Setting Up Multiple Apache HTTP Server Instances on Red Hat Linux

This document provides detailed steps for setting up multiple instances of Apache HTTP Server on a Red Hat Linux system, configured for different development environments.

1. Install Apache HTTP Server:

- Use the command `sudo yum install httpd` to install the Apache HTTP Server.

2. Create Instance Directories:

- Create separate directories for each instance, e.g., `sudo mkdir /etc/httpd-instance1`.

3. Copy Configuration Files:

- Copy the default configuration files to each instance's directory, e.g., `sudo cp -R /etc/httpd/\* /etc/httpd-instance1/`.

4. Configure Each Instance:

- Edit the `httpd.conf` file in each instance’s directory.

- Change the `Listen` directive to a unique port for each instance, e.g., `Listen 8081`.

- Update paths for ErrorLog, CustomLog, and any other directory references to the instance's directory.

5. Set Up Virtual Hosts:

- In the `httpd.conf` file, add VirtualHost entries for each URL.

- Example VirtualHost entry:

```

<VirtualHost \*:8081>

ServerName griffin-portal/dev1

DocumentRoot /path/to/dev1

<Directory /path/to/dev1>

Require all granted

</Directory>

</VirtualHost>

```

- Repeat for each environment (dev1 to dev6), ensuring unique ServerNames and DocumentRoots.

6. Configure Hosts File:

- Edit `/etc/hosts` and add entries mapping each development environment URL to 127.0.0.1.

- Example: `127.0.0.1 griffin-portal/dev1`.

7. Start Each Instance:

- Use the command `sudo httpd -f /etc/httpd-instance1/httpd.conf` to start each instance.

8. Test Your Instances:

- Access each URL in a web browser to verify the setup.

9. Monitor and Optimize:

- Use tools like `top` and `netstat` to monitor performance and optimize as needed.

Note: Ensure each port used in the Listen directive is open in the firewall settings.