COSA

# **192.168.1.25 - /ITIM/ansible/**

[**http://192.168.1.25/ITIM/ansible/installapache2.yml**](http://192.168.1.25/ITIM/ansible/installapache2.yml)

---

- name: Install apache2 on Debian

hosts: webservers

become: yes

tasks:

- name: Update apt cache

ansible.builtin.apt:

update\_cache: yes

- name: Install apache2

ansible.builtin.apt:

name: apache2

state: present

- name: Ensure apache2 is running

ansible.builtin.service:

name: apache2

state: started

enabled: yes

[**http://192.168.1.25/ITIM/ansible/inventory.ini**](http://192.168.1.25/ITIM/ansible/inventory.ini)

[webservers]

managed\_node ansible\_host=192.168.100.101 ansible\_user=star

[**http://192.168.1.25/ITIM/ansible/utf\_error.txt**](http://192.168.1.25/ITIM/ansible/utf_error.txt)

sudo nano /etc/default/locale

LANG=" .UTF-8"

LC\_ALL=" .UTF-8"

sudo locale-gen en\_In.UTF-8

sudo update-locale

Reboot

Ansible-playbook -i inventory.ini instllapache2.yml

ansible

[**http://192.168.1.25/ITIM/Docker\_DockerSwarm.txt**](http://192.168.1.25/ITIM/Docker_DockerSwarm.txt)

What is Docker?

Docker is an open platform for developing, shipping and running applications.

Docker enables you to separate your applications from your infra so you can deliver software quickly.

With docker, you can manage your infra in the same way as you manage your applications.

By taking advantage of Docker's methodologies for shipping, testing and deploying code quickly, you can significantly reduce the delay between writing code and running it in production.

Docker Platform

- Docker provides the abilitiy to package and run an application in a loosely isolated environment called a container.

- The isolation and security allows you to run many containers simultaneously on a given host.

- Containers are lightweight and contain everything needed to run the application, so you don't need to rely on what is currently installed on the host.

- You can easily share containers while you work, and be sure that everyone you share with gets the same container that works in the same way.

Docker provides tooling and a platform to manage the lifecycle of your contianers.

- Develop your application and its supporting components using containers.

- The container becomes the unit for distributing and testing your application.

- When you're ready, deploy your application into your production environment, as a container or an orchestrated service.

- This works the same whether your production environment is local data center, a cloud provider or hybrid of two.

Docker Swarm

- Docker Swarm is a container orchestration tool, meaning that it allows the user to manage multiple containers deployed across multiple host machines.

- One of the key benifits associated with the operation of a docker swarm is the high level of availability offered for applications.

- Docker Swarm is an open-source container orchestration platform built and maintained by Docker. Under the hood, Docker Swarm converts multiple Docker instance into a single virtual host. A Docker Swarm cluster generally contains three items.

Nodes

Services and Tasks

Load Balancers

Nodes are individual instances of the Docker Engine that control your cluster and manage the containers used to run your services and tasks.

Docker Swarm cluster also includes load balancing route requests across nodes.

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[**http://192.168.1.25/ITIM/docker\_setup.txt**](http://192.168.1.25/ITIM/docker_setup.txt)

echo "Let's Build Docker Image"

sleep 15

docker build -t acharyaditiss/dhadkan .

docker login -u acharyaditiss -p $password

docker push acharyaditiss/dhadkan

sleep 60

ssh admin@172.31.36.107 "docker ps -a | grep 'mycontainer' && docker stop 'mycontainer' && docker rm 'mycontainer'"

ssh admin@172.31.36.107 "docker pull acharyaditiss/dhadkan:latest && docker run --name 'mycontainer' -d -p 80:80 acharyaditiss/dhadkan"

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[**http://192.168.1.25/ITIM/git.txt**](http://192.168.1.25/ITIM/git.txt)

mkdir project

cd project

ssh-keygen

public key -> copy -> Github -> settings- > deploy key -> ssh => write permission tick....

GIT CONFIG------

=================

git init Initialization

git config user.email "EMAIL" to config user email

git config user.name "username" to config user name

git remote add origin "SSH" to add shortname for remote repo

#IF YOU BY MISTAKE ADD THE FALSE ORIGIN"

############### git remote remove origin ((IF you want to remove the already added origin) ########

echo "Hello" | tee index.html

git status To know the status

git add . to add the files into the staging area

git commit -m "MESSAGE" to commit the changes.

git push origin master push it to remote repo.

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[**http://192.168.1.25/ITIM/jenkins.txt**](http://192.168.1.25/ITIM/jenkins.txt)

#!/bin/bash

sudo apt update

sudo apt upgrade -y

sudo apt install fontconfig git default-jre -y

sudo wget -O /usr/share/keyrings/jenkins-keyring.asc \

https://pkg.jenkins.io/debian-stable/jenkins.io-2023.key

echo "deb [signed-by=/usr/share/keyrings/jenkins-keyring.asc]" \

https://pkg.jenkins.io/debian-stable binary/ | sudo tee \

/etc/apt/sources.list.d/jenkins.list > /dev/null

sudo apt-get update

sudo apt-get install jenkins -y

systemctl is-active jenkins

[**http://192.168.1.25/ITIM/Syllabus\_Covered.txt**](http://192.168.1.25/ITIM/Syllabus_Covered.txt)

Session - 8

Session - 10

Session - 19 [EC2]

Session - 9 [Task Assigned - TrueNAS]

**192.168.1.25 - /ITIM/terraform/**

<http://192.168.1.25/ITIM/terraform/main.tf.txt>

provider "aws" {

region = var.region

}

resource "aws\_instance" "debian\_ec2" {

ami = var.ami\_id

instance\_type = var.instance\_type

key\_name = var.key\_name

associate\_public\_ip\_address = true

vpc\_security\_group\_ids = [aws\_security\_group.allow\_ssh.id]

tags = {

Name = "Debian-Terraform-EC2"

}

}

resource "aws\_security\_group" "allow\_ssh" {

name = "allow\_ssh"

description = "Allow SSH inbound traffic"

ingress {

from\_port = 22

to\_port = 22

protocol = "tcp"

cidr\_blocks = ["0.0.0.0/0"] # Use your IP/CIDR for better security

}

egress {

from\_port = 0

to\_port = 0

protocol = "-1"

cidr\_blocks = ["0.0.0.0/0"]

}

}

<http://192.168.1.25/ITIM/terraform/output.tf.txt>

# output.tf

output "instance\_ip" {

value = aws\_instance.debian\_ec2.public\_ip

description = "The public IP address of the instance"

}

output "instance\_id" {

value = aws\_instance.debian\_ec2.id

description = "The ID of the instance"

}

[**ITIM/TERRAFORM/TERRAFORM.SH**](http://terraform.sh)

#!/bin/bash

sudo apt install wget -y

sudo apt-get update && sudo apt-get install -y wget gnupg software-properties-common

wget -O- https://apt.releases.hashicorp.com/gpg | \

gpg --dearmor | \

sudo tee /usr/share/keyrings/hashicorp-archive-keyring.gpg > /dev/null

gpg --no-default-keyring \

--keyring /usr/share/keyrings/hashicorp-archive-keyring.gpg \

--fingerprint

echo "deb [signed-by=/usr/share/keyrings/hashicorp-archive-keyring.gpg] \

https://apt.releases.hashicorp.com $(lsb\_release -cs) main" | \

sudo tee /etc/apt/sources.list.d/hashicorp.list

sudo apt update

sudo apt-get install terraform -y

sudo apt install -y awscli

aws --version

<http://192.168.1.25/ITIM/terraform/Terraform_README.txt>

execute terraform.sh

AWS ACCESS\_KEY GENERATE

aws configure

key - ID

key - secret

Default Region - us-east-1

output - json

mkdir terra & cd terra

create these files.....

main.tf

variables.tf

outputs.tf

Go to EC2 generate keypair copy the keypair. ..!

copy to your Debian machine. ......

~/.ssh/demo

chmod 400 demo

terraform init

terraform plan

terraform apply

<http://192.168.1.25/ITIM/terraform/variables.tf.txt>

variable "region" {

default = "us-east-1"

}

variable "ami\_id" {

description = "Debian 12 AMI ID"

default = "ami-0779caf41f9ba54f0" # Debian 12 (Bookworm) in us-east-1

}

variable "instance\_type" {

default = "t2.micro"

}

variable "key\_name" {

description = "Enter a key pair"

}

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[**http://192.168.1.25/ITIM/DEvops\_tools\_imp.txt**](http://192.168.1.25/ITIM/DEvops_tools_imp.txt)

Slack

Jenkins

Docker

github

kubernetes

LXC

Ansible

Trello

SAP

Sharepoint

Openstack

Terraform

CHEF

Splunk

Nagios

Tenable

bmc

VERACODE

Selanium

Cucumber

JUnit

Maven

UpGuard

ELK

Servicenow

ITIM

<http://192.168.1.25/COSA/Configure%20These%20Group%20Policies.txt>

Configure These Group Policies

| # | Category | Group Policy Setting | Configuration |

|----|-----------|------------------------|----------------|

| 1 | Password Policy | Minimum password length | 12 characters |

| 2 | Password Policy | Enforce password history | 24 passwords remembered |

| 3 | Password Policy | Maximum password age | 30 days |

| 4 | Account Lockout | Lockout threshold | 5 invalid attempts |

| 5 | Account Lockout | Lockout duration | 15 minutes |

| 6 | Account Lockout | Reset account lockout counter | After 15 minutes |

| 7 | Security Options | Do not display last username | Enabled |

| 8 | Windows Update | Configure Automatic Updates | Notify for download |

| 9 | Start Menu | Remove Run from Start Menu | Enabled |

| 10 | Start Menu | Remove All Programs list from Start Menu | Enabled |

| 11 | Control Panel | Prohibit access to Control Panel | Enabled |

| 12 | System | Prevent access to command prompt | Enabled |

| 13 | System | Disable Task Manager | Enabled |

| 14 | Administrative Templates | Hide specified drives | Hide C: drive |

| 15 | Internet Explorer | Disable changing homepage settings | Enabled |

| 16 | Windows Defender | Turn off real-time protection | Enabled (for tinku only) |

| 17 | Desktop | Hide all icons on desktop | Enabled |

| 18 | Power Management | Require password on wakeup | Enabled |

<http://192.168.1.25/COSA/DHCP%20Powershell.txt>

# Step 1: Install DHCP Server role

Install-WindowsFeature -Name DHCP -IncludeManagementTools

# Step 2: Authorize DHCP Server (if domain joined)

Add-DhcpServerInDC -DnsName "YourServerName.YourDomain.com" -IPAddress "YourServerIPAddress"

# Step 3: Create DHCP Scope

Add-DhcpServerv4Scope -Name "MyScope" -StartRange 192.168.100.51 -EndRange 192.168.100.75 -SubnetMask 255.255.255.0 -State Active

# Step 4: Set Default Gateway

Set-DhcpServerv4OptionValue -ScopeId 192.168.100.0 -Router 192.168.100.1

# Step 5: Set DNS Servers and Domain Name

Set-DhcpServerv4OptionValue -ScopeId 192.168.100.0 -DnsServer 192.168.100.100,192.168.100.200 -DnsDomain "yourdomain.local"

# Step 6: Verify Configuration

Get-DhcpServerv4Scope

Get-DhcpServerv4OptionValue -ScopeId 192.168.100.0

<http://192.168.1.25/COSA/FILES/Hello%20to%20Script.txt>

1. Write a script to find the number of unique elements in list and print the list.

2. Write a script to reverse the list elements

3. Write a script to find sum of numbers in list

4. Write a script to find the largest and smallest number in the list

5. Write a script to print all even numbers in a list.

6. Write a script to print all odd numbers in a list.

7. Write a script to remove common elements from two list in

8. Write a script to print multiplication table of a given number

9. Count the total number of digits in a number

10. Use else block to display a message â€œDoneâ€ after successful execution of for loop

11. Write a script to display all prime numbers within a range

12. Display Fibonacci series up to 10 terms

13. Reverse a given integer number

14. Write a script to find those numbers which are divisible by 7 and multiple of 5, between 100 and 1000 (both included).

15. Write a script to convert temperatures to and from celsius, fahrenheit

16. Write a script that prints all the numbers from 0 to 6 except 3 and 6.

Note : Use 'continue' statement.

17. Write a script to display "Hello" if a number entered by user is a multiple of five ,

otherwise print "Bye".

18. Write a script to check whether an years is leap year or not

<http://192.168.1.25/COSA/FILES/Let's%20Begin.txt>

1. Find the html tags that are more than 4 letters.

Html tags can be found inside <> characters and closing html tags can be found in the same format after / character. </>

2. Loop through the list and apply regex to each element so that only items ending with semicolon (;) are matched.

3. Find the words with exactly 8 letters

4. Write a script to identify Mobile number from the text

5. Write a script to identify unique MAC addresses from the file.

6. Write a script to identify unique IP addresses from Webserver access log

7. Write a script to identify the unique attacks from Snort logs

8. Write a script to identify the packets of ICMP from packet tracer file.

9. Write a script to take input from user for pattern and string and give the output back to the user.

10. Identify all the unique special characters and count them which are used in the files.

<https://docs.google.com/document/d/1JgeoDZ7ElJtzistPhRLATb23wT9qQrEtwMdm50afEB4/edit?tab=t.ugrsl42gf3su>

VirtualBox

Internal Network - 192.168.100.0/25

Machine1 -> Main Server (PARAM) - 6GB RAM

Windows Server 2022

Server Name - PARAM

Server IP - 192.168.100.100

Disk - 2 ( 50GB each)

Disk -1 Partitions C & D

Inside D -> Create separate folders for the users.

AD DS (Domain - cdac.local)

Users

u1

u2

u3

DHCP

MEMBER\_SERVER - 1 (win10)

WDS (Win10)

FSRM

Apply limit of 200MB Data storage on u1,u2,u3

Don't allow u1 and u2 to copy images in their folders

WSB

Setup the scheduled backup everyday morning and evening 7:00 (Dedicated Disk-2)

IIS

Display "Welcome to CDAC"

setup the FTP server on ftp.cdac.local

On the D: Drive apply the Data Deduplication

\*\*\*\*\*\* Create a shared folder "PUB\_SERVER" on D:

Machine2 -> Member Server (Shavak) - 4GB RAM

Windows Server 2022

Server Name - Shavak

Server IP - 192.168.100.101

Join the server to the domain ->

\*\*\*\*\* And make it an additional Domain Controller

\*\*\*\*\* Create a shared Folder "PUB\_MEMBER" on D:

\*\*\*\*\* Make sure that both the folders are accessible over network using the same path

[ \\PARAM\PUBLIC ]

Machine3 -> Win10 Machine (Client) - 2 GB RAM

Win 10

Computer Name - Client

Domain - cdac.local

IP - Automatic DHCP

Login u1

Don't Login the u2 and u3

\*\*\*\*

Now turn off the Server (PARAM)

and u2 and u3 should be able to Login from

Additional Domain controller

Try to access the website on cdac.local

Machine 4 -> Windows Server (Exchange Server)

Win 2022

Computer Name - MailServer

IP - 192.168.100.102

It should work on the domain name -> mail.cdac.local (from all the machines)

VPN

Policies

<http://192.168.1.25/COSA/Linux_DNS/First_Task.txt>

Debian Server

192.168. 50+xx .50

yourname.com

"Your Intro on the index.html"

Win11 Client

visit

yourname.com

It should show your intro there.

<http://192.168.1.25/COSA/Linux_DNS/prerequisite.txt>

DNS server - Linux

2 Machines

1. Server - Debian

Internal -> 192.168.25.100/24

Putty -> Host Only ->

Internet -> NAT Network

SSH

apache2

[apt update, ssh install, interfaces file ]

1. Client - win 11

Internal

Static IP

Browse the website of Server through IP

<http://192.168.1.25/COSA/NIS_SETUP.txt>

#NIS (Network Information Service) Server

#Server (rpcbind - 111)

sudo apt update

sudo apt install nis rpcbind -y

sudo ypdomainname ditiss

----Open /etc/yp.conf ---

domain ditiss server localhost

----create file ---

nano /etc/defaultdomain

ditiss

--configure NIS server ---

sudo nano /etc/ypserv.securenets

255.255.255.0 192.168.100.0

---- enable and restart rpcbind and ypserv ------

sudo systemctl enable rpcbind ypserv

sudo systemctl start rpcbind ypserv

----build NIS Map---------

sudo /usr/lib/yp/ypinit -m

in NISDomain name => ditiss

NIS server hostnames -> hosts IP and names

-----verify status

sudo systemctl status ypserv

rpcinfo -p

ypcat passwd

==================================================================

==================================================================

======================CLIENT SIDE=================================

==================================================================

==================================================================

/etc/hosts -> Server entry

systemctl restart networking

ping hostname\_server

sudo apt update

sudo apt install nis rpcbind -y

sudo ypdomainname ditiss

sudo nano /etc/defaultdomain

"ditiss"

sudo nano /etc/yp.con

domain ditiss server $SERVER\_IP

sudo nano /etc/nsswitch.conf

passwd: compat systemd nis

group: compat systemd nis

shadow: compat nis

sudo systemctl enable rpcbind systemctl

sudo systemctl start rpcbind systemctl

systemctl status rpcbind

ypwhich

ypcat passwd

TEST Login

su - USERNAME

server -> sudo adduser username

cd /var/yp -> sudo make

in case if you want to create a home directory for client you can do that either manually or you can setup the NFS to mount the home directory of user.

<http://192.168.1.25/COSA/TASK.txt>

TASK

1. Restore the machine to fresh machine.

2. you will add the group dhadkan, sholey, idiots

3. you will add members to the group

where dev,rahul, Anjali, these will be having primary group - dhadkan

gabbar, jay , veeru , kaliya -> sholey

virus, Farhan, raju -> idiots

Total -> iacsd, dev,rahul, Anjali, gabbar, jay , veeru , kaliya, virus, Farhan, raju, root

gabbar -> sudo group

**192.168.1.25 - /COSA/Tasks/**

<http://192.168.1.25/COSA/Tasks/30032025_1.txt>

30/03/2025

Network Sharing

Task - 1

Create a folder (share) -> 3rd Drive

you will create two different folders

share\_read - Everyone - Read

share\_write - Everyone - Write

To access it

Run -> \\IP

Run -> \\HOSTNAME

If you have shared something from your computer,

then you can check it from the command prompt.

'net share'

<http://192.168.1.25/COSA/Tasks/30032025_2.txt>

Task - 2

In your windows server open the disk management

and from C: shrink a new volume of 20GB

Create a partition and use it as D:

<http://192.168.1.25/COSA/Tasks/30032025_3.txt>

Task - 3

WSB

configure the Windows Server Backup

Backup should be scheduled at 1:00AM and 1:00PM Everyday.

Configure the Full Backup on dedicated disk for Backup.

<http://192.168.1.25/COSA/Tasks/30032025_4.txt>

Task - 4

================

IIS

Install and configure the IIS

on the Default Page -> Print your Name

<http://192.168.1.25/COSA/Tasks/30032025_5.txt>

Task - 5

DHCP

Setup a static ip of the server as

192.168.1xx.100

Create a scope with the range

192.168.1xx.30 - 192.168.1xx.50

Make sure client is getting the IP from the same range.

<http://192.168.1.25/COSA/Tasks/30032025_6_Linux.txt>

Task - 1

root user password reset

Task -2

install any redhat OS and run any webserver on the same.

<http://192.168.1.25/COSA/Tasks/30032025_7_DNS.txt>

DNS TASK

1. Windows Server (Static -> 172.25.100.10/16)

IIS -> GOOD NIGHT ..!!

DHCP -> 172.25.100.100 - 172.25.200.200

DNS -> 172.25.100.10

Windows client (11)

IP => DHCP, DNS

Website -> goodnight.com

-> goodmorning.com

2. Debian (Apache2)

goodmorning.com

GOOD MORNING...!!

<http://192.168.1.25/COSA/Tasks/demo.txt>

THIS IS MY DEMO FILE ON DEB2

<http://192.168.1.25/COSA/Windows%20Server%20Installation%20Task.txt>

Windows Server Installation Task

VirtualBox -> Poweroff All your Debian Machines.

Inside the VBox

Install

1. Windows Server 2025 -> 4GB Memory, 100GB HDD

Editions -> Windows Server 2025 Datacentre (Desktop Experience)

Password - Admin@123

Server

Member

2. Install windows 11.

<http://192.168.1.25/COSA/WinServer.txt>

Windows Server 2025

Datacentre Evaluation

Server Manager, Notification Centre, Local Server

1. How to set the device name or Server Name.

2. How to set the Private IP address.

2 VMs (1 as a server another as a client)

1 Server , 1 Client

SERVER Win11

8 GB 4GB

Server - 192.168.100.100/24

Network - 192.168.100.0/24

192.168.100.0 - 192.168.100.255

Windows -> Restore Point

Server Setup -> WSB (Windows Server Backup)

WSB

1. Network (task-1)

2. Hard Disk (Dedicated for Backup only)

1. 100GB (Existing)

2. So add another one with 100GB

Automatically - schedule

Manually

Run - diskmgmt.msc (Disk Management Open)

(TASK-2)

Roles - Services for others

Features - server (Feature)

WSB - feature Install

Configure the backup

TASK - 3

==========================================

Service

WebServer -> IIS

Task - 4

==========================

DHCP

Task - 5

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Compliance

[**http://192.168.1.25/Compliance\_Audit/1\_Compliance\_Audit\_Introduction.txt**](http://192.168.1.25/Compliance_Audit/1_Compliance_Audit_Introduction.txt)

Compliance Audit

There are two words

1. Compliance

2. Audit.

1. Compliance

The word Compliance is derived from the Latin word "Complere"

which means (having all parts or elements; lacking nothing)

The word complete is also derived from the same word "Complere"

Compliance consists of being amenable (happy to accept Something), being obedient(Aagnakari) to the other party, and fully meeting demands.

In a legal context, this means to obey legal orders and fully realize the rule of law

Rule of Law (The law is applied equally and fairly)

No one is above the law. (Even the king is bind to the law)

Law is KING. ..

2. Audit

- An audit involves being independent.

- Audits are impartial and intended to look at what the organisation has done and make sure that itâ€™s in line with what they said they did.

- Effectively an audit function monitors and evaluates how effectively and efficiently the business has met its own internal control policies, processes and procedures.

- It ensures that the policies, processes and procedures of the business are being followed correctly and identifies opportunities for the business to manage its risks.

- Essentially, the audit function gives the business assurance that its intentions are being followed through.

-A key part of auditâ€™s role is looking back at what the organisation has done and identifying where this may need to change in the future.

Compliance vs Audit

While compliance and audit are like two sides of the same coin, they play very different roles.

While audit may monitor what the organisation is doing and find deficiencies in a companyâ€™s policies, processes and procedures, it may not identify whether the organisation has actually complied with its legal obligations.

However, compliance will look at a policy, process and procedure from the lens of regulatory compliance. Does it meet legal obligations? Are laws being followed? Can the organisation meet its regulatory obligations?

Manufacturing Packaged Food. (ABC Pvt Ltd)

(Chips, Salted Namkeens) -> Food -> License ->

Export -> Rules & Regulations. .???

Security Audit

A security audit is a systematic evaluation of the security of a company's information system by measuring how well it conforms to an established set of criteria

1. Risk Assessment - Analysing the risks and solving them (Risk Prevention)......Technology overview, Control Policies, Identify gap area of risks.

Assess-> Identify, priorities. (System Audit. ..!!, Resources ..Server (critical)

2. Vulnerability Assessment - Business touch. weakness. prove...?? , weakness prevent. .. Security weakness review. ...

Systematic review of a security weakness in an information system/any system and give remedies accordingly.

3. Penetration Testing - test of Penetration 1 Person Detect weaknesses..

Hacker type. ..(hacking Detect), Black Box, White Box, Gray Box Testing. .!!!

Experts-> Attempt -> System Security Breach ..-> Potential Loopholes

4. Compliance Audit - review -> guidelines -> proper/improper -> security polices check inside organization

process, procedures -> Government laws -> legal or illegal...

Company Rules -> Government rules (Defined, follow)

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[**http://192.168.1.25/Compliance\_Audit/2\_Introduction\_to\_Audit.txt**](http://192.168.1.25/Compliance_Audit/2_Introduction_to_Audit.txt)

Types of Audits

Audits of Financial statements

Operational Audit (Performance Audit)

Compliance Audit

IT Security Audit Phases

1. Define the Objectives

2. Plan the Audit

3. Perform the Auditing Work

4. Report the results

5. Take necessary actions

Principles of Audit

1. Integrity

2. Fair Presentation

3. Due Professional Care

4. Confidentiality

5. Independence

6. Evidence Based Approach

7. Risk Based Approach

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[**http://192.168.1.25/Compliance\_Audit/GDPR\_Brief.txt**](http://192.168.1.25/Compliance_Audit/GDPR_Brief.txt)

GDPR (April - 2016) Was announced in 2012

DPD (Data Protection Directive - Oct 1995)

The GDPR's primary aim is to enhance individuals' control and rights over their personal data and to simplify the regulatory environment for international business.

Who does GDPR apply to?

GDPR applies to any organisation operating within the EU, as well as any organisations outside of the EU which offer goods or services to customers or businesses in the EU.

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[**http://192.168.1.25/Compliance\_Audit/LINKS\_GDPR\_PDPB.txt**](http://192.168.1.25/Compliance_Audit/LINKS_GDPR_PDPB.txt)

https://blog.privacyengine.io/article/176/destination-gdpr-how-did-we-arrive-here-0

https://eurocloud.org/news/article/a-brief-history-of-data-protection-how-did-it-all-start/

https://gdpr-info.eu/art-98-gdpr/

https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R0679

https://www.zdnet.com/article/gdpr-an-executive-guide-to-what-you-need-to-know/

https://www.meity.gov.in/writereaddata/files/Personal\_Data\_Protection\_Bill,2018.pdf

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FORENSICS

[**http://192.168.1.25/CF/kali\_sha256sum.txt**](http://192.168.1.25/CF/kali_sha256sum.txt)

aeca4f8fd7f58eda290812f538e1323d3ba1f1a34df4b203e85de4be42525bb6

sha256 - kali 2024.4

[**http://192.168.1.25/mailserver.txt**](http://192.168.1.25/mailserver.txt)

sudo apt update && sudo apt upgrade -y

sudo hostnamectl set-hostname mail.iacsd.com

edit hosts file

127.0.0.1 localhost

127.0.1.1 mail.iacsd.com mail

sudo apt install postfix dovecot-imapd dovecot-pop3d mailutils -y

sudo adduser tinku

sudo apt install

echo "Hello from Postfix" | mail -s "Test Email" tinku

su tinku

mail

sudo systemctl restart postfix dovecot

Access Mail from an Email Client (like Thunderbird)

Server Type: IMAP

Incoming Server: mail.iacsd.com, Port: 143

Outgoing Server (SMTP): mail.iacsd.com, Port: 25

Username: tinku

Password: password you set

Encryption: None (for now)

K8

[**http://192.168.1.25/k8/kubernetes\_script.txt**](http://192.168.1.25/k8/kubernetes_script.txt)

master & node

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sudo apt-get update

sudo apt-get upgrade -y

sudo apt-get install docker.io -y

sudo apt-get install -y apt-transport-https ca-certificates curl gpg

curl -fsSL https://pkgs.k8s.io/core:/stable:/v1.30/deb/Release.key | sudo gpg --dearmor -o /etc/apt/keyrings/kubernetes-apt-keyring.gpg

echo 'deb [signed-by=/etc/apt/keyrings/kubernetes-apt-keyring.gpg] https://pkgs.k8s.io/core:/stable:/v1.30/deb/ /' | sudo tee /etc/apt/sources.list.d/kubernetes.list

sudo apt-get update

sudo apt-get install -y kubelet kubeadm kubectl

sudo apt-mark hold kubelet kubeadm kubectl

-----------------sudo nano /etc/hosts ENTER ENTRIES FOR BOTH THE MACHIENS----------------------------------------------------------

==============================================================================

Now on MASTER

sudo kubeadm init --apiserver-advertise-address=$IP --pod-network-cidr=192.168.100.0/24

mkdir -p $HOME/.kube

sudo cp -i /etc/kubernetes/admin.conf $HOME/.kube/config

sudo chown $(id -u):$(id -g) $HOME/.kube/config

kubectl get nodes

Copy Join in node with using sudo

kubectl create -f https://raw.githubusercontent.com/projectcalico/calico/v3.26.1/manifests/tigera-operator.yaml

kubectl create -f https://raw.githubusercontent.com/projectcalico/calico/v3.26.1/manifests/custom-resources.yaml

watch kubectl get pods -n calico-system

CALICO / FLANNEL

After successful running

create the yaml files and run the below commands.

kubectl apply -f nginx-deployment.yaml

kubectl apply -f nginx-service.yaml

[**http://192.168.1.25/k8/nginx-deployment.yaml.txt**](http://192.168.1.25/k8/nginx-deployment.yaml.txt)

apiVersion: apps/v1

kind: Deployment

metadata:

name: nginx-deployment

labels:

app: nginx

spec:

replicas: 3

selector:

matchLabels:

app: nginx

template:

metadata:

labels:

app: nginx

spec:

containers:

- name: nginx

image: nginx:latest # Replace with your custom image if necessary

ports:

- containerPort: 80

[**http://192.168.1.25/k8/nginx-service.yaml.txt**](http://192.168.1.25/k8/nginx-service.yaml.txt)

apiVersion: v1

kind: Service

metadata:

name: nginx-service

spec:

selector:

app: nginx

ports:

- protocol: TCP

port: 80

targetPort: 80

type: LoadBalancer # Or use ClusterIP if you don't need external access