# Oracle® Monetization Cloud Integration Guide





Oracle Monetization Cloud Integration Guide, Release 18B

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### **Preface**

This document explains how to integrate Oracle Monetization Cloud with external business systems by using email messages, event notifications, payment gateways, secure file transfer protocol (SFTP), and web services. It also explains how to test your Oracle Monetization Cloud environment by using virtual time.

Before reading this document, you should be familiar with SOAP API web services and know how to configure RESTful client interfaces to accept REST messages from Oracle Monetization Cloud.

### **Audience**

This document is for developers, system integrators, and other individuals who must integrate external applications with Oracle Monetization Cloud.

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## About integrating your business systems

This document provides an overview of how to integrate Oracle Monetization Cloud with your external business systems.

#### Topics in this document

- About integrating Oracle Monetization Cloud with external systems
- About securing your integrations
- About sending messages to customers
- About sending data to external applications
- · About sending product and pricing data to external applications
- About processing payments
- About calculating taxes
- About managing subscribers and accounts
- · About rating usage events
- About retrieving invoice files
- About retrieving GL reports
- · About reporting and analyzing

See also About implementing Oracle Monetization Cloud.

## About integrating Oracle Monetization Cloud with external systems

You can integrate external systems, such as a self-service portal where customers can create accounts, with Oracle Monetization Cloud.

To integrate with front-end systems, which typically interact with customers, use web service operations and the SOAP API. For example:

- Enable a web store interface to create customer accounts.
- Create a website for customers to manage their own accounts.
- Integrate Oracle Monetization Cloud with your existing customer relationship manager (CRM) software.

See Oracle Monetization Cloud web services

To integrate with back-end systems, use the REST API. For example:

 Integrate with a payment gateway for processing credit-card payments. See Connecting to payment gateways.

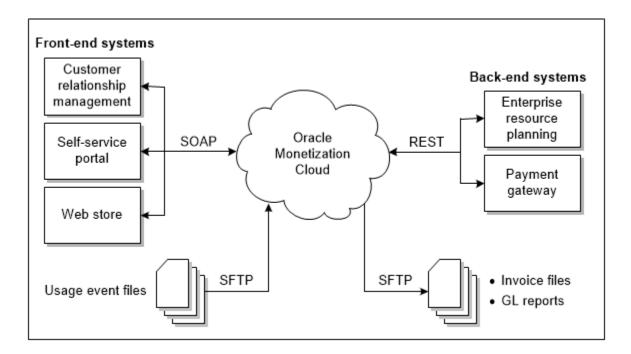


 Integrate with an enterprise resource planning (ERP) system. See Sending data to external applications.

In addition, use secure file transfer protocol (SFTP) to do the following:

- Send usage event files to the cloud for rating. See About rating usage events.
- Retrieve invoice files. See About retrieving invoice files.
- Retrieve general ledger (GL) reports. See About retrieving GL reports.

The following figure shows how external systems are integrated with Oracle Monetization Cloud:



## About securing your integrations

You can use these mechanisms to manage access to Oracle Monetization Cloud:

- External Security Assertion Markup Language (SAML) identity providers to authenticate requests for access to web services. See Using SAML to authenticate access requests.
- The OAuth 2.0 protocol or basic authentication to authorize external applications
  to access web services. OAuth is the more secure option; use basic authentication
  only if the application you are integrating with doesn't support OAuth. See Using
  OAuth to authorize access and Using basic authentication to authenticate access
  requests.
- Secure Sockets Layer (SSL) certificates to secure connections between Oracle Monetization Cloud and external service providers, such as payment processors and tax calculators. See Using SSL to secure connections to service providers.
- SFTP to protect data as you upload and download files between Oracle Monetization Cloud and external systems. See Transferring files securely with SFTP.



For more information about securing your Oracle Monetization Cloud environment, see Oracle Monetization Cloud Security Guide.

## About sending messages to customers

You can send automatically generated email notifications to customers. For example, you can send a welcome message when an account is created or an acknowledgment message when a payment is received.

See Sending messages to customers.

## About sending data to external applications

You can use REST messages with XML or JSON payloads to automatically send Oracle Monetization Cloud event data to other systems. For example, use the messages to update your CRM system when Oracle Monetization Cloud successfully creates an account or when a subscriber purchases a service offering.

See Sending data to external applications.

## About sending product and pricing data to external applications

To ensure that external client applications, such as self-service applications, have your latest product offerings and pricing data, you must regularly synchronize pricing data between Oracle Monetization Cloud and the external client application.

See Sending pricing data to external client applications.

## About processing payments

To process payments, you must receive them from your customers and send them to the appropriate payment processor:

- You can use the Payment web service operations to apply payments to accounts in Oracle Monetization Cloud that were recorded in external applications, such as CRM or online account management systems. See Managing payments and accounts receivable.
- You can configure Oracle Monetization Cloud to integrate with Chase Paymentech, Chase Paymentech Orbital, Cielo, or PayPal payment gateways.
   See Connecting to payment gateways.

## About calculating taxes

To use the Vertex Indirect Tax O Series On-Demand service to manage taxes, you must connect Oracle Monetization Cloud to the Vertex taxation gateway. See Connecting to taxation gateways.



## About managing subscribers and accounts

Oracle Monetization Cloud web services expose numerous subscriber and account management operations to external applications through SOAP APIs. See the following topics:

- · Oracle Monetization Cloud web services
- Managing subscribers and subscriptions
- Billing subscribers
- Working with subscriber self-service

## About rating usage events

If your Oracle Monetization Cloud implementation enables you to map data from external records to internal events, you can send records of your customers' service usage to Oracle Monetization Cloud for rating. You send the records through an SFTP server. See Rating usage in Oracle Monetization Cloud.

## About retrieving invoice files

Use Business Operations to generate invoices in PDF format and save them to your SFTP server. Invoices are saved to the SFTP server only if the customer's payment type is invoice and delivery method is postal. See Generating invoices.

You can then securely download the invoices from the SFTP server to an external system from which you can distribute them to your customers. See Transferring files securely with SFTP.

## About retrieving GL reports

Use Business Operations to generate GL reports and save them to your SFTP server. See Generating general ledger reports.

You can then securely download the reports from the SFTP server to an external financial system, where you can post them to your corporate general ledger. See Transferring files securely with SFTP.

## About reporting and analyzing

Use Oracle Business Intelligence (BI) Publisher to run reports on subscriber and billing data. See Running Reports.

You can use the Data Export web service to export data and generate reports to use in your external analytics and reporting applications. See About exporting Oracle Monetization Cloud data.



## Getting started with System Configuration

Use System Configuration to set up event publishing end points, connect to payment and taxation gateways, import SSL certificates, connect to Security Assertion Markup Language (SAML) identity providers, and adjust the period for retaining data.

#### Important:

- To avoid losing data, do not use browser commands such as Back, Forward, and Refresh.
- Ensure that cookies are enabled in your browser.

## **Using System Configuration**

See the following topics:

#### Managing event publishing

- · Changing which messages are sent
- Configuring event publishing endpoints
- · Choosing which events to publish

#### Connecting to payment gateways

Connecting to payment gateways

#### Connecting to taxation gateways

Connecting to taxation gateways

#### Managing SSL certificates

Importing SSL certificates

#### Authenticating and authorizing access

- Configuring connections to SAML identity providers
- Registering applications as OAuth clients

#### Protecting data privacy

Purging data



## Part I

## Access management

This part contains the following topics:

- Using SAML to authenticate access requests
- Using OAuth to authorize access
- Using basic authentication to authenticate access requests
- Using SSL to secure connections to service providers
- Transferring files securely with SFTP



## Using SAML to authenticate access requests

This document explains how to configure Oracle Monetization Cloud to use external Security Assertion Markup Language (SAML) identity providers to authenticate requests for access to its web services.

#### Topics in this document

- About authenticating access requests
- Configuring connections to SAML identity providers
- Managing connections to SAML identity providers
- Related topics

## About authenticating access requests

Authentication verifies an application's identity. It's typically performed before authorization, which ensures that an authenticated application is allowed to access a service or component.

You can configure Oracle Monetization Cloud to use external SAML identity providers to authenticate access requests from external applications. For example, you can use an external SAML identity provider to authenticate single sign-on requests from a customer relationship management (CRM) system.

## Configuring connections to SAML identity providers

To configure a connection to an external SAML identity provider:

- 1. Open the System Configuration application.
- 2. Select Federation Services.
- On the SAML Providers tab, select New SAML Provider.

The SAML Provider Configuration page appears. The following fields are preconfigured:

- Protocol: Only SAML 2.0 is supported.
- User Identity Store: This is the name of your environment's LDAP repository, which is set up when Oracle initially configures your Oracle Monetization Cloud environment.
- 4. Enter a name for the SAML identity provider.

Don't include spaces in the name.

5. Select Browse.

6. In the file upload dialog box, select the service provider metadata file for your Oracle Monetization Cloud environment.

The metadata file contains information, such as public X.509 certificates, required to register Oracle Monetization Cloud with the SAML identity provider.

**7.** Download the file into the SAML provider configuration by selecting **Open**.

The name of the metadata file appears next to the **Browse** button.

- 8. Select Save.
- On the SAML Providers tab, select the new provider configuration, and select Export SAML 2.0 Metadata.
- **10.** Save the service provider metadata file associated with the new provider configuration to an appropriate location.
- 11. Export the service provider metadata file to the associated SAML identity provider.

## Managing connections to SAML identity providers

To view, edit, or delete connections to external SAML identity providers:

- 1. Open the System Configuration application.
- 2. Select Federation Services.

The SAML identity providers configured in your environment are displayed in the **SAML Providers** tab.

- **3.** To view or edit a configuration:
  - a. Select the configuration's link.
  - **b.** Change the editable fields as necessary.
  - c. Save your changes.
- **4.** To delete a configuration, select its delete button (**X**), and then select **Yes** in the confirmation message.

## Related topics

- Using OAuth to authorize access
- Using SSL to secure connections to service providers
- Transferring files securely with SFTP
- · Oracle Monetization Cloud web services
- About integrating your business systems



## Using OAuth to authorize access

You authorize external applications to access Oracle Monetization Cloud web services by using the OAuth protocol.

#### Topics in this document

- About authorizing access to web services
- Registering applications as OAuth clients
- Managing OAuth clients
- Related topics

## About authorizing access to web services

Authorization ensures that an application is allowed to access a service or component. It's typically performed after authentication, which verifies the application's identity.

Oracle Monetization Cloud uses the OAuth 2.0 protocol to authorize external applications to access its web services.

To call the web services, an application must be registered as an OAuth client in Oracle Monetization Cloud.

## Registering applications as OAuth clients

To register an application as an OAuth client:

- Open the System Configuration application.
- 2. Select Federation Services.
- On the OAuth Clients tab, select the identity domain in which you want to register the new client.
- 4. Select New OAuth Client.

The OAuth Client Configuration page appears.

5. Enter the following information:

Option	Description
Name	The name of the external application.
Description	(Optional) A text description of the application.
Client ID	A public identifier for the application. It must be unique within the identity domain.



Option	Description
	The client ID is used to authenticate requests from the application to Oracle Monetization Cloud web services.
	You can enter an ID manually or select <b>Generate</b> to create an ID automatically.
	Don't include spaces in the ID.
Client Secret	A secret identifier for the application. It must be unique within the identity domain.  The client secret is used to authenticate requests from the application to Oracle Monetization Cloud web services.
	You can enter the secret manually or select <b>Generate</b> to create it automatically.
Shown in Clear Text	Select this option to display the client secret in human-readable form. By default, the client secret is encrypted.

6. Select Save.

## Managing OAuth clients

To view, edit, or delete OAuth clients:

- 1. Open the System Configuration application.
- 2. Select Federation Services.
- In the OAuth Clients tab, select the identity domain that contains the client you want to manage.

The clients in the selected domain are displayed in the tab.

- 4. To view or edit a client:
  - a. Select the client's link.
  - **b.** Change the editable fields as necessary.
  - Save your changes.
- 5. To delete a client, select its delete button (X), and then select Yes in the confirmation message.

## Related topics

- · Using SAML to authenticate access requests
- Using SSL to secure connections to service providers
- · Transferring files securely with SFTP
- Oracle Monetization Cloud web services



About integrating your business systems



## Using basic authentication to authenticate access requests

Although using OAuth is the most secure and recommended way to securely authorize access to Oracle Monetization Cloud web services, some applications, such as Oracle Integration Cloud, can only authenticate SOAP requests using basic authentication.

Using basic authentication involves:

- Creating a user for integration and assigning it the WSIntegration role. See Creating users in Oracle Monetization Cloud.
- Using the integration user's base64-encoded credentials in the Security element of the SOAP header. See Including the Security element in the SOAP header.



Oracle Monetization Cloud doesn't support different authorization levels using basic authentication, such as read-only access to some web services and read-write access to others. The integration user has full authorization for all web services.

## Including the Security element in the SOAP header

To access the Oracle Monetization Cloud web services using basic authentication, you must include the Security element in the SOAP header of your requests.

The Security element must include:

The following namespace:

```
http://docs.oasis-open.org/wss/2004/01/oasis-200401-wss-wssecurity-secext-1.0.xsd
```

A UsernameToken element, with elements for Username and Password. The
values for these elements are the base64 encoded user name and password of
the integration user created in Oracle Monetization Cloud.
 For the Password element, include the Type attribute with the PasswordText
value.

For example, the SOAP header would be:



#### where:

- integration\_user is the base64 encoded user name for the integration user
- inteagration\_password is the base64 encoded password for the integration user



The specification for the UsernameToken element contains Nonce and Created elements and the PasswordDigest type for the Password element. Oracle Monetization Cloud doesn't support these, and rejects requests containing them as malformed.



## Using SSL to secure connections to service providers

You secure connections between Oracle Monetization Cloud and external service providers, such as payment processors and tax calculators, by using Secure Sockets Layer (SSL) certificates.

#### Topics in this document

- Importing SSL certificates
- Related topics

## Importing SSL certificates

To use SSL to secure connections between Oracle Monetization Cloud and external service providers, import the SSL certificates provided by the service providers.

- 1. Open the System Configuration application.
- 2. Select SSL Certificate.
- 3. In the Upload SSL Certificate screen, select **Browse**.
  - A file upload screen appears.
- Select the SSL certificate file provided by the external application, and then select Open.

The name of the selected file appears next to the **Browse** button.

- 5. In the Alias field, enter a descriptive name for the certificate.
  - Don't include spaces in the name.
- Select Upload.

After you upload the certificate, the Oracle Monetization Cloud server automatically restarts to make the certificate effective.

## Related topics

- Connecting to payment gateways
- Connecting to taxation gateways
- Using SAML to authenticate access requests
- Using OAuth to authorize access
- · Transferring files securely with SFTP
- About integrating your business systems



## Transferring files securely with SFTP

You use secure file transfer protocol (SFTP) to protect data when you upload and download files between Oracle Monetization Cloud and external systems.

#### Topics in this document

- About transferring files with SFTP
- Configuring your SFTP server
- Accessing your SFTP server
- Related topics

## About transferring files with SFTP

Oracle Monetization Cloud includes an SFTP server, which you can use to transfer files securely between external sources and Oracle Monetization Cloud as follows:

- Upload usage data: To process usage records from external systems, you must upload them to your SFTP server. From there, a cron job that runs every five minutes automatically maps the external records to internal events and uploads them to Oracle Monetization Cloud. See About rating usage in Oracle Monetization Cloud.
- **Download invoices:** Business Operations saves a subset of your invoices to the SFTP server. From there, you can download the invoices to an external system from which you can distribute them to your customers. See Generating invoices.
- **Download general ledger reports:** After Business Operations generates general ledger reports, it saves them to your SFTP server. From there, you can download the reports to an external financial system for posting to your general ledger. See Generating general ledger reports.

## Configuring your SFTP server

To configure your SFTP server, submit a service request to Oracle support (https://support.oracle.com). Include the following information:

The public key used to access the SFTP server from your computer.

To generate the key, run standard ssh-keygen commands on your computer. For example, run these commands on a Linux system:

```
cd $HOME/.ssh
rm -rf ./id_rsa.pub
ssh-keygen -t rsa
```

The key is added to the \$HOME/.ssh/id\_rsa.pub file.

The email address of the person responsible for your SFTP account.

The key is valid for one year. Oracle uses the email address to notify you when the key is about to expire.

## Accessing your SFTP server

To access your SFTP server, run the following command from the computer on which you generated your SFTP key:

sftp -oPort=22 env\_tenant\_sftp@sftp\_host

#### where

- env is one of the following values:
  - prod for a production environment
  - test for a development environment
- sftp\_host is the host name of the SFTP server, which you were given when Oracle configured the server.

Transfer files to and from the following directories. Use standard SFTP commands to navigate to the directories and to put or pull the files.

Transfer operation	Directory
Upload usage records	/u01/sftp/env_tenant_sftp/incoming/events
Download invoices	/u01/sftp/env_tenant_sftp/outgoing/invoices
Download general ledger reports	/u01/sftp/env_tenant_sftp/outgoing/glreports

To check the status of usage records that Oracle Monetization Cloud attempted to convert to the internal format and upload, go to the following directories.

Processing status	Directory
Succeeded	/u01/sftp/env_tenant_sftp/outgoing/events_processed/success
Failed	/u01/sftp/env_tenant_sftp/outgoing/events_processed/reject

The **Isuccess** directory contains copies of the original external records that were successfully processed.

The *Ireject* directory contains copies of the original external records that Oracle Monetization Cloud was unable to convert and upload.

Each record also has an associated XML file that contains all of the error messages that were generated for the record. The error messages are in a file named **usagefile\_lerr.xml**, where **usagefile** is the file name of the original external record.

## Related topics

- About rating usage in Oracle Monetization Cloud
- Generating invoices
- Generating general ledger reports



About integrating your business systems



## Part II

## **Notifications**

This part contains the following topics:

- Sending messages to customers
- Sending data to external applications
- Sending pricing data to external client applications
- Event publishing reference



## Sending messages to customers

This document describes how Oracle Monetization Cloud automatically sends email messages to customers when triggering events occur.

#### Topics in this document

- About sending emails to customers
- Enabling automatic email messaging
- · Changing which messages are sent
- About email templates
- Related topics

## About sending emails to customers

Oracle Monetization Cloud can automatically send an email to a customer when:

- Their account is created, which triggers the welcome message
- Their contract is created, modified, canceled, or ended
- A phase of their contract starts, is about to end, or ends
- Their invoice is created
- Their payment is processed successfully or their payment fails
- Their balance crosses the credit limit threshold defined in the package
- Their credit card will expire in two months

## Enabling automatic email messaging

To automatically send emails to your customers, Oracle Monetization Cloud uses an Oracle server on behalf of your organization. To enable this, do the following when Oracle Monetization Cloud is initially configured:

- Provide a sending address to your Oracle representative.
- Configure your domain name server (DNS) policy to validate email notification messages sent on behalf of your organization by Oracle.

For example, configure a sender policy framework (SPF) entry in your DNS authorizing Oracle Monetization Cloud to send email messages on behalf of your domain.

We will provide you with the required host information for DNS configuration.

## Changing which messages are sent

By default, all of the available messages are sent. To change which messages are sent, use System Configuration. Select **Event Publishing**, select **Configure Notification Events**, select or deselect the messages you want to send or stop sending, and then select **Save**.

You can send emails for any of the events that have the email icon:



#### Note:

The **Job Completed in BOC** event sends messages to an internal business operations user, not to your customers. This event notifies the business operations user that a billing job they triggered is completed.

The Message Info Any event is not used. Enabling it has no effect.

The events that have the cloud icon can be published to REST API endpoints for external systems to use. See Sending data to external applications.

## About email templates

Oracle Monetization Cloud includes default email templates for the triggering events. When Oracle initially sets up your Oracle Monetization Cloud environment, we help you personalize the templates to suit your business needs.

To modify email templates after Oracle Monetization Cloud is configured, submit a service request to Oracle support with the requested changes:

https://support.oracle.com

## Related topics

- Sending data to external applications
- Event publishing reference
- Setting credit limits in a package
- Creating jobs
- About integrating your business systems



## Sending data to external applications

This document describes how Oracle Monetization Cloud publishes data from internal events to external endpoints.

#### Topics in this document

- About publishing event data
- Configuring event publishing endpoints
- Choosing which events to publish
- Related topics

## About publishing event data

You publish event data to automatically notify external systems when specified triggering events happen in Oracle Monetization Cloud.

For example, when an account is successfully created or when a subscriber purchases a product, Oracle Monetization Cloud can automatically send the event data to your customer relationship management (CRM) system.

Oracle Monetization Cloud can automatically publish events when:

- A customer's account is created
- A customer's account status is changed
- A customer's contract is created, modified, canceled, or ended
- A phase of a customer's contract starts, is about to end, or ends
- A customer's credit card will expire in two months
- A customer's payment is processed successfully or fails
- A customer's balance cross a certain threshold
- A customer's currency balance is too low to pay a new cycle forward fee
- A customer's invoice is created
- A customer's bill is created
- A cycle forward fee is applied to a customer's account
- A customer purchases a product
- A service is added to a customer's account
- A bundle, charge offer, discount offer, package, or package list is published from offer design

Event publishing automatically sends an XML or JSON payload to REST endpoints. For details about the payloads, including samples, see Event publishing reference.

## Configuring event publishing endpoints

To configure event publishing endpoints, use System Configuration.

- To create a new endpoint, on the Event Publishing page, select New Endpoint, and enter the required information described in Endpoint information.
- To update an existing endpoint, on the Event Publishing page, select the name of endpoint and update the information.

## **Endpoint information**

Field	Description
Name	The name of your endpoint.
Authentication Type	<ul> <li>The authentication type that your endpoint requires. Choose from:</li> <li>Basic Auth</li> <li>OAuth (password grant)</li> <li>OAuth (authorization code grant)</li> <li>The type you select determines which authentication credentials appearablelow.</li> </ul>
Payload Format	The format of the message payload, either XML or JSON. REST endpoints typically use JSON.
Content Type	The content type your endpoint expects. For example, <b>application/ json</b> or <b>application/xml</b> .
Location (URI)	The URI for the endpoint.
Username	The user name for accessing the endpoint.  Required for the Basic Auth and OAuth (password grant) authentication types.
Password	The password for accessing the endpoint.  Required for Basic Auth and OAuth (password grant).
Token URI	The URI from which Oracle Monetization Cloud retrieves a token. Required for both OAuth authentication types.
Client ID	The client ID your authorization server assigns to Oracle Monetization Cloud.
	Required for both OAuth authentication types.
Secret	The client secret assigned to Oracle Monetization Cloud and used to retrieve an authorization token.
	Required for both OAuth authentication types.
Authorization URI	The URI from which Oracle Monetization Cloud requests authorization when publishing messages containing a valid token. After entering values here and for Token URI, generate an access code by selecting <b>Obtain Access Code</b> .
	Required for OAuth (authorization code grant).
Scope	The OAuth scope that Oracle Monetization Cloud requests access to and that is granted with the token.
	Appears for OAuth (authorization code grant).



Field	Description
State	The unique string Oracle Monetization Cloud submits when publishing to an endpoint, guaranteeing Oracle Monetization Cloud as the origin of the message.
	Appears for OAuth (authorization code grant).
Redirect URI	The redirect URI destination for the Oracle Monetization Cloud message after the request is authenticated and authorized.  Required for OAuth (authorization code grant).

# Choosing which events to publish

Use System Configuration to choose which events to publish. Select **Event Publishing**, select **Configure Notification Events**, and then select the events to publish.

You can publish any events with the cloud icon:



The events with the email icon send emails to customers. See Sending messages to customers.

- To change the endpoint an event is published to, select the pencil icon for the event and select the new endpoint.
- To stop publishing an event, deselect it.

When you're done managing the events, select **Save** at the top of the page.

# Related topics

- Sending messages to customers
- · Event publishing reference
- About integrating your business systems



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# Sending pricing data to external client applications

This document describes how Oracle Monetization Cloud synchronizes pricing data with external client applications.

#### Topics in this document

- About synchronizing pricing data
- Running product catalog synchronization jobs
- Related topics

### About synchronizing pricing data

You synchronize pricing data with external client applications, such as self-service applications, to ensure that customers can view and purchase your latest product offerings. To do so, you set up regular product catalog synchronization jobs.

# Running product catalog synchronization jobs

To synchronize your pricing data between Oracle Monetization Cloud and your external client applications, run a product catalog synchronization job. In Business Operations, select the **Jobs** icon, **Product Catalog Sync**, and then **New**.

The options for running the job are:

- Run the job once. You can run it immediately or on a specific calendar day.
- Repeat the job.
  - Specify how often to run the job: daily, weekly, or monthly.
  - Specify when to start the job: immediately or at a specified date and time.
  - Specify when to end the job: never or at a specified date and time.
- Get an email notification when the job completes.

The product catalog sync job attributes are:

- The pricing components to synchronize. You can synchronize the entire catalog or specific elements of the catalog, such as only charge offers and discount offers.
- Whether to synchronize the full product catalog or only what's changed since the last synchronization.
- The synchronization period. You can synchronize changes that were made since a specified date and time.



# Related topics

- About running business operations jobs
- Getting started with Business Operations
- About integrating your business systems



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# Event publishing reference

This document describes the internal events that Oracle Monetization Cloud can automatically publish to external endpoints.

For an overview of publishing events, see Sending data to external applications.

#### Topics in this document

- About event publishing messages
- Publishing events

### About event publishing messages

Publishing events deliver messages in POST REST format. The endpoint to which the messages are sent must support the delivery of messages in this format.

Each message contains a header with the fields described in the following table:

Message field	Description
POST	The request method containing the destination address (endpoint)
Content-Type	The request content MIME type (the default is application/xml)
Content-Length	The length of the request content in bytes
Host	The request sender host and port number
Connection	The type of connection (the default is <b>Keep-Alive</b> )
User-Agent	The ID of the application sending the request
Authorization	The authorization credential using the Basic Authentication Scheme

# Monitoring message status

An event publishing message has one of the following statuses:

Status	Description	
Pending	A message has been sent to an endpoint.	
Complete	The endpoint has responded that it successfully received the message.	
Failed	The following messages are assigned this status:	
	<ul> <li>Messages for which no response is received from the endpoint after the preconfigured number of attempts.</li> </ul>	
	<ul> <li>Messages for which a response is received, but the endpoint indicates a failure.</li> </ul>	
	Oracle Monetization Cloud assumes that <b>200</b> and <b>202</b> response codes indicate acceptance of a message and that all other response codes indicate failure.	

Oracle Monetization Cloud maintains a history of event publishing messages for each subscriber account. Each status change is recorded in a note. To retrieve a subscriber account's message history, use the **pcmOpCustGetNote** operation in the Customer web service. See Customer operations.

### Sample event publishing message

The following is a JSON sample of the message published when a new account is created, where *destination\_host* is the name of the endpoint server, and *sender\_host* and *port* identify the Oracle Monetization Cloud environment sending the message.

```
"AccountCreate": {
      "Poid": "0.0.0.1 /event/publish/account_create 258605134853916517 0",
      "AccountObj": "0.0.0.1 /account 1000229 0",
      "EndT": "Thu Apr 01 09:00:01 PDT 2010",
      "NoteInfo": {
         "NoteObj": "0.0.0.1 /note 1000293 0"
      },
      "NameInfo": {
         "FirstName": "John",
         "MiddleName": "",
         "LastName": "Doe",
         "Address": "123 Main Street",
         "City": "San Jose",
         "State": "CA",
         "EmailAddr": "user@example.com",
         "Zip": "95054",
         "AccountNo": "12345678"
      },
      "Services": [
            "Login": "ipUser",
            "ServiceObj": "0.0.0.1 /service/ip 1002149 0"
            "Login": "emUser",
            "ServiceObj": "0.0.0.1 /service/email 1003429 0"
      ],
      "Deals": [
            "EventObj": "0.0.0.1 /event/billing/deal/purchase 17592187045797 0",
            "DealObj": "0.0.0.1 /deal 602556 28",
            "Name": "BrmPublishFW - Internet Access",
            "PackageId": "213",
            "ServiceObj": "0.0.0.1 /service/ip 1002149 0"
         },
            "EventObj": "0.0.0.1 /event/billing/deal/purchase 17592187047269 0",
            "DealObj": "0.0.0.1 /deal 604604 28",
            "Name": "BrmPublishFW - Email Account",
            "PackageId": "213",
            "ServiceObj": "0.0.0.1 /service/email 1003429 0"
      ],
      "Products": [
            "EventObj": "0.0.0.1 /event/billing/product/action/purchase
17592187046821 0",
```



```
"Name": "BrmPublishFW 2a - Credit Limit",
            "OfferingObj": "0.0.0.1 /purchased_product 1001893 0",
            "ProductObj": "0.0.0.1 /product 605372 1",
            "ServiceObj": "0.0.0.1 /service/ip 1002149 0"
         },
            "EventObj": "0.0.0.1 /event/billing/product/action/purchase
17592187045221 0",
            "Name": "BrmPublishFW 1b - Email Account",
            "OfferingObj": "0.0.0.1 /purchased_product 1002597 0",
            "ProductObj": "0.0.0.1 /product 602940 1",
            "ServiceObj": "0.0.0.1 /service/email 1003429 0"
      ],
      "Charges": [
            "EventObj": "0.0.0.1 /event/billing/product/fee/cycle/
cycle_forward_monthly 258605134853918117 0",
            "OfferingObj": "0.0.0.1 /purchased_product 1001893 0",
            "ProductObj": "0.0.0.1 /product 605372 1",
            "ServiceObj": "0.0.0.1 /service/ip 1002149 0",
            "BalImpacts": {
               "Amount": "9.95",
               "AmountDeferred": "0",
               "ImpactCategory": "default",
               "ImpactType": "1",
               "ResourceId": "840"
            }
            "EventObj": "0.0.0.1 /event/billing/product/fee/purchase
258605134853917285 0",
            "OfferingObj": "0.0.0.1 /purchased_product 1002597 0",
            "ProductObj": "0.0.0.1 /product 602940 1",
            "ServiceObj": "0.0.0.1 /service/email 1003429 0",
            "BalImpacts": {
               "Amount": "8.00",
               "AmountDeferred": "0",
               "ResourceId": "840"
            "EventObj": "0.0.0.1 /event/billing/product/fee/cycle/
cycle_forward_monthly 258605134853914981 0",
            "OfferingObj": "0.0.0.1 /purchased_product 1002597 0",
            "ProductObj": "0.0.0.1 /product 602940 1",
            "ServiceObj": "0.0.0.1 /service/email 1003429 0",
            "BalImpacts": {
               "Amount": "3.00",
               "AmountDeferred": "0",
               "ImpactCategory": "default",
               "ImpactType": "1",
               "ResourceId": "840"
      ],
      "_Version": "1.0"
```

# **Publishing events**

The following sections contain reference information, including parameters and sample payloads, for the default publishing events:

- Account Creation
- Account Status Update
- Bill Creation
- Bundle
- Card Expiry
- Charge Offer
- Contract Cancellation
- Contract Creation
- Contract Ended
- Contract Modification
- Contract Phase End Upcoming
- Contract Phase Ended
- Contract Phase Started
- Cycle Forward
- Discount Offer
- Invoice Ready
- Package
- Package List
- Payment Failure
- Payment Request
- Payment Success
- Product Purchase
- Service Creation
- Threshold Limit

### **Account Creation**

The <code>/event/notification/publish/account\_create</code> event is published after a customer account is created in Oracle Monetization Cloud.

This event contains the Account Creation message in its payload.

#### **Payload parameters**



Parameter	Description
Poid	Unique ID for the event
AccountObj	Account POID
EndT	Event time stamp
NoteInfo	Container of notes about the account
NoteInfo.NoteObj	Note POID
NameInfo	Container of the subscriber's contact details
NameInfo.FirstName	Subscriber's first name
NameInfo.MiddleName	Subscriber's middle name
NameInfo.LastName	Subscriber's last name
NameInfo.Address	Subscriber's street address
NameInfo.City	Subscriber's city
NameInfo.State	Subscriber's state
NameInfo.EmailAddr	Subscriber's email address
NameInfo.Zip	Subscriber's postal ZIP code
NameInfo.AccountNo	Subscriber's account number
Services	Container of the account's service information
Services.Login	User name for services
Services.ServiceObj	Service POID
Deals	Container of information on the bundles that were purchased when the account was created
Deals.EventObj	POID of the bundle purchase event
Deals.DealObj	Bundle POID
Deals.Name	Name of the bundle
Deals.PackageId	ID of the package containing the bundle
Deals.ServiceObj	Service POID
Products	Container of information on the charge offers that were purchased when the account was created
Products.EventObj	POID of the charge offer purchase event
Products.Name	Name of the charge offer
Products.OfferingObj	POID of the object containing information, such as cycle fee start and end dates, about the charge offer owned by the account
Products.ProductObj	POID of the object in which the charge offer is defined in your system
Products.ServiceObj	Service POID
Products.Quantity	Charge offer quantity
Charges	Container of charges associated with the account
Charges.EventObj	POID of the charge event
Charges.OfferingObj	Offering POID of the charge offer purchase
Charges.ProductObj	Charge offer POID
Charges.ServiceObj	Service POID



Parameter	Description
Charges.Ballmpacts	Container of the balance impacts of the charge
Charges.Ballmpacts.Amount	Amount of the charge
Charges.Ballmpacts.AmountDeferred	Deferred amount
Charges.Ballmpacts.ImpactCategory	Impact category of the charge
Charges.Ballmpacts.ImpactType	Impact type of the charge; for internal use only
Charges.Ballmpacts.ResourceId	Balance element ID of the charge

#### Sample Account Creation payload

The following is a sample XML payload for the Account Creation message:

```
<AccountCreate Version="1.0">
   <Poid>0.0.0.1 /event/notification/publish/account_create 258605134854388756 0</
Poid>
   <AccountObj>0.0.0.1 /account 1234567 0</AccountObj>
   <EndT>Thu Apr 01 09:00:02 PDT 2010</EndT>
   <NoteInfo>
     <NoteObj>0.0.0.1 /note 1472532 0</NoteObj>
   </NoteInfo>
   <NameInfo>
     <FirstName>John</FirstName>
      <MiddleName />
      <LastName>Smith</LastName>
      <Address>123 Main Street</Address>
      <City>San Jose</City>
      <State>CA</State>
      <EmailAddr>user@example.com</EmailAddr>
      <Zip>95054</Zip>
      <AccountNo>12345678</AccountNo>
   </NameInfo>
   <Services>
      <Login>ipUser</Login>
      <ServiceObj>0.0.0.1 /service/ip 1471844 0</ServiceObj>
   </Services>
   <Services>
      <Login>emUser</Login>
      <ServiceObj>0.0.0.1 /service/email 1471204 0</ServiceObj>
   </Services>
      <EventObj>0.0.0.1 /event/billing/deal/purchase 17592187518180 0</EventObj>
      <DealObj>0.0.0.1 /deal 602556 36/DealObj>
      <Name>BrmPublishFW - Internet Access</Name>
      <PackageId>379</PackageId>
      <ServiceObj>0.0.0.1 /service/ip 1471844 0</ServiceObj>
   </Deals>
   <Deals>
      <EventObj>0.0.0.1 /event/billing/deal/purchase 17592187514900 0</EventObj>
      <DealObj>0.0.0.1 /deal 604604 36/DealObj>
      <Name>BrmPublishFW - Email Account</Name>
      <PackageId>379</PackageId>
      <ServiceObj>0.0.0.1 /service/email 1471204 0</ServiceObj>
   </Deals>
   <Products>
      <EventObj>0.0.0.1 /event/billing/product/action/purchase 17592187516132 0/
EventObj>
```



```
<Name>BrmPublishFW 2a - Credit Limit</Name>
      <OfferingObj>0.0.0.1 /purchased_product 1472356 0</OfferingObj>
      <ProductObj>0.0.0.1 /product 605372 1</ProductObj>
      <ServiceObj>0.0.0.1 /service/ip 1471844 0</ServiceObj>
      <Quantity>1</Quantity>
   </Products>
   <Pre>roducts>
      <EventObj>0.0.0.1 /event/billing/product/action/purchase 17592187518948 0</
EventObj>
      <Name>BrmPublishFW 1b - Email Account
      <OfferingObj>0.0.0.1 /purchased_product 1470948 0</OfferingObj>
      <ProductObj>0.0.0.1 /product 602940 1</ProductObj>
      <ServiceObj>0.0.0.1 /service/email 1471204 0</ServiceObj>
      <Ouantity>1</Ouantity>
   </Products>
   <Charges>
      <EventObj>0.0.0.1 /event/billing/product/fee/cycle/cycle_forward_monthly
258605134854385892 0</EventObj>
      <OfferingObj>0.0.0.1 /purchased_product 1472356 0</OfferingObj>
      <ProductObj>0.0.0.1 /product 605372 1</ProductObj>
      <ServiceObj>0.0.0.1 /service/ip 1471844 0</ServiceObj>
      <BalImpacts>
         <Amount>9.95</Amount>
         <AmountDeferred>0</AmountDeferred>
         <ImpactCategory>default</ImpactCategory>
         <ImpactType>1</ImpactType>
         <ResourceId>840</ResourceId>
      </Balimpacts>
   </Charges>
   <Charges>
      <EventObj>0.0.0.1 /event/billing/product/fee/purchase 258605134854387172 0</
EventObj>
      <OfferingObj>0.0.0.1 /purchased_product 1470948 0</OfferingObj>
      <ProductObj>0.0.0.1 /product 602940 1</ProductObj>
      <ServiceObj>0.0.0.1 /service/email 1471204 0</ServiceObj>
      <BalImpacts>
         <Amount>8.00</Amount>
         <AmountDeferred>0</AmountDeferred>
         <ResourceId>840</ResourceId>
      </Balimpacts>
   </Charges>
   <Charges>
      <EventObj>0.0.0.1 /event/billing/product/fee/cycle/cycle_forward_monthly
258605134854388708 0</EventObj>
      <OfferingObj>0.0.0.1 /purchased_product 1470948 0</OfferingObj>
      <ProductObj>0.0.0.1 /product 602940 1</ProductObj>
      <ServiceObj>0.0.0.1 /service/email 1471204 0</ServiceObj>
      <BalImpacts>
         <Amount>3.00</Amount>
         <AmountDeferred>0</AmountDeferred>
         <ImpactCategory>default</ImpactCategory>
         <ImpactType>1</ImpactType>
         <ResourceId>840</ResourceId>
      </BalImpacts>
   </Charges>
</AccountCreate>
```



### **Account Status Update**

The **levent/customer/status** event is sent when the status of an account or a service is changed.

This event contains the Account Status Update message in its payload.

When an account's status changes, the event payload contains the account POID but no service POID. (For information about POIDs, see About object POIDs.)

When the status of a service changes, both the account POID and the service POID are included in the payload.

For example, if an account owns two services and the status of the account and of each services changes, three events are sent.

#### **Payload parameters**

The following table lists the parameters in the event's payload:

Parameter	Description
AccountObj	POID of an account whose status changed or an account that owns a service whose status changed
ServiceObj	POID of a service whose status changed; when the event is triggered by an account status change, this field is set to <b>NULL</b>
EndT	Event time stamp
StatusInfo	Container of status information
StatusInfo.Status	New status of the account or service:
	• <b>10100:</b> Active
	• <b>10102:</b> Inactive
	• <b>10103</b> : Closed
StatusInfo.StatusFlags	System and user-defined flags that specify why an account or service is inactive or closed; for example:
	<ul> <li>0x01: Future activation date</li> </ul>
	<ul> <li>0x02: Outstanding debt</li> </ul>
	<ul> <li>0x10: Subordinate account's parent closed</li> </ul>
	<ul> <li>0X8000: Account suppressed so service</li> </ul>
	deactivated

#### Sample Account Status Update payload

The following is a sample XML payload for the Account Status Update message:



### **Bill Creation**

The **/event/notification/publish/bill\_create** event is sent when a customer bill is created in Oracle Monetization Cloud.

This event contains the Bill Creation message in its payload.

#### **Payload parameters**

The following table lists the parameters in the event's payload:

Parameter	Description
Poid	Unique ID for the event
AccountObj	Account POID
EndT	Event time stamp
NoteInfo	Container of notes about the bill creation
NoteInfo.NoteObj	Note POID
NameInfo	Container of the subscriber's contact details
NameInfo.FirstName	Subscriber's first name
NameInfo.MiddleName	Subscriber's middle name
NameInfo.LastName	Subscriber's last name
NameInfo.Address	Subscriber's street address
NameInfo.City	Subscriber's city
NameInfo.State	Subscriber's state
NameInfo.EmailAddr	Subscriber's email address
NameInfo.Zip	Subscriber's postal ZIP code
NameInfo.AccountNo	Subscriber's account number
PublishBill	Container of information about the bill
PublishBill.BillObj	Bill POID
PublishBill.BillNo	Bill number
PublishBill.TotalDue	Total amount due
PublishBill.DueT	Due date
PublishBill.StartT	Billing cycle start date
PublishBill.EndT	Billing cycle end date
PublishBill.Currency	Currency of the bill
PublishBill.BillInfoObj	Bill unit (/billinfo object) POID

#### Sample Bill Creation payload

The following is a sample XML payload for the Bill Creation message:



```
</NoteInfo>
  <NameInfo>
     <FirstName>Jean</FirstName>
     <MiddleName />
     <LastName>Smith</LastName>
     <Address>123 Main Blvd</Address>
     <City>Redwood Shores</City>
     <State>CA</State>
     <EmailAddr>user@example.com</EmailAddr>
     <Zip>97701</Zip>
     <AccountNo>12345678</AccountNo>
  </NameInfo>
  <PublishBill>
     <BillObj>0.0.0.1 /bill 1473124 4</BillObj>
     <BillNo>B1-250</BillNo>
     <TotalDue>59.70</TotalDue>
     <DueT>Mon May 31 00:00:00 PDT 2017
     <StartT>Thu Apr 01 00:00:00 PDT 2017</StartT>
     <EndT>Sat May 01 00:00:00 PDT 2017</EndT>
     <Currency>840</Currency>
     <BillInfoObj>0.0.0.1 /billinfo 1471076 0</BillInfoObj>
  </PublishBill>
</BillCreate>
```

### Bundle

The *levent/notification/price/deals/modify* event is sent when a bundle is created or updated.

This event contains the Bundle message in its payload.

#### **Payload parameters**

Parameter	Description
DealInfo	Container of information about the bundle
DealInfo.EndT	Noninclusive end time of the valid period for this bundle
DealInfo.StartT	Inclusive start time of the valid period for this bundle
DealInfo.Poid	Unique ID for the bundle
DealInfo.Permitted	Service to which the bundle applies
	If the value is <b>Account</b> , the bundle applies to all accounts, not to a specific service
DealInfo.Name	Bundle name
DealInfo.Descr	Bundle description
DealInfo.Products	Container of information about the charge offers in the bundle
DealInfo.Products.ProdName	Charge offer name
DealInfo.Products.ProductObj	Charge offer POID
DealInfo.Discounts	Container of information about the discount offers in the bundle
DealInfo.Discounts.DiscName	Discount offer name



Parameter	Description
DealInfo.Discounts.DiscountObj	Discount offer POID

#### Sample Bundle payload

The following is a sample XML payload for the Bundle message:

```
<?xml version="1.0"?><DealInfoChange Version="1.0">
  <DealInfo>
   <EndT>Wed Dec 31 16:00:00 PST 1969</EndT>
   <StartT>Wed Dec 31 16:00:00 PST 1969/StartT>
   <Poid>0.0.0.1 /deal 329961 0</Poid>
   <Permitted>/service/cloud/entertainment
   <Name>Bundle</Name>
   <Descr>Bundle</Descr>
   <Products>
     <ProdName>ChargeOffer</ProdName>
     <ProductObj>0.0.0.1 /product 330089 0</ProductObj>
   </Products>
   <Discounts>
     <DiscName>DiscountOffer</DiscName>
     <DiscountObj>0.0.0.1 /discount 329577 0</DiscountObj>
   </Discounts>
 </DealInfo>
</DealInfoChange>
```

### **Card Expiry**

The **/event/notification/publish/card\_expiry** event is published two months before a customer's payment card expires.

This event contains the Card Expiry message in its payload.

#### **Payload parameters**

Parameter	Description
Poid	Unique ID for the event
AccountObj	Account POID
EndT	Event time stamp
NoteInfo	Container of notes about the account
NoteInfo.NoteObj	Note POID
NameInfo	Container of the subscriber's contact details
NameInfo.FirstName	Subscriber's first name
NameInfo.MiddleName	Subscriber's middle name
NameInfo.LastName	Subscriber's last name
NameInfo.Address	Subscriber's street address
NameInfo.City	Subscriber's city



Parameter	Description
NameInfo.State	Subscriber's state
NameInfo.EmailAddr	Subscriber's email address
NameInfo.Zip	Subscriber's postal ZIP code
NameInfo.AccountNo	Subscriber's account number
CcInfo	Container of information about the payment card
CcInfo.Name	Name of the card holder
CcInfo.CardNum	Last 4 digits of the stored payment card number
CcInfo.CardExpiry	Expiration month and year of the payment card

#### Sample Card Expiry payload

The following is a sample XML payload for the Card Expiry message:

```
<?xml version="1.0" encoding="UTF-8"?>
<CardExpiry Version="1.0">
  <Poid>0.0.0.1 /event/notification/publish/card_expiry 259678258203100932 0</Poid>
  <AccountObj>0.0.0.1 /account 1234567 0</AccountObj>
  <EndT>Tue Jun 01 09:00:07 PDT 2010</EndT>
  <NoteInfo>
     <NoteObj>0.0.0.1 /note 1478491 0</NoteObj>
  </NoteInfo>
  <NameInfo>
     <FirstName>Jean</FirstName>
     <MiddleName />
     <LastName>Smith</LastName>
     <Address>123 Main Blvd</Address>
     <City>Redwood Shores</City>
     <State>CA</State>
     <EmailAddr>user@example.com</EmailAddr>
     <Zip>97701</Zip>
     <AccountNo>12345678</AccountNo>
  </NameInfo>
  <CcInfo>
     <Name>Oracle</Name>
     <CardNum>4111 1111 1111 1111</CardNum>
     <CardExpiry>0720</CardExpiry>
  </CcInfo>
</CardExpiry>
```

# **Charge Offer**

The **/event/notification/price/products/modify** event is sent when a charge offer is created or updated.

This event contains the Charge Offer message in its payload.

#### **Payload parameters**

Parameter	Description
ProductInfo	Container of information about the charge offer
ProductInfo.ProductPoid	Unique ID for the charge offer
ProductInfo.Name	Charge offer name
ProductInfo.ProductStartTime	Inclusive absolute start time of the charge offer's validity period; if the value is <b>Wed Dec 31 16:00:00 PST 1969</b> , the charge offer is immediately available for purchase
ProductInfo.ProductEndTime	Noninclusive end time of the charge offer's validity period; if the value is <b>Wed Dec 31 16:00:00 PST 1969</b> , the charge offer is always available for purchase
ProductInfo.PermittedTypes	Service to which the charge offer applies
	If the value is <b>Account</b> , the charge offer applies to all accounts, not to a specific service; such charge offers might be used for late charges or coupons
ProductInfo.Priority	Priority number that determines the order in which the charge offer is applied to an event when more than one charge offer applies to the same event; the higher the number, the higher the priority
ProductInfo.Type	Charge offer type:
	<ul> <li>601: Item type. Contains only a one-time purchase fee.</li> <li>602: Subscription type. Contains fees for any type and combination of events, including one-time, recurring, usage, rollover, and remittance. These fees apply only to the subscriber who owns the charge offer.</li> <li>603: System type. Contains fees that apply to all subscribers who use a particular service. System charge offers aren't owned by subscribers; they can contain only usage charges.</li> </ul>
ProductInfo.Description	Charge offer description
ProductInfo.Code	Unique code for the charge offer
ProductInfo.UsageMap	List of event types to which this charge offer applies
ProductInfo.UsageMap.UsageEventType	One of the event types to which this charge offer applies
ProductInfo.UsageMap.RatePlanName	Name of the charge that applies to the event
ProductInfo.UsageMap.RumName	Name of the ratable usage metric (RUM) used to rate the event
ProductInfo.UsageMap.RatePlanSelector Obj	POID of the charge selector used to select a charge for the event if no charge name is specified
	This feature is not supported in OMC 1.0; in that release, the value of this field is always <b>0.0.0.0 0 0</b>
ProductInfo.UsageMap.RatePlan	Container of information about the charge
ProductInfo.UsageMap.RatePlan.Name	Charge name
ProductInfo.UsageMap.RatePlan.Currency	ISO code of the currency impacted by the charge



Parameter	Description
ProductInfo.UsageMap.RatePlan.RateTie rs	List of the price tiers in the charge
ProductInfo.UsageMap.RatePlan.RateTiers.Name	Name of a price tier in the charge
ProductInfo.UsageMap.RatePlan.RateTiers.DateRangeType	<ul> <li>Type of date range used in the price tier:</li> <li>0: Absolute (or "fixed") range that starts (inclusive) and ends (exclusive) on particular dates; absolute date ranges can't overlap</li> <li>1: Relative range that starts (inclusive) at a time relative to the time the charge offer is purchased and continues for a specified length of time</li> </ul>
ProductInfo.UsageMap.RatePlan.RateTie rs.RateObj	<ul> <li>(Optional) POID of a pricing object in the charge; if specified:</li> <li>This pricing object is always valid</li> <li>There is no need to specify date ranges for the price tier</li> </ul>
ProductInfo.UsageMap.RatePlan.RateTie rs.Priority	Priority number that determines the order in which the price tier is applied to a charge when more than one price tier applies to the same charge; the higher the number, the higher the priority
ProductInfo.UsageMap.RatePlan.RateTiers.DateRanges	List of date ranges in the price tier
ProductInfo.UsageMap.RatePlan.RateTiers.DateRanges.RateObj	(Optional) POID of the charge pricing object that contains information about the charge, such as the charge's validity period; if specified:
	<ul> <li>This pricing object is valid for the entire date range</li> <li>There is no need to specify day ranges</li> </ul>
ProductInfo.UsageMap.RatePlan.RateTiers.DateRanges.Name	
ProductInfo.UsageMap.RatePlan.RateTiers.DateRanges.RateIndex	
ProductInfo.UsageMap.RatePlan.RateTiers.DateRanges.Lineage	List of price tiers to which this date range belongs
ProductInfo.UsageMap.RatePlan.RateTiers.DateRanges.RelativeEndUnit	(Relative date range only) Unit of the relative end offset:
	<ul><li>1: Seconds</li><li>2: Minutes</li><li>3: Hours</li><li>4: Days</li></ul>
ProductInfo.UsageMap.RatePlan.RateTiers.DateRanges.RelativeStartUnit	(Relative date range only) Unit of the relative start offset:  1: Seconds 2: Minutes 3: Hours 4: Days
ProductInfo.UsageMap.RatePlan.RateTiers.DateRanges.EndT	Noninclusive end time of the charge pricing's validity period; if the value is <b>Wed Dec 31 16:00:00 PST 1969</b> , the pricing doesn't expire



Parameter	Description
ProductInfo.UsageMap.RatePlan.RateTie rs.DateRanges.StartT	Inclusive start time of the charge pricing's validity period; if the value is <b>Wed Dec 31 16:00:00 PST 1969</b> , the pricing is immediately valid
ProductInfo.UsageMap.RatePlan.RateTie rs.DateRanges.RelativeEndOffset	(Relative date range only) Difference between the product purchase time and the end time of the date range; if the value is <b>Wed Dec 31 16:00:00 PST 1969</b> , the pricing doesn't expire
ProductInfo.UsageMap.RatePlan.RateTie rs.DateRanges.RelativeStartOffset	(Relative date range only) Difference between the product purchase time and the start time of the date range; if the value is <b>Wed Dec 31 16:00:00 PST 1969</b> , the pricing is valid immediately
ProductInfo.UsageMap.RatePlan.RateDet ails	Container of the pricing information in a charge
ProductInfo.UsageMap.RatePlan.RateDet ails.RateObj	POID of a pricing object in the charge
ProductInfo.UsageMap.RatePlan.RateDet ails.RatePlanObj	POID of the charge object that contains the pricing object
ProductInfo.UsageMap.RatePlan.RateDet ails.QuantityTiers	List of quantity ranges in the pricing object
ProductInfo.UsageMap.RatePlan.RateDet ails.QuantityTiers.Ballmpacts	List of balance impacts in the quantity range
ProductInfo.UsageMap.RatePlan.RateDet ails.QuantityTiers.Ballmpacts.ResourceId	Numeric code of the impacted resource
ProductInfo.UsageMap.RatePlan.RateDet ails.QuantityTiers.BalImpacts.FixedAmou nt	Amount to increment independent of the quantity
ProductInfo.UsageMap.RatePlan.RateDet ails.QuantityTiers.BalImpacts.ScaledAmo unt	Amount to increment per unit of quantity
ProductInfo.UsageMap.RatePlan.RateDet ails.QuantityTiers.BalImpacts.ScaledUnit	Unit that the scaled amount is expressed in:  0: None 1: Seconds 2: Minutes 3: Hours 4: Days
ProductInfo.UsageMap.RatePlan.RateDet ails.QuantityTiers.BalImpacts.StartT	Inclusive start time of the balance impact's validity period; if the value is <b>Wed Dec 31 16:00:00 PST 1969</b> , the balance impact is valid immediately
ProductInfo.UsageMap.RatePlan.RateDet ails.QuantityTiers.BalImpacts.EndT	Noninclusive end time of the balance impact's validity period; if the value is <b>Wed Dec 31 16:00:00 PST 1969</b> , the balance impact doesn't expire
	Difference between the product purchase time and the start time of the balance impact's validity period; if the value is <b>Wed Dec 31 16:00:00 PST 1969</b> , the balance impact is valid immediately
	Difference between the product purchase time and the end time of the balance impact's validity period; if the value is <b>Wed Dec 31 16:00:00 PST 1969</b> , the balance impact doesn't expire



Parameter	Description
ProductInfo.UsageMap.RatePlan.RateDet ails.QuantityTiers.BalImpacts.RelativeStar tUnit	•
ProductInfo.UsageMap.RatePlan.RateDet ails.QuantityTiers.BalImpacts.RelativeEnd Unit	·
ProductInfo.UsageMap.RatePlan.RateDet ails.QuantityTiers.BalImpacts.Flags	<ul> <li>Flags that specify whether the balance impact is one or more of the following:</li> <li>0x1: Discountable (the charge can be discounted when the service is purchased)</li> <li>0x2: Proratable (the charge can be prorated)</li> <li>0x4: Sponsorable (the charge can be paid by another account)</li> </ul>
ProductInfo.UsageMap.RatePlan.RateDet ails.QuantityTiers.Ballmpacts.Glld	General ledger ID to use for this balance impact
ProductInfo.UsageMap.RatePlan.RateDet ails.QuantityTiers.Ballmpacts.ImpactCate gory	Name of the impact category to which this balance impact applies; for internal use only

#### Sample Charge Offer payload

The following is a sample XML payload for the Charge Offer message:

```
<?xml version="1.0"?>
<ProductInfoChange Version="1.0">
  <ProductInfo>
    <ProductPoid>0.0.0.1 /product 330089 1</ProductPoid>
    <Name>ChargeOffer</Name>
    <ProductStartTime>Wed Dec 31 16:00:00 PST 1969/ProductStartTime>
    <ProductEndTime>Wed Dec 31 16:00:00 PST 1969/ProductEndTime>
    <PermittedTypes>/service/cloud/entertainment</PermittedTypes>
    <Priority>0</Priority>
    <Type>602</Type>
    <Description>ChargeOffer</Description>
    <Code>792be5d9-8166-4acf-82d9-c13c4b6fde45</Code>
     <UsageEventType>/event/billing/product/fee/cycle_forward_monthly/
UsageEventType>
   </UsageMap>
  </ProductInfo>
</ProductInfoChange>
```

### **Contract Cancellation**

The **/event/notification/message/contract\_canceled** event is sent when a contract is canceled.

This event contains the Contract Cancellation message in its payload.

#### **Payload parameters**

The following table lists the parameters in the event's payload:

Parameter	Description
Poid	Unique ID for the cancellation event
AccountObj	POID of the account that owns the contract
EndT	Event time stamp
NoteInfo	Container of notes about the cancellation
NoteInfo.NoteObj	POID of a note
NameInfo	Container of the subscriber's contact details
NameInfo.FirstName	Subscriber's first name
NameInfo.MiddleName	Subscriber's middle name
NameInfo.LastName	Subscriber's last name
NameInfo.Address	Subscriber's street address
NameInfo.City	Subscriber's city
NameInfo.State	Subscriber's state
NameInfo.EmailAddr	Subscriber's email address
NameInfo.Zip	Subscriber's postal ZIP code
NameInfo.AccountNo	Subscriber's account number
Contract	Container of information about the contract
Contract.ContractNo	Contract number
Contract.ContractObj	Contract POID
Contract.ContractTemplateObj	POID of the contract template
Contract.ContractType	Contract type
Contract.StartT	Inclusive start time of the contract's validity period
Contract.Descr	Contract description
Contract.EndT	Inclusive end time of the contract's validity period
Contract.Status	Contract status

#### **Sample Contract Cancellation payload**

The following is a sample XML payload for the Contract Cancellation message:

```
<ContractCanceled Version="1.0">
  <Poid>0.0.0.1 /event/notification/message/contract_canceled -1 0</Poid>
  <AccountObj>0.0.0.1 /account 76152 0</AccountObj>
  <EndT>Sat Apr 01 09:00:02 PST 2020</EndT>
  <NoteInfo>
    <NoteObj>0.0.0.1 /note 80968 0</NoteObj>
  </NoteInfo>
  <NameInfo>
  <FirstName>John</FirstName>
    <MiddleName></MiddleName>
    <LastName>Jones</LastName>
    <Address>123 Main Street</Address>
    <City>Sunnydale</City>
```



```
<State>CA</State>
   <EmailAddr>jj@example.com</EmailAddr>
   <Zip>12345</Zip>
   <AccountNo>ContractManagement_004</AccountNo>
 </NameInfo>
 <Contract>
   <ContractNo>CNTR1-18</ContractNo>
   <ContractObj>0.0.0.1 /subscribed_contract 73208 9</ContractObj>
   <ContractTemplateObj>0.0.0.0 0 0</ContractTemplateObj>
   <ContractType></ContractType>
   <StartT>Sat Apr 01 00:00:00 PST 2017</StartT>
   <Descr></Descr>
   <EndT>Mon Jan 01 00:00:00 PST 2018</EndT>
   <Status>1</Status>
 </Contract>
</ContractCanceled>
```

### **Contract Creation**

The <code>/event/notification/message/contract\_created</code> event is sent when a contract is created for a subscriber.

This event contains the Contract Creation message in its payload.

#### **Payload parameters**

Parameter	Description
Poid	Unique ID for the creation event
AccountObj	POID of the account that owns the contract
EndT	Event time stamp
NoteInfo	Container of notes about the creation
NoteInfo.NoteObj	POID of a note
NameInfo	Container of the subscriber's contact details
NameInfo.FirstName	Subscriber's first name
NameInfo.MiddleName	Subscriber's middle name
NameInfo.LastName	Subscriber's last name
NameInfo.Address	Subscriber's street address
NameInfo.City	Subscriber's city
NameInfo.State	Subscriber's state
NameInfo.EmailAddr	Subscriber's email address
NameInfo.Zip	Subscriber's postal ZIP code
NameInfo.AccountNo	Subscriber's account number
Contract	Container of information about the contract
Contract.ContractNo	Contract number
Contract.ContractObj	Contract POID
Contract.ContractTemplateObj	POID of the contract template



Parameter	Description
Contract.ContractType	Contract type
Contract.StartT	Start time of the contract's validity period
Contract.Descr	Contract description
Contract.EndT	End time of the contract's validity period
Contract.Status	Contract status

#### **Sample Contract Creation payload**

The following is a sample XML payload for the Contract Creation message:

```
<ContractCreated Version="1.0">
  <Poid>0.0.0.1 /event/notification/message/contract_created -1 0</Poid>
  <AccountObj>0.0.0.1 /account 74936 0</AccountObj>
  <EndT>Sat Apr 01 09:03:10 PST 2018</EndT>
  <NoteInfo>
   <NoteObj>0.0.0.1 /note 76932 0</NoteObj>
  </NoteInfo>
  <NameInfo>
   <FirstName>Jane</FirstName>
   <MiddleName></MiddleName>
   <LastName>Jones</LastName>
   <Address>123 Main Street</Address>
   <City>Sunnydale</City>
   <State>CA</State>
   <EmailAddr>jj@example.com</EmailAddr>
   <Zip>12345</Zip>
   <AccountNo>ContractManagement_001</AccountNo>
 </NameInfo>
  <Contract>
   <ContractNo>CNTR1-13</ContractNo>
   <ContractObj>0.0.0.1 /subscribed_contract 73732 0</ContractObj>
   <ContractTemplateObj>0.0.0.1 /contract_template 78600 0/ContractTemplateObj>
   <ContractType>ContractTemplate_2P</ContractType>
   <StartT>Sat Apr 01 00:00:00 PST 2017</startT>
   <Descr></Descr>
   <EndT>Thu Jun 01 00:00:00 PDT 2019</EndT>
   <Status>1</Status>
  </Contract>
</ContractCreated>
```

### **Contract Ended**

The **/event/notification/message/contract\_ended** event is sent when a contract's validity period ends.

This event contains the Contract Ended message in its payload.

#### Payload parameters



Parameter	Description
Poid	Unique ID for the end event
AccountObj	POID of the account that owns the contract
EndT	Event time stamp
NoteInfo	Container of notes about the contract's end
NoteInfo.NoteObj	POID of a note
NameInfo	Container of the subscriber's contact details
NameInfo.FirstName	Subscriber's first name
NameInfo.MiddleName	Subscriber's middle name
NameInfo.LastName	Subscriber's last name
NameInfo.Address	Subscriber's street address
NameInfo.City	Subscriber's city
NameInfo.State	Subscriber's state
NameInfo.EmailAddr	Subscriber's email address
NameInfo.Zip	Subscriber's postal ZIP code
NameInfo.AccountNo	Subscriber's account number
Contract	Container of information about the contract
Contract.ContractNo	Contract number
Contract.ContractObj	Contract POID
Contract.ContractTemplateObj	POID of the contract template
Contract.ContractType	Contract type
Contract.StartT	Start time of the contract's validity period
Contract.Descr	Contract description
Contract.EndT	End time of the contract's validity period
Contract.Status	Contract status

#### **Sample Contract Ended payload**

The following is a sample XML payload for the Contract Ended message:

```
<ContractEnded Version="1.0">
  <Poid>0.0.0.1 /event/notification/message/contract_ended -1 0</Poid>
  <AccountObj>0.0.0.1 /account 74936 0</AccountObj>
  <EndT>Thu Jun 01 09:01:00 PDT 2017</EndT>
  <NoteInfo>
    <NoteObj>0.0.0.1 /note 77370 0</NoteObj>
  </NoteInfo>
  <NameInfo>
    <FirstName>John</FirstName>
    <MiddleName></MiddleName>
    <LastName>Jones</LastName>
    <Address>123 Main Street</Address>
    <City>Sunnydale</City>
    <State>CA</State>
    <EmailAddr>jj@example.com</EmailAddr>
    <Zip>12345</Zip>
    <AccountNo>ContractManagement_001</AccountNo>
  </NameInfo>
```



```
<Contract>
     <ContractNo>CNTR1-12</ContractNo>
     <ContractObj>0.0.0.1 /subscribed_contract 73530 4</ContractObj>
     <ContractTemplateObj>0.0.0.1 /contract_template 78600 0</ContractTemplateObj>
     <ContractType>ContractTemplate_2P</ContractType>
     <StartT>Sat Apr 01 00:00:00 PST 2016</StartT>
     <Descr></Descr>
     <EndT>Thu Jun 01 00:00:00 PDT 2018</EndT>
     <Status>3</Status>
     </ContractSended>
```

### **Contract Modification**

The **/event/notification/message/contract\_modified** event is sent when a contract is changed.

This event contains the Contract Modification message in its payload.

#### **Payload parameters**

Parameter	Description
Poid	Unique ID for the modification event
AccountObj	POID of the account that owns the contract
EndT	Event time stamp
NoteInfo	Container of notes about the modification
NoteInfo.NoteObj	POID of a note
NameInfo	Container of the subscriber's contact details
NameInfo.FirstName	Subscriber's first name
NameInfo.MiddleName	Subscriber's middle name
NameInfo.LastName	Subscriber's last name
NameInfo.Address	Subscriber's street address
NameInfo.City	Subscriber's city
NameInfo.State	Subscriber's state
NameInfo.EmailAddr	Subscriber's email address
NameInfo.Zip	Subscriber's postal ZIP code
NameInfo.AccountNo	Subscriber's account number
Contract	Container of information about the contract
Contract.ContractNo	Contract number
Contract.ContractObj	Contract POID
Contract.ContractTemplateObj	POID of the contract template
Contract.ContractType	Contract type
Contract.StartT	Start time of the contract's validity period
Contract.Descr	Contract description
Contract.EndT	End time of the contract's validity period



Parameter	Description
Contract.Status	Contract status

#### **Sample Contract Modification payload**

The following is a sample XML payload for the Contract Modification message:

```
<ContractModified Version="1.0">
  <Poid>0.0.0.1 /event/notification/message/contract_modified -1 0</Poid>
  <AccountObj>0.0.0.1 /account 75881 0</AccountObj>
  <EndT>Thu Jun 01 09:00:00 PDT 2017</EndT>
  <NoteInfo>
   <NoteObj>0.0.0.1 /note 75718 0</NoteObj>
  </NoteInfo>
  <NameInfo>
   <FirstName>Jane</FirstName>
   <MiddleName></MiddleName>
   <LastName>Jones</LastName>
   <Address>123 Main Street</Address>
   <City>Sunnydale</City>
   <State>CA</State>
   <EmailAddr>jj@example.com</EmailAddr>
   <Zip>12345</Zip>
   <AccountNo>ContractManagement_010</AccountNo>
  </NameInfo>
  <Contract>
   <ContractNo>CNTR1-19</ContractNo>
   <ContractObj>0.0.0.1 /subscribed_contract 73881 2</ContractObj>
   <ContractTemplateObj>0.0.0.0 0 0</ContractTemplateObj>
   <ContractType></ContractType>
   <StartT>Sat Apr 01 00:00:00 PST 2016</StartT>
   <Descr></Descr>
   <EndT>Wed Dec 31 16:00:00 PST 1969</EndT>
   <Status>1</Status>
  </Contract>
</ContractModified>
```

### **Contract Phase End Upcoming**

The **/event/notification/message/contract\_phase\_upcoming\_end** event is sent when a contract phase is ending in a specified number of days.

This event contains the Contract Phase End Upcoming message in its payload.

#### **Payload parameters**

Parameter	Description
Poid	Unique ID for the phase end upcoming event
AccountObj	POID of the account that owns the contract
EndT	Event time stamp
NoteInfo	Container of notes about the upcoming phase end



Parameter	Description
NoteInfo.NoteObj	POID of a note
NameInfo	Container of the subscriber's contact details
NameInfo.FirstName	Subscriber's first name
NameInfo.MiddleName	Subscriber's middle name
NameInfo.LastName	Subscriber's last name
NameInfo.Address	Subscriber's street address
NameInfo.City	Subscriber's city
NameInfo.State	Subscriber's state
NameInfo.EmailAddr	Subscriber's email address
NameInfo.Zip	Subscriber's postal ZIP code
NameInfo.AccountNo	Subscriber's account number
ContractPhase	Container of information about the contract phase
ContractPhase.PhaseId	Phase ID
ContractPhase.RenewRemaining	Number of remaining contract renewals
ContractPhase.RenewTotal	Total number of contract renewals
ContractPhase.StartT	Start time of the phase's validity period
ContractPhase.EndT	End time of the phase's validity period
ContractPhase.Status	Contract phase status
Contract	Container of information about the contract
Contract.ContractNo	Contract number
Contract.ContractObj	Contract POID
Contract.ContractTemplateObj	POID of the contract template
Contract.ContractType	Contract type
Contract.StartT	Start time of the contract's validity period
Contract.Descr	Contract description
Contract.EndT	End time of the contract's validity period
Contract.Status	Contract status

#### Sample Contract Phase End Upcoming payload

The following is a sample XML payload for the Contract Phase End Upcoming message:

```
<ContractPhaseEndUpcoming Version="1.0">
  <Poid>0.0.0.1 /event/notification/message/contract_phase_upcoming_end -1 0</Poid>
  <AccountObj>0.0.0.1 /account 75881 0</AccountObj>
  <EndT>Mon Jun 26 00:00:01 PDT 2017</EndT>
  <NoteInfo>
  <NoteObj>0.0.0.1 /note 72341 0</NoteObj>
  </NoteInfo>
  <NomeInfo>
  <FirstName>Jane</FirstName>
  <MiddleName></MiddleName>
  <LastName>Jones</LastName>
  <Address>123 Main Street</Address>
  <City>Sunnydale</City>
```



```
<State>CA</State>
   <EmailAddr>jj@example.com</EmailAddr>
   <Zip>12345</Zip>
   <AccountNo>ContractManagement_010</AccountNo>
  </NameInfo>
  <ContractPhase>
   <PhaseId>0</PhaseId>
   <RenewRemaining>0</RenewRemaining>
   <RenewTotal>1</RenewTotal>
   <StartT>Sat Apr 01 00:00:00 PST 2017</StartT>
   <EndT>Sat Jul 01 00:00:00 PDT 2017</EndT>
   <Status>1</Status>
  </ContractPhase>
  <Contract>
   <ContractNo>CNTR1-19</ContractNo>
   <ContractObj>0.0.0.1 /subscribed_contract 73881 4</ContractObj>
   <ContractTemplateObj>0.0.0.0 0 0</ContractTemplateObj>
   <ContractType></ContractType>
   <StartT>Sat Apr 01 00:00:00 PST 2017/StartT>
   <Descr></Descr>
   <EndT>Fri Sep 01 00:00:00 PDT 2018</EndT>
   <Status>1</Status>
  </Contract>
</ContractPhaseEndUpcoming>
```

### **Contract Phase Ended**

The **/event/notification/message/contract\_phase\_end** event is sent when a contract phase ends.

This event contains the Contract Phase Ended message in its payload.

#### **Payload parameters**

Parameter	Description
Poid	Unique ID for the phase end event
AccountObj	POID of the account that owns the contract
EndT	Event time stamp
NoteInfo	Container of notes about the end of the phase
NoteInfo.NoteObj	POID of a note
NameInfo	Container of the subscriber's contact details
NameInfo.FirstName	Subscriber's first name
NameInfo.MiddleName	Subscriber's middle name
NameInfo.LastName	Subscriber's last name
NameInfo.Address	Subscriber's street address
NameInfo.City	Subscriber's city
NameInfo.State	Subscriber's state
NameInfo.EmailAddr	Subscriber's email address
NameInfo.Zip	Subscriber's postal ZIP code



Parameter	Description
NameInfo.AccountNo	Subscriber's account number
ContractPhase	Container of information about the contract phase
ContractPhase.PhaseId	Phase ID
ContractPhase.RenewRemaining	Number of remaining contract renewals
ContractPhase.RenewTotal	Total number of contract renewals
ContractPhase.StartT	Start time of the phase's validity period
ContractPhase.EndT	End time of the phase's validity period
ContractPhase.Status	Contract phase status
Contract	Container of information about the contract
Contract.ContractNo	Contract number
Contract.ContractObj	Contract POID
Contract.ContractTemplateObj	POID of the contract template
Contract.ContractType	Contract type
Contract.StartT	Start time of the contract's validity period
Contract.Descr	Contract description
Contract.EndT	End time of the contract's validity period
Contract.Status	Contract status

#### Sample Contract Phase Ended payload

The following is a sample XML payload for the Contract Phase Ended message:

```
<ContractPhaseEnd Version="1.0">
  <Poid>0.0.0.1 /event/notification/message/contract_phase_end -1 0</Poid>
  <AccountObj>0.0.0.1 /account 74936 0</AccountObj>
  <EndT>Mon May 01 09:01:00 PDT 2017</EndT>
  <NoteInfo>
    <NoteObj>0.0.0.1 /note 78986 0</NoteObj>
  </NoteInfo>
  <NameInfo>
    <FirstName>John</FirstName>
    <MiddleName></MiddleName>
    <LastName>Jones</LastName>
    <Address>123 Main Street</Address>
    <City>Sunnydale</City>
    <State>CA</State>
    <EmailAddr>jj@example.com</EmailAddr>
    <Zip>12345</Zip>
    <AccountNo>ContractManagement_001</AccountNo>
  </NameInfo>
  <ContractPhase>
    <PhaseId>0</PhaseId>
    <RenewRemaining>0</RenewRemaining>
    <RenewTotal>1</RenewTotal>
    <StartT>Sat Apr 01 00:00:00 PST 2000/StartT>
    <EndT>Mon May 01 00:00:00 PDT 2000</EndT>
    <Status>1</Status>
  </ContractPhase>
  <Contract>
    <ContractNo>CNTR1-12</ContractNo>
```



### **Contract Phase Started**

The <code>/event/notification/message/contract\_phase\_start</code> event is sent when a contract phase begins.

This event contains the Contract Phase Started message in its payload.

#### **Payload parameters**

Parameter	Description
Poid	Unique ID for the phase start event
AccountObj	POID of the account that owns the contract
EndT	Event time stamp
NoteInfo	Container of notes about the start of the phase
NoteInfo.NoteObj	POID of a note
NameInfo	Container of the subscriber's contact details
NameInfo.FirstName	Subscriber's first name
NameInfo.MiddleName	Subscriber's middle name
NameInfo.LastName	Subscriber's last name
NameInfo.Address	Subscriber's street address
NameInfo.City	Subscriber's city
NameInfo.State	Subscriber's state
NameInfo.EmailAddr	Subscriber's email address
NameInfo.Zip	Subscriber's postal ZIP code
NameInfo.AccountNo	Subscriber's account number
ContractPhase	Container of information about the contract phase
ContractPhase.PhaseId	Phase ID
ContractPhase.RenewRemaining	Number of remaining contract renewals
ContractPhase.RenewTotal	Total number of contract renewals
ContractPhase.StartT	Start time of the phase's validity period
ContractPhase.EndT	End time of the phase's validity period
ContractPhase.Status	Contract phase status
Contract	Container of information about the contract
Contract.ContractNo	Contract number



Parameter	Description
Contract.ContractObj	Contract POID
Contract.ContractTemplateObj	POID of the contract template
Contract.ContractType	Contract type
Contract.StartT	Start time of the contract's validity period
Contract.Descr	Contract description
Contract.EndT	End time of the contract's validity period
Contract.Status	Contract status

#### Sample Contract Phase Started payload

The following is a sample XML payload for the Contract Phase Started message:

```
<ContractPhaseStart Version="1.0">
  <Poid>0.0.0.1 /event/notification/message/contract_phase_start -1 0</Poid>
  <AccountObj>0.0.0.1 /account 74936 0</AccountObj>
  <EndT>Mon May 01 09:01:00 PDT 2017</EndT>
    <NoteObj>0.0.0.1 /note 77898 0</NoteObj>
  </NoteInfo>
  <NameInfo>
    <FirstName>John</FirstName>
    <MiddleName></MiddleName>
    <LastName>Jones</LastName>
    <Address>123 Main Street</Address>
    <City>Sunnydale</City>
    <State>CA</State>
    <EmailAddr>jj@example.com</EmailAddr>
    <Zip>12345</Zip>
    <AccountNo>ContractManagement_001</AccountNo>
  </NameInfo>
  <ContractPhase>
    <PhaseId>1</PhaseId>
    <RenewRemaining>0</RenewRemaining>
    <RenewTotal>1</RenewTotal>
    <StartT>Mon May 01 00:00:00 PDT 2016</StartT>
    <EndT>Thu Jun 01 00:00:00 PDT 2017</EndT>
    <Status>1</Status>
  </ContractPhase>
  <Contract>
    <ContractNo>CNTR1-12</ContractNo>
    <ContractObj>0.0.0.1 /subscribed_contract 73530 2</ContractObj>
    <ContractTemplateObj>0.0.0.1 /contract_template 78600 0/ContractTemplateObj>
    <ContractType>ContractTemplate_2P</ContractType>
    <StartT>Sat Apr 01 00:00:00 PST 2017/StartT>
    <Descr></Descr>
    <EndT>Thu Jun 01 00:00:00 PDT 2018</EndT>
    <Status>1</Status>
  </Contract>
</ContractPhaseStart>
```



# Cycle Forward

The *levent/notification/publish/cycle\_forward* event is published when a cycle forward fee is applied to an account. A cycle forward fee is a recurring fee charged in advance at regular intervals, such as monthly, quarterly, or annually.

This event contains the Cycle Forward message in its payload.

#### **Payload parameters**

The following table lists the parameters in the event's payload:

Parameter	Description
Poid	Unique ID for the event
AccountObj	Account POID
EndT	Event time stamp
NoteInfo	Container of notes about the account
NoteInfo.NoteObj	Note POID
NameInfo	Container of the subscriber's contact details
NameInfo.FirstName	Subscriber's first name
NameInfo.MiddleName	Subscriber's middle name
NameInfo.LastName	Subscriber's last name
NameInfo.Address	Subscriber's street address
NameInfo.City	Subscriber's city
NameInfo.State	Subscriber's state
NameInfo.EmailAddr	Subscriber's email address
NameInfo.Zip	Subscriber's postal ZIP code
NameInfo.AccountNo	Subscriber's account number
CycleForward	Container of details of the cycle forward fee
CycleForward.ProductName	Unique name of the charge offer
CycleForward.PurchasedProductObj	Purchased charge offer POID
CycleForward.ProductObj	Charge offer POID
CycleForward.ServiceObj	Service POID
CycleForward.AccountObj	Account POID
CycleForward.Amount	Amount of the cycle forward fee
CycleForward.Currency	Currency of the cycle forward fee
CycleForward.CycleStartT	New cycle start time stamp
CycleForward.CycleEndT	New cycle end time stamp

#### Sample Cycle Forward payload

The following is a sample XML payload for the Cycle Forward message:

```
<?xml version="1.0" encoding="UTF-8"?>
<CycleForward Version="1.0">
  <Poid>0.0.0.1 /event/notification/publish/cycle_forward 287632241826295133 0</Poid>
```



```
<AccountObj>0.0.0.1 /account 95773 0</AccountObj>
  <EndT>Tue Oct 07 00:00:02 UTC 2014</EndT>
               <NoteObj>0.0.0.1 /note 92509 0</NoteObj>
  <NoteInfo>
  </NoteInfo>
  <NameInfo>
   <FirstName>John</FirstName>
   <MiddleName>James</MiddleName>
   <LastName>Smith</LastName>
   <Address>123 Main St.</Address>
   <City>Phoenix</City>
   <State>AZ</State>
   <EmailAddr>user@example.com</EmailAddr>
   <Zip>10107</Zip>
   <AccountNo>12345678</AccountNo>
  </NameInfo>
  <CycleForward>
   <ProductName>PrepaidPostpaidHybrid eBooks subscription</productName>
   <PurchasedProductObj>0.0.0.1 /purchased_product 90461 0</PurchasedProductObj>
   <ProductObj>0.0.0.1 /product 74825 1</ProductObj>
   <ServiceObj>0.0.0.1 /service/cloud 97437 0</ServiceObj>
   <AccountObj>0.0.0.1 /account 95773 0</AccountObj>
   <Amount>8.99</Amount>
   <Currency>840</Currency>
   <CycleStartT>Tue Oct 07 00:00:00 UTC 2014</CycleStartT>
   <CycleEndT>Thu Nov 06 00:00:00 UTC 2014</CycleEndT>
  </CycleForward>
</CycleForward>
```

### **Discount Offer**

The *levent/notification/price/discounts/modify* event is sent when a discount offer is created or updated.

This event contains the Discount Offer message in its payload.

#### **Payload parameters**

Parameter	Description
DiscountInfo	Container of information about the discount offer
DiscountInfo.Poid	Unique ID for the discount offer
DiscountInfo.Permitted	Service to which the discount offer applies
	If the value is <b>Account</b> , the discount offer applies to all accounts, not to a specific service
DiscountInfo.Name	Discount offer name
DiscountInfo.Descr	Discount offer description
DiscountInfo.DiscountStartTime	Inclusive absolute start time of the discount offer's validity period; if the value is <b>Wed Dec 31 16:00:00 PST 1969</b> , the discount offer is available for purchase immediately
DiscountInfo.DiscountEndTime	Noninclusive end time of the discount offer's validity period; if the value is <b>Wed Dec 31 16:00:00 PST 1969</b> , the discount offer is always available for purchase



Parameter	Description
DiscountInfo.Priority	Priority number that determines the order in which the discount offer is applied to a charge when more than one discount offer applies to the same charge; the higher the number, the higher the priority
DiscountInfo.Type	Discount offer type:
	<ul> <li>602: Subscription type. Contains fees for any type and combination of events, including one-time, recurring, usage, rollover, and remittance. These fees apply only to the subscriber who owns the charge offer.</li> <li>603: System type. Contains fees that apply to all subscribers who use a particular service. System charge offers aren't owned by subscribers; they can contain only usage charges.</li> </ul>
DiscountInfo.Code	Unique code of the discount offer
DiscountInfo.UsageMap	List of event types to which this discount offer applies
DiscountInfo.UsageMap.EventType	One of the event types to which this discount offer applies; subtypes are implicitly included

#### Sample Discount Offer payload

The following is a sample XML payload for the Discount Offer message:

```
<?xml version="1.0"?>
<DiscountInfoChange Version="1.0">
  <DiscountInfo>
   <Poid>0.0.0.1 /discount 329577 1</Poid>
   <Permitted>/service/cloud/entertainment
   <Name>DiscountOffer</Name>
   <Descr>DiscountOffer
   <DiscountStartTime>Wed Dec 31 16:00:00 PST 1969/DiscountStartTime>
   <DiscountEndTime>Wed Dec 31 16:00:00 PST 1969/DiscountEndTime>
   <Priority>10</Priority>
   <Type>602</Type>
   <Code>ef8f2772-eb7b-487d-a807-2d4b5652b96e</Code>
     <EventType>/event/billing/product/fee/cycle_forward_monthly</EventType>
   </UsageMap>
  </DiscountInfo>
</DiscountInfoChange>
```

# Invoice Ready

The *levent/notification/publish/invoice\_ready* event is published after a customer invoice is created in Oracle Monetization Cloud.

This event contains the Invoice Ready message in its payload.

For information about invoices, see Generating invoices.

#### Payload parameters



Parameter	Description
Poid	Unique ID for the event
AccountObj	Account POID
EndT	Event time stamp
NoteInfo	Container of notes about the account
NoteInfo.NoteObj	Note POID
NameInfo	Container of the subscriber's contact details
NameInfo.FirstName	Subscriber's first name
NameInfo.MiddleName	Subscriber's middle name
NameInfo.LastName	Subscriber's last name
NameInfo.Address	Subscriber's street address
NameInfo.City	Subscriber's city
NameInfo.State	Subscriber's state
NameInfo.EmailAddr	Subscriber's email address
NameInfo.Zip	Subscriber's postal ZIP code
NameInfo.AccountNo	Subscriber's account number
Invoice	Container of information about the invoice
Invoice.BillInfoObj	Billinfo POID
Invoice.BillDate	Bill date
Invoice.BillNo	Bill number
Invoice.BillObj	Bill POID
Bill	Container of bill information associated with the invoice
Bill.BillObj	Bill POID
Bill.BillNo	Bill number
Bill.TotalDue	Total amount due
Bill.DueT	Due date
Bill.StartT	Billing cycle start date
Bill.EndT	Billing cycle end date
Bill.Currency	Currency of the bill
Bill.BillInfoObj	Billinfo POID

#### Sample Invoice Ready payload

The following is a sample XML payload for the Invoice Ready message:



```
<LastName>Smith</LastName>
      <Address>123 Main Blvd</Address>
      <City>Redwood Shores</City>
      <State>CA</State>
      <EmailAddr>user@example.com</EmailAddr>
      <Zip>97701</Zip>
      <AccountNo>12345678</AccountNo>
   </NameInfo>
   <Invoice>
      <BillInfoObj>0.0.0.1 /billinfo 1471076 0</BillInfoObj>
      <BillDateT>Sat May 01 00:00:00 PDT 2010</BillDateT>
      <BillNo>B1-250</BillNo>
      <BillObj>0.0.0.1 /bill 1473124 0</BillObj>
   </Invoice>
   <Bill>
     <Bill0bj>0.0.0.1 /bill 1473124 4</Bill0bj>
      <BillNo>B1-250</BillNo>
     <TotalDue>59.7</TotalDue>
     <DueT>Mon May 31 00:00:00 PDT 2010
     <StartT>Thu Apr 01 00:00:00 PDT 2010/StartT>
     <EndT>Sat May 01 00:00:00 PDT 2010</EndT>
      <Currency>840</Currency>
      <BillInfoObj>0.0.0.1 /billinfo 1471076 0</BillInfoObj>
   </Bill>
</InvoiceReady>
```

# Package

The *levent/notification/price/plans/modify* event is sent when a package is created or updated.

This event contains the Package message in its payload.

#### **Payload parameters**

Parameter	Description
PlanInfo	Container of information about the package
PlanInfo.DealObj	POID of an account-level bundle, which is a bundle whose purchase level is all accounts but no services (see <b>DealInfo.Permitted</b> in <b>Bundle</b> ); a package can include only one account-level bundle
PlanInfo.ModT	Time the package was last modified
PlanInfo.Poid	Unique ID for the package
PlanInfo.Name	Package name
PlanInfo.CreatedT	Time the package was created
PlanInfo.Descr	Package description
PlanInfo.DealName	Name of the account-level bundle
PlanInfo.Services	List of service-level bundles in the package
PlanInfo.Services.DealObj	Bundle element; value is always 0.0.0.0 0 0
PlanInfo.Services.ServiceObj	POID of the bundle's service type



Parameter	Description
PlanInfo.Services .DealName	Name of the bundle
PlanInfo.Services.Deals	List of optional and required bundles for the service type
PlanInfo.Services.Deals.DealObj	POID of an optional or required bundle
PlanInfo.Services.Deals.Type	Value that specifies whether the bundle is optional or required:
	• 1: Required
	• <b>0</b> : Optional
PlanInfo.Services.Deals.DealName	Name of the bundle

#### Sample Package payload

The following is a sample XML payload for the Package message:

```
<?xml version="1.0"?>
<PlanInfoChange Version="1.0">
 <PlanInfo>
   <DealObj>0.0.0.0 / 0 0</DealObj>
   <ModT>Sat Jan 27 07:59:14 PST 2018</ModT>
   <Poid>0.0.0.1 /plan 328425 0</Poid>
   <Name>Package</Name>
   <CreatedT>Sat Jan 27 07:59:14 PST 2017</CreatedT>
   <Descr>Package</Descr>
   <DealName></DealName>
   <Services>
     <DealObj>0.0.0.0 0 0/DealObj>
     <ServiceObj>0.0.0.1 /service/cloud/entertainment -1 0</ServiceObj>
     <DealName></DealName>
     <Deals>
       <DealObj>0.0.0.1 /deal 329961 0</DealObj>
       <Type>1</Type>
       <DealName>Bundle
     </Deals>
   </Services>
 </PlanInfo>
</PlanInfoChange>
```

### Package List

The **/event/notification/price/plan\_lists/modify** event is sent when a package list is created or updated.

This event contains the Package List message in its payload.

#### Payload parameters

Parameter	Description
PlanlistInfo	Container of information about the package list
PlanlistInfo.Poid	Unique ID for the package list
PlanlistInfo.Name	Package list name



Parameter	Description
PlanlistInfo.Descr	Package list description
PlanlistInfo.TypeStr	Package list type:
	<ul> <li>new: Contains packages that register customers and add the services and bundles in the packages to the new accounts.</li> <li>addon: Contains packages that add services and bundles to existing accounts.</li> </ul>
PlanlistInfo.Status	Package list status:
	• <b>10100</b> : Active
	• 10102: Inactive
	• 10103: Closed
	• <b>10104:</b> Not set
PlanlistInfo.Plans	List of packages in the package list
PlanlistInfo.Plans.PlanObj	POID of one of the packages in the package list
PlanlistInfo.Plans.PlanName	Name of the package

#### Sample Package List payload

The following is a sample XML payload for the Package List message:

```
<?xml version="1.0"?>
<PlanlistInfoChange Version="1.0">
    <PlanlistInfo ElementId="0">
        <Poid>0.0.0.1 /group/plan_list 399550</Poid>
        <Name>CSR</Name>
        <Descr>The planlist for CSRs</Descr>
        <TypeStr>new</TypeStr>
        <Status>10100</Status>
        <Plans ElementId="0">
            <Plan0bj>0.0.0.1 /plan 399166 0</Plan0bj>
            <PlanName>Plan 1 - Measured Web Access with Discounts</PlanName>
        </Plans>
        <Plans ElementId="1">
            <Plan0bj>0.0.0.1 /plan 401214 0</Plan0bj>
            <PlanName>Plan 2 - Unlimited Web Access with Discounts</PlanName>
        <Plans ElementId="2">
            <Plan0bj>0.0.0.1 /plan 397502 0</Plan0bj>
            <PlanName>Plan 3 - Unlimited Web Access with Recurring Discounts/
PlanName>
        </Plans>
    </PlanlistInfo>
</PlanlistInfoChange>
```

### Payment Failure

The **/event/billing/fee/failed\_payment** event is published after an attempt to apply a payment to a customer account fails in Oracle Monetization Cloud.

This event contains the Payment Failure message in its payload.



For information about why payments fail and what happens after, see Resolving failed payments and Managing suspended payments.

### **Payload parameters**

The following table lists the parameters in the event's payload:

Parameter	Description	
Poid	Unique ID for the event	
AccountObj	Account POID	
EndT	Event time stamp	
NoteInfo	Container of notes about the account	
NoteInfo.NoteObj	Note POID	
NameInfo	Container of the subscriber's contact details	
NameInfo.FirstName	Subscriber's first name	
NameInfo.MiddleName	Subscriber's middle name	
NameInfo.LastName	Subscriber's last name	
NameInfo.Address	Subscriber's street address	
NameInfo.City		
_	Subscriber's city	
NameInfo.State	Subscriber's state	
NameInfo.EmailAddr	Subscriber's email address	
NameInfo.Zip	Subscriber's postal ZIP code	
NameInfo.AccountNo	Subscriber's account number	
Payment	Container of information about the failed payment	
Payment.AccountObj	Account POID	
Payment.Amount	Amount of the payment	
Payment.Command	Value for the type of operation attempted:	
	0: No operation	
	• 2: Authorize payment	
	<ul> <li>4: Authorize and deposit payment</li> </ul>	
	• <b>5:</b> Deposit previously authorized payment	
	• 6: Refund payment	
	<ul> <li>7: Retrieve payment by requesting (transactional) or reading (nontransactional) the request for response (RFR) file</li> </ul>	
	<ul> <li>8: Resubmit a payment batch</li> </ul>	
	<ul> <li>9: Recover payment by using outstanding checkpoints</li> </ul>	
Payment.Currency	Currency of the payment	
	canonicy of the paymont	



Parameter	Description	
Payment.PayType	Payment type:	
	• Prepaid (10000)	
	<ul> <li>Invoice (10001)</li> </ul>	
	<ul> <li>Checking account debit (10002)</li> </ul>	
	<ul><li>Credit card (10003)</li></ul>	
	<ul> <li>Smart card (10006)</li> </ul>	
	<ul> <li>Paid by a parent account (10007)</li> </ul>	
	• Cash (10011)	
	<ul> <li>Check (10012)</li> </ul>	
	<ul> <li>Wire transfer payments (10013)</li> </ul>	
	<ul> <li>Interbank payment order (10014)</li> </ul>	
	<ul> <li>Postal order payments (10015)</li> </ul>	
	<ul> <li>Voucher payments (10016)</li> </ul>	
	<ul> <li>Failed payment (10017)</li> </ul>	
Payment.TransId	Transaction ID	

#### Sample Payment Failure payload

The following is a sample XML payload for the Payment Failure message:

```
<PymtFail Version="1.0">
  <Poid>0.0.0.1 /event/billing/fee/failed_payment 259678258203101497 0</Poid>
  <AccountObj>0.0.0.1 /account 1234567 0</AccountObj>
  <EndT>Tue Jun 01 09:00:03 PDT 2010</EndT>
  <NoteInfo>
     <NoteObj>0.0.0.1 /note 1477467 0</NoteObj>
  </NoteInfo>
  <NameInfo>
     <FirstName>John</FirstName>
     <MiddleName />
     <LastName>Smith</LastName>
     <Address>123 Main Blvd</Address>
     <City>Redwood Shores</City>
     <State>CA</State>
     <EmailAddr>user@example.com</EmailAddr>
     <Zip>97701</Zip>
     <AccountNo>12345678</AccountNo>
  </NameInfo>
  <Payment>
     <AccountObj>0.0.0.1 /account 1472612 0</AccountObj>
     <Amount>98.00</Amount>
     <Command>4</Command>
     <Currency>840</Currency>
     <PayType>10003</PayType>
     <TransId>T1,d,0</TransId>
  </Payment>
</PymtFail>
```

### Payment Request

The <code>/event/notification/publish/payment\_request</code> event is published when the currency balance in a customer's account is too low to pay a new cycle forward fee.

For example, this event would be triggered if the cycle forward fee is \$30 and the balance is only \$20.

This event contains the Payment Request message in its payload.

### **Payload parameters**

The following table lists the parameters in the event's payload:

Parameter	Description
Poid	Unique ID for the event
AccountObj	Account POID
EndT	Event time stamp
NoteInfo	Container of notes about the account
NoteInfo.NoteObj	Note POID
NameInfo	Container of the subscriber's contact details
NameInfo.FirstName	Subscriber's first name
NameInfo.MiddleName	Subscriber's middle name
NameInfo.LastName	Subscriber's last name
NameInfo.Address	Subscriber's street address
NameInfo.City	Subscriber's city
NameInfo.State	Subscriber's state
NameInfo.EmailAddr	Subscriber's email address
NameInfo.Zip	Subscriber's postal ZIP code
NameInfo.AccountNo	Subscriber's account number
Bill	Container of bill details associated with the payment request
Bill.BillObj	Bill POID
Bill.BillNo	Bill number that is visible to the customer
Bill.Currency	Currency for the bill
Bill.BillInfoObj	POID of the bill unit associated with the bill
PaymentRequest	Container of details about the payment request
PaymentRequest.ProductName	Name of the charge offer associated with the payment request
PaymentRequest.PurchasedProductObj	POID of the object containing information, such as cycle fee start and end dates, about the charge offer owned by the account
PaymentRequest.ProductObj	POID of the object in which the charge offer is defined in your system
PaymentRequest.ServiceObj	POID of the service associated with the payment request
PaymentRequest.TransID	Transaction ID of the payment request
PaymentRequest.AccountObj	POID of the account associated with the payment request
PaymentRequest.Amount	Amount due for the cycle forward fee



#### Sample Payment Request payload

The following is a sample XML payload for the Payment Request message:

```
<PaymentRequest Version="1.0">
   <Poid>0.0.0.1 /event/notification/publish/payment_request 288160007407635573 0</
Poid>
   <AccountObj>0.0.0.1 /account 96431 7</AccountObj>
   <EndT>Thu Nov 06 00:00:01 UTC 2014</EndT>
      <NoteObj>0.0.0.1 /note 100469 0</NoteObj>
   </NoteInfo>
   <NameInfo>
      <FirstName>John</FirstName>
      <MiddleName>James</MiddleName>
      <LastName>Smith</LastName>
      <Address>123 Main St</Address>
      <City>Phoenix</City>
      <State>AZ</State>
      <EmailAddr>user@example.com</EmailAddr>
      <Zip>10107</Zip>
      <AccountNo>12345678</AccountNo>
   </NameInfo>
   <Bill>
      <BillObj>0.0.0.1 /bill 95919 0</BillObj>
      <<BillNo></BillNo>
      <Currency>840</Currency>
      <BillInfoObj>0.0.0.1 /billinfo 96943 0</BillInfoObj>
   </Bill>
   <PaymentRequest>
      <ProductName>PrepaidPostpaidHybrid eBooks subscription</productName>
      <PurchasedProductObj>0.0.0.1 /purchased_product 941731
         </PurchasedProductObj>
      <ProductObj>0.0.0.1 /product 74825 1</ProductObj>
      <ServiceObj>0.0.0.1 /service/cloud 96175 0</ServiceObj>
      <TransID>22</TransID>
      <AccountObj>0.0.0.1 /account 96431 7</AccountObj>
      <Amount>8.72</Amount>
   </PaymentRequest>
</PaymentRequest>
```

### **Payment Success**

The *levent/billing/payment/payment\_type* event is published after a payment is successfully applied to a customer account in Oracle Monetization Cloud.

This event contains the Payment Success message in its payload.

#### **Payload parameters**

The following table lists the parameters in the event's payload:

Parameter	Description	
Poid	Unique ID for the event	
AccountObj	Account POID	
EndT	Event time stamp	



Parameter	Description
NoteInfo	Container of notes about the account
NoteInfo.NoteObj	Note POID
NameInfo	Container of the subscriber's contact details
NameInfo.FirstName	Subscriber's first name
NameInfo.MiddleName	Subscriber's middle name
NameInfo.LastName	Subscriber's last name
NameInfo.Address	Subscriber's street address
NameInfo.City	Subscriber's city
NameInfo.State	Subscriber's state
NameInfo.EmailAddr	Subscriber's email address
NameInfo.Zip	Subscriber's postal ZIP code
NameInfo.AccountNo	Subscriber's account number
  Payment	Container of payment information
Payment.AccountObj	Account POID
Payment.Amount	Amount of the payment
Payment.Command	Value for the type of operation attempted:
	<ul> <li>0: No operation</li> <li>2: Authorize payment</li> <li>4: Authorize and deposit payment</li> <li>5: Deposit previously authorized payment</li> <li>6: Refund payment</li> <li>7: Retrieve payment by requesting (transactional) or reading (nontransactional) the request for response (RFR) file</li> <li>8: Resubmit a payment batch</li> <li>9: Recover payment by using outstanding checkpoints</li> </ul>
Payment.Currency	Currency of the payment
Payment.PayType	Payment type: Prepaid (10000) Invoice (10001) Checking account debit (10002) Credit card (10003) Smart card (10006) Paid by a parent account (10007) Cash (10011) Check (10012) Wire transfer payments (10013) Interbank payment order (10014) Postal order payments (10015) Voucher payments (10016)
Payment.TransId	<ul> <li>Failed payment (10017)</li> <li>Transaction ID</li> </ul>

### **Sample Payment Success payload**

The following is a sample XML payload for the Payment Success message:



```
<PymtSuccess Version="1.0">
  <Poid>0.0.0.1 /event/billing/payment/cash 259168084807810708 0</Poid>
  <AccountObj>0.0.0.1 /account 1234567 0</AccountObj>
  <EndT>Mon May 03 09:00:00 PDT 2010</EndT>
  <NoteInfo>
     <NoteObj>0.0.0.1 /note 1473172 0</NoteObj>
  </NoteInfo>
  <NameInfo>
     <FirstName>John</FirstName>
     <MiddleName />
     <LastName>Smith</LastName>
     <Address>123 Main Blvd</Address>
     <City>Redwood Shores</City>
     <State>CA</State>
     <EmailAddr>user@example.com</EmailAddr>
     <Zip>97701</Zip>
     <AccountNo>12345678</AccountNo>
  </NameInfo>
  <Payment>
     <AccountObj>0.0.0.1 /account 1472612 0</AccountObj>
     <Amount>19.9</Amount>
     <Command>0</Command>
     <Currency>840</Currency>
     <PayType>10011</PayType>
     <TransId>T1,d8,0</TransId>
  </Payment>
</PymtSuccess>
```

### **Product Purchase**

The <code>/event/notification/publish/product\_purchase</code> event is published after a charge offer is purchased for a customer's account in Oracle Monetization Cloud.

This event contains the Product Purchase message in its payload.

#### **Payload parameters**

The following table lists the parameters in the event's payload:

Parameter	Description
Poid	Unique ID for the event
AccountObj	Account POID
EndT	Event time stamp
NoteInfo	Container of notes about the account
NoteInfo.NoteObj	Note POID
NameInfo	Container of the subscriber's contact details
NameInfo.FirstName	Subscriber's first name
NameInfo.MiddleName	Subscriber's middle name
NameInfo.LastName	Subscriber's last name
NameInfo.Address	Subscriber's street address
NameInfo.City	Subscriber's city
NameInfo.State	Subscriber's state



Parameter	Description
NameInfo.EmailAddr	Subscriber's email address
NameInfo.Zip	Subscriber's postal ZIP code
NameInfo.AccountNo	Subscriber's account number
Products	Container of information on purchased charge offers
Products.EventObj	POID of the charge offer purchase event
Products.Name	Name of the charge offer
Products.OfferingObj	Offering POID
Products.ProductObj	Charge offer POID
Products.ServiceObj	Service POID
Products.Quantity	Charge offer quantity
Charges	Container of information on charges
Charges.EventObj	POID of the charge event
Charges.OfferingObj	Offering POID
Charges.ProductObj	Charge offer POID
Charges.ServiceObj	Service POID
Charges.Ballmpacts	Container of the balance impacts of the charge
Charges.Ballmpacts.Amount	Amount of the charge
Charges.Ballmpacts.AmountDeferred	Deferred amount
Charges.Ballmpacts.ResourceId	Balance element ID of the charge

### Sample Product Purchase payload

The following is a sample XML payload for the Product Purchase message:

```
<ProductPurchase Version="1.0">
   <Poid>0.0.0.1 /event/notification/publish/product_purchase 258605134854386823 0</
Poid>
   <AccountObj>0.0.0.1 /account 1234567 0</AccountObj>
   <EndT>Thu Apr 01 09:00:00 PDT 2010</EndT>
   <NoteInfo>
      <NoteObj>0.0.0.1 /note 1470599 0</NoteObj>
   </NoteInfo>
   <NameInfo>
      <FirstName>Jean</FirstName>
      <MiddleName />
      <LastName>/Smith</LastName>
      <Address>123 Main Blvd</Address>
      <City>Redwood Shores</City>
      <State>CA</State>
      <EmailAddr>user@example.com</EmailAddr>
      <Zip>97701</Zip>
      <AccountNo>12345678</AccountNo>
   </NameInfo>
   <Products>
      <EventObj>0.0.0.1 /event/billing/product/action/purchase 17592187518727 0
EventObj>
      <Name>BrmPublishFW - MemberShip</Name>
      <OfferingObj>0.0.0.1 /purchased_product 1471239 0</OfferingObj>
```



```
<ProductObj>0.0.0.1 /product 595297 2</ProductObj>
      <ServiceObj>0.0.0.0 0 0</ServiceObj>
      <Quantity>1</Quantity>
   </Products>
   <Charges>
      <EventObj>0.0.0.1 /event/billing/product/fee/purchase 258605134854388487 0</
EventObj>
      <OfferingObj>0.0.0.1 /purchased_product 1471239 0</OfferingObj>
      <ProductObj>0.0.0.1 /product 595297 2</ProductObj>
      <ServiceObj>0.0.0.0 0 0</ServiceObj>
      <BalImpacts>
         <Amount>12.95</Amount>
         <AmountDeferred>0</AmountDeferred>
         <ResourceId>840</ResourceId>
      </Ballmpacts>
   </Charges>
</ProductPurchase>
```

### **Service Creation**

The **/event/notification/publish/service\_create** event is published after a service is added to a customer account in Oracle Monetization Cloud.

This event contains the Service Creation message in its payload.

#### **Payload parameters**

The following table lists the parameters in the event's payload:

Parameter	Description
Poid	Unique ID for the event
AccountObj	Account POID
EndT	Event time stamp
NoteInfo	Container of notes about the account
NoteInfo.NoteObj	Note POID
NameInfo	Container of the subscriber's contact details
NameInfo.FirstName	Subscriber's first name
NameInfo.MiddleName	Subscriber's middle name
NameInfo.LastName	Subscriber's last name
NameInfo.Address	Subscriber's street address
NameInfo.City	Subscriber's city
NameInfo.State	Subscriber's state
NameInfo.EmailAddr	Subscriber's email address
NameInfo.Zip	Subscriber's postal ZIP code
NameInfo.AccountNo	Subscriber's account number
Services	Container of the account's service information
Services.Login	Service login
Services.ServiceObj	Service POID
Deals	Container of information on purchased bundles



Parameter	Description
Deals.EventObj	POID of the bundle purchase event
Deals.DealObj	Bundle POID
Deals.Name	Name of the bundle
Deals.PackageId	ID of the package containing bundle
Deals.ServiceObj	Service POID
Products	Container of information on purchased charge offers
Products.EventObj	POID of the charge offer purchase event
Products.Name	Name of the charge offer
Products.OfferingObj	Offering POID
Products.ProductObj	Charge offer POID
Products.ServiceObj	Service POID
Products.Quantity	Charge offer quantity
Charges	Container of information on charges
Charges.EventObj	POID of the charge event
Charges.OfferingObj	Offering POID
Charges.ProductObj	Charge offer POID
Charges.ServiceObj	Service POID
Charges.Ballmpacts	Container of the balance impacts of the charge
Charges.Ballmpacts.Amount	Amount of the charge
Charges.Ballmpacts.AmountDeferred	Deferred amount
Charges.Ballmpacts.ImpactCategory	Balance impact category of the charge
Charges.Ballmpacts.ImpactType	Balance impact type of the charge; for internal use only
Charges.Ballmpacts.ResourceId	Balance element ID of the charge

### **Sample Service Creation payload**

The following is a sample XML payload for the Service Creation message:

```
<ServiceCreate Version="1.0">
   <Poid>0.0.0.1 /event/notification/publish/service_create 258605134854387397 0</
Poid>
   <AccountObj>0.0.0.1 /account 1234567 0</AccountObj>
   <EndT>Thu Apr 01 09:00:00 PDT 2010</EndT>
   <NoteInfo>
      <NoteObj>0.0.0.1 /note 1471173 0</NoteObj>
   </NoteInfo>
   <NameInfo>
      <FirstName>John/FirstName>
      <MiddleName />
      <LastName>Smith</LastName>
      <Address>123 Main Blvd</Address>
      <City>Redwood Shores</City>
      <State>CA</State>
      <EmailAddr>user@example.com</EmailAddr>
      <Zip>97701</Zip>
      <AccountNo>12345678</AccountNo>
```



```
</NameInfo>
   <Services>
      <Login>faxUser</Login>
      <ServiceObj>0.0.0.1 /service/fax 1471045 0</ServiceObj>
   </Services>
   <Deals>
      <EventObj>0.0.0.1 /event/billing/deal/purchase 17592187518149 0</EventObj>
      <DealObj>0.0.0.1 /deal 1140842 6/DealObj>
      <Name>BrmPublishFW - Fax</Name>
      <PackageId>380</PackageId>
      <ServiceObj>0.0.0.1 /service/fax 1471045 0</ServiceObj>
   <Products>
      <EventObj>0.0.0.1 /event/billing/product/action/purchase 17592187516101 0</
EventObi>
      <Name>BrmPublishFW 3a - Fax</Name>
      <OfferingObj>0.0.0.1 /purchased_product 1473861 0</OfferingObj>
      <ProductObj>0.0.0.1 /product 1139626 1</ProductObj>
      <ServiceObj>0.0.0.1 /service/fax 1471045 0</ServiceObj>
      <Quantity>1</Quantity>
   </Products>
   <Charges>
      <EventObj>0.0.0.1 /event/billing/product/fee/purchase 258605134854388549 0/
EventObj>
      <OfferingObj>0.0.0.1 /purchased_product 1473861 0</OfferingObj>
      <ProductObj>0.0.0.1 /product 1139626 1</ProductObj>
      <ServiceObj>0.0.0.1 /service/fax 1471045 0</ServiceObj>
      <BalImpacts>
         <Amount>2.95</Amount>
         <AmountDeferred>0</AmountDeferred>
         <ResourceId>840</ResourceId>
      </Balimpacts>
   </Charges>
   <Charges>
      <EventObj>0.0.0.1 /event/billing/product/fee/cycle/cycle_forward_monthly
258605134854385861 0</EventObj>
      <OfferingObj>0.0.0.1 /purchased_product 1473861 0</OfferingObj>
      <ProductObj>0.0.0.1 /product 1139626 1</ProductObj>
      <ServiceObj>0.0.0.1 /service/fax 1471045 0</ServiceObj>
      <BalImpacts>
         <Amount>4.95</Amount>
         <AmountDeferred>0</AmountDeferred>
         <ImpactCategory>default</ImpactCategory>
         <ImpactType>1</ImpactType>
         <ResourceId>840</ResourceId>
      </Balimpacts>
   </Charges>
</ServiceCreate>
```

### Threshold Limit

The **/event/notification/threshold** event is published after customer activity causes a balance, such as minutes, downloads, or dollars, to cross a specified credit threshold in Oracle Monetization Cloud.

This event contains the Threshold Limit message in its payload.

For more information about threshold notifications, see Setting credit limits in a package.

### **Payload parameters**

The following table lists the parameters in the event's payload:

Parameter	Description
Poid	Unique ID for the event
AccountObj	Account POID
EndT	Event time stamp
NoteInfo	Container of notes about the account
NoteInfo.NoteObj	Note POID
NameInfo	Container of the subscriber's contact details
NameInfo.FirstName	Subscriber's first name
NameInfo.MiddleName	Subscriber's middle name
NameInfo.LastName	Subscriber's last name
NameInfo.Address	Subscriber's street address
NameInfo.City	Subscriber's city
NameInfo.State	Subscriber's state
NameInfo.EmailAddr	Subscriber's email address
NameInfo.Zip	Subscriber's postal ZIP code
NameInfo.AccountNo	Subscriber's account number
Balances	Container of balance information
Balances.ResourceId	ID of the balance element that crossed the threshold
Balances.Amount	Balance impact of the triggering event
Balances.CurrentBal	Current balance of the account, including the impact of the triggering event
Balances.BalGrpObj	ID of the balance group to which the balance belongs
Balances.Percent	Percentage of the credit limit range consumed by the current balance
Balances.AlertType	Type of alert:     1: Credit limit exceeded     2: Percent threshold crossed     3: Noncurrency credit floor reached     4: Fixed threshold crossed



Parameter	Description	
Balances.Reason	Reason for this alert:	
	<ul> <li>0x01: Upward breach: The balance crossed above a threshold.</li> </ul>	
	<ul> <li>0x02: Downward breach: The balance crossed below a threshold (for example, this can occur when the customer makes a payment).</li> <li>0x04: Upward reset: The owner of the balance increased a threshold, causing the balance to fall below a threshold. For example, this occurs when the current balance is \$50 and you change the value of threshold 1 from \$40 to \$60. In this case,</li> </ul>	
	the \$50 balance falls below the new setting for threshold 1.	
	<ul> <li>0x08: Downward reset: The owner of the balance decreased a threshold value, causing the balance to rise above a threshold. For example, this occurs when the current balance is \$40 and you change the value of threshold 1 from \$50 to \$25. In this case, the \$40 balance rises above the new setting for threshold 1.</li> <li>0x10: Unknown reason.</li> </ul>	
D   0   10   11		
Balances.CreditFloor	Starting point for calculating percentage credit thresholds; the credit limit minus the credit floor is 100% of the credit limit range	
	For example, if a balance has 1000 prepaid minutes, a credit limit of 0, and a credit floor of -1000 (no minutes used), the credit limit range is -1000 minutes, and a percentage threshold of 90% of that range is reached when the balance is 90% of -1000 minutes (that is, when the account has 100 prepaid minutes left)	
	Any percentage thresholds crossed by a triggering event are specified in a CreditThresholds parameter	
Balances.CreditLimit	Credit limit for this balance element; the current balance can't exceed this limit unless it's manually adjusted by a CSR; during normal rating, the balance is consumed only until the credit limit is reached	
Balances.CreditThresholdsFixed	List of balance element amounts, such as "100" for \$100, that represent fixed thresholds crossed by the balance as it's increased or decreased by the impact of the triggering event	
Thresholds	Container of threshold information	
Thresholds.CreditThresholds	Percentage threshold crossed by the balance as it's increased or decreased by the impact of the triggering event; one CreditThresholds element is created for each percentage threshold crossed by the event; percentage thresholds are always multiples of 5, such as 85% and 90%	
Thresholds.AlertType	Type of alert:     1: Credit limit exceeded     2: Percent threshold crossed     3: Noncurrency credit floor reached     4: Fixed threshold crossed	

Parameter	Description
Thresholds.Reason	Reason for this alert:
	<ul> <li>0x01: Upward breach: The balance crossed above a threshold.</li> <li>0x02: Downward breach: The balance crossed below a threshold (for example, this can occur when the customer makes a payment).</li> <li>0x04: Upward reset: The owner of the balance increased a threshold, causing the balance to fall below a threshold. For example, this occurs when the current balance is \$50 and you change the value of threshold 1 from \$40 to \$60. In this case, the \$50 balance falls below the new setting for</li> </ul>
	threshold 1.  Ox08: Downward reset: The owner of the balance decreased a threshold value, causing the balance to rise above a threshold. For example, this occurs when the current balance is \$40 and you change the value of threshold 1 from \$50 to \$25. In this case, the \$40 balance rises above the new setting for threshold 1.  Ox10: Unknown reason.

### Sample Threshold Limit payload

The following is a sample XML payload for the Threshold Limit message:

```
<ThresholdLimit Version="1.0">
   <Poid>0.0.0.1 /event/notification/threshold 259678258203095590 0</Poid>
   <AccountObj>0.0.0.1 /account 1234567 0</AccountObj>
   <EndT>Tue Jun 01 00:00:00 PDT 2010</EndT>
   <NoteInfo>
      <NoteObj>0.0.0.1 /note 1471526 0</NoteObj>
   </NoteInfo>
   <NameInfo>
     <FirstName>Jean</FirstName>
      <MiddleName />
      <LastName>Smith</LastName>
      <Address>123 Main Blvd</Address>
      <City>Redwood Shores</City>
      <State>CA</State>
      <EmailAddr>user@example.com</EmailAddr>
      <Zip>97701</Zip>
      <AccountNo>12345678</AccountNo>
   </NameInfo>
   <Balances>
     <ResourceId>840</ResourceId>
      <Amount>9.95</Amount>
      <CurrentBal>90.05</CurrentBal>
     <BalGrpObj>0.0.0.1 /balance_group 1474148 14</BalGrpObj>
     <Percent>90.050000000
     <AlertType>0</AlertType>
     <Reason>1</Reason>
      <CreditFloor>0</CreditFloor>
      <CreditLimit>100</CreditLimit>
      <CreditThresholdsFixed />
   </Balances>
   <Thresholds>
```



## Related topics

- Sending messages to customers
- Sending data to external applications
- About integrating your business systems



## Part III

## Gateways

This part contains the following topics:

- Connecting to payment gateways
- Connecting to taxation gateways



## Connecting to payment gateways

This document explains how to configure the connection between Oracle Monetization Cloud and external payment gateways.

### Topics in this document

- About connecting to payment gateways
- · Configuring the Chase Orbital gateway connection
- Configuring the Chase Paymentech gateway connection
- Configuring the Cielo or PayPal gateway connection
- Related topics

## About connecting to payment gateways

To process credit and debit card authorizations and payments, you can connect Oracle Monetization Cloud to the payment gateways provided by the following payment processing services:

- · Chase Paymentech
- Chase Paymentech Orbital
- Cielo
- PayPal

You can connect to one payment gateway at a time. Notify Oracle which gateway you want to use when we're setting up your Oracle Monetization Cloud instance. You must have a merchant agreement with a payment processor before connecting it to Oracle Monetization Cloud.

To configure payment gateway connections, you must have an Oracle Monetization Cloud administrative role.



You are responsible for understanding how your payment gateway implements data privacy and security, especially with regard to important data privacy regulations. Oracle Monetization Cloud doesn't communicate with payment gateways about data retention schedules or removing personal data

### Configuring the Chase Orbital gateway connection

To configure the Chase Orbital gateway connection:

- 1. Upload the SSL certificate. See Using SSL to secure connections to service providers.
- 2. Confirm that you've enabled server certificate validation and host name verification in your SSL library.
- 3. Confirm that your Orbital XML API app uses name resolution to resolve host names to IP addresses, and that it trusts the VeriSign root certification authority.
- Use System Configuration to configure the connection values. On the Payment Gateway page, enter the information described in Chase Orbital gateway information.

### Chase Orbital gateway information

Field	Description
Online XML API Base URL	The URL for your Orbital XML API app.
Online XML API Username	The user name for your Orbital XML API app account.
Online XML API Password	The password for your Orbital XML API app account.
Merchant ID	Your merchant identifier, as assigned in the Orbital XML API app.
Batch SFTP Host	The SFTP host used for batch payments.
Batch SFTP Username	The user name for connecting to the batch SFTP host.
Batch SFTP Password	The password for connecting to the batch SFTP host.

### Configuring the Chase Paymentech gateway connection

If you want to connect to the Chase Paymentech gateway, notify Oracle when we're setting up your Oracle Monetization Cloud instance. To configure the Chase Paymentech gateway connection, use System Configuration. On the Payment Gateway page, upload a configuration file that contains the information described in Paymentech gateway information.

### Paymentech gateway information

As shown in Sample Chase Paymentech configuration file, the gateway configuration file must be in JSON format and contain the following information:



Field	Description
server_information	<ul> <li>Contains the following payment gateway server connection fields:         <ul> <li>batch_port: The port number used for connections for processing batch payments through the payment gateway.</li> <li>batch_host_ip: The IP address or host name for connections for processing batch payments through the payment gateway.</li> <li>batch_connection: The status of the link to the connection for processing batch payments.</li> <li>online_port: The port number for online connections to the payment gateway.</li> <li>online_host_ip: The IP address or host name for online connections to the payment gateway.</li> <li>online_connection: The status of the online link to the payment gateway provider.</li> <li>presenter_password: The payment gateway presenter's password.</li> <li>submitter_password: The payment gateway submitter's password.</li> </ul> </li> </ul>
merchant	Contains the merchant currency associations for your payment gateway account.
identifiers	Contains the following payment gateway account identifiers:  • presenter_id: The payment gateway presenter ID.  • submitter_id: The payment gateway submitter ID.
soft_descriptor	<ul> <li>Contains the following descriptive fields:</li> <li>dba: The company name shown on customers' statements.</li> <li>product: The product or service shown on customers' statements.</li> <li>support_phone: The support phone number shown on customers' statements.</li> </ul>

### Sample Chase Paymentech configuration file

```
"server_information": {
"batch_port": 7777,
"batch_host_ip": "example.com",
"batch_connection": "example_status",
"online_port": 7778,
"online_host_ip": "192.0.2.1",
"online_connection": "example_status",
"presenter_password": "password",
"submitter_password": "password"
"merchant": {
"us_dollar": 1234,
"canadian_dollar": 1235,
"euro": 1236
"identifiers": {
"presenter_id": p_id,
"submitter_id": s_id
},
"soft_descriptor": {
```



```
"dba": "example_company",
"product": "example_product",
"support_phone": "408-555-0100"
}
}
```

## Configuring the Cielo or PayPal gateway connection

Use System Configuration to configure the Cielo or PayPal payment gateway connection. On the Payment Gateway page, enter the gateway information. See Cielo gateway information or PayPal gateway information.

## Cielo gateway information

Field	Description
Base URL	The URL for the Cielo API.
Username	The user name for your Cielo account.
Password	The password for your Cielo account.
Merchant ID	Your merchant identifier, as assigned in by Cielo.
API Key	The API key for securely accessing the Cielo API.

### PayPal gateway information

Field	Description
API Base URL	The URL for the PayPal REST API app
Client ID	The 80-character OAuth key assigned in your PayPal REST API app.
Client Secret	The 80-character OAuth secret key assigned in your PayPal REST API app.
	Together, the Client ID and Client Secret values generate a PayPal access token.

## Related topics

- About integrating your business systems
- About payments

## Connecting to taxation gateways

This document explains how to configure the connection between Oracle Monetization Cloud and the Vertex Indirect Tax O Series On-Demand taxation gateway.

#### Topics in this document

- Configuring the Vertex gateway connection
- · Related topics

## Configuring the Vertex gateway connection

To configure taxation gateway connections, you must have an Oracle Monetization Cloud administrative role.

You configure your Vertex taxation gateway connection by using System Configuration. On the Taxation Gateway page, enter the information described in Vertex gateway information.

### Vertex gateway information

Field	Description
Base URL	The URL for connecting to the taxation web service
Username	The user name for your account with the taxation service
Password	The password for your account with the taxation service
Cut Off	The cutoff value for the taxation service
API Key	The unique identifier from the taxation service for API access

### Related topics

- About integrating your business systems
- Calculating taxes

## Part IV

## Rating usage

This part contains the following topic:

• Rating usage in Oracle Monetization Cloud



## Rating usage in Oracle Monetization Cloud

This document provides an overview of how Oracle Monetization Cloud calculates charges for the use of your services.

#### Topics in this document

- About rating usage in Oracle Monetization Cloud
- Mapping data from external records to internal events
- Related topics

### About rating usage in Oracle Monetization Cloud

When a customer uses a service, the usage data is stored in a record. To rate usage, Oracle Monetization Cloud must capture data about the usage event. For example, to rate a phone call, it needs the number that made the call, the start time, and the end time. Typically, the phone number identifies the customer, which in turn identifies the charge offers owned by the customer that specify how to measure and charge for the event.



Oracle Monetization Cloud performs batch rating, not real-time rating. Batch rating supports post-paid usage. It doesn't support prepaid usage.

#### Rating usage involves the following steps:

- You create templates that map the data from your external usage records to events in Oracle Monetization Cloud. See Mapping data from external records to internal events.
- You upload your usage records to the /u01/sftp/env\_tenant\_sftp/incoming/ events directory of your secure file transfer protocol (SFTP) server, where env is prod for production environment or test for development environment. See Transferring files securely with SFTP.
- Every five minutes, a cron job uses the mapping templates to convert all external records in the incoming events directory to the internal format and then loads them into Oracle Monetization Cloud.
  - Original versions of successfully loaded records are stored here: /u01/sftp/ env tenant sftp/outgoing/events processed/success.
  - Original versions of unsuccessfully loaded records and files containing the error messages for each record are stored here: /u01/sftp/env\_tenant\_sftp/ outgoing/events\_processed/reject.
- 4. If a record is rejected, Oracle notifies you and helps you resolve the problem.



- 5. Successfully loaded usage events are measured and rated based on the applicable charge and discount offers (for example, 10 cents per minute for a wireless call).
- **6.** The usage charges are added to your customer's account balance.

For information about creating pricing components to rate usage, see the following topics:

- Creating pricing setup components
- Configuring usage charges

### Mapping data from external records to internal events

When a customer uses a service, the usage data is stored in a record. For example, details about a phone call session might be recorded in a call detail record (CDR). To enable Oracle Monetization Cloud to process the record and charge your customers, you must map the data in the external record to events in Oracle Monetization Cloud.

To map data from external records to events in Oracle Monetization Cloud, you create an event mapping template. In Business Configuration, select **Service Design**, the **Event Mapping Templates** tab, and then **Create Template**.

When you create an event mapping template, you specify the following:

The file naming pattern for your external records, without the file name extension.
 This pattern tells Oracle Monetization Cloud which files to apply the mapping rules to.

For example, a value of **activityUsage\*** specifies to apply the mapping rules to all files with this file naming pattern.

- The sample file. Upload a sample file in CSV format that includes the same fields that your external records will contain.
- How to read the uploaded CSV file.
  - The delimiter used between fields, such as a tab or space.
  - The special characters that should be treated as text, such as ().
  - Whether to trim extra white space between fields. Use this if your CSV file uses a space delimiter and the fields have more than one space separating them.
  - Whether the first row in the file is a header row.
  - Which fields in the file represent a record type.
- How to map fields from the external record to fields in Oracle Monetization Cloud events, including:
  - The field from your external records that you're mapping from.
  - The service and event that you're mapping to in Oracle Monetization Cloud.
  - The service identifier.
  - The name and data type of the field you're mapping to in Oracle Monetization Cloud.
  - (Optional) The default value for the field in Oracle Monetization Cloud. This value is assigned when the incoming value is empty.



- (Optional) The override value for the field in Oracle Monetization Cloud. This value overrides the incoming value.
- (Optional) The format to use for timestamps.

## Related topics

- Transferring files securely with SFTP
- About integrating your business systems



## Part V

## Testing and troubleshooting

This part contains the following topics:

- Testing Oracle Monetization Cloud by using virtual time
- Using log files to troubleshoot Oracle Monetization Cloud



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# Testing Oracle Monetization Cloud by using virtual time

This document explains how to use virtual time to test Oracle Monetization Cloud without affecting the operating system time and date.



Use virtual time only in a test database. Changing the time can corrupt data in a production database. For example, if the time is changed while a job is running, the data for the job might be corrupted or lost.

#### Topics in this document

- About configuring virtual time for Oracle Monetization Cloud
- Configuring virtual time for Oracle Monetization Cloud
- Related topics

## About configuring virtual time for Oracle Monetization Cloud

Testing a product offering may require simulating the passage of time. For example:

- To test whether accounts are billed correctly, use virtual time to advance the date to the next billing cycle, and then run billing and generate an invoice.
- To test whether a time-based discount takes effect correctly in a bundle that includes 90 days of free email service, advance the date more than 90 days to see whether the discount is properly applied.

To test time-sensitive functions in Oracle Monetization Cloud, you can use virtual time to adjust the current time of your cloud environment without affecting the operating system time and date.

When virtual time is enabled, a banner showing the modified time is displayed at the top of every page. Closing the banner doesn't disable virtual time.

## Configuring virtual time for Oracle Monetization Cloud

To perform this task, you must have the appropriate role. For a list of available roles, see Functional roles in Oracle Monetization Cloud.

To configure virtual time for Oracle Monetization Cloud:

- Open the Business Operations application.
- Select the Jobs icon.



The Jobs page appears.

3. In the Jobs page toolbar, select Manage Virtual Time.

The Manage Virtual Time dialog box appears.

- 4. Enable Virtual time enabled, which turns on virtual time.
- 5. In the **New virtual time value** field, set the Oracle Monetization Cloud environment's virtual time.

Moving time backward may result in unexpected behavior. If you set virtual time to be earlier than system time, rerun your entire test.

- **6.** (Optional) To freeze the virtual time to the time you specified, enable **Do not advance time**. If this option isn't enabled, the virtual clock continues running.
- Select Save.

The new virtual time is displayed in the banner at the top of every page.

Select the **Manage Virtual Time** link in the banner to change the virtual time.



You must set virtual time to be more than two minutes earlier or later than the time of the system on which Business Operations is deployed. If the difference is two minutes or less, virtual time will not take effect, and Business Operations will continue using system time.

### Related topics

About integrating your business systems



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### Using log files to troubleshoot Oracle Monetization Cloud

#### Topics in this document

- About Oracle Monetization Cloud log files
- Viewing log files
- Related topics

### **About Oracle Monetization Cloud log files**

Oracle Monetization Cloud records system activity in a set of log files, one for each component. If a component in your system has a problem, you can find an error message in the log file for that component. This can help you troubleshoot errors encountered while working in your development environment.

You can view log files for these components:

- Subscriber Management
- Offer Design
- Business Configuration
- SOAP web services
- Oracle Monetization Cloud server
- Usage processing
- Billing processes
- Invoicing processes
- Publishing processes

Sensitive information, such as hostnames, ports, user names, and passwords, won't appear in the log files.

## Viewing log files

You can view your system's log files to help troubleshoot errors in Oracle Monetization Cloud. In Business Operations, select the Log Files tab and then select the type of log file that you want to view.

By default, Business Operations displays the last 5,000 lines from the log file. You can change how many lines are displayed from the tail end of the log file, such as to the last 10,000 lines or to the last 25,000 lines. To do so, select the number of lines to display and then select **Refresh**.



## Related topics

- Getting started with Business Operations
- About running business operations jobs



## Part VI

## Oracle Monetization Cloud data

This part contains the following topics:

• About data storage in Oracle Monetization Cloud



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# About data storage in Oracle Monetization Cloud

All data in Oracle Monetization Cloud is stored in an Oracle database. In the database, data is organized into objects, which you can extend to suit your business needs.

This document is for developers who integrate Oracle Monetization Cloud with external applications, for example, with a customer management system.

#### Topics in this document

- About objects
- About object fields
- About object POIDs
- Related topics

### About objects

Each type of data in the database has its own type of object. For example, accounts are stored in *laccount* objects, and events are stored in *levent* objects.

The formatting convention for object names is *lobject\_type*, such as *lservice*. API descriptions and sample web services operation code reference objects using this convention. For example:

<POID>0.0.0.1 /account 297583 8</POID>

Some objects have sub-types. For example, *Iservice* objects can have many sub-types, such as *Iservice/email* and *Iservice/broadband*.



Object types and their sub-types are often referred to as *classes* and *sub-classes* in the API descriptions.

You can create your own service types in Oracle Monetization Cloud. When you do, the data for the service is stored in a sub-class of the *Iservice* class.

You can also create your own events in Oracle Monetization Cloud. For example, to charge customers for a movie download, you could create an event named *leventl* movie\_download that stores data about every movie that a customer downloads. You could then write an application to find all of the movies that a customer downloaded by searching for the *levent/movie\_download* objects associated with the customer's account.



### About object fields

Every object stores data in fields. For example, when you create an account, the *I* **account** object includes fields for the customer's name, address, and so on. You can view fields in objects from the data returned by API operations. For example, you can view some fields in the *Iaccount* object from the data returned by the pcmOpCustCommitCustomer operation, which creates the *Iaccount* object:

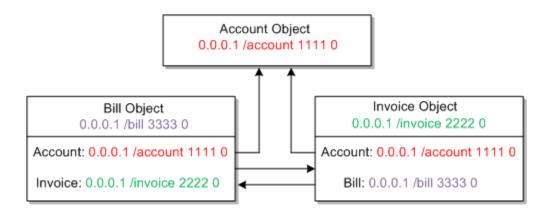
### About object POIDs

Every object in the database has a unique identifier called a POID. You use the POID to specify an object in calls to web service operations. For example, to read the contents of a package in the database, you use this operation:

In addition to identifying objects, POIDs link objects together. For example, in this figure:

- The /bill and /invoice objects point to their related account by specifying the POID
  of the /account object.
- The /bill object points to the /invoice object, and the /invoice object points to the / bill object.





You can use these links between objects when you use web services operations. For example, to change the status of a service, you use the pcmOpSubscriptionSetProductStatus operation. In that operation, you use this XML to identify the account that owns the offer, the service associated with the offer, and the offer whose status you'll change:

### Related topics

- Oracle Monetization Cloud web services
- Performing common tasks with web services

## Part VII

## Web services

### This part contains the following topics:

- Oracle Monetization Cloud web services
- · Performing common tasks with web services
- Accounts receivable operations
- Activity operations
- Balance operations
- Billing operations
- Contracts management operations
- Customer care operations
- Customer operations
- Data export operations
- Invoicing operations
- Payment operations
- Pricing operations
- Read operations
- Subscription operations



### Oracle Monetization Cloud web services

This document provides an overview of Oracle Monetization Cloud web services.

#### Topics in this document

- About Oracle Monetization Cloud web services
- About web service data types
- About web service WSDL files
- Testing and implementing web services
- Example of using a web service to create an account
- Related topics

### About Oracle Monetization Cloud web services

Oracle Monetization Cloud web services expose numerous subscriber and account management operations to external applications through SOAP APIs. The operations are grouped into web services by functional area. For example, the Billing web service contains the billing operations. For operation details, including sample requests and responses, see the following:

- Accounts receivable operations
- Activity operations (subscriber usage)
- Balance operations
- Billing operations
- Contracts management operations
- Customer operations
- Customer care operations
- Data export operations
- Invoicing operations
- · Payment operations
- Pricing operations
- Read operations
- Subscription operations

Each operation supports XML element data type payloads (see About web service data types).

The operation request input is specified in a WSDL file included with Oracle Monetization Cloud (see About web service WSDL files).



You can use any standards-compliant SOAP UI development tool to generate a stub that the client can use to communicate with the web services.

Oracle Monetization Cloud uses the OAuth 2.0 web authorization protocol to secure its web services. For information about securely accessing the web services with your client applications, see Configuring secure client access to web services.

# About web service data types

Oracle Monetization Cloud supports the following data types in web service operation requests and responses:

- Supported simple data types
- Supported complex data types

For detailed information about each operation's required and optional data types, see Oracle Monetization Cloud SOAP API Reference.

#### Supported simple data types

Simple data type	Description
decimal	Decimal data type. Oracle Monetization Cloud supports 15 decimal places.
enum	Enumerated value. Contains a list of well-known values.
int	Signed 32-bit integer.
	Contains four bytes of data represented by a number.
	Oracle Monetization Cloud considers an integer value that begins with 0 as octal and an integer value that begins with 0x as hexadecimal and converts this value into a decimal.
string	ASCII character string terminated with a \0 (NULL). len = max length in bytes, not including \0. Uses UTF-8 encoding.
timestamp	UNIX time stamp with one-second accuracy. Contains integer data. This value is interpreted as the number of seconds past January 1, 1970.

#### Supported complex data types

Complex data type	Description
array	Array element. See array.
buf	Buffer with an arbitrary size for any large data, such as text or image. See buf.
errbuf	Structure for holding error information. See errbuf.
POID	Oracle Monetization Cloud object identifier. See POID.
substruct	Embedded substructure. See substruct.

### array

The **array** data type stores a defined structure of information.



For example, the *laccount* storable class contains a NAMEINFO array. Each element in the array has fields for first name, last name, street address, and other address information. The array can contain any number of elements to describe the different types of account addresses.

### buf

The **buf** data type is used for large text files or binary data such as an array of bytes.

**xbuf** stands for external buffer. The buffer data isn't in memory but is written directly from a file to the internet or from the internet to a file. The most common use for **xbufs** are for systems with limited or slow virtual memory. **xbufs** can be used only from an application.

#### errbuf

The **errbuf** data type is used by Oracle Monetization Cloud to record errors.

An **errbuf** data type has the following structure:

```
typedef struct {
             int32
                              location;
             int32
                              errclass;
             int32
                              err;
                              field;
             num_t
                              rec_id;
             int32
             int32
                              reserved;
             int32
                              line_no;
             char
                              *filename;
             int
                              facility;
             int
                              msg_id;
             int
                              err_time_sec;
             int
                              err_time_usec;
             int
                              version;
             flist_t
                              *argsp;
             errbuf_t
                              *nextp;
             int
                              reserved2
} errbuf_t;
```

The following table describes the fields in the **errbuf** data type:



errbuf field	Possible values
location	Specifies the component that encountered the error. The following are possible values:
	<ul> <li>ERRLOC_APP: The error occurred in an external application. Use this value to specify that the problem originated in your application, not in Oracle Monetization Cloud.</li> </ul>
	<ul> <li>ERRLOC_FLIST: The error occurred in an flist manipulation routine local to the external application. Common causes include illegal parameters and low system memory.</li> </ul>
	<ul> <li>ERRLOC_POID: The error occurred in a POID manipulation routine local to the external application. Common causes include illegal parameters and low system memory.</li> </ul>
	<ul> <li>ERRLOC_PCM: The error occurred in a web service operation local to the external application. Common causes include illegal parameters.</li> </ul>
	<ul> <li>ERRLOC_PCP: The error occurred in the internal communications protocol library.         This library provides communication support between the modules of Oracle Monetization Cloud. Common causes include network connection failures. This value indicates a system problem that requires immediate attention.     </li> </ul>
	<ul> <li>ERRLOC_CM: The error occurred in an internal connection management process.</li> <li>Common causes include an unknown operation or input missing the required POID field.</li> </ul>
	<ul> <li>ERRLOC_FM: The error occurred in a web service operation. Common causes include input that doesn't conform to the required specification.</li> </ul>
	<ul> <li>ERRLOC_DM: The error occurred in an internal data translation process. Common causes include input that doesn't meet the required specifications or a problem communicating with the Oracle Monetization Cloud database.</li> </ul>
errclass	Describes the class of error. Use the error class to determine the appropriate type of error recovery. The following are possible values:
	<ul> <li>ERRCLASS_APPLICATION: The error was caused by the application passing illegal data or by a system failure in the client application. The error was detected before the requested operation was performed, so no data in the database changed. After the error is fixed, retry the operation.</li> </ul>
	<ul> <li>ERRCLASS_SYSTEM_RETRYABLE: The error was probably caused by a transient condition. Retry the operation. Common causes include a temporary shortage of system resources or the failure of a network connection that you can route around. The error was detected before any data was committed to the database; no data changed.</li> </ul>
	<ul> <li>ERRCLASS_SYSTEM_DETERMINATE: The error was caused by a system failure during the operation. Retrying the operation is unlikely to succeed, and the system failure should be investigated immediately by Oracle support (submit a service request to Oracle support at <a href="https://support.oracle.com">https://support.oracle.com</a>). The error was detected before any data was committed to the database, so no data changed. After the error is fixed, retry the operation.</li> </ul>
	<ul> <li>ERRCLASS_SYSTEM_INDETERMINATE: The error was caused by a system failure during the commit phase of an operation. A small window exists during the commit in which a network failure can leave the system unsure of whether the commit occurred. The application must determine whether system data has changed. This class of error is extremely rare, but you must deal with it carefully to avoid corrupting the data in the database. If you determine that no changes were made, you can resolve the system failure problem and then retry the operation.</li> </ul>
err	Describes the exact error that was encountered. If an API call was successful, <i>err</i> is set to ERR_NONE, and all other fields in the error buffer are left undefined. If an API call results in an error, one or more of the fields are defined with error information.
field	Identifies the field number of the input parameter that caused the error.
rec_id	Specifies the element ID of the array element that caused the error.



errbuf field	Possible values
reserved	Designates an internal system state used by Oracle support for debugging. Contains no useful information for the application developer.
line_no	Specifies the line number in the application source file where the error was detected. The logging routines print the file name and line number from the error buffer, which you can use to locate the exact call to the Oracle Monetization Cloud API that caused the error.
	This information is useful only to Oracle support.
filename	Specifies the name of the application source file where the error was detected. This can be used with the <i>line_no</i> field to locate the source of an error quickly.
	This information is useful only to Oracle support.
facility	Specifies the code of a facility associated with Oracle Monetization Cloud internationalization (I18N) features.
	Used with the <i>msg_id</i> value to create a localized error message.
msg_id	Specifies a unique ID number for each message in the facility identified by the <i>facility</i> code.
	Used with the facility value to create a localized error message.
err_time_sec	Specifies the time when the error occurred in seconds.
err_time_usec	Specifies the time when the error occurred in microseconds.
version	Specifies the version of the arguments.
flist_t   *argsp	Points to an optional arguments flist.
errbuf_t *nextp	Points to one or more optional chained errbufs.
reserved2	Reserved for internal use.

### POID

The **POID** data type identifies an object in the Oracle Monetization Cloud database. Each object has a unique POID. You use the POID to locate the object in the database.

The POID contains the following information:

 ${\tt database\_number} \quad {\tt object\_type} \quad {\tt object\_id} \quad {\tt object\_revision\_level}$ 

The following table describes each entry in the POID:

Entry	Description
database_number	An arbitrary 64-bit number assigned by Oracle to a particular Oracle Monetization Cloud database. Every database has a unique database number that's stored in each object in that database.
object_type	The storable class to which the object belongs, for example, <i>I</i> event and <i>I</i> service. A null POID has only <i>I</i> .
object_id	A unique 64-bit number assigned to each object. After it's assigned, the ID is never changed or reused. The ID is 64 bits to accommodate the large number of objects that can exist in a database.
	The maximum value allowed for the ID is $2^{64}$ in a nonpartitioned table and $2^{44}$ in a partitioned table.



Entry	Description
object_revision_level	The object's revision number. This value is incremented automatically each time the object is updated. You can't change this value directly.

#### Example:

0.0.0.1 /account 1234 0

To perform an action on all objects of a particular type, specify a type-only POID by setting the object ID to **-1**. For example, to search for all *l*invoice objects, the operation's input for the search operation request must contain the following field:

<POID>0.0.0.1 /invoice -1 0</POID>

### substruct

Use the **substruct** data type to group several data types. You use substructs to define a field that contains several fields of different data types. Substructs can contain any of the supported data types, including arrays, and they can be nested to any level.

Because substructs are single elements, they're fully identified by the field name in the object class. Unlike arrays, they don't require element IDs.

# About web service WSDL files

Oracle Monetization Cloud includes one WSDL file for each web service. The WSDL file describes the operation's request input for the service.

The following table lists the names and locations of the WSDL files, where *hostname* is the URL of your Oracle Monetization Cloud instance.

Web service	WSDL location
Accounts Receivable	https://hostname/BrmWebServices/BRMARServices_v2?wsdl
Activity	https://hostname/BrmWebServices/BRMActServices_v2?wsdl
Balance	https://hostname/BrmWebServices/BRMBalServices_v2?wsdl
Billing	https://hostname/BrmWebServices/BRMBillServices_v2?wsdl
Contracts	https://hostname/BrmWebServices/BRMContractServices_v2?wsdl
Customer	https://hostname/BrmWebServices/BRMCustServices_v2?wsdl
Customer Care	https://hostname/BrmWebServices/BRMCustcareServices_v2?wsdl
Data Export	https://hostname/BrmWebServices/BRMDataExportServices_v2?wsdl
Invoicing	https://hostname/BrmWebServices/BRMInvServices_v2?wsdl
Payment	https://hostname/BrmWebServices/BRMPymtServices_v2?wsdl
Pricing	https://hostname/BrmWebServices/BRMPricingServices_v2?wsdl
Read	https://hostname/BrmWebServices/BRMReadServices_v2?wsdl
Subscription	https://hostname/BrmWebServices/BRMSubscriptionServices_v2?wsdl



Oracle Monetization Cloud uses OAuth 2.0 or basic authentication to secure web services WSDL and related XSD files.

 To access the WSDL and the associated XSD files using OAuth, pass the OAuth Access Token in the http header when getting the WSDL and XSD files.
 For example:

```
curl -i -H 'Content-Type: text/xml;charset=UTF-8' http://hostname/BrmWebServices/
BRMReadServices_v2?wsdl -H 'Authorization : Bearer access_token'
```

where *hostname* is the URL of your Oracle Monetization Cloud instance and *access token* is the OAuth access token.

Oracle Monetization Cloud validates the access token with Oracle Access Manager and grants access to the requested WSDL and XSD. You can then download the WSDL and associated XSD files to a local system.

To import the WSDL into a client tool such as SoapUI, remove references to the Oracle Monetization Cloud server URL. For example, change:

http://hostname/BrmWebServices/BRMReadServices\_v2?xsd=1

To:

BRMReadServices\_v2?xsd=1

 To access the WSDL and the associated XSD files using basic authentication, include the Security element in the SOAP header of the request for the WSDL and XSD files. See Including the Security element in the SOAP header.

# Testing and implementing web services

This section provides an overview of how to test and implement Oracle Monetization Cloud web services. You can use available tools such as SoapUI or an integrated development environment (IDE) that supports SOAP.

To test and implement web services, perform the following tasks:

- Obtain the URLs for your Oracle Monetization Cloud instance's web services. See Obtaining web service URLs.
- Configure web service access security, and obtain the credentials for your environment's web service users. See Configuring secure client access to web services.
- Set up a SOAP development environment connected to your Oracle Monetization Cloud instance. See Setting up a SOAP test environment for web services.

### Obtaining web service URLs

The URLs for accessing Oracle Monetization Cloud web services are listed in About web service WSDL files.

To obtain the domain names that you need to use in the URLs, contact your Oracle representative.



### Configuring secure client access to web services

Oracle Monetization Cloud uses the OAuth 2.0 protocol to authorize external applications to access its web services. To call a web service, an application must be registered as an OAuth client in Oracle Monetization Cloud. For more information, see Using OAuth to authorize access.

### Setting up a SOAP test environment for web services

You can use a SOAP test environment to do the following:

- Test your applications that interact with Oracle Monetization Cloud.
- Test web service requests sent to Oracle Monetization Cloud.

SOAP test environments may have minor differences in project configuration. See your SOAP development environment documentation for configuration information.

In general, to set up a SOAP test environment:

- 1. Configure a new project in your SOAP test environment.
- 2. Import the web service WSDL files.
  - For the locations of the WSDL files, see About web service WSDL files.
- In the properties of the web service operations you want to use, specify valid credentials for the SOAP test environment.
- **4.** Use the SOAP test environment or a text editor to update the sample operation requests to include data applicable to your environment.
  - For a list of web services that includes links to sample requests and responses, see About Oracle Monetization Cloud web services.
  - For detailed reference information on the request and response parameters in each operation, see *Oracle Monetization Cloud SOAP API Reference*.
- Send your web service request to Oracle Monetization Cloud by using the SOAP test environment client.
- **6.** View the web service response in the SOAP test environment.

### About masked data in web service responses

SOAP response XML files may contain masked fields in your Oracle Monetization Cloud implementation. Subscriber fields, including payment information and user credentials, may be hidden in responses to secure sensitive subscriber data.

For more information on masked data, contact your Oracle representative.

# Example of using a web service to create an account

This section provides an example of how to use web services to create a subscriber account.

For information, see the following:



- For links to topics with sample requests and responses for all web service operations, see Web services.
- For information about parameters for each web service operation, see Oracle Monetization Cloud SOAP API Reference.

To create an account in Oracle Monetization Cloud, use a SOAP client to call the pcmOpCustCommitCustomer operation, which is included in the BRMCustServices\_v2 web service and contains operations related to subscriber accounts.

### Sample SOAP request input XML file

The following sample is a sample pcmOpCustCommitCustomer SOAP request:

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpCustCommitCustomerRequest>
        <bus:PCM_OP_CUST_COMMIT_CUSTOMER_Request>
           <bus:flags>1</bus:flags>
           <bus:PCM_OP_CUST_COMMIT_CUSTOMER_inputFlist>
              <bus:ACCTINFO elem="0">
                 <bus:ACCOUNT_NO>a022020202011992/bus:ACCOUNT_NO>
                 <bus:BAL_INFO />
                 <bus:BUSINESS_TYPE>1</bus:BUSINESS_TYPE>
                 <bus:CURRENCY>840</bus:CURRENCY>
                 <bus:POID>0.0.0.1 /account -1 0</bus:POID>
              </bus:ACCTINFO>
              <bus:BAL_INFO elem="0">
                 <bus:BILLINFO />
                 <bus:LIMIT elem="840">
                    <bus:CREDIT_LIMIT>"0"</bus:CREDIT_LIMIT>
                 </bus:LIMIT>
                 <bus:NAME>Account Level Balance Group</bus:NAME>
                 <bus:POID>0.0.0.1 /balance_group -1 0</bus:POID>
              </bus:BAL_INFO>
              <bus:BILLINFO elem="0">
                 <bus:BAL_INFO />
                 <bus:BILL_WHEN>1/bus:BILL_WHEN>
                 <bus:BILLINFO_ID>88-CYZZ5</bus:BILLINFO_ID>
                 <bus:CURRENCY>840</pus:CURRENCY>
                 <bus:PAY TYPE>10001
TYPE>
                 <bus:PAYINFO />
                 <bus:POID>0.0.0.1 /billinfo -1 0/bus:POID>
              </bus:BILLINFO>
              <bus:END_T>2010-02-17T22:37:49/bus:END_T>
              <bus:FLAGS>0</bus:FLAGS>
              <bus:LOCALES elem="1">
                 <bus:LOCALE>en_US</bus:LOCALE>
              </bus:LOCALES>
               <bus:NAMEINFO elem="1">
                 <bus:ADDRESS>123 Hollywood Boulevard</bus:ADDRESS>
                 <bus:CITY>Los Angeles/bus:CITY>
                 <bus:CONTACT_TYPE>Account holder
                 <bus:COUNTRY>USA</bus:COUNTRY>
                 <bus:EMAIL_ADDR>test_001
                 <bus:FIRST_NAME>Johnbus:FIRST_NAME>
                 <bus:LAST_NAME>Smith
                 <bus:STATE>NJ</bus:STATE>
                 <bus:ZIP>90001
ZIP>
```



```
</bus:NAMEINFO>
              <bus:PAYINFO elem="0">
                 <bus:INHERITED_INFO>
                    <bus:INV INFO elem="0">
                       <bus:ADDRESS>123 Hollywood Boulevard/bus:ADDRESS>
                       <bus:CITY>Los Angeles/bus:CITY>
                       <bus:COUNTRY>USA</bus:COUNTRY>
                       <bus:DELIVERY_DESCR>test_001
                       <bus:DELIVERY_PREFER>0</bus:DELIVERY_PREFER>
                       <bus:EMAIL_ADDR />
                       <bus:INV_TERMS>0</bus:INV_TERMS>
                       <bus:NAME>John Smith
                       <bus:STATE>NJ</bus:STATE>
                       <bus:ZIP>90001</bus:ZIP>
                    </bus:INV INFO>
                 </bus:INHERITED INFO>
                 <bus:INV_TYPE>0</bus:INV_TYPE>
                 <bus:PAY_TYPE>10001/bus:PAY_TYPE>
                 <bus:POID>0.0.0.1 /payinfo/invoice -1 0</bus:POID>
              </bus:PAYINFO>
              <bus:POID>0.0.0.1 /plan -1 0</bus:POID>
           </bus:PCM_OP_CUST_COMMIT_CUSTOMER_inputFlist>
        </bus:PCM_OP_CUST_COMMIT_CUSTOMER_Request>
     </bus:pcmOpCustCommitCustomerRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

### Sample SOAP response output XML file

#### The following sample is a SOAP response for pcmOpCustCommitCustomer:

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
      <pcmOpCustCommitCustomerResponse xmlns:brm="http://xmlns.oracle.com/BRM/</pre>
schemas/BusinessOpcodes">
        <ACCOUNT_OBJ>0.0.0.1 /account 225757 0</ACCOUNT_OBJ>
         <ACCTINFO elem="0">
            <ACCOUNT_NO>a022020202011992</ACCOUNT_NO>
            <BAL INFO elem="0" />
            <BUSINESS TYPE>1</BUSINESS TYPE>
            <CURRENCY>840</CURRENCY>
            <POID>0.0.0.1 /account -1 0</POID>
         </ACCTINFO>
         <BAL_INFO elem="0">
            <ACCOUNT_OBJ>0.0.0.1 /account 225757 0</ACCOUNT_OBJ>
            <BILLINFO_OBJ>0.0.0.1 /billinfo 226269 0</BILLINFO_OBJ>
            <LIMIT elem="840">
               <CREDIT_LIMIT />
            </LIMIT>
            <NAME>Account Level Balance Group</NAME>
            <POID>0.0.0.1 /balance_group 225341 0</POID>
            <SERVICE_OBJ>0.0.0.0 0 0</SERVICE_OBJ>
         </BAL_INFO>
         <BILLINFO elem="0">
            <BAL_GRP_OBJ>0.0.0.1 /balance_group 225341 0</BAL_GRP_OBJ>
            <BILLINFO_ID>88-CYZZ5</BILLINFO_ID>
            <BILL_WHEN>1</BILL_WHEN>
            <CURRENCY>840</CURRENCY>
            <CURRENCY_SECONDARY>0</CURRENCY_SECONDARY>
            <EFFECTIVE_T>2010-02-17T22:37:49Z</EFFECTIVE_T>
```



```
<PAYINFO_OBJ>0.0.0.1 /payinfo/invoice 226781 0</PAYINFO_OBJ>
   <PAY_TYPE>10001</PAY_TYPE>
   <POID>0.0.0.1 /billinfo 226269 0</POID>
</BILLINFO>
<END_T>2010-02-17T22:37:49Z</END_T>
<FLAGS>0</FLAGS>
<GROUP_INFO />
<HOST elem="1">
   <HOSTNAME>XXX.XXX.XXX.XXX
   <TYPE>1</TYPE>
</HOST>
<HOST elem="2">
   <HOSTNAME>XXX.XXX.XXX.XXX
   <TYPE>1</TYPE>
</HOST>
<HOST elem="3">
  <hostname>xxxxxxxxxx.xxx</hostname>
   <PORT>0</PORT>
  <TYPE>2</TYPE>
</HOST>
<HOST elem="4">
   <hostname>xxxx.xxx</hostname>
   <TYPE>3</TYPE>
</HOST>
<HOST elem="5">
   <hostname>xxxx.xxx</hostname>
   <TYPE>4</TYPE>
</HOST>
<HTTP_URL>XXXXXXXXXXXXXXXXXX/HTTP_URL>
<LOCALES elem="1">
   <LOCALE>en_US</LOCALE>
</LOCALES>
<NAMEINFO elem="1">
   <ADDRESS>123 Hollywood Boulevard</ADDRESS>
   <CANON_COUNTRY>US</CANON_COUNTRY>
   <CITY>Los Angeles</CITY>
   <COMPANY />
   <CONTACT_TYPE>Account holder</CONTACT_TYPE>
   <COUNTRY>USA</COUNTRY>
   <ELEMENT_ID>1</ELEMENT_ID>
   <EMAIL_ADDR>test_001
   <FIRST_NAME>John</FIRST_NAME>
   <LAST_NAME>Smith</LAST_NAME>
   <MIDDLE_NAME />
   <SALUTATION />
   <STATE>NJ</STATE>
   <TITLE />
   <ZIP>90001</ZIP>
</NAMEINFO>
<PAYINFO elem="0">
   <INHERITED_INFO>
      <INV_INFO elem="0">
         <ADDRESS>123 Hollywood Boulevard</ADDRESS>
         <CITY>Los Angeles</CITY>
         <COUNTRY>USA</COUNTRY>
         <DELIVERY_DESCR>test_001/DELIVERY_DESCR>
         <DELIVERY_PREFER>0</DELIVERY_PREFER>
         <EMAIL_ADDR />
         <INV_TERMS>0</INV_TERMS>
         <NAME>John Smith</NAME>
         <STATE>NJ</STATE>
```

# Related topics

- Performing common tasks with web services
- About integrating your business systems



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# Performing common tasks with web services

This document describes common tasks that you can perform using Oracle Monetization Cloud web services and specifies the operations you call to perform them.

#### Topics in this document

- Managing subscribers and subscriptions
- Loading subscriber usage data
- Billing subscribers
- · Managing payments and accounts receivable
- · Working with subscriber self-service
- Related topics

# Managing subscribers and subscriptions

This section describes tasks for managing subscriber accounts and subscriptions:

- Registering a subscriber
- · Purchasing a bundle for an existing account
- Transitioning between bundles
- Canceling a service
- Inactivating a charge offer
- · Canceling a subscriber's account
- Modifying subscriber contact info
- Managing contract milestones
- Creating an account hierarchy
- Adding an account to a hierarchy
- Removing an account from a hierarchy

# Registering a subscriber

To register a subscriber:

 Get available packages to subscribe to from a specified package list by calling pcmOpCustPolGetPlans.

For information about package list types, see Creating package lists.



**Mandatory input:** The account POID. To retrieve packages for the new subscriber, specify a type-only POID:

```
x.x.x.x /account -1
```

where *x.x.x.x* is the number of the database in which the new account will be stored, and **-1** takes the place of an actual account object ID.

- 2. Get the package details (package POID, bundle POID, charge offer POID, and service type) by calling one of the following operations:
  - pcmOpCustPolGetPlans
  - pcmOpPriceGetPriceList
- 3. Create the subscriber account by calling pcmOpCustCommitCustomer.

**Mandatory input:** The package POID, bundle POID, charge offer POID, and service type.

### Purchasing a bundle for an existing account

To add a bundle to an existing account, call pcmOpSubscriptionPurchaseDeal.

Mandatory input: The account POID, bundle, and charge offer detail.

### Transitioning between bundles

Subscribers who own bundles associated with a service may transition to other bundles associated with the same service. For example, they can do the following:

- Upgrade to a bundle that is typically more expensive and has more features.
- Downgrade to a bundle that is typically less expensive and has fewer features.

To transition between bundles, use one of the following methods:

- Method 1: Use transition rules and operation.
  - In Offer Design, configure transition rules that specify which bundles can replace a bundle when it's upgraded or downgraded.
  - 2. To perform a transition, call pcmOpSubscriptionTransitionDeal.

**Mandatory input:** The service POID, existing bundle to cancel, and new bundle to purchase.

- Method 2: Use cancel and purchase operations.
  - Show the existing bundle by calling pcmOpSubscriptionReadAcctProducts. To retrieve all charge offers (active, inactive, one-time, and account), set FLAGS to 7. To retrieve only active charge offers, set FLAGS to 4.

Mandatory input: The account POID, service POID, and bundle info.

- 2. Cancel the existing bundle by calling pcmOpSubscriptionCancelDeal.
  - Mandatory input: The account POID, service POID, and bundle info.
- 3. Purchase a new bundle by calling pcmOpSubscriptionPurchaseDeal.

Mandatory input: The account POID, service POID, and bundle info.



# Canceling a service

To cancel a service, call pcmOpCustUpdateServices.

**Mandatory input:** The account, service POID, and status.



Setting the service status to inactive or closed cancels the service and all subscriptions associated with the service.

### Inactivating a charge offer

To inactivate a charge offer, call pcmOpSubscriptionSetProductStatus.

Mandatory input: The account POID, purchased charge offer POID, and status.

### Canceling a subscriber's account

To cancel a subscriber's account, call pcmOpCustSetStatus.

Mandatory input: The account POID and service POID.



Setting the account status to inactive or closed cancels the account, all services, and all subscriptions associated with the account or service.

### Modifying subscriber contact info

To modify subscriber contact information, call pcmOpCustUpdateCustomer, which updates ACCTINFO, NAMEINFO, and so on.

Mandatory input: The account POID.

### Managing contract milestones

To retrieve all milestones associated with a customer's contract, call pcmOpContractGetMilestones.

Mandatory input: The account POID.

To mark that a milestone has been completed, call pcmOpContractProcessMilestone.

**Mandatory input:** The account POID, revenue product POID, deliverable POID, and timestamp when the milestone was completed.



### Creating an account hierarchy

To create an account hierarchy, call pcmOpBillGroupMoveMember.

Mandatory input: The account POID and parent account POID.

# Adding an account to a hierarchy

To add an account to a hierarchy, call pcmOpBillGroupMoveMember.

Mandatory input: The account POID and parent account POID.

### Removing an account from a hierarchy

To remove an account from a hierarchy, call pcmOpBillGroupMoveMember.

Mandatory input: The account POID.



Do not include the PARENT\_OBJ element in the SOAP request when removing an account from a hierarchy.

# Loading subscriber usage data

To load usage:

- 1. Call pcmOpActFind to find the service POID for a specified login.
- Call either of the following operations:
  - pcmOpActActivity

Mandatory input: The service POID.

pcmOpActLoadSession

Mandatory input: The service POID.

# Billing subscribers

To bill subscribers, call pcmOpBillMakeBillNow.

Mandatory input: The account POID and the calling program's name.

# Managing payments and accounts receivable

This section describes tasks for managing payments and accounts receivable:

- Retrieving a payment method
- · Modifying payment method details



- Adding a payment method
- · Changing a payment method in a bill unit
- Deleting a payment method
- Applying a one-time payment
- Adjusting an account
- Adjusting a bill
- Adjusting an item
- · Refunding a payment
- Writing off an account, bill unit, bill, or bill item
- Disputing a bill, item charge, or event charge
- · Resolving a dispute

### Retrieving a payment method

To retrieve the payment method (*Ipayinfo* object), call pcmOpCustFindPayinfo.

Mandatory input: The account POID.

# Modifying payment method details

To modify a customer's payment details, call pcmOpCustModifyCustomer.

Mandatory input: The account POID and Ipayinfo POID.

### Adding a payment method

To add a payment method to a customer's account, call pcmOpCustModifyCustomer.

Mandatory input: The account POID.

### Changing a payment method in a bill unit

To change a payment method associated with a customer's bill unit (/billinfo object), for example, from invoice to credit card:

Add a payment method by calling pcmOpCustModifyCustomer.

**Mandatory input:** The account POID.

2. Create the new payment method by calling pcmOpCustUpdateCustomer.

Mandatory input: The account POID.

### Deleting a payment method

To delete a payment method (/payinfo object), call pcmOpCustDeletePayinfo.





To delete a **/payinfo** object that's associated with a **/billinfo** object, you must first delete the **/billinfo** object.

Mandatory input: The Ipayinfo POID.

### Applying a one-time payment

To apply a one-time payment, call pcmOpPymtCollect.

Mandatory input: The bill unit POID, account POID, bill POID, and payment amount.

### Adjusting an account

To adjust an account, call pcmOpArAccountAdjustment.

Mandatory input: The POID of the account to adjust.

### Adjusting a bill

To display a bill before adjusting it, call pcmOpArGetBills.

To adjust a bill, call pcmOpArBillAdjustment.

Mandatory input: The POID of the bill to adjust.

### Adjusting an item

To display an item before adjusting it, call pcmOpArGetBillItems.

To adjust an item, call pcmOpArItemAdjustment.

Mandatory input: The POID of the item to adjust.

Check ADJUSTMENT AMOUNT in **pol\_valid\_adjustment** to prevent over-adjustments.

### Refunding a payment

To refund a payment, including payments made using debit or credit cards, call pcmOpBillItemRefund.

Mandatory input: The account POID and either the /billinfo POID or the bill POID.

To get /billinfo POIDs, call one of the following operations:

- pcmOpBalGetAcctBillInfo returns a list of the account's /billinfo objects, including their POIDs.
- pcmOpBalGetBalances returns the POID of the /billinfo object associated with a specified balance group.



# Writing off an account, bill unit, bill, or bill item

To write off an account, call pcmOpArAccountWriteoff.

Mandatory input: The account POID.

To write off a bill unit:

- (Optional) To retrieve the bill unit (/billinfo object) first, call pcmOpBalGetBalances.
- 2. Call pcmOpArBillinfoWriteoff.

Mandatory input: The /billinfo POID.

To write off a bill:

- 1. (Optional) To retrieve the bill first, call pcmOpArGetBills.
- 2. Call pcmOpArBillWriteoff.

Mandatory input: The bill POID.

To write off a bill item:

- 1. (Optional) To retrieve the bill item first, call pcmOpArGetBillItems.
- Call pcmOpArItemWriteoff.

Mandatory input: The bill item POID.

### Disputing a bill, item charge, or event charge

To dispute a bill, call pcmOpArBillDispute.

Mandatory input: The bill POID.

To dispute an item, call pcmOpArItemDispute.

Mandatory input: The item POID.

To dispute an event, call pcmOpArEventDispute.

Mandatory input: The account POID, event POID, and balance element ID.

### Resolving a dispute

To resolve a dispute:

- (Optional) To retrieve the dispute first, call pcmOpArGetDisputes.
- Call one of the following operations:
  - To resolve a bill, call pcmOpArBillSettlement.

Mandatory input: The bill POID.

To resolve an item, call pcmOpArItemSettlement.

Mandatory input: The item POID.

To resolve an event, call pcmOpArEventSettlement.

Mandatory input: The item POID and balance element ID.



# Working with subscriber self-service

This section describes common self-service tasks:

- Retrieving all pricing component information
- · Retrieving account details
- Retrieving billing details
- Retrieving a payment method
- Modifying a payment method
- Deleting a payment method
- · Applying a one-time payment
- Retrieving an account's bundles and charge offers
- · Retrieving invoices and AR items

# Retrieving all pricing component information

To retrieve all pricing component information (packages, bundles, charge offers, and discount offers), call pcmOpPriceGetPriceList.

### Retrieving account details

To retrieve account details, call one of the following operations:

pcmOpReadObj.

Mandatory input: The account POID.

pcmOpBalGetAcctBillInfo

Mandatory input: The account POID.

# Retrieving billing details

To retrieve billing details (for example, current account balances and balances due), call pcmOpBalGetBalances.

Mandatory input: The account POID and an empty balances array.

### Retrieving a payment method

To retrieve a payment method (/payinfo object), call one of the following operations:

pcmOpCustFindPayinfo

Mandatory input: The account POID and the operation flags field set to 256.

pcmOpReadObj

Mandatory input: The Ipayinfo POID.



### Modifying a payment method

To modify the address or expiration date associated with a payment method, call pcmOpCustModifyCustomer.

Mandatory input: The Ipayinfo POID and account POID.

### Deleting a payment method

To delete a payment method, call pcmOpCustDeletePayinfo.



To delete a **/payinfo** object that's associated with a **/billinfo** object, you must first delete the **/billinfo** object.

Mandatory input: The Ipayinfo POID.

### Applying a one-time payment

To apply a one-time payment, call pcmOpPymtCollect.

Mandatory input: The bill unit POID, account POID, bill POID, and payment amount.

# Retrieving an account's bundles and charge offers

To retrieve an account's bundles and charge offers, call pcmOpSubscriptionReadAcctProducts.

**Mandatory input:** The account POID. To retrieve all the bundles and charge offers, including canceled, set FLAGS to **7**. To retrieve only active bundles and charge offers, set FLAGS to **4**.

### Retrieving invoices and AR items

To retrieve an invoice, call pcmOpArGetBills.

To retrieve all of an account's AR items, call pcmOpArGetAcctActionItems.

To retrieve AR items for a bill unit (/billinfo object), call pcmOpArGetActionItems.

#### **Mandatory input:**

- To retrieve items for a specified bill unit, the bill unit POID
- To retrieve items for an account's default bill unit, the account POID

# Related topics

- Oracle Monetization Cloud web services
- About integrating your business systems



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# Accounts receivable operations

This document describes the accounts receivable operations in the Oracle Monetization Cloud BRMARServices\_v2 SOAP API.

#### Topics in this document

- About the BRMARServices\_v2 interface
- Related topics

# About the BRMARServices v2 interface

Use the BRMARServices\_v2 interface to perform operations such as adjusting account balances, writing off adjustments, managing billing disputes, and retrieving information related to a subscriber's bills.

### **Authorization**

Oracle Monetization Cloud uses the OAuth 2.0 protocol to authorize external applications to access its web services. To call the web services, an application must be registered as an OAuth client in Oracle Monetization Cloud. For more information, see Using OAuth to authorize access.

### Accounts receivable operations available at runtime

The following table lists the operations provided by the BRMARServices\_v2 interface.

For information about terminology used in sample requests and responses for web service operations, see About terminology.

Operation	Description
pcmOpArAccountAdjustment	Debits or credits an account balance for currency adjustments.
pcmOpArAccountWriteoff	Performs write-off adjustments for an account or account hierarchy with or without tax implications.
pcmOpArBillAdjustment	Credits the currency balance of a bill.
pcmOpArBillDispute	Opens a dispute against a bill.
pcmOpArBillinfoWriteoff	Performs write-off adjustments against a bill unit (/billinfo object).
pcmOpArBillSettlement	Settles a dispute against a bill.
pcmOpArBillWriteoff	Performs write-off adjustments against a bill.
pcmOpArEventAdjustment	Adjusts the impact of an event on an account's balance.
pcmOpArEventDispute	Opens a dispute against one or more events in an account.



Operation	Description
pcmOpArEventSettlement	Settles one or more dispute events in a dispute item.
pcmOpArGetAcctActionItems	Retrieves the A/R items for a specified bill unit. If you specify an account instead, this operation retrieves the A/R items for all the account's bill units. You can specify search criteria in the operation's input.
pcmOpArGetAcctBalSummary	Retrieves the consolidated balances for all bill units in an account, including the applied amount, unapplied amount, open bill due amount, pending bill due amount, and total dispute amount.
pcmOpArGetAcctBills	Retrieves the bills for a specified bill unit. If you specify an account instead, this operation retrieves the bills for all the account's bill units. You can specify search criteria in the operation's input.
pcmOpArGetActionItems	Retrieves the list of A/R items applied to a bill unit.
pcmOpArGetBalSummary	Retrieves the applied, unapplied, open bill due, pending bill due, and total dispute balances for a specified bill unit (/billinfo object).
pcmOpArGetBillItems	Retrieves the list of bill items for a bill unit.
pcmOpArGetBills	Retrieves a list of bills for a bill unit.
pcmOpArGetDisputeDetails	Retrieves all the item and event disputes for a specified bill unit. If you specify an account instead, this operation returns the disputes for the account's default bill unit. For each disputed event, the operation returns the currently available amount of every balance associated with the event.
pcmOpArGetDisputes	Retrieves details of all disputed bill items for a specified bill unit.
pcmOpArGetItemDetail	Retrieves details about currency balances for a specified A/R action or bill item.
pcmOpArGetItems	Retrieves details about currency and noncurrency balances for a specified A/R action or bill item.
pcmOpArItemAdjustment	Makes adjustments against an item.
pcmOpArItemDispute	Files a dispute against an item.
pcmOpArItemSettlement	Settles an item that's in dispute.
pcmOpArItemWriteoff	Makes write-off adjustments against an item.
pcmOpArResourceAggregation	Calculates the aggregated amount of each balance for an event.

# pcmOpArAccountAdjustment

This operation creates debit or credit adjustments for accounts, bill units (/billinfo objects), and services.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.



#### **URI**

https://hostname/BrmWebServices/BRMARServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpArAccountAdjustment request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpArAccountAdjustmentRequest>
        <bus:PCM_OP_AR_ACCOUNT_ADJUSTMENT_Request>
           <bus:flags>0</bus:flags>
           <bus:PCM_OP_AR_ACCOUNT_ADJUSTMENT_inputFlist>
              <bus:AMOUNT>-1
              <bus:BAL_GRP_OBJ>0.0.0.1 /balance_group 293537 0</bus:BAL_GRP_OBJ>
              <bus:BILLINFO_OBJ>0.0.0.1 /billinfo 293025 0</bus:BILLINFO_OBJ>
              <bus:POID>0.0.0.1 /account 293665 0</bus:POID>
              <bus:PROGRAM_NAME>SoapWebServices
              <bus:RESOURCE_ID_ORIG>840</bus:RESOURCE_ID_ORIG>
           </bus:PCM_OP_AR_ACCOUNT_ADJUSTMENT_inputFlist>
        </bus:PCM_OP_AR_ACCOUNT_ADJUSTMENT_Request>
      </bus:pcmOpArAccountAdjustmentRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpArAccountAdjustment response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpArAccountAdjustmentResponse xmlns:brm="http://xmlns.oracle.com/BRM/</pre>
schemas/BusinessOpcodes">
         <POID>0.0.0.1 /account 293665 0</POID>
         <RESULTS elem="0">
            <account obj>0.0.0.1 /account 293665 0</account obj>
            <BAL_IMPACTS elem="0">
               <ACCOUNT_OBJ>0.0.0.1 /account 293665 0</ACCOUNT_OBJ>
               <AMOUNT>-1</AMOUNT>
               <AMOUNT_DEFERRED>0</AMOUNT_DEFERRED>
               <AMOUNT_ORIG />
               <BAL_GRP_OBJ>0.0.0.1 /balance_group 293537 0</BAL_GRP_OBJ>
               <DISCOUNT>0</DISCOUNT>
               <GL_ID>105</GL_ID>
               <IMPACT_TYPE>2</IMPACT_TYPE>
               <ITEM_OBJ>0.0.0.1 /item/adjustment 299052 0</ITEM_OBJ>
               <PERCENT>0</PERCENT>
               <QUANTITY>0</QUANTITY>
               <RATE_OBJ>0.0.0.0 0 0</RATE_OBJ>
               <RATE_TAG />
               <RESOURCE_ID>840</RESOURCE_ID>
               <RESOURCE_ID_ORIG>840</RESOURCE_ID_ORIG>
               <TAX_CODE />
            </BAL_IMPACTS>
            <POID>0.0.0.1 /event/billing/adjustment/account 257232944341751852 0</
POID>
            <SUB BAL IMPACTS elem="0">
               <BAL GRP_OBJ>0.0.0.1 /balance_group 293537 6</BAL_GRP_OBJ>
```



```
<RESOURCE_ID>840</RESOURCE_ID>
               <SUB_BALANCES elem="0">
                  <AMOUNT>-1</AMOUNT>
                  <CONTRIBUTOR STR />
                  <GRANTOR_OBJ>0.0.0.1 /purchased_product 292769 0</GRANTOR_OBJ>
                  <ROLLOVER_DATA>0</ROLLOVER_DATA>
                  <VALID_FROM>2014-09-23T07:00:00Z</VALID_FROM>
                  <VALID_FROM_DETAILS>0</VALID_FROM_DETAILS>
                  <VALID_TO>2015-01-01T00:00:00Z</VALID_TO>
                  <VALID_TO_DETAILS>0</VALID_TO_DETAILS>
               </SUB_BALANCES>
            </SUB_BAL_IMPACTS>
         </RESULTS>
     </pcmOpArAccountAdjustmentResponse>
  </S:Body>
</S:Envelope>
```

# pcmOpArAccountWriteoff

This operation writes off an account.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### URI

https://hostname/BrmWebServices/BRMARServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpArAccountWriteoff request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpArAccountWriteoffRequest>
         <bus:PCM_OP_AR_ACCOUNT_WRITEOFF_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_AR_ACCOUNT_WRITEOFF_inputFlist>
               <bus:DESCR>Incorect charges/bus:DESCR>
               <bus:END_T />
               <bus:FLAGS>1</bus:FLAGS>
               <bus:POID>0.0.0.1 /bill 298665 7</bus:POID>
               <bus:PROGRAM_NAME>web services/bus:PROGRAM_NAME>
            </bus:PCM_OP_AR_ACCOUNT_WRITEOFF_inputFlist>
         </bus:PCM_OP_AR_ACCOUNT_WRITEOFF_Request>
      </bus:pcmOpArAccountWriteoffRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpArAccountWriteoff response

```
</RESULTS>
     <RESULT>1</RESULT>
     </pcmOpArAccountWriteoffResponse>
     </S:Body>
</S:Envelope>
```

# pcmOpArBillAdjustment

This operation adjusts a bill by calling the pcmOpArItemAdjustment operation.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### URI

https://hostname/BrmWebServices/BRMARServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpArBillAdjustment request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpArBillAdjustmentRequest>
        <bus:PCM_OP_AR_BILL_ADJUSTMENT_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_AR_BILL_ADJUSTMENT_inputFlist>
              <bus:AMOUNT>-0.5</bus:AMOUNT>
              <bus:DESCR>Customer unaware of charges/bus:DESCR>
              <bus:FLAGS>1</bus:FLAGS>
              <bus:ITEMS elem="0">
                 <bus:AMOUNT>-0.5
                 <bus:POID>0.0.0.1 /item/cycle_forward 293330 0</bus:POID>
              </bus:ITEMS>
              <bus:POID>0.0.0.1 /bill 297084 2/bus:POID>
              <bus:PROGRAM_NAME>SoapWebServices
              <bus:REASON_DOMAIN_ID>16</bus:REASON_DOMAIN_ID>
              <bus:REASON_ID>2</bus:REASON_ID>
            </bus:PCM_OP_AR_BILL_ADJUSTMENT_inputFlist>
        </bus:PCM_OP_AR_BILL_ADJUSTMENT_Request>
      </bus:pcmOpArBillAdjustmentRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpArBillAdjustment response



```
</pcmOpArBillAdjustmentResponse>
</S:Body>
</S:Envelope>
```

# pcmOpArBillDispute

This operation disputes a bill amount by calling the pcmOpArItemDispute operation.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### URI

https://hostname/BrmWebServices/BRMARServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpArBillDispute request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpArBillDisputeRequest>
         <bus:PCM OP AR BILL DISPUTE Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_AR_BILL_DISPUTE_inputFlist>
               <bus: AMOUNT>-0.5</bus: AMOUNT>
               <bus:DESCR>Customer unhappy with charges/bus:DESCR>
              <bus:FLAGS />
              <bus:POID>0.0.0.1 /bill 297084 2</bus:POID>
              <bus:PROGRAM_NAME>SoapWebServices
/bus:PROGRAM_NAME>
               <bus:REASON_DOMAIN_ID>16
               <bus:REASON_ID>2</bus:REASON_ID>
            </bus:PCM_OP_AR_BILL_DISPUTE_inputFlist>
        </bus:PCM_OP_AR_BILL_DISPUTE_Request>
     </bus:pcmOpArBillDisputeRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpArBillDispute response



# pcmOpArBillinfoWriteoff

This operation writes off a bill unit (**/billinfo** object). If the operation **flags** field is set to pcmOpflgCalcOnly, the operation returns the writeoff information but doesn't perform the writeoff.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMARServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpArBillinfoWriteoff request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpArBillinfoWriteoffRequest>
        <bus:PCM_OP_AR_BILLINFO_WRITEOFF_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_AR_BILLINFO_WRITEOFF_inputFlist>
              <bus:DESCR>[bill wirteoff-user not satisfied]/bus:DESCR>
              <bus:POID>0.0.0.1 /billinfo 297327 0</bus:POID>
              <bus:PROGRAM_NAME>web service
           </bus:PCM_OP_AR_BILLINFO_WRITEOFF_inputFlist>
        </bus:PCM_OP_AR_BILLINFO_WRITEOFF_Request>
     </bus:pcmOpArBillinfoWriteoffRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpArBillinfoWriteoff response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpArBillinfoWriteoffResponse xmlns:brm="http://xmlns.oracle.com/BRM/</pre>
schemas/BusinessOpcodes">
         <POID>0.0.0.1 /billinfo 297327 0</POID>
         <RESULT>1</RESULT>
         <RESULTS elem="0">
            <ACCOUNT_OBJ>0.0.0.1 /account 297583 0</ACCOUNT_OBJ>
            <BAL_IMPACTS elem="0">
               <ACCOUNT_OBJ>0.0.0.1 /account 297583 0</ACCOUNT_OBJ>
               <AMOUNT>-12</AMOUNT>
               <AMOUNT_DEFERRED>0</AMOUNT_DEFERRED>
               <AMOUNT_ORIG />
               <BAL_GRP_OBJ>0.0.0.1 /balance_group 297839 9</BAL_GRP_OBJ>
               <DISCOUNT>0</DISCOUNT>
               <GL_ID>106</GL_ID>
               <IMPACT_TYPE>2</IMPACT_TYPE>
               <ITEM_OBJ>0.0.0.1 /item/writeoff 295583 0</ITEM_OBJ>
               <PERCENT>0</PERCENT>
               <QUANTITY>0</QUANTITY>
               <RATE_OBJ>0.0.0.0 0 0</RATE_OBJ>
               <RATE_TAG />
               <RESOURCE_ID>840</RESOURCE_ID>
```



```
<RESOURCE_ID_ORIG>0</RESOURCE_ID_ORIG>
               <TAX_CODE />
            </BAL_IMPACTS>
            <POID>0.0.0.1 /event/billing/writeoff/billinfo 257250536527792799 0</
POID>
            <SUB_BAL_IMPACTS elem="0">
               <BAL_GRP_OBJ>0.0.0.1 /balance_group 297839 10</BAL_GRP_OBJ>
               <RESOURCE_ID>840</RESOURCE_ID>
               <SUB_BALANCES elem="0">
                  <AMOUNT>-12</AMOUNT>
                  <CONTRIBUTOR_STR />
                  <GRANTOR_OBJ>0.0.0.1 /purchased_product 296687 0</GRANTOR_OBJ>
                  <ROLLOVER_DATA>0</ROLLOVER_DATA>
                  <VALID FROM>2014-09-23T07:00:00Z</VALID FROM>
                  <VALID_FROM_DETAILS>0</VALID_FROM_DETAILS>
                  <VALID TO>2015-01-01T00:00:00Z</VALID TO>
                  <VALID_TO_DETAILS>0</VALID_TO_DETAILS>
               </SUB_BALANCES>
            </SUB_BAL_IMPACTS>
         </RESULTS>
      </pcmOpArBillinfoWriteoffResponse>
   </S:Body>
</S:Envelope>
```

# pcmOpArBillSettlement

This operation settles a bill dispute.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference* 

#### URI

https://hostname/BrmWebServices/BRMARServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpArBillSettlement request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpArBillSettlementRequest>
         <bus:PCM_OP_AR_BILL_SETTLEMENT_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_AR_BILL_SETTLEMENT_inputFlist>
               <bus: AMOUNT>-0.5</bus: AMOUNT>
               <bus:DESCR>Bill settled for Half amount/bus:DESCR>
               <bus:POID>0.0.0.1 /bill 297084 2</bus:POID>
               <bus:PROGRAM_NAME>SoapWebServices
PROGRAM_NAME>
               <bus:REASON_DOMAIN_ID>16</bus:REASON_DOMAIN_ID>
               <bus:REASON_ID>2</bus:REASON_ID>
            </bus:PCM_OP_AR_BILL_SETTLEMENT_inputFlist>
         </bus:PCM_OP_AR_BILL_SETTLEMENT_Request>
      </bus:pcmOpArBillSettlementRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpArBillSettlement response

# pcmOpArBillWriteoff

This operation writes off a bill.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMARServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpArBillWriteoff request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpArBillWriteoffRequest>
         <bus:PCM_OP_AR_BILL_WRITEOFF_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_AR_BILL_WRITEOFF_inputFlist>
               <bus:DESCR>[Bill writeoff,full]/bus:DESCR>
               <bus:FLAGS>1</bus:FLAGS>
               <bus:POID>0.0.0.1 /bill 292351 3</bus:POID>
               <bus:PROGRAM_NAME>web servce</bus:PROGRAM_NAME>
            </bus:PCM_OP_AR_BILL_WRITEOFF_inputFlist>
         </bus:PCM_OP_AR_BILL_WRITEOFF_Request>
      </bus:pcmOpArBillWriteoffRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpArBillWriteoff response



```
<RESULTS elem="0">
            <ACCOUNT_OBJ>0.0.0.1 /account 293631 0</ACCOUNT_OBJ>
            <BAL_IMPACTS elem="0">
               <ACCOUNT_OBJ>0.0.0.1 /account 293631 0</ACCOUNT_OBJ>
               <AMOUNT>-86.8</AMOUNT>
               <AMOUNT_DEFERRED>0</AMOUNT_DEFERRED>
               <AMOUNT_ORIG />
               <BAL_GRP_OBJ>0.0.0.1 /balance_group 296960 11</BAL_GRP_OBJ>
               <DISCOUNT>0</DISCOUNT>
               <GL_ID>106</GL_ID>
               <IMPACT_TYPE>2</IMPACT_TYPE>
               <ITEM_OBJ>0.0.0.1 /item/writeoff 296958 0</ITEM_OBJ>
               <PERCENT>0</PERCENT>
               <OUANTITY>0</OUANTITY>
               <RATE_OBJ>0.0.0.0 0 0</RATE_OBJ>
               <RATE TAG />
               <RESOURCE_ID>840</RESOURCE_ID>
               <RESOURCE_ID_ORIG>0</RESOURCE_ID_ORIG>
               <TAX_CODE />
            </BAL_IMPACTS>
            <POID>0.0.0.1 /event/billing/writeoff/bill 257250536527794174 0</POID>
            <SUB_BAL_IMPACTS elem="0">
               <BAL_GRP_OBJ>0.0.0.1 /balance_group 296960 12</BAL_GRP_OBJ>
               <RESOURCE_ID>840</RESOURCE_ID>
               <SUB_BALANCES elem="0">
                  <AMOUNT>-86.8</AMOUNT>
                  <CONTRIBUTOR_STR />
                  <GRANTOR_OBJ>0.0.0.1 /purchased_product 296704 0</GRANTOR_OBJ>
                  <ROLLOVER_DATA>0</ROLLOVER_DATA>
                  <VALID_FROM>2014-09-23T07:00:00Z</VALID_FROM>
                  <VALID_FROM_DETAILS>0</VALID_FROM_DETAILS>
                  <VALID_TO>2015-01-01T00:00:00Z</VALID_TO>
                  <VALID_TO_DETAILS>0</VALID_TO_DETAILS>
               </SUB_BALANCES>
            </SUB_BAL_IMPACTS>
         </RESULTS>
      </pcmOpArBillWriteoffResponse>
   </S:Body>
</S:Envelope>
```

### pcmOpArEventAdjustment

This operation adjusts balances according to specified adjustment information and events.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### URI

https://hostname/BrmWebServices/BRMARServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpArEventAdjustment request

```
<bus:pcmOpArEventAdjustmentRequest>
         <bus:PCM_OP_AR_EVENT_ADJUSTMENT_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_AR_EVENT_ADJUSTMENT_inputFlist>
               <bus:ADJUSTMENT_INFO elem="0">
                  <bus: AMOUNT>-0.5</bus: AMOUNT>
                  <bus:FLAGS>5</bus:FLAGS>
                  <bus:PERCENT />
                  <bus:RESOURCE_ID>840/bus:RESOURCE_ID>
               </bus:ADJUSTMENT_INFO>
               <bus:EVENTS elem="0">
                  <bus:FLAGS>0</bus:FLAGS>
                  <bus:POID>0.0.0.1 /event/billing/product/fee/cycle/
cycle_forward_monthly 257338497458012722 0</bus:POID>
               </bus:EVENTS>
               <bus:POID>0.0.0.1 /account 295570 7</bus:POID>
               <bus:PROGRAM_NAME>web service
            </bus:PCM_OP_AR_EVENT_ADJUSTMENT_inputFlist>
         </bus:PCM_OP_AR_EVENT_ADJUSTMENT_Request>
      </bus:pcmOpArEventAdjustmentRequest>
   </soapenv:Body>
</soapenv:Envelope>
Sample pcmOpArEventAdjustment response
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
      <pcmOpArEventAdjustmentResponse xmlns:brm="http://xmlns.oracle.com/BRM/schemas/</pre>
BusinessOpcodes">
         <ADJUSTMENT_INFO elem="0">
            <AMOUNT>9.45</AMOUNT>
            <AMOUNT_ADJUSTED>-0.5/AMOUNT_ADJUSTED>
            <AMOUNT_TAXED>0</AMOUNT_TAXED>
            <AMOUNT_TAX_ADJUSTED>0</AMOUNT_TAX_ADJUSTED>
            <DISCOUNT>0</DISCOUNT>
            <RESOURCE_ID>840</RESOURCE_ID>
         </ADJUSTMENT_INFO>
         <BAL_GRP_OBJ>0.0.0.1 /balance_group 295826 7</BAL_GRP_OBJ>
         <ITEMS elem="0">
            <ITEM_OBJ>0.0.0.1 /item/adjustment 301608 0</ITEM_OBJ>
         </ITEMS>
         <ITEM_OBJ>0.0.0.1 /item/adjustment 301608 0</ITEM_OBJ>
         <POID>0.0.0.1 /account 295570 7</POID>
         <RESULT>1</RESULT>
         <RESULTS elem="0">
            <EVENTS elem="0">
               <account_OBJ>0.0.0.1 /account 295570 0</account_OBJ>
               <BAL_IMPACTS elem="0">
                  <ACCOUNT_OBJ>0.0.0.1 /account 295570 7</ACCOUNT_OBJ>
                  <AMOUNT>0.5</AMOUNT>
                  <AMOUNT_DEFERRED>0</AMOUNT_DEFERRED>
                  <AMOUNT_ORIG>0</AMOUNT_ORIG>
                  <BAL_GRP_OBJ>0.0.0.1 /balance_group 295826 7</BAL_GRP_OBJ>
                  <DISCOUNT>0</DISCOUNT>
                  <DISCOUNT_INFO />
                  <GL_ID>102</GL_ID>
                  <IMPACT_CATEGORY>default</IMPACT_CATEGORY>
                  <IMPACT_TYPE>32</IMPACT_TYPE>
                  <ITEM_OBJ>0.0.0.1 /item/adjustment 301608 0</ITEM_OBJ>
```

<OFFERING\_OBJ>0.0.0.1 /purchased\_product 298834 1</OFFERING\_OBJ>

<PERCENT>1</PERCENT>

```
<PRODUCT_OBJ>0.0.0.1 /product 299504 0</PRODUCT_OBJ>
                  <QUANTITY>0.5</QUANTITY>
                  <RATE_OBJ>0.0.0.1 /rate 301552 1</RATE_OBJ>
                  <RATE_TAG>$9.95 a month</RATE_TAG>
                  <RESOURCE_ID>840</RESOURCE_ID>
                  <RESOURCE_ID_ORIG>0</RESOURCE_ID_ORIG>
                  <RUM_ID>0</RUM_ID>
                  <TAX_CODE />
               </BAL_IMPACTS>
               <POID>0.0.0.1 /event/billing/adjustment/event 257338497458017832 0</
POID>
               <SERVICE_OBJ>0.0.0.1 /service/ip 295762 0</SERVICE_OBJ>
               <SUB_BAL_IMPACTS elem="0">
                  <BAL_GRP_OBJ>0.0.0.1 /balance_group 295826 8</BAL_GRP_OBJ>
                  <RESOURCE_ID>840</RESOURCE_ID>
                  <SUB BALANCES elem="0">
                     <AMOUNT>0.5</AMOUNT>
                     <CONTRIBUTOR_STR />
                     <GRANTOR_OBJ>0.0.0.1 /purchased_product 297554 0</GRANTOR_OBJ>
                     <ROLLOVER_DATA>0</ROLLOVER_DATA>
                     <VALID_FROM>2014-09-29T07:00:00Z</VALID_FROM>
                     <VALID_FROM_DETAILS>0</VALID_FROM_DETAILS>
                     <VALID_TO>2015-01-01T00:00:00Z</VALID_TO>
                     <VALID_TO_DETAILS>0</VALID_TO_DETAILS>
                  </SUB_BALANCES>
               </SUB_BAL_IMPACTS>
            </EVENTS>
            <POID>0.0.0.1 /event/billing/product/fee/cycle/cycle_forward_monthly
257338497458012722 0</POID>
            <RESULT>1</RESULT>
         </RESULTS>
      </pcmOpArEventAdjustmentResponse>
   </S:Body>
</S:Envelope>
```

# pcmOpArEventDispute

This operation handles disputes according to specified dispute information and events. It reserves any disputed amounts accordingly, which are held until the settlement date.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### URI

https://hostname/BrmWebServices/BRMARServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpArEventDispute request



```
<bus:DISPUTES elem="0">
                  <bus:PERCENT>1</bus:PERCENT>
                  <bus:RESOURCE_ID>840</bus:RESOURCE_ID>
               </bus:DISPUTES>
               <bus:END_T>1414825795/bus:END_T>
               <bus:EVENTS elem="0">
                  <bus:POID>0.0.0.1 /event/billing/product/fee/cycle/
cycle_forward_monthly 257338497458012722 0</bus:POID>
               </bus:EVENTS>
               <bus:POID>0.0.0.1 /account 295570 8</bus:POID>
               <bus:PROGRAM_NAME>web service</bus:PROGRAM_NAME>
            </bus:PCM_OP_AR_EVENT_DISPUTE_inputFlist>
         </bus:PCM_OP_AR_EVENT_DISPUTE_Request>
      </bus:pcmOpArEventDisputeRequest>
   </soapenv:Body>
</soapenv:Envelope>
Sample pcmOpArEventDispute response
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpArEventDisputeResponse xmlns:brm="http://xmlns.oracle.com/BRM/schemas/</pre>
BusinessOpcodes">
         <BAL_GRP_OBJ>0.0.0.1 /balance_group 295826 8</BAL_GRP_OBJ>
         <DISPUTES elem="0">
            <AMOUNT>9.95</AMOUNT>
            <AMOUNT_ADJUSTED>0.1/AMOUNT_ADJUSTED>
            <AMOUNT_TAXED>0</AMOUNT_TAXED>
            <AMOUNT_TAX_ADJUSTED>0</AMOUNT_TAX_ADJUSTED>
            <DISCOUNT>0</DISCOUNT>
            <RESOURCE_ID>840</RESOURCE_ID>
         </DISPUTES>
         <ITEMS elem="0">
            <TTEM_OBJ>0.0.0.1 /item/dispute 294266 0</TTEM_OBJ>
         <ITEM_OBJ>0.0.0.1 /item/dispute 294266 0</ITEM_OBJ>
         <POID>0.0.0.1 /account 295570 8</POID>
         <RESULT>1</RESULT>
         <RESULTS elem="0">
            <EVENTS elem="0">
               <ACCOUNT_OBJ>0.0.0.1 /account 295570 0</ACCOUNT_OBJ>
               <BAL_IMPACTS elem="0">
                  <account_OBJ>0.0.0.1 /account 295570 8</account_OBJ>
                  <AMOUNT>-0.1</AMOUNT>
                  <AMOUNT_DEFERRED>0</AMOUNT_DEFERRED>
                  <AMOUNT_ORIG>0</AMOUNT_ORIG>
                  <BAL_GRP_OBJ>0.0.0.1 /balance_group 295826 8</BAL_GRP_OBJ>
                  <DISCOUNT>0</DISCOUNT>
                  <DISCOUNT_INFO />
                  <GL_ID>102</GL_ID>
                  <IMPACT_CATEGORY>default</IMPACT_CATEGORY>
                  <IMPACT_TYPE>32</IMPACT_TYPE>
                  <TTEM_OBJ>0.0.0.1 /item/dispute 294266 0</TTEM_OBJ>
                  <OFFERING_OBJ>0.0.1 /purchased_product 298834 1</OFFERING_OBJ>
                  <PERCENT>1</PERCENT>
                  <PRODUCT_OBJ>0.0.0.1 /product 299504 0</PRODUCT_OBJ>
                  <QUANTITY>-0.1</QUANTITY>
                  <RATE_OBJ>0.0.0.1 /rate 301552 1</RATE_OBJ>
                  <RATE_TAG>$9.95 a month</RATE_TAG>
```

<RESOURCE\_ID>840</RESOURCE\_ID>

<RESOURCE\_ID\_ORIG>0</RESOURCE\_ID\_ORIG>

```
<RUM_ID>0</RUM_ID>
                 <TAX_CODE />
              </BAL_IMPACTS>
              <POID>0.0.0.1 /event/billing/dispute/event 257338497458008954 0</POID>
              <SERVICE_OBJ>0.0.0.1 /service/ip 295762 0</SERVICE_OBJ>
              <SUB_BAL_IMPACTS elem="0">
                 <BAL_GRP_OBJ>0.0.0.1 /balance_group 295826 9</BAL_GRP_OBJ>
                 <RESOURCE_ID>840</RESOURCE_ID>
                 <SUB_BALANCES elem="0">
                    <AMOUNT>-0.1</AMOUNT>
                    <CONTRIBUTOR_STR />
                    <GRANTOR_OBJ>0.0.0.1 /purchased_product 297554 0</GRANTOR_OBJ>
                    <ROLLOVER_DATA>0</ROLLOVER_DATA>
                    <VALID FROM>2014-09-29T07:00:00Z</VALID FROM>
                    <VALID_FROM_DETAILS>0</VALID_FROM_DETAILS>
                    <VALID TO>2015-01-01T00:00:00Z</VALID TO>
                    <VALID_TO_DETAILS>0</VALID_TO_DETAILS>
                 </SUB_BALANCES>
              </SUB_BAL_IMPACTS>
            </EVENTS>
            <POID>0.0.0.1 /event/billing/product/fee/cycle/cycle_forward_monthly
257338497458012722 0</POID>
            <RESULT>1</RESULT>
        </RESULTS>
     </S:Body>
</S:Envelope>
```

# pcmOpArEventSettlement

This operation settles previous disputes according to specified settlement information. It locates and releases previously reserved balances accordingly.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### URI

https://hostname/BrmWebServices/BRMARServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpArEventSettlement request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpArEventSettlementRequest>
         <bus:PCM_OP_AR_EVENT_SETTLEMENT_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_AR_EVENT_SETTLEMENT_inputFlist>
               <bus:DESCR>Setteltment through web sevice/bus:DESCR>
               <bus:FLAGS>0</bus:FLAGS>
               <bus:ITEM_OBJ>0.0.0.1 /item/dispute 294266 2</bus:ITEM_OBJ>
               <bus:POID>0.0.0.1 /account 295570 9</bus:POID>
               <bus:PROGRAM_NAME>web service
               <bus:SETTLEMENTS elem="0">
                  <bus:AMOUNT>0.10</bus:AMOUNT>
                  <bus:RESOURCE_ID>840</bus:RESOURCE_ID>
```

#### Sample pcmOpArEventSettlement response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpArEventSettlementResponse xmlns:brm="http://xmlns.oracle.com/BRM/schemas/</pre>
BusinessOpcodes">
         <BAL_GRP_OBJ>0.0.0.1 /balance_group 295826 10</BAL_GRP_OBJ>
         <ITEM_OBJ>0.0.0.1 /item/settlement 291066 0</ITEM_OBJ>
         <POID>0.0.0.1 /account 295570 9</POID>
         <RESULT>1</RESULT>
         <RESULTS elem="0">
            <EVENTS elem="0">
               <ACCOUNT_OBJ>0.0.0.1 /account 295570 0</ACCOUNT_OBJ>
               <BAL_IMPACTS elem="0">
                  <ACCOUNT_OBJ>0.0.0.1 /account 295570 9</ACCOUNT_OBJ>
                  <AMOUNT>0</AMOUNT>
                  <AMOUNT_DEFERRED>0</AMOUNT_DEFERRED>
                  <AMOUNT_ORIG>0</AMOUNT_ORIG>
                  <BAL_GRP_OBJ>0.0.0.1 /balance_group 295826 10</BAL_GRP_OBJ>
                  <DISCOUNT>0</DISCOUNT>
                  <DISCOUNT_INFO />
                  <GL ID>102</GL ID>
                  <IMPACT_CATEGORY>default</IMPACT_CATEGORY>
                  <IMPACT_TYPE>2</IMPACT_TYPE>
                  <ITEM_OBJ>0.0.0.1 /item/settlement 291066 0</ITEM_OBJ>
                  <OFFERING_OBJ>0.0.0.1 /purchased_product 298834 1</OFFERING_OBJ>
                  <PERCENT>1</PERCENT>
                  <PRODUCT_OBJ>0.0.0.1 /product 299504 0</PRODUCT_OBJ>
                  <QUANTITY>0</QUANTITY>
                  <RATE_OBJ>0.0.0.1 /rate 301552 1</RATE_OBJ>
                  <RATE_TAG>$9.95 a month</RATE_TAG>
                  <RESOURCE ID>840</RESOURCE ID>
                  <RESOURCE_ID_ORIG>0</RESOURCE_ID_ORIG>
                  <RUM ID>0</RUM ID>
                  <TAX_CODE />
               </BAL_IMPACTS>
               <POID>0.0.0.1 /event/billing/settlement/event 257338497458010362 0</
POTD>
               <SERVICE_OBJ>0.0.0.1 /service/ip 295762 0</SERVICE_OBJ>
            <POID>0.0.0.1 /event/billing/dispute/event 257338497458008954 0</POID>
            <RESULT>1</RESULT>
         </RESULTS>
         <SETTLEMENTS elem="0">
            <AMOUNT>-0.1</AMOUNT>
            <AMOUNT_ADJUSTED>-0.1/AMOUNT_ADJUSTED>
            <AMOUNT_TAXED>0</AMOUNT_TAXED>
            <AMOUNT_TAX_ADJUSTED>0</AMOUNT_TAX_ADJUSTED>
            <DISCOUNT>0</DISCOUNT>
            <RESOURCE_ID>840</RESOURCE_ID>
         </SETTLEMENTS>
      </pcmOpArEventSettlementResponse>
   </S:Body>
</S:Envelope>
```

# pcmOpArGetAcctActionItems

This operation returns the A/R items for a specified bill unit (**/billinfo** object). If you specify an account instead, the operation retrieves the A/R items for all the account's bill units. You can specify search criteria in the input parameters.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMARServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpArGetAcctActionItems request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
  <soapenv:Header/>
  <soapenv:Body>
      <bus:pcmOpArGetAcctActionItemsRequest>
         <bus:PCM_OP_AR_GET_ACCT_ACTION_ITEMS_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_AR_GET_ACCT_ACTION_ITEMS_inputFlist>
               <bus:INCLUDE CHILDREN>1
               <bus:AR_BILLINFO_OBJ>0.0.0.1 /billinfo 295314 2/bus:AR_BILLINFO_OBJ>
              <bus:BILL_OBJ>0.0.0.1 /bill 297362 7</bus:BILL_OBJ>
               <bus:INCLUDE_CHILDREN>1</bus:INCLUDE_CHILDREN>
               <bus:POID>0.0.0.1 /billinfo 295314 2</bus:POID>
               <bus:THRESHOLD>20</bus:THRESHOLD>
            </bus:PCM_OP_AR_GET_ACCT_ACTION_ITEMS_inputFlist>
        </bus:PCM_OP_AR_GET_ACCT_ACTION_ITEMS_Request>
     </bus:pcmOpArGetAcctActionItemsRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpArGetAcctActionItems response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpArGetAcctActionItemsResponse xmlns:brm="http://xmlns.oracle.com/BRM/</pre>
schemas/BusinessOpcodes">
         <POID>0.0.0.1 /billinfo 295314 2</POID>
         <RESULTS elem="0">
            <account_no>0.0.1-295570</account_no>
            <account_OBJ>0.0.0.1 /account 295570 8</account_OBJ>
            <ADJUSTMENT_TYPE>1</ADJUSTMENT_TYPE>
            <AGGREGATE_AMOUNTS elem="0">
               <ADJUSTED>-0.5</ADJUSTED>
               <AMOUNT>9.95</AMOUNT>
               <DTSCOUNT>0</DTSCOUNT>
               <RESOURCE_ID>840</RESOURCE_ID>
            </AGGREGATE AMOUNTS>
            <ALLOCATED>-0.5</ALLOCATED>
            <CREATED_T>2010-01-19T17:37:13Z</CREATED_T>
            <DUE>0</DUE>
            <EFFECTIVE_T>2014-11-01T07:02:27Z</EFFECTIVE_T>
            <EVENTS elem="0">
```



```
<DESCR>[Customer not satisfied with the service]/DESCR>
               <POID>0.0.0.1 /event/billing/adjustment/event 257338497458012424 0</
POID>
            </EVENTS>
            <ITEM_NO>A1-24</ITEM_NO>
            <ITEM_TOTAL>-0.5</ITEM_TOTAL>
            <NAME>Adjustment</NAME>
            <NAMEINFO elem="1">
               <COMPANY />
               <FIRST_NAME>BBBB</FIRST_NAME>
               <LAST_NAME>BBBB</LAST_NAME>
               <MIDDLE_NAME>BBBB</MIDDLE_NAME>
               <SALUTATION />
            </NAMEINFO>
            <POID>0.0.0.1 /item/adjustment 298504 2</POID>
            <RELATED_ACTION_ITEM_OBJ>0.0.0.0 0 0</RELATED_ACTION_ITEM_OBJ>
            <RELATED_BILL_ITEM_OBJ>0.0.0.0 0 0</related_BILL_ITEM_OBJ>
            <RESOURCE_ID>840</RESOURCE_ID>
            <RESOURCE_IMPACTED>0</RESOURCE_IMPACTED>
            <TRANSFERED>-0.5</TRANSFERED>
         </RESULTS>
         <RESULTS elem="1">
            <ACCOUNT_NO>0.0.0.1-295570</ACCOUNT_NO>
            <ACCOUNT_OBJ>0.0.0.1 /account 295570 9</ACCOUNT_OBJ>
            <ADJUSTMENT_TYPE>1</ADJUSTMENT_TYPE>
            <AGGREGATE AMOUNTS elem="0">
               <ADJUSTED>0.5</ADJUSTED>
               <AMOUNT>9.95</AMOUNT>
               <DISCOUNT>0</DISCOUNT>
               <RESOURCE_ID>840</RESOURCE_ID>
            </AGGREGATE_AMOUNTS>
            <ALLOCATED>0.5</ALLOCATED>
            <CREATED_T>2010-01-19T17:39:39Z</CREATED_T>
            <DUE>0</DUE>
            <EFFECTIVE_T>2014-11-01T07:04:53Z</EFFECTIVE_T>
            <EVENTS elem="0">
               <DESCR />
               <POID>0.0.0.1 /event/billing/adjustment/event 257338497458017832 0</
POID>
            </EVENTS>
            <TTEM_NO>A1-25</TTEM_NO>
            <TTEM_TOTAL>0.5</TTEM_TOTAL>
            <NAME>Adjustment</NAME>
            <NAMEINFO elem="1">
               <COMPANY />
               <FIRST_NAME>BBBB</FIRST_NAME>
               <LAST_NAME>BBBB</LAST_NAME>
               <MIDDLE_NAME>BBBB</MIDDLE_NAME>
               <SALUTATION />
            </NAMEINFO>
            <POID>0.0.0.1 /item/adjustment 301608 2</POID>
            <RELATED_ACTION_ITEM_OBJ>0.0.0.0 0 0</related_ACTION_ITEM_OBJ>
            <RELATED_BILL_ITEM_OBJ>0.0.0.0 0 0</related_BILL_ITEM_OBJ>
            <RESOURCE_ID>840</RESOURCE_ID>
            <RESOURCE_IMPACTED>0</RESOURCE_IMPACTED>
            <TRANSFERED>0.5</TRANSFERED>
         </RESULTS>
         <RESULTS elem="2">
            <account_no>0.0.1-295570</account_no>
            <account_OBJ>0.0.0.1 /account 295570 9</account_OBJ>
            <AGGREGATE_AMOUNTS elem="0">
```

```
<AMOUNT>9.95</AMOUNT>
               <AMOUNT_ADJUSTED>-0.1/AMOUNT_ADJUSTED>
               <DISCOUNT>0</DISCOUNT>
               <DISPUTED>-0.1</DISPUTED>
               <ORIG_DISPUTE_AMOUNT>-0.1/ORIG_DISPUTE_AMOUNT>
               <RESOURCE_ID>840</RESOURCE_ID>
            </AGGREGATE_AMOUNTS>
            <ALLOCATED>-0.1</ALLOCATED>
            <CREATED_T>2010-01-19T17:44:47Z</CREATED_T>
            <DISPUTE_TYPE>1</DISPUTE_TYPE>
            <DUE>0</DUE>
            <EFFECTIVE_T>2014-11-01T07:09:55Z</EFFECTIVE_T>
            <EVENTS elem="0">
               <DESCR>Customer unaware of charges
               <POID>0.0.0.1 /event/billing/dispute/event 257338497458008954 0</POID>
            </EVENTS>
            <TTEM_NO>D1-17</TTEM_NO>
            <TTEM_TOTAL>-0.1</TTEM_TOTAL>
            <NAME>Dispute</NAME>
            <NAMEINFO elem="1">
               <COMPANY />
               <FIRST_NAME>BBBB</fIRST_NAME>
               <LAST_NAME>BBBB</LAST_NAME>
               <MIDDLE_NAME>BBBB</MIDDLE_NAME>
               <SALUTATION />
            </NAMEINFO>
            <POID>0.0.0.1 /item/dispute 294266 2</POID>
            <RELATED_ACTION_ITEM_OBJ>0.0.0.1 /item/settlement 291066 0
RELATED_ACTION_ITEM_OBJ>
            <RELATED_BILL_ITEM_OBJ>0.0.0.1 /item/cycle_forward 295122 4
RELATED_BILL_ITEM_OBJ>
            <RESOURCE_ID>840</RESOURCE_ID>
            <RESOURCE_IMPACTED>0</RESOURCE_IMPACTED>
            <TRANSFERED>-0.1</TRANSFERED>
         </RESULTS>
      </pcmOpArGetAcctActionItemsResponse>
   </S:Body>
</S:Envelope>
```

### pcmOpArGetAcctBalSummary

This operation retrieves the unapplied, open bill due, pending bill due, and total dispute balances for all the bill units (**/billinfo** objects) in a specified account or for a particular bill unit.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMARServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpArGetAcctBalSummary request



#### Sample pcmOpArGetAcctBalSummary response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpArGetAcctBalSummaryResponse xmlns:brm="http://xmlns.oracle.com/BRM/</pre>
schemas/BusinessOpcodes">
         <AR_BILLINFO_OBJ />
         <BILLINFO_OBJ />
         <BILL_OBJ />
         <COUNT>0</COUNT>
         <DISPUTED>0</DISPUTED>
         <OPENBILL_DUE>0</OPENBILL_DUE>
         <PENDINGBILL_DUE>14.95</PENDINGBILL_DUE>
         <POID>0.0.0.1 /account 293665 0</POID>
         <TOTAL_RECORDS>0</TOTAL_RECORDS>
         <UNAPPLIED AMOUNT>0</UNAPPLIED AMOUNT>
       </pcmOpArGetAcctBalSummaryResponse>
   </S:Body>
</S:Envelope>
```

# pcmOpArGetAcctBills

This operation returns the bills for a specified bill unit (/billinfo object). If you specify an account instead, the operation returns the bills for all the account's bill units. You can specify search criteria in the operation's input.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMARServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpArGetAcctBills request



#### Sample pcmOpArGetAcctBills response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpArGetAcctBillsResponse xmlns:brm="http://xmlns.oracle.com/BRM/schemas/</pre>
BusinessOpcodes">
        <POID>0.0.0.1 /billinfo 331139 0</POID>
         <RESULTS elem="0">
            <ACCOUNT_OBJ>0.0.0.1 /account 331395 0</ACCOUNT_OBJ>
            <ADJUSTED>0</ADJUSTED>
            <AR_BILLINFO_OBJ>0.0.0.1 /billinfo 331139 0</AR_BILLINFO_OBJ>
            <BILLINFO_ID>Bill Unit(1)/BILLINFO_ID>
            <BILLINFO_OBJ>0.0.0.1 /billinfo 331139 3/BILLINFO_OBJ>
            <BILL_NO>B1-20</BILL_NO>
            <CLOSED_T>1970-01-01T00:00:00Z</CLOSED_T>
            <CREATED_T>2014-10-08T02:24:07Z</CREATED_T>
            <CURRENT_TOTAL>9.95</CURRENT_TOTAL>
            <DISPUTED>0</DISPUTED>
            <DUE>9.95</DUE>
            <DUE_T>2014-11-07T03:24:07Z</DUE_T>
            <END_T>2014-10-08T02:24:07Z</END_T>
            <NAME>PIN Bill NOW</NAME>
            <PARENT>0.0.0.0 0 0</PARENT>
            <POID>0.0.0.1 /bill 333440 2</POID>
            <PREVIOUS_TOTAL>0</PREVIOUS_TOTAL>
            <RECVD>0</RECVD>
            <START_T>2014-10-07T07:00:00Z</START_T>
            <SUBORDS_TOTAL>0</SUBORDS_TOTAL>
            <TOTALS>9.95</TOTALS>
            <TRANSFERED>0</TRANSFERED>
            <WRITEOFF>0</WRITEOFF>
         </RESULTS>
      </S:Body>
</S:Envelope>
```

### pcmOpArGetActionItems

This operation returns a list of A/R items for a particular bill unit (*/billinfo* object). If you specify an account instead, the operation returns the A/R items of the account's default bill unit. You can specify search criteria in the operation's input.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMARServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.



#### Sample pcmOpArGetActionItems request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpArGetActionItemsRequest>
         <bus:PCM_OP_AR_GET_ACTION_ITEMS_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_AR_GET_ACTION_ITEMS_inputFlist>
               <bus:INCLUDE_CHILDREN>1/bus:INCLUDE_CHILDREN>
               <bus:AR BILLINFO OBJ>0.0.0.1 /billinfo 295314 2/bus:AR BILLINFO OBJ>
               <bus:BILL_OBJ>0.0.0.1 /bill 297362 7</bus:BILL_OBJ>
               <bus:INCLUDE_CHILDREN>1</bus:INCLUDE_CHILDREN>
               <bus:POID>0.0.0.1 /billinfo 295314 2</bus:POID>
               <bus:THRESHOLD>20</bus:THRESHOLD>
            </bus:PCM_OP_AR_GET_ACTION_ITEMS_inputFlist>
         </bus:PCM_OP_AR_GET_ACTION_ITEMS_Request>
      </bus:pcmOpArGetActionItemsRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpArGetActionItems response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpArGetActionItemsResponse xmlns:brm="http://xmlns.oracle.com/BRM/schemas/</pre>
BusinessOpcodes">
         <POID>0.0.0.1 /billinfo 295314 2</POID>
         <RESULTS elem="1">
            <ACCOUNT_NO>0.0.1-295570</ACCOUNT_NO>
            <ACCOUNT_OBJ>0.0.0.1 /account 295570 8</ACCOUNT_OBJ>
            <ADJUSTMENT_TYPE>1</ADJUSTMENT_TYPE>
            <AGGREGATE_AMOUNTS elem="0">
               <ADJUSTED>-0.5</ADJUSTED>
               <AMOUNT>9.95</AMOUNT>
               <DISCOUNT>0</DISCOUNT>
               <RESOURCE_ID>840</RESOURCE_ID>
            </AGGREGATE_AMOUNTS>
            <ALLOCATED>-0.5</ALLOCATED>
            <CREATED_T>2010-01-19T17:37:13Z</CREATED_T>
            <DUE>0</DUE>
            <EFFECTIVE_T>2014-11-01T07:02:27Z</EFFECTIVE_T>
            <EVENTS elem="0">
               <DESCR>[Customer not satisfied with the service]/DESCR>
               <POID>0.0.0.1 /event/billing/adjustment/event 257338497458012424 0</
POID>
            </EVENTS>
            <ITEM_NO>A1-24</ITEM_NO>
            <ITEM_TOTAL>-0.5</ITEM_TOTAL>
            <NAME>Adjustment</NAME>
            <NAMEINFO elem="1">
               <COMPANY />
               <FIRST_NAME>BBBB</fIRST_NAME>
               <LAST_NAME>BBBB</LAST_NAME>
               <MIDDLE_NAME>BBBB</MIDDLE_NAME>
               <SALUTATION />
            </NAMEINFO>
            <POID>0.0.0.1 /item/adjustment 298504 2</POID>
            <RELATED_ACTION_ITEM_OBJ>0.0.0.0 0 0</related_ACTION_ITEM_OBJ>
```



```
<RELATED_BILL_ITEM_OBJ>0.0.0.0 0 0</related_BILL_ITEM_OBJ>
            <RESOURCE_ID>840</RESOURCE_ID>
            <RESOURCE_IMPACTED>0</RESOURCE_IMPACTED>
            <TRANSFERED>-0.5</TRANSFERED>
         </RESULTS>
         <RESULTS elem="2">
            <account_no>0.0.0.1-295570</account_no>
            <account_OBJ>0.0.0.1 /account 295570 9</account_OBJ>
            <ADJUSTMENT_TYPE>1</ADJUSTMENT_TYPE>
            <AGGREGATE_AMOUNTS elem="0">
               <ADJUSTED>0.5</ADJUSTED>
               <AMOUNT>9.95</AMOUNT>
               <DISCOUNT>0</DISCOUNT>
               <RESOURCE ID>840</RESOURCE ID>
            </AGGREGATE AMOUNTS>
            <ALLOCATED>0.5</ALLOCATED>
            <CREATED_T>2010-01-19T17:39:39Z</CREATED_T>
            <DUE>0</DUE>
            <EFFECTIVE_T>2014-11-01T07:04:53Z</EFFECTIVE_T>
            <EVENTS elem="0">
               <DESCR />
               <POID>0.0.0.1 /event/billing/adjustment/event 257338497458017832 0</
POID>
            </EVENTS>
            <TTEM_NO>A1-25</TTEM_NO>
            <ITEM_TOTAL>0.5</ITEM_TOTAL>
            <NAME>Adjustment</NAME>
            <NAMEINFO elem="1">
               <COMPANY />
               <FIRST_NAME>BBBB</FIRST_NAME>
               <LAST_NAME>BBBB</LAST_NAME>
               <MIDDLE_NAME>BBBB</MIDDLE_NAME>
               <SALUTATION />
            </NAMEINFO>
            <POID>0.0.0.1 /item/adjustment 301608 2</POID>
            <RELATED ACTION ITEM OBJ>0.0.0.0 0 0
O
RELATED ACTION ITEM OBJ>
            <RELATED_BILL_ITEM_OBJ>0.0.0.0 0 0</related_BILL_ITEM_OBJ>
            <RESOURCE_ID>840</RESOURCE_ID>
            <RESOURCE_IMPACTED>0</RESOURCE_IMPACTED>
            <TRANSFERED>0.5</TRANSFERED>
         </RESULTS>
         <RESULTS elem="0">
            <account_no>0.0.0.1-295570</account_no>
            <ACCOUNT_OBJ>0.0.0.1 /account 295570 9</ACCOUNT_OBJ>
            <AGGREGATE_AMOUNTS elem="0">
               <AMOUNT>9.95</AMOUNT>
               <AMOUNT_ADJUSTED>-0.1/AMOUNT_ADJUSTED>
               <DISCOUNT>0</DISCOUNT>
               <DISPUTED>-0.1</DISPUTED>
               <ORIG_DISPUTE_AMOUNT>-0.1/ORIG_DISPUTE_AMOUNT>
               <RESOURCE_ID>840</RESOURCE_ID>
            </AGGREGATE_AMOUNTS>
            <ALLOCATED>-0.1</ALLOCATED>
            <CREATED_T>2010-01-19T17:44:47Z</CREATED_T>
            <DISPUTE_TYPE>1</DISPUTE_TYPE>
            <DUE>0</DUE>
            <EFFECTIVE_T>2014-11-01T07:09:55Z</EFFECTIVE_T>
            <EVENTS elem="0">
               <DESCR>Customer unaware of charges
               <POID>0.0.0.1 /event/billing/dispute/event 257338497458008954 0</POID>
            </EVENTS>
```

```
<ITEM_NO>D1-17</ITEM_NO>
            <TTEM_TOTAL>-0.1</TTEM_TOTAL>
            <NAME>Dispute</NAME>
            <NAMEINFO elem="1">
               <COMPANY />
               <FIRST_NAME>BBBB</FIRST_NAME>
               <LAST_NAME>BBBB</LAST_NAME>
               <MIDDLE_NAME>BBBB</MIDDLE_NAME>
               <SALUTATION />
            </NAMEINFO>
            <POID>0.0.0.1 /item/dispute 294266 2</POID>
            <RELATED_ACTION_ITEM_OBJ>0.0.0.1 /item/settlement 291066 0
RELATED_ACTION_ITEM_OBJ>
            <RELATED_BILL_ITEM_OBJ>0.0.0.1 /item/cycle_forward 295122 4
RELATED_BILL_ITEM_OBJ>
            <RESOURCE_ID>840</RESOURCE_ID>
            <RESOURCE_IMPACTED>0</RESOURCE_IMPACTED>
            <TRANSFERED>-0.1</TRANSFERED>
         </RESULTS>
      </pcmOpArGetActionItemsResponse>
   </S:Body>
</S:Envelope>
```

### pcmOpArGetBalSummary

This operation retrieves the unapplied, open bill due, pending bill due, and total dispute balances for an account's default bill unit (/billinfo object) or for a specified bill unit.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMARServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpArGetBalSummary request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpArGetBalSummaryRequest>
         <bus:PCM_OP_AR_GET_BAL_SUMMARY_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_AR_GET_BAL_SUMMARY_inputFlist>
               <bus:AR_BILLINFO_OBJ>0.0.0.1 /billinfo 295314 0/bus:AR_BILLINFO_OBJ>
               <bus:INCLUDE_CHILDREN>1</bus:INCLUDE_CHILDREN>
               <bus:POID>0.0.0.1 /account 295570 0</bus:POID>
            </bus:PCM_OP_AR_GET_BAL_SUMMARY_inputFlist>
         </bus:PCM_OP_AR_GET_BAL_SUMMARY_Request>
      </bus:pcmOpArGetBalSummaryRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

### Sample pcmOpArGetBalSummary response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpArGetBalSummaryResponse xmlns:brm="http://xmlns.oracle.com/BRM/schemas/</pre>
BusinessOpcodes">
         <AR_BILLINFO_OBJ>0.0.0.1 /billinfo 295314 0</AR_BILLINFO_OBJ>
         <BILLINFO_OBJ>0.0.0.1 /billinfo 295314 0</BILLINFO_OBJ>
         <BILL_OBJ>0.0.0.1 /bill 296338 0</BILL_OBJ>
         <COUNT>0</COUNT>
         <DISPUTED>0</DISPUTED>
         <DISPUTE_TYPE>0</DISPUTE_TYPE>
         <DUE>26.46</DUE>
         <DUE_T>2014-12-01T08:00:00Z</DUE_T>
         <ITEM_PENDING_FLAGS>0</ITEM_PENDING_FLAGS>
         <OPENBILL_DUE>26.46</OPENBILL_DUE>
         <PENDINGBILL_DUE>0</PENDINGBILL_DUE>
         <POID>0.0.0.1 /billinfo 295314 0</POID>
         <TOTAL_RECORDS>0</TOTAL_RECORDS>
         <UNAPPLIED_AMOUNT>0</UNAPPLIED_AMOUNT>
      </pcmOpArGetBalSummaryResponse>
   </S:Body>
</S:Envelope>
```

### pcmOpArGetBillItems

This operation returns the bill items for a bill unit (/billinfo object) or a bill.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### URI

https://hostname/BrmWebServices/BRMARServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpArGetBillItems request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpArGetBillItemsRequest>
         <bus:PCM_OP_AR_GET_BILL_ITEMS_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_AR_GET_BILL_ITEMS_inputFlist>
               <bus:AR_BILLINFO_OBJ>0.0.0.1 /billinfo_295314_0/bus:AR_BILLINFO_OBJ>
               <bus:FLAGS>0</bus:FLAGS>
               <bus:INCLUDE_CHILDREN>1/bus:INCLUDE_CHILDREN>
               <bus:POID>0.0.0.1 /account 295570 0</bus:POID>
            </bus:PCM_OP_AR_GET_BILL_ITEMS_inputFlist>
         </bus:PCM_OP_AR_GET_BILL_ITEMS_Request>
      </bus:pcmOpArGetBillItemsRequest>
   </soapenv:Body>
</soapenv:Envelope>
```



#### Sample pcmOpArGetBillItems response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpArGetBillItemsResponse xmlns:brm="http://xmlns.oracle.com/BRM/schemas/</pre>
BusinessOpcodes">
         <POID>0.0.0.1 /search -1 0</POID>
         <RESULTS elem="0">
            <account_no>0.0.0.1-295570</account_no>
            <ACCOUNT_OBJ>0.0.0.1 /account 295570 0</ACCOUNT_OBJ>
            <ADJUSTED>0</ADJUSTED>
            <AMOUNT>0</AMOUNT>
            <AR_BILLINFO_OBJ>0.0.0.1 /billinfo 295314 0</AR_BILLINFO_OBJ>
            <AR_BILL_OBJ>0.0.0.0 0 0</AR_BILL_OBJ>
            <BAL_GRP_OBJ>0.0.0.1 /balance_group 295826 0</BAL_GRP_OBJ>
            <BILLINFO_OBJ>0.0.0.1 /billinfo 295314 0</BILLINFO_OBJ>
            <BILL_OBJ>0.0.0.1 /bill 296498 0</BILL_OBJ>
            <DISCOUNT>0</DISCOUNT>
            <DISPUTED>0</DISPUTED>
            <DUE>0</DUE>
            <EFFECTIVE_T>1970-01-01T00:00:00Z</EFFECTIVE_T>
            <ITEM_NO />
            <TTEM_TOTAL>0</TTEM_TOTAL>
            <NAME>Usage</NAME>
            <NAMEINFO elem="1">
               <COMPANY />
               <FIRST_NAME>BBBB</FIRST_NAME>
               <LAST NAME>BBBB</LAST NAME>
               <MIDDLE_NAME>BBBB</MIDDLE_NAME>
               <SALUTATION />
            </NAMEINFO>
            <POID>0.0.0.1 /item/misc 298546 0</POID>
            <RECVD>0</RECVD>
            <SERVICE_OBJ>0.0.0.0 0 0</SERVICE_OBJ>
            <TRANSFERED>0</TRANSFERED>
            <WRITEOFF>0</WRITEOFF>
         </RESULTS>
         <RESULTS elem="1">
            <ACCOUNT_NO>0.0.1-295570</ACCOUNT_NO>
            <ACCOUNT OBJ>0.0.0.1 /account 295570 0</ACCOUNT OBJ>
            <ADJUSTED>0</ADJUSTED>
            <AMOUNT>0</AMOUNT>
            <AR_BILLINFO_OBJ>0.0.0.1 /billinfo 295314 0</AR_BILLINFO_OBJ>
            <AR_BILL_OBJ>0.0.0.1 /bill 297362 0</AR_BILL_OBJ>
            <BAL_GRP_OBJ>0.0.0.1 /balance_group 295826 0</BAL_GRP_OBJ>
            <BILLINFO_OBJ>0.0.0.1 /billinfo 295314 0</BILLINFO_OBJ>
            <BILL_OBJ>0.0.0.1 /bill 297362 0</BILL_OBJ>
            <DISCOUNT>0</DISCOUNT>
            <DISPUTED>0</DISPUTED>
            <DUE>0</DUE>
            <EFFECTIVE_T>2014-11-01T07:00:00Z</EFFECTIVE_T>
            <ITEM_NO>B1-33,1</ITEM_NO>
            <TTEM_TOTAL>0</TTEM_TOTAL>
            <NAME>Usage</NAME>
            <POID>0.0.0.1 /item/misc 296850 0</POID>
            <RECVD>0</RECVD>
            <SERVICE_OBJ>0.0.0.0 0 0</SERVICE_OBJ>
            <TRANSFERED>0</TRANSFERED>
            <WRITEOFF>0</WRITEOFF>
         </RESULTS>
```



```
<RESULTS elem="2">
   <account_no>0.0.0.1-295570</account_no>
   <ACCOUNT_OBJ>0.0.0.1 /account 295570 4</ACCOUNT_OBJ>
   <ADJUSTED>-0.1</ADJUSTED>
   <AMOUNT>20.56</AMOUNT>
   <AR_BILLINFO_OBJ>0.0.0.1 /billinfo 295314 0</AR_BILLINFO_OBJ>
   <AR_BILL_OBJ>0.0.0.1 /bill 297362 0</AR_BILL_OBJ>
   <BAL_GRP_OBJ>0.0.0.1 /balance_group 295826 2</BAL_GRP_OBJ>
   <BILLINFO_OBJ>0.0.0.1 /billinfo 295314 0</BILLINFO_OBJ>
   <BILL_OBJ>0.0.0.1 /bill 297362 0</BILL_OBJ>
   <DISCOUNT>0</DISCOUNT>
   <DISPUTED>0</DISPUTED>
   <DUE>20.46</DUE>
   <EFFECTIVE T>2014-11-01T07:00:00Z</EFFECTIVE T>
   <TTEM_NO>B1-33,3</TTEM_NO>
   <ITEM_TOTAL>20.56</ITEM_TOTAL>
   <LOGIN>user@example.com</LOGIN>
   <NAME>Cycle forward</NAME>
   <POID>0.0.0.1 /item/cycle_forward 295122 6</POID>
   <RECVD>0</RECVD>
   <SERVICE_OBJ>0.0.0.1 /service/ip 295762 0</SERVICE_OBJ>
   <TRANSFERED>0</TRANSFERED>
   <WRITEOFF>0</WRITEOFF>
</RESULTS>
<RESULTS elem="3">
   <ACCOUNT_NO>0.0.1-295570</ACCOUNT_NO>
   <account_OBJ>0.0.0.1 /account 295570 4</account_OBJ>
   <ADJUSTED>0</ADJUSTED>
   <AMOUNT>6</AMOUNT>
   <AR_BILLINFO_OBJ>0.0.0.1 /billinfo 295314 0</AR_BILLINFO_OBJ>
   <AR_BILL_OBJ>0.0.0.1 /bill 297362 0</AR_BILL_OBJ>
   <BAL_GRP_OBJ>0.0.0.1 /balance_group 295826 1</BAL_GRP_OBJ>
   <BILLINFO_OBJ>0.0.0.1 /billinfo 295314 0</BILLINFO_OBJ>
   <BILL_OBJ>0.0.0.1 /bill 297362 0</BILL_OBJ>
   <DISCOUNT>0</DISCOUNT>
   <DISPUTED>0</DISPUTED>
   <DUE>6</DUE>
   <EFFECTIVE_T>2014-11-01T07:00:00Z</EFFECTIVE_T>
   <ITEM_NO>B1-33,2</ITEM_NO>
   <TTEM_TOTAL>6</TTEM_TOTAL>
   <LOGIN>user@example.com</LOGIN>
   <NAME>Cycle forward</NAME>
   <POID>0.0.0.1 /item/cycle_forward 296530 2</POID>
   <RECVD>0</RECVD>
   <SERVICE_OBJ>0.0.0.1 /service/email 296018 0</SERVICE_OBJ>
   <TRANSFERED>0</TRANSFERED>
   <WRITEOFF>0</WRITEOFF>
</RESULTS>
<RESULTS elem="4">
   <account_no>0.0.0.1-295570</account_no>
   <account_OBJ>0.0.0.1 /account 295570 0</account_OBJ>
   <ADJUSTED>0</ADJUSTED>
   <AMOUNT>0</AMOUNT>
   <AR_BILLINFO_OBJ>0.0.0.1 /billinfo 295314 0</AR_BILLINFO_OBJ>
   <AR_BILL_OBJ>0.0.0.0 0 0</AR_BILL_OBJ>
   <BAL_GRP_OBJ>0.0.0.1 /balance_group 295826 0</BAL_GRP_OBJ>
   <BILLINFO_OBJ>0.0.0.1 /billinfo 295314 0</BILLINFO_OBJ>
   <BILL_OBJ>0.0.0.1 /bill 296338 0</BILL_OBJ>
   <DISCOUNT>0</DISCOUNT>
   <DISPUTED>0</DISPUTED>
   <DUE>0</DUE>
```

### pcmOpArGetBills

This operation returns a list of bills for a specified bill unit (**/billinfo** object) or bill. You can specify search criteria in the operation's input.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMARServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpArGetBills request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpArGetBillsRequest>
         <bus:PCM_OP_AR_GET_BILLS_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_AR_GET_BILLS_inputFlist>
               <bus:AR_BILLINFO_OBJ>0.0.0.1 /billinfo 295314 0/bus:AR_BILLINFO_OBJ>
               <bus:INCLUDE_CHILDREN>1</bus:INCLUDE_CHILDREN>
               <bus:POID>0.0.0.1 /bill 297362 7/bus:POID>
            </bus:PCM_OP_AR_GET_BILLS_inputFlist>
         </bus:PCM_OP_AR_GET_BILLS_Request>
      </bus:pcmOpArGetBillsRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

### Sample pcmOpArGetBills response



```
<CLOSED_T>1970-01-01T00:00:00Z</CLOSED_T>
           <CREATED_T>2010-01-19T17:33:05Z</CREATED_T>
           <CURRENT_TOTAL>26.56</CURRENT_TOTAL>
           <DISPUTED>0</DISPUTED>
           <DUE>26.46</DUE>
           <DUE_T>2014-12-01T08:00:00Z</DUE_T>
           <END_T>2014-11-01T07:00:00Z</END_T>
           <NAME>PIN Bill</NAME>
           <PARENT>0.0.0.0 0 0
           <POID>0.0.0.1 /bill 297362 7</POID>
           <PREVIOUS_TOTAL>0</PREVIOUS_TOTAL>
           <RECVD>0</RECVD>
           <START_T>2014-09-29T07:00:00Z</START_T>
           <SUBORDS TOTAL>0</SUBORDS TOTAL>
           <TOTALS>26.56</TOTALS>
           <TRANSFERED>0</TRANSFERED>
           <WRITEOFF>0</WRITEOFF>
        </RESULTS>
     </pcmOpArGetBillsResponse>
  </S:Body>
</S:Envelope>
```

### pcmOpArGetDisputeDetails

This operation retrieves all the item disputes (<code>/event/billing/dispute/item</code> objects) and event disputes (<code>/event/billing/dispute/event</code> objects) for a specified bill unit (<code>/billinfo</code> object). If you specify an account instead, this operation returns the event and item disputes for the account's default bill unit. You can specify the status of the dispute items to search for in the operation's input.

For each disputed event, the operation returns the currently available amount of every balance associated with the event.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### URI

https://hostname/BrmWebServices/BRMARServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpArGetDisputeDetails request



```
</soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpArGetDisputeDetails response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpArGetDisputeDetailsResponse xmlns:brm="http://xmlns.oracle.com/BRM/</pre>
schemas/BusinessOpcodes">
         <POID>0.0.0.1 /billinfo 295314 0</POID>
         <RESULTS elem="0">
            <ACCOUNT_NO>0.0.1-295570</ACCOUNT_NO>
            <ACCOUNT_OBJ>0.0.0.1 /account 295570 4</ACCOUNT_OBJ>
            <ADJUSTED>-0.1</ADJUSTED>
            <AR_BILLINFO_OBJ>0.0.0.1 /billinfo 295314 0</AR_BILLINFO_OBJ>
            <AR_BILL_OBJ>0.0.0.1 /bill 297362 0</AR_BILL_OBJ>
            <BILLINFO_OBJ>0.0.0.1 /billinfo 295314 0</BILLINFO_OBJ>
            <BILL_OBJ>0.0.0.1 /bill 297362 0</BILL_OBJ>
            <CLOSED_T>1970-01-01T00:00:00Z</CLOSED_T>
            <CREATED_T>2010-01-19T17:33:06Z</CREATED_T>
            <CURRENCY>840</CURRENCY>
            <CURRENCY_SECONDARY>0</CURRENCY_SECONDARY>
            <DISPUTED>0</DISPUTED>
            <DUE>20.46</DUE>
            <DUE_T>2014-12-01T08:00:00Z</DUE_T>
            <EFFECTIVE_T>2014-11-01T07:00:00Z</EFFECTIVE_T>
            <TEM_NO>B1-33,3</ITEM_NO>
            <TTEM_TOTAL>20.56</TTEM_TOTAL>
            <MOD T>2010-01-19T17:48:05Z</mod T>
            <NAME>Cycle forward</NAME>
            <NAMEINFO elem="1">
               <COMPANY />
               <FIRST_NAME>BBBB</FIRST_NAME>
               <LAST_NAME>BBBB</LAST_NAME>
               <MIDDLE_NAME>BBBB</MIDDLE_NAME>
               <SALUTATION />
            </NAMEINFO>
            <POID>0.0.0.1 /item/cycle_forward 295122 6</POID>
            <RECVD>0</RECVD>
            <SERVICE_OBJ>0.0.0.1 /service/ip 295762 0</SERVICE_OBJ>
            <STATUS>2</STATUS>
            <TAX>0</TAX>
            <TRANSFERED>0</TRANSFERED>
            <TRANSFERS_INTO elem="0">
               <ALLOCATED>0</ALLOCATED>
               <DESCR>Setteltment through web sevice</DESCR>
               <END_T>2014-11-01T07:13:19Z</END_T>
               <EVENTS elem="0">
                  <DESCR>Setteltment through web sevice</DESCR>
                  <POID>0.0.0.1 /event/billing/settlement/event 257338497458010362
0</POID>
               </FVENTS>
               <EVENT_OBJ>0.0.0.1 /event/billing/settlement/event 257338497458010362
0</EVENT_OBJ>
               <TTEM_NO>S1-9</TTEM_NO>
               <ITEM_OBJ>0.0.0.1 /item/settlement 291066 0</ITEM_OBJ>
               <POID>0.0.0.1 /event/billing/item/transfer 257338497458008826 0</POID>
               <RELATED_ACTION_ITEM_OBJ>0.0.0.0 0 0</related_ACTION_ITEM_OBJ>
               <RESOURCE_ID>840</RESOURCE_ID>
               <RESOURCE_IMPACTED>0</RESOURCE_IMPACTED>
               <SETTLEMENT_TYPE>1</SETTLEMENT_TYPE>
```

```
<SYS_DESCR>Item Transfer (misc)</SYS_DESCR>
               <TRANSFERED>0</TRANSFERED>
            </TRANSFERS_INTO>
            <TRANSFERS OUT elem="0">
               <account_no>0.0.0.1-295570</account_no>
               <account_OBJ>0.0.0.1 /account 295570 9</account_OBJ>
               <AGGREGATE_AMOUNTS elem="0">
                  <ALLOCATED>9.85</ALLOCATED>
                  <AMOUNT>9.95</AMOUNT>
                  <DISCOUNT>0</DISCOUNT>
                  <DISPUTED>-0.1</DISPUTED>
                  <RESOURCE_ID>840</RESOURCE_ID>
               </AGGREGATE_AMOUNTS>
               <ALLOCATED>-0.1</ALLOCATED>
               <CREATED T>2010-01-19T17:44:47Z</CREATED T>
               <DESCR>Customer unaware of charges
               <DISPUTE_TYPE>1</DISPUTE_TYPE>
               <DUE>0</DUE>
               <EFFECTIVE_T>2014-11-01T07:09:55Z</EFFECTIVE_T>
               <EVENTS elem="0">
                  <DESCR>Customer unaware of charges
                  <POID>0.0.0.1 /event/billing/dispute/event 257338497458008954 0</
POID>
               <EVENT_OBJ>0.0.0.1 /event/billing/dispute/event 257338497458008954 0</
EVENT OBJ>
               <TTEM_NO>D1-17</TTEM_NO>
               <TTEM_TOTAL>-0.1</TTEM_TOTAL>
               <NAME>Dispute</NAME>
               <NAMEINFO elem="1">
                  <COMPANY />
                  <FIRST_NAME>BBBB</FIRST_NAME>
                  <LAST_NAME>BBBB</LAST_NAME>
                  <MIDDLE_NAME>BBBB</MIDDLE_NAME>
                  <SALUTATION />
               </NAMEINFO>
               <POID>0.0.0.1 /item/dispute 294266 2</POID>
               <RELATED_ACTION_ITEM_OBJ>0.0.0.1 /item/settlement 291066 0
RELATED_ACTION_ITEM_OBJ>
               <RELATED_BILL_ITEM_OBJ>0.0.0.1 /item/cycle_forward 295122 4
RELATED_BILL_ITEM_OBJ>
               <RESOURCE_ID>840</RESOURCE_ID>
               <RESOURCE_IMPACTED>0</RESOURCE_IMPACTED>
               <TRANSFERED>-0.1</TRANSFERED>
            </TRANSFERS_OUT>
            <WRITEOFF>0</WRITEOFF>
         </RESULTS>
      </pcmOpArGetDisputeDetailsResponse>
   </S:Bodv>
</S:Envelope>
```

### pcmOpArGetDisputes

This operation returns details about dispute items for a specified bill unit (/billinfo object). If you specify an account instead, the operation returns details about dispute items for the account's default bill unit. You can specify the status of the dispute items to search for in the operation's input.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMARServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpArGetDisputes request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpArGetDisputesRequest>
         <bus:PCM OP AR GET DISPUTES Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_AR_GET_DISPUTES_inputFlist>
               <bus:AR_ACCOUNT_OBJ>0.0.0.1 /account 295570 0</bus:AR_ACCOUNT_OBJ>
               <bus:AR_BILLINFO_OBJ>0.0.0.1 /billinfo 295314 0/bus:AR_BILLINFO_OBJ>
               <bus:INCLUDE_CHILDREN>1</bus:INCLUDE_CHILDREN>
               <bus:POID>0.0.0.1 /account 295570 0</bus:POID>
            </bus:PCM_OP_AR_GET_DISPUTES_inputFlist>
         </bus:PCM_OP_AR_GET_DISPUTES_Request>
      </bus:pcmOpArGetDisputesRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpArGetDisputes response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpArGetDisputesResponse xmlns:brm="http://xmlns.oracle.com/BRM/schemas/</pre>
BusinessOpcodes">
         <POID>0.0.0.1 /billinfo 292946 0</POID>
         <RESULTS elem="0">
            <ACCOUNT_NO>TEST_ACC</ACCOUNT_NO>
            <ACCOUNT_OBJ>0.0.0.1 /account 293778 4</ACCOUNT_OBJ>
            <ADJUSTED>-0.5</ADJUSTED>
            <AR_BILLINFO_OBJ>0.0.0.1 /billinfo 292946 0</AR_BILLINFO_OBJ>
            <AR_BILL_OBJ>0.0.0.1 /bill 297084 0</AR_BILL_OBJ>
            <BILLINFO_OBJ>0.0.0.1 /billinfo 292946 0</BILLINFO_OBJ>
            <BILL_OBJ>0.0.0.1 /bill 297084 0</BILL_OBJ>
            <CLOSED_T>2010-07-01T00:00:00Z</CLOSED_T>
            <CREATED_T>2010-01-13T21:38:12Z</CREATED_T>
            <CURRENCY>840</CURRENCY>
            <CURRENCY_SECONDARY>0</CURRENCY_SECONDARY>
            <DISPUTED>-0.5</DISPUTED>
            <DUE>8.95</DUE>
            <DUE_T>2010-04-23T11:59:16Z</DUE_T>
            <EFFECTIVE_T>2010-04-24T11:59:16Z</EFFECTIVE_T>
            <TTEM_NO>B1-10,1</TTEM_NO>
            <ITEM_TOTAL>9.95</ITEM_TOTAL>
            <MOD_T>2010-06-30T21:38:48Z</MOD_T>
            <NAME>Cycle forward</NAME>
            <NAMEINFO elem="1">
               <COMPANY />
               <FIRST_NAME>John/FIRST_NAME>
               <LAST_NAME>Smith</LAST_NAME>
               <MIDDLE_NAME>James</MIDDLE_NAME>
               <SALUTATION>Mr.</SALUTATION>
            </NAMEINFO>
```



```
<POID>0.0.0.1 /item/cycle_forward 293330 6</POID>
            <RECVD>0</RECVD>
            <SERVICE_OBJ>0.0.0.1 /service/ip 293586 0</SERVICE_OBJ>
            <STATUS>2</STATUS>
            <TAX>0</TAX>
            <TRANSFERED>0</TRANSFERED>
            <TRANSFERS_OUT elem="0">
               <ACCOUNT_NO>TEST_ACC</ACCOUNT_NO>
               <ACCOUNT_OBJ>0.0.0.1 /account 293778 12</ACCOUNT_OBJ>
               <ALLOCATED>-0.5</ALLOCATED>
               <CREATED_T>2010-01-13T21:38:48Z</CREATED_T>
               <DESCR>Customer unhappy with charges
               <DISPUTE_TYPE>0</DISPUTE_TYPE>
               <DUE>0</DUE>
               <EFFECTIVE T>2014-09-23T11:59:40Z</EFFECTIVE T>
               <EVENT_OBJ>0.0.0.1 /event/billing/dispute/item 257232944341741841 0</
EVENT_OBJ>
               <ITEM_NO>D1-15</ITEM_NO>
               <TTEM_TOTAL>-0.5</TTEM_TOTAL>
               <NAME>Dispute</NAME>
               <NAMEINFO elem="1">
                  <COMPANY />
                  <FIRST_NAME>John/FIRST_NAME>
                  <LAST_NAME>Smith</LAST_NAME>
                  <MIDDLE_NAME>James</MIDDLE_NAME>
                  <SALUTATION>Mr.</SALUTATION>
               </NAMETNEO>
               <POID>0.0.0.1 /item/dispute 294417 3</POID>
               <RELATED_ACTION_ITEM_OBJ>0.0.0.0 0 0</related_ACTION_ITEM_OBJ>
               <RELATED_BILL_ITEM_OBJ>0.0.0.1 /item/cycle_forward 293330 5
RELATED_BILL_ITEM_OBJ>
               <RESOURCE_ID>840</RESOURCE_ID>
               <RESOURCE_IMPACTED>0</RESOURCE_IMPACTED>
               <TRANSFERED>-0.5</TRANSFERED>
            </TRANSFERS_OUT>
            <WRITEOFF>0</WRITEOFF>
         </RESULTS>
      </pcmOpArGetDisputesResponse>
   </S:Body>
</S:Envelope>
```

## pcmOpArGetItemDetail

This operation returns the details of an item object. You can specify an item or an item transfer event (*levent/billing/item/transfer* object) in the input POID parameter. Transfer events contain information about the transfer of balance elements between items.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMARServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpArGetItemDetail request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpArGetItemDetailRequest>
         <bus:PCM_OP_AR_GET_ITEM_DETAIL_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_AR_GET_ITEM_DETAIL_inputFlist>
               <bus:POID>0.0.0.1 /item/dispute 294266 2</bus:POID>
            </bus:PCM_OP_AR_GET_ITEM_DETAIL_inputFlist>
         </bus:PCM_OP_AR_GET_ITEM_DETAIL_Request>
      </bus:pcmOpArGetItemDetailRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpArGetItemDetail response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpArGetItemDetailResponse xmlns:brm="http://xmlns.oracle.com/BRM/schemas/</pre>
BusinessOpcodes">
         <POID>0.0.0.1 /item/dispute 294266 2</POID>
         <RESULTS elem="0">
            <ACCOUNT_NO>0.0.1-295570</ACCOUNT_NO>
            <account_obj>0.0.0.1 /account 295570 9</account_obj>
            <ADJUSTED>0</ADJUSTED>
            <AR_BILLINFO_OBJ>0.0.0.1 /billinfo 295314 2</AR_BILLINFO_OBJ>
            <AR BILL OBJ>0.0.0.0 0 0</AR BILL OBJ>
            <BILLINFO_OBJ>0.0.0.1 /billinfo 295314 0</BILLINFO_OBJ>
            <BILL_OBJ>0.0.0.0 0 0</BILL_OBJ>
            <CLOSED_T>2014-11-01T07:10:01Z</CLOSED_T>
            <CREATED_T>2010-01-19T17:44:47Z</CREATED_T>
            <CURRENCY>840</CURRENCY>
            <CURRENCY_SECONDARY>0</CURRENCY_SECONDARY>
            <DESCR>Customer unaware of charges
            <DISPUTED>0</DISPUTED>
            <DISPUTE_TYPE>1</DISPUTE_TYPE>
            <DUE>0</DUE>
            <DUE_T>1970-01-01T00:00:00Z</DUE_T>
            <EFFECTIVE T>2014-11-01T07:09:55Z</EFFECTIVE T>
            <EVENTS elem="0">
               <DESCR>Customer unaware of charges
               <POID>0.0.0.1 /event/billing/dispute/event 257338497458008954 0</POID>
            </EVENTS>
            <EVENT_OBJ>0.0.0.1 /event/billing/dispute/event 257338497458008954 0</
EVENT_OBJ>
            <ITEM_NO>D1-17</ITEM_NO>
            <ITEM_TOTAL>-0.1</ITEM_TOTAL>
            <MOD_T>2010-01-19T17:44:47Z</mod_T>
            <NAME>Dispute</NAME>
            <NAMEINFO elem="1">
               <COMPANY />
               <FIRST_NAME>BBBB</FIRST_NAME>
               <LAST_NAME>BBBB</LAST_NAME>
               <MIDDLE_NAME>BBBB</MIDDLE_NAME>
               <SALUTATION />
            </NAMEINFO>
            <POID>0.0.0.1 /item/dispute 294266 2</POID>
```

### pcmOpArGetItems

This operation returns the details of an item object. Aggregated amounts are returned for billable and action items. You can specify an item or an item transfer event (*levent/billing/item/transfer* object) in the input POID parameter. Transfer events contain information about the transfer of balance elements between items.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### URI

https://hostname/BrmWebServices/BRMARServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpArGetItems request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpArGetItemsRequest>
         <bus:PCM_OP_AR_GET_ITEMS_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_AR_GET_ITEMS_inputFlist>
               <bus:POID>0.0.0.1 /item/cycle_forward 293330 0</bus:POID>
               <bus:RELATED_ACTION_ITEM_OBJ>0.0.0.1 /item/cycle_forward 293330 0
bus: RELATED ACTION ITEM OBJ>
               <bus:RELATED_BILL_ITEM_OBJ>0.0.0.1 /item/cycle_forward 293330 0
bus:RELATED_BILL_ITEM_OBJ>
            </bus:PCM_OP_AR_GET_ITEMS_inputFlist>
         </bus:PCM_OP_AR_GET_ITEMS_Request>
      </bus:pcmOpArGetItemsRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpArGetItems response



```
<ACCOUNT_NO>TEST_ACC</ACCOUNT_NO>
            <ACCOUNT_OBJ>0.0.0.1 /account 293778 4</ACCOUNT_OBJ>
            <ADJUSTED>-0.5</ADJUSTED>
            <AR_BILLINFO_OBJ>0.0.0.1 /billinfo 292946 0</AR_BILLINFO_OBJ>
            <AR_BILL_OBJ>0.0.0.1 /bill 297084 0</AR_BILL_OBJ>
            <BILLINFO_OBJ>0.0.0.1 /billinfo 292946 0</BILLINFO_OBJ>
            <BILL_OBJ>0.0.0.1 /bill 297084 0</BILL_OBJ>
            <CLOSED_T>1970-01-01T00:00:00Z</CLOSED_T>
            <CREATED_T>2010-01-13T21:38:12Z</CREATED_T>
            <CURRENCY>840</CURRENCY>
            <CURRENCY_SECONDARY>0</CURRENCY_SECONDARY>
            <DISPUTED>0</DISPUTED>
            <DUE>9.45</DUE>
            <DUE T>2014-10-23T11:59:16Z</DUE T>
            <EFFECTIVE_T>2014-09-23T11:59:16Z</EFFECTIVE_T>
            <TEM_NO>B1-10,1</TEM_NO>
            <TTEM_TOTAL>9.95</TTEM_TOTAL>
            <MOD_T>2010-01-13T21:38:45Z</MOD_T>
            <NAME>Cycle forward</NAME>
            <NAMEINFO elem="1">
               <COMPANY />
               <FIRST_NAME>John/FIRST_NAME>
               <LAST_NAME>Smith</LAST_NAME>
               <MIDDLE_NAME>James</MIDDLE_NAME>
               <SALUTATION>Mr.</SALUTATION>
            </NAMEINFO>
            <POID>0.0.0.1 /item/cycle_forward 293330 5</POID>
            <RECVD>0</RECVD>
            <SERVICE_OBJ>0.0.0.1 /service/ip 293586 0</SERVICE_OBJ>
            <STATUS>2</STATUS>
            <TAX>0</TAX>
            <TRANSFERED>0</TRANSFERED>
            <TRANSFERS_INTO elem="0">
               <ACCOUNT_NO>TEST_ACC</ACCOUNT_NO>
               <ACCOUNT_OBJ>0.0.0.1 /account 293778 12</ACCOUNT_OBJ>
               <aDJUSTMENT_TYPE>0</aDJUSTMENT_TYPE>
               <ALLOCATED>-0.5</ALLOCATED>
               <CREATED_T>2010-01-13T21:38:44Z</CREATED_T>
               <DESCR>Customer unaware of charges
               <DUE>0</DUE>
               <EFFECTIVE_T>2014-09-23T11:59:36Z</EFFECTIVE_T>
               <EVENT_OBJ>0.0.0.1 /event/billing/adjustment/item 257232944341743405
0</EVENT_OBJ>
               <TTEM_NO>A1-16</TTEM_NO>
               <TTEM_TOTAL>-0.5</TTEM_TOTAL>
               <NAME>Adjustment</NAME>
               <NAMEINFO elem="1">
                  <COMPANY />
                  <FIRST_NAME>SOAP_UI_Update_Customer
                  <LAST_NAME>SOAP_UI_Update_Customer</LAST_NAME>
                  <MIDDLE_NAME>SOAP_UI_Update_Customer
                  <SALUTATION>Mr.</SALUTATION>
               </NAMEINFO>
               <POID>0.0.0.1 /item/adjustment 293677 3</POID>
               <RELATED_ACTION_ITEM_OBJ>0.0.0.0 0 0</related_ACTION_ITEM_OBJ>
               <RELATED_BILL_ITEM_OBJ>0.0.0.0 0 0</relateD_BILL_ITEM_OBJ>
               <RESOURCE_ID>840</RESOURCE_ID>
               <RESOURCE_IMPACTED>0</RESOURCE_IMPACTED>
               <TRANSFERED>-0.5</TRANSFERED>
            </TRANSFERS_INTO>
            <WRITEOFF>0</WRITEOFF>
```

```
</RESULTS>
</pcmOpArGetItemsResponse>
</S:Body>
</S:Envelope>
```

### pcmOpArItemAdjustment

This operation adjusts an item's deferred or due amount.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### URI

https://hostname/BrmWebServices/BRMARServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpArItemAdjustment request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpArItemAdjustmentRequest>
         <bus:PCM_OP_AR_ITEM_ADJUSTMENT_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_AR_ITEM_ADJUSTMENT_inputFlist>
               <bus: AMOUNT>-1</bus: AMOUNT>
               <bus:CURRENCY>840</pus:CURRENCY>
               <bus:ITEM_OBJ>0.0.0.1 /item/misc 298546 0</bus:ITEM_OBJ>
               <bus:POID>0.0.0.1 /account 295570 4</bus:POID>
               <bus:PROGRAM_NAME>web services
            </bus:PCM_OP_AR_ITEM_ADJUSTMENT_inputFlist>
         </bus:PCM_OP_AR_ITEM_ADJUSTMENT_Request>
      </bus:pcmOpArItemAdjustmentRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpArItemAdjustment response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpArItemAdjustmentResponse xmlns:brm="http://xmlns.oracle.com/BRM/schemas/</pre>
BusinessOpcodes">
         <POID>0.0.0.1 /item/misc 298546 5</POID>
         <DESCR>Successful</DESCR>
         <RESULT elem="0">
            <POID>0.0.0.1 /event/billing/adjustment/item 220025470857536632 0</POID>
         </RESULT>
         <RESULT elem="0">
            <POID>0.0.0.1 /event/billing/item/transfer 220025470857536120 0</POID>
            <POID>0.0.0.1 /account 295570 4</POID>
         </RESULT>
         <RESULT>3</RESULT>
      </pcmOpArItemAdjustmentResponse>
   </S:Body>
</S:Envelope>
```



## pcmOpArItemDispute

This operation creates a dispute against an item's deferred or due amount.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

```
https://hostname/BrmWebServices/BRMARServices_v2/
```

where hostname is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpArItemDispute request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpArItemDisputeRequest>
         <bus:PCM_OP_AR_ITEM_DISPUTE_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_AR_ITEM_DISPUTE_inputFlist>
               <bus: AMOUNT>-0.5</bus: AMOUNT>
               <bus:CURRENCY>840/bus:CURRENCY>
               <bus:DESCR>Opening item dispute for cycle forward/bus:DESCR>
               <bus:POID>0.0.0.1 /item/cycle_forward 293330 0</bus:POID>
               <bus:PROGRAM_NAME>SoapWebServices
PROGRAM_NAME>
            </bus:PCM_OP_AR_ITEM_DISPUTE_inputFlist>
         </bus:PCM_OP_AR_ITEM_DISPUTE_Request>
      </bus:pcmOpArItemDisputeRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpArItemDispute response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpArItemDisputeResponse xmlns:brm="http://xmlns.oracle.com/BRM/schemas/</pre>
BusinessOpcodes">
         <DESCR>Succeeded</DESCR>
         <POID>0.0.0.1 /item/cycle_forward 293330 0</POID>
         <RESULT>1
         <RESULTS elem="0">
            <ACCOUNT_OBJ>0.0.0.1 /account 293778 4</ACCOUNT_OBJ>
            <BAL_IMPACTS elem="0">
               <ACCOUNT_OBJ>0.0.0.1 /account 293778 4</ACCOUNT_OBJ>
               <AMOUNT>-0.5</AMOUNT>
               <AMOUNT DEFERRED>0</AMOUNT DEFERRED>
               <AMOUNT_ORIG />
               <BAL_GRP_OBJ>0.0.0.1 /balance_group 293458 2</BAL_GRP_OBJ>
               <DISCOUNT>0</DISCOUNT>
               <GL_ID>107</GL_ID>
               <IMPACT_TYPE>2</IMPACT_TYPE>
               <ITEM_OBJ>0.0.0.1 /item/dispute 300204 0</ITEM_OBJ>
               <PERCENT>0</PERCENT>
               <QUANTITY>0</QUANTITY>
               <RATE_OBJ>0.0.0.0 0 0</RATE_OBJ>
               <RATE_TAG />
```



```
<RESOURCE_ID>840</RESOURCE_ID>
               <RESOURCE_ID_ORIG>0</RESOURCE_ID_ORIG>
               <TAX_CODE />
            </BAL IMPACTS>
            <POID>0.0.0.1 /event/billing/dispute/item 257232944341753004 0</POID>
            <SUB_BAL_IMPACTS elem="0">
               <BAL_GRP_OBJ>0.0.0.1 /balance_group 293458 10</BAL_GRP_OBJ>
               <RESOURCE_ID>840</RESOURCE_ID>
               <SUB_BALANCES elem="0">
                  <AMOUNT>-0.5</AMOUNT>
                  <CONTRIBUTOR_STR />
                  <GRANTOR_OBJ>0.0.0.1 /purchased_product 292690 0</GRANTOR_OBJ>
                  <ROLLOVER_DATA>0</ROLLOVER_DATA>
                  <VALID FROM>2014-09-23T07:00:00Z</VALID FROM>
                  <VALID_FROM_DETAILS>0</VALID_FROM_DETAILS>
                  <VALID TO>2015-01-01T00:00:00Z</VALID TO>
                  <VALID_TO_DETAILS>0</VALID_TO_DETAILS>
               </SUB_BALANCES>
            </SUB_BAL_IMPACTS>
         </RESULTS>
         <RESULTS elem="1">
            <account_OBJ>0.0.0.1 /account 293778 4</account_OBJ>
            <POID>0.0.0.1 /event/billing/item/transfer 257232944341752492 0</POID>
            <RATING_STATUS>12</RATING_STATUS>
         </RESULTS>
     </pcmOpArItemDisputeResponse>
  </S:Body>
</S:Envelope>
```

### pcmOpArItemSettlement

This operation settles a dispute against an item's deferred or due amount.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### URI

https://hostname/BrmWebServices/BRMARServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpArItemSettlement request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpArItemSettlementRequest>
         <bus:PCM_OP_AR_ITEM_SETTLEMENT_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_AR_ITEM_SETTLEMENT_inputFlist>
               <bus:AMOUNT>-0.5</bus:AMOUNT>
               <bus:DESCR>Item Settlement/bus:DESCR>
               <!--bus:FLAGS>0</bus:FLAGS-->
               <bus:ITEM_OBJ>0.0.0.1 /item/cycle_forward 293330 0</bus:ITEM_OBJ>
               <bus:POID>0.0.0.1 /item/cycle_forward 293330 0</bus:POID>
               <bus:PROGRAM_NAME>SoapWebServices
/bus:PROGRAM_NAME>
               <bus:RESOURCE_ID_ORIG>840</bus:RESOURCE_ID_ORIG>
            </bus:PCM_OP_AR_ITEM_SETTLEMENT_inputFlist>
```

```
</bus:PCM_OP_AR_ITEM_SETTLEMENT_Request>
     </bus:pcmOpArItemSettlementRequest>
     </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpArItemSettlement response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpArItemSettlementResponse xmlns:brm="http://xmlns.oracle.com/BRM/schemas/</pre>
BusinessOpcodes">
         <DESCR>Succeeded
         <POID>0.0.0.1 /item/cycle_forward 293330 0</POID>
         <RESULT>1</RESULT>
         <RESULTS elem="0">
            <ACCOUNT_OBJ>0.0.0.1 /account 293778 4</ACCOUNT_OBJ>
            <BAL_IMPACTS elem="0">
               <ACCOUNT_OBJ>0.0.0.1 /account 293778 4</ACCOUNT_OBJ>
               <AMOUNT>0</AMOUNT>
               <AMOUNT_DEFERRED>0</AMOUNT_DEFERRED>
               <AMOUNT_ORIG />
               <BAL_GRP_OBJ>0.0.0.1 /balance_group 293458 2</BAL_GRP_OBJ>
               <DISCOUNT>0</DISCOUNT>
               <GL_ID>108</GL_ID>
               <IMPACT_TYPE>2</IMPACT_TYPE>
               <ITEM_OBJ>0.0.0.1 /item/cycle_forward 293330 0</ITEM_OBJ>
               <PERCENT>0</PERCENT>
               <QUANTITY>0</QUANTITY>
               <RATE_OBJ>0.0.0.0 0 0</RATE_OBJ>
               <RATE_TAG />
               <RESOURCE_ID>840</RESOURCE_ID>
               <RESOURCE_ID_ORIG>840</RESOURCE_ID_ORIG>
               <TAX_CODE />
            </BAL_IMPACTS>
            <BAL_IMPACTS elem="1">
               <ACCOUNT_OBJ>0.0.0.1 /account 293778 4</ACCOUNT_OBJ>
               <AMOUNT>0</AMOUNT>
               <AMOUNT_DEFERRED>0</AMOUNT_DEFERRED>
               <AMOUNT ORIG />
               <BAL_GRP_OBJ>0.0.0.1 /balance_group 293458 10</BAL_GRP_OBJ>
               <DISCOUNT>0</DISCOUNT>
               <GL_ID>108</GL_ID>
               <IMPACT_TYPE>16</IMPACT_TYPE>
               <ITEM_OBJ>0.0.0.1 /item/cycle_forward 293330 0</ITEM_OBJ>
               <PERCENT>0</PERCENT>
               <QUANTITY>0</QUANTITY>
               <RATE_OBJ>0.0.0.0 0 0</RATE_OBJ>
               <RATE_TAG />
               <RESOURCE_ID>840</RESOURCE_ID>
               <RESOURCE_ID_ORIG>0</RESOURCE_ID_ORIG>
               <TAX_CODE />
            </BAL_IMPACTS>
            <POID>0.0.0.1 /event/billing/settlement/item 257232944341746430 0</POID>
         </RESULTS>
         <RESULTS elem="1">
            <ACCOUNT_OBJ>0.0.0.1 /account 293778 4</ACCOUNT_OBJ>
            <POID>0.0.0.1 /event/billing/item/transfer 257232944341747454 0</POID>
            <RATING_STATUS>12</RATING_STATUS>
         </RESULTS>
      </pcmOpArItemSettlementResponse>
```

```
</S:Body>
```

### pcmOpArItemWriteoff

This operation writes off an item.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### URI

https://hostname/BrmWebServices/BRMARServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpArItemWriteoff request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
  <soapenv:Body>
      <bus:pcmOpArItemWriteoffRequest>
         <bus:PCM_OP_AR_ITEM_WRITEOFF_Request>
           <bus:flags>0</bus:flags>
           <bus:PCM_OP_AR_ITEM_WRITEOFF_inputFlist>
              <bus:ACCOUNT_OBJ>0.0.0.1 /account 297583 4</bus:ACCOUNT_OBJ>
              <bus:AR_BILLINFO_OBJ>0.0.0.1 /billinfo 297327 0bus:AR_BILLINFO_OBJ>
              <bus:BAL_GRP_OBJ>0.0.0.1 /balance_group 297839 2</bus:BAL_GRP_OBJ>
              <bus:BILLINFO_OBJ>0.0.0.1 /billinfo 297327 0</bus:BILLINFO_OBJ>
              <bus:FLAGS>0</bus:FLAGS>
              <!--Zero or more repetitions:-->
              <bus:ITEMS elem="0">
                 <bus:ACCOUNT_OBJ>0.0.0.1 /account 297583 4/bus:ACCOUNT_OBJ>
                 <bus:ADJUSTED>0
                 <bus:AR_BILL_OBJ>0.0.0.1 /billinfo 297327 0</bus:AR_BILL_OBJ>
                 <bus:BILL_OBJ>0.0.0.1 /billinfo 297327 0</bus:BILL_OBJ>
                 <bus:CURRENCY>840</pus:CURRENCY>
                 <bus:DISPUTED>0
bus:DISPUTED>
                 <bus:DUE>19.95
                 <bus:ITEM_TOTAL>19.95
                 <bus:POID>0.0.0.1 /item/cycle_forward 296991 2</bus:POID>
              </bus:ITEMS>
              <bus:POID>0.0.0.1 /item/cycle_forward 296991 2</bus:POID>
              <bus:PROGRAM_NAME>Web service
           </bus:PCM_OP_AR_ITEM_WRITEOFF_inputFlist>
        </bus:PCM_OP_AR_ITEM_WRITEOFF_Request>
     </bus:pcmOpArItemWriteoffRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpArItemWriteoff response



```
<account_obj>0.0.0.1 /account 297583 4</account_obj>
            <BAL_IMPACTS elem="0">
               <ACCOUNT_OBJ>0.0.0.1 /account 297583 4</ACCOUNT_OBJ>
               <AMOUNT>-19.95</AMOUNT>
               <AMOUNT_DEFERRED>0</AMOUNT_DEFERRED>
               <AMOUNT_ORIG />
               <BAL_GRP_OBJ>0.0.0.1 /balance_group 297839 5</BAL_GRP_OBJ>
               <DISCOUNT>0</DISCOUNT>
               <GL_ID>106</GL_ID>
               <IMPACT_TYPE>2</IMPACT_TYPE>
               <ITEM_OBJ>0.0.0.1 /item/writeoff 291729 0</ITEM_OBJ>
               <PERCENT>0</PERCENT>
               <QUANTITY>0</QUANTITY>
               <RATE OBJ>0.0.0.0 0 0/RATE OBJ>
               <RATE TAG />
               <RESOURCE_ID>840</RESOURCE_ID>
               <RESOURCE_ID_ORIG>0</RESOURCE_ID_ORIG>
               <TAX_CODE />
            </BAL_IMPACTS>
            <POID>0.0.0.1 /event/billing/writeoff/item 257250536527788945 0</POID>
            <SUB_BAL_IMPACTS elem="0">
               <BAL_GRP_OBJ>0.0.0.1 /balance_group 297839 6</BAL_GRP_OBJ>
               <RESOURCE_ID>840</RESOURCE_ID>
               <SUB_BALANCES elem="0">
                  <AMOUNT>-19.95</AMOUNT>
                  <CONTRIBUTOR STR />
                  <GRANTOR_OBJ>0.0.0.1 /purchased_product 296687 0</GRANTOR_OBJ>
                  <ROLLOVER_DATA>0</ROLLOVER_DATA>
                  <VALID_FROM>2014-09-23T07:00:00Z</VALID_FROM>
                  <VALID_FROM_DETAILS>0</VALID_FROM_DETAILS>
                  <VALID_TO>2015-01-01T00:00:00Z</VALID_TO>
                  <VALID_TO_DETAILS>0</VALID_TO_DETAILS>
               </SUB_BALANCES>
            </SUB_BAL_IMPACTS>
         </RESULTS>
      </pcmOpArItemWriteoffResponse>
   </S:Body>
</S:Envelope>
```

## pcmOpArResourceAggregation

This operation searches event balance impact details and aggregates the total per balance element.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMARServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpArResourceAggregation request

```
<bus:PCM_OP_AR_RESOURCE_AGGREGATION_Request>
           <bus:flags>0</bus:flags>
           <bus:PCM_OP_AR_RESOURCE_AGGREGATION_inputFlist>
              <bus:EVENTS elem="0">
                 <bus:POID>0.0.0.1 /event/session 257232944341747229 0/bus:POID>
              </bus:EVENTS>
              <bus:POID>0.0.0.1 /account 293778 0
              <bus:CONTEXT_INFO>
                 <bus:CORRELATION_ID />
                 <bus:EXTERNAL_USER />
              </bus:CONTEXT_INFO>
           </bus:PCM_OP_AR_RESOURCE_AGGREGATION_inputFlist>
        </bus:PCM_OP_AR_RESOURCE_AGGREGATION_Request>
     </bus:pcmOpArResourceAggregationRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpArResourceAggregation response

## Related topics

- Oracle Monetization Cloud web services
- Performing common tasks with web services
- About integrating your business systems

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# **Activity operations**

This document describes the activity operations in the Oracle Monetization Cloud BRMActServices\_v2 SOAP API.

#### Topics in this document

About the BRMActServices\_v2 interface

# About the BRMActServices\_v2 interface

Use the BRMActServices\_v2 interface to perform operations such as loading subscriber activity for charging usage, looking up customer accounts, and calculating the maximum available usage based on account balances.

### Authorization

Oracle Monetization Cloud uses the OAuth 2.0 protocol to authorize external applications to access its web services. To call the web services, an application must be registered as an OAuth client in Oracle Monetization Cloud. For more information, see Using OAuth to authorize access.

### Activity operations available at runtime

The following table lists the operations provided by the BRMActServices\_v2 interface.

For information about terminology used in sample requests and responses for web service operations, see About terminology.

Operation	Description
pcmOpActActivity	Records and rates activity events.
pcmOpActCalcMaxUsage	Calculates the maximum available usage.
pcmOpActFind	Retrieves the account and service information associated with the service identifier specified in the input LOGIN parameter.
pcmOpActLoadSession	Creates, rates, and records a session event as a single operation.
pcmOpActScheduleCreate	Creates deferred actions, which schedules activities, such as account and service status changes, for a future date and time.
pcmOpActScheduleDelete	Deletes deferred actions.
pcmOpActScheduleExecute	Executes scheduled activities in a deferred action.
pcmOpActScheduleModify	Modifies the description or scheduled date of a deferred action.



## pcmOpActActivity

This operation records and rates activity events.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

```
https://hostname/BrmWebServices/BRMActServices_v2/
```

where hostname is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpActActivity request

#### Sample pcmOpActActivity response

### pcmOpActCalcMaxUsage

This operation gets the maximum possible duration or quantity that can be authorized for use based on an account's credit limit and current balance.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMActServices\_v2/



where hostname is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpActCalcMaxUsage request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpActCalcMaxUsageRequest>
        <bus:PCM_OP_ACT_CALC_MAX_USAGE_Request>
           <bus:flags>0</bus:flags>
           <bus:PCM_OP_ACT_CALC_MAX_USAGE_inputFlist>
              <bus:BALANCES elem="0">
                 <bus: AMOUNT>-1</bus: AMOUNT>
              </bus:BALANCES>
              <bus:EVENT>
                 <bus:ACCOUNT_OBJ>0.0.0.1 /account 293631 0</bus:ACCOUNT_OBJ>
                 <bus:DESCR>test
                 <bus:POID>0.0.0.1 /event/activity 257250536527793503 0
                 <bus:PROGRAM_NAME>web service
                 <bus:SERVICE_OBJ>0.0.0.1 /service/ip 298880 12</bus:SERVICE_OBJ>
                 <bus:SESSION_OBJ>0.0.0.1 /event/session 257250536527790176 1
bus:SESSION_OBJ>
                 <bus:START_T>1416735556/bus:START_T>
              </bus:EVENT>
              <bus:POID>0.0.0.1 /account 293631 0</bus:POID>
           </bus:PCM_OP_ACT_CALC_MAX_USAGE_inputFlist>
        </bus:PCM_OP_ACT_CALC_MAX_USAGE_Request>
      </bus:pcmOpActCalcMaxUsageRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpActCalcMaxUsage response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpActCalcMaxUsageResponse xmlns:brm="http://xmlns.oracle.com/BRM/schemas/</pre>
BusinessOpcodes">
         <POID>0.0.0.1 /account 293631 0</POID>
         <OUANTITY>0</OUANTITY>
         <RESULTS elem="0">
            <ACCOUNT_OBJ>0.0.0.1 /account 293631 0</ACCOUNT_OBJ>
            <BILLINFO_OBJ>0.0.0.1 /billinfo 293375 0</BILLINFO_OBJ>
            <DESCR>test</DESCR>
            <END_T>2014-11-24T09:39:16Z</END_T>
            <POID>0.0.0.1 /event/activity 257250536527793503 0</POID>
            <PROGRAM_NAME>web service
            <RATING_STATUS>12</RATING_STATUS>
            <SERVICE_OBJ>0.0.0.1 /service/ip 298880 12</SERVICE_OBJ>
            <SESSION_OBJ>0.0.0.1 /event/session 257250536527790176 1</SESSION_OBJ>
            <START_T>2014-11-23T09:39:16Z</START_T>
         </RESULTS>
      </pcmOpActCalcMaxUsageResponse>
   </S:Body>
</S:Envelope>
```

### pcmOpActFind

This operation retrieves the account and service information associated with the service identifier specified in the input LOGIN parameter.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMActServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpActFind request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpActFindRequest>
         <bus:PCM_OP_ACT_FIND_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_ACT_FIND_inputFlist>
               <bus:LOGIN>user@example.com</bus:LOGIN>
               <bus:POID>0.0.0.1 /service/email 326456 0</bus:POID>
               <bus:USERID>CLL
            </bus:PCM_OP_ACT_FIND_inputFlist>
         </bus:PCM_OP_ACT_FIND_Request>
      </bus:pcmOpActFindRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpActFind response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
     <pcmOpActFindResponse xmlns:brm="http://xmlns.oracle.com/BRM/schemas/</pre>
BusinessOpcodes">
        <ACCOUNT_OBJ>0.0.0.1 /account 324664 0</ACCOUNT_OBJ>
        <LIFECYCLE_STATE>0</LIFECYCLE_STATE>
        <LOGIN>user@example.com</LOGIN>
        <PASSWD>Password</PASSWD>
        <PASSWD_EXPIRATION_T>1970-01-01T00:00:00Z</PASSWD_EXPIRATION_T>
        <PASSWD_STATUS>0</PASSWD_STATUS>
        <POID>0.0.0.1 /service/email 326456 9</POID>
        <SERVICE_STATE_EXPIRATION_T>1970-01-01T00:00:00Z
SERVICE_STATE_EXPIRATION_T>
        <STATUS>10102</STATUS>
     </S:Body>
</S:Envelope>
```

## pcmOpActLoadSession

This operation creates, rates, and records a session event as a single operation.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### URI

https://hostname/BrmWebServices/BRMActServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.



#### Sample pcmOpActLoadSession request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpActLoadSessionRequest>
        <bus:PCM_OP_ACT_LOAD_SESSION_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_ACT_LOAD_SESSION_inputFlist>
               <bus:DESCR>IP Usage for Account/bus:DESCR>
               <bus:START_T>1411992869/bus:START_T>
               <bus:END_T>1411993123/bus:END_T>
               <bus:POID>0.0.0.1 /account 291725 24</bus:POID>
               <bus:SERVICE_OBJ>0.0.0.1 /service/ip 291533 7</bus:SERVICE_OBJ>
               <bus:PROGRAM_NAME>web service
            </bus:PCM_OP_ACT_LOAD_SESSION_inputFlist>
        </bus:PCM_OP_ACT_LOAD_SESSION_Request>
      </bus:pcmOpActLoadSessionRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpActLoadSession response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpActLoadSessionResponse xmlns:brm="http://xmlns.oracle.com/BRM/schemas/</pre>
BusinessOpcodes">
         <POID>0.0.0.1 /account 291725 24</POID>
         <RESULTS elem="0">
            <ACCOUNT_OBJ>0.0.0.1 /account 291725 24</ACCOUNT_OBJ>
            <BAL_IMPACTS elem="0">
               <ACCOUNT_OBJ>0.0.0.1 /account 291725 23</ACCOUNT_OBJ>
               <AMOUNT>0.08</AMOUNT>
               <AMOUNT_DEFERRED>0</AMOUNT_DEFERRED>
               <BAL_GRP_OBJ>0.0.0.1 /balance_group 291405 15</BAL_GRP_OBJ>
               <DISCOUNT>0</DISCOUNT>
               <GL_ID>104</GL_ID>
               <IMPACT_CATEGORY>default</IMPACT_CATEGORY>
               <IMPACT_TYPE>1</IMPACT_TYPE>
               <ITEM_OBJ>0.0.0.1 /item/misc 297109 0</ITEM_OBJ>
               <OFFERING_OBJ>0.0.0.1 /purchased_product 294605 1</OFFERING_OBJ>
               <PERCENT>1</PERCENT>
               <PRODUCT_OBJ>0.0.0.1 /product 16741 2</PRODUCT_OBJ>
               <QUANTITY>300</QUANTITY>
               <RATE_OBJ>0.0.0.1 /rate 148919 1</RATE_OBJ>
               <RATE_TAG>$1 per hour</RATE_TAG>
               <RESOURCE_ID>840</RESOURCE_ID>
               <TAX_CODE />
            </BAL_IMPACTS>
            <NET_QUANTITY>300</NET_QUANTITY>
            <POID>0.0.0.1 /event/session 287491504338160515 0</POID>
            <RATING STATUS>0</RATING STATUS>
            <RUM_NAME>Duration
            <SERVICE_OBJ>0.0.0.1 /service/ip 291533 7</SERVICE_OBJ>
            <SUB_BAL_IMPACTS elem="0">
               <BAL_GRP_OBJ>0.0.0.1 /balance_group 291405 16</BAL_GRP_OBJ>
               <RESOURCE_ID>840</RESOURCE_ID>
               <SUB_BALANCES elem="0">
                  <AMOUNT>0.08</AMOUNT>
```



## pcmOpActScheduleCreate

This operation creates a deferred action, which schedules an action for a specified date and time in the future. These types of actions can be scheduled for a future date and time:

- Account activation, deactivation, and closure
- Service activation or closure

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMActServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpActScheduleCreate request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpActScheduleCreateReqRequest>
         <bus:PCM_OP_ACT_SCHEDULE_CREATE_REQ_Request>
           <bus:flags>0</bus:flags>
           <bus:PCM_OP_ACT_SCHEDULE_CREATE_REQ_inputFlist>
              <bus:ACTION_NAME>Collections/bus:ACTION_NAME>
              <bus:ACTION_STR>0 PIN_FLD_POID POID [0] 0.0.0.1 /account 113082 0
                             0 PIN_FLD_PROGRAM_NAME STR [0] "Billing Care"
                             0 PIN_FLD_END_T TSTAMP [0] (1531166409)
                             0 PIN_FLD_STATUSES ARRAY [0] allocated 20, used 2
                             1 PIN_FLD_STATUS_FLAGS INT [0] 0
                             1 PIN_FLD_STATUS ENUM [0] 10100
              </bus:ACTION_STR>
              <bus:DESCR>Collections:
              <bus:FLAGS>0</bus:FLAGS>
              <bus:OPCODE>62
              <bus:POID>0.0.0.1 /account 113082 0</bus:POID>
              <bus:PROGRAM NAME>collection center
              <bus:SYS_DESCR>Collections:
              <bus:WHEN T>2018-07-09T00:00:00/bus:WHEN T>
           </bus:PCM_OP_ACT_SCHEDULE_CREATE_REQ_inputFlist>
```



```
</bus:PCM_OP_ACT_SCHEDULE_CREATE_REQ_Request>
     </bus:pcmOpActScheduleCreateReqRequest>
     </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpActScheduleModify response

# pcmOpActScheduleDelete

#### **Section Title**

This operation deletes a deferred action.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMActServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpActScheduleDelete request

#### Sample pcmOpActScheduleModify response

### pcmOpActScheduleExecute

This operation performs all scheduled activities that are defined in a deferred action.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMActServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpActScheduleExecute request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
  <soapenv:Header/>
  <soapenv:Body>
      <bus:pcmOpActScheduleExecuteRegRequest>
         <bus:PCM_OP_ACT_SCHEDULE_EXECUTE_REQ_Request>
           <bus:flags>0</bus:flags>
            <bus:PCM_OP_ACT_SCHEDULE_EXECUTE_REQ_inputFlist>
               <bus:ACCOUNT_OBJ>0.0.0.1 /account 113082 0</bus:ACCOUNT_OBJ>
               <bus:ACTION_STR>0 PIN_FLD_POID POID [0] 0.0.0.1 /account 113082 0
                              0 PIN_FLD_PROGRAM_NAME STR [0] "Billing Care"
                              0 PIN_FLD_END_T TSTAMP [0] (1531166409)
                              0 PIN_FLD_STATUSES ARRAY [0] allocated 20, used 2
                              1 PIN_FLD_STATUS_FLAGS INT [0] 0
                              1 PIN_FLD_STATUS ENUM [0] 10100</bus:ACTION_STR>
               <bus:FLAGS>0</bus:FLAGS>
               <bus:OPCODE>62
               <bus:POID>0.0.0.1 /schedule 115098 0</bus:POID>
               <bus:PROGRAM_NAME>collection center
            </bus:PCM_OP_ACT_SCHEDULE_EXECUTE_REQ_inputFlist>
         </bus:PCM_OP_ACT_SCHEDULE_EXECUTE_REQ_Request>
      </bus:pcmOpActScheduleExecuteReqRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpActScheduleModify response



## pcmOpActScheduleModify

This operation allows you to modify the description or scheduled date of a deferred action.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMActServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpActScheduleModify request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpActScheduleModifyRequest>
         <bus:PCM_OP_ACT_SCHEDULE_MODIFY_Request>
             <bus:PCM_OP_ACT_SCHEDULE_MODIFY_inputFlist>
               <bus:ACCOUNT_OBJ>0.0.0.1 /account 7482799/bus:ACCOUNT_OBJ>
               <bus:DESCR>Test
               <bus:POID>0.0.0.1 /schedule 7680459/bus:POID>
               <bus:PROGRAM_NAME>SOAPUI</bus:PROGRAM_NAME>
               <bus:WHEN_T>1526835606/bus:WHEN_T>
             </bus:PCM_OP_ACT_SCHEDULE_MODIFY_inputFlist>
         </bus:PCM OP ACT SCHEDULE MODIFY Request>
      </bus:pcmOpActScheduleModifyRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpActScheduleModify response

### Related topics

- Oracle Monetization Cloud web services
- Performing common tasks with web services
- About integrating your business systems



# **Balance operations**

This document describes the balance operations in the Oracle Monetization Cloud BRMBalServices\_v2 SOAP API.

#### Topics in this document

- About the BRMBalServices\_v2 interface
- · Related topics

# About the BRMBalServices\_v2 interface

Use the BRMBalServices\_v2 interface to perform operations such as managing balances and retrieving balance information for a specified bill unit (/billinfo object).

### Authorization

Oracle Monetization Cloud uses the OAuth 2.0 protocol to authorize external applications to access its web services. To call the web services, an application must be registered as an OAuth client in Oracle Monetization Cloud. For more information, see Using OAuth to authorize access.

### Balance operations available at runtime

The following table lists the operations provided by the BRMBalServices\_v2 interface.

For information about terminology used in sample requests and responses for web service operations, see About terminology.

Operation	Description
pcmOpBalChangeValidity	Changes a sub-balance validity period.
pcmOpBalGetAcctBalGrpAndSvc	Returns the balance groups and services for all the account's bill units or for a single bill unit.
pcmOpBalGetAcctBillInfo	Returns the main contact information for an account and a list of the account's bill units with the default bill unit marked.
pcmOpBalGetBalances	Returns the POID of a bill unit and, optionally, the balances it contains.
pcmOpBalGetBalGrpAndSvc	Returns the balance groups and services for a bill unit.

# pcmOpBalChangeValidity

This operation changes the validity period dates for a sub-balance.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMBalServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpBalChangeValidity request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
  <soapenv:Body>
     <bus:pcmOpBalChangeValidityRequest>
         <bus:PCM OP BAL CHANGE VALIDITY Request>
            <bus:flags>0</bus:flags>
           <bus:PCM_OP_BAL_CHANGE_VALIDITY_inputFlist>
              <bus:BAL_GRP_OBJ>0.0.0.1 /balance_group 295826 9</bus:BAL_GRP_OBJ>
              <bus:POID>0.0.0.1 /account 295570 14</bus:POID>
              <bus:PROGRAM_NAME>web service
              <bus:RESOURCE_ID>840</bus:RESOURCE_ID>
              <bus:SUB_BALANCES elem="0">
                 <bus:BAL_GRP_OBJ>0.0.0.1 /balance_group 295826 11</bus:BAL_GRP_OBJ>
                 <bus:ELEMENT_ID>677</bus:ELEMENT_ID>
                 <bus:RESOURCE_ID>840/bus:RESOURCE_ID>
                 <bus:VALID_FROM>1420100062/bus:VALID_FROM>
                 <bus:VALID_TO>1420290062
              </bus:SUB_BALANCES>
            </bus:PCM_OP_BAL_CHANGE_VALIDITY_inputFlist>
        </bus:PCM_OP_BAL_CHANGE_VALIDITY_Request>
      </bus:pcmOpBalChangeValidityRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

### Sample pcmOpBalChangeValidity response

## pcmOpBalGetAcctBalGrpAndSvc

This operation returns the balance groups and services for all the bill units (/billinfo objects) of an account or for a single bill unit.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

### URI

https://hostname/BrmWebServices/BRMBalServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpBalGetAcctBalGrpAndSvc request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpBalGetAcctBalGrpAndSvcRequest>
         <bus:PCM_OP_BAL_GET_ACCT_BAL_GRP_AND_SVC_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_BAL_GET_ACCT_BAL_GRP_AND_SVC_inputFlist>
               <bus:ACCOUNT_OBJ>0.0.0.1 /account 324664 0</bus:ACCOUNT_OBJ>
               <bus:FLAGS>1</bus:FLAGS>
               <bus:POID>0.0.0.1 /billinfo 326200 0</bus:POID>
            </bus:PCM_OP_BAL_GET_ACCT_BAL_GRP_AND_SVC_inputFlist>
         </bus:PCM_OP_BAL_GET_ACCT_BAL_GRP_AND_SVC_Request>
      </bus:pcmOpBalGetAcctBalGrpAndSvcRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpBalGetAcctBalGrpAndSvc response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpBalGetAcctBalGrpAndSvcResponse xmlns:brm="http://xmlns.oracle.com/BRM/</pre>
schemas/BusinessOpcodes">
         <POID>0.0.0.1 /billinfo 326200 0</POID>
         <RESULTS elem="0">
            <ACCOUNT_OBJ>0.0.0.1 /account 324664 0</ACCOUNT_OBJ>
            <BAL GRP_OBJ>0.0.0.1 /balance_group 325944 5</BAL_GRP_OBJ>
            <BILLINFO ID>Bill Unit(1)</BILLINFO ID>
            <BILLINFO_OBJ>0.0.0.1 /billinfo 326200 0</BILLINFO_OBJ>
            <ITEM_POID_LIST>0.0.0.1|/item/cycle_forward 327480 0</ITEM_POID_LIST>
            <LAST_STATUS_T>2014-10-03T19:57:58Z</LAST_STATUS_T>
            <LOGIN>user@example.com</LOGIN>
            <NAME>Balance Group&lt;Account&gt;</NAME>
            <NEXT_ITEM_POID_LIST />
            <SERVICE_OBJ>0.0.0.1 /service/email 326456 9</SERVICE_OBJ>
            <STATUS>10102</STATUS>
            <SUBSCRIPTION_OBJ>0.0.0.0 0 0</subscription_OBJ>
         </RESULTS>
         <RESULTS elem="1">
            <ACCOUNT_OBJ>0.0.0.1 /account 324664 0</ACCOUNT_OBJ>
            <BAL_GRP_OBJ>0.0.0.1 /balance_group 325944 5</BAL_GRP_OBJ>
            <BILLINFO_ID>Bill Unit(1)</BILLINFO_ID>
            <BILLINFO_OBJ>0.0.0.1 /billinfo 326200 0</BILLINFO_OBJ>
            <TEM_POID_LIST />
            <LAST_STATUS_T>2014-10-03T19:57:52Z</LAST_STATUS_T>
            <LOGIN>user@example.com</LOGIN>
            <NAME>Balance Group&lt;Account&gt;</NAME>
            <NEXT_ITEM_POID_LIST />
            <SERVICE_OBJ>0.0.0.1 /service/ip 324280 9</SERVICE_OBJ>
            <STATUS>10100</STATUS>
            <SUBSCRIPTION_OBJ>0.0.0.0 0 0</SUBSCRIPTION_OBJ>
         </RESULTS>
         <RESULTS elem="2">
            <BAL_GRP_OBJ>0.0.0.1 /balance_group 325944 5</BAL_GRP_OBJ>
            <BILLINFO_ID>Bill Unit(1)</BILLINFO_ID>
            <BILLINFO_OBJ>0.0.0.1 /billinfo 326200 0</BILLINFO_OBJ>
            <NAME>Balance Group&lt;Account&gt;</NAME>
            <SERVICE_OBJ>0.0.0.0 0 0</SERVICE_OBJ>
```



```
</RESULTS>
  </pcmOpBalGetAcctBalGrpAndSvcResponse>
  </S:Body>
</S:Envelope>
```

### pcmOpBalGetAcctBillInfo

This operation returns the main contact information for an account and a list of the account's bill units (/billinfo objects) with the default bill unit marked.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMBalServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpBalGetAcctBillInfo request

### Sample pcmOpBalGetAcctBillInfo response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpBalGetAcctBillInfoResponse xmlns:brm="http://xmlns.oracle.com/BRM/</pre>
schemas/BusinessOpcodes">
         <BILLINFO elem="0">
            <AR_BILLINFO_OBJ>0.0.0.1 /billinfo 322523 0</AR_BILLINFO_OBJ>
            <BILLINFO_ID>Bill Unit(1)</BILLINFO_ID>
            <BILL_OBJ>0.0.0.1 /bill 321499 0</BILL_OBJ>
            <CURRENCY>840</CURRENCY>
            <CURRENCY_SECONDARY>0</CURRENCY_SECONDARY>
            <FLAGS>0</FLAGS>
            <LAST_BILL_T>2014-10-03T07:00:00Z</LAST_BILL_T>
            <NEXT_BILL_T>2014-11-03T08:00:00Z</NEXT_BILL_T>
            <PAY_TYPE>0</PAY_TYPE>
            <POID>0.0.0.1 /billinfo 322523 2</POID>
         </BILLINFO>
         <BILLINFO elem="1">
            <AR BILLINFO OBJ>0.0.0.1 /billinfo 326200 2</AR BILLINFO OBJ>
            <BILLINFO_ID>Bill Unit(1)</BILLINFO_ID>
            <BILL_OBJ>0.0.0.1 /bill 325176 0</BILL_OBJ>
            <CURRENCY>840</CURRENCY>
            <CURRENCY_SECONDARY>0</CURRENCY_SECONDARY>
```



```
<FLAGS>1</FLAGS>
            <LAST_BILL_T>2014-10-03T07:00:00Z</LAST_BILL_T>
            <NEXT_BILL_T>2014-11-03T08:00:00Z</NEXT_BILL_T>
            <PAY TYPE>10001</PAY TYPE>
            <POID>0.0.0.1 /billinfo 326200 6</POID>
         </RITITINFO>
         <NAMEINFO elem="1">
            <ADDRESS>SOAP_UI_Update_Customer</ADDRESS>
            <CANON_COMPANY />
            <CANON_COUNTRY>IN</CANON_COUNTRY>
            <CITY>SOAP_UI_Update_Customer</CITY>
            <COMPANY />
            <CONTACT_TYPE>Account holder</CONTACT_TYPE>
            <COUNTRY>USA</COUNTRY>
            <EMAIL ADDR>john@example.com</EMAIL ADDR>
            <FIRST CANON>John</FIRST CANON>
            <FIRST_NAME>John</FIRST_NAME>
            <GEOCODE />
            <LAST_CANON>Smith</LAST_CANON>
            <LAST_NAME>Smith</LAST_NAME>
            <MIDDLE_CANON>James</MIDDLE_CANON>
            <MIDDLE_NAME>James/MIDDLE_NAME>
            <SALUTATION>Mr.</SALUTATION>
            <SERVICE_OBJ>0.0.0.0 0 0</SERVICE_OBJ>
            <STATE>CA</STATE>
            <TAXPKG_TYPE>0</TAXPKG_TYPE>
            <TITLE />
            <ZIP>90026</ZIP>
         </NAMEINFO>
         <POID>0.0.0.1 /account 324664 12</POID>
      </pcmOpBalGetAcctBillInfoResponse>
   </S:Body>
</S:Envelope>
```

# pcmOpBalGetBalances

This operation returns the POID of a balance group and, optionally, the balances it contains.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

### URI

https://hostname/BrmWebServices/BRMBalServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpBalGetBalances request



### Sample pcmOpBalGetBalances response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpBalGetBalancesResponse xmlns:brm="http://xmlns.oracle.com/BRM/schemas/</pre>
BusinessOpcodes">
         <ACCOUNT_OBJ>0.0.0.1 /account 324664 0</ACCOUNT_OBJ>
         <BALANCES elem="840">
            <CONSUMED_RESERVED_AMOUNT>0</CONSUMED_RESERVED_AMOUNT>
            <CONSUMPTION_RULE>0</CONSUMPTION_RULE>
            <CREDIT_FLOOR />
            <CREDIT_LIMIT />
            <CREDIT_PROFILE>0</CREDIT_PROFILE>
            <CREDIT_THRESHOLDS>0</CREDIT_THRESHOLDS>
            <CREDIT_THRESHOLDS_FIXED />
            <CURRENT_BAL>12.95</CURRENT_BAL>
            <NEXT_BAL>0</NEXT_BAL>
            <RESERVED_AMOUNT>0</RESERVED_AMOUNT>
         </BALANCES>
         <BILLINFO_OBJ>0.0.0.1 /billinfo 326200 0</BILLINFO_OBJ>
         <EFFECTIVE_T>2014-10-03T19:57:56Z</EFFECTIVE_T>
         <POID>0.0.0.1 /balance_group 325944 4</POID>
         <REALTIME_CNTR>0</REALTIME_CNTR>
      </pcmOpBalGetBalancesResponse>
   </S:Body>
</S:Envelope>
```

## pcmOpBalGetBalGrpAndSvc

This operation gets the list of balance groups and services for a specified bill unit (*I* billinfo object).

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMBalServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpBalGetBalGrpAndSvc request



### Sample pcmOpBalGetBalGrpAndSvc response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpBalGetBalGrpAndSvcResponse xmlns:brm="http://xmlns.oracle.com/BRM/</pre>
schemas/BusinessOpcodes">
         <POID>0.0.0.1 /billinfo 331139 0</POID>
         <RESULTS elem="0">
            <ACCOUNT_OBJ>0.0.0.1 /account 331395 0</ACCOUNT_OBJ>
            <BAL_GRP_OBJ>0.0.0.1 /balance_group 331651 5</BAL_GRP_OBJ>
            <ITEM_POID_LIST>0.0.0.1|/item/cycle_forward 330051 0</ITEM_POID_LIST>
            <LAST_STATUS_T>2014-10-08T02:23:57Z</LAST_STATUS_T>
            <LOGIN>user@example.com</LOGIN>
            <NAME>Balance Group&lt;Account&gt;</NAME>
            <NEXT_ITEM_POID_LIST />
            <SERVICE_OBJ>0.0.0.1 /service/email 330307 10</SERVICE_OBJ>
            <STATUS>10102</STATUS>
            <SUBSCRIPTION_OBJ>0.0.0.0 0 0</SUBSCRIPTION_OBJ>
         </RESULTS>
         <RESULTS elem="1">
            <ACCOUNT_OBJ>0.0.0.1 /account 331395 0</ACCOUNT_OBJ>
            <BAL_GRP_OBJ>0.0.0.1 /balance_group 331651 5</BAL_GRP_OBJ>
            <ITEM_POID_LIST />
            <LAST_STATUS_T>2014-10-08T02:23:44Z</LAST_STATUS_T>
            <LOGIN>Thru_Soap_UI_1</LOGIN>
            <NAME>Balance Group&lt;Account&gt;</NAME>
            <NEXT_ITEM_POID_LIST />
            <SERVICE_OBJ>0.0.0.1 /service/ip 331587 9</SERVICE_OBJ>
            <STATUS>10100</STATUS>
            <SUBSCRIPTION_OBJ>0.0.0.0 0 0</subscription_obJ>
         </RESULTS>
         <RESULTS elem="2">
            <BAL_GRP_OBJ>0.0.0.1 /balance_group 331651 5</BAL_GRP_OBJ>
            <NAME>Balance Group&lt;Account&gt;</NAME>
            <SERVICE_OBJ>0.0.0.0 0 0</SERVICE_OBJ>
         </RESULTS>
      </pcmOpBalGetBalGrpAndSvcResponse>
   </S:Body>
</S:Envelope>
```

### Related topics

- Oracle Monetization Cloud web services
- Performing common tasks with web services
- About integrating your business systems



# Billing operations

This document describes the billing operations in the Oracle Monetization Cloud BRMBillServices\_v2 SOAP API.

### Topics in this document

- About the BRMBillServices\_v2 interface
- · Related topics

# About the BRMBillServices\_v2 interface

Use the BRMBillServices\_v2 interface to perform operations such as finding and viewing subscriber billing information, debiting or crediting noncurrency balances, creating refunds, and setting balance element credit limits.

### Authorization

Oracle Monetization Cloud uses the OAuth 2.0 protocol to authorize external applications to access its web services. To call the web services, an application must be registered as an OAuth client in Oracle Monetization Cloud. For more information, see Using OAuth to authorize access.

### Billing operations available at runtime

The following table lists the operations provided by the BRMBillServices\_v2 interface.

For information about terminology used in sample requests and responses for web service operations, see About terminology.

Operation	Description
pcmOpBillDebit	Debits or credits a balance.
pcmOpBillFind	Searches for information in a bill object associated with a specified bill number.
pcmOpBillGetItemEventChargeDiscount	Returns the charges and discounts associated with each event in a specified item.
pcmOpBillGroupGetParent	Returns the parent account of the specified member account from the group object.
pcmOpBillGroupMoveMember	Moves the specified account to or from the group. In particular, it can move a member account from one group to another, deleting the group if it's empty and creating another group if one doesn't exist.
pcmOpBillItemEventSearch	Returns the event objects that belong to a specified item.



Operation	Description
pcmOpBillItemRefund	Creates a refund item for a bill or bill unit (/billinfo object).
pcmOpBillMakeBillNow	Produces an immediate bill for the specified bill unit, account, or list of pending items.
pcmOpBillReverse	Opens a closed payment item and removes the credit.
pcmOpBillSetLimitAndCr	Sets the credit limit and consumption rules for both currency and noncurrency balance elements.
pcmOpBillViewInvoice	Returns the contents of the invoice associated with a specified bill POID.

### pcmOpBillDebit

This operation debits or credits a balance.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### URI

https://hostname/BrmWebServices/BRMBillServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpBillDebit request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpBillDebitRequest>
         <bus:PCM_OP_BILL_DEBIT_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_BILL_DEBIT_inputFlist>
               <bus:DEBIT elem="840">
                  <bus:BAL_OPERAND>2.0
bus:BAL_OPERAND>
               </bus:DEBIT>
               <bus:DESCR>Debit $2 from Account/bus:DESCR>
               <bus:POID>0.0.0.1 /account 324664 0/bus:POID>
               <bus:PROGRAM_NAME>SoapWebServices
PROGRAM_NAME>
            </bus:PCM_OP_BILL_DEBIT_inputFlist>
         </bus:PCM_OP_BILL_DEBIT_Request>
      </bus:pcmOpBillDebitRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

### Sample pcmOpBillDebit response



```
<account_obj>0.0.0.1 /account 324664 0</account_obj>
            <BAL_IMPACTS elem="0">
               <ACCOUNT_OBJ>0.0.0.1 /account 324664 0</ACCOUNT_OBJ>
               <AMOUNT>2</AMOUNT>
               <AMOUNT_DEFERRED>0</AMOUNT_DEFERRED>
               <AMOUNT_ORIG />
               <BAL_GRP_OBJ>0.0.0.1 /balance_group 325944 0</BAL_GRP_OBJ>
               <DISCOUNT>0</DISCOUNT>
               <GL_ID>0</GL_ID>
               <IMPACT_TYPE>2</IMPACT_TYPE>
               <ITEM_OBJ>0.0.0.1 /item/misc 324920 0</ITEM_OBJ>
               <PERCENT>0</PERCENT>
               <QUANTITY>0</QUANTITY>
               <RATE OBJ>0.0.0.0 0 0/RATE OBJ>
               <RATE TAG />
               <RESOURCE_ID>840</RESOURCE_ID>
               <RESOURCE_ID_ORIG>0</RESOURCE_ID_ORIG>
               <TAX_CODE />
            </BAL_IMPACTS>
            <POID>0.0.0.1 /event/billing/debit 287561873082350150 0</POID>
            <SUB_BAL_IMPACTS elem="0">
               <BAL_GRP_OBJ>0.0.0.1 /balance_group 325944 5</BAL_GRP_OBJ>
               <RESOURCE_ID>840</RESOURCE_ID>
               <SUB_BALANCES elem="0">
                  <AMOUNT>2</AMOUNT>
                  <CONTRIBUTOR STR />
                  <GRANTOR_OBJ>0.0.0.1 /purchased_product 325432 0</GRANTOR_OBJ>
                  <ROLLOVER_DATA>0</ROLLOVER_DATA>
                  <VALID_FROM>2014-10-03T07:00:00Z</VALID_FROM>
                  <VALID_FROM_DETAILS>0</VALID_FROM_DETAILS>
                  <VALID_TO>2015-01-01T00:00:00Z</VALID_TO>
                  <VALID_TO_DETAILS>0</VALID_TO_DETAILS>
               </SUB_BALANCES>
            </SUB_BAL_IMPACTS>
         </RESULTS>
      </pcmOpBillDebitResponse>
   </S:Body>
</S:Envelope>
```

## pcmOpBillFind

This operation searches for information in a bill object associated with a specified bill number. No authentication is performed; the object is simply located, and fields are returned.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

### URI

https://hostname/BrmWebServices/BRMBillServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpBillFind request



```
<bus:pcmOpBillFindRequest>
         <bus:PCM_OP_BILL_FIND_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_BILL_FIND_inputFlist>
               <bus:ARGS elem="0">
                  <bus:BILL_NO>B1-20</bus:BILL_NO>
               </bus:ARGS>
               <bus:POID>0.0.0.1 /bill 333440 2/bus:POID>
               <bus:RESULTS elem="0">
                  <bus:TOTAL_DUE />
                  <bus:DUE />
               </bus:RESULTS>
            </bus:PCM_OP_BILL_FIND_inputFlist>
         </bus:PCM OP BILL FIND Request>
     </bus:pcmOpBillFindRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

### Sample pcmOpBillFind response

# pcmOpBillGetItemEventChargeDiscount

This operation returns the charges and discounts associated with each event in a specified item.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

### **URI**

https://hostname/BrmWebServices/BRMBillServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpBillGetItemEventChargeDiscount request



### Sample pcmOpBillGetItemEventChargeDiscount response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpBillGetItemEventChargeDiscountResponse xmlns:brm="http://</pre>
xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
         <POID>0.0.0.1 /account 295570 9</POID>
         <RESULTS elem="1">
            <DESCR>Success
            <EVENTS elem="0">
               <BAL_IMPACTS elem="1">
                  <AMOUNT>-0.1</AMOUNT>
                  <DISCOUNT>0</DISCOUNT>
                  <RESOURCE_ID>840</RESOURCE_ID>
                </BAL_IMPACTS>
               <CREATED_T>2010-01-19T17:44:47Z</CREATED_T>
               <DESCR>Customer unaware of charges
               <END_T>2014-11-01T07:09:55Z</END_T>
               <EVENT_OBJ>0.0.0.1 /event/billing/dispute/event 257338497458008954 0</
EVENT OBJ>
               <FLAGS>0</FLAGS>
               <NET_QUANTITY>0</NET_QUANTITY>
               <RUM_NAME />
               <SERVICE_OBJ>0.0.0.1 /service/ip 295762 0</SERVICE_OBJ>
               <START_T>2014-11-01T07:09:55Z</START_T>
               <TIMEZONE_ID>-0700</TIMEZONE_ID>
               <UNIT>0</UNIT>
            </EVENTS>
            <RESULT>1</RESULT>
         </RESULTS>
         <RESULTS elem="2">
            <DESCR>Success
            <EVENTS elem="1">
               <CREATED_T>2010-01-19T17:44:47Z</CREATED_T>
               <DESCR />
               <END_T>2014-11-01T07:09:55Z</END_T>
               <EVENT_OBJ>0.0.0.1 /event/billing/item/transfer 257338497458009978 0
EVENT_OBJ>
               <FLAGS>0</FLAGS>
               <NET_QUANTITY>0</NET_QUANTITY>
               <RUM_NAME />
               <SERVICE_OBJ>0.0.0.0 0 0</SERVICE_OBJ>
               <START_T>2014-11-01T07:09:55Z</START_T>
               <TIMEZONE_ID>-0700</TIMEZONE_ID>
               <UNIT>0</UNIT>
            </EVENTS>
            <RESULT>1</RESULT>
      </pcmOpBillGetItemEventChargeDiscountResponse>
   </S:Body>
</S:Envelope>
```

### pcmOpBillGroupGetParent

This operation retrieves the parent account of the specified member account from the group object.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

```
https://hostname/BrmWebServices/BRMBillServices_v2/
```

where hostname is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpBillGroupGetParent request

### Sample pcmOpBillGroupGetParent response

## pcmOpBillGroupMoveMember

This operation moves the specified account to or from a group. In particular, it can move a member account from one group to another, deleting the group if it's empty and creating another group if one doesn't exist.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### URI

```
https://hostname/BrmWebServices/BRMBillServices_v2/
```

where hostname is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpBillGroupMoveMember request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpBillGroupMoveMemberRequest>
        <bus:PCM_OP_BILL_GROUP_MOVE_MEMBER_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_BILL_GROUP_MOVE_MEMBER_inputFlist>
              <bus:DESCR>test
              <bus:FLAGS>0</bus:FLAGS>
              <bus:POID>0.0.0.1 /account 331395 0
            </bus:PCM_OP_BILL_GROUP_MOVE_MEMBER_inputFlist>
        </bus:PCM_OP_BILL_GROUP_MOVE_MEMBER_Request>
      </bus:pcmOpBillGroupMoveMemberRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

### Sample pcmOpBillGroupMoveMember response

### pcmOpBillItemEventSearch

This operation returns the event objects that belong to a specified item.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

```
https://hostname/BrmWebServices/BRMBillServices_v2/
```

where *hostname* is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpBillItemEventSearch request

### Sample pcmOpBillItemEventSearch response

### pcmOpBillItemRefund

This operation creates a refund item for a bill or bill unit (/billinfo object).

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

### **URI**

https://hostname/BrmWebServices/BRMBillServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpBillItemRefund request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpBillItemRefundRequest>
         <bus:PCM_OP_BILL_ITEM_REFUND_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_BILL_ITEM_REFUND_inputFlist>
               <bus:AMOUNT>1</bus:AMOUNT>
               <bus:BILLINFO_OBJ>0.0.0.1 /billinfo 326200 0</bus:BILLINFO_OBJ>
               <bus:BILL_OBJ>0.0.0.1 /bill 321723 2</bus:BILL_OBJ>
               <bus:ITEM_NO>0.0.0.1 /item/misc 326968 0</bus:ITEM_NO>
               <bus:POID>0.0.0.1 /account 324664 0/bus:POID>
               <bus:PROGRAM_NAME>SoapWebServices
/bus:PROGRAM_NAME>
            </bus:PCM_OP_BILL_ITEM_REFUND_inputFlist>
         </bus:PCM_OP_BILL_ITEM_REFUND_Request>
      </bus:pcmOpBillItemRefundRequest>
```

```
</soapenv:Body>
</soapenv:Envelope>
```

### Sample pcmOpBillItemRefund response

### pcmOpBillMakeBillNow

This operation produces an immediate bill for the specified bill unit (**/billinfo** object), account, or list of pending items.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### URI

https://hostname/BrmWebServices/BRMBillServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpBillMakeBillNow request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpBillMakeBillNowRequest>
         <bus:PCM_OP_BILL_MAKE_BILL_NOW_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_BILL_MAKE_BILL_NOW_inputFlist>
               <bus:BILLINFO_OBJ>0.0.0.1 /billinfo 326200 0</bus:BILLINFO_OBJ>
               <bus:FLAGS>1</bus:FLAGS>
               <bus:ITEMS elem="0">
                  <bus:ITEM_OBJ>0.0.0.1 /item/cycle_forward 325304 0</bus:ITEM_OBJ>
               </bus:ITEMS>
               <bus:POID>0.0.0.1 /account 324664 0/bus:POID>
               <bus:PROGRAM_NAME>SoapWebServices
PROGRAM_NAME>
            </bus:PCM_OP_BILL_MAKE_BILL_NOW_inputFlist>
         </bus:PCM_OP_BILL_MAKE_BILL_NOW_Request>
      </bus:pcmOpBillMakeBillNowRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpBillMakeBillNow response



### pcmOpBillReverse

This operation opens a closed payment item and removes the credit.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### URI

https://hostname/BrmWebServices/BRMBillServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpBillReverse request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpBillReverseRequest>
         <bus:PCM_OP_BILL_REVERSE_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_BILL_REVERSE_inputFlist>
               <bus:BATCH_INFO elem="1">
                  <bus:BATCH_TOTAL>15</bus:BATCH_TOTAL>
                  <bus:SUBMITTER_ID>brmcops</bus:SUBMITTER_ID>
               </bus:BATCH_INFO>
               <bus:DESCR>Check Reversal Batch Payment Reversal Batch: Number of
payments = 1.</bus:DESCR>
               <bus:POID>0.0.0.1 /account 1</bus:POID>
               <bus:PROGRAM_NAME>SOAP UI</bus:PROGRAM_NAME>
               <bus:REVERSALS elem="1">
                  <bus:DESCR></bus:DESCR>
                  <bus:INHERITED_INFO/>
                  <bus:PAYMENT_TRANS_ID>T1,125,0
bus:PAYMENT_TRANS_ID>
                  <bus:PAY_TYPE>10012
               </bus:REVERSALS>
               <bus:INHERITED INFO>
               <bus:CHECK_INFO elem="1">
                  <bus:REASON_CODE />
                  <bus:EFFECTIVE_T>1418112000
               </bus:CHECK_INFO>
               </bus:INHERITED_INFO>
            </bus:PCM_OP_BILL_REVERSE_inputFlist>
         </bus:PCM_OP_BILL_REVERSE_Request>
      </bus:pcmOpBillReverseRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

### Sample pcmOpBillReverse response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
      <pcmOpBillReverseResponse xmlns:brm="http://xmlns.oracle.com/BRM/schemas/</pre>
BusinessOpcodes">
         <BATCH_ID>T1,126</BATCH_ID>
         <END_T>2010-08-14T20:19:25Z</END_T>
         <POID>0.0.0.1 /account 1 0</POID>
         <RESULTS elem="1">
            <ACCOUNT_OBJ>0.0.0.1 /account 231668 7</ACCOUNT_OBJ>
            <BAL_IMPACTS elem="0">
               <ACCOUNT_OBJ>0.0.0.1 /account 231668 7</ACCOUNT_OBJ>
               <AMOUNT>15</AMOUNT>
               <AMOUNT_DEFERRED>0</AMOUNT_DEFERRED>
               <AMOUNT_ORIG />
               <BAL_GRP_OBJ>0.0.0.1 /balance_group 231924 10</BAL_GRP_OBJ>
               <DISCOUNT>0</DISCOUNT>
               <DISCOUNT_INFO />
               <GL_ID>109</GL_ID>
               <IMPACT_CATEGORY />
               <IMPACT_TYPE>2</IMPACT_TYPE>
               <ITEM_OBJ>0.0.0.1 /item/payment/reversal 270207 0</ITEM_OBJ>
               <OFFERING_OBJ>0.0.0.0 0 0</OFFERING_OBJ>
               <PERCENT>0</PERCENT>
               <PRODUCT_OBJ>0.0.0.0 0 0
               <QUANTITY>0</QUANTITY>
               <RATE_OBJ>0.0.0.0 0 0</RATE_OBJ>
               <RATE_TAG />
               <RESOURCE_ID>840</RESOURCE_ID>
               <RESOURCE_ID_ORIG>0</RESOURCE_ID_ORIG>
               <RUM_ID>0</RUM_ID>
               <TAX_CODE />
            </BAL_IMPACTS>
            <DESCR>Successful payment reversal
            <POID>0.0.0.1 /event/billing/reversal/check 260980079969178623 0</POID>
            <RESULT>0</RESULT>
            <SUB BAL IMPACTS elem="0">
               <BAL_GRP_OBJ>0.0.0.1 /balance_group 231924 12</BAL_GRP_OBJ>
               <RESOURCE ID>840</RESOURCE ID>
               <SUB_BALANCES elem="4">
                  <AMOUNT>15</AMOUNT>
                  <CONTRIBUTOR_STR />
                  <GRANTOR_OBJ>0.0.0.0 0 0</GRANTOR_OBJ>
                  <ROLLOVER_DATA>0</ROLLOVER_DATA>
                  <VALID_FROM>2010-08-14T20:02:28Z</VALID_FROM>
                  <VALID_FROM_DETAILS>0</VALID_FROM_DETAILS>
                  <VALID_TO>2015-01-01T00:00:00Z</VALID_TO>
                  <VALID_TO_DETAILS>0</VALID_TO_DETAILS>
               </SUB BALANCES>
            </SUB_BAL_IMPACTS>
         </RESULTS>
      </pcmOpBillReverseResponse>
   </S:Body>
</S:Envelope>
```



### pcmOpBillSetLimitAndCr

This operation sets the credit limit for both currency and noncurrency balance elements.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMBillServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpBillSetLimitAndCr request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpBillSetLimitAndCrRequest>
         <bus:PCM_OP_BILL_SET_LIMIT_AND_CR_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_BILL_SET_LIMIT_AND_CR_inputFlist>
               <bus:DESCR>test
               <bus:LIMIT elem="840">
                  <bus:CREDIT_FLOOR>10</bus:CREDIT_FLOOR>
               </bus:LIMIT>
               <bus:POID>0.0.0.1 /account 295570 13</bus:POID>
               <bus:PROGRAM NAME>web service/bus:PROGRAM NAME>
               <bus:RULES elem="840">
                  <bus:CONSUMPTION_RULE>5</bus:CONSUMPTION_RULE>
               </bus:RULES>
            </bus:PCM_OP_BILL_SET_LIMIT_AND_CR_inputFlist>
         </bus:PCM_OP_BILL_SET_LIMIT_AND_CR_Request>
      </bus:pcmOpBillSetLimitAndCrRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

### SamplepcmOpBillSetLimitAndCr response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpBillSetLimitAndCrResponse xmlns:brm="http://xmlns.oracle.com/BRM/schemas/</pre>
BusinessOpcodes">
         <POID>0.0.0.1 /account 295570 13</POID>
         <RESULTS elem="0">
            <ACCOUNT_OBJ>0.0.0.1 /account 295570 13</ACCOUNT_OBJ>
            <POID>0.0.0.1 /event/billing/limit 257338497458015346 0</POID>
         </RESULTS>
         <RESULTS elem="1">
            <account_OBJ>0.0.0.1 /account 295570 13</account_OBJ>
            <POID>0.0.0.1 /event/billing/consumption_rule 257338497458014834 0</POID>
            <RATING_STATUS>12</RATING_STATUS>
         </RESULTS>
      </pcmOpBillSetLimitAndCrResponse>
   </S:Body>
</S:Envelope>
```



## pcmOpBillViewInvoice

This operation returns the contents of the invoice associated with a specified bill POID.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

```
https://hostname/BrmWebServices/BRMBillServices_v2/
```

where hostname is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpBillViewInvoice request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpBillViewInvoiceRequest>
         <PCM_OP_BILL_VIEW_INVOICE_Request>
            <flags>0</bus:flags>
            <PCM_OP_BILL_VIEW_INVOICE_inputFlist>
               <ARGS elem="0">
                  <BILL NO>B1-35</bus:BILL NO>
                  <BILL_OBJ>0.0.0.1 /bill 296338 3/bus:BILL_OBJ>
               </bus:ARGS>
               <POID>0.0.0.1 /account 295570 10</bus:POID>
            </bus:PCM_OP_BILL_VIEW_INVOICE_inputFlist>
         </bus:PCM_OP_BILL_VIEW_INVOICE_Request>
      </bus:pcmOpBillViewInvoiceRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

### Sample pcmOpBillViewInvoice response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
     <pcmOpBillViewInvoiceResponse xmlns:brm="http://xmlns.oracle.com/BRM/schemas/</pre>
BusinessOpcodes">
        <POID>0.0.0.1 /account 295570 10</POID>
        <RESULT>1</RESULT>
        <RESULTS elem="0">
           <BUFFER flags="0x00" offset="0"
size="6342">3C21444F43545950452048544D4C205055424C494320222D2F2F494554462F2F445444204
8544D4C2F2F454E223E0A3C68746D6C3E0A3C686561643E0A3C4D45544120687474702D65717569C3E0A0
0</BUFFER>
           <TYPE_STR>text/html</TYPE_STR>
         </RESULTS>
     </S:Body>
</S:Envelope>
```

### Related topics

- Oracle Monetization Cloud web services
- Performing common tasks with web services

About integrating your business systems



# Contracts management operations

This document describes the contracts management operations in the Oracle Monetization Cloud BRMContractServices\_v2 SOAP API.

### Topics in this document

- About the BRMContractServices\_v2 interface
- Related topics

# About the BRMContractServices\_v2 interface

You use the BRMContractServices\_v2 interface to create, modify, and cancel customer contracts for the offers and services you sell. Oracle Monetization Cloud also provides an operation to notify a subscriber about contract events based on your system configuration.

### Authorization

Oracle Monetization Cloud uses the OAuth 2.0 protocol to authorize external applications to access its web services. To call the web services, an application must be registered as an OAuth client in Oracle Monetization Cloud. For more information, see Using OAuth to authorize access.

### Contracts management operations available at runtime

The following table lists the operations provided by the BRMContractServices\_v2 interface.

For information about terminology used in sample requests and responses for web service operations, see About terminology.

Operation	Description
pcmOpContractCancelContract	Cancels an active customer's contract and applies an early cancellation fee if required by the contract terms.
pcmOpContractCreateContract	Creates a customer contract.
pcmOpContractGetMilestones	Retrieves a list of milestones associated with a customer's contract or account.
pcmOpContractModifyContract	Modifies a customer's contract.
pcmOpContractProcessMilestone	Marks that a contract milestone has been completed.

### pcmOpContractCancelContract

This operation cancels an active customer contract and applies a cancellation fee if required by the contract terms.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMContractServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpContractCancelContract request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpContractCancelContractRequest>
         <bus:PCM_OP_CONTRACT_CANCEL_CONTRACT_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_CONTRACT_CANCEL_CONTRACT_inputFlist>
               <bus:ACCOUNT_OBJ>0.0.0.1 /account 616598 0</bus:ACCOUNT_OBJ>
               <bus:POID>0.0.0.1 /subscribed_contract 616972 1/bus:POID>
               <bus:PROGRAM_NAME>ContractManagement Cuke4brm Test</bus:PROGRAM_NAME>
            </bus:PCM_OP_CONTRACT_CANCEL_CONTRACT_inputFlist>
         </bus:PCM_OP_CONTRACT_CANCEL_CONTRACT_Request>
      </bus:pcmOpContractCancelContractRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

### Sample pcmOpContractCancelContract response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpContractCancelContractResponse xmlns:brm="http://xmlns.oracle.com/BRM/</pre>
schemas/BusinessOpcodes">
         <ACCOUNT_OBJ>0.0.0.1 /account 616598 0</ACCOUNT_OBJ>
         <EVENT>
            <account_OBJ>0.0.0.1 /account 616598 0</account_OBJ>
            <ACTION_INFO elem="0">
               <PHASE_ID>0</PHASE_ID>
            </ACTION_INFO>
            <CONTRACT>
               <CONTRACT NO>CNTR1-502</CONTRACT NO>
               <CONTRACT_OBJ>0.0.0.1 /subscribed_contract 616972 1</CONTRACT_OBJ>
               <CONTRACT_TEMPLATE_NAME/>
               <CONTRACT_TEMPLATE_OBJ>0.0.0.0 0 0</CONTRACT_TEMPLATE_OBJ>
               <PACKAGE_ID>845</PACKAGE_ID>
            </CONTRACT>
            <DESCR/>
            <END_T>2015-04-17T22:14:23Z</END_T>
            <NAME>Contract Management.Evt log</NAME>
            <POID>0.0.0.1 /event/customer/contract/cancel 194587169837902902 0</POID>
            <PROGRAM_NAME>ContractManagement Cuke4brm Test/PROGRAM_NAME>
            <SERVICE_OBJ>0.0.0.1 /service/cloud 614486 0</SERVICE_OBJ>
            <SESSION_OBJ>0.0.0.1 /event/session 194587169837897188 0</SESSION_OBJ>
            <START_T>2015-04-17T22:14:23Z</START_T>
            <SYS_DESCR>Contract cancel event</SYS_DESCR>
            <USERID>0.0.0.1 /service/admin_client 2 13</USERID>
         </EVENT>
         <FLAGS>0</FLAGS>
         <OFFERINGS elem="0">
            <ACTION>cancel</ACTION>
```



### pcmOpContractCreateContract

This operation creates a customer contract. You can create a contract by using an existing contract template, or you can create a contract without a template by specifying the required parameters.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMContractServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpContractCreateContract request

The following sample pcmOpContractCreateContract request uses a template named **ContractTemplate 2P**.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpContractCreateContractRequest>
         <bus:BRMC_OP_CONTRACT_CREATE_CONTRACT_Request>
            <bus:flags>0</bus:flags>
            <bus:BRMC_OP_CONTRACT_CREATE_CONTRACT_inputFlist>
               <bus:ACCOUNT_OBJ>0.0.0.1 /account 611831 0</bus:ACCOUNT_OBJ>
               <bus:CONTRACT_TEMPLATE_NAME>ContractTemplate_2P
bus: CONTRACT_TEMPLATE_NAME>
               <bus:POID>0.0.0.1 /account 1 0</bus:POID>
               <bus:PROGRAM_NAME>ContractManagement Cuke4brm Testbus:PROGRAM_NAME>
               <bus:SERVICE_OBJ>0.0.0.1 /service/cloud 612623 0</bus:SERVICE_OBJ>
            </bus:BRMC_OP_CONTRACT_CREATE_CONTRACT_inputFlist>
         </bus:BRMC_OP_CONTRACT_CREATE_CONTRACT_Request>
      </bus:pcmOpContractCreateContractRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

The following sample pcmOpContractCreateContract request specifies the required parameters instead of specifying an existing contract template.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
        <soapenv:Header/>
```

```
<soapenv:Body>
      <bus:pcmOpContractCreateContractRequest>
         <bus:BRMC_OP_CONTRACT_CREATE_CONTRACT_Request>
            <bus:flags>0</bus:flags>
            <bus:BRMC_OP_CONTRACT_CREATE_CONTRACT_inputFlist>
               <bus:ACCOUNT_OBJ>0.0.0.1 /account 616598 0</bus:ACCOUNT_OBJ>
               <bus:POID>0.0.0.1 /account 1 0</bus:POID>
               <bus:PROGRAM_NAME>ContractManagement Cuke4brm Test</bus:PROGRAM_NAME>
               <bus:SERVICE_OBJ>0.0.0.1 /service/cloud 614486 0/bus:SERVICE_OBJ>
               <bus:CONTRACT_PHASES elem="0">
                  <bus:CANCEL_APPLY_NO>1</bus:CANCEL_APPLY_NO>
                  <bus:FIXED_CANCEL_PRODUCT_OBJ>0.0.0.0 -1 0
bus:FIXED_CANCEL_PRODUCT_OBJ>
                  <bus:LENGTH>3</bus:LENGTH>
                  <bus:NOTIFICATION_DAYS>5</bus:NOTIFICATION_DAYS>
                  <bus:OFFERINGS elem="0">
                     <bus:PRICING_OBJ>0.0.0.1 /product 465670 1</bus:PRICING_OBJ>
                     <bus:SERVICE_OBJ>0.0.0.1 /service/cloud 614486 0
bus:SERVICE_OBJ>
                  </bus:OFFERINGS>
                  <bus:PRORATE_CANCEL_PRODUCT_OBJ>0.0.0.0 -1 0
bus:PRORATE_CANCEL_PRODUCT_OBJ>
                  <bus:RENEW_FLAGS>0</bus:RENEW_FLAGS>
                  <bus:RENEW_REMAINING>0</bus:RENEW_REMAINING>
                  <bus:RENEW_TOTAL>1</bus:RENEW_TOTAL>
                  <bus:STATUS>0</bus:STATUS>
                  <bus:UNIT>5</bus:UNIT>
               </bus:CONTRACT_PHASES>
               <bus:CONTRACT_PHASES elem="1">
                  <bus:CANCEL_APPLY_NO>1</bus:CANCEL_APPLY_NO>
                  <bus:FIXED_CANCEL_PRODUCT_OBJ>0.0.0.1 /product 463878 2/
bus:FIXED_CANCEL_PRODUCT_OBJ>
                  <bus:LENGTH>3</bus:LENGTH>
                  <bus:NOTIFICATION_DAYS>5</bus:NOTIFICATION_DAYS>
                  <bus:OFFERINGS elem="0">
                     <bus:PRICING_OBJ>0.0.0.1 /product 465402 2</bus:PRICING_OBJ>
                     <bus:SERVICE_OBJ>0.0.0.1 /service/cloud 614486 0
bus:SERVICE OBJ>
                  </bus:OFFERINGS>
                  <bus:PRORATE_CANCEL_PRODUCT_OBJ>0.0.0.0 -1 0
bus:PRORATE_CANCEL_PRODUCT_OBJ>
                  <bus:RENEW_FLAGS>0</bus:RENEW_FLAGS>
                  <bus:RENEW_REMAINING>0</bus:RENEW_REMAINING>
                  <bus:RENEW TOTAL>2</bus:RENEW TOTAL>
                  <bus:STATUS>0</bus:STATUS>
                  <bus:UNIT>5</bus:UNIT>
               </bus:CONTRACT_PHASES>
               <bus:GRACE_DAYS>15</bus:GRACE_DAYS>
            </bus:BRMC_OP_CONTRACT_CREATE_CONTRACT_inputFlist>
         </bus:BRMC_OP_CONTRACT_CREATE_CONTRACT_Request>
      </bus:pcmOpContractCreateContractRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

### Sample pcmOpContractCreateContract response

In this sample response, the reportBytes element contains the base64 encoded report data in the requested format, such as CSV.

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
  <S:Body>
```

```
<pcmOpContractCreateContractResponse xmlns:brm="http://xmlns.oracle.com/BRM/</pre>
schemas/BusinessOpcodes">
         <ACCOUNT_OBJ>0.0.0.1 /account 611831 0</ACCOUNT_OBJ>
         <ACTION INFO elem="0">
            <RENEW_REMAINING>0</RENEW_REMAINING>
            <RENEW_TOTAL>1</RENEW_TOTAL>
         </ACTION_INFO>
         <CONTRACT_NO>CNTR1-503</CONTRACT_NO>
         <CONTRACT_PHASES elem="0">
            <CANCEL_APPLY_NO>1</CANCEL_APPLY_NO>
            <DESCR/>
            <END_T>2015-07-17T07:00:00Z</END_T>
            <FIXED_CANCEL_PRODUCT_OBJ>0.0.0.0 -1 0
            <LENGTH>3</LENGTH>
            <NAME>Trial Phase</NAME>
            <NOTIFICATION DAYS>5</NOTIFICATION DAYS>
            <NOTIFICATION_DUE_T>2015-07-12T07:00:00Z</NOTIFICATION_DUE_T>
            <NOTIFICATION_STATUS>0</NOTIFICATION_STATUS>
            <OFFERINGS elem="0">
               <OFFERING_OBJ>0.0.0.1 /purchased_product 608247 0</OFFERING_OBJ>
               <PRICING_OBJ>0.0.0.1 /product 464134 1</PRICING_OBJ>
               <SERVICE_OBJ>0.0.0.1 /service/cloud 612623 0</SERVICE_OBJ>
            </OFFERINGS>
            <OVERRIDE_CANCEL_FEE>0</OVERRIDE_CANCEL_FEE>
            <PRORATE_CANCEL_PRODUCT_OBJ>0.0.0 -1 0</PRORATE_CANCEL_PRODUCT_OBJ>
            <RENEW_FLAGS>0</RENEW_FLAGS>
            <RENEW_REMAINING>0</RENEW_REMAINING>
            <RENEW_TOTAL>1</PRENEW_TOTAL>
            <START_T>2015-04-17T07:00:00Z</START_T>
            <STATUS>1</STATUS>
            <UNIT>5</UNIT>
         </CONTRACT_PHASES>
         <CONTRACT_PHASES elem="1">
            <CANCEL_APPLY_NO>1</CANCEL_APPLY_NO>
            <END T>2015-10-17T07:00:00Z</END T>
            <FIXED_CANCEL_PRODUCT_OBJ>0.0.0.1 /product 466938 2/
FIXED CANCEL PRODUCT OBJ>
            <LENGTH>3</LENGTH>
            <NAME>Subscription Phase</NAME>
            <NOTIFICATION_DAYS>5</NOTIFICATION_DAYS>
            <NOTIFICATION_DUE_T>1970-01-01T00:00:00Z</NOTIFICATION_DUE_T>
            <NOTIFICATION_STATUS>0</NOTIFICATION_STATUS>
            <OFFERINGS elem="0">
               <OFFERING_OBJ>0.0.0.0 0 0</OFFERING_OBJ>
               <PRICING_OBJ>0.0.0.1 /product 464634 2</PRICING_OBJ>
               <SERVICE_OBJ>0.0.0.1 /service/cloud 612623 0</SERVICE_OBJ>
            </OFFERINGS>
            <OVERRIDE_CANCEL_FEE>0</OVERRIDE_CANCEL_FEE>
            <PRORATE_CANCEL_PRODUCT_OBJ>0.0.0.0 -1 0/PRORATE_CANCEL_PRODUCT_OBJ>
            <RENEW_FLAGS>0</RENEW_FLAGS>
            <RENEW_REMAINING>1</RENEW_REMAINING>
            <RENEW_TOTAL>3</RENEW_TOTAL>
            <START_T>2015-07-17T07:00:00Z</START_T>
            <STATUS>0</STATUS>
            <UNIT>5</UNIT>
         </CONTRACT_PHASES>
         <CONTRACT_TEMPLATE_NAME>ContractTemplate_2P</CONTRACT_TEMPLATE_NAME>
         <CONTRACT_TEMPLATE_OBJ>0.0.0.1 /contract_template 611704 0
CONTRACT_TEMPLATE_OBJ>
         <DESCR/>
```

```
<ENABLED_NOTIFICATIONS>0</ENABLED_NOTIFICATIONS>
         <END_T>2015-10-17T07:00:00Z</END_T>
         <GRACE_DAYS>10</GRACE_DAYS>
         <GRACE_END_T>2015-10-27T07:00:00Z</GRACE_END_T>
         <GROUP_CONTRACT_OBJ>0.0.0.0 0 0/GROUP_CONTRACT_OBJ>
         <OFFERINGS elem="0">
            <ACTION>purchase</ACTION>
            <EVENT_OBJ>0.0.0.1 /event/billing/product/action/purchase 17592186652175
0</EVENT_OBJ>
            <OFFERING_OBJ>0.0.0.1 /purchased_product 608247 0</OFFERING_OBJ>
            <PHASE_ID>0</PHASE_ID>
            <PRICING_OBJ>0.0.0.1 /product 464134 1</PRICING_OBJ>
            <PURCHASE_END_T>2015-07-17T07:00:00Z</purchase_END_T>
            <SERVICE OBJ>0.0.0.1 /service/cloud 612623 0</SERVICE OBJ>
         </OFFERINGS>
         <PACKAGE ID>846</PACKAGE ID>
         <POID>0.0.0.1 /subscribed_contract 607223 1</POID>
         <SERVICE_OBJ>0.0.0.1 /service/cloud 612623 0</SERVICE_OBJ>
         <START_T>2015-04-17T07:00:00Z</START_T>
         <STATUS>1</STATUS>
      </pcmOpContractCreateContractResponse>
   </S:Body>
</S:Envelope>
```

### pcmOpContractGetMilestones

This operation retrieves all milestones that are associated with a customer's contract or account. See About the revenue earning schedule.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### URI

https://hostname/BrmWebServices/BRMContractServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpContractGetMilestones request

#### Sample pcmOpContractGetMilestones response

```
BusinessOpcodes">
         <GL_MILESTONES elem="0">
            <CONTRACT_END_T>2031-01-01T08:00:00Z</CONTRACT_END_T>
            <CONTRACT_START_T>2030-01-01T08:00:00Z</CONTRACT_START_T>
            <CURRENCY>840</CURRENCY>
            <DELIVERABLE_NAME>ExpertSuppport_Deliverable_4.1-20180316041911425
DELIVERABLE NAME>
            <DELIVERABLE_OBJ>0.0.0.1 /deliverable/product 280260 0/DELIVERABLE_OBJ>
            <MILESTONE_COMPLETION_T>1970-01-01T00:00:00Z</mileSTONE_COMPLETION_T>
            <PRODUCT_NAME>CO_Cloud _Internet_TV_4.1-20180316042023784/PRODUCT_NAME>
            <REVENUE_PRODUCT_OBJ>0.0.0.1 /revenue_product 373969 0/
REVENUE_PRODUCT_OBJ>
            <STATUS>0</STATUS>
            <SUBSCRIBER CONTRACT OBJ>0.0.0.1 /subscriber contract 372945 0
SUBSCRIBER CONTRACT OBJ>
         </GL MILESTONES>
         <POID>0.0.0.1 /account 375889 0</POID>
      </pcmOpContractGetMilestonesResponse>
   </S:Body>
</S:Envelope>
```

### pcmOpContractModifyContract

This operation modifies a customer's existing contract.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMContractServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpContractModifyContract request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpContractModifyContractRequest>
         <bus:BRMC_OP_CONTRACT_MODIFY_CONTRACT_Request>
            <bus:flags>0</bus:flags>
            <bus:BRMC_OP_CONTRACT_MODIFY_CONTRACT_inputFlist>
               <bus:ACCOUNT_OBJ>0.0.0.1 /account 611831 0</bus:ACCOUNT_OBJ>
               <bus:POID>0.0.0.1 /subscribed_contract 607223 1</bus:POID>
               <bus:SERVICE_OBJ>0.0.0.1 /service/cloud 612623 0/bus:SERVICE_OBJ>
               <bus:CONTRACT PHASES elem="0">
                  <bus:CANCEL_APPLY_NO>1</bus:CANCEL_APPLY_NO>
                  <bus:FIXED_CANCEL_PRODUCT_OBJ>0.0.0.0 -1 0
bus:FIXED_CANCEL_PRODUCT_OBJ>
                  <bus:LENGTH>3</bus:LENGTH>
                  <bus:NOTIFICATION_DAYS>5</bus:NOTIFICATION_DAYS>
                  <bus:OFFERINGS elem="0">
                     <bus:PRICING_OBJ>0.0.0.1 /product 465670 1</bus:PRICING_OBJ>
                     <bus:SERVICE_OBJ>0.0.0.1 /service/cloud 460474 0
bus:SERVICE_OBJ>
                  </bus:OFFERINGS>
                  <bus:PRORATE_CANCEL_PRODUCT_OBJ>0.0.0.0 -1 0
bus: PRORATE_CANCEL_PRODUCT_OBJ>
```

```
<bus:RENEW_FLAGS>0</bus:RENEW_FLAGS>
                  <bus:RENEW_REMAINING>0</bus:RENEW_REMAINING>
                  <bus:RENEW_TOTAL>1/bus:RENEW_TOTAL>
                  <bus:STATUS>0</bus:STATUS>
                  <bus:UNIT>5</bus:UNIT>
               </bus:CONTRACT_PHASES>
               <bus:CONTRACT_PHASES elem="1">
                  <bus:CANCEL_APPLY_NO>1</bus:CANCEL_APPLY_NO>
                  <bus:FIXED_CANCEL_PRODUCT_OBJ>0.0.0.1 /product 463878 2/
bus:FIXED_CANCEL_PRODUCT_OBJ>
                  <bus:LENGTH>3</bus:LENGTH>
                  <bus:NOTIFICATION_DAYS>5</bus:NOTIFICATION_DAYS>
                  <bus:OFFERINGS elem="0">
                     <bus:PRICING_OBJ>0.0.0.1 /product 465402 2</bus:PRICING_OBJ>
                     <bus:SERVICE_OBJ>0.0.0.1 /service/cloud 460474 0
bus:SERVICE OBJ>
                  </bus:OFFERINGS>
                  <bus:PRORATE_CANCEL_PRODUCT_OBJ>0.0.0.0 -1 0
bus:PRORATE_CANCEL_PRODUCT_OBJ>
                  <bus:RENEW_FLAGS>0</bus:RENEW_FLAGS>
                  <bus:RENEW_REMAINING>0</bus:RENEW_REMAINING>
                  <bus:RENEW_TOTAL>2</bus:RENEW_TOTAL>
                  <bus:STATUS>0</bus:STATUS>
                  <bus:UNIT>5</bus:UNIT>
               </bus:CONTRACT_PHASES>
            </bus:BRMC_OP_CONTRACT_MODIFY_CONTRACT_inputFlist>
         </bus:BRMC_OP_CONTRACT_MODIFY_CONTRACT_Request>
      </bus:pcmOpContractModifyContractRequest>
   </soapenv:Body>
</soapenv:Envelope>
Sample pcmOpContractModifyContract response
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
      <pcmOpContractModifyContractResponse xmlns:brm="http://xmlns.oracle.com/BRM/</pre>
schemas/BusinessOpcodes">
         <ACTIONS elem="0">
            <CONTRACT PHASES elem="0">
               <FIXED_CANCEL_PRODUCT_OBJ>0.0.0.0 -1 0
               <LENGTH>3</LENGTH>
               <NOTIFICATION_DAYS>5</NOTIFICATION_DAYS>
               <OFFERINGS elem="0">
                  <PRICING_OBJ>0.0.0.1 /product 465670 1</PRICING_OBJ>
                  <SERVICE_OBJ>0.0.0.1 /service/cloud 460474 0</SERVICE_OBJ>
               </OFFERINGS>
               <RENEW_FLAGS>0</RENEW_FLAGS>
               <RENEW_TOTAL>1
               <UNIT>5</UNIT>
            </CONTRACT_PHASES>
            <CONTRACT_PHASES elem="1">
               <FIXED_CANCEL_PRODUCT_OBJ>0.0.0.1 /product 463878 2/
FIXED_CANCEL_PRODUCT_OBJ>
               <LENGTH>3</LENGTH>
               <NOTIFICATION_DAYS>5</NOTIFICATION_DAYS>
               <OFFERINGS elem="0">
                  <PRICING_OBJ>0.0.0.1 /product 465402 2</PRICING_OBJ>
                  <SERVICE_OBJ>0.0.0.1 /service/cloud 460474 0</SERVICE_OBJ>
               </OFFERINGS>
               <RENEW_FLAGS>0</RENEW_FLAGS>
```

<RENEW TOTAL>2</RENEW TOTAL>

### pcmOpContractProcessMilestone

This operation marks that a contract milestone has been completed. This allows your company to recognize the revenue associated with the milestone. See About the revenue earning schedule.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMContractServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpContractProcessMilestone request

```
<soapenv:Envelope xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes"</pre>
xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpContractProcessMilestoneRequest>
         <bus:PCM_OP_CONTRACT_PROCESS_MILESTONE_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_CONTRACT_PROCESS_MILESTONE_inputFlist>
               <bus:ACCOUNT_OBJ>0.0.0.1 /account 375889</bus:ACCOUNT_OBJ>
               <bus:DELIVERABLE_OBJ>0.0.0.1 /deliverable/product 280260 0
bus:DELIVERABLE OBJ>
               <bus:MILESTONE_COMPLETION_T>1893579779/bus:MILESTONE_COMPLETION_T>
               <bus:POID>0.0.0.1 /revenue_product 373969 0</bus:POID>
            </bus:PCM_OP_CONTRACT_PROCESS_MILESTONE_inputFlist>
         </bus:PCM_OP_CONTRACT_PROCESS_MILESTONE_Request>
      </bus:pcmOpContractProcessMilestoneRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

### Sample pcmOpContractProcessMilestone response

## Related topics

Oracle Monetization Cloud web services

- Performing common tasks with web services
- About integrating your business systems



# **Customer operations**

This document describes the customer operations in the Oracle Monetization Cloud BRMCustServices\_v2 SOAP API.

### Topics in this document

- About the BRMCustServices\_v2 interface
- · Related topics

# About the BRMCustServices\_v2 interface

Use the BRMCustServices\_v2 interface to perform operations such as creating and deleting customer accounts, updating account information, and retrieving pricing package information.

### Authorization

Oracle Monetization Cloud uses the OAuth 2.0 protocol to authorize external applications to access its web services. To call the web services, an application must be registered as an OAuth client in Oracle Monetization Cloud. For more information, see Using OAuth to authorize access.

### Customer operations available at runtime

The following table lists the operations provided by the BRMCustServices\_v2 interface.

For information about terminology used in sample requests and responses for web service operations, see About terminology.

Operation	Description
pcmOpCustCommitCustomer	Creates an active customer account with the specified services.
pcmOpCustCreateProfile	Creates an account profile (Iprofile object).
pcmOpCustDeleteAcct	Deletes the specified account and all the objects related to the account.
pcmOpCustDeletePayinfo	Deletes a payment method (Ipayinfo object).
pcmOpCustDeletePersonalData	Removes all personal data from a closed account.
pcmOpCustDeleteProfile	Deletes an account profile.
pcmOpCustFind	Finds an account by account number.
pcmOpCustFindPayinfo	Finds the payment method associated with an account's default bill unit (/billinfo object) or a specified bill unit.
pcmOpCustFindProfile	Finds the profile of a specified account.

Operation	Description
pcmOpCustGetNote	Returns notes based on the specified search criteria.
pcmOpCustModifyCustomer	Modifies account information, such as services, bundles, and profiles.
pcmOpCustModifyProfile	Modifies an account profile.
pcmOpCustPolGetPlans	Returns a list of available packages.
pcmOpCustPolGetProducts	Returns a list of charge offers that an account can purchase.
pcmOpCustPolReadPlan	Retrieves a list of available account packages and packages related to services. Use this operation to customize bundles during account creation.
pcmOpCustSetNote	Creates or updates a note.
pcmOpCustSetStatus	Sets the status of an account or an account's bill unit, service, or both.
pcmOpCustSetTaxInfo	Adds or updates the tax information in an account.
pcmOpCustUpdateCustomer	Updates account information.
pcmOpCustUpdateServices	Updates multiple services in an account.

### pcmOpCustCommitCustomer

This operation creates an active customer account with the requested services. This operation purchases bundles, charges for purchase fees and the first cycle forward fees, and validates a customer's credit card if necessary. If the credit card can't be validated, errors may be returned.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMCustServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpCustCommitCustomer request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpCustCommitCustomerRequest>
         <bus:PCM_OP_CUST_COMMIT_CUSTOMER_Request>
            <bus:flags>1</bus:flags>
            <bus:PCM_OP_CUST_COMMIT_CUSTOMER_inputFlist>
               <bus:ACCTINFO elem="0">
                  <bus:ACCOUNT_NO>a022020202011992</bus:ACCOUNT_NO>
                  <bus:BAL_INFO />
                  <bus:BUSINESS_TYPE>1</bus:BUSINESS_TYPE>
                  <bus:CURRENCY>840CURRENCY>
                  <bus:POID>0.0.0.1 /account -1 0</bus:POID>
               </bus:ACCTINFO>
               <bus:BAL_INFO elem="0">
```

```
<bus:BILLINFO />
                 <bus:LIMIT elem="840">
                    <bus:CREDIT_LIMIT>"0"</bus:CREDIT_LIMIT>
                 </bus:LIMIT>
                 <bus:NAME>Account Level Balance Group</bus:NAME>
                 <bus:POID>0.0.0.1 /balance_group -1 0</bus:POID>
              </bus:BAL_INFO>
              <bus:BILLINFO elem="0">
                 <bus:BAL_INFO />
                 <bus:BILL_WHEN>1</bus:BILL_WHEN>
                 <bus:BILLINFO_ID>88-CYZZ5</bus:BILLINFO_ID>
                 <bus:ACTG_CYCLE_DOM>10/bus:ACTG_CYCLE_DOM>
                 <bus:CURRENCY>840</pus:CURRENCY>
                 <bus:PAY TYPE>10001
TYPE>
                 <bus:PAYINFO />
                 <bus:POID>0.0.0.1 /billinfo -1 0
              </bus:BILLINFO>
              <bus:END_T>2010-02-17T22:37:49</bus:END_T>
              <bus:FLAGS>0</bus:FLAGS>
              <bus:LOCALES elem="1">
                 <bus:LOCALE>en_US</bus:LOCALE>
              </bus:LOCALES>
              <bus:NAMEINFO elem="1">
                 <bus:ADDRESS>123 Hollywood Boulevard</bus:ADDRESS>
                 <bus:CITY>Los Angeles/bus:CITY>
                 <bus:CONTACT_TYPE>Account holder/bus:CONTACT_TYPE>
                 <bus:COUNTRY>USACOUNTRY>
                 <bus:EMAIL_ADDR>user@example.com</bus:EMAIL_ADDR>
                 <bus:FIRST_NAME>John
                 <bus:LAST_NAME>Smith
                 <bus:STATE>NJ</bus:STATE>
                 <bus:ZIP>90001</bus:ZIP>
              </bus:NAMEINFO>
              <bus:PAYINFO elem="0">
                 <bus:INHERITED_INFO>
                    <bus:INV_INFO elem="0">
                       <bus:ADDRESS>123 Hollywood Boulevard/bus:ADDRESS>
                       <bus:CITY>Los Angeles
                       <bus:COUNTRY>USA</bus:COUNTRY>
                       <bus:DELIVERY_DESCR>test_001/bus:DELIVERY_DESCR>
                       <bus:DELIVERY_PREFER>0</bus:DELIVERY_PREFER>
                       <bus:EMAIL_ADDR />
                       <bus:INV_TERMS>0</bus:INV_TERMS>
                       <bus:NAME>John James Smith
                       <bus:STATE>NJ</bus:STATE>
                       <bus:ZIP>90001
ZIP>
                    </bus:INV_INFO>
                 </bus:INHERITED_INFO>
                 <bus:INV_TYPE>0</bus:INV_TYPE>
                 <bus:PAY_TYPE>10001
                 <bus:POID>0.0.0.1 /payinfo/invoice -1 0</bus:POID>
              </bus:PAYINFO>
              <bus:POID>0.0.0.1 /plan -1 0</bus:POID>
           </bus:PCM_OP_CUST_COMMIT_CUSTOMER_inputFlist>
        </bus:PCM_OP_CUST_COMMIT_CUSTOMER_Request>
     </bus:pcmOpCustCommitCustomerRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

### Sample pcmOpCustCommitCustomer response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpCustCommitCustomerResponse xmlns="http://xmlns.oracle.com/BRM/schemas/</pre>
BusinessOpcodes">
         <ACCOUNT_OBJ>0.0.0.1 /account 225757 0</ACCOUNT_OBJ>
         <ACCTINFO elem="0">
            <ACCOUNT_NO>a022020202011992</ACCOUNT_NO>
            <BAL_INFO elem="0" />
            <BUSINESS_TYPE>1</BUSINESS_TYPE>
            <CURRENCY>840</CURRENCY>
            <POID>0.0.0.1 /account -1 0</POID>
         </ACCTINFO>
         <BAL_INFO elem="0">
            <ACCOUNT_OBJ>0.0.0.1 /account 225757 0</ACCOUNT_OBJ>
            <BILLINFO_OBJ>0.0.0.1 /billinfo 226269 0</BILLINFO_OBJ>
            <LIMIT elem="840">
               <CREDIT_LIMIT />
            </LIMIT>
            <NAME>Account Level Balance Group</NAME>
            <POID>0.0.0.1 /balance_group 225341 0</POID>
            <SERVICE_OBJ>0.0.0.0 0 0</SERVICE_OBJ>
         </BAL_INFO>
         <BILLINFO elem="0">
         <actg_cycle_dom>10</bus:actg_cycle_dom>
         <BAL_GRP_OBJ>0.0.0.1 /balance_group 225341 0</BAL_GRP_OBJ>
            <BILLINFO ID>88-CYZZ5</BILLINFO ID>
            <BILL_WHEN>1</BILL_WHEN>
            <CURRENCY>840</CURRENCY>
            <CURRENCY_SECONDARY>0</CURRENCY_SECONDARY>
            <EFFECTIVE_T>2010-02-17T22:37:49Z</EFFECTIVE_T>
            <PAYINFO_OBJ>0.0.0.1 /payinfo/invoice 226781 0</PAYINFO_OBJ>
            <PAY_TYPE>10001</PAY_TYPE>
            <POID>0.0.0.1 /billinfo 226269 0</POID>
         <END_T>2010-02-17T22:37:49Z</END_T>
         <FLAGS>0</FLAGS>
         <GROUP_INFO />
         <HOST elem="1">
            <HOSTNAME>XXX.XXX.XXX.XXX
            <TYPE>1</TYPE>
         </HOST>
         <HOST elem="2">
            <HOSTNAME>XXX.XXX.XXX.XXX
            <TYPE>1</TYPE>
         </HOST>
         <HOST elem="3">
            <hostname>xxxxxxxxxx.xxx</hostname>
            <PORT>0</PORT>
            <TYPE>2</TYPE>
         </HOST>
         <HOST elem="4">
            <hostname>xxxx.xxx</hostname>
            <TYPE>3</TYPE>
         </HOST>
         <HOST elem="5">
            <hostname>xxxx.xxx</hostname>
            <TYPE>4</TYPE>
         </HOST>
```



```
<HTTP_URL>XXXXXXXXXXXXXXXXXX/HTTP_URL>
         <LOCALES elem="1">
            <LOCALE>en_US</LOCALE>
         </LOCALES>
         <NAMEINFO elem="1">
            <aDDRESS>123 Hollywood Boulevard</aDDRESS>
            <CANON_COUNTRY>US</CANON_COUNTRY>
            <CITY>Los Angeles</CITY>
            <COMPANY />
            <CONTACT_TYPE>Account holder</CONTACT_TYPE>
            <COUNTRY>USA</COUNTRY>
            <ELEMENT_ID>1</ELEMENT_ID>
            <EMAIL ADDR>user@example.com</EMAIL ADDR>
            <FIRST NAME>John</FIRST NAME>
            <LAST_NAME>Smith</LAST_NAME>
            <MIDDLE NAME />
            <SALUTATION />
            <STATE>NJ</STATE>
            <TITLE />
            <ZIP>90001</ZIP>
         </NAMEINFO>
         <PAYINFO elem="0">
            <INHERITED_INFO>
               <INV_INFO elem="0">
                  <ADDRESS>123 Hollywood Boulevard</ADDRESS>
                  <CITY>Los Angeles</CITY>
                  <COUNTRY>USA</COUNTRY>
                  <DELIVERY_DESCR>test_001/DELIVERY_DESCR>
                  <DELIVERY_PREFER>0</DELIVERY_PREFER>
                  <EMAIL_ADDR />
                  <INV_TERMS>0</INV_TERMS>
                  <NAME>John Smith</NAME>
                  <STATE>NJ</STATE>
                  <ZIP>90001</ZIP>
               </INV_INFO>
            </INHERITED_INFO>
            <INV_TYPE>0</INV_TYPE>
            <PAY_TYPE>10001</PAY_TYPE>
            <POID>0.0.0.1 /payinfo/invoice 226781 0</POID>
         </PAYINFO>
         <POID>0.0.0.1 /plan -1 0</POID>
         <START_T>2014-05-07T06:00:09Z</START_T>
         <SUPPORT_PHONE>XXXXXXXXXXXXXXXXX</SUPPORT_PHONE>
      </pcmOpCustCommitCustomerResponse>
   </S:Body>
</S:Envelope>
```

# pcmOpCustCreateProfile

This operation creates an account profile.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMCustServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpCustCreateProfile request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpCustCreateProfileRequest>
         <bus:flags>0</bus:flags>
         <bus:PCM_OP_CUST_CREATE_PROFILE_inputFlist>
            <bus:ACCOUNT_OBJ>0.0.0.1 /account 324664 0</bus:ACCOUNT_OBJ>
            <bus:POID>0.0.0.1 /profile/acct_extrating -1 0</bus:POID>
            <bus:PROFILES elem="0">
               <bus:PROFILE_OBJ>0.0.0.1 /profile 0 0</bus:PROFILE_OBJ>
            </bus:PROFILES>
         </bus:PCM_OP_CUST_CREATE_PROFILE_inputFlist>
      </bus:pcmOpCustCreateProfileRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

### Sample pcmOpCustCreateProfile response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpCustCreateProfileResponse xmlns:brm="http://xmlns.oracle.com/BRM/schemas/</pre>
BusinessOpcodes">
         <POID>0.0.0.1 /profile/acct_extrating -1 0</POID>
         <RESULTS elem="1">
            <POID>0.0.0.1 /profile/acct_extrating 323035 0</POID>
      </pcmOpCustCreateProfileResponse>
   </S:Body>
</S:Envelope>
```

### pcmOpCustDeleteAcct

This operation deletes the specified account and all the objects related to the account.



### Caution:

Don't delete accounts in a production system.

For a description of this operation's input and output parameters, see Oracle Monetization Cloud SOAP API Reference.

#### URI

https://hostname/BrmWebServices/BRMCustServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpCustDeleteAcct request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
```



### Sample pcmOpCustDeleteAcct response

# pcmOpCustDeletePayinfo

This operation deletes a payment method (/payinfo object).



To delete a **/payinfo** object that's associated with a **/billinfo** object, you must first delete the **/billinfo** object.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMCustServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpCustDeletePayinfo request

```
</soapenv:Body>
</soapenv:Envelope>
```

### Sample pcmOpCustDeletePayinfo response

# pcmOpCustDeletePersonalData

This operation removes personal data on demand from a closed account. It sets the value of any fields containing personal data to the string "".



This operation doesn't confirm that the account is closed before removing personal data. You're responsible for checking that the account is closed and only running this operation against closed accounts.

Oracle Monetization Cloud also automatically purges personal data from old events and deletes closed accounts after 12 months.

For information about what is considered personal data, see About personal data in *Oracle Monetization Cloud Security Guide*.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

### **URI**

https://hostname/BrmWebServices/BRMCustServices\_2/

where hostname is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpCustDeletePersonalData request



```
</bus:pcmOpCustDeletePersonalDataRequest>
</soapenv:Body>
</soapenv:Envelope>
```

### Sample pcmOpCustDeletePersonalData response

# pcmOpCustDeleteProfile

This operation deletes an account profile. Before deleting the profile, the operation verifies whether the profile belongs to a profile sharing group. If it does, the profile isn't deleted.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

### URI

https://hostname/BrmWebServices/BRMCustServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpCustDeleteProfile request

### Sample pcmOpCustDeleteProfile response



# pcmOpCustFind

This operation finds an account by account number. No authentication is performed. The *laccount* object is simply located, and fields are returned.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

```
https://hostname/BrmWebServices/BRMCustServices_v2/
```

where *hostname* is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpCustFind request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpCustFindRequest>
         <bus:flags>0</bus:flags>
         <bus:PCM_OP_CUST_FIND_inputFlist>
            <bus:ARGS elem="0">
               <bus:ACCOUNT_NO>TEST_ACC/bus:ACCOUNT_NO>
            </bus:ARGS>
            <bus:POID>0.0.0.1 /account 324664 0</bus:POID>
            <bus:RESULTS elem="0" />
         </bus:PCM_OP_CUST_FIND_inputFlist>
      </bus:pcmOpCustFindRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

### Sample pcmOpCustFind response

### pcmOpCustFindPayinfo

This operation returns the payment method (/payinfo object) associated with an account's default bill unit (/billinfo object) or a specified bill unit.



If the pcmOpflgReadResult operation flag is passed in with this operation, the entire **/payinfo** object is read (any fields specified in the input RESULTS array are ignored).

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMCustServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpCustFindPayinfo request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpCustFindPayinfoRequest>
         <bus:PCM_OP_CUST_FIND_PAYINFO_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_CUST_FIND_PAYINFO_inputFlist>
               <bus:ACCOUNT_OBJ>0.0.0.1 /account 324664 0</bus:ACCOUNT_OBJ>
               <bus:POID>0.0.0.1 /payinfo 0 0</bus:POID>
               <bus:RESULTS elem="0">
                  <bus:CC_INFO elem="0" />
               </bus:RESULTS>
               <bus:TYPE_STR>/payinfo/invoice</bus:TYPE_STR>
            </bus:PCM_OP_CUST_FIND_PAYINFO_inputFlist>
         </bus:PCM_OP_CUST_FIND_PAYINFO_Request>
      </bus:pcmOpCustFindPayinfoRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

### Sample pcmOpCustFindPayinfo response

# pcmOpCustFindProfile

This operation returns the profile (*/profile* object) of a specified account.



If the pcmOpflgReadResult operation flag is passed in with this operation, the entire **/profile** object is read (any fields in the input RESULTS array are ignored).

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMCustServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpCustFindProfile request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpCustFindProfileRequest>
         <bus:PCM_OP_CUST_FIND_PROFILE_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_CUST_FIND_PROFILE_inputFlist>
               <bus:ACCOUNT_OBJ>0.0.0.1 /account 324664 0</bus:ACCOUNT_OBJ>
               <bus:POID>0.0.0.1 /profile 0 0</bus:POID>
               <bus:TYPE_STR>/profile/acct_extrating</bus:TYPE_STR>
            </bus:PCM_OP_CUST_FIND_PROFILE_inputFlist>
         </bus:PCM_OP_CUST_FIND_PROFILE_Request>
      </bus:pcmOpCustFindProfileRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

### Sample pcmOpCustFindProfile response

# pcmOpCustGetNote

This operation returns notes based on the specified search criteria.



Oracle Monetization Cloud maintains a history of event publishing messages for each subscriber account. Each status change is recorded in a note. To retrieve a subscriber account's message history, use this operation. For more information, see Monitoring message status.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

### URI

https://hostname/BrmWebServices/BRMCustServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpCustGetNote request

#### Sample pcmOpCustGetNote response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpCustGetNoteResponse xmlns:brm="http://xmlns.oracle.com/BRM/schemas/</pre>
BusinessOpcodes">
         <POID>0.0.0.1 /note 318976 0</POID>
         <RESULTS elem="0">
            <ACCOUNT_OBJ>0.0.0.1 /account 291725 23</ACCOUNT_OBJ>
            <AMOUNT>100</AMOUNT>
            <BILLINFO_OBJ>0.0.0.1 /billinfo 298724 2</BILLINFO_OBJ>
            <CLOSED_T>1970-01-01T00:00:00Z</CLOSED_T>
            <COUNT>1</COUNT>
            <CREATED_T>2014-09-29T12:08:24Z</CREATED_T>
            <DATA ARRAY elem="0">
               <CSR_ACCOUNT_OBJ>0.0.0.1 /account 291725 23</CSR_ACCOUNT_OBJ>
               <ENTRY_T>2014-09-29T12:08:24Z</ENTRY_T>
               <NOTE_STR>TRAIL</NOTE_STR>
               <TRACKING_ID>abc-123</TRACKING_ID>
            </DATA_ARRAY>
            <EFFECTIVE_T>1970-01-01T00:00:00Z</EFFECTIVE_T>
            <EVENT_OBJ>0.0.0.0 0 0</EVENT_OBJ>
            <HEADER_STR>Header-1/HEADER_STR>
            <TTEM_OBJ>0.0.0.0 0 0</TTEM_OBJ>
```



# pcmOpCustModifyCustomer

This operation modifies account information. It adds account and service bundles, new services, and purchased bundles to those services. It also adds and updates balance groups, bill units (*Ibillinfo* objects), payment methods (*Ipayinfo* objects), and account profiles.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### URI

https://hostname/BrmWebServices/BRMCustServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpCustModifyCustomer request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpCustModifyCustomerRequest>
         <bus:PCM_OP_CUST_MODIFY_CUSTOMER_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_CUST_MODIFY_CUSTOMER_inputFlist>
               <bus:ACCOUNT_OBJ>0.0.0.1 /account 324664 0</bus:ACCOUNT_OBJ>
               <bus:BAL INFO elem="0">
                  <bus:BILLINFO elem="1" />
                  <bus:NAME>Balance Group&lt;Account&gt;</bus:NAME>
                  <bus:POID>0.0.0.1 /balance_group 325944 0</bus:POID>
               </bus:BAL_INFO>
               <bus:BILLINFO elem="1">
                  <bus:BAL_INFO elem="0" />
                  <bus:BILLINFO_ID>Bill Unit(1)
                  <bus:PAY_TYPE>0</bus:PAY_TYPE>
                  <bus:POID>0.0.0.1 /billinfo -1 0</bus:POID>
               </bus:BILLINFO>
               <bus:POID>0.0.0.1 /account 324664 0</bus:POID>
            </bus:PCM_OP_CUST_MODIFY_CUSTOMER_inputFlist>
         </bus:PCM_OP_CUST_MODIFY_CUSTOMER_Request>
      </bus:pcmOpCustModifyCustomerRequest>
   </soapenv:Body>
</soapenv:Envelope>
```



### Sample pcmOpCustModifyCustomer response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpCustModifyCustomerResponse xmlns:brm="http://xmlns.oracle.com/BRM/</pre>
schemas/BusinessOpcodes">
         <ACCOUNT_OBJ>0.0.0.1 /account 324664 0</ACCOUNT_OBJ>
         <ACCTINFO elem="0">
            <CURRENCY>840</CURRENCY>
            <CURRENCY_SECONDARY>0</CURRENCY_SECONDARY>
            <POID>0.0.0.1 /account 324664 12</POID>
         </ACCTINFO>
         <BAL_INFO elem="0">
            <account_obj>0.0.0.1 /account 324664 0</account_obj>
            <NAME>Balance Group&lt;Account&gt;</NAME>
            <POID>0.0.0.1 /balance_group 325944 0</POID>
         </BAL_INFO>
         <BILLINFO elem="1">
            <BAL_GRP_OBJ>0.0.0.1 /balance_group 326949 0</BAL_GRP_OBJ>
            <BILLINFO_ID>Bill Unit(1)</BILLINFO_ID>
            <CURRENCY>840</CURRENCY>
            <CURRENCY_SECONDARY>0</CURRENCY_SECONDARY>
            <EFFECTIVE_T>2014-10-03T20:25:32Z</EFFECTIVE_T>
            <PAY_TYPE>0</PAY_TYPE>
           <POID>0.0.0.1 /billinfo 327205 0</POID>
         </BILLINFO>
         <END_T>2014-10-03T20:25:32Z</END_T>
         <POID>0.0.0.1 /account 324664 0</POID>
         <PROGRAM_NAME>Automatic Customer Modification
         <START_T>2014-10-03T20:25:32Z</START_T>
      </pcmOpCustModifyCustomerResponse>
   </S:Body>
</S:Envelope>
```

# pcmOpCustModifyProfile

This operation modifies an account profile. It can also modify a service associated with the profile.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

### **URI**

https://hostname/BrmWebServices/BRMCustServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpCustModifyProfile request



```
<bus:END_T>2014-11-09T11:31:03/bus:END_T>
               <bus:NAME>DATAWAREHOUSE</bus:NAME>
               <bus:POID>0.0.0.1 /profile/acct_extrating 323035 0</bus:POID>
               <bus:PROFILES elem="0">
                  <bus:INHERITED_INFO>
                     <bus:profile_acct_extratingExtension>
                        <bus:DATA_ARRAY elem="1">
                           <bus:NAME>Quality999</pus:NAME>
                           <bus:VALID_FROM>2014-11-13T10:31:03/bus:VALID_FROM>
                           <bus:VALID_TO>2014-11-17T10:31:03/bus:VALID_TO>
                           <bus:VALUE>999</pus:VALUE>
                        </bus:DATA_ARRAY>
                     </bus:profile_acct_extratingExtension>
                  </bus:INHERITED INFO>
                  <bus:PROFILE_OBJ>0.0.0.1 /profile/acct_extrating 323035 0
bus:PROFILE OBJ>
               </bus:PROFILES>
            </bus:PCM_OP_CUST_MODIFY_PROFILE_inputFlist>
         </bus:PCM_OP_CUST_MODIFY_PROFILE_Request>
      </bus:pcmOpCustModifyProfileRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

### Sample pcmOpCustModifyProfile response

### pcmOpCustPolGetPlans

This operation returns a list of available packages.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

### **URI**

https://hostname/BrmWebServices/BRMCustServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpCustPolGetPlans request

```
</bus:pcmOpCustPolGetPlansRequest>
</soapenv:Body>
</soapenv:Envelope>
```

### Sample pcmOpCustPolGetPlans response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpCustPolGetPlansResponse xmlns:brm="http://xmlns.oracle.com/BRM/schemas/</pre>
BusinessOpcodes">
         <PLAN elem="0">
            <ACCOUNT_OBJ>0.0.0.1 /account 1 0</ACCOUNT_OBJ>
            <CODE>Plan 3 - Unlimited Web Access with Recurring Discounts</CODE>
            <CREATED_T>2014-05-05T06:46:48Z</CREATED_T>
            <DEAL_OBJ>0.0.0.0 / 0 0</DEAL_OBJ>
            <DESCR />
            <FLAGS>0</FLAGS>
            <MOD_T>2014-05-05T06:46:48Z</MOD_T>
            <NAME>Plan 3 - Unlimited Web Access with Recurring Discounts</NAME>
            <POID>0.0.0.1 /plan 10031 0</POID>
            <READ_ACCESS>B</READ_ACCESS>
            <SERVICES elem="0">
               <BAL_INFO_INDEX>0</BAL_INFO_INDEX>
               <DEAL_OBJ>0.0.0.1 /deal 9519 0</DEAL_OBJ>
               <SERVICE_ID />
               <SERVICE_OBJ>0.0.0.1 /service/email -1 0</SERVICE_OBJ>
               <SUBSCRIPTION_INDEX>0</SUBSCRIPTION_INDEX>
            </SERVICES>
            <SERVICES elem="1">
               <BAL_INFO_INDEX>0</BAL_INFO_INDEX>
               <DEAL_OBJ>0.0.0.1 /deal 11567 0</DEAL_OBJ>
               <SERVICE_ID />
               <SERVICE_OBJ>0.0.0.1 /service/ip -1 0</SERVICE_OBJ>
               <SUBSCRIPTION_INDEX>0</SUBSCRIPTION_INDEX>
            </SERVICES>
            <WRITE_ACCESS>S</WRITE_ACCESS>
         <POID>0.0.0.1 /account 1 0</POID>
      </pcmOpCustPolGetPlansResponse>
   </S:Body>
</S:Envelope>
```

### pcmOpCustPolGetProducts

This operation returns a list of charge offers that an account can purchase.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

### **URI**

https://hostname/BrmWebServices/BRMCustServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpCustPolGetProducts request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
        <soapenv:Header/>
```

### Sample pcmOpCustPolGetProducts response

# pcmOpCustPolReadPlan

This operation retrieves a list of available account packages and packages related to services.

For a given package, this operation constructs a tree of services, bundles, and charge offers associated with that package. Use this operation to customize bundles during account creation.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

### URI

https://hostname/BrmWebServices/BRMCustServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpCustPolReadPlan request



```
</soapenv:Body>
</soapenv:Envelope>
```

### Sample pcmOpCustPolReadPlan response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpCustPolReadPlanResponse xmlns:brm="http://xmlns.oracle.com/BRM/schemas/</pre>
BusinessOpcodes">
         <AAC_ACCESS />
         <AAC_PACKAGE />
         <AAC_PROMO_CODE />
         <AAC_SERIAL_NUM />
         <AAC_SOURCE />
         <AAC_VENDOR />
         <ACCESS_CODE1 />
         <ACCESS_CODE2 />
         <ACCOUNT_NO>ROOT</ACCOUNT_NO>
         <ACCOUNT_TAG />
         <ACCOUNT_TYPE>2</ACCOUNT_TYPE>
         <ATTRIBUTE>0</ATTRIBUTE>
         <BAL_GRP_OBJ>0.0.0.1 /balance_group 1 0</BAL_GRP_OBJ>
         <BRAND_OBJ>0.0.0.1 /account 1 0</BRAND_OBJ>
         <BUSINESS_TYPE>0</BUSINESS_TYPE>
         <CLOSE_WHEN_T>1970-01-01T00:00:00Z</CLOSE_WHEN_T>
         <CREATED_T>2014-05-05T06:41:33Z</CREATED_T>
         <CURRENCY>840</CURRENCY>
         <CURRENCY_SECONDARY>0</CURRENCY_SECONDARY>
         <CUSTOMER_SEGMENT_LIST />
         <EFFECTIVE_T>2014-05-05T06:41:33Z</EFFECTIVE_T>
         <GL_SEGMENT />
         <GROUP_OBJ>0.0.0.0 0 0/GROUP_OBJ>
         <INCORPORATED_FLAG>0</INCORPORATED_FLAG>
         <INTERNAL_NOTES flags="0x00" offset="0" size="0" />
         <ITEM_POID_LIST>0.0.0.1 /item/misc 1 0</ITEM_POID_LIST>
         <LASTSTAT_CMNT />
         <LAST_STATUS_T>2014-05-05T06:41:33Z</LAST_STATUS_T>
         <LINEAGE>/</LINEAGE>
         <LOCALE />
         <MOD_T>2014-05-05T06:41:33Z</mod_T>
         <NAME>Brand Host</NAME>
         <NAMEINFO elem="1">
            <ADDRESS />
            <CANON_COMPANY />
            <CANON_COUNTRY />
            <CITY />
            <COMPANY />
            <CONTACT_TYPE />
            <COUNTRY />
            <EMAIL_ADDR />
            <FIRST_CANON>system/FIRST_CANON>
            <FIRST_NAME>System/FIRST_NAME>
            <GEOCODE />
            <LAST_CANON>administrator</LAST_CANON>
            <LAST_NAME>Administrator</LAST_NAME>
            <MIDDLE_CANON />
            <MIDDLE_NAME />
            <SALUTATION />
            <SERVICE_OBJ>0.0.0.0 0 0</SERVICE_OBJ>
            <STATE />
```

<TAXPKG\_TYPE>0</TAXPKG\_TYPE>



```
<TITLE />
            <ZIP />
         </NAMEINFO>
         <NEXT_ITEM_POID_LIST />
         <OBJECT_CACHE_TYPE>0</OBJECT_CACHE_TYPE>
         <POID>0.0.0.1 /account 1 1</POID>
         <READ_ACCESS>L</READ_ACCESS>
         <RESIDENCE_FLAG>0</RESIDENCE_FLAG>
         <STATUS>10100</STATUS>
         <STATUS_FLAGS>0</STATUS_FLAGS>
         <TIMEZONE_ID />
         <VAT_CERT />
         <WRITE_ACCESS>L</WRITE_ACCESS>
      </pcmOpCustPolReadPlanResponse>
  </S:Body>
</S:Envelope>
```

### pcmOpCustSetNote

This operation creates or updates a note.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### URI

https://hostname/BrmWebServices/BRMCustServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpCustSetNote request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpCustSetNoteRequest>
         <bus:PCM_OP_CUST_SET_NOTE_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_CUST_SET_NOTE_inputFlist>
               <bus:ACCOUNT_OBJ>0.0.0.1 /account 291725 23</bus:ACCOUNT_OBJ>
               <bus:AMOUNT>100</bus:AMOUNT>
               <bus:BILLINFO_OBJ>0.0.0.1 /billinfo 298724 2</bus:BILLINFO_OBJ>
               <bus:DATA_ARRAY elem="0">
                  <bus:CSR_ACCOUNT_OBJ>0.0.0.1 /account 291725 23
bus:CSR_ACCOUNT_OBJ>
                  <bus:NOTE_STR>TRAIL/bus:NOTE_STR>
                  <bus:TRACKING ID>abc-123/bus:TRACKING ID>
               </bus:DATA_ARRAY>
               <bus:HEADER_STR>Header-1
               <bus:NOTE_SUB_TYPE>101
NOTE_SUB_TYPE>
               <bus:NOTE_TYPE>100</bus:NOTE_TYPE>
               <bus:POID>0.0.0.1 /note -1
               <bus:SERVICE_OBJ>0.0.0.1 /service/ip 291533 10</bus:SERVICE_OBJ>
               <bus:STATUS>100</bus:STATUS>
            </bus:PCM_OP_CUST_SET_NOTE_inputFlist>
         </bus:PCM_OP_CUST_SET_NOTE_Request>
      </bus:pcmOpCustSetNoteRequest>
   </soapenv:Body>
</soapenv:Envelope>
```



### Sample pcmOpCustSetNote response

### pcmOpCustSetStatus

This operation sets the status of an account or of an account's bill unit (/billinfo object), service, or both.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMCustServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpCustSetStatus request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpCustSetStatusRequest>
         <bus:PCM_OP_CUST_SET_STATUS_Request>
            <bus:flags>1</bus:flags>
            <bus:PCM_OP_CUST_SET_STATUS_inputFlist>
               <bus:POID>0.0.0.1 /account 158325 0</bus:POID>
               <bus:PROGRAM_NAME>test wsm</bus:PROGRAM_NAME>
               <!--1 or more repetitions:-->
               <bus:STATUSES elem="0">
                  <bus:STATUS>10100STATUS>
                  <bus:STATUS_FLAGS>1</bus:STATUS_FLAGS>
               </bus:STATUSES>
            </bus:PCM_OP_CUST_SET_STATUS_inputFlist>
         </bus:PCM_OP_CUST_SET_STATUS_Request>
      </bus:pcmOpCustSetStatusRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

### Sample pcmOpCustSetStatus response



### pcmOpCustSetTaxInfo

This operation adds or updates the following tax information in an account:

- VAT certificate
- Tax exemptions
- Tax incorporation
- Tax residence

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMCustServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpCustSetTaxInfo request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpCustSetTaxinfoRequest>
         <bus:PCM_OP_CUST_SET_TAXINFO_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_CUST_SET_TAXINFO_inputFlist>
               <bus:EXEMPTIONS elem="0">
                  <bus:CERTIFICATE_NUM>011212
                  <bus:PERCENT>5</bus:PERCENT>
                  <bus:START_T>2014-09-23T12:50:40
bus:START_T>
                  <bus:END_T>2015-03-16T12:50:40/bus:END_T>
                  <bus:TYPE>0</bus:TYPE>
               </bus:EXEMPTIONS>
               <bus:INCORPORATED_FLAG>0</bus:INCORPORATED_FLAG>
               <bus:POID>0.0.0.1 /account 297583 0</bus:POID>
               <bus:PROGRAM_NAME />
               <bus:RESIDENCE_FLAG>0</bus:RESIDENCE_FLAG>
               <bus:SESSION_OBJ />
            </bus:PCM_OP_CUST_SET_TAXINFO_inputFlist>
         </bus:PCM_OP_CUST_SET_TAXINFO_Request>
      </bus:pcmOpCustSetTaxinfoRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

### Sample pcmOpCustSetTaxInfo response

# pcmOpCustUpdateCustomer

This operation updates an account's information. The input data is partitioned in logical buckets: account information, contact information, balance groups, bill units (/billinfo objects), payment methods (/payinfo objects), locale, profiles, and top-up details.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMCustServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpCustUpdateCustomer request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpCustUpdateCustomerRequest>
         <bus:PCM_OP_CUST_UPDATE_CUSTOMER_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_CUST_UPDATE_CUSTOMER_inputFlist>
               <bus:ACCOUNT_OBJ>0.0.0.1 /account 324664 0</bus:ACCOUNT_OBJ>
               <bus:NAMEINFO elem="1">
                  <bus:ADDRESS>123 Main St</bus:ADDRESS>
                  <bus:CITY>Los Angeles/bus:CITY>
                  <bus:EMAIL_ADDR>user@example.com</bus:EMAIL_ADDR>
                  <bus:FIRST NAME>Susan
                  <bus:LAST NAME>Smith/bus:LAST NAME>
                  <bus:MIDDLE_NAME>Jean/bus:MIDDLE_NAME>
                  <bus:STATE>CA</bus:STATE>
                  <bus:ZIP>95127</bus:ZIP>
               </bus:NAMEINFO>
               <bus:POID>0.0.0.1 /account 324664 0/bus:POID>
               <bus:PROGRAM_NAME>SoapWebServices
/bus:PROGRAM_NAME>
            </bus:PCM_OP_CUST_UPDATE_CUSTOMER_inputFlist>
         </bus:PCM_OP_CUST_UPDATE_CUSTOMER_Request>
      </bus:pcmOpCustUpdateCustomerRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpCustUpdateCustomer response



```
<COMPANY />
            <CONTACT_TYPE>Account holder</CONTACT_TYPE>
            <COUNTRY>USA</COUNTRY>
            <ELEMENT_ID>1</ELEMENT_ID>
            <EMAIL_ADDR>user@example.com</EMAIL_ADDR>
            <FIRST_CANON>Susan/FIRST_CANON>
            <FIRST_NAME>Susan/FIRST_NAME>
            <LAST_CANON>Smith</LAST_CANON>
            <LAST_NAME>Smith</LAST_NAME>
            <MIDDLE_CANON>Jean/MIDDLE_CANON>
            <MIDDLE_NAME>Jean</MIDDLE_NAME>
            <SALUTATION>Ms.</SALUTATION>
            <STATE>CA</STATE>
            <TITLE />
            <ZIP>95127</ZIP>
         </NAMEINFO>
         <POID>0.0.0.1 /account 324664 0</POID>
     </pcmOpCustUpdateCustomerResponse>
  </S:Body>
</S:Envelope>
```

# pcmOpCustUpdateServices

This operation updates multiple service instances of an account. The updates can be made to sign-in, password, status, device, and extended service information for each service passed to this operation.

The following table lists the possible STATUS FLAG values for this operation:

STATUS_FLAG Element	Description	Value
STATUS_FLAG_PROVISIONING_FAILED	Edit/enhance: Provisioning Failed	0x800
STATUS_FLAG_UNPROVISIONING	Unprovisioning in progress	0x1000
STATUS_FLAG_DUE_TO_REQ_SRVC	Change status (inactive/closed) for all services in the Plan if a Required Service is closed/inactivated	0x2000
STATUS_FLAG_DUE_TO_TRANSITION	During Transition of Plan, if any service in the "CLOSED" status it's status_flag is set to this	0x4000
STATUS_FLAG_DUE_TO_ACCOUNT_SUPP RESSION	Deactivate account's products and services due to account suppression	0x8000
STATUS_FLAG_DUE_TO_BILLINFO	close all related services on billinfo	0x10000
STATUS_FLAG_DUE_TO_SUBSCRIPTION_S ERVICE	Changes all member services when the subscription's service status is changed.  Inactive/closed member service due to line/ subscription service *	0x20000
STATUS_FLAG_CANCEL_LINE	Closed subscription service & member services due to line cancel	0x40000
STATUS_FLAG_DEFERRED	This flag is used to handle deferred action on services. Used in TCF provisioning	0x80000
STATUS_FLAG_DUE_TO_SERVICE_TRANS FER	This flag is used to handle subscription transfer with recreate approach	0x100000

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

### **URI**

https://hostname/BrmWebServices/BRMCustServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpCustUpdateServices request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpCustUpdateServicesRequest>
        <bus:PCM OP CUST UPDATE SERVICES Request>
           <bus:flags>0</bus:flags>
           <bus:PCM_OP_CUST_UPDATE_SERVICES_inputFlist>
              <bus:DESCR>[May 23, 2007 8:55 PM Bill not paid]
              <bus:POID>0.0.0.1 /account 324664 0</bus:POID>
              <bus:PROGRAM_NAME>SoapWebServices
              <bus:SERVICES elem="0">
                 <bus:POID>0.0.0.1 /service/email 326456 0</bus:POID>
                 <bus:STATUS>10102STATUS>
                 <bus:STATUS_FLAGS>4</bus:STATUS_FLAGS>
              </bus:SERVICES>
           </bus:PCM_OP_CUST_UPDATE_SERVICES_inputFlist>
        </bus:PCM_OP_CUST_UPDATE_SERVICES_Request>
     </bus:pcmOpCustUpdateServicesRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

### Sample pcmOpCustUpdateServices response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpCustUpdateServicesResponse xmlns:brm="http://xmlns.oracle.com/BRM/</pre>
schemas/BusinessOpcodes">
         <POID>0.0.0.1 /account 324664 0</POID>
         <SERVICES elem="0">
            <POID>0.0.0.1 /service/email 326456 0</POID>
            <RESULTS elem="2">
               <ACCOUNT_OBJ>0.0.0.1 /account 324664 0</ACCOUNT_OBJ>
               <POID>0.0.0.1 /event/customer/status 287561873082346811 0</POID>
               <SERVICE_OBJ>0.0.0.1 /service/email 326456 0</SERVICE_OBJ>
            </RESULTS>
         </SERVICES>
      </pcmOpCustUpdateServicesResponse>
   </S:Body>
</S:Envelope>
```

# Related topics

- Oracle Monetization Cloud web services
- Performing common tasks with web services
- About integrating your business systems



# Customer care operations

This document describes the customer care operations in the Oracle Monetization Cloud BRMCustcareServices\_v2 SOAP API.

### Topics in this document

- About the BRMCustcareServices\_v2 interface
- Related topics

# About the BRMCustcareServices\_v2 interface

Use the BRMCustcareServices\_v2 interface to move subscriber accounts in and out of account hierarchies.

### Authorization

Oracle Monetization Cloud uses the OAuth 2.0 protocol to authorize external applications to access its web services. To call the web services, an application must be registered as an OAuth client in Oracle Monetization Cloud. For more information, see Using OAuth to authorize access.

### Customer care operations available at runtime

The following table lists the operation provided by the BRMCustcareServices\_v2 interface.

For information about terminology used in sample requests and responses for web service operations, see About terminology.

Operation	Description	
pcmOpCustcareMoveAcct	Performs the following actions:	
	<ul> <li>Adds a standalone account to a hierarchy</li> </ul>	
	<ul> <li>Moves an account from one hierarchy to another</li> </ul>	
	<ul> <li>Removes an account from a hierarchy</li> </ul>	

### pcmOpCustcareMoveAcct

This operation can perform the following actions:

- Add a standalone account to a hierarchy
- Move an account from one hierarchy to another
- Remove an account from a hierarchy

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

### **URI**

https://hostname/BrmWebServices/BRMCustcareServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

### Sample pcmOpCustcareMoveAcct request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpCustcareMoveAcctRequest>
         <bus:PCM OP CUSTCARE MOVE ACCT Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_CUSTCARE_MOVE_ACCT_inputFlist>
               <bus:POID>0.0.0.1 /account 542760 8</bus:POID>
               <bus:UPDATE_CUSTOMER elem="0">
                  <bus:BILLINFO elem="0">
                     <bus:POID>0.0.0.1 /billinfo 543272 4/bus:POID>
                     <bus:PARENT_BILLINFO_OBJ>0.0.0.1 /billinfo 541064 3
bus:PARENT_BILLINFO_OBJ>
                     <bus:PAY_TYPE>10007
                     <bus:AR_BILLINFO_OBJ>0.0.0.1 /billinfo 541064 2
bus: AR_BILLINFO_OBJ>
                     <bus:PAYINFO_OBJ>0.0.0.0 / 0 0</bus:PAYINFO_OBJ>
                  </bus:BILLINFO>
                  <bus:BILLINFO elem="1">
                     <bus:POID>0.0.0.1 /billinfo 543016 3</bus:POID>
                     <bus:PARENT_BILLINFO_OBJ>0.0.0.0 / 0 0</bus:PARENT_BILLINFO_OBJ>
                     <bus:PAY_TYPE>0</bus:PAY_TYPE>
                  </bus:BILLINFO>
                  <bus:AR_BILLINFO_OBJ>0.0.0.1 /billinfo 543016 3
bus:AR_BILLINFO_OBJ>
                  <bus:PROGRAM_NAME>web service
                  <bus:GROUP MOVE MEMBER elem="0">
                     <bus:FLAGS>1</bus:FLAGS>
                     <bus:PARENT>0.0.0.1 /account 540808 7</bus:PARENT>
                  </bus:GROUP MOVE MEMBER>
               </bus:UPDATE_CUSTOMER>
            </bus:PCM_OP_CUSTCARE_MOVE_ACCT_inputFlist>
         </bus:PCM_OP_CUSTCARE_MOVE_ACCT_Request>
      </bus:pcmOpCustcareMoveAcctRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

### Sample pcmOpCustcareMoveAcct response



```
<PAY_TYPE>10007</PAY_TYPE>
               <AR_BILLINFO_OBJ>0.0.0.1 /billinfo 541064 2</AR_BILLINFO_OBJ>
               <PAYINFO_OBJ>0.0.0.0 / 0 0</PAYINFO_OBJ>
               <CURRENCY>840</CURRENCY>
               <CURRENCY_SECONDARY>0</CURRENCY_SECONDARY>
               <EFFECTIVE_T>20131221T21:48:18Z</EFFECTIVE_T>
               <FLAGS>1</FLAGS>
            </BILLINFO>
            <BILLINFO elem="0">
               <POID>0.0.0.1 /billinfo 543016 3</POID>
               <PARENT_BILLINFO_OBJ>0.0.0.0 / 0 0/ PARENT_BILLINFO_OBJ>
               <PAY_TYPE>0</PAY_TYPE>
               <AR_BILLINFO_OBJ>0.0.0.1 /billinfo 543016 3</AR_BILLINFO_OBJ>
               <CURRENCY>840</CURRENCY>
               <CURRENCY_SECONDARY>0</CURRENCY_SECONDARY>
               <EFFECTIVE_T>20131221T21:48:18Z</EFFECTIVE_T>
               <FLAGS>1</FLAGS>
            </BILLINFO>
         </UPDATE_CUSTOMER>
     </pcmOpCustcareMoveAcctResponse>
   </S:Body>
</S:Envelope>
```

# Related topics

- Oracle Monetization Cloud web services
- Performing common tasks with web services
- About integrating your business systems



# Data export operations

You use the Oracle Monetization Cloud data export operations to run reports that export Oracle Monetization Cloud data and generate report documents. You can use these documents, for example, in your analytics applications. The operations are provided in the BRMDataExportServices v2 SOAP API.

### Topics in this document

- About exporting Oracle Monetization Cloud data
- Exporting data on demand
- Scheduling data exports
- Getting information about data export reports
- About the BRMDataExportServices v2 interface
- Related Topics

# About exporting Oracle Monetization Cloud data

Exporting data involves these elements:

- Report: What operations run to export data and generate a report document.
- Report document: The electronic document generated by a report that's run. It contains the exported data in report format.
- Data export job: A scheduled job that exports data and generates a report document.
- Data export schedule: The schedule for running data export jobs.

To export Oracle Monetization Cloud data, you use the BRMDataExportServices\_v2 interface. The interface operations run reports that export data and use the data to generate report documents. Most reports can generate report documents in CSV and HTML formats. Depending on the report, other formats are also supported, such as PDF and RTF.

The report documents are returned encoded in base64. You decode the data and view it using an application that supports your chosen output format.

The report you run, such as a report of one-time fee transactions or a report of payment transactions, determines which data is exported. Your environment contains report directories that include the reports you can run. To get information about the directories and which reports they contain, use the <a href="mailto:getFolderContents">getFolderContents</a> operation.

You can export data in these ways:

- Exporting data on demand
- Scheduling data exports



# Exporting data on demand

To export data on demand, use the runReport operation.

When you run the operation, you specify whether you want to retrieve the generated report document all at once or in chunks. Retrieving the document in chunks is useful for large data sets because it helps prevent session timeouts and reduces the chance that the data could get corrupted during retrieval.

- If you want the report document all at once, it's returned in the operation's response.
- If you want to retrieve the document in chunks, the operation returns the ID of a temporary file where the report document is stored. You run the downloadReportDataChunk operation to retrieve the document from the temporary file.

In both cases, the returned report document is encoded in base64.

### Retrieving data exported in chunks

If you want to retrieve a generated report document in chunks, you call the downloadReportDataChunk operation.

When calling downloadReportDataChunk, you specify the file ID returned by runReport. This is the ID of the temporary file where runReport stored the report document.

You call downloadReportDataChunk iteratively to get all the report document data from the temporary file. You indicate the size of the data chunk to retrieve and get subsequent chunks with each call until you have the entire report. You can get a different sized chunk with each call.

# Scheduling data exports

To schedule data exports, use the scheduleReport operation. You might schedule a large data export for off-peak times to reduce the impact on performance, or schedule an export when you need the data at specific times of the month.

When you create a data export schedule, you specify the following:

- A name and description for the schedule
- When the schedule starts
- The report to run
- The period from which to gather the data

Whether the start and end dates are inclusive depends on the report. In general, if a date is specified without a time, the start time is midnight of the first day (midnight being the beginning of the day), and the end time is midnight of the last day. In this case, the first day is inclusive and the last day is exclusive. You can get information about the date formats for reports by using the getReportDefinition operation.

The format of the generated report document



The possible formats are specified in the report definition, which you can retrieve by using the getReportDefinition operation.

The scheduleReport operation creates a data export job for the scheduled export. The data export job runs the specified report and generates and stores the report document.

The operation returns the schedule ID. After the data is exported, you use this ID in the process of retrieving the report document.

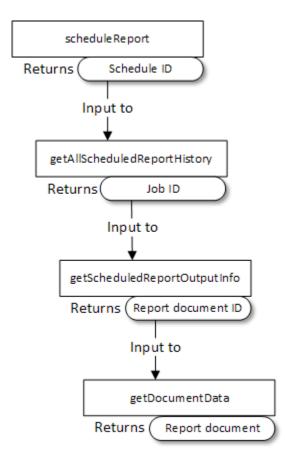
### Retrieving data from scheduled exports

When you schedule a data export, you use several operations to retrieve the generated report document.

Call these operations in this order:

- Call getAllScheduledReportHistory to get information about the data export job scheduled in the specified export schedule. The information in the response includes the data export job ID. Use this ID as input to the next operation.
- Call getScheduledReportOutputInfo to get the ID of the report document generated by the specified data export job. Use this ID as input to the next operation.
- Call getDocumentData to retrieve the report document with the specified ID.

The following figure shows the call flow and relevant output and input values for retrieving a report document generated by a scheduled data export job.





# Getting information about data export reports

You use the getFolderContents operation to get information about which reports are available in your environment for exporting data. You use the getReportDefinition operation to get information about a specific report, such as the input data required to run the report and the supported output formats of the report documents.

# About the BRMDataExportServices\_v2 interface

Use the BRMDataExportServices\_v2 interface to run reports that export Oracle Monetization Cloud data, which you can use, for example, with your analytics applications.

There are many reports you can run. This table lists the reports located in the **DataExport** subdirectory of your Oracle Monetization Cloud reports directory. To get information about the reports available in other subdirectories, run the **getFolderContents** operation.

Report	Description	
OnetimeFees	Exports one-time fee transactions.	
PaymentsReceived	Exports payments received transactions.	
RecurringFees	Exports recurring charge transactions.	
SubscriberAccounts	Exports subscriber account records.	

### Authorization

Oracle Monetization Cloud uses the OAuth 2.0 protocol to authorize external applications to access its web services. To call the web services, an application must be registered as an OAuth client in Oracle Monetization Cloud. For more information, see Using OAuth to authorize access.

### Data export operations available at runtime

This table lists the operations provided by the BRMDataExportServices v2 interface.

For information about terminology used in sample requests and responses for web service operations, see About terminology.

Operation	Description	
getFolderContents	Returns information about the report folders and files in the specified Oracle Monetization Cloud reports director The report files are the reports you can run to export dat	
getReportDefinition	Returns information about a report, such as the input data required to run the report and the supported output formats of the report document.	
runReport	Exports data on demand and generates a report document.	
downloadReportDataChunk	Retrieves portions of a report document generated by the runReport operation.	



Operation	Description	
scheduleReport	Schedules one or more data export jobs that export data and generate report documents.	
getAllScheduledReportHistory	Returns information about scheduled data export jobs.	
getScheduledReportOutputInfo	Returns the ID of the report document generated by a scheduled data export job.	
getDocumentData	Retrieves a report document that was generated by a scheduled data export job.	

# getFolderContents

This operation returns information about the report files and folders located in the specified Oracle Monetization Cloud reports directory. The report files are the reports you can run to export data.

This operation returns information about the files and folders immediately under the specified directory. To get information about subdirectories, you must call the operation for each subdirectory.

### **URI**

https://hostname/BrmWebServices/BRMDataExportServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

### getFolderContents request parameter

Parameter	Туре	Description
folderAbsolutePath	String	The directory for which to retrieve content information. A forward slash ( <i>I</i> ) identifies the base reports directory.
		To get information about the content of the base reports directory, use only the slash. To get information about folders under the base reports directory, begin with a slash; for example, /DataExport/OnetimeFees.

### getFolderContents response parameters

Parameter	Туре	Description
item	Array	Information about each report file and folder in the directory.
item.absolutePath	String	The path to the file or folder in the directory.
item.creationDate	dateTime	The date the file or folder was created.
item.displayName	String	The display name of the file or folder.
item.fileName	String	The name of the file or folder.
item.lastModified	dateTime	The date the file or folder was last modified.
item.lastModifier	String	The name of the user who last modified the file or folder.
item.owner	String	The file or folder owner.



Parameter	Туре	Description
item.parentAbsolutePath	String	The absolute path of the parent folder.
item.type	String	The type of item in the directory. For example, Folder, Report, DataModel, and so on. A value of <b>Report</b> indicates it's a report that you can run.

### Sample getFolderContents request

### Sample getFolderContents response

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Header/>
  <soapenv:Body>
      <getFolderContentsResponse xmlns="http://xmlns.oracle.com/oxp/service/v2">
         <getFolderContentsReturn>
            <catalogContents>
               <item>
                  <absolutePath>/BRM_Invoices</absolutePath>
                  <creationDate>2014-04-30T10:04:28.000Z</creationDate>
                  <displayName>BRM_Invoices</displayName>
                  <fileName>BRM_Invoices</fileName>
                  <lastModified>2014-04-30T10:04:28.000Z</lastModified>
                  <lastModifier/>
                  <owner/>
                  <parentAbsolutePath/>
                  <type>Folder</type>
               </item>
               <item>
                  <absolutePath>/BRM_Reports</absolutePath>
                  <creationDate>2014-11-18T16:58:57.000Z</creationDate>
                  <displayName>BRM_Reports</displayName>
                  <fileName>BRM_Reports</fileName>
                  <lastModified>2014-11-18T16:58:57.000Z</lastModified>
                  <lastModifier/>
                  <owner/>
                  <parentAbsolutePath/>
                  <type>Folder</type>
               </item>
               <item>
                  <absolutePath>/Cloud_Reports</absolutePath>
                  <creationDate>2015-03-06T22:39:46.000Z</creationDate>
                  <displayName>Cloud_Reports</displayName>
                  <fileName>Cloud_Reports</fileName>
                  <lastModified>2015-03-06T22:39:46.000Z</lastModified>
                  <lastModifier/>
                  <owner/>
                  <parentAbsolutePath/>
                  <type>Folder</type>
```



```
</item>
               <item>
                  <absolutePath>/Components</absolutePath>
                  <creationDate>2014-11-06T22:24:36.000Z</creationDate>
                  <displayName>Components</displayName>
                  <fileName>Components</fileName>
                  <lastModified>2014-11-06T22:24:36.000Z</lastModified>
                  <lastModifier/>
                  <owner/>
                  <parentAbsolutePath/>
                  <type>Folder</type>
               <item>
                  <absolutePath>/DataExport</absolutePath>
                  <creationDate>2015-02-26T20:50:46.000Z</creationDate>
                  <displayName>DataExport</displayName>
                  <fileName>DataExport</fileName>
                  <lastModified>2015-02-26T20:50:46.000Z</lastModified>
                  <lastModifier/>
                  <owner/>
                  <parentAbsolutePath/>
                  <type>Folder</type>
               </item>
               <item>
                  <absolutePath>/Samples</absolutePath>
                  <creationDate>2014-11-06T22:24:36.000Z</creationDate>
                  <displayName>Samples</displayName>
                  <fileName>Samples</fileName>
                  <lastModified>2014-11-06T22:24:36.000Z</lastModified>
                  <lastModifier/>
                  <owner/>
                  <parentAbsolutePath/>
                  <type>Folder</type>
               </item>
            </catalogContents>
         </getFolderContentsReturn>
      </getFolderContentsResponse>
   </soapenv:Body>
</soapenv:Envelope>
```

# getReportDefinition

This operation returns information about a report, such as the input data required to run the report, the required format of the input data, and the supported output formats for the report document.

### **URI**

https://hostname/BrmWebServices/BRMDataExportServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

### getReportDefinition request parameters

Parameter	Туре	Description
reportAbsolutePath	String	The path to, and name of, the report for which to get information.



### getReportDefinition response parameters

Parameter	Туре	Description
defaultOutputFormat	String	The default format in which to generate the report document.
listOfTemplateFormatsLab elsValues.item.listOfTempl ateFormatLabelValue	Array	A list of the supported formats in which the report document can be generated, such as <b>HTML</b> , <b>CSV</b> , <b>PDF</b> , and so on.
		Note: The Interactive format isn't applicable.
parameterNames	Array	List of parameters that are required as input to the operation that runs this report.
reportParameterNameValu	Array	List of required formats of parameter values.
es		List of supported value formats for the required input parameters.

### Sample getReportDefinition request

### Sample getReportDefinition response

In this sample, the report is ForecastAndPayments. The default output format is **html**. The required input parameters are **p\_startT** and **p\_endT** and the required date format for those parameters is **MM/dd/yyyy**.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
  <soapenv:Header/>
  <soapenv:Body>
      <getReportDefinitionResponse xmlns="http://xmlns.oracle.com/oxp/service/v2">
         <getReportDefinitionReturn>
            <autoRun>true</autoRun>
            <cacheDocument>true</cacheDocument>
            <defaultOutputFormat>html</defaultOutputFormat>
            <defaultTemplateId>ForecastAndPayments</defaultTemplateId>
            <diagnostics>false</diagnostics>
            <listOfTemplateFormatsLabelValues>
               <item>
                  <listOfTemplateFormatLabelValue>
                        <templateFormatLabel>Interactive</templateFormatLabel>
                        <templateFormatValue>analyze</templateFormatValue>
                     </item>
                        <templateFormatLabel>HTML</templateFormatLabel>
                        <templateFormatValue>html</templateFormatValue>
                     </item>
                     <item>
```



```
<templateFormatLabel>PDF</templateFormatLabel>
                        <templateFormatValue>pdf</templateFormatValue>
                     </item>
                     <item>
                        <templateFormatLabel>RTF</templateFormatLabel>
                        <templateFormatValue>rtf</templateFormatValue>
                     </item>
                     <item>
                        <templateFormatLabel>Excel (*.xlsx)</templateFormatLabel>
                        <templateFormatValue>xlsx</templateFormatValue>
                     <item>
                        <templateFormatLabel>PowerPoint (*.pptx)
templateFormatLabel>
                        <templateFormatValue>pptx</templateFormatValue>
                     </item>
                     <item>
                        <templateFormatLabel>CSV</templateFormatLabel>
                        <templateFormatValue>csv</templateFormatValue>
                     </item>
                  </listOfTemplateFormatLabelValue>
                  <templateAvailableLocales>
                     <item>en_US</item>
                  </templateAvailableLocales>
                  <templateID>ForecastAndPayments</templateID>
                  <templateType>xpt</templateType>
                  <templateURL>ForecastAndPayments.xpt</templateURL>
               </item>
            </listOfTemplateFormatsLabelValues>
            <onLine>true</onLine>
            <openLinkInNewWindow>true</openLinkInNewWindow>
            <parameterColumns>3</parameterColumns>
            <parameterNames>
               <item>p_startT</item>
               <item>p endT</item>
            </parameterNames>
            <reportDefnTitle/>
            <reportDescription/>
            <reportName>ForecastAndPayments</reportName>
            <reportParameterNameValues>
               <item>
                  <UIType>Date</UIType>
                  <dataType>xsd:date</dataType>
                  <dateFormatString>MM/dd/yyyy</dateFormatString>
                  <dateFrom xsi:nil="true"/>
                  <dateTo xsi:nil="true"/>
                  <defaultValue>03/09/2015</defaultValue>
                  <fieldSize xsi:nil="true"/>
                  <label>Start Time (>=)</label>
                  <lovLabels xsi:nil="true"/>
                  <multiValuesAllowed>false</multiValuesAllowed>
                  <name>p_startT</name>
                  <refreshParamOnChange>false</refreshParamOnChange>
                  <selectAll>false</selectAll>
                  <templateParam>false</templateParam>
                  <useNullForAll>false</useNullForAll>
                  <values xsi:nil="true"/>
               </item>
               <item>
                  <UIType>Date</UIType>
                  <dataType>xsd:date</dataType>
```

```
<dateFormatString>MM/dd/yyyy</dateFormatString>
                  <dateFrom xsi:nil="true"/>
                  <dateTo xsi:nil="true"/>
                  <defaultValue>03/10/2015</defaultValue>
                  <fieldSize xsi:nil="true"/>
                  <label>End Time (&lt;)</label>
                  <lovLabels xsi:nil="true"/>
                  <multiValuesAllowed>false</multiValuesAllowed>
                  <name>p_endT</name>
                  <refreshParamOnChange>false</refreshParamOnChange>
                  <selectAll>false</selectAll>
                  <templateParam>false</templateParam>
                  <useNullForAll>false</useNullForAll>
                  <values xsi:nil="true"/>
               </item>
            </reportParameterNameValues>
            <reportType xsi:nil="true"/>
            <showControls>true</showControls>
            <showReportLinks>true</showReportLinks>
            <templateIds>
               <item>ForecastAndPayments</item>
            </templateIds>
         </getReportDefinitionReturn>
     </getReportDefinitionResponse>
  </soapenv:Body>
</soapenv:Envelope>
```

### runReport

This operation runs a report that exports data and generates a report document, encoded in base64.

The report document is returned in the response unless you specify that you want to retrieve the document in chunks. Use the sizeOfDataChunkDownload parameter to indicate your choice. To retrieve the report document in chunks after it's generated, call the downloadReportDataChunk operation.

### **URI**

https://hostname/BrmWebServices/BRMDataExportServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

### runReport request parameters

Parameter	Туре	Description
attributeFormat	String	The format in which to generate the report document.
		For information about which document formats are supported for a report, run the getReportDefinition operation.



Parameter	Туре	Description
parameterNameValues	Array	A list of name-value parameters required for the specified report; for example, the start and end dates for which to export data.
		For information about the required parameters and their supported value formats, run the getReportDefinition operation.
reportAbsolutePath	String	The path to, and name of, the report to run.
sizeOfDataChunkDownload	Integer	Indicates how the report document is returned.
		<ul> <li>To return the report document in the response, use -1.</li> <li>To store the report document so you can retrieve it in chunks, use 0.</li> <li>This returns the ID of the</li> </ul>
		temporary file where the report is stored. You call downloadReportDataChunk to retrieve the report document.

### runReport response parameters

Parameter	Туре	Description
reportBytes	Binary	The generated report document, encoded in base64.
		This is returned when sizeOfDataChunkDownload in the request is set to <b>-1</b> .
reportFileID	String	The ID of the temporary file where the generated report document is stored.
		This is returned when sizeOfDataChunkDownload in the request is set to <b>0</b> , indicating you want to retrieve the document data in chunks.

### Sample runReport request



### Sample runReport response

In this sample, the reportBytes field contains the base64-encoded report document in the requested format, such as CSV. No file ID is returned because exporting the data in chunks was disabled.

# downloadReportDataChunk

This operation retrieves a portion of a data export report document that was generated by the runReport operation.

When you call runReport and specify that you will retrieve the report document in chunks, runReport stores the report document in a temporary file. Call downloadReportDataChunk iteratively until all the report document data is retrieved from the file. The returned data is encoded in base64.

You specify the size of the data chunk to get with each call. The operation returns the byte location of the last byte of data retrieved. Use that location as the starting point for getting the next chunk of data. When all data has been retrieved from the temporary file, the value of the last byte retrieved will be **-1**.

#### **URI**

https://hostname/BrmWebServices/BRMDataExportServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.



### downloadReportDataChunk request parameters

Parameter	Туре	Description
fileID	String	The ID of the temporary file where the report document is stored. Get this ID from the runReport operation's response.
beginldx	Integer	The starting point (byte location) from which to start retrieving the chunk of data.
		Use <b>0</b> as the value for the first chunk. In subsequent calls, use the value from the response that's returned in the reportDataOffset parameter.
size	Integer	The size, in bytes, of the report data chunk to retrieve from the temporary file.

### downloadReportDataChunk response parameters

Parameter	Туре	Description
reportDataChunk	Byte array	The portion of the report document data that was retrieved, encoded in base64.
reportDataFileID	String	The ID of the temporary file from which the data was retrieved.
reportDataOffset	Integer	The terminating byte of the retrieved chunk of data.
		This value will be different with each call of downloadReportDataChunk. Until the value is <b>-1</b> , pass this value in the beginIdx parameter in the next downloadReportDataChunk request.

### Sample downloadReportDataChunk request

### Sample downloadReportDataChunk response



</soapenv:Body>
</soapenv:Envelope>

# scheduleReport

This operation schedules a data export job. The job runs a report that exports Oracle Monetization Cloud data and generates a report document.

The response includes the ID of the schedule, which you use in the process of retrieving the report document. See Retrieving data from scheduled exports.

### URI

https://hostname/BrmWebServices/BRMDataExportServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

### scheduleReport request parameters

Parameter	Туре	Description
reportRequest	Array	The request parameters for running the data export job.
reportRequest.paramet erNameValues.listOfPa ramNameValues	Array	A list of name-value parameters required for the specified report; for example, the start and end dates for which to export data.
		For information about the required parameters and their supported value formats, run the <a href="mailto:getReportDefinition">getReportDefinition</a> operation.
reportRequest.reportAb solutePath	String	The path to, and name of, the report to run.
reportRequest.atttribute	String	The format in which to generate the report document.
Format		For information about which document formats are supported for a report, run the getReportDefinition operation.
saveDataOption	Boolean	Set to <b>true</b> so you can retrieve the report document.
saveOutputOption	Boolean	Set to <b>true</b> so you can retrieve the report document.
startDate	String	The date on which the schedule starts.
useUTF8Option	Boolean	Whether to use UTF8. We recommend <b>True</b> so that characters are displayed correctly.
userJobDesc	String	Specify a description of the export schedule.
userJobName	String	Specify a name for the export schedule.

### scheduleReport response parameters

Parameter	Туре	Description
scheduleReportReturn	Integer	The ID of the schedule.

### Sample scheduleReport request



```
<soapenv:Body>
      <v2:scheduleReport xmlns:v2="http://xmlns.oracle.com/oxp/service/v2">
        <v2:scheduleRequest>
          <v2:reportRequest>
            <v2:parameterNameValues>
              <v2:listOfParamNameValues>
                <TV2:item>
                  <v2:name>s_time</v2:name>
                  <v2:values>
                    <v2:item>04-01-2017</v2:item>
                  </v2:values>
                </v2:item>
                <v2:item>
                  <v2:name>e time</v2:name>
                  <v2:values>
                    <v2:item>05-01-2017</v2:item>
                  </v2:values>
                </v2:item>
              </v2:listOfParamNameValues>
            </v2:parameterNameValues>
            <v2:reportAbsolutePath>/Cloud_Reports/ForecastAndPayments.xdo/
v2:reportAbsolutePath>
            <v2:attributeFormat>csv</v2:attributeFormat>
          </v2:reportRequest>
          <v2:saveDataOption>true</v2:saveDataOption>
          <v2:saveOutputOption>true</v2:saveOutputOption>
          <v2:startDate></v2:startDate>
          <v2:useUTF8Option>true</v2:useUTF8Option>
          <v2:userJobDesc>JobDesc</v2:userJobDesc>
          <v2:userJobName>MyJob</v2:userJobName>
        </v2:scheduleRequest>
      </v2:scheduleReport>
   </soapenv:Body>
</soapenv:Envelope>
```

### Sample scheduleReport response

### getAllScheduledReportHistory

This operation gets information about a data export job scheduled by the specified data export schedule. The information includes the job ID. You use this ID as input to the getScheduledReportOutputInfo operation to get the ID of the report document that the job generated.

#### URI

https://hostname/BrmWebServices/BRMDataExportServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

#### getAllScheduledReportHistory request parameters

Parameter	Туре	Description
filter	Filter	The criteria for identifying the data export schedule.
filter.jobld	Integer	The ID of the data export schedule. Get this ID from the scheduleReport operation's response.
filter.jobName	String	(Optional) The name of a data export schedule.
		This is the same name you gave the schedule in the userJobName parameter in the scheduleReport operation's request.
beginIdx	Integer	The offset from the most recent job found by which to return jobs. Set this to 1).

#### getAllScheduledReportHistory response parameters

Parameter	Туре	Description
jobInfoList.item	Array	The list of scheduled data export jobs and their associated information.
jobInfoList.item.jobId	Integer	The ID of the data export job.
jobInfoList.item.parentJobId	Integer	The ID of the schedule that created this data export job.
jobInfoList.item.reportUrl	String	The path to, and name of, the report run by this data export job.
jobInfoList.item.startDate	dateTime	The job's start date.
jobInfoList.item.status	String	The status of the job; for example, whether it was run successfully or hasn't yet been run.
jobInfoList.item.statusDetail	String	Details about the status of the job, if any.
jobInfoList.item.userJobName	String	The name of the schedule that created this data export job.

#### Sample getAllScheduledReportHistory request

#### Sample getAllScheduledReportHistory response

In this sample, the ID of the scheduled data export job is 1120.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
     <soapenv:Header/>
```

```
<soapenv:Body>
      <getAllScheduledReportHistoryResponse xmlns="http://xmlns.oracle.com/oxp/</pre>
service/v2">
         <getAllScheduledReportHistoryReturn>
            <jobInfoList>
               <item>
                  <burstingJob>false/burstingJob>
                  <created>2015-02-26T00:53:34.374Z</created>
                  <deleted>false</deleted>
                  <endDate>2015-02-26T00:53:34.734Z</endDate>
                  <instanceId>1</instanceId>
                  <jobId>1120</jobId>
                  <jobType>Instance</jobType>
                  <lastUpdated>2015-02-26T00:53:34.734Z</lastUpdated>
                  <owner>weblogic-b</owner>
                  <parentJobId>1119</parentJobId>
                  <public>false</public>
                  <reportUrl>/Cloud_Reports/ForecastAndPayments/
ForecastAndPayments.xdo</reportUrl>
                  <startDate>2015-02-26T00:53:34.370Z</startDate>
                  <status>S</status>
                  <statusDetail xsi:nil="true" xmlns:xsi="http://www.w3.org/2001/</pre>
XMLSchema-instance"/>
                  <userJobName>MyJob</userJobName>
               </item>
            </jobInfoList>
         </getAllScheduledReportHistoryReturn>
      </getAllScheduledReportHistoryResponse>
   </soapenv:Body>
</soapenv:Envelope>
```

### getScheduledReportOutputInfo

This operation gets the ID of the report document that was generated by the specified data export job. You need the report document ID to retrieve the report document when you call the getDocumentData operation.

#### URI

https://hostname/BrmWebServices/BRMDataExportServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

#### getScheduledReportOutputInfo request parameters

Parameter	Туре	Description
jobInstanceID	Integer	The ID of the data export job that generated the report document you want to retrieve. Get this ID from the getAllScheduledReportHistory operation's response.

#### getScheduledReportOutputInfo response parameters

Parameter	Туре	Description
outputId	Integer	The ID of the report document.

Parameter	Туре	Description
status	String	The status of the report document; for example, whether it was successfully generated.
statusDetail	String	Details about the report status.

#### Sample getScheduledReportOutputInfo request

#### Sample getScheduledReportOutputInfo response

The following sample response contains the outputId used to retrieve the report document.

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/">
   <soapenv:Header/>
   <soapenv:Body>
      <getScheduledReportOutputInfoResponse xmlns="http://xmlns.oracle.com/oxp/</pre>
service/v2">
         <getScheduledReportOutputInfoReturn>
            <jobOutputList>
               <item>
                  <burstKey/>
                  <created>2014-12-15T23:57:02.724Z</created>
                  <deleted>false</deleted>
                  <documentDataAvailable>true</documentDataAvailable>
                  <documentDataCompressed>false</documentDataCompressed>
                  <documentDataContentType>csv</documentDataContentType>
                  <jobId>1120</jobId>
                  <jobName xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"</pre>
xsi:nil="true"/>
                  <lastUpdated>2014-12-15T23:57:02.772Z</lastUpdated>
                  <outputId>1058</outputId>
                  <outputName>MyJob0-Document-1
                  <parentOutputId xmlns:xsi="http://www.w3.org/2001/XMLSchema-</pre>
instance" xsi:nil="true"/>
                  <status>S</status>
                  <statusDetail> DOCUMENT_PROCESSING_SUCCESSFUL
[INSTANCE_ID=host.domain.com.1415313528128] </statusDetail>
               </item>
            </jobOutputList>
         </getScheduledReportOutputInfoReturn>
      </getScheduledReportOutputInfoResponse>
   </soapenv:Body>
</soapenv:Envelope>
```

### getDocumentData

This operation retrieves a report document that was generated by a scheduled data export job. You specify the ID of the report document to return. You find the document ID by running the getScheduledReportOutputInfo operation.

#### **URI**

https://hostname/BrmWebServices/BRMDataExportServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

#### getDocumentData request parameter

Parameter	Туре	Description
jobOutputID	String	The report document ID. Get this ID from the getScheduledReportOutputInfo operation's response.

#### getDocumentData response parameter

Parameter	Туре	Description
getDocumentDataReturn	Binary	The report document, encoded in base64.

#### Sample getDocumentData request

#### Sample getDocumentData response

In the following sample response, the data in the getDocumentDataReturn parameter is base64-encoded and begins with a 3 byte order mark (BOM) of EF BB BF.

### **Related Topics**

Oracle Monetization Cloud web services

- Performing common tasks with web services
- About integrating your business systems



# Invoicing operations

This document describes the invoicing operations in the Oracle Monetization Cloud BRMInvServices\_v2 SOAP API.

#### Topics in this document

- About the BRMInvServices v2 interface
- Related topics

# About the BRMInvServices\_v2 interface

Use the BRMInvServices\_v2 interface to view subscriber invoices.

### Authorization

Oracle Monetization Cloud uses the OAuth 2.0 protocol to authorize external applications to access its web services. To call the web services, an application must be registered as an OAuth client in Oracle Monetization Cloud. For more information, see Using OAuth to authorize access.

### Invoicing operations available at runtime

The following table lists the operation provided by the BRMInvServices v2 interface.

For information about terminology used in sample requests and responses for web service operations, see About terminology.

Operation	Description
pcmOpInvViewInvoice	Retrieves an invoice from the database.

### pcmOpInvViewInvoice

This operation retrieves an invoice from the database given the POID of a specified bill or invoice object. You can use the input TYPE\_STR element to specify the format (XML, HTML, and so on) of the invoice to retrieve.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMInvServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpInvViewInvoice request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpInvViewInvoiceRequest>
         <bus:PCM_OP_INV_VIEW_INVOICE_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_INV_VIEW_INVOICE_inputFlist>
               <bus:POID>0.0.0.1 /invoice 11886 2/bus:POID>
               <bus:THRESHOLD_UPPER>1024</bus:THRESHOLD_UPPER>
               <bus:TYPE_STR>XML</bus:TYPE_STR>
            </bus:PCM_OP_INV_VIEW_INVOICE_inputFlist>
         </bus:PCM_OP_INV_VIEW_INVOICE_Request>
      </bus:pcmOpInvViewInvoiceRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpInvViewInvoice response

In the following sample response, the BUFFER field contains the invoice information in the requested format, such as XML.

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Bodv>
      <pcmOpInvViewInvoiceResponse xmlns:brm="http://xmlns.oracle.com/BRM/schemas/</pre>
BusinessOpcodes">
         <POID>0.0.0.1 /invoice 11886 2</POID>
         <INV_FLAGS>0x00000004</INV_FLAGS>
         <BILL OBJ>0.0.0.1 /bill 12731 2</BILL OBJ>
         <BILL NO>97701</BILL NO>
         <BILL_DATE_T>2012-07-12T12:34:56Z</BILL_DATE_T>
         <HEADER NUM>8</HEADER NUM>
         <HEADER_STR>CLOUD SERVICE INVOICE/HEADER_STR>
         <STATUSES elem="1">
            <STATUS>2</STATUS>
            <EFFECTIVE_T>1975-07-12T12:34:56Z</EFFECTIVE_T>
         </STATUSES>
         <FORMATS elem="1">
            <INV_SIZE>1024</INV_SIZE>
            <TYPE_STR>XML</TYPE_STR>
            <LOCALE>US</LOCALE>
            <EFFECTIVE_T>2007-10-15T12:34:56Z</EFFECTIVE_T>
            <HEADER_NUM>8</HEADER_NUM>
            <HEADER_STR>CLOUD SERVICE INVOICE/HEADER_STR>
            <BUFFER>Invoice Buffer/BUFFER>
         </FORMATS>
         <RESULT>1</RESULT>
      </pcmOpInvViewInvoiceResponse>
   </S:Body>
</S:Envelope>
```

### Related topics

- Oracle Monetization Cloud web services
- Performing common tasks with web services
- About integrating your business systems



# Payment operations

This document describes the payment operations in the Oracle Monetization Cloud BRMPymtServices\_v2 SOAP API.

#### Topics in this document

- About the BRMPymtServices\_v2 interface
- · Related topics

# About the BRMPymtServices\_v2 interface

Use the BRMPymtServices\_v2 interface to perform payment collection and refund operations.

### Authorization

Oracle Monetization Cloud uses the OAuth 2.0 protocol to authorize external applications to access its web services. To call the web services, an application must be registered as an OAuth client in Oracle Monetization Cloud. For more information, see Using OAuth to authorize access.

### Payment operations available at runtime

The following table lists the operation provided by the BRMPymtServices\_v2 interface.

For information about terminology used in sample requests and responses for web service operations, see About terminology.

Operation	Description
pcmOpPymtCollect	Collects and refunds payments.

### pcmOpPymtCollect

This operation collects and refunds payments. It allocates a payment to open items for each bill unit (**/billinfo** object) specified for the account. It calls other standard operations to validate payments.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### URI

https://hostname/BrmWebServices/BRMPymtServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.



#### Sample pcmOpPymtCollect request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpPymtCollectRequest>
         <bus:PCM_OP_PYMT_COLLECT_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_PYMT_COLLECT_inputFlist>
               <bus:BATCH_INFO elem="0">
                  <bus:BATCH_ID />
                  <bus:BATCH_TOTAL>1/bus:BATCH_TOTAL>
                  <bus:CHANNEL_ID>0</bus:CHANNEL_ID>
                  <bus:CURRENCY>840</bus:CURRENCY>
                  <bus:SUBMITTER_ID>root.0.0.1/bus:SUBMITTER_ID>
               </bus:BATCH_INFO>
               <bus:CHARGES elem="0">
                  <bus:ACCOUNT_NO>TEST_ACC</bus:ACCOUNT_NO>
                  <bus:ACCOUNT_OBJ>0.0.0.1 /account 293778 0</bus:ACCOUNT_OBJ>
                  <!--bus:AMOUNT>25.9</bus:AMOUNT-->
                  <bus:BILLS elem="0">
                     <bus:BILL_NO>B1-10</bus:BILL_NO>
                  </bus:BILLS>
                  <bus:COMMAND>0</bus:COMMAND>
                  <bus:CURRENCY>840</bus:CURRENCY>
                  <bus:FLAGS>1</bus:FLAGS>
                  <bus:PAYMENT>
                     <bus:DESCR />
                     <bus:INHERITED INFO>
                        <bus:CASH_INFO elem="0">
                           <bus:EFFECTIVE_T>2010-01-13T21:38:12Z</bus:EFFECTIVE_T>
                           <bus:RECEIPT_NO>12345/bus:RECEIPT_NO>
                        </bus:CASH_INFO>
                     </bus:INHERITED_INFO>
                  </bus:PAYMENT>
                  <bus:PAY_TYPE>10011
                  <bus:POID>0.0.0.1 /account 293778 0</bus:POID>
               </bus:CHARGES>
               <bus:PROGRAM NAME>SoapWebServices/bus:PROGRAM NAME>
            </bus:PCM_OP_PYMT_COLLECT_inputFlist>
         </bus:PCM_OP_PYMT_COLLECT_Request>
      </bus:pcmOpPymtCollectRequest>
   </soapenv:Body>
</soapenv:Envelope>
Sample pcmOpPymtCollect response
```

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpPymtCollectResponse xmlns:brm="http://xmlns.oracle.com/BRM/schemas/</pre>
BusinessOpcodes">
         <POID>0.0.0.1 /account 1 0</POID>
         <RESULTS elem="0">
            <ACCOUNT_OBJ>0.0.0.1 /account 293778 0</ACCOUNT_OBJ>
            <BAL_IMPACTS elem="0">
               <ACCOUNT_OBJ>0.0.0.1 /account 293778 0</ACCOUNT_OBJ>
               <AMOUNT>-7.95</AMOUNT>
               <AMOUNT_DEFERRED>0</AMOUNT_DEFERRED>
               <AMOUNT_ORIG />
```



```
<BAL_GRP_OBJ>0.0.0.1 /balance_group 293458 10</BAL_GRP_OBJ>
               <DISCOUNT>0</DISCOUNT>
               <GL_ID>109</GL_ID>
               <IMPACT_TYPE>2</IMPACT_TYPE>
               <ITEM_OBJ>0.0.0.1 /item/payment 302764 0</ITEM_OBJ>
               <PERCENT>0</PERCENT>
               <QUANTITY>0</QUANTITY>
               <RATE_OBJ>0.0.0.0 0 0</RATE_OBJ>
               <RATE_TAG />
               <RESOURCE_ID>840</RESOURCE_ID>
               <RESOURCE_ID_ORIG>0</RESOURCE_ID_ORIG>
               <TAX_CODE />
            </BAL_IMPACTS>
            <DESCR />
            <ITEM_NO>P1-8</ITEM_NO>
            <POID>0.0.0.1 /event/billing/payment/cash 257232944341750188 0</POID>
            <RESULT>1</RESULT>
            <SELECT_RESULT>0</SELECT_RESULT>
            <SELECT_STATUS>1</SELECT_STATUS>
            <SUB_BAL_IMPACTS elem="0">
               <BAL_GRP_OBJ>0.0.0.1 /balance_group 293458 11</BAL_GRP_OBJ>
               <RESOURCE_ID>840</RESOURCE_ID>
               <SUB_BALANCES elem="0">
                  <AMOUNT>-7.95</AMOUNT>
                  <CONTRIBUTOR_STR />
                  <GRANTOR_OBJ>0.0.0.1 /purchased_product 292690 0</GRANTOR_OBJ>
                  <ROLLOVER_DATA>0</ROLLOVER_DATA>
                  <VALID_FROM>2014-09-23T07:00:00Z</VALID_FROM>
                  <VALID_FROM_DETAILS>0</VALID_FROM_DETAILS>
                  <VALID_TO>2015-01-01T00:00:00Z</VALID_TO>
                  <VALID_TO_DETAILS>0</VALID_TO_DETAILS>
               </SUB_BALANCES>
            </SUB_BAL_IMPACTS>
            <TYPE>0</TYPE>
         </RESULTS>
      </pcmOpPymtCollectResponse>
   </S:Body>
</S:Envelope>
```

# Related topics

- Oracle Monetization Cloud web services
- · Performing common tasks with web services
- · About integrating your business systems

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# Pricing operations

This document describes the pricing operations in the Oracle Monetization Cloud BRMPricingServices\_v2 SOAP API.

#### Topics in this document

- About the BRMPricingServices\_v2 interface
- · Related topics

### About the BRMPricingServices v2 interface

Use the BRMPricingServices\_v2 interface to perform operations such as retrieving pricing, discount, and charge offer information.

### **Authorization**

Oracle Monetization Cloud uses the OAuth 2.0 protocol to authorize external applications to access its web services. To call the web services, an application must be registered as an OAuth client in Oracle Monetization Cloud. For more information, see Using OAuth to authorize access.

### Pricing operations available at runtime

The following table lists the operations provided by the BRMPricingServices\_v2 interface.

For information about terminology used in sample requests and responses for web service operations, see About terminology.

Operation	Description
pcmOpPriceGetDiscountInfo	Retrieves information about a specified discount.
pcmOpPriceGetPriceList	Retrieves pricing objects.
pcmOpPriceGetProductInfo	Retrieves charge offer pricing information for a specified charge offer POID.

### pcmOpPriceGetDiscountInfo

This operation retrieves information about a specified discount.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMPricingServices\_v2/



where hostname is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpPriceGetDiscountInfo request

#### Sample pcmOpPriceGetDiscountInfo response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpPriceGetDiscountInfoResponse xmlns:brm="http://xmlns.oracle.com/BRM/</pre>
schemas/BusinessOpcodes">
         <POID>0.0.0.1 /discount 178762 1</POID>
         <DISCOUNTS elem="0">
            <ACCOUNT_OBJ>0.0.0.1 /account 1 0</ACCOUNT_OBJ>
            <CODE>Discount 1a - Test Discount</CODE>
            <CREATED_T>2010-01-01T17:00:07Z</CREATED_T>
            <NAME>Discount 1a - Test Discount
            <POID>0.0.0.1 /discount 178762 1</POID>
            <DESCR />
            <START_T>2016-01-01T00:00:00Z</START_T>
            <END_T>2016-12-31T00:00:00Z</END_T>
            <PURCHASE_MIN>PIN_NUM_MIN</purchase_MIN>
            <PURCHASE_MAX>1</PURCHASE_MAX>
            <OWN_MIN>PIN_NUM_MIN/OWN_MIN>
            <OWN_MAX>1</OWN_MAX>
            <PRIORITY>0</PRIORITY>
            <PERMITTED>/service/ip</PERMITTED>
            <PROVISIONING_TAG />
            <READ_ACCESS>G</READ_ACCESS>
            <WRITE_ACCESS>S</WRITE_ACCESS>
            <TYPE>602</TYPE>
            <MODE />
            <MOD_T>2016-09-01T17:00:07Z</MOD_T>
            <USAGE_MAP elem="0">
               <EVENT_TYPE>/event/session</EVENT_TYPE>
               <DISCOUNT_MODEL>DMStandard/DISCOUNT_MODEL>
               <FLAGS>1</FLAGS>
               <SNOWBALL_FLAG>0</SNOWBALL_FLAG>
            </USAGE_MAP>
            <DISCOUNT_CYCLE_VALIDITY>1</DISCOUNT_CYCLE_VALIDITY>
               <DISCOUNT_FLAGS>2</DISCOUNT_FLAGS>
            <DISCOUNT_USAGE_VALIDITY />
               <DISCOUNT_FLAGS>2</DISCOUNT_FLAGS>
            <PIPELINE_DISC_MODELS>
               <CODE_STR>PDM_IP</CODE_STR>
               <NAME>Discount model for IP</NAME>
```



```
<CHARGESHARE_FLAG />
               <DISC_MODEL_VERS>
                  <VERSION_ID>1</VERSION_ID>
                  <VALID_FROM>2016-01-01T00:00:00Z</VALID_FROM>
                  <STATUS_STR>a</STATUS_STR>
                  <DISC_MODEL_CNFS />
                     <RANK>1</RANK>
                     <MODE />
                     <TRIGGER_INDEX>1</TRIGGER_INDEX>
                     <RULE_INDEX>1</RULE_INDEX>
                     <VERSION_ID>1</VERSION_ID>
                  <DISC_MODEL_CNFS />
                     <RANK>2</RANK>
                     <MODE />
                     <TRIGGER_INDEX>2</TRIGGER_INDEX>
                     <RULE_INDEX>2</RULE_INDEX>
                     <VERSION_ID>1</VERSION_ID>
                  <DISC_TRIGGERS />
                     <CODE_STR>1</CODE_STR>
                     <NAME>Trigger set 1</NAME>
                     <DISC_CONDS />
                        <COND_EXPR>condition_expression</COND_EXPR>
                        <OPERATOR_STR>condition_operator</OPERATOR_STR>
                        <COND_VALUE>condition_value</COND_VALUE>
                  <DISC_TRIGGERS />
                     <CODE_STR>2</CODE_STR>
                     <NAME>Trigger set 2</NAME>
                     <DISC_CONDS />
                        <COND_EXPR>condition_expression</COND_EXPR>
                        <OPERATOR_STR>condition_operator
                        <COND_VALUE>condition_value</COND_VALUE>
                  <DISC_RULES />
                     <CODE_STR>1</CODE_STR>
                     <NAME>Rule set 1</NAME>
<DRUM_EXPR>Amount_or_quantity_of_discount_ratable_usage_metric_(DRUM)_type_to_discoun
t</DRUM_EXPR>
                     <RULE_TYPE>Tiered_or_Threshold/RULE_TYPE>
                     <DRUM_TYPE>"Currency"</DRUM_TYPE>
                     <MASTER_INDEX>1</MASTER_INDEX>
                     <STEPS />
                        <CODE_STR>1</CODE_STR>
                        <RANK>1</RANK>
                        <THRESHOLD_FROM>0</THRESHOLD_FROM>
                        <THRESHOLD_TO>10</THRESHOLD_TO>
                        <THRESHOLD_TO_STR>$10</THRESHOLD_TO_STR>
                        <PRORATE_PURCHASE />
                        <PRORATE_CANCEL />
                        <BAL_IMPACTS elem="0">
                           <RESOURCE_ID>840</RESOURCE_ID>
                           <TYPE_STR>0</TYPE_STR>
                           <AMOUNT>5</AMOUNT>
                           <GRANT_BEAT />
                           <GRANT_PRORATED_BEAT />
                           <BASE_EXPR>Base_expression</BASE_EXPR>
                           <IMPACT_CATEGORY />
                           <EVENT_BAL_ID />
                           <DISC_OWNER_FLAG />
                           <VALID_FROM />
                           <VALID_TO />
                           <GRANT_PERIOD_OFFSET>0</GRANT_PERIOD_OFFSET>
```

```
<GRANT_PERIOD_UNIT />
                           <FIRST_USAGE />
                           <TAX_CODE />
                           <GL ACCT />
                        </BAL_IMPACTS>
                  <DISC_MASTERS>
                     <CODE_STR>DM10%OFF</CODE_STR>
                     <NAME>10% Off Discount Master</NAME>
                     <DISC_DETAILS>
                       <RANK>1</RANK>
                        <VALID_FROM_STR>2016-01-01T00:00:00Z</VALID_FROM_STR>
                        <VALID_TO_STR>2016-12-31T00:00:00Z</VALID_TO_STR>
                        <TIME_FROM_STR />
                        <TIME TO STR />
                        <ZONEMODEL_CODE>BASIC</ZONEMODEL_CODE>
                        <IMPACT_CATEGORY>US</IMPACT_CATEGORY>
                        <SERVICE_CODE>CODE1</SERVICE_CODE>
                        <SERVICE_CLASS>/service/ip</SERVICE_CLASS>
                        <USAGE_TYPE>Internet access</USAGE_TYPE>
                        <USAGE_CLASS>/event/session/telco</USAGE_CLASS>
                        <TIMEMODEL>National Time Model</TIMEMODEL>
                        <TIMEZONE_CODE>NATIONAL</TIMEZONE_CODE>
                        <PRICE_MODEL_CODE>T1.99_60
                        <RESOURCE_NAME>US Dollars</resource_NAME>
                        <RUM_NAME>Duration</RUM_NAME>
                        <RECORD_TYPE>020</RECORD_TYPE>
                        <RATE_PLAN_CODE>Session Event</RATE_PLAN_CODE>
                        <RATE_TAG />
                        <GL_ACCT />
                     </DISC_DETAILS>
                  </DISC_MASTERS>
               </DISC_MODEL_VERS>
            </PIPELINE_DISC_MODELS>
         </DISCOUNTS>
      </pcmOpPriceGetDiscountInfoResponse>
   </S:Body>
</S:Envelope>
```

### pcmOpPriceGetPriceList

This operation retrieves pricing objects.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMPricingServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpPriceGetPriceList request



#### Sample pcmOpPriceGetPriceList response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpPriceGetPriceListResponse xmlns="http://xmlns.oracle.com/BRM/schemas/</pre>
BusinessOpcodes">
         <DEALS elem="0">
            <account_OBJ>0.0.0.1 /account 1 0</account_OBJ>
            <CODE>6e3410db-bfef-4fa0-bb55-e4eb814f69cd</CODE>
            <CREATED_T>2018-10-02T19:25:06Z</CREATED_T>
            <DESCR>Telemotive Safety Bundle/DESCR>
            <END_T>1970-01-01T00:00:00Z</END_T>
            <FLAGS>0</FLAGS>
            <MOD_T>2018-09-06T02:04:48Z</MOD_T>
            <NAME>Telemotive Safety Bundle</NAME>
            <PERMITTED>/service/cloud/roadside_assistance</PERMITTED>
            <POID>0.0.0.1 /deal 129443 2</POID>
            <PRODUCTS elem="0">
               <CODE>bc6fa7d0-ceb0-473e-9499-d19c7a1d2181</CODE>
               <CYCLE DISCOUNT>0</CYCLE DISCOUNT>
               <CYCLE_END_OFFSET>0</CYCLE_END_OFFSET>
               <CYCLE_END_T>1970-01-01T00:00:00Z</CYCLE_END_T>
               <CYCLE_END_UNIT>0</CYCLE_END_UNIT>
               <CYCLE_START_OFFSET>0</CYCLE_START_OFFSET>
               <CYCLE_START_T>1970-01-01T00:00:00Z</CYCLE_START_T>
               <CYCLE_START_UNIT>0</CYCLE_START_UNIT>
               <PRODUCT_OBJ>0.0.0.1 /product 127523 16</PRODUCT_OBJ>
               <PROD_NAME>Telemotive $4.99 Sign-up Fee</PROD_NAME>
               <PURCHASE_DISCOUNT>0</PURCHASE_DISCOUNT>
               <PURCHASE END OFFSET>0</PURCHASE END OFFSET>
               <PURCHASE_END_T>1970-01-01T00:00:00Z</purchase_END_T>
               <PURCHASE_END_UNIT>0</PURCHASE_END_UNIT>
               <PURCHASE START_OFFSET>0</PURCHASE START_OFFSET>
               <PURCHASE_START_T>1970-01-01T00:00:00Z</purchase_START_T>
               <PURCHASE_START_UNIT>0</PURCHASE_START_UNIT>
               <QUANTITY>1</QUANTITY>
               <STATUS>1</STATUS>
               <STATUS_FLAGS>0</STATUS_FLAGS>
               <USAGE_DISCOUNT>0</USAGE_DISCOUNT>
               <USAGE_END_OFFSET>0</USAGE_END_OFFSET>
               <USAGE_END_T>1970-01-01T00:00:00Z</USAGE_END_T>
               <USAGE_END_UNIT>0</USAGE_END_UNIT>
               <USAGE_START_OFFSET>0</USAGE_START_OFFSET>
               <USAGE_START_T>1970-01-01T00:00:00Z</USAGE_START_T>
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               <CREATED_T>2018-10-02T19:25:05Z</CREATED_T>
               <CURRENCY>840</CURRENCY>
               <CYCLE_FEE_FLAGS>0</CYCLE_FEE_FLAGS>
               <EVENT_TYPE>/event/billing/product/fee/cycle/cycle_forward_monthly</
EVENT_TYPE>
               <MOD_T>2018-10-02T19:25:05Z</MOD_T>
               <NAME>CHG-060216:081605:166</NAME>
               <OFFSET_UNIT>0</OFFSET_UNIT>
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               <PRODUCT_OBJ>0.0.0.1 /product 127139 0</PRODUCT_OBJ>
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                  <DESCR>Pricing</DESCR>
                  <MOD_T>2018-10-02T19:25:05Z</MOD_T>
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                  <PRORATE_FIRST>702</PRORATE_FIRST>
                  <PRORATE_LAST>702/PRORATE_LAST>
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                        <FLAGS>3</FLAGS>
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                        <RELATIVE_START_OFFSET>0</RELATIVE_START_OFFSET>
                        <RELATIVE_START_UNIT>0</RELATIVE_START_UNIT>
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                        <SCALED_UNIT>0</SCALED_UNIT>
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                        <FLAGS>11</FLAGS>
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                        <RELATIVE_END_UNIT>7</RELATIVE_END_UNIT>
                        <RELATIVE_START_OFFSET>0</RELATIVE_START_OFFSET>
                        <RELATIVE_START_UNIT>0</RELATIVE_START_UNIT>
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                     <STEP_MIN/>
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                  <STEP_TYPE>0</STEP_TYPE>
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EVENT_TYPE>
               <FLAGS>2</FLAGS>
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               <INCR_UNIT>0</INCR_UNIT>
               <MIN_QUANTITY>0</MIN_QUANTITY>
               <MIN_UNIT>0</MIN_UNIT>
               <RATE_PLAN_CODE>Occurrence-2fd54c80-a4cf-463a-88fb-0237c4517162/
RATE_PLAN_CODE>
               <RATE_PLAN_NAME>CHG-060216:081605:166</RATE_PLAN_NAME>
               <RATE_PLAN_SELECTOR_OBJ>0.0.0.0 0 0/RATE_PLAN_SELECTOR_OBJ>
               <ROUNDING_MODE>0</ROUNDING_MODE>
               <RUM_NAME>Occurrence</RUM_NAME>
               <TIMEZONE_MODE>0</TIMEZONE_MODE>
               <TOD_MODE>0</TOD_MODE>
            </USAGE_MAP>
            <WRITE_ACCESS>S</WRITE_ACCESS>
            <ZONEMAP_NAME/>
         </PRODUCTS>
         <PRODUCTS elem="1">
            <ACCOUNT_OBJ>0.0.0.1 /account 1 0</ACCOUNT_OBJ>
            <BASE_PRODUCT_OBJ>0.0.0.0 0 0/BASE_PRODUCT_OBJ>
            <CODE>c60a2675-8341-446a-b94d-1f49addb2d45</CODE>
            <CREATED_T>2018-10-02T19:25:05Z</CREATED_T>
            <DESCR>Usage Offer Description/DESCR>
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```

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<PERMITTED>/service/cloud</PERMITTED>
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<PRIORITY>0</PRIORITY>
<PROVISIONING_TAG/>
<PURCHASE_MAX/>
<PURCHASE_MIN/>
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  <BILL_OFFSET>0</BILL_OFFSET>
  <CODE>QTY-e3296730-32a3-493c-9f02-be8ca5647514</CODE>
  <CREATED T>2018-10-02T19:25:05Z</CREATED T>
  <CURRENCY>840</CURRENCY>
  <CYCLE_FEE_FLAGS>0</CYCLE_FEE_FLAGS>
  <EVENT_TYPE>/event/session</EVENT_TYPE>
  <MOD_T>2018-10-02T19:25:05Z</MOD_T>
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  <OFFSET_UNIT>0</OFFSET_UNIT>
  <POID>0.0.0.1 /rate_plan 127779 0</POID>
  <PRODUCT_OBJ>0.0.0.1 /product 128291 0</PRODUCT_OBJ>
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      <DESCR>Pricing</DESCR>
      <MOD_T>2018-10-02T19:25:05Z</MOD_T>
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      <PRORATE_LAST>701/PRORATE_LAST>
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            <END_T>1970-01-01T00:00:00Z</END_T>
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            <FLAGS>1</FLAGS>
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            <RELATIVE_END_UNIT>0</RELATIVE_END_UNIT>
            <RELATIVE_START_OFFSET>0</RELATIVE_START_OFFSET>
            <RELATIVE_START_UNIT>0</RELATIVE_START_UNIT>
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            <SCALED_UNIT>0</SCALED_UNIT>
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         <STEP_MIN>0</STEP_MIN>
      </QUANTITY_TIERS>
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      <READ_ACCESS>B</READ_ACCESS>
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      <STEP_TYPE>0</STEP_TYPE>
      <TAILORMADE_DATA/>
      <TYPE>0</TYPE>
      <WRITE_ACCESS>S</WRITE_ACCESS>
  </RATES>
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                     <RELATIVE_END_UNIT>0</RELATIVE_END_UNIT>
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               </RATE TIERS>
               <READ_ACCESS>B</READ_ACCESS>
               <TAX CODE/>
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            <READ_ACCESS>B</READ_ACCESS>
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RATE_PLAN_CODE>
               <RATE_PLAN_NAME>QTY-CHG-032916:102853:427</RATE_PLAN_NAME>
               <RATE_PLAN_SELECTOR_OBJ>0.0.0.0 0 0/RATE_PLAN_SELECTOR_OBJ>
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               <TOD_MODE>0</TOD_MODE>
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            <ZONEMAP_NAME/>
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         . . .
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            <BASE_PRODUCT_OBJ>0.0.0.0 0 0/BASE_PRODUCT_OBJ>
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            <CREATED_T>2018-10-02T19:25:05Z</CREATED_T>
            <DESCR>Telemotive $4.99 Sign-up Fee</DESCR>
            <END_T>1970-01-01T00:00:00Z</END_T>
            <MOD_T>2018-10-02T19:25:05Z</MOD_T>
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            <OWN_MAX/>
            <OWN_MIN/>
            <PARTIAL>0</PARTIAL>
            <PERMITTED>/service/cloud/roadside_assistance</PERMITTED>
            <POID>0.0.0.1 /product 127523 16</POID>
            <PRIORITY>0</PRIORITY>
            <PROVISIONING_TAG/>
            <PURCHASE_MAX/>
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  <BILL OFFSET>0</BILL OFFSET>
  <CODE>Occurrence-d0270d22-21f7-4023-8d20-0ee70b8aa318</CODE>
  <CREATED_T>2018-10-02T19:25:05Z</CREATED_T>
  <CURRENCY>840</CURRENCY>
  <CYCLE_FEE_FLAGS>0</CYCLE_FEE_FLAGS>
  <EVENT_TYPE>/event/billing/product/fee/purchase</EVENT_TYPE>
  <MOD_T>2018-10-02T19:25:05Z</MOD_T>
  <NAME>CHG-060216:164222:501</NAME>
  <OFFSET_UNIT>0</OFFSET_UNIT>
  <POID>0.0.0.1 /rate_plan 128547 0</POID>
  <PRODUCT_OBJ>0.0.0.1 /product 127523 0</PRODUCT_OBJ>
  <RATES elem="0">
     <ACCOUNT_OBJ>0.0.0.1 /account 1 0</ACCOUNT_OBJ>
      <CREATED_T>2018-10-02T19:25:05Z</CREATED_T>
      <DESCR>Pricing</DESCR>
      <MOD_T>2018-10-02T19:25:05Z</MOD_T>
      <POID>0.0.0.1 /rate 129571 1</POID>
      <PRORATE_FIRST>702</PRORATE_FIRST>
      <PRORATE_LAST>701/PRORATE_LAST>
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            <FLAGS>1</FLAGS>
            <GL_ID>101</GL_ID>
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            <RELATIVE_END_UNIT>0</RELATIVE_END_UNIT>
            <RELATIVE_START_OFFSET>0</RELATIVE_START_OFFSET>
            <RELATIVE_START_UNIT>0</RELATIVE_START_UNIT>
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            <SCALED_UNIT>0</SCALED_UNIT>
            <START_T>1970-01-01T00:00:00Z</START_T>
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         <STEP_MIN/>
      </QUANTITY_TIERS>
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      <TYPE>0</TYPE>
     <WRITE_ACCESS>S</WRITE_ACCESS>
  </RATES>
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         <RELATIVE_END_UNIT>0</RELATIVE_END_UNIT>
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         <RELATIVE_START_UNIT>0</RELATIVE_START_UNIT>
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               </RATE_TIERS>
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               <TAX_WHEN>0</TAX_WHEN>
               <WRITE_ACCESS>S</WRITE_ACCESS>
            </RATE_PLANS>
            <READ_ACCESS>B</READ_ACCESS>
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            <TAX_SUPPLIER>0</TAX_SUPPLIER>
            <TYPE>602</TYPE>
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               <INCR_UNIT>0</INCR_UNIT>
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               <MIN_UNIT>0</MIN_UNIT>
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RATE_PLAN_CODE>
               <RATE_PLAN_NAME>CHG-060216:164222:501/RATE_PLAN_NAME>
               <RATE_PLAN_SELECTOR_OBJ>0.0.0.0 0 0</RATE_PLAN_SELECTOR_OBJ>
               <ROUNDING_MODE>0
               <RUM_NAME>Occurrence</RUM_NAME>
               <TIMEZONE_MODE>0</TIMEZONE_MODE>
               <TOD_MODE>0</TOD_MODE>
            </USAGE_MAP>
            <WRITE_ACCESS>S</WRITE_ACCESS>
            <ZONEMAP_NAME/>
         </PRODUCTS>
         . . .
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            <CREATED_T>2018-10-03T06:56:34Z</CREATED_T>
            <END_T>1970-01-01T00:00:00Z</END_T>
            <FEE_FLAG>3</FEE_FLAG>
            <FROM_CODE>554354ab-94c4-4d01-ad9c-3a30801631c4/FROM_CODE>
            <FROM_NAME>Telemotive Safety Package/FROM_NAME>
            <FROM_OBJ>0.0.0.1 /plan 127907 0</FROM_OBJ>
            <MOD_T>2018-10-03T06:56:34Z</MOD_T>
            <NAME>[554354ab-94c4-4d01-ad9c-3a30801631c4,1e05af7d-5ae5-4e2a-830f-
f49ea31a2a89,/service/cloud/roadside_assistance,1]</NAME>
            <PERMITTED>/service/cloud/roadside_assistance</PERMITTED>
            <POID>0.0.0.1 /transition 131714 0</POID>
            <READ_ACCESS>B</READ_ACCESS>
            <START_T>1970-01-01T00:00:00Z</START_T>
            <TO_CODE>1e05af7d-5ae5-4e2a-830f-f49ea31a2a89</TO_CODE>
            <TO_NAME>Telemotive Premium and Entertainment Package</TO_NAME>
            <TO_OBJ>0.0.0.1 /plan 130979 0</TO_OBJ>
            <TYPE>1</TYPE>
            <WRITE_ACCESS>S</WRITE_ACCESS>
         </TRANSITIONS>
      </pcmOpPriceGetPriceListResponse>
   </S:Body>
</S:Envelope>
```

### pcmOpPriceGetProductInfo

This operation retrieves charge offer pricing information for a specified charge offer POID.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMPricingServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpPriceGetProductInfo request

#### Sample pcmOpPriceGetProductInfo response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Bodv>
      <pcmOpPriceGetProductInfoResponse xmlns:brm="http://xmlns.oracle.com/BRM/</pre>
schemas/BusinessOpcodes">
         <POID>0.0.0.1 /product 299708 1</POID>
         <PRODUCTS elem="0">
            <ACCOUNT_OBJ>0.0.0.1 /account 1 0</ACCOUNT_OBJ>
            <BASE_PRODUCT_OBJ>0.0.0.0 0 0/BASE_PRODUCT_OBJ>
            <CODE>Product 1a - Test Product</CODE>
            <CREATED_T>2010-01-01T17:00:07Z</CREATED_T>
            <DESCR />
            <END T>2011-01-01T00:00:00Z</END T>
            <MOD_T>2010-09-01T17:00:07Z</MOD_T>
            <NAME>Product 1a - Test Product</NAME>
            <OWN MAX />
            <OWN_MIN />
            <PARTIAL>0</PARTIAL>
            <PERMITTED>/service/ip</PERMITTED>
            <POID>0.0.0.1 /product 299708 1</POID>
            <PRIORITY>0</PRIORITY>
            <PROVISIONING_TAG />
            <PURCHASE MAX />
            <PURCHASE_MIN />
            <RATE_PLANS elem="0">
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               <BILL_OFFSET>0</BILL_OFFSET>
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   <CYCLE_FEE_FLAGS>0</CYCLE_FEE_FLAGS>
   <EVENT_TYPE>/event/session</EVENT_TYPE>
   <MOD_T>2010-01-01T17:00:07Z</MOD_T>
   <NAME>Session Event</NAME>
   <OFFSET_UNIT>0</OFFSET_UNIT>
   <POID>0.0.0.1 /rate_plan 300732 0</POID>
   <PRODUCT_OBJ>0.0.0.1 /product 299708 0</PRODUCT_OBJ>
   <RATES elem="0">
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      <MOD_T>2010-01-01T17:00:07Z</MOD_T>
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      <PRORATE_LAST>0</PRORATE_LAST>
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            <FLAGS>0</FLAGS>
            <GL_ID>0</GL_ID>
            <IMPACT CATEGORY />
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            <RELATIVE_END_UNIT>0</RELATIVE_END_UNIT>
            <RELATIVE_START_OFFSET>0</RELATIVE_START_OFFSET>
            <RELATIVE_START_UNIT>0</RELATIVE_START_UNIT>
            <SCALED_AMOUNT>0</SCALED_AMOUNT>
            <SCALED_UNIT>0</SCALED_UNIT>
            <START_T>2016-01-01T00:00:00Z</START_T>
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      <PRIORITY>0</PRIORITY>
      <RATE_INDEX>0</RATE_INDEX>
      <RATE_OBJ>0.0.0.1 /rate 301756 0</RATE_OBJ>
   </RATE_TIERS>
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</RATE_PLANS>
<READ_ACCESS>B</READ_ACCESS>
<START_T>1970-01-01T00:00:00Z</START_T>
<TAILORMADE>0</TAILORMADE>
<TAX_SUPPLIER>0</TAX_SUPPLIER>
```

```
<TYPE>602</TYPE>
           <USAGE_MAP elem="0">
              <EVENT_TYPE>/event/session</EVENT_TYPE>
              <FLAGS>0</FLAGS>
              <INCR_QUANTITY>1</INCR_QUANTITY>
              <INCR_UNIT>1</INCR_UNIT>
              <MIN_QUANTITY>1</MIN_QUANTITY>
              <MIN_UNIT>0</MIN_UNIT>
              <RATE_PLAN_CODE>Session Event</RATE_PLAN_CODE>
              <RATE_PLAN_NAME>Session Event
              <RATE_PLAN_SELECTOR_OBJ>0.0.0.0 0 0</rate_PLAN_SELECTOR_OBJ>
              <ROUNDING_MODE>0
              <RUM_NAME>Duration</RUM_NAME>
              <TIMEZONE_MODE>0</TIMEZONE_MODE>
              <TOD_MODE>0</TOD_MODE>
           </USAGE_MAP>
           <WRITE_ACCESS>S</WRITE_ACCESS>
           <ZONEMAP_NAME />
        </PRODUCTS>
     </pcmOpPriceGetProductInfoResponse>
  </S:Body>
</S:Envelope>
```

### Related topics

- Oracle Monetization Cloud web services
- Performing common tasks with web services
- About integrating your business systems



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# Read operations

This document describes the read operations in the Oracle Monetization Cloud BRMReadServices\_v2 SOAP API.

#### Topics in this document

- About the BRMReadServices\_v2 interface
- · Related topics

# About the BRMReadServices\_v2 interface

Use the BRMReadServices\_v2 interface to perform operations such as searching for objects in the Oracle Monetization Cloud database.

### Authorization

Oracle Monetization Cloud uses the OAuth 2.0 protocol to authorize external applications to access its web services. To call the web services, an application must be registered as an OAuth client in Oracle Monetization Cloud. For more information, see Using OAuth to authorize access.

### Read operations available at runtime

The following table lists the operations provided by the BRMReadServices\_v2 interface.

For information about terminology used in sample requests and responses for web service operations, see About terminology.

Operation	Description
pcmOpReadFlds	Reads one or more fields in an object.
	Returns the POID of the object and the specified fields and their values.
pcmOpReadObj	Reads an entire object from the database.
	Returns the POID of the object and all fields in the object, including array elements and substructures.
pcmOpSearch	Searches for objects in the Oracle Monetization Cloud database.
pcmOpTestLoopback	Tests connections between Oracle Monetization Cloud and external applications.



### pcmOpReadFlds

This operation enables a client application to read specified fields in an object. You specify the POID of the object and the list of fields to read in the operation's input. The POID is mandatory; the fields are optional. If no fields are specified, only the POID is read and returned. This operation returns the POID of the object and the specified fields and their values.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMReadServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpReadFlds request

### Sample pcmOpReadFlds response



### pcmOpReadObj

This operation reads an entire object from the database. You specify the POID of the object to read in the operation's input. The POID of the object and all fields in the object are returned, including array elements and substructures.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMReadServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpReadObj request

#### Sample pcmOpReadObj response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpReadObjResponse xmlns:brm="http://xmlns.oracle.com/BRM/schemas/</pre>
BusinessOpcodes">
         <ACCOUNT_OBJ>0.0.0.1 /account 1 0</ACCOUNT_OBJ>
         <CODE>PlanMCf</CODE>
         <CREATED_T>2010-01-14T21:51:58Z</CREATED_T>
         <DEAL_OBJ>0.0.0.1 /deal 295651 4</DEAL_OBJ>
         <DESCR />
         <FLAGS>0</FLAGS>
         <MOD_T>2010-01-15T20:56:39Z</MOD_T>
         <NAME>PlanMCf</NAME>
         <POID>0.0.0.1 /plan 298723 8</POID>
         <READ_ACCESS>B</READ_ACCESS>
         <SERVICES elem="0">
            <BAL_INFO_INDEX>0</BAL_INFO_INDEX>
            <DEAL_OBJ>0.0.0.1 /deal 295970 0</DEAL_OBJ>
            <SERVICE ID />
            <SERVICE_OBJ>0.0.0.1 /service/telco/qsm/telephony -1 0</SERVICE_OBJ>
            <SUBSCRIPTION_INDEX>0</SUBSCRIPTION_INDEX>
         </SERVICES>
         <WRITE_ACCESS>S</WRITE_ACCESS>
      </pcmOpReadObjResponse>
   </S:Body>
</S:Envelope>
```



### pcmOpSearch

This operation searches for objects in the Oracle Monetization Cloud database. This operation enables a client application to retrieve objects that meet a set of search criteria defined by the client application.

If the search finds two objects that have an encrypted field containing the same data encrypted with different keys, this operation returns only one object.

You can apply the Order By clause only to the top-level arrays; Order By can't be applied to subarrays.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### About the search request

You specify the storable classes you want to search and the results you want returned in the search operation's request (see Sample pcmOpSearch request).

For an overview of storable classes, see About data storage in Oracle Monetization Cloud.

Two fields are required:

#### ARGS array

You specify the storable classes to search in the ARGS array. Each array element contains one storable class. You must provide at least one storable class in the request.

You should always put the POID of the storable class type you want returned in the ARGS array. If you don't, the search returns an error.

The maximum number of arguments is 32. The array element ID must represent the location of the argument in the array. For example, element ID 1 corresponds to argument 1.

The arguments in the ARGS array are referenced in the **where** clause of the search query. The storable class specified in the **where** clause must contain the fields specified in the ARGS array. If it doesn't, you'll get an error.

#### RESULTS array

You specify which fields you want returned from the storable objects you're searching in the RESULTS array. One element is returned for each storable object that was matched.

Results can be returned in the following ways:

- To return all the fields from a matched storable object, set the RESULTS element to NULL.
- To return only a count of matching objects, set the RESULTS element to NULL, and include the PCM\_OPFLG\_COUNT\_ONLY flag. The number of matching results is returned as the element ID of the RESULTS array in the operation's response.
- To return only specified fields, the RESULTS element must contain a sub-flist with the specified fields.



 To return a single value that's calculated from the matched storable objects, the RESULTS element must include a single AMOUNT field. Set the search flag to SRCH\_CALC\_ONLY.

To indicate the maximum number of records to return, specify that number as the RESULTS element ID. To return all records, use zero. For a count-only search, only one value is returned.

If you call for a calculate-only search by using the CALC\_ONLY\_1 flag, the RESULTS array must contain only one AMOUNT field with an element ID of 1.

#### Search query syntax

The search query is part of the search template. You include it in the TEMPLATE field in the request at runtime.

Use the following syntax for search queries:

"select X from class\_name where expression"

#### where:

- *X* is a placeholder for the fields to return, which are specified in the RESULTS array in the request.
- class\_name is the type name of the storable class that contains the arguments.

You can fully specify the name by including a specific subclass, or you can add the optional **\$1** parameter (for example, **/event/\$1**). The **\$1** parameter is substituted with the value of the PARAMETERS field in the request. If PARAMETERS is not included in the request, the **\$1** is null.



The storable class type you specify in the search query indicates where to find the arguments in the **where** clause. It doesn't indicate the storable class type to return.

expression is an SQL expression such as "where F1 = V1 and F2 = V2".

The column names and literal values (Fn and Vn) are replaced by the array field names and field values specified in the ARGS array in the request. The column name and value indexes must be contiguous and correspond with the elements in the ARGS array, starting with element ID 1. That is, F1 and V1 correspond to the field name and value in ARGS[1], F2 and V2 to the field name and value in ARGS[2], and so on.

#### About searching for objects by their POID subcomponent

You can search for objects by specifying any of the following POID subcomponents in the search expression:

- Database number
- Storable class type
- Object ID
- Revision number



To do this, you can use any of the following expressions in the **where** clause of the search query template:

- Fn.db =Vn to search by the POID database number. See Searching for objects by the POID database number.
- **F***n***.type** = **V***n* to search by the POID type. See Searching for objects by the POID type.
- **F***n*.**id** = **V***n* to search by the POID object ID. See Searching for objects by the POID object ID.
- Fn.rev = Vn to search by the POID revision number. See Searching for objects by the POID revision number.



To return only a specific class and all its subclasses, add the POID of the parent class type to the argument list, set the POID to **-1**, use a **like** operator in the **where** clause, and add a percent sign (%) at the end of the class type.

#### Searching for objects by the POID database number

The following example shows the pcmOpSearch request with the POID database number specified in the search query:

#### Searching for objects by the POID type

The following example shows the pcmOpSearch request with the POID type specified in the search guery:

#### Searching for objects by the POID object ID

The following example shows the pcmOpSearch request with the POID object ID specified in the search query:



```
1 ACCOUNT_OBJ POID [0] 0.0.0.1 /account -1 0
0 ARGS ARRAY [1] allocated 1, used 1
1 POID POID [0] 0.0.0.1 /service/ip -1 0
0 ARGS ARRAY [2] allocated 1, used 1
1 ACCOUNT_OBJ POID [0] 0.0.0.1 /account 24295 1 0
```

#### Searching for objects by the POID revision number

The following example shows the pcmOpSearch request with the POID revision number specified in the search query:

#### Search query syntax for count-only searches

You can search using the following syntax:

```
"select result from class_name where expression"
```

where *result* is a calculation to be performed on a value from the ARGS array when a search is performed using the PCM\_OPFLG\_COUNT\_ONLY flag. This flag returns only the number of matches found by the search.

The following example shows the pcmOpSearch request for counting the total number of journal objects:

```
0 PIN_FLD_POID          POID [0] 0.0.0.1 /search -1 0
0 PIN_FLD_TEMPLATE          STR [0] "select X from /journal where F1 = V1 "
0 PIN_FLD_FLAGS          INT [0] 0
0 PIN_FLD_ARGS          ARRAY [1]
1 PIN_FLD_POID          POID [0] 0.0.0.1 /journal -1 0
0 PIN_FLD_RESULTS          ARRAY [*] NULL
```

#### Search query syntax for calculate-only searches

You can search using the following syntax:

```
"select result from class_name where expression"
```

where *result* is a calculated value returned when a search is performed by using the calculate-only flag. There are two forms of the calculate-only flag:

SRCH CALC ONLY 1

This flag returns a single value. You specify one calculation in the search query. For example:

"select sum(F1) from class\_name where expression"



You must include spaces around F1.



**F1** references the field value of ARGS array element 1 in the request. You must include the AMOUNT field with an element ID of **1** as the only field in the RESULTS array.

SRCH\_CALC\_ONLY

This flag can return one or more values. You specify each calculation in the search query. For example:

"select sum( F1 ), avg( F2 ) from class\_name where expression"

For multiple results, you must include an AMOUNT field in the RESULTS array for each result to return.

If you use SRCH\_CALC\_ONLY with the PCM\_OPFLG\_SRCH\_CALC\_RESULTS flag not set (which is the default), all AMOUNT values are returned in the RESULTS array. For example:

```
0 RESULTS ARRAY [0]
1 AMOUNT DECIMAL [1]
1 AMOUNT DECIMAL [2]
```

If you use SRCH\_CALC\_ONLY with the PCM\_OPFLG\_SRCH\_CALC\_RESULTS flag set, each AMOUNT value is returned in its own RESULTS array. For example:

```
0 RESULTS ARRAY [0]
1 AMOUNT DECIMAL [0]
0 RESULTS ARRAY [1]
1 AMOUNT DECIMAL [0]
```

#### **URI**

https://hostname/BrmWebServices/BRMReadServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpSearch request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpSearchRequest>
         <bus:PCM_OP_SEARCH_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_SEARCH_inputFlist>
               <bus:FLAGS>256/bus:FLAGS>
               <bus:ARGS elem="1">
                  <bus:ACCOUNT_OBJ>0.0.0.1 /account 324664 0</bus:ACCOUNT_OBJ>
               </bus:ARGS>
               <bus:ARGS elem="2">
                  <bus:POID>0.0.0.1 /item 1 0</pus:POID>
               </bus:ARGS>
               <bus:POID>0.0.0.1 /search/pin -1 0</bus:POID>
               <bus:RESULTS elem="0" />
               <bus:RESULTS_LIMIT>1000/bus:RESULTS_LIMIT>
               <bus:TEMPLATE>select X from /item where F1 = V1</bus:TEMPLATE>
            </bus:PCM_OP_SEARCH_inputFlist>
         </bus:PCM_OP_SEARCH_Request>
      </bus:pcmOpSearchRequest>
   </soapenv:Body>
</soapenv:Envelope>
```



#### Sample pcmOpSearch response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
      <pcmOpSearchResponse xmlns:brm="http://xmlns.oracle.com/BRM/schemas/</pre>
BusinessOpcodes">
         <POID>0.0.0.1 /search/pin -1 0</POID>
         <RESULTS elem="0">
            <account_OBJ>0.0.0.1 /account 324664 0</account_OBJ>
            <ADJUSTED>0</ADJUSTED>
            <ARCHIVE_STATUS>0</ARCHIVE_STATUS>
            <AR_BILLINFO_OBJ>0.0.0.1 /billinfo 326200 0</AR_BILLINFO_OBJ>
            <AR_BILL_OBJ>0.0.0.0 0 0</AR_BILL_OBJ>
            <BAL_GRP_OBJ>0.0.0.1 /balance_group 325944 0</BAL_GRP_OBJ>
            <BILLINFO_OBJ>0.0.0.1 /billinfo 326200 0</BILLINFO_OBJ>
            <BILL_OBJ>0.0.0.1 /bill 325176 0</BILL_OBJ>
            <CLOSED_T>2015-01-01T00:00:00Z</CLOSED_T>
            <CREATED_T>2014-10-03T19:57:52Z</CREATED_T>
            <CURRENCY>840</CURRENCY>
            <CURRENCY_OPERATOR>0</CURRENCY_OPERATOR>
            <CURRENCY_RATE>0</CURRENCY_RATE>
            <CURRENCY_SECONDARY>0</CURRENCY_SECONDARY>
            <DELTA_DUE>0</DELTA_DUE>
            <DISPUTED>0</DISPUTED>
            <DUE>0</DUE>
            <DUE_T>1970-01-01T00:00:00Z</DUE_T>
            <EFFECTIVE_T>1970-01-01T00:00:00Z</EFFECTIVE_T>
            <EVENT POID LIST />
            <FLAGS>0</FLAGS>
            <GL_SEGMENT>.</GL_SEGMENT>
            <ITEM_NO />
            <TTEM_TOTAL>0</TTEM_TOTAL>
            <MOD_T>2014-10-03T19:57:52Z</MOD_T>
            <NAME>Usage</NAME>
            <OPENED_T>1970-01-01T00:00:00Z</OPENED_T>
            <POID>0.0.0.1 /item/misc 324920 0</POID>
            <READ_ACCESS>L</READ_ACCESS>
            <RECVD>0</RECVD>
            <SERVICE_OBJ>0.0.0.0 0 0
            <STATUS>1</STATUS>
            <TRANSFERED>0</TRANSFERED>
            <WRITEOFF>0</WRITEOFF>
            <WRITE_ACCESS>L</WRITE_ACCESS>
         </RESULTS>
         <RESULTS elem="1">
            <account_OBJ>0.0.0.1 /account 324664 0</account_OBJ>
            <ADJUSTED>0</ADJUSTED>
            <ARCHIVE_STATUS>0</ARCHIVE_STATUS>
            <AR_BILLINFO_OBJ>0.0.0.1 /billinfo 326200 0</AR_BILLINFO_OBJ>
            <AR_BILL_OBJ>0.0.0.0 0 0</AR_BILL_OBJ>
            <BAL_GRP_OBJ>0.0.0.1 /balance_group 325944 0</BAL_GRP_OBJ>
            <BILLINFO_OBJ>0.0.0.1 /billinfo 326200 0</BILLINFO_OBJ>
            <BILL_OBJ>0.0.0.1 /bill 327224 0</BILL_OBJ>
            <CLOSED_T>2015-01-01T00:00:00Z</CLOSED_T>
            <CREATED_T>2014-10-03T19:57:52Z</CREATED_T>
            <CURRENCY>840</CURRENCY>
            <CURRENCY_OPERATOR>0</CURRENCY_OPERATOR>
            <CURRENCY_RATE>0</CURRENCY_RATE>
            <CURRENCY_SECONDARY>0</CURRENCY_SECONDARY>
            <DELTA DUE>0</DELTA DUE>
```



```
<DISPUTED>0</DISPUTED>
   <DUE>0</DUE>
   <DUE_T>1970-01-01T00:00:00Z</DUE_T>
   <EFFECTIVE_T>1970-01-01T00:00:00Z</EFFECTIVE_T>
   <EVENT_POID_LIST />
   <FLAGS>0</FLAGS>
   <GL_SEGMENT>.</GL_SEGMENT>
   <ITEM_NO />
   <TTEM_TOTAL>0</TTEM_TOTAL>
   <MOD_T>2014-10-03T19:57:52Z</MOD_T>
   <NAME>Usage</NAME>
   <OPENED_T>1970-01-01T00:00:00Z</OPENED_T>
   <POID>0.0.0.1 /item/misc 326968 0</POID>
   <READ ACCESS>L</READ ACCESS>
   <RECVD>0</RECVD>
   <SERVICE OBJ>0.0.0.0 0 0</SERVICE OBJ>
   <STATUS>1</STATUS>
   <TRANSFERED>0</TRANSFERED>
   <WRITEOFF>0</WRITEOFF>
   <WRITE_ACCESS>L</WRITE_ACCESS>
</RESULTS>
<RESULTS elem="2">
   <ACCOUNT_OBJ>0.0.0.1 /account 324664 4</ACCOUNT_OBJ>
   <ADJUSTED>0</ADJUSTED>
   <ARCHIVE_STATUS>0</ARCHIVE_STATUS>
   <AR_BILLINFO_OBJ>0.0.0.1 /billinfo 326200 0</AR_BILLINFO_OBJ>
   <AR_BILL_OBJ>0.0.0.0 0 0</AR_BILL_OBJ>
   <BAL_GRP_OBJ>0.0.0.1 /balance_group 325944 2</BAL_GRP_OBJ>
   <BILLINFO_OBJ>0.0.0.1 /billinfo 326200 0</BILLINFO_OBJ>
   <BILL_OBJ>0.0.0.1 /bill 325176 0</BILL_OBJ>
   <CLOSED_T>2015-01-01T00:00:00Z</CLOSED_T>
   <CREATED_T>2014-10-03T19:57:52Z</CREATED_T>
   <CURRENCY>840</CURRENCY>
   <CURRENCY_OPERATOR>0</CURRENCY_OPERATOR>
   <CURRENCY_RATE>0</CURRENCY_RATE>
   <CURRENCY_SECONDARY>0</CURRENCY_SECONDARY>
   <DELTA_DUE>0</DELTA_DUE>
   <DISPUTED>0</DISPUTED>
   <DUE>9.95</DUE>
   <DUE_T>1970-01-01T00:00:00Z</DUE_T>
   <EFFECTIVE_T>1970-01-01T00:00:00Z</EFFECTIVE_T>
   <EVENT_POID_LIST />
   <FLAGS>0</FLAGS>
   <GL_SEGMENT>.</GL_SEGMENT>
   <ITEM_NO />
   <TTEM_TOTAL>9.95</TTEM_TOTAL>
   <MOD_T>2014-10-03T19:57:52Z</MOD_T>
   <NAME>Cycle forward</NAME>
   <OPENED_T>1970-01-01T00:00:00Z</OPENED_T>
   <POID>0.0.0.1 /item/cycle_forward 325304 1</POID>
   <READ_ACCESS>L</READ_ACCESS>
   <RECVD>0</RECVD>
   <SERVICE_OBJ>0.0.0.1 /service/ip 324280 0</SERVICE_OBJ>
   <STATUS>1</STATUS>
   <TRANSFERED>0</TRANSFERED>
   <WRITEOFF>0</WRITEOFF>
   <WRITE_ACCESS>L</WRITE_ACCESS>
</RESULTS>
<RESULTS elem="3">
   <account_OBJ>0.0.0.1 /account 324664 4</account_OBJ>
   <ADJUSTED>0</ADJUSTED>
```

```
<ARCHIVE_STATUS>0</ARCHIVE_STATUS>
            <AR_BILLINFO_OBJ>0.0.0.1 /billinfo 326200 0</AR_BILLINFO_OBJ>
            <AR_BILL_OBJ>0.0.0.0 0 0</AR_BILL_OBJ>
            <BAL_GRP_OBJ>0.0.0.1 /balance_group 325944 1</BAL_GRP_OBJ>
            <BILLINFO_OBJ>0.0.0.1 /billinfo 326200 0</BILLINFO_OBJ>
            <BILL_OBJ>0.0.0.1 /bill 325176 0</BILL_OBJ>
            <CLOSED_T>2015-01-01T00:00:00Z</CLOSED_T>
            <CREATED_T>2014-10-03T19:57:52Z</CREATED_T>
            <CURRENCY>840</CURRENCY>
            <CURRENCY_OPERATOR>0</CURRENCY_OPERATOR>
            <CURRENCY_RATE>0</CURRENCY_RATE>
            <CURRENCY_SECONDARY>0</CURRENCY_SECONDARY>
            <DELTA_DUE>0</DELTA_DUE>
            <DISPUTED>0</DISPUTED>
            <DUE>3</DUE>
           <DUE T>1970-01-01T00:00:00Z</DUE T>
            <EFFECTIVE_T>1970-01-01T00:00:00Z</EFFECTIVE_T>
           <EVENT_POID_LIST />
           <FLAGS>0</FLAGS>
           <GL_SEGMENT>.</GL_SEGMENT>
           <ITEM_NO />
           <TTEM_TOTAL>3</TTEM_TOTAL>
           <MOD_T>2014-10-03T19:57:52Z</MOD_T>
            <NAME>Cycle forward</NAME>
           <OPENED_T>1970-01-01T00:00:00Z</OPENED_T>
            <POID>0.0.0.1 /item/cycle_forward 327480 1</POID>
            <READ_ACCESS>L</READ_ACCESS>
            <RECVD>0</RECVD>
            <SERVICE_OBJ>0.0.0.1 /service/email 326456 0</SERVICE_OBJ>
            <STATUS>1</STATUS>
            <TRANSFERED>0</TRANSFERED>
            <WRITEOFF>0</WRITEOFF>
            <WRITE_ACCESS>L</WRITE_ACCESS>
        </RESULTS>
     </S:Body>
</S:Envelope>
```

# pcmOpTestLoopback

This operation verifies that an external application and Oracle Monetization Cloud are successfully communicating with each other by returning the POID passed in as the input.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### URI

https://hostname/BrmWebServices/BRMReadServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpTestLoopback request



#### Sample pcmOpTestLoopback response

## Related topics

- Oracle Monetization Cloud web services
- Performing common tasks with web services
- About integrating your business systems



# Subscription operations

This document describes the subscription operations in the Oracle Monetization Cloud BRMSubscriptionServices\_v2 SOAP API.

#### Topics in this document

- About the BRMSubscriptionServices\_v2 interface
- Related topics

### About the BRMSubscriptionServices v2 interface

Use the BRMSubscriptionServices\_v2 interface to perform operations that manage a subscriber's offerings. Use this interface to purchase or cancel offers, retrieve subscription information, and transition subscribers from one package to another.

### Authorization

Oracle Monetization Cloud uses the OAuth 2.0 protocol to authorize external applications to access its web services. To call the web services, an application must be registered as an OAuth client in Oracle Monetization Cloud. For more information, see Using OAuth to authorize access.

### Subscription operations available at runtime

The following table lists the operations provided by the BRMSubscriptionServices\_v2 interface.

For information about terminology used in sample requests and responses for web service operations, see About terminology.

Operation	Description
pcmOpSubscriptionCalcQuote	Returns a price quote for a specified product offering without charging the customer.
pcmOpSubscriptionCancelDeal	Cancels a bundle for a specified account or service.
pcmOpSubscriptionCancelDiscount	Cancels the discount offers associated with a specified account or service.
pcmOpSubscriptionCancelProduct	Cancels the charge offers for a specified account or service.
pcmOpSubscriptionCancelSubscription	Cancels a subscription service and all the member services.
pcmOpSubscriptionChangeDeal	Wraps pcmOpSubscriptionCancelDeal and pcmOpSubscriptionPurchaseDeal in one transaction, giving CSRs or subscribers the ability to change bundles in one step.



Operation	Description
pcmOpSubscriptionGetHistory	Returns the event history of a specified service, bundle, charge offer, or discount offer of an account.
pcmOpSubscriptionGetPurchasedOfferings	Retrieves the purchased charge offers and discount offers for a specified account, service, or bill unit (/billinfo object).
pcmOpSubscriptionPurchaseDeal	Purchases a bundle for a specified account or service.
pcmOpSubscriptionPurchaseFees	Applies deferred purchase fees for a charge offer that has an expired purchase start time.
pcmOpSubscriptionReadAcctProducts	Returns the purchased offers of an account. Optionally includes item charge offers, canceled offers, or both in a hierarchical service > bundle > offer structure.
pcmOpSubscriptionServiceBalgrpTransfer	Transfers subscription services from one balance group to another, or associates a balance group with a different bill unit.
pcmOpSubscriptionSetBundle	Creates or modifies a purchased bundle and its attributes.
pcmOpSubscriptionSetDiscountinfo	Modifies or sets a discount offer's purchase, cycle, or usage date.
pcmOpSubscriptionSetDiscountStatus	Changes the status of a purchased discount offer in a bundle for an account or service.
pcmOpSubscriptionSetProdInfo	Modifies or sets a charge offer's purchase, cycle, or usage date.
pcmOpSubscriptionSetProductStatus	Sets the status of a purchased charge offer owned by an account.
pcmOpSubscriptionTransferSubscription	Transfers a subscription service from one account to another.
pcmOpSubscriptionTransitionDeal	Upgrades or downgrades a bundle owned by an account.
pcmOpSubscriptionTransitionPlan	Upgrades or downgrades a package owned by an account.

# pcmOpSubscriptionCalcQuote

This operation returns a price quote for a requested product offering without charging the customer. This operation calculates the final price of the product offering, including all fees and relevant discounts.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMCustServices\_2/

where hostname is the URL of your Oracle Monetization Cloud instance.



#### Sample pcmOpSubscriptionCalcQuote request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpSubscriptionCalcQuoteRequest>
        <bus:PMC_OP_SUBSCRIPTION_CALC_QUOTE_Request>
           <bus:flags>0</bus:flags>
           <bus:PMC_OP_SUBSCRIPTION_CALC_QUOTE_inputFlist>
              <bus:POID>0.0.0.1 /plan 15543 0</bus:POID>
              <bus:SERVICES elem="0">
                 <bus:LOGIN>Susan
                 <bus:DEAL_INFO>
                    <bus:PRODUCTS elem="0">
                       <bus:CYCLE_START_T>0
                       <bus:PURCHASE_END_T>0</bus:PURCHASE_END_T>
                       <bus:PURCHASE_START_T>0</bus:PURCHASE_START_T>
                       <bus:PLAN_OBJ>0.0.0.1 /plan 15543 0</bus:PLAN_OBJ>
                       <bus:PRODUCT_OBJ>0.0.0.1 /product 14295 1</bus:PRODUCT_OBJ>
                          <bus:QUANTITY>1
                          <bus:STATUS>1</bus:STATUS>
                          <bus:USAGE_END_T>0</bus:USAGE_END_T>
                          <bus:USAGE_START_T>0</bus:USAGE_START_T>
                          <bus:CYCLE_END_T>0</bus:CYCLE_END_T>
                    </bus:PRODUCTS>
                    <bus:NAME>Deal 1b - Standard Email Access/bus:NAME>
                    <bus:POID>0.0.0.1 /deal 16183 0/bus:POID>
                    <bus:END_T>0</bus:END_T>
                    <bus:START_T>0</bus:START_T>
                 </bus:DEAL_INFO>
                 <bus:SERVICE_OBJ>0.0.0.1 /service/email -1 0</bus:SERVICE_OBJ>
              </bus:SERVICES>
              <bus:SERVICES elem="1">
                 <bus:LOGIN>ip susan
                 <bus:DEAL_INFO>
                    <bus:PRODUCTS elem="0">
                       <bus:PURCHASE END T>0</bus:PURCHASE END T>
                       <bus:PURCHASE START T>0</bus:PURCHASE START T>
                       <bus:OUANTITY>1/bus:OUANTITY>
                       <bus:PLAN_OBJ>0.0.0.1 /plan 15543 0</bus:PLAN_OBJ>
                       <bus:PRODUCT_OBJ>0.0.0.1 /product 16087 1/bus:PRODUCT_OBJ>
                       <bus:STATUS>1</bus:STATUS>
                       <bus:USAGE_END_T>0</bus:USAGE_END_T>
                       <bus:USAGE_START_T>0</bus:USAGE_START_T>
                       <bus:CYCLE_END_T>0</bus:CYCLE_END_T>
                       <bus:CYCLE_START_T>0</bus:CYCLE_START_T>
                    </bus:PRODUCTS>
                    <bus:NAME>Deal 1a - Measured Internet Service</bus:NAME>
                    <bus:POID>0.0.0.1 /deal 14135 0
                    <bus:END_T>0</bus:END_T>
                    <bus:START_T>0</bus:START_T>
                 </bus:DEAL_INFO>
                 <bus:SERVICE_OBJ>0.0.0.1 /service/ip -1 0</bus:SERVICE_OBJ>
              </bus:SERVICES>
              <bus:NAMEINFO elem="1">
                 <bus:LAST_NAME>Smith/bus:LAST_NAME>
                 <bus:FIRST_NAME>Susan
                 <bus:SALUTATION>Ms.</bus:SALUTATION>
                 <bus:CONTACT TYPE>Account holder/bus:CONTACT TYPE>
```

```
<bus:EMAIL_ADDR>susan@example.com</bus:EMAIL_ADDR>
                 <bus:COUNTRY>USACOUNTRY>
                 <bus:ZIP>95054</bus:ZIP>
                 <bus:STATE>CA</bus:STATE>
                 <bus:CITY>Santa Clara/bus:CITY>
                 <bus:ADDRESS>4210 Network Circle/bus:ADDRESS>
                 <bus:COMPANY>Oralce Corporation
              </bus:NAMEINFO>
              <bus:ACCTINFO elem="0">
                 <bus:POID>0.0.0.1 /account -1 0</bus:POID>
                 <bus:CURRENCY>840</bus:CURRENCY>
                 <bus:BUSINESS_TYPE>2</bus:BUSINESS_TYPE>
                 <bus:ACCOUNT_NO>PQ_NO_ACCOUNT</bus:ACCOUNT_NO>
              </bus:ACCTINFO>
              <bus:PAYINFO elem="0">
                 <bus:INV TYPE>257</bus:INV TYPE>
                 <bus:NAME>Invoice1
                 <bus:POID>0.0.0.1 /payinfo/invoice -1 0</bus:POID>
                 <bus:INHERITED_INFO>
                    <bus:INV_INFO elem="0">
                       <bus:NAME>Susan Smith
                       <bus:DELIVERY_DESCR>rs@xyz.com</bus:DELIVERY_DESCR>
                       <bus:COUNTRY>USA</pus:COUNTRY>
                       <bus:ZIP>95054ZIP>
                       <bus:STATE>CA</bus:STATE>
                       <bus:CITY>Santa Clara/bus:CITY>
                       <bus:ADDRESS>4210 Network Circle/bus:ADDRESS>
                    </bus:INV_INFO>
                 </bus:INHERITED_INFO>
                 <bus:FLAGS>1</bus:FLAGS>
                 <bus:PAY_TYPE>10001</bus:PAY_TYPE>
              </bus:PAYINFO>
           </bus:PMC_OP_SUBSCRIPTION_CALC_QUOTE_inputFlist>
        </bus:PMC_OP_SUBSCRIPTION_CALC_QUOTE_Request>
     </bus:pcmOpSubscriptionCalcQuoteRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpSubscriptionCalcQuote response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpSubscriptionCalcQuoteResponse xmlns:brm="http://xmlns.oracle.com/BRM/</pre>
schemas/BusinessOpcodes">
         <POID>0.0.0.1 /account 151268 0</POID>
         <RESULTS elem="0">
            <ACCOUNT_OBJ>0.0.0.1 /account 151268 0</ACCOUNT_OBJ>
            <BAL_IMPACTS elem="0">
               <ACCOUNT_OBJ>0.0.0.1 /account 151268 7</ACCOUNT_OBJ>
               <AMOUNT>3</AMOUNT>
               <AMOUNT_DEFERRED>0</AMOUNT_DEFERRED>
               <BAL_GRP_OBJ>0.0.0.1 /balance_group 150500 1</BAL_GRP_OBJ>
               <DISCOUNT>0</DISCOUNT>
               <GL_ID>104</GL_ID>
               <IMPACT_CATEGORY>default</IMPACT_CATEGORY>
               <IMPACT_TYPE>1</IMPACT_TYPE>
               <ITEM_OBJ>0.0.0.1 /item/cycle_forward 150548 0</ITEM_OBJ>
               <OFFERING_OBJ>0.0.0.1 /purchased_product 148500 0</OFFERING_OBJ>
               <PERCENT>1</PERCENT>
               <PRODUCT_OBJ>0.0.0.1 /product 14295 0</PRODUCT_OBJ>
               <QUANTITY>1</QUANTITY>
```

```
<RATE_OBJ>0.0.0.1 /rate 16343 1</RATE_OBJ>
               <RATE_TAG>$3 a month</RATE_TAG>
               <RESOURCE_ID>840</RESOURCE_ID>
               <TAX CODE/>
            </BAL IMPACTS>
            <CYCLE_INFO>
               <CYCLE_END_T>2010-05-01T07:00:00Z</CYCLE_END_T>
               <CYCLE_START_T>2010-04-02T07:00:00Z</CYCLE_START_T>
               <FLAGS>1032</FLAGS>
               <ORIGINAL_SCALE>1</ORIGINAL_SCALE>
               <SCALE>1</SCALE>
            </CYCLE_INFO>
            <NET_QUANTITY>1</NET_QUANTITY>
            <POID>0.0.0.1 /event/billing/product/fee/cycle/cycle forward monthly
258622727039107604 0</POID>
            <RATING STATUS>0</RATING STATUS>
            <RUM_NAME>Occurrence</RUM_NAME>
            <SERVICE_OBJ>0.0.0.1 /service/email 147476 0</SERVICE_OBJ>
            <SUB_BAL_IMPACTS elem="0">
               <BAL_GRP_OBJ>0.0.0.1 /balance_group 150500 2</BAL_GRP_OBJ>
               <RESOURCE_ID>840</RESOURCE_ID>
               <SUB_BALANCES elem="0">
                  <AMOUNT>3</AMOUNT>
                  <CONTRIBUTOR_STR/>
                  <GRANTOR_OBJ>0.0.0.1 /purchased_product 148500 0</GRANTOR_OBJ>
                  <ROLLOVER_DATA>0</ROLLOVER_DATA>
                  <VALID_FROM>2010-04-02T07:00:00Z</VALID_FROM>
                  <VALID_FROM_DETAILS>0</VALID_FROM_DETAILS>
                  <VALID_TO>2015-01-01T00:00:00Z</VALID_TO>
                  <VALID_TO_DETAILS>0</VALID_TO_DETAILS>
               </SUB_BALANCES>
            </SUB_BAL_IMPACTS>
            <UNRATED_QUANTITY>0</UNRATED_QUANTITY>
         </RESULTS>
         <RESULTS elem="1">
            <ACCOUNT_OBJ>0.0.0.1 /account 151268 0</ACCOUNT_OBJ>
            <BAL IMPACTS elem="0">
               <ACCOUNT_OBJ>0.0.0.1 /account 151268 4</ACCOUNT_OBJ>
               <AMOUNT>9.62</AMOUNT>
               <AMOUNT_DEFERRED>0</AMOUNT_DEFERRED>
               <BAL_GRP_OBJ>0.0.0.1 /balance_group 150500 1</BAL_GRP_OBJ>
               <DISCOUNT>0</DISCOUNT>
               <GL_ID>102</GL_ID>
               <IMPACT_CATEGORY>default</IMPACT_CATEGORY>
               <IMPACT_TYPE>1</IMPACT_TYPE>
               <ITEM_OBJ>0.0.0.1 /item/cycle_forward 149780 0</ITEM_OBJ>
               <OFFERING_OBJ>0.0.0.1 /purchased_product 147732 0</OFFERING_OBJ>
               <PERCENT>0.96666666666666666666/PERCENT>
               <PRODUCT_OBJ>0.0.0.1 /product 16087 0</PRODUCT_OBJ>
               <QUANTITY>1</QUANTITY>
               <RATE_OBJ>0.0.0.1 /rate 12759 1</RATE_OBJ>
               <RATE_TAG>$9.95 a month/RATE_TAG>
               <RESOURCE_ID>840</RESOURCE_ID>
               <TAX_CODE/>
            </BAL_IMPACTS>
            <CYCLE_INFO>
               <CYCLE_END_T>2010-05-01T07:00:00Z</CYCLE_END_T>
               <CYCLE_START_T>2010-04-02T07:00:00Z</CYCLE_START_T>
               <FLAGS>1032</FLAGS>
               <ORIGINAL_SCALE>1</ORIGINAL_SCALE>
               <SCALE>0.9666666666666666666/SCALE>
```

```
</CYCLE_INFO>
            <NET_QUANTITY>1</NET_QUANTITY>
            <POID>0.0.0.1 /event/billing/product/fee/cycle/cycle_forward_monthly
258622727039108372 0</POID>
            <RATING_STATUS>0</RATING_STATUS>
            <RUM_NAME>Occurrence</RUM_NAME>
            <SERVICE_OBJ>0.0.0.1 /service/ip 149524 0</SERVICE_OBJ>
            <SUB_BAL_IMPACTS elem="0">
               <BAL_GRP_OBJ>0.0.0.1 /balance_group 150500 3</BAL_GRP_OBJ>
               <RESOURCE_ID>840</RESOURCE_ID>
               <SUB_BALANCES elem="0">
                  <AMOUNT>9.62</AMOUNT>
                  <CONTRIBUTOR_STR/>
                  <GRANTOR_OBJ>0.0.0.1 /purchased_product 148500 0</GRANTOR_OBJ>
                  <ROLLOVER_DATA>0</ROLLOVER_DATA>
                  <VALID FROM>2010-04-02T07:00:00Z</VALID FROM>
                  <VALID_FROM_DETAILS>0</VALID_FROM_DETAILS>
                  <VALID_TO>2015-01-01T00:00:00Z</VALID_TO>
                  <VALID_TO_DETAILS>0</VALID_TO_DETAILS>
               </SUB_BALANCES>
            </SUB_BAL_IMPACTS>
            <UNRATED_QUANTITY>0</UNRATED_QUANTITY>
     </pcmOpSubscriptionCalcQuoteResponse>
   </S:Body>
</S:Envelope>
```

### pcmOpSubscriptionCancelDeal

This operation cancels a bundle for a specified account or service.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### URI

https://hostname/BrmWebServices/BRMSubscriptionServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpSubscriptionCancelDeal request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpSubscriptionCancelDealRequest>
         <bus:PCM OP SUBSCRIPTION CANCEL DEAL Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_SUBSCRIPTION_CANCEL_DEAL_inputFlist>
               <bus:DEAL INFO>
                  <bus:DEAL_OBJ>0.0.0.1 /deal 299144 2</bus:DEAL_OBJ>
                  <bus:PACKAGE_ID>1</bus:PACKAGE_ID>
               </bus:DEAL_INFO>
               <bus:POID>0.0.0.1 /account 301826 0</bus:POID>
               <bus:PROGRAM_NAME>web service
               <bus:SERVICE_OBJ>0.0.0.1 /service/ip 296297 8</bus:SERVICE_OBJ>
            </bus:PCM_OP_SUBSCRIPTION_CANCEL_DEAL_inputFlist>
         </bus:PCM_OP_SUBSCRIPTION_CANCEL_DEAL_Request>
      </bus:pcmOpSubscriptionCancelDealRequest>
```

```
</soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpSubscriptionCancelDeal response

## pcmOpSubscriptionCancelDiscount

This operation cancels the discount offers associated with the account or service specified in the operation's input.

This operation is also called by pcmOpSubscriptionCancelDeal to cancel each charge offer associated with a specified bundle.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMSubscriptionServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpSubscriptionCancelDiscount request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
     <bus:pcmOpSubscriptionCancelDiscountRequest>
        <bus:PCM_OP_SUBSCRIPTION_CANCEL_DISCOUNT_Request>
           <bus:flags>0</bus:flags>
           <bus:PCM_OP_SUBSCRIPTION_CANCEL_DISCOUNT_inputFlist>
              <bus:DESCR>cancel discount
              <bus:POID>0.0.0.1 /account 301844 0</bus:POID>
              <bus:SERVICE_OBJ>/service/ip</bus:SERVICE_OBJ>
              <bus:SESSION_OBJ />
              <bus:PROGRAM_NAME>web services
              <bus:DESCR />
              <bus:START_T>2016-01-01T00:00:00Z</bus:START_T>
              <bus:END_T>2016-12-31T00:00:00Z</bus:END_T>
              <bus:DISCOUNTS elem="0">
                 <bus:DISCOUNT_OBJ>0.0.0.1 /discount 299504 1</bus:DISCOUNT_OBJ>
                 <bus:OFFERING_OBJ>0.0.0.1 /purchased_discount 297833 1
bus:OFFERING OBJ>
                 <bus:QUANTITY>1
              </bus:DISCOUNTS>
           </bus:PCM_OP_SUBSCRIPTION_CANCEL_DISCOUNT_inputFlist>
```



#### Sample pcmOpSubscriptionCancelDiscount response

### pcmOpSubscriptionCancelProduct

This operation cancels the charge offers for the account or service specified in the operation's input.

This operation is also called by pcmOpSubscriptionCancelDeal to cancel each charge offer associated with a specific bundle. If the charge offer is part of a required bundle, don't allow it to be canceled.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### URI

https://hostname/BrmWebServices/BRMSubscriptionServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpSubscriptionCancelProduct request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpSubscriptionCancelProductRequest>
         <bus:PCM_OP_SUBSCRIPTION_CANCEL_PRODUCT_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_SUBSCRIPTION_CANCEL_PRODUCT_inputFlist>
               <bus:DESCR>cancel offer
               <bus:FLAGS>0</bus:FLAGS>
               <bus:POID>0.0.0.1 /account 301826 10</bus:POID>
               <bus:PRODUCTS elem="0">
                  <bus:OFFERING_OBJ>0.0.0.1 /purchased_product 297833 1/
bus:OFFERING OBJ>
                  <bus:PRODUCT_OBJ>0.0.0.1 /product 299504 1</bus:PRODUCT_OBJ>
                  <bus:OUANTITY>1</bus:OUANTITY>
               </bus:PRODUCTS>
               <bus:PROGRAM_NAME>web services</bus:PROGRAM_NAME>
            </bus:PCM_OP_SUBSCRIPTION_CANCEL_PRODUCT_inputFlist>
         </bus:PCM_OP_SUBSCRIPTION_CANCEL_PRODUCT_Request>
```



```
</bus:pcmOpSubscriptionCancelProductRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpSubscriptionCancelProduct response

### pcmOpSubscriptionCancelSubscription

This operation cancels a subscription service and all its member services.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMSubscriptionServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpSubscriptionCancelSubscription request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
      <bus:pcmOpSubscriptionCancelSubscriptionRequest>
         <bus:PCM_OP_SUBSCRIPTION_CANCEL_SUBSCRIPTION_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_SUBSCRIPTION_CANCEL_SUBSCRIPTION_inputFlist>
               <bus:DESCR>cancel subscription/bus:DESCR>
               <bus:FLAGS>0</bus:FLAGS>
               <bus:POID>0.0.0.1 /account 301826 10</bus:POID>
               <bus:PROGRAM_NAME>web services/bus:PROGRAM_NAME>
               <bus:SUBSCRIPTION_OBJ>0.0.0.1 /service/ip 296297 8
bus:SUBSCRIPTION OBJ>
            </bus:PCM_OP_SUBSCRIPTION_CANCEL_SUBSCRIPTION_inputFlist>
         </bus:PCM OP SUBSCRIPTION CANCEL SUBSCRIPTION Request>
      </bus:pcmOpSubscriptionCancelSubscriptionRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpSubscriptionCancelSubscription response



### pcmOpSubscriptionChangeDeal

This operation wraps pcmOpSubscriptionCancelDeal and pcmOpSubscriptionPurchaseDeal in one transaction, giving CSRs or subscribers the ability to change bundles in one step.

This operation notifies the caller when the transition from one bundle to another is in progress and when it is complete.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### URI

https://hostname/BrmWebServices/BRMSubscriptionServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpSubscriptionChangeDeal request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpSubscriptionChangeDealRequest>
         <bus:PCM_OP_SUBSCRIPTION_CHANGE_DEAL_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_SUBSCRIPTION_CHANGE_DEAL_inputFlist>
               <bus:CANCEL_DEAL_INFO>
                  <bus:DEAL_INFO>
                     <bus:PACKAGE_ID>12</bus:PACKAGE_ID>
                  </bus:DEAL_INFO>
                  <bus:POID>0.0.0.1 /account 297583 0</bus:POID>
                  <bus:PROGRAM_NAME>web service/bus:PROGRAM_NAME>
                  <bus:SERVICE_OBJ>0.0.0.1 /service/email 298223 0</bus:SERVICE_OBJ>
               </bus:CANCEL_DEAL_INFO>
               <bus:POID>0.0.0.1 /account 297583 0</bus:POID>
               <bus:PROGRAM_NAME>web service
               <bus:PURCHASE_DEAL_INFO>
                  <bus:DEAL_INFO>
                     <bus:DEAL_OBJ>0.0.0.1 /deal 16405 4/bus:DEAL_OBJ>
                  </bus:DEAL_INFO>
                  <bus:POID>0.0.0.1 /account 297583 0</bus:POID>
                  <bus:PROGRAM_NAME>0</bus:PROGRAM_NAME>
                  <bus:SERVICE_OBJ>0.0.0.1 /service/email 298223 0</bus:SERVICE_OBJ>
               </bus:PURCHASE_DEAL_INFO>
               <bus:SERVICE_OBJ>0.0.0.1 /service/email 298223 0</bus:SERVICE_OBJ>
            </bus:PCM_OP_SUBSCRIPTION_CHANGE_DEAL_inputFlist>
         </bus:PCM_OP_SUBSCRIPTION_CHANGE_DEAL_Request>
      </bus:pcmOpSubscriptionChangeDealRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpSubscriptionChangeDeal response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpSubscriptionChangeDealResponse xmlns:brm="http://xmlns.oracle.com/BRM/</pre>
schemas/BusinessOpcodes">
         <POID>0.0.0.1 /account 297583 0</POID>
         <RESULTS elem="0">
            <POID>0.0.0.1 /account 297583 0</POID>
         </RESULTS>
         <RESULTS elem="1">
            <POID>0.0.0.1 /account 297583 0</POID>
            <PRODUCTS elem="0">
               <OFFERING_OBJ>0.0.0.1 /purchased_product 291711 0</OFFERING_OBJ>
               <PACKAGE_ID>25</PACKAGE_ID>
               <PRODUCT_OBJ>0.0.0.1 /product 20325 2</PRODUCT_OBJ>
            </PRODUCTS>
            <RESULTS elem="0">
               <ACCOUNT_OBJ>0.0.0.1 /account 297583 0</ACCOUNT_OBJ>
               <BAL_IMPACTS elem="0">
                  <ACCOUNT_OBJ>0.0.0.1 /account 297583 22</ACCOUNT_OBJ>
                  <AMOUNT>3</AMOUNT>
                  <AMOUNT_DEFERRED>0</AMOUNT_DEFERRED>
                  <BAL_GRP_OBJ>0.0.0.1 /balance_group 297839 3</BAL_GRP_OBJ>
                  <DISCOUNT>0</DISCOUNT>
                  <GL_ID>104</GL_ID>
                  <IMPACT_CATEGORY>default</IMPACT_CATEGORY>
                  <IMPACT_TYPE>1</IMPACT_TYPE>
                  <ITEM_OBJ>0.0.0.1 /item/cycle_forward 298735 0</ITEM_OBJ>
                  <OFFERING_OBJ>0.0.0.1 /purchased_product 291711 0</OFFERING_OBJ>
                  <PERCENT>1</PERCENT>
                  <PRODUCT_OBJ>0.0.0.1 /product 20325 1</PRODUCT_OBJ>
                  <QUANTITY>1</QUANTITY>
                  <RATE_OBJ>0.0.0.1 /rate 148599 1</RATE_OBJ>
                  <RATE_TAG>$3 a month</RATE_TAG>
                  <RESOURCE_ID>840</RESOURCE_ID>
                  <TAX_CODE />
               </BAL IMPACTS>
               <NET_QUANTITY>1</NET_QUANTITY>
               <POID>0.0.0.1 /event/billing/product/fee/cycle/cycle_forward_monthly
257232944341744511 0</POID>
               <RATING_STATUS>0</RATING_STATUS>
               <RUM_NAME>Occurrence
               <SERVICE_OBJ>0.0.0.1 /service/email 298223 0</SERVICE_OBJ>
               <SUB_BAL_IMPACTS elem="0">
                  <BAL_GRP_OBJ>0.0.0.1 /balance_group 297839 4</BAL_GRP_OBJ>
                  <RESOURCE_ID>840</RESOURCE_ID>
                  <SUB_BALANCES elem="0">
                     <AMOUNT>3</AMOUNT>
                     <CONTRIBUTOR STR />
                     <GRANTOR_OBJ>0.0.0.1 /purchased_product 296687 0</GRANTOR_OBJ>
                     <ROLLOVER_DATA>0</ROLLOVER_DATA>
                     <VALID_FROM>2014-09-23T07:00:00Z</VALID_FROM>
                     <VALID_FROM_DETAILS>0</VALID_FROM_DETAILS>
                     <VALID_TO>2015-01-01T00:00:00Z</VALID_TO>
                     <VALID_TO_DETAILS>0</VALID_TO_DETAILS>
                  </SUB_BALANCES>
               </SUB_BAL_IMPACTS>
               <UNRATED_QUANTITY>0</UNRATED_QUANTITY>
            </RESULTS>
```

### pcmOpSubscriptionGetHistory

This operation returns the event history of a specified service, bundle, charge offer, or discount offer of an account.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMSubscriptionServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpSubscriptionGetHistory request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpSubscriptionGetHistoryRequest>
         <bus:PCM_OP_SUBSCRIPTION_GET_HISTORY_Request>
            <bus:PCM_OP_SUBSCRIPTION_GET_HISTORY_inputFlist>
               <bus:flags>0</bus:flags>
               <bus:CURRENCY>840
CURRENCY>
               <bus:DESCR>test
               <bus:FLAGS>0</bus:FLAGS>
               <bus:POID>0.0.0.1 /account 293665 0</bus:POID>
              <bus:PROGRAM_NAME>SoapWebServices
               <bus:SERVICE_OBJ>0.0.0.1 /service/email 294305 0</bus:SERVICE_OBJ>
               <bus:SESSION_OBJ>0.0.0.1 /event/session 257232944341753654 0
bus:SESSION_OBJ>
              <bus:CONTEXT_INFO>
                 <bus:CORRELATION_ID />
                 <bus:EXTERNAL_USER />
               </bus:CONTEXT_INFO>
            </bus:PCM_OP_SUBSCRIPTION_GET_HISTORY_inputFlist>
         </bus:PCM OP SUBSCRIPTION GET HISTORY Request>
      </bus:pcmOpSubscriptionGetHistoryRequest>
   </soapenv:Body>
</soapenv:Envelope>
```



#### Sample pcmOpSubscriptionGetHistory response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpSubscriptionGetHistoryResponse xmlns:brm="http://xmlns.oracle.com/BRM/</pre>
schemas/BusinessOpcodes">
         <POID>0.0.0.1 /search/pin 0 0</POID>
         <RESULTS elem="0">
            <account_OBJ>0.0.0.1 /account 293665 0</account_OBJ>
            <ARCHIVE_STATUS>0</ARCHIVE_STATUS>
            <BATCH_ID />
            <CREATED_T>2010-01-13T21:02:28Z</CREATED_T>
            <CURRENCY>0</CURRENCY>
            <DESCR>[May 23, 2007 8:55 PM Bill not paid]
            <EARNED_END_T>1970-01-01T00:00:00Z</EARNED_END_T>
            <EARNED_START_T>1970-01-01T00:00:00Z</EARNED_START_T>
            <EARNED_TYPE>0</EARNED_TYPE>
            <EFFECTIVE_T>1970-01-01T00:00:00Z</EFFECTIVE_T>
            <END_T>2014-09-23T11:23:20Z</END_T>
            <EVENT_NO />
            <FLAGS>0</FLAGS>
            <GROUP_OBJ>0.0.0.0 0 0/GROUP_OBJ>
            <INCR_QUANTITY>0</INCR_QUANTITY>
            <INCR_UNIT>0</INCR_UNIT>
            <INVOICE_DATA />
            <ITEM_OBJ>0.0.0.0 0 0</ITEM_OBJ>
            <LINK_OBJ>0.0.0.0 0 0</LINK_OBJ>
            <LOADER_BATCH_OBJ>0.0.0.0 0 0</LOADER_BATCH_OBJ>
            <MIN_QUANTITY>0</MIN_QUANTITY>
            <MIN_UNIT>0</MIN_UNIT>
            <MOD_T>2010-01-13T21:02:28Z</MOD_T>
            <NAME>Customer Mngmt. Event Log</NAME>
            <NAP_IP_ADDRESS />
            <NET_QUANTITY>0</NET_QUANTITY>
            <ORIGINAL_BATCH_ID />
            <POID>0.0.0.1 /event/customer/status 257232944341742561 0</POID>
            <PROFILE_LABEL_LIST />
            <PROGRAM NAME>SoapWebServices/PROGRAM NAME>
            <PROVIDER DESCR />
            <PROVIDER_ID>0.0.0.0 0 0/PROVIDER_ID>
            <PROVIDER_IPADDR>1 00</PROVIDER_IPADDR>
            <RATED_TIMEZONE_ID />
            <READ_ACCESS>L</READ_ACCESS>
            <RERATE_OBJ>0.0.0.0 0 0</RERATE_OBJ>
            <ROUNDING_MODE>0</ROUNDING_MODE>
            <RUM NAME />
            <SERVICE_OBJ>0.0.0.1 /service/email 294305 0</SERVICE_OBJ>
            <SESSION_OBJ>0.0.0.1 /event/session 257232944341753654 0</SESSION_OBJ>
            <START_T>2014-09-23T11:23:20Z</START_T>
            <STATUSES elem="0">
               <CLOSE_WHEN_T>1970-01-01T00:00:00Z</CLOSE_WHEN_T>
               <LIFECYCLE_STATE>0</LIFECYCLE_STATE>
               <SERVICE_STATE_EXPIRATION_T>1970-01-01T00:00:00Z
SERVICE_STATE_EXPIRATION_T>
               <STATUS>10100</STATUS>
               <STATUS_FLAGS>0</STATUS_FLAGS>
            </STATUSES>
            <STATUSES elem="1">
               <CLOSE_WHEN_T>1970-01-01T00:00:00Z</CLOSE_WHEN_T>
               <LIFECYCLE STATE>0</LIFECYCLE STATE>
```



```
<SERVICE_STATE_EXPIRATION_T>1970-01-01T00:00:00Z
SERVICE_STATE_EXPIRATION_T>
               <STATUS>10102</STATUS>
               <STATUS_FLAGS>4</STATUS_FLAGS>
            </STATUSES>
            <SYS_DESCR>Set Status (srvc)</SYS_DESCR>
            <TAX_LOCALES />
            <TAX_SUPPLIER>0</TAX_SUPPLIER>
            <TIMEZONE_ADJ_END_T>2010-01-13T21:02:28Z</TIMEZONE_ADJ_END_T>
            <TIMEZONE_ADJ_START_T>2010-01-13T21:02:28Z</TIMEZONE_ADJ_START_T>
            <TIMEZONE_ID />
            <TIMEZONE_MODE>0</TIMEZONE_MODE>
            <TOD_MODE>0</TOD_MODE>
            <UNIT>0</UNIT>
            <UNRATED_QUANTITY>0</UNRATED_QUANTITY>
            <USAGE TYPE />
            <USERID>0.0.0.1 /service/admin_client 2 28</USERID>
            <WRITE_ACCESS>L</WRITE_ACCESS>
         </RESULTS>
         <SERVICE_OBJ>0.0.0.1 /service/email 294305 0</SERVICE_OBJ>
      </pcmOpSubscriptionGetHistoryResponse>
   </S:Body>
</S:Envelope>
```

### pcmOpSubscriptionGetPurchasedOfferings

This operation retrieves the purchased charge offers and discount offers for a specified account, service, or bill unit (/billinfo object).

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### URI

https://hostname/BrmWebServices/BRMSubscriptionServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpSubscriptionGetPurchasedOfferings request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpSubscriptionGetPurchasedOfferingsRequest>
         <bus:PCM_OP_SUBSCRIPTION_GET_PURCHASED_OFFERINGS_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_SUBSCRIPTION_GET_PURCHASED_OFFERINGS_inputFlist>
               <bus:DEAL_OBJ>0.0.0.1 /deal 299144 3</bus:DEAL_OBJ>
               <bus:POID>0.0.0.1 /account 296105 10</bus:POID>
               <bus:PRODUCTS elem="0">
                  <bus:OFFERING_OBJ>0.0.0.1 /purchased_product 298089 0/
bus:OFFERING_OBJ>
               </bus:PRODUCTS>
               <bus:DISCOUNTS elem="*" />
               <bus:SCOPE_OBJ>0.0.0.1 /service/email 295017 0</bus:SCOPE_OBJ>
               <bus:STATUS_FLAGS>1</bus:STATUS_FLAGS>
               <bus:VALIDITY_FLAGS>3</bus:VALIDITY_FLAGS>
            </bus:PCM_OP_SUBSCRIPTION_GET_PURCHASED_OFFERINGS_inputFlist>
         </bus:PCM_OP_SUBSCRIPTION_GET_PURCHASED_OFFERINGS_Request>
```



```
</bus:pcmOpSubscriptionGetPurchasedOfferingsRequest>
  </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpSubscriptionGetPurchasedOfferings response

## pcmOpSubscriptionPurchaseDeal

This operation purchases a bundle, including the charge offers and discount offers in the bundle, for the account or service specified in the operation's input.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMSubscriptionServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpSubscriptionPurchaseDeal request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpSubscriptionPurchaseDealRequest>
         <bus:PCM_OP_SUBSCRIPTION_PURCHASE_DEAL_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_SUBSCRIPTION_PURCHASE_DEAL_inputFlist>
               <bus:DEAL_INFO>
                  <bus:DESCR>Part of the main plan: Standard GSM./bus:DESCR>
                  <bus:END T>2016-01-01T00:00:00/bus:END T>
                  <bus:FLAGS>0</bus:FLAGS>
                  <bus:NAME>aa</bus:NAME>
                  <bus:POID>0.0.0.1 /deal 20453 0</bus:POID>
                  <bus:START_T>1970-01-01T00:00:00
               </bus:DEAL_INFO>
               <bus:POID>0.0.0.1 /account 293665 0</bus:POID>
               <bus:PROGRAM_NAME>SoapWebServices/bus:PROGRAM_NAME>
               <bus:SERVICE_OBJ>0.0.0.1 /service/ip 293473 0</bus:SERVICE_OBJ>
            </bus:PCM_OP_SUBSCRIPTION_PURCHASE_DEAL_inputFlist>
         </bus:PCM OP SUBSCRIPTION PURCHASE DEAL Request>
      </bus:pcmOpSubscriptionPurchaseDealRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpSubscriptionPurchaseDeal response

### pcmOpSubscriptionPurchaseFees

This operation applies deferred purchase fees for a charge offer that has an expired purchase start time.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### URI

https://hostname/BrmWebServices/BRMSubscriptionServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpSubscriptionPurchaseFees request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpSubscriptionPurchaseFeesRequest>
         <bus:PCM_OP_SUBSCRIPTION_PURCHASE_FEES_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_SUBSCRIPTION_PURCHASE_FEES_inputFlist>
               <bus:CURRENCY>840</bus:CURRENCY>
               <bus:DESCR>purchase fees discount/bus:DESCR>
               <bus:FLAGS>0</bus:FLAGS>
               <bus:POID>0.0.0.1 /account 297583 0</bus:POID>
               <bus:PROGRAM NAME>web service
               <bus:SERVICE_OBJ>0.0.0.1 /service/email 298223 0</bus:SERVICE_OBJ>
               <!--bus:SESSION_OBJ>0.0.0.1 /event/session 283568446849954613 1</
bus:SESSION OBJ-->
            </bus:PCM_OP_SUBSCRIPTION_PURCHASE_FEES_inputFlist>
         </bus:PCM_OP_SUBSCRIPTION_PURCHASE_FEES_Request>
      </bus:pcmOpSubscriptionPurchaseFeesRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpSubscriptionPurchaseFees response

### pcmOpSubscriptionReadAcctProducts

This operation returns the purchased offers of an account. Optionally, it includes the item charge offers, canceled offers, or both in a hierarchical service > bundle > offer structure.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMSubscriptionServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpSubscriptionReadAcctProducts request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Bodv>
      <bus:pcmOpSubscriptionReadAcctProductsRequest>
         <bus:PCM_OP_SUBSCRIPTION_READ_ACCT_PRODUCTS_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_SUBSCRIPTION_READ_ACCT_PRODUCTS_inputFlist>
               <bus:POID>0.0.0.1 /account 293665 0</bus:POID>
               <bus:CONTEXT_INFO>
                  <bus:CORRELATION_ID />
                  <bus:EXTERNAL_USER />
               </bus:CONTEXT INFO>
            </bus:PCM_OP_SUBSCRIPTION_READ_ACCT_PRODUCTS_inputFlist>
         </bus:PCM_OP_SUBSCRIPTION_READ_ACCT_PRODUCTS_Request>
      </bus:pcmOpSubscriptionReadAcctProductsRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpSubscriptionReadAcctProducts response



```
<CYCLE_DISCOUNT>0</CYCLE_DISCOUNT>
                  <CYCLE_DISC_AMT>0</CYCLE_DISC_AMT>
                  <CYCLE END DETAILS>2</CYCLE END DETAILS>
                  <CYCLE_END_T>2015-01-01T00:00:00Z</CYCLE_END_T>
                  <CYCLE_FEES elem="1">
                     <CHARGED_FROM_T>2014-09-23T07:00:00Z</CHARGED_FROM_T>
                     <CHARGED_TO_T>2014-10-23T07:00:00Z</CHARGED_TO_T>
                     <COUNT>1</COUNT>
                     <CYCLE_FEE_END_T>2014-10-23T07:00:00Z</CYCLE_FEE_END_T>
                     <CYCLE_FEE_START_T>2014-09-23T07:00:00Z</CYCLE_FEE_START_T>
                     <UNIT>0</UNIT>
                  </CYCLE_FEES>
                  <CYCLE_FEE_AMT>0</CYCLE_FEE_AMT>
                  <CYCLE FEE FLAGS>1</CYCLE FEE FLAGS>
                  <CYCLE_START_DETAILS>1</CYCLE_START_DETAILS>
                  <CYCLE_START_T>2014-09-23T07:00:00Z</CYCLE_START_T>
                  <DEAL_OBJ>0.0.0.1 /deal 20453 0</DEAL_OBJ>
                  <DESCR>Charges for monthly internet access service and hourly
usage.</DESCR>
                  <EFFECTIVE_T>2014-09-23T11:23:14Z</EFFECTIVE_T>
                  <FLAGS>3</FLAGS>
                  <INSTANTIATED_T>2014-09-23T07:00:00Z</INSTANTIATED_T>
                  <MMC_TYPE>0</MMC_TYPE>
                  <MOD_T>2010-01-13T21:02:22Z</MOD_T>
                  <NAME>Product 1a - Internet Access</NAME>
                  <NODE_LOCATION />
                  <OBJECT_CACHE_TYPE>0</OBJECT_CACHE_TYPE>
                  <OFFERING_OBJ>0.0.0.1 /purchased_product 291169 1</OFFERING_OBJ>
                  <OVERRIDDEN_OBJ>0.0.0.0 0 0</OVERRIDDEN_OBJ>
                  <PACKAGE_ID>18</PACKAGE_ID>
                  <PLAN_OBJ>0.0.0.1 /plan 16917 4</PLAN_OBJ>
                  <PRICE_LIST_NAME />
                  <PRODUCT_OBJ>0.0.0.1 /product 16741 2</PRODUCT_OBJ>
                  <PURCHASE_DISCOUNT>0</PURCHASE_DISCOUNT>
                  <PURCHASE_DISC_AMT>0</PURCHASE_DISC_AMT>
                  <PURCHASE_END_DETAILS>2</PURCHASE_END_DETAILS>
                  <PURCHASE_END_T>2015-01-01T00:00:00Z</purchase_END_T>
                  <PURCHASE FEE AMT>0</PURCHASE FEE AMT>
                  <PURCHASE_START_DETAILS>1/PURCHASE_START_DETAILS>
                  <PURCHASE_START_T>2014-09-23T07:00:00Z</purchase_START_T>
                  <QUANTITY>1</QUANTITY>
                  <READ_ACCESS>L</READ_ACCESS>
                  <SERVICE_OBJ>0.0.0.1 /service/ip 293473 0</SERVICE_OBJ>
                  <SPONSOR_OBJ>0.0.0.0 0 0/SPONSOR_OBJ>
                  <STATUS>1</STATUS>
                  <STATUS_FLAGS>0</STATUS_FLAGS>
                  <TYPE>602</TYPE>
                  <USAGE_DISCOUNT>0</USAGE_DISCOUNT>
                  <USAGE_END_DETAILS>2</USAGE_END_DETAILS>
                  <USAGE_END_T>2015-01-01T00:00:00Z</USAGE_END_T>
                  <USAGE_START_DETAILS>1</USAGE_START_DETAILS>
                  <USAGE_START_T>2014-09-23T07:00:00Z</USAGE_START_T>
                  <WRITE_ACCESS>L</WRITE_ACCESS>
               </PRODUCTS>
            <LOGIN>Thru_Soap_UI_1thru_soap_ui_211@portal.com</LOGIN>
            <NAME>PIN Service Object</NAME>
            <POID>0.0.0.1 /service/ip 293473 9</POID>
            <STATUS>10100</STATUS>
         </SERVICES>
         <SERVICES elem="294305">
```

```
<CREATED_T>2010-01-13T21:02:22Z</CREATED_T>
<DEALS elem="0">
  <account_obj>0.0.0.1 /account 293665 0</account_obj>
   <DEAL OBJ>0.0.0.1 /deal 16405 0</DEAL OBJ>
   <NAME>Deal 1b - Standard Email Access</NAME>
  <PACKAGE_ID>18</PACKAGE_ID>
  <PRODUCTS elem="0">
      <account_OBJ>0.0.0.1 /account 293665 0</account_OBJ>
      <CREATED_T>2010-01-13T21:02:22Z</CREATED_T>
      <CYCLE_DISCOUNT>0</CYCLE_DISCOUNT>
      <CYCLE_DISC_AMT>0</CYCLE_DISC_AMT>
      <CYCLE_END_DETAILS>2</CYCLE_END_DETAILS>
      <CYCLE_END_T>2010-02-28T00:00:00Z</CYCLE_END_T>
      <CYCLE FEES elem="1">
        <CHARGED_FROM_T>2014-09-23T07:00:00Z</CHARGED_FROM_T>
        <CHARGED_TO_T>2014-10-23T07:00:00Z</CHARGED_TO_T>
        <COUNT>1</COUNT>
        <CYCLE_FEE_END_T>2014-10-23T07:00:00Z</CYCLE_FEE_END_T>
        <CYCLE_FEE_START_T>2014-09-23T07:00:00Z</CYCLE_FEE_START_T>
        <UNIT>0</UNIT>
      </CYCLE_FEES>
      <CYCLE_FEE_AMT>0</CYCLE_FEE_AMT>
      <CYCLE_FEE_FLAGS>1</CYCLE_FEE_FLAGS>
      <CYCLE_START_DETAILS>1</CYCLE_START_DETAILS>
      <CYCLE_START_T>2010-02-01T07:00:00Z</CYCLE_START_T>
      <DEAL_OBJ>0.0.0.1 /deal 16405 0</DEAL_OBJ>
      <DESCR>Charges monthly for 1 email account.
      <EFFECTIVE_T>2014-09-23T11:23:20Z</EFFECTIVE_T>
      <FLAGS>3</FLAGS>
      <INSTANTIATED_T>2014-09-23T07:00:00Z</INSTANTIATED_T>
      <MMC_TYPE>0</MMC_TYPE>
      <MOD_T>2010-01-13T21:02:28Z</MOD_T>
      <NAME>Product 1b - Email Account
      <NODE_LOCATION />
      <OBJECT_CACHE_TYPE>0</OBJECT_CACHE_TYPE>
      <OFFERING_OBJ>0.0.0.1 /purchased_product 292769 4</OFFERING_OBJ>
      <OVERRIDDEN_OBJ>0.0.0.0 0 0</OVERRIDDEN_OBJ>
      <PACKAGE_ID>18</PACKAGE_ID>
      <PLAN_OBJ>0.0.0.1 /plan 16917 4</PLAN_OBJ>
      <PRICE_LIST_NAME />
      <PRODUCT_OBJ>0.0.0.1 /product 20325 2</PRODUCT_OBJ>
      <PURCHASE_DISCOUNT>0</PURCHASE_DISCOUNT>
      <PURCHASE_DISC_AMT>0</PURCHASE_DISC_AMT>
      <PURCHASE_END_DETAILS>2</PURCHASE_END_DETAILS>
      <PURCHASE_END_T>T>2014-09-24T00:00:00Z</purchase_END_T>
      <PURCHASE_FEE_AMT>0</PURCHASE_FEE_AMT>
      <PURCHASE_START_DETAILS>1</purchase_START_DETAILS>
      <PURCHASE_START_T>2014-09-23T07:00:00Z</PURCHASE_START_T>
      <QUANTITY>1</QUANTITY>
      <READ_ACCESS>L</READ_ACCESS>
      <SERVICE_OBJ>0.0.0.1 /service/email 294305 0</SERVICE_OBJ>
      <SPONSOR_OBJ>0.0.0.0 0 0</SPONSOR_OBJ>
      <STATUS>2</STATUS>
      <STATUS_FLAGS>8</STATUS_FLAGS>
      <TYPE>602</TYPE>
      <USAGE_DISCOUNT>0</USAGE_DISCOUNT>
      <USAGE END DETAILS>2</USAGE END DETAILS>
      <USAGE_END_T>2014-09-24T00:00:00Z</USAGE_END_T>
      <USAGE_START_DETAILS>1</USAGE_START_DETAILS>
      <USAGE_START_T>2014-09-23T07:00:00Z</USAGE_START_T>
      <WRITE_ACCESS>L</WRITE_ACCESS>
```

### pcmOpSubscriptionServiceBalgrpTransfer

This operation transfers subscription services from one balance group to another or associates a balance group with a different bill unit (/billinfo object).

All subscription services being transferred should belong to the same balance group and can be transferred to one balance group only. If the transfer of service is across accounts, only one subscription service can be transferred, and the target balance group must be created.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMSubscriptionServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpSubscriptionServiceBalgrpTransfer request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpSubscriptionServiceBalgrpTransferRequest>
         <bus:PCM_OP_SUBSCRIPTION_SERVICE_BALGRP_TRANSFER_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_SUBSCRIPTION_SERVICE_BALGRP_TRANSFER_inputFlist>
               <bus:BILLINFO_OBJ>0.0.0.1 /billinfo 300864 0</bus:BILLINFO_OBJ>
               <bus:FROM_BAL_GRP_OBJ>0.0.0.1 /balance_group 300480 0/
bus: FROM BAL GRP_OBJ>
               <bus:POID>0.0.0.1 /account 300352 0</bus:POID>
               <bus:PROGRAM_NAME>Web service
               <bus:SERVICES elem="0">
                  <bus:SERVICE_OBJ>0.0.0.1 /service/ip 302752 9</bus:SERVICE_OBJ>
               </bus:SERVICES>
               <bus:TO_BAL_GRP_OBJ>0.0.0.1 /balance_group 300480 0/
bus:TO_BAL_GRP_OBJ>
               <bus:TO_OBJ>0.0.0.1 /account 296639 0</bus:TO_OBJ>
            </bus:PCM_OP_SUBSCRIPTION_SERVICE_BALGRP_TRANSFER_inputFlist>
         </bus:PCM_OP_SUBSCRIPTION_SERVICE_BALGRP_TRANSFER_Request>
      </bus:pcmOpSubscriptionServiceBalgrpTransferRequest>
   </soapenv:Body>
</soapenv:Envelope>
```



#### Sample pcmOpSubscriptionServiceBalgrpTransfer response

### pcmOpSubscriptionSetBundle

This operation creates or modifies a purchased bundle and its attributes.

This operation handles upgrading (adding offers to the bundle) and downgrading (removing offers from the bundle).

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMSubscriptionServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpSubscriptionSetBundle request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpSubscriptionSetBundleRequest>
         <bus:PCM_OP_SUBSCRIPTION_SET_BUNDLE_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_SUBSCRIPTION_SET_BUNDLE_inputFlist>
               <bus:BUNDLE_INFO elem="0">
                  <bus:DESCR>Email Product</bus:DESCR>
                  <bus:NAME>PromotionFuturedatewithofferings/bus:NAME>
                  <bus:POID>0.0.0.1 /purchased_bundle -1 0</bus:POID>
                  <bus:STATUS>1</bus:STATUS>
                  <bus:VALID_FROM>2015-01-15T00:00:00/bus:VALID_FROM>
                  <bus:VALID_TO>2017-01-01T00:00:00/bus:VALID_TO>
               </bus:BUNDLE_INFO>
               <bus:OFFERINGS elem="0">
                  <bus:BUNDLE_INFO elem="0" />
                  <bus:POID />
               </bus:OFFERINGS>
               <bus:POID>0.0.0.1 /account 233671 0</bus:POID>
               <bus:PROGRAM_NAME>web service
            </bus:PCM_OP_SUBSCRIPTION_SET_BUNDLE_inputFlist>
         </bus:PCM_OP_SUBSCRIPTION_SET_BUNDLE_Request>
```

```
</bus:pcmOpSubscriptionSetBundleRequest>
</soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpSubscriptionSetBundle response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpSubscriptionSetBundleResponse xmlns:brm="http://xmlns.oracle.com/BRM/</pre>
schemas/BusinessOpcodes">
         <BUNDLE_INFO elem="0">
            <DESCR>Email Product</DESCR>
            <NAME>PromotionFuturedatewithofferings</NAME>
            <POID>0.0.0.1 /purchased_bundle 291217 0</POID>
            <STATUS>1</STATUS>
            <VALID_FROM>2015-01-15T00:00:00Z</VALID_FROM>
            <VALID_TO>2017-01-01T00:00:00Z</VALID_TO>
         </BUNDLE_INFO>
         <POID>0.0.0.1 /account 297583 0</POID>
      </pcmOpSubscriptionSetBundleResponse>
   </S:Body>
</S:Envelope>
```

### pcmOpSubscriptionSetDiscountinfo

This operation modifies or sets a discount's purchase, cycle, or usage date.

If the pcmOpflgCalcOnly operation flag is set, this operation returns the entire event flist element for the events created by the modification. If the flag isn't set, it returns the event POIDs of all event objects created by the modification.

When automatic rerating is enabled, this operation triggers automatic rerating of backdated discount status changes when certain conditions are met.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMSubscriptionServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpSubscriptionSetDiscountinfo request



```
<bus:DISCOUNTS elem="0">
                  <bus:DISCOUNT_OBJ>0.0.0.1 /discount 20325 1/bus:DISCOUNT_OBJ>
                  <bus:OFFERING_OBJ>0.0.0.1 /purchased_discount 294943 1
bus:OFFERING OBJ>
                  <bus:PURCHASE_START_T />
                  <bus:PURCHASE_END_T />
                  <bus:PURCHASE_END_UNIT />
                  <bus:PURCHASE_END_OFFSET />
                  <bus:CYCLE_START_T>2016-01-01T00:00:00Z</bus:CYCLE_START_T>
                  <bus:CYCLE_END_T>2016-01-31-T00:00:00Z</bus:CYCLE_END_T>
                  <bus:CYCLE_END_UNIT>"5"</bus:CYCLE_END_UNIT>
                  <bus:CYCLE_END_OFFSET />
                  <bus:USAGE_START_T>2016-01-01T00:00:00Z</bus:USAGE_START_T>
                  <bus:USAGE END T>2016-01-31-T00:00:00Z</bus:USAGE END T>
                  <bus:USAGE END UNIT />
                  <bus:USAGE_END_OFFSET />
                  <bus:DESCR />
               </bus:DISCOUNTS>
            </bus:PCM_OP_SUBSCRIPTION_SET_DISCOUNTINFO_inputFlist>
         </bus:PCM_OP_SUBSCRIPTION_SET_DISCOUNTINFO_Request>
      </bus:pcmOpSubscriptionSetDiscountinfoRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpSubscriptionSetDiscountinfo response

# pcmOpSubscriptionSetDiscountStatus

This operation changes the status of a purchased discount offer in a bundle for an account or service. This operation is called when the discount offer's status is changed as follows:

- To the status of the account or service
- From inactive to active

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

```
https://hostname/BrmWebServices/BRMSubscriptionServices_v2/
```

where *hostname* is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpSubscriptionSetDiscountStatus request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpSubscriptionSetDiscountStatusRequest>
         <bus:PCM_OP_SUBSCRIPTION_SET_DISCOUNT_STATUS_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_SUBSCRIPTION_SET_DISCOUNT_STATUS_inputFlist>
               <bus:DESCR>Due to activating/inactivating an account/service./
bus:DESCR>
               <!--bus:END_T>2014-01-10T00:00:00</bus:END_T-->
               <bus:POID>0.0.0.1 /account 297583 0</bus:POID>
               <bus:PROGRAM_NAME>web service
               <bus:SERVICE_OBJ>0.0.0.1 /service/ip 298223 0</bus:SERVICE_OBJ>
               <bus:STATUSES elem="1">
                  <bus:OFFERING_OBJ>0.0.0.1 /purchased_discount 294943 1
bus:OFFERING_OBJ>
                  <bus:STATUS>2</bus:STATUS>
                  <bus:STATUS_FLAGS>0</bus:STATUS_FLAGS>
               </bus:STATUSES>
            </bus:PCM_OP_SUBSCRIPTION_SET_DISCOUNT_STATUS_inputFlist>
         </bus:PCM_OP_SUBSCRIPTION_SET_DISCOUNT_STATUS_Request>
      </bus:pcmOpSubscriptionSetDiscountStatusRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpSubscriptionSetDiscountStatus response

# pcmOpSubscriptionSetProdInfo

This operation modifies or sets a charge offer's purchase, cycle, or usage date.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMSubscriptionServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpSubscriptionSetProdInfo request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpSubscriptionSetProdinfoRequest>
         <bus:PCM_OP_SUBSCRIPTION_SET_PRODINFO_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_SUBSCRIPTION_SET_PRODINFO_inputFlist>
               <bus:PRODUCTS elem="0">
                  <bus:CYCLE_DISCOUNT>0</bus:CYCLE_DISCOUNT>
                  <bus:CYCLE_DISC_AMT>10</bus:CYCLE_DISC_AMT>
                  <bus:OFFERING_OBJ>0.0.0.1 /purchased_product 294943 1/
bus:OFFERING_OBJ>
                  <bus:PRODUCT_OBJ>0.0.0.1 /product 20325 1</bus:PRODUCT_OBJ>
                  <bus:PURCHASE_DISCOUNT>.0000
/bus:PURCHASE_DISCOUNT>
                  <bus:PURCHASE_DISC_AMT>0</bus:PURCHASE_DISC_AMT>
               </bus:PRODUCTS>
               <bus:POID>0.0.0.1 /account 297583 0</bus:POID>
               <bus:PROGRAM_NAME>web service/bus:PROGRAM_NAME>
               <bus:SERVICE_OBJ>0.0.0.1 /service/email 298223 0</bus:SERVICE_OBJ>
            </bus:PCM_OP_SUBSCRIPTION_SET_PRODINFO_inputFlist>
         </bus:PCM_OP_SUBSCRIPTION_SET_PRODINFO_Request>
      </bus:pcmOpSubscriptionSetProdinfoRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpSubscriptionSetProdInfo response

### pcmOpSubscriptionSetProductStatus

This operation sets the status of a purchased charge offer owned by an account. This operation is called in the following cases:

- When the status of an account or service is changed
- When the status of a charge offer is changed

You might change only the charge offer status when you purchase the charge offer as inactive for future provisioning, and you activate it later.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMSubscriptionServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpSubscriptionSetProductStatus request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpSubscriptionSetProductStatusRequest>
         <bus:PCM OP SUBSCRIPTION SET PRODUCT STATUS Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_SUBSCRIPTION_SET_PRODUCT_STATUS_inputFlist>
               <bus:DESCR>Due to activating/inactivating an account/service./
bus:DESCR>
               <!--bus:END_T>2014-01-10T00:00:00</bus:END_T-->
               <bus:POID>0.0.0.1 /account 297583 0</bus:POID>
               <bus:PROGRAM_NAME>web service
               <bus:SERVICE_OBJ>0.0.0.1 /service/email 298223 0</bus:SERVICE_OBJ>
               <bus:STATUSES elem="1">
                  <bus:OFFERING_OBJ>0.0.0.1 /purchased_product 294943 1/
bus:OFFERING_OBJ>
                  <bus:STATUS>2</bus:STATUS>
                  <bus:STATUS_FLAGS>0</bus:STATUS_FLAGS>
               </bus:STATUSES>
            </bus:PCM_OP_SUBSCRIPTION_SET_PRODUCT_STATUS_inputFlist>
         </bus:PCM_OP_SUBSCRIPTION_SET_PRODUCT_STATUS_Request>
      </bus:pcmOpSubscriptionSetProductStatusRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpSubscriptionSetProductStatus response

### pcmOpSubscriptionTransferSubscription

This operation transfers a subscription service from one account to another.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### URI

https://hostname/BrmWebServices/BRMSubscriptionServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpSubscriptionTransferSubscription request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpSubscriptionTransferSubscriptionRequest>
         <bus:PCM OP SUBSCRIPTION TRANSFER SUBSCRIPTION Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_SUBSCRIPTION_TRANSFER_SUBSCRIPTION_inputFlist>
               <bus:BILLINFO_OBJ>0.0.0.1 /billinfo 296383 3</bus:BILLINFO_OBJ>
               <bus:FROM_OBJ>0.0.0.1 /account 300352 0</bus:FROM_OBJ>
               <bus:POID>0.0.0.1 /service/ip 302752 8</bus:POID>
               <bus:PROGRAM_NAME>Web Service/bus:PROGRAM_NAME>
               <bus:TO_OBJ>0.0.0.1 /account 296639 0</bus:TO_OBJ>
            </bus:PCM_OP_SUBSCRIPTION_TRANSFER_SUBSCRIPTION_inputflist>
         </bus:PCM_OP_SUBSCRIPTION_TRANSFER_SUBSCRIPTION_Request>
      </bus:pcmOpSubscriptionTransferSubscriptionRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpSubscriptionTransferSubscription response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpSubscriptionTransferSubscriptionResponse xmlns:brm="http://</pre>
xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
         <ACTION_INFO elem="1">
            <OFFER elem="1">
               <POID>0.0.0.1 /purchased_discount 295682 0</POID>
            </OFFER>
            <OFFER elem="2">
               <POID>0.0.0.1 /purchased_product 297730 0</POID>
            </OFFER>
         </ACTION INFO>
         <ACTION_INFO elem="0">
            <OFFER elem="1">
               <POID>0.0.0.1 /purchased_discount 300448 0</POID>
            </OFFER>
            <OFFER elem="2">
               <POID>0.0.0.1 /purchased_product 299936 1</POID>
            </OFFER>
         </ACTION_INFO>
         <POID>0.0.0.1 /service/ip 302752 8</POID>
         <RESULTS elem="0">
            <account_OBJ>0.0.0.1 /account 300352 0</account_OBJ>
            <POID>0.0.0.1 /event/audit/subscription/transfer 257250536527792258 0</
POID>
            <RATING_STATUS>12</RATING_STATUS>
            <SERVICE_OBJ>0.0.0.1 /service/ip 302752 8</SERVICE_OBJ>
         </RESULTS>
      </pcmOpSubscriptionTransferSubscriptionResponse>
   </S:Body>
</S:Envelope>
```



### pcmOpSubscriptionTransitionDeal

This operation upgrades or downgrades a bundle owned by an account.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### **URI**

https://hostname/BrmWebServices/BRMSubscriptionServices\_v2/

where hostname is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpSubscriptionTransitionDeal request

```
<soapenv:Envelope xmlns:soapenv="http://schemas.xmlsoap.org/soap/envelope/"</pre>
xmlns:bus="http://xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
   <soapenv:Header/>
   <soapenv:Body>
      <bus:pcmOpSubscriptionTransitionDealRequest>
         <bus:PCM_OP_SUBSCRIPTION_TRANSITION_DEAL_Request>
            <bus:flags>0</bus:flags>
            <bus:PCM_OP_SUBSCRIPTION_TRANSITION_DEAL_inputFlist>
               <bus:DESCR>transitioning deal IP</bus:DESCR>
               <bus:FROM DEAL INFO>
                  <bus:DEAL_OBJ>0.0.0.1 /deal 299144 0</bus:DEAL_OBJ>
                  <bus:PACKAGE_ID>1</bus:PACKAGE_ID>
               </bus:FROM_DEAL_INFO>
               <bus:POID>0.0.0.1 /account 301826 0</bus:POID>
               <bus:PROGRAM_NAME>web service
               <bus:SERVICE_OBJ>0.0.0.1 /service/email 295017 8</bus:SERVICE_OBJ>
               <bus:START_T />
               <bus:TO_DEAL_INFO>
                  <bus:DEAL_OBJ>0.0.0.1 /deal 301192 0</bus:DEAL_OBJ>
                  <bus:PLAN_OBJ>0.0.0.1 /plan 301704 6</bus:PLAN_OBJ>
               </bus:TO_DEAL_INFO>
               <bus:TRANSITION_TYPE>1</bus:TRANSITION_TYPE>
            </bus:PCM_OP_SUBSCRIPTION_TRANSITION_DEAL_inputFlist>
         </bus:PCM_OP_SUBSCRIPTION_TRANSITION_DEAL_Request>
      </bus:pcmOpSubscriptionTransitionDealRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpSubscriptionTransitionDeal response



```
</RESULTS>
            <RESULTS elem="2">
               <POID>0.0.0.1 /event/billing/product/action/cancel 17592186085477 0</
POID>
            </RESULTS>
         </RESULTS>
         <RESULTS elem="3">
            <POID>0.0.0.1 /event/billing/deal/cancel 17592186087525 0</POID>
         </RESULTS>
         <RESULTS elem="1">
            <POID>0.0.0.1 /account 301826 0</POID>
            <RESULTS elem="0">
               <POID>0.0.0.1 /event/billing/product/fee/purchase 216383888346358885
0</POID>
            </RESULTS>
            <RESULTS elem="1">
               <POID>0.0.0.1 /event/billing/product/fee/cycle/cycle_forward_monthly
216383888346360933 0</POID>
            </RESULTS>
            <RESULTS elem="2">
               <POID>0.0.0.1 /event/billing/product/action/purchase 17592186085989
0</POID>
            </RESULTS>
            <RESULTS elem="3">
               <POID>0.0.0.1 /event/billing/deal/purchase 17592186088037 0</POID>
            </RESULTS>
         </RESULTS>
      </pcmOpSubscriptionTransitionDealResponse>
   </S:Bodv>
</S:Envelope>
```

### pcmOpSubscriptionTransitionPlan

This operation replaces the package owned by an account with a different package.

You specify the account's current package and the package to transition to in the operation's input.

For a description of this operation's input and output parameters, see *Oracle Monetization Cloud SOAP API Reference*.

#### URI

https://hostname/BrmWebServices/BRMSubscriptionServices\_v2/

where *hostname* is the URL of your Oracle Monetization Cloud instance.

#### Sample pcmOpSubscriptionTransitionPlan request

```
<bus:FROM_SERVICE>
                    <bus:SERVICE_OBJ>0.0.0.1 /service/ip 296297 0</bus:SERVICE_OBJ>
                 </bus:FROM_SERVICE>
                 <bus:TO SERVICE>
                    <bus:DEALS elem="0">
                       <bus:DEAL_OBJ>0.0.0.1 /deal 301192 0</bus:DEAL_OBJ>
                       <bus:PACKAGE_ID>12345/bus:PACKAGE_ID>
                    </bus:DEALS>
                    <bus:LOGIN>ip33</pus:LOGIN>
                    <bus:PASSWD_CLEAR>password</bus:PASSWD_CLEAR>
                    <bus:SERVICE_ID>ip33</bus:SERVICE_ID>
                    <bus:SERVICE_OBJ>0.0.0.1 /service/ip -1 0</bus:SERVICE_OBJ>
                 </bus:TO_SERVICE>
              </bus:SERVICES>
              <bus:TO_PLAN>0.0.0.1 /plan 301704 0</bus:TO_PLAN>
              <bus:TRANSITION TYPE>1
           </bus:PCM_OP_SUBSCRIPTION_TRANSITION_PLAN_inputFlist>
        </bus:PCM_OP_SUBSCRIPTION_TRANSITION_PLAN_Request>
     </bus:pcmOpSubscriptionTransitionPlanRequest>
   </soapenv:Body>
</soapenv:Envelope>
```

#### Sample pcmOpSubscriptionTransitionPlan response

```
<S:Envelope xmlns:S="http://schemas.xmlsoap.org/soap/envelope/">
   <S:Body>
      <pcmOpSubscriptionTransitionPlanResponse xmlns:brm="http://</pre>
xmlns.oracle.com/BRM/schemas/BusinessOpcodes">
         <POID>0.0.0.1 /account 41349 0</POID>
         <RESULTS elem="0">
            <POID>0.0.0.1 /account 301826 0</POID>
            <RESULTS elem="0">
               <POID>0.0.0.1 /event/billing/product/fee/cycle/cycle_forward_monthly
216383888346360741 0</POID>
            </RESULTS>
            <RESULTS elem="1">
               <POID>0.0.0.1 /event/billing/product/fee/cancel 216383888346359717</
POID>
            </RESULTS>
            <RESULTS elem="2">
               <POID>0.0.0.1 /event/billing/product/action/cancel 17592186085477 0</
POTD>
            </RESULTS>
         </RESULTS>
         <RESULTS elem="3">
            <POID>0.0.0.1 /event/billing/deal/cancel 17592186087525 0</POID>
         </RESULTS>
         <RESULTS elem="1">
            <POID>0.0.0.1 /account 301826 0</POID>
            <RESULTS elem="0">
               <POID>0.0.0.1 /event/billing/product/fee/cycle/cycle_forward_monthly
15026 0</POID>
            </RESULTS>
            <RESULTS elem="1">
               <POID>0.0.0.1 /event/billing/product/action/purchase 14002 0</POID>
            </RESULTS>
            <RESULTS elem="2">
               <POID>0.0.0.1 /event/billing/deal/purchase 16050 0</POID>
            </RESULTS>
            <RESULTS elem="2">
               <SERVICES elem="0">
```



```
<DEALS elem="0">
                    <DEAL_OBJ>0.0.0.1 /deal 301192 0</DEAL_OBJ>
                    <PACKAGE_ID>12345</PACKAGE_ID>
                 </DEALS>
                 <LOGIN>ip33</LOGIN>
                 <PASSWD_CLEAR>password/PASSWD_CLEAR>
                 <SERVICE_ID>ip33</SERVICE_ID>
                 <SERVICE_OBJ>0.0.0.1 /service/ip -1 0</SERVICE_OBJ>
              </SERVICES>
              <PLAN>0.0.0.1 /plan 301704 0</PLAN>
              <POID>0.0.0.1 /account 301826 0</POID>
              <PROGRAM_NAME>web service
           </RESULTS>
        </RESULTS>
     </pcmOpSubscriptionTransitionPlanResponse>
  </S:Body>
</S:Envelope>
```

# Related topics

- Oracle Monetization Cloud web services
- Performing common tasks with web services
- About integrating your business systems