### **DevOps FAQs**

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- \* What is DevOps?
- \* diff b/w Agile and Devops?

### Linux:

- \* ssh connection b/w two servers
- \* Hard Link and soft Link
- \* grep, sed (stream editor), awk (field processor)
- \* file permissions, compression...
- \* head, tail, kill, pkill ....

### **SVN:**

- \* Trunk, branch, tags
- \* code merging,
- \* how to resolve conflicts

### GIT:

- \* Master branch
- \* git clone and git fetch
- \* git reset (to unstage)

- \* git checkout
  - 1) to revert changes
  - 2) to switch branches
- \* git stash ---> temp. memory area
  - > git pop <stashid>
  - > git apply <stashid>
- \* diff b/w git merge & git rebase
  - > merge --> can add the code
  - > rebase --> move the code and commit history
- \* git pull
  - > to get others code changes
- \* how to delete remote branch
  - > git push origin --delete <Branch>
- \* how to delete remote tags
  - > git push origin --delete <Tag Name>

```
* set set key for git repository
     > ssh-keyge
     > copy public key --> add "deploy key" in gitHub
      > # git remote set-url origin
           git@github.com:sathyadevops/myrepo.git
    .git direcotry
      > git init
      > hooks (pre-commit changes,
               post-update changes)
      > HEAD
ANT / MVN:
  * Need: compile, package, test, deploy, copy files
  * build.xml
     > project , default target
     > targets , depends
  * pom.xml
     > targets,
```

> dependency

- > plugins
- > test server url
- > nexus url
- > Group id , Artifact ID , Snapshot
- \* maven life cycle phases
  - > mvn clean ---> to clear local files
  - > mvn compile ---> to compile
  - > mvn test
  - > mvn pakcage ---> to prepare package
  - > mvn install ---> to install a file to local repo.
  - > mvn deploy ---> to deploy a file to remote serv/ repo.

### **NEXUS:**

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- \* Nexus (Global repo) ---> Artifact repo. manager
- \* group id , artifact id , snapshots (version)

sathya: myproj: 1.0

sathya: myproj: 2.0

```
Jenkins:
  * what is CICD?
  * Build pipe line ---> compile ---> package ---> deploy
  * Poll SCM
  * Build perodically
  * how to schedule jobs?
  * how to run parallel builds
  * how to configure Jenkins Master and Slave
  * how to add new plugins?
  * how to add new users?
  * how to set email notifications?
Docker:
  * diff b/w Virtual machine and Container?
  * docker image & container
  * docker swarm (cluster)
  * docker compose
  * dockerfile (Build Script)
  * diff. commands in docker file (ADD, COPY, RUN, CMD...)
```

## **Ansible:** \* adv. of Ansible > agent less > push > yaml > simple .... \* modules (yum, apt, shell, raw, service, ping, ...) \* playbooks \* roles \* Ad-Hoc command \* variables (vars) > static data \* vars\_prompt > dynamic data \* loops (with\_items) \* Handlers > services \* Host override \* hosts inventory (all node ips)

# **Puppet:** \* Puppet master and Agent configuration (Handshake) \* puppet port: 8140 \* manifests \* resources >package > exec > service > file > user > group > hosts.... \* class & inheritance \* modules & diff. types of modules 1) forge modules

2) user defined modules

\* resource chain

\* node definition

\* templates

# Chef: ---- \* Server, Client, Workstation (DK) \* wht is bootstrap? \* resources > apt-package > package > yum-package > service > host...

- \* recipe
- \* cookbooks
- \* Roles (a group of recipes)
- \* Environments (a logical group of nodes)
- \* Data Bags (a container can store data)
- \* knife ( a command line utility)
- \* run\_list (a queue of recipes and roles)

# Nagis: \* Nagios server & Agent \* NRPE & Nagios core \* server monitoring nagios.cfg \* email alerts ----> contacts.cfg Cloud: (AWS) \* Ec2 Instance, \* Elastic IPs (static ips) \* How to provide security for EC2 Instnaces > sercurity group (custom: 192.168.12.34) \* VPC (Virtual Private Cloud) \* S3 buckets

\* RDS (Data base)

\* Bit Bucket

\* ELB (Elastic Load Balancer)

\* Cloud watch (monitor)