Conjur

Authorization platform for the cloud

Hleb Rubanau, LVEE 2014

Infrastructure moves to the cloud: challenges

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✔Authentication (Who are you?)

✔Authorization (Are you allowed to do this?)

✔Audit (Who did this?)

Old approaches are revisited

- ✔ Perimeter-based security... is no more
- ✔ Scripts and services are powerful actors
- ✔ Lots of credentials to third-party services are used
- ✔ Data should be encrypted... but where keys are stored?
- ✔ **Compliance requirements make it all even harder**

The Authorization Challenge

New Frontiers of Identity

- Web and mobile users
- Cloud/PaaS consoles and APIs
- Web services, scripts, code and other “robots”

New Kinds of Assets

- Virtual machines & lightweight containers
- 3rd party and hosted services
- Widely dispersed geography

The platform

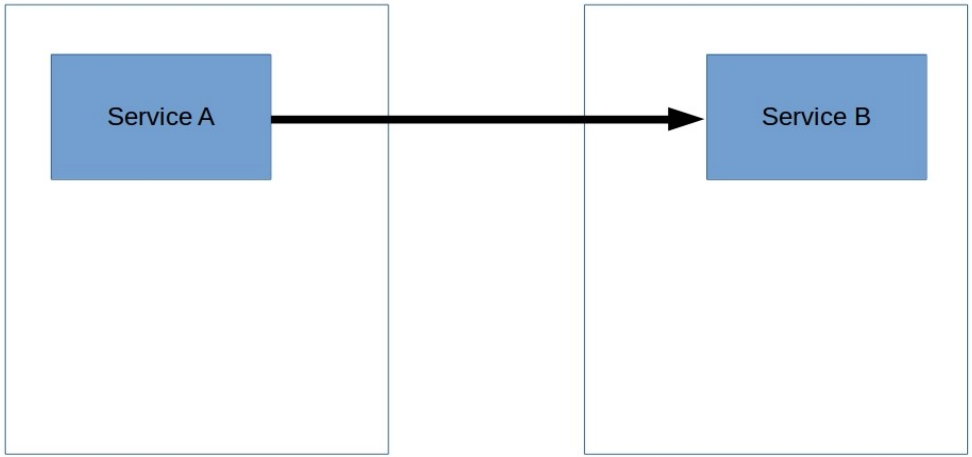
Separate appliance, which encapsulates:

- ✔ Directory of users, “robots”, their roles and permissions
- ✔ Encrypted access-controlled containers for sensitive data
- ✔ Audit trail

Interfaces exposed:

- ✔ HTTPS REST
- ✔ LDAPS (partially, to fit the needs of ssh management)

Use Case #1: Service to service authorization



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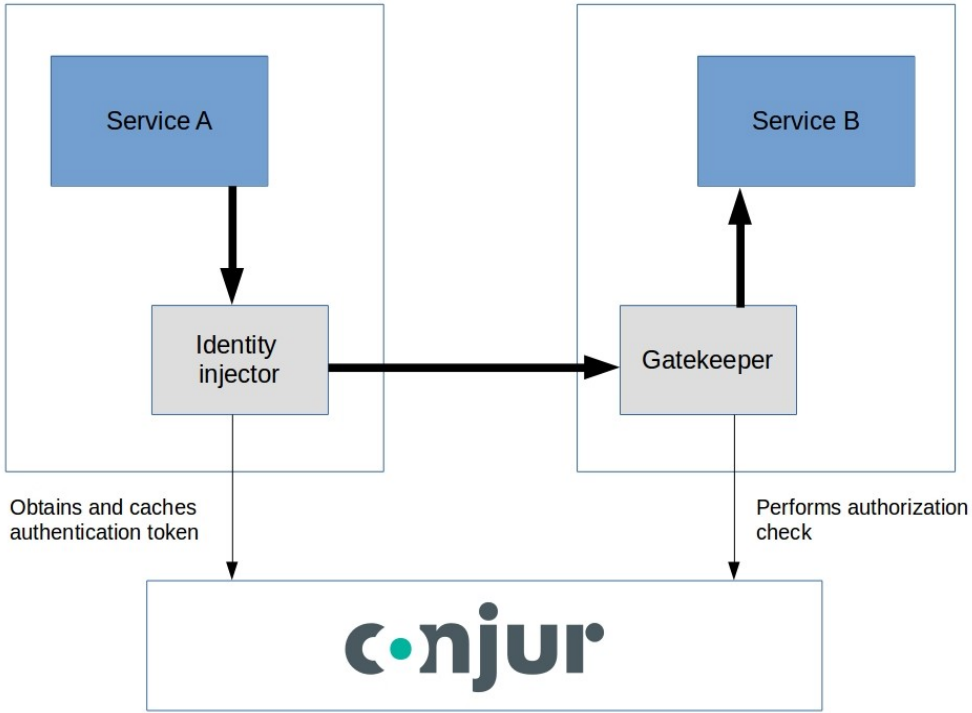
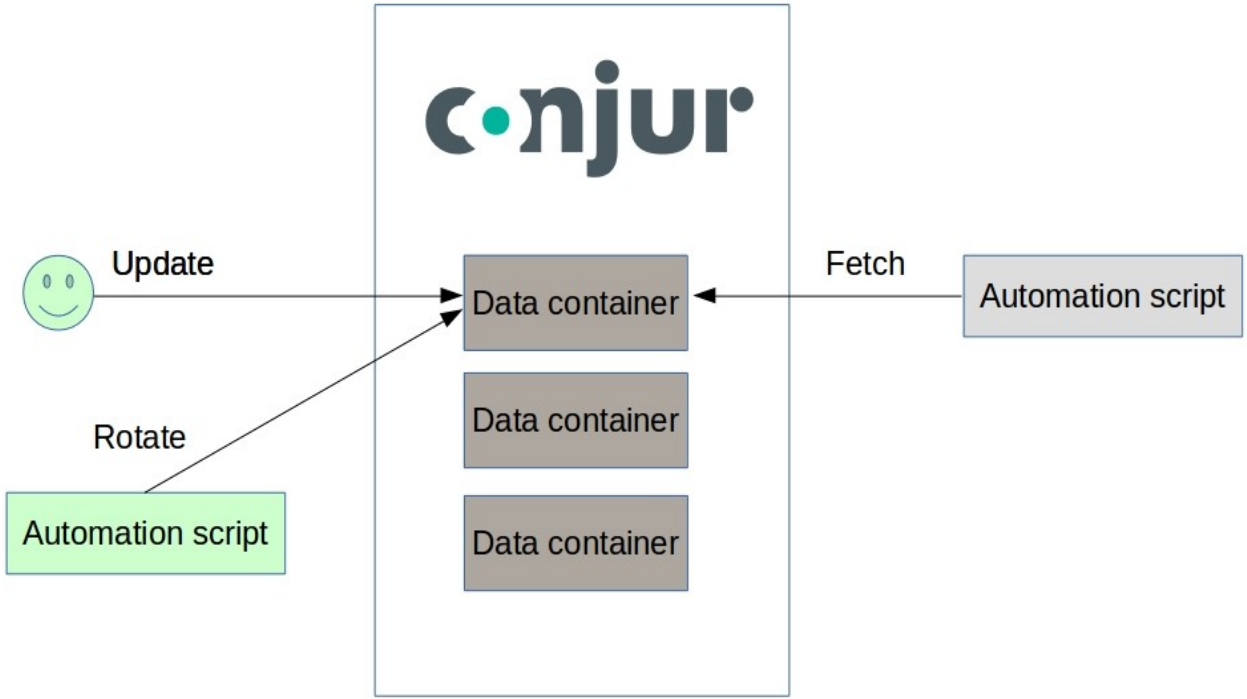
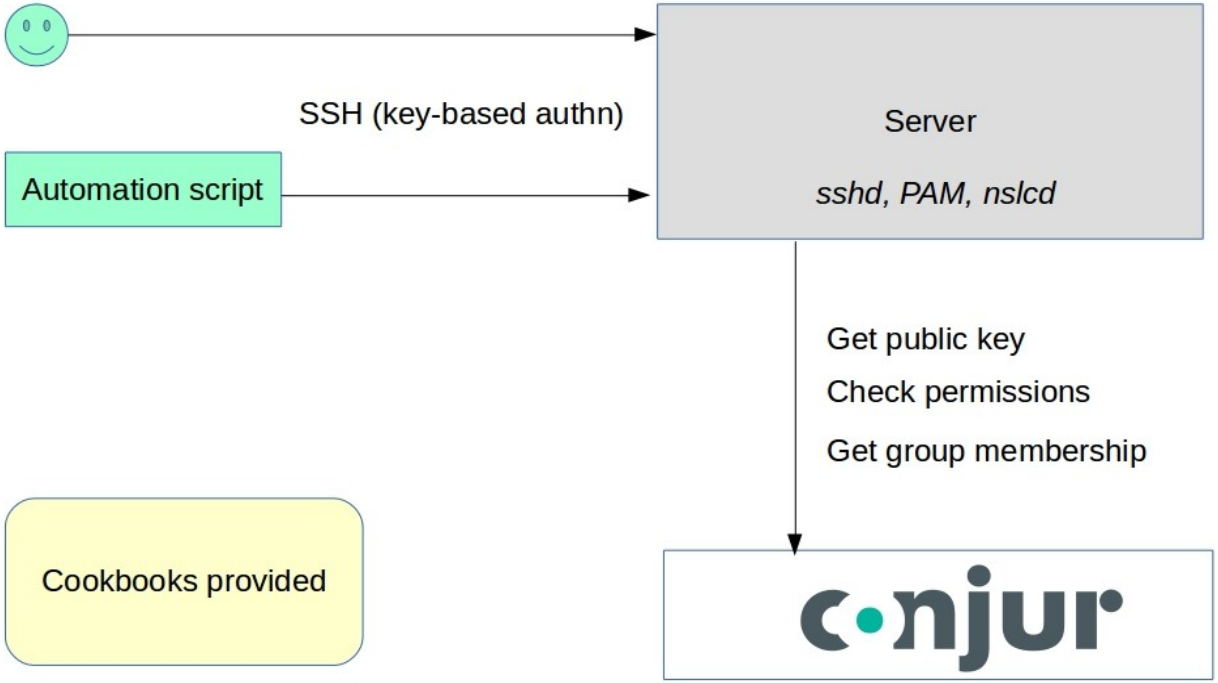


Use Case #2: Secrets management



Use Case #3: SSH access orchestration



Devops' view

- ✔ Command-line driven
- ✔ Fully-accessible REST API
- ✔ Client library for Ruby, more in development
- ✔ Scalable HA deployments supported
- ✔ CF recipes (cookbooks, etc.) are part of the product
- ✔ Low-level protocols: standard open-source only

conjur Developer's insight

- ✔ Postgres, Ruby, Cucumber, Rspec, Chef
- ✔ For outer world (constantly improving): recipes for Chef, Puppet, Saltstack, CloudFormation... and more in plans
- ✔ Test-driven development, Jenkins-managed CI
- ✔ Cloud-oriented
- ✔ Git just works

Some facts about the company

Massachusetts-based startup, with investments and paying customers

Considered as prospective by guys from PuppetLabs, Opscode (Chef), Netflix

Small distributed horizontal team, freelance-style collaboration

We look for smart guy (or two?) in Minsk :)

Bookmarks

http://conjur.net

http://developer.conjur.net

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THANK YOU!