



EDB™ Ark

API User's Guide

Version 3.0

April 19, 2018

EDB Ark API User's Guide, Version 3.0
by EnterpriseDB® Corporation
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1 Introduction

EDB Ark automatically provisions PostgreSQL or EDB Postgres Advanced Server databases in single instances, high-availability clusters, or application development sandboxes. EDB Ark allows service providers and organizations to offer elastic and highly scalable database-as-a-service (DBaaS) environments while freeing DBAs and application developers from the rigors of setting up and administering modern and robust database environments.

The API provides a convenient interface for developers and managers to interact with and manage Postgres instances that are deployed on an Ark cloud.

For more information about using EnterpriseDB products, please visit the EnterpriseDB website at:

<http://www.enterprisedb.com/documentation>

This document uses *Postgres* to mean either the PostgreSQL or EDB Postgres Advanced Server database.

1.1 What's New

The following features have been added to the EDB Ark API for release 3.0:

- Ark APIs support template management; please note that templates are a feature added for version 3.0, and calls made with prior versions of the API will not include template-related properties. If you pass a template name to a version 2.3 or prior API resource, the value will be ignored. For more information about template management, see [Section 2.1.33](#) and [Section 2.1.34](#).

1.2 Typographical Conventions Used in this Guide

Certain typographical conventions are used in this manual to clarify the meaning and usage of various commands, statements, programs, examples, etc. This section provides a summary of these conventions.

In the following descriptions a *term* refers to any word or group of words that are language keywords, user-supplied values, literals, etc. A term's exact meaning depends upon the context in which it is used.

- *Italic font* introduces a new term, typically, in the sentence that defines it for the first time.
- *Fixed-width (mono-spaced) font* is used for terms that must be given literally such as SQL commands, specific table and column names used in the examples, programming language keywords, etc. For example, `SELECT * FROM emp;`
- *Italic fixed-width font* is used for terms for which the user must substitute values in actual usage. For example, `DELETE FROM table_name;`
- A vertical pipe | denotes a choice between the terms on either side of the pipe. A vertical pipe is used to separate two or more alternative terms within square brackets (optional choices) or braces (one mandatory choice).
- Square brackets [] denote that one or none of the enclosed term(s) may be substituted. For example, `[a | b]`, means choose one of “a” or “b” or neither of the two.
- Braces {} denote that exactly one of the enclosed alternatives must be specified. For example, `{ a | b }`, means exactly one of “a” or “b” must be specified.
- Ellipses ... denote that the proceeding term may be repeated. For example, `[a | b] ...` means that you may have the sequence, “`b a a b a`”.

2 EDB Ark API Support

EDB Ark provides JSON-compatible support for the API as described in this guide. The API uses token-based authentication. You should include a valid token string in the `X-Auth-Token` header when calling any resource except `/tokens`. For information about retrieving a token, see Section [2.1.35](#).

Please note: Template Only users are required to use the Ark version 3.0 API. Template Only users that attempt to use a URI with an API version that is less than 3.0 will receive an authentication error (HTTP response code 401) or a method not allowed error (HTTP response code 405) when attempting to generate a token.

For detailed information about restrictions placed on Template Only users, please see the EDB Ark Getting Started Guide, available through the EDB Ark Dashboard.

2.1 Resources

When calling a resource, prefix the resource name with the URI:

```
https://<ark_host_address>/api/v3.0
```

EDB Ark 3.0 supports the request types shown below for the resources listed:

Resource Name	GET	POST	PUT	DELETE
<code>/admin/logs</code>	GET			
<code>/admin/wall</code>	GET		PUT	DELETE
<code>/clusters</code>	GET			
<code>/consoleurls</code>	GET	POST		
<code>/consolurls/id</code>	GET		PUT	DELETE
<code>/dbengines</code>	GET	POST		
<code>/dbengines/id</code>	GET		PUT	DELETE
<code>/options/backup-windows</code>	GET			
<code>/options/rhelsubscriptionlevels</code>	GET			
<code>/options/rhelsubscriptionlevels</code>	GET			
<code>/options/rhelsubscriptionlevels</code>	GET			
<code>/options/rhelsubscriptiontypes</code>	GET			
<code>/options/server-classes/tenant</code>	GET			
<code>/options/server-classes/tenant/?engineId=id</code>	GET			
<code>/options/systemtypes</code>	GET			
<code>/options/types</code>	GET			
<code>/options/versions/type</code>	GET			
<code>/options/vpcids/tenant</code>	GET			
<code>/owners</code>	GET			
<code>/owners/name/backups</code>	GET	POST		
<code>/owners/name/backups/backup_id</code>	GET			DELETE
<code>/owners/name/clusters</code>	GET	POST		
<code>/owners/name/clusters/clusterName</code>	GET		PUT	DELETE
<code>/owners/name/clusters/clusterName/events</code>	GET			
<code>/owners/name/clusters/clusterName/key</code>	GET			
<code>/owners/name/clusters/clusterName/statistics?start=start&end=end</code>	GET			
<code>/properties</code>	GET	POST	PUT	
<code>/properties/name</code>	GET		PUT	DELETE
<code>/rhelsubscriptions</code>	GET	POST		
<code>/rhelsubscriptions/subscriptionId</code>	GET		PUT	DELETE
<code>/serverimages</code>	GET	POST		
<code>/serverimages/id</code>	GET		PUT	DELETE
<code>/templates</code>	GET	POST	PUT	DELETE
<code>/templates/id</code>	GET	POST	PUT	DELETE
<code>/tokens</code>		POST		DELETE
<code>/users</code>	GET	POST		
<code>/users/id</code>	GET		PUT	DELETE
<code>/users/id/notifications</code>	GET			

2.1.1 /admin/logs

Use the /admin/logs resource to download the server log files. You must be an administrator to use this resource. The following example uses curl to download the server log files:

```
curl -H "X-Auth-Token: ostoken"
https://ark_host_address/api/v3.0/admin/logs -o logs.zip
```

The file containing the console logs will be saved to the location specified by the calling application.

GET Status Codes

Property	Description
200	The call was successful.
401	The requested call is not scoped to the X-Auth-Token used.

2.1.2 /admin/wall

An administrator can use the /admin/wall resource to manage the information displayed on the console wall.

GET Response Parameters

Property	Example
Description	
wallMessage	"wallMessage": "The console will be unavailable Sunday morning due to scheduled maintenance."
The wallMessage property contains the text of the message displayed on the console wall.	

For example, the following request:

```
https://ark_server/api/v3.0/admin/wall
```

Might return:

```
{
  "wallMessage": "The console will be unavailable Sunday morning due to
  scheduled maintenance."
}
```

GET Status Codes

Property	Description
200	The call to this resource was successful
401	The wall message can only be modified by an administrator.

An administrator can use a PUT request to update the wall message.

PUT Request Parameters

Property	Description
wallMessage	Provide the text of the message you wish to display on the console wall.

PUT Status Codes

Property	Description
200	The call to this resource was successful.
400	The message is NULL.
401	The wall message can only be modified by an administrator.

An administrator can use a DELETE request to remove the console wall message.

DELETE Status Codes

Property	Description
200	The call to this resource was successful
401	The wall message can only be modified by an administrator.

2.1.3 /clusters

An administrator can use the `/clusters` resource to retrieve a list of all clusters; the output will include information about the master instance of each cluster.

GET Response Parameters

Property	Example
Description	
autoScaleReplicas	"autoScaleReplicas": "false"
True if automatic replica scaling is enabled; false if it is disabled.	
autoScaleStorage	"autoScaleStorage": "false"
True if automatic storage scaling is enabled; false if it is disabled.	
availabilityZone	"availabilityZone": "us-east-1d"
The data center in which the cluster resides.	
backupRetention	"backupRetention": "1"
The number of backups that EDB Ark will retain for the master node of the cluster.	
BackupWindow	"backupWindow": "12:00am - 2:00am"
The time during which backups will be taken.	
caState	"caState": ""
The most-recent continuous archiving state of the instance.	
clusterKey	"clusterKey": "RSA PRIVATE KEY"
The SSH key shared by all of the instances in the cluster.	
clusterKeyName	"clusterKeyName": "ark-acctg"
The name of the SSH key.	
clusterName	"clusterName": "accounting"
The name of the cluster.	
clusterNodeCount	"clusterNodeCount": "1"
The number of nodes in the cluster.	
clusterState	"clusterState": "2"
The current state of the database. Valid values are: STOPPED = 0 STARTING = 1 RUNNING = 2 WARNING = 3 UNKNOWN = 99	
clusterUuid	"clusterUuid": "d7a0fff4-5091-4abd-9258-68b24b965dea"
The universal unique identifier of the cluster.	
connectionThreshold	"connectionThreshold": "95"
Specifies the number of connections made before the cluster is scaled up.	
connections	"connections": "1"
The current number of client connections.	
continuousArchiving	"continuousArchiving": "false"
Boolean value; true if continuous archiving is enabled, false if continuous archiving is not enabled.	
cpuLoad	"cpuLoad": "88"
The current CPU load of the instance.	
creationTime	"creationTime": "2018-02-27T16:07:10-05:00"
The date and time at which the cluster was created.	
dataThreshold	"dataThreshold": "65"
The disk space threshold at which the cluster will be automatically scaled up.	
dbEngine	"dbEngine": {engine description }

The detailed description of the database engine selected when creating the cluster.	
dbName	"dbName": "postgres"
The name of the default database created when the instance was created (edb or postgres).	
dbPort	"dbPort": "5432"
The database listener port.	
dbState	"dbState": "2"
The current state of the database:	
0	- Stopped
1	- Starting
2	- Running
3	- Warning
99	- Unknown
dnsName	"dnsName": "address"
The DNS name of the cluster.	
encrypted	"encrypted": "false"
engineVersion	"engineVersion": "PG 9.6 64bit on CentOS/RHEL 7"
The version of the database that is running on the instance.	
freeDataSpace	"freeDataSpace": "1861084"
The amount of available data space.	
serverClass	"serverClass": "t2.micro"
The current server class of the cluster.	
id	"id": "i-072c8ed4fe9801687"
The unique identifier of the cluster.	
imageId	"imageId": "ami-46c1b650"
The server image used when creating the node.	
instanceState	"instanceState": "running"
The current state of the node.	
iops	"iops": "0"
The requested IOPS setting for the cluster (valid for AWS users only).	
ipPool	"ipPool": ""
lbPort	"lbPort": "9999"
The load balancing port used for client connections to the database.	
manuallyScaleReplicas	"manuallyScaleReplicas": "true"
Specifies true if manual replica node scaling is allowed.	
manuallyScaleStorage	"manuallyScaleStorage": "false"
Specifies true if manual storage scaling is allowed.	
masterUser	"masterUser": "postgres"
The name of the master database user.	
monitoringDatabase	"monitoringDatabase": "true"
Specifies true if database health monitoring is enabled.	
monitoringLB	"monitoringLB": "true"
Specifies true if load balancer health monitoring is enabled.	
notificationEmail	"notificationEmail": "acctg@example.com"
The notification email provided for the cluster owner; if no email is specified, this parameter is omitted.	
numberOfNodes	"numberOfNodes": "1"
The number of nodes in the Ark cluster.	
optimized	"optimized": "false"
owner	"owner": "acctg@example.com"
The identifier used to connect to the Ark console; on AWS, this is an email address.	
pendingModifications	"pendingModifications": ""
A message describing any cluster modification in progress (if applicable).	
port	"port": "22"

The port monitored by the database for ssh connections.	
primaryFailoverToReplica	"primaryFailoverToReplica": "true"
Boolean value; true if the cluster will fail over to a replica; false if the cluster will fail over to a new master instance.	
privateIp	"privateIp": "xx.x.x.x"
The private IP address of the cluster.	
publicIp	"publicIp": "xx.xxx.xxx.xxx"
The public IP address of the cluster.	
readonly	"readonly": "false"
True if the cluster is read only.	
region	"region": "us-east-1"
The region in which the host of the cluster resides.	
securityGroup	"securityGroup": "ark-acctg"
The security group (and rules) that are applied to the cluster.	
storage	"storage": "1.0"
The amount of storage allocated for the cluster.	
subnetid	"subnetid": "subnet-1d797e79"
The subnet identifier of the cluster.	
templateName	"templateName": "accounts"
The template name specified when creating the cluster; the template determines initial cluster properties.	
tenant	"tenant": "Admin"
The tenant (or role) in which the cluster resides.	
usedDataSpace	"usedDataSpace": "45288"
The amount of data space used by the cluster.	
versionNum	"versionNum": "020000"
The version of EDB Ark under which the instance was created.	
vpcid	"vpcid": "vpc-e3ebc586"
The VPC identifier of the cluster.	
yumStatus	"yumStatus": "2"
The current yum status of the node:	
0	- OK
1	- Unknown
2	- Warning
3	- Critical
yumUpdate	"yumUpdate": "false"
Boolean value; true if the cluster was created with "yum update" enabled, false if "yum update" was not enabled when the cluster was created.	
zone	"zone": "us-east-1d"
The zone in which the cluster was created.	

For example, the following call to this resource

```
https://ark_server/api/v3.0/clusters
```

Might return:

```
{
    "autoScaleReplicas": "true",
    "autoScaleStorage": "true",
    "availabilityZone": "us-east-1c",
    "backupRetention": "1",
    "backupWindow": "12:00am - 2:00am",
    "caState": "",
    "clusterKey": "-----BEGIN RSA PRIVATE KEY-----\n... ==\n-----END RSA PRIVATE KEY-----",
}
```

```
"clusterKeyName": "acctg-clerks",
"clusterName": "accounting",
"clusterNodeCount": "1",
"clusterState": "2",
"clusterUuid": "a694bb1b-8071-4069-89f9-1fde6f620223",
"connectionThreshold": "95",
"connections": "1",
"continuousArchiving": "false",
"cpuLoad": "80",
"creationTime": "2018-02-28T11:07:24-05:00",
"dataThreshold": "65",
"dbEngine": {
    "engineId": "PG_96_CR7_ARK22",
    "eol": "false",
    "id": "8",
    "name": "PostgreSQL 9.6 64bit on CentOS / RHEL 7",
    "optionalPkgs": "",
    "repos": {
        "id": "10",
        "url": "http://yum.postgresql.org/9.6/rhel-7/pgdg-redhat96-9.6-3.noarch.rpm"
    },
    "requiredPkgs": "postgresql96-server pgpool-II-96",
    "serverImage": {
        "id": "1",
        "imageId": "ami-46c1650",
        "initialUser": "centos",
        "isStatic": "false",
        "osType": "CentOS",
        "serverDescription": "Cent OS 7",
        "serverId": "C7"
    },
    "type": "postgres",
    "version": "9.6"
},
"dbName": "postgres",
"dbPort": "5432",
"dbState": "2",
"dnsName": "ec2-5-173-12-155.compute-1.amazonaws.com",
"encrypted": "false",
"engineVersion": "PostgreSQL 9.6 64bit on CentOS / RHEL 7",
"freeDataSpace": "1861084",
"serverClass": "t2.micro",
"id": "i-095e43c1e1225278c",
"imageId": "ami-46c1b650",
"instanceState": "running",
"iops": "0",
"lbPort": "9999",
"manuallyScaleReplicas": "true",
"manuallyScaleStorage": "true",
"masterUser": "postgres",
"monitoringDatabase": "true",
"monitoringLB": "true",
"notificationEmail": "name@email.com",
"numberOfNodes": "1",
"optimized": "false",
"owner": "name@email.com",
"pendingModifications": "",
"port": "22",
"primaryFailoverToReplica": "true",
"privateIp": "112.30.23.41",
"publicIp": "3.113.15.154",
"readonly": "false",
```

```
        "region": "us-east-1",
        "securityGroup": "acctg-clerks",
        "storage": "1.0",
        "subnetid": "subnet-760fc2b",
        "templateName": "",
        "tenant": "acctg",
        "usedDataSpace": "45288",
        "versionNum": "020000",
        "vpcid": "vpc-49a1f3e",
        "yumStatus": "2",
        "yumUpdate": "false",
        "zone": "us-east-1c"
    }
```

GET Status Codes

Property	Description
200	The call to this resource was successful.
401	You must be an administrator to use this resource.

2.1.4 /consoleurls

A GET request to the /consoleurl resource retrieves a list of console switcher entries.

GET Response Parameters

Property	Example
Description	
id	"id": "17",
The unique identifier of the Console URL.	
name	"name": "acctg",
The name displayed in the console switcher.	
url	"url": "https://172.253.2.167.com"
The address of an Ark cluster.	

For example, a GET request to this resource:

```
https://ark_server/api/v3.0/consoleurls
```

Might return:

```
{
  "id": "17",
  "name": "acctg",
  "url": "https://172.253.2.167.com"
},
{
  "id": "18",
  "name": "sales",
  "url": "https://172.253.2.170.com"
}
```

GET Status Codes

Property	Description
200	The call to this resource was successful.
204	No console URLs are defined.

An administrator can use a POST request to create a new console switcher; include the following properties in the request.

POST Request Parameters

Property	Description
id	The identifier of the Console URL.
name	The name displayed in the console switcher.
url	The address of an Ark cluster.

POST Status Codes

Property	Description
201	The call to this resource was successful.
401	You must be an administrator to POST to this resource.
400	The resource has encountered validation errors with the name or URL.

2.1.5 /consoleurls/*id*

The /consoleurl/*id* resource allows you to retrieve information about a specific console switcher entry. *id* is the unique identifier of an entry in the console switcher list.

GET Request Parameters

Property	Description
<i>id</i>	The unique identifier of the Console URL.

The resource returns the following information.

GET Response Parameters

Property	Example
Description	
<i>id</i>	"id": "17", The identifier of the Console URL.
<i>name</i>	"name": "acctg", The name displayed in the console switcher.
<i>url</i>	"url": "https://172.253.2.167.com" The address of an Ark cluster.

For example, a GET request to this resource:

```
https://ark_server/api/v3.0/consoleurls/17
```

Might return:

```
{
  "id": "17",
  "name": "acctg",
  "url": "https://172.253.2.167.com"
}
```

GET Status Codes

Property	Description
200	The call to the resource was successful.
404	The requested console URL does not exist.

An administrator can use a PUT request to this resource to update the specified console switcher.

PUT Request Parameters

Property	Description
<i>id</i>	The identifier of the Console URL.

name	The name displayed in the console switcher.
url	The address of an Ark cluster.

PUT Status Codes

Property	Description
204	The call to this resource was successful.
400	The request has encountered validation errors.
401	You must be an administrator to call this resource.
404	The requested console URL does not exist.

An administrator can use a DELETE request to delete a console switcher.

DELETE Request Parameters

Property	Description
id	The identifier of the Console URL.

DELETE Status Codes

Property	Description
204	The call to this resource was successful.
401	You must be an administrator to call this resource.
404	The requested console URL does not exist.

2.1.6 /dbengines

A GET request to the /dbengines resource returns a list of the currently defined database engines. If the GET request is issued using a token retrieved by an administrative user, the list will include database engines that have been disabled (`eol = true`). If the list is retrieved by a non-administrative user, disabled engines will be omitted.

GET Response Parameters

Property	Example
Description	
engineid	"engineId": "PPAS_10_ARK23"
	The user defined engine identifier; this value must be unique.
eol	"eol": "true"
	true if the engine is no longer supported; false if the engine is supported.
id	"id": "14"
	The server assigned engine identifier.
name	"name": "EDB PG Advanced Server 10 64bit CentOS 6/7, RHEL 7"
	The user-friendly name that is displayed for the engine definition.
optionalPkgs	"optionalPkgs": ""
	Any optional packages that will be installed with the engine.
repos	<pre> "repos": [{ "id": "19", "url": "http://USERNAME:PASSWORD@yum.enterprisedb.com/tools/redhat/rhel-\\$releasever-\\$basearch" }, { "id": "20", "url": "http://USERNAME:PASSWORD@yum.enterprisedb.com/10/redhat/rhel-\\$releasever-\\$basearch" }, { "id": "18" }] </pre>
	The repository access required to install the engine.
requiredPkgs	"requiredPkgs": "edb-as10-server edb-pgpool136 edb-as10-pgpool36-extensions"
	A list of the packages that are required to install the engine.
rhelSubscription	<pre> "rhelSubscription": { "activationKey": "", "attachAuto": "false", "autoAttach": "true", "baseUrl": "", "environment": "", "force": "false", "id": "107", "name": "" } </pre>

	<pre> "org": "", "password": "", "pool": "", "quantity": "0", "release": "", "repos": [{ "enabled": "false", "id": "117", "repoName": "rhel-7-server-rt-beta-rpms" }, "serverUrl": "", "subscriptionId": "S1", "type": "", "userName": "bob.king"] </pre>
The RHEL subscription associated with the database engine definition.	
serverImage	<pre> "serverImage": { "id": "84", "imageId": "f67c475d-d1fb-466d-b4c3-cfe1e20d8c6a", "initialUser": "cloud-user", "osType": "RHEL", "serverDescription": "RHEL 7.3", "serverId": "R7" } </pre>
The server image associated with the database engine definition.	
type	"type": "ppas"
The database server type; ppas if the server is EDB Postgres Advanced Server, and postgres if the server is PostgreSQL.	
version	"version": "10"
The version of the database server.	

GET Status Codes

Property	Description
200	A call to this resource was successful

For example, the following call to the resource:

```
https://ark_server/api/v3.0/dbengines
```

Might return:

```
{
    "engineId": "PPAS_10_ARK23",
    "eol": "true",
    "id": "14",
    "name": "EDB Postgres Advanced Server 10 64bit on CentOS 6/7,
RHEL 7",
    "optionalPkgs": "",
    "repos": [
        {
            "id": "19",
            "url":
"http://USERNAME:PASSWORD@yum.enterprisedb.com/tools/redhat/rhel-
\\$releasever-\\$basearch"
        },
        {
            "id": "20",
            "url":
"http://USERNAME:PASSWORD@yum.enterprisedb.com/10/redhat/rhel-\\$releasever-"
    
```

```

\\$basearch"
},
{
    "id": "18",
    "url":
"http://USERNAME:PASSWORD@yum.enterprisedb.com/dependencies/redhat/rhel-
\\$releasever-\\$basearch"
},
],
"requiredPkgs": "edb-as10-server edb-pgpool36 edb-as10-pgpool36-
extensions",
    "type": "ppas",
    "version": "10"
},
{
    "engineId": "PG_10_CR7_ARK23",
    "eol": "true",
    "id": "13",
    "name": "PostgreSQL 10 64bit on CentOS / RHEL 7",
    "optionalPkgs": "",
    "repos": {
        "id": "17",
        "url": "https://yum.postgresql.org/10/redhat/rhel-7-
x86_64/pgdg-redhat10-10-2.noarch.rpm"
    },
    "requiredPkgs": "postgresql10-server pgpool-II-10 pgpool-II-10-
extensions",
        "type": "postgres",
        "version": "10"
}

```

An administrator may use a POST request to the `/dbengines` resource to create a new database engine.

POST Request Parameters

Property	Example
Description	
engineid	"engineId": "PPAS_10_ARK23"
	The user defined engine identifier; this value must be unique.
eol	"eol": "true"
	true if the engine is no longer supported; false if the engine is supported.
name	"name": "EDB PG Advanced Server 10 64bit CentOS 6/7, RHEL 7"
	The user-friendly name that is displayed for the engine definition.
optionalPkgs	"optionalPkgs": ""
	Any optional packages that will be installed with the engine.
repos	<pre> "repos": [{ "url": "http://USERNAME:PASSWORD@yum.enterprisedb.com/tools/redhat/rhel- \\\$releasever-\\\$basearch" }, { "url": "http://USERNAME:PASSWORD@yum.enterprisedb.com/10/redhat/rhel- \\\$releasever-\\\$basearch" }, { "url": </pre>

	<pre>"http://USERNAME:PASSWORD@yum.enterprisedb.com/dependencies/r edhat/rhel-\\$releasever-\\$basearch" }]</pre>
The repository access required to install the engine. When passing in repository information, only the repository URL is required.	
requiredPkgs	<pre>"requiredPkgs": "edb-as10-server edb-pgpool36 edb-as10- pgpool36-extensions"</pre>
A list of the packages that are required to install the engine.	
rhelSubscription	<pre>"rhelSubscription": { "activationKey": "", "attachAuto": "false", "autoAttach": "true", "baseUrl": "", "environment": "", "force": "false", "id": "107", "name": "", "org": "", "password": "", "pool": "", "quantity": "0", "release": "", "repos": { "enabled": "false", "id": "117", "repoName": "rhel-7-server-rt-beta-rpms" }, "serverUrl": "", "subscriptionId": "S1", "type": "", "userName": "bob.king"</pre>
Red Hat subscription service users can optionally assign a RHEL subscription manager in a POST request by including the rhelSubscription property and supporting arguments.	
serverImage	<pre>"serverImage": { "id": "84", "imageId": "f67c475d-d1fb-466d-b4c3-cfe1e20d8c6a", "initialUser": "cloud-user", "osType": "RHEL", "serverDescription": "RHEL 7.3", "serverId": "R7"</pre>
When passing in information about the server image, pass in only the unique id number of the server image (returned by the /serverimages resource). The server image must already exist in the Ark console, or the request will fail.	
type	<pre>"type": "ppas"</pre>
The database server type; ppas if the server is EDB Postgres Advanced Server, and postgres if the server is PostgreSQL.	
version	<pre>"version": "10"</pre>
The version of the database server.	

POST Status Codes

Property	Description
201	The request to this resource was successful
401	A POST will return 401 if: the resource was invoked by a non-administrative user. the request contains a NULL dbengine value. the engine does not include a server image reference. the engine contains a RHEL subscription ID that cannot be found.

	<p>if any of the repo URLs are NULL. If there are any validation errors: engine id length is greater than 25 engine name is greater than 113 missing required packages unknown engine type (must be <code>postgres</code> or <code>ppas</code>) empty or invalid version missing postgresql.conf file for the given engine type and version if a RHEL subscription is set but the underlying server image is not of type <code>RHEL</code></p>
409	The engine name is not unique.

2.1.7 /dbengines/*id*

Use a GET request to the /dbengines/*id* resource to retrieve information about a specific database engine. A non-administrative user may only retrieve information about enabled engines; administrative users may retrieve information about any engine.

GET Request Parameters

Property	Description
<code>id</code>	The server-assigned engine identifier.

The resource returns the following information.

GET Response Parameters

Property	Example
Description	
<code>engineId</code>	<code>"engineId": "PPAS 10 ARK23"</code>
	The user defined engine identifier; this value must be unique.
<code>eol</code>	<code>"eol": "true"</code>
	true if the engine is no longer supported; false if the engine is supported.
<code>id</code>	<code>"id": "14"</code>
	The server assigned engine identifier.
<code>name</code>	<code>"name": "EDB PG Advanced Server 10 64bit CentOS 6/7, RHEL 7"</code>
	The user-friendly name that is displayed for the engine definition.
<code>optionalPkgs</code>	<code>"optionalPkgs": ""</code>
	Any optional packages that will be installed with the engine.
<code>repos</code>	<pre> "repos": [{ "id": "19", "url": "http://USERNAME:PASSWORD@yum.enterprisedb.com/tools/redhat/rhel-\\$releasever-\\$basearch" }, { "id": "20", "url": "http://USERNAME:PASSWORD@yum.enterprisedb.com/10/redhat/rhel-\\$releasever-\\$basearch" }, { "id": "18" }] </pre>
	The repository access required to install the engine.
<code>requiredPkgs</code>	<code>"requiredPkgs": "edb-as10-server edb-pgpool36 edb-as10-pgpool36-extensions"</code>
	A list of the packages that are required to install the engine.
<code>rhelSubscription</code>	<code>"rhelSubscription": { "activationKey": "",</code>

	<pre>"attachAuto": "false", "autoAttach": "true", "baseUrl": "", "environment": "", "force": "false", "id": "107", "name": "", "org": "", "password": "", "pool": "", "quantity": "0", "release": "", "repos": { "enabled": "false", "id": "117", "repoName": "rhel-7-server-rt-beta-rpms" }, "serverUrl": "", "subscriptionId": "S1", "type": "", "userName": "bob.king"</pre>
The RHEL subscription associated with the database engine definition.	
serverImage	<pre>"serverImage": { "id": "84", "imageId": "f67c475d-d1fb-466d-b4c3-cfe1e20d8c6a", "initialUser": "cloud-user", "osType": "RHEL", "serverDescription": "RHEL 7.3", "serverId": "R7"</pre>
The server image associated with the database engine definition.	
type	"type": "ppas"
The database server type; ppas if the server is EDB Postgres Advanced Server, and postgres if the server is PostgreSQL.	
version	"version": "10"
The version of the database server.	

For example, the following call:

```
https://ark\_server/api/v3.0/dbengines/8
```

Might return:

```
{
    "engineId": "PPAS_10_ARK23",
    "eol": "true",
    "id": "8",
    "name": "EDB Postgres Advanced Server 10 64bit on CentOS 6/7,
RHEL 7",
    "optionalPkgs": "",
    "repos": [
        {
            "id": "19",
            "url":
http://USERNAME:PASSWORD@yum.enterprisedb.com/tools/redhat/rhel-\\$releasever-\\$basearch
        },
        {
            "id": "20",
            "url":
http://USERNAME:PASSWORD@yum.enterprisedb.com/10/redhat/rhel-\\$releasever-\\$basearch
        }
    ]
}
```

```

\\$basearch"
},
{
    "id": "18",
    "url":
"http://USERNAME:PASSWORD@yum.enterprisedb.com/dependencies/redhat/rhel-
\\$releasever-\\$basearch"
}
],
"requiredPkgs": "edb-as10-server edb-pgpool136 edb-as10-pgpool136-
extensions",
    "type": "ppas",
    "version": "10"
}

```

GET Status Codes

Property	Description
204	A call to this resource was successful.
404	The engine id is not found, or if the engine is disabled and the user is not an administrative user. Administrative users are allowed access to engine definitions of disabled engines.

An administrator can use a PUT request to update the definition of a database engine; include the server-assigned engine identifier (the value in the `id` property) when making a PUT request.

PUT Request Parameters

Property	Example
Description	
eol	"eol": "true"
true	if the engine is no longer supported; false if the engine is supported.
name	"name": "EDB PG Advanced Server 10 64bit CentOS 6/7, RHEL 7"
The user-friendly name that is displayed for the engine definition.	
optionalPkgs	"optionalPkgs": ""
Any optional packages that will be installed with the engine.	
repos	<pre> "repos": [{ "url": "http://USERNAME:PASSWORD@yum.enterprisedb.com/tools/redhat/rhel- \\\$releasever-\\\$basearch" }, { "url": "http://USERNAME:PASSWORD@yum.enterprisedb.com/10/redhat/rhel- \\\$releasever-\\\$basearch" }, { "url": "http://USERNAME:PASSWORD@yum.enterprisedb.com/dependencies/rhel/rhel- \\\$releasever-\\\$basearch" }] </pre>

	}]
The repository access required to install the engine.	
requiredPkgs	"requiredPkgs": "edb-as10-server edb-pgpool36 edb-as10-pgpool36-extensions"
A list of the packages that are required to install the engine.	
rhelSubscription	<pre> "rhelSubscription": { "activationKey": "", "attachAuto": "false", "autoAttach": "true", "baseUrl": "", "environment": "", "force": "false", "id": "107", "name": "", "org": "", "password": "", "pool": "", "quantity": "0", "release": "", "repos": { "enabled": "false", "id": "117", "repoName": "rhel-7-server-rt-beta-rpms" }, "serverUrl": "", "subscriptionId": "S1", "type": "", "userName": "bob.king" } </pre>
The RHEL subscription associated with the database engine definition.	
serverImage	<pre> "serverImage": { "id": "84", "imageId": "f67c475d-d1fb-466d-b4c3-cfe1e20d8c6a", "initialUser": "cloud-user", "osType": "RHEL", "serverDescription": "RHEL 7.3", "serverId": "R7" } </pre>
The server image associated with the database engine definition.	

PUT Status Codes

Property	Description
204	A call to this resource was successful.
400	A PUT returns a 400 if: the id in the engine doesn't match the id in the request URI there are any other validation errors: engine id length is greater than 25 engine name is greater than 113 missing required packages unknown engine type (must be postgres or ppas) empty or invalid version missing postgresql.conf file for the given engine type and version a RHEL subscription is set but the underlying server image is not of type RHEL the server image id isn't found the RHEL subscription id isn't found a repo URL is null
401	The call was placed by a non-administrative user.

409	The engine name is not unique, or the PUT is attempting to modify the engine id, type, or version.
-----	--

An administrator can use a DELETE request with this resource to remove the definition of a database engine.

DELETE Request Parameters

Property	Example
	Description
id	The system-defined engine identifier.

DELETE Status Codes

Property	Description
204	A call to this resource was successful.
401	The call was placed by a non-administrative user.
404	The specified engine id was not found.
409	The call attempts to delete an engine that is currently required by a running cluster, backup, or template.

2.1.8 /options/backup-windows

Use a GET request to the /options/backup-windows resource to retrieve a list of backup windows.

GET Response Parameters

Property	Example	Description
backupWindows	<pre>"backupWindows": ["12:00am - 2:00am", "2:00am - 4:00am", "4:00am - 6:00am", "6:00am - 8:00am", "8:00am - 10:00am", "10:00am - 12:00pm", "12:00pm - 2:00pm", "2:00pm - 4:00pm", "4:00pm - 6:00pm", "6:00pm - 8:00pm", "8:00pm - 10:00pm", "10:00pm - 12:00am"]</pre>	This resource returns a list of the available backup windows that may be specified for a cluster.

For example, the following call:

```
https://ark\_server/api/v3.0/options/backup-windows
```

Might return:

```
{
  "backupWindows": [
    "12:00am - 2:00am",
    "2:00am - 4:00am",
    "4:00am - 6:00am",
    "6:00am - 8:00am",
    "8:00am - 10:00am",
    "10:00am - 12:00pm",
    "12:00pm - 2:00pm",
    "2:00pm - 4:00pm",
    "4:00pm - 6:00pm",
    "6:00pm - 8:00pm",
    "8:00pm - 10:00pm",
    "10:00pm - 12:00am"
  ]
}
```

GET Status Codes

Property	Description
200	A call to this resource was successful

2.1.9 /options/ip-pools/*tenant*

Pass in the name of a tenant or role when calling this resource to retrieve a list of available IP pools. Please note: IP pool support for Azure instances is provided by a regional pool; you can not specify the identity of the pool used by your cluster.

GET Request Parameters

Property	Example
Description	
<i>tenant</i>	The name of a role or tenant.

The resource returns the following information.

GET Response Parameters

Property	Example
Description	
ipPools	"ipPools": ["Sales East", "Mgmt"]
This resource returns a list of the available IP pools.	

For example, the following request:

```
https://ark_server/api/v3.0/ip-pools/resources
```

Might return:

```
{
    "ipPools": [
        "Sales East",
        "Mgmt"
    ]
}
```

GET Status Codes

Property	Description
200	A call to this resource was successful
400	This cloud provider does not support IP pools.
401	You are requesting IP Pools for a tenant that is not scoped to this X-Auth-Token.

2.1.10 /options/properties

An administrator can use a GET request to retrieve a list of Ark properties.

GET Response Parameters

Property	Example
Description	
caption	"caption": "Email From Address"
	The label displayed in the Ark console for the property.
description	"description": "Return address for all generated emails. This can be separate from the mailto links that are included in the email bodies."
	A description of the property.
name	"name": "email.from.address"
	The name of the property.

For example the following request:

```
https://ark\_server/api/v3.0/options/properties
```

Returns information in the form:

```
{
  "propertyInfo": [
    {
      "caption": "Email From Address",
      "description": "Return address for all generated emails. This can be separate from the mailto links that are included in the email bodies.",
      "name": "email.from.address"
    },
    {
      "caption": "Backup Script",
      "description": "Path to the console DB backup script",
      "name": "console.db.backup.script"
    },
    {
      "caption": "Dashboard Hot Topics URL",
      "description": "URL to hot topics page. Enter \"DEFAULT\" if you want to load the default content from enterpriseDB.com. Leave the field blank if you don't want to display any content. or enter a custom URL to load content from an alternate location.",
      "name": "console.dashboard.hot.topics"
    }
  ...
]
```

GET Status Codes

Property	Description
200	A call to this resource was successful
401	The user calling this resource is not an administrator.

2.1.11 /options/rhelsubscriptionlevels

A GET request to this resource returns a list of supported RHEL subscription service levels.

GET Response Parameters

Property	Example
	Description
rhelsubscriptionlevels	"rhelsubscriptionlevels": ["None", "Standard", "Premium"]
This resource returns a list of the available RHEL subscription levels.	

For example, the following call:

```
https://ark_server/api/v3.0/options/rhelsubscriptionlevels
```

Might return:

```
{
    "rhelsubscriptionlevels": [
        "None",
        "Standard",
        "Premium"
    ]
}
```

GET Status Codes

Property	Description
200	A call to this resource was successful

2.1.12 /options/rhelsubscriptiontypes

A GET request to this resource returns a list of supported RHEL subscription types.

GET Response Parameters

Property	Example
Description	
rhelsubscriptiontypes	"rhelsubscriptiontypes": ["system", "hypervisor", "person", "domain", "rhui", "candlepin"
This resource returns a list of the available RHEL subscription types.	

For example, the following call:

```
https://ark\_server/api/v3.0/options/rhelsubscriptiontypes
```

Might return:

```
{
    "rhelsubscriptiontypes": [
        "system",
        "hypervisor",
        "person",
        "domain",
        "rhui",
        "candlepin"
    ]
}
```

Status Codes

Property	Description
200	A call to this resource was successful

2.1.13 /options/server-classes/tenant

A call to this resource returns a list of server classes available to the tenant (or role) to which the requesting token is scoped. Pass in the name of a tenant or role when calling this resource

GET Request Parameters

Property	Description
<i>tenant</i>	The unique identifier of the tenant or role.

The resource returns the following information.

GET Response Parameters

Property	Example
	Description
serverClasses	<pre data-bbox="489 868 771 992">"serverClasses": ["m1.small", "m1.medium", "m1.large", "m1.xlarge", "d1.large", "m1.tiny", "d1.small", "d1.xlarge", "d1.tiny", "d1.medium"]</pre>

For example, the following call:

<https://ark-server/api/v3.0/options/server-classes/acctg/>

Might return:

```
    "c3.large",
    "c3.xlarge",
    "c3.2xlarge",
    "c3.4xlarge",
    "c3.8xlarge",
    "c4.large",
    "c4.xlarge",
    "c4.2xlarge",
    "c4.4xlarge",
    "c4.8xlarge",
    "r3.large",
    "r3.xlarge",
    "r3.2xlarge",
    "r3.4xlarge",
    "r3.8xlarge",
    "d2.xlarge",
    "d2.2xlarge",
    "d2.4xlarge",
    "d2.8xlarge",
    "i2.xlarge",
    "i2.2xlarge",
    "i2.4xlarge",
    "i2.8xlarge",
    "g2.2xlarge",
    "g2.8xlarge",
    "hi1.4xlarge",
    "hs1.8xlarge"
]
}
```

GET Status Codes

Property	Description
200	A call to this resource was successful.
401	The tenant requested does not match the tenant to which the X-Auth-Token is scoped.

2.1.14 /options/server-classes/*tenant*?engineId=*id*

A call to this resource returns a list of server classes available to the tenant (or role) to which the requesting token is scoped. Pass in the name of a tenant or role and the name of an engine to filter the result set.

GET Request Parameters

Property	Description
<i>name</i>	The name of the tenant or role.
<i>engineId</i>	An integer value that represents the database engine; use the /dbengines resource to retrieve a list of engine ids. The id parameter is optional. If supplied, the specified engine will be used to filter the list of available server classes meeting the minimum requirements of the backing VM image.

The resource returns the following information.

GET Response Parameters

Property	Example	Description
<i>serverClasses</i>	<pre>"serverClasses": ["m1.small", "m1.medium", "m1.large", "m1.xlarge", "d1.large", "m1.tiny", "d1.small", "d1.xlarge", "d1.tiny", "d1.medium"]</pre>	
This resource returns a list of the available server classes to which the authentication token has access.		

For example, the following call:

```
https://ark\_server/api/v3.0/options/server-classes/acctg/?engineId=8
```

Might return the following result set:

```
{
  "serverClasses": [
    "t2.micro",
    "t2.small",
    "t2.medium"
  ]
}
```

GET Status Codes

Property	Description
200	A call to this resource was successful.
401	The tenant requested does not match the tenant to which the X-Auth-Token is scoped.
404	The provided engine id does not exist.

2.1.15 /options/systemtypes

A GET call to the /options/systemtypes resource returns a list of supported operating system types.

GET Response Parameters

Property	Example	Description
systemtypes	<pre>"systemtypes": ["CentOS", "RHEL"</pre>	
This resource returns a list of the supported operating system types.		

For example, the following request:

```
https://ark_server/api/v3.0/options/systemtypes
```

Might return:

```
{
  "systemtypes": [
    "CentOS",
    "RHEL"
  ]
}
```

GET Status Codes

Property	Description
200	A call to this resource was successful

2.1.16 /options/types

Use a GET request to the `/options/types` resource to return a list of available database types.

GET Response Parameters

Property	Example
Description	
types	"types": ["postgres", "ppas"]
This resource returns a list of the supported database types.	

For example, the following request:

```
https://ark_server/api/v3.0/options/types
```

Might return:

```
{
  "types": [
    "postgres",
    "ppas"
  ]
}
```

GET Status Codes

Property	Description
200	A call to this resource was successful

2.1.17 /options/versions/type

Use this resource to request a list of database versions available for the specified type.

GET Request Parameters

Property	Description
<code>type</code>	The database type for which you wish to retrieve a version list.

The resource returns the following information.

GET Response Parameters

Property	Example
Property	Description
<code>versions</code>	"versions": ["9.4", "9.5"]
This resource returns a list of the supported database types.	

For example, the following call:

```
https://ark_server/api/v3.0/options/versions/ppas
```

Might return:

```
{
  "versions": [
    "10",
    "9.4",
    "9.5",
    "9.6"
  ]
}
```

GET Status Codes

Property	Description
200	A call to this resource was successful.
404	The requested type is not valid.

2.1.18 /options/vpcids/*tenant*

Pass in the name of a tenant or role when calling this resource to retrieve a list of available virtual network IDs:

GET Request Parameters

Property	Description
<i>tenant</i>	The name of a tenant or role for which you would like to retrieve a list of virtual network IDs.

The resource returns the following information.

GET Response Parameters

Property	Example
Description	
vpcids	"vpcids": "General VM Network"
This resource returns a list of virtual network IDs.	

For example, the following request:

```
https://ark_server/api/v3.0/options/vpcids/acctg
```

Might return:

```
{
  "vpcids": [
    "vpc-9720b2f2",
    "vpc-e3ebc586",
    "vpc-59a1ef3e",
    "vpc-726c0314",
    "vpc-b2f397d4"
  ]
}
```

GET Status Codes

Property	Description
200	A call to this resource was successful.
401	The requested call is not scoped to the X-Auth-Token used.

2.1.19 /owners

Use the /owners resource to retrieve a list of tenants (or roles) that may be accessed by the user that retrieved the security token. The user specified by the service.account.id property has access to all of the tenants that the console recognizes.

GET Response Parameters

Property	Example	Description
owners	<pre>"owners": ["admin", "acctg", "sales"</pre>	
This resource returns a list of tenants or roles that may be accessed with the current security token.		

For example, the following call:

```
https://ark\_server/api/v3.0/options/vpcids/acctg
```

Might return:

```
{
  "owners": [
    "admin",
    "acctg",
    "sales"
  ]
}
```

GET Status Codes

Property	Description
200	A call to this resource was successful.
401	This call was placed with an invalid token.

2.1.20 /owners/*name*/backups

Use the `/owners/name/backups` resource to retrieve a list of the current cluster backups.

GET Request Parameters

Property	Description
<code>name</code>	The name of a tenant or role in which the cluster resides.

The resource returns the following information.

GET Response Parameters

Property	Example
Description	
<code>backupType</code>	<code>"backupType": "Manual"</code>
	Manual Backup if the backup was invoked by a user; Auto Backup if the backup was a scheduled system backup.
<code>capacity</code>	<code>"capacity": "2"</code>
	The size of the backup. If the cluster is encrypted, the column will also include (encrypted).
<code>clusterUuid</code>	<code>"clusterUuid": "0e6d9b08-19f1-4d15-8b80-96b186a7dcf0", "ended": "2016-01-18T23:35:05.497Z"</code>
	The identifier of the cluster from which the backup was created.
<code>continuousArchiving</code>	<code>"continuousArchiving": "false"</code>
	True if archiving is enabled; false if archiving is disabled.
<code>dbEngine</code>	<pre>dbEngine": { "engineId": "PG_94", "eol": "false", "id": "1", "name": "PostgreSQL 9.4 64bit", "optionalPkgs": "", "repos": { "id": "30", "url": "http://yum.postgresql.org/9.4/redhat/ rhel-6-x86_64/pgdg-redhat94-9.4- 1.noarch.rpm" }, "requiredPkgs": "postgresql94-server.x86_64 pgpool-II-94.x86_64 postgresql94- jdbc.x86_64", "serverImage": { "id": "2", "imageId": "a8ed57dd-9a34-40ca-977b-ce3af9ad3745", "initialUser": "centos", "serverDescription": "CentOS 6.6", "serverId": "centos_6.6" }, "type": "postgres", "version": "9.4" }</pre>
	The database engine that was used when creating the cluster.

encrypted	"encrypted": "false"
True if the content of a backup is stored on an encrypted file system; false if it is not.	
encryptionKey	"encryptionKey": ""
The key associated with the backup.	
ended	"ended": "2016-01-18T23:35:05.497Z "
The time at which the backup ended.	
engineVersion	"engineVersion": "PostgreSQL 9.4 64bit"
The Postgres engine version.	
id	"id": "6f9cc175-2f30-45e9-8a40-50c144117162"
A string value that identifies the backup.	
masterUser	"masterUser": "postgres"
The name of the database superuser.	
notes	"notes": ""
Notes added by the cluster owner when the backup was taken.	
owner	"owner": "some.user"
The name of the cluster owner.	
signature	"signature": "upgradecluster"
The name of the cluster owner and the cluster (colon delimited).	
started	"started": "2016-01-18T18:15:06.497Z "
The time at which the backup began.	
tenant	"tenant": "Resources"
The tenant in which the cluster resides.	
yumUpdate	"yumUpdate": "true"
True if updates are enabled for the cluster; false if they are not.	

For example, the following call to this resource:

```
https://ark\_server/api/v3.0/owners/acctg/backups
```

Could return the following information:

```
{
  "backup": [
    {
      "id": "snap-07c01afea69ec2c38",
      "capacity": "2",
      "signature": "alice.smith@edb.com:payables",
      "notes": "Scheduled backup: Thu Mar 08 01:12:34 GMT-05:00 2018",
      "owner": "clerks@acctg.com",
      "started": "2018-03-08T01:12:34.432-05:00",
      "ended": "2018-03-08T01:13:59.422-05:00",
      "backupType": "Automatic",
      "dbEngine": {
        "engineId": "PG_96_CR7_ARK22",
        "eol": "false",
        "id": "8",
        "name": "PostgreSQL 9.6 64bit on CentOS / RHEL 7",
        "optionalPkgs": "",
        "repos": {
          "id": "10",
          "url": "http://yum.postgresql.org/9.6/redhat/rhel-7-x86_64/pgdg-redhat96-9.6-3.noarch.rpm"
        },
        "requiredPkgs": "postgresql96-server pgpool-II-96",
        "serverImage": {
          "id": "1",
          "imageId": "ami-46c1b650",
          "initialUser": "centos",
        }
      }
    }
  ]
}
```

```

        "isStatic": "false",
        "osType": "CentOS",
        "serverDescription": "Cent OS 7",
        "serverId": "C7"
    },
    "type": "postgres",
    "version": "9.6"
},
"engineVersion": "PostgreSQL 9.6 64bit on CentOS / RHEL 7",
"masterUser": "postgres",
"continuousArchiving": "false",
"clusterUuid": "d7a0fff4-5091-4abd-9258-68b24b965dea",
"tenant": "acctg",
"encryptfs": "false",
"encryptKey": "",
"yumUpdate": "false"
},
{
    ...
}
]
}

```

GET Status Codes

Property	Description
200	A call to this resource was successful
204	There are no backups available for this owner.
401	This request was made with an invalid token, or is requesting backups belonging to a different owner than the auth token.

Use a POST request to create a backup for a cluster. When creating a backup, only the cluster identifier is required; the cluster identifier is passed in as `clusterUuid`:

POST Request Parameters

Property	Description
<code>clusterUuid</code>	The <code>clusterUuid</code> of the cluster.
<code>notes</code>	A note about the backup is optional.

POST Status Codes

Property	Description
202	A call to this resource was successful.
400	This request was made with an invalid token, or is requesting backups belonging to a different owner than the auth token.
400	The request is missing a <code>backup</code> parameter.
400	The <code>backup</code> parameter does not include a cluster id.
401	This request was made with an invalid token, or is requesting a resource belonging to a different owner than the auth token.

2.1.21 /owners/*name*/backups/*backup_id*

A GET request to the `/owners/name/backups/backup_id` resource retrieves information about a specific cluster backup.

GET Request Parameters

Property	Description
<code>name</code>	The name of a tenant or role in which the cluster resides.
<code>backup_id</code>	The unique identifier of the backup, provided in the <code>id</code> field.

The resource returns the following information.

GET Response Parameters

Property	Example
Description	
<code>backupType</code>	<code>"backupType": "Manual"</code>
	Manual Backup if the backup was invoked by a user; Auto Backup if the backup was a scheduled system backup.
<code>capacity</code>	<code>"capacity": "2"</code>
	The size of the backup. If the cluster is encrypted, the column will also include (encrypted).
<code>clusterUuid</code>	<code>"clusterUuid": "0e6d9b08-19f1-4d15-8b80-96b186a7dcf0", "ended": "2016-01-18T23:35:05.497Z "</code>
	The identifier of the cluster from which the backup was created.
<code>continuousArchiving</code>	<code>"continuousArchiving": "false"</code>
	True if archiving is enabled; false if archiving is disabled.
<code>dbEngine</code>	<code>dbEngine": { "engineId": "PG_94", "eol": "false", "id": "1", "name": "PostgreSQL 9.4 64bit", "optionalPkgs": "", "repos": { "id": "30", "url": "http://yum.postgresql.org/9.4/redhat/rhel-6-x86_64/pgdg-redhat94-9.4-1.noarch.rpm" }, "requiredPkgs": "postgresql94-server.x86_64 pgpool-II-94.x86_64 postgresql94-jdbc.x86_64", "serverImage": { "id": "2", "imageId": "a8ed57dd-9a34-40ca-977b-ce3af9ad3745", "initialUser": "centos", "serverDescription": "CentOS 6.6", "serverId": "centos_6.6" }, "type": "postgres", "version": "9.4" }</code>

The database engine that was used when creating the cluster.
encrypted "encrypted": "false"
True if the content of a backup is stored on an encrypted file system; false if it is not.
encryptionKey "encryptionKey": ""
The key associated with the backup.
ended "ended": "2016-01-18T23:35:05.497Z "
The time at which the backup ended.
engineVersion "engineVersion": "PostgreSQL 9.4 64bit"
The Postgres engine version.
id "id": "6f9cc175-2f30-45e9-8a40-50c144117162"
A string value that identifies the backup
masterUser "masterUser": "postgres"
The name of the database superuser.
notes "notes": ""
Notes added by the cluster owner when the backup was taken.
owner "owner": "some.user"
The name of the cluster owner.
signature "signature": "upgradecluster"
The name of the cluster owner and the cluster (colon delimited).
started "started": "2016-01-18T18:15:06.497Z "
The time at which the backup began.
tenant "tenant": "Resources"
The tenant in which the cluster resides.
yumUpdate "yumUpdate": "true"
True if updates are enabled for the cluster; false if they are not.

For example, the following request:

```
https://ark\_server/api/v3.0/owners/acctg/backups/snap-08ee8e5d9173323bf
```

Might return:

```
{
  "id": "snap-07c01afea69ec2c38",
  "capacity": "2",
  "signature": "alice.smith@edb.com:payables",
  "notes": "Scheduled backup: Thu Mar 08 01:12:34 GMT-05:00 2018",
  "owner": "clerks@acctg.com",
  "started": "2018-03-08T01:12:34.432-05:00",
  "ended": "2018-03-08T01:13:59.422-05:00",
  "backupType": "Automatic",
  "dbEngine": {
    "engineId": "PG_96_CR7_ARK22",
    "eol": "false",
    "id": "8",
    "name": "PostgreSQL 9.6 64bit on CentOS / RHEL 7",
    "optionalPkgs": "",
    "repos": {
      "id": "10",
      "url": "http://yum.postgresql.org/9.6/redhat/rhel-7-x86_64/pgdg-redhat96-9.6-3.noarch.rpm"
    },
    "requiredPkgs": "postgresql96-server pgpool-II-96",
    "serverImage": {
      "id": "1",
      "imageId": "ami-46c1b650",
      "initialUser": "centos",
      "isStatic": "false",
      "name": "PostgreSQL 9.6 64bit on CentOS / RHEL 7"
    }
  }
}
```

```

        "osType": "CentOS",
        "serverDescription": "Cent OS 7",
        "serverId": "C7"
    },
    "type": "postgres",
    "version": "9.6"
},
"engineVersion": "PostgreSQL 9.6 64bit on CentOS / RHEL 7",
"masterUser": "postgres",
"continuousArchiving": "false",
"clusterUuid": "d7a0fff4-5091-4abd-9258-68b24b965dea",
"tenant": "acctg",
"encryptefs": "false",
"encryptKey": "",
"yumUpdate": "false"
}

```

When sending a DELETE request, provide the name of the tenant in which a cluster resides, and a backup identifier.

GET Status Codes

Property	Description
200	The call to this resource was successful.
401	The request has been made with an invalid token, or is requesting a resource that belongs to a different owner than the auth token.
404	A backup was not found for the specified id.

DELETE Request Parameters

Property	Description
<code>name</code>	The name of a tenant or role in which the cluster resides.
<code>backup_id</code>	The unique identifier of the backup, provided in the <code>id</code> field.

DELETE Status Codes

Property	Description
202	A DELETE request to this resource was successful.
401	The request has been made with an invalid token, or is requesting a resource that belongs to a different owner than the auth token.
403	A Template Only user has attempted to delete a backup from a cluster that was created manually.
404	A backup was not found with the specified id.

2.1.22 /owners/*name*/clusters

Use the `/owners/name/clusters` resource to retrieve cluster details about all of the clusters that reside within the specified tenant or role or to create a new cluster.

Pass a name with a GET request to retrieve a list of all the clusters in the tenant.

GET Request Parameters

Property	Description
<code>name</code>	The name of a tenant or role in which the cluster resides.

The resource returns the following information.

GET Response Parameters

Property	Example
Description	
<code>autoScaleReplicas</code>	<code>"autoScaleReplicas": "false"</code>
True if automatic connection scaling is enabled; false if it is disabled.	
<code>autoScaleStorage</code>	<code>"autoScaleStorage": "false"</code>
True if automatic storage scaling is enabled; false if it is disabled.	
<code>availabilityZone</code>	<code>"availabilityZone": "us-east-1d"</code>
The data center in which the cluster resides.	
<code>backupRetention</code>	<code>"backupRetention": "1"</code>
The number of backups that EDB Ark will retain for the master node of the cluster.	
<code>BackupWindow</code>	<code>"backupWindow": "12:00am - 2:00am"</code>
The time during which backups will be taken.	
<code>caState</code>	<code>"caState": ""</code>
The most-recent continuous archiving state of the instance.	
<code>clusterKey</code>	<code>"clusterKey": "RSA PRIVATE KEY"</code>
The SSH key shared by all of the instances in the cluster.	
<code>clusterKeyName</code>	<code>"clusterKeyName": "ark-acctg"</code>
The name of the SSH key.	
<code>clusterName</code>	<code>"clusterName": "accounting"</code>
The name of the cluster.	
<code>clusterNodeCount</code>	<code>"clusterNodeCount": "1"</code>
The number of nodes in the cluster.	
<code>clusterState</code>	<code>"clusterState": "2"</code>
The current state of the database. Valid values are:	
STOPPED = 0	
STARTING = 1	
RUNNING = 2	
WARNING = 3	
UNKNOWN = 99	
<code>clusterUuid</code>	<code>"clusterUuid": "d7a0fff4-5091-4abd-9258-68b24b965dea"</code>
The universal unique identifier of the cluster.	
<code>connectionThreshold</code>	<code>"connectionThreshold": "95"</code>
Specifies the number of connections made before the cluster is scaled up.	
<code>connections</code>	<code>"connections": "1"</code>

The current number of client connections.	
continuousArchiving	"continuousArchiving": "false"
Boolean value; true if continuous archiving is enabled, false if continuous archiving is not enabled.	
cpuLoad	"cpuLoad": "88"
The current CPU load of the instance.	
creationTime	"creationTime": "2018-02-27T16:07:10-05:00"
The date and time at which the cluster was created.	
dataThreshold	"dataThreshold": "65"
The disk space threshold at which the cluster will be automatically scaled up.	
dbEngine	"dbEngine": {engine description }
The detailed description of the database engine selected when creating the cluster.	
dbName	"dbName": "postgres"
The name of the default database created when the instance was created (edb or postgres).	
dbPort	"dbPort": "5432"
The database listener port.	
dbState	"dbState": "2"
The current state of the database:	
0 - Stopped	
1 - Starting	
2 - Running	
3 - Warning	
99 - Unknown	
dnsName	"dnsName": "address"
The DNS name of the cluster.	
encrypted	"encrypted": "false"
If you specify true, the cluster will be encrypted. EDB Ark uses the aes-xts-plain (512-bit) cipher suite. When encryption is enabled, everything residing on the cluster is encrypted except for the root filesystem.	
engineVersion	"engineVersion": "PG 9.6 64bit on CentOS/RHEL 7"
The version of the database that is running on the instance.	
freeDataSpace	"freeDataSpace": "1861084"
The amount of available data space.	
serverClass	"serverClass": "t2.micro"
The current server class of the cluster.	
id	"id": "i-072c8ed4fe9801687"
The unique identifier of the cluster.	
imageId	"imageId": "ami-46c1b650"
The server image used when creating the node.	
instanceState	"instanceState": "running"
The current state of the node.	
iops	"iops": "0"
The requested IOPS setting for the cluster (valid for AWS users only).	
ipPool	"ipPool": ""
The ipPool in which the cluster will be created.	
lbPort	"lbPort": "9999"
The load balancing port used for client connections to the database.	
manuallyScaleReplicas	"manuallyScaleReplicas": "true"
Specifies true if manual replica node scaling is allowed.	
manuallyScaleStorage	"manuallyScaleStorage": "false"
Specifies true if manual storage scaling is allowed.	
masterUser	"masterUser": "postgres"
The name of the master database user.	
monitoringDatabase	"monitoringDatabase": "true"
Specifies true if database health monitoring is enabled.	
monitoringLB	"monitoringLB": "true"
Specifies true if load balancer health monitoring is enabled.	

notificationEmail	"notificationEmail": "acctg@example.com"
The notification email provided for the cluster owner; if no email is specified, this parameter is omitted.	
numberOfNodes	"numberOfNodes": "1"
The number of nodes in the Ark cluster.	
optimized	"optimized": "false"
owner	"owner": "acctg@example.com"
The identifier used to connect to the Ark console; on AWS, this is an email address.	
pendingModifications	"pendingModifications": ""
A message describing any cluster modification in progress (if applicable).	
port	"port": "22"
The port monitored by the database for ssh connections.	
primaryFailoverToReplica	"primaryFailoverToReplica": "true"
Boolean value; true if the cluster will fail over to a replica; false if the cluster will fail over to a new master instance.	
privateIp	"privateIp": "xx.x.x.x"
The private IP address of the cluster.	
publicIp	"publicIp": "xx.xxx.xxx.xxx"
The public IP address of the cluster.	
readonly	"readonly": "false"
True if the cluster is read only.	
region	"region": "us-east-1"
The region in which the host of the cluster resides.	
securityGroup	"securityGroup": "ark-acctg"
The security group (and rules) that are applied to the cluster.	
storage	"storage": "1.0"
The amount of storage allocated for the cluster.	
subnetid	"subnetid": "subnet-1d797e79"
The subnet identifier of the cluster.	
templateName	"templateName": "accounts"
The template name specified when creating the cluster; the template determines initial cluster properties.	
tenant	"tenant": "Admin"
The tenant (or role) in which the cluster resides.	
usedDataSpace	"usedDataSpace": "45288"
The amount of data space used by the cluster.	
versionNum	"versionNum": "020000"
The version of EDB Ark under which the instance was created.	
vpcid	"vpcid": "vpc-e3ebc586"
The VPC identifier of the cluster.	
yumStatus	"yumStatus": "2"
The current yum status of the node:	
0	- OK
1	- Unknown
2	- Warning
3	- Critical
yumUpdate	"yumUpdate": "false"
Boolean value; true if the cluster was created with "yum update" enabled, false if "yum update" was not enabled when the cluster was created.	
zone	"zone": "us-east-1d"
The zone in which the cluster was created.	

For example, a call to this resource:

```
https://ark_server/api/v3.0/owners/acctg/clusters/
```

Might return a list with multiple entries in the form:

```
{
    "autoScaleReplicas": "false",
    "autoScaleStorage": "false",
    "availabilityZone": "us-east-1d",
    "backupRetention": "1",
    "backupWindow": "12:00am - 2:00am",
    "caState": "",
    "clusterKey": "--BEGIN RSA PRIVATE KEY---END RSA PRIVATE KEY--",
    "clusterKeyName": "ark-acctg",
    "clusterName": "payables",
    "clusterNodeCount": "1",
    "clusterState": "2",
    "clusterUuid": "d7a0f2-501-4acd-98-68b965da",
    "connectionThreshold": "95",
    "connections": "1",
    "continuousArchiving": "false",
    "cpuLoad": "74",
    "creationTime": "2018-02-27T16:07:10-05:00",
    "dataThreshold": "65",
    "dbEngine": {
        "engineId": "PG_96_CR7_ARK22",
        "eol": "false",
        "id": "8",
        "name": "PostgreSQL 9.6 64bit on CentOS / RHEL 7",
        "optionalPkgs": "",
        "repos": {
            "id": "10",
            "url": "http://yum.postgresql.org/9.6/redhat/rhel-7-x86_64/pgdg-redhat96-9.6-3.noarch.rpm"
        },
        "requiredPkgs": "postgresql96-server pgpool-II-96",
        "serverImage": {
            "id": "1",
            "imageId": "ami-46c1b650",
            "initialUser": "centos",
            "isStatic": "false",
            "osType": "CentOS",
            "serverDescription": "Cent OS 7",
            "serverId": "C7"
        },
        "type": "postgres",
        "version": "9.6"
    },
    "dbName": "postgres",
    "dbPort": "5432",
    "dbState": "2",
    "dnsName": "ec2-35-171-217-111.compute-1.amazonaws.com",
    "encrypted": "false",
    "engineVersion": "PostgreSQL 9.6 64bit on CentOS / RHEL 7",
    "freeDataSpace": "1861084",
    "serverClass": "t2.micro",
    "id": "i-072c8ed4fe9801687",
    "imageId": "ami-46c1b650",
    "instanceState": "running",
    "iops": "0",
}
```

```

    "ipPool": "",
    "lbPort": "9999",
    "manuallyScaleReplicas": "true",
    "manuallyScaleStorage": "false",
    "masterUser": "postgres",
    "monitoringDatabase": "true",
    "monitoringLB": "true",
    "notificationEmail": "alice.smith@edb.com",
    "numberOfNodes": "1",
    "optimized": "false",
    "owner": "alice.smith@edb.com",
    "pendingModifications": "",
    "port": "22",
    "primaryFailoverToReplica": "true",
    "privateIp": "12.0.75.4",
    "publicIp": "36.17.27.11",
    "readonly": "false",
    "region": "us-east-1",
    "securityGroup": "ark-acctg",
    "storage": "1.0",
    "subnetid": "subnet-1d797e79",
    "templateName": "clerk",
    "tenant": "acctg",
    "usedDataSpace": "45288",
    "versionNum": "020000",
    "vpcid": "vpc-eebbc56",
    "yumStatus": "2",
    "yumUpdate": "false",
    "zone": "us-east-1d"
}

```

GET Status Codes

Property	Description
200	The call to this resource was successful.
204	There are no clusters for the role/tenant.
401	The call uses an invalid token, or is requesting clusters scoped to a different owner than the auth token.

Please note: IP pool support for Azure instances is provided by a regional pool; you can not specify the identity of the pool used by your cluster.

Using a POST Request to Create or Clone a Cluster

Pass cluster details with a POST request to create a new cluster.

An administrative user can use a POST request that does not include a value in the templateName field; if you are a Template Only user, you must include a value for templateName. Please note that the template specified in templateName must reside in the current role/tenant.

To use a POST request to clone a cluster, pass in the following fields:

POST Request Parameters to Clone a Cluster

Property	Description
clusterName	The name of the cluster.
continuousArchiving	Boolean value; true if continuous archiving is enabled, false if continuous archiving is not enabled.
encrypted	Specify true or false; if you specify true, the cluster will be encrypted. EDB Ark uses the aes-xts-plain (512-bit) cipher suite. When encryption is enabled, everything residing on the cluster is encrypted except for the root filesystem.
fromCluster	The clusterUuid of the cluster that you are cloning.
hardware	The hardware type or serverClass of the cluster.
ipPool	The ipPool in which the cluster will be created.
vpcid	The VPC identifier of the cluster.
yumUpdate	Boolean value; true if the cluster was created with "yum update" enabled, false if "yum update" was not enabled when the cluster was created.

Note that `fromCluster` refers to the `clusterUuid` of the source cluster, and is not a value stored after this call.

To create a cluster from a backup, pass in the same fields, but specify `fromBackup` instead of `fromCluster`, and pass in the backup identifier:

POST Request Parameters to Create a Cluster from a Backup

Property	Description
clusterName	The name of the cluster.
continuousArchiving	Boolean value; true if continuous archiving is enabled, false if continuous archiving is not enabled.
encrypted	Specify true or false; if you specify true, the cluster will be encrypted. EDB Ark uses the aes-xts-plain (512-bit) cipher suite. When encryption is enabled, everything residing on the cluster is encrypted except for the root filesystem.
fromBackup	The identifier of the backup that you are restoring into the new cluster.
hardware	The hardware type or serverClass of the cluster.
ipPool	The ipPool in which the cluster will be created.
vpcid	The VPC identifier of the cluster.
yumUpdate	Boolean value; true if the cluster was created with "yum update" enabled, false if "yum update" was not enabled when the cluster was created.

Template Only Users

If you are a Template Only user, include the following fields when using a POST request to create a cluster:

POST Request Parameters to Create a Cluster- Template Only User

Property	Description
clusterName	The name of the cluster.
masterUser	The name of the master database user.

masterPassword	The password associated with the master database user.
notificationEmail	The notificationEmail for the cluster
templateName	The name of the template that will determine additional cluster properties.

If you are a Template Only user, you can use a POST request to clone an existing cluster; include the following properties:

POST Request Parameters to Clone a Cluster - Template Only User

Property	Description
fromCluster	The clusterUuid of the cluster that you are cloning.
clusterName	The name of the cluster.
templateName	The name of the template that will determine additional cluster properties.

Note that `fromCluster` refers to the `clusterUuid` of the source cluster, and is not a value stored after this call.

To create a cluster from a backup, pass in the same fields, but specify `fromBackup` instead of `fromCluster`, and pass in the backup identifier:

POST Request Parameters to Create a Cluster from Backup- Template Only User

Property	Description
fromBackup	The identifier of the backup that you wish to restore into the new cluster.
clusterName	The name of the cluster.
recoveryPoint	This property must be included when creating a cluster from backup; the value is a long integer that represents the number of milliseconds since the epoch. The timestamp specified is the value at which you wish to execute a point-in-time recovery. For example, to specify a recovery time of 4/5/2018 12:30:00pm provide the value 1522949400576. The specified time may not precede the timestamp of the specified backup.
templateName	The name of the template that will determine additional cluster properties.

When you create a new cluster, the resource responds with an HTTP header that contains an URL that represents the location of the new cluster.

POST Status Codes

Property	Description
201	A POST to this resource was successful.
400	400 is returned if: <ul style="list-style-type: none"> • Instance information is missing. • During cloning Ark was unable to find master node for cluster id specified in <code>fromCluster</code> parameter. • During backup restoration Ark is unable to find master node for cluster id specified in <code>fromBackup</code> parameter. • During backup restoration Ark has encountered an error with <code>recoveryPoint</code> parameter formatting, or the specified time precedes the timestamp of the backup.

	<ul style="list-style-type: none">• The specified database engine can't be found or a <code>DbEngine</code> parameter isn't specified.• There are validation errors with the cluster info passed in.• A list of detailed validation errors will be returned in the response <p>A Template-Only user has encountered an error:</p> <ul style="list-style-type: none">• No template name is specified.• The specified template doesn't exist, is disabled, or is not enabled for the specified owner.
401	The token is invalid, or is requesting clusters that are scoped to a different owner than the auth token.
409	A Template-Only user has encountered an error: <ul style="list-style-type: none">• The storage size in the specified template is too small to contain a clone or backup of the original cluster.• The database engine in the specified template doesn't match the database engine in the original cluster.

2.1.23 /owners/*name*/clusters/*clusterName*

When making a GET request to the `/owners/name/clusters/clusterName` resource, pass in the name of the tenant or role in which the cluster resides and the name of the cluster.

GET Request Parameters

Property	Description
<code>name</code>	The name of a tenant or role in which the cluster resides.
<code>clusterName</code>	The name of the cluster about which you wish to retrieve information.

The resource returns the following information.

GET Response Parameters

Property	Example
Description	
<code>autoScaleReplicas</code>	<code>"autoScaleReplicas": "false"</code>
True if automatic replica scaling is enabled; false if it is disabled.	
<code>autoScaleStorage</code>	<code>"autoScaleStorage": "false"</code>
True if automatic storage scaling is enabled; false if it is disabled.	
<code>availabilityZone</code>	<code>"availabilityZone": "us-east-1d"</code>
The data center in which the cluster resides.	
<code>backupRetention</code>	<code>"backupRetention": "1"</code>
The number of backups that EDB Ark will retain for the master node of the cluster.	
<code>BackupWindow</code>	<code>"backupWindow": "12:00am - 2:00am"</code>
The time during which backups will be taken.	
<code>caState</code>	<code>"caState": ""</code>
The most-recent continuous archiving state of the instance.	
<code>clusterKey</code>	<code>"clusterKey": "RSA PRIVATE KEY"</code>
The SSH key shared by all of the instances in the cluster.	
<code>clusterKeyName</code>	<code>"clusterKeyName": "ark-acctg"</code>
The name of the SSH key.	
<code>clusterName</code>	<code>"clusterName": "accounting"</code>
The name of the cluster.	
<code>clusterNodeCount</code>	<code>"clusterNodeCount": "1"</code>
The number of nodes in the cluster.	
<code>clusterState</code>	<code>"clusterState": "2"</code>
The current state of the database. Valid values are:	
STOPPED = 0	
STARTING = 1	
RUNNING = 2	
WARNING = 3	
UNKNOWN = 99	
<code>clusterUuid</code>	<code>"clusterUuid": "d7a0fff4-5091-4abd-9258-68b24b965dea"</code>
The universal unique identifier of the cluster.	
<code>connectionThreshold</code>	<code>"connectionThreshold": "95"</code>
Specifies the number of connections made before the cluster is scaled up.	
<code>connections</code>	<code>"connections": "1"</code>

The current number of client connections.	
continuousArchiving	"continuousArchiving": "false"
Boolean value; true if continuous archiving is enabled, false if continuous archiving is not enabled.	
cpuLoad	"cpuLoad": "88"
The current CPU load of the instance.	
creationTime	"creationTime": "2018-02-27T16:07:10-05:00"
The date and time at which the cluster was created.	
dataThreshold	"dataThreshold": "65"
The disk space threshold at which the cluster will be automatically scaled up.	
dbEngine	"dbEngine": {engine description }
The detailed description of the database engine selected when creating the cluster.	
dbName	"dbName": "postgres"
The name of the default database created when the instance was created (edb or postgres).	
dbPort	"dbPort": "5432"
The database listener port.	
dbState	"dbState": "2"
The current state of the database:	
0 - Stopped	
1 - Starting	
2 - Running	
3 - Warning	
99 - Unknown	
dnsName	"dnsName": "address"
The DNS name of the cluster.	
encrypted	"encrypted": "false"
If you specify true, the cluster will be encrypted. EDB Ark uses the aes-xts-plain (512-bit) cipher suite. When encryption is enabled, everything residing on the cluster is encrypted except for the root filesystem.	
engineVersion	"engineVersion": "PG 9.6 64bit on CentOS/RHEL 7"
The version of the database that is running on the instance.	
freeDataSpace	"freeDataSpace": "1861084"
The amount of available data space.	
serverClass	"serverClass": "t2.micro"
The current server class of the cluster.	
id	"id": "i-072c8ed4fe9801687"
The unique identifier of the cluster.	
imageId	"imageId": "ami-46c1b650"
The server image used when creating the node.	
instanceState	"instanceState": "running"
The current state of the node.	
iops	"iops": "0"
The requested IOPS setting for the cluster (valid for AWS users only).	
ipPool	"ipPool": ""
The ipPool used by the cluster.	
lbPort	"lbPort": "9999"
The load balancing port used for client connections to the database.	
manuallyScaleReplicas	"manuallyScaleReplicas": "true"
Specifies true if manual replica node scaling is allowed.	
manuallyScaleStorage	"manuallyScaleStorage": "false"
Specifies true if manual storage scaling is allowed.	
masterUser	"masterUser": "postgres"
The name of the master database user.	
monitoringDatabase	"monitoringDatabase": "true"
Specifies true if database health monitoring is enabled.	
monitoringLB	"monitoringLB": "true"
Specifies true if load balancer health monitoring is enabled.	

notificationEmail	"notificationEmail": "acctg@example.com"
The notification email provided for the cluster owner; if no email is specified, this parameter is omitted.	
numberOfNodes	"numberOfNodes": "1"
The number of nodes in the Ark cluster.	
optimized	"optimized": "false"
true if the cluster is optimized; false if it is not.	
owner	"owner": "acctg@example.com"
The identifier used to connect to the Ark console; on AWS, this is an email address.	
pendingModifications	"pendingModifications": ""
A message describing any cluster modification in progress (if applicable).	
port	"port": "22"
The port monitored by the database for ssh connections.	
primaryFailoverToReplica	"primaryFailoverToReplica": "true"
Boolean value; true if the cluster will fail over to a replica; false if the cluster will fail over to a new master instance.	
privateIp	"privateIp": "xx.x.x.x"
The private IP address of the cluster.	
publicIp	"publicIp": "xx.xxx.xxx.xxx"
The public IP address of the cluster.	
readonly	"readonly": "false"
True if the cluster is read only.	
region	"region": "us-east-1"
The region in which the host of the cluster resides.	
securityGroup	"securityGroup": "ark-acctg"
The security group (and rules) that are applied to the cluster.	
storage	"storage": "1.0"
The amount of storage allocated for the cluster.	
subnetid	"subnetid": "subnet-1d797e79"
The subnet identifier of the cluster.	
templateName	"templateName": "accounts"
The template name specified when creating the cluster; the template determines initial cluster properties.	
tenant	"tenant": "Admin"
The tenant (or role) in which the cluster resides.	
usedDataSpace	"usedDataSpace": "45288"
The amount of data space used by the cluster.	
versionNum	"versionNum": "020000"
The version of EDB Ark under which the instance was created.	
vpcid	"vpcid": "vpc-e3ebc586"
The VPC identifier of the cluster.	
yumStatus	"yumStatus": "2"
The current yum status of the node:	
0	- OK
1	- Unknown
2	- Warning
3	- Critical
yumUpdate	"yumUpdate": "false"
Boolean value; true if the cluster was created with "yum update" enabled, false if "yum update" was not enabled when the cluster was created.	
zone	"zone": "us-east-1d"
The zone in which the cluster was created.	

For example, a call to this resource:

```
https://ark_server/api/v3.0/owners/acctg/clusters/payables
```

Might return a list with multiple entries in the form:

```
{
    "autoScaleReplicas": "false",
    "autoScaleStorage": "false",
    "availabilityZone": "us-east-1d",
    "backupRetention": "1",
    "backupWindow": "12:00am - 2:00am",
    "caState": "",
    "clusterKey": "--BEGIN RSA PRIVATE KEY---END RSA PRIVATE KEY--",
    "clusterKeyName": "ark-acctg",
    "clusterName": "payables",
    "clusterNodeCount": "1",
    "clusterState": "2",
    "clusterUuid": "d7a0f2-501-4acd-98-68b965da",
    "connectionThreshold": "95",
    "connections": "1",
    "continuousArchiving": "false",
    "cpuLoad": "74",
    "creationTime": "2018-02-27T16:07:10-05:00",
    "dataThreshold": "65",
    "dbEngine": {
        "engineId": "PG_96_CR7_ARK22",
        "eol": "false",
        "id": "8",
        "name": "PostgreSQL 9.6 64bit on CentOS / RHEL 7",
        "optionalPkgs": "",
        "repos": {
            "id": "10",
            "url": "http://yum.postgresql.org/9.6/redhat/rhel-7-x86_64/pgdg-redhat96-9.6-3.noarch.rpm"
        },
        "requiredPkgs": "postgresql96-server pgpool-II-96",
        "serverImage": {
            "id": "1",
            "imageId": "ami-46c1b650",
            "initialUser": "centos",
            "isStatic": "false",
            "osType": "CentOS",
            "serverDescription": "Cent OS 7",
            "serverId": "C7"
        },
        "type": "postgres",
        "version": "9.6"
    },
    "dbName": "postgres",
    "dbPort": "5432",
    "dbState": "2",
    "dnsName": "ec2-35-171-217-111.compute-1.amazonaws.com",
    "encrypted": "false",
    "engineVersion": "PostgreSQL 9.6 64bit on CentOS / RHEL 7",
    "freeDataSpace": "1861084",
    "serverClass": "t2.micro",
    "id": "i-072c8ed4fe9801687",
    "imageId": "ami-46c1b650",
    "instanceState": "running",
    "iops": "0",
}
```

```

    "ipPool": "",
    "lbPort": "9999",
    "manuallyScaleReplicas": "true",
    "manuallyScaleStorage": "false",
    "masterUser": "postgres",
    "monitoringDatabase": "true",
    "monitoringLB": "true",
    "notificationEmail": "alice.smith@edb.com",
    "numberOfNodes": "1",
    "optimized": "false",
    "owner": "alice.smith@edb.com",
    "pendingModifications": "",
    "port": "22",
    "primaryFailoverToReplica": "true",
    "privateIp": "12.0.75.4",
    "publicIp": "36.17.27.11",
    "readonly": "false",
    "region": "us-east-1",
    "securityGroup": "ark-acctg",
    "storage": "1.0",
    "subnetid": "subnet-1d797e79",
    "templateName": "clerk",
    "tenant": "acctg",
    "usedDataSpace": "45288",
    "versionNum": "020000",
    "vpcid": "vpc-eebc56",
    "yumStatus": "2",
    "yumUpdate": "false",
    "zone": "us-east-1d"
}

```

GET Status Codes

Property	Description
200	The request is successful.
401	The request uses an invalid token, or is requesting clusters scoped to a different owner than the auth token.
404	The specified cluster name is not found.

Use this resource with a PUT request to change cluster settings; when you change a cluster, specify the relevant keyword and the new value.

PUT Request Parameters

Property	Description	Example
numberOfNodes	Scale up (add replicas). The number must be greater than the current number of nodes in the cluster.	{"numberOfNodes": "4"}
removeNode	Remove replica(s) from a cluster.	{"removeNode" : "id1"} or {"removeNode" : ["id1", "id2"]}
primaryFailoverToReplica	Change primary failover type. The value must be 'true' or 'false,' ignoring case.	{"primaryFailoverToReplica": "false"}
autoScaleReplicas	Turn auto scaling of replicas on or off. Specify true or false.	{"autoScaleReplicas" : "false"}

autoScaleStorage	Turn auto scaling of storage on or off. Specify true or false.	{"autoScaleStorage" : "false"}
backupRetention	Set the backup retention.	{"backupRetention" : "4"}
backupWindow	Set the backup window:	{"backupWindow" : "10:00am - 12:00pm"}
connectionThreshold	Set the connection threshold.	{"connectionThreshold" : "60"}
dataThreshold	Set the cpu threshold.	{"dataThreshold" : "65"}
upgrade	Perform update on cluster. Value can be true or false; passing in false does nothing and a 204 is returned.	{"upgrade" : "true"}
monitoringLB	Turn load balancer monitoring on/off.	{"monitoringLB" : "false"}
notificationEmail	Change the notification email.	{"notificationEmail" : "name@example.com"}
owner	Change the cluster owner.	{"owner" : "id"}
continuousArchiving	Turn on continuous archiving. If the value passed in is already what the cluster is using, a 204 is returned. Otherwise a 202 is returned while the cluster is changed in the background.	{"continuousArchiving" : "true"}
storage	Add storage to the cluster. The number passed in is the new total, not the amount to be added (in GB).	{"storage" : "5"}
serverClass	Used to specify a new server class for the cluster.	<pre>{ "serverClass" : "m1.medium", "yumUpdate": "true", "vpcid": "General VM Network", "ipPool": "Sales East" }</pre> <p>If you specify an invalid value for serverClass, the error message will provide a list of available server classes. For example:</p> <pre>"error": { "code": "400", "message": "Server class invalidServerClass, is not defined in any available templates. Valid server classes are: m1.small, m1.xlarge", "description": "", "title": "Bad Request" }</pre> <p>Please note: Template Only users may scale the machine type of any cluster created from a template to a service class that is defined in a template available in the current role/tenant. During scaling, only the serverClass property is evaluated; all other properties are ignored.</p>
yumUpdate	Used to specify if the cluster should perform a yum update when provisioning a cluster.	Please note that yumUpdate is optional, and will default to false.

PUT Status Codes

Property	Description
202	A PUT to this resource was successful (asynchronous events).
204	A PUT to this resource was successful (synchronous events).
400/409	There is a validation error in the cluster info; a detailed validation error will be returned in the response.
401	The auth token used for the request is invalid, or is requesting clusters scoped to a different owner than the auth token.
403	A Template Only user has attempted to modify a cluster that was created manually.
404	A template with the specified ID was not found.
500	The requested cluster exists, but there is no master node.

Use a DELETE request with this resource to terminate a cluster.

DELETE Status Codes

Property	Description
202	The call was successful.
401	The request uses an invalid token, or is requesting clusters scoped to a different owner than the auth token.
403	A Template Only user has attempted to delete a cluster that was created manually.
404	The requested cluster name is not found.

Please note: IP pool support for Azure instances is provided by a regional pool; you can not specify the identity of the pool used by your cluster.

2.1.24 /owners/*name*/clusters/*clusterName*/events

Use a GET request to the `/owners/name/clusters/clusterName/events` resource to retrieve a list of events for a specific cluster.

GET Request Parameters

Property	Description
<code>name</code>	The name of a tenant or role in which the cluster resides.
<code>clusterName</code>	The name of the cluster about which you wish to retrieve information.

The resource returns the following information.

GET Response Parameters

Property	Example
Description	
<code>clocktime</code>	<code>"clocktime": "2016-01-18T23:35:05.497Z"</code>
<code>The time at which the event occurred.</code>	
<code>description</code>	<code>description": "Creation of cluster acctg started."</code>
<code>The description of the event.</code>	
<code>id</code>	<code>"id": "12251"</code>
<code>The row identifier for the pcshistory table.</code>	
<code>owner</code>	<code>"owner": "Resources"</code>
<code>The registered owner of the cluster on which the event occurred.</code>	
<code>source</code>	<code>"source": "fc6c56f0-c2c5-480d-8775-15249c70e1f4"</code>
<code>The name of the cluster on which the event occurred.</code>	

For example, the following call:

```
https://ark_server/api/v3.0/owners/acctg/clusters/payables/events
```

Might include the following events in the result set:

```
"event": [
  {
    "id": "3303",
    "clocktime": "2018-02-27T16:37:23.940-05:00",
    "source": "d7a0fff4-5091-4abd-9258-68b24b965dea",
    "description": "Load Balancer Notification i-072c8ed4fe9801687",
    "owner": "acctg"
  },
  {
    "id": "3553",
    "clocktime": "2018-02-27T17:39:44.707-05:00",
    "source": "d7a0fff4-5091-4abd-9258-68b24b965dea",
    "description": "Load Balancer Notification i-072c8ed4fe9801687",
    "owner": "acctg"
  },
  ...
]
```

GET Status Codes

Property	Description
200	A call to this resource was successful.
401	The request uses an invalid token or is requesting events scoped to a different owner than the auth token.
404	The requested cluster name is not found.

2.1.25 /owners/*name*/clusters/*clusterName*/key

A user with access to the specified cluster can use this resource to retrieve the SSH key for a cluster.

GET Request Parameters

Property	Description
<i>name</i>	The name of a tenant or role in which the cluster resides.
<i>clusterName</i>	The name of the cluster about which you wish to retrieve information.

GET Response Parameters

Property	Example
Description	
<i>target_file.pem</i>	The location to which the SSH key for the cluster will be saved.

For example, the following call:

```
https://ark_server/api/v3.0/owners/acctg/clusters/payables/key
```

Returns an SSH key for the payables cluster:

```
-----BEGIN RSA PRIVATE KEY-----
IIEowIBAAKCAQEAvtU90kcTls8FqxrwtPoNGbcn1Vti4QJ9YIaYxa5BauWrcYShBqHe8Khyu8
KdQfYXsyRKdCHesC8CeQ8SViWexSQGTfgInYHS+ZzKqiEzmzZ9AyJoa2EydPpyAwiyDVKwXE9iK
3+ntzpJhsA61q6uAcD1LsnuihsZHGQG4K4OGSD/TPne/ZL04pcKy0Qynl3BjMynJsqq5xTD1LpxB
WTZEdRuNCrAxM26fUh+aM4McyrQnBcizQYlUne6+DyogW0zB0mIUtUj2tOdyYHtcaY81XstTC01
61PZEETMmjioWEAnlfSIIa2OTG6qb84QCotyVmJdcfnbpR7THGUCQIDAQABoIBAEJrQbsgVecV
Yums1LFBe/5RFtS2DQyUBkt3wxCe9ALPOAB/gg5M1X8zvNA+5qrY8iv8k0G0fJLy5f+jWoBEvwt
TmtvMIMye41Y1LRiZAQh7xlg0zOp1GbSxPmFj82TdtPJMBuUQ5zTUqqal3T54ycN+f1ernMSgr
dt013430/NpS8H0FA6wb0OYT5I1h42CMFUQOsYkxjYO64dGw60/W1weaRoMMvY99GrRmvfFX
fAPYC/Y1X1IyzcYK6N7Aeyq9ITKM1eC6aBHJONReg5xoQQ0R3ftdPSpL0nYN917vBNEMS65tZyw
ipm7FjWEd8LHVN0/G1R1VAUcmwkCgYEAt7PmGTOvQ4rEx6je18ep6f12Uy6Ts8BWLJ0M+Y2pvlUc1
LzYq5eOX6L6gOfFDyjMB+yVY7sPYHA5MK5xz2w98SXTiopT6R6hH+spze9IlxjZHY0fq7V1B0pv
3AGOy5etxMVzb0JbKH0It2lfxHdhyDGO0wuje4NdpgvPLh0zeWCgYEAzidg8Ueo0KrYapx50S9r
bXB2Ravo6A01RfpZFxayXpobox5wMdmGgXKB+8z9yZBoaXGYKX1j1bvBUu+KtMovu9yf5mXXq0rZ7
RjsBYOg/hWDzbCwufow65wKBgEuqHGSyfmvqOCaab3Zb7U+AM+jLlb/k5LizJczA7FaixbVqSb
29vbxMIHdLKZw8jnzPNbRVNfzCDnhGvdWsWEI9s7UPKA0yIgSsbmZ8aGRMyv+0S+qEMh11ZCVSRT
fLPpw+8Xyy540JbuHrBBTFLL8GkG19cAVXesef/rhofFAoGBALGEfEj1pTjg48kiDiMsL/2pEEo
TIQp+U4jnQ9VWR5EmAHZOU1ZVjqJsGXhBW5YfBxLm2N5ADGKpzifMD6wD8LEim68XC3KTQ2KaeIA
7SHyPWxsdLCr9SO1rnoD5vVvd9V1Ww1rMCKZTTvP18mink9BMSnzjOtcMoruFBXq6kn
-----END RSA PRIVATE KEY-----
```

GET Status Codes

Property	Description
200	A call to this resource was successful.
401	The request uses an invalid token, or is requesting a key scoped to a different owner than the auth token.
404	The cluster name specified in the request was not found.

2.1.26 /owners/*name*/clusters/*clusterName*/statistics?start=*start*&end=*end*

Use this resource to retrieve statistics about the specified cluster for the given time period. Please note: statistics are only kept for the last 14 days.

GET Request Parameters

Property	Description
<i>name</i>	The name of a tenant or role in which the cluster resides.
<i>clusterName</i>	The name of the cluster about which you wish to retrieve information.
<i>start</i>	<i>start</i> is the time at which the report will start; specify the time in an ISO_8601 format, or as the number of milliseconds since January 1, 1970.
<i>end</i>	<i>end</i> is the time at which the report ends; enter the time in an ISO_8601 format, or as the number of milliseconds since January 1, 1970. This parameter is optional.

The resource returns the following information.

GET Response Parameters

Property	Example
Description	
<i>nodeId</i>	"nodeId": "aa27d8e0-6325-41c6-82dd-39868a66bd1c"
The service provider's node identifier.	
<i>cpuload</i>	"cpuload": "11"
The processing load placed on the CPU by connecting clients.	
<i>freemem</i>	"freemem": "1882276"
The amount of free memory available to the node.	
<i>usedmem</i>	"usedmem": "40480"
The amount of used memory (on the node).	
<i>connections</i>	"connections": "1"
The number of connections to the specified node.	
<i>opspersecond</i>	"opspersecond": "1"
The number of operations per second.	
<i>timestamp</i>	"timestamp": "2016-01-18T23:35:05.497Z"
The time at which the data was gathered.	

For example, the following call:

```
https://ark_server/api/v3.0/owners/acctg/clusters/payables/statistics?start=2018-01-12T15:45:47Z
```

Might include the following events in the result set:

```
{
  "nodeStatistics": [
    {
      "nodeId": "i-072c8ed4fe9801687",
      "cpuload": "16",
      "freemem": "1882276",
      "usedmem": "40480",
      "connections": "1",
      "opspersecond": "1"
    }
  ]
}
```

```
        "freemem": "1861172",
        "usedmem": "45200",
        "connections": "1",
        "opspersecond": "1",
        "timestamp": "2018-02-27T16:12:01.101-05:00"
    },
    {
        "nodeId": "i-072c8ed4fe9801687",
        "cpuload": "18",
        "freemem": "1861168",
        "usedmem": "45204",
        "connections": "1",
        "opspersecond": "1",
        "timestamp": "2018-02-27T16:12:28.981-05:00"
    },
    ...
}
```

GET Status Codes

Property	Description
200	A call to this resource was successful.
400	The request did not include a <code>start</code> parameter, or the <code>end</code> parameter specified is more recent than the <code>start</code> parameter.
401	The request uses an invalid token or is requesting statistics scoped to a different owner than the auth token.
404	The specified cluster name was not found.

2.1.27 /properties

Use a GET request to the /properties resource to retrieve a list of console properties. Properties with an empty value contain sensitive information (such as a password).

GET Response Parameters

Property	Example
Description	
name	"name": "email.from.address"
The name of the console property.	
value	"value": "first.last@example.com"
The current value of the property.	

For example, the result set from following call:

```
https://ark_server/api/v3.0/properties
```

Might include:

```
{
  "property": [
    {
      "name": "service.account.id",
      "value": "service"
    },
    {
      "name": "email.from.address",
      "value": "name@email.com"
    },
    {
      "name": "aws.cross.account.secretkey",
      "value": ""
    },
    {
      "name": "aws.service.account.rolearn",
      "value": "arn:aws:iam::4631902:role/acctg"
    },
    {
      "name": "console.dashboard.hot.topics",
      "value": "DEFAULT"
    },
    ...
  ]
}
```

GET Status Codes

Property	Description
200	A call to this resource was successful.
204	There are no properties available.
401	The request uses an invalid token, or the request has been made by a non-administrative user.

Use a POST request with this resource to create a new console property.

POST Request Parameters

Property	Example
Description	
name	"name": "email.from.address"
The name of the console property.	
value	"value": "alice.smith@edb.com"
The current value of the property.	

POST Status Codes

Property	Description
204	A call to this resource was successful.
401	The request uses an invalid auth token, or was made by a non-administrative user.
409	The specified property already exists.

Use a PUT request with this resource to edit one or more properties in the same call; in some cases, you will be required to modify more than one property simultaneously. For example, if you need to change the AWS access and secret keys, changing just one property will not work; the console will attempt to validate the new property in the context of the others (the changed key will not match the modified key).

PUT Request Parameters

Property	Example
Description	
name	"name": "email.from.address"
The name of the console property.	
value	"value": "alice.smith@edb.com"
The new value of the property.	

The following table lists the modifiable console properties:

Property	Service Provider	Default Value
contact.email.address	Common	
email.from.address	Common	
notification.email	Common	
console.db.name	Common	"postgres"
console.db.backup.script	Common	"/var/ppcd/.edb/backup-postgresql.sh"
console.db.backup.dir	Common	"/var/ppcd/backups"
console.db.backup.container	Common	
console.db.backup.folder	Common	
api.timeout	Common	"10" (specified in minutes)
console.dashboard.docs	Common	"DEFAULT" (string literal)
console.dashboard.hot.topics	Common	"DEFAULT" (string literal)
console.switcher.enabled	Common	"true"

<code>postgres.auth.enabled</code>	Common	"false"
<code>template.restriction.enabled</code>	Common	"false"
<code>aws.cross.account.accesskey</code>	AWS	
<code>aws.cross.account.secretkey</code>	AWS	
<code>aws.service.account.rolearn</code>	AWS	
<code>aws.service.account.external.id</code>	AWS	
<code>self.registration.enabled</code>	AWS	"false"
<code>console.db.backup.tenant</code>	OpenStack	
<code>openstack.admin.role</code>	OpenStack	
<code>openstack.identity.service.endpoint</code>	OpenStack	
<code>openstack.identity.service.admin.endpoint</code>	OpenStack	
<code>service.account.id</code>	OpenStack & Azure	
<code>service.account.password</code>	OpenStack & Azure	
<code>azure.subscription.id</code>	Azure	
<code>azure.directory.id</code>	Azure	
<code>azure.application.id</code>	Azure	
<code>azure.storage.account</code>	Azure	

PUT Status Codes

Property	Description
204	A call to this resource was successful.
400	The following conditions will return a 400 status code: The property does not exist. The property value is empty. The property value may not be modified. There are validation errors for the specified value; a detailed error will be returned.
401	The request uses an invalid token, or was made by a non-administrative user.

2.1.28 /properties/name

Use a GET request with the /properties resource to retrieve the value of a single console property.

GET Request Parameters

Property	Description
<i>name</i>	The name of the property for which you wish to retrieve a value.

The resource returns the following information.

GET Response Parameters

Property	Example
Description	
<i>name</i>	"name": "api.timeout"
The property name.	
<i>value</i>	"value": "10"
The current value of the property.	

For example, the result set from following call:

```
https://ark_server/api/v3.0/properties/api.timeout
```

Might include:

```
{
  "name": "api.timeout",
  "value": "600"
}
```

Please note: a property that returns an empty value contains sensitive information (such as a password).

GET Status Codes

Property	Description
200	A call to this resource was successful.
401	The request uses an invalid token, or was made by a non-administrative user.
404	The specified property name is not found, or the specified property has a null or empty value.

Use a PUT request to modify the value of a property.

PUT Request Parameters

Property	Description
<code>name</code>	The name of the property for which you wish to modify a value.
<code>value</code>	The new value for the property.

The following table lists the modifiable console properties:

Property Name	Service Provider	Default Value
<code>contact.email.address</code>	Common	
<code>email.from.address</code>	Common	
<code>notification.email</code>	Common	
<code>console.db.name</code>	Common	"postgres"
<code>console.db.backup.script</code>	Common	" <code>/var/ppcd/.edb/backup-postgresql.sh</code> "
<code>console.db.backup.dir</code>	Common	" <code>/var/ppcd/backups</code> "
<code>console.db.backup.container</code>	Common	
<code>console.db.backup.folder</code>	Common	
<code>api.timeout</code>	Common	"10" (specified in minutes)
<code>console.dashboard.docs</code>	Common	"DEFAULT" (string literal)
<code>console.dashboard.hot.topics</code>	Common	"DEFAULT" (string literal)
<code>console.switcher.enabled</code>	Common	"true"
<code>postgres.auth.enabled</code>	Common	"false"
<code>template.restriction.enabled</code>	Common	"false"
<code>aws.cross.account.accesskey</code>	AWS	
<code>aws.cross.account.secretkey</code>	AWS	
<code>aws.service.account.rolearn</code>	AWS	
<code>aws.service.account.external_id</code>	AWS	
<code>self.registration.enabled</code>	AWS	"false"
<code>console.db.backup.tenant</code>	OpenStack	
<code>openstack.admin.role</code>	OpenStack	
<code>openstack.identity.service.endpoint</code>	OpenStack	
<code>openstack.identity.service.admin.endpoint</code>	OpenStack	
<code>service.account.id</code>	OpenStack & Azure	
<code>service.account.password</code>	OpenStack & Azure	
<code>azure.subscription.id</code>	Azure	
<code>azure.directory.id</code>	Azure	
<code>azure.application.id</code>	Azure	
<code>azure.storage.account</code>	Azure	

PUT Status Codes

Property	Description
204	A call to this resource was successful.
400	The following conditions return a 400 status code: The property name in the request body does not match the property name in the request URI.

	The property may not be modified. The property value is null or empty. There is a validation error on the property value; a detailed error message will be returned.
401	The request uses an invalid token, or was made by a non-administrative user.
404	The property is not found.

Use a DELETE request to delete a property; not all properties may be deleted. Backup properties can only be deleted if the `console.db.user` property is blank.

DELETE Request Parameters

Property	Description
<code>name</code>	The name of the property for which you wish to retrieve a value.

DELETE Status Codes

Property	Description
204	A call to this resource was successful.
400	The specified property may not be deleted.
401	The request uses an invalid token, or has been placed by a non-administrative user.
404	The property is not found.

2.1.29 /rhelsubscriptions

An administrative user can use a GET request to the /rhelsubscriptions resource to retrieve information about all current RHEL subscriptions.

GET Request Parameters

Property	Description
name	The name of the property for which you wish to retrieve a value.

A property returned with an empty value contains sensitive information (such as a password). A property that does not have a value will be omitted from the result set.

GET Response Parameters

Property	Example
Description	
activationKey	"activationKey": ""
The activation key of the RHEL subscription.	
attachAuto	"attachAuto": "false"
If true, nodes provisioned to use the specified pool will automatically attach to the service.	
autoAttach	"autoAttach": "true"
If true, any node associated with the subscription will automatically attach to the service.	
baseUrl	"baseUrl": ""
This property specifies the host name of the content delivery server; if left blank, the default is https://cdn.redhat.com.	
environment	"environment": ""
The name of the environment (within the organization that will be registered).	
force	"force": "false"
If true, the node will be registered, even if it is already registered.	
id	"id": "116"
The service identifier.	
name	"name": ""
The name of the system that will be registered.	
org	"org": ""
The organization (name) that will be registered with the Red Hat subscription system.	
password	"password": ""
The password associated with the specified user.	
pool	"pool": ""
The pool identifier for the Red Hat subscription service.	
quantity	"quantity": "0"
The number of subscriptions in the subscription pool.	
release	"release": ""
The operating system minor release that will be used when identifying updates to any nodes provisioned with the subscription.	
repos	<pre>"repos": [{ "id": "97", "repoName": "a1", "enabled": "false" },]</pre>

	{ ... }
A list of the repositories required by the subscription definition.	
serverUrl	"serverUrl": ""
The host name of the subscription server used by the service; if left blank, the default value is subscription.rhn.redhat.com.	
serviceLevel	"serviceLevel": ""
The service level of the subscription.	
subscriptionId	"subscriptionId": "acctg"
A user-friendly name for the subscription.	
type	"type": ""
The type of consumer that is being registered; the default is system.	
userName	"userName": "alice.smith"
The name of the user account registered with the Red Hat content server.	

For example, a GET request to this resource:

```
https://ark\_server/api/v3.0/rhelsubscriptions
```

Returns a list of RHEL subscriptions; for each subscription, the request might return:

```
{
  "activationKey": "",
  "attachAuto": "false",
  "autoAttach": "true",
  "baseUrl": "",
  "environment": "",
  "force": "false",
  "id": "116",
  "name": "",
  "org": "",
  "password": "",
  "pool": "",
  "quantity": "0",
  "release": "",
  "repos": [
    {
      "id": "97",
      "repoName": "a1",
      "enabled": "false"
    },
    {
      "id": "98",
      "repoName": "a2",
      "enabled": "false"
    },
    {
      "id": "99",
      "repoName": "a3",
      "enabled": "false"
    }
  ],
  "serverUrl": "",
  "serviceLevel": "",
  "subscriptionId": "acctg",
  "type": "",
  "userName": "alice.smith"
},  
etc....
```

GET Status Codes

Property	Description
200	The call is successful and returns a list of subscriptions.
204	The returned list is empty; there are no subscriptions.
401	The resource can only be called by an administrative user, or the token is invalid.

An administrative user can use a POST request to the /rhelsubscriptions resource to create a new RHEL subscription. When creating a new subscription, omit the `id` field; the server will assign a unique identifier.

POST Request Parameters

Property	Example
Description	
activationKey	<code>"activationKey": ""</code>
	The activation key of the RHEL subscription.
attachAuto	<code>"attachAuto": "false"</code>
	If true, nodes provisioned to use the specified pool will automatically attach to the service.
autoAttach	<code>"autoAttach": "true"</code>
	If true, any node associated with the subscription will automatically attach to the service.
baseUrl	<code>"baseUrl": ""</code>
	This property specifies the host name of the content delivery server; if left blank, the default is https://cdn.redhat.com .
environment	<code>"environment": ""</code>
	The name of the environment (within the organization that will be registered).
force	<code>"force": "false"</code>
	If true, the node will be registered, even if it is already registered.
name	<code>"name": "admin-east"</code>
	The name of the system that will be registered.
org	<code>"org": ""</code>
	The organization (name) that will be registered with the Red Hat subscription system.
password	<code>"password": ""</code>
	The password associated with the specified user. This property is required.
pool	<code>"pool": ""</code>
	The pool identifier for the Red Hat subscription service.
quantity	<code>"quantity": "0"</code>
	The number of subscriptions in the subscription pool.
release	<code>"release": ""</code>
	The operating system minor release that will be used when identifying updates to any nodes provisioned with the subscription.
repos	<code>"repos": [</code> { <code>"id": "97",</code> <code>"repoName": "a1",</code> <code>"enabled": "false"</code> }, { <code>...</code> }]
	A list of the repositories required by the subscription definition.
serverUrl	<code>"serverUrl": ""</code>
	The host name of the subscription server used by the service; if left blank, the default value is subscription.rhn.redhat.com .

serviceLevel	"serviceLevel": "Standard"
The service level of the subscription. This value may be "None", "Standard", or "Premium".	
subscriptionId	"subscriptionId": "acctg"
A user-friendly name for the subscription; this property is required.	
type	"type": "domain"
The type of consumer that is being registered; the default is system. This may be "system", "hypervisor", "person", "domain", "rhui", or "candlepin".	
userName	"userName": "alice.smith"
The name of the user account registered with the Red Hat content server. This property is required.	

POST Status Codes

Property	Description
201	A call to this resource was successful.
400	A request has encountered validation issues, or required subscription information is missing.
401	The token used was not obtained by an administrator, or the token is invalid.
409	There is already a subscription with the specified subscriptionId field.

2.1.30 /rhelsubscriptions/*subscriptionId*

An administrative user can use a GET request to this resource to retrieve information about a specific RHEL subscription.

GET Request Parameters

Property	Description
<i>id</i>	The name of the RHEL subscription about which you wish to retrieve information.

The resource returns the following information.

GET Response Parameters

Property	Example
Description	
activationKey	"activationKey": ""
	The activation key of the RHEL subscription.
attachAuto	"attachAuto": "false"
	If true, nodes provisioned to use the specified pool will automatically attach to the service.
autoAttach	"autoAttach": "true"
	If true, any node associated with the subscription will automatically attach to the service.
baseUrl	"baseUrl": ""
	This property specifies the host name of the content delivery server; if left blank, the default is https://cdn.redhat.com .
environment	"environment": ""
	The name of the environment (within the organization that will be registered).
force	"force": "false"
	If true, the node will be registered, even if it is already registered.
id	"id": "116"
	The service identifier.
name	"name": ""
	The name of the system that will be registered.
org	"org": ""
	The organization (name) that will be registered with the Red Hat subscription system.
password	"password": ""
	The password associated with the specified user.
pool	"pool": ""
	The pool identifier for the Red Hat subscription service.
quantity	"quantity": "0"
	The number of subscriptions in the subscription pool.
release	"release": ""
	The operating system minor release that will be used when identifying updates to any nodes provisioned with the subscription.
repos	"repos": [{ "id": "97", "repoName": "a1", "enabled": "false" }]

	{ ... }
A list of the repositories required by the subscription definition.	
serverUrl	"serverUrl": ""
The host name of the subscription server used by the service; if left blank, the default value is subscription.rhn.redhat.com.	
serviceLevel	"serviceLevel": ""
The service level of the subscription.	
subscriptionId	"subscriptionId": "acctg"
A user-friendly name for the subscription.	
type	"type": ""
The type of consumer that is being registered; the default is system.	
userName	"userName": "alice.smith"
The name of the user account registered with the Red Hat content server.	

For example, a GET request to this resource:

```
https://ark_server/api/v3.0/rhelsubscriptions/acctg
```

Might return:

```
{
  "activationKey": "",
  "attachAuto": "false",
  "autoAttach": "true",
  "baseUrl": "",
  "environment": "",
  "force": "false",
  "id": "116",
  "name": "",
  "org": "",
  "password": "",
  "pool": "",
  "quantity": "0",
  "release": "",
  "repos": [
    {
      "id": "97",
      "repoName": "a1",
      "enabled": "false"
    },
    {
      "id": "98",
      "repoName": "a2",
      "enabled": "false"
    },
    {
      "id": "99",
      "repoName": "a3",
      "enabled": "false"
    }
  ],
  "serverUrl": "",
  "serviceLevel": "",
  "subscriptionId": "acctg",
  "type": "",
  "userName": "alice.smith"
},  
etc....
```

GET Status Codes

Property	Description
200	The call to the resource was successful.
204	There are no subscriptions.
401	The token used was not obtained by an administrator, or is invalid.
404	The specified subscriptionId cannot be found.

An administrative user can use a PUT request to this resource to modify a specific RHEL subscription. Please note that you can not modify the `subscriptionId` field.

PUT Request Parameters

Property	Example
Description	
activationKey	<code>"activationKey": ""</code>
	The activation key of the RHEL subscription.
attachAuto	<code>"attachAuto": "false"</code>
	If true, nodes provisioned to use the specified pool will automatically attach to the service.
autoAttach	<code>"autoAttach": "true"</code>
	If true, any node associated with the subscription will automatically attach to the service.
baseUrl	<code>"baseUrl": ""</code>
	This property specifies the host name of the content delivery server; if left blank, the default is https://cdn.redhat.com .
environment	<code>"environment": ""</code>
	The name of the environment (within the organization that will be registered).
force	<code>"force": "false"</code>
	If true, the node will be registered, even if it is already registered.
name	<code>"name": "admin-east"</code>
	The name of the system that will be registered.
org	<code>"org": ""</code>
	The organization (name) that will be registered with the Red Hat subscription system.
password	<code>"password": ""</code>
	The password associated with the specified user.
pool	<code>"pool": ""</code>
	The pool identifier for the Red Hat subscription service.
quantity	<code>"quantity": "0"</code>
	The number of subscriptions in the subscription pool.
release	<code>"release": ""</code>
	The operating system minor release that will be used when identifying updates to any nodes provisioned with the subscription.
repos	<pre>"repos": [{ "id": "97", "repoName": "a1", "enabled": "false" }, { ... }]</pre>
	A list of the repositories required by the subscription definition.
serverUrl	<code>"serverUrl": ""</code>
	The host name of the subscription server used by the service; if left blank, the default value is subscription.rhn.redhat.com .
serviceLevel	<code>"serviceLevel": "Standard"</code>

The service level of the subscription. This value may be "None", "Standard", or "Premium".	
type	"type": "domain"
The type of consumer that is being registered; the default is system. This may be "system", "hypervisor", "person", "domain", "rhui", or "candlepin".	
userName	"userName": "alice.smith"
The name of the user account registered with the Red Hat content server.	

PUT Status Codes

Property	Description
204	The call to the resource was successful.
400	The call to the resource has encountered validation errors.
401	The resource was called by a non-administrative user, or uses an invalid token.
404	No subscription was found that matches the specified subscription id.
409	The subscriptionId field may not be modified.

An administrative user can use a DELETE request to this resource to delete a RHEL subscription.

DELETE Request Parameters

Property	Description
subscriptionId	The name of the RHEL subscription about which you wish to retrieve information.

DELETE Status Codes

Property	Description
204	The call to the resource was successful.
401	The token used was not obtained by an administrator, or is invalid.
404	The specified subscription does not exist.
409	The specified subscription is in use by a running cluster.

2.1.31 /serverimages

A GET request to the /serverimages resource returns information about the currently defined server images.

GET Response Parameters

Property	Example
Description	
id	"id": "1"
The unique identifier of the server.	
imageId	"imageId": "ccecc7685-09d1-4bc4-8f30-4b2bf0f54bc7"
The image identifier of the server.	
initialUser	"initialUser": "cloud-user"
The virtual machine OS user (as provided on the Add Server dialog).	
osType	"osType": "RHEL"
The operating system type of the server.	
serverDescription	"serverDescription": "RHEL 7.1"
The server description.	
serverId	"serverId": "R7"
The descriptive identifier of the server.	

GET Status Codes

Property	Description
200	A call to this resource was successful.
401	The request uses an invalid token.

For example, a call to this resource:

```
https://ark_server/api/v3.0/serverimages
```

Might return:

```
{
  "serverImage": {
    "id": "1",
    "imageId": "ami-46c1b650",
    "initialUser": "centos",
    "isStatic": "false",
    "osType": "CentOS",
    "serverDescription": "Cent OS 7",
    "serverId": "C7"
  }
}
```

An administrative user can use a POST request with this resource to create a new server image. When creating a new server image, the server will assign a unique identifier (the `id` field). You must specify a `serverId` field and the `osType` field.

POST Request Parameters

Property	Example
Description	
<code>id</code>	<code>"id": "1"</code>
The unique identifier of the server.	
<code>imageId</code>	<code>"imageId": "ccecc7685-09d1-4bc4-8f30-4b2bf0f54bc7"</code>
The image identifier of the server.	
<code>initialUser</code>	<code>"initialUser": "cloud-user"</code>
The virtual machine OS user (as provided on the Add Server dialog).	
<code>osType</code>	<code>"osType": "RHEL"</code>
The operating system type of the server.	
<code>serverDescription</code>	<code>"serverDescription": "RHEL 7.1"</code>
The server description.	
<code>serverId</code>	<code>"serverId": "R7"</code>
The descriptive identifier of the server.	

POST Status Codes

Property	Description
201	A call to this resource was successful.
400	The call to this resource did not include server image information, or encountered validation errors.
401	The call to the resource was placed by a non-administrative user, or uses an invalid token.
409	The server image id specified in the call already exists.

2.1.32 /serverimages/*id*

A GET request to the `/serverimages/id` resource returns information about a specific server image.

GET Request Parameters

Property	Description
<i>id</i>	The unique identifier of the server image.

The resource returns the following information.

GET Response Parameters

Property	Example
Description	
<i>id</i>	"id": "1"
The unique identifier of the server.	
<i>imageId</i>	"imageId": "ccecc7685-09d1-4bc4-8f30-4b2bf0f54bc7"
The image identifier of the server.	
<i>initialUser</i>	"initialUser": "cloud-user"
The virtual machine OS user (as provided on the Add Server dialog).	
<i>osType</i>	"osType": "RHEL"
The operating system type of the server.	
<i>serverDescription</i>	"serverDescription": "RHEL 7.1"
The server description.	
<i>serverId</i>	"serverId": "R7"
The descriptive identifier of the server.	

GET Status Codes

Property	Description
200	The call was successful.
401	The call to this resource uses an invalid token.
404	The server ID specified in the call is not found

For example, the following call:

```
https://ark_server/api/v3.0/serverimages/1
```

Might return:

```
{
  "id": "1",
  "imageId": "ami-46c1b650",
  "initialUser": "centos",
  "isStatic": "false",
  "osType": "CentOS",
  "serverDescription": "Cent OS 7",
```

```

    "serverId": "C7"
}

```

An administrative user can use this resource to modify a server image. Pass in the image identifier of a server image with the PUT request to update a server image.

PUT Request Parameters

Property	Description	Example
<code>id</code>	" <code>id</code> ": "1"	
<code>imageId</code>	The unique identifier of the server; you cannot modify this value.	" <code>imageId</code> ": "ccecc7685-09d1-4bc4-8f30-4b2bf0f54bc7"
<code>initialUser</code>	The image identifier of the server.	" <code>initialUser</code> ": "cloud-user"
<code>serverDescription</code>	The virtual machine OS user (as provided on the Add Server dialog).	" <code>serverDescription</code> ": "RHEL 7.1"
	The server description.	

PUT Status Codes

Property	Description
204	A call to this resource was successful.
400	The call to the resource encountered validation errors: The server id cannot be validated. You may not modify the image id. You may not modify the osType of the image. You may not modify the isStatic value of the image.
401	The call to the resource was placed by a non-administrative user, or uses an invalid token.
404	The specified image id is not found.

An administrative user can use this resource to delete a server image.

DELETE Request Parameters

Property	Description
<code>imageId</code>	The image ID associated with the server image.

DELETE Status Codes

Property	Description
204	A call to this resource was successful.
401	The call to the resource was placed by a non-administrative user, or uses an invalid token.
404	The specified image id is not found.
409	You have attempted to delete an image that is in use by a running cluster.

2.1.33 /templates

A template is a pre-defined cluster definition that provides an administrative user better control of access to resources and system usage.

A non-administrative user can use this resource to GET a list of templates that are defined for the current tenant or role; these templates are available to the Template Only (TO) user(s). When an administrative user calls this resource to GET a list of templates, the result set will include information about templates defined on all tenants.

GET Response Parameters

Property	Example
Description	
autoScaleReplicas	"autoScaleReplicas": "false"
	True if automatic replica scaling is enabled; false if it is disabled.
autoScaleStorage	"autoScaleStorage": "false"
	True if automatic storage scaling is enabled; false if it is disabled.
backupRetention	"backupRetention": "1"
	The number of backups that EDB Ark will retain for the master node of the cluster.
BackupWindow	"backupWindow": "12:00am - 2:00am"
	The time during which backups will be taken.
continuousArchiving	"continuousArchiving": "false"
	Boolean value; true if continuous archiving is enabled, false if continuous archiving is not enabled.
dbEngine	"dbEngine": { "id": "10", }
	The detailed description of the database engine selected when creating the cluster.
description	"description": "Accounting template"
	The name of the default database created when the instance was created (edb or postgres).
disabled	"disabled": "false"
	The DNS name of the cluster.
encrypted	"encrypted": "false"
	true if clusters created with the template are encrypted; false if they are not encrypted.
serverClass	"serverClass": "t2.micro"
	The current server class of the cluster.
iops	"iops": "0"
	The requested IOPS setting for the cluster (valid for AWS users only).
ipPool	"ipPool": ""
	The IP pool used by the cluster.
manuallyScaleReplicas	"manuallyScaleReplicas": "true"
	Specifies true if manual replica node scaling is allowed.
manuallyScaleStorage	"manuallyScaleStorage": "false"
	Specifies true if manual storage scaling is allowed.
name	"name": "acctg"
	The name of the template.
numberOfNodes	"numberOfNodes": "1"
	The number of nodes in the Ark cluster.
optimized	"optimized": "false"
	true if clusters deployed with the template are optimized; false if clusters deployed with the template are not optimized.

storage	"storage": "1.0"
The amount of storage provisioned for clusters deployed with the template.	
tenants	"tenant": "Admin"
The tenant (or role) in which the cluster may reside.	
vpcid	"vpcid": "vpc-e3ebc586"
The VPC identifier of the cluster.	
yumUpdate	"yumUpdate": "false"
Boolean value; true if the cluster was created with "yum update" enabled, false if "yum update" was not enabled when the cluster was created.	

GET Status Codes

Property	Description
200	The call was successful. If the call was placed by an administrative user, the list of templates will include all of the templates. If the call was placed by a non-administrative user, the list of templates will include only those templates whose tenant/role matches the tenant/role in the auth token.
204	There are no configured templates.
204	There are no configured templates.

For example, the following request:

```
https://ark_server/api/v3.0/templates
```

Might return the following information:

```
{
  "template": [
    {
      "autoScaleReplicas": "false",
      "autoScaleStorage": "true",
      "backupRetention": "1",
      "backupWindow": "12:00am - 2:00am",
      "continuousArchiving": "false",
      "dbEngine": {
        "id": "10",
      }
      "description": "Accounting template",
      "disabled": "false",
      "encrypted": "false",
      "serverClass": "m1.small",
      "id": "2",
      "iops": "0",
      "ipPool": "EnterpriseDB Network",
      "manuallyScaleReplicas": "false",
      "manuallyScaleStorage": "false",
      "name": "acctg",
      "numberOfNodes": "1",
      "optimized": "false",
          "storage": "1.0",
      "tenants": "OpenStack Chicago,Boston",
      "vpcid": "General VM Network",
      "yumUpdate": "false"
    },
    {
      "autoScaleReplicas": "true",
      "autoScaleStorage": "true",
    }
  ]
}
```

```

    "backupRetention": "1",
    "backupWindow": "12:00am - 2:00am",
    "continuousArchiving": "false",
    "dbEngine": {
        "id": "10",
    },
    "description": "sales template",
    "disabled": "false",
    "encrypted": "false",
    "serverClass": "m1.small",
    "id": "10",
    "iops": "0",
    "ipPool": "EnterpriseDB Network",
    "manuallyScaleReplicas": "true",
    "manuallyScaleStorage": "true",
    "name": "sales",
    "numberOfNodes": "1",
    "optimized": "false",
    "storage": "1.0",
    "tenants": "OpenStack Chicago,Boston",
    "vpcid": "General VM Network",
    "yumUpdate": "false"
}
]
}

```

Please note: the `iops` and `optimized` properties are returned only for templates that define Amazon clusters.

Creating a Template

An administrative user can use a POST request to create a template. When creating a template, include the properties that describe the cluster configuration that will be used when deploying a cluster from the template. Do not include the `id` field; the template identifier is system assigned when the template is created.

POST Request Parameters

Property	Example
Description	
autoScaleReplicas	"autoScaleReplicas": "false"
	True if automatic replica scaling is enabled; false if it is disabled.
autoScaleStorage	"autoScaleStorage": "false"
	True if automatic storage scaling is enabled; false if it is disabled.
backupRetention	"backupRetention": "1"
	The number of backups that EDB Ark will retain for the master node of the cluster.
BackupWindow	"backupWindow": "12:00am - 2:00am"
	The time during which backups will be taken.
continuousArchiving	"continuousArchiving": "false"
	Boolean value; true if continuous archiving is enabled, false if continuous archiving is not enabled.
dbEngine	"dbEngine": { "id": "10", }
	The detailed description of the database engine selected when creating the cluster.
description	"description": "Accounting template"
	The name of the default database created when the instance was created (edb or postgres).

disabled	"disabled": "false"
The DNS name of the cluster.	
encrypted	"encrypted": "false"
Set encrypted to true to indicate that clusters created with the template should be encrypted.	
serverClass	"serverClass": "t2.micro"
The current server class of the cluster.	
iops	"iops": "0"
The requested IOPS setting for the cluster (valid for AWS users only).	
ipPool	"ipPool": ""
The IP pool that is used by the template.	
manuallyScaleReplicas	"manuallyScaleReplicas": "true"
Specifies true if manual replica node scaling is allowed.	
manuallyScaleStorage	"manuallyScaleStorage": "false"
Specifies true if manual storage scaling is allowed.	
name	"name": "acctg"
The template name.	
numberOfNodes	"numberOfNodes": "1"
The number of nodes in the Ark cluster.	
optimized	"optimized": "false"
true if clusters deployed with the template are optimized; false if the clusters are not optimized.	
storage	"storage": "1.0"
The amount of storage that will be provisioned for clusters deployed with the template.	
tenant	"tenant": "Admin"
The tenant (or role) in which the cluster resides.	
vpcid	"vpcid": "vpc-e3ebc586"
The VPC identifier of the cluster.	
yumUpdate	"yumUpdate": "false"
Boolean value; true if the cluster was created with "yum update" enabled, false if "yum update" was not enabled when the cluster was created.	

POST Status Codes

Property	Description
201	The call was successful.
400	The request body is missing properties or includes validation errors.
401	The request was made by a non-administrative user, or uses an invalid token.
409	The specified template name is already in use by another template.

2.1.34 /templates/*id*

A template is a pre-defined cluster definition that allows an administrative user to control access to resources and system usage.

When called by a non-administrative user, this resource will only display information about a template if that template is available in the current role/tenant. An administrative user may use this resource to GET information about a template that resides on any tenant.

When using this resource to retrieve information about a specific template, include the template identifier in the call.

GET Request Parameters

Property	Description
<i>id</i>	The template id.

The resource returns the following information.

GET Response Parameters

Property	Example
Description	
autoScaleReplicas	"autoScaleReplicas": "false"
True if automatic replica scaling is enabled; false if it is disabled.	
autoScaleStorage	"autoScaleStorage": "false"
True if automatic storage scaling is enabled; false if it is disabled.	
backupRetention	"backupRetention": "1"
The number of backups that EDB Ark will retain for the master node of the cluster.	
BackupWindow	"backupWindow": "12:00am - 2:00am"
The time during which backups will be taken.	
continuousArchiving	"continuousArchiving": "false"
Boolean value; true if continuous archiving is enabled, false if continuous archiving is not enabled.	
dbEngine	"dbEngine": { "id": "10", }
The detailed description of the database engine selected when creating the cluster.	
description	"description": "Accounting template"
The name of the default database created when the instance was created (edb or postgres).	
disabled	"disabled": "false"
The DNS name of the cluster.	
encrypted	"encrypted": "false"
true if the cluster is encrypted; false if the cluster is not encrypted.	
serverClass	"serverClass": "t2.micro"
The current server class of the cluster.	
id	"id": "i-072c8ed4fe9801687"
The unique identifier of the cluster.	
iops	"iops": "0"

The requested IOPS setting for the cluster (valid for AWS users only).	
ipPool	"ipPool": ""
The IP pool used by the cluster.	
manuallyScaleReplicas	"manuallyScaleReplicas": "true"
Specifies true if manual replica node scaling is allowed.	
manuallyScaleStorage	"manuallyScaleStorage": "false"
Specifies true if manual storage scaling is allowed.	
name	"name": "acctg"
The name of the template.	
numberOfNodes	"numberOfNodes": "1"
The number of nodes in the Ark cluster.	
optimized	"optimized": "false"
true if clusters created with the template are optimized; false if they are not optimized.	
storage	"storage": "1.0"
The amount of storage allocated for clusters provisioned with the template.	
tenant	"tenant": "Admin"
The tenant (or role) in which the cluster resides.	
vpcid	"vpcid": "vpc-e3ebc586"
The VPC identifier of the cluster.	
yumUpdate	"yumUpdate": "false"
Boolean value; true if the cluster was created with "yum update" enabled, false if "yum update" was not enabled when the cluster was created.	

For example, the following call:

```
https://ark_server/api/v3.0/templates/2
```

Might return:

```
{
  "template": [
    {
      "autoScaleReplicas": "false",
      "autoScaleStorage": "true",
      "backupRetention": "1",
      "backupWindow": "12:00am - 2:00am",
      "continuousArchiving": "false",
      "dbEngine": {
        "id": "10",
      },
      "description": "CentOS 7 server for acctg",
      "disabled": "false",
      "encrypted": "false",
      "serverClass": "m1.small",
      "id": "2",
      "iops": "0",
      "ipPool": "Admin Network",
      "manuallyScaleReplicas": "false",
      "manuallyScaleStorage": "false",
      "name": "acctg",
      "numberOfNodes": "1",
      "optimized": "false",
      "storage": "1.0",
      "tenants": "OpenStack Chicago, Boston",
      "vpcid": "General VM Network",
      "yumUpdate": "false"
    }
  ]
}
```

```

    ]
}
```

Please note: the `iops` and `optimized` properties are returned only for templates that define Amazon clusters.

GET Status Codes

Property	Description
200	The call to the resource was successful.
204	There are no configured templates.
401	The call to the resource uses an invalid token.
404	A template with the specified ID was not found. If the call was placed by an administrative user, the template does not exist. If the call was placed by a non-administrative user, the template does not exist in a tenant that the user has permission to access.

Modifying a Template

An administrative user can use a PUT request to modify an existing template. Please note that the template identifier (`id`) may not be modified, and template names (`name`) must be unique.

PUT Request Parameters

Property	Example
Description	
autoScaleReplicas	"autoScaleReplicas": "false"
True if automatic replica scaling is enabled; false if it is disabled.	
autoScaleStorage	"autoScaleStorage": "false"
True if automatic storage scaling is enabled; false if it is disabled.	
backupRetention	"backupRetention": "1"
The number of backups that EDB Ark will retain for the master node of the cluster.	
BackupWindow	"backupWindow": "12:00am - 2:00am"
The time during which backups will be taken.	
continuousArchiving	"continuousArchiving": "false"
Boolean value; true if continuous archiving is enabled, false if continuous archiving is not enabled.	
dbEngine	"dbEngine": { "id": "10", }
The detailed description of the database engine selected when creating the cluster.	
description	"description": "Accounting template"
The name of the default database created when the instance was created (edb or postgres).	
disabled	"disabled": "false"
The DNS name of the cluster.	
encrypted	"encrypted": "false"
true if the cluster is encrypted; false if the cluster is not encrypted.	
serverClass	"serverClass": "t2.micro"
The current server class of the cluster.	
iops	"iops": "0"
The requested IOPS setting for the cluster (valid for AWS users only).	
ipPool	"ipPool": "
The IP pool used by the cluster.	

manuallyScaleReplicas	"manuallyScaleReplicas": "true"
Specifies true if manual replica node scaling is allowed.	
manuallyScaleStorage	"manuallyScaleStorage": "false"
Specifies true if manual storage scaling is allowed.	
name	"name": "acctg"
The name of the template; the template name must be unique.	
numberOfNodes	"numberOfNodes": "1"
The number of nodes in the Ark cluster.	
optimized	"optimized": "false"
true if the cluster is optimized; false if the cluster is not optimized.	
storage	"storage": "1.0"
The amount of storage allocated for the cluster.	
tenant	"tenant": "Admin"
The tenant (or role) in which the cluster resides.	
vpcid	"vpcid": "vpc-e3ebc586"
The VPC identifier of the cluster.	
yumUpdate	"yumUpdate": "false"
Boolean value; true if the cluster was created with "yum update" enabled, false if "yum update" was not enabled when the cluster was created.	

For example, the following PUT request modifies a template to set the autoscaling policies for clusters deployed with the template to false:

```
{
  "id": "12",
  "autoScaleReplicas": "false",
  "autoScaleStorage": "false",
  "backupRetention": "2",
  "backupWindow": "4:00pm - 6:00pm",
  "continuousArchiving": "false",
  "dbEngine": {
    "id": "8"
  },
  "description": " This template defines a cluster for acctg.",
  "disabled": "true",
  "encrypted": "false",
  "serverClass": "m1.small",
  "iops": "120",
  "ipPool": "EnterpriseDB Network",
  "name": "accounting",
  "numberOfNodes": "3",
  "optimized": "true",
  "storage": "3.0",
  "tenants": "PPCD",
  "vpcid": "General VM Network",
  "yumUpdate": "true"
}
```

PUT Status Codes

Property	Description
204	The call was successful.
400	The request body includes invalid values.
401	The request was made by a non-administrative user, or uses an invalid token.
404	The specified template was not found.
409	The specified template name is already in use by another template.

Deleting a Template

An administrative user may delete a template by passing the template identifier (`id`) with the call to the resource.

DELETE Request Parameters

Property	Description
<code>id</code>	The template id.

DELETE Status Codes

Property	Description
204	The call was successful.
401	The request was made by a non-administrative user, or uses an invalid token.
404	The specified ID was not found.
500	The API encountered a problem deleting the template.

2.1.35 /tokens

The EDB Ark API uses token-based authentication. All calls to the EDB Ark API require a valid token be passed in with the X-Auth-Token header. Please note that a Template Only user must use API version 3.0 to generate a token.

Use a POST request with the /tokens resource to retrieve a token used for token-based authentication.

POST Request Parameters

Property	Description
name	"name":"alice"
password	"password":"1safePWD"
tenant role	"tenant role":"acctg"

The resource returns the following information.

POST Response Parameters

Property	Example
Description	
Server	Server: Admin
The name of the server on which the token is valid.	
X-Subject-Token	X-Subject-Token: 014khlia0abddk4xboyhy4bsygr9dt27ycplsdv
The token is the string of random values returned in the X-Subject-Token field.	
expiresAt	"expiresAt":"2015-09-21T18:55:42.582+01:00"
The date and time at which the token expires.	
issuedAt	"issuedAt":"2015-09-21T18:25:42.582+01:00"
The date and time at which the token was issued.	

The following example uses curl to demonstrate obtaining a token:

```
curl -k -i -H "Content-Type: application/json" -d \
'{"name":"alice","password":"1safePWD","tenant|role":"acctg"}' \
https://<host>/api/v3.0/tokens

HTTP/1.1 201 Created
Server: Admin
X-Subject-Token: 014khlia0abddk4xboyhy4bsygr9dt27ycplsdv
Content-Type: application/json
Transfer-Encoding: chunked
Date: Mon, 21 Sep 2015 17:25:42 GMT

{"expiresAt":"2015-09-21T18:55:42.582+01:00",
"issuedAt":"2015-09-21T18:25:42.582+01:00"}
```

POST Status Codes

Property	Description
201	The call was successful.
400	The request is missing required information.
405	A Template Only user is attempting to use an API version that was released prior to Ark version 3.0.

When deleting a token, pass the token to be deleted in the X-Subject-Token header along with the normal X-Auth-Token header.

DELETE Request Parameters

Property	Example
Description	
X-Subject-Token	X-Subject-Token: 014khlia0abddk4xboyhy4bsygr9dt27ycyp1sdv
The token is the string of random values returned in the X-Subject-Token field.	

DELETE Status Codes

Property	Description
204	The call was successful.
400	The subject token is missing.
401	The request has encountered an error: The request uses an invalid token. A non-administrative user is attempting to delete a subject token that does not match the auth token. The subject token is from a different tenant/role than the auth token.

2.1.36 /users

An administrative user can use a GET request with the `/users` resource to retrieve information about all currently registered users.

GET Response Parameters

Property	Example
Description	
<code>id</code>	<code>"id": "name"</code>
The unique identifier of the user.	
<code>region</code>	<code>"region": "region"</code>
The region in which the user is defined.	
<code>serviceprovider</code>	<code>"serviceprovider": "openstack-nova"</code>
The service provider on which the user is defined.	
<code>firstname</code>	<code>"firstname": "First"</code>
The first name of the user.	
<code>lastname</code>	<code>"lastname": "Last"</code>
The last name of the user.	
<code>email</code>	<code>"email": "first.last@enterprisedb.com"</code>
The email address of the user.	
<code>companyName</code>	<code>"companyName": "EDB"</code>
The company name that is associated with the user.	
<code>serviceProviderEndpoint</code>	<code>"serviceProviderEndpoint": ""</code>
<code>creationTime</code>	<code>"creationTime": "2015-10-27T13:06:41.798Z"</code>
The time at which the user was created.	
<code>lastLogin</code>	<code>"lastLogin": "2016-02-23T19:38:25.369Z"</code>
The date and time that the user last logged in to the server.	
<code>numLogins</code>	<code>"numLogins": "100"</code>
The number of times that the user has logged in.	
<code>enabled</code>	<code>"enabled": "true"</code>
The status of the user account; enabled if the user can log in, or disabled if the user cannot log in.	
<code>numNodes</code>	<code>"numNodes": "65"</code>
The numNodes field specifies the cumulative number of nodes created by the user; the nodes may or may not be currently running.	
<code>activationTime</code>	<code>"activationTime": "2015-10-27T13:06:41.798Z"</code>
<code>roleid</code>	<code>"roleid": "first.last"</code>
The roleid associated with the user account; applicable only on Amazon.	
<code>rolearn</code>	<code>"rolearn": "arn:aws:iam::325753300792:role/acctg"</code>
The rolearn associated with the user account; applicable only on Amazon.	
<code>admin</code>	<code>"admin": "true"</code>
<code>admin</code> is true if the user is an administrator, and false if they are not.	
<code>templatesOnly</code>	<code>"templatesOnly": "false"</code>
If true, the user is required to use a template when creating a cluster; modifications to the cluster are determined by values specified in the template.	

For example, the following call:

```
https://ark_server/api/v3.0/users
```

Might return:

```
{
  "user": [
    {
      "id": "clerk@edb.com",
      "region": "us-east-1",
      "serviceprovider": "aws-ec2",
      "firstname": "acctg",
      "lastname": "clerk",
      "email": "clerk@edb.com",
      "companyName": "",
      "serviceProviderEndpoint": "",
      "creationTime": "2018-02-19T14:53:55.415-05:00",
      "lastLogin": "2018-02-19T14:59:46.362-05:00",
      "numLogins": "2",
      "enabled": "true",
      "numNodes": "0",
      "activationTime": "2018-02-19T14:53:55.415-05:00",
      "roleid": "cb596d-f676-44fb-8b2-aa3e40591",
      "rolearn": "arn:aws:iam::573002:role/acctg",
      "admin": "false",
      "templatesOnly": "true"
    },
    {
      "id": "alice.smith@edb.com",
      "region": "us-east-1",
      "serviceprovider": "aws-ec2",
      "firstname": "alice",
      "lastname": "smith",
      "email": "alice.smith@edb.com",
      "EDB": "",
      "serviceProviderEndpoint": "",
      "creationTime": "2017-06-07T17:22:18.446-05:00",
      "lastLogin": "2017-06-07T18:10:23.507-05:00",
      "numLogins": "2",
      "enabled": "true",
      "numNodes": "2",
      "activationTime": "2017-06-07T17:22:18.446-05:00",
      "roleid": "cb595d-f66-44fb-8b27-aa3e405c991",
      "rolearn": "arn:aws:iam::53002:role/acctg",
      "admin": "true",
      "templatesOnly": "false"
    }
  ]
}
```

GET Status Codes

Property	Description
200	The call was successful.
401	The call was placed by a non-administrative user, or uses an invalid token.

An administrative user can use a POST request with the /users resource to create a new user. The behavior of this resource is dependent on the authentication method employed by the host system.

Using a POST Request on an Amazon Host

If Postgres Authentication is enabled, a post request does not require a password. If you provide a password, the password will be accepted and ignored. A create user request must include the following parameters:

POST Request Parameters (Postgres Authentication enabled)

Property	Description
<code>admin</code>	<code>admin</code> is true if the user is an administrator, and false if they are not.
<code>enabled</code>	The status of the user account; enabled if the user can log in, or disabled if the user cannot log in.
<code>firstname</code>	The firstname of the user.
<code>id</code>	The log in identity of the user; on Amazon, this takes the form of an email address. This field must be unique.
<code>lastname</code>	The lastname of the user.
<code>rolearn</code>	The rolearn associated with the user account; applicable only on Amazon.
<code>roleid</code>	The roleid associated with the user account; applicable only on Amazon.
<code>templatesOnly</code>	true if the new role is a Template Only user; false if they can manually create and manage clusters.

If Postgres Authentication is disabled, you must include the password parameter.

POST Request Parameters (Postgres Authentication disabled)

Property	Description
<code>admin</code>	<code>admin</code> is true if the user is an administrator, and false if they are not.
<code>enabled</code>	The status of the user account; enabled if the user can log in, or disabled if the user cannot log in.
<code>firstname</code>	The firstname of the user.
<code>id</code>	The log in identity of the user; on Amazon, this takes the form of an email address. This field must be unique.
<code>lastname</code>	The lastname of the user.
<code>password</code>	The password associated with the user account. The password will be stored only if Postgres authentication is not enabled.
<code>rolearn</code>	The rolearn associated with the user account; applicable only on Amazon.
<code>roleid</code>	The roleid associated with the user account; applicable only on Amazon.
<code>templatesOnly</code>	true if the new role is a Template Only user; false if they can manually create and manage clusters.

Using a POST Request on an OpenStack Host

If Postgres Authentication is enabled or OpenStack Standalone Security Mode is enabled, an Administrative user can use a post request to create a user. If OpenStack Standalone Security Mode is enabled and Postgres Authentication is disabled, the request must include the `password` parameter.

POST Request Parameters (Postgres Authentication and OpenStack Standalone Security Mode enabled)

Property	Description
<i>admin</i>	admin is true if the user is an administrator, and false if they are not.
<i>enabled</i>	The status of the user account; enabled if the user can log in, or disabled if the user cannot log in.
<i>firstname</i>	The firstname of the user.
<i>id</i>	The log in identity of the user; on Amazon, this takes the form of an email address. This field must be unique.
<i>lastname</i>	The lastname of the user.
<i>templatesOnly</i>	true if the new role is a Template Only user; false if they can manually create and manage clusters.

If OpenStack Standalone Security Mode is enabled and Postgres Authentication is disabled, the request must include the `password` parameter.

POST Request Parameters (OpenStack Standalone Security Mode enabled and Postgres Authentication disabled)

Property	Description
<i>admin</i>	admin is true if the user is an administrator, and false if they are not.
<i>enabled</i>	The status of the user account; enabled if the user can log in, or disabled if the user cannot log in.
<i>firstname</i>	The firstname of the user.
<i>id</i>	The log in identity of the user; on Amazon, this takes the form of an email address. This field must be unique.
<i>lastname</i>	The lastname of the user.
<i>password</i>	The password associated with the user account. The password will be stored only if Postgres authentication is not enabled.
<i>templatesOnly</i>	true if the new role is a Template Only user; false if they can manually create and manage clusters.

Using POST on an Azure Host

If Postgres Authentication is enabled, an Administrative user can use a post request to create a user. If Postgres Authentication is disabled, this resource is disabled.

POST Request Parameters (Postgres Authentication and OpenStack Standalone Security Mode enabled)

Property	Description
<i>admin</i>	admin is true if the user is an administrator, and false if they are not.
<i>enabled</i>	The status of the user account; enabled if the user can log in, or disabled if the user cannot log in.
<i>firstname</i>	The firstname of the user.
<i>id</i>	The log in identity of the user; on Amazon, this takes the form of an email address. This field must be unique.

<i>lastname</i>	The lastname of the user.
<i>templatesOnly</i>	<code>true</code> if the new role is a Template Only user; <code>false</code> if they can manually create and manage clusters.

POST Status Codes

Property	Description
201	A call to this resource was successful
400	A status code of 400 will be returned if: The first name is missing. The last name is missing. The password is missing. The password format is invalid. The value for the <code>enabled</code> parameter is missing.
401	The call was placed by a non-administrative user, or uses an invalid token.
405	The request method is not allowed.
409	The user already exists.

2.1.37 /users/*id*

Pass a user id with a GET request to the `/users/id` resource to retrieve or modify information about a specific user.

GET Request Parameters

Property	Description
<i>id</i>	The id associated with the user.

The resource returns the following information.

GET Response Parameters

Property	Example
Description	
<i>id</i>	"id": "name"
The unique identifier of the user.	
<i>region</i>	"region": "region"
The region in which the user is defined.	
<i>serviceprovider</i>	"serviceprovider": "openstack-nova"
The service provider on which the user is defined.	
<i>firstname</i>	"firstname": "First"
The first name of the user.	
<i>lastname</i>	"lastname": "Last"
The last name of the user.	
<i>email</i>	"email": "first.last@enterprisedb.com"
The email address of the user. The email address will be returned only if the user has set a notification email value.	
<i>companyName</i>	"companyName": "EDB"
The company name that is associated with the user.	
<i>serviceProviderEndpoint</i>	"serviceProviderEndpoint": ""
<i>creationTime</i>	"creationTime": "2015-10-27T13:06:41.798Z"
The time at which the user was created.	
<i>lastLogin</i>	"lastLogin": "2016-02-23T19:38:25.369Z"
The date and time that the user last logged in to the server.	
<i>numLogins</i>	"numLogins": "100"
The number of times that the user has logged in.	
<i>enabled</i>	"enabled": "true"
The status of the user account; enabled if the user can log in, or disabled if the user cannot log in.	
<i>numNodes</i>	"numNodes": "65"
The numNodes field specifies the cumulative number of nodes created by the user; the nodes may or may not be currently running.	
<i>activationTime</i>	"activationTime": "2015-10-27T13:06:41.798Z"
<i>roleid</i>	"roleid": "first.last"
The roleid associated with the user account; applicable only on Amazon.	
<i>rolearn</i>	"rolearn": "arn:aws:iam::325753300792:role/acctg"
The rolearn associated with the user account; applicable only on Amazon.	
<i>admin</i>	"admin": "true"

admin is true if the user is an administrator, and false if they are not.
templatesOnly "templatesOnly": "false"
If true, the user is required to use a template when creating a cluster; modifications to the cluster are determined by values specified in the template. If false, the user may manually specify cluster properties.

For example, the following request:

```
https://ark\_server/api/v3.0/users/alice.smith@edb.com
```

Might return:

```
{
  "user": [
    {
      "id": "alice.smith@edb.com",
      "region": "us-east-1",
      "serviceprovider": "aws-ec2",
      "firstname": "alice",
      "lastname": "smith",
      "email": "alice.smith@edb.com",
      "EDB": "",
      "serviceProviderEndpoint": "",
      "creationTime": "2017-06-07T17:22:18.446-05:00",
      "lastLogin": "2017-06-07T18:10:23.507-05:00",
      "numLogins": "2",
      "enabled": "true",
      "numNodes": "2",
      "activationTime": "2017-06-07T17:22:18.446-05:00",
      "roleid": "cb595d-f66-44fb-8b27-aa3e405c991",
      "rolearn": "arn:aws:iam::53002:role/acctg",
      "admin": "true",
      "templatesOnly": "false"
    }
  ]
}
```

GET Status Codes

Property	Description
200	The call was successful.
401	The call was placed by a non-administrative user, the call uses an invalid token, or the user id in the request does not match the user id in the auth token.
404	The user does not exist.

An administrative user can use a POST request with this resource to modify a user account. An administrative user is not allowed to modify the `enabled` or `admin` parameters for their own user account.

The behavior of this resource is dependent on the authentication method employed by the host system.

Using a PUT Request on an Amazon Host

If Postgres Authentication is disabled, you cannot modify the `password` associated with the user account. Please note that an administrative user can modify another user's `enabled` or `admin` value, but not the values associated with their own account.

PUT Request Parameters (Postgres Authentication enabled)

Property	Description
<code>admin</code>	admin is true if the user is an administrator, and false if they are not.
<code>companyName</code>	The company name associated with the user account.
<code>email</code>	The email address associated with the user account.
<code>enabled</code>	The status of the user account; enabled if the user can log in, or disabled if the user cannot log in.
<code>firstname</code>	The firstname of the user.
<code>id</code>	The log in identity of the user; on Amazon, this takes the form of an email address. This field must be unique.
<code>lastname</code>	The lastname of the user.
<code>password</code>	The password associated with the user account. The password will be stored only if Postgres authentication is not enabled.
<code>rolearn</code>	The rolearn associated with the user account; applicable only on Amazon.
<code>roleid</code>	The roleid associated with the user account; applicable only on Amazon.
<code>templatesOnly</code>	true if the new role is a Template Only user; <code>false</code> if they can manually create and manage clusters.

If Postgres Authentication is enabled, the password may not be modified with a PUT request.

PUT Request Parameters (Postgres Authentication disabled)

Property	Description
<code>admin</code>	admin is true if the user is an administrator, and false if they are not.
<code>companyName</code>	The company name associated with the user account.
<code>email</code>	The email address associated with the user account.
<code>enabled</code>	The status of the user account; enabled if the user can log in, or disabled if the user cannot log in.
<code>firstname</code>	The firstname of the user.
<code>id</code>	The log in identity of the user; on Amazon, this takes the form of an email address. This field must be unique.
<code>lastname</code>	The lastname of the user.
<code>password</code>	The password associated with the user account. The password will be stored only if Postgres authentication is not enabled.
<code>rolearn</code>	The rolearn associated with the user account; applicable only on Amazon.
<code>roleid</code>	The roleid associated with the user account; applicable only on Amazon.
<code>templatesOnly</code>	true if the new role is a Template Only user; <code>false</code> if they can manually create and manage clusters.

Using a PUT Request on an OpenStack Host

If your console resides on an OpenStack host, an administrative user can use a put request to modify values associated with a user account. Please note that an administrative user can modify another user's `enabled` or `admin` value, but not the values associated with their own account.

If OpenStack Standalone Security Mode is enabled and Postgres Authentication is disabled, the request may include the `password` parameter; in all other cases, the `password` parameter will be ignored.

PUT Request Parameters (OpenStack Standalone Security Mode enabled and Postgres Authentication disabled)

Property	Description
<code>admin</code>	admin is true if the user is an administrator, and false if they are not.
<code>companyName</code>	The company name associated with the user account.
<code>email</code>	The email address associated with the user account.
<code>enabled</code>	The status of the user account; enabled if the user can log in, or disabled if the user cannot log in.
<code>firstname</code>	The firstname of the user.
<code>id</code>	The log in identity of the user; on Amazon, this takes the form of an email address. This field must be unique.
<code>lastname</code>	The lastname of the user.
<code>password</code>	The password associated with the user account. The password will be stored only if Postgres authentication is not enabled.
<code>templatesOnly</code>	true if the new role is a Template Only user; <code>false</code> if they can manually create and manage clusters.

Using a PUT Request on an Azure Host

If your console resides on an Azure host, an administrative user can use a put request to modify values associated with a user account. Please note that an administrative user can modify another user's `enabled` or `admin` value, but not the values associated with their own account.

PUT Request Parameters

Property	Description
<code>admin</code>	admin is true if the user is an administrator, and false if they are not.
<code>companyName</code>	The company name associated with the user account.
<code>email</code>	The email address associated with the user account.
<code>enabled</code>	The status of the user account; enabled if the user can log in, or disabled if the user cannot log in.
<code>firstname</code>	The firstname of the user.
<code>id</code>	The log in identity of the user; on Amazon, this takes the form of an email address. This field must be unique.

<code>lastname</code>	The lastname of the user.
<code>templatesOnly</code>	<code>true</code> if the new role is a Template Only user; <code>false</code> if they can manually create and manage clusters.

PUT Status Codes

Property	Description
202	A call to this resource was successful
400	A status code of 400 will be returned if there are validation errors: The first name is missing. The last name is missing The user ID does not match the URL specified in the request. The value for the <code>enabled</code> parameter is missing.
401	The change requested is not allowed; the user is attempting to modify their own <code>enabled</code> , <code>admin</code> , or <code>templatesOnly</code> value, or the token is invalid.
404	The user ID is not found.

An administrative user can use a DELETE request with this resource to remove a user account. The behavior of this resource is dependent on the authentication method employed by the host system:

- On an Amazon host, an administrator can delete a user account.
- On an OpenStack host, an administrator can delete an account if Postgres Authentication is enabled or OpenStack Standalone Security Mode is enabled.
- On an Azure host, an administrator can delete an account if Postgres Authentication is enabled.

DELETE Status Codes

Property	Description
204	A call to this resource was successful
400	A status code of 400 will be returned if: The user has running clusters. The user account has backups. The user is currently logged in.
401	The call was placed by a non-administrative user, or uses an invalid token.
405	The request is not supported for this resource configuration.

2.1.38 /users/*id*/notifications

Use the `/users/id/notifications` resource to retrieve a list of notifications for your user account. Provide the `user_id` of a registered EDB Ark user with a GET request to retrieve a notification message for the user (if available).

GET Request Parameters

Property	Description
<code>id</code>	The id associated with the user.

The resource returns the following information.

GET Response Parameters

Property	Description	Example
		Example
<code>message</code>	" <code>id</code> ": "The service provider was unable to create the requested instance at this time"	
The message body of the notification.		

For example, the following request:

```
https://ark_server/api/v3.0/users/alice.smith@edb.com/notifications
```

Might return:

```
{"message":"The service provider was unable to create the requested instance at this time"}
```

GET Status Codes

Property	Description
200	The call to the resource was successful.
204	There is no notification for the specified server.
401	The request you have made requires authentication.