Automation & Orchestration made easy possible?
Agenda

● What problems is Cumin solving
● Main components: backends, grammar and transports
● Execution strategies and other features
● Demo time
How we got here

- Puppet for Configuration Management Fall 2008
- Salt for Distributed SSH Fall 2012
- Cumin for Automation and Orchestration Spring 2017

# Servers

Time
What we wanted

- OS is Debian Stretch
- Has Puppet class nginx with param cluster = foo
- The host is pooled in cluster foo
What we wanted

- Check Status
- Grab Info
- Cleanup

OR

- Depool
- Restart
- Pool

OK

OK

OK

FAIL

STOP
Cumin components

- BACKENDS
  - PUPPETDB
  - OPEN STACK
  - SSH KNOWN HOSTS
  - ...

GLOBAL GRAMMAR

CUMIN MASTER

TRANSPORT
- HOST-01
- HOST-12
- HOST-19
- HOST-42
- HOST-93
- HOST-99
Cumin features

- Batch Size
- Valid Exit Codes
- Batch Sleep
- Output Formats
- Success Percentage
- Execution Strategies
- Global Timeout
- Per Host Timeout
- Interactive
Cumin allows to

- Powerful query syntax to select hosts
- Multiple execution strategies
- Smartly aggregate outputs and reliably report failures
- Use it from CLI or as a Python framework
Links & Contacts

Search keywords

CUMIN

FOSDEM

COCCIOLI
THANK YOU