

**Tribhuvan University**  
Institute of Engineering  
**Pulchowk Campus**

INTERNET AND INTRANET

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**Lab 3**

Installation of Squid proxy server

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# Title

## Installation of Squid proxy server

### Background Theory

A proxy server is a computer system or an application program that acts as an intermediary between client devices and the internet. It receives requests from clients, forwards them to the desired web servers, and returns the server's responses back to the clients.

Squid is an open-source proxy server that is commonly used for caching frequently accessed web content, filtering web traffic, and providing anonymity for clients. It can run on various platforms, including Linux, Windows, and macOS. Squid can be used as a forward proxy, allowing clients to make indirect network connections to other servers, or as a reverse proxy, serving as an intermediary for HTTP requests from clients to servers. Squid can also be used to control access to the internet, enforce security policies, and optimize network performance.

### Activity

## 1 Installing Squid

1. Updated system packages.

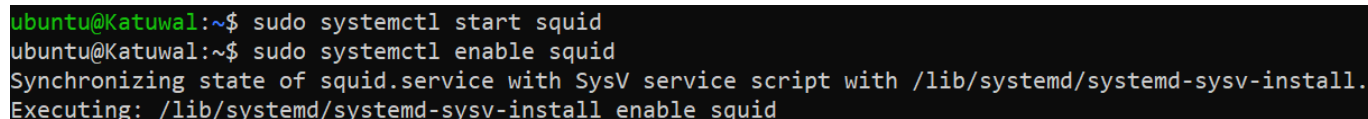
```
sudo apt update
sudo apt upgrade
```

2. Installed squid proxy.

```
sudo apt install squid
```

3. Started and enabled squid.

```
sudo systemctl start squid
sudo systemctl enable squid
```



```
ubuntu@Katuwal:~$ sudo systemctl start squid
ubuntu@Katuwal:~$ sudo systemctl enable squid
Synchronizing state of squid.service with SysV service script with /lib/systemd/systemd-sysv-install.
Executing: /lib/systemd/systemd-sysv-install enable squid
```

Figure 1: Docker installation

## 2 Configuration of Squid proxy server

1. Configured squid.conf

```
sudo nano /etc/squid/squid.conf
```

2. Replaced http\_access deny all with http\_access allow all.

A screenshot of a terminal window with a dark background. It shows two lines of text in a light blue font. The first line is a comment: `# And finally deny all other access to this proxy`. The second line is a configuration directive: `http_access allow all_`. The cursor is at the end of the second line.

Figure 2: HTML file

3. Restarted squid.

```
sudo systemctl restart squid
```

### Conclusion

In this report, we have discussed the basic steps for Proxy Server configuration on Linux operating systems. The process of configuring proxy server involves installing the squid software, configuring the squid.conf file for http\_access and ACL.