

Praktikum Squid Proxy

Alat dan bahan:

- Squid
- Mysql

Langkah Percobaan:

1. Update repository apt pada terminal

```
adiguna7@adiguna-Suryo ~$ sudo apt-update
[sudo] password for adiguna7: 
```

2. Install squid dengan sudo apt-get install squid

```
adiguna7@adiguna-Suryo ~$ sudo apt-get install squid
```

3. Untuk mengkonfigurasi squid, buka file /etc/squid/squid.conf, lalu ubah http_access menjadi deny all

```
# And finally deny all other access to this proxy
http_access deny all
```

4. Restart squid

```
adiguna7@adiguna-Suryo ~$ sudo /etc/init.d/squid reload
[sudo] password for adiguna7: 
```

5. Konfigurasi proxy pada browser dengan alamat ip dari proxy server kita

Connection Settings

Configure Proxy Access to the Internet

☐ No proxy

☐ Auto-detect proxy settings for this network

☐ Use system proxy settings

☒ Manual proxy configuration

HTTP Proxy: 192.168.43.50 Port: 3128

☒ Also use this proxy for FTP and HTTPS

HTTPS Proxy: 192.168.43.50 Port: 3128

FTP Proxy: 192.168.43.50 Port: 3128

SOCKS Host: Port: 0

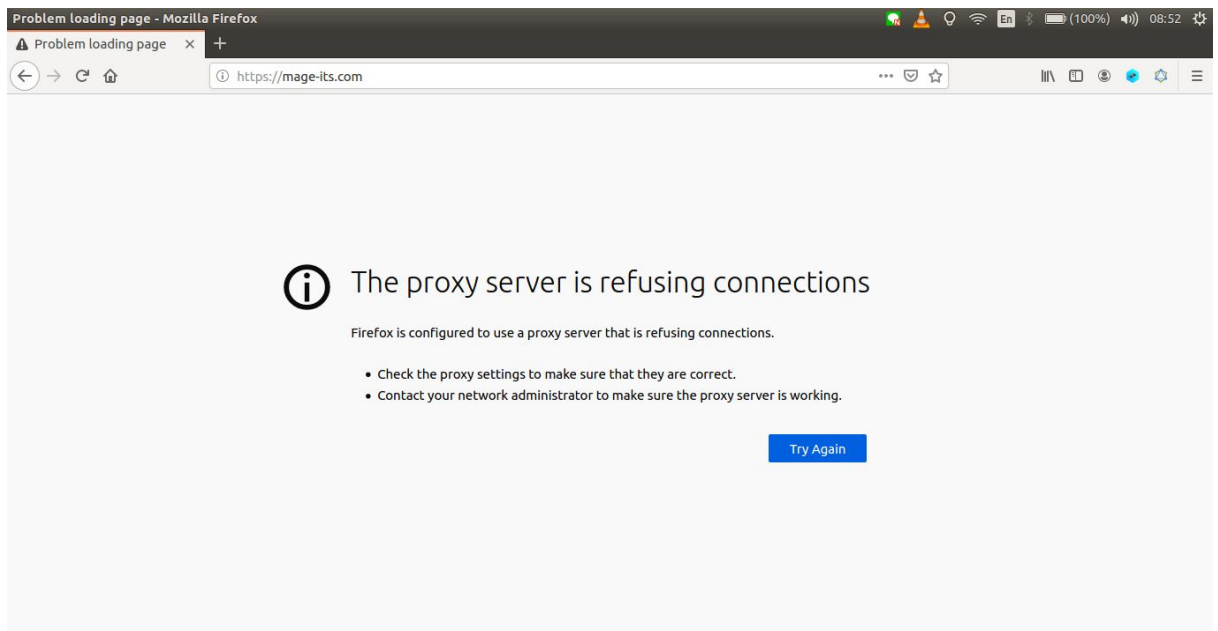
☐ SOCKS v4 ☒ SOCKS v5

☐ Automatic proxy configuration URL

Reload

Help Cancel OK

6. Cek pada browser apabila browser men-deny semua akses berarti benar



7. Cara untuk mengecek situs-situs tertentu

- Buat file BlockLink.txt



- Edit konfigurasi squid.conf

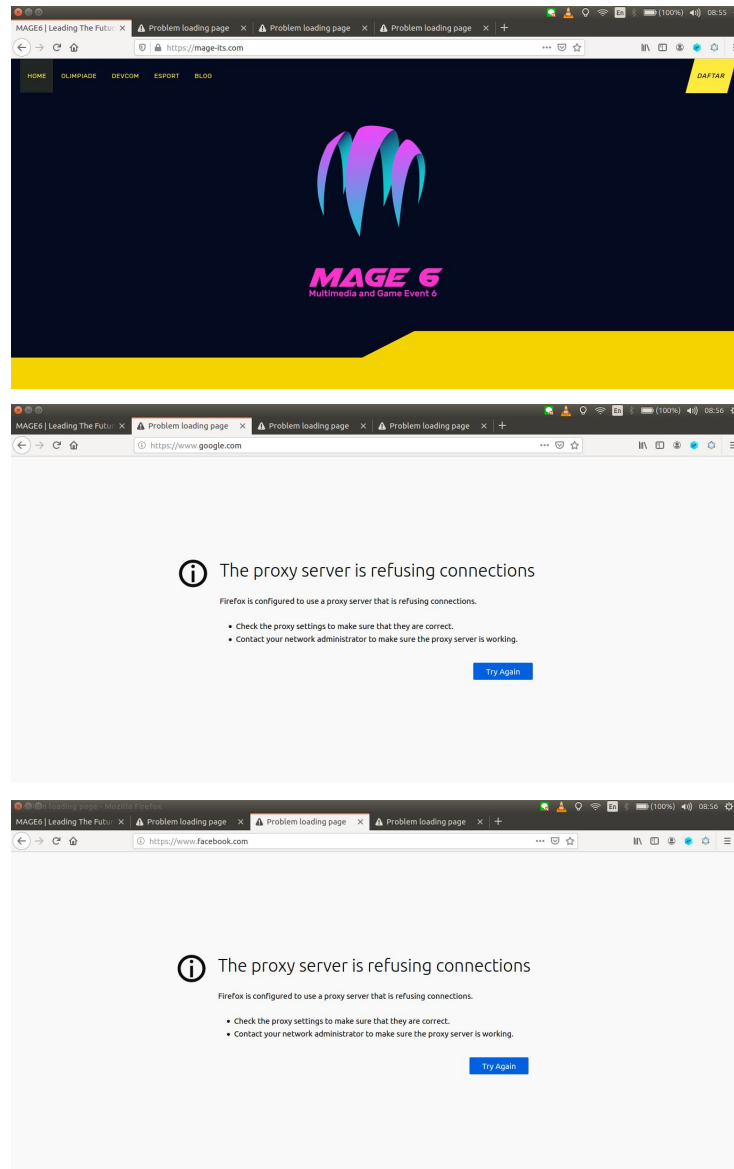
```
# And finally deny all other access to this proxy
http_access allow

acl UrlBlocked url_regex "/etc/squid/BlockLink.txt"
http_access deny UrlBlocked
```

- Restart squid dan akses browser



- Restart browser dan cek, apakah list web sudah terblock




8. Otorisasi user untuk mengakses internet

- Install mysql-server

```
adiguna7@adiguna-Suryo /opt/firefox$ sudo apt install mysql-server
```


- Buat database bernama proxy dan buat tabel bernama passwd didalamnya

```
mysql> CREATE DATABASE proxy
```



Name:

Schema:



Column Name	Datatype	PK	NN	UQ	BIN	UN	ZF	AI	G	Default / Expression
user	VARCHAR(32)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
password	VARCHAR(35)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	"
enabled	TINYINT(1)	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	'1'
fullname	VARCHAR(60)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL
comment	VARCHAR(60)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	NULL

- Masukkan data user ke dalam tabel passwd

#	user	password	enabled	fullname	comment	
1	test	test	1	test	test	
*	NULL	NULL	NULL	NULL	NULL	

- Setting kembali pada konfigurasi squid.conf

```
##
auth_param basic program /usr/lib/squid/basic_db_auth
auth_param basic children 5
auth_param basic realm Web-Proxy
auth_param basic credentialsttl 1 minute
auth_param basic casesensitive off
```

```
acl db-auth proxy_auth REQUIRED
http_access allow db-auth
http_access allow localhost
```

```
# And finally deny all other access to this proxy
http_access deny
```

```
acl UrlBlocked url_regex "/etc/squid/BlockLink.txt"
http_access deny UrlBlocked
```

- Setting pada file /usr/lib/squid/basic_db_auth sesuai dengan Database

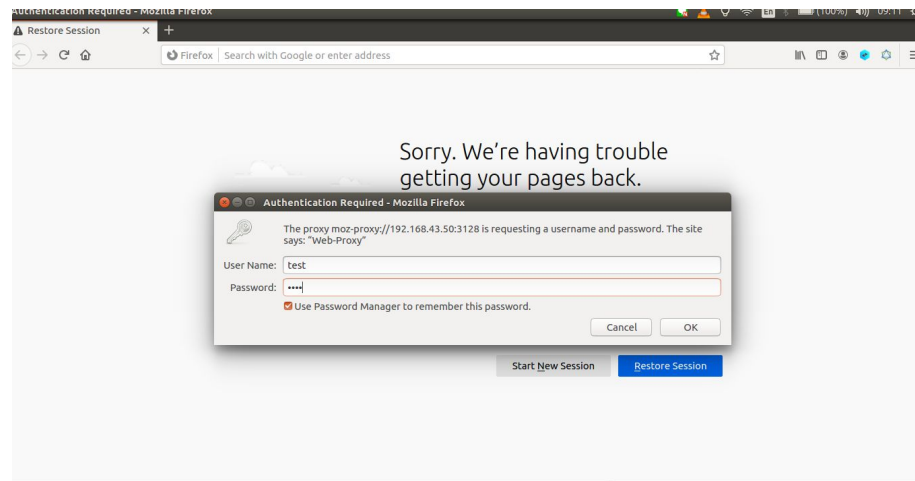
```
use DBI;
use Digest::MD5 qw(md5 md5_hex md5_base64);

my $dsn = "DBI:mysql:database=proxy";
my $db_user = "root";
my $db_passwd = "123";
my $db_table = "passwd";
my $db_usercol = "user";
my $db_passwdcol = "password";
my $db_cond = "enabled = 1";
my $plaintext = 1;
my $md5 = 0;
my $persist = 0;
my $isjoomla = 0;
my $debug = 0;
my $hashsalt = undef;
```

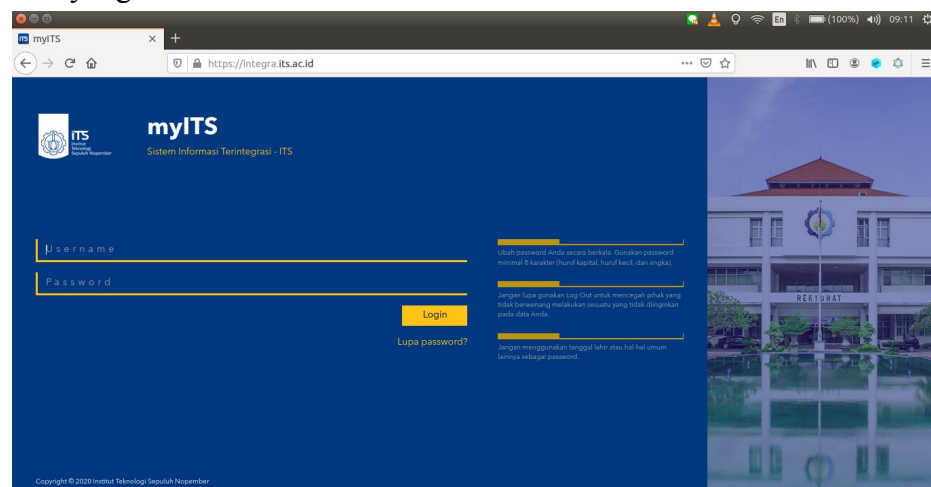
- Restart kembali squid

```
adiguna7@adiguna-Suryo > /opt/firefox sudo /etc/init.d/squid reload
[sudo] password for adiguna7:
```

- Restart browser



jika berhasil maka akan tampil sebagai berikut, masukkan user dan password dalam database untuk otorisasi. Setelah otorisasi, maka baru bisa mengakses web yang dibutuhkan.



9. Top 5 website

- Install web server pada terminal (nginx)

```
adiguna7@adiguna-Suryo /opt/firefox$ sudo apt install nginx
```

- Install dependency yang dibutuhkan

```
sudo apt install php-pear php-fpm php-dev php-zip php-curl php-xmlrpc  
php-gd php-mysql php-mbstring php-xml  
libapache2-mod-php
```

```
adiguna7@adiguna-Suryo /opt/firefox$ sudo apt install php-pear php-fpm php-d  
ev php-zip php-curl php-xmlrpc php-gd php-mysql php-mbstring php-xml  
libapache2-mod-php
```

- Buat file index.php dalam /var/www/html/proxy/

```
<?php  
$host = "localhost"; //atau bisa di isi dengan ip  
localhost
```

```

        $user = "root"; //id user, karena kita menggunakan
localhost, nama usernya di isi root
        $pass = "123"; //password kita kosongi
        $database = "proxy";
        $connect = mysqli_connect($host,$user,$pass,$database) or
die ("gagal");
        $ac_arr = file('/var/log/squid/access.log');
        $astring = join("", $ac_arr);
        $astring = preg_replace("/(\n|\r|\t)/", "", $astring);
                                $records =
preg_split("/([0-9]+\.[0-9]+\.[0-9]+\.[0-9]+)/", $astring,
-1, PREG_SPLIT_DELIM_CAPTURE);
        $sizerecs = sizeof($records);
        $i = 1;
        $each_rec = 0;

        while($i < $sizerecs) {
            $ip = $records[$i];
            $all = $records[$i+1];
            $myword=explode("http", $all);
            $myword2=explode("/", $myword[1]);
            if(preg_match("/:/", $myword2[0])){
                $myword3 = explode(":", $myword2[0]);
                $myrealword = $myword3[0];
                // var_dump($myword3);
                // echo "pass";
            }
            else
                $myrealword=$myword2[0];
            if($myrealword!=""){
                $queri="SELECT * FROM link WHERE
url='$myrealword'";
                $result = mysqli_query($connect, $queri);
                $row = mysqli_num_rows($result);
                if($row==1){
                    $queri="SELECT * FROM link WHERE
url='$myrealword'";
                    $result = mysqli_query($connect, $queri);
                    $data = mysqli_fetch_array($result);
                    $mycount=$data['jml'];
                    $mycount++;
                    $queri="UPDATE link SET jml='$mycount'
WHERE

```

```

        url='$myrealword';
        $result = mysqli_query($connect, $queri);
    }
    else{
        $queri="INSERT INTO link (url, jml)
VALUES
        ('$myrealword','1')";
        $result = mysqli_query($connect, $queri);
    }
}
$i = $i + 2;
$each_rec++;
}
?>
<html>
<head>
<title>Top 5</title>
</head>
<body>
<h1>These are the top 5 website mostly visited</h1>
<?php
$queri="Select * from link order by jml desc";
$result = mysqli_query($connect, $queri);
$a=1;
while($data = mysqli_fetch_array($result)){
echo "<p>".$data['url'].> " => ".$data['jml'].> "</p>";
$a++;
if($a>5) break;
}
?>
</body>
</html>

```

- Setting vhost pada nginx


```

server {
    listen 1515;
    listen [::]:1515;
    root /var/www/html/proxy;
    index index.php index.html index.htm;
    server_name 127.0.0.1;

    location / {
        if (!-e $request_filename){
            rewrite ^(.*)$ /index.php?url=$1 last;
        }
    }

    location ~ \.php$ {
        try_files $uri /index.php =404;
        fastcgi_split_path_info ^(.+\.php)(/.+)$;
        fastcgi_pass unix:/var/run/php/php7.2-fpm.sock;
        fastcgi_index index.php;
        fastcgi_param SCRIPT_FILENAME $document_root$fastcgi_script_name;
        include fastcgi_params;
    }
}

```

- Buka browser pada port tersebut



These are the top 5 website mostly visited

www.google.com => 19

www.mage-its.com => 3

www.youtube.com => 3