Edge Capacity Expansion

Create and delete Organization

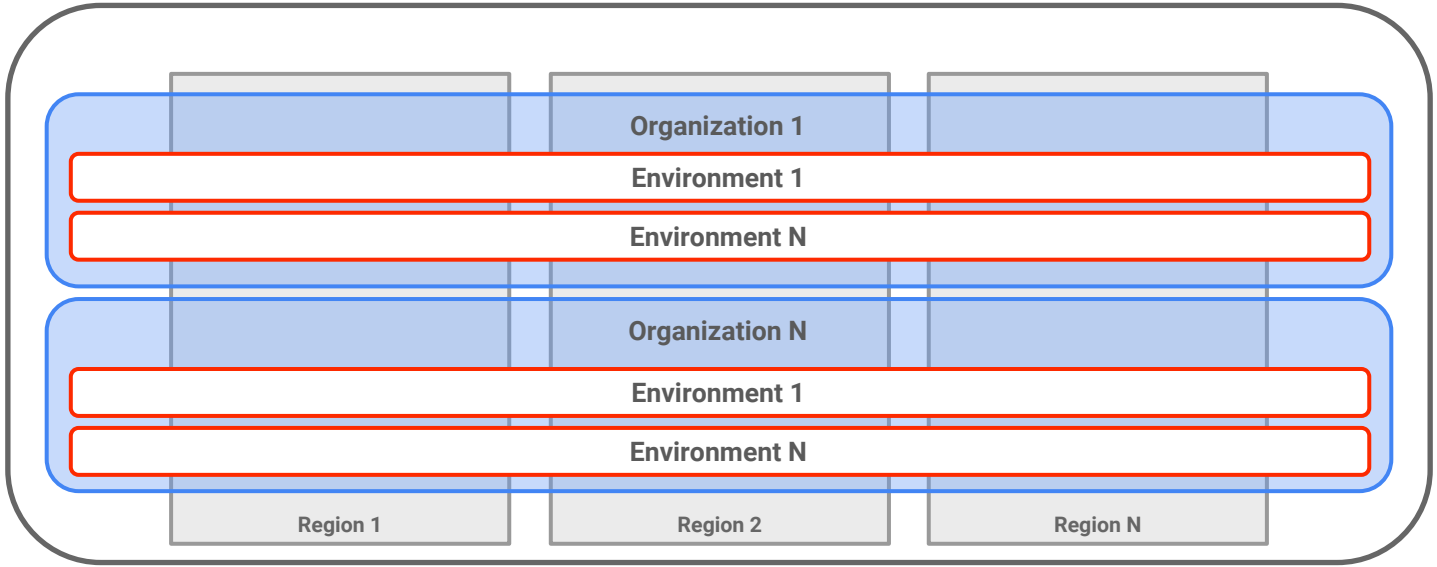
Google Cloud

Agenda

- Multitenancy
- Organization naming convention
- Onboarding process
- Onboarding verification
- Create organization
- Organization deletion process

Multitenancy

- A Planet can span multiple DCs. Organization and Environments expand across the planet.
- A planet can contain multiple Organizations. Organizations represent tenants. An Organization can have multiple environments. Organization and environment represent conceptual boundaries driving logical data, and in some cases, processing partitioning.



Organization naming convention

- Organization names must be unique. You cannot create two organizations with the same name. In that case, the second create will fail.

- Organization name must be lowercase only, no spaces, underscores, periods or special characters. If multiple words are required use dash (-).

Onboarding process

Most of the time, Organizations are created as part of the “Onboarding process”. The Onboarding process is part of Edge automation capabilities to provision all necessary elements needed for create a fully functional organization.

The setup-org command is used to perform the onboarding process. This command MUST be run on the Management Server node.

As part of the onboarding process, the script:

- Optionally creates a new user to function as the organization administrator.
- Creates the organization.
- Adds the specified user as the org admin. The user must already exist; otherwise the script issues an error.
- Associates the organization with a pod, by default is associates it with the "gateway" pod.
- Create an environment.
- Create a virtual host for the environment.
- Associate the environment with all Message Processor(s).
- Enables analytics.

Onboarding process

- Typically, Organizations and Environments are created together. To simplify the process, use the `apigee-provision setup-org` command. `apigee-provision` utility is installed in Management Server as part of the initial Edge installation:

- `/opt/apigee/apigee-service/bin/apigee-service apigee-provision setup-org -f <configFile>`

Sample response file:

```
IP1=<node 1>

MSIP="$IP1"
ADMIN_EMAIL="<opdk@google.com>"
APIGEE_ADMINPW="<password>"
NEW_USER="y"
USER_NAME="<opdk-orgadmin@google.com>"
FIRST_NAME="OrgAdminName"
LAST_NAME="OrgAdminLastName"
USER_PWD="<password>"
ORG_ADMIN="$USER_NAME"
```

```
ORG_NAME="<org name>"
ENV_NAME="prod"
VHOST_PORT="9001"
VHOST_NAME="default"
VHOST_ALIAS="<virtual-host-name>"
USE_ALL_MPS="y"
```

Onboarding Verification

List users:

```
curl -u <adminEmail>:<adminPassword> http://<ms_IP>:8080/v1/users
```

List orgs:

```
curl -u <adminEmail>:<adminPassword> http://<ms_IP>:8080/v1/organizations
```

Describe org:

```
curl -u <adminEmail>:<adminPassword> http://<ms_IP>:8080/v1/organizations/<orgname>
```

Describe analytics provisioning:

```
curl -u <adminEmail>:<adminPassword>
http://<ms_IP>:8080/v1/organizations/<orgname>/environments/<envname>/provisioning/axstatus
```

Describe analytics tables:

```
psql -h /opt/apigee/var/run/apigee-postgresql -U apigee apigee
apigee=# : \d analytics."<orgname>.<envname>.fact"
```

Create an Organization

To create an Organization by itself:

```
/opt/apigee/apigee-service/bin/apigee-service apigee-provision create-org -f <configFile>
```

Sample response file:

```
APIGEE_ADMINPW="<password>"
ORG_NAME="<org name>"
ORG_ADMIN="<org admin user>"
```

Alternatively, you can use Management API calls to create Organizations.

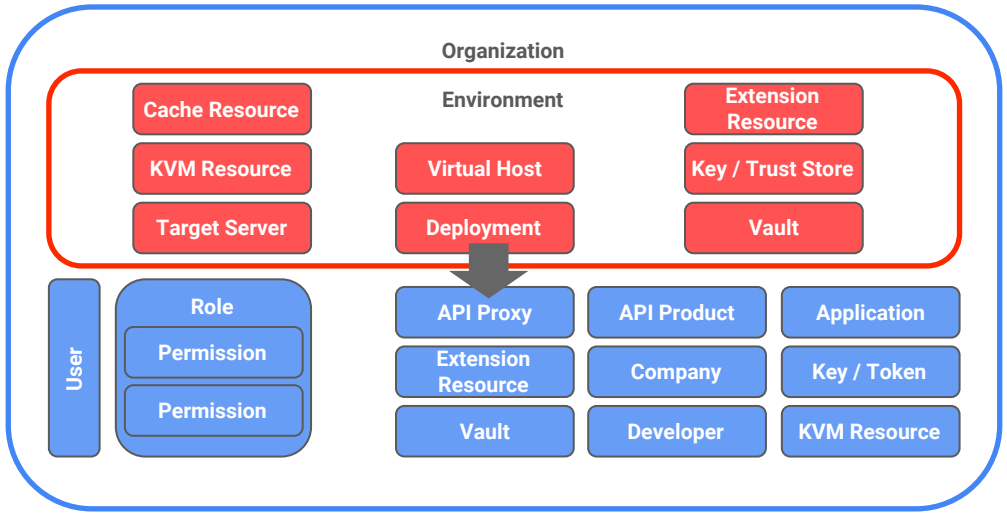
```
http://docs.apigee.com/api/organizations-0
```

```
http://docs.apigee.com/private-cloud/latest/creating-organization-environment-and-virtual-host
```

Organization Deletion Process

It is possible to delete an organization. Before attempting the operation, it is relevant to understand what an organization represents. An organization represents a tenant on Edge, it implies a strong logical data partitioning boundary used by Edge security model to control access to resources associated to the tenant.

By design, organization delete will not perform a cascade delete of all relationships and items owned by the organization. Before deleting an organization, you must disassociate or delete related organization items.



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The following steps are required to delete a fully functional Organization. Depending on what additional elements may have been added to the organization, additional steps may be needed:

1. Delete any Keystores defined in that Environment

    1.1. API to get the keystores defined for an Environment:

```
curl -v -u <adminEmail>:<adminPassword>
http://<ms_IP>:8080/v1/o/<org-name>/e/<env-name>/keystores
```

    1.2. API to delete the keystores defined for an Environment:

```
curl -v -u <adminEmail>:<adminPassword> -X DELETE
http://<ms_IP>:8080/v1/o/<org-name>/e/<env-name>/keystores/<keystore-name>
```

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2. Delete the Virtual Hosts for that Environment

2.1 API call to get the Virtual Hosts defined for an Environment:

curl -v -u <adminEmail>:<adminPassword> http://<ms_IP>:8080/v1/o/<org-name>/e/<env-name>/virtualhosts

2.2. API call to delete the Virtual Hosts:

curl -v -u <adminEmail>:<adminPassword> -X DELETE
http://<ms_IP>:8080/v1/o/<org-name>/e/<env-name>/virtualhosts/<vhost>

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3. Dissociate the servers associated with the Environment

3.1 API call to get the UUID's of the servers:

curl -v -u <adminEmail>:<adminPassword>
http://<ms_IP>:8080/v1/organizations/<org-name>/environments/<env-name>/servers

3.2. For each of the servers on 3.1, execute:

curl -v -u <adminEmail>:<adminPassword> -X POST
http://<ms_IP>:8080/v1/organizations/<org-name>/environments/<env-name>/servers
-d "action=remove&uuid=<uuid>region=<region-name>&pod=<pod-name>"
-H "Content-Type: application/x-www-form-urlencoded"

Note the qpid is in the central pod, postgres in the analytics pod and MP is on gateway pod (or name assigned by you during installation).

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4. Delete the Environment

curl -v -u <adminEmail>:<adminPassword> -X DELETE http://<ms_IP>:8080/v1/o/<org-name/e/<env-name>

5. Dissociate the Organization from the Pods

5.1. Get pods associated to org:

curl -v -u <adminEmail>:<adminPassword> http://<ms_IP>:8080/v1/o/<org-name>/pods

5.2. Dissociate organization from pods:

curl -v -u <adminEmail>:<adminPassword> -X DELETE http://<ms_IP>:8080/v1/organizations/<org-name>/pods
-d "action=removeregion=<region-name>&pod=<pod-name>" -H "Content-Type: application/x-www-form-urlencoded"

6. Delete the Organization

curl -v -u <adminEmail>:<adminPassword> -X DELETE http://<ms_IP>:8080/v1/o/<org-name>

Thank You

Presenter Name | email@email.com | @handle

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