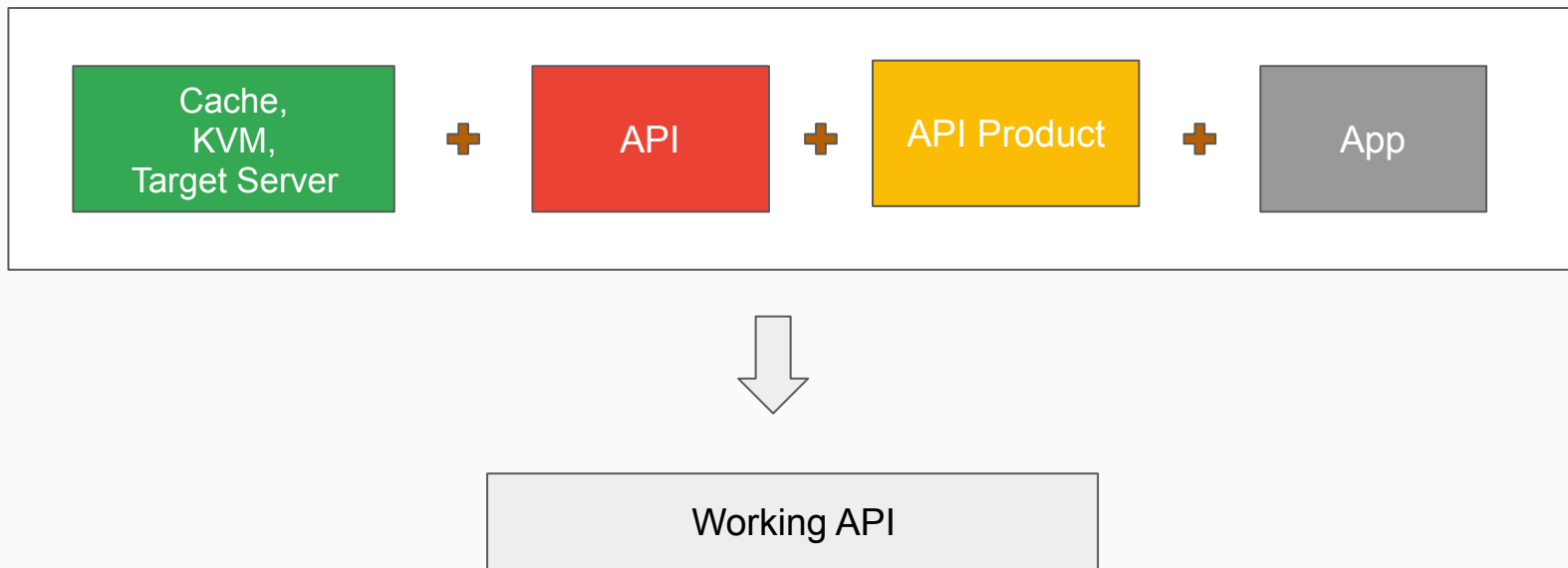# Edge API Lifecycle and Tools

Maven Config Plugin

Prerequisites

1. Java

2. Maven

3. Use of Maven in CI tooling

4. Maven deploy plugin

API Deployment

Cache, KVM, Target Server **+** API **+** API Product **+** App
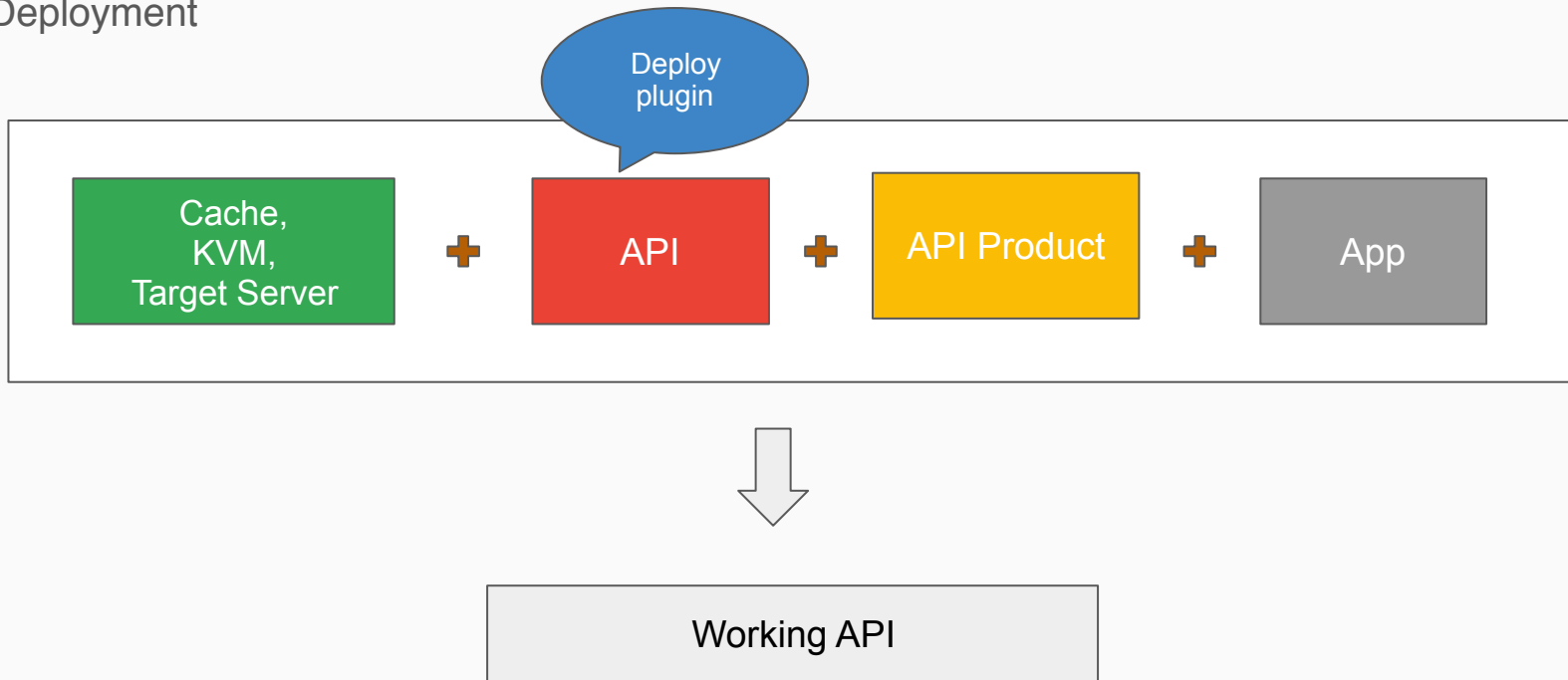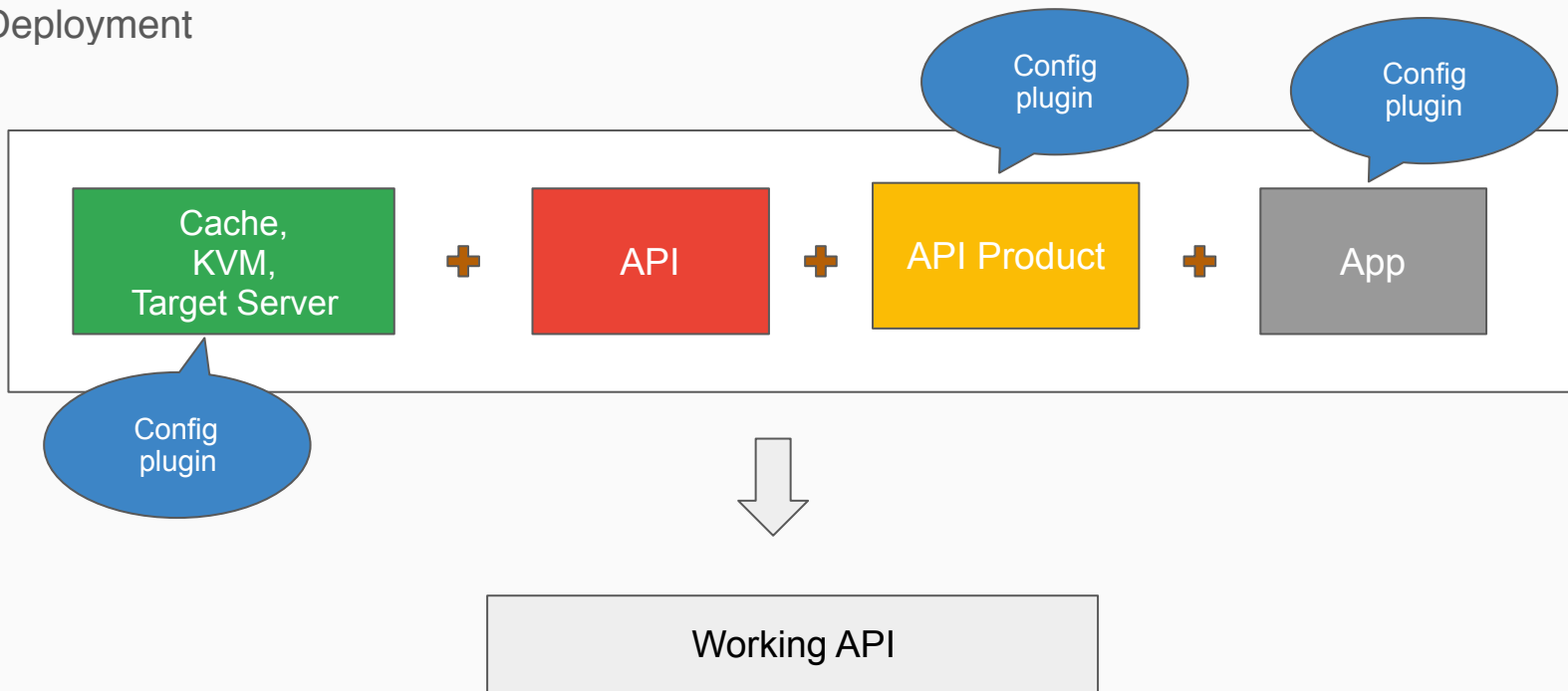
⬇

Working API

What is config ?

"API config refers to all dependencies of an API in Edge that is necessary to get an API working"

Think cache, KVM, target server, API product …

apigee-config-maven-plugin ?

Deploy API config like cache, key value maps, target servers etc., along with an API to allow config to live in version control (git) and change along with API

edge.json

Config format

Captures all API config in a single file organized as global, env and API config.

Walkthrough

https://github.com/apigee/apigee-config-maven-plugin/blob/master/samples/EdgeConfig/edge.json

```
{
    "version": "1.0",
    "envConfig": {
        "test": {
            "targetServers": [...],
            "caches": [...],
            "kvms": [...]
        },
        "dev": {
            "caches": [...],
            "targetServers": [...],
            "kvms": [...]
        }
    },
    "orgConfig": {
        "maskconfigs": [...],
        "apiProducts": [...],
        "developers": [...]
    },
    "apiConfig": {
        "weatherapi": {
            "kvms": [...]
        }
    }
}
```

Invoking maven

```
mvn install -Ptest -Dapigee.config.options=create
```

create	Create config if not found
update	Create if does not exist; Overwrite if exists (upsert)
delete	Delete
sync	Delete and Create
none	(default) Do nothing. Allows use in API dev phase.

Lab

Fitting pieces together

- Use one pom.xml for both deploy and config plugins

- Use one mvn command to deploy API and deploy config

- Config can be deployed standalone (without an API) if needed

- Group related APIs together and have all of their config in one edge.json file

API dev best practices

Use config to externalize configuration from API code

Use version control (git) as single source of truth for config

Deploy config using automated tools

Use no human touch promotion to environments/orgs

Benefits

- *Reduces manual error in config*

- *Know where a config is used without introspecting Edge*

- Know when a change was made

- *Reduces manual tasks in promoting API from one env to another*

- *Reduces manual tasks in moving API from one org to another*

Disclaimer

- Open source project github project

  https://github.com/apigee/apigee-config-maven-plugin

- Contribute and join the community

- Use community.apigee.com to ask questions

- File issues in github.com to report bugs or enhancements

THANK YOU