groups under the selected group, invokes the Subscription Call Details use case for the selected subscriber.

Exceptions

None.

Budget Management

The user defines the allocated budget, at a subscriber level, for each contract (mobile phone). These subscriber level budget amounts then roll up to the groups to define the group level budget.

These settings affect budget reports only. The budget grid is displayed for an additional twelve months from the current period that has billing data.

Table 68 lists and describes the Budget Management use case functions.

Table 68. Budget Management

Function	Description
Name	Budget Management
Primary Users	Manager and administrator only

Table 68. Budget Management

Function	Description
Trigger	■ Cost Management tab ■ Budget Management subtab
Report Content	User Selection: Budget Year list Yearly Budget Details, Displayed Fields: ■ Service Number ■ Yearly Budget Amount Footer: ■ Sub-total of Budget for the group ■ Drill-down: Select service number from list ■ User Selection: Budget Year list Budget Details, Displayed Fields: ■ Period Name (Month and Year). ■ Budget Amount. Footer: Sub-total of Budget for the group
Business Rules	■ Past budget cells can also be viewed by selecting the drop down Budget Year. ■ The Budget Management Report is only visible and editable by the administrator Manager. The administrator manager can enter future budgets for up to one year. ■ The budget reports can be viewed by other user types.
Standard Features	■ Printer-friendly view ■ Download CSV or XML
Configuration Points	Report Threshold Value for Batch Mode. Determines the number of result set lines above which a report must process in batch mode instead of as an online download. You can set values for each type of download file: ■ **CSV**. The maximum number of output lines. ■ **XML**. A percentage of the CSV threshold value (Default is 20%). For example, if the CSV report threshold is set to 3,000 result set lines, then an XML threshold value set at 20% must process in batch mode when there are 600 or more result set lines in the CSV file.

Main Path for Using Budget Management

The following path describes the Budget Management use case:

1. The user selects Budget Management Subtab.
2. The user chooses to change the budget year from the (default is the current year).
3. Oracle Self-Service E-Billing will display the appropriate budget for that year listing each service number.
4. The user might drill-down into each service number to set monthly budget amounts.
5. The user might enter a budget amount for each month.
6. The user clicks Submit.
7. Oracle Self-Service E-Billing will adjust the budget for that particular service month.

Alternate Paths

None

Exceptions

The following error can occur in the Budget Management use case:

The User Encounters an Application Error

Oracle Self-Service E-Billing invokes the error message use case. If the account has one service number associated with it, then the following message appears instead: *There is no data available for this report.*

Cost Reallocation Setting

The user can use this use case to define the reallocation setting for account level charges. This use case enables account level charges to be distributed among the individual subscribers. The reallocated charges are available on any report where non-usage charges are displayed.

The reports generated have an option for the user to Display or Not Display the cost allocation changes. These settings affect the following reports:

- Business Report: Group Summary
- Business Report: Group Spending
- Business Report: Group Spending Trend
- Business Report: Service Spending Trend
- Billing Report: Account Billing Overview

Table 69 lists and describes the use case functions.

Table 69. Cost Reallocation Setting

Function	Description
Name	Cost Reallocation Setting
Primary Users	This is an administrator function has the ability to set the Allocation Amounts. The manager and subscribers can only view reports with the new charges if there have been any allocations.
Chart	Not applicable
Business Rules	All of the account level charges (total on Statement Account Summary) are equally reallocated to the service agreements in that account. The allocated charges are displayed in a separate column in the reports.
Configuration Points	None
Trigger	■ Cost Management tab ■ Cost Reallocation subtab

Main Path for Using Cost Reallocation Setting

The following path describes the Cost Reallocation Setting use case:

1. User Selects Cost Reallocation subtab.
2. The user might change the cost reallocation by selecting the appropriate radio buttons.
3. The user clicks Submit to save the changes.
4. Oracle Self-Service E-Billing determines query parameters, using the report context or the default values, and it displays the report with the appropriate subscription charges for each account.
5. The user might click display to show these cost allocation changes in all the reports. This option is only available for the administrator manager. The subscriber user only sees the reports with the new charges already shown.

Alternate Paths for Using Cost Reallocation Setting

Alternate paths can occur in this use case.

The User Modifies the Query Parameters

1. The user changes any of the query parameters on the Billing tab or his or her business structure context position and selects Display to run the report.
2. Oracle Self-Service E-Billing regenerates the report for the scope of selected reporting period and business structure context position.

Exceptions for Using Cost Reallocation Setting

An exception can occur in this use case.

The User Encounters an Application Error

Application invokes the error message use case.

10 Using Hierarchies

This chapter covers using and managing a hierarchy, where business administrators can create groups and assign users to groups, nodes, or service agreements within the billing hierarchy and business structure. It includes the following topics:

Managing a Hierarchy

This topic describes the user interface for managing a hierarchy and the behavior of associated actions. Table 70 lists and describes the use case functions.

Table 70. Managing a Hierarchy

Function	Description
Name	Managing a Hierarchy
Users	Business administrator user and business manager user
Trigger	■ My Account tab: Hierarchy tab ■ Manage subtab

Table 70. Managing a Hierarchy

Function	Description

Form Elements	Top Pane: Hierarchy Context and Search Criteria
	
	(If there is no user-specified default hierarchy type and hierarchy name, then Oracle Self-Service E-Billing uses the first billing hierarchy in the hit list as the default.)
	
	Form elements include:
	
	■ Hierarchy Type (Required. Default: Current Context or user's Default Hierarchy for start of session. If no default is specified then the list is populated with Billing.)
	Options:
	  ■ Billing (Default)
	  ■ Organization (Replace business with organization to make it visually different from billing to reduce confusion.)
	
	■ Hierarchy Name (Required. Default: Current context or user's default hierarchy for start of session. If no default is specified then the list is populated with Select.)
	List is populated with hierarchy names stored in Oracle Self-Service E-Billing for the current hierarchy type.
	
	■ Period (Required: Default: Current context default: Current month):
	  ■ List Options: (monthly, up to 12 periods, configurable for more or fewer periods).
	  ■ The text string 'Unpublished' is displayed in the period list for unpublished hierarchies.
	
	■ Element: (Optional: Default: Select). Types of elements that can be assigned to the hierarchy.
	List Options:
	  ■ When Billing Hierarchy Type is selected:
	    ❑ Company
	    ❑ Accounts
	    ❑ Service Agreements
	    ❑ Users
	  ■ When Organization Type is selected:
	    ❑ Groups
	    ❑ Service Agreements
	    ❑ Users

Table 70. Managing a Hierarchy

Function	Description
Form Elements	❑ Groups ❑ Accounts ❑ Users ■ Status: (Optional: Default: Select – Required if element type is specified). Status of elements that can be assigned to the hierarchy. List Options: ■ When Company or Groups Element is selected: Assigned only. ■ When Users Element is selected: Assigned, Unassigned, Authorized, and Unauthorized. ■ When Accounts or Services Elements are selected: Assigned, Unassigned. ■ Attribute: (Optional. Default: Select). Selections in this list repopulate dependent upon what attributes are available for Element chosen. List Option: ■ When Element is specified, the list of Attributes is updated to display all attributes both standard and custom to be used in filtering the hierarchy search values ■ Keyword: (Optional. Default: Blank). Freeform text field that enable further filtering of search results. The list is queried with a default exact match search. Wildcard might be used to create other searches: ■ **Exact match.** String (no wildcards) ■ **Starts with.** String* (wildcard at the end) ■ **Ends with.** *String (wildcard at the beginning) ■ **Contains.** *string* (wildcard at both the beginning and end) ■ Search Radio buttons. (Default: From Current Location). Specifies the scope of the search, entire hierarchy or from the current position and below. Options: ■ From Current Location (Default) ■ Entire Hierarchy ■ Instructional text: Please select hierarchy criteria.

Table 70. Managing a Hierarchy

Function	Description
Form Elements	Bottom Left Pane ■ Hierarchy Tree View tab: 　■ Set Position Action. The set position action allows the current context whether it is the root node or some lower position to be set for use in other parts of the application such as payment or analytics. 　■ Hierarchy displayed matches the hierarchy context including hierarchy type, hierarchy name, and period. 　■ The Hierarchy is displayed with the root node and the elements one level below. 　　❏ If the number of nodes in the current group is more than a threshold amount, then the result set is paged allowing the user to navigate to the next group or previous group of nodes. 　　❏ If the node is a grouping node such as Company, Account, Cost Center, or Group and the object has at least one child, then an expand option icon is displayed (+). 　　❏ If the object has been expanded, then the collapse icon is displayed (-) 　　❏ If the object does not contain any children, then no expand or collapse icon is shown.

Table 70. Managing a Hierarchy

Function	Description
Form Elements	■ Preferences tab: ■ About: ❏ Create Date ❏ Created By ❏ Modified Date. This is the date last modified. ❏ Modified By. This is the name of the user that made the last modification. ■ Set Default. The user can set his or her default hierarchy for one of the following areas: ❏ **Billing.** Hierarchy type and name. This is the default value. ❏ **Payment.** Hierarchy type and name. ❏ **Reporting.** Hierarchy type and name ■ Set Attributes. Specify the hierarchy attribute display and sort order: ❏ A checkbox for the display or hide attribute. The default is the Display Name). ❏ A list for up to three attributes. Only Display Name is selected in the first drop-down. ❏ A radio button for ascending or descending sort order. The default is ascending. ■ Hierarchy settings: ❏ Number of items in a group that triggers paging. The default is 50. ❏ Number of items in a page. The default is 10.

Table 70. Managing a Hierarchy

Function	Description

Form Elements	Bottom Right Pane: Details Subtab
	(All fields are prepopulated with previously stored information.)
	■ List of Attributes and values that correspond to the selected link target object in the hierarchy tree view. The attributes contain both default and custom fields and have the following features:
	  ■ The Attribute Labels included in the list contain both standard and custom attributes.
	  ■ If the labels for the attributes are fixed, then the default attribute label will be Custom 1, Custom 2, and so on.
	  ■ If the labels are customizable, then the customer specified label will be displayed in place of the default labels.
	■ Attribute values might be displayed as (The editing method is configurable on an individual link target object and attribute level):
	  ■ **Text.** The value is fixed and might not be changed by the user (Default).
	  ■ **Text entry box**. The value might be changed by the user by erasing and entering a new value or editing the current value. The Submit action writes the changes to the database.
	  ■ **List.** The value might only contain predefined values that are displayed as a list.

Table 70. Managing a Hierarchy

Function	Description

Form Elements	Bottom Right Pane: Elements Subtab
	■ Results header (start to end-of-total) 1 – 50 of 1000:
	  ■ The number of displayed results of the total of all results that match the search criteria.
	  ■ When changing the page the results update (51 – 100 of 1000).
	  ■ If the search results in more than a threshold number of results, then the user is notified that there are only first 1000 records that match the criteria and prompted to refine the search criteria to reduce the number of records in the result set. 1000 is a configurable number.
	■ Page number of total pages: Page | |< 1 of 20 >| >>|:
	  ■ First page: |
	  ■ Previous page: |<
	  ■ Next page: >|
	  ■ Last page: >>|
	■ Check Box (header row):
	  ■ Selects all records on the result set, not just the current page.
	  ■ Uncheck deselects all records in the current result set.
	■ Check Box (record row).
	  ■ Selects and individual record, which is persisted when paging.
	  ■ Uncheck deselects the individual row
	■ Row record displays:
	  ■ Element display name.
	  ■ Location of the element in the current hierarchy.
	    ❑ Location is the display name of the parent node
	    ❑ Location might be displayed as root if the current node is the root node (therefore it does not have a parent)
	    ❑ Location might be unassigned if it is not current part of the current hierarchy
	    ❑ Location might be a virtual node display name
	  ■ Link to Search page for more information.

Table 70. Managing a Hierarchy

Function	Description

Form Elements	Bottom Right Pane, Move Subtab: Displays an identical tree view compared with the left pane except the nodes have a checkbox next to each element.
	■ Checkbox (group or cost center node).
	  ■ Selects the current node and all the child nodes below it.
	  ■ Uncheck deselects the current node and all the child nodes below it.
	■ Checkbox (child branch).
	  ■ Selects the individual child node.
	  ■ Uncheck deselects the individual child node.
	Bottom Right Pane, Create Subtab (New):
	■ Displays a list to select the object to be created.
	■ The group or folder only exists in the current hierarchy.
	NOTE: Since group is the only object in the preconfigured application the list is suppressed. The Billing and Payment application can be customized to enable any number of objects that might be interactively created such as cost centers.
	■ When an object type has been selected, the pane below lists the attributes and the entry widgets (group).
	  ■ Display name
	  ■ Description
	  ■ Attribute 1 through attribute 5

Report Content	Results Fields Details Subtab: ■ Name (Display name of element type) ■ Attributes of the current element (Default: the root node of the current hierarchy)
Note	A cost center, location, and region are optional link-target types similar to the default group element.

Table 70. Managing a Hierarchy

<table>
<tr><th>Function</th><th>Description</th></tr>
<tr><td>Business Rules</td><td>General:
When the user selects the Manage tab, the current hierarchy context is displayed at the top with the Tree View and Details panes blank. The user must select submit before Oracle Self-Service E-Billing retrieves the data.
The current position including the hierarchy type, hierarchy name, period, and position are not carried throughout the session The user must select the Set Position action to store the hierarchy context for other parts of the application. The set position is reset to the defaults each time the hierarchy context is changed.
Hierarchy Access Control: Users can only view hierarchies to which they have been assigned and positions at or below the positions to which they have been assigned. Users cannot view hierarchy nodes to which they have not been granted view access privileges.
Bottom Left Pane, Tree View of Hierarchy:
If the hierarchy is modified, then the fields Last Modified and Modified By are updated.
If a position is selected, then the position is highlighted and set to the current hierarchy focus for actions.
If the expand or collapse icon is selected, then the position is highlighted and set to the current hierarchy focus and the group expands or collapses opposite action to the status when selected.
If a node is empty, then there will be no expand or collapse arrow next to the node.
Bottom Right Pane, Details, Element, Move, Create Subtabs:
If the user selects the checkbox in the row of the column headers of the search results, then all items of the search results become selected.
If the user selects the checkbox next to a node in the Move subtab, then all elements below it are selected.
If Element is unassigned, then it can be added to the hierarchy.
If Element is assigned, then it can be removed from the hierarchy.
If Element is a Group type (created using the Create function in Hierarchy), then the Delete action is available. For all other elements, the Remove action is available because billing elements might not be deleted from Oracle Self-Service E-Billing. Instead, billing elements can only be removed from the current organizational hierarchy.
If the text field exists or a list is displayed, then the attribute is editable. Otherwise, the field is fixed and can only be updated by a billing or attribute data file. The results field for the search criteria specified is updated according to the action performed.</td></tr>
</table>

Main Path for Managing a Hierarchy

The following path describes the Managing a Hierarchy use case:

1. The user selects Manage subtab.
2. Oracle Self-Service E-Billing returns a page displaying the following:
   - Top Pane: The current hierarchy context or default context.
   - Bottom Left Pane: The blank tree view.
   - Bottom Right Pane: The blank details tab.
3. The user is prompted to submit the hierarchy context to populate tree view and details.

Alternate Paths for Managing a Hierarchy

Alternate paths can occur in this use case.

The User Changes the Hierarchy Type in the Drop-Down

1. The user changes the current Hierarchy Type selection.
2. Oracle Self-Service E-Billing prompts the user to select a name for that type, makes all other context and search boxes unselectable, makes the lower left Tree View and lower right Detail panes blank, and disables the Submit button.
3. The user must complete the context name and period.
4. Reset restores the previous context and the user clicks Submit.

The User Changes the Hierarchy Name in the Drop-Down

1. The user changes the current Hierarchy Name selection.
2. If the list of names for the type is less than or equal to 50, then Oracle Self-Service E-Billing displays the selection in a drop-down.
3. If the list of names for the type is greater than 50, then Oracle Self-Service E-Billing opens a selection page listing the name and some attributes (created by, status (published or unpublished) with a radio button to select a hierarchy name.
4. Oracle Self-Service E-Billing prompts the user to select a period for that hierarchy, makes all other context and search boxes unselectable, makes the lower left Tree View and lower right panes blank, and disables the Submit button.
5. The user must complete the context (Period) before selecting submit to display the results.
6. Reset restores the previous context and enables the Submit button.

The User Changes the Period in the Drop-Down

1. The user changes the current Period selection.

2 Oracle Self-Service E-Billing enables the Element selection list and makes all other search boxes unselectable, and makes the lower left Tree View and lower right panes blank and Submit is enabled.

3 The user selects submit to display the results (with or without selecting an Element).

4 Reset restores the previous context, which enables the Submit button. The user submits the new hierarchy context and resets any previous set position context values to the root of the new hierarchy context.

5 Oracle Self-Service E-Billing updates the lower left Tree view and displays the Details for the default node.

The User Changes an Element from the Drop-Down

1 The user changes the Element type from the drop-down.

2 Oracle Self-Service E-Billing clears the values in the status, attribute, and keyword search, makes them unselectable, and makes the lower right Element pane blank – lower left Tree View pane is unchanged.

3 The user selects an element from the drop-down.

4 Oracle Self-Service E-Billing enables the status drop-down.

5 The user must select both an element and status before submitting to display the element results. Reset restores the previous context and enables the Submit button.

The User Changes a Status from the Drop-Down

1 The user changes the status from the list, which come from the status values for the current Element selection.

2 Oracle Self-Service E-Billing makes the lower right Elements pane blank – lower left Tree View pane is unchanged.

3 The user selects a status from the list and Oracle Self-Service E-Billing enables the Attribute list and the Submit button.

4 The user selects submit to display the results. Reset restores the previous context and enables the Submit button.

5 Oracle Self-Service E-Billing displays the results in the Elements tab list.

The User Changes the Attribute Name from the Drop-Down

1 The user changes the Attribute from the list, which come from the list available for the current Element selection.

2 Oracle Self-Service E-Billing clears the key word field and makes the lower right Elements pane blank – lower left Tree View pane is unchanged.

3 The user selects Submit to display the results.

4 Oracle Self-Service E-Billing displays the results in the Elements tab list.

The User Enters or Edits a Key Word in the Text Box

1. The user enters or edits the key word in the text box.
2. The user selects Submit to display the results.
3. Oracle Self-Service E-Billing displays the results in the Elements tab list.

The User Changes the Entire Hierarchy Search or Current Position

1. Default setting is Element search from the current position in the hierarchy and below.
2. The user might specify an entire hierarchy to execute Element searches from either the root node of the hierarchy or the highest node in the hierarchy the user has access to (including virtual nodes).

The User Selects Set Position

1. The current hierarchy context is stored for use in other areas of the E-Billing application such as statement, payment, or reporting.
2. The set position is reset when a user either changes the hierarchy context or selects set position again within the same hierarchy.

   Only one set position is stored for a user session.

The User Selects the Display Name Link in the Elements Subtab

Oracle Self-Service E-Billing returns the user to the Details subtab displaying attributes and values for the selected link target or user.

The User Selects Link of a Position in the Elements Subtab

Oracle Self-Service E-Billing highlights the position of the selected item in the Tree View of the hierarchy and sets the node as the current hierarchy focus. If the position is Unassigned and the Display Unassigned in Hierarchy checkbox is not checked, then the Unassigned position is not linkable.

The User Expands and Collapses the Hierarchy Branch by Selecting on the Arrow in the Graphical View of the Current Hierarchy

Oracle Self-Service E-Billing invokes the Collapse and Expand Hierarchy use case.

The User Pages the Hierarchy Tree View by Selecting the Next or Previous Page Icon

Oracle Self-Service E-Billing displays the requested page.

The User Selects the Create Subtab

Oracle Self-Service E-Billing invokes the Create Element use case.

The User Selects the Details Subtab

Oracle Self-Service E-Billing returns the user to the Details subtab displaying attributes for the link target or user that is the current hierarchy focus in the Tree view

The User Selects the Delete or Remove Action in the Details or Element Subtabs

1. Oracle Self-Service E-Billing invokes Remove Element use case.
2. Alternate Paths: The user modifies attributes in the Details subtab:
3. Oracle Self-Service E-Billing saves changes when the user clicks Submit.

Oracle Self-Service E-Billing Invokes the Modify Element Attributes Use Case and the User Selects the Add Action in the Element Subtab

Oracle Self-Service E-Billing invokes the Add Element use case.

The User Selects Column Header Links in the Element Subtab

Oracle Self-Service E-Billing invokes the Sorting use case.

The User Selects the Move Subtab

Oracle Self-Service E-Billing invokes Move use case.

The User Selects the Reset Action

Oracle Self-Service E-Billing clears entries or selection and restores the previous values or context.

Exceptions

Exceptions can occur with this use case.

The User Encounters a Validation Error

Oracle Self-Service E-Billing invokes the Validation error message use case.

The User Encounters a Server System Error

Oracle Self-Service E-Billing invokes the error message use case.

Creating Hierarchy Elements

A user can use this use case to create hierarchy elements. Table 71 lists and describes the use case functions.

Table 71. Creating Hierarchy Elements

Function	Description
Name	Creating Hierarchy Elements
Users	Business administrator user, and business manager user.
Trigger	■ Manage tab, Create subtab ■ Hierarchy type context either organization or account (tab disabled if context is billing hierarchy)
Form Elements	■ Element Type (Default is Group, others might be configured and presented in a list for the type of hierarchy. ■ Name (Required) ■ Group ID (Required) ID test, suggest action button ■ Description (Optional) ■ Attributes 1 through 5 (Optional)
Business Rules	None
Rules	A Cost Center, Location, and Region are optional link-target types similar to the default Group element. Only Group will be supported out-of-the-box.

Main Path for Creating Hierarchy Elements

The following path describes the Creating Hierarchy Elements use case:

1. The user selects the Create tab.
2. Oracle Self-Service E-Billing page displaying:
   - Top Pane: Hierarchy Context.
   - Bottom Left Pane: Tree view of current hierarchy with the current focus node highlighted for where the created object will be placed in the hierarchy.
   - Bottom Right Pane: Create subtab element attribute entry form.
3. The user inputs data to create the group and clicks Submit. The group ID has to be unique.
4. Oracle Self-Service E-Billing validation passes.
5. Oracle Self-Service E-Billing redisplays the page as follows:
   - Top Pane: Hierarchy context.
   - Bottom Left Pane: Tree view of the current hierarchy with the new element created as a node under the hierarchy. Hierarchy node highlighted remains the same as before submitting.

- Bottom Right Pane: Create subtab with a blank form ready to create another element.

Alternate Paths for Creating Hierarchy Elements

Alternate paths can occur in this use case.

The User Selects the Reset Action

Oracle Self-Service E-Billing clears the current form entry values.

Exceptions for Creating Hierarchy Elements

Exceptions can occur in this use case.

The User Encounters a Validation Error

Oracle Self-Service E-Billing invokes the validation error message use case.

The User Encounters a Server System Error

Oracle Self-Service E-Billing invokes the error message use case.

The User Selects Cancel Action

Oracle Self-Service E-Billing invokes Cancel use case.

Adding Hierarchy Elements

A user can use this use case to add users, accounts, and services. Table 72 lists and describes the use case functions.

Table 72. Adding Hierarchy Elements

Function	Description
Name	Adding Hierarchy Elements
Users	Business administrator user and manager user
Trigger	Manage tab: Element subtab

Table 72. Adding Hierarchy Elements

Function	Description
Report Content	Results For Element Subtab. ■ Name (Display name of element type). ■ Position (The name of the hierarchy node one level above).
Business Rules	■ The Add action assigns elements into the current version of the hierarchy specified by the Hierarchy Period only. ■ The user can only add users and service agreements when the current context is organization hierarchy type. ■ The user can only add a user and account when the current context is Account Hierarchy Type. ■ Accounts and Service agreements can only be added to the same hierarchy once. ■ Users can be added to multiple locations within the same hierarchy and can only be added to the same node once. A user cannot be added to a node that he or she already has access to above the current node. If the user is added to a node higher than a position that he or she already has access to, then the lower assignment is removed. ■ Element Display Name links to Details subtab for the view. ■ Element Position in hierarchy link highlights the position in the graphical view of the hierarchy and sets the current focus. ■ When elements are assigned to the hierarchy, the fields Last Modified and Modified By are updated. ■ The only option when Company, Groups element is selected in the Hierarchy Search Criteria is Assigned. Companies and groups are never unassigned. Accounts and service agreements are never unassigned in a billing hierarchy. ■ If user selects the radio button for Entire Hierarchy, then the scope of the search is all the nodes in the hierarchy. ■ If user selects the radio button for From Current Position, then the scope of the search is relative to and limited by the nodes below the current position. This is the default behavior.

Main Path for Adding Hierarchy Elements

The following path describes the Adding Hierarchy Elements use case:

1. The user navigates to the position in the hierarchy where the desired object is to be added to specify the focus for the action.
2. The user specifies a type of Element.
3. The user selects Unassigned status in the Hierarchy Search Criteria.

4 The user might also specify Attribute and Key Word to narrow results returned.

5 The user clicks Submit.

6 Oracle Self-Service E-Billing returns a list of Elements that are not assigned to any node within the current hierarchy in the Element subtab displaying the Name and Position in hierarchy.

7 The user selects the checkbox or checkboxes next to desired item or items to be added to the hierarchy.

8 The user selects Add action.

9 Oracle Self-Service E-Billing adds the selected element to the hierarchy below the current focus.

10 Oracle Self-Service E-Billing redisplays the page showing the following:

- Top Pane: Hierarchy context.
- Bottom Left Pane: Tree View of the current hierarchy with the new elements added to the hierarchy.
- Bottom Right Pane: Updated list of elements with the Elements added to the hierarchy removed from the list in the Element subtab and Number of Results field updated.

Alternate Paths for Adding Hierarchy Elements

None

Exceptions for Adding Hierarchy Elements

Exceptions can occur in the Add Element use case.

The Number of Results Exceeds a Threshold Amount for the Number of Rows in the Elements Window (Default is 1000)

Oracle Self-Service E-Billing displays the following error message: *Too many results – refine the search criteria and select submit to filter the list.*

The User Encounters a Validation Error

Oracle Self-Service E-Billing invokes the validation error message use case.

The User Encounters a Server System Error

Oracle Self-Service E-Billing invokes the error message use case.

Removing Hierarchy Elements

A user can use this use case to remove users, accounts, and services or to delete groups from a hierarchy. Table 73 lists and describes the use case functions.

Table 73. Removing Hierarchy Elements

Function	Description
Name	Removing Hierarchy Elements
Users	Business administrator user and manager user
Triggers	■ Manage tab: Element subtab ■ Manage tab: Details subtab
Report Content	Results Fields For Element Groups Element Subtab (Organization and Account Hierarchy Only): ■ Name (Display name of element type Groups) ■ Position (The name of the hierarchy node one level above) Results Fields For Element Accounts Element Subtab (Account Hierarchy Only): ■ Account Number (Display name of element type Accounts) ■ Position (The name of the hierarchy node one level above) Results Fields For Element Service Agreement Element Subtab (Organization Hierarchy Only): ■ Number (Display name of element type Services). ■ Position (The name of the hierarchy node one level above). Results Fields For Element Users in Element Subtab (All Hierarchy types): ■ Name (Display name of element type User). ■ Position (The name of the hierarchy node one level above).

Table 73. Removing Hierarchy Elements

Function	Description
Exception Paths	■ The user encounters a validation error. Oracle Self-Service E-Billing invokes the validation error message use case. ■ The user encounters a server system error. Oracle Self-Service E-Billing invokes the error message use case.
Business Rules	■ The Remove action and the Delete action apply to elements in the current version of the hierarchy specified by the Hierarchy Period only. ■ Users assigned to removed groups are unassigned from group and will still appear elsewhere in the hierarchy. ■ Accounts that are unassigned from a removed group are moved to unassigned status but maintain any user settings. ■ Service Agreements that are unassigned from a removed group are moved to unassigned status but maintain any user settings. ■ Element Display Name links to Details subtab for the view. Position in hierarchy highlights the position in the graphical view of the hierarchy. ■ When elements are unassigned from the hierarchy, the fields Last Modified and Modified By are updated. ■ If user selects the checkbox in the row of the column headers of the search results, then all items of the search results become selected. ■ Results field for the search criteria specified is updated according to action performed. ■ The only option when Groups element is selected in the Hierarchy Search Criteria is Assigned. Groups are never unassigned. ■ If user selects the radio button for Entire Hierarchy, then the scope of the search is all the nodes in the hierarchy. ■ If user selects the radio button for From Current Position, then the scope of the search is relative to and limited by the nodes below the current position.

Main Path for Removing Hierarchy Elements

The following path describes the Removing Hierarchy Elements use case:

1. The user specifies a type of Element and Assigned status in the Hierarchy Search Criteria and clicks Submit.
2. Oracle Self-Service E-Billing returns Element subtab displaying:
   - Top Pane: Hierarchy Search Criteria form with current search criteria context.
   - Bottom Left Pane: Tree View of the current hierarchy and position.

- Bottom Right Pane: the Display Name and Position in hierarchy for the specified Element type.

3 The user selects the checkboxes next to the items to be removed from the hierarchy and selects Remove action.

4 Oracle Self-Service E-Billing displays the following confirmation message on the right pane:

   For all element types except Group: *Performing this operation will remove the item(s) from this location in the hierarchy. The item(s) will become unassigned. Do you want to continue?*

   For Group element: *Performing this operation will permanently delete the group(s) and cannot be reversed. Items contained within the group will become unassigned. Do you want to continue?*

5 The user clicks Submit.

6 Oracle Self-Service E-Billing redisplays the page displaying the following:

   - Top Pane: Hierarchy context.
   - Bottom Left Pane: Tree View of the current hierarchy with the elements removed from the hierarchy. After removal, the next element below is highlighted. If the element removed is the last one, then the highlight jumps up to the next element.
   - Bottom Right Pane: Updated list of elements with removed or deleted elements removed from the list in the Element subtab and Results field updated as elements are removed from the list.

Alternate Paths for Removing Hierarchy Elements

None

Exceptions for Removing Hierarchy Elements

Exceptions can occur in this use case.

The User Encounters a Validation Error

Oracle Self-Service E-Billing invokes the validation error message use case.

The User Encounters a Server System Error

Oracle Self-Service E-Billing invokes the error message use case.

Modifying Attributes of Hierarchy Elements

A user can use this use case to modifying element attributes. Table 74 lists and describes the use case functions.

Table 74. Modifying Attributes of Hierarchy Elements

Function	Description
Name	Modifying Attributes of Hierarchy Elements
Users	Business administrator user and manager user
Trigger	Manage tab: Details subtab
Main Path	1 The user selects Manage tab. 2 Oracle Self-Service E-Billing returns a page displaying: ■ Top Pane: Hierarchy Search context. ■ Bottom Left Pane: Tree view of current hierarchy tree opened to current position context. ■ Bottom Right Pane: Details tab containing the details for current Element highlighted. 3 The user modifies attributes of current hierarchy context in the Details tab and clicks Submit. 4 Oracle Self-Service E-Billing updates the Details with the new information entered by the user.
Business Rules	■ Not all attributes can be modified. Attributes from other sources (for example, billing system) are display only and cannot be modified.

Main Path to Modifying Attributes of Hierarchy Elements

The following path describes the Modifying Attributes use case:

1. The user selects Manage tab.
2. Oracle Self-Service E-Billing returns a page displaying:
   - Top Pane: Hierarchy Search context.
   - Bottom Left Pane: Tree view of current hierarchy tree opened to current position context.
   - Bottom Right Pane: Details tab containing the details for current Element highlighted.
3. The user modifies attributes of current hierarchy context in the Details tab and clicks Submit.
4. Oracle Self-Service E-Billing updates the Details with the new information entered by the user.

Alternate Paths for Modifying Attributes of Hierarchy Elements

An alternate path can occur in this use case.

The User Selects the Reset Action

Oracle Self-Service E-Billing invokes the Reset use case.

Exceptions for Modifying Attributes of Hierarchy Elements

Exceptions can occur in this use case.

The User Encounters a Validation Error

Oracle Self-Service E-Billing invokes the validation error message use case.

The User Encounters a Server System Error

Oracle Self-Service E-Billing invokes the error message use case.

Moving Hierarchy Groups

A user can use this use case to move a group from one node to another within the same hierarchy. Table 75 lists and describes the use case functions.

Table 75. Moving Hierarchy Groups

Function	Description
Name	Moving Hierarchy Groups
Users	Business administrator user and manager user
Trigger	Manage tab, Move subtab
Business Rules	■ The Move action changes the structure of the current version of the hierarchy specified by the Hierarchy Period only. ■ If user selects the checkbox next to a group node, then all elements below it are also selected. ■ When elements are moved within the hierarchy, the fields Last Modified and Modified By are updated. ■ Move Action can only take place within an organization hierarchy. The Movie action cannot happen in a billing hierarchy.

Main Path for Moving Hierarchy Groups

1 In the Manage tab, the user navigates to the parent node of the structure where the desired elements are to be moved to (action focus).

2 The user selects Move subtab.

3. Oracle Self-Service E-Billing displays a screen showing:
   - Left pane: Tree View of the current hierarchy.
   - Right pane: Tree View of the current hierarchy with checkbox next to each node to permit specifying the nodes to be moved.
4. The user selects the checkboxes next to all the nodes to be moved to the focus node.
5. If the focus node is a group then any type of node or user might be selected in the right move pane.
6. If the focus node is not a group then only Users might be selected in the right move pane.
7. The user selects the Move action.
8. Oracle Self-Service E-Billing moves all selected nodes under the focus node in hierarchy.
9. Oracle Self-Service E-Billing redisplays page displayed a screen showing:
   - Left pane: Updated Tree View with parent mode where move was made.
   - Right pane: Updated Tree View of all the groups in the current hierarchy (views in right and left pane are the same structure).

Alternate Paths for Moving Hierarchy Groups

An alternate path can occur in this use case.

The User Selects the Reset Action

Oracle Self-Service E-Billing invokes the Reset use case

Exceptions for Moving Hierarchy Groups

Exceptions can occur in this use case.

The User Encounters a Validation Error

Oracle Self-Service E-Billing invokes the validation error message use case.

The User Encounters a Server System Error

Oracle Self-Service E-Billing invokes the error message use case.

Searching a Hierarchy

A user can use this use case to find a particular group, account, service, and attribute for any node or leaf within a hierarchy. Table 76 lists and describes the use case functions.

Table 76. Searching a Hierarchy

Function	Description
Name	Searching a Hierarchy
Users	Business administrator user and manager user
Trigger	Search tab
Report Content - Search Results Fields For Element Groups	■ Name (Display name of Group element type.) ■ Position (The name of the hierarchy node one level above.) ■ Display Name ■ Description ■ Attributes 1 through 5
Report Content - Search Results Fields For Element Accounts	The search results display the following fields for the element accounts: ■ Account No. (Display name of the Accounts element type.) ■ Position (The name of the hierarchy node one level above.) ■ Account Name ■ Attributes 1 through 5
Report Content - Search Results Fields For Element Service Agreement	The search results display the following fields for the element service agreement: ■ Service Number (Display name of element type Services). ■ Position (The name of the hierarchy node one level above.) ■ Account Number ■ Subscriber Name ■ Attributes 1 through 5

Table 76. Searching a Hierarchy

Function	Description
Report Content - Search Results Fields For Element Users	The search results display the following fields for element users: ■ Name (Display name of element type User) ■ Position (The name of the hierarchy node one level above) ■ Contact Number ■ Email Address ■ Attributes 1 through 5
Business Rules	■ Checkbox selections persist when paging. Selections are aggregated across pages. ■ If user selects the radio button for Entire Hierarchy, then the scope of the search is all the nodes in the hierarchy. ■ If user selects the radio button for From Current Position, then the scope of the search is relative to and limited by the nodes below the current position.

Main Path for Searching a Hierarchy

The following path describes the Searching a Hierarchy use case:

1. The user selects the Search tab.
2. Oracle Self-Service E-Billing displays Hierarchy Search Criteria form with current context and defaults.
3. The user changes the Element search criteria and clicks Submit.
4. Oracle Self-Service E-Billing verifies that the required fields are specified as a search parameter.
5. Oracle Self-Service E-Billing validation passes.
6. Oracle Self-Service E-Billing displays a tabular search results report with the total count for the search result set and all attributes for the selected element type.

Alternate Paths for Searching a Hierarchy

Alternate paths can occur in this use case.

When Search Results Display, the User Selects One or More Checkboxes and Selects Submit

Oracle Self-Service E-Billing returns the user to the Manage tab displaying:

- Top pane: Hierarchy context.
- Bottom Left Pane: Tree view of current hierarchy tree opened to current position context.
- Bottom Right Pane: Elements tab containing the display name and position of the selected elements only selected in the Search page.

The User Selects a Display Name Link of the Specified Element Type for the Search Criteria

Oracle Self-Service E-Billing returns the user to the Manage tab displaying:

- Top pane: Hierarchy context.
- Bottom Left Pane: Tree view of current hierarchy tree opened to where the element selected is located in the tree in the bottom left pane.
- Bottom Right Pane: Details tab containing the details for the selected element.

The User Selects the Sorting Action

Oracle Self-Service E-Billing invokes Sorting use case.

The User Selects the Paging action

Oracle Self-Service E-Billing invokes Paging use case.

Exceptions for Searching a Hierarchy

Exceptions can occur in this use case.

The User Encounters a Validation Error

Oracle Self-Service E-Billing invokes the validation error message use case.

The User Encounters a Server System Error

Oracle Self-Service E-Billing invokes the error message use case.

11 Hierarchy Administration

This chapter covers administration of hierarchies. A user can use administration hierarchy to create new business hierarchies from the user interface, import an existing XML file, copy and delete hierarchies, and publish a hierarchy to create a version set for a specified period of time. Administration hierarchy regulates the maintenance of a complete hierarchy. This chapter includes the following topics:

Creating a Hierarchy

A user can use this use case to create a non-billing hierarchy (organization or account hierarchies). Table 77 lists and describes the use case functions.

Table 77. Creating a Hierarchy

Value	Description
Name	Creating a Hierarchy
Users	Business administrator user and manager user
Trigger	Administrator tab: Create subtab
Form Elements	Create Hierarchy form: ■ Hierarchy Type (Required: Default: Current Context). ■ Drop-down: Default: Organization. ■ Hierarchy Name (Required, Default: None, Length of field limit: 20). ■ Description (Optional, Default: None, Length of field limit: 80).
Business Rules	■ Only Organizational and Account hierarchies can be created by a User. ■ Account hierarchies group together multiple Accounts into groups to facilitate payment and reporting.

Main Path for Creating Hierarchy

The following path describes the Creating Hierarchy use case:

1. The user selects the Administration tab, and then the Create subtab.
2. Oracle Self-Service E-Billing displays the Create Hierarchy form.
3. The user inputs data to create the hierarchy and clicks Submit.
4. Oracle Self-Service E-Billing checks to confirm that the entered hierarchy name does not already exist.
5. Oracle Self-Service E-Billing validation passes.
6. Oracle Self-Service E-Billing returns a message indicating the hierarchy was successfully created.

Alternate Paths

Alternate paths can occur in this use case.

Oracle Self-Service E-Billing Creates a Billing Hierarchy Automatically

A billing hierarchy is automatically created when invoice data is loaded into Oracle Self-Service E-Billing with a status of Published.

The User Clicks Reset

Oracle Self-Service E-Billing invokes the Reset use case.

The User Clicks Submit

Oracle Self-Service E-Billing displays message: *Please enter Hierarchy Name to create hierarchy.*

Exceptions

Exceptions can occur in this use case.

The User Encounters a Validation Error

Oracle Self-Service E-Billing invokes the validation error message use case.

The User or CSR Encounters a Server System Error

Oracle Self-Service E-Billing invokes the error message use case.

Copying a Hierarchy

A user can use this use case to copy an entire hierarchy to create a new hierarchy. Table 78 lists and describes the use case functions.

Table 78. Copy a Hierarchy

Value	Description
Name	Copying a Hierarchy
Users	Business administrator user and manager user
Trigger	The user selects the Administration tab, and then the Copy subtab.
Business Rules	■ Only non-billing hierarchies or groups can be copied and can only be copied into a new hierarchy. ■ A Hierarchy need not be published in order to use the Copy function.

Main Path for Copying a Hierarchy

The following path describes the Copy a Hierarchy use case:

1. The user selects the Administration tab.
2. The user selects the Copy subtab.
3. The user selects a hierarchy to be copied from the Hierarchy Drop down.
4. The user clicks Submit.
5. The user specifies new name for the hierarchy to be copied and clicks Submit.
6. Oracle Self-Service E-Billing confirms that the hierarchy name does not already exist. Oracle Self-Service E-Billing validation passes.
7. Oracle Self-Service E-Billing creates a new hierarchy with a status of Unpublished.
8. Oracle Self-Service E-Billing returns the success page. It also displays the following information:
   - Top pane: The hierarchy search criteria is prepopulated with copied hierarchy information.
   - Left pane: The tree view shows the copied hierarchy as the top node.
   - Right pane: The details tab is hard-coded with information entered by user for the copied hierarchy.

Alternate Paths for Copying a Hierarchy

Alternate paths can occur in this use case.

Oracle Self-Service E-Billing Invokes the Reset Use Case

Oracle Self-Service E-Billing displays following message: *Hierarchy Name already exists.*

Exceptions

Exceptions can occur in this use case.

The User Encounters a Validation Error

Oracle Self-Service E-Billing invokes the validation error message use case.

The User Encounters a Server System Error

Oracle Self-Service E-Billing invokes the error message use case.

Importing a Hierarchy

The purpose of this use case is to import a hierarchy. Table 79 lists and describes the use case functions.

Table 79. Importing a Hierarchy

Value	Description
Name	Importing a Hierarchy
Users	Business administrator user and manager user
Trigger	The user selects the Administration tab, and then the Import subtab.
Form Elements	Import Non-Billing Hierarchy form: ■ Select File (Required: XML file type only)
Business Rules	■ You can import non-billing hierarchies only. This includes both organization and consolidation hierarchy types. ■ Only XML file types can be imported that comply with the hierarchy load data format specification. ■ The name, type, and description of the hierarchy information must be contained with the file being imported. ■ Validation of the XML source compliance with the definition of the hierarchy type specified within the file. ■ The user who initiates the hierarchy import is automatically assigned to the root node of the hierarchy if user's role is not and administrator.

Main Path for Importing a Hierarchy

The following path describes the Importing a Hierarchy use case:

1. The user selects the Administration tab.
2. The user selects the Import subtab.
3. Oracle Self-Service E-Billing displays the Import Hierarchy form.

4 The user specifies the file to be imported, selects the periods, and then clicks Submit.

5 Oracle Self-Service E-Billing reads the hierarchy metadata including hierarchy type, hierarchy name, and description data (if available) contained in the specified file.

6 Oracle Self-Service E-Billing checks to confirm that the hierarchy name does not already exist.

Oracle Self-Service E-Billing hierarchy validation passes.

7 Oracle Self-Service E-Billing refreshes page with the graphical view of the hierarchy on the left pane and the hierarchy attributes on the right pane with the confirmation message stating Performing this operation will import the Hierarchy.

8 The user clicks Submit.

9 Oracle Self-Service E-Billing creates a new hierarchy from the imported data in an Unpublished status if no period is being selected.

10 Oracle Self-Service E-Billing indicates that it has successfully imported the hierarchy. It also displays the following information:

- Hierarchy import criteria prepopulated with information read-in or entered by the user to create the imported hierarchy with the start and end periods.
- Import status; the new name of the imported hierarchy along with the folder information and service agreements.

11 The user confirms the imported hierarchy at the Manage tab.

Exceptions for Copying a Hierarchy

Exceptions can occur in this use case.

The User Encounters a Validation Error

Oracle Self-Service E-Billing invokes the validation error message use case.

The User or CSR Encounters a Server System Error

Oracle Self-Service E-Billing invokes the error message use case.

Alternate Paths for Copying a Hierarchy

Alternate paths can occur in this use case.

User Imports a Hierarchy that Already Exists in Oracle Self-Service E-Billing

Oracle Self-Service E-Billing displays a message A hierarchy of the same name already exists. Select submit to update the hierarchy.

The User Clicks Submit

Oracle Self-Service E-Billing updates and saves the hierarchy.

Oracle Self-Service E-Billing does not save the imported hierarchy.

The User Clicks Reset

Oracle Self-Service E-Billing runs the Reset use case.

The User Clicks Start Over

Publishing a Hierarchy

A use can use this use case to publish a hierarchy. Table 80 lists and describes the use case functions.

Table 80. Publishing a Hierarchy

Value	Description
Name	Publishing a Hierarchy
Users	Business administrator user and manager user
Trigger	The user selects the Administration tab, and then the Publish subtab.
Business Rules	■ Any organization hierarchy that is created has to be publishable. The user will have to ensure there is data for the period that the hierarchy is published. ■ If a hierarchy is already published, then it will not show in the drop-down. ■ The end period has to be greater than the start period. ■ A hierarchy cannot be published after it expires and can only be published once.

Main Path for Publishing a Hierarchy

The following path describes the Publish Hierarchy use case:

1. The user selects Administration tab and Publish subtab.
2. Oracle Self-Service E-Billing displays Publish Hierarchy form.
3. The user selects the hierarchy name from the list to publish and the appropriate dates, and clicks Submit.
4. Oracle Self-Service E-Billing displays a status message of Hierarchy Successfully Published.
5. The user clicks Submit.

Alternate Paths for Publishing a Hierarchy

Alternate paths can occur in this use case.

The User Selects the Reset Action

Oracle Self-Service E-Billing invokes the Reset use case.

Exceptions for Publishing a Hierarchy

Exceptions can occur in this use case.

The User Encounters a Server System Error

Oracle Self-Service E-Billing invokes the error message use case.

Downloading a Hierarchy

The purpose of this use case is so that a user can download a hierarchy. Table 81 lists and describes the use case functions.

Table 81. Downloading a Hierarchy

Value	Description
Name	Downloading a Hierarchy
Users	Business administrator user and manager user
Trigger	The user selects the Administration tab, and then the Download subtab.
Business Rules	■ Any type of hierarchy can be downloaded. ■ Download is only available in XML format.
Rules	■ Uses standard browser download function. ■ XML format supported in the current implementation. The download format is equivalent to the import format.

Main Path for Downloading a Hierarchy

The following path describes the Download Hierarchy use case:

1. The user selects the Administration tab, and then the Download subtab.
2. Oracle Self-Service E-Billing displays Download Hierarchy form.
3. The user specifies the data for the download and clicks Submit.
4. The user browser displays a dialog box with the options for download.
5. The user selects the browser Save function.
6. The user browser returns a dialog box for the Save function.
7. The user enters a name for the file and selects the Save.
8. Oracle Self-Service E-Billing displays the Download Hierarchy form defaulted to the current context.

Alternate Paths for Downloading a Hierarchy

Alternate paths can occur in this use case.

The User Selects the Reset Action

Oracle Self-Service E-Billing runs the Reset use case.

Exceptions for Downloading a Hierarchy

Exceptions can occur in this use case.

The User Encounters a Server System Error

Oracle Self-Service E-Billing invokes the error message use case.

Expiring a Hierarchy

A user can use this use case to expire (stop version replication) of a non-billing hierarchy. Table 82 lists and describes the use case functions.

Table 82. Expiring a Hierarchy

Value	Description
Name	Expiring a Hierarchy
Users	Business administrator user and manager user
Trigger Point	The user selects the Administration tab, and then the Expire subtab.
Business Rules	■ Only non-billing hierarchies can be expired. Users assigned to expired hierarchies remain assigned. ■ Managers (only if they create the hierarchy), administrators (regardless of who created the hierarchy); subscribers cannot expire hierarchies.
Rules	None

Main Path for Expiring a Hierarchy

The following path describes the Expiring a Hierarchy use case:

1. The user selects the Administration tab, and then the Expire subtab.
2. Oracle Self-Service E-Billing displays the Expire Hierarchy form.
3. The user specifies the hierarchy and the period for the hierarchy to be expired and clicks Submit. Oracle Self-Service E-Billing validation passes.
4. Oracle Self-Service E-Billing displays the following information:
   - Top pane: Hierarchy name and period of the hierarchy to be expired.
   - Left pane: Tree view of the hierarchy to be expired.

- Right pane: Details tab prepopulated with information for the hierarchy about to be expired.

5. Oracle Self-Service E-Billing displays the following confirmation message: *Performing this operation will permanently expire the hierarchy and cannot be reversed. Do you want to continue?*
6. The user clicks Expire.
7. Oracle Self-Service E-Billing expires the selected hierarchy.
8. Oracle Self-Service E-Billing returns a success page with the following message: *The Hierarchy has been successfully expired.*

Alternate Paths for Expiring a Hierarchy

Alternate paths can occur in this use case.

The User Selects the Reset Action

Oracle Self-Service E-Billing invokes the Reset use case.

Exceptions for Expiring a Hierarchy

Exceptions can occur in this use case.

The User Encounters a Validation Error

Oracle Self-Service E-Billing invokes the validation error message use case.

The User or CSR Encounters a Server System Error

Oracle Self-Service E-Billing invokes an error message use case.

Deleting a Hierarchy

A user can use this use case to delete a non-billing hierarchy. Table 83 lists and describes the use case functions.

Table 83. Deleting a Hierarchy

Value	Description
Name	Deleting a Hierarchy
Users	Business administrator user and manager user.
Trigger	The user selects the Administration tab, and then the Delete subtab.
Business Rules	Only non-billing hierarchies can be deleted.

Main Path for Deleting a Hierarchy

The following path describes the Delete Hierarchy use case:

1. The user selects the Administration tab, and then the Delete subtab.
2. Oracle Self-Service E-Billing displays Delete Hierarchy form.
3. The user specifies data for the hierarchy to be deleted and clicks Submit.
4. Oracle Self-Service E-Billing returns a dialog box with the message: *Performing this Operation will permanently delete this hierarchy. Do you want to continue?*
5. The user clicks OK.
6. Oracle Self-Service E-Billing deletes selected hierarchy and all nodes below it.
7. Oracle Self-Service E-Billing returns a success page stating: The Hierarchy has been successfully deleted.

Alternate Paths for Deleting a Hierarchy

Alternate paths can occur in this use case.

The User Selects Cancel Action

Oracle Self-Service E-Billing invokes Cancel use case.

The user selects Start Over action

Oracle Self-Service E-Billing invokes Start Over use case.

Exceptions for Deleting a Hierarchy

Exceptions can occur in this use case.

The User Encounters a Validation Error

Oracle Self-Service E-Billing invokes the validation error message use case.

The User Encounters a Server System Error

Oracle Self-Service E-Billing invokes the error message use case.

12 Versioning Hierarchies

This chapter covers versioning a hierarchy. It includes the following topics:

Versioning Billing Hierarchies

Oracle Self-Service E-Billing saves the current form of the billing hierarchy. Table 84 lists and describes the use case functions.

Table 84. Versioning Billing Hierarchies

Function	Description
Name	Versioning Billing Hierarchies
Users	Oracle Self-Service E-Billing
Business Rules	■ The effective date is based upon the provider’s reporting period. Reporting period is defaulted to one month. Service providers bill monthly and in rare cases the bills are cut on a frequency other than monthly, so the reporting period and effective dated hierarchies might be configured to match the provider’s billing frequency. ■ The effective date is 12:00 AM from the first of the month until 12:00 AM on the first of the next month.

Main Path for Versioning a Billing Hierarchy

The following path describes the Versioning a Billing Hierarchy use case:

1. Oracle Self-Service E-Billing stores the current version and effective date of all billing hierarchies on the first day of the month at 12:00 AM.
2. Oracle Self-Service E-Billing carries over the current version of all billing hierarchies to the new month.

Alternate Paths for Versioning Billing Hierarchy

Alternate paths can occur in this use case.

Versioned Hierarchy is Purged

Oracle Self-Service E-Billing invokes the Purge use case.

Exceptions for Versioning a Billing Hierarchy

Exceptions can occur in this use case.

Oracle Self-Service E-Billing Encounters an Error During Versioning

Oracle Self-Service E-Billing logs the error in the log file.

Managing a Versioned Hierarchy

A user can use this use case to manage an effective dated hierarchy and behavior of associated actions. Table 85 lists and describes the use case functions.

Table 85. Managing a Versioned Hierarchy

Function	Description
Name	Managing a Versioned Hierarchy.
Users	Business administrator user and manager user.
Trigger	My Account tab: Hierarchy subtab, Manage tab
Business Rules	Same as Manage Hierarchy use case.
Rules	Hierarchy behavior is the same as current hierarchy view except operations are performed on the current hierarchy period version only.

Main Path for Managing a Versioned Hierarchy

The following path describes the Managing a Versioned Hierarchy use case:

1. The user selects Manage tab.
2. Oracle Self-Service E-Billing returns a page displaying:
   - Top Pane: Hierarchy Search context.
   - Bottom Left Pane: Tree view of current hierarchy tree opened to current position context.
   - Bottom Right Pane: Details tab containing the details for current hierarchy context.
3. The user specifies an alternate Period from the current period from the Period list box.
4. Oracle Self-Service E-Billing determines query parameters, based upon the specified hierarchy search criteria, and redisplays page as follows:
   - Top Pane: Hierarchy Search Criteria form with context updated by specified search criteria.
   - Bottom Left Pane: Tree view of current hierarchy tree opened to current position context.

- Bottom Right Pane: Elements tab containing the fields for specified element and status with the total count for the search result set.

Alternate Path for Managing a Versioned Hierarchy

Same as Manage Hierarchy Use case.

Exceptions for Managing a Versioned Hierarchy

Exceptions can occur in this use case.

The User Encounters a Validation Error

Oracle Self-Service E-Billing invokes the validation error message use case.

The User Encounters a Server System Error

Oracle Self-Service E-Billing invokes the error message use case.

Comparing Versioned Hierarchies

A user can use this use case to compare hierarchies. Table 86 lists and describes the use case functions.

Table 86. Compare Versioned Hierarchy

Function	Description
Name	Comparing Versioned Hierarchies
Users	Business administrator user and manager user
Trigger	Compare tab
Business Rules	Compares to versions of the same hierarchy type and hierarchy name only.

Main Path for Comparing Versioned Hierarchies

The following path describes the Comparing Versioned Hierarchies use case:

1. The user selects the Compare tab.
2. Oracle Self-Service E-Billing returns a page displaying:

   Display with Hierarchy Type, Hierarchy Name and Period.
3. The user specifies a Hierarchy Name and an alternate for period 1 or for Period 2 from the current period from the Period drop down box.
4. Oracle Self-Service E-Billing determines query parameters, based upon the specified hierarchy search criteria, and redisplays page as follows:
   - Top Pane: Hierarchy Search Criteria form with context updated by specified search criteria.

- Bottom Left Pane: Tree view of current hierarchy tree opened to Period 1 context.
- Bottom Right Pane: Graphical view of current hierarchy tree opened to Period 2 context.

Alternate Paths for Comparing Versioned Hierarchies

None.

Exceptions for Comparing Versioned Hierarchies

Exceptions can occur in this use case.

The User Encounters a Validation Error

Oracle Self-Service E-Billing invokes the validation error message use case.

The User Encounters a Server System Error

Oracle Self-Service E-Billing invokes the error message use case.

13 Customer Service Representative Use Cases

This chapter covers customer service representative (CSR) use cases. It includes the following topics:

Overview of Customer Service Representative Use Cases

The customer service use cases cover the functional requirements for allowing the service provider to effectively manage business users to perform the following functions:

- Search for an organization.
- View organization administrators.
- Edit organization administrators

- Search for users.
- Impersonate a user.
- Search and modify a CSR user.
- Add a CSR user.
- Modify a personal profile.

Enrolling the Bootstrap User as the Initial CSR Administrator

This use case describes how to enroll the bootstrap user as the initial CSR administrator.

Table 87 lists and describes the use case functions.

Table 87. Enrolling the Bootstrap User as the Initial CSR Administrator

Function	Description
Name	Enrolling the bootstrap user as the initial CSR administrator.
Feature Area	User enrollment.
User	Bootstrap user.
Trigger	The bootstrap user displays the CSR Login page.
Configuration Points	The number of characters in the temporary password that Oracle Self-Service E-Billing generates.

Table 87. Enrolling the Bootstrap User as the Initial CSR Administrator

Function	Description
Business Rules	When the bootstrap user enters the user name and password created during the installation, Oracle Self-Service E-Billing requires the employee to immediately set a personal CSR user ID and password, using different values.
Rules	■ Oracle Self-Service E-Billing-generated validation codes cannot contain the following characters: a, A, e, E, 3, o, O, 0, i, I, 1, u, U, y, Y, $, @, !, * ■ The account that has been created and set to Inactive state expires within four hours, and only a CSR administrator can reset the account. ■ Oracle Self-Service E-Billing cannot reuse the validation code for 30 days after the code is initially created. ■ The bootstrap user's CSR user name and password must be preserved and can never be changed. This account can be deactivated and reactivated, however. ■ The message on the login screen after the enrollment is as follows: *A message has been sent to the email address you have supplied during the enrollment process, you'll need to review it so that you can log in to the application.*

Main Path for Enrolling the Bootstrap User as the Initial CSR Administrator

The following path describes the CSR (Administrator) Initial Enrollment use case:

1. The bootstrap user enters the user name and password created during the installation.
2. Oracle Self-Service E-Billing determines this is the correct bootstrap user and password and displays the CSR administrator's form. The bootstrap user must provide a new value for each field:
   - CSR Admin User Name - The CSR admin user name cannot be the same as the bootstrap user name.
   - CSR Administrator First Name
   - CSR Administrator Last Name
   - CSR Administrator Role. Specify the CSR, or read-only, Administrator.
   - CSR administrator user name
3. The bootstrap user clicks Submit.
4. Oracle Self-Service E-Billing validates the information on the form for the following:
   - Formatting

- Completeness

5 Oracle Self-Service E-Billing sends an email to the user email address. The email must contain an HTTPS link with a unique validation code that does the following:
    - Uses an abbreviated list of characters
    - Contains at least one uppercase character, one lowercase character, and one number

6 Oracle Self-Service E-Billing enters the validation code in the database.

7 Oracle Self-Service E-Billing sets a status flag in the database, indicating this CSR account is inactive.

8 Oracle Self-Service E-Billing displays the Login screen with a message.

Alternate Paths for Enrolling the Bootstrap User as the Initial CSR Administrator

The bootstrap user clicks Cancel and Oracle Self-Service E-Billing displays the Login page.

Exceptions for Enrolling the Bootstrap User as the Initial CSR Administrator

Exceptions can occur in this use case.

The Bootstrap User Enters the User Name Created During the Installation as the Personal CSR User ID

Oracle Self-Service E-Billing displays the following error message: *Invalid User Name was Entered.*

One of the Form Fields is Left NULL When Submitted

Oracle Self-Service E-Billing displays the populated Enrollment form with the following error message: *Please provide a value for ****.*

The Email Address Does Not Have at Least One Valid Character Preceding the at Sign (@) Preceding the Period and Following the Period

Oracle Self-Service E-Billing displays the populated Enrollment form with the following error message: *Please provide a valid email address.*

Enrolling a CSR Administrator

This use case lets the initial CSR (and other CSR users with an administrative role) create additional CSR users after the bootstrap user has enrolled as the initial CSR administrator.

Table 88 lists and describes the use case functions.

Table 88. Enrolling a CSR Administrator

Function	Description
Name	Enrolling a CSR Administrator
Feature Area	Enrollment
User	Initial CSR and CSR Administrator
Trigger	A CSR with an administrator's role clicks CSR users, and then click Create CSRs.
Preconditions	Oracle Self-Service E-Billing CSR application has been deployed and the initial CSR Administrator has been created.
Configuration Points	■ The length of the CSR user name ■ The number of characters in the temporary password that Oracle Self-Service E-Billing generates
Business Rules	When a CSR user enters the bootstrap user ID and password, Oracle Self-Service E-Billing requires the employee to immediately set a personal CSR user ID and password, using different values.
Rules	■ Oracle Self-Service E-Billing-generated validation codes cannot contain the following characters: a, A, e, E, 3, o, O, 0, i, I, 1, u, U, y, Y, $, @, !, * ■ The account that has been created and set to inactive state expires within four hours, and only a CSR administrator can reset the account. ■ Oracle Self-Service E-Billing cannot reuse the validation code for 30 days after the code is initially created.

Main Path for Enrolling a CSR Administrator

The following path describes the Enrolling a CSR Administrator use case:

1. CSR Administrator enters the following information into the form:
   - CSR user name
     - The default length is a minimum of eight characters. The minimum default length is configurable.
     - User name cannot be the same as the bootstrap user ID.
   - CSR first name
   - CSR last name
   - CSR role
     - CSR administrator
     - CSR

- CSR email address
- CSR Confirm Email

2 The CSR administrator user clicks Submit.

3 Oracle Self-Service E-Billing validates the information on the form for the following:

- Formatting
- Completeness
- CSR Email and CSR Confirm Email match

4 Oracle Self-Service E-Billing sends an email to the user email address. The email must contain an HTTPS link with a unique validation code that does the following:

- Uses an abbreviated list of characters
- Contains of at least one uppercase character, one lowercase character, and one number

5 Oracle Self-Service E-Billing enters the validation code in the database.

6 Oracle Self-Service E-Billing sets a status flag in the database indicating this account is an inactive CSR user.

- Oracle Self-Service E-Billing displays the Create CSR User page populated with the information entered, in a read-only state, and displays the following message: *A message has been sent to the email address of the CSR user you have just created.*

Alternate Paths for Enrolling a CSR Administrator

The following alternate paths can occur in this use case:

- The user clicks Cancel and Oracle Self-Service E-Billing displays to the CSR Users Page.
- The user clicks the back button on the Confirmation Page and Oracle Self-Service E-Billing displays the CSR Users Page

Exceptions for Enrolling a CSR Administrator

Exceptions can occur in this use case.

One of the Form Fields is Left NULL When Submitted

Oracle Self-Service E-Billing displays the populated Enrollment form with the following error message: *Please provide a value for ****.*

The User Name Field Does Not Meet the Form Validation

Oracle Self-Service E-Billing displays the populated Enrollment form with the following error message: *Please provide a user name that is eight characters in length.*

The Email Address Does Not Have at Least One Valid Character Preceding the at Sign (@) Preceding the Period and Following the Period

Oracle Self-Service E-Billing displays the populated Enrollment form with the following error message: *Please provide a valid email address.*

The CSR user enters the bootstrap user ID as a personal CSR user ID

Oracle Self-Service E-Billing displays the following error message: *Invalid Username was Entered.*

Setting a CSR Password and Security Question

CSR users must create a password, security question, and answer.

Table 89 lists and describes the use case functions.

Table 89. Setting a CSR Password and Security Question

Function	Description
Name	Setting a CSR Password and Security Question
Feature Area	Enrollment
User	CSR administrator
Trigger	The CSR user clicks the HTTPS request that was sent in an email notification.
Configuration Points	■ The number of characters in a password. The Payment Card Industry (PCI) Data Security Standard requires a minimum of seven characters. ■ The complexity of the password. ■ The number of questions for the security question. ■ The list of security questions.
Rules	The success message states: *Your security credentials have been accepted, please click here CSR_LOGIN to access your billing information.*

Main Path for Setting a CSR Password and Security Question

The following path describes the use case:

1 Oracle Self-Service E-Billing displays a form to the user, who must enter the following:

- CSR user name

- Password

  When a user enters a password it default is eight characters and must have at least the following:

  - One uppercase Character
  - One lowercase Character
  - One number
  - No spaces
  - Special characters are valid.
  - The password cannot be the same as the user name.
  - The password cannot be the same as the previously entered password.
  - The password cannot be the same as the initial CSR user password.
- Confirm Password - Must be the same as the password entered in the previous field.
- Select a Security Question - The list of security questions is configurable. By default, the list contains the following:
  - Best friend's name from childhood?
  - The name of the boy or girl you first kissed?
  - The place where you first met your spouse/significant other?
  - What is the make or model type of your first car?
  - What was the name of the school you attended in first grade?
- Security Answer
  - Form box size of 30 to be consistent with others
  - The default minimum length of a security question is one character, which cannot be a space. The minimum length is configurable.
  - The maximum length of the answer is 100 characters.
  - Oracle Self-Service E-Billing trims leading and trailing spaces and does not include these in the calculation of minimum and maximum lengths.
  - Spaces within the answer are valid.
  - Special characters are valid and enhance the security level of the answer.

2 End user clicks Submit.

3 Oracle Self-Service E-Billing validates the information on the form for the following:

- Formatting
- Completeness
- CSR user name and validation code within HTTPS request match in Oracle Self-Service E-Billing
- The account has not expired. The default time limit is four hours, which is configurable.

- Password requirements

4 Oracle Self-Service E-Billing sets the status flag in the database indicating this is an active CSR user.

5 Oracle Self-Service E-Billing displays a message with a link to the CSR Login Page.

Alternate Paths for Setting a CSR Password and Security Question

The user clicks Cancel and Oracle Self-Service E-Billing displays the CSR Login Page.

Exceptions for Setting a CSR Password and Security Question

Exceptions can occur with this use case.

One of the Form Fields is Left NULL When Submitted

Oracle Self-Service E-Billing displays the populated Enrollment form with the following error message: *Please provide a value for ****.*

The Password or Confirm Password Does Not Meet the Requirements

Oracle Self-Service E-Billing displays the prepopulated Enrollment form with the following error message: *Please provide a valid password and confirm password.*

The Password and Confirm Passwords are Not Exactly the Same

Oracle Self-Service E-Billing displays the prepopulated Enrollment form with the following error message: *Please provide a valid password and confirm password.*

Resetting a CSR Password

If a CSR user forgets his or her password for Oracle Self-Service E-Billing, then he or she can reset it in this use case or contact his or her CSR administrator.

Table 90 lists and describes the use case functions.

Table 90. Resetting a CSR Password

Function	Description
Name	Resetting a CSR Password
Feature Area	Enrollment
User	CSR administrator
Trigger	The CSR user clicks the HTTPS request that was sent in an email notification.

Table 90. Resetting a CSR Password

Function	Description
Preconditions	The CSR user is currently enrolled in Oracle Self-Service E-Billing and the CSR application is deployed behind the corporate firewall.
Configuration Points	■ The number of times the CSR user, security question, or security answer are incorrect. ■ The number of characters in a password. The Payment Card Industry (PCI) Data Security Standard requires a minimum of seven characters.

Main Path for Resetting a CSR Password

The following path describes this use case:

1. Oracle Self-Service E-Billing displays a form to the user where he or she needs to enter:
   - CSR User ID - Required
   - CSR Email Address - Required
   - Select a Security Question - The list of security questions is configurable. By default, the list contains the following:
     - Best friend's name from childhood?
     - The name of the boy or girl you first kissed?
     - The place where you first met your spouse/significant other?
     - What is the make or model type of your first car?
     - What was the name of the school you attended in first grade?
   - Security Answer - The user must provide the correct answer he or she supplied during the enrollment process.
     - The answer has to be an exact match.
     - The answer is case-sensitive.
2. End user clicks Submit.
3. Oracle Self-Service E-Billing validates the information on the form for the following:
   - Completeness
   - CSR User ID
   - Email Address
4. Oracle Self-Service E-Billing validates the security question and answer. After five configurable attempts by the user, the account locks and an error message appears.
5. Oracle Self-Service E-Billing displays the Reset Password form with the following values:
   - Password - The password length and contents are configurable. By default, the password length is eight characters and it must contain at least:

- One uppercase character
- One lowercase character
- One number
- No spaces
- Special characters are valid

The password cannot be the same as the user name.

The password cannot be the same as the previously entered password.

- Confirm Password - Must be the same as the password entered in the previous field.

6 The user clicks Next.

7 Oracle Self-Service E-Billing validates the form for the following:

- Formatting
- Completeness
- Password Requirements

8 Oracle Self-Service E-Billing displays the CSR Login Page with the following success message: *Please log in to the application using your new personal password you have just created.*

Alternate Paths for Resetting a CSR Password

The user clicks Cancel and Oracle Self-Service E-Billing displays the CSR Login Page.

Exceptions for Resetting a CSR Password

Exceptions can occur in this use case.

One of the Form Fields is Left NULL When Submitted

Oracle Self-Service E-Billing displays the populated Enrollment form with the following error message: *Please provide a value for ****.*

The CSR User Name, Security Question, or Security Answer Are Not in Oracle Self-Service E-Billing

Oracle Self-Service E-Billing displays the populated reset password form with the following error message: *The information you have provided does not currently match our system records, please try again, or call customer service at: xxx-xxx-xxxx*

After Five Configurable Attempts, a CSR User Does Not Enter the Correct the CSR User Name, Security Question, or Security Answer

Oracle Self-Service E-Billing displays the Login Page with the following error message: *Please contact your customer self service representative at xxx-xxx-xxxx to get your account reactivated.*

The Password or Confirm Password Does Not Meet the Requirements

Oracle Self-Service E-Billing displays the prepopulated Enrollment form with the following error message: *Please provide a valid password and confirm password.*

The Password and Confirm Passwords are Not Exactly the Same

Oracle Self-Service E-Billing displays the prepopulated Enrollment form with the following error message: *Please provide a valid password and confirm password.*

Searching for CSR Users

The goal of this use case is to identify a user. Any account information (attributes) can be used for searching (for example, ZIP Codes, Tax ID, and so on). Table 91 lists and describes the use case functions.

Table 91. Searching for CSR Users

Function	Description
Name	Searching for CSR Users
Feature Area	CSR
Brief Description	CSR enters search criteria to locate users.
Users	CSR, CSR administrator
Trigger	Successful login into CSR application (default page) or user clicks the Search for User subtab of the Search tab from any other page.
Preconditions	The CSR user must be logged in.

Table 91. Searching for CSR Users

Function	Description
Configuration, Search Screen	■ User First Name - Only characters and apostrophes, hyphens and spaces allowed. ■ User Last Name - Only characters and apostrophes, hyphens and spaces allowed. ■ User ID - Only characters and numbers allowed. ■ Service Agreement - Only Numbers, spaces, and dashes. ■ Account Number - Only Numbers spaces, and dashes. ■ Email Address - You can enter an the at sign (@) in the search string. ■ Company - For business searches.
Rules	■ Oracle Self-Service E-Billing displays users (userid) associated at either account level or service agreement level in the search results page. ■ Paging is implemented for organization with large hierarchies and is configurable. The user can configure the number of rows returned for each page. ■ Result set columns are configurable for each implementation.

Main Path for Searching for CSR Users

The following path describes the Searching for Users use case:

1. A customer service representative selects search criteria from the Search Accounts screen.
2. Oracle Self-Service E-Billing displays search screen with the following attributes:
   - User First Name
   - User Last Name
   - User ID
   - Service Agreement
   - Account Number
   - Email Address
   - Company Name (for Business searches)
   - Include Inactive Users: Check this box to include Inactive status users as well as Active status users.
3. The user enters the search criteria and submits the form. The user can perform partial wildcard search.

4 Oracle Self-Service E-Billing displays the following search results for all users matching the search criteria**:**

   - User ID
   - Name
   - Email address (useful for two users with same name)
   - Action: Edit or Delete and Impersonate

Alternate Paths for Searching for CSR Users

Alternate paths can occur in this use case.

The Action Selected Is on the Wrong User from the Result List

If action is taken on the wrong user from the search result, then the CSR must be able to return to the original search result list to select another user from which to take action.

The User Clicks the Impersonate Link in Search Results

Oracle Self-Service E-Billing invokes the Impersonate User use case.

The CSR Selects the Edit Action on Another User

The user selects edit action, Oracle Self-Service E-Billing displays user edit profile screen with the following attributes:

- First Name
- Last Name
- User Name
- Password
- Confirm Password
- Email Address
   - Role
   - Delete

Impersonating a User

A customer service representative can use this use case to impersonate a user to view specific account information. Table 92 lists and describes the use case functions.

Table 92. Impersonating a User

Function	Description
Name	Impersonating a User.
Feature Area	CSR
Users	Customer service representative, CSR administrator
Trigger	The user clicks the Impersonate link in the search results.
Preconditions	The CSR can use either search result to locate users and use the Impersonate link to impersonate the user.
Rules	■ A CSR inherits the same rights and privileges as the user he or she is impersonating. ■ It is recommended to end impersonation sessions by logging out of the impersonation session.

Main Path to Search for User

The following path describes this use case:

1. The CSR selects a user and clicks the Impersonate link.
2. Oracle Self-Service E-Billing opens an impersonation session in a new browser for the selected user, while maintaining the existing CSR navigation for the CSR user.
3. The CSR navigates through the application as a user.
4. The CSR exits the impersonated user session in a way that is clearly marked for its purpose. Recommended method is to 'Logout' from Impersonation session.
5. Oracle Self-Service E-Billing ends impersonation session for the selected user and returns the CSR to the search screen**.**

Searching for an Organization

Customer service representatives can use this use case to search for an organization. Table 93 lists and describes the use case functions.

Table 93. Searching for an Organization

Function	Description
Name	Searching for an Organization
Feature Area	CSR

Table 93. Searching for an Organization

Function	Description
Users	Customer service representative (CSR)
Trigger	The user selects Organization tab
Preconditions	Organization and accounts exist.
Rules	The number of rows displayed on the results page can be configured by user. Pagination UI guidelines apply for all search result pages.
Configuration Points	Search Organization: ■ Company Name ■ Phone Number ■ Account Number ■ Tax ID ■ Address ■ City ■ State ■ Postal Code

Main Path for Searching For an Organization

The following path describes this use case:

1. A CSR selects Search Organization to find an account in order to view the account details.
2. Oracle Self-Service E-Billing displays search screen.
   - Company name
   - Phone number
   - Account Number
   - Tax ID (Unique ID)
   - Address
   - City
   - State
   - Postal Code
3. The CSR enters criteria and submits the form**.** The user can enter an asterisk (*) for wild card search.
4. Oracle Self-Service E-Billing displays a list of all matching Organizations – Search Organization Results screen.
5. Oracle Self-Service E-Billing displays search results screen and provides options to select:

- View Organization Profile.
- View Assigned Administrators.

6 Oracle Self-Service E-Billing displays the appropriate child screen.

Alternate Paths for Searching For an Organization

Alternate paths can occur in this use case.

The User Clears Search Fields and Can Search Again

After a search the user can clear the search fields and perform another search.

No Matching Accounts are Found for the Given Criteria

Oracle Self-Service E-Billing displays a message stating that there are no matching results.

The User Selects View Profile

Oracle Self-Service E-Billing displays Organization Detail screen.

The User Selects View Administrator Details

Oracle Self-Service E-Billing displays View Assigned Administrators.

Viewing Organization Administrators

Customer service representatives use this use case to view Administrators for an Organization. This use case is different from search users (6200) in that searching or editing administrators is only available from the Organization tab, and the results of the search contain only administrators for the organization being searched. Table 94 lists and describes the use case functions.

Table 94. Viewing Organization Administrators

Function	Description
Name	Viewing Organization Administrators
Feature Area	CSR.
Users	Customer service representative
Rules	Paging is implemented and is configurable.

Main Path for Viewing Organization Administrators

The following path describes this use case:

1 A user selects the View Administrator view from the Search Organization Results screen.

2 Oracle Self-Service E-Billing displays the list of organization administrators for the company.

3 The user can select:

- Edit Administrator Profile
- Delete Administrator
- Impersonate Administrator

Alternate Paths for Viewing Organization Administrators

Alternate paths can occur in this use case.

The User Selects to Edit Administrator Profile Information

The administrator displays User Profile screen.

The User Selects to Impersonate an Organization Administrator

Oracle Self-Service E-Billing invokes the impersonate user functionality

Editing an Organization Administrator

Customer service representatives use this use case to edit details about an organization administrator. Table 95 lists and describes the use case functions.

Table 95. Editing an Organization Administrator

Function	Description
Name	Editing an Organization Administrator
Feature Area	CSR
Users	Customer service representative (CSR).
Trigger	The user chooses edit or delete on the View Organization Administrators page in the Search for Organization and Organization's Information use case.
Preconditions	The CSR has searched for an existing organization.

Table 95. Editing an Organization Administrator

Function	Description
Standard Features	Password Reset – CSRs can reset Administrator passwords by changing the Password and Confirm Password fields and submitting.
Configuration Points	Edit Administrator Details: ■ First Name ■ Last Name ■ User Name - Only characters and numbers allowed ■ Password ■ Confirm Password ■ Email Address ■ Role - List options

Main Path for Editing an Organization Administrator

The following path describes this use case:

1. The CSR elects Edit Organization Administrator Details link.
2. Oracle Self-Service E-Billing displays Edit Organization Administrator Details screen with the following information:
   - First Name
   - Last Name
   - Password
   - Confirm Password
   - Email Address
   - Role (Drop down; cannot change administrator to user)
3. The user edits the administrator details and clicks Submit.
4. Oracle Self-Service E-Billing displays Edit Administrator Details Summary page with the updated information.

Alternate Paths for Editing an Organization Administrator

Alternate paths can occur in this use case.

The User Selects Add New Administrator

The Add Administrator page appears.

The User Selects to Impersonate an Administrator

Oracle Self-Service E-Billing invokes the Impersonate User function for the Administrator

Searching and Modifying a CSR User

A customer service representative administrator can use this use case to modify other CSRs so that they can access the application. Table 96 lists and describes the use case functions.

Table 96. Searching and Modifying a CSR User

Function	Description
Name	Searching and Modifying a CSR User
Feature Area	CSR
Users	Customer service representative administrator
Preconditions	The CSR administrator user has been created. An organization and accounts exist.
Trigger	The CSR must be logged in to the CSR application. The CSR Administrator clicks the Manage CSR tab.
Rules	Wildcard search asterisk (*) can be added to the end of any value to change it to starts with match logic.
Configuration Points	Search CSR Profile: ■ First Name ■ Last Name ■ CSR ID Modify CSR Profile: ■ First Name ■ Last Name ■ CSR ID - Only characters and numbers allowed. ■ Password ■ Confirm Password ■ Email Address ■ Role - Either CSR Administrator or CSR.

Main Path for Searching and Modifying a CSR User

The following path describes this use case:

1. A CSR clicks the Manage tab.
2. Oracle Self-Service E-Billing displays search screen with the following attributes:

- CSR ID
- First Name
- Last Name

3. The CSR enters the search criteria and submits the form.
4. Oracle Self-Service E-Billing displays search result with the list of internal user accounts to the administrator.
5. The CSR has the option to edit or delete the CSR user. The CSR selects an appropriate option.
6. Oracle Self-Service E-Billing links to the appropriate for the option selected.

Alternate Paths for Searching and Modifying a CSR User

Alternate paths can occur in this use case.

There are No Matching Accounts for the Search Criteria

Oracle Self-Service E-Billing displays a message stating that there are no matching results.

The CSR User Chooses to Edit CSR Details

1. CSR Administrator selects user from the list and invokes the Edit User option.
2. Oracle Self-Service E-Billing displays the Edit User page including:
   - First name
   - Last name
   - CSR ID
   - Password
   - Password confirmation
   - Email Address
   - Role
3. User updates fields and submits the form.
4. Oracle Self-Service E-Billing validates the information and updates the profile for the selected user.
5. Oracle Self-Service E-Billing displays the updated list of internal users to the administrator.

The CSR Admin Selects the Delete Operation

1. Oracle Self-Service E-Billing displays a confirmation page with the following information:
   - First Name
   - Last Name
   - User Name

2 The user confirms the operation.

3 Oracle Self-Service E-Billing validates the request and logs details of inactivated user and disables the user's access.

4 Oracle Self-Service E-Billing displays the updated list of Internal Users.

Adding a CSR User

A customer service representative administrator can use this use case to add other CSRs. Table 97 lists and describes the use case functions.

Table 97. Adding a CSR User

Function	Description
Name	Adding a CSR User
Feature Area	CSR
Users	Customer service representative administrator
Trigger	The CSR must click the CSR Users tab and select Create CSR.
Preconditions	The CSR administrator user has been created. An organization and accounts exist.
Standard Features	Form Validation
Rules	■ Only administrator CSRs have the ability to manage other CSR users. ■ User name and password have same limits as end users. ■ A CSR admin can add another CSR from the confirmation page.

Main Path for Adding a CSR User

The following path describes this use case:

1 An administrator CSR chooses to add an internal user.

2 The user selects the Add function for a chosen CSR user and enters the user's details:

- First Name
- Last Name
- User ID
- Email
- Role
- Password
- Confirm Password

3 The administrator internal user enters information and submits the form.

4 Oracle Self-Service E-Billing confirms successful creation of CSR user.

Alternate Paths for Adding CSR Users

CSR creates additional CSR users from the confirmation page.

Editing a CSR User

This use case lets an administrative CSR user view the current profile information of all the CSR users including themselves. He or she can modify the first name, last name, email address, or role.

Table 98 lists and describes the Edit CSR User use case functions.

Table 98. Editing a CSR User

Function	Description
Name	Editing a CSR User
Feature Area	CSR.
User	CSR Administrator
Trigger	An administrative CSR user clicks CSR Users and performs a search, which displays a list of CSR users.
Configuration Points	None

Main Path for Editing a CSR User

The following path describes this use case:

1. The CSR administrator clicks the Edit link for a CSR user
2. A screen displays the following information:
   - CSR User ID - Hard-coded (cannot be changed).
   - A user can change his or her profile information:
     - First Name - prepopulated form box - Required
     - Last Name - prepopulated form box - Required
     - Email address - prepopulated form box - Required
   - Role:
     - CSR Administrator
     - CSR
3. The CSR administrator clicks Update.
4. Oracle Self-Service E-Billing validates the form information for:
   - Formatting

- Completeness

5 Oracle Self-Service E-Billing displays the updated User Information with the following success message: *Your profile information has been updated successfully.*

Alternate Paths for Editing a CSR User

The user clicks Cancel; the Manage Profile Detail screen displays with the original settings.

Managing a CSR Profile

In this use case, CSRs can view his or her current profile information and can modify his or her first name, last name, email address, password, and security question.

Table 99 lists and describes the Managing a CSR Profile use case functions.

Table 99. Managing a CSR Profile

Function	Description
Name	Managing a CSR Profile
Feature Area	CSR User Management
User	CSR Administrator
Preconditions	The user is currently enrolled in Oracle Self-Service E-Billing
Trigger	The user clicks the My Profile tab in Oracle Self-Service E-Billing
Configuration Points	■ The number of characters in a password. The Payment Card Industry (PCI) Data Security Standard requires a minimum of seven characters. ■ The complexity of the password. ■ The number of questions for the security question. ■ The list of security questions.

Main Path for Managing a CSR Profile

The following path describes this use case:

1 Oracle Self-Service E-Billing displays the Update Profile view

- CSR User ID - Hard-coded (cannot be changed)
- The user can change his or her profile information
  - First Name - prepopulated form box - Required
  - Last Name - prepopulated form box - Required
  - Email address - prepopulated form box - Required
- Role - Hard-coded (cannot be changed)

- New Password - Displays an empty form field. Default is eight characters and must contain at least:
  - One uppercase character
  - One lowercase character
  - One number
  - No spaces
  - Special characters are valid
- Confirm Password - Displays and empty form field.
- Security question - CSR selects a security question:
  - Best friend's name from childhood?
  - The name of the boy or girl you first kissed?
  - The place where you first met your spouse/significant other?
  - What is the make or model type of your first car?
  - What was the name of the school you attended in first grade?
- Security Answer
  - Form box size of 30 to be consistent with others
  - The default minimum length of a security question is one character, which cannot be the space character. The minimum length is configurable.
  - The maximum length of the answer is 100 characters.
  - Oracle Self-Service E-Billing trims leading and trailing spaces and does not include these in the calculation of minimum and maximum lengths.
  - Spaces within the answer are valid.
  - Special characters are valid and enhance the security level of the answer.

2. The user clicks Update.
3. Oracle Self-Service E-Billing validates the information on the form for the following:
   - Formatting
   - Completeness
4. Oracle Self-Service E-Billing displays the CSR My Profile confirmation screen with the following success message: *Your changes have been saved.*

Alternate Paths for Managing a CSR Profile

Alternate paths can occur in this use case.

The User Clicks Cancel on the Manage Profile Page

The page refreshes with the original settings.

The User Clicks Cancel on the Change Password Page

The Manage Profile page appears.

The User Clicks Cancel on the Change Security Question Page

The Manage Profile page appears.

Exceptions for Managing a CSR Profile

Exceptions can occur in this use case.

One of the Form Fields is Left NULL When Submitted

Oracle Self-Service E-Billing displays the Change Password form with the following error message: *Please provide a value for ****.*

The Password or Confirm Password Does Not Meet the Requirements

Oracle Self-Service E-Billing displays the prepopulated Enrollment form with the following error message: *Please provide a valid password and confirm password.*

The Password and Confirm Passwords are Not Exactly the Same

Oracle Self-Service E-Billing displays the prepopulated Enrollment form with the following error message: *Please provide a valid password and confirm password.*

No Question is Selected or the Security Question Answer is Left Null on the Security Question Form

Oracle Self-Service E-Billing displays the Change Security Question form with the following error message: P*lease select a question and a valid answer for the question selected.*

Adding a CSR Administrator

In this use case, CSR users can search a company's organization and add additional administrative users for the company.

Table 100 lists and describes the Adding a CSR Administrator use case functions.

Table 100. Adding a CSR Administrator

Function	Description
Name	Adding a CSR Administrator
Feature Area	Enrollment.
User	CSR administrator
Preconditions	CSR user setup.

Table 100. Adding a CSR Administrator

Function	Description
Trigger	The CSR administrator clicks the Organizations tab, performs a search, clicks the View Administrators link, and then clicks New Administrator.
Configuration Points	■ The number of characters in a user name. ■ The number of characters in the Oracle Self-Service E-Billing-generated temporary password.
Rules	■ Oracle Self-Service E-Billing-generated validation codes cannot contain the following characters: a, A, e, E, 3, o, O, 0, i, I, 1, u, U, y, Y, $, @, !, * ■ The account that has been created and set to inactive state expires within four hours, and only a CSR administrator can reset the account. ■ Oracle Self-Service E-Billing cannot reuse the validation code for 30 days after the code is initially created.

Main Path for Adding a CSR Administrator

The following path describes this use case:

1. Oracle Self-Service E-Billing displays a form where the CSR administrator fills out the following values:
   - First Name - Required
   - Last Name- Required
   - Email Address - Required
   - Confirm Email - Required
   - Role - Required
     - Administrator
     - Manager
     - Subscriber
   - User Name - Required
     - The default minimum length of the user name is eight characters. The minimum length is configurable.
2. The CSR administrator user clicks Next
3. Oracle Self-Service E-Billing validates the information on the form for the following:
   - Formatting
   - Completeness
   - Email and Confirm Email match

- User Name Requirements

4. Oracle Self-Service E-Billing displays the user enrollment verification form.
5. The administrator user clicks Submit.
6. Oracle Self-Service E-Billing sends an email to the user email address. The email must contain an HTTPS link with a unique validation code that does the following:
   - Uses an abbreviated list of characters
   - Contains of at least one uppercase character, one lowercase character, and one number
7. Oracle Self-Service E-Billing enters the validation code in the database
8. Oracle Self-Service E-Billing sets a status flag in the database indicating this account is inactive.
9. Oracle Self-Service E-Billing displays the Organization Search Results page with the following message:

   User (user name) enrollment has been initiated and an email notification has been sent to the user's email address supplied during the enrollment process. You will need to inform this end user of the user name that was entered, so they will be able complete the enrollment process.

Alternate Paths for Adding a CSR Administrator

The CSR Administrator clicks Cancel and Oracle Self-Service E-Billing displays the Search Results screen.

Exceptions for Adding a CSR Administrator

Exceptions can occur in this use case.

One of the Form Fields is Left NULL When Submitted

Oracle Self-Service E-Billing displays the Change Password form with the following error message: *Please provide a value for ****.*

The User Name Field Does Not Meet the Form Validation When Submitted

Oracle Self-Service E-Billing displays the populated Enrollment form with the following error message: *Please provide a user name that is eight characters in length.*

The Email Address Does Not Have at Least One Valid Character Preceding the at Sign (@) Preceding the Period and Following the Period

Oracle Self-Service E-Billing displays the populated Enrollment form with the following error message: *Please provide a valid email address.*

Setting a Preferred Language (CSR)

In this use case, CSR users can set a personal language preference. Setting a preferred language displays all screen text, attributes, error messages, and email notifications in the preferred language for that CSR user each time he or she logs in.

Oracle Self-Service E-Billing is preconfigured with U.S. English only; you must localize your implementation to provide additional languages. For information about localization, see *Implementation Guide for Oracle Self-Service E-Billing*. If Oracle Self-Service E-Billing is localized and a CSR user has not selected a preferred language, then the Billing and Payment application displays in the language configured as the default.

Table 101 lists and describes the Setting a Preferred Language use case functions.

Table 101. Setting a Preferred Language (CSR)

Function	Description
Name	Setting a Preferred Language (CSR)
Feature Area	CSR User Management
User	CSR administrator or user
Preconditions	The CSR user is currently enrolled and logged in to Oracle Self-Service E-Billing.
Trigger	End user clicks the My Account tab and then the Preferences subtab, or clicks Language.
Page Content	Page Title: Change Language Attributes: ■ Language Buttons: ■ Submit ■ Cancel
Subtabs	■ Profile ■ Preferences
Configuration Points	Oracle Self-Service E-Billing is preconfigured with U.S. English only; you must localize your implementation to provide additional languages.

Main Path for Setting a Preferred Language (CSR)

The following path describes this use case:

1. The CSR user clicks the My Accounts tab and the Preferences subtab, or clicks Language.
2. On the Preferences page, the CSR user selects a language and clicks Submit.

3 Oracle Self-Service E-Billing displays the Billing and Payment application in the chosen language and stores this preference as part of the CSR user's profile.

Each time the CSR user logs in, Oracle Self-Service E-Billing uses the preferred language.

Alternate Paths for Setting a Preferred Language (CSR)

The following alternate path can occur in this use case.

The User Clicks Cancel

Oracle Self-Service E-Billing displays the Profile page.

Exceptions for Setting a Preferred Language (CSR)

None.

Setting CSR Account Lockout Status

In this use case describes the trigger points that cause Oracle Self-Service E-Billing to lock a CSR user account, preventing the user from logging in to the Billing and Payment application.

Table 102 lists and describes the Setting CSR Account Lockout Status use case functions.

Table 102. Setting CSR Account Lockout Status

Function	Description
Name	Setting CSR Account Lockout Status
Feature Area	Login and Authentication
User	CSR Administrator
Trigger Points	■ On the Login page a user tries logging in to the Billing and Payment application more than the maximum number of attempts allowed. ■ During the Resetting a CSR Password flow, when a user tries more than five configurable times to enter his or her user name, account number, or service number. ■ During the Resetting a CSR Password flow, when a user tries more than five configurable times to enter his or her security question or security answer. ■ If the user (end user or CSR user) does not click the HTTPS link within four hours of being sent.
Preconditions	The CSR user is currently enrolled in the Billing and Payment application.

Table 102. Setting CSR Account Lockout Status

Function	Description
Configuration Points	■ Number of incorrect entries on the Login page. ■ Number of incorrect entries on the Resetting a Password flow - Password. ■ Number of incorrect entries on the Resetting a Password flow - Security Question. ■ Number of hours before the account locks during the HTTPS validation request.
Rules	■ The value set in the database is unique for each trigger point. ■ The error message on the Login screen states: *Please contact your customer self service representative at xxx-xxx-xxxx to get your account reactivated.*

Main Path for Setting CSR Account Lockout Status

The following path describes this use case:

1. Oracle Self-Service E-Billing displays the Login page with an error message.
2. Oracle Self-Service E-Billing sets the status flag in the database indicating this account has been locked, for one of the triggers.

Viewing the Account Lockout Report

The CSR administrator displays a list of end user or CSR accounts that have been locked out of Oracle Self-Service E-Billing.

Table 103 lists and describes the Viewing the Account Lockout Report use case functions.

Table 103. Viewing the Account Lockout Report

Function	Description
Name	Account Lockout Report
Feature Area	Login and Authentication
User	CSR administrator
Trigger	The CSR administrative user logs in to the application and clicks the Reports (New) link next to My Profile.
Preconditions	The CSR user is currently enrolled in the Billing and Payment application.

Main Path for Account Lockout Report

The following path describes this use case:

1 Oracle Self-Service E-Billing displays a view listing the available reports:
   - Locked Out Customer Accounts link
   - Locked Out Customer Service Representatives link
   - Locked Out Accounts Reactivated

2 CSR Administrator clicks the Locked Out Customer Accounts Link. Oracle Self-Service E-Billing displays a report that shows:
   - User ID
   - Business Account Number - If the user is tied directly to the ETL business account number, the user enters a value here. Otherwise, the user leaves the field blank.
   - Service Number - If the user is tied directly to a service number, the user enters a value here. Otherwise, the user leaves the field blank.
   - First Name
   - Last Name
   - Locked Out Reason
     - Incorrect Login
     - Reset Password
     - Security Question
     - Account Expired
   - Action - Re-Activate

3 CSR Administrator clicks the Locked Out Customer Service Representatives Link. Oracle Self-Service E-Billing displays a report that shows:
   - CSR User ID
   - First Name
   - Last Name
   - Locked Out Reason
     - Incorrect Login
     - Reset Password
     - Security Question
     - Account Expired
   - Action - Re-Activate

4 CSR Administrator clicks the Locked Out Accounts Reactivated Link. Oracle Self-Service E-Billing displays a report which shows:
   - CSR user ID or end user ID
   - First Name
   - Last Name

- Locked Out Reason
  - Incorrect Login
  - Reset Password
  - Security Question
  - Account Expired
- Date and time account was reactivated

Exceptions for Account Lockout Report

Exceptions can occur in the Account Lockout Report.

No one in Oracle Self-Service E-Billing has been locked out and not reset

A message on the page states: *No Accounts have been lockout, at this point in time.*

Reactivating a Locked Account

This use case reactivates a CSR or user account that has been locked out.

Table 104 lists and describes the Reactivate a Locked Account use case functions.

Table 104. Reactivating a Locked Account

Function	Description
Name	Reactivating a Locked Account
Feature Area	Login and Authentication
User	CSR Administrator
Trigger	The CSR Administrative user logs in to Oracle Self-Service E-Billing and clicks the Reports (New) link next to My Profile, clicks the Locked Out Accounts link, and then clicks the reactivate link within the report.
Preconditions	■ The CSR administrator user is currently enrolled in Oracle Self-Service E-Billing. ■ The CSR Administrator receives a call from the user or CSR user who is locked out. ■ The CSR Administrator validates the email address entered in Oracle Self-Service E-Billing.
Rules	Oracle Self-Service E-Billing-generated validation code cannot contain the characters: a, A, e, E, 3, o, O, 0, i, I, 1, u, U, y, Y, $, @, !, *

Main Path for Reactivating a Locked Account

The following path describes this use case:

1. Oracle Self-Service E-Billing sends an email to the user email address. The email must contain an HTTPS link with a unique validation code that does the following:
   - Uses an abbreviated list of characters
   - Contains of at least one uppercase character, one lowercase character, and one number
2. Oracle Self-Service E-Billing enters the Validation code in the database.
3. Oracle Self-Service E-Billing sets a status flag in the database indicating this account has been reset.
4. Oracle Self-Service E-Billing displays the Lockout Account Report populated with the information displayed earlier, but the action link is no longer active and displays a message.
5. Oracle Self-Service E-Billing enters the CSR ID, Date and Time when the Account was reactivated in the database for auditing purposes.

   The message on the Login screen after the enrollment is as follows: *An email message has been sent to the account you have just re-activated.*

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