DevOps -Azure 2024

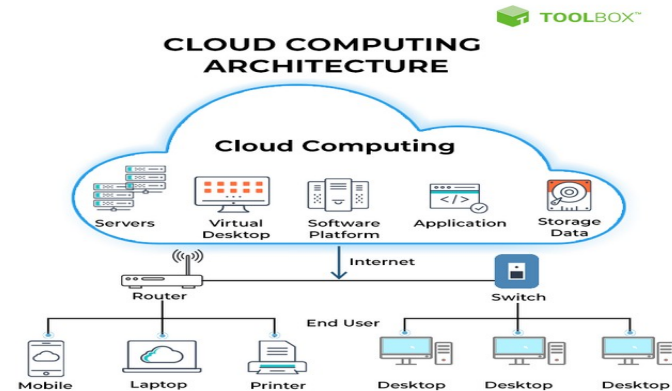Presented by Ranjitha

Agenda

- **Devops**

- **Datacenter vs cloud**

- **Linux**

- **Shell scripting**

- **Git**

Devops

- *Devops is a software development and deployment process.*
- *It combines development and operations team.*
- *Allows a single team to handle entire application lifecycle.*

Data center vs Cloud

Data center	cloud
• Physical resource • Maintance high • Performance low • Required experienced developers to operate	• Virtual resource • Maintance low • Performance high • Easy to operate

Linux

- *free,open source operating system.*

- *more secure than other operating system.*

- *Various linux distributions are available like ubuntu,debian,fedora etc.*

Basic Linux commands

- *Linux directory commands*

    Pwd,mkdir,rmdir,ls,cd

- *Linux file commands*

    Touch,cat,rm

- *Process management command*

     Ps,top,kill

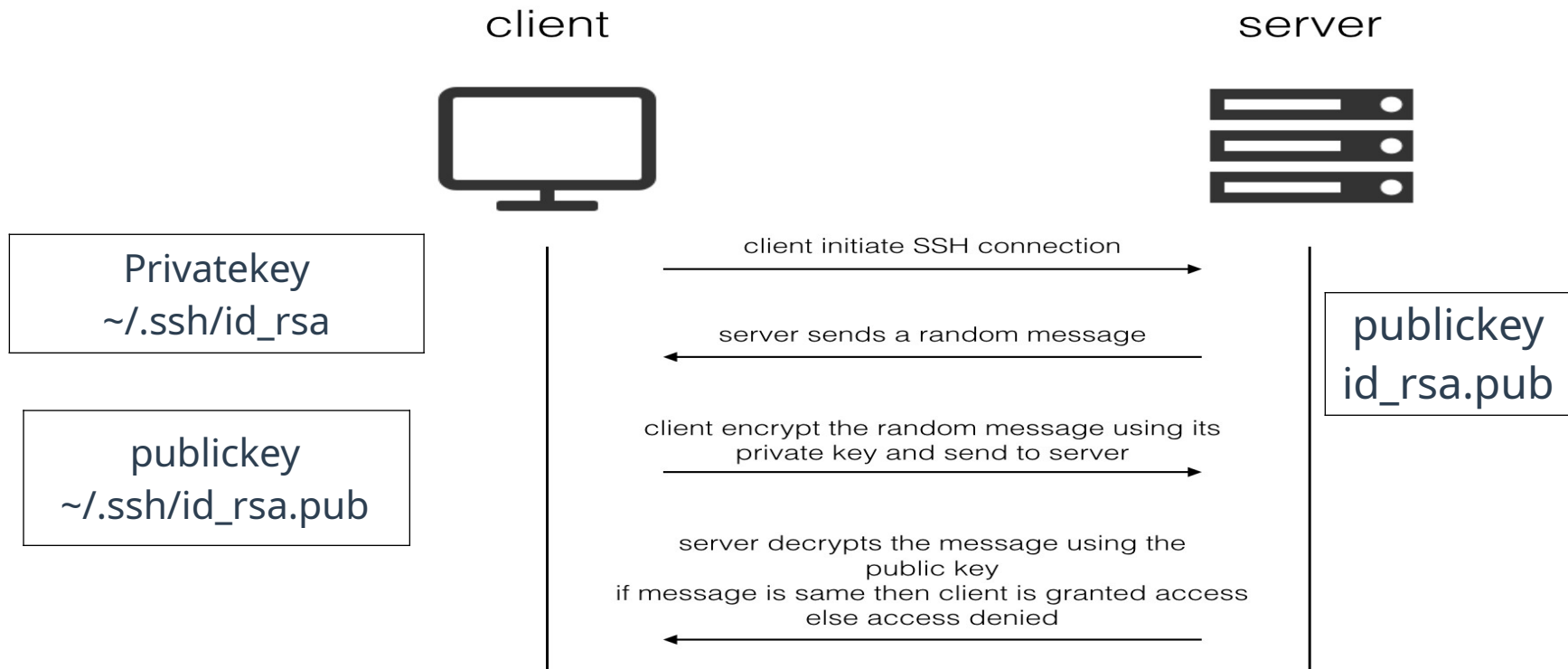- *Memory usage command*

     df,du,free

Secure shell

- *SSH that access by a remote system.*
- *It is way of communication between client and server through internet with secure.*

   There are two types of authentication.

- *Keytype authentication*

- *Password type authentication*
  Private key
  Public key

SSH KEY generation

client   server

Privatekey
~/.ssh/id_rsa

publickey
~/.ssh/id_rsa.pub

publickey
id_rsa.pub

client initiate SSH connection

server sends a random message

client encrypt the random message using its
private key and send to server

server decrypts the message using the
public key
if message is same then client is granted access
else access denied

Shell scripting

- *scripting used in software industries.*
- *text file with list of commands to perform certain task.*
- *helpful to automative the tasks,helps to saving time and reduce error.*

Commands used in shell script

- *vim filename .sh*
- *#!/bin/bash*
- *Chmod +x filename*
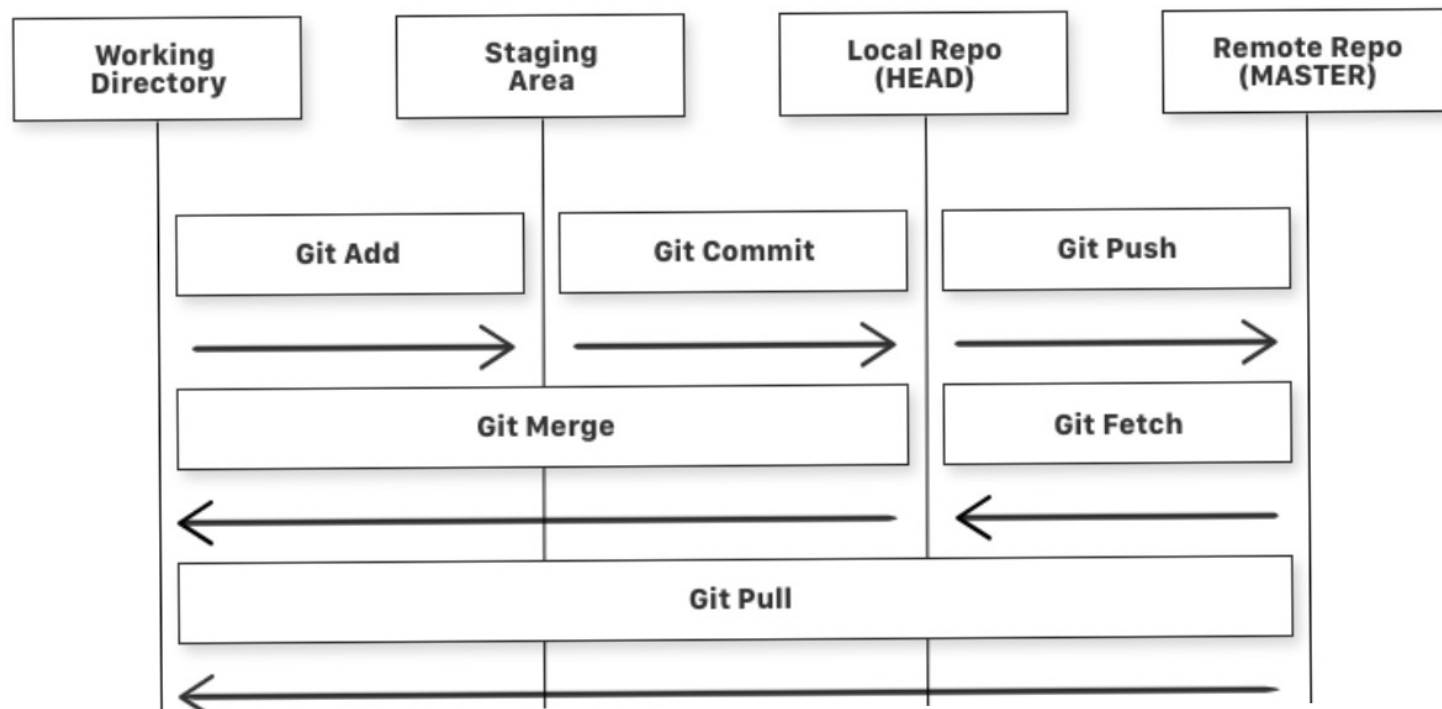- *./filename.sh*
- *:wq!*
- *:q!*

GIT-Global Information Tracker

- *version controll system .*
- *free and open source software .*
- *command line tool .*

- *Git hub is remote server.*

Some basic GIT commands

- *Git init*

- *Git add .*

- *Git commit -m "message"*

- *Git push*

- *Git pull*

- *Git branch*

- *Git cherrypick*

GIT COMMANDS WORKFLOW

Thank you