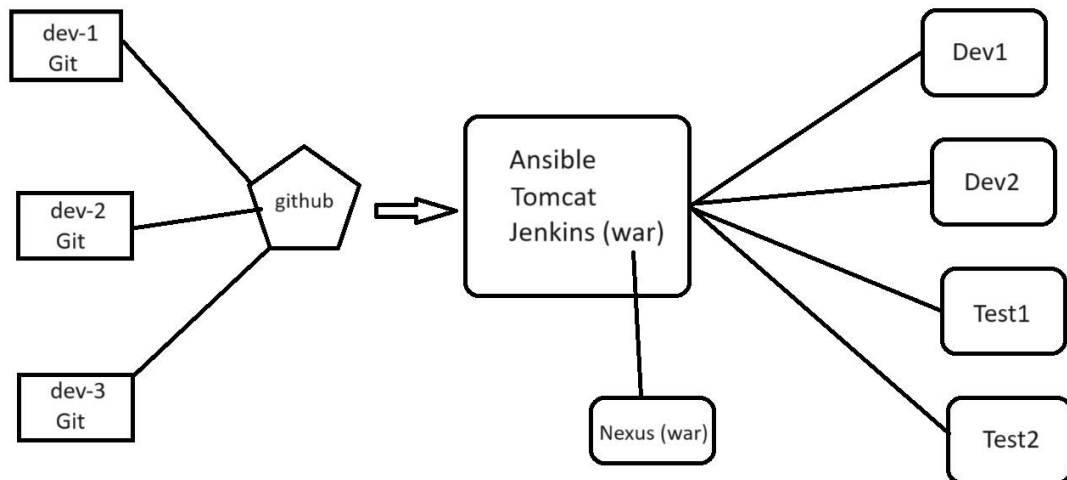


ANSIBLE - JENKINS - INTEGRATION

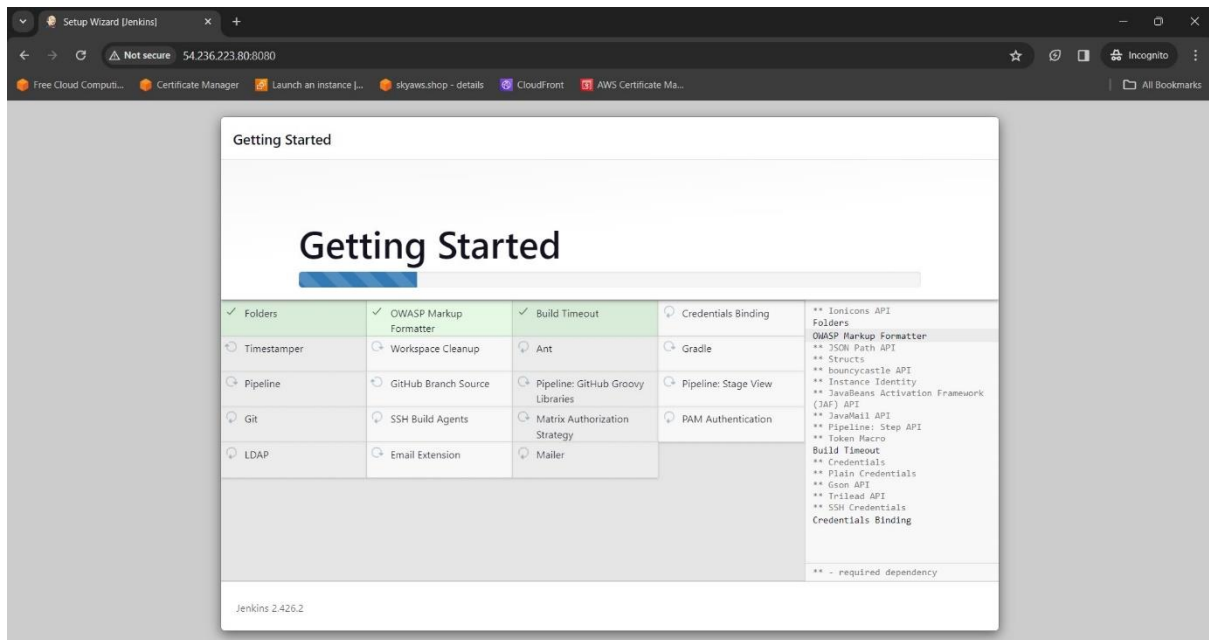


1. Create 5 servers (1 Ansible, 2 Dev, 2 Test) and One Nexus Server

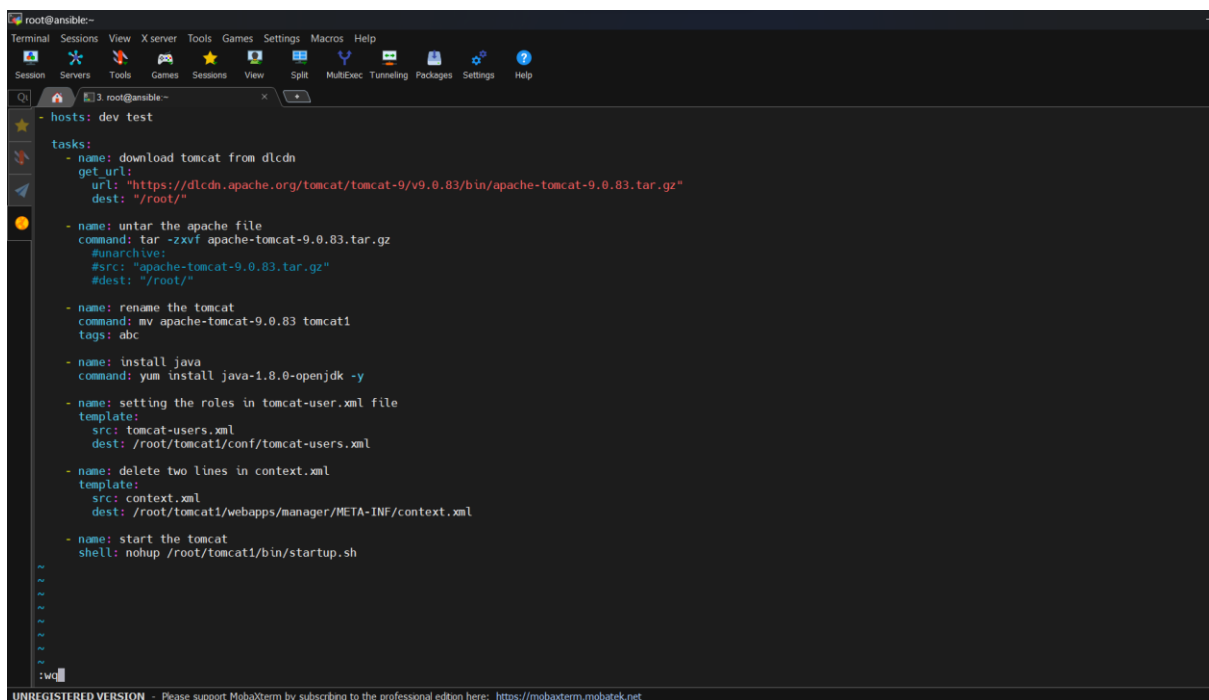
The screenshot shows the AWS Management Console with the 'Instances (7)' page selected. The table lists the following instances:

Name	Instance ID	Instance state	Instance type	Status check	Alarm status	Availability Zone	Public IPv4 DNS
Monitoring ser...	i-0b9ae7bc081b015d2	Running	t2.micro	2/2 checks passed	View alarms +	us-east-1d	ec2-67-202-23-167.co...
Master-Ansible	i-037d3d508d7d9b137	Running	t2.micro	2/2 checks passed	View alarms +	us-east-1c	ec2-54-236-223-80.co...
Node-Dev 1	i-0987c3c68362eb34a	Running	t2.micro	2/2 checks passed	View alarms +	us-east-1c	ec2-54-159-33-179.co...
Node-Dev 2	i-0ce7c40ec7423f3f	Running	t2.micro	2/2 checks passed	View alarms +	us-east-1c	ec2-34-228-24-77.com...
Node-Test 1	i-0023a6f68438dce15	Running	t2.micro	2/2 checks passed	View alarms +	us-east-1c	ec2-34-236-152-230.co...
Node-Test 2	i-00cee98cf16f162ed	Running	t2.micro	2/2 checks passed	View alarms +	us-east-1c	ec2-3-88-140-202.com...
nexus	i-0c22ef83d4ababb9c	Pending	t2.medium	-	View alarms +	us-east-1e	-

2. Configure Ansible Connection and Install Jenkins in Ansible-Master Node



3. Write a playbook for Install Tomcat on Ansible nodes (dev1, dev2 & test1, test2)



4. Install Nexus, Ansible-playbook & Deployment plugins:

- Nexus Artifact Uploader
- Ansible
- Deploy to Container

← → ↻ 🔒 Not secure 54.236.223.80:8080/manage/pluginManager/sortable

Free Cloud Comput... Certificate Manager Launch an instance [... skyaws.shop - details CloudFront AWS Certificate Ma... All Bookmarks

Jenkins

🔍 Search (CTRL+K) ⓘ

🔔 📁 🛡️ 🇮🇳 Saravana 🗑️ 🔑 log out

Dashboard > Manage Jenkins > Plugins

Plugins

🔍 deploy ⓘ

📄 Install 📄

📄 Updates


📄 Available plugins

📄 Installed plugins





⚙️ Advanced settings

📄 Download progress


Install	Name	Released
<input checked="" type="checkbox"/>	<div>Deploy to container 1.16</div> <div>Artifact Uploaders</div> <div>This plugin allows you to deploy a war to a container after a successful build. Glassfish 3.x remote deployment</div>	3 yr 1 mo ago
<input type="checkbox"/>	<div>Docker Pipeline 572.v950f58993843</div> <div>pipeline DevOps Deployment docker</div> <div>Build and use Docker containers from pipelines.</div>	4 mo 11 days ago
<input type="checkbox"/>	<div>Artifactory 4.0.0</div> <div>pipeline</div> <div>This plugin allows your build jobs to deploy artifacts and resolve dependencies to and from Artifactory, and then have them linked to the build job that created them. The plugin includes a vast collection of features, including a rich pipeline API library and release management for Maven and Gradle builds with Staging and Promotion.</div>	2 mo 4 days ago
<input type="checkbox"/>	<div>Artifact Deployer 1.3</div> <div>Artifact Uploaders</div> <div>This plugin makes it possible to deploy artifacts from workspace to output directories.</div>	



Search (CTRL+K)

Saravana

 log out

Dashboard > Manage Jenkins > Plugins

Plugins

Updates

Available plugins

Installed plugins

Advanced settings

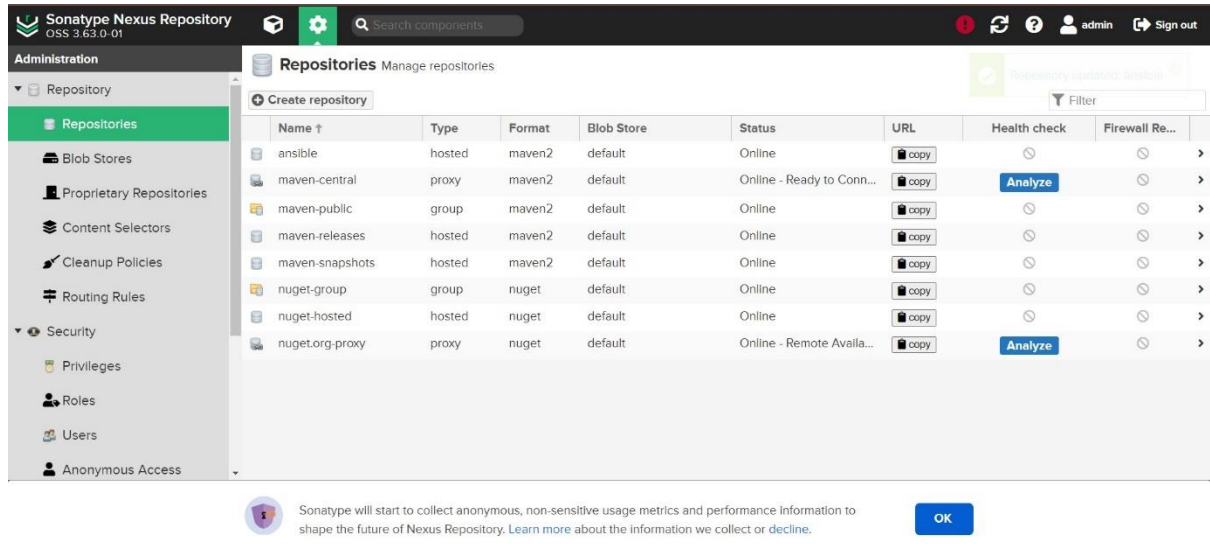
Q

ansible

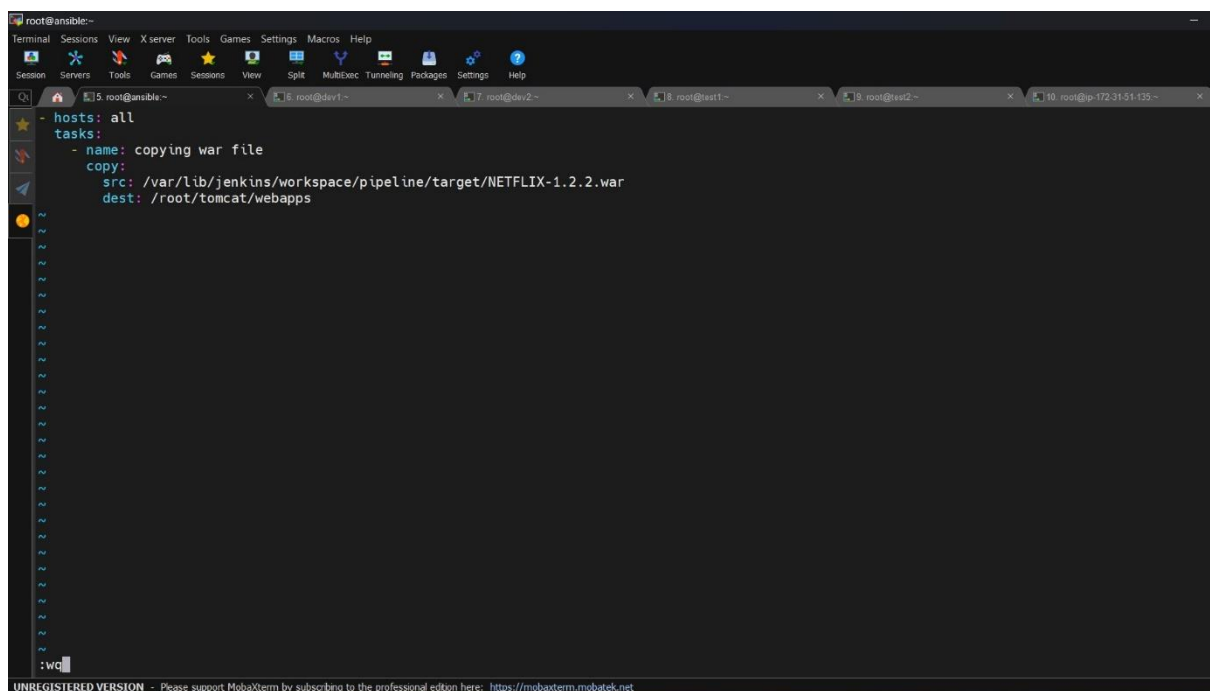
Install

Install	Name	Released
<input checked="" type="checkbox"/>	Ansible 285.v2f044b_eb_7a_3e pipeline External Site/Tool Integrations DevOps Build Tools Deployment Invoke Ansible Ad-Hoc commands and playbooks.	1 mo 6 days ago
<input type="checkbox"/>	Ansible Tower 0.16.0 This plugin connects Jenkins with Ansible Tower	3 yr 6 mo ago

5. Install Nexus using a shell script & Start Nexus Create a Repository (ansible) in Nexus



6. Copy the .war file from Jenkins workspace to Tomcat



7. Configure Ansible in Jenkins Pipeline by using pipeline syntax

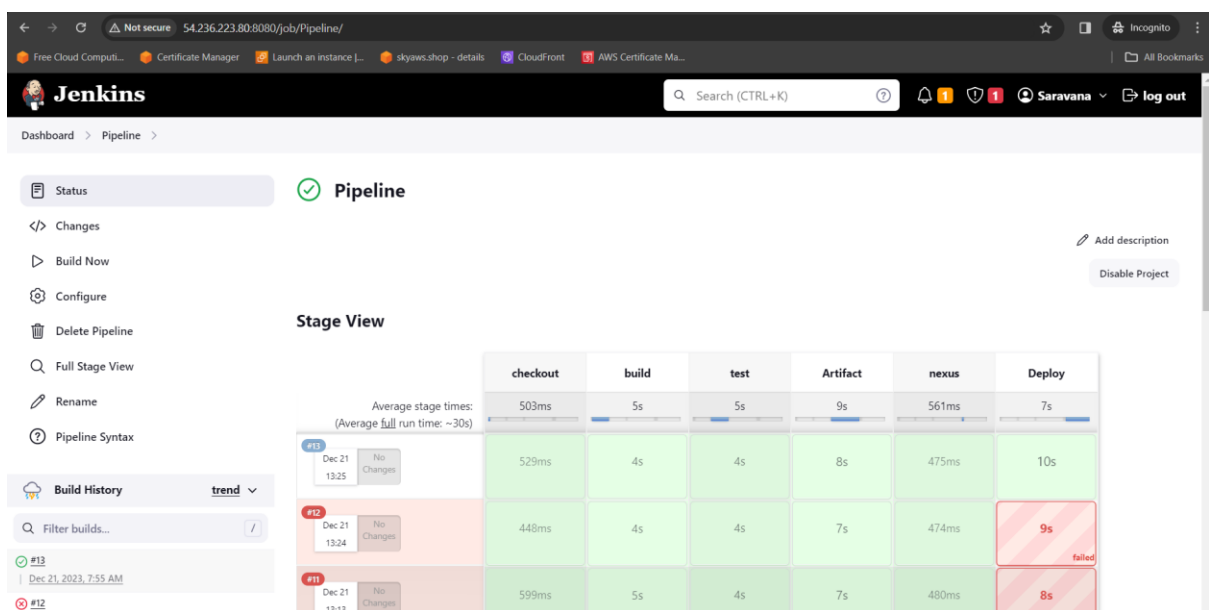
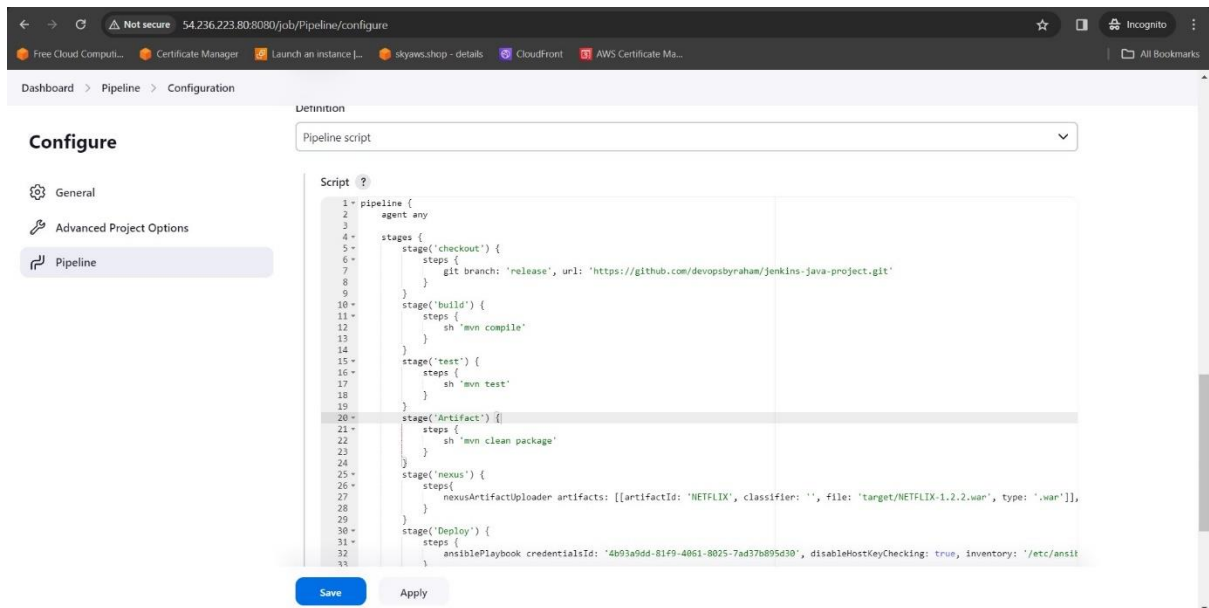
- Ansible tool: ansible-path - /usr/bin
- Playbook file path in workspace: /etc/ansible/joy1.yml

- c. Inventory file path in workspace: `/etc/ansible/hosts`
- d. SSH connection credentials: Username & password of Ansible nodes

The screenshot shows the Jenkins 'Ansible installations' configuration page. The browser address bar indicates the URL is `54.236.223.80:8080/manage/configureTools/`. The page has a breadcrumb trail: Dashboard > Manage Jenkins > Tools. The main heading is 'Ansible installations'. Below it is an 'Add Ansible' button. A dashed box contains the configuration form for a new Ansible installation. The form has a title 'Ansible' with a close button. It includes a 'Name' field with the value 'ansible-path', a 'Path to ansible executables directory' field with the value '/usr/bin', and an 'Install automatically' checkbox which is unchecked. Below the form is another 'Add Ansible' button. At the bottom of the page are 'Save' and 'Apply' buttons. The Jenkins version 'Jenkins 2.426.2' is noted in the bottom right corner.

The screenshot shows the Jenkins 'Pipeline Syntax' Snippet Generator page. The browser address bar indicates the URL is `54.236.223.80:8080/job/Pipeline/pipeline-syntax/`. The page has a breadcrumb trail: Dashboard > Pipeline > Pipeline Syntax. On the left is a sidebar with a 'Back' link and a list of links: Snippet Generator (selected), Declarative Directive Generator, Declarative Online Documentation, Steps Reference, Global Variables Reference, Online Documentation, Examples Reference, and IntelliJ IDEA GD5L. The main content area is titled 'Overview' and contains a paragraph explaining the Snippet Generator's purpose. Below this is a 'Steps' section. It features a 'Sample Step' dropdown menu with the selected option 'ansiblePlaybook: Invoke an ansible playbook'. Below the dropdown are four input fields: 'ansiblePlaybook' (with a help icon), 'Ansible tool' (with a dropdown menu showing 'ansible'), 'Playbook file path in workspace' (with the value 'etc/ansible/playbook.yml'), and 'Inventory file path in workspace' (with the value '/etc/ansible/hosts').

8. Generate a pipeline script to execute the Jenkins pipeline to deploy the Netflix application using Ansible-playbook pipeline syntax



9. Verify Deployment:

- Check for the WAR file in the target directory.
- Access Tomcat using any worker node public IP:8080.
- Log in with username and password.
- Confirm the presence of the deployed NETFLIX application.

Tomcat Web Application Manager

Message: OK

Manager

List Applications HTML Manager Help Manager Help Server Status

Applications

Path	Version	Display Name	Running	Sessions	Commands
/	None specified	Welcome to Tomcat	true	0	Start Stop Reload Undeploy Expire sessions with idle > 30 minutes
/NETFLIX-1.2.2	None specified	Archetype Created Web Application	true	0	Start Stop Reload Undeploy Expire sessions with idle > 30 minutes
/docs	None specified	Tomcat Documentation	true	0	Start Stop Reload Undeploy Expire sessions with idle > 30 minutes
/examples	None specified	Servlet and JSP Examples	true	0	Start Stop Reload Undeploy Expire sessions with idle > 30 minutes
/host-manager	None specified	Tomcat Host Manager Application	true	0	Start Stop Reload Undeploy Expire sessions with idle > 30 minutes
/manager	None specified	Tomcat Manager Application	true	1	Start Stop Reload Undeploy Expire sessions with idle > 30 minutes

NETFLIX SIGN IN V-5.0

Email or Mobile number

SECRET

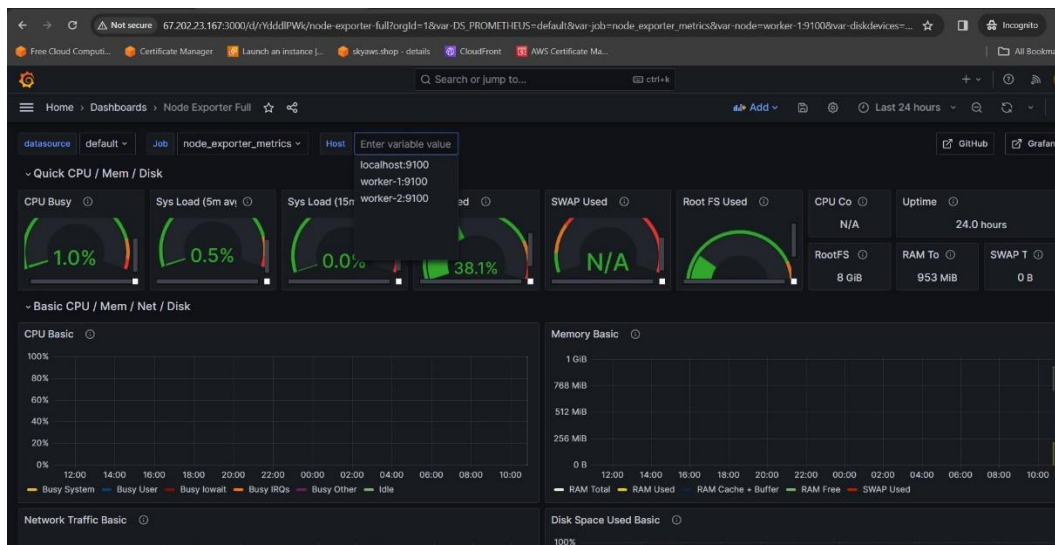
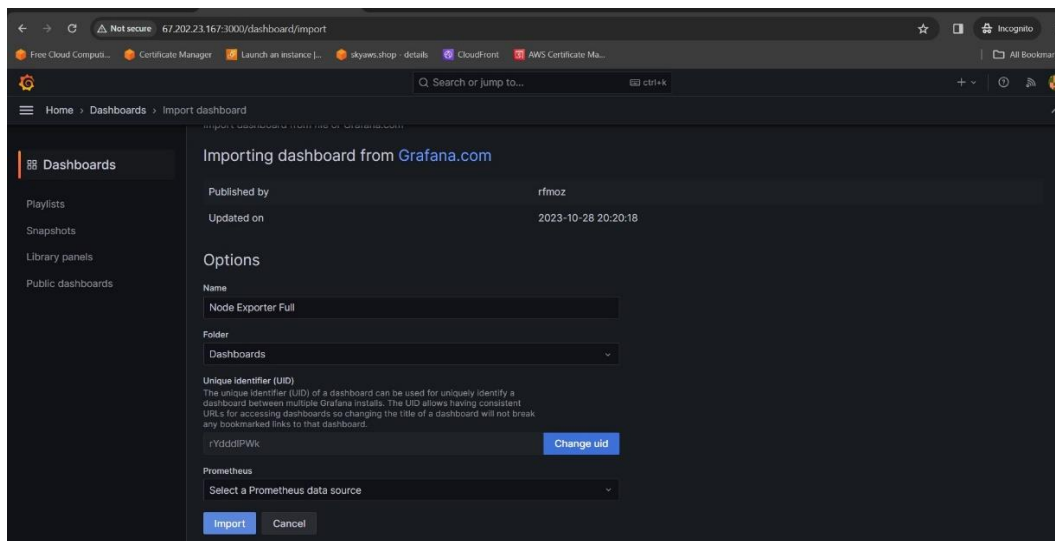
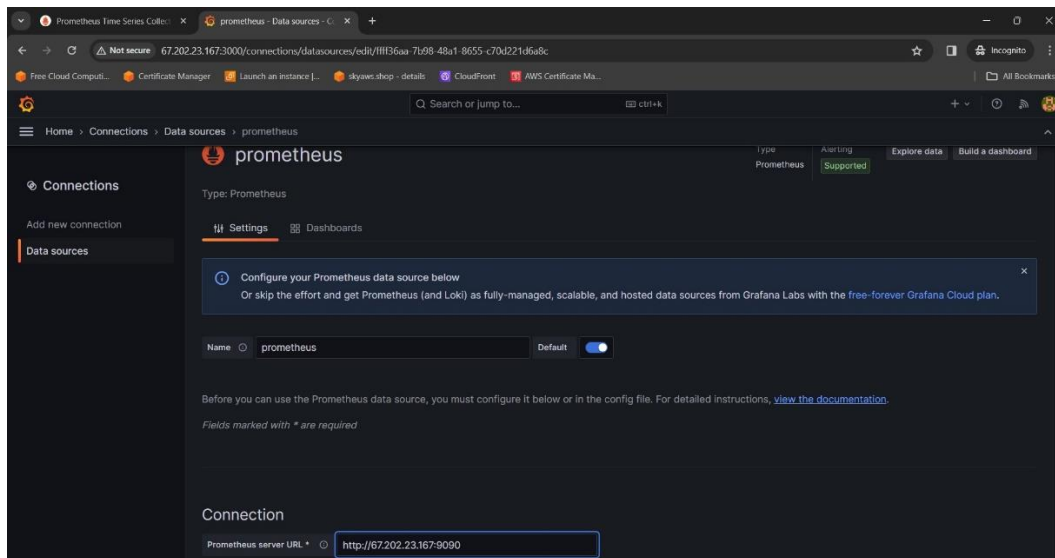
WELCOME TO NETFLIX V-2

Remember me Need help?

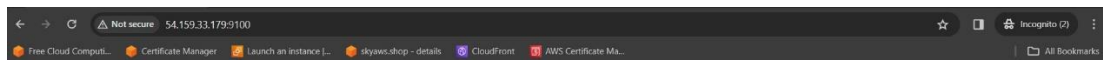
New to Netflix? Lets join up now

This page is protected by Google reCAPTCHA to ensure you're not a bot. [Learn more.](#)

- Install Prometheus, Grafana, and Node Exporter in Monitoring Server.
- Prometheus Configuration:
 - a. Add Ansible master and worker nodes' public IPs to /etc/hosts.
 - b. Edit /etc/prometheus/prometheus.yml to include worker node values.



- Verify Node Exporter: Login to Node Exporter using each worker node's public IP and port number 9100. Explore metrics



Node Exporter

[Metrics](#)

