ORACLE CRM On Demand

Oracle CRM On Demand REST API Developer's Guide

Release 37

August 2018

Documentation Accessibility

For information about Oracle's commitment to accessibility, visit the Oracle Accessibility Program website at http://www.oracle.com/pls/topic/lookup?ctx=acc&id=docacc.

Access to Oracle Support

Oracle customers that have purchased support have access to electronic support through My Oracle Support. For information, visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=info or visit http://www.oracle.com/pls/topic/lookup?ctx=acc&id=trs if you are hearing impaired.

Contents

Chapter 4:   Using the Oracle CRM On Demand REST API

Index

1 What's New in This Release

What's New in Oracle CRM On Demand REST API Developer's Guide, Release 37

No new features have been added to this guide for this release. This guide has been updated to reflect product version changes only.

2 Overview of Using the Oracle CRM On Demand REST API

This chapter provides an overview of the REST application programming interface (API) available with Oracle CRM On Demand. It contains the following topics:

About Oracle CRM On Demand REST API

REST stands for Representational State Transfer and is an architectural style that makes use of existing technology and protocols of the Web, such as HTTP and JSON. A REST API allows you to send data requests and receive responses over an HTTP interface. REST requests and responses include a header and a body. The header defines the operating parameters of the interaction and contains metadata, such as HTTP methods or encoding information. The body contains data that you want to transmit over the network. The body header contains instructions on how to use the transmitted data. The body can also remain empty.

An important concept of REST is the existence of resources, which are sources of specific information. Each resource is referenced with a global identifier, a URL in HTTP. To manipulate these resources, clients and servers communicate through an HTTP interface and exchange abstractions of these resources, such as a record or a list of records.

The Oracle CRM On Demand REST API exposes Oracle CRM On Demand records (resources), allowing you to integrate with Oracle CRM On Demand by using the GET, POST, PATCH, and DELETE HTTP methods to take actions on the Oracle CRM On Demand Server.

For example, you can do the following:

- Use the POST HTTP method to create a new Oracle CRM On Demand resource.

- Use the GET HTTP method to retrieve information about an Oracle CRM On Demand resource.

■ Use the PATCH HTTP method to update an Oracle CRM On Demand resource.

■ Use the DELETE HTTP method to delete an Oracle CRM On Demand resource.

■ Perform a query or search on Oracle CRM On Demand collection resources.

Use the Oracle CRM On Demand REST API for interactive operations with Oracle CRM On Demand. For Oracle CRM On Demand bulk operations, use Web services. For more information about Oracle CRM On Demand Web services, see *Oracle Web Services On Demand Guide.*

About Oracle CRM On Demand REST API Requests and Responses

To use the Oracle CRM On Demand REST API to interact with Oracle CRM On Demand, you must send a request to the Oracle CRM On Demand Server.

A request can include the following information:

■ A request URL. For more information about the Oracle CRM On Demand REST API URL, see "Oracle CRM On Demand REST API URL Format" on page 11.

■ The object type of the Oracle CRM On Demand resource that you want to take action on. For more information about the supported Oracle CRM On Demand resources, see "Oracle CRM On Demand REST API Supported Resources" on page 12.

■ The HTTP method that you use to perform a REST API operation (create, retrieve, update, or delete) on the Oracle CRM On Demand Server. For more information about supported HTTP methods, see "Supported HTTP Methods" on page 18.

■ Header information to define the parameters of the interaction with the Oracle CRM On Demand Server and the information and format you want in the response. For more information about supported HTTP headers, see "Supported HTTP and Oracle CRM On Demand Header Fields" on page 18.

■ Optional query parameters to search for specific resources in a collection. For more information about querying a collection, see "Querying a Collection Resource" on page 52.

■ Optional sorting parameters to sort collection lists. For additional information about sorting, see "Sorting Collection Resources" on page 57.

■ Optional paging parameters to limit large collection resource lists. For additional information about paging, see "Paging Collection Resources" on page 58.

After the Oracle CRM On Demand Server processes the request, the server sends back a response. The response body contains the results of the REST API call and also additional metadata and information based on what was specified in the request.

The response can include the following information:

■ An HTTP status code that indicates whether the request was successful or failed. For more information about HTTP status codes, see "Standard HTTP Status Codes" on page 24.

■ If the request failed, then the response body includes additional information about the error. For additional information about error formats, see "Error Response Format" on page 23.

■ Links to additional resources. For more information about links, see Oracle CRM On Demand REST API Response Links on page 25.

Oracle CRM On Demand REST API URL Format

The supported Oracle CRM On Demand resources are accessed by using a URL. The Oracle CRM On Demand REST API uses the following URL formats for top-level and child resources:

The top-level format is as follows:

    OnDemand/user/Rest/latest/*<objects>*

The child format is as follows:

    OnDemand/user/Rest/latest/*<ParentObject>/<ParentRowId>/*child*/<childobjects>*

An example top-level resource structure is as follows:

    OnDemand/user/Rest/latest/Accounts

An example child resource structure is as follows:

    OnDemand/user/Rest/latest/Accounts/1QA2-21SEF/child/AccountAddresses

where:

■ *OnDemand* indicates the name of the integration product, Oracle CRM On Demand.

■ *user* is always user and cannot be modified.

■ *Rest* is the endpoint for the REST API URL.

■ *latest* indicates the version number for Oracle CRM On Demand.

■ *<objects>* indicates the name of the Oracle CRM On Demand REST API resource. For more information about supported Oracle CRM On Demand resources, see "Oracle CRM On Demand REST API Supported Resources" on page 12.

■ *<ParentObject>* indicates the name of the Oracle CRM On Demand REST API parent resource.

■ *<ParentRowID>* indicates the row ID for the parent resource.

■ *child* indicates that a child resource is referenced.

■ *<childobjects>* indicates the name of the Oracle CRM On Demand REST API child resource. For more information about the supported Oracle CRM On Demand child resources, see "Oracle CRM On Demand REST API Supported Resources" on page 12.

Oracle CRM On Demand REST API Supported Resources

A REST API resource is a piece of information, such as a data record or a list of records. Each Oracle
CRM On Demand REST API resource is identified by a named URL, and it is accessed using standard
HTTP methods. For more information about URL format, see "Oracle CRM On Demand REST API URL
Format" on page 11.

NOTE: When you use the Oracle CRM On Demand REST API to call Oracle CRM On Demand
resources, you must use the plural form. For example, use Accounts and not Account. If you
customized the resource name, then use the custom resource name. For more information about
customizing resource names, see "Customizing REST API Integration Tags" on page 33.

The REST API supports top-level and child resources. A supported top-level resource will also appear
as a child of another supported object provided it is a one-to-many relationship. You can see which
parent and child resources are supported by running describe requests. For more information about
describe requests, see "Retrieving Metadata about Oracle CRM On Demand Resources" on page 58. In
addition, see the describe request examples provided in "Retrieving All Top-Level Resources" and
"Retrieving All Child Resources" on page 66.

The REST API supports the relationship between accounts, contacts, and their opportunities as a
many-to-many parent-child relationship. For more information about associating accounts to contact
resources, see "Associating Accounts to Contacts Resources" on page 81. For more information about
associating contacts to accounts and opportunities, see "Associating Contacts to Accounts and
Opportunities Resources" on page 82.

The REST API supports create, retrieve, update and delete actions on book and team child resources.
Existing book and team resources can also be associated with other resources for which book
relationships are supported. For information about associating books to REST API resources, see
"Associating Books to REST API Resources" on page 79. For information about associating teams to
REST API resources, see "Associating Teams to REST API Resources" on page 80.

The REST API supports not only core Oracle CRM On Demand top-level and child resources, but also
industry-specific resources. Top-level and child resources and resources available with industry-
specific editions of the application are covered in the following topics:

■ "Supported Core Oracle CRM On Demand Resources" on page 14

■ "Supported Partner Relation Management Edition Resources" on page 15

■ "Supported Life Sciences Edition Resources" on page 16

■ "Supported Financial Services Edition Resources" on page 17

■ "Supported Automotive Edition Resources" on page 18

About Working with Oracle CRM On Demand Resources

You can use Oracle CRM On Demand REST API resources to interact with Oracle CRM On Demand.
For example, you can:

■ Use the Oracle CRM On Demand REST API versions request to return either a list of supported versions of Oracle CRM On Demand or get a description of a specific version of Oracle CRM On Demand. For more information about supported Oracle CRM On Demand REST API versions, see "Getting a List of Available Oracle CRM On Demand Versions" on page 36.

■ Create top-level and child resources on the Oracle CRM On Demand Server. For more information about creating resources, see "Creating Oracle CRM On Demand Resources" on page 40.

■ Retrieve top-level and child resources on the Oracle CRM On Demand Server. For more information about retrieving resources, see "Retrieving Oracle CRM On Demand Resources" on page 42.

■ Update top-level and child resources on the Oracle CRM On Demand Server. For more information about updating resources, see "Updating Oracle CRM On Demand Resources" on page 44.

■ Delete top-level and child resources on the Oracle CRM On Demand Server. For more information about deleting resources, see "Deleting Oracle CRM On Demand Resources" on page 46.

■ Retrieve information about collection resource lists. For more information about retrieving collection resources, see "Retrieving Oracle CRM On Demand REST API Collection Lists" on page 47.

■ Query a collection resource. For more information about querying a collection resource, see "Querying a Collection Resource" on page 52.

■ Use the describe request to retrieve detailed metadata information about an Oracle CRM On Demand resource, such as an Account. For more information about retrieving metadata information about an Oracle CRM On Demand resource, see "Retrieving Metadata about Oracle CRM On Demand Resources" on page 58.

■ Use the enclosure URL keyword to perform actions on attachments. For more information about working with attachments, see "Working with Resource Attachments" on page 75.

■ Convert a lead to an opportunity and create new account and contact records for the lead on the Oracle CRM On Demand Server. For more information about converting leads, see "Converting Oracle CRM On Demand Leads" on page 77.

■ Associate an existing book to REST API resources. For more information about associating books to REST API resources, see "Associating Books to REST API Resources" on page 79.

■ Associate an existing team to REST API resources. For more information about associating teams to REST API resources, see "Associating Teams to REST API Resources" on page 80.

■ Associate Accounts to Contacts resources. For more information associating accounts to contacts resources, see "Associating Accounts to Contacts Resources" on page 81.

■ Associate Contacts to Accounts and Opportunities resources. For more information about associating contacts to accounts and opportunities resources, see "Associating Contacts to Accounts and Opportunities Resources" on page 82.

■ Work with Account Contact Role resources. For more information about Account Contact Role resources, see "Working with Account Contact Role Resources" on page 83.

Supported Core Oracle CRM On Demand Resources

Table 1 contains the supported top-level core Oracle CRM On Demand resources for the Oracle CRM
On Demand REST API, the supported operations, and whether the resource supports using enclosure
to perform actions on attachments. For information about using the REST API to interact with Oracle
CRM On Demand supported top-level and child core resources, see "About Using the Oracle CRM On
Demand REST API with Oracle CRM On Demand" on page 35.

Table 1.   Supported Oracle CRM On Demand Core Top-Level Resources, Operations, and Enclosure
            Actions

Top-Level Resources	Create	Retrieve	Update	Delete	Enclosure
Accounts	Yes	Yes	Yes	Yes	No
Activities	Yes	Yes	Yes	Yes	No
Allotment Usages	No	Yes	No	No	No
Assets	Yes	Yes	Yes	Yes	No
Books	Yes	Yes	Yes	Yes	No
Campaigns	Yes	Yes	Yes	Yes	No
Categories	Yes	Yes	Yes	Yes	No
Contacts	Yes	Yes	Yes	Yes	No
Custom Objects 1	Yes	Yes	Yes	Yes	Yes
Custom Objects 2	Yes	Yes	Yes	Yes	Yes
Custom Objects 3	Yes	Yes	Yes	Yes	Yes
Custom Objects 4-40	Yes	Yes	Yes	Yes	Yes
Groups	Yes	Yes	Yes	Yes	No
Leads	Yes	Yes	Yes	Yes	No
Modification Trackings	Yes	Yes	Yes	Yes	No
Notes	Yes	Yes	Yes	Yes	No
Opportunities	Yes	Yes	Yes	Yes	No
Products	Yes	Yes	Yes	Yes	No
Service Allotments	No	Yes	No	No	No
Service Requests	Yes	Yes	Yes	Yes	No
Solutions	Yes	Yes	Yes	Yes	No
Users	Yes	Yes	Yes	No	No

Supported Partner Relation Management Edition Resources

Table 2 contains the supported Oracle CRM On Demand resources available with Oracle CRM On Demand Partner Relationship Management Edition, the supported operations, and whether the resource supports using enclosure to perform actions on attachments.

Table 2.   Supported Partner Relation Management Edition Resources, Operations, and Enclosure Actions

Partner Relation Management Resources	Create	Retrieve	Update	Delete	Enclosure
Accreditations	Yes	Yes	Yes	Yes	No
Accreditation Requests	Yes	Yes	Yes	Yes	No
Applications	Yes	Yes	Yes	Yes	No
Certification Requests	Yes	Yes	Yes	Yes	No
Courses	Yes	Yes	Yes	Yes	No
Course Enrollments	Yes	Yes	Yes	Yes	No
Deal Registrations	Yes	Yes	Yes	Yes	No
Exams	Yes	Yes	Yes	Yes	No
Exam Registrations	Yes	Yes	Yes	Yes	No
Funds	Yes	Yes	Yes	Yes	No
MDF Requests	Yes	Yes	Yes	Yes	No
Partners	Yes	Yes	Yes	Yes	No
Price Lists	Yes	Yes	Yes	Yes	No
Price List Line Items	Yes	Yes	Yes	Yes	No
Special Pricing Products	Yes	Yes	Yes	Yes	No
Special Pricing Requests	Yes	Yes	Yes	Yes	No

Supported Life Sciences Edition Resources

Table 3 contains the supported top-level Oracle CRM On Demand resources available with Oracle CRM
On Demand Life Sciences Edition, the supported operations, and whether the resource supports
using enclosure to perform actions on attachments.

Table 3.   Supported Life Sciences Edition Resources, Operations, and Enclosure Actions

Top-Level Resources	Create	Retrieve	Update	Delete	Enclosure
Allocations	Yes	Yes	Yes	Yes	No
Blocked Products	Yes	Yes	Yes	Yes	No
Business Plans	Yes	Yes	Yes	Yes	No
Call Activity Histories	No	Yes	No	No	No
Contact State Licenses	Yes	Yes	Yes	Yes	No
Events	Yes	Yes	Yes	Yes	No
HCP Contact Allocations	Yes	Yes	Yes	Yes	No
Inventory Audit Reports	Yes	Yes	Yes	Yes	No
Inventory Periods	Yes	Yes	Yes	Yes	No
Message Responses	Yes	Yes	Yes	Yes	No
Messaging Plans	Yes	Yes	Yes	Yes	No
Messaging Plan Items	Yes	Yes	Yes	Yes	No
Messaging Plan Item Relations	Yes	Yes	Yes	Yes	No
Objectives	Yes	Yes	Yes	Yes	No
Orders	Yes	Yes	Yes	Yes	No
Order Items	Yes	Yes	Yes	Yes	No
Plan Accounts	Yes	Yes	Yes	Yes	No
Plan Contacts	Yes	Yes	Yes	Yes	No
Plan Opportunities	Yes	Yes	Yes	Yes	No
Related Disclaimers	Yes	Yes	Yes	Yes	No
Sample Disclaimers	Yes	Yes	Yes	Yes	No
Sample Inventories	Yes	Yes	Yes	Yes	No
Sample Lots	Yes	Yes	Yes	Yes	No
Sample Requests	Yes	Yes	Yes	Yes	No
Sample Request Items	Yes	Yes	Yes	Yes	No
Sample Transactions	Yes	Yes	Yes	Yes	No

Table 3.   Supported Life Sciences Edition Resources, Operations, and Enclosure Actions

Top-Level Resources	Create	Retrieve	Update	Delete	Enclosure
Signatures	Yes	Yes	Yes	Yes	No
Transaction Items	Yes	Yes	Yes	Yes	No

Supported Financial Services Edition Resources

Table 4 contains the supported Oracle CRM On Demand resources available with Oracle CRM On
Demand Financial Services Edition, the supported operations, and whether the resource supports
using enclosure to perform actions on attachments.

Table 4.   Supported Financial Services Edition Resources, Operations, and Enclosure Actions

Top-Level Resources	Create	Retrieve	Update	Delete	Enclosure
Claims	Yes	Yes	Yes	Yes	No
Coverages	Yes	Yes	Yes	Yes	No
Damages	Yes	Yes	Yes	Yes	No
Financial Accounts	Yes	Yes	Yes	Yes	No
Financial Account Holders	Yes	Yes	Yes	Yes	No
Financial Account Holdings	Yes	Yes	Yes	Yes	No
Financial Plans	Yes	Yes	Yes	Yes	No
Financial Products	Yes	Yes	Yes	Yes	No
Financial Transactions	Yes	Yes	Yes	Yes	No
Households	Yes	Yes	Yes	Yes	No
Insurance Properties	Yes	Yes	Yes	Yes	No
Involved Parties	Yes	Yes	Yes	Yes	No
Policies	Yes	Yes	Yes	Yes	No
Policy Holders	Yes	Yes	Yes	Yes	No
Portfolios	Yes	Yes	Yes	Yes	No

Supported Automotive Edition Resources

Table 5 contains the supported Oracle CRM On Demand resources available with Oracle CRM On Demand Automotive Edition, the supported operations, and whether the resource supports using enclosure to perform actions on attachments.

Table 5.   Supported Automotive Edition Resources, Operations, and Enclosure Actions

Top-Level Resources	Create	Retrieve	Update	Delete	Enclosure
Dealers	Yes	Yes	Yes	Yes	No
Vehicles	Yes	Yes	Yes	Yes	No

Supported HTTP Methods

Table 6 contains the HTTP methods supported by Oracle CRM On Demand and the corresponding REST API operation.

Table 6.   Supported HTTP Methods

HTTP Method	REST API Operation	Description
GET	Retrieve	The GET method retrieves an Oracle CRM On Demand resource.
POST	Create	The POST method creates a new Oracle CRM On Demand resource.
PATCH	Update	The PATCH method updates an Oracle CRM On Demand resource.
DELETE	Delete	The DELETE method deletes an Oracle CRM On Demand resource.

NOTE: The HTTP PUT method is only supported for Add and Update REST API operations for enclosure attachments. For more information about working with attachments, see "Working with Resource Attachments" on page 75.

Supported HTTP and Oracle CRM On Demand Header Fields

HTTP header fields are components of the REST API message header for requests and responses that define the operating parameters of the REST API transaction with Oracle CRM On Demand.

Table 7 contains the HTTP and Oracle CRM On Demand header fields supported by the Oracle CRM
On Demand REST API.

Table 7.   Supported HTTP Header Fields

HTTP Header Field Name	Description	Example
Content-Type	The HTTP request and response header field that indicates the content type of the message body. The Oracle CRM On Demand REST API supports only JSON encoding for the request body. The Content-Type field is used with POST and PATCH requests. When submitting a POST or PATCH request, you typically supply a body with the request. You can indicate the format of the response by setting the HTTP Content-Type header on the request.	Content-Type: application/ vnd.oracle.adf.resource+json
Content-Encoding	The HTTP request header field that indicates the encoding for the response message.	Accept-Encoding: gzip, deflate
Content-Language	The HTTP response header that indicates the language the content is in.	Content-Language: da
Accept	The HTTP request header field that indicates the content types that are valid in the response message.	Accept: text/plain
Accept-Language	The HTTP request header that indicates the languages that are valid for the response message. For more information about language formats, see "Language Format" on page 20. For information about supported language codes, see "Supported Languages" on page 21.	Accept-Language: en-US
Location	The HTTP response header that indicates the location of a new resource that has been created.	Location: https://<host>/ OnDemand/user/Rest/latest/ Accounts/1QA2-21SEFX

Table 7.   Supported HTTP Header Fields

HTTP Header Field Name	Description	Example
LOVLanguageMode	The Oracle CRM On Demand request header field that indicates whether language independent codes (LIC) or language dependent codes (LDC) are returned in the message response. For more information about the LOVLanguageMode input argument, see "Special Search Fields" on page 54.	LOVLanguageMode: LIC
JSESSIONID	The Oracle CRM On Demand response header field that indicates the session ID for login authentication and session management. For more information about login authentication, see "Login with Oracle CRM On Demand REST API" on page 30.	JSESSIONID=sessionidvalue

Oracle CRM On Demand REST API Formats

The Oracle CRM On Demand REST API uses the language, date, time, currency, and number formats described in this topic.

Language Format

For requests, you can use the standard HTTP Header Accept-Language to specify what language to return. You can list the preferred language codes in the Accept-Language header, and Oracle CRM On Demand parses the header and selects the first language code listed in the header. For more information about the languages supported by Oracle CRM On Demand and the corresponding language codes, see "Supported Languages" on page 21.

For example:

    Accept-Language : en-us, fr-f, es

In the previous example, the user prefers US-English. If US-English is not supported, then the user will accept French in France. If French is not supported, then the user will accept any type of Spanish.

If either the header is not present or if the language could not be determined from the header, then the response will have the user set the language. A response uses standard HTTP Header Content-Language to specify the language returned. For additional information about HTTP headers, see "Supported HTTP and Oracle CRM On Demand Header Fields" on page 18.

Supported Languages

Table 8 lists the supported languages for the Oracle CRM On Demand REST API with the
corresponding language code.

Table 8.   Supported Languages

Supported Language	REST API Language Code
Danish	da_DK
German	de_DE
English (UK)	en_GB
English (USA)	en_US
Spanish	es_ES
Finnish	fi_FI
French	fr_FR
Italian	it_IT
Japanese	ja_JP
Korean	ko_KR
Dutch	nl_NL
Norwegian	no_NO
Polish	pl_PL
Portuguese (Brazil)	pt_BR
Portuguese (Portugal)	pt_PT
Russian	ru_RU
Swedish	sv_SE
Thai	th_TH
Turkish	tr_TR
Chinese (Simplified)	zh_CN
Chinese (Traditional)	zh_TW

Date and Time Formats

For all dates and times displayed, the time zone is the logged in user's time zone, which is
determined from the user's locale.

All date fields are displayed in the format YYYY-MM-DD format, for example:

    2014-11-03

Datetime fields for the Oracle CRM On Demand REST API are displayed in the following format:

YYYY-MM-DDTHH:mm:ssZ

An example of a date and time in this format is:

2014-11-03T18:00:12Z

This example represents 6:00 PM on the third of November 2014, in the user's time zone.

Currency Formats

Currency fields for the Oracle CRM On Demand REST API requests use the following format:

currencyfieldname: currencyfieldvalue

Currency fields for the Oracle CRM On Demand REST API responses are displayed in the following format:

```
currencyfieldname:
{
type: "currency",
value: "400300,50",
modifier: "EUR"
}
```

where:

■ *type* indicates the data type, currency.

■ *value* indicates the numeric value of the currency. The currency symbol is not part of the value. The value includes the decimal separator, which is determined according to the user's locale. The value does not contain a thousands separator. In this example, the user's locale is France, therefore the decimal separator used is the comma.

■ *modifier* indicates the international three-letter currency code.

Number Formats

All number formats (NUMBER, INTEGER and PERCENTAGE) for the Oracle CRM On Demand REST API are displayed in the following format:

<FieldName> : <Value>

The value element includes the decimal separator, which is determined according to the user's locale. The value does not contains a thousands separator.

REST API Request Rate Limits

The Oracle CRM On Demand's REST API resources can be shared by multiple users. Oracle CRM On Demand limits the number of REST API requests that a user can simultaneously execute during a defined time period. The REST Request Rate Limit is 30 requests for each minute.

When a user's session is established for the first time or re-established after a session expires or a session is ended by the user signing out, the REST request rate count starts at zero, and it increments by one with each REST request made. The count returns to zero at the end of each defined time period, which is one minute and is not a rolling time period.

If the rate limit is exceeded, then the following error message is provided in response to subsequent REST API requests:

> The maximum rate of requests was exceeded. A maximum of 30 requests per minute is allowed.

Error Response Format

Oracle CRM On Demand REST API responses indicating an error or warning are represented by a proper response HTTP status code, such as 404. For more information about HTTP status codes, see "Standard HTTP Status Codes" on page 24.

Additionally, a response body is provided containing additional information about the error. The following is an example of the Oracle CRM On Demand Rest API error format:

```
"Error": [
{
 "problemType": "https://support.oracle.com/epmos/faces/DocumentDisplay?id=1663390.1",
 "title": "The value entered in field %2 of buscomp %3 does not match any value in the bounded pick list%1.",
 "httpStatus": 400,
 "detail": "The value entered in field AccountType of buscomp Account does not match any value in the bounded
pick list PickList Account Type. (SBL-DAT-00225)",
 "problemInstance": "urn:ocrmod:/OnDemand/user/Rest/latest/Accounts",
 "errorCode": "SBL-DAT-00225",
 "OCRMODErrorDetail": {
 "Parameters":["PickList Account Type", "AccountType", "Account"]
 }
}]
```

where:

■ *problemType* indicates the location for help about troubleshooting.

■ *title* indicates the error message before substituting variables.

■ *httpStatus* indicates the HTTP status code.

■ *detail* indicates the error message after substituting variables.

■ *problemInstance* indicates the URL that generated the error.

■ *errorCode* indicates the error code.

■ *OCRMODErrorDetail* indicates application-specific details about the error.

■ *Parameters* indicates the variables that are used in the error message substitution.

Standard HTTP Status Codes

Oracle CRM On Demand REST API uses standard HTTP status codes to indicate the success or failure of API calls. When an error occurs or when a response is successful, the response header contains an HTTP code, and the response body usually contains a message accompanying the HTTP response code with additional information about the error. For additional information about Oracle CRM On Demand API error formats, see "Error Response Format" on page 23.

Table 9 contains the standard HTTP status codes used by the Oracle CRM On Demand REST API.

Table 9.   Standard HTTP Status Codes and Errors Messages

HTTP Code	Error Message	Description
200	OK	The request successfully executed, and the response has content.
201	Created	The resource was successfully created and the response contains the created resource.
204	No Content	The request successfully executed, but content is not available. For example, the content was deleted.
302	Found	The requested resource resides temporarily under a different URL. The response includes redirection to the correct URL.
304	Not Modified	The resource was not modified.
400	Bad Request	The server could not interpret the request.
401	Unauthorized	The request did not have valid authorization credentials.
403	Forbidden	The request has been refused because of insufficient privileges. Verify that the signed-in user has the appropriate privileges.
404	Not Found	The requested resource was not found because of an invalid object name.
405	Not Allowed	The request is not allowed.
406	Not Acceptable	The resource identified by the request is capable of generating only response entities that have content characteristics that are not acceptable according to the accept headers sent in the request.

Table 9.   Standard HTTP Status Codes and Errors Messages

HTTP Code	Error Message	Description
415	Unsupported Media Type	The data format of the request body, specified in the Content-Type header, is not supported by the targeted resource.
500	Internal Server Error	The server encountered an unexpected error, preventing it from fulfilling the request.

Oracle CRM On Demand REST API Response Links

A link in the Oracle CRM On Demand REST API response contains a location of a resource and metadata about that resource.

The Oracle CRM On Demand REST API response can include the following types of links:

■ **self link.** The original URL that generated the response.

  For an example of a self response link, see “Example of a Response Link for Self, Canonical, Parent, and Child Links” on page 27.

■ **canonical link.** The URL for the same resource as the top level resource. If you are already viewing the resource as a top-level resource, then this URL is the same as self. If this resource is not available as a top-level resource, then this link shows child resource context.

  For an example of a canonical response link, see “Example of a Response Link for Self, Canonical, Parent, and Child Links” on page 27.

■ **parent link.** The URL for the parent resource details. This URL of the parent resource is returned in the response only when retrieving details about a child resource.

  For an example of a parent response link, see “Example of a Response Link for Self, Canonical, Parent, and Child Links” on page 27.

■ **child link.** The URL for the child resource details. The URL returns the path to retrieve each child collection for this record. The href attribute contains the child value. A response can return several child links.

  For an example of a child response link, see “Example of a Response Link for Self, Canonical, Parent, and Child Links” on page 27.

■ **association link.** The URL of a specific resource included in the response. There can be many association links.

  For an example of an association response link, see “Example of an Association Response Link” on page 28.

Each link contains attributes. Table 10 lists the link attributes returned in an Oracle CRM On Demand
REST API response.

Table 10.   Links Attributes

Name	Type	Description	Example
rel	string	Indicates the relationship of the linked resource to the current resource that contains the list of links. Values include: ■ Self: Indicates that the linked resource is the current resource. ■ Parent: Indicates that the linked resource is the parent resource. ■ Child: Indicates that the linked resource is the child resource. ■ Canonical: Indicates the URL for directly accessing the linked resource.	```"links": { "self": { "rel": "self", "href": "/OnDemand/user/Rest/028/Accounts/{id}", … "links": { "canonical": { "rel": "canonical", "href": "/OnDemand/user/Rest/028/Accounts/{id}", … "links": { "parent": { "rel": "parent", "href": "/OnDemand/user/Rest/028/Accounts/{id}", … "links": { "AccountAddresses": { "rel": "child", "href": "/OnDemand/user/Rest/028/Accounts/1QA2-22EWBI/child/AccountAddresses", …```
href	string	Indicates the fully qualified location URL of the linked resource.	```"links": { "self": { "rel": "self", "href": "/OnDemand/user/Rest/028/Accounts/{id}", "kind" : "item" …```
kind	string	A describe link attribute that indicates context within a describe response. Values include: item, collection, and describe. For information about collections, see "About Collection Resources" on page 47. For more information about describe requests, see "Retrieving Metadata about Oracle CRM On Demand Resources" on page 58.	```"links": { "self": { "rel": "self", "href": "/OnDemand/user/Rest/028/Accounts/{id}", "kind" : "item" … "self" : { "rel" : "self", "href" : "/OnDemand/user/Rest/028/Accounts/", "kind" : "collection" … "describe": { "rel": "self", "href": "/OnDemand/user/Rest/028/Accountsdescribe", "kind" : "describe"```

Example of a Response Link for Self, Canonical, Parent, and Child Links

This topic contains an example of a response that includes self, canonical, parent, and child links.
For more information about response links, see "Oracle CRM On Demand REST API URL Format" on
page 11.

Request:

https://<host>/OnDemand/user/Rest/026/Accounts/1QA2-227Q47/child/Opportunities/1QA2-
227Q49?fields=OpportunityName,SalesStage

Response:

```
{
    "Opportunities": [
        {
            "OpportunityName": "RestDoNotDelete",
            "SalesStage": "Closed/Won",
            "links": {
                "self": {
                    "rel": "self",
                    "href": "/OnDemand/user/Rest/026/Accounts/1QA2-227Q47/child/Opportunities/1QA2-227Q49"
                },
                "canonical": {
                    "rel": "canonical",
                    "href": "/OnDemand/user/Rest/026/Opportunities/1QA2-227Q49"
                },
                "parent": {
                    "rel": "parent",
                    "href": "/OnDemand/user/Rest/026/Accounts/1QA2-227Q47"
                },
                "Activities": {
                    "rel": "child",
                    "href": "/OnDemand/user/Rest/026/Opportunities/1QA2-227Q49/child/Activities"
                },
                "CustomObjects4": {
                    "rel": "child",
                    "href": "/OnDemand/user/Rest/026/Opportunities/1QA2-227Q49/child/CustomObjects4"
                },
                "Leads": {
                    "rel": "child",
                    "href": "/OnDemand/user/Rest/026/Opportunities/1QA2-227Q49/child/Leads"
                },
                "Opportunities": {
                    "rel": "child",
                    "href": "/OnDemand/user/Rest/026/Opportunities/1QA2-227Q49/child/Opportunities"
                },
                "OpportunityNotes": {
                    "rel": "child",
                    "href": "/OnDemand/user/Rest/026/Opportunities/1QA2-227Q49/child/OpportunityNotes"
                },
                "OpportunityPartners": {
                    "rel": "child",
                    "href": "/OnDemand/user/Rest/026/Opportunities/1QA2-227Q49/child/OpportunityPartners"
                },
                "OpportunityRevenues": {
                    "rel": "child",
                    "href": "/OnDemand/user/Rest/026/Opportunities/1QA2-227Q49/child/OpportunityRevenues"
                },
                "OpportunityTeams": {
                    "rel": "child",
                    "href": "/OnDemand/user/Rest/026/Opportunities/1QA2-227Q49/child/OpportunityTeams"
                }
            }
        }
    ]
}
```

Example of an Association Response Link

This topic contains an example of an association link. For more information about response links, see
"Oracle CRM On Demand REST API URL Format" on page 11

This example includes the primary contact field for an account in the request URL, and the response
includes an association link to the specific primary contact resource.

Request:

User/Rest/latest/Accounts?fields=AccountName, PrimaryContactFullName

Response:

```
{
  "Accounts":[{
    "AccountName":"ACME Computer Parts",
    "PrimaryContactFullName":"John Smith",
  "links":{
    "self":{
      "rel":"self",
      "href":"/OnDemand/user/Rest/latest/Accounts/1QA2-1ATBR"},
    "canonical":{
      "rel":"canonical",
      "href":"/OnDemand/user/Rest/latest/Accounts/1QA2-21ATBR"},
    "PrimaryContactFullName":{
      "rel":"self",
      "href":"/OnDemand/user/Rest/latest/Contacts/1QA2-21ATC5"}
    }
  }
 ]
}
```

3 Getting Started with the Oracle CRM On Demand REST API

This chapter provides an overview of how to get started with using the REST API in Oracle CRM On Demand. It contains the following topics:

Oracle CRM On Demand REST API Privilege Required

To send requests and manage RESTful Services Integration, your user role must include the privilege: Restful Services Integration. Contact Oracle Customer Care if you do not have the privilege.

NOTE: Oracle CRM On Demand REST API users can access only data they have access to in the Oracle CRM On Demand user interface.

About Oracle CRM On Demand REST API Authentication

The Oracle CRM On Demand REST API uses Oracle CRM On Demand authentication. To use the Oracle CRM On Demand REST API with Oracle CRM On Demand, you must have a valid Oracle CRM On Demand user account to establish a secure session with the Oracle CRM On Demand server. There are several different ways in which Oracle CRM On Demand server sessions can be established and maintained:

- You can log into the Oracle CRM On Demand server through the Oracle CRM On Demand user interface. You must be successfully signed in to Oracle CRM On Demand to send REST API requests and receive REST API responses. If you are not signed in to Oracle CRM On Demand, and if you try to send a REST API request, then you will receive an HTTP 403 forbidden status code. For more information about HTTP status codes, see "Standard HTTP Status Codes" on page 24.

- You can use the Oracle CRM On Demand REST API connection request to establish a session with the Oracle CRM On Demand server using a JSESSIONID cookie. For more information about using the Oracle CRM On Demand REST API connection request to establish an Oracle CRM On Demand server session, see "Login with Oracle CRM On Demand REST API" on page 30.

■ You can use the Oracle CRM On Demand REST API and your SSO ID URL parameter to log into the Oracle CRM On Demand server. For more information regarding SSO, "Using SSO with the Oracle CRM On Demand REST API" on page 32.

If authentication is unsuccessful, the Oracle CRM On Demand server returns an HTTP 401 unauthorized status code and you are prompted to authenticate again. If the Oracle CRM On Demand server returns an HTTP 302 found code, the Oracle CRM On Demand checks the login server to confirm if the user is authenticated. If you are authenticated, then you are redirected to the correct URL. For more information about HTTP status codes, see "Standard HTTP Status Codes" on page 24.

Login with Oracle CRM On Demand REST API

You can use the Oracle CRM On Demand REST API connection request to initiate an Oracle CRM On Demand server session.

You can request an Oracle CRM On Demand server session and obtain a valid session ID by sending an HTTP GET request to the following URL:

```
/OnDemand/user/Rest/Connection

Request Header:

Authorization:  Basic cmVzdC91c2VyMTpVc2VyMTI4NQ==
```

In the example above, the authorization was added as a request header that has the value of the username followed by a colon and then the password encoded in Base 64. A basic string was added to indicate basic authentication.

A successful logon request returns an HTTP status code of 200 and the JSESSIONID is returned in the JSESSION response header. For more information about HTTP status codes, see "Standard HTTP Status Codes" on page 24.

If the Oracle CRM On Demand server session times out for any reason, the error returned reports that the session is not valid and you must then request a new Oracle CRM On Demand session.

After local authentication, Oracle CRM On Demand authenticates you against the login server when an application makes a REST API request. After credentials are authenticated, Oracle CRM On Demand executes the REST API request, allowing you to interact with the Oracle CRM On Demand server to perform data retrieval, modification, creation, and deletion operations. The REST API response returns a valid JSESSIONID value, which is used for authenticating subsequent requests. The response also includes metadata about the connection session. For more information about connection attributes, see "REST API Connection Attributes" on page 30.

REST API Connection Attributes

After credentials are authenticated, the Oracle CRM On Demand server returns a response to the REST API connection request that includes connection attributes. The REST API connection attributes provide details about the current user and the current Oracle CRM On Demand server session.

Table 11 contains the connection attributes returned in a REST API connection request.

Table 11.   Connection Attributes

Connection Attribute	Description
apiVersion	The latest version of the Oracle CRM On Demand REST API.
apiVersionMinimum	The oldest version of the Oracle CRM On Demand REST API.
clientHelpURL	The URL for the page that describes Oracle CRM On Demand REST API errors.
dateFormatLocale	The date and time format.
languageLocale	The expected language code for REST API requests that matches the locale code of the logged-in user language.
maximumFileSize	The maximum file size in MB supported for attachments.
Version	The current Oracle CRM On Demand version number.
ServerDate	The current date/time in REST API date format.
ITSUrlforSSO	The Security Assertion Markup Language (SAML) Intersite Transfer Service URL that is used for Single Sign-On (SSO) into Oracle CRM On Demand.
LastLoggedIn	The date that the user last logged in.
UserLoginId	The user login ID.
UserId	The user ID returned.
TenantId	The tenant ID returned.
CompanyName	The company name returned.

REST API Connection Attributes Example

The connection attributes are returned when you send a request to log into an Oracle CRM On Demand server session.

To return the connection attributes, send an HTTP GET request to the following URL:

/OnDemand/user/Rest/Connection

The REST API request returns the connection response with the following attributes. Some values of the attributes are context-sensitive. For more information about connection attributes, see "REST API Connection Attributes" on page 30.

```
{
    "Connection": {
    "apiVersion": "028",
    "apiVersionMinimum": "026",
    "clientHelpURL": "https://support.oracle.com/epmos/faces/DocumentDisplay?id=1663390.1",
    "dateFormatLocale": "yyyy-MM-dd, yyyy-MM-dd'T'HH:mm:ss'Z'",
    "languageLocale": "ENU",
    "maximumFileSize": 20,
    "Version": "028.009.000",
    "ServerDate": "2014-12-10T10:55:36Z",
    "LastLoggedIn": "2014-12-08T13:22:41Z",
    "UserLoginId": "REST/USER1",
    "UserId": "1QA2-21ATBK",
    "TenantId": "1QA2-21AI7F",
    "CompanyName": "rest"
  }
}
```

Logoff with Oracle CRM On Demand REST API

You can use the Oracle CRM On Demand REST API connection request logoff action to terminate an Oracle CRM On Demand session.

You can request to terminate an Oracle CRM On Demand server session by sending an HTTP GET or POST request to the following URL:

/OnDemand/user/Rest/Connection?action=logoff

A successful logoff request returns an HTTP status code of 200. For more information about HTTP status codes, see .

Using SSO with the Oracle CRM On Demand REST API

The Oracle CRM On Demand REST API Single Sign-On (SSO) feature is a session and user authentication process that allows you to enter one name and password in order to access multiple applications, without having to enter your log-on credentials a second time. You can use the REST API Single Sign-On (SSO) feature to initiate an Oracle CRM On Demand server session and to manage user credentials and authentication. The REST API SSO login feature uses the Oracle CRM On Demand SSO login mechanism. For more information about Oracle CRM On Demand SSO, see *Oracle CRM On Demand Online Help*.

Before you can use the Oracle CRM On Demand REST API SSO feature to log into Oracle CRM On Demand, you need to do the following:

■ Verify whether your company is configured to use the Oracle CRM On Demand SSO feature by checking the Authentication Type value set in your company profile and verify that the Authentication Type is set to Single Sign-On Only or User ID/PWD or Single Sign-On. For more information about the Authentication Type setting in the Oracle CRM On Demand company profile, see *Oracle CRM On Demand Online Help*.

■ Verify that your company is configured for SSO logon for Oracle CRM On Demand by checking the ITS URL for SSO Authentication value in your company profile. The SAML Intersite Transfer Service URL is used for signing in to Oracle CRM On Demand and the company administrator sets this value. Contact Oracle CRM On Demand Customer Care to obtain an SSO worksheet that contains instructions for setting the ITS URL.

■ If your company is configured to use Oracle CRM On Demand SSO, you will need the External Identifier for Single Sign-On value set in your company profile. For more information about the External Identifier for Single Sign-On setting in your company profile, see *Oracle CRM On Demand Online Help*.

You can request a SSO Oracle CRM On Demand server session by sending an HTTP GET or POST request specifying the SSO ID to the following URL:

`/OnDemand/user/Rest/Connection?ssoid=<ID>`

The Oracle CRM On Demand server returns the ITS URL value, which can then be used in a prompt for authentication credentials.

About Customizing REST Integration Tags

Your company can rename Oracle CRM On Demand record types or use custom record types. For example, the Account record type might be renamed Companies. To allow for this, you can customize the record type (resource) tag name referenced in Oracle CRM On Demand REST API URLs.

The Oracle CRM On Demand REST API resource can be accessed by both the default tag name and the custom tag name that you create. For example, Accounts is the default tag name for the Account record type. If you create a custom tag name, Companies, for the Account record type, then accounts can be accessed by both of the following URLs:

`https://<host>/OnDemand/user/Rest/latest/Accounts`

`https://<host>/OnDemand/user/Rest/latest/Companies`

Customizing REST API Integration Tags

The following procedure describes how to customize the REST API integration tags that you use in REST API URLs. You can view the available integration tags in the REST Integration Tags page in the Oracle CRM On Demand user interface.

To customize REST integration tags

1 In the upper-right corner of any page, click the Admin global link.

2 In the Application Customization section, click Application Customization.

3 Click the Customize REST Integration Tags link.

4 In the REST Integration Tags list, click the Edit link for the record type.

5 In the REST Integration Tag field, enter the new name and click Save.

Using JavaScript to Send REST API Requests

You can use an XMLHttpRequest JavaScript object to send REST API requests to the Oracle CRM On Demand Server. An XMLHttpRequest object allows you to send GET, POST, PUT or DELETE requests. Your request can also include the format for the response, for example, JSON or XML.

The example in this topic is a sample of JavaScript code that makes a REST API call to get the Accounts collection. The JavaScript then converts the response output into a JSON object and outputs a screen alert with the number of accounts in the collection that is visible to the user.

In the example below, accounts are accessed using the default Accounts tag name, that is, Accounts has not been renamed or customized. In addition, the visible accounts do not exceed the default limit of 100 for the user, because the example does not use the limit or paging arguments. For an example of retrieving accounts using limit and paging arguments, see "Retrieving a Collection Top-Level Resource List" on page 47.

To use JavaScript to send REST API requests to the Oracle CRM On Demand Server, you must have access to Oracle CRM On Demand and be successfully logged into the Oracle CRM On Demand Server. For more information about REST API privileges, see "Oracle CRM On Demand REST API Privilege Required" on page 29. For more information about logging into Oracle CRM On Demand, see "Login with Oracle CRM On Demand REST API" on page 30.

```
var xhr = new XMLHttpRequest();
xhr.open("GET", "/OnDemand/user/Rest/latest/Accounts", true);
xhr.onload = function (e) {
if (xhr.readyState === 4) {
if (xhr.status === 200) {
var respJSON = JSON.parse(xhr.responseText);
alert(respJSON.Accounts.length);
} else {
//console.error(xhr.statusText);
//handle error status
}
}
};
xhr.onerror = function (e) {
console.error(xhr.statusText);
};
xhr.send(null);
```

4 Using the Oracle CRM On Demand REST API

This chapter describes the Oracle CRM On Demand REST API requests and responses for REST API calls to access Oracle CRM On Demand resources. It includes the following topics:

About Using the Oracle CRM On Demand REST API with Oracle CRM On Demand

Each topic in this chapter provides examples demonstrating how to use the Oracle CRM On Demand REST API calls to interact with Oracle CRM On Demand resources. For more information about supported Oracle CRM On Demand resources, see "Oracle CRM On Demand REST API Supported Resources" on page 12.

Top-level and child Oracle CRM On Demand resources include fields. Field names used in the fields URL parameter, request, or response body are Web service integration tags. For more information regarding supported fields and Web service integration tags, please refer to the *Oracle Web Services On Demand Guide*.

Each REST API call in this chapter uses the following format:

■ An example request, which includes the following information:

■ **URL.** The location of the Oracle CRM On Demand REST API resource on the Oracle CRM On Demand Server. For more information about the Oracle CRM On Demand REST API URL format, see "Oracle CRM On Demand REST API URL Format" on page 11.

■ **HTTP Method.** The HTTP method used to call the Oracle CRM On Demand REST API to interact with the Oracle CRM On Demand Server. For more information about supported HTTP Methods, see "Supported HTTP Methods" on page 18.

■ **Content-Type.** The part of the HTTP header that indicates the media type of the data that is sent by the Oracle CRM On Demand REST API HTTP methods. For more information about supported HTTP headers, see "Supported HTTP and Oracle CRM On Demand Header Fields" on page 18.

■ **Request Body.** The code example for the Oracle CRM On Demand REST API request.

■ An example response, which includes the following information:

■ **HTTP Code.** The HTTP status code returned to indicate whether the request was successful or if there was an error. For more information about supported HTTP codes, see "Standard HTTP Status Codes" on page 24. For information about error formats, see "Error Response Format" on page 23.

■ **Content-Type.** The part of the HTTP header that indicates the media type of the data that is returned by the Oracle CRM On Demand REST API HTTP methods. For more information about supported HTTP headers, see "Supported HTTP and Oracle CRM On Demand Header Fields" on page 18.

■ **Location.** The header that indicates the location of a new resource created on the Oracle CRM On Demand Server.

■ **Response Body.** The code example for the Oracle CRM On Demand REST API response.

Getting a List of Available Oracle CRM On Demand Versions

The Oracle CRM On Demand REST API supports multiple versions of Oracle CRM On Demand. You can use the versions request to return either a list of supported versions of Oracle CRM On Demand or get a description of a specific version of Oracle CRM On Demand.

Version Attributes

Table 12 contains the attributes that are returned in the response to version requests.

Table 12. Version Attributes

Version Attribute	Description
version	Indicates the version number.
isLatest	Indicates whether the version is the latest version of Oracle CRM On Demand. Values are either true or false.
lifecycle	Indicates whether the version of Oracle CRM On Demand is active or deprecated.

Getting A Specific Oracle CRM On Demand Version Description

The following details are for a request to get a description of a specific version of Oracle CRM On Demand from the Oracle CRM On Demand Server:

■ URL: /OnDemand/user/Rest/028/versions

■ HTTP Method: GET

■ Content-Type: None

■ Request body: None

The following are the details for the response to a successful request:

■ HTTP Code: 200

■ Content-Type: application/vnd.oracle.adf.description+json

■ Response body:

```
{
    "versions": [
    {
        "version": "028",
        "lifecycle": "active",
        "isLatest": true,
        "catalog": {
        "links": {
            "self": {
             "rel": "self",
             "href": "/OnDemand/user/Rest/028/describe"
            },
            "canonical": {
             "rel": "canonical",
             "href": "/OnDemand/user/Rest/028/describe"
```

```
                    }
                }
            },
            "links": {
             "self": {
              "rel": "self",
              "href": "/OnDemand/user/Rest/028/versions"
             },
             "canonical": {
                "rel": "canonical",
                "href": "/OnDemand/user/Rest/028/versions"
             },
             "predecessor-version": {
                "rel": "predecessor-version",
                "href": "/OnDemand/user/Rest/latest/versions"
             },
             "current": {
                "rel": "current",
                "href": "/OnDemand/user/Rest/028/versions"
             }
            }
        }
    ]
}
```

Getting a List of All Oracle CRM On Demand Versions

The following details are for a request to get a list of supported Oracle CRM On Demand versions from the Oracle CRM On Demand Server:

■ URL: /OnDemand/user/Rest/versions

■ HTTP Method: GET

■ Content-Type: None

■ Request body: None

The following are the details for the response to a successful request:

■ HTTP Code: 200

■ Content-Type: application/vnd.oracle.adf.description+json

■ Response body:

```
{
  "versions": [
    {
     "version": "026",
      "lifecycle": "deprecated",
      "catalog": {
       "links": {
        "self": {
         "rel": "self",
         "href": "/OnDemand/user/Rest/latest/describe"
        },
        "canonical": {
         "rel": "canonical",
         "href": "/OnDemand/user/Rest/latest/describe"
        }
       }
      }
      "links": {
        "self": {
```

```
              "rel": "self",
              "href": "/OnDemand/user/Rest/latest/versions"
            },
            "canonical": {
              "rel": "canonical",
              "href": "/OnDemand/user/Rest/latest/versions"
            },
            "successor-version": {
              "rel": "successor-version",
              "href": "/OnDemand/user/Rest/027/versions"
            },
            "current": {
              "rel": "current",
              "href": "/OnDemand/user/Rest/027/versions"
            }
          }
        },
        {
          "version": "028",
          "lifecycle": "active",
          "isLatest": true,
          "catalog": {
            "links": {
              "self": {
                "rel": "self",
                "href": "/OnDemand/user/Rest/028/describe"
              },
              "canonical": {
                "rel": "canonical",
                "href": "/OnDemand/user/Rest/028/describe"
              }
            }
          },
          "links": {
            "self": {
              "rel": "self",
              "href": "/OnDemand/user/Rest/028/versions"
            },
            "canonical": {
              "rel": "canonical",
              "href": "/OnDemand/user/Rest/028/versions"
            },
            "predecessor-version": {
              "rel": "predecessor-version",
              "href": "/OnDemand/user/Rest/latest/versions"
            },
            "current": {
              "rel": "current",
              "href": "/OnDemand/user/Rest/028/versions"
            }
          }
        }
      ],
      "links": {
        "self": {
          "rel": "self",
          "href": "/OnDemand/user/Rest/versions"
        },
        "canonical": {
          "rel": "canonical",
          "href": "/OnDemand/user/Rest/versions"
        },
        "current": {
          "rel": "current",
          "href": "/OnDemand/user/Rest/028/versions"
        }
      }
    }
}
```

Creating Oracle CRM On Demand Resources

The Oracle CRM On Demand REST API supports the ability to create top-level and child resources on the Oracle CRM On Demand Server.

NOTE: The Oracle CRM On Demand REST API supports creating only one resource in each request.

Creating Oracle CRM On Demand Top-Level Resources

You can create Oracle CRM On Demand top-level resources by sending an HTTP POST request to the resource's URL.

The following details are for a request to create an Accounts resource on the Oracle CRM On Demand Server:

■ URL: OnDemand/user/Rest/latest/Accounts

■ HTTP Method: POST

■ Content-Type: application/vnd.oracle.adf.resource+json

■ Request body:

```
{
  "Accounts": [
    {
      "AccountName": "test post",
      "Location": "Hometown",
      "AccountType": "Customer",
      "PublicCompany": true,
      "Region": "West",
      "MarketShare": 3,
      "NumberEmployees": 1,
      "OptimizedCustomNumber0":99
    }
  ]
}
```

The following are the details for the response to a successful request:

■ HTTP Code: 201

■ Content-Type: application/vnd.oracle.adf.resource+json

■ Location: https://<host>/OnDemand/user/Rest/latest/Accounts/1QA2-21SEFX

■ Response body:

```
{
  "Accounts": [
    {
      "Region": "West",
      "PublicCompany": true,
      "OptimizedCustomNumber0": 99,
      "MarketShare": 3,
      "Location": "Hometown",
      "AccountName": "test post",
      "NumberEmployees": 1,
      "AccountType": "Customer",
```

```
    "links":    {
       "self":          {
        "rel": "self",
        "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-21SEFX"
       },
       "canonical":          {
         "rel": "canonical",
         "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-21SEFX"
       },
       "Opportunity":              {
         "rel": "child",
         "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-21SEFX/child/Opportunities"
       }
      }
     }
    ]
}
```

Creating Oracle CRM On Demand Child Resources

You can create Oracle CRM On Demand child resources by sending an HTTP POST request to the resource's URL.

The following details are for a request to create a child Activities resource on the Oracle CRM On Demand Server:

■   URL: https://*<host>*/OnDemand/user/Rest/latest/Accounts/1QA2-22P076/child/Activities

■   HTTP Method: POST

■   Content-Type: application/vnd.oracle.adf.resource+json

■   Request body:

```
{
  "Activities": [
    {
      "Activity": "Task",
      "Subject": "Task1"
    }
  ]
}
```

The following are the details for the response to a successful request:

■   HTTP Code: 201

■   Content-Type: application/vnd.oracle.adf.resource+json

■   Location: https://*<host>*/OnDemand/user/Rest/latest/Accounts/1QA2-22P076/child/Activities/1QA2-22U11G

■   Response body:

```
{
  "Activities": [
    {
      "Activity": "Task",
      "Subject": "Task1",
      "links": {
        "self": {
        "rel": "self",
        "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-22P076/child/Activities/1QA2-22U11G"
        },
```

```
        "canonical": {
          "rel": "canonical",
          "href": "/OnDemand/user/Rest/latest/Activities/1QA2-22U11G"
        },
        "parent": {
          "rel": "parent",
          "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-22P076"
        },
        "CustomObjects15": {
          "rel": "child",
          "href": "/OnDemand/user/Rest/latest/Activities/1QA2-22U11G/child/CustomObjects15"
        }
      }
    }
  ]
}
```

Retrieving Oracle CRM On Demand Resources

The Oracle CRM On Demand REST API supports the ability to retrieve top-level and child resources from the Oracle CRM On Demand Server.

Retrieving Oracle CRM On Demand Top-Level Resources

You can retrieve Oracle CRM On Demand top-level resources by sending an HTTP GET request to the resource's URL.

The following details are for a request to retrieve an Accounts resource on the Oracle CRM On Demand Server:

■ URL: /OnDemand/user/Rest/latest/Accounts/1QA2-21SEFY?fields=AccountName,Location

■ HTTP Method: GET

■ Content-Type: None

■ Request body: None

The following are the details for the response to a successful request:

■ HTTP Code: 200

■ Content-Type: application/vnd.oracle.adf.resource+json

■ Response body:

```
{
  "Accounts": [
    {
      "AccountName": "test get",
      "Location": "HomeTown",
      "links":    {
        "self": {
        "rel": "self",
        "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-21SEFY"
        },
        "canonical": {
          "rel": "canonical",
```

```
        "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-21SEFY"
      }
      "Opportunities": {
        "rel": "child",
        "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-21SEFY/child/Opportunities"
      }
    }
  }
 ]
}
```

Retrieving Oracle CRM On Demand Child Resources

You can retrieve Oracle CRM On Demand child resources by sending an HTTP GET request to the resource's URL.

The following details are for a request to retrieve a child Opportunities resource on the Oracle CRM On Demand Server:

■   URL: https://*<host>*/OnDemand/user/Rest/latest/Accounts/1QA2-LXMA3/child/Opportunities/ 1QA2-22HIFC?fields=OpportunityName

■   HTTP Method: GET

■   Content-Type: None

■   Request body: None

The following are the details for the response to a successful request:

■   HTTP Code: 200

■   Content-Type: application/vnd.oracle.adf.resource+json

■   Location: https://*<host>*/OnDemand/user/Rest/latest/Accounts/ZSXV-2345/child/ Opportunities

■   Response body:

```
{
  "Opportunities": [
    {
      "OpportunityName": "ENAME3",
      "links": {
        "self": {
        "rel": "self",
        "href": "/Accounts/ZSXV-2345/child/Opportunities/ABCD-1234"
        },
        "canonical": {
        "rel": "canonical",
        "href": "/Opportunities/ABCD-1234"
        },
        "parent": {
        "rel": "parent",
        "href": "/Accounts/ZSXV-2345"
        }
        "CustomObjects15": {
        "rel": "child",
        "href": "/OnDemand/user/Rest/latest/Opportunities/ABCD-1234/child/CustomObjects15"
        }
      }
```

```
      }
    ]
}
```

Updating Oracle CRM On Demand Resources

The Oracle CRM On Demand REST API supports the ability to update top-level and child resources on the Oracle CRM On Demand Server.

Updating Oracle CRM On Demand Top-Level Resources

You can update Oracle CRM On Demand top-level resources by sending an HTTP PATCH request to the resource's URL.

The following details are for a request to update an Accounts resource on the Oracle CRM On Demand Server:

■   URL: OnDemand/user/Rest/latest/Accounts/1QA2-21SEFX

■   HTTP Method: PATCH

■   Content-Type: application/vnd.oracle.adf.resource+json

■   Request body:

```
{
  "Accounts": [
    {
      "AccountName": "test put",
      "Location": "Hometown2",
      "AccountType": "Customer",
      "PublicCompany": false,
      "Region": "East",
      "MarketShare": 30,
      "NumberEmployees": 10,
      "OptimizedCustomNumber0": 99
    }
  ]
}
```

The following are the details for the response to a successful request:

■   HTTP Code: 200

■   Content-Type: application/vnd.oracle.adf.resource+json

■   Response body:

```
{
  "Accounts": [
    {
      "Region": "East",
      "PublicCompany": false,
      "OptimizedCustomNumber0": 99,
      "MarketShare": 30,
      "Location": "Hometown2",
      "AccountName": "test put",
      "NumberEmployees": 10,
```

```
      "AccountType": "Customer",
      "links":     {
         "self":          {
         "rel": "self",
         "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-21SEFX"
         },
      "canonical":           {
         "rel": "canonical",
         "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-21SEFX"
         },
       "Opportunities":              {
         "rel": "child",
         "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-21SEFX/child/Opportunities"
         }
      }
    }
  ]
}
```

Updating Oracle CRM On Demand Child Resources

You can update Oracle CRM On Demand child resources by sending an HTTP PATCH request to the resource's URL.

The following details are for a request to update a child Activities resource on the Oracle CRM On Demand Server:

■   URL: https://*<host>*/OnDemand/user/Rest/latest/Accounts/1QA2-22P076/child/Activities/ 1QA2-22U11G

■   HTTP Method: PATCH

■   Content-Type: application/vnd.oracle.adf.resource+json

■   Request body:

```
{
  "Activities": [
   {
      "Subject": "New Task Subject"
   }
  ]
```

The following are the details for the response to a successful request:

■   HTTP Code: 200

■   Content-Type: application/vnd.oracle.adf.resource+json

■   Location: https://*<host>*/OnDemand/user/Rest/latest/Accounts/1QA2-22P076/child/Activities/ 1QA2-22U11G

■   Response body:

```
{
  "Activities": [
    {
      "Subject": "New Task Subject",
      "links": {
        "self": {
        "rel": "self",
        "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-22P076/child/Activities/1QA2-22U11G"
         },
```

```
    "canonical": {
        "rel": "canonical",
        "href": "/OnDemand/user/Rest/latest/Activities/1QA2-22U11G"
    },
    "parent": {
        "rel": "parent",
        "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-22P076"
    },
    "CustomObjects15": {
        "rel": "child",
        "href": "/OnDemand/user/Rest/latest/Activities/1QA2-22U11G/child/CustomObjects15"
        }
      }
    }
  ]
}
```

Deleting Oracle CRM On Demand Resources

The Oracle CRM On Demand REST API supports the ability to delete top-level and child resources on the Oracle CRM On Demand Server.

NOTE: User and Product resources do not support the delete operation.

Deleting Oracle CRM On Demand Top-Level Resources

You can delete Oracle CRM On Demand top-level resources by sending an HTTP DELETE request to the resource's URL.

The following details are for a request to delete an Accounts resource on the Oracle CRM On Demand Server:

■ URL: https://*<host>*/OnDemand/user/Rest/latest/Accounts/1QA2-21UI43

■ HTTP Method: DELETE

■ Content-Type: None

■ Request body: None

The following are the details for the response to a successful request:

■ HTTP Code: 204

■ Content-Type: None

■ Response body: None

Deleting Oracle CRM On Demand Child Resources

You can delete Oracle CRM On Demand child resources by sending an HTTP DELETE request to the resource's URL.

The following details are for a request to delete a child Opportunities resource on the Oracle CRM On Demand Server:

■ URL: https://*<host>*/OnDemand/user/Rest/latest/Accounts/1QA2-LXMA3/child/Opportunities/
1QA2-22HIFC

■ HTTP Method: DELETE

■ Content-Type: None

■ Request body: None

The following are the details for the response to a successful request:

■ HTTP Code: 204

■ Content-Type: None

■ Response body: None

About Collection Resources

REST API collection resources provide access to lists of Oracle CRM On Demand resources. For example, you can use a collection resource to request a list of Accounts. The Oracle CRM On Demand REST API collection resources include Oracle CRM On Demand top-level and child resources. For more information about Oracle CRM On Demand REST API supported resources, see "Oracle CRM On Demand REST API Supported Resources" on page 12.

To acquire a collection resource list, you submit an HTTP GET request to the Oracle CRM On Demand collection resource URL. Oracle CRM On Demand collection resources can be paged, sorted, and queried.

Retrieving Oracle CRM On Demand REST API Collection Lists

The Oracle CRM On Demand REST API supports the ability to retrieve collection lists for top-level and child resources on the Oracle CRM On Demand Server.

Retrieving a Collection Top-Level Resource List

You can retrieve Oracle CRM On Demand collection top-level resources by sending an HTTP GET request to the collection resource's URL.

The following details are for a request to retrieve a list of Accounts resources on the Oracle CRM On Demand Server. The example includes the limit and offset paging parameters to limit the collection resource list. For more information about paging collection resources, see "Paging Collection Resources" on page 58.

■ URL: https://*<host>*/OnDemand/user/Rest/latest/
Accounts?fields=AccountName,Location&limit=2&offset=0

■ HTTP Method: GET

■ Content-Type: None

■ Request body: None

The following are the details for the response to a successful request:

■ HTTP Code: 200

■ Content-Type: application/vnd.oracle.adf.resource+json

■ Response body:

```
{
  "Accounts":      [
    {
      "AccountName": "ACME Computer Parts",
      "Location": "Hometown",
        "links":            {
            "self":              {
            "rel": "self",
            "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-21ATBR"
          },
          "canonical":             {
            "rel": "canonical",
            "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-21ATBR"
          },
          "Opportunity":              {
            "rel": "child",
            "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-21ATBR/child/Opportunities"
          },
        }
      },
    {
      "AccountName": "Big Industry Inc.",
      "Location": "Capital City",
          "links":            {
          "self":              {
            "rel": "self",
            "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-21ATBY"
          },
           "canonical":              {
            "rel": "canonical",
            "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-21ATBY"
          }
          "Opportunities":              {
            "rel": "child",
             "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-21ATBY/child/Opportunities"
          },
        }
      }
    ],
  "links": {"self":      {
    "rel": "self",
    "href": "/OnDemand/user/Rest/latest/Accounts"
  }},
    "_contextInfo":      {
    "limit": 2,
    "offset": 0
  }
}
```

Retrieving a Collection Child Resource List

You can retrieve Oracle CRM On Demand collection child resources by sending an HTTP GET request to the collection resource's URL.

The following details are for a request to retrieve a list of child Opportunities resources on the Oracle CRM On Demand Server:

■ URL: https://*<host>*/OnDemand/user/Rest/latest/Accounts/1QA2-21ATBY/child/ Opportunities?fields=OpportunityName,SalesStage&limit=2&offset=0

■ HTTP Method: GET

■ Content-Type: None

■ Request body: None

The following are the details for the response to a successful request:

■ HTTP Code: 200

■ Content-Type: application/vnd.oracle.adf.resource+json

■ Response body:

```
{
  "Opportunities":     [
    {
      "OpportunityName": "2500 Barebones with Graphics Upgrade",
      "SalesStage": "Qualified Lead",
      "links":           {
        "self":              {
          "rel": "self",
          "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-21ATBY/child/Opportunities/1QA2-21ATCX"
        },
        "canonical":               {
          "rel": "canonical",
          "href": "/OnDemand/user/Rest/latest/Opportunities/1QA2-21ATCX"
        },
        "parent":             {
          "rel": "parent",
          "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-21ATBY"
        }
        "Leads":             {
          "rel": "child",
          "href": "/OnDemand/user/Rest/latest/Opportunities/1QA2-21ATCX/child/Leads"
        }
      }
    },
    {
      "OpportunityName": "insert account -opp by rest",
      "SalesStage": "Qualified Lead",
      "links":           {
        "self":             {
          "rel": "self",
          "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-21ATBY/child/Opportunities/1QA2-21YFHJ"
        },
        "canonical":              {
          "rel": "canonical",
          "href": "/OnDemand/user/Rest/latest/Opportunities/1QA2-21YFHJ"
        },
        "parent":             {
          "rel": "parent",
          "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-21ATBY"
        },
        "Leads":             {
          "rel": "child",
```

```
            "href": "/OnDemand/user/Rest/latest/Opportunities/1QA2-21YFHJ/child/Leads"
          }
        }
      }
    ],
    "links": {"self":     {
        "rel": "self",
        "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-21ATBY/child/Opportunities"
      }
    },
    "_contextInfo":     {
        "limit": 2,
        "offset": 0
      }
}
```

Using the Finder Parameter for Predefined Queries and Customized Lists

Oracle CRM On Demand REST API supports the retrieval of predefined queries and custom list resources by using the finder parameter.

The finder parameter is supported only for top-level objects. Each managed list includes filter criteria, display fields, and a sort field. The fields and orderBy parameters can be used to override the display fields and sort used by the managed list. For more information about sorting collection resources, see "Sorting Collection Resources" on page 57.

You can also use the q parameter along with the finder parameter in the URL to further filter your list of Oracle CRM On Demand resources.

In the example below, the q parameter is used to retrieve PSKDemo02 and A.C. Networks accounts on the Oracle CRM On Demand Server. For more information about using the q parameter to query resource collections, see "Querying a Collection Resource" on page 52.

```
https://<host>/OnDemand/user/Rest/latest/Accounts?q=AccountName='PSKDemo02' OR 'A.
C. Networks';Reference = false&limit=5&offset=0
```

The following details are for a request to retrieve a list of Accounts using the finder parameter on the Oracle CRM On Demand Server:

■ URL: https://<host>/OnDemand/user/Rest/latest/Accounts?finder=My Accounts&limit=5&offset=0

■ HTTP Method: GET

■ Content-Type: None

■ Request body: None

The following are the details for the response to a successful request:

■ HTTP Code: 200

■ Content-Type: application/vnd.oracle.adf.resource+json

■ Response body:

```
{
  "Accounts": [
    {
      "AccountName": "A. C. Networks",
      "Location": "11431",
      "Priority": "",
      "AccountType": "Service Company",
      "Industry": "",
      "Reference": false,
      "Owner": "restuser",
      "links": {
        "self": {
          "rel": "self",
          "href": "/OnDemand/user/Rest/latest/Accounts/1-FDFUZ"
        },
        "canonical": {
          "rel": "canonical",
          "href": "/OnDemand/user/Rest/latest/Accounts/1-FDFUZ"
        },
        "Owner": {
          "rel": "self",
          "href": "/OnDemand/user/Rest/latest/Users/1QA2-22B4TF"
        },
      }
    },
    {
      "AccountName": "PSKDemo02",
      "Location": "",
      "Priority": "",
      "AccountType": "",
      "Industry": "",
      "Reference": false,
      "Owner": "restuser",
      "links": {
        "self": {
          "rel": "self",
          "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-22EWBI"
        },
        "canonical": {
          "rel": "canonical",
          "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-22EWBI"
        },
        "Owner": {
          "rel": "self",
          "href": "/OnDemand/user/Rest/latest/Users/1QA2-22B4TF"
        },
        "AccountNotes": {
          "rel": "child",
          "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-22EWBI/child/AccountNotes"
        },
        "Accounts": {
          "rel": "child",
          "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-22EWBI/child/Accounts"
        },
        "Leads": {
          "rel": "child",
          "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-22EWBI/child/Leads"
        },
        "AccountPartners": {
          "rel": "child",
          "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-22EWBI/child/AccountPartners"
        },
        "Opportunities": {
          "rel": "child",
          "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-22EWBI/child/Opportunities"
        },
        "AccountTeams": {
          "rel": "child",
          "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-22EWBI/child/AccountTeams"
        },
```

```
        "AccountCompetitors": {
            "rel": "child",
            "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-22EWBI/child/AccountCompetitors"
        },
        "ServiceRequests": {
            "rel": "child",
            "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-22EWBI/child/ServiceRequests"
        },
        "Activities": {
            "rel": "child",
            "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-22EWBI/child/Activities"
        },
        "CustomObjects8": {
            "rel": "child",
            "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-22EWBI/child/CustomObjects8"
        },
        "AccountAddresses": {
            "rel": "child",
            "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-22EWBI/child/AccountAddresses"
        }
      }
    }
  }
],
  "links": {
    "self": {
      "rel": "self",
      "href": "/OnDemand/user/Rest/latest/Accounts"
    }
},
  "_contextInfo": {
    "limit": 5,
    "offset": 0
  }
}
```

Querying a Collection Resource

You can search for specific resources in a collection by using query parameters in the URL to specify your search criteria. You can use a combination of different query parameters to filter, page, and sort the query results. Query terms such as AND, OR, LIKE, TRUE, and FALSE, are case insensitive, while all field identifiers and values are case sensitive. For information about special search fields that you can use to avoid the case sensitivity on the regular search fields, see "Special Search Fields" on page 54.

You can query resource collections using the q URL parameter with query expressions to specify search criteria. The maximum supported expression length is 4096 characters.

The following is the query expression syntax:

```
QUERY EXPRESSION = FIELD EXPRESSION [; FIELD EXPRESSION]

[FIELD EXPRESSION] = <Field> <OPERATOR> <VALUE> [ANDOR CLAUSE]

[ANDOR CLAUSE] = <AND/OR> <OPERATOR> <VALUE> [ ANDOR CLAUSE]
```

The following in an example of a query expression:

```
AccountName='PSKDemo02' OR  = 'A. C. Networks'; Reference = false
```

The previous query expression example is comprised of two field expressions and the two expressions are separated with a semi-colon.

```
AccountName="PSKDemo02" OR = "A. C. Networks"

Reference = false
```

The first field expression includes a field (AccountName), an operator (=), a value ("PSKDemo02"), and then an optional ANDOR clause. The ANDOR clause is comprised of either AND or OR (in this example OR), an operator (=), and a value ("A. C. Networks"). Reference is an Account field, where the false value indicates that the account cannot be used as a reference for potential customers or sales representatives to contact.

Supported Query Operators

Table 13 lists the supported query operators that you can use in query expressions.

Table 13.   Supported Query Operators

Operator	Description
=	Equals
>	Greater than
<	Less than
>=	Greater than or equal to
<=	Less than or equal to
AND	The Boolean AND operator
OR	The Boolean OR operator
LIKE	The LIKE query operator

Supported Query Characters

A query expression must not contain null values. Table 14 contains the query characters supported for Oracle CRM On Demand REST API.

Table 14.   Supported Query Characters

Query Character	Description
" " or ' '	The quotation marks are used to define literals. Literals can be enclosed in either single quotation marks or in double quotation marks.
;	The semi-colon is used to separate multiple expressions. It must not be used at the end of an expression, if there are no further expressions.
\	The backslash is used to escape a special character.
*	The asterisk indicates a wildcard character.

Special Search Fields

Some field names are prefixed with CI_ to denote that they are special fields that provide better search functionality. CI_ fields have all upper case values and can be used for searching.

In the example below, AccountName is returned with capitalization:

```
/Rest/latest/Accounts/1QA2-22FKWR?fields=Id,CI_AccountName
```

LOVLanguageMode Querying

The Oracle CRM On Demand REST API supports using the LOVLanguageMode input argument to query the Oracle CRM On Demand Server. The LOVLanguageMode input argument determines whether query processing for picklist fields occurs using language independent codes (LIC) or language dependent codes (LDC). LIC is the default value.

LOVLanguageMode values are specified in the REST API request as a header field. For more information about supported HTTP and Oracle header fields, see "Supported HTTP and Oracle CRM On Demand Header Fields" on page 18.

If LIC is specified in the REST API request header field, then any values specified in the query must be language independent values. These values are used in the processing of the query and any values returned in the response are language independent values that can be used regardless of a user's language. If LDC is specified, then Oracle CRM On Demand converts any values that are specified in the query to LIC values before performing the query, and any values returned in the response are in the user's language.

For example, you have a custom picklist field where the English value is: One. In French, the value is: Un. The language independent value is: 'Option 1'. The following REST API request includes an LOVLanguageMode argument specifying a LIC return value for the custom picklist field:

■ URL: https://*<host>*/OnDemand/user/Rest/latest/Accounts/1QA2-22RT5M?fields=CustomPickList0

■ HTTP Method: GET

■ Content-Type: application/vnd.oracle.adf.resource+json

■ Accept-Language: fr

■ LOVLanguageMode: LIC

■ Request body: None

The following are the details for the response that returns the LIC value for the custom picklist:

■ HTTP Code: 200

■ Content-Type: application/vnd.oracle.adf.resource+json

■ Response body:

```
{
  "Accounts": [
  {
    "CustomPickList0": "Option1",
  ]
}
```

The following REST API request includes an LOVLanguageMode argument specifying a French LDC return value for the custom picklist:

■ URL: https://*<host>*/OnDemand/user/Rest/latest/Accounts/1QA2-22RT5M?fields=CustomPickList0

■ HTTP Method: GET

■ Content-Type: application/vnd.oracle.adf.resource+json

■ Accept-Language: fr

■ LOVLanguageMode: LDC

■ Request body: None

The following are the details for the response that returns a LDC value for the custom picklist:

■ HTTP Code: 200

■ Content-Type: application/vnd.oracle.adf.resource+json

■ Response body:

```
{
  "Accounts": [
  {
    "CustomPickList0": "Un",
  ]
}
```

Sample Query Request and Response

The following is a sample query REST API request and response. In this example, this query searches for an Accounts resource where the CustomCurrency0 field has a 10000.50 value.

■   URL: URL https://*<host>*/OnDemand/user/Rest/latest/
    Accounts?fields=AccountName,CustomCurrency0&q=CustomCurrency0=10000.50

■   Response body:

```
{
  "Account": [
    {
      "AccountName": "test",
      "CustomCurrency0": {
        "type": "currency",
        "value": "10000.50",
        "Modifier": "USD"
      },
      "links": {
        "self": {
          "rel": "self",
          "href": "/OnDemand/user/Rest/Account/1QA2-22D3XZ"
        },
        "canonical": {
          "rel": "canonical",
          "href": "/OnDemand/user/Rest/Account/1QA2-22D3XZ"
        },
      }
    }
  ],
  "links": {
    "self": {
      "rel": "self",
      "href": "/OnDemand/user/Rest/Account"
    }
  },
  "_contextInfo": {
    "limit": 100,
    "offset": 0
  }
}
```

REST API Query Expression Parser Errors

REST API query expression parser errors are returned in the REST API error response when Oracle CRM On Demand is unable to parse a query expression. For more information about Oracle CRM On Demand REST API error response format, see "Error Response Format" on page 23.

Table 15 contains REST API query expression parser errors.

Table 15.   REST API Query Expression Parser Errors

Error	Error Description
REST_QUERY_PARSER_UNSUPPORTED_CHAR	Indicates an unsupported character.
REST_QUERY_PARSER_FLD_NOT_SEARCHABLE	Indicates that a field is not searchable.
REST_QUERY_PARSER_INVALID_FIELD	Indicates an invalid field name.
REST_QUERY_PARSER_INVALID_OPERATOR	Indicates an invalid operator.
REST_QUERY_PARSER_OPERATOR_NOT_FOUND	Indicates that an operator was not found.
REST_QUERY_PARSER_INVALID_STRING	Indicates an invalid string literal.
REST_QUERY_PARSER_UNCLOSED_STRING	Indicates an unclosed string literal.
REST_QUERY_PARSER_UNSUPPORTED_ESCAPE_SEQ	Indicates an unsupported special character escape sequence.
REST_QUERY_PARSER_EXPRESSION_TOO_LONG	Indicates an expression is too long to parse.
REST_QUERY_PARSER_VALUE_NOT_FOUND	Indicates that the value was not found.
REST_QUERY_PARSER_OPERATOR_EXPECTED	Indicates that an operator, such as AND or OR, was expected.
REST_QUERY_PARSER_SEMICOLON_EXPECTED	Indicates that a delimiter semi-colon is expected.
REST_QUERY_PARSER_INVALID_RECORD	Indicates an invalid record type.
REST_QUERY_PARSER_AT_POSITION	Indicates where the error occurred.
REST_QUERY_PARSER_INVALID_FLD_NAME	Indicates an invalid field name.
REST_QUERY_PARSER_INVALID_BOOL_VAL	Indicates an invalid Boolean value.
REST_QUERY_PARSER_UNSUPPORTED_WILDCARD_CHAR	Indicates an invalid wildcard value. This error occurs when a wildcard value is used with an operator other than LIKE.

Sorting Collection Resources

When you list Oracle CRM On Demand collection resources, you can sort the collections list using the orderBy URL parameter. The orderBy query parameter value contains the field name, followed by either asc (ascending) or desc (descending) to specify whether the sort results return in either ascending or descending order. If there are multiple field names specified for the orderBy parameter value, then a comma is used to separate the field names.

For example:

```
https://<host>/user/OnDemand/Rest/latest/
Accounts?orderBy=AccountName:asc,AccountLocation:asc&limit=100&offset=0&fields=Row
Id,AccountName,AccountLocation
```

Paging Collection Resources

You can use paging URL parameters to limit large collection resource lists by breaking up lists into one or more pages of data. The Oracle CRM On Demand REST API supports paging for Oracle CRM On Demand top-level and child collection resources. For more information about Oracle CRM On Demand REST API supported top-level and child resources, see "Oracle CRM On Demand REST API Supported Resources" on page 12.

The following are optional request query parameters that you can specify to page through query results:

■ **offset.** Specifies how many results to skip for the first returned result. The default is 0.

■ **limit.** The maximum number of collection list items returned in a single request. The minimum value is 1, and the maximum value is 100. The default value is 100.

In the example below, the offset and limit parameters in the URL specify that the first 100 resources are returned in the query.

```
https://<host>/user/OnDemand/Rest/latest/
Accounts?orderBy=AccountName:asc,AccountLocation:asc&limit=100&offset=0&fields=Row
Id,AccountName,AccountLocation
```

All paged responses contain a lastpage attribute indicating whether or not the last value in the paging collection resources query set has been returned. In the example below, a paged response has the lastpage attribute set to true, indicating that the last value in the paging collection resources query set has been returned.

```
"_contextInfo": {
  "limit": 100,
  "offset": 0,
  "lastpage" : true
}
```

Retrieving Metadata about Oracle CRM On Demand Resources

You can use the describe request to return metadata information about Oracle CRM On Demand resources. The metadata information includes additional information about fields, for example, which fields are read-only and which fields are required.

The describe request can be used to show metadata information about:

■ **All resources.** You can use the describe request to show more information about all supported Oracle CRM On Demand resources, including the actions (create, retrieve, update, and delete) supported for the resource, and links to retrieve the parent and child resources.

An example URL to show all resources:

```
https://<host>/OnDemand/user/Rest/latest/describe
```

For more information and a code sample using the describe request to show all resources, see "Retrieving Metadata for All Oracle CRM On Demand Resources" on page 63.

■ **A resource.** You can use the describe request to show more information about a particular resource, such as Accounts, including information about attachments and custom content.

An example URL to show an Accounts resource:

https://<host>/OnDemand/user/Rest/latest/Accounts/1QA2-22789P/describe

For more information and a code sample using the describe request to show a specific resource, see "Retrieving Metadata for a Specific Oracle CRM On Demand Resource" on page 70.

■ **A collection.** You can use the describe request to show more information about a collection, such as an accounts collection, including the actions (create, retrieve, update, and delete) supported for the resource, and links to retrieve the parent and child resources. The describe request does not return information about attachments or custom content.

An example URL to show an Accounts collection:

https://<host>/OnDemand/user/Rest/latest/Accounts/describe

For more information and a code sample using the describe request to show a collection, see "Retrieving Metadata for an Oracle CRM On Demand Collection" on page 71.

■ **A child resource:** You can use the describe request to show more information about a child resource.

An example URL to show an Account Notes child resource:

https://<host>/OnDemand/user/Rest/latest/Accounts/1QA2-213442/AccountNotes/describe

For more information and a code sample using the describe request to show a child resource, see "Retrieving Metadata for an Oracle CRM On Demand Child Resource" on page 72.

Describe Fields Parameters

By default, the describe request returns all field values in the REST API response. You can use the fields URL parameter to limit your response output. You can use more than one fields URL parameter as long as values are separated with commas.

You can also use paging parameters with fields URL parameters to manage REST API response output. For more information about paging parameters, see "Paging Collection Resources" on page 58.

Table 16 contains the fields URL parameter values that you can use with describe requests.

Table 16.   Fields URL Parameter Values for Describe Requests

Fields URL Parameter Values	Description	URL Example
attributes	Returns additional information about field attributes, for example, whether the field is read-only or required or if the field has a custom integration tag.	OnDemand/user/Rest/latest/ describe?**fields=attributes**
collection.finders	Returns all the finders. Finders refers to managed lists or predefined queries.	OnDemand/user/Rest/latest/ describe?**fields=collection.finders**
collection.links	Returns the collection links.	OnDemand/user/Rest/latest/ describe?**fields=collection.links**
collection.actions	Returns available actions, such as, GET, POST, PUT, and DELETE.	OnDemand/user/Rest/latest/ describe?**fields=collection.actions**
item.links	Returns item links.	OnDemand/user/Rest/latest/ describe?**fields=item.links**
item.actions	Returns the item actions.	OnDemand/user/Rest/latest/ describe?**fields=item.actions**
children.attributes	Returns the children attributes.	OnDemand/user/Rest/latest/ describe?**fields=children.attributes**
children.collection	Returns the children collections.	OnDemand/user/Rest/latest/ describe?**fields=children.collection**
children.item	Returns the children items.	OnDemand/user/Rest/latest/ describe?**fields=children.item**
children.links	Returns the children links.	OnDemand/user/Rest/latest/ describe?**fields=childrenlinks**
links	Returns all the links.	OnDemand/user/Rest/latest/ describe?**fields=links**

Describe Field Attributes

Table 17 contains the describe field attributes returned in the REST API response.

Table 17.   Describe Field Attributes

Attribute	Description
name	Indicates the REST integration tag name.
type	Indicates the field type.
updatable	Indicates whether the field is read-only.
mandatory	Indicates whether the field is required and must contain a value.
queryable	Indicates whether the field is searchable.
title	Indicates the display name.
controlType	Indicates how users select the value for a filter. The choices are to select the value from a calendar, a drop-down list, or a multiple list of values, or type it into an edit box.
maxLength	Indicates the maximum length of the field.
currencyCode	Indicates the currency code when applicable.
markfortranslation	Indicates whether an administrator needs a translator to enter the field's title in another language.
copyenabled	Indicates which fields can be copied using the Copy button.
optimized	Indicates if the field is optimized to improve performance during searches and when sorting lists.

Table 17.   Describe Field Attributes

Attribute	Description
postdefault	Indicates the field is not prepopulated with the specified value when a user creates a new record, but the field takes the specified default value when the record is saved, if: ■ The user leaves the field blank. ■ The field is hidden from the layout. ■ A value has not been supplied by the integration tools.
fieldvalidation	Indicates whether field validation is performed for a field to ensure that it has a particular value.
fieldvalidationerrormessage	The field validation error message.
casesensitivity	Indicates whether the field is case sensitive. The default value is false.
htmlfieldtag	The name of the HTML field tag.
customwsintegrationtag	The name of the custom integration tag.

Describe Examples

This topic contains examples of using the describe request to return metadata information about supported Oracle CRM On Demand resources. For information about supported Oracle CRM On Demand resources, see "Oracle CRM On Demand REST API Supported Resources" on page 12.

This topic includes the following examples:

■ "Retrieving Metadata for All Oracle CRM On Demand Resources" on page 63

■ "Retrieving Metadata for a Specific Oracle CRM On Demand Resource" on page 70

■ "Retrieving Metadata for an Oracle CRM On Demand Collection" on page 71

■ "Retrieving Metadata for an Oracle CRM On Demand Child Resource" on page 72

Retrieving Metadata for All Oracle CRM On Demand Resources

The following details are for a request to retrieve metadata information for all resources. The example shows accounts along with some of the child resources for accounts such as account addresses, account books, and vehicles. This example uses the fields URL parameter to retrieve links metadata:

■ URL: https://*<host>*/OnDemand/user/Rest/latest/
describe?fields=collection.links,children.links,item.links,links&offset=0&limit=1

   NOTE: The limit field specifies the maximum number of resource items that are returned. You can set the limit field to a maximum value of 100. The default value is 2.

■ HTTP Method: GET

■ Content-Type: None

■ Request body: None

For more information about the fields URL parameter, see "Describe Fields Parameters" on page 59.

The following are the details for the response to a successful request:

■ HTTP Code: 200

■ Content-Type: application/vnd.oracle.adf.resource+json

■ Response body:

```
{
    "Resources": {
        "Accounts": {
            "title": "Account",
            "titlePlural": "Accounts",
            "CustomObjectTagName": "Accounts",
            "collection": {
                "links": {
                    "self": {
                        "rel": "self",
                        "href": "/OnDemand/user/Rest/latest/Accounts/"
                        "kind": "collection"
                    },
                    "canonical": {
                        "rel": "canonical",
                        "href": "/OnDemand/user/Rest/latest/Accounts/"
                        "kind": "collection"
                    }
                }
            },
            "item": {
                "links": {
                    "self": {
                        "rel": "self",
                        "href": "/OnDemand/user/Rest/latest/Accounts/{id}"
                        "kind": "item"
                    },
                    "canonical": {
                        "rel": "canonical",
                        "href": "/OnDemand/user/Rest/latest/Accounts/{id}"
                        "kind": "item"
                    },
                    "AccountAddresses": {
                        "rel": "child",
                        "href": "/OnDemand/user/Rest/latest/Accounts/{id}/child/AccountAddresses",
                        "kind": "collection",
                        "cardinality": {
```

```
                               "value": "1 to *",
                               "sourceAttributes": "Id",
                               "destinationAttributes": "AccountId"
                           }
                       },
                       "AccountBooks": {
                           "rel": "child",
                           "href": "/OnDemand/user/Rest/latest/Accounts/{id}/child/AccountBooks",
                           "kind": "collection",
                           "cardinality": {
                               "value": "1 to *",
                               "sourceAttributes": "Id",
                               "destinationAttributes": "ObjectId"
                           }
                       }
                       .
                       .
                       .
                       "Vehicles": {
                           "rel": "child",
                           "href": "/OnDemand/user/Rest/latest/Accounts/{id}/child/Vehicles",
                           "kind": "collection",
                           "cardinality": {
                               "value": "1 to *",
                               "sourceAttributes": "Id",
                               "destinationAttributes": "AccountId"
                           }
                       }
                   }
               },
               "children": {
                   "AccountAddresses": {
                       "title": "Account Address",
                       "titlePlural": "Account Addresses",
                       "CustomObjectTagName": "AccountAddresses",
                       "links": {
                           "describe": {
                               "rel": "describe",
                               "href": "/OnDemand/user/Rest/latest/Accounts/child/AccountAddresses/describe",
                               "kind": "describe"
                           },
                           "canonicalDescribe": {
                               "rel": "canonicalDescribe",
                               "href": "/OnDemand/user/Rest/latest/Accounts/child/AccountAddresses/describe",
                               "kind": "describe"
                           }
                       }
                   },
                   "AccountBooks": {
                       "title": "Account Book",
                       "titlePlural": "Account Books",
                       "CustomObjectTagName": "AccountBooks",
                       "links": {
                           "describe": {
                               "rel": "describe",
                               "href": "/OnDemand/user/Rest/latest/Accounts/child/AccountBooks/describe",
                               "kind": "describe"
                           },
                           "canonicalDescribe": {
                               "rel": "canonicalDescribe",
                               "href": "/OnDemand/user/Rest/latest/Accounts/child/AccountBooks/describe",
                               "kind": "describe"
                           }
                       }
                   },
                   .
                   .
                   .
                   "Vehicles": {
                       "title": "Vehicle",
```

```
                    "titlePlural": "Vehicles",
                    "CustomObjectTagName": "Vehicles",
                    "links": {
                        "describe": {
                            "rel": "describe",
                            "href": "/OnDemand/user/Rest/latest/Accounts/child/Vehicles/describe",
                            "kind": "describe"
                        },
                        "canonicalDescribe": {
                            "rel": "canonicalDescribe",
                            "href": "/OnDemand/user/Rest/latest/Vehicles/describe",
                            "kind": "describe"
                        }
                    }
                }
            }
        },
        "links": {
            "describe": {
                "rel": "describe",
                "href": "/OnDemand/user/Rest/latest/Accounts/describe"
                "kind": "describe"
            },
            "canonicalDescribe": {
                "rel": "canonicalDescribe",
                "href": "/OnDemand/user/Rest/latest/Accounts/describe"
                "kind": "describe"
            }
        }
    }
},
    "_contextInfo": {
        "limit": 1,
        "offset": 0,
        "lastpage": false
    }
}
```

Retrieving All Top-Level Resources

The following details are for a request to retrieve metadata information for all top-level resources for your company. The example uses the fields URL parameter to retrieve links metadata:

■ URL: https://<*host*>/OnDemand/user/Rest/latest/describe?fields=links&offset=0&limit=100

   NOTE: The limit field specifies the maximum number of resource items that are returned. You can set the limit field to a maximum value of 100. The default value is 2.

■ HTTP Method: GET

■ Content-Type: None

■ Request body: None

For more information about the fields URL parameter, see "Describe Fields Parameters" on page 59.

The following are the details for the response to a successful request:

■ HTTP Code: 200

■ Content-Type: application/vnd.oracle.adf.resource+json

■ Response body:

```
{
  "Resources": {
    "Accounts": {
```

```
          "title": "Account",
          "titlePlural": "Accounts",
          "CustomObjectTagName": "Accounts",
          "links": {
            "describe": {
              "rel": "describe",
              "href": "/OnDemand/user/Rest/latest/Accounts/describe",
              "kind": "describe"
            },
            "canonicalDescribe": {
              "rel": "canonicalDescribe",
              "href": "/OnDemand/user/Rest/latest/Accounts/describe",
              "kind": "describe"
            }
          }
        },
        "AccreditationRequests": {
          "title": "Accreditation Request",
          "titlePlural": "Accreditation Requests",
          "CustomObjectTagName": "AccreditationRequests",
          "links": {
            "describe": {
              "rel": "describe",
              "href": "/OnDemand/user/Rest/latest/AccreditationRequests/describe",
              "kind": "describe"
            },
            "canonicalDescribe": {
              "rel": "canonicalDescribe",
              "href": "/OnDemand/user/Rest/latest/AccreditationRequests/describe",
              "kind": "describe"
            }
          }
        },
        .
        .
        .
        "Vehicles": {
          "title": "Vehicle",
          "titlePlural": "Vehicles",
          "CustomObjectTagName": "Vehicles",
          "links": {
            "describe": {
              "rel": "describe",
              "href": "/OnDemand/user/Rest/latest/Vehicles/describe",
              "kind": "describe"
            },
            "canonicalDescribe": {
              "rel": "canonicalDescribe",
              "href": "/OnDemand/user/Rest/latest/Vehicles/describe",
              "kind": "describe"
            }
          }
        }
      },
      "_contextInfo": {
        "limit": 100,
        "offset": 0,
        "lastpage": true
      }
    }
```

Retrieving All Child Resources

The following details are for a request to retrieve metadata information all child resources for your
company. The example shows some of the child resources for accounts such as account addresses,
account books, and some of the child resources for vehicles, such as custom object 10, custom object
11, and vehicle books.The example uses the fields URL parameter to retrieve links metadata:

■ URL: https://<*host*>/OnDemand/user/Rest/latest/describe?fields=children.links&limit=100

   NOTE: The limit field specifies the maximum number of resource items that are returned. You can set the limit field to a maximum value of 100. The default value is 2.

■ HTTP Method: GET

■ Content-Type: None

■ Request body: None

For more information about the fields URL parameter, see .

The following are the details for the response to a successful request:

■ HTTP Code: 200

■ Content-Type: application/vnd.oracle.adf.resource+json

■ Response body:

```
{
  "Resources": {
    "Accounts": {
    "title": "Account",
    "titlePlural": "Accounts",
    "CustomObjectTagName": "Accounts",
    "children": {
      "AccountAddresses": {
        "title": "Account Address",
        "titlePlural": "Account Addresses",
        "CustomObjectTagName": "AccountAddresses",
        "links": {
          "describe": {
            "rel": "describe",
            "href": "/OnDemand/user/Rest/latest/Accounts/child/AccountAddresses/describe",
            "kind": "describe"
          },
          "canonicalDescribe": {
            "rel": "canonicalDescribe",
            "href": "/OnDemand/user/Rest/latest/Accounts/child/AccountAddresses/describe",
            "kind": "describe"
          }
        }
      },
      "AccountBooks": {
        "title": "Account Book",
        "titlePlural": "Account Books",
        "CustomObjectTagName": "AccountBooks",
        "links": {
          "describe": {
            "rel": "describe",
            "href": "/OnDemand/user/Rest/latest/Accounts/child/AccountBooks/describe",
            "kind": "describe"
          },
          "canonicalDescribe": {
            "rel": "canonicalDescribe",
            "href": "/OnDemand/user/Rest/latest/Accounts/child/AccountBooks/describe",
            "kind": "describe"
          }
        }
      },
      .
      .
      .
    "Vehicles": {
      "title": "Vehicle",
      "titlePlural": "Vehicles",
```

```
     "CustomObjectTagName": "Vehicles",
     "children": {
       "CustomObjects10": {
         "title": "Custom Object 10",
         "titlePlural": "Custom Objects 10",
         "CustomObjectTagName": "CustomObjects10",
         "links": {
           "describe": {
             "rel": "describe",
             "href": "/OnDemand/user/Rest/latest/Vehicles/child/CustomObjects10/describe",
             "kind": "describe"
           },
           "canonicalDescribe": {
             "rel": "canonicalDescribe",
             "href": "/OnDemand/user/Rest/latest/CustomObjects10/describe",
             "kind": "describe"
           }
         }
       },
       "CustomObjects11": {
         "title": "Custom Object 11",
         "titlePlural": "Custom Objects 11",
         "CustomObjectTagName": "CustomObjects11",
         "links": {
           "describe": {
             "rel": "describe",
             "href": "/OnDemand/user/Rest/latest/Vehicles/child/CustomObjects11/describe",
             "kind": "describe"
           },
           "canonicalDescribe": {
             "rel": "canonicalDescribe",
             "href": "/OnDemand/user/Rest/latest/CustomObjects11/describe",
             "kind": "describe"
           }
         }
       },
       .
       .
       .
       .
       "VehicleBooks": {
         "title": "Vehicle Book",
         "titlePlural": "Vehicle Books",
         "CustomObjectTagName": "VehicleBooks",
         "links": {
           "describe": {
             "rel": "describe",
             "href": "/OnDemand/user/Rest/latest/Vehicles/child/VehicleBooks/describe",
             "kind": "describe"
           },
           "canonicalDescribe": {
             "rel": "canonicalDescribe",
             "href": "/OnDemand/user/Rest/latest/Vehicles/child/VehicleBooks/describe",
              "kind": "describe"
           }
         }
       }
     }
   }
 },
 "_contextInfo": {
   "limit": 100,
   "offset": 0,
   "lastpage": true
 }
}
```

Retrieving Child Resources for a Top-Level Resource

The following details are for a request to retrieve metadata information for a given top-level resource object, for example, Business Plan. The example shows some of the child resources for a business plan such as accreditation requests, activities, and plan opportunities. The example uses the fields URL parameter to retrieve links metadata:

■ URL: https://<*host*>/OnDemand/user/Rest/latest/BusinessPlans/describe?fields=children.links

  NOTE: The limit field specifies the maximum number of resource items that are returned. You can set the limit field to a maximum value of 100. The default value is 2.

■ HTTP Method: GET

■ Content-Type: None

■ Request body: None

For more information about the fields URL parameter, see "Describe Fields Parameters" on page 59.

The following are the details for the response to a successful request:

■ HTTP Code: 200

■ Content-Type: application/vnd.oracle.adf.resource+json

■ Response body:

```
{
  "Resources": {
    "BusinessPlans": {
      "title": "Business Plan",
      "titlePlural": "Business Plans",
      "CustomObjectTagName": "BusinessPlans",
      "children": {
        "AccreditationRequests": {
          "title": "Accreditation Request",
          "titlePlural": "Accreditation Requests",
          "CustomObjectTagName": "AccreditationRequests",
          "links": {
            "describe": {
              "rel": "describe",
              "href": "/OnDemand/user/Rest/latest/BusinessPlans/child/AccreditationRequests/describe",
              "kind": "describe"
            },
            "canonicalDescribe": {
              "rel": "canonicalDescribe",
              "href": "/OnDemand/user/Rest/latest/AccreditationRequests/describe",
              "kind": "describe"
            }
          }
        },
        "Activities": {
          "title": "Activity",
          "titlePlural": "Activities",
          "CustomObjectTagName": "Activities",
          "links": {
            "describe": {
              "rel": "describe",
              "href": "/OnDemand/user/Rest/latest/BusinessPlans/child/Activities/describe",
              "kind": "describe"
            },
            "canonicalDescribe": {
              "rel": "canonicalDescribe",
              "href": "/OnDemand/user/Rest/latest/Activities/describe",
              "kind": "describe"
            }
```

```
        }
      },
      .
      .
      .
      "PlanOpportunities": {
        "title": "Plan Opportunity",
        "titlePlural": "Plan Opportunities",
        "CustomObjectTagName": "PlanOpportunities",
        "links": {
          "describe": {
            "rel": "describe",
            "href": "/OnDemand/user/Rest/latest/BusinessPlans/child/PlanOpportunities/describe",
            "kind": "describe"
          },
          "canonicalDescribe": {
            "rel": "canonicalDescribe",
            "href": "/OnDemand/user/Rest/latest/PlanOpportunities/describe",
            "kind": "describe"
          }
        }
      }
    }
  },
  "_contextInfo": {
    "limit": 1,
    "offset": 0,
    "lastpage": true
  }
}
```

Retrieving Metadata for a Specific Oracle CRM On Demand Resource

The following details are for a request to retrieve metadata information for an accounts resource. This example uses the fields URL parameter to retrieve attribute values for the resource and shows metadata for only two of the many fields for account:

■ URL: https://*<host>*/OnDemand/user/Rest/latest/Accounts/ describe?fields=attributes&offset=0&limit=1

■ HTTP Method: GET

■ Content-Type: None

■ Request body: None

For more information about describe attributes, see "Describe Field Attributes" on page 61.

The following are the details for the response to a successful request:

■ HTTP Code: 200

■ Content-Type: application/vnd.oracle.adf.resource+json

■ Response body:

```
{
  "Resources": {
    "Accounts": {
      "title": "Account",
      "titlePlural": "Accounts",
      "CustomObjectTagName": "Accounts",
```

```
            "attributes": [
            {
                "name": "FuriganaName", // default tag name
                "type": "string", // field type
                "updatable": true, // readonly = false
                "mandatory": false, // required = true
                "queryable": true, // searchable
                "title": "Furigana Name", // display name
                "maxLength": 100,
                "markfortranslation": false,
                "copyenabled": true,
                "optimized": false,
                "postdefault": false,
                "casesensitivity": false,
                "htmlfieldtag": "Furigana Name",
                "customwsintegrationtag": "FuriganaName"
            },
            {
                "name": "PrimaryGroup",
                "type": "string",
                "updatable": false,
                "mandatory": false,
                "queryable": true,
                "title": "Primary Group",
                "maxLength": 50,
                "markfortranslation": false,
                "copyenabled": false,
                "optimized": false,
                "postdefault": false,
                "casesensitivity": false,
                "htmlfieldtag": "Owner Group Name",
                "customwsintegrationtag": "PrimaryGroup"
            }
            ]
        }
    },
    "_contextInfo": {
        "limit": 1,
        "offset": 0,
        "lastpage": false
    }
}
```

Retrieving Metadata for an Oracle CRM On Demand Collection

The following details are for a request to retrieve metadata information about an accounts collection, including the account actions supported and links to parent and child resources:

■ URL: https://*<host>*/OnDemand/user/Rest/latest/Accounts/
describe?fields=collection.actions,links

■ HTTP Method: GET

■ Content-Type: None

■ Request body: None

The following are the details for the response to a successful request:

■ HTTP Code: 200

■ Content-Type: application/vnd.oracle.adf.resource+json

■ Response body:

```
{"Resources":
   {"Accounts":
     {
       "title":"MyAccount",
       "titlePlural":"MyAccounts",
       "CustomObjectTagName":"Accounts","collection":
     {
       "actions":[
         {
           "name":"get",
           "method":"GET",
           "responseType":["application/vnd.oracle.adf.resource+json"]},
         {
           "name":"create",
           "method":"POST",
           "responseType":["application/vnd.oracle.adf.resource+json"],
           "requestType":["application/vnd.oracle.adf.resource+json"]
         }
       ]
     },
     "links":
     {
       "describe":
       {
         "rel":"describe",
         "href":"/OnDemand/user/Rest/latest/Accounts/describe"},
         "canonicalDescribe":
       {
         "rel":"canonicalDescribe",
         "href":"/OnDemand/user/Rest/latest/Accounts/describe"}
       }
     }
   },
   "_contextInfo":{
     "limit":1,
     "offset":0,
     "lastpage":true}
}
```

Retrieving Metadata for an Oracle CRM On Demand Child Resource

The following details are for a request to retrieve metadata information about an Account Notes child resource:

■ URL: https://*<host>*/OnDemand/user/Rest/latest/Accounts/1QA2-22789P/child/ AccountNotes/describe

■ HTTP Method: GET

■ Content-Type: None

■ Request body: None

The following are the details for the response to a successful request:

■ HTTP Code: 200

■ Content-Type: application/vnd.oracle.adf.resource+json

■ Response body:

```
{"Resources":{"AccountNotes":
   {"title":"Account Note",
    "titlePlural":"Account Notes",
    "CustomObjectTagName":"AccountNotes",
    "attributes":[
```

```
{
 "name": "AccountId",
 "type": "string",
 "updatable": true,
 "mandatory": true,
 "queryable": true,
 "title": "MyAccount Id",
 "maxLength": 15,
 "markfortranslation": false,
 "copyenabled": false,
 "optimized": false,
 "postdefault": false,
 "casesensitivity": false,
 "htmlfieldtag": "Account Id",
 "wscustomintegrationtag": "AccountId"},
{
 "name": "Description",
 "type": "string",
 "updatable": true,
 "mandatory": false,
 "queryable": true,
 "title": "Note",
 "maxLength": 16350,
 "markfortranslation": false,
 "copyenabled": true,
 "optimized": false,
 "postdefault": false,
 "casesensitivity": false,
 "htmlfieldtag": "Note",
 "wscustomintegrationtag": "Description"},
{
 "name": "ExternalSystemId",
 "type": "string",
 "updatable": true,
 "mandatory": false,
 "queryable": true,
 "title": "ExternalUniqueID",
 "maxLength": 30,
 "markfortranslation": false,
 "copyenabled": true,
 "optimized": false,
 "postdefault": false,
 "casesensitivity": false,
 "htmlfieldtag": "External System Id",
 "wscustomintegrationtag": "ExternalSystemId"},
{
 "name": "Id",
 "type": "string",
 "updatable": false,
 "mandatory": true,
 "queryable": true,
 "title": "RowId",
 "maxLength": 15,
 "markfortranslation": false,
 "copyenabled": false,
 "optimized": false,
 "postdefault": false,
 "casesensitivity": false,
 "htmlfieldtag": "Id",
 "wscustomintegrationtag": "Id"},
{
 "name": "Subject",
 "type": "string",
 "updatable": true,
 "mandatory": true,
 "queryable": true,
 "title": "Subject",
 "maxLength": 150,
 "markfortranslation": false,
 "copyenabled": true,
```

```
                "optimized": false,
                "postdefault": false,
                "casesensitivity": false,
                "htmlfieldtag": "Note Type",
                "wscustomintegrationtag": "Subject"}],
                "item":
                   {
                   "links": {
                      "self": {
                         "rel": "self",
                         "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-22789P/child/AccountNotes/{id}"},
                      "canonical": {
                         "rel": "canonical",
                         "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-22789P/child/AccountNotes/{id}"}},
                   "actions": [{
                      "name": "get",
                      "method": "GET",
                      "responseType": ["application/vnd.oracle.adf.resource+json"]},
                      {
                         "name": "update",
                         "method": "PATCH",
                         "responseType": ["application/vnd.oracle.adf.resource+json"],
                         "requestType": ["application/vnd.oracle.adf.resource+json"]},
                      {
                         "name": "delete",
                         "method": "DELETE"}]
                   },
                "links": {
                   "describe": {
                      "rel": "describe",
                      "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-22789P/child/AccountNotes/describe"},
                      "canonicalDescribe": {
                         "rel": "canonicalDescribe",
                         "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-22789P/child/AccountNotes/describe"}
                   }
                }
             },
          "_contextInfo":
          {
          "limit": 1,
          "offset": 0,
          "lastpage": true}
}
```

Retrieving Only Resource Field Values Using the onlyData Parameter

You can use the onlyData REST API request parameter with an HTTP GET request to retrieve only field values for Oracle CRM On Demand REST API resources and collections. The onlyData response excludes links.

The following details are for a request to retrieve field value information about an Account resource:

■ URL: https://*<host>*/OnDemand/user/Rest/028/Accounts/1QA2-21ATBR?onlyData=true

■ HTTP Method: GET

■ Content-Type: None

■ Request body: None

The following are the details for the response to a successful request:

■ HTTP Code: 200

■ Content-Type: application/vnd.oracle.adf.resource+json

■ Response body:

```
{
  "Accounts":[{
    "Id":"1QA2-21ATBR"}
  ]
}
```

The following details are for a request to retrieve field value information about an Accounts collection:

■ URL: https://*<host>*/OnDemand/user/Rest/028/Accounts?onlyData=true

■ HTTP Method: GET

■ Content-Type: None

■ Request body: None

The following are the details for the response to a successful request:

■ HTTP Code: 200

■ Content-Type: application/vnd.oracle.adf.resource+json

■ Response body:

```
{
  "Accounts":[{
    "Id":"1QA2-21ATBR"},{
    "Id":"1QA2-21ATBY"},{
    "Id":"1QA2-21AWXV"},{
    "Id":"1QA2-21AWY3"},{
    "Id":"1QA2-21RR8P"},{
    "Id":"1QA2-21RR8R"},{
    "Id":"1QA2-21UP19"},{
    "Id":"1QA2-21USBV"},{
    "Id":"1QA2-22789P"},{
    "Id":"1QA2-227E7M"},{
    "Id":"1QA2-227J34"},{
    "Id":"1QA2-227JBS"},{
    "Id":"1QA2-227JBT"},{
    "Id":"1QA2-227JBV"},{
    "Id":"1QA2-227Q47"},{
    "Id":"1QA2-229J2J"},{
    "Id":"1QA2-22EH7L"},{
    "Id":"1QA2-22Y0V1"}],
  "_contextInfo":{
    "limit":100,
    "offset":0,
    "lastpage":true
  }
}
```

Working with Resource Attachments

You can use the REST API enclosure URL keyword to add, retrieve, update, and remove attachment information for Custom Objects 1-40 resources.

NOTE: Only Custom Objects 1-40 are supported for attachments as a field.

Adding or Updating an Attachment

You can add or update an Oracle CRM On Demand resource attachment with an attachment specified in the request by sending an HTTP PUT request to the resource's URL.

NOTE: The HTTP PUT method is only supported for Add and Update REST API operations for enclosure attachments. The request and response attachment data are in Base64 Encoding.

The following details are for a request to add or update an attachment on the Oracle CRM On Demand Server:

■ URL: https://*<host>*/OnDemand/user/Rest/latest/CustomObjects8/1QA2-1S4YSD/enclosure/
Attachment

■ HTTP Method: PUT

■ Content-Type: json

■ Request body:

```
{"CustomObjects8": [
    {
        "Attachment": "Q3JpY2tldCBpcyBhIGJhdC1hbmQtYmFsbCBnYW1lIHBsYXIlIZCBiZXR3ZWVuIHR3byBOZWFtcyBvZiAxMSBwbGF
5ZXJzIGVhY2ggb24gYSBmaWVsZCBhdCBOaGUgY2VudHJIIG9mIHdoaWNoIGlzIGEgcmVjdGFuZ3VsYXIgMjIteWFyZCBsb25nIHBpdGNo
LiBFYWNoIHRlYWOgdGFrZXMgaXRzIHR1cm4gdG8gYmFOLCBhdHRlbXBOaW5nIHRvIHNjb3JlIHJ1bnMsIHdoaWxllHRoZSBvdGhlci BOZ
WFtIGZpZWxkcy4gRWFjaCBOdXJuIGlzIGtub3duIGFzIGFuIGlubmluZ3Mu",
        "AttachFileName": "Cricket",
        "AttachFileExt": "txt"}]
}
```

The following are the details for the response to a successful request:

■ HTTP Code: 200

■ Content-Type: <enclosure dependent>

■ Location: https://*<host>*/OnDemand/user/Rest/latest/CustomObjects8/1QA2-1S4YSD/
enclosure/Attachment

■ Response body:

```
{"CustomObjects8": [
    {
        "Attachment": "Q3JpY2tldCBpcyBhIGJhdC1hbmQtYmFsbCBnYW1lIHBsYXIlIZCBiZXR3ZWVuIHR3byBOZWFtcyBvZiAxMSBwbGF
5ZXJzIGVhY2ggb24gYSBmaWVsZCBhdCBOaGUgY2VudHJIIG9mIHdoaWNoIGlzIGEgcmVjdGFuZ3VsYXIgMjIteWFyZCBsb25nIHBpdGNo
LiBFYWNoIHRlYWOgdGFrZXMgaXRzIHR1cm4gdG8gYmFOLCBhdHRlbXBOaW5nIHRvIHNjb3JlIHJ1bnMsIHdoaWxllHRoZSBvdGhlci BOZ
WFtIGZpZWxkcy4gRWFjaCBOdXJuIGlzIGtub3duIGFzIGFuIGlubmluZ3Mu",
        "AttachFileName": "Cricket",
        "AttachFileExt": "txt"}]
}
```

Retrieving Attachments

You can retrieve Oracle CRM On Demand attachments by sending an HTTP GET request to the resource's URL.

NOTE: The response body is in Base64 Encoding.

The following details are for a request to retrieve an attachment on the Oracle CRM On Demand Server:

- URL: https://*<host>*/OnDemand/user/Rest/latest/CustomObjects8/1QA2-1S4YSD/enclosure/ Attachment

- HTTP Method: GET

- Content-Type: None

- Request body: None

The following are the details for the response to a successful request:

- HTTP Code: 200

- Content-Type: <enclosure dependent>

- Location: https://*<host>*/OnDemand/user/Rest/latest/CustomObjects8/1QA2-1S4YSD/ enclosure/Attachment

- Response body: i VBORwOKGgoAAAANSUhEUg. . . . . FTkSuQmCC

Removing Attachments

The Oracle CRM On Demand REST API supports the ability to remove attachments on the Oracle CRM On Demand Server Using the DELETE HTTP method.

The following details are for a request to remove an attachment on the Oracle CRM On Demand Server:

- URL: https://*<host>*/OnDemand/user/Rest/latest/CustomObjects8/1QA2-1S4YSD/enclosure/ Attachment

- HTTP Method: DELETE

- Content-Type: None

- Request body: None

The following are the details for the response to a successful request:

- HTTP Code: 204

- Content-Type: None

- Location: https://*<host>*/OnDemand/user/Rest/latest/CustomObjects8/1QA2-1S4YSD/ enclosure/Attachment

- Response body: None

Converting Oracle CRM On Demand Leads

You can use the Oracle CRM On Demand REST API to create Account, Contact, and Opportunity resources, or copy lead information to existing resources by converting the Lead resource to an Opportunity resource.

The following details are for a request to convert a Lead resource to an Opportunity resource and create new Account and Contact records for the Lead resource on the Oracle CRM On Demand Server:

■ URL: https://*<host>*/OnDemand/user/Rest/latest/Leads/1QA2-22WT7L

■ HTTP Method: POST

■ Content-Type: application/vnd.oracle.adf.resource+json

■ Request body:

```
{"actions": {
   "name": "convertLead",
   "parameters": [
      {"AccountName": "lead6"},
      {"ContactFirstName": "Lead6"},
      {"ContactLastName": "Rest"},
      {"OpportunityName": "lead6"},
      {"PotentialRevenue": 100000},
      {"EstimatedCloseDate": "2014-05-08T00:00:00Z"},
      {"NextStep": "ddddd"},
      {"Description": "ffffff"}
   ]
 }
}
```

The following are the details for the response to a successful request and the links to the newly-created account, contact, and opportunity resources:

■ HTTP Code: 201

■ Content-Type: application/vnd.oracle.adf.resource+json

■ Location: https://*<host>*/OnDemand/user/Rest/latest/Leads/1QA2-22WT7L

■ Response body:

```
{
    "LeadFirstName": "lead 6",
    "LeadLastName": "REST",
    "AccountName": "lead6",
    "ContactFullName": "Lead6 Rest",
    "OpportunityName": "lead6",
    "links": {
        "self": {
            "rel": "self",
            "href": "/OnDemand/user/Rest/latest/Leads/1QA2-22WT7L"
        },
        "canonical": {
            "rel": "canonical",
            "href": "/OnDemand/user/Rest/latest/Leads/1QA2-22WT7L"
        },
        "AccountName": {
            "rel": "self",
            "href": "/OnDemand/user/Rest/latest/Accounts/1QA2-22WT7M"
        },
        "ContactFullName": {
            "rel": "self",
            "href": "/OnDemand/user/Rest/latest/Contacts/1QA2-22WT7N"
        },
        "OpportunityName": {
            "rel": "self",
            "href": "/OnDemand/user/Rest/latest/Opportunities/1QA2-22WT7P"
        },
        "Activities": {
            "rel": "child",
            "href": "/OnDemand/user/Rest/latest/Leads/1QA2-22WT7L/child/Activities"
        },
```

```
        "CustomObjects4": {
          "rel": "child",
          "href": "/OnDemand/user/Rest/latest/Leads/1QA2-22WT7L/child/CustomObjects4"
        },
        "DealRegistrations": {
          "rel": "child",
          "href": "/OnDemand/user/Rest/latest/Leads/1QA2-22WT7L/child/DealRegistrations"
        }
    }
  }
}
```

Associating Books to REST API Resources

You can use the REST API to associate an existing book to existing supported REST API resources. You can see which books are supported by looking at the REST Integration Tags page in the Oracle CRM On Demand user interface. For more information about REST API Integration Tags, see "Customizing REST API Integration Tags" on page 33.

When you add a book child resource to an Oracle CRM On Demand resource, you must specify the BookExternalSystemId field value in the REST API request.

The following details are for a POST request to associate an existing CriticalAccounts book to an Account resource on the Oracle CRM On Demand Server:

■ URL: https://*<host>*/OnDemand/user/Rest/latest/Accounts/1QA2-238N93/child/AccountBooks

■ HTTP Method: POST

■ Content-Type: application/vnd.oracle.adf.resource+json

■ Request body:

```
{
  "AccountBooks":[
  {
    "BookExternalSystemId":"CriticalAccounts"
  }
  ]
}
```

The following are the details for the response to a successful request and the links to the associated book:

■ HTTP Code: 201

■ Content-Type: application/vnd.oracle.adf.resource+json

■ Response body:

```
{
  "AccountBooks":[
  {
    "BookExternalSystemId":"CriticalAccounts",
     "links":{
        "self":{
          "rel":"self",
          "href":"/OnDemand/user/Rest/028/Accounts/1QA2-238N93/child/AccountBooks/1QA2-2458T5"},
        "canonical":{
          "rel":"canonical",
          "href":"/OnDemand/user/Rest/028/Accounts/1QA2-238N93/child/AccountBooks/1QA2-2458T5"},
        "parent":{
```

```
                "rel":"parent",
                "href":"/OnDemand/user/Rest/028/Accounts/1QA2-238N93"
            }
        }
    }
    ]
}
```

Associating Teams to REST API Resources

You can use the REST API to associate an existing team child resource to existing supported REST API resources. You can see which teams are supported by looking at the REST Integration Tags page in the Oracle CRM On Demand user interface. For more information about REST API Integration Tags, see "Customizing REST API Integration Tags" on page 33.

When you add a team child resource to an Oracle CRM On Demand resource, you must specify the FullName field value in the REST API request.

The following details are for a POST request to associate an existing team to a Custom Object resource on the Oracle CRM On Demand Server:

■ URL: https://*<host>*/OnDemand/user/Rest/latest/CustomObjects4/1QA2-238N93/child/
  CustomObject4Teams

■ HTTP Method: POST

■ Content-Type: application/vnd.oracle.adf.resource+json

■ Request body:

```
{
    "CustomObject4Teams": [
        {
        "UserId": "ABCD-1234",
        "TeamRole": "Owner",
        "AccessCode": "Full"
        }
    ]
}
```

   Where UserId is the row ID of the user.

The following are the details for the response to a successful request and the links to the associated team:

■ HTTP Code: 201

■ Content-Type: application/vnd.oracle.adf.resource+json

■ Response body:

```
{
  "CustomObject4Teams": [{
    "FullName":"user1 user1",
    "TeamRole":"Owner",
    "AccessCode":"Full",
  "links":{
```

```
  "self": {
    "rel": "self",
    "href": "/OnDemand/user/Rest/028/CustomObjects4/1QA2-238N93/child/CustomObject4Teams/1QA2-2458T6"},
  "canonical": {
    "rel": "canonical",
    "href": "/OnDemand/user/Rest/028/CustomObjects4/1QA2-238N93/child/CustomObject4Teams/1QA2-2458T6"},
  "parent": {
    "rel": "parent",
    "href": "/OnDemand/user/Rest/028/CustomObjects4/1QA2-238N93"}
    }
  }
 ]
}
```

Associating Accounts to Contacts Resources

You can use the REST API to associate an Accounts resource to a Contacts resource.

The following details are for a POST request to associate a child Contacts resource (including the contact Id), Account Contacts, to an Account resource on the Oracle CRM On Demand Server:

■ URL: https://*<host>*/OnDemand/user/Rest/028/Accounts/1QA2-22789P/child/AccountContacts

■ HTTP Method: POST

■ Content-Type: application/vnd.oracle.adf.resource+json

■ Request body:

```
{
  "AccountContacts": [{
    "ContactId": "1QA2-21ATC5"
    }
 ]
}
```

The following are the details for the response to a successful request that returns the same Contact Id in the original request:

■ HTTP Code: 201

■ Content-Type: application/vnd.oracle.adf.resource+json

■ Response body:

```
{
  "AccountContacts": [{
    "ContactId": "1QA2-21ATC5",
  "links": {
    "self": {
      "rel": "self",
      "href": "/OnDemand/user/Rest/028/Accounts/1QA2-22789P/child/AccountContacts/1QA2-24859P"},
    "canonical": {
      "rel": "canonical",
      "href": "/OnDemand/user/Rest/028/Accounts/1QA2-22789P/child/AccountContacts/1QA2-24859P"},
    "parent": {
      "rel": "parent",
      "href": "/OnDemand/user/Rest/028/Accounts/1QA2-22789P"
    }
  }
```

```
    }
  ]
}
```

Associating Contacts to Accounts and Opportunities Resources

You can use the REST API to associate existing contacts resources to existing Accounts and Opportunities resources.

The following details are for a request to associate an existing child Contacts resource (including the contact Id and role), Account Contacts, to an existing Accounts resource on the Oracle CRM On Demand Server:

■ URL: https://*<host>*/OnDemand/user/Rest/028/Accounts/1QA2-22789P/child/ AccountContactRoles/1QA2-23MIPS

■ HTTP Method: PATCH

■ Content-Type: application/vnd.oracle.adf.resource+json

■ Request body:

```
{
  "AccountContactRoles":[{
    "ContactId":"1QA2-2278B3",
    "Role":"Approver"
  }
 ]
}
```

The following are the details for the response to a successful request and returns the role and Contact Id from the original request:

■ HTTP Code: 200

■ Content-Type: application/vnd.oracle.adf.resource+json

■ Response body:

```
{
   "AccountContactRoles":[{
     "Role":"Approver",
     "ContactId":"1QA2-2278B3",
    "links":{
      "self":{
        "rel":"self",
        "href":"/OnDemand/user/Rest/028/Accounts/1QA2-22789P/child/AccountContactRoles/1QA2-23MIPS"},
      "canonical":{
        "rel":"canonical",
        "href":"/OnDemand/user/Rest/028/Accounts/1QA2-22789P/child/AccountContactRoles/1QA2-23MIPS"},
      "parent":{
        "rel":"parent",
         "href":"/OnDemand/user/Rest/028/Accounts/1QA2-22789P"}
    }
  }
 ]
}
```

Working with Account Contact Role Resources

You can use the REST API to add, retrieve, update, and remove Account Contact Role resources.

Creating an Account Contact Role

You can use the REST API to create an Account Contact Role resource.

The following details are for a request to create an Account Contact Role resource on the Oracle CRM On Demand Server:

■ URL: https://*<host>*/OnDemand/user/Rest/028/Accounts/1QA2-21ATBR/child/
   AccountContactRoles

■ HTTP Method: POST

■ Content-Type: application/vnd.oracle.adf.resource+json

■ Request body:

```
{
  "AccountContactRoles":
  [{
      "ContactId": "1QA2-21ATC5",
      "Role":"Unknown"
  }]
}
```

The following are the details for the response to a successful request:

■ HTTP Code: 201

■ Content-Type: application/vnd.oracle.adf.resource+json

■ Response body:

```
{
  "AccountContactRoles": [
    {
      "Role": "Unknown",
      "ContactId": "1QA2-21ATC5",
      "links": {
        "self": {
         "rel": "self",
         "href": "/OnDemand/user/Rest/028/Accounts/1QA2-21ATBR/child/AccountContactRoles/1QA2-2CRNM2"
        },
        "canonical": {
         "rel": "canonical",
         "href": "/OnDemand/user/Rest/028/Accounts/1QA2-21ATBR/child/AccountContactRoles/1QA2-2CRNM2"
        },
        "parent": {
         "rel": "parent",
         "href": "/OnDemand/user/Rest/028/Accounts/1QA2-21ATBR"
        }
      }
    }
  ]
}
```

Retrieving an Account Contact Role List

You can use the REST API to retrieve a list of Account Contact Role resources.

The following details are for a GET request to retrieve a list of Account Contact Role resources on the
Oracle CRM On Demand Server:

■ URL: https://*<host>*/OnDemand/user/Rest/028/Accounts/1QA2-21ATBR/child/
AccountContactRoles?fields=AccountName,ContactFullName,Role,Order

■ HTTP Method: GET

■ Content-Type: application/vnd.oracle.adf.resource+json

■ Request body: None

The following are the details for the response to a successful request:

■ HTTP Code: 200

■ Content-Type: application/vnd.oracle.adf.resource+json

■ Response body:

```
{
  "AccountContactRoles": [
   {
    "AccountName": "ACME Computer Parts",
    "ContactFullName": "John Smith",
    "Role": "Unknown",
    "Order": 0,
    "links": {
     "self": {
      "rel": "self",
      "href": "/OnDemand/user/Rest/028/Accounts/1QA2-21ATBR/child/AccountContactRoles/1QA2-2CRNM2"
     },
     "canonical": {
      "rel": "canonical",
      "href": "/OnDemand/user/Rest/028/Accounts/1QA2-21ATBR/child/AccountContactRoles/1QA2-2CRNM2"
     },
     "parent": {
      "rel": "parent",
      "href": "/OnDemand/user/Rest/028/Accounts/1QA2-21ATBR"
     }
    }
   }
  ],
  "links": {
   "self": {
    "rel": "self",
    "href": "/OnDemand/user/Rest/028/Accounts/1QA2-21ATBR/child/AccountContactRoles"
   }
  },
  "_contextInfo": {
   "limit": 100,
   "offset": 0,
   "lastpage": true
  }
}
```

Updating an Account Contact Role

You can use the REST API to update an Account Contact Role resource.

The following details are for a request to update an Account Contact Role resource on the Oracle CRM On Demand Server:

■   URL: https://*<host>*/OnDemand/user/Rest/028/Accounts/1QA2-21ATBR/child/
    AccountContactRoles/1QA2-2CSXTD

■   HTTP Method: PATCH

■   Content-Type: application/vnd.oracle.adf.resource+json

■   Request body:

```
{
  "AccountContactRoles":
  [
   {
     "Role":"User"
   }
  ]
}
```

The following are the details for the response to a successful request:

■   HTTP Code: 200

■   Content-Type: application/vnd.oracle.adf.resource+json

■   Response body:

```
{
  "AccountContactRoles": [
  {
   "Role": "User",
   "links": {
    "self": {
     "rel": "self",
     "href": "/OnDemand/user/Rest/028/Accounts/1QA2-21ATBR/child/AccountContactRoles/1QA2-2CSXTD"
    },
    "canonical": {
     "rel": "canonical",
     "href": "/OnDemand/user/Rest/028/Accounts/1QA2-21ATBR/child/AccountContactRoles/1QA2-2CSXTD"
    },
    "parent": {
     "rel": "parent",
     "href": "/OnDemand/user/Rest/028/Accounts/1QA2-21ATBR"
    }
   }
  }
  ]
}
```

Deleting an Account Contact Role

You can use the REST API to delete an Account Contact Role resource.

The following details are for a request to remove an Account Contact Role resource on the Oracle CRM On Demand Server:

■   URL: https://*<host>*/OnDemand/user/Rest/028/Accounts/1QA2-21ATBR/child/
    AccountContactRoles/1QA2-2CRNM2

■   HTTP Method: DELETE

■ Content-Type: application/vnd.oracle.adf.resource+json

■ Request body: None

The following details are for a response to remove an Account Contact Role resource on the Oracle
CRM On Demand Server:

■ HTTP Code: 204

■ Content-Type: Text

■ Response body: None

Index