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| *Agnel Charities*  **Fr. C. Rodrigues Institute of Technology, Vashi**  **Department of Electronics and Telecommunication Engg.**  **SUB:-Linux & Networking & Server Configuration ( LNSC) ECL-604** | | | |  | |  |
| **Setting Up an Apache Web Server on Ubuntu** | | | |  |
| **EXPT NO** | **14** |  | |  |  | |
| **AIM** | **Apache Web Server on Ubuntu** | |  |
| **THEORY** | Apache web server is a free, open-source software that is used to serve web pages over the internet. It is one of the most popular web servers in use today, and it is widely used to host websites, web applications, and other online services.  Apache web server was first released in 1995 and was initially developed as a set of patches to the existing NCSA HTTPs web server software. The name "Apache" was chosen because it was a reference to the "patchy" nature of the early software, which was made up of a series of patches.  Today, Apache web server is maintained by the Apache Software Foundation and is available for use on a wide variety of platforms, including Windows, Linux, and macOS. It is highly configurable and supports a wide range of modules that can be used to add additional functionality, such as support for PHP, SSL encryption, and virtual hosting.  Setting up an Apache web server typically involves installing the software on a web server or other computer, configuring the server settings, and creating and configuring web pages to be served by the server. This process can be complex and may require some technical knowledge, but there are many resources available online to help guide users through the process.  In this lab experiment, we will be setting up an Apache web server on Ubuntu. Apache is a widely used web server software that allows us to host and serve web content. Ubuntu is a popular Linux operating system that is easy to use and widely supported. By the end of this lab, you will have a basic understanding of how to install and configure an Apache web server on Ubuntu.   * A computer running Ubuntu (or a virtual machine running Ubuntu) * Internet connectivity | |  |

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| **PROCEDURE** | 1. Install Apache web server on Ubuntu:  * Open a terminal window. * Run the following command to update the package list:   **sudo apt-get update**   * Run the following command to install the Apache web server:   **sudo apt-get install apache2**   * Wait for the installation to complete.  1. Configure the Apache web server:  * Open the default Apache configuration file using the following command:   **sudo nano /etc/apache2/sites-available/000-default.conf**   * Add the following lines to the end of the file, after the **DocumentRoot /var/www/html** line:   <Directory /var/www/html> Options Indexes FollowSymLinks MultiViews AllowOverride All Order allow,deny allow from all </Directory>   * Save and close the file by pressing **Ctrl+X**, then **Y**, and then **Enter**. * Restart the Apache web server using the following command:   **sudo systemctl restart apache2**   1. Test the Apache web server:  * Open a web browser on your computer and navigate to **http://localhost/**. You should see the default Apache web page. * To test if the web server is accessible from other devices on the network, find the IP address of your Ubuntu machine by running the following command:   **hostname -I**   * Enter the IP address in the web browser of another device on the same network. You should see the default Apache web page. |
| **Conclusion** | In this lab experiment, we learned how to install and configure an Apache web server on Ubuntu. We also tested the web server to ensure that it was accessible from other devices on the network. Apache is a powerful and widely used web server software, and Ubuntu is a popular and user-friendly operating system that is ideal for hosting web content. With the knowledge gained from this lab, you can now confidently set up your own web server on Ubuntu |