

SRE Engineer assignment - Radware Cloud.

Task 1

Write a Script to Monitor System Health

Objective:

Create a Python script that monitors the health of a system : CPU usage, memory usage, disk space.

Requirements:

Collect the current CPU load, memory usage, and disk space.

Issue a warning log if usage exceeded over 80%

Issue Major level alert if usage exceeded over 90%

Send an alert (log entry to file) when any of the monitored metrics exceed defined thresholds.

Task 2

Implement a Python Script to Check Service Availability and Restart It if Down

Objective:

Write a Python script that checks if a nginx service is running on a system. If the service is found to be down, the script should automatically attempt to restart it.

Requirements:

Log the actions and outcomes (success or failure) to a log file.

Task 3

Write an Ansible Playbook to Deploy a Simple Web Application

Objective:

Write an Ansible playbook that automates the deployment of simple web application to a remote server.

Requirements:

Install nginx

Configure the Nginx web server to serve an HTML file from a specific directory.

Ensure the service is started and enabled to run on boot.

SRE Engineer assignment - Radware Cloud.

Task 4

Write an Ansible Playbook to Perform a System Backup

Objective:

Write an Ansible playbook to automate system backups of critical directories and files. The playbook should:

Requirements:

Archive log directory (/var/log) into a .tar.gz file.

Store the backup to a remote server or s3.

Ensure the backup file is timestamped.

Verify that the backup was completed successfully by checking the file's existence and size.

Task 5

Write a Jenkins pipeline that will execute a python script.

Objective:

Write a Jenkins pipeline to execute python script periodically.

Requirements:

Execute script from task 2.

Configure the job to run every 4 hours.