# Oracle® Financial Services Profitability and Balance Sheet Management Cloud Service

Public APIs for Analytics





Oracle Financial Services Profitability and Balance Sheet Management Cloud Service Public APIs for Analytics, 25A G35569-03

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# Contents

Getting	Started	
1.1 Prei	requisites	1-1
1.1.1	Obtain Account Information	1-1
1.2 Sup	ported Methods	1-3
1.2.1	Media Types	1-1
1.3 Sup	ported Headers	1-2
1.4 Stat	tus Code	1-2
Profital	oility Analytics Cloud Service Analytics APIs	
2.1 API	for Customer Profitability KPI's	2-:
2.1.1	Request Parameters	2-2
2.1.2	Response	2-2
2.1.3	Error Handling/Validation	2-4
Profitat	oility and Balance Sheet Management Cloud Servic	e Public APIs
3.1 Reti	rieving BI Publisher Export File from Object Storage	3-1
3.1.1	Request Parameters	3-2
3.1.2	Response	3-3
3.1.3	Error Handling/Validation	3-3
3.1.4	Detailed Documentation	3-3
Index		



1

# **Getting Started**

Before executing the Rest APIs and performing various tasks, refer to the following topics to meet the necessary requirements.

- Prerequisites
- Support Methods
- Support Headers
- Status Codes

# 1.1 Prerequisites

The following are the set of prerequisites required for executing/invoking Rest APIs.

- Access to the Profitability and Balance Sheet Management Cloud Service.
- Appropriate User Privileges to access the services.
- Technical and Functional knowledge to understand and execute the REST APIs and configuration knowledge.
- Knowledge of REST Concepts, JSON, and browser-based REST Client.
- Knowledge of interactive and automatic tools to verify the APIs such as Postman and Command Line Interfaces (CLI).

#### 1.1.1 Obtain Account Information

You can get the Identity Domain name from the account creation email sent by Oracle Support.

You can also contact your Service Administrator, to get the account information.

# 1.2 Supported Methods

- GET: Retrieve information about the service instance.
- **POST**: Create, scale, backup, start, and stop the service instance.

#### 1.2.1 Media Types

The following media type is supported by the Accounting Foundation Cloud Service REST APIs:

· application/json

# 1.3 Supported Headers

The REST API supports headers that may be passed in the header section of an HTTP Request or Response.

Table 1-1 Table: Supported Headers

Headers	Description	Example
Content-Type	The media type of the body of the request. Required for POST and PUT requests, and the supported types vary with each endpoint.	Content-Type: application/json
Accept	The media type of the body of the response.	Accept: application/json

# 1.4 Status Code

When you call the Accounting Foundation Cloud Service REST APIs Resources, the Response Header returns one of the standard HTTP Status Codes.

Table 1-2 Status Code

HTTP Status Code	Description
200 OK	The request was successfully completed. A 200 status is returned for a successful GET or POST Method.
201 Created	The request has been fulfilled and resulted in a new resource being created.  The response includes a Location Header containing the canonical URI for the newly created resource.
	A 201 status is returned from a synchronous resource creation or an asynchronous resource creation that was completed before the response was returned.
202 Accepted	The request has been accepted for processing, but the processing has not been completed.  The request may or may not eventually be acted upon, as it may be disallowed at the time the processing takes place.
	When specifying an Asynchronous (detached=true) Resource creation (for example, when deploying an application), or update (for example, when redeploying an application), a 202 is returned if the operation is still in progress. Ifdetached=false, a 202 may be returned if the underlying operation does not complete in a reasonable amount of time.
400 Bad Request	The request could not be processed because it contains missing or invalid information (such as a validation error on an input field, a missing required value, and so on).
401 Unauthorized	The request is not authorized.  The Authentication Credentials included with this request are missing or invalid.
403 Forbidden	The user cannot be authenticated. The user does not have the authorization to perform this request.
404 Not Found	The request includes a resource URI that does not exist.
405 Method Not Allowed	The HTTP verb specified in the request (DELETE, GET, POST, PUT) is not supported for this request URI.



Table 1-2 (Cont.) Status Code

HTTP Status Code	Description
406 Not Acceptable	The resource identified by this request is not capable of generating a representation corresponding to one of the media types in the Accept Header of the request.  For example, the client's Accept Header request XML be returned, but the resource can only return JSON.
409 Conflict	The client's ContentType Header is not correct (for example, the client attempts to send the request in XML, but the resource can only accept JSON).
415 Not Acceptable	The client's ContentType Header is not correct (for example, the client attempts to send the request in XML, but the resource can only accept JSON).
500 Internal Server Error	The server encountered an unexpected condition that prevented it from fulfilling the request.
503 Service Unavailable	The server is unable to handle the request due to temporary overloading or maintenance of the server.
	The REST Web Application is not currently running.



# Profitability Analytics Cloud Service Analytics APIs

This chapter covers the information regarding the following Public API available for Profitability Analytics Cloud Service:

• API for Information Exchange with External Applications

# 2.1 API for Customer Profitability KPI's

This topic provides information on how to make a REST call for fetching required Customer Profitability KPI's:

**End Point Details** 

- Method POST
- REST Endpoint customer-metrics/custmetrics/v1
- Content-Type Application/Json

### 2.1.1 Request Parameters

The following sections cover the Request Parameters:

#### **Request Header Details**

Table 2-1 Request Header Details

Name	Туре	Required	Value
Content-Type	String	Yes	application/json

#### **Authorization**

Authorization will be enabled through bearer token, this token is being generated through OAuth2 protocol, which is for granting access to the remote APIs.

#### **Request JSON Parameters**

**Table 2-2 Request JSON Parameters** 

Name	Туре	Required	Description
asOfDate	String	Yes	As of Date
customerCode	String	Yes	Customer Code
accountNo	String	Optional	Account Number
segTypeCode	String	Optional	Segment Type Code

Table 2-2 (Cont.) Request JSON Parameters

Name	Туре	Required	Description	
segType	String	Optional	Segment Type	

#### **Request JSON Sample**

```
"asOfDate": "30-NOV-22",
"customerCode": "77777114",
"accountNo": "VOLUME_TEST_ASSET_00000001",
"segTypeCode": "SEGM_TYPE_0002",
"segType": "Customer Profile 2"
```

# 2.1.2 Response

This topic lists the Response parameters.

#### **Response JSON Parameters**

This section provides the list of parameters in the JSON Response.

Table 2-3 POST JSON Response

Name	Туре	Description
asOfDate	Number	As of Date
customerCode	String	Customer code
accountNumber	String	Account Number
segTypeCode	String	Segment Type Code
SegType	String	Segment Type
SegmentID	Number	Customer Segment ID
segmentName	String	Customer Segment Name

Table 2-3 (Cont.) POST JSON Response

Name	Туре	Description
currencyCode	Number	Currency Code
netIncomeBeforeTaxes	Number	Net Income Before Taxes
netInterestMargin	Number	Net Interest Margin
returnOnEquity	Number	Return on Equity
returnOnTotalAssets	Number	Return on Total assets
riskAdjustedReturnOn Capital	Number	Risk-Adjusted Return on Capital

#### **Response JSON Sample**

```
"CustomerMetrics": [
            "asOfDate": 20221130,
            "customerCode": "7777114",
            "accountNumber": "VOLUME TEST ASSET 00000001",
            "segmentTypeCode": "SEGM TYPE 0002",
            "segmentType": "Customer Profile 2",
            "segmentID": 4,
            "segmentName": "BRONZE",
            "currencyCode": "EUR",
            "netIncomeBeforeTaxes": 5129.210979,
            "netInterestMargin": -0.0337954961269931244954715806574875180618,
            "returnOnEquity": 0.3064452817272534648839243511661894697953,
            "returnOnTotalAssets": 0.2283755639963458857051757340493102985796,
            "riskAdjustedReturnOnCapital":
0.2985633478699000437354146362119970013782
   ]
```

# 2.1.3 Error Handling/Validation

Among the request payload, 'As of date' and 'Customer code' are mandatory to fetch customer metrics details.

The following are the alerts after validation of request payload.

If 'As of date' is not included, response from the service will be:

```
{
    "As of Date is mandatory to get customer metrics details"
}
```

If 'Customer code' is not included, response from the service will be:

```
{
    "Customer code is mandatory to get customer metrics details"
}
```

Rest of the values such as 'Account No', 'Segment Type' and 'Segment Type code' are optional, even though it is empty or not being passed, Response will be having records matched to 'As of date' and 'Customer code'.

If there are no matched records for requested 'As of date' and/or 'Customer code', response will have relevant alert message as:

```
"There are no details available for the requested customer metrics"
```



# Profitability and Balance Sheet Management Cloud Service Public APIs

This chapter covers the information regarding the following Public API available for Profitability and Balance Sheet Management Cloud Service (PBSM CS) Cloud Service:

Retrieving BI Publisher Export File from Object Storage

# 3.1 Retrieving BI Publisher Export File from Object Storage

This topic provides details on how to leverage Public API to retrieve BI Publisher Export File from Object Storage, the same REST API could be used to orchestrate such process if required.

#### **End Point Details**

Method: POST

REST Endpoint: /analytics/v1/parUrlgenerator

Content-Type: Application/Json

## 3.1.1 Request Parameters

The following sections cover the Request Parameters:

#### **Request Header Details**

Table 3-1 Request Header Details

Name	Туре	Required	Value
Content-Type	String	Yes	application/json

#### **Authorization**

Authorization will be enabled through bearer token, this token is being generated through OAuth2 protocol, which is for granting access to the remote APIs.

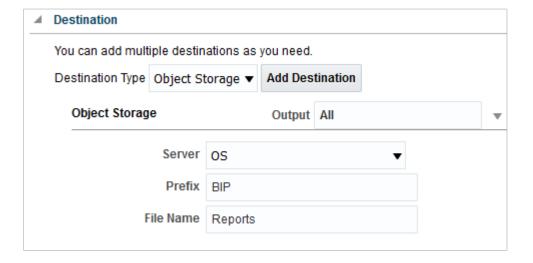
Table 3-2 Request JSON Parameters

Name	Туре	Required	Description
name	String	Yes	A unique name

Table 3-2 (Cont.) Request JSON Parameters

Name	Туре	Required	Description
objectName	String	Yes	The parameter is used to identify the report scheduled via BI Publisher UI. The parameter is a concatenation of the "Prefix" and "File Name" (separated by "/") defined while adding the destination configuration of BI Publisher report scheduling. For example, see the following screen shot.

Figure 3-1 Destination



#### **Request JSON Sample**

```
"name": "NEWTEST",
   "objectName": "BIP/Reports"
}
```



## 3.1.2 Response

This section provides the list of parameters in the JSON Response.

#### **Response JSON Parameters**

Name	Туре	Description
id	String	Unique ID generated by
		DIS
status	String	PAR generation status
		Success/Failure
url	String	PAR URL path

#### **Response JSON Sample**

```
{
    "id": "ggdfs548987535rj7r789-bdre",
    "status": "Success",
    "url": "https://objectstorage.us-ashburn-1.oraclecloud.com/p/dJ41-
ClADpDYRZ-ZMZfv2ntf-Rr06cmrDagTzYtys/n/oraclegbuprod/b/
cds_gbua_fsgbu_pbsm_iad_qe0saoyeic01_pbsmqa250425-prd_1/o/BI/rep2"
}
```

# 3.1.3 Error Handling/Validation

Both the name and objectName are mandatory fields.

objectName should have a valid path for BIPublisher.

Sample Error Response:

```
{
    "status": "Failure",
    "url": "Report/B12 is not present in the specified bucket:
cds_gbua_cndevcorp_fsgbu_pbsm_d13odhfftryts5mnw_paqa050425-prd_1"
}
```

#### 3.1.4 Detailed Documentation

The current functionality to export data from Oracle Analytics Server using BI Publisher is part of a proposed large scale enhancement to facilitate seamless data exchange between PBSM apps using the OAS platform and Oracle Applications.

For more details on using Oracle Analytics Server (OAS) to aggregate and/or manipulate the data to required level and downloading it from Object Storage, refer to the *FRC Analytics - Export Data to SaaS Object Store* document available Doc ID: 2869409.1.

# Glossary



# Index

