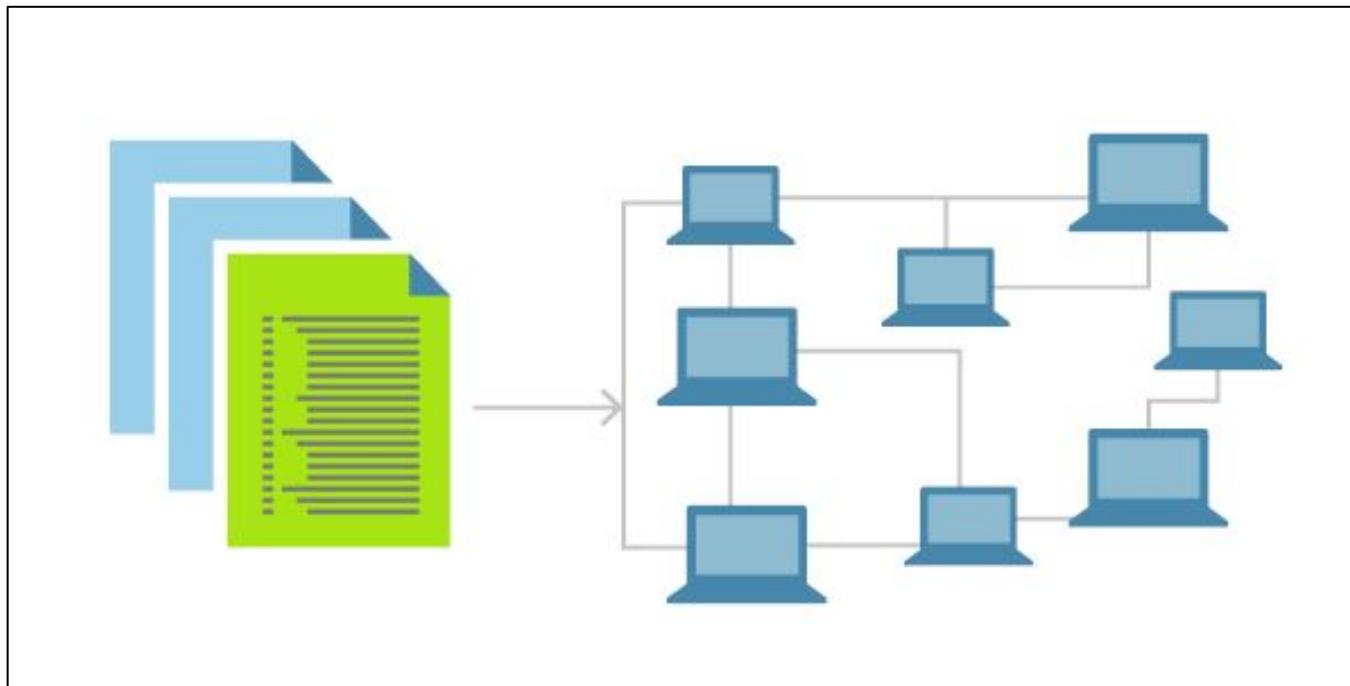


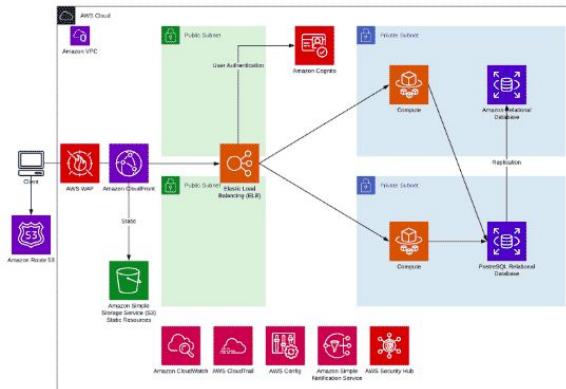
IAC: Mudahnya setup Server dengan Kode

Ananda Dwi R

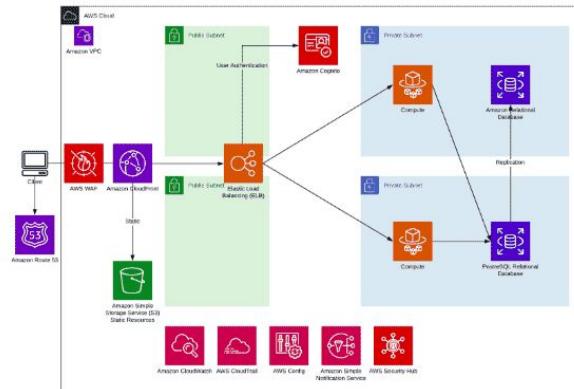




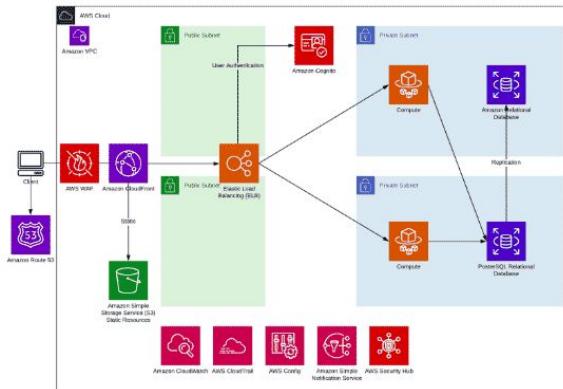
DEVELOPMENT



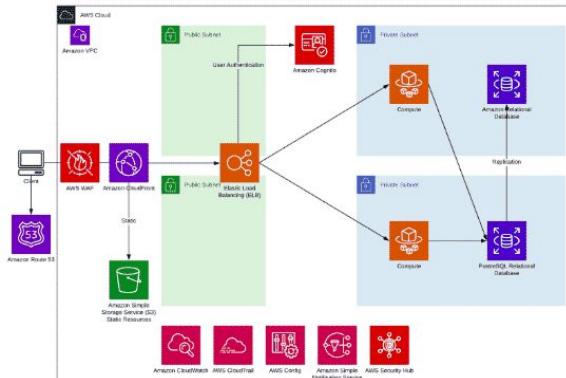
STAGING



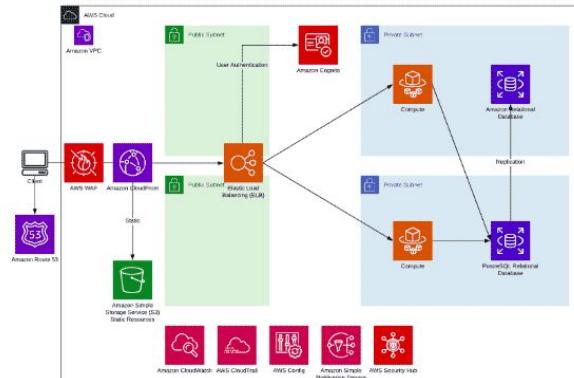
PRODUCTION



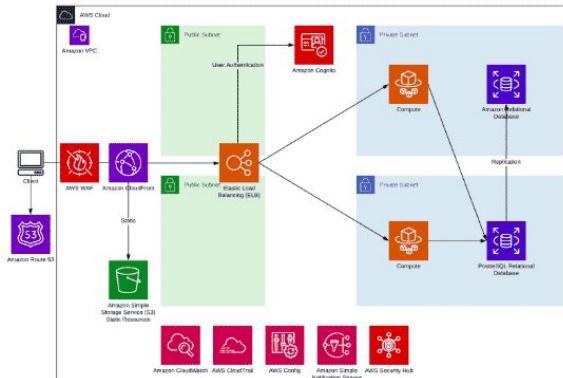
PERFORMANCE TEST



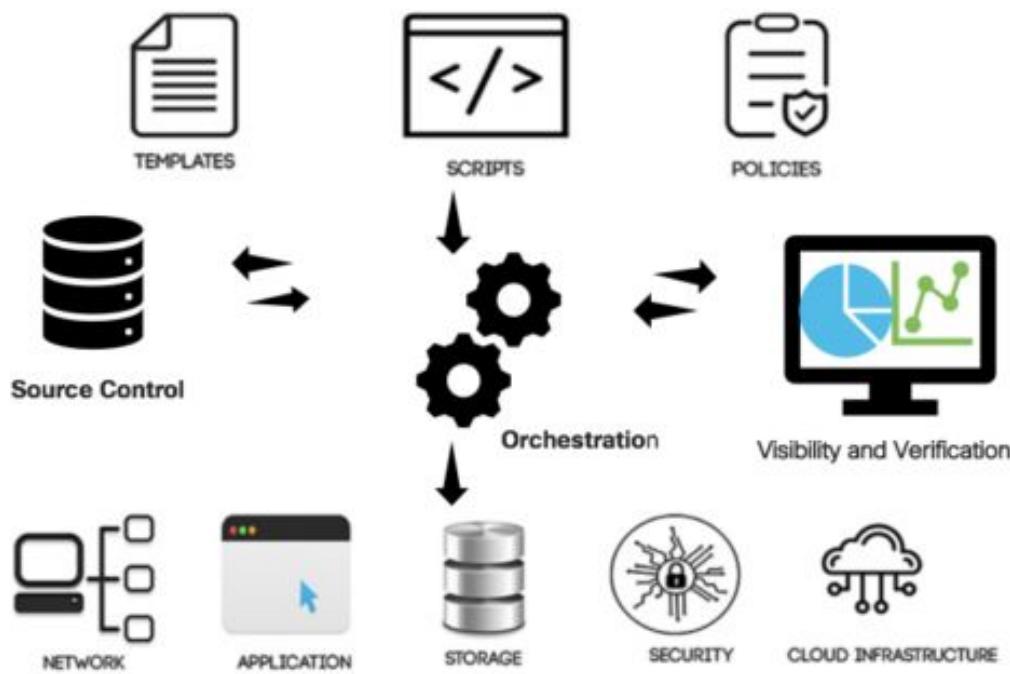
DISASTER RECOVERY

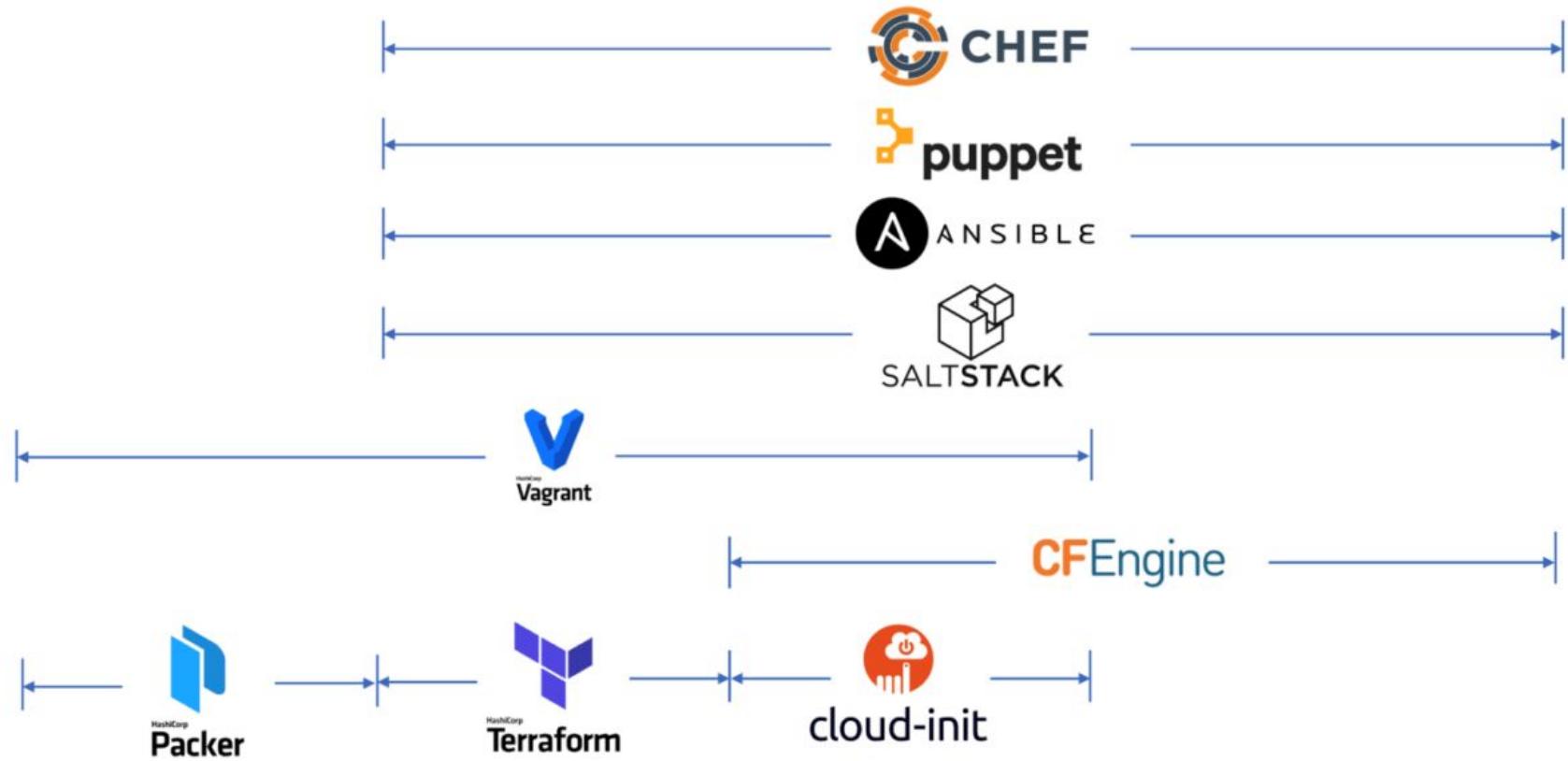


OTHER REGION



Infrastructure as Code





Infrastructure Templating

Manage infrastructure

Install applications and one time configurations

Deploy configuration and changes post install

Infrastructure as Code

- You write and execute code to define, deploy, and update your infrastructure.
- Treat all aspects of operations as software
- A key insight of DevOps is that you can manage almost everything in code, including servers, databases, networks, log files, application configuration, documentation, automated tests, deployment processes, and so on.

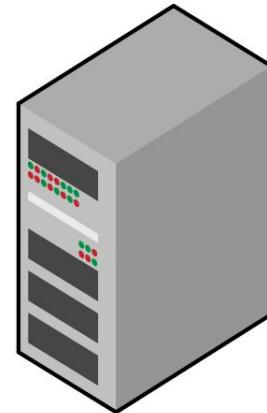
Categories of IAC tools

- Ad hoc scripts
- Configuration management (CM) tools
- Server templating tools
- Server provisioning tools

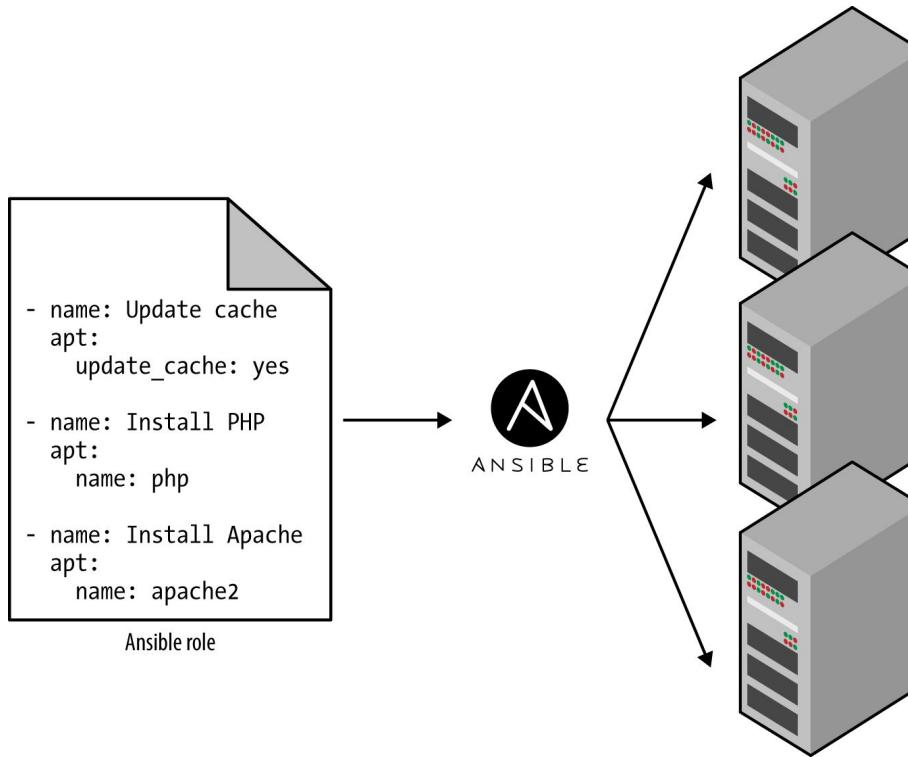
Ad Hoc Scripts

```
apt-get update  
  
apt-get install \  
  -y \  
  php \  
  apache 2  
  
git clone \  
  github.com/foo/bar \  
  /var/www/html/app  
  
service apache2 start
```

Ad hoc script



CM Tools



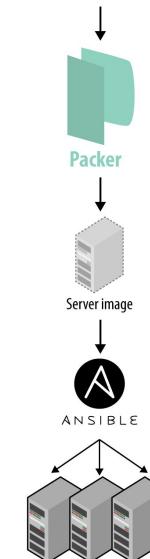
Server Templating Tools

Server templating tools such as Docker, Packer, and Vagrant.

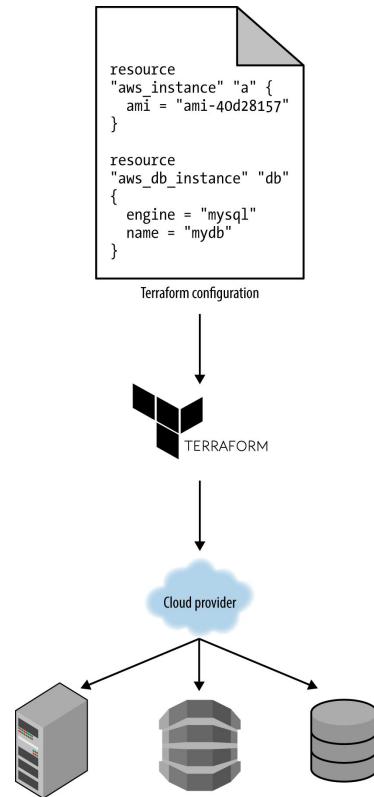
Create an image of a server that captures a fully self-contained “snapshot” of the operating system, the software, the files, and all other relevant details.

```
"provisioners": [{  
  "type": "shell",  
  "inline": [  
    "apt-get update",  
    "apt-get install  
    -y php",  
    "apt-get install  
    -y apache2",  
  ]  
}]]
```

Packer Template



Server Provisioning Tools



Benefits of IAC

- Self-service
- Speed and safety
- Documentation
- Version control
- Validation
- Reuse
- Happiness

Ansible

Ansible is an open source automation platform. It is a simple automation language that can perfectly describe an IT application infrastructure in Ansible Playbooks.

It is also an automation engine that runs Ansible Playbooks.

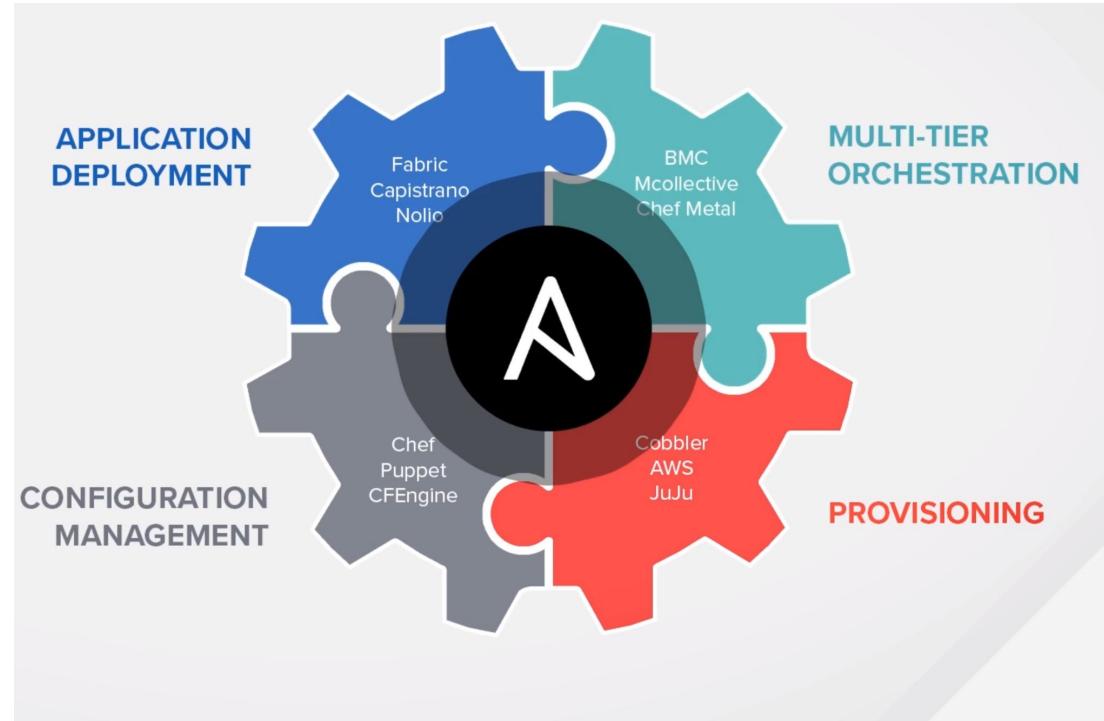


A N S I B L E

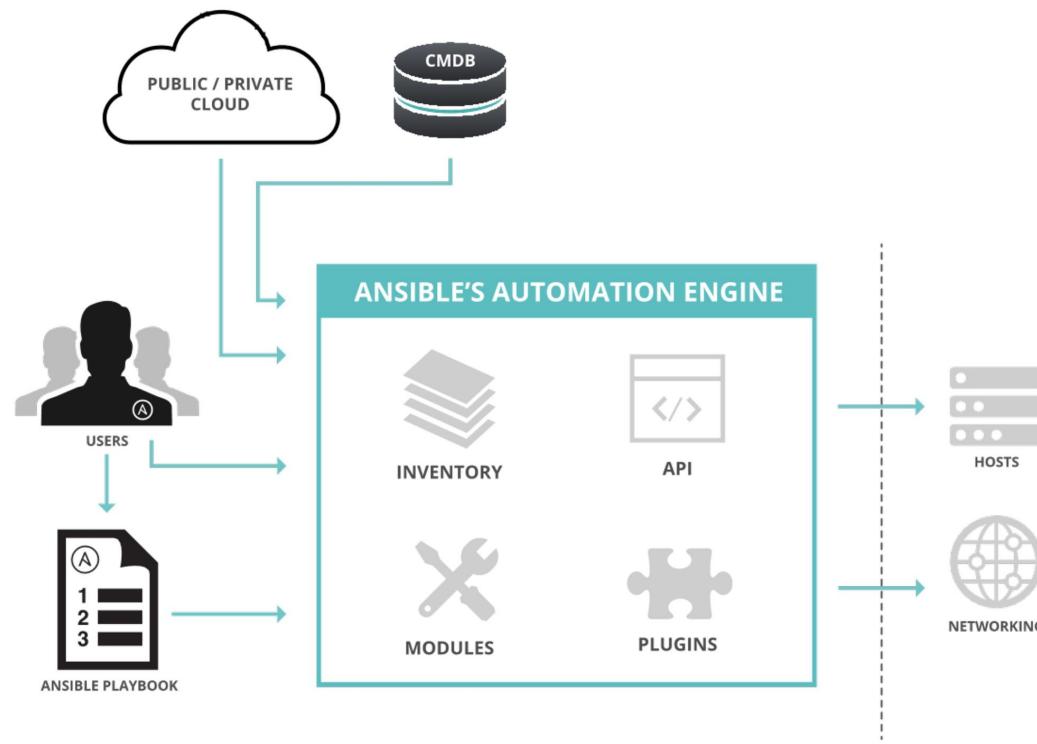
Ansible Use Case

- Configuration Management
- Security and Compliance
- Application Deployment
- Orchestration
- Continuous Delivery
- Provisioning

Ansible

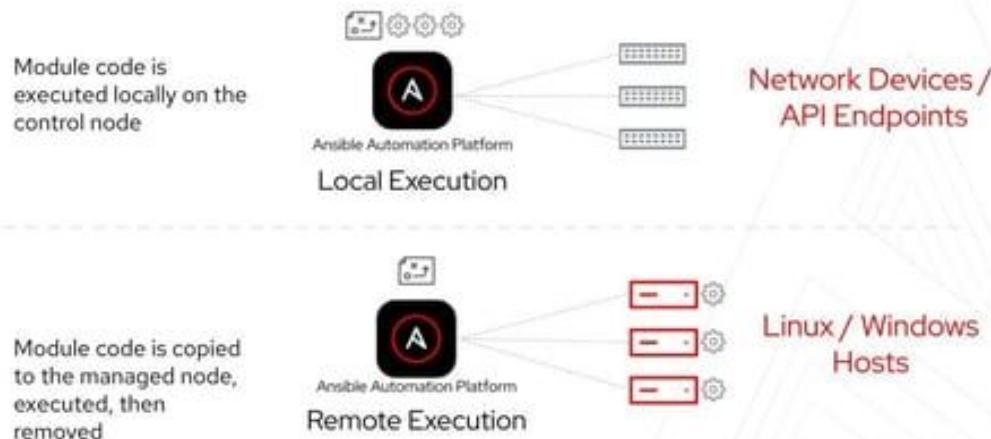


Arsitektur Ansible



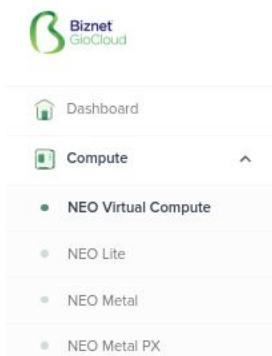
Ansible Workflow

Network Automation compared to servers



Demo

Biznet NVC



QUICK CREATE

Server Storage Snapshot & Image Network Router Public IP Key Pair Security Group

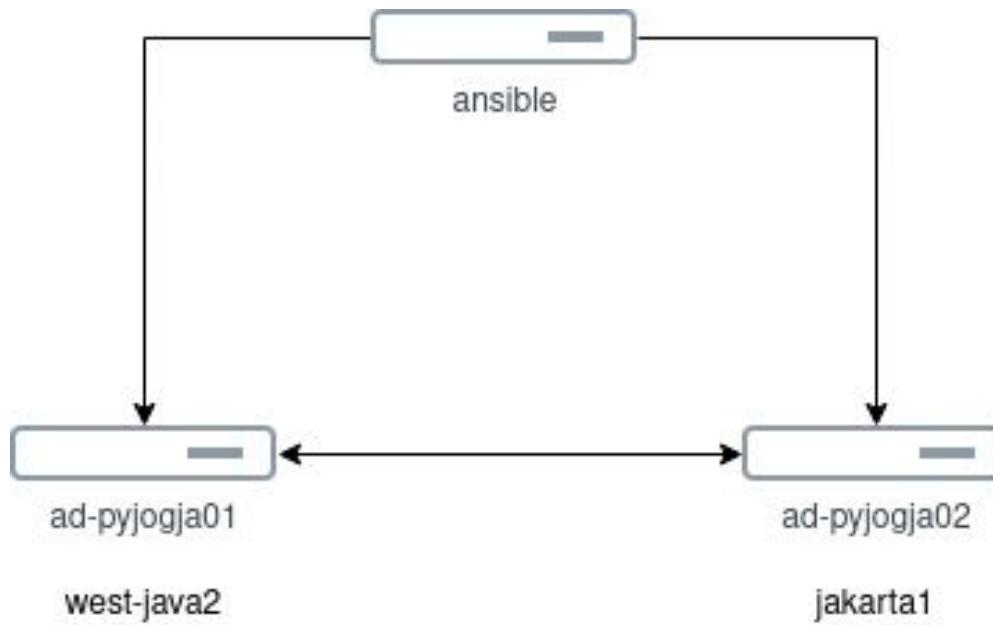
Compute > Server

Server

CREATE NEW

Name	Flavor	Status	Public IP	Region	Created Date	Next Due Date
ad-vm01	SS2.2	Active	103.93.56.250	Jakarta 2		

Demo



Terima kasih
