1 Mark Questions

1)Which is the web server with RedHat Enterprise server.

A web server is a network service that serves content to a client over the web.

This typically means web pages, and any other documents

The web server available in Red Hat Enterprise Linux 7 is Apache HTTP Server, version 2.4, httpd

2)Give the command to install a web server in RedHat Linux

yum install httpd

3)How will you set the web server to run by default in RedHat linux.

If you want the service to start automatically at boot time, use the following command systemctl enable httpd.service

4)Which protocol is used by the Web servers to communicate with the client.

They use the hypertext transport protocol (HTTP). But Now a days we use HTTPS that is hypertext transport protocol secured

5)Name the configuration file related to Virtual Hosting.

httpd-vhosts.conf in /etc/httpd/conf.d/directory

You can find the example configuration file at

/usr/share/doc/httpd-VERSION/httpd-vhosts.conf

7 Marks questions

1)What is a Web server? Give the significance of Web server in RedHat linux

A web server is a network service that serves content to a client over the web.This typically means web pages, and any other documents Web servers are also known as HTTP servers

They use the hypertext transport protocol (HTTP). The web server available in Red Hat Enterprise Linux 7 is Apache HTTP Server, version 2.4, httpd It is a open source web server developed by the Apache Software Foundation

Your web server plays a crucial role in displaying your website to site visitors. Without the web server housing all of your site's data, site visitors would not be able to access your content at all. It is important that your web server performs well so it can deliver site content to visitors as quickly as possible.

2)Give the procedure to set a RedHat Enterprise server as a Web server.

To run the httpd service, type the following at a shell prompt as root

systemctl start httpd.service

To be able to use the httpd service, make sure you have the httpd installed. You can do so by using the following command

yum install httpd

If you want the service to start automatically at boot time, use the following command

systemctl enable httpd.service To stop the running httpd service, type the following at a shell prompt as root systemctl stop httpd.serviceTo prevent the service from starting automatically at boot time, type

systemctl disable httpd.service

To restart the service completely, enter the following command as root

systemctl restart httpd.serviceTo only reload the configuration, as root, type

systemctl reload httpd.service

3)What is a Virtual host? Give the types and significance of

Apache Virtual Hosts (host) are used to run more than one web site(domain) using a single IP address. In other words you can have multiple websites(domains) but a single server.

Different sites will be shown depending on the user’s requested URL. Best part is you can have any number of virtual hosts in a single server. It simply means you can have any number of websites(domains) in a single server.Requests from each domain will be mapped into respective document root. document root is where all the files of the website are located(could be public\_html)

Name-Based Virtual Hosting

Most of the time you will be using name-based virtualhost configuration

When a request is made to the Apache web server, it looks for the hostname in the HTTP header in the given request.Depending on the hostname, requests will be served.

IP-Based Virtual Hosting

In this scenario the physical server should have two ip Addresses Server should have two ethernet cards, each one of them are configured to the particular ip-address of the

corresponding website There is only one physical server running Apache but two IPs.

This allows one server to share its resources, such as memory and processor cycles, without requiring all services provided to use the same host name.

* Saves money on IT costs. ...
* Reduces the number of physical servers a company must have on its premises. ...
* Cuts down on energy consumption since there are fewer physical servers consuming power. ...
* Creates independent user environments. ...
* Provide affordable web hosting.

4)Apache Virtual Hosts (host) are used to run more than one web site(domain) using a single IP address. In other words you can have multiple websites(domains) but a single server.

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Setting Up Virtual Hosts

Apache HTTP Server's built in virtual hosting allows the server to provide different information based on which IP address, host name, or port is being requested.

To create a name-based virtual host, create configuration file named httpd-vhosts.conf in /etc/httpd/conf.d/directory

Eg:-httpd-vhosts.conf

Note that ServerName must be a valid DNS name assigned to the machine

You can find the example configuration file at /usr/share/doc/httpd-VERSION/httpd-vhosts.conf

5)What is SSL? Give the functionality of SSL

SSL (secure socket layer) in Linux. A SSL certificate is **a way to encrypt a site's information and create a more secure connection**. Additionally, the certificate can show the virtual private server's identification information to site visitors.

SSL stands for Secure Sockets Layer and, in short, it's the standard technology for **keeping an internet connection secure and safeguarding any sensitive data that is being sent between two systems, preventing criminals from reading and modifying any information transferred, including potential personal details**.

Setting Up an SSL Server

Secure Sockets Layer (SSL) is a cryptographic protocol that allows a server and a client to communicate securely.

Its extended and improved version called Transport Layer Security (TLS) gives both privacy and data integrity. Unlike an HTTP connection that can be read and

possibly modified by anybody who is able to intercept it, the use of SSL/TLS over HTTP, referred to as HTTPS, prevents any inspection or modification of the transmitted content

6)How to make http server as a secured server implementation? Explain.

HTTP or hypertext transfer protocol is a protocol used in web servers but it's not that secure here http contents can be modified and it's vulnerable to attacks.

Secure Sockets Layer (SSL) is a cryptographic protocol that allows a server and a client to communicate securely.Its extended and improved version called Transport Layer Security (TLS) gives both privacy and data integrity.

The Apache HTTP Server in combination with amodule mod\_ssl, uses the OpenSSL toolkit to provide the SSL/TLS support, is commonly referred to as the SSL server

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