



Global Auth API Developer Guide

API v1.0.2011.16 (2011-07-08)

Copyright © 2010, 2011 Rackspace Hosting, Inc. All rights reserved.

This document is intended for software developers interested in developing applications which utilizes Global Auth API System as the authentication engine. It includes details on how to integrate with Global Auth API.

Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License at

http://www.apache.org/licenses/LICENSE-2.0

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.

Table of Contents

| 1. | Overview | 1 |
|----|--|-----|
| 2. | Concepts | 2 |
| | 2.1. Token | 2 |
| | 2.2. Customer | 2 |
| | 2.3. User | . 2 |
| | 2.4. Client | |
| 3 | General API Information | |
| ٥. | 3.1. Request/Response Types | |
| | 3.2. Content Compression | |
| | 3.3. API Version | |
| | 3.3.1. List Versions | |
| | 3.3.2. Get Version Details | |
| | | |
| | 3.4. Faults | |
| | 3.5. Getting Started | |
| _ | 3.6. Authorization Header | |
| 4. | Service Developer Operations | |
| | 4.1. Overview | |
| | 4.2. Token Operations | |
| | 4.2.1. Authenticate | |
| | 4.2.2. Validate Token | |
| | 4.2.3. Check if Token has been Provisioned for Service | |
| | 4.2.4. Check if Token has Permission for Service | 12 |
| | 4.2.5. Revoke Token | 12 |
| | 4.3. Customer Operations | 13 |
| | 4.3.1. Get a Customer | 13 |
| | 4.3.2. Set Customer Lock Status | 14 |
| | 4.3.3. Delete a Customer | 14 |
| | 4.3.4. Set Customer Password Rotation Policy | |
| | 4.4. User Operations | |
| | 4.4.1. Create the First User | |
| | 4.4.2. Add a User | |
| | 4.4.3. Get a User | |
| | 4.4.4. Get a User by Mosso ID | |
| | 4.4.5. Get a User by NAST ID | |
| | 4.4.6. Get a User by Username | |
| | 4.4.7. Update a User | |
| | 4.4.8. Soft Delete a User | |
| | | |
| | 4.4.9. Delete User | |
| | 4.4.10. Get User List | |
| | 4.4.11. Add User to Customer IdM Group | |
| | 4.4.12. Remove User from Customer IdM Group | |
| | 4.4.13. Get the Groups That a User is a Member Of | |
| | 4.4.14. Generate/Reset Auth Service Key | |
| | 4.4.15. Set Auth Service Key | |
| | 4.4.16. Set User Lock | |
| | 4.4.17. Set User Password | |
| | 4.4.18. Reset User Password | 34 |
| | 4.4.19. Get a User Password | 34 |
| | | |

| | 4.4.20. Get Password Recovery Token | 35 |
|------|---|----|
| | 4.4.21. Set User Status | 36 |
| | 4.4.22. Set User Secret | 36 |
| | 4.4.23. Get the Services that a User has Provisioned | 37 |
| | 4.4.24. Provision a Service for a User | 39 |
| | 4.4.25. Remove Provision a Service for a User | |
| | 4.4.26. Grant a User Permission for Service | |
| | 4.4.27. Revoke a User Permission for Service | |
| | 4.4.28. Check if User has Permission for Service | |
| | 4.4.29. Get a List of Delegated Refresh Tokens for a User | |
| | 4.4.30. Get a Delegated Refresh Token for a User | |
| | 4.4.31. Delete a Delegated Refresh Token for a User | |
| 15 | Authentication Operations | |
| 4.3. | 4.5.1. Authenticate a user by Mosso ID | |
| | • | |
| | 4.5.2. Authenticate a user by NAST ID | |
| 4.6 | 4.5.3. Authenticate a user by Username | |
| 4.6. | Application Operations | |
| | 4.6.1. Add an Application | |
| | 4.6.2. Get an Application | |
| | 4.6.3. Get All Applications for a Customer | |
| | 4.6.4. Update an Application | |
| | 4.6.5. Soft Delete an Application | |
| | 4.6.6. Delete an Application | |
| | 4.6.7. Get Permissions defined by an Application | |
| | 4.6.8. Add a Permission defined by an Application | 53 |
| | 4.6.9. Get a Permission defined by an Application | 54 |
| | 4.6.10. Update a Permission defined by an Application | 54 |
| | 4.6.11. Delete a Permission defined by an Application | 56 |
| | 4.6.12. Reset an Application Secret | 56 |
| | 4.6.13. Add a Group for an Application | |
| | 4.6.14. Get all Groups for an Application | |
| | 4.6.15. Update a Group for an Application | |
| | 4.6.16. Delete a Group for an Application | |
| | 4.6.17. Add a User to a Group for an Application | |
| | 4.6.18. Remove a User from a Group for an Application | |
| | 4.6.19. Get the Services that a Client has Provisioned | |
| | 4.6.20. Grant a Client Permission for Service | |
| | 4.6.21. Revoke a Client Permission for Service | |
| | 4.6.22. Check if Client has Permission for Service | |
| 17 | Password Operations | |
| 4.7. | 4.7.1. Get Password Rules | |
| | | |
| 4.0 | 4.7.2. Password validation check | |
| 4.8. | Admin Operations | |
| | 4.8.1. Get Base URLs | |
| | 4.8.2. Add Base URL | |
| | 4.8.3. Get a Base URL | |
| | 4.8.4. Delete a Base URL | |
| | 4.8.5. Get Base Url Refs | |
| | 4.8.6. Add Base URL Ref | |
| | 4.8.7. Get Base URL Ref | |
| | 4.8.8. Delete a Base URL Ref | 71 |
| | | |

RAFT - DRAFT - DRAFT

- DRAFT RAFT - DRAFT - DRAFT

List of Tables

| 3.1. | Response Types | 3 |
|------|---|---|
| | Compression Headers | |
| 3.3. | Fault Types | 7 |
| | Application Information needed to register with Global Auth API | |

List of Examples

| 3.1. JSON Request with Headers | . 3 |
|--|-----|
| 3.2. XML Response with Headers | 3 |
| 3.3. XML Versions Response | 5 |
| 3.4. XML Version Response | 5 |
| 3.5. XML Fault Response | 6 |
| 3.6. JSON Fault Response | 6 |
| 3.7. XML Not Found Fault | 6 |
| 3.8. JSON Not Found Fault | 6 |
| 3.9. JSON Request with Headers | |
| 3.10. XML Response with Headers | |
| 3.11. Authorization Header Request Format | |
| 4.1. XML User Auth Request | |
| 4.2. JSON User Auth Request | |
| 4.3. XML User Auth Response | |
| 4.4. JSON User Auth Response | |
| 4.5. XML Application Auth Request | |
| 4.6. JSON Application Auth Request | |
| 4.7. XML Application Auth Response | |
| 4.8. JSON Application Auth Response | |
| 4.9. XML Validate Token Response | |
| 4.10. JSON Validate Token Response | |
| 4.11. XML Customer Response | |
| 4.12. JSON Customer Response | |
| 4.13. XML Customer Lock Request | |
| 4.14. JSON Customer Lock Request | |
| 4.15. XML Customer Lock Response | |
| 4.16. JSON Customer Lock Response | |
| 4.17. XML Password Rotation Policy Request | |
| 4.18. JSON Password Rotation Policy Request | |
| 4.19. XML Password Rotation Policy Response | |
| 4.20. JSON Password Rotation Policy Response | |
| 4.22. JSON Add First User Request | |
| 4.23. XML Add First User Response | |
| · | |
| 4.25. XML Add User Request | |
| 4.26. JSON Add User Request | |
| 4.27. XML Add User Response | |
| 4.28. JSON Add User Response | |
| 4.29. XML Get User Response | |
| 4.30. JSON Get User Response | |
| 4.31. XML Get User By Mossold Response | |
| 4.32. JSON Get User By Mossold Response | |
| 4.33. XML Get User By NastId Response | |
| 4.34. JSON Get User By Nastld Response | |
| 4.35. XML Get User By Username Response | |
| 4.36. JSON Get User By Username Response | |
| 4.37. XML Update User Request | |
| | |

| <u>L</u> | |
|---------------|--|
| A | |
| X | |
| | |
| - 1 | |
| \vdash | |
| Œ | |
| 4 | |
| R | |
| 7 | |
| | |
| - 1 | |
| \vdash | |
| iL. | |
| 4 | |
| 8 | |
| | |
| | |
| - 1 | |
| \vdash | |
| ш | |
| 4 | |
| ~ | |
| | |
| | |
| - 1 | |
| \vdash | |
| ш | |
| 4 | |
| ~ | |
| | |
| | |
| - 1 | |
| \vdash | |
| Щ | |
| P | |
| α | |
| | |
| $\overline{}$ | |
| | |
| \vdash | |
| 4 | |
| 4 | |
| | |
| | |
| - 1 | |
| | |
| F | |
| | |
| A | |
| X | |
| | |
| - 1 | |
| \vdash | |
| 田 | |
| 4 | |
| R | |
| F | |
| | |
| - 1 | |
| \vdash | |
| 14. | |
| 4 | |
| R | |
| | |
| | |
| - 1 | |
| \vdash | |
| 144 | |
| 4 | |
| 7 | |
| α | |

| 4.38. | JSON Update User Request | 25 |
|-------|---|----|
| 4.39. | XML Update User Response | 26 |
| 4.40. | JSON Update User Response | 26 |
| 4.41. | XML User Soft Delete Request | 26 |
| 4.42. | JSON User Soft Delete Request | 27 |
| | XML User Soft Delete Response | |
| | JSON User Soft Delete Response | |
| | XML Get User List Response | |
| | JSON Get User List Response | |
| | XML User Groups Response | |
| | JSON User Groups Response | |
| | XML User Auth Key Response | |
| | JSON User Auth Key Response | |
| | XML Set Auth Key Requist | |
| | JSON Set Auth Key Request | |
| | XML Set Auth Key Response | |
| | JSON Set Auth Key Response | |
| | XML Set User Lock Request | |
| | JSON Set User Lock Request | |
| | XML Set User Lock Response | |
| | JSON Set User Lock Response | |
| | XML Set User Password Request | |
| | | |
| | JSON Set User Password Request | |
| | XML User Password Response | |
| | JSON User Password Response | |
| | XML Reset User Password Response | |
| | JSON Reset User Password Response | |
| | XML Get User Password Response | |
| | JSON Get User Passwrord Response | |
| | XML Password Recovery Token Response | |
| | JSON Password Recovery Token Response | |
| | XML Set User Status Request | |
| | JSON Set User Status Request | |
| | XML Set User Status Response | |
| 4.72. | JSON Set User Status Response | 36 |
| 4.73. | XML Set User Secret Request | 37 |
| 4.74. | JSON Set User Secret Request | 37 |
| 4.75. | XML Set User Secret Response | 37 |
| 4.76. | JSON Set User Secret Response | 37 |
| 4.77. | XML Get User Services Response | 38 |
| 4.78. | JSON Get User Services Response | 38 |
| 4.79. | XML Provision User Service Request | 39 |
| | JSON Get Provision User Service Request | |
| 4.81. | XML Grant User Permission Request | 40 |
| | JSON Grant User Permission Request | |
| | XML Delegated Tokens Response | |
| | JSON Delegated Tokens Response | |
| | XML Delegated Token Response | |
| | JSON Delegated Token Response | |
| | XML Auth By Mosso Credentials Request | |
| | JSON Auth By Mosso Credentials Request | |
| | | |

| 4.89. XML Auth By Mosso Credentials Response | 44 |
|--|-----|
| 4.90. JSON Auth By Mosso Credentials Response | 44 |
| 4.91. XML Auth By Nast Credentials Request | |
| 4.92. JSON Auth By Nast Credentials Request | 45 |
| 4.93. XML Auth By Nast Credentials Response | |
| 4.94. JSON Auth By Nast Credentials Response | |
| 4.95. XML Auth By Username Request | |
| 4.96. XML Auth By Username Response | |
| 4.97. JSON Auth By Username Response | |
| 4.98. XML Add Client Request | |
| 4.99. JSON Add Client Request | |
| 4.100. XML Add Client Response | |
| 4.101. JSON Add Client Response | |
| 4.102. XML Get Client Response | |
| 4.103. JSON Get Client Response | |
| 4.104. XML Get Clients Response | |
| 4.105. JSON Get Clients Response | |
| 4.106. XML Update Client Request | |
| 4.107. JSON Update Client Request | |
| · | |
| 4.108. XML Update Client Response | |
| 4.109. JSON Update Client Response | |
| 4.110. XML Soft Delete Application Request | |
| 4.111. JSON Soft Delete Application Request | |
| 4.112. XML Soft Delete Application Response | |
| 4.113. JSON Soft Delete Application Response | |
| 4.114. XML Get Permissions Response | |
| 4.115. JSON Get Permissions Response | |
| 4.116. XML Add a Defined Permission Request | |
| 4.117. JSON Add a Defined Permission Request | |
| 4.118. XML Add a Defined Permission Response | |
| 4.119. JSON Add a Defined Permission Response | |
| 4.120. XML Get Defined Permission Response | |
| 4.121. JSON Get Defined Permission Response | |
| 4.122. XML Update a Defined Permission Request | |
| 4.123. JSON Update a Defined Permission Request | 55 |
| 4.124. XML Update a Defined Permission Response | 55 |
| 4.125. JSON Update a Defined Permission Response | 55 |
| 4.126. XML Reset Client Secret Response | 56 |
| 4.127. JSON Reset Client Secret Response | 56 |
| 4.128. XML Add a Group Request | 57 |
| 4.129. JSON Add a Group Request | 57 |
| 4.130. XML Add a Group Response | |
| 4.131. JSON Add a Group Response | |
| 4.132. XML Get Groups Response | |
| 4.133. JSON Get Groups Response | |
| 4.134. XML Update a Group Request | |
| 4.135. JSON Update a Group Request | |
| 4.136. XML Update a Group Response | |
| 4.137. JSON Update a Group Response | |
| 4.138. XML Get Cilent Services Response | |
| 4.139. JSON Get Client Services Response | |
| 7.133. 33014 det ciicht services hespolise | J I |

| - | |
|----------|--|
| DRAFT | |
| _ | |
| DRAFT | |
| | |
| - DRAFT | |
| RAFT | |
| | |
| SAFT - | |
| <u> </u> | |
| DRAFT. | |
| 1 | |
| - DRAFT | |
| <u>—</u> | |
| - DRAF | |
| H | |
| - DRAF | |
| <u>—</u> | |
| DRAF | |
| _ | |
| RAFT | |

| 4.140. XML Grant Client Permission Request | 62 |
|---|----|
| 4.141. JSON Grant Client Permission Request | 62 |
| 4.142. XML Get Password Rules Response | 64 |
| 4.143. JSON Get Password Rules Response | 64 |
| 4.144. XML Password Validation Request | 65 |
| 4.145. JSON Password Validation Request | 65 |
| 4.146. XML Password Validation Response | 65 |
| 4.147. JSON Password Validation Response | 65 |
| 4.148. XML Get BaseURLs Response | 66 |
| 4.149. JSON Get BaseURLs Response | 66 |
| 4.150. XML Add BaseUrl Request | 67 |
| 4.151. XML Get BaseUrl Response | 68 |
| 4.152. JSON Get BaseUrl Response | 68 |
| 4.153. XML Get Base Url Ref Response | 69 |
| 4.154. JSON Get Base Url Ref Response | 69 |
| 4.155. XML Add Base Url Ref Request | 70 |
| 4.156. XML Get Base Url Ref Response | 71 |
| 4.157. JSON Get Base Url Ref Response | 71 |
| 4.158. XML Get Service Catalog Response | 72 |
| 4.159. JSON Get Service Catalog Response | 72 |

1. Overview

The Global Auth API Service allows Rackspace Applications to obtain tokens that can be used to access resources in Rackspace. This document is intended for:

Service Developers Service developers are interested in writing client for Global

Auth API service.

This Guide assumes the reader is familiar with RESTful web services, HTTP/1.1, and JSON and/or XML serialization formats.

2. Concepts

The IdM system has several key concepts that are important to understand:

2.1. Token

Small bits of text that contain the security information for a login session and identifies the user, the user's groups, and the user's privileges. Tokens may be revoked at anytime and are valid for a finite duration.

2.2. Customer

Organizations that are customers of Rackspace

2.3. User

Individuals at a customer that have a login

2.4. Client

Rackspace applications (e.g.: Control Panel, Billing, etc.) or Customer third party applications. IdM will intially setup all Rackspace applications

3. General API Information

The Global Auth API is implemented using a RESTful web service interface. All requests to authenticate and operate against the Global Auth API are performed using SSL over HTTP (HTTPS) on TCP port 443.

3.1. Request/Response Types

The Global Auth API supports both the JSON and XML data serialization formats. The request format is specified using the Content-Type header and is required for operations that have a request body. The response format can be specified in requests using either the Accept header or adding an .xml or . json extension to the request URI. Note that it is possible for a response to be serialized using a format different from the request (see example below). If no response format is specified, JSON is the default. If conflicting formats are specified using both an Accept header and a query extension, the query extension takes precedence.

Table 3.1. Response Types

| Format | Accept Header | Query Extension | Default |
|--------|------------------|-----------------|---------|
| JSON | application/json | .json | Yes |
| XML | application/xml | .xml | No |

Example 3.1. JSON Request with Headers

```
POST /v1.0/token HTTP/1.1
Host: {host name TBD}
Content-Type: application/json
Accept: application/xml
```

```
<?xml version="1.0" encoding="UTF-8"?>
<authCredentials
    xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    password="P@ssword1"
    username="testuser"
    client_secret="0923899flewriudsb"
    client_id="8972348923400fdshasdf"
    grant_type="PASSWORD" />
```

Example 3.2. XML Response with Headers

```
HTTP/1.1 200 OKAY
Date: Mon, 12 Nov 2010 15:55:01 GMT
Server: Apache
Content-Length:
Content-Type: application/xml; charset=UTF-8
```

3.2. Content Compression

Request and response body data my be encoded with gzip compression in order to accelerate interactive performance of API calls and responses. This is controlled using the Accept-Encoding header on the request from the client and indicated by the Content-Encoding header in the server response. Unless the header is explicitly set, encoding defaults to disabled.

Table 3.2. Compression Headers

| Header Type | Name | Value |
|-------------------|------------------|-------|
| HTTP/1.1 Request | Accept-Encoding | gzip |
| HTTP/1.1 Response | Content-Encoding | gzip |

3.3. API Version

The IdM API uses a URI versioning scheme. The first element of the path contains the target version identifier (e.g. https://idm.api.rackspace.com/v1.0/...) All requests (except to query for version - see below) must contain a target version. Any features or functionality changes that would necessitate a break in API-compatibility will require a new version, which will result in the URI version being updated accordingly. When new API versions are released, older versions will be marked as Deprecated. Rackspace will work with developers and partners to ensure there is adequate time to migrate to the new version before deprecated versions are discontinued.

3.3.1. List Versions

| Verb | URI | Description |
|------|-------------------------|--------------------------------------|
| GET | https://{Hostname TBD}/ | Retrieve a list of IdM API versions. |

Normal Response Code(s):200

Error Response Code(s): badRequest (400), idmFault (500), serviceUnavailable(503)

Your application can programmatically determine available API versions by performing a **GET** on the root URL (https://idm.api.rackspace.com/).

This operation does not require a request body.

Example 3.3. XML Versions Response

3.3.2. Get Version Details

| Verb | URI | Description |
|------|------------------------------|------------------------------|
| GET | https://{Hostname TBD}/v1.0/ | Retrieve API Version details |

Normal Response Code(s):200

Error Response Code(s): badRequest (400), idmFault (500), serviceUnavailable(503)

You can also obtain additional information about a specific version by performing a **GET** on the base version URL (e.g. https://idm.api.rackspace.com/v1.0). Version request URLs should always end with a trailing slash (/). If the slash is omitted, the server may respond with a 302 redirection request. Format extensions may be placed after the slash (e.g. https://idm.api.rackspace.com/v1.0/.xml).

This operation does not require a request body.

Example 3.4. XML Version Response

```
<?xml version="1.0" encoding="UTF-8"?>
<version xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
   wadl="http://docs.rackspacecloud.com/idm/api/v1.0/application.wadl"
   docURL="http://docs.rackspacecloud.com/idm/api/v1.0/idm-devguide.pdf"
   status="CURRENT"
   id="v1.0" />
```

The detailed version response contains a pointer to both the human readable and a machine processable description of the API service. The machine processable description is written in the Web Application Description Language (WADL).

3.4. Faults

When an error occurs the system will return an HTTP error response code denoting the type of error. The system will also return additional information about the fault in the body of the response.

Example 3.5. XML Fault Response

```
<?xml version="1.0" encoding="UTF-8"?>
<idmFault xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    code="500">
    <message>Fault</message>
    <details>Error Details...</details>
</idmFault>
```

Example 3.6. JSON Fault Response

```
{
  "message": "Fault",
  "details": "Error Details...",
  "code": 500
}
```

The error code is returned in the body of the response for convenience. The message section returns a human readable message. The details section is optional and may contain useful information for tracking down an error (e.g a stack trace).

The root element of the fault (e.g. idmFault) may change depending on the type of error. The following is an example of an itemNotFound error.

Example 3.7. XML Not Found Fault

Example 3.8. JSON Not Found Fault

```
{
  "message": "Item not found.",
  "details": "Error Details...",
  "code": 404
}
```

The following is a list of possible fault types along with their associated error codes.

Table 3.3. Fault Types

| Fault Element | Associated Error Code | Expected in All Requests |
|---------------------|-----------------------|--------------------------|
| idmFault | 500, 400 | ✓ |
| serviceUnavailable | 503 | ✓ |
| unauthorized | 401 | ✓ |
| badRequest | 400 | ✓ |
| password Validation | 400 | |
| user Disabled | 403 | |
| forbidden | 403 | |
| itemNotFound | 404 | |
| clientConflict | 409 | |
| customerConflict | 409 | |
| emailConflict | 409 | |
| usernameConflict | 409 | |

From an XML schema perspective, all API faults are extensions of the base fault type idmFault. When working with a system that binds XML to actual classes (such as JAXB), one should be capable of using idmFault as a "catch-all" if there's no interest in distinguishing between individual fault types.

3.5. Getting Started

The first step to using the Global Auth API is registering your application with Global Auth. The Global Auth Team will need the following information in order to register your application.

Table 3.4. Application Information needed to register with Global Auth API

| Item | Description | Example |
|-------------|--|----------------------|
| Name | The name of the application | Cloud Servers API |
| Simple Name | A continuous lower case name | cloud_servers_api |
| Description | A human readable description of what the application does, which should be presentable to end users. | Cloud Servers API is |

Once the Global Auth Team has this information we will add your application to the Global Auth System and send you the clientId and clientSecret that you will need in order to authenticate with the Global Auth API (see section below for Authentication).

Example 3.9. JSON Request with Headers

POST /v1.0/token HTTP/1.1 Host: {host name TBD} Content-Type: application/json Accept: application/xml

```
<?xml version="1.0" encoding="UTF-8"?>
<authCredentials
    xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    password="P@ssword1"
    username="testuser"
    client_secret="0923899flewriudsb"
    client_id="8972348923400fdshasdf"
    grant_type="PASSWORD" />
```

Example 3.10. XML Response with Headers

```
HTTP/1.1 200 OKAY
Date: Mon, 12 Nov 2010 15:55:01 GMT
Server: Apache
Content-Length:
Content-Type: application/xml; charset=UTF-8
<?xml version="1.0" encoding="UTF-8"?>
<auth xmlns="http://docs.rackspacecloud.com/idm/api/v1.0">
 <access_token
    expires_in="3600"
    id="ab48a9efdfedb23ty3494" />
 <refresh token
    id="8792gdfskjbadf98y234r" />
 <user
     xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
     customerId="RCN-000-000-000"
     username="jqsmith" />
</auth>
```

3.6. Authorization Header

Most calls made against the Global Auth API require the addition of an authorization header in the request.

The format of the authoriztion header is the word "OAuth" followed by a space followed by the access token id that belongs to the entity making the call. For example, here is an sample request for getting a user's details.

Example 3.11. Authorization Header Request Format

```
GET /v1.0/users/joeuser HTTP/1.1
Host: {host name TBD}
Accept: application/xml
Authorization: OAuth ab48a9efdfedb23ty3494
```

4. Service Developer Operations

4.1. Overview

The operations described in this chapter allow service developers to get and validate access tokens, manage users, manage clients, and password related operations (get password rules, valid password).

4.2. Token Operations

4.2.1. Authenticate

| Verb | URI | Description |
|------|--------|--|
| POST | /token | Authenticate a user or application and generate an access token. |

Normal Response Code(s):200, 203

Error Response Code(s): unauthorized (401), userDisabled (403), badRequest (400), idmFault (500), serviceUnavailable(503)

Example 4.1. XML User Auth Request

```
<?xml version="1.0" encoding="UTF-8"?>
<authCredentials
    xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    password="P@ssword1"
    username="testuser"
    client_secret="0923899flewriudsb"
    client_id="8972348923400fdshasdf"
    grant_type="PASSWORD" />
```

Example 4.2. JSON User Auth Request

```
{
  "grant_type": "PASSWORD",
  "client_id": "8972348923400fdshasdf",
  "client_secret": "0923899flewriudsb",
  "username": "testuser",
  "password": "P@ssword1"
}
```

Example 4.3. XML User Auth Response

```
<?xml version="1.0" encoding="UTF-8"?>
<auth xmlns="http://docs.rackspacecloud.com/idm/api/v1.0">
   <access_token</pre>
```

Example 4.4. JSON User Auth Response

```
{
  "accessToken": {
     "id": "ab48a9efdfedb23ty3494",
     "expiresIn": 3600
},
  "refreshToken": {
     "id": "8792gdfskjbadf98y234r"
},
  "user" : {
     "username": "jqsmith",
     "customerId": "RCN-000-000",
}
}
```

Example 4.5. XML Application Auth Request

```
<?xml version="1.0" encoding="UTF-8"?>
<authCredentials
    xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    client_secret="0923899flewriudsb"
    client_id="8972348923400fdshasdf"
    grant_type="CLIENT_CREDENTIALS" />
```

Example 4.6. JSON Application Auth Request

```
{
  "grant_type": "CLIENT_CREDENTIALS",
  "client_id": "8972348923400fdshasdf",
  "client_secret": "0923899flewriudsb"
}
```

Example 4.7. XML Application Auth Response

Example 4.8. JSON Application Auth Response

```
{
  "accessToken": {
     "id": "ab48a9efdfedb23ty3494",
     "expiresIn": 3600
},
  "client": {
     "clientId": "ab4820dhcb39347",
     "customerId": "RACKSPACE",
}
}
```

4.2.2. Validate Token

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.

| Verb | URI | Description |
|------|---|---|
| GET | , · · · · · · · · · · · · · · · · · · · | Check that a token is valid and return the token details. |

Normal Response Code(s):200, 203

Error Response Code(s): unauthorized (401), forbidden (403), userDisabled(403), badRequest (400), itemNotFound (404), idmFault(500), serviceUnavailable(503)

This operation does not require a request body.

Example 4.9. XML Validate Token Response

Example 4.10. JSON Validate Token Response

```
{
    "access_token": {
```

4.2.3. Check if Token has been Provisioned for Service

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|------|------------------------------------|---|
| GET | /tokens/tokenId/services/serviceId | Check if token has been provisioned for service |

Normal Response Code(s):200 404

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), idmFault (500), serviceUnavailable(503)

This operation does not require a request body.

4.2.4. Check if Token has Permission for Service

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|------|---|--|
| | /tokens/tokenId/services/serviceId/ permissions/permissionId | Checks if token has permission for a service |

Normal Response Code(s):200 404

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), idmFault (500), serviceUnavailable(503)

This operation does not require a request body.

4.2.5. Revoke Token

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.

| Verb | URI | Description |
|--------|----------------|---------------------------|
| DELETE | /token/tokenId | Revoke an existing token. |

Normal Response Code(s):204

Error Response Code(s): unauthorized (401), forbidden (403), userDisabled(403), badRequest (400), itemNotFound (404), idmFault(500), serviceUnavailable(503)

This operation does not require a request body.

4.3. Customer Operations

4.3.1. Get a Customer

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|------|-----------------------|-----------------|
| GET | /customers/customerId | Get a customer. |

Normal Response Code(s):204

Error Response Code(s): unauthorized (401), forbidden(403), itemNotFound(404), badRequest (400), idmFault (500), serviceUnavailable(503)

This operation does not require a request body.

Example 4.11. XML Customer Response

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<customer xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    softDeleted="false"
    locked="false"
    iname="@Rackspace*Customer"
    inum="@FFFF.FFFF.FFFF.FFFF!OABE.34EC"
    customerId="RCN-123-549-034" />
```

Example 4.12. JSON Customer Response

```
{
  "customerId": "RCN-123-549-034",
  "inum": "@FFFF.FFFF.FFFF.FFFF!OABE.34EC",
  "iname": "@Rackspace*Customer",
  "locked": false,
  "softDeleted": false
}
```

4.3.2. Set Customer Lock Status

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|------|------------------------------------|----------------------------|
| PUT | /customers/customerId/actions/lock | Lock or unlock a customer. |

Normal Response Code(s):204

Error Response Code(s): unauthorized (401), forbidden(403), itemNotFound(404), badRequest (400), idmFault (500), serviceUnavailable(503)

Example 4.13. XML Customer Lock Request

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<customer xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    locked="true" />
```

Example 4.14. JSON Customer Lock Request

```
{
    "locked": true
}
```

Example 4.15. XML Customer Lock Response

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<customer xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    locked="true" />
```

Example 4.16. JSON Customer Lock Response

4.3.3. Delete a Customer

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.

| Verb | URI | Description |
|--------|-----------------------|--------------------|
| DELETE | /customers/customerId | Delete a Customer. |

Normal Response Code(s):204

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

This operation does not require a request body.

4.3.4. Set Customer Password Rotation Policy

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.

| Verb | URI | Description |
|------|--|---|
| PUT | /customers/customerId/passwordrotationpolicy | Sets the password rotation policy for a customer. |

Normal Response Code(s):200

Error Response Code(s): unauthorized (401), forbidden (403), userDisabled(403), badRequest (400), itemNotFound (404), idmFault(500), serviceUnavailable(503)

This operation does not require a request body.

Example 4.17. XML Password Rotation Policy Request

```
<?xml version="1.0" encoding="UTF-8"?>
<passwordRotationPolicy xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    enabled="true"
    duration="90" />
```

Example 4.18. JSON Password Rotation Policy Request

```
{
    "enabled": true,
    "duration": "60"
}
```

Example 4.19. XML Password Rotation Policy Response

```
<?xml version="1.0" encoding="UTF-8"?>
<passwordRotationPolicy xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    enabled="true"
    duration="90" />
```

Example 4.20. JSON Password Rotation Policy Response

```
{
  "enabled": true,
  "duration": "60"
}
```

4.4. User Operations

4.4.1. Create the First User

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|------|----------|--|
| POST | <i>'</i> | Create a new customer entry and add the user as an Admin user. |

The Username attribute, CustomerId attribute and Password element are required in this request. If a blank password is passed in the Password element, the API will generate a random password for the user. The prefLanguage attribute defaults to "US_en" and the timeZone attribute defaults to "America/Chicago".

Normal Response Code(s):201

Error Response Code(s): unauthorized (401), badRequest (400), passwordValidation(400), forbidden (403), itemNotFound (404), customerConflict(409), usernameConflict(409), emailConflict(409), idmFault (500), serviceUnavailable(503)

Example 4.21. XML Add First User Request

```
<?xml version="1.0" encoding="UTF-8"?>

<user xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    region="SAT" prefLanguage="US_en" timeZone="America/Chicago"
    displayName="John Smith" lastName="Smith"
    middleName="Quincy" firstName="John"
    personId="RPN-111-111"
    email="john.smith@example.org"
    customerId="RCN-000-000-000" username="jqsmith">
        <secret secretAnswer="Francis"
        secretQuestion="What is your dogs name?" />
        <password password="C@n+f001me!" />
</user>
```

Example 4.22. JSON Add First User Request

```
"secret": {
    "secretAnswer": "Francis",
    "secretQuestion": "What is your dogs name?"
},
"password": {
    "password": "P@ssword1"
},
"username": "jqsmith",
"customerId": "RCN-000-000-000",
"email": "john.smith@example.org",
"personId": "RPN-111-111-111",
"firstName": "John",
"middleName": "Quincy",
"lastName": "Smith",
"displayName": "John Smith",
"prefLanguage": "US_en",
"region": "America/Chicago"
}
```

Example 4.23. XML Add First User Response

```
<?xml version="1.0" encoding="UTF-8"?>
<user
   xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
   softDeleted="false" locked="false"
   status="ACTIVE" timeZone="America/Chicago"
   region="SAT" iname="@Example.Smith*John"
   inum="@!FFFF.FFFF.FFFF!EEEE.EEEE!1111"
   prefLanguage="US_en" displayName="John Smith"
   lastName="Smith" middleName="Quincy"
   firstName="John" personId="RPN-111-111-111"
   email="john.smith@example.org"
   customerInum="@!FFFF.FFFF.FFFF!EEEE.EEEE"
   customerId="RCN-000-000-000"
   username="jqsmith">
   <secret secretAnswer="Francis"</pre>
       secretQuestion="What is your dogs name?" />
   <password password="C@n+f001me!" />
        <clientGroup type="RackspaceDefined"</pre>
           customerInum="@FFFF.FFFF.FFFF!EEEE.EEEE"
           customerId="RCN-000-000-000" name="Admin" />
   </groups>
</user>
```

Example 4.24. JSON Add First User Response

```
{
    "secret": {
        "secretQuestion": "What is your dogs name?",
        "secretAnswer": "sicnarF"
```

```
1
4
1
DRAFT
1
4
1
```

```
"password": {
  "password": "C@n+f001me!"
groups: {
  "clientGroup": [
      "permissions": {},
      "name": "Admin",
      "customerId": "RCN-234-592-018",
      "customerInum": "@FFFF.FFFF.FFFF!2398.1FCB",
      "type": "RackspaceDefined"
 ]},
"username": "jqsmith",
"customerId": "RCN-000-000-000",
"customerInum": "@!FFFF.FFFF.FFFF!EEEE.EEEE",
"email": "john.smith@example.org",
"personId": "RPN-111-111-111",
"firstName": "John",
"middleName": "Quincy",
"lastName": "Smith",
"displayName": "John Smith",
"prefLanguage": "US_en",
"inum": "@!FFFF.FFFF.FFFF!EEEE.EEEE!1111",
"timeZone": "America/Chicago",
"region": "SAT",
"status": "ACTIVE",
"locked": false,
"softDeleted": false
```

4.4.2. Add a User

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.

| Verb | URI | Description |
|------|-----|--|
| POST | | Create a new user. If a blank password is passed in, the API generates a random password for the user. |

The Username attribute and Password element are required in this request. If a blank password is passed in the Password element, the API will generate a random password for the user. The prefLanguage attribute defaults to "US_en" and the timeZone attribute defaults to "America/Chicago".

Normal Response Code(s):201

Error Response Code(s): unauthorized (401), badRequest (400), passwordValidation(400), forbidden (403), itemNotFound (404), usernameConflict(409), emailConflict(409), idmFault (500), serviceUnavailable(503)

Example 4.25. XML Add User Request

```
<?xml version="1.0" encoding="UTF-8"?>
<user xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"</pre>
   region="SAT" prefLanguage="US_en" timeZone="America/Chicago"
   displayName="John Smith" lastName="Smith"
   middleName="Quincy" firstName="John"
   personId="RPN-111-111-111"
   email="john.smith@example.org"
   customerId="RCN-000-000-000" username="jqsmith">
   <secret secretAnswer="Francis"</pre>
        secretQuestion="What is your dogs name?" />
    <password password="C@n+f001me!" />
</user>
```

Jul 8, 2011

Example 4.26. JSON Add User Request

```
"secret": {
  "secretAnswer": "Francis",
  "secretQuestion": "What is your dogs name?"
"password": {
  "password": "P@ssword1"
"username": "jqsmith",
"customerId": "RCN-000-000-000",
"email": "john.smith@example.org",
"personId": "RPN-111-111-111",
"firstName": "John",
"middleName": "Quincy",
"lastName": "Smith",
"displayName": "John Smith",
"prefLanguage": "US_en",
"region": "America/Chicago"
```

Example 4.27. XML Add User Response

```
<?xml version="1.0" encoding="UTF-8"?>
<user
   xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
softDeleted="false" locked="false"
   status="ACTIVE" timeZone="America/Chicago"
region="SAT" iname="@Example.Smith*John"
inum="@!FFFF.FFFF.FFFF!EEEE.EEEE!1111"
prefLanguage="US_en" displayName="John Smith"
lastName="Smith" middleName="Quincy"
firstName="John" personId="RPN-111-111-111"
email="john.smith@example.org"
customerInum="@!FFFF.FFFF.FFFF!EEEE.EEEE"
customerId="RCN-000-000-000"
username="jqsmith">
<secret secretAnswer="Francis"</pre>
      secretQuestion="What is your dogs name?" />
   <password password="C@n+f001me!" />
```

</user>

Example 4.28. JSON Add User Response

```
"secret": {
  "secretQuestion": "What is your dogs name?",
  "secretAnswer": "Francis"
"password": {
  "password": "C@n+f001me!"
"username": "jqsmith",
"customerId": "RCN-000-000-000",
"customerInum": "@!FFFF.FFFF.FFFF!EEEE.EEEE",
"email": "john.smith@example.org",
"personId": "RPN-111-111-111",
"firstName": "John",
"middleName": "Quincy",
"lastName": "Smith",
"displayName": "John Smith",
"prefLanguage": "US_en",
"inum": "@!FFFF.FFFF.FFFF!EEEE.EEEE!1111",
"timeZone": "America/Chicago",
"region": "SAT",
"status": "ACTIVE",
"locked": false,
"softDeleted": false
```

4.4.3. Get a User

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.

| Verb | URI | Description |
|------|--------------------------------------|-------------|
| GET | /customers/customerId/users/username | Get a user. |

Normal Response Code(s):200

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

This operation does not require a request body.

Example 4.29. XML Get User Response

```
status="ACTIVE" region="America/Chicago"
   inum="@!FFFF.FFFF.FFFF!EEEE.EEEE!1111"
   prefLanguage="US_en" displayName="John Smith"
   lastName="Smith" middleName="Quincy"
   firstName="John" personId="RPN-111-111-111"
   email="john.smith@example.org"
   customerInum="@!FFFF.FFFF.FFFF!EEEE.EEEE"
   customerId="RCN-000-000-000"
   username="jqsmith">
   <groups>
       <cli>clientGroup
            customerId="RCN-000-000-000",
            clientId="ab4820dhcb39347",
            type="Role"
           name="Admin" />
   </groups>
</user>
```

Example 4.30. JSON Get User Response

```
"groups": {
  "clientGroup": [
      "customerId" : "RCN-000-000-000",
      "clientId" : "ab4820dhcb39347",
      "name": "Admin",
      "type": "Role"
   }
 ]},
"username": "jqsmith",
"customerId": "RCN-000-000-000",
"customerInum": "@!FFFF.FFFF.FFFF!EEEE.EEEE",
"email": "john.smith@example.org",
"personId": "RPN-111-111-111",
"firstName": "John",
"middleName": "Quincy",
"lastName": "Smith",
"displayName": "John Smith",
"prefLanguage": "US_en",
"inum": "@!FFFF.FFFF.FFFF.FFFF!EEEE.EEEE!1111",
"region": "America/Chicago",
"status": "ACTIVE",
"locked": false,
"softDeleted": false
```

4.4.4. Get a User by Mosso ID

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|------|----------------|--------------------------|
| GET | /mosso/mossoId | Get a user with mossold. |

Normal Response Code(s):200

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

This operation does not require a request body.

Example 4.31. XML Get User By Mossold Response

```
<?xml version="1.0" encoding="UTF-8"?>
<user xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"</pre>
   username="qauser"
   customerId="RCN-QATestingCustomer"
   customerInum="@!FFFF.FFFF.FFFF!EEEE.999"
   email="quauser@example.com"
   personId="RPN-qauser-000-10001"
   firstName="qauser"
   middleName="none"
   lastName="Tester"
   displayName="qauser"
   prefLanguage="en-us"
   inum="@!FFFF.FFFF.FFFF!EEEE.999!10001"
   status="ACTIVE"
   locked="false"
   softDeleted="false"
   country="USA"
   timeZone="America/Chicago"
   mossoId="999112358"
   nastId="nastid-qauser"/>
```

Example 4.32. JSON Get User By Mossold Response

```
"username": "qauser",
"customerId": "RCN-QATestingCustomer",
"customerInum": "@!FFFF.FFFF.FFFF!EEEE.999",
"email": "quauser@example.com",
"personId": "RPN-qauser-000-10001",
"firstName": "qauser",
"middleName": "none",
"lastName": "Tester",
"displayName": "qauser",
"prefLanguage": "en-us",
"inum": "@!FFFF.FFFF.FFFF!EEEE.999!10001",
"status": "ACTIVE",
"locked": false,
"softDeleted": false,
"country": "USA",
"timeZone": "America/Chicago",
"mossoId": 999112358,
"nastId": "nastid-qauser"
```

4.4.5. Get a User by NAST ID

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|------|--------------|---------------------------|
| GET | /nast/nastId | Get a user with a nastId. |

Normal Response Code(s):200

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

This operation does not require a request body.

Example 4.33. XML Get User By NastId Response

```
<?xml version="1.0" encoding="UTF-8"?>
<user xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"</pre>
   username="qauser"
   customerId="RCN-QATestingCustomer"
   customerInum="@!FFFF.FFFF.FFFF!EEEE.999"
   email="quauser@example.com"
   personId="RPN-qauser-000-10001"
   firstName="gauser"
   middleName="none"
   lastName="Tester"
   displayName="qauser"
   prefLanguage="en-us"
   inum="@!FFFF.FFFF.FFFF!EEEE.999!10001"
   status="ACTIVE"
   locked="false"
   softDeleted="false"
   country="USA"
   timeZone="America/Chicago"
   mossoId="999112358"
   nastId="nastid-qauser"/>
```

Example 4.34. JSON Get User By NastId Response

```
{
  "username": "qauser",
  "customerId": "RCN-QATestingCustomer",
  "customerInum": "@!FFFF.FFFF.FFFF!EEEE.999",
  "email": "quauser@example.com",
  "personId": "RPN-qauser-000-10001",
```

```
"firstName": "qauser",
"middleName": "none",
"lastName": "Tester",
"displayName": "qauser",
"prefLanguage": "en-us",
"inum": "@!FFFF.FFFF.FFFF.FFF!EEEE.999!10001",
"status": "ACTIVE",
"locked": false,
"softDeleted": false,
"country": "USA",
"timeZone": "America/Chicago",
"mossoId": 999112358,
"nastId": "nastid-qauser"
```

4.4.6. Get a User by Username

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|------|-----------------|-----------------------------|
| GET | /users/username | Get a user with a username. |

Normal Response Code(s):200

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

This operation does not require a request body.

Example 4.35. XML Get User By Username Response

```
<?xml version="1.0" encoding="UTF-8"?>
<user xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"</pre>
   username="qauser"
   customerId="RCN-QATestingCustomer"
   customerInum="@!FFFF.FFFF.FFFF!EEEE.999"
   email="quauser@example.com"
   personId="RPN-qauser-000-10001"
   firstName="qauser"
   middleName="none"
   lastName="Tester"
   displayName="qauser"
   prefLanguage="en-us"
   inum="@!FFFF.FFFF.FFFF!EEEE.999!10001"
   status="ACTIVE"
   locked="false"
   softDeleted="false"
   country="USA"
   timeZone="America/Chicago"
```

```
mossoId="999112358"
nastId="nastid-qauser"/>
```

Example 4.36. JSON Get User By Username Response

```
"username": "qauser",
"customerId": "RCN-QATestingCustomer",
"customerInum": "@!FFFF.FFFF.FFFF!EEEE.999",
"email": "quauser@example.com",
"personId": "RPN-qauser-000-10001",
"firstName": "qauser",
"middleName": "none",
"lastName": "Tester",
"displayName": "qauser",
"prefLanguage": "en-us",
"inum": "@!FFFF.FFFF.FFFF.FFFF!EEEE.999!10001",
"status": "ACTIVE",
"locked": false,
"softDeleted": false,
"country": "USA",
"timeZone": "America/Chicago",
"mossoId": 999112358,
"nastId": "nastid-qauser"
```

4.4.7. Update a User

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.

| Verb | URI | Description |
|------|------------------------------------|----------------|
| PUT | /customers/customerId/users/userId | Update a user. |

Normal Response Code(s):200, 203

Error Response Code(s): unauthorized (401), badRequest (400), forbidden(403), itemNotFound (404), emailConflict (409), idmFault (500), serviceUnavailable(503)

Example 4.37. XML Update User Request

```
<?xml version="1.0" encoding="UTF-8"?>
<user xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    email="john.smith@somenewemail.org"
    username="jqsmith" />
```

Example 4.38. JSON Update User Request

```
{
```

```
"email": "john.smith@example.org",
"username": "jqsmith"
}
```

Example 4.39. XML Update User Response

```
<?xml version="1.0" encoding="UTF-8"?>
<user xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    timeZone="America/Chicago" prefLanguage="US_en"
    displayName="John Smith" lastName="Smith"
    middleName="Quincy" firstName="John"
    region="SAT" personId="RPN-111-111-111"
    email="john.smith@somenewemail.org"
    customerId="RCN-000-000-000" username="jqsmith" />
```

Example 4.40. JSON Update User Response

```
"username": "jqsmith",
"customerId": "RCN-000-000-000",
"customerInum": "@!FFFF.FFFF.FFFF!EEEE.EEEE",
"email": "john.smith@somenewemail.org",
"personId": "RPN-111-111-111",
"firstName": "John",
"middleName": "Quincy",
"lastName": "Smith",
"displayName": "John Smith",
"prefLanguage": "US_en",
"inum": "@!FFFF.FFFF.FFFF!EEEE.EEEE!1111",
"iname": "@Example.Smith*John",
"region": "America/Chicago",
"status": "ACTIVE",
"locked": false,
"softDeleted": false
```

4.4.8. Soft Delete a User

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.

| Verb | URI | Description |
|------|---|-------------------------------|
| PUT | /customers/customerId/users/userId/softDelete | Set a User's softDeleted Flag |

Normal Response Code(s):200

Error Response Code(s): unauthorized (401), badRequest (400), forbidden(403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

Example 4.41. XML User Soft Delete Request

```
<?xml version="1.0" encoding="UTF-8"?>
<user xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    softDeleted="true" />
```

Example 4.42. JSON User Soft Delete Request

```
{
    "softDeleted": "true"
}
```

Example 4.43. XML User Soft Delete Response

```
<?xml version="1.0" encoding="UTF-8"?>
<user xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    softDeleted="true" />
```

Example 4.44. JSON User Soft Delete Response

```
{
    "softDeleted": "true"
}
```

4.4.9. Delete User

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|--------|------------------------------------|----------------|
| DELETE | /customers/customerId/users/userId | Delete a user. |

Normal Response Code(s):204

Error Response Code(s): unauthorized (401), badRequest (400), forbidden(403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

This operation does not require a request body.

4.4.10. Get User List

| Verb | URI | Description |
|------|---|---|
| GET | /customers/customerId/users/?offset=x&limit=y | Gets a page of users where x is the offset and y is the limit of records to return. |

Error Response Code(s): unauthorized (401), badRequest (400), forbidden(403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

This operation does not require a request body.

Example 4.45. XML Get User List Response

```
<?xml version="1.0" encoding="UTF-8"?>
<users xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"</pre>
   limit="10"
   offset="0"
   totalRecords="2">
    <user
        softDeleted="false" locked="false"
        status="ACTIVE" region="America/Chicago"
        iname="@Example.Smith*John"
        inum="@!FFFF.FFFF.FFFF!EEEE.EEEE!1111"
        prefLanguage="US_en" displayName="John Smith"
        lastName="Smith" middleName="Quincy"
        firstName="John" personId="RPN-111-111-111"
        email="john.smith@example.org"
        customerInum="@!FFFF.FFFF.FFFF.FFFF!EEEE.EEEE"
        customerId="RCN-000-000-000"
       username="jqsmith" />
    <user softDeleted="false" locked="false"</pre>
        status="ACTIVE" region="America/Chicago"
        iname="@Example.Anderson*Bob"
        inum="@!FFFF.FFFF.FFFF!EEEE.EEEE!2222"
        prefLanguage="US_en" displayName="Bob Anderson"
        lastName="Anderson" middleName="Mark"
        firstName="Bob" personId="RPN-111-111-222"
        email="bob.anderson@example.org"
        customerInum="@!FFFF.FFFF.FFFF!EEEE.EEEE"
        customerId="RCN-000-000-000"
        username="bmanderson" />
</users>
```

Example 4.46. JSON Get User List Response

```
"displayName": "John Smith",
    "prefLanguage": "US_en",
    "inum": "@!FFFF.FFFF.FFFF!EEEE.EEEE!1111",
    "iname": "@Example.Smith*John",
    "region": "America/Chicago",
    "status": "ACTIVE",
    "locked": false,
    "softDeleted": false
    "username": "bmanderson",
    "customerId": "RCN-000-000-000",
    "customerInum": "@!FFFF.FFFF.FFFF!EEEE.EEEE",
    "email": "bob.anderson@example.org",
    "personId": "RPN-111-111-222",
    "firstName": "Bob",
    "middleName": "Mark"
    "lastName": "Anderson",
    "displayName": "Bob Anderson",
    "prefLanguage": "US_en",
    "inum": "@!FFFF.FFFF.FFFF!EEEE.EEEE!2222",
    "iname": "@Example.Anderson*Bob",
    "timeZone": "America/Chicago",
    "region": "SAT",
    "status": "ACTIVE",
    "locked": false,
    "softDeleted": false
],
"totalRecords": 2,
"offset": 0,
"limit": 10
```

4.4.11. Add User to Customer IdM Group

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.

| Verb | URI | Description |
|------|---|------------------------------------|
| | /customers/customerId/users/userId/ groups/groupName | Add a user to a Customer IdM group |

Normal Response Code(s):200

Error Response Code(s): unauthorized (401), badRequest (400), forbidden(403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

4.4.12. Remove User from Customer IdM Group

| Verb | URI | Description |
|--------|---|---|
| DELETE | /customers/customerId/users/userId/ groups/groupName | Remove a user from a customer IdM group |

Error Response Code(s): unauthorized (401), badRequest (400), forbidden(403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

4.4.13. Get the Groups That a User is a Member Of

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.

| Verb | URI | Description |
|------|--|---|
| | /customers/customerId/users/userId/groups? clientId=clientId&type=type | Get a user's groups optionally filtered by clientId and/or type |

Normal Response Code(s):200

Error Response Code(s): unauthorized (401), badRequest (400), forbidden(403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

Example 4.47. XML User Groups Response

Example 4.48. JSON User Groups Response

4.4.14. Generate/Reset Auth Service Key

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.

| Verb | URI | Description |
|------|--|--------------------------------------|
| POST | /customers/customerId/users/username/key | Generate or reset a user's Auth key. |

Normal Response Code(s):200, 203

Error Response Code(s): unauthorized (401), badRequest (400), forbidden(403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

This operation does not require a request body.

Example 4.49. XML User Auth Key Response

Example 4.50. JSON User Auth Key Response

```
{
"apiKey": "403958809d0809834e0809808a"
}
```

4.4.15. Set Auth Service Key

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|------|--|------------------------|
| PUT | /customers/customerId/users/username/key | Set a user's Auth key. |

Normal Response Code(s):200, 203

Error Response Code(s): unauthorized (401), badRequest (400), forbidden(403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

Example 4.51. XML Set Auth Key Requist

Example 4.52. JSON Set Auth Key Request

```
{
    "apiKey": "403958809d0809834e0809808a"
}
```

Example 4.53. XML Set Auth Key Response

Example 4.54. JSON Set Auth Key Response

```
{
    "apiKey": "403958809d0809834e0809808a"
}
```

4.4.16. Set User Lock

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|------|---|-------------------|
| PUT | /customers/customerId/users/username/lock | Set a user's lock |

Normal Response Code(s):204

Error Response Code(s): unauthorized (401), badRequest (400), forbidden(403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

Example 4.55. XML Set User Lock Request

```
<?xml version="1.0" encoding="UTF-8"?>
<user xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    locked="true" />
```

Example 4.56. JSON Set User Lock Request

```
{
    "locked": "true"
}
```

Example 4.57. XML Set User Lock Response

```
<?xml version="1.0" encoding="UTF-8"?>
<user xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    locked="true" />
```

Example 4.58. JSON Set User Lock Response

```
{
    "locked": "true"
}
```

4.4.17. Set User Password

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.

| Verb | URI | Description |
|------|---|-------------------------|
| | /customers/customerId/users/username/password? recovery=boolean | Sets a user's password. |

This method takes an optional boolean query parameter (recovery). True indicates that the password change is for Forget Password and will not require the old password. False is the normal reset route when an old password is used to reset the password.

Normal Response Code(s):204

Error Response Code(s): unauthorized (401), badRequest (400), passwordValidation(400), forbidden(403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

This operation does not require a request body.

Example 4.59. XML Set User Password Request

Example 4.60. JSON Set User Password Request

```
{
  "newPassword": {
    "password": "newpassword"
},
  "currentPassword": {
    "password": "oldpassword"
}
```

Example 4.61. XML User Password Response

```
<?xml version="1.0" encoding="UTF-8"?>
```

```
<userPassword xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
   password="newpassword" />
```

Example 4.62. JSON User Password Response

```
{
    "password": "newpassword"
}
```

4.4.18. Reset User Password

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.

| Verb | URI | Description |
|------|---|--------------------------|
| POST | /customers/customerId/users/username/password | Reset a user's password. |

Normal Response Code(s):200

Error Response Code(s): unauthorized (401), badRequest (400), forbidden(403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

This operation does not require a request body.

Example 4.63. XML Reset User Password Response

```
<?xml version="1.0" encoding="UTF-8"?>
<userPassword xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    password="7ud$dnF" />
```

Example 4.64. JSON Reset User Password Response

```
{
  "password": "7ud$dnF"
}
```

4.4.19. Get a User Password

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|------|---|------------------------|
| GET | /customers/customerId/users/userId/password | Get a user's password. |

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

This operation does not require a request body.

Example 4.65. XML Get User Password Response

```
<?xml version="1.0" encoding="UTF-8"?>
<userPassword xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    password="newpassword" />
```

Example 4.66. JSON Get User Passwrord Response

```
{
    "password": "newpassword"
}
```

4.4.20. Get Password Recovery Token

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|------|--|---|
| POST | /customers/customerId/users/username/password/ | Get a token that can be used to reset a |
| | recoveryToken | user's password. |

Normal Response Code(s):204

Error Response Code(s): unauthorized (401), badRequest (400), forbidden(403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

This operation does not require a request body.

Example 4.67. XML Password Recovery Token Response

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<token xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
        expires_in="3600"
        id="309487987f0892397a9439875900b" />
```

Example 4.68. JSON Password Recovery Token Response

```
{
  "id": "309487987f0892397a9439875900b",
  "expiresIn": 3600
}
```

4.4.21. Set User Status

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.

| Verb | URI | Description |
|------|---|---|
| PUT | /customers/customerId/users/username/status | Set a user's status to ACTIVE or INACTIVE |

Normal Response Code(s):204

Error Response Code(s): unauthorized (401), badRequest (400), forbidden(403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

Example 4.69. XML Set User Status Request

```
<?xml version="1.0" encoding="UTF-8"?>
<user xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    status="ACTIVE" />
```

Example 4.70. JSON Set User Status Request

```
{
    "status": "INACTIVE"
}
```

Example 4.71. XML Set User Status Response

```
<?xml version="1.0" encoding="UTF-8"?>
<user xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    status="ACTIVE" />
```

Example 4.72. JSON Set User Status Response

```
{
    "status": "INACTIVE"
}
```

4.4.22. Set User Secret

| Verb | URI | Description |
|------|---|---|
| PUT | /customers/customerId/users/username/secret | Sets a user's secret question and answer. |

Error Response Code(s): unauthorized (401), badRequest (400), forbidden(403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

Example 4.73. XML Set User Secret Request

```
<?xml version="1.0" encoding="UTF-8"?>
<userSecret xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    secretAnswer="Not a very good one."
    secretQuestion="Is this a secret question?" />
```

Example 4.74. JSON Set User Secret Request

```
{
    "secretQuestion": "Is this a secret question?",
    "secretAnswer": "Not a very good one."
}
```

Example 4.75. XML Set User Secret Response

```
<?xml version="1.0" encoding="UTF-8"?>
<userSecret xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    secretAnswer="Not a very good one."
    secretQuestion="Is this a secret question?" />
```

Example 4.76. JSON Set User Secret Response

```
{
  "secretQuestion": "Is this a secret question?",
  "secretAnswer": "Not a very good one."
}
```

4.4.23. Get the Services that a User has Provisioned

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|------|---|--|
| GET | /customers/customerId/users/userId/services | Get the services that a user has provisioned |

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

This operation does not require a request body.

Example 4.77. XML Get User Services Response

```
<?xml version="1.0" encoding="UTF-8"?>
<cli>ents xmlns="http://docs.rackspacecloud.com/idm/api/v1.0">
<client
   softDeleted="false"
   locked="false"
   status="ACTIVE"
   inum="@FFFF.FFFF.FFFF!EEEE.EEEE!0001"
   name="Test Application2"
   customerId="RCN-000-000-000"
   clientId="ab4820dhcb39347">
</client>
<client
   softDeleted="false"
   locked="false"
   status="ACTIVE"
   inum="@FFFF.FFFF.FFFF!EEEE.EEEE!0002"
   name="Test Application2"
   customerId="RCN-000-000-000"
   clientId="632h389cv902bde">
</client>
</clients>
```

Example 4.78. JSON Get User Services Response

```
"client": [
    "clientId": "ab4820dhcb39347",
    "customerId": "RCN-000-000-000",
    "name": "Test Application2",
    "inum": "@FFFF.FFFF.FFFF.FFFF!EEEE.EEEE!0001",
    "status": "ACTIVE",
    "locked": false,
    "softDeleted": false
    "clientId": "632h389cv902bde",
    "customerId": "RCN-000-000-000",
    "name": "Test Application2",
    "inum": "@FFFF.FFFF.FFFF!EEEE.EEEE!0002",
    "status": "ACTIVE",
    "locked": false,
    "softDeleted": false
]
```

4.4.24. Provision a Service for a User

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|------|---|--|
| POST | /customers/customerId/users/userId/services | Get the services that a user has provisioned |

Normal Response Code(s):200

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

Example 4.79. XML Provision User Service Request

Example 4.80. JSON Get Provision User Service Request

```
{
    "clientId": "ab4820dhcb39347",
}
```

4.4.25. Remove Provision a Service for a User

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|--------|---|---|
| DELETE | /customers/customerId/users/userId/ services/serviceId | Removes a provisioned service from a user |

Normal Response Code(s):204

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

This operation does not require a request body.

4.4.26. Grant a User Permission for Service

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|------|---|---------------------------------------|
| POST | /customers/customerId/users/userId/ services/serviceId/permissions | Grant a user permission for a service |

Normal Response Code(s):200

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

Example 4.81. XML Grant User Permission Request

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<permission xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    clientId="IDM"
    customerId="RCN-000-000-000"
    permissionId="addCustomer" />
```

Example 4.82. JSON Grant User Permission Request

```
{
    "permissionId": "addCustomer",
    "customerId": "RCN-000-000",
    "clientId": "IDM"
}
```

4.4.27. Revoke a User Permission for Service

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|--------|--|--|
| DELETE | /customers/customerId/users/userId/ services/serviceId/permissions/permissionId | Revoke a user permission for a service |

Normal Response Code(s):204

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

This operation does not require a request body.

4.4.28. Check if User has Permission for Service

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|------|--|---|
| GET | /customers/customerId/users/userId/ services/serviceId/permissions/permissionId | Check to see if user has permisison for a service |

Normal Response Code(s):200 404

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), idmFault (500), serviceUnavailable(503)

This operation does not require a request body.

4.4.29. Get a List of Delegated Refresh Tokens for a User

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|------|---|---------------------------------------|
| GET | /customers/customerId/users/userId/delegatedrefreshtokens | Get a user's delegated refresh tokens |

Normal Response Code(s):200

Error Response Code(s): unauthorized (401), badRequest (400), forbidden(403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

Example 4.83. XML Delegated Tokens Response

```
id="27aaf6789a9dcb789879972729abf"
    clientId="af62785da123567" />
</delegatedTokens>
```

Example 4.84. JSON Delegated Tokens Response

4.4.30. Get a Delegated Refresh Token for a User

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|------|---|--------------------------------------|
| GET | /customers/customerId/users/userId/ delegatedrefreshtokens/tokenId | Get a user's delegated refresh token |

Normal Response Code(s):200

Error Response Code(s): unauthorized (401), badRequest (400), forbidden(403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

Example 4.85. XML Delegated Token Response

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<token xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    expires="2010-11-02T03:32:15-05:00"
    id="309487987f0892397a9439875900b"
    clientId="ab4820dhcb39347" />
```

Example 4.86. JSON Delegated Token Response

```
{
"id": "309487987f0892397a9439875900b",
"expires": "2010-11-02T03:32:15-05:00",
"clientId": "ab4820dhcb39347"
```

4.4.31. Delete a Delegated Refresh Token for a User

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|--------|---|---|
| DELETE | /customers/customerId/users/userId/ delegatedrefreshtokens/tokenId | Deletes a user's delegated refresh tokens |

Normal Response Code(s):204

Error Response Code(s): unauthorized (401), badRequest (400), forbidden(403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

This operation does not require a request body.

4.5. Authentication Operations

4.5.1. Authenticate a user by Mosso ID

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.

| Verb | URI | Description |
|------|-------------|---|
| POST | /auth/mosso | Authenticate a user by mosso Id. Pass in the mosso credentials shown below. |

Normal Response Code(s):200

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

Example 4.87. XML Auth By Mosso Credentials Request

```
<?xml version="1.0" encoding="UTF-8"?>
<mossoCredentials xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    mossoId="999112358"
    key="qauser-000-001" />
```

Example 4.88. JSON Auth By Mosso Credentials Request

```
{
"mossoId": "999112358"
```

```
"key": "qauser-000-001" }
```

Example 4.89. XML Auth By Mosso Credentials Response

```
<?xml version="1.0" encoding="UTF-8"?>
<cloudAuth xmlns="http://docs.rackspacecloud.com/idm/api/v1.0">
    <token id="DFW-c6dfc4456f6545f8b8265ff5b6bda775"</pre>
        expires_in="16640"/>
<serviceCatalog xmlns="http://docs.rackspacecloud.com/idm/api/v1.0">
     <service name="cloudFiles">
         <endpoint region="DFW"</pre>
             v1Default="true"
             publicURL="https://storage.clouddrive.com/v1/KovacsNastId"
             internalURL="https://storage-snet.clouddrive.com/v1/
KovacsNastId"/>
    </service>
    <service name="cloudServers">
         <endpoint v1Default="false"</pre>
             publicURL="https://servers.api.rackspacecloud.com/v1.0/90000"/>
    </service>
</serviceCatalog>
</cloudAuth>
```

Example 4.90. JSON Auth By Mosso Credentials Response

```
{"token": {
    "id": "DFW-c6dfc4456f6545f8b8265ff5b6bda775",
    "expires_in": 16110
}}
```

4.5.2. Authenticate a user by NAST ID

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.

| Verb | URI | Description |
|------|------------|---|
| POST | /auth/nast | Authenticate a user by nast Id. Pass in the nast credentials shown below. |

Normal Response Code(s):200

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

Example 4.91. XML Auth By Nast Credentials Request

```
<?xml version="1.0" encoding="UTF-8"?>
<nastCredentials xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    nastId="nastid-qauser"</pre>
```

```
key="qauser-000-001" />
```

Example 4.92. JSON Auth By Nast Credentials Request

```
{
    "nastId": "nastid-qauser"
    "key": "qauser-000-001"
}
```

Example 4.93. XML Auth By Nast Credentials Response

```
<?xml version="1.0" encoding="UTF-8"?>
<cloudAuth xmlns="http://docs.rackspacecloud.com/idm/api/v1.0">
    <token id="DFW-c6dfc4456f6545f8b8265ff5b6bda775"</pre>
        expires_in="16640"/>
<serviceCatalog xmlns="http://docs.rackspacecloud.com/idm/api/v1.0">
    <service name="cloudFiles">
         <endpoint region="DFW"</pre>
             v1Default="true"
             publicURL="https://storage.clouddrive.com/v1/KovacsNastId"
             internalURL="https://storage-snet.clouddrive.com/v1/
KovacsNastId"/>
   </service>
    <service name="cloudServers">
         <endpoint v1Default="false"</pre>
             publicURL="https://servers.api.rackspacecloud.com/v1.0/90000"/>
    </service>
</serviceCatalog>
</cloudAuth>
```

Example 4.94. JSON Auth By Nast Credentials Response

```
{"token": {
    "id": "DFW-c6dfc4456f6545f8b8265ff5b6bda775",
    "expires_in": 16110
}}
```

4.5.3. Authenticate a user by Username

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.

| Verb | URI | Description |
|------|----------|--|
| POST | ' | Authenticate a user by username. Pass in the username credentials shown below. |

Normal Response Code(s):200

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

Example 4.95. XML Auth By Username Request

```
<?xml version="1.0" encoding="UTF-8"?>
<usernameCredentials xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    username="qauser"
    key="qauser-000-001" />
```

Example 4.96. XML Auth By Username Response

```
<?xml version="1.0" encoding="UTF-8"?>
<cloudAuth xmlns="http://docs.rackspacecloud.com/idm/api/v1.0">
    <token id="DFW-c6dfc4456f6545f8b8265ff5b6bda775"</pre>
        expires in="16640"/>
<serviceCatalog xmlns="http://docs.rackspacecloud.com/idm/api/v1.0">
     <service name="cloudFiles">
         <endpoint region="DFW"</pre>
             v1Default="true"
             publicURL="https://storage.clouddrive.com/v1/KovacsNastId"
             internalURL="https://storage-snet.clouddrive.com/v1/
KovacsNastId"/>
    </service>
    <service name="cloudServers">
         <endpoint v1Default="false"</pre>
             publicURL="https://servers.api.rackspacecloud.com/v1.0/90000"/>
    </service>
</serviceCatalog>
</cloudAuth>
```

Example 4.97. JSON Auth By Username Response

```
{"token": {
    "id": "DFW-c6dfc4456f6545f8b8265ff5b6bda775",
    "expires_in": 16110
}}
```

4.6. Application Operations

4.6.1. Add an Application

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.

| Verb | URI | Description |
|------|-------------------------------|---------------|
| POST | /customers/customerId/clients | Add a client. |

Normal Response Code(s):201

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

Example 4.98. XML Add Client Request

```
<?xml version="1.0" encoding="UTF-8"?>
<client xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    name="Test Application2"
    customerId="RCN-000-000-000" />
```

Example 4.99. JSON Add Client Request

```
{
  "customerId": "RCN-000-000",
  "name": "Test Application2"
}
```

Example 4.100. XML Add Client Response

```
<?xml version="1.0" encoding="UTF-8"?>
<client xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    softDeleted="false"
    locked="false"
    status="ACTIVE"
    inum="@FFFF.FFFF.FFFF.FFFF!EEEE.EEEE!0001"
    name="Test Application2"
    customerId="RCN-000-000-000"
    clientId="ab4820dhcb39347">
        <credentials clientSecret="3af738fbeiwu23" />
</client>
```

Example 4.101. JSON Add Client Response

```
"credentials": {
    "clientSecret": "3af738fbeiwu23"
},
    "clientId": "ab4820dhcb39347",
    "customerId": "RCN-000-000-000",
    "name": "Test Application2",
    "inum": "@FFFF.FFFF.FFFF.FFFF!EEEE.EEEE!0001",
    "status": "ACTIVE",
    "locked": false,
    "softDeleted": false
}
```

4.6.2. Get an Application

| Verb | URI | Description |
|------|--|---------------|
| GET | /customers/customerId/clients/clientId | Get a client. |

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

Example 4.102. XML Get Client Response

```
<?xml version="1.0" encoding="UTF-8"?>
<client xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    softDeleted="false"
    locked="false"
    status="ACTIVE"
    iname="@Rackspace*Rackspace*ControlPanel"
    inum="@FFFF.FFFF.FFFF.FFFF!EEEE.EEEE!0001"
    name="Test Application2"
    customerId="RCN-000-000-000"
    clientId="ab4820dhcb39347" />
```

Example 4.103. JSON Get Client Response

```
{
  "clientId": "ab4820dhcb39347",
  "customerId": "RCN-000-000",
  "name": "Test Application2",
  "inum": "@FFFF.FFFF.FFFF.FFFF!EEEE.EEEE!0001",
  "status": "ACTIVE",
  "locked": false,
  "softDeleted": false
}
```

4.6.3. Get All Applications for a Customer

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.

| Verb | URI | Description |
|------|--------------------------------|--------------------------------|
| GET | /customers/customerId/clients/ | Get all clients for customerId |

Normal Response Code(s):200

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

Example 4.104. XML Get Clients Response

```
<?xml version="1.0" encoding="UTF-8"?>
```

```
<clients xmlns="http://docs.rackspacecloud.com/idm/api/v1.0">
   softDeleted="false"
   locked="false"
   status="ACTIVE"
   inum="@FFFF.FFFF.FFFF!EEEE.EEEE!0001"
   name="Test Application2"
   customerId="RCN-000-000-000"
   clientId="ab4820dhcb39347">
</client>
<client
   softDeleted="false"
   locked="false"
   status="ACTIVE"
   inum="@FFFF.FFFF.FFFF!EEEE.EEEE!0002"
   name="Test Application2"
   customerId="RCN-000-000-000"
   clientId="632h389cv902bde">
</client>
</clients>
```

Example 4.105. JSON Get Clients Response

```
"client": [
    "clientId": "ab4820dhcb39347",
    "customerId": "RCN-000-000-000",
    "name": "Test Application2",
    "inum": "@FFFF.FFFF.FFFF!EEEE.EEEE!0001",
    "status": "ACTIVE",
    "locked": false,
    "softDeleted": false
   "clientId": "632h389cv902bde",
   "customerId": "RCN-000-000-000",
    "name": "Test Application2",
    "inum": "@FFFF.FFFF.FFFF!EEEE.EEEE!0002",
    "status": "ACTIVE",
    "locked": false,
    "softDeleted": false
]
```

4.6.4. Update an Application

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|------|--|------------------|
| PUT | /customers/customerId/clients/clientId | Update a client. |

Error Response Code(s): unauthorized (401), badRequest (400), forbidden(403), itemNotFound (404), emailConflict (409), idmFault (500), serviceUnavailable(503)

Example 4.106. XML Update Client Request

```
<?xml version="1.0" encoding="UTF-8"?>
<client xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    scope="cloud_servers"
    clientId="ab4820dhcb39347" />
```

Example 4.107. JSON Update Client Request

```
{
  "clientId": "ab4820dhcb39347",
  "scope": "cloud_servers"
}
```

Example 4.108. XML Update Client Response

```
<?xml version="1.0" encoding="UTF-8"?>
<client xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    softDeleted="false"
    locked="false"
    status="ACTIVE"
    iname="@Rackspace*Rackspace*ControlPanel"
    inum="@FFFF.FFFF.FFFF.FFFF!EEEE.EEEE!0001"
    name="Test Application2"
    customerId="RCN-000-000-000"
    clientId="ab4820dhcb39347"
    scope="cloud_servers" />
```

Example 4.109. JSON Update Client Response

```
"clientId": "ab4820dhcb39347",
"customerId": "RCN-000-000",
"name": "Test Application2",
"inum": "@FFFF.FFFF.FFFF.FFFF!EEEE.EEEE!0001",
"scope": "cloud_servers",
"status": "ACTIVE",
"locked": false,
"softDeleted": false
```

4.6.5. Soft Delete an Application

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.

| Verb | URI | Description |
|--------|--|--------------------------------|
| DELETE | /customers/customerId/clients/clientId/softdeleted | Delete a customer application. |

Normal Response Code(s):204

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

Example 4.110. XML Soft Delete Application Request

Example 4.111. JSON Soft Delete Application Request

```
{
    "softDeleted": "true"
}
```

Example 4.112. XML Soft Delete Application Response

```
<?xml version="1.0" encoding="UTF-8"?>
<client xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    softDeleted="true" />
```

Example 4.113. JSON Soft Delete Application Response

```
{
    "softDeleted": "true"
}
```

4.6.6. Delete an Application

| Verb | URI | Description |
|--------|--|------------------|
| DELETE | /customers/customerId/clients/clientId | Delete a client. |

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

This operation does not require a request body.

4.6.7. Get Permissions defined by an Application

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.

| Verb | URI | Description |
|------|--|---|
| GET | /customers/customerId/clients/clientId/permissions | Get all permissions defined by clientId |
| | | of a customerId |

Normal Response Code(s):200

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

This operation does not require a request body.

Example 4.114. XML Get Permissions Response

Example 4.115. JSON Get Permissions Response

4.6.8. Add a Permission defined by an Application

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|------|--|---|
| POST | /customers/customerId/clients/clientId/permissions | Define a permission for a clientId of a |
| | | customerId |

Normal Response Code(s):201

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

Example 4.116. XML Add a Defined Permission Request

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<permission xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    type="application/text"
    clientId="IDM"
    customerId="RCN-000-000-000"
    permissionId="addCustomer">POST /customers</permission>
```

Example 4.117. JSON Add a Defined Permission Request

```
{
  "value": "POST /customers",
  "permissionId": "addCustomer",
  "customerId": "RCN-000-000",
  "clientId": "IDM",
  "type": "application/text"
}
```

Example 4.118. XML Add a Defined Permission Response

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<permission xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    type="application/text"
    clientId="IDM"
    customerId="RCN-000-000-000"
    permissionId="addCustomer">POST /customers</permission>
```

Example 4.119. JSON Add a Defined Permission Response

```
{
  "value": "POST /customers",
  "permissionId": "addCustomer",
  "customerId": "RCN-000-000-000",
  "clientId": "IDM",
  "type": "application/text"
}
```

4.6.9. Get a Permission defined by an Application

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|------|---|---|
| GET | /customers/customerId/clients/clientId/permissions/defined/permissionId | Get a permissionId for a clientId of a customerId |

Normal Response Code(s):200

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

This operation does not require a request body.

Example 4.120. XML Get Defined Permission Response

Example 4.121. JSON Get Defined Permission Response

```
{
  "value": "POST /customers",
  "permissionId": "addCustomer",
  "customerId": "RCN-000-000-000",
  "clientId": "IDM",
  "type": "application/text"
}
```

4.6.10. Update a Permission defined by an Application



Note

This is a management API function.

| Verb | URI | Description |
|------|---|----------------------------------|
| PUT | /customers/customerId/clients/clientId/permissions/ | Update a permission defined by a |
| | defined/permissionId | clientId of a customerId |

Normal Response Code(s):201

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

Example 4.122. XML Update a Defined Permission Request

Example 4.123. JSON Update a Defined Permission Request

```
{
  "value": "POST /customers",
  "permissionId": "addCustomer",
  "customerId": "RCN-000-000",
  "clientId": "IDM",
  "type": "application/text"
}
```

Example 4.124. XML Update a Defined Permission Response

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<permission xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    type="application/text"
    clientId="IDM"
    customerId="RCN-000-000"
    permissionId="addCustomer">POST /customers</permission>
```

Example 4.125. JSON Update a Defined Permission Response

```
{
  "value": "POST /customers",
  "permissionId": "addCustomer",
  "customerId": "RCN-000-000",
  "clientId": "IDM",
  "type": "application/text"
```

4.6.11. Delete a Permission defined by an Application

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|--------|---|----------------------------------|
| DELETE | /customers/customerId/clients/clientId/permissions/ | Delete a permission defined by a |
| | <pre>defined/permissionId</pre> | clientId of a customerId |

Normal Response Code(s):204

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

This operation does not require a request body.

4.6.12. Reset an Application Secret

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.

| Verb | URI | Description |
|------|---|----------------------|
| POST | /customers/customerId/clients/clientId/secret | Reset client secret. |

Normal Response Code(s):200

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

This operation does not require a request body.

Example 4.126. XML Reset Client Secret Response

```
<?xml version="1.0" encoding="UTF-8"?>
<clientCredentials xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
   clientSecret="c582fe94dda4c0da19bf234c504db0b63df96daa" />
```

Example 4.127. JSON Reset Client Secret Response

```
{
    "clientSecret" : "eca2d413a1790dc6473842ab5a49387a29996757"
}
```

4.6.13. Add a Group for an Application

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|------|---|---------------------------------|
| POST | /customers/customerId/clients/clientId/groups | Add a group for a clientId of a |
| | | customerId |

Normal Response Code(s):201

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

Example 4.128. XML Add a Group Request

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<clientGroup xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    customerId="RCN-000-000-000"
    clientId="IDM"
    name="Idm Admin"
    type="Role" />
```

Example 4.129. JSON Add a Group Request

```
{
    "customerId" : "RCN-000-000",
    "clientId" : "IDM",
    "name" : "Idm Admin",
    "type" : "Role"
}
```

Example 4.130. XML Add a Group Response

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<clientGroup xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    customerId="RCN-000-000-000"
    clientId="IDM"
    name="Idm Admin"
    type="Role" />
```

Example 4.131. JSON Add a Group Response

```
{
```

```
"customerId" : "RCN-000-000",

"clientId" : "IDM",

"name" : "Idm Admin",

"type" : "Role"
}
```

4.6.14. Get all Groups for an Application

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|------|---|------------------------------------|
| GET | /customers/customerId/clients/clientId/groups | Get all groups for a clientId of a |
| | | customerId |

Normal Response Code(s):200

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

This operation does not require a request body.

Example 4.132. XML Get Groups Response

Example 4.133. JSON Get Groups Response

4.6.15. Update a Group for an Application





Note

This is a management API function.

| Verb | URI | Description |
|------|---|------------------------------------|
| PUT | /customers/customerId/clients/clientId/ | Update a group for a clientId of a |
| | <pre>groups/groupName</pre> | customerId |

Normal Response Code(s):201

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

Example 4.134. XML Update a Group Request

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<clientGroup xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    customerId="RCN-000-000-000"
    clientId="IDM"
    name="Idm Admin"
    type="Role" />
```

Example 4.135. JSON Update a Group Request

```
{
    "customerId" : "RCN-000-000",
    "clientId" : "IDM",
    "name" : "Idm Admin",
    "type" : "Role"
}
```

Example 4.136. XML Update a Group Response

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<clientGroup xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    customerId="RCN-000-000-000"
    clientId="IDM"
    name="Idm Admin"
    type="Role" />
```

Example 4.137. JSON Update a Group Response

```
{
    "customerId" : "RCN-000-000",
    "clientId" : "IDM",
    "name" : "Idm Admin",
    "type" : "Role"
}
```

4.6.16. Delete a Group for an Application

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|------|---|---|
| | /customers/customerId/clients/clientId/ groups/groupName | Delete a group for a clientId of a customerId |

Normal Response Code(s):204

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

This operation does not require a request body.

4.6.17. Add a User to a Group for an Application

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|------|---|---|
| | /customers/customerId/clients/clientId/ | Add a user to a group for a clientId of a |
| | groups/groupName/members/username | customerId |

Normal Response Code(s):200

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

This operation does not require a request body.

4.6.18. Remove a User from a Group for an Application

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|--------|---|----------------------------------|
| DELETE | /customers/customerId/clients/clientId/ | Remove a user from a group for a |
| | groups/groupName/mbmers/username | clientId of a customerId |

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

This operation does not require a request body.

4.6.19. Get the Services that a Client has Provisioned

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|------|---|--|
| GET | /customers/customerId/clients/clientId/services | Get the services that a user has provisioned |

Normal Response Code(s):200

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

This operation does not require a request body.

Example 4.138. XML Get Cilent Services Response

```
<?xml version="1.0" encoding="UTF-8"?>
<clients xmlns="http://docs.rackspacecloud.com/idm/api/v1.0">
<client
   softDeleted="false"
   locked="false"
   status="ACTIVE"
   inum="@FFFF.FFFF.FFFF!EEEE.EEEE!0001"
   name="Test Application2"
   customerId="RCN-000-000-000"
   clientId="ab4820dhcb39347">
</client>
<client
   softDeleted="false"
   locked="false"
   status="ACTIVE"
   inum="@FFFF.FFFF.FFFF!EEEE.EEEE!0002"
   name="Test Application2"
   customerId="RCN-000-000-000"
   clientId="632h389cv902bde">
</client>
</clients>
```

Example 4.139. JSON Get Client Services Response

```
"client": [
    "clientId": "ab4820dhcb39347",
    "customerId": "RCN-000-000-000",
    "name": "Test Application2",
    "inum": "@FFFF.FFFF.FFFF!EEEE.EEEE!0001",
    "status": "ACTIVE",
    "locked": false,
    "softDeleted": false
    "clientId": "632h389cv902bde",
    "customerId": "RCN-000-000-000",
    "name": "Test Application2",
    "inum": "@FFFF.FFFF.FFFF!EEEE.EEEE!0002",
    "status": "ACTIVE",
    "locked": false,
    "softDeleted": false
]
```

4.6.20. Grant a Client Permission for Service

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|------|---|---|
| POST | /customers/customerId/clients/clientId/ services/serviceId/permissions | Grant a client permission for a service |

Normal Response Code(s):200

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

Example 4.140. XML Grant Client Permission Request

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<permission xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    clientId="IDM"
    customerId="RCN-000-000-000"
    permissionId="addCustomer" />
```

Example 4.141. JSON Grant Client Permission Request

```
{
```

```
"permissionId": "addCustomer",
"customerId": "RCN-000-000",
"clientId": "IDM"
}
```

4.6.21. Revoke a Client Permission for Service

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|--------|--|---|
| DELETE | /customers/customerId/cilents/clientId/ services/serviceId/permissions/permissionId | Check to see if client has permisison for a service |

Normal Response Code(s):204

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

This operation does not require a request body.

4.6.22. Check if Client has Permission for Service

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|------|---|--|
| | , , , , , , , | Revoke a client permission for a service |
| | services/serviceId/permissions/permissionId | |

Normal Response Code(s):200 404

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), idmFault (500), serviceUnavailable(503)

This operation does not require a request body.

4.7. Password Operations

4.7.1. Get Password Rules

| Verb | URI | Description |
|------|----------------|--------------------|
| GET | /passwordrules | Get Password Rules |

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), idmFault (500), serviceUnavailable(503)

Example 4.142. XML Get Password Rules Response

```
<?xml version="1.0" encoding="UTF-8" standalone="yes"?>
<passwordRuleResults
    xmlns="http://docs.rackspacecloud.com/idm/api/v1.0">
    <passwordRuleResults
        ruleMessage="Password must be at least 7 characters."
        ruleName="Minimum Length"
        ruleId="1"
        passed="true" />
        <passwordRuleResults
        ruleMessage="Password must contain a lowercase."
        ruleName="Lowercase Character"
        ruleId="2"
        passed="true" />
        </passwordRuleResults>
```

Example 4.143. JSON Get Password Rules Response

4.7.2. Password validation check

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.

| Verb | URI | Description |
|------|---------------------------|--|
| POST | /passwordrules/validation | Check Password Validation for password |

Normal Response Code(s):200

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), itemNotFound (404), idmFault (500), serviceUnavailable(503)

Example 4.144. XML Password Validation Request

```
<?xml version="1.0" encoding="UTF-8"?>
<userPassword xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    password="newpassword" />
```

Example 4.145. JSON Password Validation Request

```
{
    "password": "newpassword"
}
```

Example 4.146. XML Password Validation Response

```
<?xml version="1.0" encoding="UTF-8"?>
<passwordValidation xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"</pre>
    validPassword="true">
    <passwordRuleResults>
        <passwordRuleResults</pre>
          ruleMessage="Password must be at least 7 characters long."
          ruleName="Minimum Length"
          ruleId="1"
          passed="true" />
        <passwordRuleResults</pre>
          ruleMessage="Password must contain a lowercase character."
          ruleName="Lowercase Character"
          ruleId="2"
          passed="true" />
    </passwordRuleResults>
</passwordValidation>
```

Example 4.147. JSON Password Validation Response

```
[] } ,
    "validPassword": false
}
```

4.8. Admin Operations

4.8.1. Get Base URLs

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|------|-----------|---------------|
| GET | /baseurls | Get base urls |

Normal Response Code(s):200

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), idmFault (500), serviceUnavailable(503), itemNotFound (404)

Example 4.148. XML Get BaseURLs Response

```
<?xml version="1.0" encoding="UTF-8"?>
<baseURLs xmlns="http://docs.rackspacecloud.com/idm/api/v1.0">
    <baseURL
       id="111111"
       userType="NAST"
       serviceName="cloudFiles"
       region="DFW"
       publicURL="https://storage.clouddrive.com/v1"
        internalURL="https://storage-snet.clouddrive.com/v1"
       default="true"/>
    <baseURL
       id="222222"
       userType="MOSSO"
       serviceName="cloudServers"
       publicURL="https://servers.api.rackspacecloud.com/v1.0"
       default="true"/>
</baseURLs>
```

Example 4.149. JSON Get BaseURLs Response

```
"publicURL": "https://storage.clouddrive.com/v1",
    "internalURL": "https://storage-snet.clouddrive.com/v1",
    "adminURL": null,
    "default": true
},

{
    "id": 222222,
    "userType": "MOSSO",
    "serviceName": "cloudServers",
    "region": null,
    "publicURL": "https://servers.api.rackspacecloud.com/v1.0",
    "internalURL": null,
    "adminURL": null,
    "default": true
}
```

4.8.2. Add Base URL

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|------|-----------|---------------------------------------|
| POST | /baseurls | Add base urls. Pass the base url data |
| | | (shown below). |

Normal Response Code(s):200

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), idmFault (500), serviceUnavailable(503), itemNotFound (404)

Example 4.150. XML Add BaseUrl Request

```
<?xml version="1.0" encoding="UTF-8"?>
<baseURL xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    id="111114"
    userType="NAST"
    serviceName="cloudFiles"
    region="DFW"
    publicURL="https://storage.clouddrive.com/v1"
    internalURL="https://storage-snet.clouddrive.com/v1"
    adminURL="https://storage-snet.clouddrive.com/v1"
    default="true"/>
```

4.8.3. Get a Base URL



Note

This is a management API function.

| Verb | URI | Description |
|------|---------------------|----------------|
| GET | /baseurls/baseUrlId | Get a base url |

Normal Response Code(s):200

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), idmFault (500), serviceUnavailable(503), itemNotFound (404)

Example 4.151. XML Get BaseUrl Response

```
<?xml version="1.0" encoding="UTF-8"?>
<Response xmlns="http://10.127.7.164/v1.0/baseurls/111111"
   adminURL="https://storage-snet.clouddrive.com/v1"
   default="true"
   id="111111"
   internalURL="https://storage-snet.clouddrive.com/v1"
   publicURL="https://storage.clouddrive.com/v1"
   region="DFW"
   serviceName="cloudFiles"
   userType="NAST"/>
```

Example 4.152. JSON Get BaseUrl Response

```
{
  "id": 111111,
  "userType": "NAST",
  "serviceName": "cloudFiles",
  "region": "DFW",
  "publicURL": "https://storage.clouddrive.com/v1",
  "internalURL": "https://storage-snet.clouddrive.com/v1",
  "adminURL": null,
  "default": true
}
```

4.8.4. Delete a Base URL

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|--------|---------------------|-------------------|
| DELETE | /baseurls/baseUrlId | Delete a base url |

Normal Response Code(s):200

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), idmFault (500), serviceUnavailable(503), itemNotFound (404)

4.8.5. Get Base Url Refs

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|------|-----------------------------|---------------------------|
| GET | /users/username/baseurlrefs | Gets a base url reference |

Normal Response Code(s):200

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), idmFault (500), serviceUnavailable(503), itemNotFound (404)

Example 4.153. XML Get Base Url Ref Response

```
<?xml version="1.0" encoding="UTF-8"?>
<baseURLRefs xmlns="http://docs.rackspacecloud.com/auth/api/v1.1">
<baseURLRef</pre>
        href="https://auth.api.rackspacecloud.com/v1.1/baseURLs/1"
        id="1"
        v1Default="true" />
<baseURLRef</pre>
        href="https://auth.api.rackspacecloud.com/v1.1/baseURLs/2"
        id="2" />
<baseURLRef</pre>
        href="https://auth.api.rackspacecloud.com/v1.1/baseURLs/3"
        id="3"
        v1Default="true" />
<baseURLRef</pre>
        href="https://auth.api.rackspacecloud.com/v1.1/baseURLs/4"
<baseURLRef</pre>
        href="https://auth.api.rackspacecloud.com/v1.1/baseURLs/5"
        v1Default="true" />
</baseURLRefs>
```

Example 4.154. JSON Get Base Url Ref Response

```
{
"baseURLRefs" : [
    {
      "id" : 1,
      "href" : "https://auth.api.rackspacecloud.com/v1.1/baseURLs/1",
      "v1Default" : true
```

```
},
{
"id" : 2,
"href" : "https://auth.api.rackspacecloud.com/v1.1/baseURLs/2"
},
{
"id" : 3,
"href" : "https://auth.api.rackspacecloud.com/v1.1/baseURLs/3",
"v1Default" : true
},
{
"id" : 4,
"href" : "https://auth.api.rackspacecloud.com/v1.1/baseURLs/4"
},
{
"id" : 5,
"href" : "https://auth.api.rackspacecloud.com/v1.1/baseURLs/5",
"v1Default" : true
}
```

4.8.6. Add Base URL Ref

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|------|-----------------------------|--|
| PUT | /users/username/baseurlrefs | Add base url Ref. Pass the base url ref data |
| | | (shown below). |

Normal Response Code(s):200

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), idmFault (500), serviceUnavailable(503), itemNotFound (404)

Example 4.155. XML Add Base Url Ref Request

```
<?xml version="1.0" encoding="UTF-8"?>
<baseURLRef xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
   id="111114"
   href="https://storage-snet.clouddrive.com/v1"
   vlDefault="true"/>
```

4.8.7. Get Base URL Ref



Note

This is a management API function.

| Verb | URI | Description |
|------|---------------------------------------|-----------------|
| GET | /users/username/baseurlrefs/baseUrlId | Get a base url. |

Normal Response Code(s):200

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), idmFault (500), serviceUnavailable(503), itemNotFound (404)

Example 4.156. XML Get Base Url Ref Response

```
<?xml version="1.0" encoding="UTF-8"?>
<baseURLRef xmlns="http://docs.rackspacecloud.com/idm/api/v1.0"
    id="111111"
    href="https://idm.rackspace.com/v1.0/baseurls/111111"
    v1Default="true" />
```

Example 4.157. JSON Get Base Url Ref Response

```
{
  "id": 111111,
  "href": "https://idm.rackspace.com/v1.0/baseurls/111111",
  "v1Default": true
}
```

4.8.8. Delete a Base URL Ref

This operation requires an authorization header. See Section 3.6, "Authorization Header" for details.



Note

This is a management API function.

| Verb | URI | Description |
|--------|------------------------------------|-----------------------|
| DELETE | /users/username/baseurls/baseUrlId | Delete a base url ref |

Normal Response Code(s):200

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), idmFault (500), serviceUnavailable(503), itemNotFound (404)

4.8.9. Get Service catalog for user



Note

This is a management API function.

| Verb | URI | Description |
|------|--------------------------------|--------------------------------|
| GET | /users/username/servicecatalog | Get Service Catalog for users. |

Normal Response Code(s):200

Error Response Code(s): unauthorized (401), badRequest (400), forbidden (403), idmFault (500), serviceUnavailable(503), itemNotFound (404)

Example 4.158. XML Get Service Catalog Response

Example 4.159. JSON Get Service Catalog Response

```
{"service": [
      "endpoint": [
         "region": "DFW",
         "v1Default": true,
         "publicURL": "https://storage.clouddrive.com/v1/KovacsNastId",
         "internalURL": "https://storage-snet.clouddrive.com/v1/KovacsNastId",
         "adminURL": null
      }],
      "name": "cloudFiles"
   },
      "endpoint": [
         "region": null,
         "v1Default": false,
         "publicURL": "https://servers.api.rackspacecloud.com/v1.0/90000",
         "internalURL": null,
         "adminURL": null
      }],
      "name": "cloudServers"
]}
```