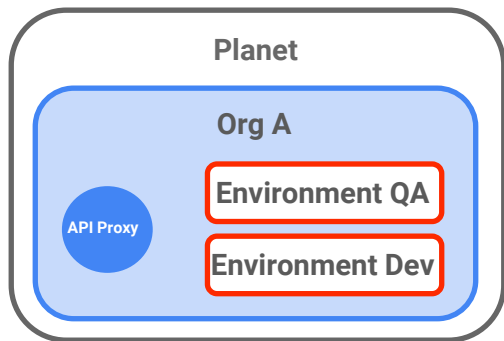# Edge Management

API proxy deployment

Agenda

- API Proxy deployment
- API Proxy import/export
- API Proxy deployment and SDLC integration

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Deploying an API Proxy

1. Proxy created

Planet

Org A

API Proxy

Environment QA

Environment Dev
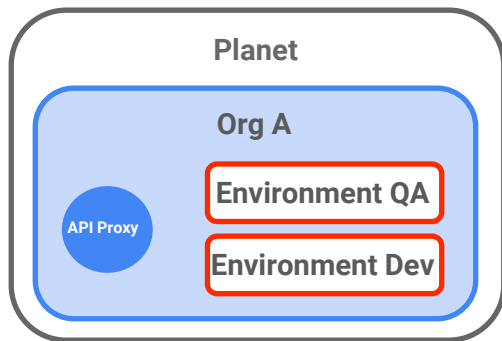
- An API proxy is a part of the organization.
- When an API proxy is created or imported, it is logically placed within the boundary of the specified organization.

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Deploying an API Proxy

1. Proxy created

Planet

Org A

API Proxy

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Environment Dev

- An API proxy is a part of the organization.
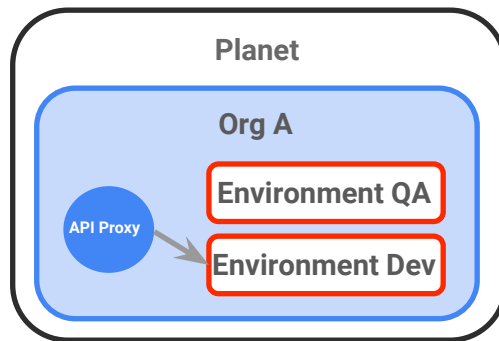- When an API proxy is created or imported, it is logically placed within the boundary of the specified organization.

2. Proxy deployed to Dev

Planet

Org A

API Proxy

Environment QA

Environment Dev

- An API proxy deployment is a logical association between the API proxy revision and a specified environment.
- A revision represents a snapshot of the state of the proxy code.

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Deploying an API Proxy

1. Proxy created

Planet

Org A

API Proxy

Environment QA

Environment Dev

- An API proxy is a part of the organization.
- When an API proxy is created or imported, it is logically placed within the boundary of the specified organization.
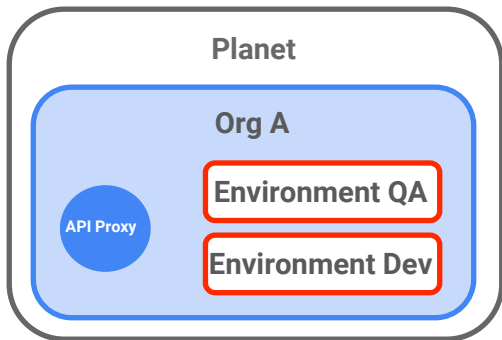
2. Proxy deployed to Dev

Planet

Org A

API Proxy

Environment QA

Environment Dev

- An API proxy deployment is a logical association between the API proxy revision and a specified environment.
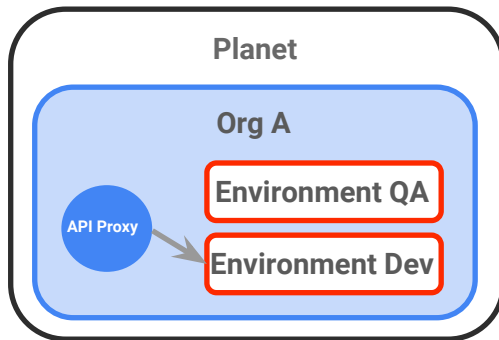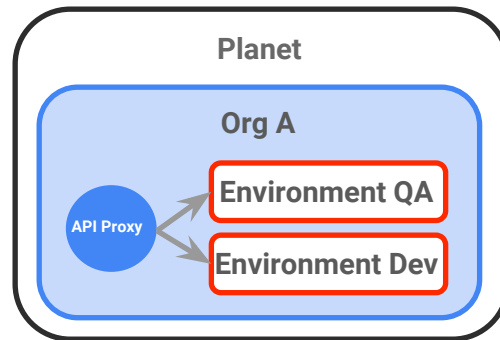- A revision represents a snapshot of the state of the proxy code.

3. Proxy deployed to QA
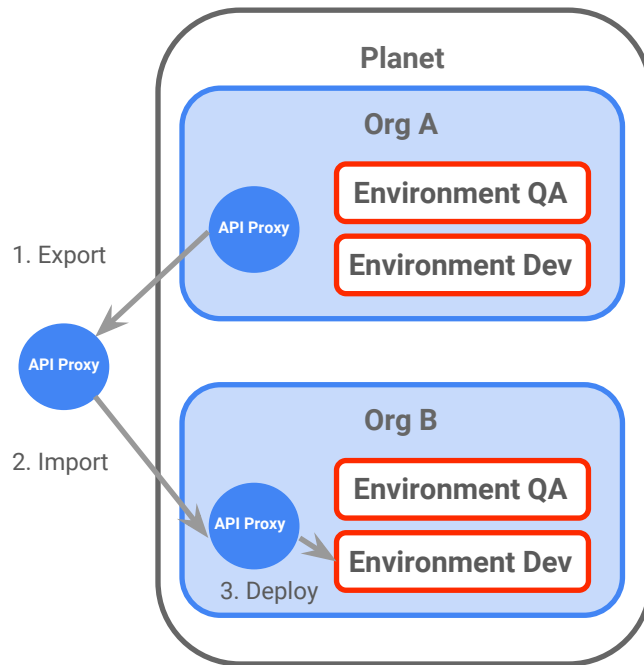
Planet

Org A

API Proxy

Environment QA

Environment Dev

- Deploying the API proxy to QA doesn't involve movement of code artifacts.
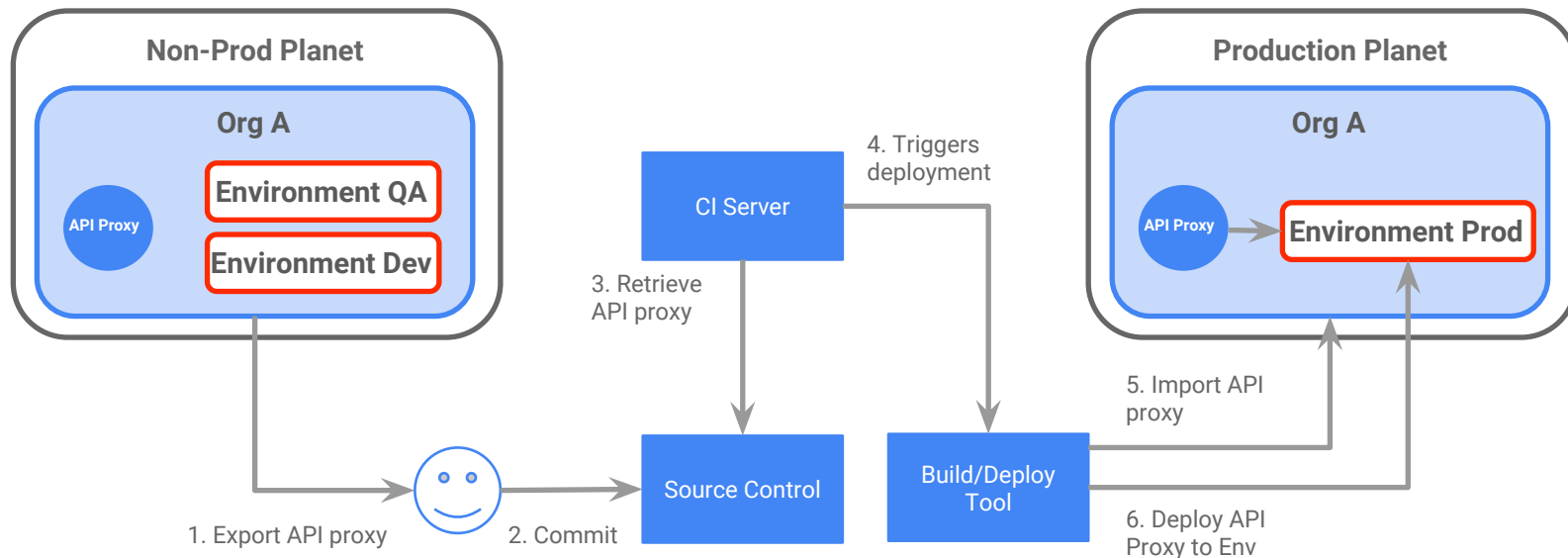- An API proxy revision can be simultaneously deployed to multiple environments.

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Deploying an API proxy to a new organization

- An Organization represents a tenant. Organization are hard logical boundaries and drive strong separation of assets.

- In order to deploy an API Proxy owned by Org A to environment Dev B owned by Org B. The API Proxy must be:
  - Exported from Org A.
  - Imported to Org B.
  - Deploy to Dev Env.

- This applies equally applies to two organizations in the same planet or two organizations in two different planets.

Planet

Org A

API Proxy

Environment QA

Environment Dev

1. Export

API Proxy

2. Import

Org B

API Proxy

Environment QA

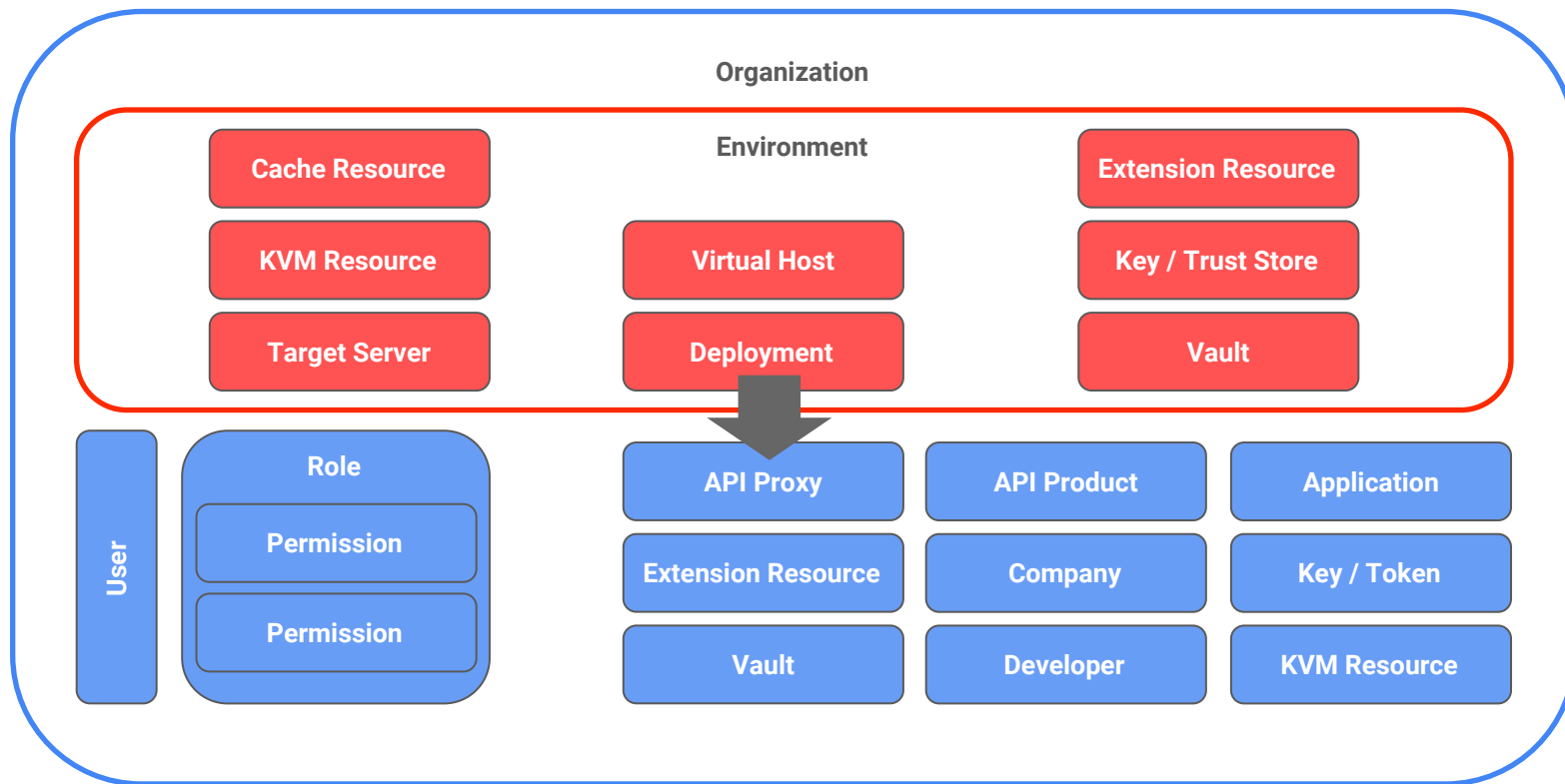**Environment Dev**

3. Deploy

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Integrating API proxy deployment with your SDLC

- Automating API Proxy deployment and other tasks related to Apigee management doesn't require new tools. You can leverage your existing investment and favorite tools (i.e. Git, Jenkins, Maven, etc) to integrate API Proxy deployment in your SDLC.
- It is important to remember than a deployment may be composed by more than just API Proxies. Target Servers, Cache resources, KVM definitions, API Products, etc, may need to be promoted between Orgs and Envs.

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Organization and Environment Scope

Organization

Environment

Cache Resource		Extension Resource
KVM Resource	Virtual Host	Key / Trust Store
Target Server	Deployment	Vault

User

Role
- Permission
- Permission

API Proxy	API Product	Application
Extension Resource	Company	Key / Token
Vault	Developer	KVM Resource

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List/describe API proxies

List APIs in an organization

```
curl -v -u <sysAdminEmail>:<passwd> http://<ms_IP>:8080/v1/o/<orgname>/apis
E.g.

curl  -uopdk@google.com http://localhost:8080/v1/o/VALIDATE/apis

[ "smartdocs", "healthcheck", "passthrough" ]
```

List/describe API proxies

Get an API

```
curl -u <sysAdminEmail>:<passwd> http://<ms_IP>:8080/v1/o/<orgname>/apis/<apiname>

e.g curl -uopdk@google.com http://localhost:8080/v1/o/VALIDATE/apis/smartdocs
```

```json
{
  "metaData" : {
    "createdAt" : 1517275362887,
    "createdBy" : "opdk@google.com",
    "lastModifiedAt" : 1517275362887,
    "lastModifiedBy" : "opdk@google.com",
    "subType" : "null"
  },
  "name" : "smartdocs",
  "revision" : [ "1" , "2" ]
}
```

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List/describe API proxies

Get a revision

```
curl -v -u <sysAdminEmail>:<passwd> http://<ms_IP>:8080/v1/o/<orgname>/apis/<apiname>/revisions/<revision>
e.g.

curl  -uopdk@google.com http://localhost:8080/v1/o/VALIDATE/apis/smartdocs/revisions/1
Enter host password for user 'opdk@google.com':
{
  "basepaths" : [ "/smartdocs/v1" ],
  "configurationVersion" : {
    "majorVersion" : 4,
    "minorVersion" : 0
  },
  "contextInfo" : "Revision 1 of application smartdocs, in organization VALIDATE",
  "policies" : [ "cors-preflight-response", "create-smartdocs-response", "dns-resolve", "extract-cors-headers",
"extract-request-response", "modify-target-url" ],
  "proxies" : [ "default" ],
  "proxyEndpoints" : [ "default" ]
  }
```

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Import/Export API proxies

Export API Proxy bundle

```
curl -u <sysAdminEmail>:<passwd>
http://<ms_IP>:8080/v1/o/<orgname>/apis/<apiname>/revisions/<revision>?format=bundle  -o
<apiname>.zip


e.g.
curl  -uopdk@google.com
http://localhost:8080/v1/o/VALIDATE/apis/smartdocs/revisions/1?format=bundle -o smartdocs.zip
```

Import API Proxy bundle

```
curl -v -u <sysAdminEmail>:<passwd> -X POST -H "Content-Type: application/octet-stream" -T
<apiproxybundle.zip>  "http://<ms_IP>:8080/v1/o/<orgname>/apis?action=import&name=<apiname>"


e.g.
curl -v -uopdk@google.com -X POST -H "Content-Type: application/octet-stream" -T smartdocs.zip
"http://localhost:8080/v1/o/VALIDATE/apis?action=import&name=smartdocs"
```

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Thank You

Google Cloud