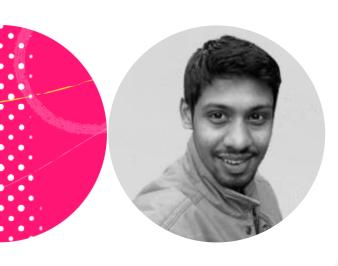
## Operating Spinnaker



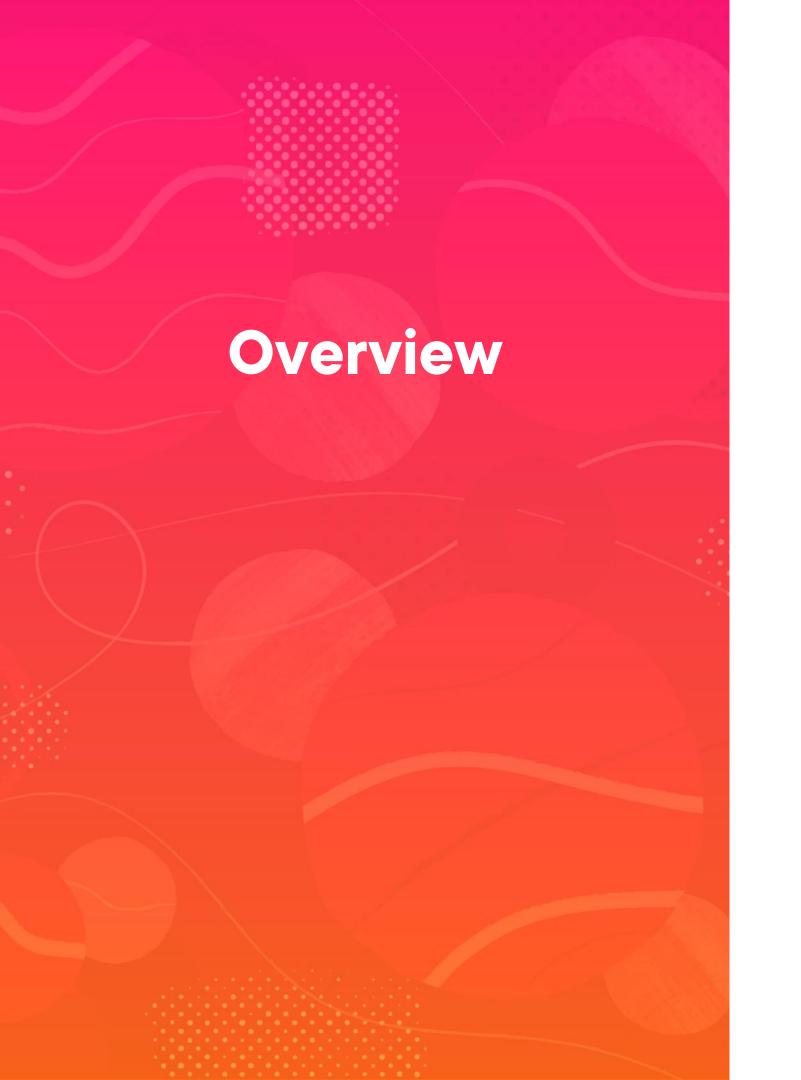
### **Shubhasish Panda**

Infra & Platform Engineer

@linkedin | www.linkedin.com/in/subhasishpanda







### How to

- Setup notification
- Take backup
- Scale and cache

**Upgrade Spinnaker & install plugins** 

Automate Spinnaker's day-to-day tasks

### Operating Spinnaker

CLI Upgrades **Alerting** API Plugins Scaling



## Alerting



### **Alerting**

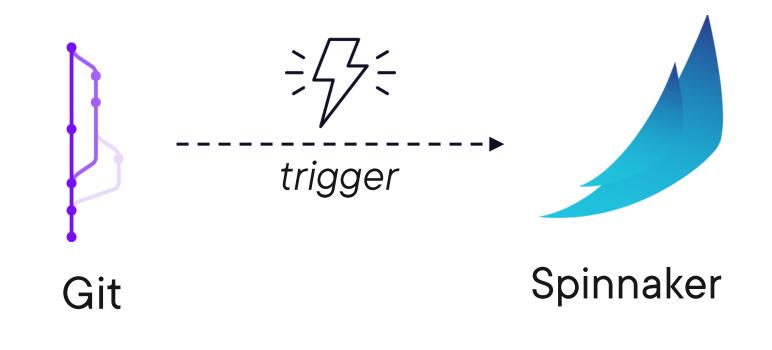


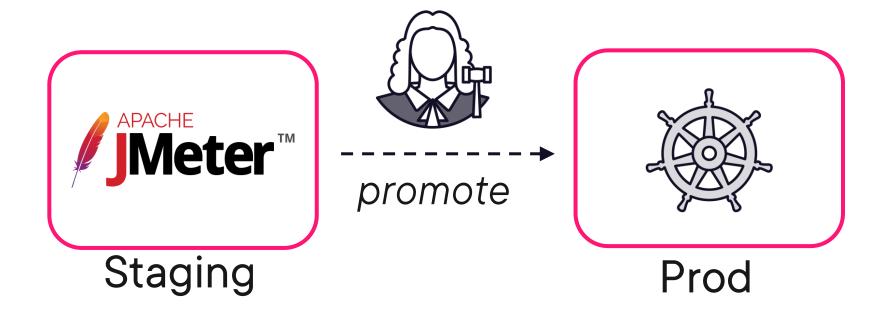
Fundamental step of SRE practices

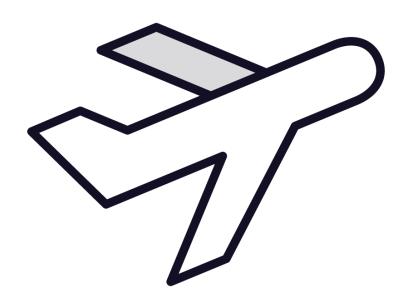
Know what's happening without logging



### Spinnaker Pipelines







Auto-pilot

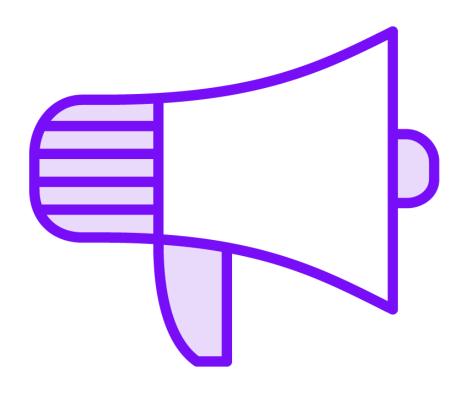




### Challenging to know:

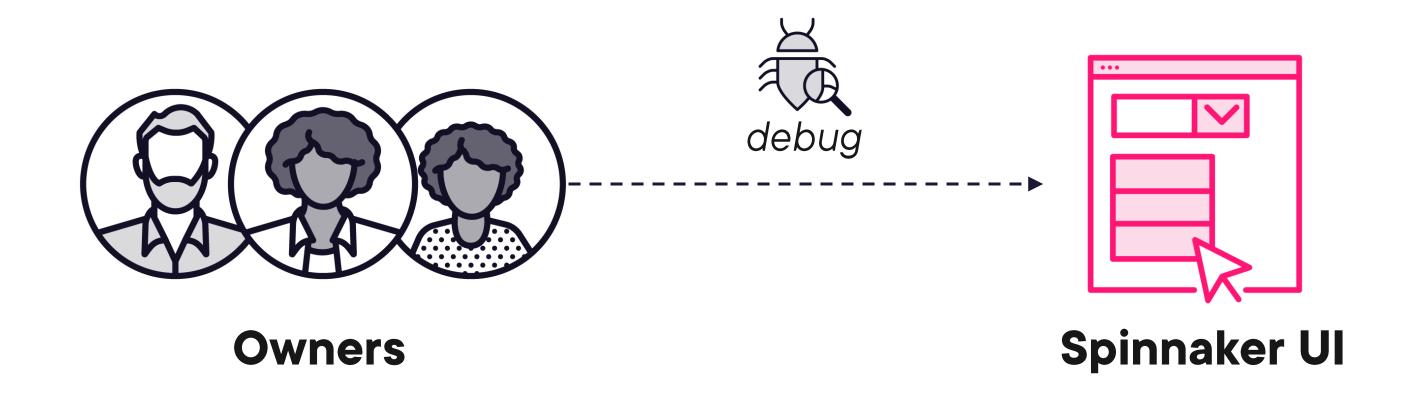
- Which pipeline has started
- Which stage is executing
- Which stage has failed
- Which manual approval is pending

### Notify



### Whenever:

- A pipeline starts, passes, or fails
- A stage starts, passes, or fails
- A manual judgement stage starts



### Spinnaker notification

Echo

"echo-local.yaml" → "~/.hal/default/profile"

### **Spinnaker supports:**

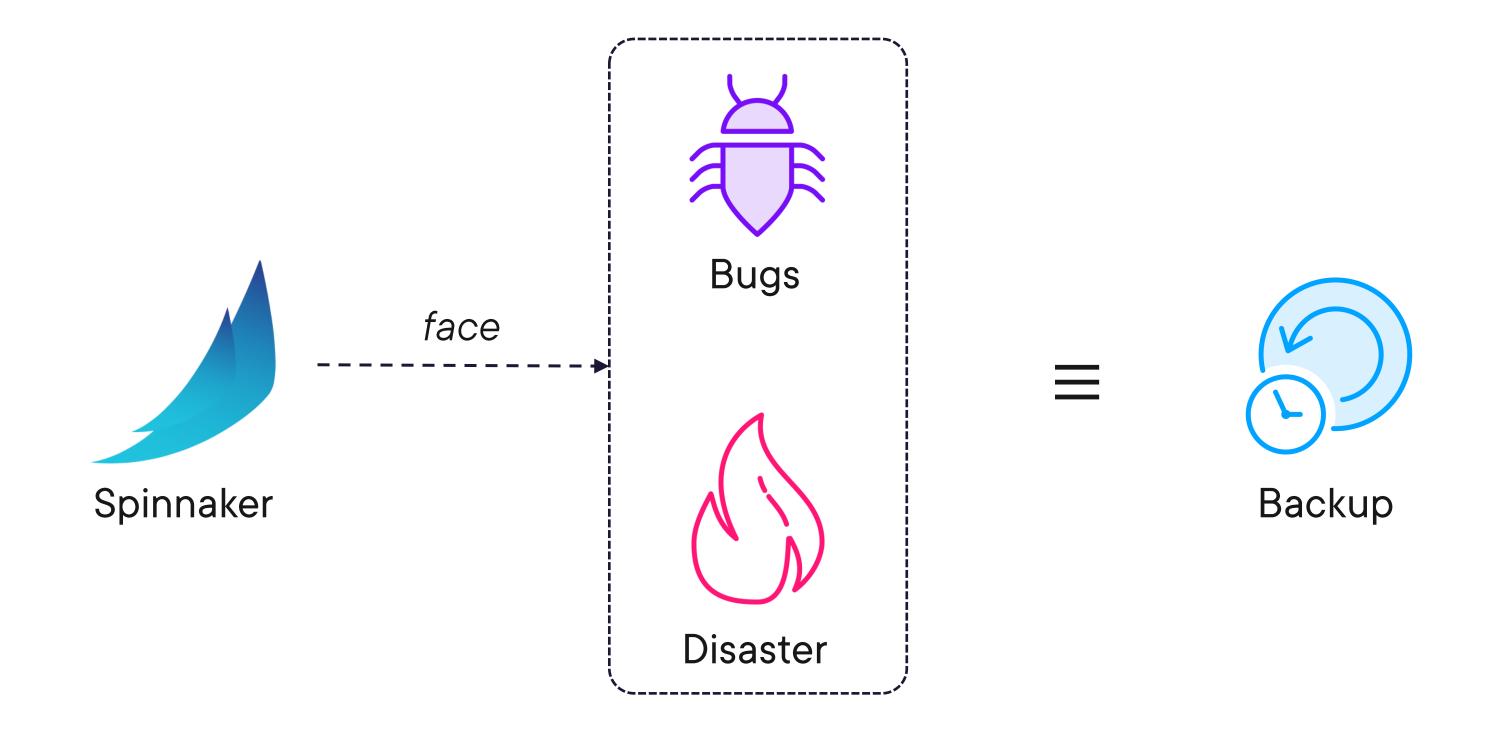
- Email
- Microsoft teams
- Slack
- SMS

# Demo

**Enable slack notification** 

## Back-ups & Upgrades





### Backups



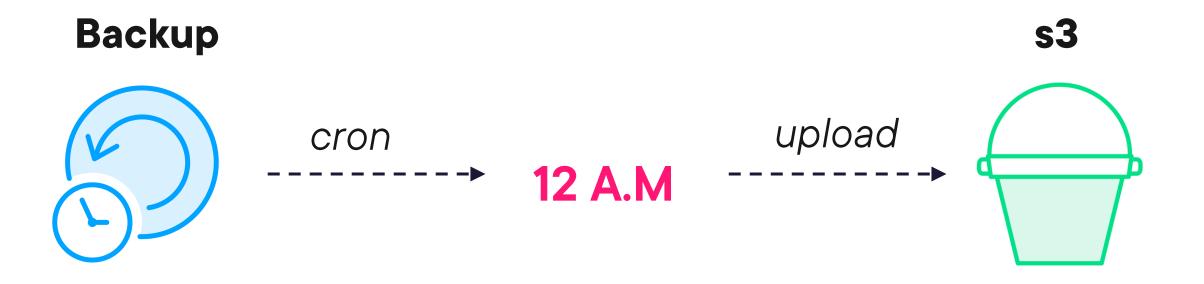
### Common practice among IT engineers

### Helps in

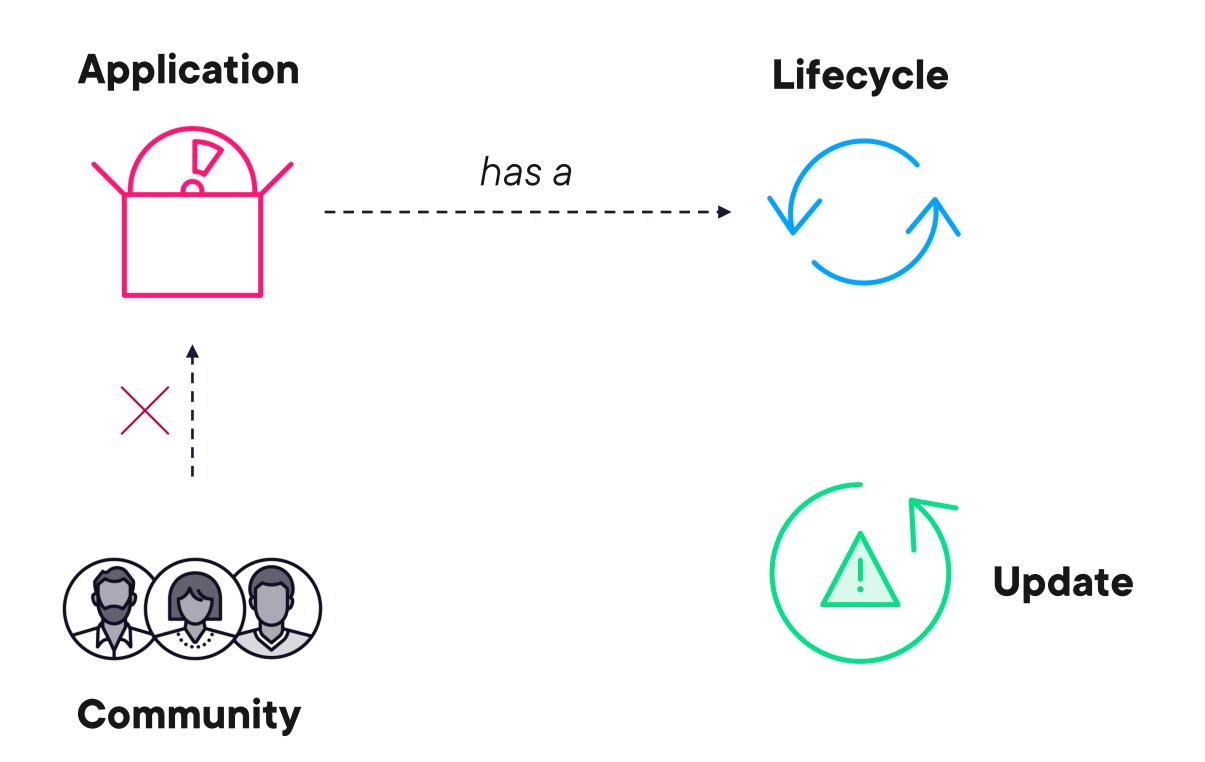
- Recovery
- Data replication
- Disaster recovery
- Migration

# Demo

**Backup Spinnaker** 

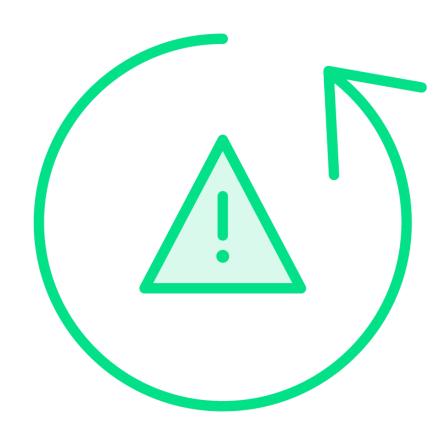


### Spinnaker Updates





### Spinnaker Updates



Are secure & faster

Have newer feature & fewer bugs



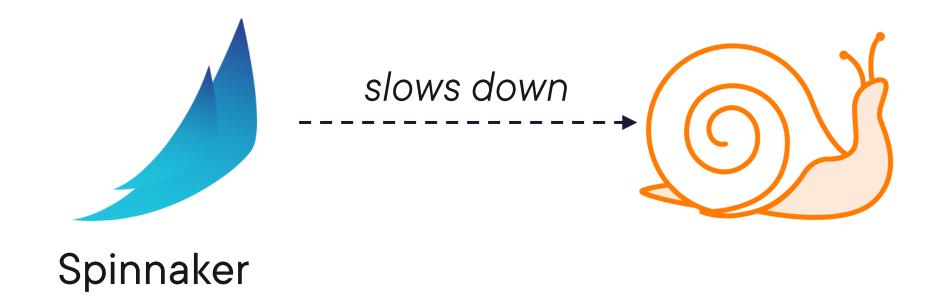
# Demo

**Upgrade the Spinnaker** 

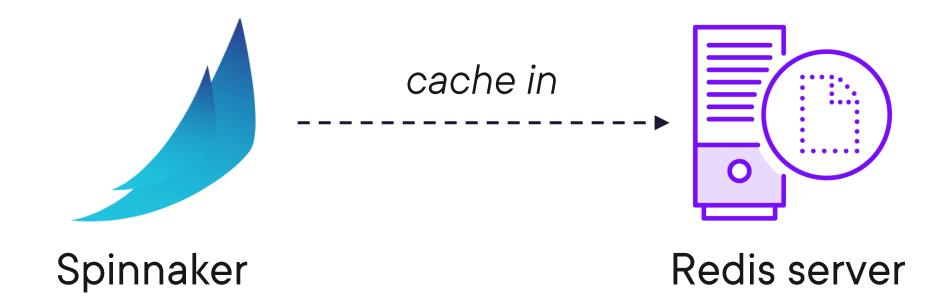
## Scaling & Caching



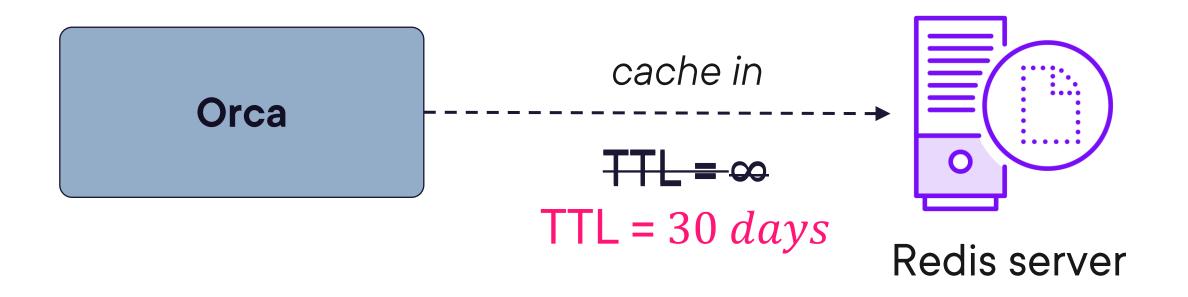
### Scaling & Caching Issue

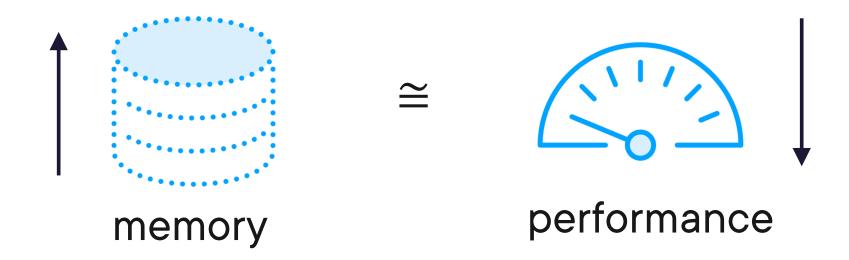


### Spinnaker Caching



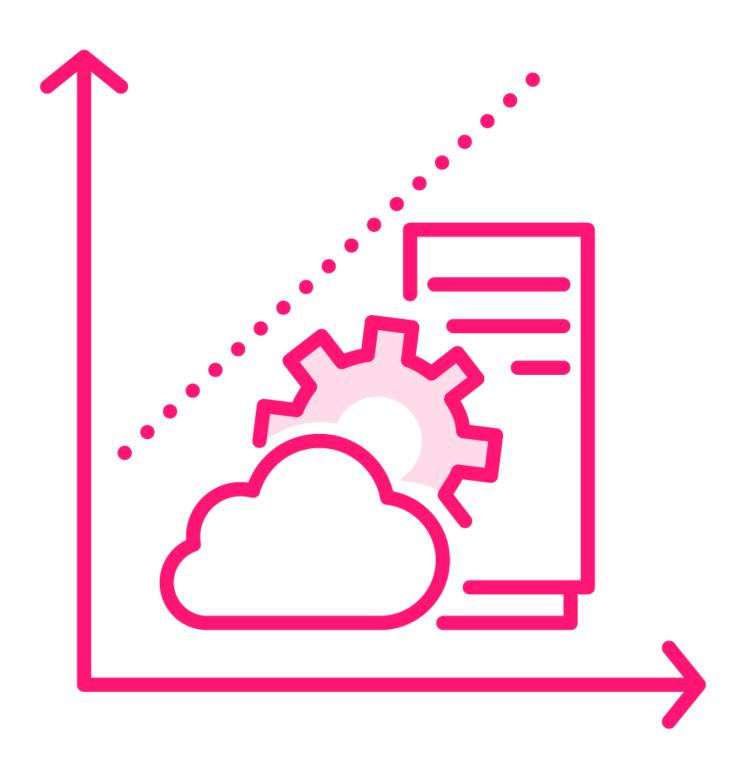
### **Orca Caching Behavior**







### Scaling





### Scale..

**Cloud driver** 

### When issue in:

- Loading cloud infra
- Performing cache update
- Searching for resources

### Scale..

Orca

### When slowness in:

- Creating applications
- Running pipelines
- Submitting ad-hoc operations

### Spinnaker Microservices

Deck

Gate

Orca

Cloud driver

Front50

Rosco

Echo

Spinnaker is a combination of microservices working together.





## Plugins





### Plugins

A software add-on that enhances the application's capabilities



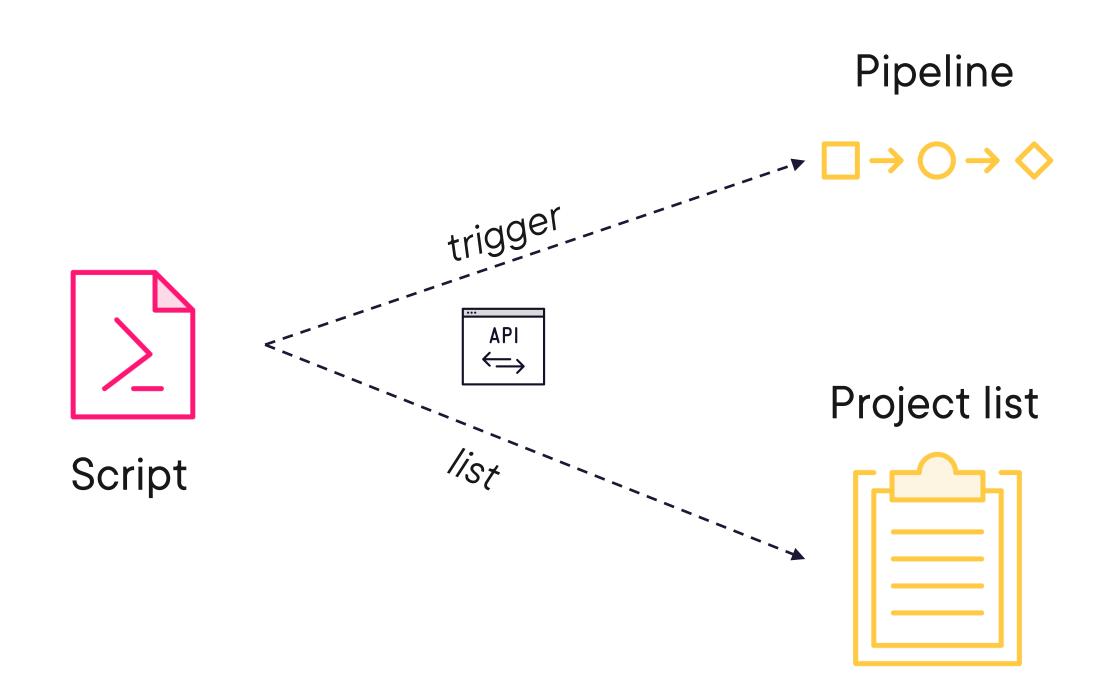
## Demo

Install "random-wait" plugin

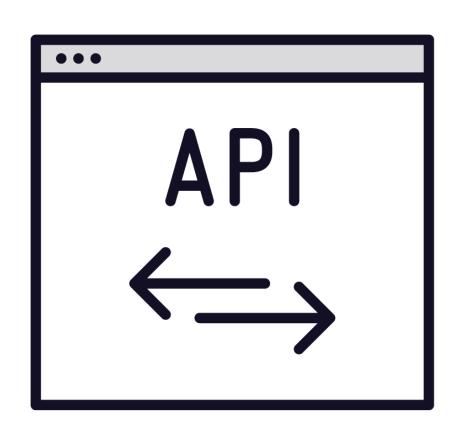
## APIs



### **API (Application Programming Interface)**



### Spinnaker's API



Gateway to the backend services

Gate microservice is responsible for API



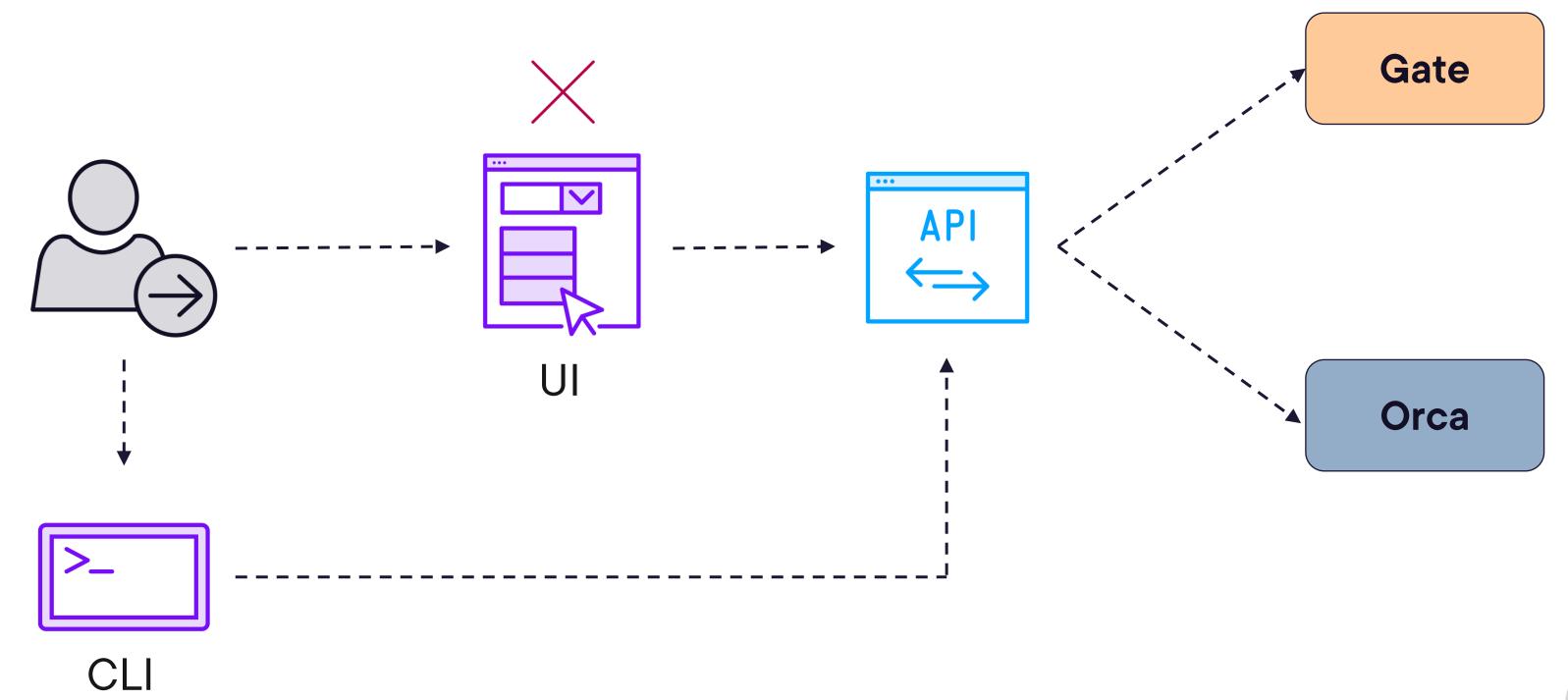
# Demo

Interact with the Spinnaker's API

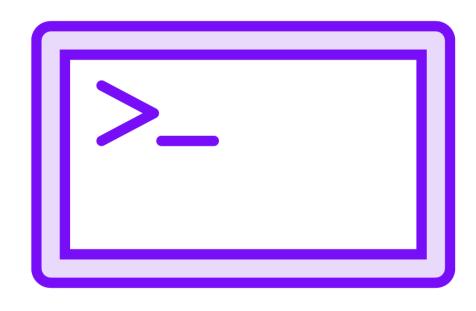
## CLI



### **CLI (Command Line Interface)**



### Spinnaker CLI



Used for configuration management

Is faster than the GUI

**Used for automation scripts** 

Maintain scripts in a git repo

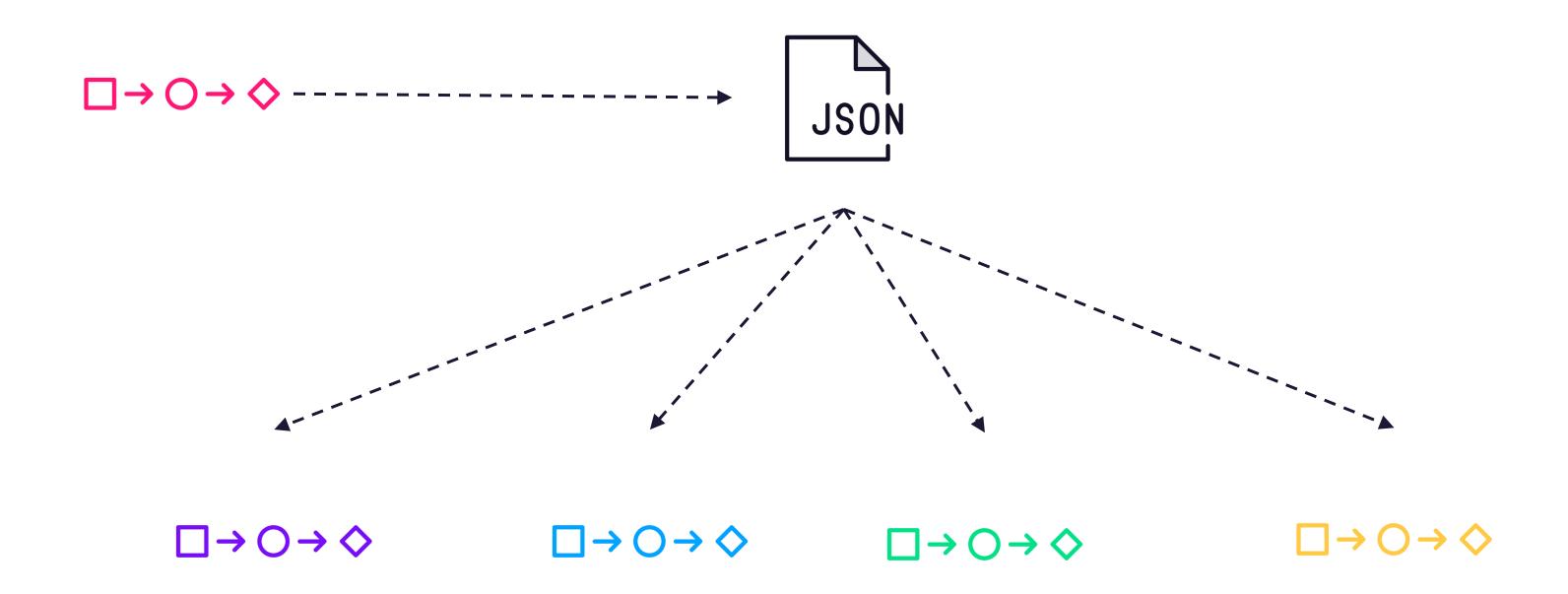
# Demo

**Setup Spinnaker CLI** 

## Pipeline Templates



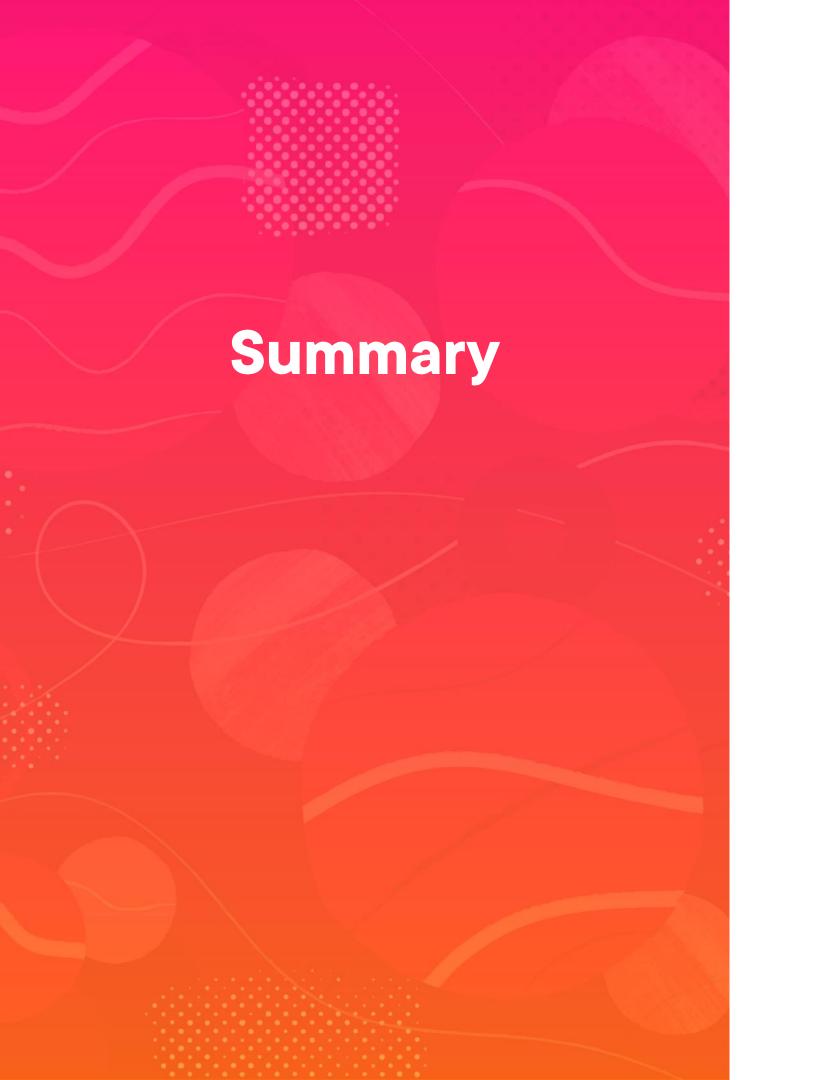
### **Pipeline Templates**





### **Pipeline Templates**





Set notifications & backup

Upgrade or install a plugin

**Automation & configuration management** 

