Puppet

DKB@CERN

- Puppet
  a software configuration management tool
- DKB@CERN
  - Resources
  - Current installation
  - Future plans

Outline
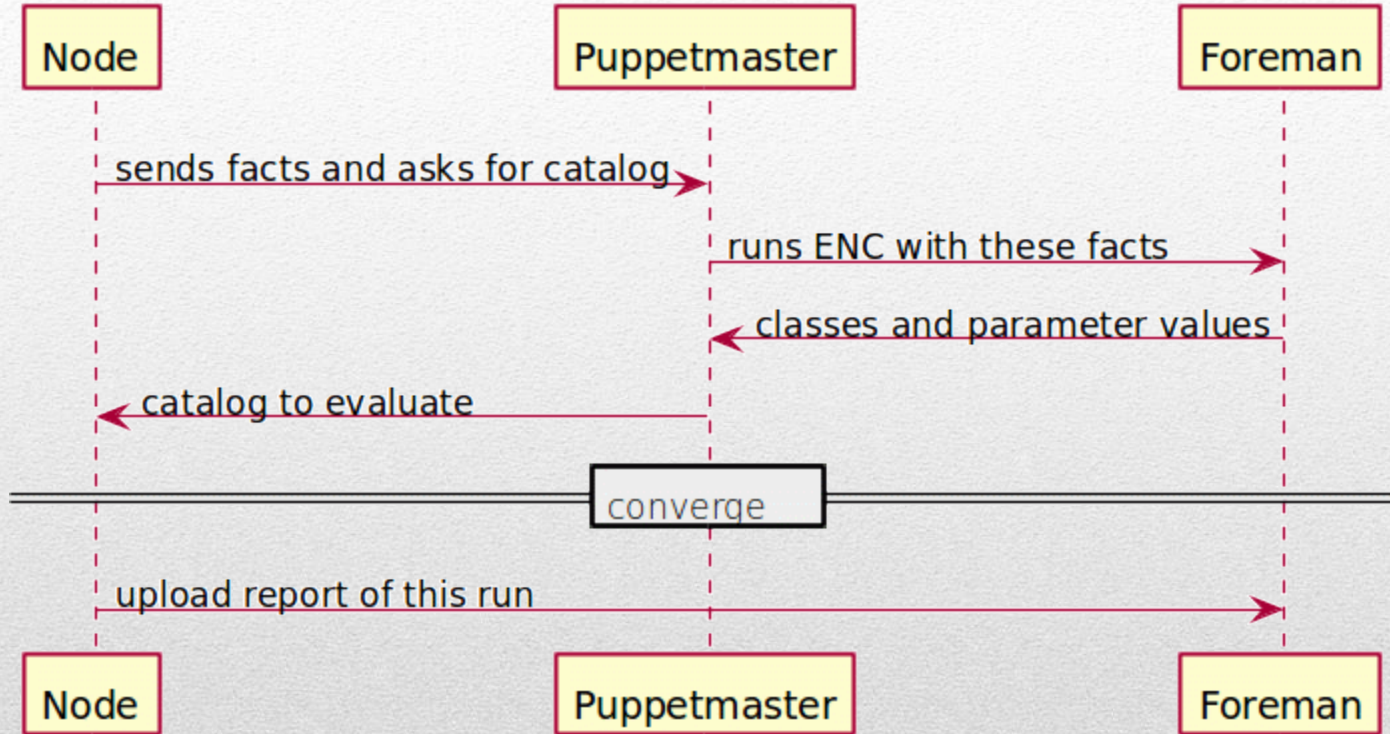
PUPPET

What is it?

24/08/2017

Dictionary

- Architecture: **<u>master/agent</u>** or **standalone**
- A **catalog** is a document that describes the desired system state for one specific computer *(packages must be installed, users must exist, file contents, services to be run, etc.)* Is to be **compiled** from sources by master and **applied** by agent.
- Sources are:
  - agent-provided data (node specific information)
  - external data (external node classifier (ENC), etc.)
  - manifests – files, describing the system state. Written in Puppet language.
  - files and file templates (with desired file content)

Puppet *a software configuration management tool*

Configuration workflow with puppet

http://ares.github.io/presentations/foreman_chef/presentation.html#slide5
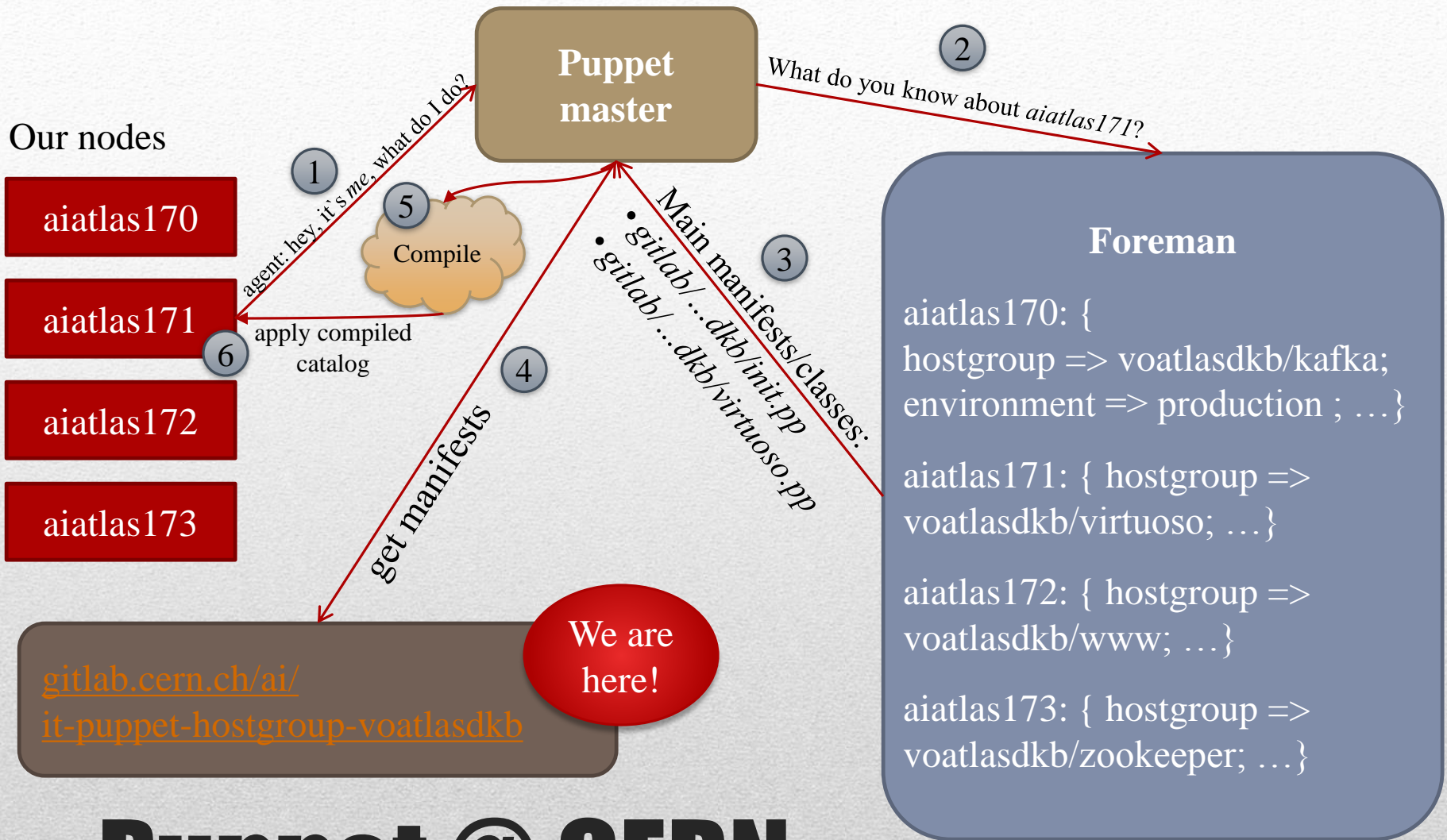
Master/agent

Puppet language

- Classes (group of resources)
- Resources
- Resource/class declaration
- Variables
- Conditions:
  - if/elseif/else;
  - case switch;
  - …
- Loops (for each; …)

```
class zookeeper {
 $zoo_home = '/data/zookeeper'
 $osver = $facts['os']['release']['major']
 $arch = $facts['os']['architecture']

 yumrepo { 'cloudera_chd5':
  baseurl  => "http://archive.cloudera.com/cdh5/redhat/${osver}/${arch}/cdh/5",
  ensure   => present,
 } ->
 package { 'zookeeper-server':
  ensure => installed,
 } ->
 user { 'zookeeper':
  home => $zoo_home,
 } ->
 file { $zoo_home:
  ensure => directory,
  owner  => 'zookeeper',
 } ->
 file { '/etc/zookeeper/conf/zoo.cfg':
  ensure => file,
  content => template('hg_voatlasdkb/zoo.cfg.erb'),
 } ~>
 exec { 'zookeeper-init':
  command  => "service zookeeper-server init && touch ${zoo_home}/init_done",
  creates       => "${zoo_home}/init_done",
  refreshonly => true,
 }

 service { 'zookeeper-server':
  ensure => running,
  enable => true,
  require => File['/etc/zookeeper/conf/zoo.cfg'],
 }
}
```

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What do we have?

aiatlas170
(kafka)

∅

aiatlas171
(virtuoso)

:9200 – Elasticsearch
:5601 – Kibana
:8890 – Virtuoso
:80 – Apache

aiatlas172
(www)

∅

aiatlas173
(zookeeper)

:2181 – Zookeeper

ssh -D 8080 lxplus[034].cern.ch

Firefox: Preferences -> Advanced ->
Network -> Connection (Settings…) -> Manual
proxy configuration:
SOCKS host: 127.0.0.1 port: 8080
SOCKS v.5

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To Be Continued

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