RedHat Linux Administration

Assignments

1. Installation

* Install OS 8GB HDD
* Add the partitioning as below
  + /boot with 256MB
  + swap with 2GB
  + /root with 4GB on LVM
  + /opt with remaining on LVM

1. User administration

* Create users “user1” and “user2”
* Modify their home directories to “/opt/user1” and “/opt/user2” respectively.
* Create group “dev”
* Add user1 and user2 to group “dev”.
* Create qat group and add the users “user3” and “user4” to the group
* Set maximum password age to 10 days to all the users created above
* Set the warning period for password expiry to 4 days.
* Devel group should not have any access to qat files and vice versa
* Create directories for group data
* /data/devel for devel group
* /data/qat for qat files for qat group
* When any user logs in you need to display a message on the screen like this.
* "Hi (username).. You are part of (groupname). You can place your files in /data/devel" when he is part of devel group
* "Hi (username).. You are part of (groupname). You can place your files in /data/qat" when he is part of qat group
* Any member in the group should be able to modify the content of the other members files. but he should not delete the files.

1. Enable SSH key based authentication for users
   * Create user account ‘matt’
   * generate SSH keys for this account
   * Test access using the keys
2. Create user “john” and enable password less authentication for him.
3. Provide sudo access to group
   * Create group ‘devel’
   * Add user matt to group devel
   * Enable sudo access to devel group in /etc/sudoers file
4. Configure epel repo and install htop package
5. Configure mongodb repository and install mongos package
6. Install GIT server
7. Setup LAMP using native packages and configure phpmyadmin
   * On one server install mysql and create database using db.sql
   * On another server install apache and php and deploy web application (php-registration.zip) and phpmyadmin
   * validation from browser

Remove the instances after successful testing

1. Setup LAMP using sources of apache, php and mysql and configure phpmyadmin
   * On one server install mariadb using source and create database using db.sql
   * On one server install apache and php using sources and deploy web application (php-registration.zip) and phpmyadmin
   * Validation from browser
2. setup mysql on two servers and configure replication
   * Create another mariadb server and enable replication to the database used in previous task
3. Enable high availability for web servers using haproxy
   * Create another web server and setup apache and php using source
   * Create another server and setup haproxy and configure both webservers as backend instances
4. Enable monitoring on all the web and database server using collectd + graphite
5. Enable monitoring on all the web and database servers using newrelic
6. Enable monitoring on all the web and database server using ELK stack ( Elastic Search + Logstashd + Kibana )