

New issue Jump to bottom

[panic]: slice OOB caused by illegal uri #4775

⊘ Closed secsys-go opened this issue on May 9 · 8 comments

```
secsys-go commented on May 9
It occurs in modules/caddyhttp/rewrite/rewrite.go.
Specifically, this bug locates in func (rewr Rewrite) rewrite
  func (rewr Rewrite) rewrite(r *http.Request, repl *caddy.Replacer, logger *zap.Logger) bool {
           oldMethod := r.Method
           oldURI := r.RequestURI
           // method
           if rewr.Method != "" {
                   r.Method = strings.ToUpper(repl.ReplaceAll(rewr.Method, ""))
           }
           // uri (path, query string and... fragment, because why not)
           if uri := rewr.URI; uri != "" {
                   // find the bounds of each part of the URI that exist
                   pathStart, qsStart, fragStart := -1, -1, -1
                   pathEnd, qsEnd := -1, -1
                   for i, ch := range uri {
                           switch {
                           case ch == '?' && qsStart < 0:</pre>
                                    pathEnd, qsStart = i, i+1
                           case ch == '#' && fragStart < 0:</pre>
                                    qsEnd, fragStart = i, i+1
                           case pathStart < 0 && qsStart < 0 && fragStart < 0:</pre>
                                    pathStart = i
                           }
                   if pathStart >= 0 && pathEnd < 0 {</pre>
                           pathEnd = len(uri)
```

In this function, it parse the rewr.URI and attemps to find the bounds of each part of the URI that exist. However, this implementation is too simple to handle unexpected scenarios.

If '#' appears in front of the '?' in rewr.URI, it makes that qsStart is larger than qsEnd, which leads to a crash like 'panic: runtime error: slice bounds out of range' in slice accessing at query = uri[qsStart:qsEnd]

francislavoie added the bug 🐞 label on May 9

mholt commented on May 9 • edited •

Member

Thanks for the report. In the future, please post the precise input and log output to expedite a fix.

In order to add a regression test, can you please share the exact input you had that caused the bug? I can find some too but I need to make sure your case is covered too. What was your config? i.e. what are you rewriting to?

Edit: I'm not able to reproduce the bug with an input of /foo#a?b=c.

- A mholt self-assigned this on May 9
- mholt added the needs info plabel on May 9

In my case, rewr.URI="/#?"

As for the precise log output, I made some modification on TestRewrite and get that:

```
func TestRewrite1(t *testing.T) {
 25
 26
             repl := caddy.NewReplacer()
 27
 28
             tc := struct {
                 input, expect *http.Request
 29
 30
                 rule
                               Rewrite
 31
             }{
                         Rewrite{URI: "/#?"},
 32
                 rule:
 33
                 input: newRequest(t, "GET", "/foo/bar?a=b"),
 34
                 expect: newRequest(t, "GET", "/foo?a=b#frag"),
             }
 35
 36
 37
             // copy the original input just enough so that we can
             // compare it after the rewrite to see if it changed
 38
 39
             originalInput := &http.Request{
                 Method:
                             tc.input.Method,
 40
                 RequestURI: tc.input.RequestURI,
 41
 42
                 URL:
                             &*tc.input.URL,
 43
             }
             changed := tc.rule.rewrite(tc.input, repl, nil)
 59
             if expected, actual := !reqEqual(originalInput, tc.input), changed; expected !=
 61
actual {
 62
                 t.Errorf("Expected changed=%t but was %t", expected, actual)
 63
 64
             if expected, actual := tc.expect.Method, tc.input.Method; expected != actual {
                 t.Errorf("Expected Method='%s' but got '%s'", expected, actual)
 65
 66
 67
             if expected, actual := tc.expect.RequestURI, tc.input.RequestURI; expected != actual
                 t.Errorf("Expected RequestURI='%s' but got '%s'", expected, actual)
 68
 69
 70
             if expected, actual := tc.expect.URL.String(), tc.input.URL.String(); expected !=
actual {
 71
                 t.Errorf("Expected URL='%s' but got '%s'", expected, actual)
 72
             if expected, actual := tc.expect.URL.RequestURI(), tc.input.URL.RequestURI();
 73
expected != actual {
 74
                 t.Errorf("Expected URL.RequestURI()='%s' but got '%s'", expected, actual)
 75
             if expected, actual := tc.expect.URL.Fragment, tc.input.URL.Fragment; expected !=
 76
actual {
 77
                 t.Errorf("Expected URL.Fragment='%s' but got '%s'", expected, actual)
 78
 79
 80
             return
 81
       | }
```

```
--- FAIL: TestRewrite1 (0.00s)
panic: runtime error: slice bounds out of range [3:1] [recovered]
        panic: runtime error: slice bounds out of range [3:1]
goroutine 25 [running]:
testing.tRunner.func1.2({0x12f70c0, 0xc0001e0a98})
        /home/zjx/.local/go/src/testing/testing.go:1211 +0x24e
testing.tRunner.func1()
        /home/zjx/.local/go/src/testing/testing.go:1214 +0x218
panic({0x12f70c0, 0xc0001e0a98})
        /home/zjx/.local/go/src/runtime/panic.go:1038 +0x215
github.com/caddyserver/caddy/v2/modules/caddyhttp/rewrite.Rewrite.rewrite({{0x0, 0x0}, {0x139e2a5,
0x3}, \{0x0, 0x0\}, \{0x0, 0x0\}, \{0x0, 0x0, ...\}, ...}, ...
        /home/zjx/workspace/gowork/src/go-fdg-
exmaples/caddy/modules/caddyhttp/rewrite/rewrite.go:161 +0xc65
github.com/caddyserver/caddy/v2/modules/caddyhttp/rewrite.TestRewrite1(0xc000471520)
        /home/zjx/workspace/gowork/src/go-fdg-
exmaples/caddy/modules/caddyhttp/rewrite/tmp test.go:59 +0x525
testing.tRunner(0xc000471520, 0x1410440)
        /home/zjx/.local/go/src/testing/testing.go:1261 +0x102
created by testing.(*T).Run
        /home/zjx/.local/go/src/testing/testing.go:1308 +0x35a
exit status 2
```

mholt commented on May 9

Member

Thanks! I see it now.

mholt removed the needs info plabel on May 9

mholt closed this as completed in 693e9b5 on May 9

mholt commented on May 9

Member

Should be fixed in 693e9b5. Feel free to double-check my work!



mholt added this to the v2.5.2 milestone on May 9

This issue has been assigned as CVE-2022-34037.



```
mholt commented on Jul 26 • edited •
```

Member

This bug only affected the client of the request, and to my knowledge cannot DoS anyone other than the attacker; i.e. no attack surface is possible here in the server. (Would be a client bug if the client allows user to make invalid/malformed request when expecting something to work.) The CVE is unwarranted IMO.



francislavoie commented on Aug 2 • edited •

Member

IMO, this CVE is absurd. It was given a score of 7.5. But it requires a bad config, AND it has no real attack surface. The panic does *not* take down the server, it just stops the current request which contained bad input, and emits a log. There's no exploit here.

Example Caddyfile config of the reported issue:

```
{
     debug
}
:8888 {
     rewrite * /#?
     respond "Hello"
}
```

Run Caddy v2.5.1, making a request with curl -v http://localhost:8888 twice, notice the server never shuts down, it just prints two DEBUG level logs (newlines for emphasis), because the debug global option is enabled, which shows the panic message.

```
$ ./caddy run
2022/08/03 01:53:29.381 INFO using adjacent Caddyfile
2022/08/03 01:53:29.381 WARN admin admin endpoint disabled
2022/08/03 01:53:29.381 INFO
                              tls.cache.maintenance started background certificate maintenance
{"cache": "0xc00034fea0"}
2022/08/03 01:53:29.382 INFO
                                      cleaning storage unit {"description":
                              tls
"FileStorage:/var/lib/caddy/.local/share/caddy"}
2022/08/03 01:53:29.382 DEBUG http
                                      starting server loop {"address": "[::]:8888", "http3":
false, "tls": false}
2022/08/03 01:53:29.385 INFO
                              autosaved config (load with --resume flag)
                                                                             {"file":
"/var/lib/caddy/.config/caddy/autosave.json"}
2022/08/03 01:53:29.385 INFO
                               serving initial configuration
```

```
2022/08/03 01:53:29.385 INFO
                                tls
                                        finished cleaning storage units
2022/08/03 01:53:40.694 DEBUG http.stdlib
                                                http: panic serving 127.0.0.1:43806: runtime
error: slice bounds out of range [3:1]
goroutine 36 [running]:
net/http.(*conn).serve.func1()
        net/http/server.go:1825 +0xbf
panic({0x186a1a0, 0xc0000422d0})
        runtime/panic.go:844 +0x258
github.com/caddyserver/caddy/v2/modules/caddyhttp/rewrite.Rewrite.Rewrite({{0x0, 0x0},
\{0xc00009c008, 0x3\}, \{0x0, 0x0\}, \{0x0, 0x0\}, \{0x0, 0x0, ...\}, ...\}, ...\}
        github.com/caddyserver/caddy/v2@v2.5.1/modules/caddyhttp/rewrite/rewrite.go:161 +0xc65
github.com/caddyserver/caddy/v2/modules/caddyhttp/rewrite.Rewrite.ServeHTTP({{0x0, 0x0},
{0xc00009c008, 0x3}, {0x0, 0x0}, {0x0, 0x0}, {0x0, 0x0, ...}, ...}, ...)
        github.com/caddyserver/caddy/v2@v2.5.1/modules/caddyhttp/rewrite/rewrite.go:109 +0x20e
github.com/caddyserver/caddy/v2/modules/caddyhttp.
(*metricsInstrumentedHandler).ServeHTTP(0xc00053afe0, {0x1ca3ea0?, 0xc000158000}, 0xc0002fc200,
{0x1c9a3c0, 0xc00053b080})
        github.com/caddyserver/caddy/v2@v2.5.1/modules/caddyhttp/metrics.go:132 +0x53b
github.com/caddyserver/caddy/v2/modules/caddyhttp.wrapMiddleware.func1.1({0x1ca3ea0?,
0xc000158000?}, 0x1c9a3c0?)
        github.com/caddyserver/caddy/v2@v2.5.1/modules/caddyhttp/routes.go:272 +0x3b
github.com/caddyserver/caddy/v2/modules/caddyhttp.HandlerFunc.ServeHTTP(0x1c9a3c0?, {0x1ca3ea0?,
0xc000158000?}, 0x6?)
        github.com/caddyserver/caddy/v2@v2.5.1/modules/caddyhttp/caddyhttp.go:57 +0x2f
github.com/caddyserver/caddy/v2/modules/caddyhttp.wrapRoute.func1.1({0x1ca3ea0, 0xc000158000},
0xc0002fc200)
        github.com/caddyserver/caddy/v2@v2.5.1/modules/caddyhttp/routes.go:244 +0x322
github.com/caddyserver/caddy/v2/modules/caddyhttp.HandlerFunc.ServeHTTP(0xc0002c2c00?,
{0x1ca3ea0?, 0xc000158000?}, 0x18a8200?)
        github.com/caddyserver/caddy/v2@v2.5.1/modules/caddyhttp/caddyhttp.go:57 +0x2f
github.com/caddyserver/caddy/v2/modules/caddyhttp.(*Server).enforcementHandler(0x0?, {0x1ca3ea0?,
0xc000158000?}, 0xc00069c6e0?, {0x1c9a3c0?, 0xc00053b0a0?})
        github.com/caddyserver/caddy/v2@v2.5.1/modules/caddyhttp/server.go:318 +0x252
github.com/caddyserver/caddy/v2/modules/caddyhttp.(*Server).wrapPrimaryRoute.func1({0x1ca3ea0?,
0xc000158000?}, 0x49b737?)
        github.com/caddyserver/caddy/v2@v2.5.1/modules/caddyhttp/server.go:294 +0x3b
github.com/caddyserver/caddy/v2/modules/caddyhttp.HandlerFunc.ServeHTTP(0xc0002b6bb0?,
{0x1ca3ea0?, 0xc000158000?}, 0xc0002fc200?)
        github.com/caddyserver/caddy/v2@v2.5.1/modules/caddyhttp/caddyhttp.go:57 +0x2f
github.com/caddyserver/caddy/v2/modules/caddyhttp.(*Server).ServeHTTP(0xc000024360, {0x1ca3ea0,
0xc000158000}, 0xc0002fc200)
        github.com/caddyserver/caddy/v2@v2.5.1/modules/caddyhttp/server.go:230 +0xac6
net/http.serverHandler.ServeHTTP({0xc000314120?}, {0x1ca3ea0, 0xc000158000}, 0xc0002fc000)
        net/http/server.go:2916 +0x43b
net/http.(*conn).serve(0xc0000baaa0, {0x1ca5790, 0xc0001aa630})
        net/http/server.go:1966 +0x5d7
created by net/http.(*Server).Serve
        net/http/server.go:3071 +0x4db
```

```
net/http/server.go:3071 +0x4db

2022/08/03 01:53:46.882 DEBUG http.stdlib http: panic serving 127.0.0.1:43808: runtime error: slice bounds out of range [3:1] goroutine 38 [running]: net/http.(*conn).serve.func1() net/http/server.go:1825 +0xbf panic({0x186a1a0, 0xc00000423c0})
```

```
runtime/panic.go:844 +0x258
github.com/caddyserver/caddy/v2/modules/caddyhttp/rewrite.Rewrite.Rewrite({{0x0, 0x0},
\{0xc00009c008, 0x3\}, \{0x0, 0x0\}, \{0x0, 0x0\}, \{0x0, 0x0, ...\}, ...\}, ...\}
              github.com/caddyserver/caddy/v2@v2.5.1/modules/caddyhttp/rewrite/rewrite.go:161 +0xc65
github.com/caddyserver/caddy/v2/modules/caddyhttp/rewrite.Rewrite.ServeHTTP({{0x0, 0x0},
\{0xc00009c008, 0x3\}, \{0x0, 0x0\}, \{0x0, 0x0\}, \{0x0, 0x0, ...\}, ...\}, ...\}
              github.com/caddyserver/caddy/v2@v2.5.1/modules/caddyhttp/rewrite/rewrite.go:109 +0x20e
github.com/caddyserver/caddy/v2/modules/caddyhttp.
(*metricsInstrumentedHandler).ServeHTTP(0xc00053afe0, {0x1ca3ea0?, 0xc0001580e0}, 0xc0002fc500,
{0x1c9a3c0, 0xc00053b080})
              github.com/caddyserver/caddy/v2@v2.5.1/modules/caddyhttp/metrics.go:132 +0x53b
github.com/caddyserver/caddy/v2/modules/caddyhttp.wrapMiddleware.func1.1({0x1ca3ea0?,
0xc0001580e0?}, 0x1c9a3c0?)
              github.com/caddyserver/caddy/v2@v2.5.1/modules/caddyhttp/routes.go:272 +0x3b
github.com/caddyserver/caddy/v2/modules/caddyhttp.HandlerFunc.ServeHTTP(0x1c9a3c0?, {0x1ca3ea0?,
0xc0001580e0?}, 0x6?)
              github.com/caddyserver/caddy/v2@v2.5.1/modules/caddyhttp/caddyhttp.go:57 +0x2f
github.com/caddyserver/caddy/v2/modules/caddyhttp.wrapRoute.func1.1({0x1ca3ea0, 0xc0001580e0},
              github.com/caddyserver/caddy/v2@v2.5.1/modules/caddyhttp/routes.go:244 +0x322
github.com/caddyserver/caddy/v2/modules/caddyhttp.HandlerFunc.ServeHTTP(0xc0000dd400?,
{0x1ca3ea0?, 0xc0001580e0?}, 0x18a8200?)
              github.com/caddyserver/caddy/v2@v2.5.1/modules/caddyhttp/caddyhttp.go:57 +0x2f
github.com/caddyserver/caddy/v2/modules/caddyhttp.(*Server).enforcementHandler(0x0?, \{0x1ca3ea0?, addynamical ad
0xc0001580e0?}, 0xc00069c850?, {0x1c9a3c0?, 0xc00053b0a0?})
              github.com/caddyserver/caddy/v2@v2.5.1/modules/caddyhttp/server.go:318 +0x252
github.com/caddyserver/caddy/v2/modules/caddyhttp.(*Server).wrapPrimaryRoute.func1({0x1ca3ea0?,
0xc0001580e0?}, 0x49b737?)
              github.com/caddyserver/caddy/v2@v2.5.1/modules/caddyhttp/server.go:294 +0x3b
github.com/caddyserver/caddy/v2/modules/caddyhttp.HandlerFunc.ServeHTTP(0xc0002b6bb0?,
{0x1ca3ea0?, 0xc0001580e0?}, 0xc0002fc500?)
              github.com/caddyserver/caddy/v2@v2.5.1/modules/caddyhttp/caddyhttp.go:57 +0x2f
github.com/caddyserver/caddy/v2/modules/caddyhttp.(*Server).ServeHTTP(0xc000024360, {0x1ca3ea0,
0xc0001580e0}, 0xc0002fc500)
              github.com/caddyserver/caddy/v2@v2.5.1/modules/caddyhttp/server.go:230 +0xac6
net/http.serverHandler.ServeHTTP({0xc0003145d0?}, {0x1ca3ea0, 0xc0001580e0}, 0xc0002fc300)
              net/http/server.go:2916 +0x43b
net/http.(*conn).serve(0xc0000babe0, {0x1ca5790, 0xc0001aa630})
             net/http/server.go:1966 +0x5d7
created by net/http.(*Server).Serve
             net/http/server.go:3071 +0x4db
```

If debug was not enabled, there wouldn't even be a log (the failing requests should be an indication to the user that they should turn on debug mode to see what's going on).

Curl output:

```
$ curl -v http://localhost:8888/
* Trying 127.0.0.1:8888...
* Connected to localhost (127.0.0.1) port 8888 (#0)
> GET / HTTP/1.1
> Host: localhost:8888
> User-Agent: curl/7.74.0
> Accept: */*
```

```
* Empty reply from server
* Connection #0 to host localhost left intact
curl: (52) Empty reply from server
```

This is *very clearly* just a regular bug, there is *no* security implications here at all. The CVE should be revised or dismissed.



mholt commented on Aug 3

Member

I've officially disputed the CVE with this letter:

CVE-2022-34037 was assigned to an ordinary bug, not a security vulnerability, in the Caddy web server that emerged when an administrator's bad configuration containing a malformed request URI caused the server to return an empty reply instead of a valid HTTP response to the client.

This CVE entry claims a Denial-of-Service (DoS) attack on the server, but this claim is rejected on the grounds that:

- 1. Only a faulty/nonsensical configuration causes the bug. It attempts to transform the request URI into an invalid syntax that would result in HTTP errors anyway. There is no practical use for such a configuration.
- 2. Only a trusted, authorized user is allowed to set the server configuration. This CVE entry does not demonstrate any unauthorized tampering or disabling of the server.
- 3. Only matched requests are affected (again, requires a trusted administrator's certain configuration). The CVE claims that the attacker can cause DoS "via a crafted URI," however that is not the case.
- 4. The server's availability is not impacted by this bug. The "panic" (which is just an error message with a stack trace) is recovered successfully, and it continues to serve requests as configured. It does not even yield a log entry unless verbose/debug logging is enabled.
- 5. This bug does not impact service availability. Denial-of-Service is defined by OWASP as to "make a service unavailable for legitimate users", further explaining that these attacks "significantly degrade the service quality experienced by legitimate users ... large response delays, excessive losses, and service interruptions, resulting in direct impact on availability." This bug does not fit that definition.
- 6. It is actually compelling to return an HTTP error response, since the faulty configuration attempts to rewrite the request URI to an invalid syntax. While empty HTTP responses are less than ideal, they are no more a security exploit than returning an HTTP 400 response. The fix we chose involves silently ignoring the invalid syntax, but returning an error is also a valid (and less confusing) way to resolve this.

- 7. A Caddy instance being given a bad configuration is not a security exploit in Caddy. It would be, however, if an untrusted user was able to cause Caddy to run an unauthorized configuration. But this CVE entry does not demonstrate any such vulnerability.
- 8. The severity rating is based on metrics that simply do not apply to this bug.

Our case can be objectively verified with this configuration:

```
{
          debug
}
:8888 {
          rewrite /bad /#?
          respond "Hello"
}
```

With Caddy running that config, first execute curl -v http://localhost:8888/bad, and then curl -v http://localhost:8888.

Server log:

```
$ ./caddy run
INFO using adjacent Caddyfile
WARN
       admin admin endpoint disabled
INFO
     tls.cache.maintenance started background certificate maintenance
                                                                               {"cache":
"0xc00034fea0"}
INFO
     tls
               cleaning storage unit {"description":
"FileStorage:/var/lib/caddy/.local/share/caddy"}
               starting server loop {"address": "[::]:8888", "http3": false, "tls":
DEBUG http
false}
       autosaved config (load with --resume flag)
                                                       {"file":
INFO
"/var/lib/caddy/.config/caddy/autosave.json"}
INFO serving initial configuration
INFO
      tls
               finished cleaning storage units
DEBUG http.stdlib
                      http: panic serving 127.0.0.1:43806: runtime error: slice bounds out
of range [3:1]
goroutine 36 [running]:
net/http.(*conn).serve.func1()
       net/http/server.go:1825 +0xbf
panic({0x186a1a0, 0xc0000422d0})
       runtime/panic.go:844 +0x258
github.com/caddyserver/caddy/v2/modules/caddyhttp/rewrite.Rewrite.Rewrite({{0x0, 0x0},
\{0xc00009c008, 0x3\}, \{0x0, 0x0\}, \{0x0, 0x0\}, \{0x0, 0x0, ...\}, ...\}, ...\}
       github.com/caddyserver/caddy/v2@v2.5.1/modules/caddyhttp/rewrite/rewrite.go:161
+0xc65
github.com/caddyserver/caddy/v2/modules/caddyhttp/rewrite.Rewrite.ServeHTTP({{0x0, 0x0},
\{0xc00009c008, 0x3\}, \{0x0, 0x0\}, \{0x0, 0x0\}, \{0x0, 0x0, ...\}, ...\}, ...\}
       github.com/caddyserver/caddy/v2@v2.5.1/modules/caddyhttp/rewrite/rewrite.go:109
+0x20e
github.com/caddyserver/caddy/v2/modules/caddyhttp.
```

```
(*metricsInstrumentedHandler).ServeHTTP(0xc00053afe0, {0x1ca3ea0?, 0xc000158000},
0xc0002fc200, {0x1c9a3c0, 0xc00053b080})
        github.com/caddyserver/caddy/v2@v2.5.1/modules/caddyhttp/metrics.go:132 +0x53b
github.com/caddyserver/caddy/v2/modules/caddyhttp.wrapMiddleware.func1.1({0x1ca3ea0?,
0xc000158000?}, 0x1c9a3c0?)
        github.com/caddyserver/caddy/v2@v2.5.1/modules/caddyhttp/routes.go:272 +0x3b
github.com/caddyserver/caddy/v2/modules/caddyhttp.HandlerFunc.ServeHTTP(0x1c9a3c0?,
{0x1ca3ea0?, 0xc000158000?}, 0x6?)
        github.com/caddyserver/caddy/v2@v2.5.1/modules/caddyhttp/caddyhttp.go:57 +0x2f
github.com/caddyserver/caddy/v2/modules/caddyhttp.wrapRoute.func1.1({0x1ca3ea0,
0xc000158000}, 0xc0002fc200)
        github.com/caddyserver/caddy/v2@v2.5.1/modules/caddyhttp/routes.go:244 +0x322
github.com/caddyserver/caddy/v2/modules/caddyhttp.HandlerFunc.ServeHTTP(0xc0002c2c00?,
{0x1ca3ea0?, 0xc000158000?}, 0x18a8200?)
        github.com/caddyserver/caddy/v2@v2.5.1/modules/caddyhttp/caddyhttp.go:57 +0x2f
github.com/caddyserver/caddy/v2/modules/caddyhttp.(*Server).enforcementHandler(0x0?,
{0x1ca3ea0?, 0xc000158000?}, 0xc00069c6e0?, {0x1c9a3c0?, 0xc00053b0a0?})
        github.com/caddyserver/caddy/v2@v2.5.1/modules/caddyhttp/server.go:318 +0x252
github.com/caddyserver/caddy/v2/modules/caddyhttp.
(*Server).wrapPrimaryRoute.func1({0x1ca3ea0?, 0xc000158000?}, 0x49b737?)
        github.com/caddyserver/caddy/v2@v2.5.1/modules/caddyhttp/server.go:294 +0x3b
github.com/caddyserver/caddy/v2/modules/caddyhttp.HandlerFunc.ServeHTTP(0xc0002b6bb0?,
{0x1ca3ea0?, 0xc000158000?}, 0xc0002fc200?)
        github.com/caddyserver/caddy/v2@v2.5.1/modules/caddyhttp/caddyhttp.go:57 +0x2f
github.com/caddyserver/caddy/v2/modules/caddyhttp.(*Server).ServeHTTP(0xc000024360,
{0x1ca3ea0, 0xc000158000}, 0xc0002fc200)
        github.com/caddyserver/caddy/v2@v2.5.1/modules/caddyhttp/server.go:230 +0xac6
net/http.serverHandler.ServeHTTP({0xc000314120?}, {0x1ca3ea0, 0xc000158000}, 0xc0002fc000)
        net/http/server.go:2916 +0x43b
net/http.(*conn).serve(0xc0000baaa0, {0x1ca5790, 0xc0001aa630})
        net/http/server.go:1966 +0x5d7
created by net/http.(*Server).Serve
        net/http/server.go:3071 +0x4db
```

You can see the server continues to handle and serve requests properly, according to its configuration:

```
$ curl -v "http://localhost:8888/"
* Trying 127.0.0.1:8888...
* Connected to localhost (127.0.0.1) port 8888 (#0)
> GET / HTTP/1.1
> Host: localhost:8888
> User-Agent: curl/7.81.0
> Accept: */*
>
* Mark bundle as not supporting multiuse
< HTTP/1.1 200 OK
< Server: Caddy
< Date: Wed, 03 Aug 2022 05:00:39 GMT
< Content-Length: 5
< 
* Connection #0 to host localhost left intact
Hello</pre>
```

Additionally, the assigned severity base score of 7.5 is absurdly high.

The CVE entry claims the attack vector (AV) is Network (AV:N), but no network exploit has been demonstrated. As we have shown, the bug is caused by a faulty server configuration by an administrator; no exploit where an attacker successfully loads a faulty configuration over a network has been demonstrated in this CVE entry. It should be AV:L or AV:P.

The attack complexity (AC) metric was assigned Low (AC:L), however, this bug requires external factors outside an attacker's control to be put into force. It should have a complexity of High (AC:H).

The privileges required (PR) metric was assigned None (PR:N) but an attacker needs sufficient (usually administrator/root) privileges to load an unauthorized configuration. It should be High (PR:H).

The user interaction (UI) metric was assigned None (UI:N) but a user must send a certain kind of matching request for the error to be revealed; by clicking a link or otherwise. It should be Required (UI:R).

The availability impact (A) metric was assigned High (A:H), however we have demonstrated why that is wrong. It should be None (A:N).

These corrections take the base score down to 0.3.

The most severe bug-like behavior in the report is the unpleasant panic in the logs and an empty HTTP response instead of a pleasant message in the logs and an error HTTP response. This is an "ordinary" bug that is not a security vulnerability at all: the web server is properly executing its configuration from an authorized user.

We recommend that this irrelevant CVE entry be withdrawn to keep the database focused on legitimate security bugs and meaningful for other users.



Milestone

acaddyserver locked as resolved and limited conversation to collaborators on Aug 3

Assignees mholt			
Labels bug			
Projects None yet			

Development

No branches or pull requests

3 participants





