Chef Advantages

- It has agent.
- Only one connection

- Pull Mechanism
- Pure Idempotent

Dis-Advantages:

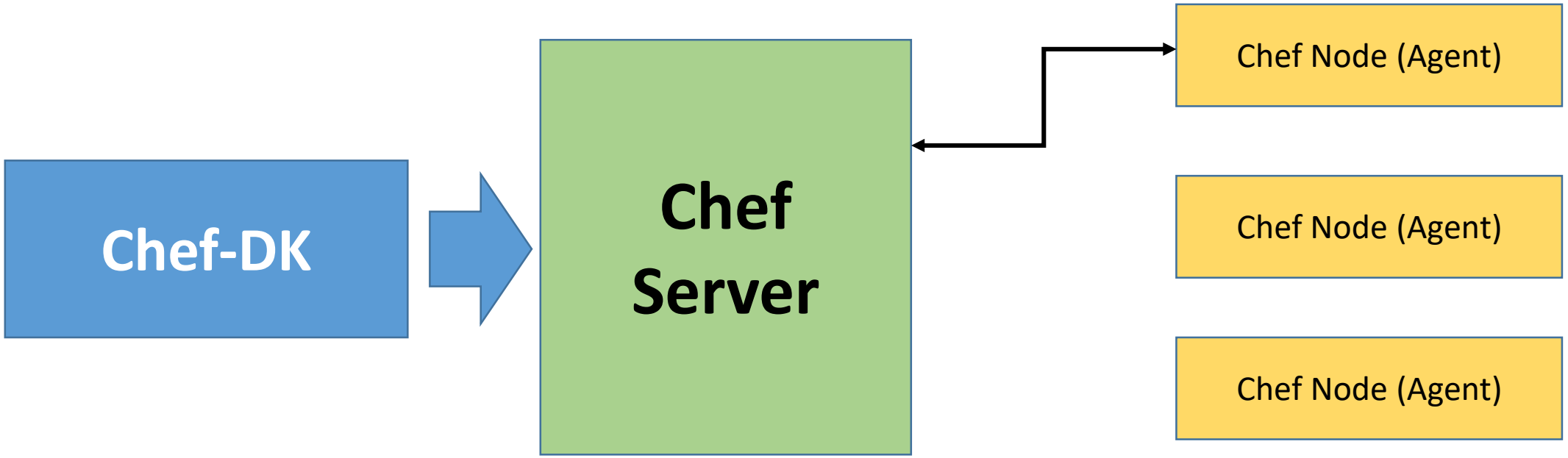
- Having agent (Consume Resources)
  (To overcome this we will not use chef as service,
  But we will use crontab to run Chef)

Ansible Dis-Advantages

- SSH
- It uses multiple ssh connection
- What if SSH is broken ????

- Push Configuration (One time setups)
- Not pure Idempotent

Chef Architecture



Node Architecture

- To start using chef you should have one organization.
- Every organization is going to have multiple environments.
- You can put a node inside a particular environment.
- In every organization there is a default group which created and it is **'_default'**

➢ You cannot add a node neither in multiple environments nor in multiple organizations.

Install Chef-Server

- **Install chef server**

```
# yum install https://packages.chef.io/files/stable/chef-server/12.17.33/el/7/chef-server-core-12.17.33-1.el7.x86_64.rpm -y
# chef-server-ctl reconfigure
```

- **Create User**

```
# chef-server-ctl user-create admin Admin User 'admin@student.com' 'admin' --filename /opt/admin-chef.pem
```

- **Create Organization**

```
# chef-server-ctl org-create student 'Student Project' --association_user admin  --filename /opt/student-org.pem
```

- **Install Web Interface**

```
# chef-server-ctl install chef-manage
# chef-server-ctl reconfigure
# chef-manage-ctl reconfigure
```

Install Chef-Client

- You can run the following commands from Chef-DK

```
# knife bootstrap -i ../devops.pem ec2-user@chefnode1 --sudo -N chefnode1
```