Systemkonfiguration mit Puppet

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2.9.2022

$whoami

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- work and live in Rubigen/Berne/Switzerland
- communicate in (swiss)german (pardon the helvetisms), english and french

Cirrax GmbH[2]

- Puppet trainings (from beginner to professional)
- Puppet consultancy and contract work
- Maintain some Opensource puppet modules[3]
- OpenStack cloud
- Linux and OpenSource consultancy and contract work

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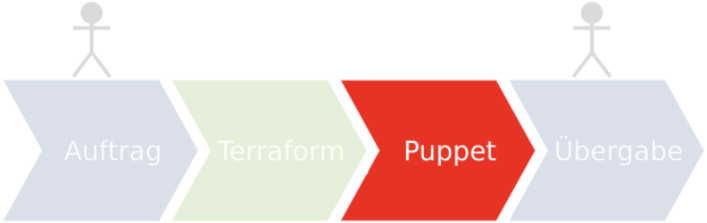
[3] https://forge.puppet.com/modules/cirrax

where we are



software for configuration management

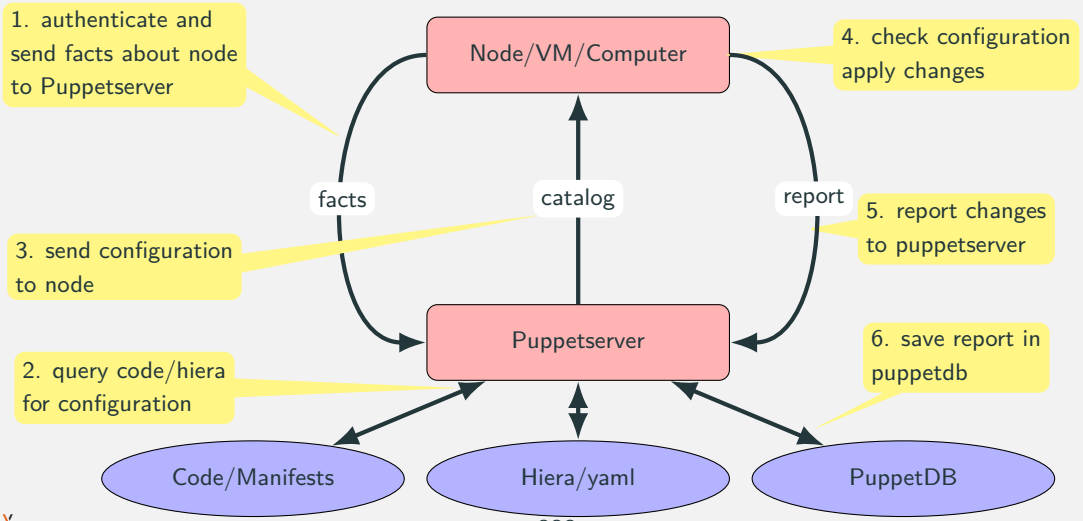
Software for configuration management:

- puppet[4]
- ansible[5]
- CFEngine[6]
- chef[7]
- salt[8]

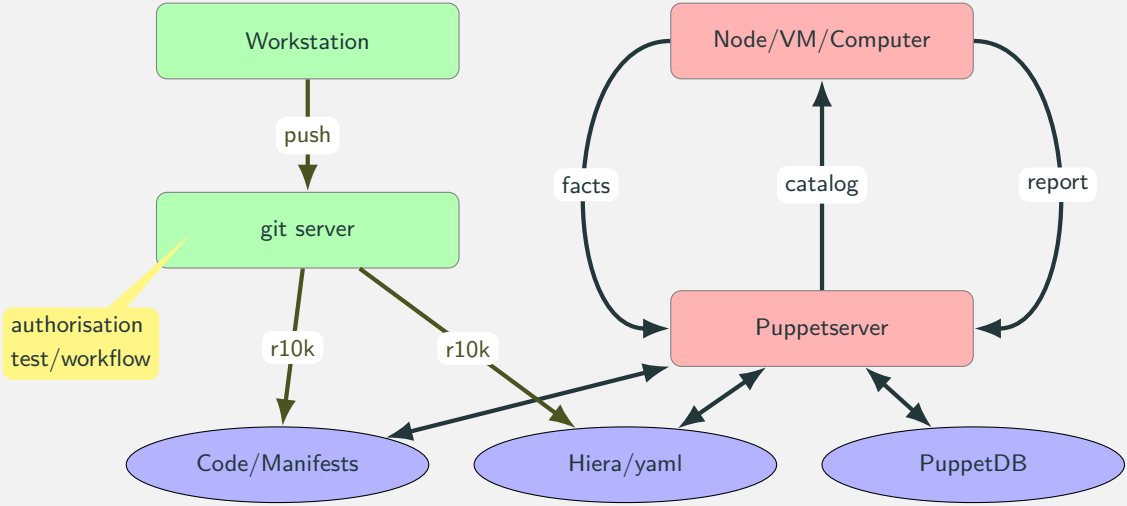
Also look at comparison of configuration management software on wikipedia[9]

[4] https://en.wikipedia.org/wiki/Puppet_(software)
[5] https://en.wikipedia.org/wiki/Ansible_(software)
[6] https://en.wikipedia.org/wiki/CFEngine
[7] https://en.wikipedia.org/wiki/Chef_(software)
[8] https://en.wikipedia.org/wiki/Salt_(software)
[9] https://en.wikipedia.org/wiki/Comparison_of_open-source_configuration_management_software

Architecture



Workflow


Workstation
push
git server
authorisation
test/workflow
r10k
r10k
Code/Manifests
Hiera/yaml
Node/VM/Computer
facts
catalog
report
Puppetserver
PuppetDB

Why?

- **Continuous Integration**: disallows manual configuration (will be overwritten)
- **Policy as Code/Consistency**: equal configuration on each node per role/profile/software
- **Compliance**: eg. git workflow to ensure *four eye principle*, encrypted passwords (eyaml)
- **Documentation**: manifests/hiera in git and you know what you have changed at a certain time
- **Automation**: eg. new dns resolver, time server etc
- **One place for config**: new webhost also configures DB, DNS, backup, monitoring ...

but...

- **Initial work**: needs to be done, can be done step by step
- **No manual configuration on node**: but that's our goal !
- **Orchestration**: puppet is weak for node dependencies