Siebel Communications Guide Addendum

Version 7.8, Rev. A

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ORACLE®

Contents

Chapter 6:   Web Service Reference

Index

1 What's New in This Release

What's New in Siebel Communications Guide Addendum, Version 7.8, Rev. A

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

Table 1.   New Product Features in the Siebel Communications Guide Addendum, Version 7.8, Rev. A

Topic	Description
About Service Bundles on page 26	This new topic includes information about the constraints and the behavior of service bundles.
Workflows to Edit Quote Line Items on page 48	This new topic includes information about the workflows that allow a user to edit the line items in quotes.
Workflows to Edit Order Line Items on page 52	This new topic includes information about the workflows that allow a user to edit the line items in orders.
Workflows to Update Order Line Items on page 58	This updated topic includes the additional workflows that update order line items.
Workflows to Modify a Service Item on page 61	This new topic includes information about the workflows that allow a user to modify a service item.
Workflows to Disconnect a Service Item on page 65	This updated topic includes a revised diagram, revised workflow steps, and a reference to the workflow that adds a onetime service charge to an order.
Workflows to Suspend or Resume Service Items on page 66	This updated topic includes a revised diagram, revised workflow steps, and a reference to the workflow that adds a onetime service charge to an order.
Workflows to Transfer a Service to Another Location on page 69	This updated topic includes a revised diagram, revised workflow steps, and a reference to the workflow that adds a onetime service charge to an order.
CMU Account Query on page 81	This updated topic includes a revised operation name.
CMU Account Update on page 83	This updated topic includes a revised operation name.
ISS Price List Item WS on page 107	This updated topic includes a revised operation name.
SWI Update Order Line Item on page 118	This new topic includes information about a Web service that updates order line items for simple products, complex products, and nested service bundles.

What's New in Siebel Communications Guide Addendum, Version 7.8

Table 2 lists product features in this version of the documentation to support this release of the software.

Table 2.   New Product Features in the Siebel Communications Guide Addendum, Version 7.8

Topic	Description
Chapter 2, "Overview of Integration for Siebel Communications"	General background about integration for Siebel Communications.
Chapter 3, "Billing Management"	Billing management features for the integration functionality.
Chapter 4, "Customer Order Management"	Customer order management features for the integration functionality.
Chapter 5, "Workflow Reference"	Process integration workflows for the integration functionality.
Chapter 6, "Web Service Reference"	Web services for the integration functionality.

2 Overview of Integration for Siebel Communications

This chapter provides overview information about the integration of Siebel Communications with an application for managing billing and revenue, such as Oracle Communications Billing and Revenue Management.

This chapter includes the following topics:

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Integration Overview

The Oracle Application Integration Architecture (Oracle AIA) is a set of products that enables you to set up and orchestrate cross-application business processes so that multiple applications can work together. The Oracle AIA runs on top of Oracle Fusion Middleware.

The Oracle Communications Process Integration Packs (PIPs) are pre-built packaged process integrations between specific Oracle applications, such as Siebel Communications and Oracle Communications Billing and Revenue Management, based on the Oracle AIA.

Administrators can implement the following PIPs to integrate Siebel Communications with an application for managing billing and revenue, such as Oracle Communications Billing and Revenue Management:

- Siebel CRM Integration Pack for Oracle Communications Billing and Revenue Management: Order To Bill

  This pack enables billing activities for move, add, change, and disconnect sales orders.

- Siebel CRM Integration Pack for Oracle Communications Billing and Revenue Management: Agent Assisted Billing Care

  This pack enables call center representatives to efficiently respond to billing inquires, take payments, and initiate adjustments.

The following Oracle AIA for Communications guides, which you can access on the Oracle Technology Network, are available for these PIPs:

- *Process Integration for Order Management Implementation Guide*
- *Process Integration for Customer Management Implementation Guide*
- *Process Integration for Product Management Implementation Guide*
- *Process Integration for Billing Management Implementation Guide*

You must install a maintenance release (a quick fix or a fix pack) to implement the functionality to integrate Siebel Communications with an application for managing billing and revenue. For instructions about installing this maintenance release, see the documentation that is included with the release. When you install the maintenance release, additional features for Siebel Communications are automatically available. However, you must purchase AIA licenses to integrate Siebel Communications with a billing and revenue management application, such as Oracle Communications Billing and Revenue Management.

Guide Overview

Siebel Communications Guide Addendum contains information you use in combination with *Siebel Communications Guide*. For more information about Siebel Communications, see *Siebel Communications Guide*.

When you integrate billing management functionality in the Siebel Call Center module for Siebel Communications with billing and invoicing functionality in a billing and revenue management application, such as Oracle Communications Billing and Revenue Management, additional billing management features are available in Siebel Communications. For more information about these features, see Chapter 3, "Billing Management."

When you integrate customer order management functionality in the Siebel Call Center module for Siebel Communications with a billing and revenue management application, such as Oracle Communications Billing and Revenue Management, additional customer order management features are available in Siebel Communications. For more information about these features, see Chapter 4, "Customer Order Management."

For information about the business process workflows that are associated with the integration functionality, see Chapter 5, "Workflow Reference."

For information about the Web services that are associated with the integration functionality, see Chapter 6, "Web Service Reference."

3 Billing Management

This chapter describes the additional features for billing management in Siebel Communications that are available when you integrate the billing management functionality in the Siebel Call Center module for Siebel Communications with billing and invoicing functionality in an application for managing billing and revenue, such as Oracle Communications Billing and Revenue Management.

This chapter includes the following topics:

About Billing Management Features

When Siebel Communications is integrated with an application for managing billing and revenue, such as Oracle Communications Billing and Revenue Management, additional billing management features are available in Siebel Communications.

End users can create multiple billing profiles. Changes that end users make to billing profile data in Siebel Communications are reflected in the billing application. Likewise, changes that end users make to billing profile data in the billing application are reflected in Siebel Communications.

End users can view complete billing data about a customer in Siebel Communications. This billing data includes balance groups, unbilled usage, bills, payments, and adjustments. However, data in the billing application for balance groups, unbilled usage, bills, and payments is not stored in the Siebel Communications database. Instead, when end users navigate through a billing profile to view billing details, the necessary data is retrieved in real time from the billing application and displayed in Siebel Communications using virtual business components. Adjustment data is stored in Siebel Communications, where users enter the data, and in the billing application.

Also, end users can enter bill payments and adjustments in Siebel Communications and submit those payments and adjustments to the billing application for further processing. After processing is complete, the billing application transfers further details about those payments and adjustments to Siebel Communications.

Creating and Updating Billing Profiles (End User)

End users create billing profiles to bill the customer for products and services. They can associate more than one billing profile with an account, but they must choose one billing profile as the primary billing profile.

A billing profile record is successfully passed to the billing application if the contact and address fields for the record contain data and if the payment method field for the record is Credit Card, Automatic Debit, or Bill Me. Additionally, if the payment method is Credit Card, the billing profile record is successfully passed to the billing application only if the Name, Credit Card #, and Exp fields in the Credit Card Payment form contain data. If the payment method is Automatic Debit, the billing profile record is successfully passed to the billing application only if the Account # and Routing # fields in the Automatic Debit form contain data.

After billing profiles are created, end users can select any billing profile for the account that is associated with an order, an order line item, a quote, a quote line item, and an asset.

To create or update a billing profile

1 Navigate to the Accounts screen > Accounts List view.

2 In the Accounts list, click the Name field for the account.

3 Click the Profiles view tab.

4 In the link bar of the Profiles view, click Billing Profile.

The Billing Profile list displays.

Alternatively, you can display the Billing Profile list if you navigate to the Billing Data Administration screen > Profiles view, select an account in the Billing Accounts list, and click the Billing Profile view tab.

5 Enter data about the profile for the account in the Billing Profile list fields. Some fields are described in the following table.

Field	Comments
Name	The name of the billing profile.
Primary	Select this field to indicate that this profile is the most commonly applicable profile for the customer. Each account can have only one primary profile.
Frequency	The interval in which you bill the customer for service. All of the billing profiles for an account must have the same value in the this field. If you create a billing profile with a different value in this field than the other billing profiles for the account, the billing profile is not successfully passed to the billing application.

Field	Comments
Payment Method	The value in this field determines the fields available in the form for payment details. ■ If you select a payment method of Credit Card, the Credit Card Payment form displays below the Billing Profile list. See Step 6. ■ If you select another payment method, the Automatic Debit form displays below the Billing Profile list. See Step 7.
Email Bill To	The email address to which the customer bill is sent.

6 If you select Credit Card in the Payment Method field, enter credit card details for the account in the Credit Card Payment form that displays below the Billing Profile list. Some fields are described in the following table.

Field	Comments
Category	Category of the payment card, such as Debit, Procurement, or Credit card.
Blocked	After you use an external system to verify a card, select this field if you discover that the card is blocked.
Blocked Reason	The reason the card is blocked. This reason applies only to the card in the Payment Details view, not to other customer cards.

7 If you select a payment method other than Credit Card in the Payment Method field, enter payment method details for the account in the Automatic Debt form that displays below the Billing Profile list.

Process of Viewing Billing Profile Details (End User)

To view billing profile details, perform the following tasks:

■ Accessing the Billing Profile Portal on page 14

■ Viewing Balance Groups for a Billing Profile on page 14

■ Viewing Unbilled Services for a Billing Profile on page 15

■ Viewing Bills for a Billing Profile on page 16

■ Viewing Payments for a Billing Profile on page 16

■ "Viewing Adjustments for a Billing Profile" on page 17

Accessing the Billing Profile Portal

End users can navigate to the billing profile portal to view details about a billing profile. These details include balance groups, unbilled usage, bills, payments, and adjustments. You can return to the billing profile portal from the views accessed through the portal by clicking the Billing Profile link at the top of the view.

This task is a step in "Process of Viewing Billing Profile Details (End User)" on page 13.

To access the billing profile portal

1 Navigate to the Accounts screen > Accounts List view.

2 In the Accounts list, click the Name field for the account.

3 In the Account Summary view, scroll to the Billing Profile list.

Alternatively, you can scroll to the Billing Items list.

4 Click the Profile Name field for the appropriate billing profile.

The portal for the billing profile displays a form for the billing profile detail and a form for the billing profile's balance summary. View tabs for Balance Group, Unbilled Usage, Bills, Payments, and Adjustments display below these forms, and the Balance Group view tab displays a list of balance groups for the billing profile.

5 In the Balance Summary form, click Refresh to retrieve up-to-date data from the billing application.

Viewing Balance Groups for a Billing Profile

In a billing profile, end users can view balance groups. A *balance group* is a collection of resources associated with one or more services within a bundle of services for an account. Examples of resources include:

■ 1000 free minutes applicable to all the phone lines in a family plan.

■ 1 frequent flyer mile for each minute of time on any phone line in a family plan.

■ 3 MB of data to download at no charge.

■ 100 Short Message Services (SMS) applicable to wireless and wire line services.

A balance group can have a single currency balance and multiple non-currency balances (for example, the balance of unused phone minutes). Though customers are generally not aware of balance groups in a bundle, they understand how resources are applicable to the services within a bundle. For more information about balance groups, see *Process Integration for Order Management Implementation Guide*.

This task is a step in "Process of Viewing Billing Profile Details (End User)" on page 13.

To view balance groups for a billing profile

1 Navigate to the Billing Profile portal. For instructions, see "Accessing the Billing Profile Portal" on page 14.

2 Click Refresh to retrieve up-to-date data from the billing application.

3 To view the currency and non-currency balances as well as the services for a group, select that group in the Balance Group list and scroll down to the Balance list and to the Services list.

4 To view validity details for a balance, select that balance in the Balance listing.

The Balance Details list displays the validity details.

Viewing Unbilled Services for a Billing Profile

In a billing profile, end users can view the services that the customer used but that the company has not yet billed. They can view unbilled service details such as item charges (for example, cycle forward charges and usage charges), events (for example, phone call details), and non-currency balance totals for events (for example, the balance of unused phone minutes).

This task is a step in "Process of Viewing Billing Profile Details (End User)" on page 13.

To view unbilled services for a billing profile

1 Navigate to the Billing Profile portal. For instructions, see "Accessing the Billing Profile Portal" on page 14.

2 Click the Unbilled Usage view tab to display a list of service charges that the company has not yet billed for the billing profile.

3 Click Refresh to retrieve up-to-date data from the billing application.

4 To view the item charges for a service charge, select that service charge from the Service Charges list and scroll down to the Item Charges list.

5 To view the events for an item charge, click the Net Amount field for that item charge.

The Event Details list displays.

6 To find specific events in the Event Details list, click Search, enter search criteria, and click Go.

7 To view non-currency balance totals for an event, select an event for which the Non-Currency check box is selected, click View Detail, and scroll down to the Non-Currency Balance Impacts for Event list.

The Non-Currency Balance Impacts for Event list is populated with the non-currency balance totals for the event.

NOTE: If the Non-Currency check box is not selected, non-currency balances are not available for the event, and the View Detail button is disabled.

Viewing Bills for a Billing Profile

In a billing profile, end users can view additional details for bills. They can view billed service details such as item charges (for example, cycle forward charges and usage charges), events (for example, phone call details), and non-currency balance totals for events (for example, the balance of unused phone minutes). They can also view payments and adjustment request items for bills. Adjustment request items consist of adjustments, settlements, refunds, and write-off amounts.

This task is a step in "Process of Viewing Billing Profile Details (End User)" on page 13.

To view bills for a billing profile

1   Navigate to the Billing Profile portal. For instructions, see "Accessing the Billing Profile Portal" on page 14.

2   Click the Bills view tab to display a list of bills for the billing profile.

3   Click Refresh to retrieve up-to-date data from the billing application.

4   Click the Bill Number field for a bill that you want to view.

   The Bill Details form for the bill displays and a list of service charges for that bill displays in the Service Charges view tab.

5   To view a list of payments for the bill, click the Payments view tab.

6   To view a list of adjustment request items for the bill, click the A/R Items view tab.

7   To view the list of service charges for the bill, click the Service Charges view tab.

   a   To view the item charges for a service charge, select that service charge from the Service Charges list and scroll down to the Item Charges list.

   b   To view the events for an item charge, click the Net Amount field for that item charge.

      The Event Details list displays.

   c   To find specific events in the Event Details list, click Search, enter search criteria, and click Go.

   d   To view non-currency balance totals for an event, select an event for which the Non-Currency check box is selected, click View Detail, and scroll down to the Non-Currency Balance Impacts for Event list.

      The Non-Currency Balance Impacts for Event list is populated with the non-currency balance totals for the event.

      NOTE: If the Non-Currency check box is not selected, non-currency balances are not available for the event, and the View Detail button is disabled.

Viewing Payments for a Billing Profile

In a billing profile, end users can view payments for the profile.

This task is a step in "Process of Viewing Billing Profile Details (End User)" on page 13.

To view payments for a billing profile

1 Navigate to the Billing Profile portal. For instructions, see *"Accessing the Billing Profile Portal" on page 14*.

2 Click the Payments view tab to display a list of payments for the billing profile.

3 Click Refresh to retrieve up-to-date data from the billing application.

4 To find specific payments in the Payments list, click Search, enter search criteria, and click Go.

Viewing Adjustments for a Billing Profile

In a billing profile, end users can view adjustments for the profile.

This task is a step in *"Process of Viewing Billing Profile Details (End User)" on page 13*.

To view adjustments for a billing profile

1 Navigate to the Billing Profile portal. For instructions, see *"Accessing the Billing Profile Portal" on page 14*.

2 Click the Adjustments view tab to display a list of adjustment requests for the billing profile and scroll down to the Line Items list.

3 To view the line items for an adjustment request, select that adjustment request in the Adjustment Requests list.

Entering Payments (End User)

End users can enter payments for a billing profile or for a bill in that billing profile. When they enter a payment for a billing profile, the billing application applies that payment to the outstanding bills for the billing profile according to business logic in the billing application. To enter payments for a billing profile, complete the steps in the following procedure.

To enter payments for a billing profile

1 Navigate to the Billing Profile portal. For instructions, see *"Accessing the Billing Profile Portal" on page 14*.

2 Click the Payments view tab to display a list of payments for the billing profile.

3 Click New to add a new payment.

The Capture New Payment dialog box displays.

4 Enter an amount in the Payment Amount field, and select the One-Time Payment check box.

5 Select a method of payment in the Payment Method field:

■ If you select Credit Card, enter details in the Credit Card area of the screen.

■ If you select Automatic Debit, enter details in the Bank Account area of the screen.

6 Click Submit to submit the payment to the billing application.

A payment confirmation number displays. When the billing application processes the payment, the payment is included in the payments list.

When end users enter a payment for a bill, the billing application applies that payment to the bill. To enter payments for a bill, complete the steps in the following procedure.

To enter payments for a bill

1 Navigate to the Billing Profile portal. For instructions, see .

2 Click the Bills view tab to display a list of bills for the billing profile.

3 Click the Bill Number field for the bill that you want to pay.

4 Click the Payments view tab to display a list of payments for the bill.

5 Click New to add a new payment.

The Capture New Payment dialog box displays.

6 Enter an amount in the Payment Amount field, and select the One-Time Payment check box.

7 Select a method of payment in the Payment Method field:

■ If you select Credit Card, enter details in the Credit Card area of the screen.

■ If you select Automatic Debit, enter details in the Bank Account area of the screen.

8 Click Submit to submit the payment to the billing application.

A payment confirmation number displays. When the billing application processes the payment, the payment is included in the payments list.

Creating Adjustments for Bills (End User)

End users can create adjustments for bills. Requested adjustments that are approved are reflected on the next bill that the customer receives. You can adjust only a single bill and not multiple bills at a time.

You can enter adjustments for an entire bill, for selected item charges on a bill, for selected events associated with an item charge, and for a balance total associated with a selected event.

The level of your selection in the bill detail determines the invoice lines that display when you create adjusts. For example, if you select an entire bill, no invoice lines display. If you select item charges for usage charges and balance forward charges on a bill, an invoice line for usage charges displays, and an invoice line for balance forward charges displays. If you select two phone call events for a usage item charge, an invoice line displays for each of the two phone calls. If you select a balance total for an event, a single invoice line displays for that balance total.

To create adjustments for an entire bill, complete the steps in the following procedure.

To create adjustments for an entire bill

1 Navigate to the Billing Profile portal. For instructions, see "Accessing the Billing Profile Portal" on page 14.

2 Click the Bills view tab to display a list of bills for the billing profile.

3 Click the Bill Number field for the bill that you want to adjust.

The Bill Details form for the bill displays and a list of service charges for that bill displays in the Service Charges view tab.

4 Click Adjust in the Bill Details form.

The Billing Adjustments screen displays showing the form to create an adjustment request with some fields populated and showing the Line Items view tab with no invoice lines.

5 Enter adjustment details in the fields for the form. Some fields are described in the following table.

Field	Comments
Status	The status of the adjustment. The value in this field is automatically changed when the billing application processes the adjustment.
Request Amount	The amount for which you want to adjust the bill. This field is automatically populated with the amount in the Amount Due field in the Billing Details form, but you can change this amount. If you enter a percentage in the Request Percentage field, you must clear this field.
Customer Decision	The customer's decision to accept or reject the adjustment.
Adjustment Type	The type of adjustment (for example, Credit, Cash, and Debit).
Reason for Request	The reason for the adjustment request (for example, Billing Error, Partner Code, Special Credit, and Other).
Approved Amount	This field is automatically populated with the amount in the Amount Due field in the Billing Details form, and you cannot enter data in this field. If you change the Request Amount field, this field displays the value in the Request Amount field. After you click the Submit button, and the billing application processes the adjustment request, the portion of the request amount that the billing application approves displays in this field.
Approval Date	The date that the billing application approves the adjustment. You cannot enter data in this field.
Comments	If necessary, enter additional comments about the adjustment request.

Field	Comments
Request Percentage	The percentage by which you want to adjust the bill. If the Request Amount field contains data, do not enter a percentage in this field.
Approved Percentage	The portion of the request percentage that the billing application approves. You cannot enter data in this field. If you change the Request Percentage field, this field displays the value in the Request Percentage field. The billing application processes the adjustment request after you click the Submit button.

6   Step off the adjustment to save the record, and then click Submit to submit the adjustment to the billing application.

To create adjustments for the item charges on a bill, complete the steps in the following procedure.

To create adjustments for item charges on a bill

1   Navigate to the Billing Profile portal. For instructions, see "Accessing the Billing Profile Portal" on page 14.

2   Click the Bills view tab to display a list of bills for the billing profile.

3   Click the Bill Number field for the bill that you want to adjust.

The Bill Details form for the bill displays and a list of service charges for that bill displays in the Service Charges view tab.

4   Select the appropriate service charge from the Service Charges list and scroll down to the Item Charges list.

5   Select the item charges and click Adjust in the Item Charges list.

The Billing Adjustments screen displays showing the form to create an adjustment request with some fields populated and showing the Line Items view tab with invoice lines for the item charges that you select.

NOTE: You can delete existing line items, but you cannot add more line items.

6   Enter adjustment details in the fields for invoice line items. Some fields are described in the following table.

Field	Comments
Original Amount	The original amount of the item charge. This field is automatically populated with the amount in the Charge field in the Item Charges list. You cannot change this amount.
Request Amount	The amount for which you want to adjust the item charge. This field is automatically populated with the amount in the Net Amount field in the Item Charges list, but you can change this amount.

Field	Comments
Approved Amount	This field is automatically populated with the amount in the Net Amount field in the Item Charges list, and you cannot enter data in this field. If you change the Request Amount field, this field displays the value in the Request Amount field. After you click the Submit button, and the billing application processes the adjustment request, the portion of the request amount that the billing application approves displays in this field.
Request Description	If necessary, enter additional comments about the adjustment request.
Status	The status of the adjustment. The value in this field is automatically changed when the billing application processes the adjustment.
Adjustment Type	The type of adjustment (for example, Credit, Cash, and Debit).
Reason	The reason for the adjustment request (for example, Billing Error, Partner Code, Special Credit, and Other).

7 Click Refresh Total to see the cumulative effect of the adjustment line items in the Request Amount field of the form for the adjustment request.

8 Step off the adjustment to save the record, and then click Submit to submit the adjustment to the billing application.

To create adjustments for the events on a bill, complete the steps in the following procedure.

To create adjustments for events on a bill

1 Navigate to the Billing Profile portal. For instructions, see "Accessing the Billing Profile Portal" on page 14.

2 Click the Bills view tab to display a list of bills for the billing profile.

3 Click the Bill Number field for the bill that you want to adjust.

The Bill Details form for the bill displays and a list of service charges for that bill displays in the Service Charges view tab.

4 Select the appropriate service charge from the Service Charges list and scroll down to the Item Charges list.

5 Click the Net Amount field for the appropriate item charge.

The Event Details list displays.

6 Select the events, and click Adjust in the Event Details list.

The Billing Adjustments screen displays showing the form to create an adjustment request with some fields populated and showing the Line Items view tab with invoice lines for the events that you select.

NOTE: You can delete existing line items, but you cannot add more line items.

7 Enter adjustment details in the fields for invoice line items. Some fields are described in the following table.

Field	Comments
Original Amount	The original amount of the event. This field is automatically populated with the amount in the Charge field in the Event Details list. You cannot change this amount.
Request Amount	The amount for which you want to adjust the event. This field is automatically populated with the amount in the Net Amount field in the Event Details list, but you can change this amount.
Approved Amount	This field is automatically populated with the amount in the Net Amount field in the Event Details list, and you cannot enter data in this field. If you change the Request Amount field, this field displays the value in the Request Amount field. After you click the Submit button, and the billing application processes the adjustment request, the portion of the request amount that the billing application approves displays in this field.
Request Description	If necessary, enter additional comments about the adjustment request.
Status	The status of the adjustment. The value in this field is automatically changed when the billing application processes the adjustment.
Adjustment Type	The type of adjustment (for example, Credit, Cash, and Debit).
Reason	The reason for the adjustment request (for example, Billing Error, Partner Code, Special Credit, and Other).

8 Click Refresh Total to see the cumulative effect of the adjustment line items in the Request Amount field of the form for the adjustment request.

9 Step off the adjustment to save the record, and then click Submit to submit the adjustment to the billing application.

To create adjustments for the balance totals that are associated with a bill, complete the steps in the following procedure.

To create adjustments for balance totals associated with a bill

1 Navigate to the Billing Profile portal. For instructions, see "Accessing the Billing Profile Portal" on page 14.

2 Click the Bills view tab to display a list of bills for the billing profile.

3 Click the Bill Number field for the bill that you want to adjust.

The Bill Details form for the bill displays and a list of service charges for that bill displays in the Service Charges view tab.

4 Select the appropriate service charge from the Service Charges list and scroll down to the Item Charges list.

5 Click the Net Amount field for the appropriate item charge.

The Event Details list displays.

6 Select an event for which the Non-Currency check box is selected, click View Detail, and scroll down to the Non-Currency Balance Impacts for Event list.

The Non-Currency Balance Impacts for Event list is populated with the non-currency balance totals for the event.

NOTE: If the Non-Currency check box is not selected, non-currency balances are not available for the event, and the View Detail button is disabled.

7 Select a balance and click Adjust in the Non-Currency Balance Impacts for Event list.

The Billing Adjustments screen displays showing the form to create an adjustment request with some fields populated and showing the Line Items view tab with an invoice line for the non-currency balance total that you select.

NOTE: You can delete existing line items, but you cannot add more line items.

8 Enter adjustment details in the fields for the invoice line item. Some fields are described in the following table.

Field	Comments
Request Value	The value by which you want to adjust the balance total. This field is automatically populated with the value in the After AR Actions field in the Non-Currency Balance Impacts for Event list, but you can change this value. If you enter a percentage in the Request Percentage field, you must clear this field.
Approved Value	This field is automatically populated with the amount in the After A/R Actions field in the Non-Currency Balance Impacts for Event list, and you cannot enter data in this field. If you change the Request Value field, this field displays the value in the Request Value field. After you click the Submit button, and the billing application processes the adjustment request, the portion of the request value that the billing application approves displays in this field.
Request Description	If necessary, enter additional comments about the adjustment request.
Status	The status of the adjustment. The value in this field is automatically changed when the billing application processes the adjustment.
Request Percentage	The percentage by which you want to adjust the balance total. If the Request Value field contains data, do not enter a percentage in this field.
Adjustment Type	The type of adjustment (for example, Credit, Cash, and Debit).

Field	Comments
Reason	The reason for the adjustment request (for example, Billing Error, Partner Code, Special Credit, and Other).
Approved Percentage	The portion of the request percentage that the billing application approves. You cannot enter data in this field. The billing application processes the adjustment request after you click the Submit button.

9 Step off the adjustment to save the record, and then click Submit to submit the adjustment to the billing application.

4 Customer Order Management

This chapter describes the additional features for customer order management in Siebel Communications that are available when you integrate the customer order management functionality in the Siebel Call Center module in Siebel Communications with an application for managing billing and revenue, such as Oracle Communications Billing and Revenue Management. These additional features streamline the process of creating bills from orders.

This chapter includes the following topics:

- "About Customer Order Management Features" on page 25
- "About Passing Customer Orders to Oracle Billing Application" on page 26
- "About Service Bundles" on page 26
- "Setting Up Service Charges for Products" on page 28
- "Configuring the Workflow for Promotion Penalties" on page 29
- "Setting Up Promotion Price Adjustments for Components" on page 30
- "Viewing Change History for Line Items (End User)" on page 32
- "Transferring Service to Another Location (End User)" on page 33

About Customer Order Management Features

When Siebel Communications is integrated with an application for managing billing and revenue, such as Oracle Communications Billing and Revenue Management, additional order management features for customers are available in Siebel Communications.

Product managers can create multiple service charge products for a related service product. Administrators can configure the workflow to accommodate penalties for promotions. Administrators can also set up adjustments to prices for components that are part of a customizable product in a promotion.

End users can view additional details about change history for order and quote lines. Also, when end users transfer service from one location to another, an additional sub-action field is available to distinguish in the billing application a move-out service action from a disconnect service action and to distinguish a move-in service action from a connect service action.

About Passing Customer Orders to Oracle Billing Application

When you create a customer order in Siebel Communications, the order is successfully passed to the Oracle Communications Billing and Revenue Management (BRM) application if all of the following conditions are satisfied:

■ For the account in the order header:

■ The Account Type field must have a value of Business or Residential.

■ The Account Class field must have a value Customer, Service, or Billing.

■ The Primary Contact field must contain data.

■ An account address must be designated as the primary address.

■ The price list in the order header must be the same price list that the Oracle Communications BRM application uses.

■ The following fields in the order lines must contain data:

■ Service Id (if the order line relates to a service bundle)

■ Service Account

■ Billing Account

■ Billing Profile

NOTE: A billing profile is successfully passed to the billing application if the billing profile satisfies some conditions. For more information about these conditions, see "Creating and Updating Billing Profiles (End User)" on page 12.

About Service Bundles

This topic includes information relating to:

■ "A Description of Service Bundles" on page 26

■ "Behavior of Service Bundles" on page 27

A Description of Service Bundles

A service bundle is a group of related services that you sell as a package. Service bundles simplify service selection and configuration. A single billing instance in the BRM application is constructed for a service bundle. A service bundle is similar to a product bundle. For more information about product bundles, see *Siebel Product Administration Guide*.

You must create service bundles. To create a service bundle, select Service Bundle in the Billing Type field for the bundle. Other examples of values for the Billing Type field include: Discount, Event, Item, and Subscription. A service bundle can include:

■ **Simple products.** If a product is available in one form and does not include other products that you can configure for it, the product is a simple product. Simple products have the billing service type of the parent service bundle.

■ **Customizable products.** If a product can include other product components that you can configure for it, the product is a customizable product (or complex product). A customizable product can include simple products, other customizable products, service bundles, and non-billing products. Customizable products have the billing service type of the parent service bundle.

■ **Nested service bundles.** If a parent service bundle contains a child service bundle, the child service bundle is a nested service bundle. Child service bundles can have a different billing service type from the parent service bundle.

■ **Non-billing products.** If a product is not billed to the customer, the product is a non-billing product. Non-billing products do not have a billing service type and can be part of an installed asset. These products exist only in the Siebel Customer Relationship Management (CRM) application and are not passed to the Oracle Communications Billing and Revenue Management (BRM) application.

To see the products in a bundle, navigate to Administration - Product screen > Products view, select the product bundle, and click the Bundle Product view tab. A service bundle for wireless phone service might include the following items:

■ Rate plans (for example, Main Line 1, Main Line 2, and an add-on line)

■ Activation fees

■ Usage fees

■ Features (for example, call forwarding)

■ Discounts (for example, 50% off the first 3 months and a free minutes discount)

■ SMS (Short Message Service) for text messaging. This service might include rate plans (for example, SMS Basic and SMS Unlimited)

In this example, the activation fees and usage fees are simple products, the rate plans, features, and discounts are customizable products, and the SMS is a nested service bundle.

Behavior of Service Bundles

The Billing Service Type field for a service bundle is populated with data when the products in the Oracle Communications BRM application are synchronized with the products in the Siebel CRM application. Examples of values for the Billing Service Type field include:

■ /service/telco/gsm/telephony

■ /service/telco/gsm/sms

■ /service/telephony

■ /service/ip

■ /account

To see the Billing Type field and the Billing Service Type field for a service bundle or a product in that bundle, navigate to the Administration - Product screen > Products view and select the record for a service bundle or a product in that bundle. Expand the form in the Detail view. The Billing Type field and the Billing Service Type field display in the Logistics section of the form. After products are synchronized, do not change the values in these fields.

Though Siebel Communications provides no validation rules, all product components under a service bundle must have the billing account, service account, and billing profile of the root product in that service bundle. The billing account, service account, and billing profile fields are associated with the line items in an order and are populated when a user creates an order.

If you modify, disconnect, suspend, resume, or transfer a service item that relates to a parent service bundle, or if you upgrade or downgrade a promotion for a service item that relates to a parent service bundle, multiple service charges can be automatically created if the parent service bundle includes child service bundles to which service charges apply. For more information about service charges, see "Setting Up Service Charges for Products" on page 28.

If a service bundle status is updated, the statuses of the product components in a service bundle are updated. If a customizable product that contains a service bundle is updated, the status of the service bundle is updated. The SIS OM Order Line Item Update Main workflow updates the status field of order line items, but administrators can configure this workflow to update other fields.

Setting Up Service Charges for Products

Service charges are onetime charges that the customer incurs when the customer suspends, resumes, moves, or cancels service. Products that represent service charges can originate in the billing and revenue application. Product managers can add a service charge product to the catalog, and then associate this service charge product with another product and an order type. When a user creates an order or quote for that other product and that order type, the service charge product is automatically included in the order or quote. Product managers can add service charge products to price lists in the same way that they add other products to price lists. They can also use pricing policies to determine the price of a service charge product based on the data in an order or quote.

For example, if customers are charged a service fee for suspending DSL service, the product manager can add a DSL-Suspend Service Charge product to the catalog, and then associate this new product with the DSL product and a Suspend order type. The product manager can then add this new product to the price lists. When a user suspends the customer's DSL asset and consequently creates a Suspend order for the DSL product, the DSL-Suspend Service Charge product is automatically included as a line item in the order. The Related Service field of this line item has the DSL product to indicate that the DSL - Suspend Service Charge product is related to the DSL product.

Before you complete the procedure in this topic, you must add the service charge product to the catalog. For information about adding products to the catalog, see *Siebel Order Management Guide*.

To set up service charge products for products

1 Navigate to the Administration - Product screen > Products view.

2 Click the Name field of the product for which you want to set up a service charge product.

The form for the Product displays.

3   Click the Recommendations tab to display the Related Products list.

4   Add the service charge product to the Related Products list and complete the necessary fields. Some fields are described in the following table.

Field	Comments
Product	The name of the service charge product.
Relation	The relation of the service charge product to the product. Select Service Charge in this field.
Description	A description of the service charge product.
Effective Start Date	The date on and after which users can include the service charge product in an order or quote.
Effective End Date	The date after which users cannot include the service charge product in an order or quote.
Order Type	The type of order to which the service charge product applies. Values include: ■ **Suspend**. These orders suspend service for an asset. The order line items have an Action field of Suspend. ■ **Resume**. These orders resume service for an asset after suspension. The order line items have an Action field of Resume. ■ **Move**. These orders transfer service for an asset from one location to another location. The order line items for the asset at the new location have an Action field of Add, and the order line items for the asset at the previous location have an Action field of Delete. ■ **Cancellation**. These orders disconnect service for an asset. The order line items have an Action field of Delete. Order types for activation and installation are not available because these services are generally component products for the service products to which they apply.

Configuring the Workflow for Promotion Penalties

One type of service charge product is a penalty associated with a promotion. For example, a company gives a customer free minutes of phone time as part of a promotion. However, the customer must maintain phone service with the company for two years as a condition of the free minutes. If the customer prematurely terminates phone service, the company charges the customer a penalty. This penalty charge appears on the customer's invoice.

A penalty charge product is created in the billing application. After the products in the billing application are synchronized with the products in the Siebel CRM application, the penalty charge product is available in the Siebel CRM application. After the penalty charge product is available in the Siebel application, administrators must configure the ISS Promotion Disconnect Process workflow to use this penalty charge product.

To configure a promotion penalty

1   Navigate to the Administration - Product screen > Products view.

2   Select the service charge product for the promotion penalty.

3   Click Menu, select About Record, and note the value in the Row # field.

   NOTE: If the Row # field contains no value, the products in the billing application are not yet synchronized with the products in the Siebel CRM application.

4   Start Siebel Tools and log in as the administrator.

5   Select Workflow Process in the Object Explorer, right click the ISS Promotion Disconnect Process workflow, and select Edit Workflow Process.

   The workflow diagram and the Multi Value Property Window display.

6   Edit the Create Penalty step:

   a   In the workflow diagram, select the icon for this step to display its multi value properties.

   b   In the Multi Value Property Window, change the value for the Product Id field to the value that you noted in Step 3.

7   Edit the Create Penalty Order step:

   a   In the workflow diagram, select the icon for this step to display its multi value properties.

   b   In the Multi Value Property Window, change the value for the Product Id field to the value that you noted in Step 3.

8   Deploy the configured workflow.

   For information about deploying workflows, see *Siebel Business Process Framework: Workflow Guide*.

Setting Up Promotion Price Adjustments for Components

Administrators can set up adjustments to prices for components that are part of a customizable product in a promotion. When a user creates an order or quote for that customizable product in the promotion, the user can view the adjusted prices for the components. You can add promotion components to price lists in the same way that you add other components to price lists. The prices for components in a promotion supersede any other prices for those components.

For example, if a promotion includes a bundle that allows for free voice mail for wire line service or a 50% discount for wireless service, the administrator can set up the voice mail component for the wire line service with no price and the voice mail component for the wireless service with a 50% discount. When a user creates an order that includes this bundle, the user can view the $0 price for voice mail if the customer wants the wire line service and the 50% discount price for voice mail if the customer wants the wireless service. If voice mail is priced at $10 for each month when it is not part of a promotion, the user does not see this $10 monthly price.

To set up promotion price adjustments for components

1 Navigate to the Administration - Product screen > Product Promotions view.

2 In the Promotions list, select the promotion for which you want to set up adjustments to component prices.

3 Click the Pricing tab.

4 In the Pricing Components list, select a customizable product for which you want to set up adjustments to component prices.

   NOTE: A check mark displays in the Customizable field for the products that you can customize.

5 Click the Product Name field to display the components for the customizable product.

6 For each component for which you want to set up a price adjustment, select the component, and add a price adjustment record to the Adjustments list. Some fields are described in the following table.

Field	Comments
Adjustment Type	Select the type of price adjustment applicable to the component. Options include: Discount Amount, % Discount, Markup Amount, % Markup, and Price Override.
Adjustment Value	Enter the value of the adjustment. How this value is used depends on the value in the Adjustment Type field: ■ **Discount Amount.** The adjustment value is subtracted from the component price. ■ **% Discount.** The adjustment value is a percentage of the component price and is subtracted from the component price. ■ **Markup Amount.** The adjustment value is added to the component price. ■ **% Markup.** The adjustment value is a percentage of the component price and is added to the component price. ■ **Price Override.** The adjustment value is used as the component price and overrides the original component price.
Maximum Price	Enter the price that the adjusted price cannot exceed.

7 (Optional) Click Verify Adjustments to view the component prices in time intervals after adjustments.

Viewing Change History for Line Items (End User)

End users can view change history for line items in sales orders and quotes. They can view previous and current values for the following line item fields:

- Billing Account
- Service Account
- Service Point
- Asset Status
- Service ID
- Net Price
- Billing Profile

When Siebel Communications is integrated with an application for managing billing and revenue, Siebel Communications provides values for these fields to the billing and revenue application. The integration process reviews these fields to determine changed data. End users can view these fields in a read-only view.

To view the change history for a line item in a sales order, complete the steps in the following procedure.

To view change history for a line item in a sales order

1 Navigate to the Sales Order screen > List view.

2 Click the number for the sales order.

3 Click the Line Items tab.

4 Select a line item and click the Changes link.

If the Changes link does not display, display this link by navigating, in the site map, to: Sales Orders > Line Items > Changes.

The Modify History Line Items form displays showing previous and current values for line item fields. Below the form, the Line Item Attributes list displays previous and current values for line item attributes.

To view the change history for a line item in a sales quote, complete the steps in the following procedure.

To view change history for a line item in a quote

1 Navigate to the Quotes screen > List view.

2 Click the number for the quote.

3 Click the Line Items tab.

4 Select a line item and click the Changes link.

If the Changes link does not display, display this link by navigating, in the site map, to: Quotes > Line Items > Changes.

The Modify History Line Items form displays showing previous and current values for line item fields. Below the form, the Line Item Attributes list displays previous and current values for line item attributes.

Transferring Service to Another Location (End User)

With asset-based ordering, employee users can use the procedure in this topic to disconnect services at one address (the move-out address) and install the same services at another address (the move-in address). If the correct service points exist at the new address for the transferred services, the services are automatically assigned to these service points.

In the procedure in this topic, you create a quote that shows the service deleted for one address and added for another address. The items displayed in the quote reflect the current configuration of the service adjusted for changes in open orders.

NOTE: Users can transfer a service only if the service is provisioned at a service point. The Workflow does not recognize services that are not associated with a service point.

To transfer a service to another location

1 Navigate to the Accounts screen > Accounts List view.

2 Click the name of the appropriate account.

3 In the Account form, in the Address field, click the select button.

The Account Addresses dialog box displays.

4 In the Account Addresses dialog box:

a If necessary, click New and add the move-in address to the Available list.

b If necessary, move the move-in address from the Available list to the Selected list.

c In the Selected list, in the record for the move-in address, in the Start Date field, enter the date on which the new address is active for invoicing purposes.

d In the Selected list, in the record for the move-out address, in the End Date field, enter the date on which the old address is inactive for invoicing purposes.

e In the Selected list, select the record for the move-in address, and click Transfer Service.

The Line Items view displays listing two copies of the service. The line items in one copy have an action code of Delete as well as a sub-action code of Move-Delete and are associated with the move-out address. The line items in the other copy have an action code of Add as well as a sub-action code of Move-Add and are associated with the move-in address.

5 For each service item, verify that the Service Point field displays a service item.

If the Service Point field displays a service item, a service point is available at the move-in address.

6 If a service item does not display a service point, delete the item from the quote.

7 Convert the quote to an order and submit the order.

The action codes and sub-action codes in the quote lines also display in the order lines. For more information about converting a quote to an order and submitting an order, see *Siebel Order Management Guide*.

5 Workflow Reference

This chapter describes the workflows for the integration of Siebel Communications with an application for managing billing and revenue. It supplements the information described in the topic about workflows for employee asset-based ordering in *Siebel Order Management Guide* and *Siebel Order Management Guide Addendum for Industry Applications*.

This chapter includes the following topics:

NOTE: If you cannot see all of the detail in some of the larger workflow diagrams in this chapter, you can view these workflows in Siebel Tools to see a clearer image.

Workflows for Synchronization

This group of workflows synchronizes data between the Siebel CRM application and the billing application. It consists of the following workflow processes:

CMU Account Sync Workflow

This workflow synchronizes account data between the Siebel CRM application and the billing application. Figure 1 shows this workflow.

A user initiates this workflow by creating an account record or by changing any field in the business component for an account record in the Siebel CRM application.
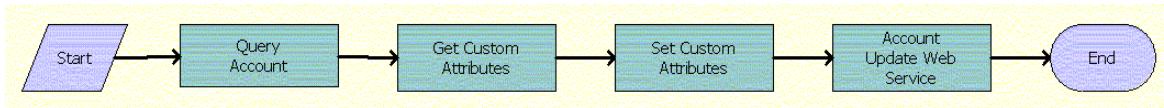
Figure 1.   CMU Account Sync Workflow

Workflow Description. This workflow:

1   Queries for the updated account details.

2   Reads the enterprise details, such as the enterprise server name, language, and locale.

3   Sets the enterprise details as part of the request message.

4   Invokes an asynchronous proxy Web service to send the account details to the billing application.

Associated Business Service Methods. The following table shows the steps in this workflow that call business service methods.

Workflow Step	Method Called	In Business Service
Query Account	QueryById	CMU Query Account Service
Get Custom Attributes	GetEnterpriseParameters	CMU External Integration Service
Set Custom Attributes	SetAttributesToMessage	CMU External Integration Service
Account Update Web Service	UpdateCustomerParty	UpdateCustomerSiebelJMSProducer

CMU Address Sync Workflow

This workflow synchronizes address data between the Siebel CRM application and the billing application. Figure 2 shows this workflow.

A user initiates this workflow by creating an address record or by changing any field for the business component for an address record in the Siebel CRM application.

Figure 2.   CMU Address Sync Workflow

Workflow Description. This workflow:

1   Queries for the updated address details.

2 Reads the enterprise details, such as the enterprise server name, language, and locale.

3 Sets the enterprise details as part of the request message.

4 Invokes an asynchronous proxy Web service to send the address details to the billing application.

Associated Business Service Methods. The following table shows the steps in this workflow that call business service methods.

Workflow Step	Method Called	In Business Service
Query Address	QueryById	CMU Query Address Service
Get Custom Attributes	GetEnterpriseParameters	CMU External Integration Service
Set Custom Attributes	SetAttributesToMessage	CMU External Integration Service
Address Update Web Service	UpdateCustomerPartyAddress	UpdateCustomerSiebelJMSProducer

CMU Contact Sync Workflow

This workflow synchronizes contact data between the Siebel CRM application and the billing application. Figure 3 shows this workflow.

A user initiates this workflow by creating a contact record or by changing any field for the business component for a contact record in the Siebel CRM application.
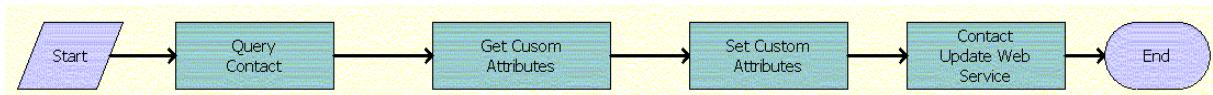
Figure 3.   CMU Contact Sync Workflow

Workflow Description. This workflow:

1 Queries for the updated contact details.

2 Reads the enterprise details, such as the enterprise server name, language, and locale.

3 Sets the enterprise details as part of the request message.

4 Invokes an asynchronous proxy Web service to send the contact details to the billing application.

Associated Business Service Methods. The following table shows the steps in this workflow that call business service methods.

Workflow Step	Method Called	In Business Service
Query Contact	QueryById	CMU Query Contact Service
Get Custom Attributes	GetEnterpriseParameters	CMU External Integration Service

Workflow Step	Method Called	In Business Service
Set Custom Attributes	SetAttributesToMessage	CMU External Integration Service
Contact Update Web Service	UpdateCustomerPartyContact	UpdateCustomerSiebelJMSProducer

CMU Profile Sync Workflow

This workflow synchronizes billing profile data between the Siebel CRM application and the billing application. Figure 4 shows this workflow.

A user initiates this workflow by creating a billing profile record or by changing any field for the business component for a billing profile record in the Siebel CRM application.
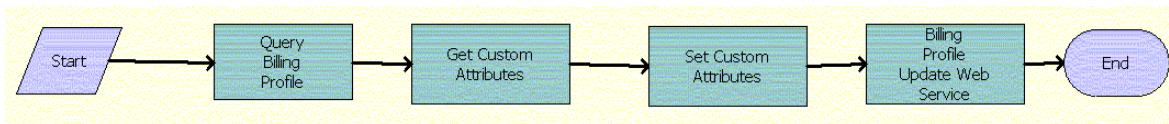
Figure 4.   CMU Profile Sync Workflow

Workflow Description. This workflow:

1   Queries for the updated billing profile details.

2   Reads the enterprise details, such as the enterprise server name, language, and locale.

3   Sets the enterprise details as part of the request message.

4   Invokes an asynchronous proxy Web service to send the billing profile details to the billing application.

Associated Business Service Methods. The following table shows the steps in this workflow that call business service methods.

Workflow Step	Method Called	In Business Service
Query Billing Profile	QueryById	CMU Query Billing Profile Service
Get Custom Attributes	GetEnterpriseParameters	CMU External Integration Service
Set Custom Attributes	SetAttributesToMessage	CMU External Integration Service
Billing Profile Update Web Service	UpdateCustomerPartyBillingProfile	UpdateCustomerSiebelJMSProducer

Workflow to View Content in the Billing Profile Portal

This workflow allows users to view content in the Billing Profile portal. It consists of one workflow process.

SIA External Integration Process

This workflow displays the content in the Billing Profile portal. This content includes balance group, unbilled usage, bill, and bill payment information. Figure 5 shows this workflow.

A user initiates this workflow by clicking the Name field for a billing profile in the Billing Profile list of the Account Summary view. Also, a user initiates this workflow by accessing the Balance Group, Unbilled Usage, Bills, and Payments views (but not the Adjustments view) within the billing profile portal and navigating within those views.
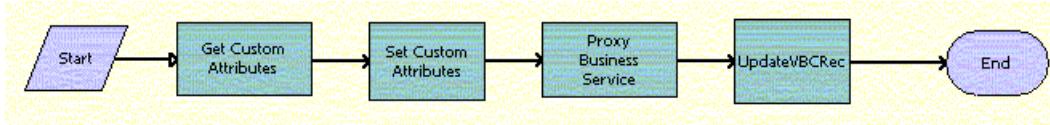
Figure 5.   SIA External Integration Process Workflow

Workflow Description. This workflow:

1 Reads the enterprise details, such as the enterprise server name, language, and locale.

2 Sets the enterprise details as part of the request message.

3 Calls the appropriate proxy service based on the input that is passed to the business service, and subsequently calls the WSDL file on the integration server to get the response in Siebel message format.

4 Retrieves the data from the Siebel message and stores the data in the property set.

Associated Business Service Methods. The following table shows the steps in this workflow that call business service methods.

Workflow Step	Method Called	In Business Service
Get Custom Attributes	GetEnterpriseParameters	CMU External Integration Service
Set Custom Attributes	SetAttributesToMessage	CMU External Integration Service
Proxy Business Service	InvokeAndValidateProxy	CMU External Integration Service
UpdateVBCRec	AddSiebelMessage	CMU External Integration Service

Workflows to Enter Adjustments in the Billing Profile Portal

This group of workflows allows users to enter adjustments for bills in the Billing Profile portal. It consists of the following workflow processes and subprocess:

CMUInvoiceAdjustmentWF

This workflow creates appropriate adjustment request detail when a user adjusts an entire bill. Figure 6 shows this workflow.

A user initiates this workflow by clicking the Adjust button for an entire bill.
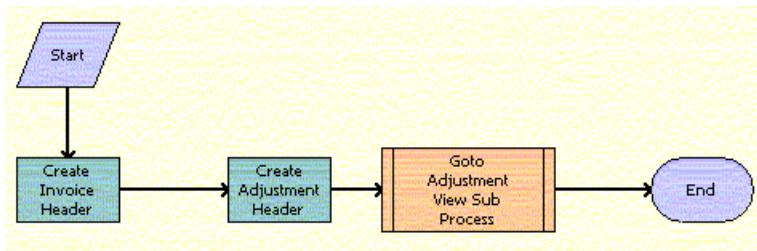
Figure 6.   CMUInvoiceAdjustmentWF Workflow

Workflow Description. This workflow:

1   Calls the CMUInvoiceQueryWF workflow to check if the bill exists in the Siebel database. If the bill does not exist, creates the bill header. For more information, see "CMUInvoiceQueryWF Workflow" on page 41.

2   Creates the adjustment request header and populates the Request Amount and Approved Amount fields with the value in the Amount Due field in the Billing Details form in the billing profile portal.

3 Calls the CMU Adjustment View Sub Process to navigate to the adjustment view. For more information, see "CMU Adjustment View Sub Process Workflow" on page 47.

Associated Business Service Methods. The following table shows the steps in this workflow that call business service methods.

Workflow Step	Method Called	In Business Service
Create Invoice Header	CMUInvoiceDataTransfer	CMU Util UI Service
Create Adjustment Header	CMUAdjustmentDataTransfer	CMU Util UI Service

CMUInvoiceQueryWF

This workflow finds a particular bill in the Siebel database. Figure 7 shows this workflow.

The following workflows invoke this workflow as a subprocess:

■ CMUInvoiceAdjustmentWF

■ CMUItemChargeAdjustmentWF

■ CMUEventDetailsAdjustmentWF

■ CMUBalanceDetailsEventAdjustmentWF
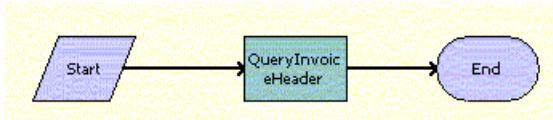
Figure 7.   CMUInvoiceQueryWF Workflow

Workflow Description. This workflow:

Checks if a bill exists in the Siebel database.

Associated Business Service Methods. The following table shows the step in this workflow that calls a business service method.

Workflow Step	Method Called	In Business Service
QueryInvoiceHeader	QueryInvoiceData	CMU Util UI Service

CMUItemChargeAdjustmentWF

This workflow creates appropriate adjustment request detail when a user adjusts bill item charges. Figure 8 shows this workflow.

A user initiates this workflow by clicking the Adjust button for item charges relating to a bill.
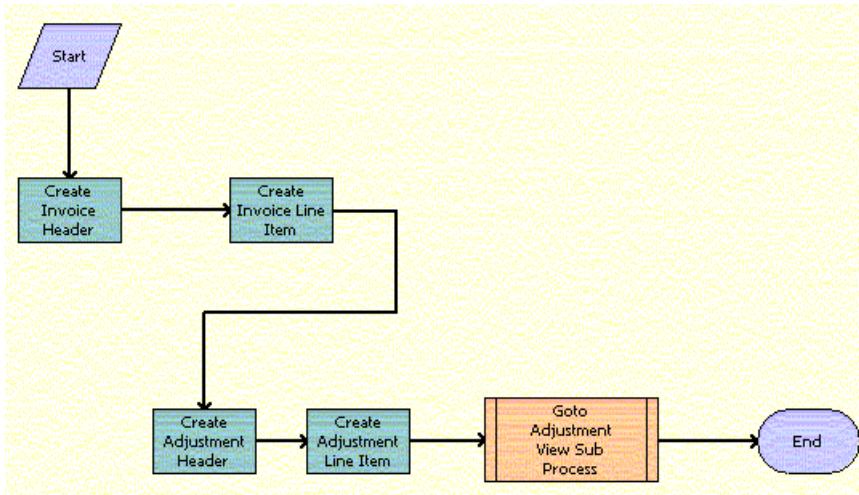
Figure 8.   CMUItemChargeAdjustmentWF Workflow

Workflow Description. This workflow:

1   Calls the CMUInvoiceQueryWF workflow to check if the bill exists in the Siebel database. If the bill does not exist, creates the bill header. For more information, see "CMUInvoiceQueryWF Workflow" on page 41.

2   Calls the CMUItemChargeQueryWF workflow to check if the item charge exists in the Siebel database. If the item charge does not exist, creates the bill line item. For more information, see "CMUItemChargeQueryWF Workflow" on page 43.

3   Creates the adjustment request header and populates some of the header fields.

4   Creates the adjustment request line item and populates the Request Amount and Approved Amount fields with the value in the Net Amount field in the Item Charges list in the billing profile portal.

5   Calls the CMU Adjustment View Sub Process to navigate to the adjustment view. For more information, see "CMU Adjustment View Sub Process Workflow" on page 47.

Associated Business Service Methods. The following table shows the steps in this workflow that call business service methods.

Workflow Step	Method Called	In Business Service
Create Invoice Header	CMUInvoiceDataTransfer	CMU Util UI Service
Create Invoice Line Item	CMUInvoiceDataTransfer	CMU Util UI Service
Create Adjustment Header	CMUAdjustmentDataTransfer	CMU Util UI Service
Create Adjustment Line Item	CMUAdjustmentDataTransfer	CMU Util UI Service

CMUItemChargeQueryWF

This workflow finds a particular item charge in the Siebel database. Figure 9 shows this workflow.

The following workflows invoke this workflow as a subprocess:

■ CMUItemChargeAdjustmentWF

■ CMUEventDetailsAdjustmentWF

■ CMUBalanceDetailsEventAdjustmentWF
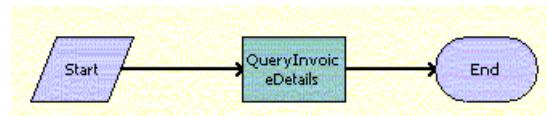
Figure 9.   CMUItemChargeQueryWF Workflow

Workflow Description. This workflow:

Checks if an item charge exists in the Siebel database.

Associated Business Service Methods. The following table shows the step in this workflow that calls a business service method.

Workflow Step	Method Called	In Business Service
QueryInvoiceDetails	QueryInvoiceData	CMU Util UI Service

CMUEventDetailsAdjustmentWF

This workflow creates appropriate adjustment request detail when a user adjusts bill events. Figure 10 shows this workflow.

A user initiates this workflow by clicking the Adjust button for events relating to a bill.
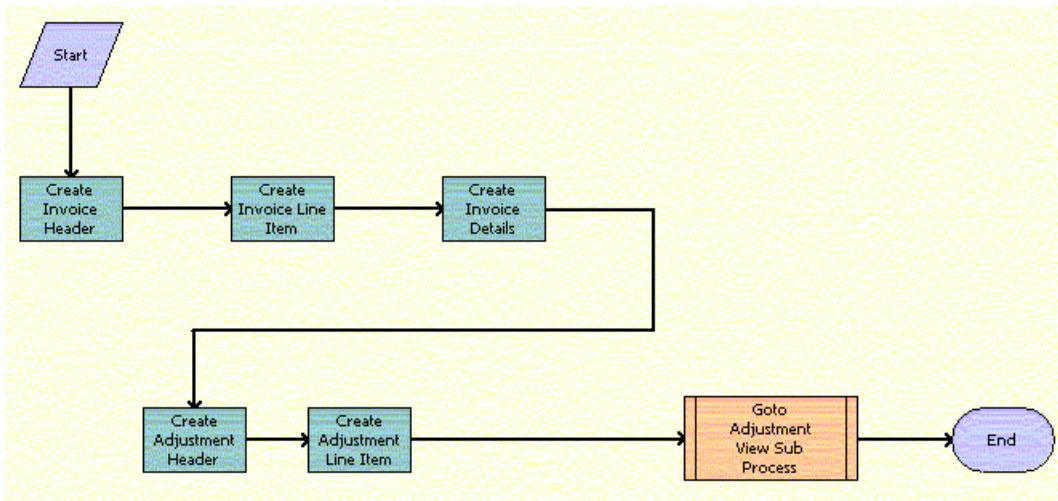

Figure 10. CMUEventDetailsAdjustmentWF Workflow

Workflow Description. This workflow:

1   Calls the CMUInvoiceQueryWF workflow to check if the bill exists in the Siebel database. If the bill does not exist, creates the bill header. For more information, see "CMUInvoiceQueryWF Workflow" on page 41.

2   Calls the CMUItemChargeQueryWF workflow to check if the item charge exists in the Siebel database. If the item charge does not exist, creates the bill line item. For more information, see "CMUItemChargeQueryWF Workflow" on page 43.

3   Calls the CMUEventDetailsQueryWF workflow to check if the bill event detail exists in the Siebel database. If the bill event detail does not exist, creates the bill event detail. For more information, see "CMUEventDetailsQueryWF" on page 45.

4   Creates the adjustment request header and populates some of the header fields.

5   Creates the adjustment request line item and populates the Request Amount and Approved Amount fields with the value in the Net Amount field in the Event Details list in the billing profile portal.

6   Calls the CMU Adjustment View Sub Process to navigate to the adjustment view. For more information, see "CMU Adjustment View Sub Process Workflow" on page 47.

Associated Business Service Methods. The following table shows the steps in this workflow that call business service methods.

Workflow Step	Method Called	In Business Service
Create Invoice Header	CMUInvoiceDataTransfer	CMU Util UI Service
Create Invoice Line Item	CMUInvoiceDataTransfer	CMU Util UI Service

Workflow Step	Method Called	In Business Service
Create Invoice Details	CMUInvoiceDataTransfer	CMU Util UI Service
Create Adjustment Header	CMUAdjustmentDataTransfer	CMU Util UI Service
Create Adjustment Line Item	CMUAdjustmentDataTransfer	CMU Util UI Service

CMUEventDetailsQueryWF

This workflow finds a particular event in the Siebel database. Figure 11 shows this workflow.

The following workflows invoke this workflow as a subprocess:

■ CMUEventDetailsAdjustmentWF

■ CMUBalanceDetailsEventAdjustmentWF
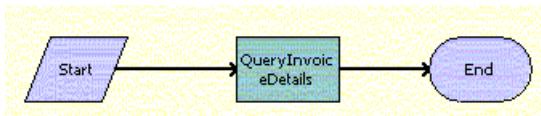
Figure 11. CMUEventDetailsQueryWF Workflow

Workflow Description. This workflow:

Checks if an event exists in the Siebel database.

Associated Business Service Methods. The following table shows the step in this workflow that calls a business service method.

Workflow Step	Method Called	In Business Service
QueryInvoiceDetails	QueryInvoiceData	CMU Util UI Service

CMUBalanceDetailsEventAdjustmentWF

This workflow creates appropriate adjustment request detail when a user adjusts a resource balance. Figure 12 shows this workflow.

A user initiates this workflow by clicking the Adjust button for a resource balance total relating to events.
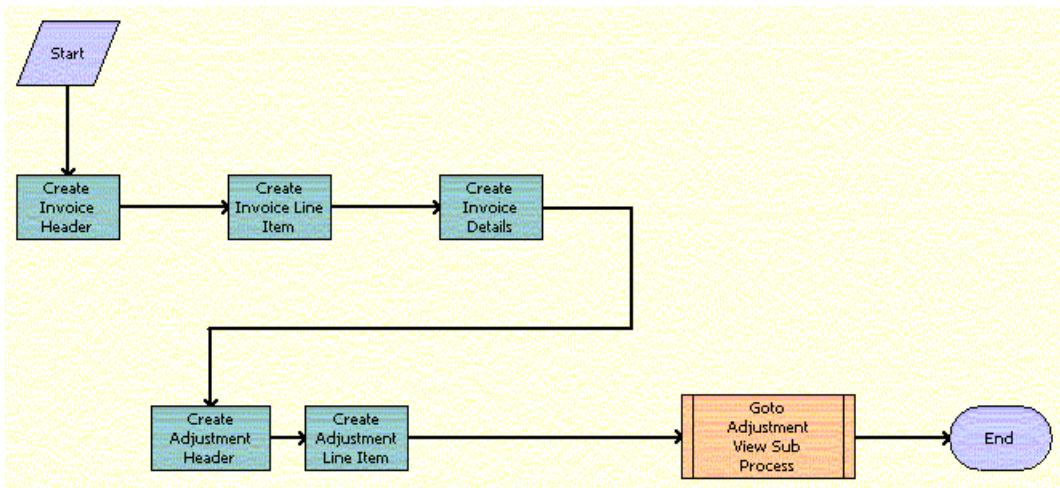
Figure 12. CMUBalanceDetailsEventAdjustmentWF Workflow

Workflow Description. This workflow:

1 Calls the CMUInvoiceQueryWF workflow to check if the bill exists in the Siebel database. If the bill does not exist, creates the bill header. For more information, see "CMUInvoiceQueryWF Workflow" on page 41.

2 Calls the CMUItemChargeQueryWF workflow to check if the item charge exists in the Siebel database. If the item charge does not exist, creates the bill line item. For more information, see "CMUItemChargeQueryWF Workflow" on page 43.

3 Calls the CMUEventDetailsQueryWF workflow to check if the bill event detail exists in the Siebel database. If the bill event detail does not exist, creates the bill event detail. For more information, see "CMUEventDetailsQueryWF" on page 45.

4 Creates the adjustment request header and populates some of the header fields.

5 Creates the adjustment request line item and populates the Request Value and Approved Value fields with the value in the After A/R Actions field in the Non-Currency Balance Impacts for Event list in the billing profile portal.

6 Calls the CMU Adjustment View Sub Process to navigate to the adjustment view. For more information, see "CMU Adjustment View Sub Process Workflow" on page 47.

Associated Business Service Methods. The following table shows the steps in this workflow that call business service methods.

Workflow Step	Method Called	In Business Service
Create Invoice Header	CMUInvoiceDataTransfer	CMU Util UI Service
Create Invoice Line Item	CMUInvoiceDataTransfer	CMU Util UI Service
Create Invoice Details	CMUInvoiceDataTransfer	CMU Util UI Service
Create Adjustment Header	CMUAdjustmentDataTransfer	CMU Util UI Service
Create Adjustment Line Item	CMUAdjustmentDataTransfer	CMU Util UI Service

CMU Adjustment View Sub Process

This workflow navigates to the adjustment view. Figure 13 shows this workflow.

The following workflows invoke this workflow as a subprocess:

■ CMUInvoiceAdjustmentWF

■ CMUItemChargeAdjustmentWF

■ CMUEventDetailsAdjustmentWF

■ CMUBalanceDetailsEventAdjustmentWF
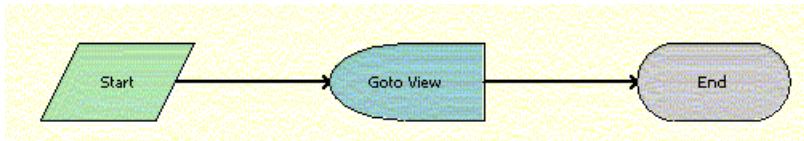
Figure 13. CMU Adjustment View Sub Process Workflow

Workflow Description. This workflow:

Navigates to the adjustment view.

CMU SIA Submit Adjustment Request to External

This workflow submits an adjustment request from the Siebel CRM application to the billing application. Figure 14 shows this workflow.

A user initiates this workflow by clicking the Submit button in the Billing Adjustments screen.
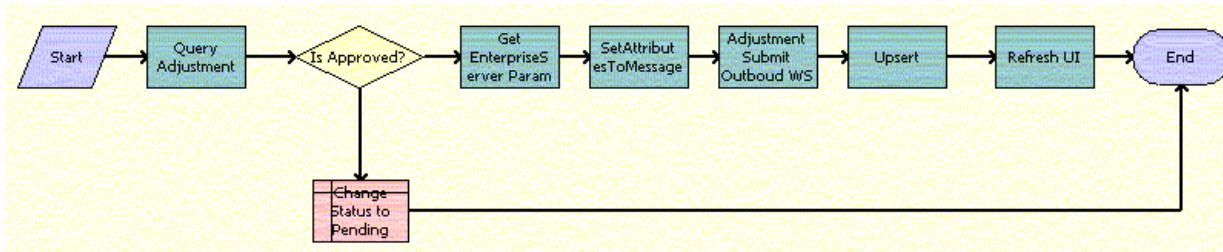
Figure 14. CMU SIA Submit Adjustment Request to External Workflow

Workflow Description. This workflow:

1   Queries the adjustment request.

2   If the adjustment request is not approved, changes the status of the request to Pending, and terminates.

3   If the adjustment request is approved, reads the enterprise details, such as the enterprise server name, language, and locale.

4   Sets the enterprise details as part of the request message.

5   Makes an outbound call to the billing application.

6   Updates the Siebel database with the response from the billing application.

7   Refreshes the active applet.

Associated Business Service Methods. The following table shows the steps in this workflow that call business service methods.

Workflow Step	Method Called	In Business Service
Query Adjustment	Query	EAI Siebel Adapter
Get EnterpriseServer Param	GetEnterpriseParameters	CMU External Integration Service
SetAttributesToMessage	SetAttributesToMessage	CMU External Integration Service
Adjustment Submit Outbound WS	CreateAdjustment	AdjustmentSiebelReqABCS
Upsert	Upsert	EAI Siebel Adapter
Refresh UI	RefreshCurrentApplet	FINS Teller UI Navigation

Workflows to Edit Quote Line Items

This group of workflows allows a user to edit the line items of quotes that result from creating or modifying service items. It consists of the following workflow process and subprocess:

■   "SIS OM Edit Delta Quote Line Item" on page 49

SIS OM Edit Delta Quote Line Item

This workflow applies active and unprocessed orders to the asset associated with the selected line item and displays the asset in the Product Configurator view. The user makes changes to define the newly requested state and clicks the Done button. The workflow writes the delta of the current and requested states of the asset to the current quote as one or more line items. Figure 15 shows this workflow.

A user initiates this workflow by clicking Customize in the Quote Detail view.
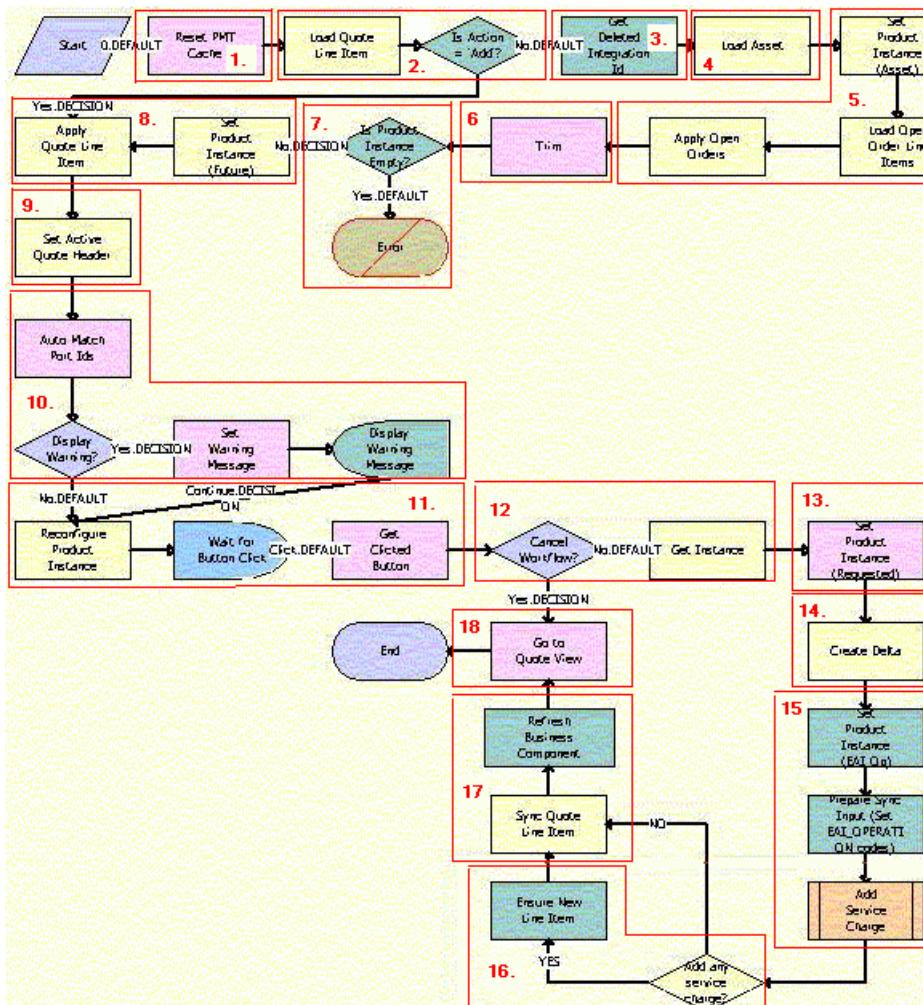
Figure 15. SIS OM Edit Delta Quote Line Item Workflow

Workflow Description. This workflow:

1 Clears business service cache of existing product instances.

2 Checks the action code of the top-level component of the quote line item. If the action code is Add, then goes to Step 8.

3 If the action code is not Add, recursively loops through the input property set (the quote line items in the active document) and gets the integration IDs for the line items.

4 Reads the asset associated with the selected quote line item from the database, excluding components with a status of Inactive.

5 Retrieves all prior active and unprocessed orders that relate to the asset and applies them to generate the requested future state of the asset.

6 Removes the asset components that do not have the Track As Asset flag set.

7 If one of the active and unprocessed orders disconnects the top-level component, or no asset components have the Track As Asset flag set, the resulting asset is empty, and the workflow displays the following error message: A request has already been made to disconnect this service item. The workflow stops.

8 Applies the current quote line item to the asset.

9 Stores the quote header so that line items can be added to it.

10 Self-heals the asset so that the asset structure matches the product definition. If any changes are made to the asset, a warning message appears.

11 Displays the currently requested state of the asset in the Product Configurator view. The user makes the required changes and clicks the Done or Cancel button.

12 If the user clicks the Cancel button, the workflow terminates. If the user clicks the Done button, retrieves the newly requested state from the Configurator.

13 If the action code of the root item is not Add, caches the newly requested state of the asset to use as an input to Delta.

14 Generates the delta of the following as one or more quote line items:

■ The requested state of the asset before the current order line item is applied.

■ The state of the asset after the user reconfigures it.

15 Creates a onetime service charge item for the quote. For more information, see "SIS OM Add Service Charge Quote Sub-Process" on page 51.

16 Generates a unique asset integration ID for all line items with an action code of Add.

17 Saves the document to the database.

18 Navigates to the Quote Line Item view.

Associated Business Service Methods. The following table shows the steps in this workflow that call business service methods.

Workflow Step	Business Service Method Called
Reset PMT Cache	Reset
Get Deleted Integration Id	TraverseHierarchy
Set Product Instance (Asset)	Set Product Instance
Load Open Order Line Items	Find Orders
Apply Open Orders	Apply
Trim	Trim
Set Product Instance (Future)	Set Product Instance
Apply Quote Line Item	Apply
Set Active Quote Header	Set Output Header
Auto Match Port Ids	AutoMatch
Reconfigure Product Instance	Reconfigure Product Instance
Get Clicked Button	Get Configure Button Click Information
Get Instance	Get Product Instance
Set Product Instance (Requested)	Set Product Instance
Create Delta	Delta
Sync Quote Line Item	Synchronize
Go To Quote View	GotoView

SIS OM Add Service Charge Quote Sub-Process

This workflow adds a onetime charge to a service instance for a disconnect order type. Figure 16 shows this workflow.

The SIS OM Edit Delta Quote Line Item workflow invokes this workflow as a subprocess.
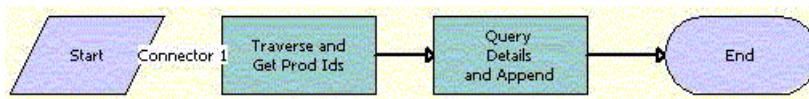
Figure 16. SIS OM Add Service Charge Quote Sub-Process Workflow

Workflow Description. This workflow:

1 Recursively loops through the input property set (the complete hierarchy of service instances for the delete operation) and returns a list of the product IDs and corresponding integration IDs with a Service Bundle billing type.

2 Queries each of the products and gets the penalty charge details, if any, to append to the input property set.

Associated Business Service Methods. The following table shows the steps in this workflow that call business service methods.

Workflow Step	Method Called	In Business Service
Traverse and Get Prod Ids	GetProductId	SIS OM PMT Service
Query Details and Append	AppendServiceCharge	SIS OM PMT Service

Workflows to Edit Order Line Items

This group of workflows allows a user to edit the line items in orders. It consists of the following workflow process and subprocess:

■ "SIS OM Edit Service Order Line Item" on page 52

    ■ "SIS OM Add Service Charge Order Sub-Process" on page 55

SIS OM Edit Service Order Line Item

This workflow applies active and unprocessed orders to the asset associated with the selected line item and displays the asset in the Product Configurator view. The user makes changes to define the newly requested state and clicks the Done button. The workflow then writes the delta of the current and requested states of the asset to the current order as one or more line items. Figure 17 shows this workflow.

A user initiates this workflow by clicking the Customize button in the Order Detail view.
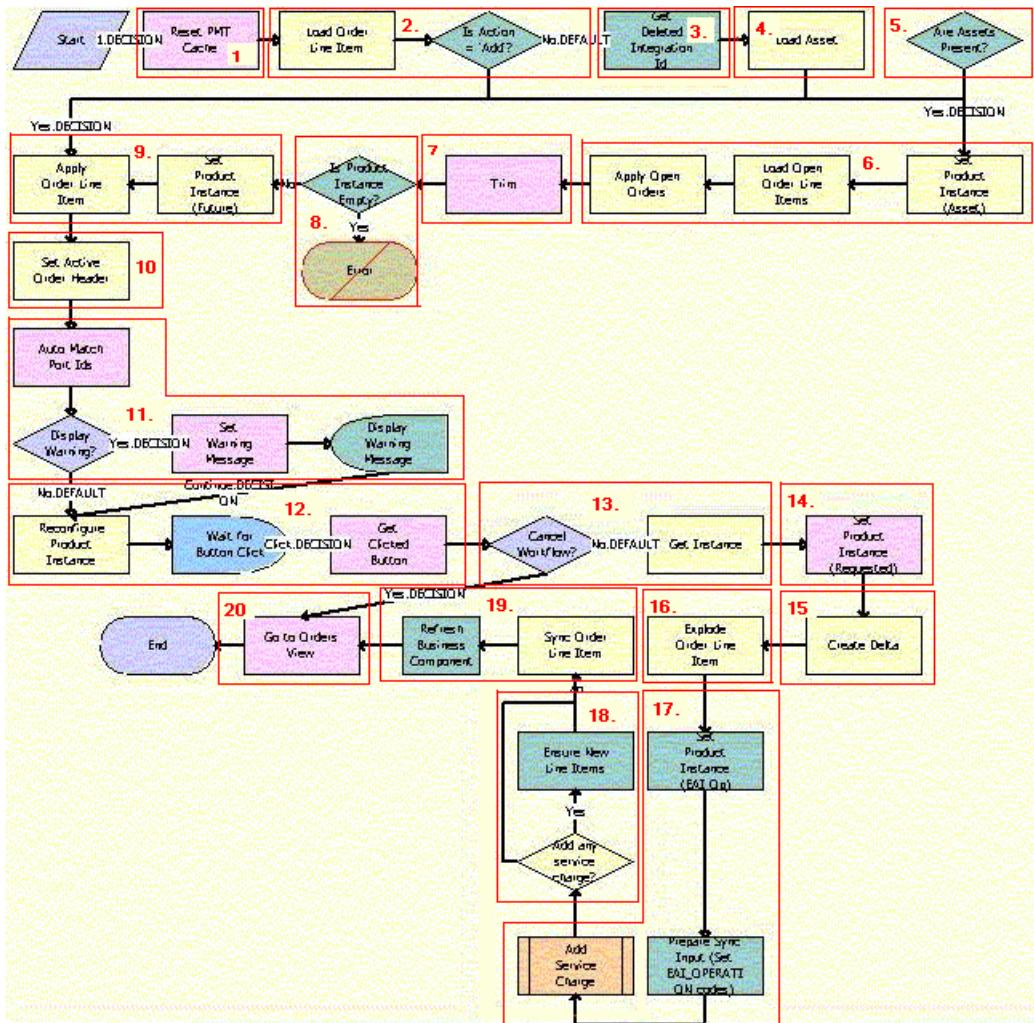

Figure 17. SIS OM Edit Service Order Line Item Workflow

Workflow Description. This workflow:

1   Clears the business service cache of existing product instances.

2   Checks the action code of the top-level component of the order line item. If the action code is Add, then goes to Step 9.

3   If the action code is not Add, recursively loops through the input property set (the order line items in the active document) and gets the integration IDs for the line items.

4   Reads the asset associated with the selected order line item from the database, excluding components with a status of Inactive.

5 Checks whether the asset is successfully loaded. If not, then goes to Step 9.

6 Retrieves all prior active and unprocessed orders related to the asset and applies them to generate the requested future state of the asset.

7 Removes the asset components that do not have the Track As Asset flag set.

8 If one of the active and unprocessed orders disconnects the top-level component, or no asset components have the Track As Asset flag set, the resulting asset is empty, and the workflow displays the following error message: A request has already been made to disconnect this service item. The workflow stops.

9 Applies the current order line item to the asset.

10 Stores the order header so that line items can be added to it.

11 Self-heals the asset so that the asset structure matches the product definition. If any changes are made to the asset, a warning message appears.

12 Displays the currently requested state of the asset in the Product Configurator view. The user makes the required changes and clicks the Done or Cancel button.

13 If the user clicks the Cancel button, the workflow terminates. If the user clicks the Done button, retrieves the newly requested state from the Configurator.

14 Caches the newly requested state of the asset to use as an input to Delta.

15 Generates the delta of the following as one or more order line items:

  ■ The requested state of the asset before the current order line item is applied.

  ■ The state of the asset after the user reconfigures it.

16 Explodes (ungroups) any order line item that has a quantity of more than 1 into multiple line items, each with a quantity of 1. Writes the order line item to the database and refreshes the view.

   NOTE: This step does not control the quantity of the line items, but only works with the quantity it is given. The user specifies order line item quantities in Configurator.

17 Creates a onetime service charge item for the order. For more information, see "SIS OM Add Service Charge Order Sub-Process" on page 55.

18 Generates a unique asset integration ID for all line items with an action code of Add.

19 Saves the document to the database.

20 Navigates to the Order Line Item view.

Associated Business Service Methods. The following table shows the steps in this workflow that call business service methods.

Workflow Step	Business Service Method Called
Reset PMT Cache	Reset
Get Deleted Integration Id	TraverseHierarchy
Set Product Instance (Asset)	Set Product Instance

Workflow Step	Business Service Method Called
Load Open Order Line Items	Find Orders
Apply Open Orders	Apply
Trim	Trim
Set Product Instance (Future)	Set Product Instance
Apply Order Line Item	Apply
Set Active Order Header	Set Output Header
Auto Match Port Ids	AutoMatch
Reconfigure Product Instance	Reconfigure Product Instance
Get Clicked Button	Get Configure Button Click Information
Get Instance	Get Product Instance
Set Product Instance (Requested)	Set Product Instance
Create Delta	Delta
Explode Order Line Item	Explode
Sync Order Line Item	Synchronize
Go to Orders View	GotoView

SIS OM Add Service Charge Order Sub-Process

This workflow adds a onetime charge to a service instance for a disconnect order type. Figure 18 shows this workflow.

The SIS OM Edit Service Order Line Item workflow invokes this workflow as a subprocess.
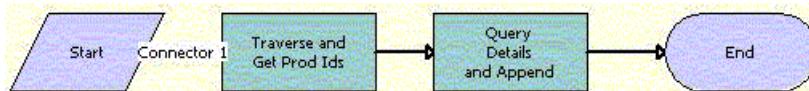
Figure 18. SIS OM Add Service Charge Order Sub-Process Workflow

Workflow Description. This workflow:

1 Recursively loops through the input property set (the complete hierarchy of service instances for the delete operation) and returns a list of the product IDs and corresponding integration IDs with a Service Bundle billing type.

2 Queries each of the products and gets the penalty charge details, if any, to append to the input property set.

Associated Business Service Methods. The following table shows the steps in this workflow that call business service methods.

Workflow Step	Method Called	In Business Service
Traverse and Get Prod Ids	GetProductId	SIS OM PMT Service
Query Details and Append	AppendServiceCharge	SIS OM PMT Service

Workflows to Submit an Order

This group workflows allows users to submit an order and signal to the provisioning system that the order is ready for provisioning. It consists of the following workflow processes:

■ "SISOMBillingSubmitOrderWebService" on page 56

■ "SIS OM Submit Order Process" on page 57

SISOMBillingSubmitOrderWebService

This workflow submits an order from the Siebel CRM application to the billing application and creates a new account, if needed, in the billing application. Figure 14 shows this workflow.

A user initiates this workflow by clicking the Submit button on the order header form in the Order Entry views.
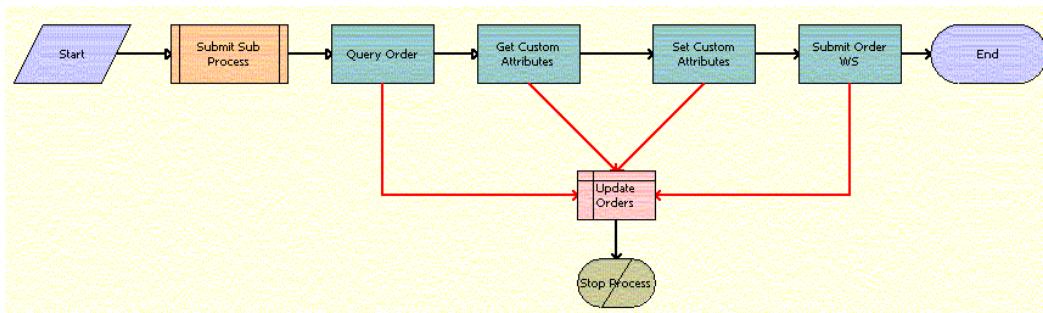
Figure 19. SISOMBillingSubmitOrderWebService Workflow

Workflow Description. This workflow:

1 Calls the SIS OM Submit Order Process. For more information, see "SIS OM Submit Order Process" on page 57.

2 Queries the Siebel integration object and returns data for the order.

3 Reads the enterprise details, such as the enterprise server name, language, and locale.

4 Sets the enterprise details as part of the request message.

5 Invokes a proxy business service to send order data to the billing application.

6 If any of the preceding steps have exceptions, changes the status of the order from Open to Pending.

Associated Business Service Methods. The following table shows the steps in this workflow that call business service methods.

Workflow Step	Method Called	In Business Service
Query Order	Query	EAI Siebel Adapter
Get Custom Attributes	GetEnterpriseParameters	CMU External Integration Service
Set Custom Attributes	SetAttributesToMessage	CMU External Integration Service
Submit Order WS	process	ProcessSalesOrderSiebelJMSProducer

SIS OM Submit Order Process

This workflow checks that account information exists and sets the status of the order and the line items to Open. Because only orders that do not have a status of Open are submitted, this workflow cannot submit orders more than once. Figure 20 shows this workflow.

A user initiates this workflow by clicking the Submit button on the order header form in the Order Entry views. The Submit button is hardcoded to invoke this workflow. Also, the SISOMBillingSubmitOrderWebService workflow invokes this workflow as a subprocess.
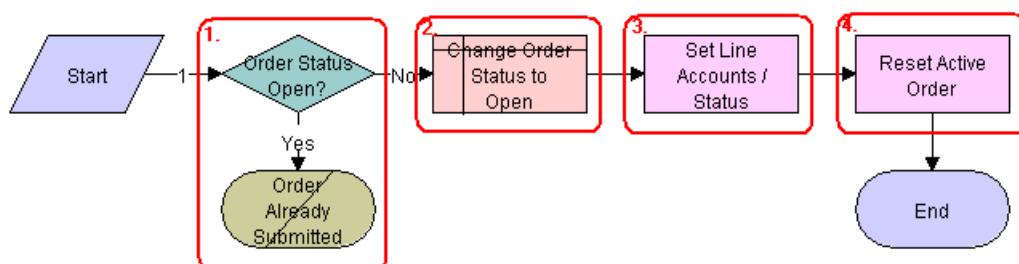
Figure 20. SIS OM Submit Order Process Workflow

Workflow Description. This workflow:

1 Checks that the order status is not Open.

2 If the order has a status of Open, does not submit the order because the order is already submitted.

3 Sets the status of the order to Open.

4 Sets the status of each Pending line item to Open.

5 Resets the Active Order so that the current order is no longer the active order.

Workflows to Update Order Line Items

This group of workflows updates order line items. It consists of the following workflow processes and subprocesses:

■ "SIS OM Order Line Item Update Main" on page 58

   ■ "SIS OM UpdateOrderItem" on page 59

   ■ "SIS OM NSB Update Order Line" on page 60

SIS OM Order Line Item Update Main

This workflow updates the status of order line items for simple products, invokes a subprocess to update the status of order line items for complex products, and invokes a subprocess to update the status of order line items for nested service bundles. Figure 21 shows this workflow.

An inbound Web service call invokes this workflow when the status of an order line item changes in the billing application.
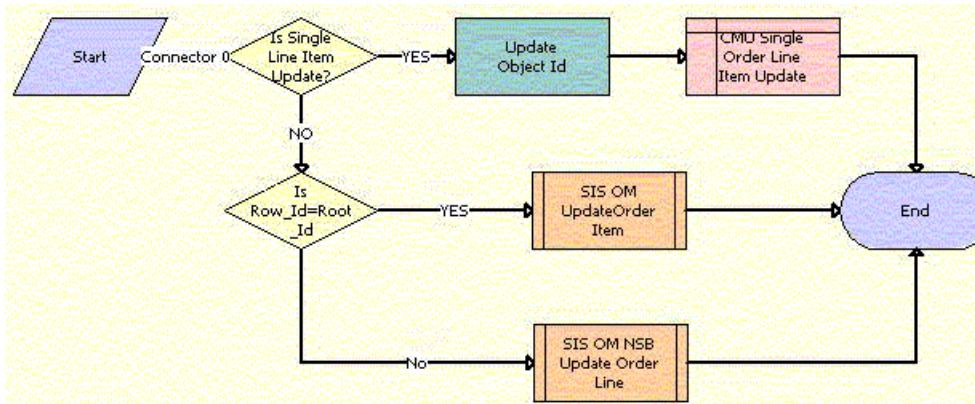
Figure 21. SIS OM Order Line Item Update Workflow

Workflow Description. This workflow:

1 Updates the status of the order line items for simple products.

2 Updates the status of the order line items for complex products. For more information, see "SIS OM UpdateOrderItem" on page 59.

3 Updates the status of the order line items for nested service bundles. For more information, see "SIS OM NSB Update Order Line" on page 60

Associated Business Service Methods. The following table shows the step in this workflow that call a business service method.

Workflow Step	Method Called	In Business Service
Update Object Id	Echo	Workflow Utilities

SIS OM UpdateOrderItem

This workflow updates the status of order line items for complex products. Figure 22 shows this workflow.

The SIS OM Order Line Item Update Main workflows invokes this workflow as a subprocess.
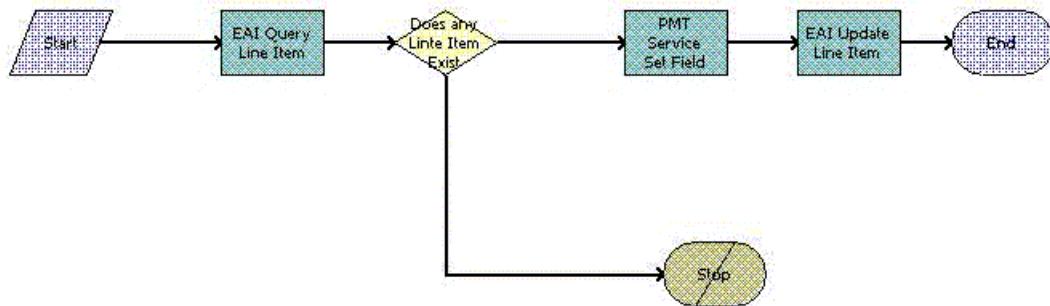
Figure 22. SIS OM UpdateOrderItem Workflow

Workflow Description. This workflow:

1 Finds the appropriate line item for the order.

2 If the line item exists, updates the line item for the order.

3 If the line item does not exist, terminates the workflow and returns an error message.

Associated Business Service Methods. The following table shows the steps in this workflow that call business service methods.

Workflow Step	Method Called	In Business Service
EAI Query Line Item	Query	EAI Siebel Adapter
PMT Service Set Field	Set Field Value	EAI Siebel Adapter

SIS OM NSB Update Order Line

This workflow updates the status of order line items for nested service bundles. The field name and value of the line item to update as well as the row ID of the root order and the nested service bundle are passed to this workflow. Figure 23 shows this workflow.

The SIS OM Order Line Item Update Main workflows invokes this workflow as a subprocess.
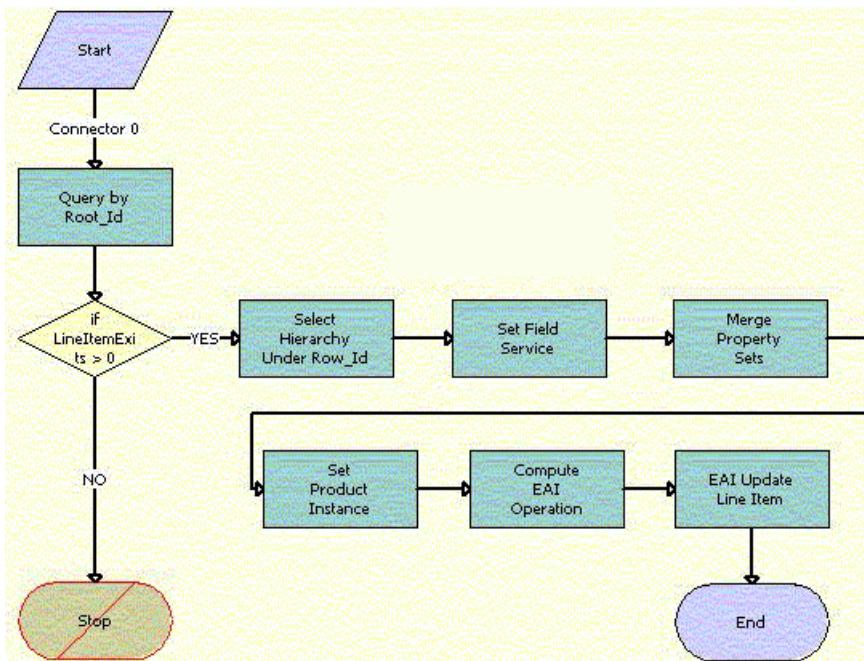
Figure 23. SIS OM NSB Update Order Line Item Workflow

Workflow Description. This workflow:

1 Gets the order hierarchy of the entire order using the row ID of the root order.

2 Gets the order hierarchy of the nested service bundle using the row ID of the nested service bundle.

3 Iterates through the order hierarchy of the nested service bundle and updates those fields and values that are passed to the workflow.

4 Merges the updated order hierarchy of the nested service bundle with the order hierarchy of the entire order to update the order hierarchy of the entire order.

5 Loads the order hierarchy that is not updated into memory.

6 Compares the updated order hierarchy with the order hierarchy that is not updated, and sets a flag for the fields with updated values.

7 Updates the database with the updated values.

Associated Business Service Methods. The following table shows the steps in this workflow that call business service methods.

Workflow Step	Method Called	In Business Service
Query by Root_Id	Query	EAI Siebel Adapter
Select Hierarchy Under Row_Id	GetProductHierarchyUnderRow	CMU External Integration Service
Set Field Service	SetFieldValue	CMU External Integration Service
Merge Property Sets	MergePropertySet	CMU External Integration Service
Set Product Instance	Set Product Instance	SIS OM PMT Service
Compute EAI Operation	Compute EAI Operation	SIS OM PMT Service
EAI Update Line Item	Update	EAI Siebel Adapter

Workflows to Modify a Service Item

This group of workflows allows a user to modify a service item. It consists of the following workflow process and subprocess:

- ■ "SIS OM Edit Complex Asset Workflow" on page 61
  - ■ "SIS OM Add Service Charge Sub-Process" on page 64

SIS OM Edit Complex Asset Workflow

This workflow applies the changes for open and pending orders related to the selected asset and displays the requested state in the Product Configurator view. After the user makes the changes that specify the newly requested state, the workflow writes the delta of the two requested states as quote line items and adds these line items to the active quote. Figure 24 shows this workflow.

The SIS OM Modify Products & Services Process invokes this workflow as a subprocess. For information about the SIS OM Modify Products & Services Process workflow, see *Siebel Order Management Guide*.
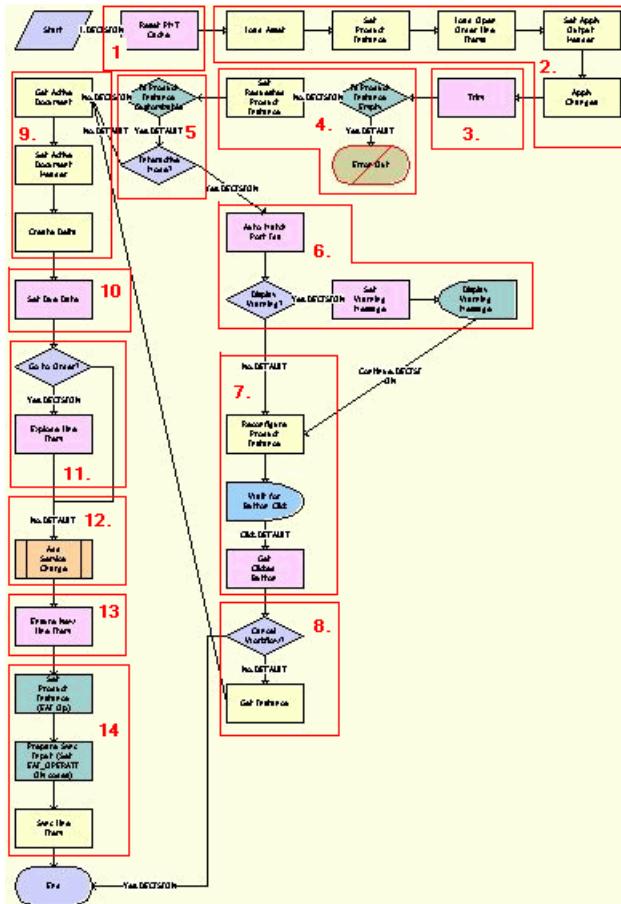
Figure 24. SIS OM Edit Complex Asset Workflow

Workflow Description. This workflow:

1 Clears the business service cache of existing product instances.

2 Reads the asset from the database.

The workflow includes only components that do not have a status of Inactive. The workflow looks for all the orders with a status of Open or Pending that are related to the selected asset. The workflow applies the changes that those orders specify to re-create the state of the service product as the user requests it.

3 Removes any components from the asset that do not have the Track As Asset flag set.

4   Displays an error message if the asset is empty.

If an open or pending order disconnects the root component, or if no components have the Track As Asset flag set, the result is an empty asset, and the workflow displays an error message.

5   Tests for a customizable asset and interactive mode.

If the asset is customizable and the workflow is in interactive mode, then displays the asset in the Product Configurator view, where the user can make changes to it. If the asset is not customizable or the workflow is not in interactive mode, then goes directly to Step 9.

6   Self-heals the asset so that the asset structure matches the product definition. If any changes are made to the asset, a warning message appears.

7   Displays the future requested state of the asset in the Configurator view.

8   If the user clicks the Cancel button, the workflow terminates. If the user clicks the Done button, retrieves the newly requested state from the Configurator.

9   Retrieves the active document and adds as line items the delta of the previously requested state of the asset and the newly requested state of the asset.

10 Sets the due date for all the line items.

11 If the active document is an order, explodes (ungroups) the line items with a quantity greater than 1 into multiple copies of the line item, each with quantity 1.

12 Creates a onetime service charge item for the quote or order based on the type of target document. For more information, see "SIS OM Add Service Charge Sub-Process" on page 64.

13 Generates a unique asset integration ID for all line items with an action code of Add.

14 Saves the document to the database.

Associated Business Service Methods. The following table shows the steps in this workflow that call business service methods.

Workflow Step	Business Service Method Called
Reset PMT Cache	Reset
Set Product Instance	Set Product Instance
Load Open Order Line Items	Find Orders
Set Apply Output Header	Set Output Header
Apply Changes	Apply
Trim	Trim
Set Requested Product Instance	Set Product Instance
Auto Match Port Ids	AutoMatch
Reconfigure Product Instance	Reconfigure Product Instance
Get Clicked Button	Get Cfg Button Click Information
Get Instance	Get Product Instance

Workflow Step	Business Service Method Called
Set Active Document Header	Set Output Header
Create Delta	Delta
Set Due Date	Set Field Value
Explode Line Item	Explode
Ensure New Line Item	Set Field Value
Sync Line Item	Synchronize

SIS OM Add Service Charge Sub-Process

This workflow adds a onetime charge to a service instance for a disconnect, move, suspend, or remove order type. Figure 25 shows this workflow.

The following workflows invoke this workflow as a subprocess:

■ SIS OM Edit Complex Asset Workflow

■ SIS OM Disconnect Asset Sub-Process

■ SIS OM Suspend / Resume Sub-Process

■ SIS OM Move Process
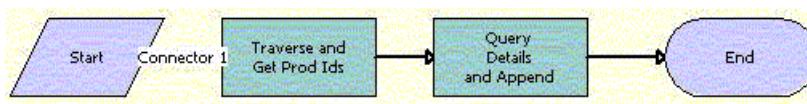
Figure 25. SIS OM Add Service Charge Sub-Process Workflow

Workflow Description. This workflow:

1   Recursively loops through the input property set (the complete hierarchy of service instances for the delete, transfer, suspend, or resume operation) and returns a list of the product IDs and corresponding integration IDs with a Service Bundle billing type.

2   Queries each of the products and gets the penalty charge details, if any, to append to the input property set.

Associated Business Service Methods. The following table shows the steps in this workflow that call business service methods.

Workflow Step	Method Called	In Business Service
Traverse and Get Prod Ids	GetProductId	SIS OM PMT Service
Query Details and Append	AppendServiceCharge	SIS OM PMT Service

Workflows to Disconnect a Service Item

This group of workflows allows a user to disconnect a service. It consists of the following workflow process and subprocess:

■ *"SIS OM Disconnect Asset Sub-Process" on page 65*

    ■ *"SIS OM Add Service Charge Sub-Process" on page 64*

SIS OM Disconnect Asset Sub-Process

This workflow applies the changes for the open and pending orders related to the selected asset to get requested state of the asset, creates line items to disconnect the selected asset in that state, and adds these line items to the active document. Figure 26 shows this workflow.

The SIS OM Disconnect Products & Services Process invokes this workflow as a subprocess. For information about the SIS OM Disconnect Products & Services Process workflow, see *Siebel Order Management Guide*.
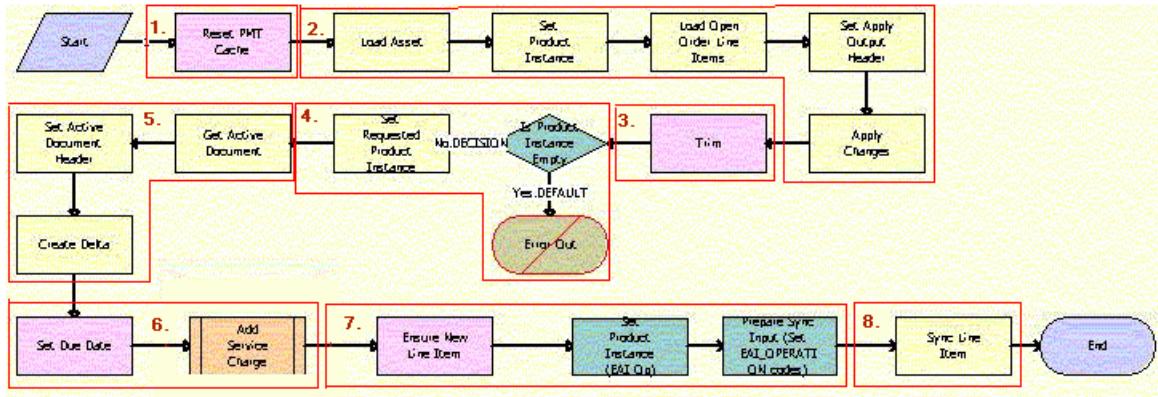
Figure 26. SIS OM Disconnect Asset Sub-Process Workflow

Workflow Description. This workflow:

1   Clears the business service cache of existing product instances.

2   Reads the asset from the database.

    The workflow includes only components that do not have a status of Inactive. The workflow looks for all the orders with a status of Open or Pending that are related to the selected asset. The workflow applies the changes that those orders specify to re-create the state of the service product as the user requests it.

3   Removes any components from the asset that do not have the Track As Asset flag set.

4 Displays an error message if the asset is empty.

If an open or pending order disconnects the root component, or if no components have the Track As Asset flag set, the result is an empty asset, and the workflow displays an error message.

5 Retrieves the active document and generates the delta of the requested state of the asset and the future empty state of the asset to create line items to disconnect the asset in the active document.

6 Sets the due date for each line item. Also, creates a onetime service charge item for the quote or order based on the type of target document. For more information, see "SIS OM Add Service Charge Sub-Process" on page 64.

7 Generates a new asset integration ID for any line item with an action code of Add.

8 Saves the document to the database.

Associated Business Service Methods. The following table shows the steps in this workflow that call business service methods.

Workflow Step	Business Service Method Called
Reset PMT Cache	Reset
Set Product Instance	Set Product Instance
Load Open Order Line Items	Find Orders
Set Apply Output Header	Set Output Header
Apply Changes	Apply
Trim	Trim
Set Requested Product Instance	Set Product Instance
Set Active Document Header	Set Output Header
Create Delta	Delta
Set Due Date	Set Field Value
Ensure New Line Item	Set Field Value
Sync Line Item	Synchronize

Workflows to Suspend or Resume Service Items

This group of workflows allows a user to suspend or resume a service. It consists of the following workflow process and subprocess:

■ "SIS OM Suspend / Resume Asset Sub-Process" on page 67

 ■ "SIS OM Add Service Charge Sub-Process" on page 64

SIS OM Suspend / Resume Asset Sub-Process

This workflow applies the changes for the open and pending orders related to the selected asset to get the requested state of the asset, creates line items to suspend or resume the selected asset in that state, and adds these line items to the active document. Figure 27 shows this workflow.

The SIS OM Suspend / Resume Products & Services Process workflow invokes this workflow as a subprocess. For information about the SIS OM Suspend / Resume Products & Services Process workflow, see *Siebel Order Management Guide*.
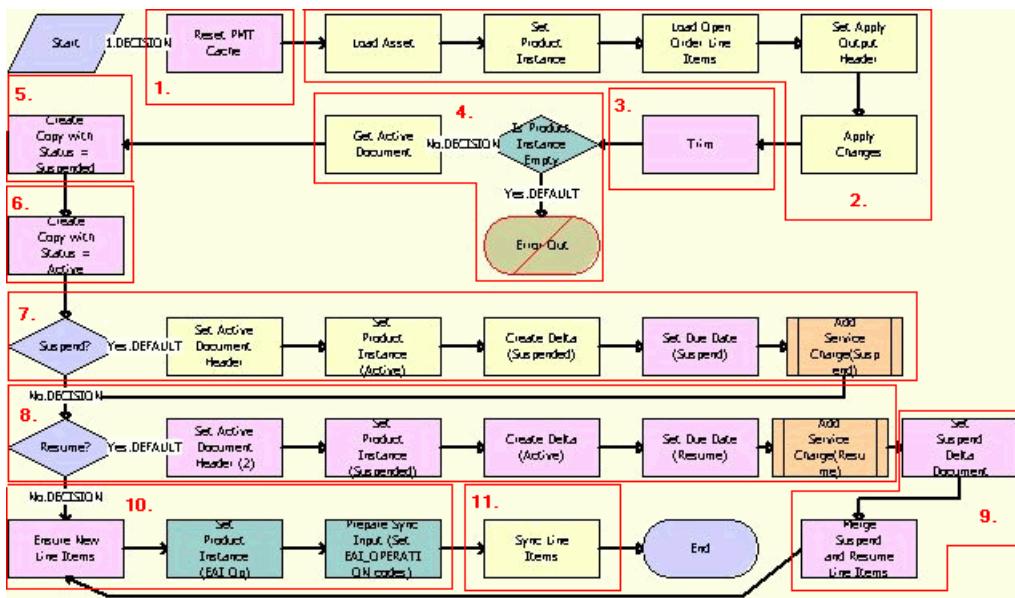

Figure 27. SIS OM Suspend / Resume Asset Sub-Process Workflow

Workflow Description. This workflow:

1 Clears the business service cache of existing product instances.

2 Reads the asset from the database.

   The workflow includes only components that do not have a status of Inactive. The workflow looks for all the orders with a status of Open or Pending that are related to the selected asset. The workflow applies the changes that those orders specify to re-create the state of the service product as the user requests it.

3 Removes any components from the asset that do not have the Track As Asset flag set.

4 Displays an error message if the asset is empty.

   If an open or pending order disconnects the root component, or if no components have the Track As Asset flag set, the result is an empty asset, and the workflow displays an error message.

5 Copies the asset and sets the status of each component to Suspended.

6 Copies the asset and sets the status of each component to Active.

7 If the user clicks the Suspend button, generates the delta of the requested state of the asset and the future suspended state of the asset to create line items to suspend the asset and set the due date for each line item. Also, creates a onetime service charge item for the quote or order based on the type of target document. For more information, see "SIS OM Add Service Charge Sub-Process" on page 64.

8 If the user clicks the Resume button, generates the delta of the requested state of the asset and the future active state of the asset to create line items to resume the asset and set the due date for each line item. Also, creates a onetime service charge item for the quote or order based on the type of target document. For more information, see "SIS OM Add Service Charge Sub-Process" on page 64.

9 Merges the line items of the suspend and resume requests into a single document.

10 Generates a new asset integration ID for any line item with an action code of Add.

11 Saves the document to the database.

Associated Business Service Methods. The following table shows the steps in this workflow that call business service methods.

Workflow Step	Business Service Method Called
Reset PMT Cache	Reset
Set Product Instance	Set Product Instance
Load Open Order Line Items	Find Orders
Set Apply Output Header	Set Output Header
Apply Changes	Apply
Trim	Trim
Create Copy with Status = Suspended	Set Field Value
Create Copy with Status = Active	Set Field Value
Set Active Document Header	Set Output Header
Set Requested Product Instance (Active)	Set Product Instance
Create Delta (Suspended)	Delta
Set Due Date (Suspend)	Set Field Value
Set Active Document Header (2)	Set Output Header
Set Requested Product Instance (Suspended)	Set Product Instance
Create Delta (Active)	Delta
Set Due Date (Resume)	Set Field Value
Set Suspend Delta Document	Set Product Instance
Merge Suspend and Resume Line Items	Merge

Workflow Step	Business Service Method Called
Ensure New Line Item	Set Field Value
Sync Line Items	Synchronize

Workflows to Transfer a Service to Another Location

This group of workflows facilitates the transfer of service from one location to another location when a customer moves. It consists of the following workflow process and subprocesses:

■ "SIS OM Move Process" on page 69

    ■ "SIS OM Move Exception Handling" on page 76

    ■ "SIS OM Move Service Point Check" on page 77

    ■ "SIS OM Add Service Charge Sub-Process" on page 64

    ■ "SIS OM Move Display Quote" on page 78

SIS OM Move Process

This workflow creates a quote with line items to disconnect all services at the move-out address and to connect those same services at the move-in address. The workflow automatically assigns service points to services at the new address in each case in which a service point of the correct type exists at the new address. Figure 28 shows this workflow.

A user initiates this workflow by clicking the Transfer Service button in the Address MVG of the Accounts view. The user must first specify the end date for services at the move-out address and the start date for services at the move-in address.
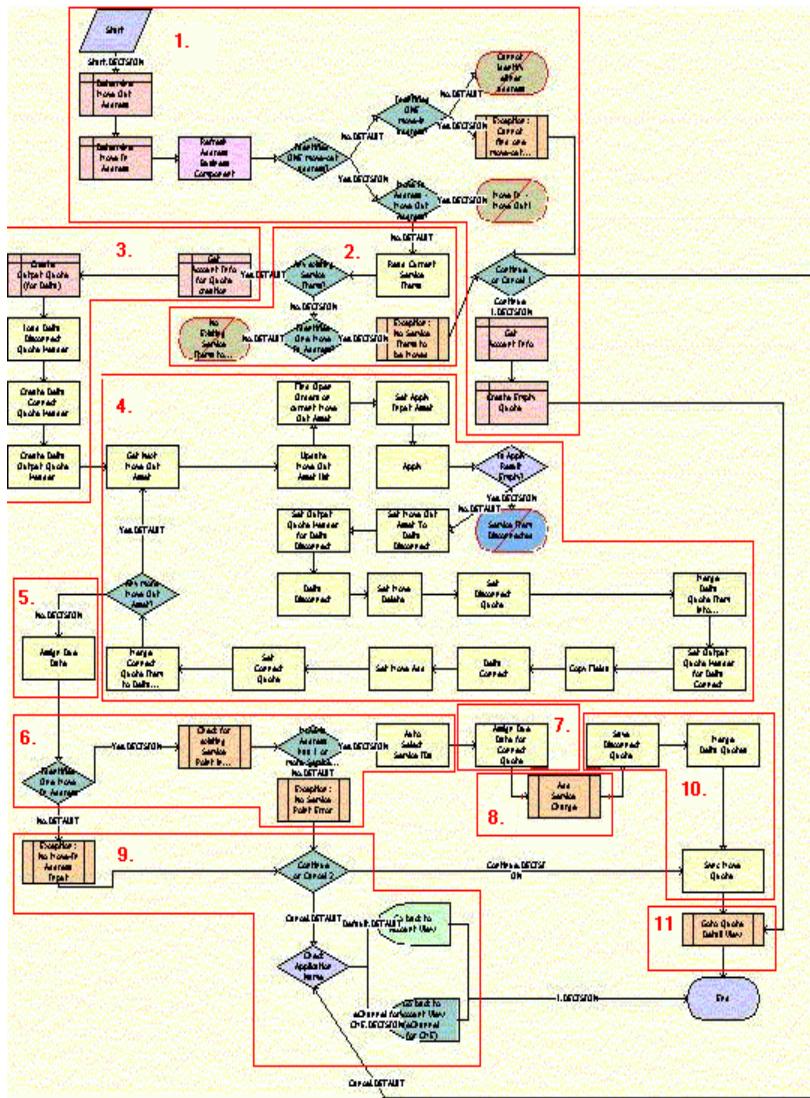
Figure 28.   SIS OM Move Process Workflow

Workflow Description. This workflow:

1   Identifies and validates the move-out and move-in addresses:

    a   The workflow identifies the move-out address as the address record for the current account that was updated most recently and that has an end date later than the current date.

b The workflow identifies the move-in address as the address record for the current account that was updated most recently and that has a start date later than the current date.

c If the workflow can identify neither a move-out address nor a move-in address, the workflow displays the following error message: Cannot identify the move-out address and move-in address. Press OK to return to the Account view.

Then the workflow terminates.

d If the workflow identifies a move-out address and a move-in address that are the same, the workflow displays the following error message: The move-in address cannot be the same as the move-out address. Press OK to return to the previous view and try again. Move Out Address = <move-out address> Move Out Date = <move-out date> Move In Address = <move-in address> Move In Date = <move-in date>

Then the workflow terminates.

e If the workflow cannot identify a move-out address but can identify a move-in address, the workflow displays the following error message: Cannot identify the move-out address. Please press Cancel to return to the previous view and provide a valid move-out address, or Continue to manually create a Connect quote for the move-in address.

For more details, see "SIS OM Move Exception Handling" on page 76.

f If the user clicks Continue, the workflow creates and displays an empty quote in the Quote Detail view.

In this view, the user can manually add new items for the move-in address.

g If the user clicks Cancel, the workflow returns the user to the Account view.

2 If the move-in address and the move-out address are validated, retrieves the service items for the move-out address.
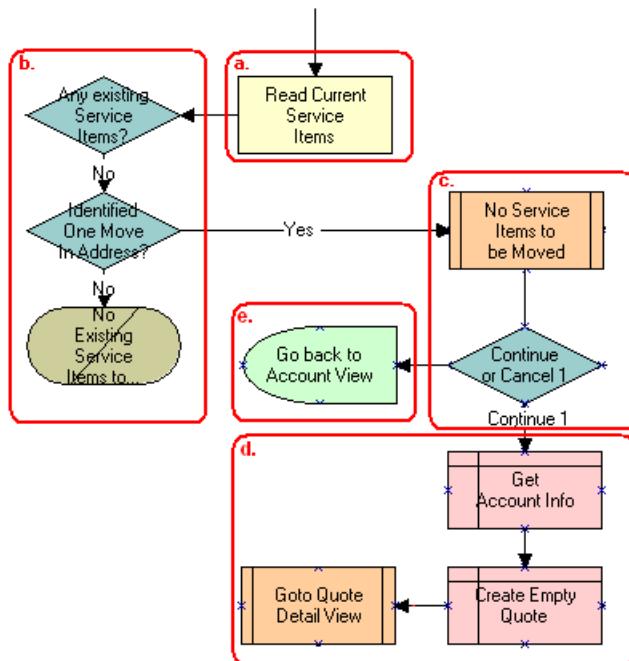
a The workflow retrieves the service items.

b If the move-out address has no service items and a move-in address is not identified, the workflow displays the following error message: There are no existing service items at the move-out address selected. Press OK to return to the Accounts view.

Then the workflow terminates.

c If the move-out address has no service items and a move-in address is identified, the workflow displays the following error message: There are no existing service items at the move-out address selected. Press Cancel to return to the Accounts view, or Continue to manually create a Connect quote.

d If the user clicks Continue, the workflow displays an empty quote in the Quote Detail view.

In this view, the user can manually add new items for the move-in address.

e If the user clicks Cancel, the workflow returns the user to the Account view.

3 Creates an output quote and fills in the account information.

4 Generates two quote line items for each service item at the move-out address:

■ A quote line item to disconnect the service item at the move-out address.

■ A quote line item to connect the service item at the move-in address.
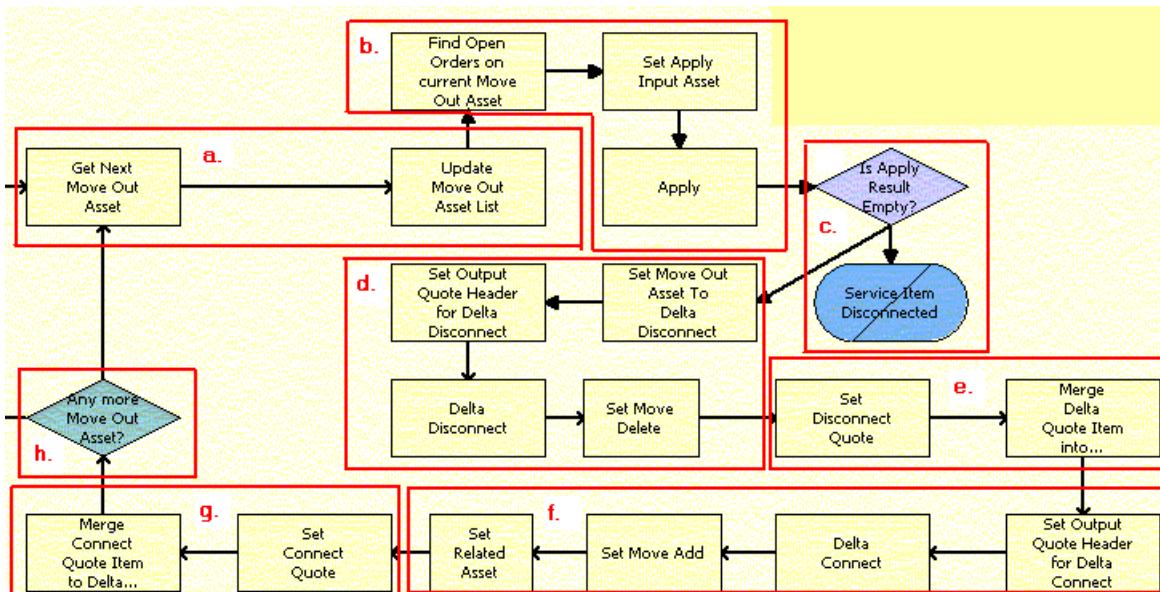
a   The workflow retrieves in turn each service item at the move-out address.

b   The workflow applies all open and pending orders related to each service item to generate the requested future state of the item.

c   The workflow checks to determine if the asset is disconnected as a result of an open or pending order.

  If the asset is disconnected, an error message displays and the workflow terminates.

d   The workflow generates the delta of the requested state of service item and an empty future state to create the disconnect instructions for the item.

e   The workflow adds the disconnect line items to the disconnect quote.

f   The workflow generates the delta of the requested state of service item and an empty current state to create the connect instructions for the item.

g   The workflow adds the connect line items to the connect quote.

h   If the move-out address has more service items, the workflow continues to the next item.

Associated Business Service Methods. The following table shows the steps in this part of the workflow that call business service methods.

Workflow Step	Business Service Method Called
Find Open Orders on current Move Out Asset	Find Orders
Set Apply Input Asset	Set Product Instance
Apply	Apply

Workflow Step	Business Service Method Called
Set Move Out Asset To Delta Disconnect	Set Product Instance
Set Output Quote Header for Delta Disconnect	Set Output Header
Delta Disconnect	Delta
Set Move Delete	Set field Value
Set Disconnect Quote	Set Product Instance
Merge Delta Quote Item into Disconnect Quote	Merge
Set Output Quote Header for Delta Connect	Set Output Header
Delta Connect	Delta
Set Move Add	Set field Value
Set Related Asset	Set field Value
Set Connect Quote	Set Product Instance
Merge Connect Quote Item to Delta Connect Quote	Merge

5 Specifies the due date for each of the disconnect line items.

The workflow sets the due date to the end date for the move-out address.

Associated Business Service Methods. The following table shows the step in this part of the workflow that calls a business service method.

Workflow Step	Business Service Method Called
Assign Due Date	Set Field Value

6 If the move-in address is identified, assigns a service point to each service item to connect at that address.
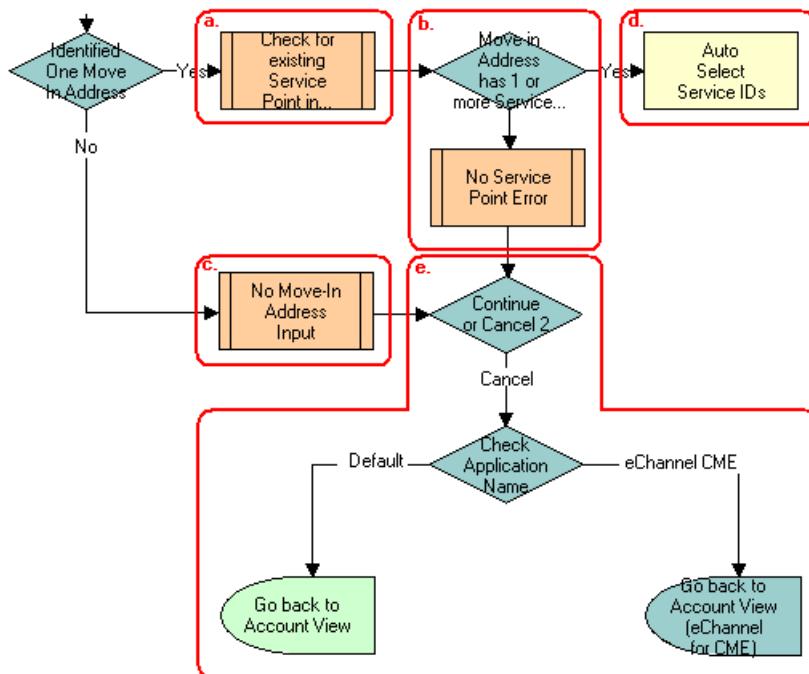
a The workflow checks to determine if existing service points of any type exist at the move-in address.

For more details, see "SIS OM Move Service Point Check" on page 77.

b If no service points exist at the move-in address, the workflow displays the following error message: There are no service points at the move-in address selected. Address may be invalid or outside the service area. Press Continue to proceed with only the Disconnect operation or Cancel to return to the Accounts view.

c If no available service points of the correct type exist, the Service Point ID for the item is empty.

d If service points exist at the move-in address, the workflow assigns each service item a service point with the same item type.

e If the user clicks Continue, the workflow displays the disconnect quote in the Quote Detail view. If the user clicks Cancel, the workflow returns the user to the Account view.

Associated Business Service Methods. The following table shows the step in this part of the workflow that calls a business service method.

| Workflow Step	Business Service Method Called
Auto Select Service IDs	Assign New Service Ids

7 Specifies the due date for each of the connect line items.

The workflow sets the due date to the start date for the move-in address.

Associated Business Service Methods. The following table shows the step in this part of the workflow that calls a business service method.

Workflow Step	Business Service Method Called
Assign Due Date for Connect Quote	Set Multiple Field Values

8 Creates a onetime service charge item for the quote. For more information, see "SIS OM Add Service Charge Sub-Process" on page 64.

9 If the move-in address is not identified, displays the following error message: Cannot identify the move-in address. Please press Cancel to return to the previous view and provide a valid start date or Continue to proceed with only a disconnect at the move-out address. Move In Date Entered =.

The user can cancel the process or proceed with only the disconnect service. If the user clicks the Cancel button, the workflow returns the user to the Accounts view.

10 Merges the disconnect line items and the connect line items into one quote and saves that quote to the database.

Associated Business Service Methods. The following table shows the steps in this part of the workflow that call business service methods.

Workflow Step	Business Service Method Called
Save Disconnect Quote	Set Product Instance
Merge Delta Quotes	Merge
Sync Move Quote	Synchronize

11 Displays the quote in the Quote Detail view.

For more details, see "SIS OM Move Display Quote" on page 78.

SIS OM Move Exception Handling

This workflow provides exception handling for the SIS OM Move Process. Figure 29 shows this workflow.

The SIS OM Move Process workflow invokes this workflow as a subprocess.
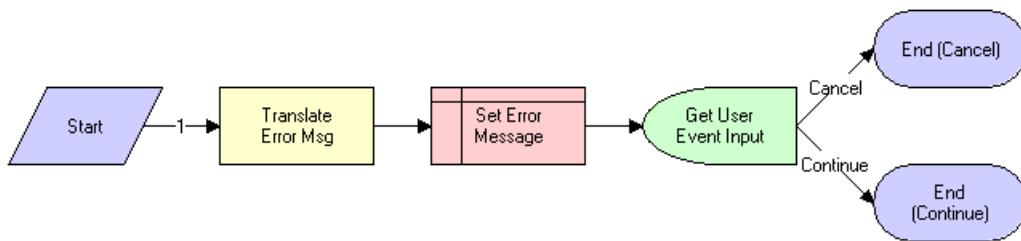
Figure 29. SIS OM Move Exception Handling Workflow

Workflow Description. This workflow:

Displays an error message in a view (not in a popup window) and determines if the user clicked the Continue button or the Cancel button.

Associated Business Service Methods. The following table shows the step in this workflow that calls a business service method.

Workflow Step	Business Service Method Called
Translate Error Msg	Set Exception Error Message

SIS OM Move Service Point Check

This workflow checks the number of service points at the move-in address. Figure 30 shows this workflow.

The SIS OM Move Process workflow invokes this workflow as a subprocess.
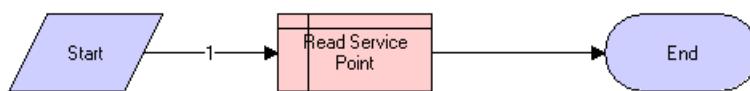
Figure 30. SIS OM Move Service Point Check Workflow

Workflow Description. This workflow:

Determines the number of service points for an address.

SIS OM Move Display Quote

This workflow displays the newly created quote in the Quote Detail view. Figure 31 shows this workflow.

The SIS OM Move Process workflow invokes this workflow as a subprocess.

Figure 31. SIS OM Move Display Quote Workflow

Workflow Description. This workflow:

Displays the Quote Detail view.

6 Web Service Reference

This chapter describes the Web services for the integration of Siebel Communications with an application for managing billing and revenue. These Web services are part of the Siebel CRM Web services offering.

This chapter includes the following topics:

Web Service Summary

Table 3 shows the namespace and type for the Web services that are described in this chapter.

Table 3. Web Service Summary

Web Service Name	Namespace	Type
CMU Account Query	http:siebel.com/asi/	Inbound
CMU Account Update	http:siebel.com/asi/	Inbound
SWI Update Order Line Item	http:siebel.com/asi/	Inbound
Product Import	http://www.siebel.com/xml/ProductImport	Inbound

Table 3.   Web Service Summary

Web Service Name	Namespace	Type
ISS Price List Item WS	http:siebel.com/asi/	Inbound
ESB_AccountBalanceSiebelReqABCS_Service	http://xmlns.oracle.com/ABCS/Siebel/ Industry/Telco/ AccountBalanceSiebelReqABCS/V1	Outbound
ESB_UnbilledUsageSiebelReqABCS_Service	http://xmlns.oracle.com/ABCS/Siebel/ Industry/Telco/ UnbilledUsageSiebelReqABCS/V1	Outbound
ESB_InvoiceSiebelReqABCS_Service	http://xmlns.oracle.com/ABCS/Siebel/ Industry/Telco/ InvoiceSiebelReqABCS/V1	Outbound
ESB_PaymentSiebelReqABCS_Service	http://xmlns.oracle.com/ABCSImpl/ Siebel/Industry/Telco/ PaymentSiebelReqABCS/V1	Outbound
ESB_AdjustmentSiebelReqABCS_Service	http://xmlns.oracle.com/ABCS/Siebel/ Industry/Telco/ AdjustmentSiebelReqABCS/V1	Outbound
ProcessSalesOrderSiebelJMSProducer	http://xmlns.oracle.com/ABCS/ Industry/Telco/SalesOrder/ ProcessSalesOrderSiebelJMSProducer	Outbound
UpdateCustomerSiebelJMSProducer	http://xmlns.oracle.com/ABCS/Siebel/ Industry/Telco/ UpdateCustomerSiebelJMSProducer/V1	Outbound

Configuring Web Services

The Process Integration Packs (PIPs) in the Oracle Application Integration Architecture can use the Web services described in this chapter. To configure a Web service, you change the URI address for its service ports. For information about exposing Web services, see *Siebel CRM Web Services Reference*.

A call into the Siebel Call Center module for Siebel Communications uses an inbound Web service. To configure the inbound Web services, complete the steps in the following procedure.

To configure the inbound Web services

1   Navigate to the Administration - Web Services screen > Inbound Web Services view.

2   Query for the Web service name in the Inbound Web Services list.

3   If the Web service is not active, change the its status from Inactive to Active, and click Clear Cache.

4   In the Service Ports list for the Web service, change the following text strings in the Address field to the appropriate data for your server:

  ■   <webserver>

  ■   <lang>

  ■   <UserName>

  ■   <Password>

A call out of the Siebel Call Center module for Siebel Communications uses an outbound Web service. To configure the outbound Web services, complete the steps in the following procedure.

To configure the outbound Web services

1   Navigate to the Administration - Web Services screen > Outbound Web Services view.

2   Query for the Web service name in the Outbound Web Services list.

3   In the Service Ports list for the Web service, change the web server name and port in the Address field to the appropriate data for your server.

CMU Account Query

Use this Web service to find the account detail in the Siebel CRM application. A business service is exposed in the Siebel CRM application so that the middle layer can query for account detail in the CRM application and synchronize this detail with the billing application.

The account detail that this Web service finds includes details about the contacts, addresses, and billing profiles that are associated with the account. This detail includes only those fields that the billing application needs to synchronize data.

The response message returns only an acknowledgement message and not data.

Operation for CMU Account Query

Operation Name	Description
Request Message Description: CMU Account QueryPage	Finds the account detail based on the account ID and the billing profile ID.

Request Message Description: CMU Account QueryPage

Request Message	
Node	**Description**
AccountId	The ID of the account for the billing profile.
BillingProfileId	The ID of the billing profile for the account.

Application Interface for CMU Account Query

This section describes the application objects that this Web service calls. For more information about implementing the application, see the application development documentation.

Service Object (Business Service or Workflow)

Name	Boundary Object Type	Class (If Business Service)
CMU Account Query Service	Business Service	CSSEAIUIDataService

Data Object (Integration Object)

Siebel Repository Name	External Name
CMU Query Account Io	CMU - Account

Methods

Operation	Method
CMU Account QueryPage	[BS: CMU Account Query Service].QueryPage

Example Package for CMU Account Query

To view an example of messages for this Web service, navigate to documentation library for Siebel applications on the Oracle Technology Network, and click the Related Files link next to the link for *Siebel Communications Guide Addendum* to access a zip file. Then extract the files in the zip file.

Request Message File

See the following file to view the sample code:

...\CMUAccountQuery\CMU Account Query.xml

Response Message File

See the following file to view the sample code:

...\CMUAccountQuery\CMU Account Query.xml

Message Schema for CMU Account Query

To view the message schema for this Web service, navigate to the documentation library for Siebel applications on the Oracle Technology Network, and click the Related Files link next to the link for *Siebel Communications Guide Addendum* to access a zip file. Then extract the files in the zip file.

See the following file to view the message schema:

`...\CMUAccountQuery\CMU Account Query.wsdl`

CMU Account Update

Use this Web service to update the status of an account in the Siebel CRM application when the status of the account changes in the billing application. The billing application makes this inbound Web service call to the Siebel CRM application to update the status of the account. A business service is exposed in the Siebel CRM application to update the status field.

The response message returns only an acknowledgement message and not data.

Operation for Account Update

Operation Name	Description
Request Message Description: CMU Account Update	Updates the status of an account in the Siebel CRM application when the status of the account changes in the billing application.

Request Message Description: CMU Account Update

Request Message	
Node	Description
AccountId	The ID of the account for the billing profile.
AccountStatus	The status of the account that was updated in the billing application.

Application Interface for Account Update

This section describes the application objects that this Web service calls. For more information about implementing the application, see the application development documentation.

Service Object (Business Service or Workflow)

Name	Boundary Object Type	Class (If Business Service)
CMU Account Update	Business Service	CSSEAIDataSyncService

Data Object (Integration Object)

Siebel Repository Name	External Name
CMU Update Account Io	Account

Methods

Operation	Method
CMU Account Update	[BS: CMU Account Update].Update

Example Package for Account Update

To view an example of messages for this Web service, navigate to documentation library for Siebel applications on the Oracle Technology Network, and click the Related Files link next to the link for *Siebel Communications Guide Addendum* to access a zip file. Then extract the files in the zip file.

Request Message File

See the following file to view the sample code:

...\CMUAccountUpdate\CMU Account Update.xml

Response Message File

See the following file to view the sample code:

...\CMUAccountUpdate\CMU Account Update.xml

Message Schema for Account Update

To view the message schema for this Web service, navigate to the documentation library for Siebel applications on the Oracle Technology Network, and click the Related Files link next to the link for *Siebel Communications Guide Addendum* to access a zip file. Then extract the files in the zip file.

See the following file to view the message schema:

...\CMUAccountUpdate\CMU Account Update.wsdl

ESB_AccountBalanceSiebelReqABCS_Service

Use this Web service to retrieve information about the balance summary, balance groups, and balance details for a billing profile. This Web service retrieves the information from the billing application.

Operations for ESB_AccountBalanceSiebelReqABCS_Service

Operation Name	Description
Request Message Description: QueryBalanceSummary	Retrieves the balance summary information for a billing profile.
Request Message Description: QueryBalanceDetails	Retrieves the balance group and balance detail information for a billing profile.

Request Message Description: QueryBalanceSummary

Request Message	
Node	**Description**
AccountId	The ID of the account for the billing profile.
AccountName	The name of the account for the billing profile.
MaximumNumberOfRecords	The maximum number of records to retrieve from the external system.
CurrencyCode	The currency code of the account for the billing profile.
BillingProfileName	The name of the billing profile for the account.
BillingProfileId	The ID of the billing profile for the account.

Response Message Description: QueryBalanceSummary

Response Message	
Node	**Description**
CmuBalanceSummaryVbc	The attributes of the balance summary.

Request Message Description: QueryBalanceDetails

Request Message	
Node	**Description**
AccountId	The ID of the account for the billing profile.
AccountName	The name of the account for the billing profile.
MaximumNumberOfRecords	The maximum number of records to retrieve from the external system.
CurrencyCode	The currency code of the account for the billing profile.
BillingProfileName	The name of the billing profile for the account.
BillingProfileId	The ID of the billing profile for the account.

Response Message Description: QueryBalanceDetails

Response Message	
Node	**Description**
CmuBalanceGroupVbc	The attributes of the balance group.
CmuBalanceVbc	The attributes of the balances for the balance group.
CmuBalanceDetailsVbc	The attributes of the balance details for the balance.
CmuBalanceGroupServicesVbc	The attributes of the service charges for the balance group.

Application Interface for ESB_AccountBalanceSiebelReqABCS_Service

This section describes the application objects that this Web service calls. For more information about implementing the application, see the application development documentation.

Service Object (Business Service or Workflow)

Name	Boundary Object Type	Class (If Business Service)
AccountBalanceSiebelReqABCS	Business Service	CSSWSOutboundDispatcher

Data Object (Integration Object)

Siebel Repository Name	External Name
CMU Request Billing Profile IO	Account
CMU Response Balance Group IO	Account

Methods

Operation	Method
QueryBalanceSummary	[BS:AccountBalanceSiebelReqABCS].QueryBalanceSummary
QueryBalanceDetails	[BS:AccountBalanceSiebelReqABCS].QueryBalanceDetails

Example Package for ESB_AccountBalanceSiebelReqABCS_Service

To view an example of messages for this Web service, navigate to documentation library for Siebel applications on the Oracle Technology Network, and click the Related Files link next to the link for *Siebel Communications Guide Addendum* to access a zip file. Then extract the files in the zip file.

Request Message File

See the following file to view the sample code:

. . .\AccountBalanceSiebelReqABCS\QueryBalanceDetailsReqMsg.xml

Response Message File

See the following file to view the sample code:

. . .\AccountBalanceSiebelReqABCS\QueryBalanceDetailsRespMsg.xml

Message Schema for ESB_AccountBalanceSiebelReqABCS_Service

To view the message schema for this Web service, navigate to the documentation library for Siebel applications on the Oracle Technology Network, and click the Related Files link next to the link for *Siebel Communications Guide Addendum* to access a zip file. Then extract the files in the zip file.

See the following file to view the message schema:

. . .\AccountBalanceSiebelReqABCS\AccountBalanceSiebelReqABCSService.xml

ESB_AdjustmentSiebelReqABCS_Service

Use this Web service to adjust the bills, item charges, events, and resource balances in a billing profile. Also, use this Web service to retrieve adjustment information for a billing profile.

Operations for ESB_AdjustmentSiebelReqABCS_Service

Operation Name	Description
Request Message Description: CreateAdjustment	Creates an adjustment for a bill, item charge, event, and resource balance in a billing profile.
Request Message Description: QueryAdjustment	Retrieves the adjustments for a bill in a billing profile.

Request Message Description: CreateAdjustment

The following request message information applies to an adjustment for a bill.

Request Message	
Node	**Description**
The following nodes apply to the FsInvoiceAdjustment node:	
AccountId	The ID of the account for the billing profile.
BillingProfileId	The ID of the billing profile for the account.
AdjustmentID	The row ID of the adjustment record.
AdjustmentLevelType	The adjustment level (for example, Bill).
ApprovedDate	The date the adjustment is approved.
ReasonForRequest	The reason for the adjustment.
TaxType	The type of tax for the adjustment (for example, Include Tax or Exclude Tax).
Status	The status of the adjustment. By default, the status is Open.
IntegrationId	The ID of the bill for the adjustment in the billing application.
DecisionDescription	Comments that the user enters about the adjustment.
ApprovedAmt	The approved amount for the adjustment. If this node is included, the ApprovedPercentage node is excluded.
ApprovedPercentage	The approved percentage for the adjustment. If this node is included, the ApprovedAmt node is excluded.

The following request message information applies to an adjustment for an item charge, event, and resource balance.

Request Message	
Node	**Description**
The following nodes apply to the FsInvoiceAdjustment node:	
AccountId	The ID of the account for the billing profile.
BillingProfileId	The ID of the billing profile for the account.
AdjustmentID	The row ID of the adjustment record.
AdjustmentLevelType	The adjustment level (for example, Item Charge, Event Details, and Resource Impact).
ApprovedDate	The date the adjustment is approved.
The following nodes apply to the SiaInvoiceAdjustmentExternalItems node:	
ReasonForRequest	The reason for the adjustment.

Request Message	
Node	**Description**
TaxType	The type of tax for the adjustment (for example, Include Tax or Exclude Tax).
Status	The status of the adjustment. By default, the status is Open.
IntegrationId	The ID of the bill for the adjustment in the billing application.
ApprovedDescription	Comments that the user enters about the adjustment.
ResourceType	The type of resource for the adjustment (for example, Currency or Non Currency).
ApprovedCurrencyCode	The currency code for the adjustment (for example, USD).
ApprovedAmt	The approved amount for the adjustment. If this node is included, the ApprovedPercentage and ApprovedValue nodes are excluded.
ApprovedPercentage	The approved percentage for the adjustment. If this node is included, the ApprovedAmt and ApprovedValue nodes are excluded.
ApprovedValue	The approved value for the adjustment. If this node is included, the ApprovedAmt and ApprovedPercentage nodes are excluded. This node applies only to a resource balance adjustment.

Response Message Description: CreateAdjustment

The following response message information applies to an adjustment for a bill.

Response Message	
Node	**Description**
FsInvoiceAdjustment	The attributes of the adjustment in the header for the bill in the billing profile.

The following response message information applies to an adjustment for an item charge, event, and resource balance.

Response Message	
Node	**Description**
FsInvoiceAdjustment	The attributes of the adjustment in the header for the bill in the billing profile.
SiaInvoiceAdjustmentExternalItems	The attributes of the adjustment for the item charge, event, and resource balance in the billing profile.

Request Message Description: QueryAdjustment

Request Message Node	Description
AccountId	The ID of the account for the billing profile.
AccountName	The name of the account for the billing profile.
MaximumNumberOfRecords	The maximum number of records to retrieve from the external system.
CurrencyCode	The currency code of the account for the billing profile.
BillingProfileName	The name of the billing profile for the account.
BillingProfileId	The ID of the billing profile for the account.
BillPOID	The ID of the bill.

Response Message Description: QueryAdjustment

Response Message Node	Description
CmuBilledUsageArItemsVbc	The attributes of the adjustments for the bill in the billing profile.

Application Interface for ESB_AdjustmentSiebelReqABCS_Service

This section describes the application objects that this Web service calls. For more information about implementing the application, see the application development documentation.

Service Object (Business Service or Workflow)

Name	Boundary Object Type	Class (If Business Service)
AdjustmentSiebelReqABCS	Business Service	CSSWSOutboundDispatcher

Data Object (Integration Object)

Siebel Repository Name	External Name
CMU Request Adjustment IO	Account
CMU Response Adjustment IO	Account

Siebel Repository Name	External Name
CMU Request Billed Usage IO	Account
CMU Response Billed Usage AR Items IO	Account

Methods

Operation	Method
CreateAdjustment	[BS:AdjustmentSiebelReqABCS].CreateAdjustment
QueryAdjustment	[BS:AdjustmentSiebelReqABCS].QueryAdjustment

Example Package for ESB_AdjustmentSiebelReqABCS_Service

To view an example of messages for this Web service, navigate to documentation library for Siebel applications on the Oracle Technology Network, and click the Related Files link next to the link for *Siebel Communications Guide Addendum* to access a zip file. Then extract the files in the zip file.

Request Message File

See the following file to view the sample code:

...\AdjusmentSiebelReqABCS\QueryAdjusmentRequestMessage.xml

Response Message File

See the following file to view the sample code:

...\AdjustmentSiebelReqABCS\QueryAdjustmentResponseMessage.xml

Message Schema for ESB_AdjustmentSiebelReqABCS_Service

To view the message schema for this Web service, navigate to the documentation library for Siebel applications on the Oracle Technology Network, and click the Related Files link next to the link for *Siebel Communications Guide Addendum* to access a zip file. Then extract the files in the zip file.

See the following file to view the message schema:

...\AdjustmentSiebelReqABCS\ESB_AdjustmentSiebelReqABCS_Service

ESB_InvoiceSiebelReqABCS_Service

Use this Web service to retrieve bill, usage, event, and resource balance information for bills in a billing profile. This Web service retrieves the information from the billing application.

Operations for ESB_InvoiceSiebelReqABCS_Service

Operation Name	Description
Request Message Description: QueryInvoiceList	Retrieves the bills for a billing profile.
Request Message Description: QueryInvoice	Retrieves the detail for a bill.
Request Message Description: QueryEventDetails	Retrieves the billed event (for example, phone call) detail for an item charge.
Request Message Description: SearchEventDetails	Finds the billed event detail based on data in the From Amount, To Amount, Start Date, and End Date fields.
Request Message Description: QueryResourceBalance	Retrieves the non-currency resource balance detail for a billed event.

Request Message Description: QueryInvoiceList

Request Message	
Node	Description
AccountId	The ID of the account for the billing profile.
AccountName	The name of the account for the billing profile.
MaximumNumberOfRecords	The maximum number of records to retrieve from the external system.
CurrencyCode	The currency code of the account for the billing profile.
BillingProfileName	The name of the billing profile for the account.
BillingProfileId	The ID of the billing profile for the account.

Response Message Description: QueryInvoiceList

Response Message	
Node	Description
CmuInvoiceVbc	The attributes of the header for the bills.

Request Message Description: QueryInvoice

Request Message	
Node	**Description**
AccountId	The ID of the account for the billing profile.
AccountName	The name of the account for the billing profile.
MaximumNumberOfRecords	The maximum number of records to retrieve from the external system.
CurrencyCode	The currency code of the account for the billing profile.
BillingProfileName	The name of the billing profile for the account.
BillingProfileId	The ID of the billing profile for the account.
BillPOID	The ID of the bill.

Response Message Description: QueryInvoice

Response Message	
Node	**Description**
CmuBilledUsageServiceChargesVbc	The attributes of the billed service charges.
CmuBilledUsageItemChargesVbc	The attributes of the billed item charges.

Request Message Description: QueryEventDetails

Request Message	
Node	**Description**
AccountId	The ID of the account for the billing profile.
AccountName	The name of the account for the billing profile.
MaximumNumberOfRecords	The maximum number of records to retrieve from the external system.
CurrencyCode	The currency code of the account for the billing profile.
BillingProfileName	The name of the billing profile for the account.
BillingProfileId	The ID of the billing profile for the account.
BillPOID	The ID of the bill.
ItemChargeId	The ID of the item charge.

Response Message Description: QueryEventDetails

Response Message	
Node	**Description**
CmuCdrDetailsVbc	The attributes of the billed events.

Request Message Description: SearchEventDetails

Request Message	
Node	**Description**
AccountId	The ID of the account for the billing profile.
AccountName	The name of the account for the billing profile.
MaximumNumberOfRecords	The maximum number of records to retrieve from the external system.
CurrencyCode	The currency code of the account for the billing profile.
BillingProfileName	The name of the billing profile for the account.
BillingProfileId	The ID of the billing profile for the account.
BillPOID	The ID of the bill.
ItemChargeId	The ID of the item charge.
StartDate	The starting date of the event.
EndDate	The ending date of the event.
FromAmount	The minimum amount of the event.
ToAmount	The maximum amount of the event.

Response Message Description: SearchEventDetails

Response Message	
Node	**Description**
CmuCdrDetailsVbc	The attributes for the billed events.

Request Message Description: QueryResourceBalance

Request Message Node	Description
AccountId	The ID of the account for the billing profile.
AccountName	The name of the account for the billing profile.
MaximumNumberOfRecords	The maximum number of records to retrieve from the external system.
CurrencyCode	The currency code of the account for the billing profile.
BillingProfileName	The name of the billing profile for the account.
BillingProfileId	The ID of the billing profile for the account.
BillPOID	The ID of the bill.
ItemChargeId	The ID of the item charge.
EventId	The ID of the event.

Response Message Description: QueryResourceBalance

Response Message Node	Description
CmuCdrBalanceDetailsVbc	The attributes of the non-currency resource balances for the billed event.

Application Interface for ESB_InvoiceSiebelReqABCS_Service

This section describes the application objects that this Web service calls. For more information about implementing the application, see the application development documentation.

Service Object (Business Service or Workflow)

Name	Boundary Object Type	Class (If Business Service)
InvoiceSiebelReqABCS	Business Service	CSSWSOutboundDispatcher

Data Object (Integration Object)

Siebel Repository Name	External Name
CMU Request Billing Profile IO	Account
CMU Response Billing Invoice IO	Account
CMU Request Billed Usage IO	Account
CMU Response Billed Usage IO	Account
CMU Request CDR Details IO	Account
CMU Response CDR Details IO	Account
CMU Request CDR Details Search IO	Account
CMU Request CDR Balance Details IO	Account
CMU Response CDR Balance Details IO	Account

Methods

Operation	Method
QueryInvoiceList	[BS:InvoiceSiebelReqABCS].QueryInvoiceList
QueryInvoice	[BS:InvoiceSiebelReqABCS].QueryInvoice
QueryEventDetails	[BS:InvoiceSiebelReqABCS].QueryEventDetails
SearchEventDetails	[BS:InvoiceSiebelReqABCS].SearchEventDetails
QueryResourceBalance	[BS:InvoiceSiebelReqABCS].QueryResouceBalance

Example Package for ESB_InvoiceSiebelReqABCS_Service

To view an example of messages for this Web service, navigate to documentation library for Siebel applications on the Oracle Technology Network, and click the Related Files link next to the link for *Siebel Communications Guide Addendum* to access a zip file. Then extract the files in the zip file.

Request Message File

See the following file to view the sample code:

...\InvoiceSiebelReqABCS\QueryInvoiceListReqMsg.xml

Response Message File

See the following file to view the sample code:

...\InvoiceSiebelReqABCS\QueryInvoiceListRespMsg.xml

Message Schema for ESB_InvoiceSiebelReqABCS_Service

To view the message schema for this Web service, navigate to the documentation library for Siebel applications on the Oracle Technology Network, and click the Related Files link next to the link for *Siebel Communications Guide Addendum* to access a zip file. Then extract the files in the zip file.

See the following file to view the message schema:

. . . \InvoiceSiebelReqABCS\InvoiceSiebelReqABCSService.xml

ESB_PaymentSiebelReqABCS_Service

Use this Web service to pay the bills in a billing profile. This Web service transfers payments that users create to the billing application, and the billing application processes these payments. Also, use this Web service to retrieve payment information for the bills in a billing profile. This Web service retrieves the payment information from the billing application.

Operations for ESB_PaymentSiebelReqABCS_Service

Operation Name	Description
Request Message Description: CreatePayment	Creates a payment for a billing profile.
Request Message Description: CreateInvoicePayment	Creates a payment for a bill in a billing profile.
Request Message Description: QueryPayment	Retrieves the payments for a billing profile.
Request Message Description: QueryInvoicePayment	Retrieves the payments for a bill in a billing profile.
Request Message Description: SearchPayment	Finds the payment detail for a billing profile based on data in the Minimum Amount, Maximum Amount, Start Date, and End Date fields.

Request Message Description: CreatePayment

Request Message	
Node	**Description**
CmuCaptureNewPaymentVbc	The attributes of the payment for the billing profile which include the payment method and the payment method details.

Response Message Description: CreatePayment

Response Message	
Node	**Description**
CmuCaptureNewPaymentVbc	The attributes of the payment for the billing profile which include the confirmation number from the billing application after the application successfully processes the billing profile payment.

Request Message Description: CreateInvoicePayment

Request Message	
Node	**Description**
CmuCaptureNewPaymentInvoiceVbc	The attributes of the payment for the bill which include the payment method and the payment method details.

Response Message Description: CreateInvoicePayment

Response Message	
Node	**Description**
CmuCaptureNewPaymentInvoiceVbc	The attributes of the payment for the bill which include the confirmation number from the billing application after the application successfully processes the bill payment.

Request Message Description: QueryPayment

Request Message	
Node	**Description**
AccountId	The ID of the account for the billing profile.
AccountName	The name of the account for the billing profile.
MaximumNumberOfRecords	The maximum number of records to retrieve from the external system.
CurrencyCode	The currency code of the account for the billing profile.
BillingProfileName	The name of the billing profile for the account.
BillingProfileId	The ID of the billing profile for the account.

Response Message Description: QueryPayment

Response Message	
Node	**Description**
CmuBillingProfilePaymentsVbc	The attributes of the payments for the billing profile.

Request Message Description: QueryInvoicePayment

Request Message	
Node	**Description**
AccountId	The ID of the account for the billing profile.
AccountName	The name of the account for the billing profile.
MaximumNumberOfRecords	The maximum number of records to retrieve from the external system.
CurrencyCode	The currency code of the account for the billing profile.
BillingProfileName	The name of the billing profile for the account.
BillingProfileId	The ID of the billing profile for the account.
BillPOID	The ID of the bill.

Response Message Description: QueryInvoicePayment

Response Message	
Node	**Description**
CmuBilledUsagePaymentsVbc	The attributes of the payments for the bill.

Request Message Description: SearchPayment

Request Message	
Node	**Description**
AccountId	The ID of the account for the billing profile.
AccountName	The name of the account for the billing profile.
MaximumNumberOfRecords	The maximum number of records to retrieve from the external system.
CurrencyCode	The currency code of the account for the billing profile.
BillingProfileName	The name of the billing profile for the account.
BillingProfileId	The ID of the billing profile for the account.

Request Message	
Node	**Description**
StartDate	The starting date of the payment.
EndDate	The ending date of the payment.
MinimumAmount	The minimum amount of the payment.
MaximumAmount	The maximum amount of the payment.

Response Message Description: SearchPayment

Response Message	
Node	**Description**
CmuBillingProfilePaymentsVbc	The attributes of the payments for the billing profile.

Application Interface for ESB_PaymentSiebelReqABCS_Service

This section describes the application objects that this Web service calls. For more information about implementing the application, see the application development documentation.

Service Object (Business Service or Workflow)

Name	Boundary Object Type	Class (If Business Service)
PaymentReceiptSiebelABCS	Business Service	CSSWSOutboundDispatcher

Data Object (Integration Object)

Siebel Repository Name	External Name
CMU Request New Payment Capture IO	Account
CMU Response New Payments IO	Account
CMU Request Billing Profile IO	Account
CMU Response Billing Profile Payments IO	Account
CMU Request New Payment Capture Invoice IO	Account
CMU Response New Payment Invoice IO	Account
CMU Request Billed Usage IO	Account

Siebel Repository Name	External Name
CMU Response Billed Usage Payments IO	Account
CMU Request Billing Profile Payments Search IO	Account

Methods

Operation	Method
CreatePayment	[BS: PaymentReceiptSiebelABCS].CreatePayment
CreateInvoicePayment	[BS: PaymentReceiptSiebelABCS].CreateInvoicePayment
QueryPayment	[BS: PaymentReceiptSiebelABCS].QueryPayment
QueryInvoicePayment	[BS: PaymentReceiptSiebelABCS].QueryInvoicePayment
SearchPayment	[BS: PaymentReceiptSiebelABCS].SearchPayment

Example Package for ESB_PaymentSiebelReqABCS_Service

To view an example of messages for this Web service, navigate to documentation library for Siebel applications on the Oracle Technology Network, and click the Related Files link next to the link for *Siebel Communications Guide Addendum* to access a zip file. Then extract the files in the zip file.

Request Message File

See the following file to view the sample code:

. . . \PaymentReceiptSiebelABCS\QueryPaymentRequestMessage.xml

Response Message File

See the following file to view the sample code:

. . . \PaymentReceiptSiebelABCS\QueryPaymentResponseMessage.xml

Message Schema for ESB_PaymentSiebelReqABCS_Service

To view the message schema for this Web service, navigate to the documentation library for Siebel applications on the Oracle Technology Network, and click the Related Files link next to the link for *Siebel Communications Guide Addendum* to access a zip file. Then extract the files in the zip file.

See the following file to view the message schema:

. . . \PaymentReceiptSiebelABCS\PaymentReceiptSiebelABCSService.xml

ESB_UnbilledUsageSiebelReqABCS_Service

Use this Web service to retrieve usage, event, and resource balance information that is not yet billed for a billing profile. This Web service retrieves the information from the billing application.

Operations for ESB_UnbilledUsageSiebelReqABCS_Service

Operation Name	Description
Request Message Description: QueryUnbilledUsage	Retrieves unbilled usage detail for a billing profile.
Request Message Description: QueryEventDetails	Retrieves unbilled event (for example, phone call) detail for an item charge.
Request Message Description: SearchEventDetails	Finds the unbilled event detail based on data in the From Amount, To Amount, Start Date, and End Data fields.
Request Message Description: QueryResouceBalance	Retrieves the non-currency resource balance detail for an unbilled event.

Request Message Description: QueryUnbilledUsage

Request Message	
Node	**Description**
AccountId	The ID of the account for the billing profile.
AccountName	The name of the account for the billing profile.
MaximumNumberOfRecords	The maximum number of records to retrieve from the external system.
CurrencyCode	The currency code of the account for the billing profile.
BillingProfileName	The name of the billing profile for the account.
BillingProfileId	The ID of the billing profile for the account.

Response Message Description: QueryUnbilledUsage

Response Message	
Node	**Description**
CmuUnbilledUsageVbc	The attributes of the unbilled service charges.
CmuUnbilledItemChargesVbc	The attributes of the unbilled item charges

Request Message Description: QueryEventDetails

Request Message	
Node	**Description**
AccountId	The ID of the account for the billing profile.
AccountName	The name of the account for the billing profile.
MaximumNumberOfRecords	The maximum number of records to retrieve from the external system.
CurrencyCode	The currency code of the account for the billing profile.
BillingProfileName	The name of the billing profile for the account.
BillingProfileId	The ID of the billing profile for the account.
UnbilledUsageServiceId	The ID of the unbilled service charge.
UnbilledItemChargesId	The ID of the unbilled item charge.

Response Message Description: QueryEventDetails

Response Message	
Node	**Description**
CmuUnbilledItemChargesDetailsVbc	The attributes of the unbilled events.

Request Message Description: SearchEventDetails

Request Message	
Node	**Description**
AccountId	The ID of the account for the billing profile.
AccountName	The name of the account for the billing profile.
MaximumNumberOfRecords	The maximum number of records to retrieve from the external system.
CurrencyCode	The currency code of the account for the billing profile.

Request Message	
Node	**Description**
BillingProfileName	The name of the billing profile for the account.
BillingProfileId	The ID of the billing profile for the account.
UnbilledUsageServiceId	The ID of the unbilled service charge.
UnbilledItemChargesId	The ID of the unbilled item charge.
StartDate	The starting date of the event.
EndDate	The ending date of the event.
FromAmount	The minimum amount of the event.
ToAmount	The maximum amount of the event.

Response Message Description: SearchEventDetails

Response Message	
Node	**Description**
CmuUnbilledItemChargesDetailsVbc	The attributes of the unbilled events.

Request Message Description: QueryResouceBalance

Request Message	
Node	**Description**
AccountId	The ID of the account for the billing profile.
AccountName	The name of the account for the billing profile.
MaximumNumberOfRecords	The maximum number of records to retrieve from the external system.
CurrencyCode	The currency code of the account for the billing profile.
BillingProfileName	The name of the billing profile for the account.
BillingProfileId	The ID of the billing profile for the account.
UnbilledUsageServiceId	The ID of the unbilled service charge.
UnbilledItemChargesId	The ID of the unbilled item charge.
UnbilledEventDetailsId	The ID of the unbilled event.

Response Message Description: QueryResouceBalance

Response Message	
Node	**Description**
CmuUnbilledBalanceDetailsVbc	The attributes of the non-currency resource balances for an unbilled event.

Application Interface for ESB_UnbilledUsageSiebelReqABCS_Service

This section describes the application objects that this Web service calls. For more information about implementing the application, see the application development documentation.

Service Object (Business Service or Workflow)

Name	Boundary Object Type	Class (If Business Service)
UnbilledUsageSiebelReqABCS	Business Service	CSSWSOutboundDispatcher

Data Object (Integration Object)

Siebel Repository Name	External Name
CMU Request Billing Profile IO	Account
CMU Response Unbilled Usage IO	Account
CMU Request Unbilled Details IO	Account
CMU Response Unbilled Details IO	Account
CMU Request Unbilled Details Search IO	Account
CMU Request Unbilled Balance Details IO	Account
CMU Response Unbilled Balance Details IO	Account

Methods

Operation	Method
QueryUnbilledUsage	[BS:UnbilledUsageSiebelReqABCS].QueryUnbilledUsage
QueryEventDetails	[BS:UnbilledUsageSiebelReqABCS].QueryEventDetails
SearchEventDetails	[BS:UnbilledUsageSiebelReqABCS].SearchEventDetails
QueryResourceBalance	[BS:UnbilledUsageSiebelReqABCS].QueryBalanceSummary

Example Package for ESB_UnbilledUsageSiebelReqABCS_Service

To view an example of messages for this Web service, navigate to documentation library for Siebel applications on the Oracle Technology Network, and click the Related Files link next to the link for *Siebel Communications Guide Addendum* to access a zip file. Then extract the files in the zip file.

Request Message File

See the following file to view the sample code:

. . . \UnbilledUsageSiebelReqABCS\UnbilledUsageRequestMessage.xml

Response Message File

See the following file to view the sample code:

. . . \UnbilledUsageSiebelReqABCS\UnbilledUsageResponseMessage.xml

Message Schema for ESB_UnbilledUsageSiebelReqABCS_Service

To view the message schema for this Web service, navigate to the documentation library for Siebel applications on the Oracle Technology Network, and click the Related Files link next to the link for *Siebel Communications Guide Addendum* to access a zip file. Then extract the files in the zip file.

See the following file to view the message schema:

. . . \UnbilledUsageSiebelReqABCS\UnbilledUsageSiebelReqABCSService.xml

ISS Price List Item WS

Use this Web service to add, update, and delete items in a price list in the Siebel CRM application.

The response message returns only an acknowledgement message and not data.

Operations for ISS Price List Item WS

Operation Name	Description
Request Message Description: Price List Item InsertOrUpdate	Adds an item to a price list that does not already contain that item, and updates an item in a price list that already contains that item.
Request Message Description: Price List Item Insert	Adds an item to a price list.

Operation Name	Description
Request Message Description: Price List Item Update	Updates an item in a price list.
Request Message Description: Price List Item Delete	Deletes an item from a price list.

Request Message Description: Price List Item InsertOrUpdate

Request Message	
Node	**Description**
Price List Id	The ID of the price list. This node is used only to insert.
Product Id	The ID of the product to add to the price list. This node is used only to insert.
Price List Item Id	The ID of the price list item to update to the price list. This node is used only to update.

Request Message Description: Price List Item Insert

Request Message	
Node	**Description**
Price List Id	The ID of the price list.
Product Id	The ID of the product to add to the price list.

Request Message Description: Price List Item Update

Request Message	
Node	**Description**
Price List Item Id	The ID of the price list item to update in the price list.

Request Message Description: Price List Item Delete

Request Message	
Node	**Description**
Price List Item Id	The ID of the price list item to delete from the price list.

Application Interface for ISS Price List Item WS

This section describes the application objects that this Web service calls. For more information about implementing the application, see the application development documentation.

Service Object (Business Service or Workflow)

Name	Boundary Object Type	Class (If Business Service)
ISS Price List Item WS	Business Service	CSSEAIDataSyncService

Data Object (Integration Object)

Siebel Repository Name	External Name
ISS Price List Item Integration Object	Admin Price List

Methods

Operation	Method
Price List Item InsertOrUpdate	[BS: ISS Price List Item WS].InsertOrUpdate
Price List Item Insert	[BS: ISS Price List Item WS].Insert
Price List Item Update	[BS: ISS Price List Item WS].Update
Price List Item Delete	[BS: ISS Price List Item WS].Delete

Example Package for ISS Price List Item WS

To view an example of messages for this Web service, navigate to documentation library for Siebel applications on the Oracle Technology Network, and click the Related Files link next to the link for *Siebel Communications Guide Addendum* to access a zip file. Then extract the files in the zip file.

Request Message File
See the following file to view the sample code:

`...\ISSPriceListItemWS\ISS Price List Item.xml`

Response Message File
See the following file to view the sample code:

`...\ISSPriceListItemWS\ISS Price List Item.xml`

Message Schema for ISS Price List Item WS

To view the message schema for this Web service, navigate to the documentation library for Siebel applications on the Oracle Technology Network, and click the Related Files link next to the link for *Siebel Communications Guide Addendum* to access a zip file. Then extract the files in the zip file.

See the following file to view the message schema:

`...\ISSPriceListItemWS\ISS Price List Item WS.wsdl`

ProcessSalesOrderSiebelJMSProducer

Use this Web service to submit a sales order from the Siebel CRM application to the billing application and to create a customer account, if needed, in the billing application.

The response message returns only an acknowledgement message and not data.

Operation for ProcessSalesOrderSiebelJMSProducer

Operation Name	Description
Request Message Description: Process	Submits a sales order to the billing application and creates a customer account, if needed, in the billing application.

Request Message Description: Process

Request Message	
Node	**Description**
Order	The details of the header for the order.
OrderItem	The details of the order item.
OrderItemXA	The properties of the order item.

Application Interface for ProcessSalesOrderSiebelJMSProducer

This section describes the application objects that this Web service calls. For more information about implementing the application, see the application development documentation.

Service Object (Business Service or Workflow)

Name	Boundary Object Type	Class (If Business Service)
ProcessSalesOrderSiebelJMSProducer	Business Service	CSSWSOutboundDispatcher

Data Object (Integration Object)

Siebel Repository Name	External Name
PDS Order - No Hierarchy	PDS Simplified Order

Methods

Operation	Method
process	[BS: ProcessSalesOrderSiebelJMSProducer].process

Example Package for ProcessSalesOrderSiebelJMSProducer

To view an example of messages for this Web service, navigate to documentation library for Siebel applications on the Oracle Technology Network, and click the Related Files link next to the link for *Siebel Communications Guide Addendum* to access a zip file. Then extract the files in the zip file.

Request Message File

See the following file to view the sample code:

. . .\ProcessSalesOrderSiebelJMSProducer\ProcessSalesOrderSiebelJMSProducerRequest Message.xml

Response Message File

See the following file to view the sample code:

. . .\ProcessSalesOrderSiebelJMSProducer\ProcessSalesOrderSiebelJMSProducerResponse Message.xml

Message Schema for ProcessSalesOrderSiebelJMSProducer

To view the message schema for this Web service, navigate to the documentation library for Siebel applications on the Oracle Technology Network, and click the Related Files link next to the link for *Siebel Communications Guide Addendum* to access a zip file. Then extract the files in the zip file.

See the following file to view the message schema:

...\ProcessSalesOrderSiebelJMSProducer\ProcessSalesOrderSiebelJMSProducer.xml

Product Import

Use this Web service to add and update product definitions and product structures in the Siebel CRM application. In this Web service, *upsert* denotes a combination of the insert and update operations.

The response message returns only an acknowledgement message and not data.

Operations for Product Import

Operation Name	Description
Request Message Description: Product Import Insert	This operation: ■ Inserts the root product definition. Generates an error if the product definition exists. ■ Upserts the related products in the product structure. Performs the insert operation if the child product structure does not exist. Performs the update operation if the child product structure exists. ■ Upserts the workspace project.
Request Message Description: Product Import Update	This operation: ■ Updates the root product definition and the related products in the product structure. Generates an error if the product definition or the child product structure does not exist. ■ Upserts the workspace project.
Request Message Description: Product Import Upsert	This operation: ■ Upserts the root product definition and the related products in the product structure. Performs the insert operation if the product definition or the child product structure does not exist. Performs the update operation if the product definition or the child product structure exists. ■ Upserts the workspace project.

Request Message Description: Product Import Insert

Request Message	
Node	**Description**
SiebelMessage	The Siebel message for the integration object of CMU Product Integration.

Request Message Description: Product Import Update

Request Message	
Node	**Description**
SiebelMessage	The Siebel message for the integration object of CMU Product Integration.

Request Message Description: Product Import Upsert

Request Message	
Node	**Description**
SiebelMessage	The Siebel message for the integration object of CMU Product Integration.

Application Interface for Product Import

This section describes the application objects that this Web service calls. For more information about implementing the application, see the application development documentation.

Service Object (Business Service or Workflow)

Name	Boundary Object Type	Class (If Business Service)
Product Import	Business Service	CSSCMUProdWebSvc

Business Service User Property

Name	Value	Comment
Data Sync Service	EAI Siebel Adapter	EAI Adapter service that is invoked.
Data Sync Service: Attribute	CMU Attribute	IO name for data sync service. Currently not supported.
Data Sync Service: Class	CMU Product Class	IO name for data sync service. Currently not supported.
Data Sync Service: Product	CMU Product	IO name for data sync service.
Data Sync Service: Workspace	CMU Joint Workspace	IO name for data sync service.
Definition Business Component	CMU Product Definition VBC	See the first note after this table.
Definition Business Object	CMU Admin ISS Product Definition	See the first note after this table.
Detail Business Component	CMU ISS Product Details BusComp	See the first note after this table.
Integration Field Map: Auto Explode Flag	Product|CMU Internal Product VOD|Auto Explode Flag	See the second note after this table.
Integration Field Map: Billable Flag	Product|CMU Internal Product VOD|Billable Flag	See the second note after this table.
Integration Field Map: Billing Service Type	Product|CMU Internal Product VOD|Billing Service Type	See the second note after this table.
Integration Field Map: Billing Type	Product|CMU Internal Product VOD|Billing Type	See the second note after this table.
Integration Field Map: Business Unit Id	Product|CMU Internal Product VOD|Primary Organization Id	See the second note after this table.
Integration Field Map: Check Eligibility Flag	Product|CMU Internal Product VOD|Pre Pick CD	See the second note after this table.
Integration Field Map: Description	Product|CMU Internal Product VOD|Description	See the second note after this table.
Integration Field Map: Effective End Time	Product|CMU Internal Product VOD|End Date	See the second note after this table.
Integration Field Map: Effective Start Time	Product|CMU Internal Product VOD|Start Date	See the second note after this table.

Name	Value	Comment
Integration Field Map: Inclusive Eligibility Flag	Product|CMU Internal Product VOD| Inclusive Eligibility Flag	See the second note after this table.
Integration Field Map: Orderable Flag	Product|CMU Internal Product VOD| Orderable	See the second note after this table.
Integration Field Map: Price Type	Product|CMU Internal Product VOD| Price Type	See the second note after this table.
Integration Field Map: Product Id	Product|CMU Internal Product VOD| Id	See the second note after this table.
Integration Field Map: Product Name	Product|CMU Internal Product VOD| Name	See the second note after this table.
Integration Field Map: Product Type	Product|CMU Internal Product VOD| Product Type Code	See the second note after this table.
Integration Field Map: Sales Product Flag	Product|CMU Internal Product VOD| Sales Product Flag	See the second note after this table.
Integration Field Map: Service Instance Flag	Product|CMU Internal Product VOD| Service Instance	See the second note after this table.
Integration Field Map: Service Product Flag	Product|CMU Internal Product VOD| Sales Service Flag	See the second note after this table.
Integration Field Map: Structure Type	Product|CMU Internal Product VOD| Product Def Type Code	See the second note after this table.
Integration Field Map: Track As Asset Flag	Product|CMU Internal Product VOD| Track As Asset Flag	See the second note after this table.
Integration Field Map: Type	Product|CMU Internal Product VOD| Type	See the second note after this table.
Integration Field Map: Unit of Measure	Product|CMU Internal Product VOD| Unit of Measure	See the second note after this table.
Integration Field Map: Vendor Id	Product|CMU Internal Product VOD| Vendor Id	See the second note after this table.
Integration Object: External	CMU Product Integration	See the first note after this table.
Integration Object: Product	CMU Admin ISS Product Definition	See the first note after this table.
Integration Object: Product Structure	CMU Admin ISS Product Structure	See the first note after this table.
Integration Object: Workspace	CMU Admin ISS Joint Workspace Definition	See the first note after this table.
Preset Value: CMU Attribute VOD BusComp	VOD Type:ISS_ATTR_DEF	See the first note after this table.

Name	Value	Comment
Preset Value: CMU Attribute Versions BusComp	Version:1	See the first note after this table.
Preset Value: CMU ISS Product Attribute BusComp	Last Version:0	See the first note after this table.
Preset Value: CMU ISS Product Details BusComp	Last Version:0	See the first note after this table.
Preset Value: CMU ISS Product Structure Admin BusComp	Last Version:0	See the first note after this table.
Preset Value: CMU ISS Product VOD BusComp	VOD Type:ISS_PROD_DEF	See the first note after this table.
Preset Value: CMU ISS Product Versions BusComp	Released Flag:N	See the first note after this table.
Preset Value: CMU Internal Product Organization	Organization Id:	See the first note after this table.
Product Business Component	CMU Internal Product VOD	See the first note after this table.
Required Integration Component 1	CMU Attribute Versions BusComp	See the first note after this table.
Required Integration Component 2	CMU ISS Product VOD BusComp	See the first note after this table.
Required Integration Component 3	CMU ISS Product Versions BusComp	See the first note after this table.
Required Integration Component 4	CMU ISS Product Details BusComp	See the first note after this table.
Required Integration Component 5	CMU Internal Product Organization	See the first note after this table.
Structure Business Component	CMU Product Structure VBC	See the first note after this table.
Structure Internal Business Component	CMU ISS Product Structure Admin BusComp	See the first note after this table.
Version Business Component	CMU ISS Product Versions BusComp	See the first note after this table.

Name	Value	Comment
Workspace Business Component	CMU ISS Joint Workspace BusComp	See the first note after this table.
Workspace Business Object	CMU Admin ISS Joint Workspace Definition	See the first note after this table.
Workspace Object Business Component	CMU ISS Joint Workspace Object BusComp	See the first note after this table.
Workspace Project Business Component	ISS Joint Workspace BusComp	See the first note after this table.
Workspace Project Business Object	Admin ISS Joint Workspace Definition	See the first note after this table.
Workspace Project Item Business Component	ISS Joint Workspace VOD Pick BusComp	See the first note after this table.
Workspace Project Lock Business Component	ISS Joint Workspace VOD Lock BusComp	See the first note after this table.

NOTE: You must change this value if you use an integration object, integration component, business object, or business component with a different name.

NOTE: This value is the field map. The first part is the data type (for example, product, class, and attribute). The second part is the integration component name. The third part is the integration component field name.

Data Object (Integration Object)

Siebel Repository Name	External Name
CMU Product Integration	CMU Product Integration

Methods

Operation	Method
Product Import Insert	[BS: Product Import].Insert
Product Import Update	[BS: Product Import]. Update
Product Import Upsert	[BS: Product Import]. Upsert

Example Package for Product Import

To view an example of messages for this Web service, navigate to documentation library for Siebel applications on the Oracle Technology Network, and click the Related Files link next to the link for *Siebel Communications Guide Addendum* to access a zip file. Then extract the files in the zip file.

Request Message File

See the following file to view the sample code:

`...\ProductImport\ProductImport_Request.xml`

Response Message File

See the following file to view the sample code:

`...\ProductImport\ProductImport_Response.xml`

Message Schema for Product Import

To view the message schema for this Web service, navigate to the documentation library for Siebel applications on the Oracle Technology Network, and click the Related Files link next to the link for *Siebel Communications Guide Addendum* to access a zip file. Then extract the files in the zip file.

See the following file to view the message schema:

`...\ProductImport\Product Import.wsdl`

SWI Update Order Line Item

Use this Web service to update the status of order line items for simple products, complex products, and nested service bundles in the Siebel CRM application when the status of the order line item changes in the billing application. The billing application makes this inbound Web service call to the Siebel CRM application to update the status of the order line item. A business service is exposed in the Siebel CRM application to update the status field.

If the order line item contains a complex product or nested service bundle, this Web service updates the statuses of the component products within that complex product or nested service bundle for the order line item ID that is passed to this Web service. If the order line item ID is the same as the root line item ID, then this Web service updates the statuses of the entire product hierarchy for the order.

The response message returns only an acknowledgement message and not data.

Operations for SWI Update Order Line Item

Operation Name	Description
Request Message Description: UpdateLineItems	Updates the value of the field that is passed to it for order line items in simple products, complex products, and nested service bundles.

Request Message Description: UpdateLineItems

Request Message	
Node	**Description**
FieldName1	The name of the field in the order line item to update.
FieldValue1	The new value of the field in the order line item to update.
RootLineItemId	The row ID of the root order in the order line item hierarchy.
OrderLineItemId	The row ID of the nested product in the order line item hierarchy.
UpdateSingleLineItem	The designation for an order with a single line item. If this node has a value of TRUE, the order has a single line item.

Application Interface for SWI Update Order Line Item

This section describes the application objects that this Web service calls. For more information about implementing the application, see the application development documentation.

Service Object (Business Service or Workflow)

Name	Boundary Object Type	Class (If Business Service)
CMU Order Line Item Update (For simple products)	Business Service	CSSEAIDataSyncService
SIS OM UpdateOrderItem (For complex products)	Workflow	Not applicable
SIS OM NSB Update Order Line (For nested service bundles)	Workflow	Not applicable

Data Object (Integration Object)

Siebel Repository Name	External Name
Order Entry Line Item Update	Order Entry Line Item Update

Methods

Operation	Method
UpdateLineItems	[BS: CMU Order Line Item Update].Update

Example Package for SWI Update Order Line Item

To view an example of messages for this Web service, navigate to documentation library for Siebel applications on the Oracle Technology Network, and click the Related Files link next to the link for *Siebel Communications Guide Addendum* to access a zip file. Then extract the files in the zip file.

Request Message File

See the following file to view the sample code:

`...\SWIUpdateOrderLineItem\SWIUpdateOrderLineItem.xml`

Response Message File

See the following file to view the sample code:

`...\SWIUpdateOrderLineItem\SWIUpdateOrderLineItem.xml`

Message Schema for SWI Update Order Line Item

To view the message schema for this Web service, navigate to the documentation library for Siebel applications on the Oracle Technology Network, and click the Related Files link next to the link for *Siebel Communications Guide Addendum* to access a zip file. Then extract the files in the zip file.

See the following file to view the message schema:

`...\SWIUpdateOrderLineItem\SWIUpdateOrderLineItem.wsdl`

UpdateCustomerSiebelJMSProducer

Use this Web service to synchronize the data between the Siebel CRM application and the billing application for details relating to accounts, addresses, contacts, and billing profiles. Because this Web service uses an asynchronous call, a response message does not apply.

Operations for UpdateCustomerSiebelJMSProducer

Operation Name	Description
Request Message Description: UpdateCustomerParty	Synchronizes account detail between the Siebel CRM application and the billing application.
Request Message Description: UpdateCustomerPartyAddress	Synchronizes address detail for an account between the Siebel CRM application and the billing application.

Operation Name	Description
Request Message Description: UpdateCustomerPartyContact	Synchronizes contact detail for an account between the Siebel CRM application and the billing application.
Request Message Description: UpdateCustomerPartyBillProfile	Synchronizes billing profile detail for an account between Oracle's Siebel CRM application and the billing application.

Request Message Description: UpdateCustomerParty

Request Message	
Node	**Description**
Account	The details of the account.
CutAddress	The details of the address for an account.
Contact	The details of the contact for an account.

Request Message Description: UpdateCustomerPartyAddress

Request Message	
Node	**Description**
Account	The details of the account.
CutAddress	The details of the address for an account.
ComInvoiceProfile	The details of the billing profile for an account.

Request Message Description: UpdateCustomerPartyContact

Request Message	
Node	**Description**
Account	The details of the account.
Contact	The details of the contact for an account.
ComInvoiceProfile	The details of the billing profile for an account.

Request Message Description: UpdateCustomerPartyBillProfile

Request Message	
Node	**Description**
BillingProfileCutAddress	The details of the address for a billing profile.

Request Message	
Node	**Description**
BillingProfileContact	The details of the contact for a billing profile.
ComInvoiceProfile	The details of the billing profile for an account.

Application Interface for UpdateCustomerSiebelJMSProducer

This section describes the application objects that this Web service calls. For more information about implementing the application, see the application development documentation.

Service Object (Business Service or Workflow)

Name	Boundary Object Type	Class (If Business Service)
UpdateCustomerSiebelJMSProducer	Business Service	CSSWSOutboundDispatcher

Data Object (Integration Object)

Siebel Repository Name	External Name
CMU AccSync Account Io	CMU - Account
CMU AccSync Address Io	CMU - Address
CMU AccSync Contact Io	CMU - Contact
CMU AccSync Billing Profile Io	CMU - Com Invoice Profile

Methods

Operation	Method
UpdateCustomerParty	[BS: UpdateCustomerSiebelJMSProducer].UpdateCustomerParty
UpdateCustomerParty Address	[BS: UpdateCustomerSiebelJMSProducer].UpdateCustomerPartyAddress
UpdateCustomerParty BillProfile	[BS: UpdateCustomerSiebelJMSProducer].UpdateCustomerPartyBillProfile
UpdateCustomerParty Contact	[BS: UpdateCustomerSiebelJMSProducer].UpdateCustomerPartyContact

Example Package for UpdateCustomerSiebelJMSProducer

To view an example of messages for this Web service, navigate to documentation library for Siebel applications on the Oracle Technology Network, and click the Related Files link next to the link for *Siebel Communications Guide Addendum* to access a zip file. Then extract the files in the zip file.

Request Message File

See the following file to view the sample code:

`. . .\UpdateCustomerSiebelJMSProducer\CmuAccSyncAccount.xml`

Response Message File

Because this Web service uses an asynchronous call, a response message does not apply.

Message Schema for UpdateCustomerSiebelJMSProducer

To view the message schema for this Web service, navigate to the documentation library for Siebel applications on the Oracle Technology Network, and click the Related Files link next to the link for *Siebel Communications Guide Addendum* to access a zip file. Then extract the files in the zip file.

See the following file to view the message schema:

`. . .\UpdateCustomerSiebelJMSProducer\UpdateCustomerSiebelJMSProducer.xml`

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