

BUG REPORTING MADE LESS BUGGY

DebugPack tool by David Petera

ABOUT ME

Software Engineering student at MFF CUNI in Prague

Support/testing in BIRD team at CZ.NIC



**Faculty of Mathematics
and Physics**
Charles University



PROBLEM

• Bird-users

↪ 9/30/25, 00:00 :

BIRD Crash when reconfiguring with a change ...

✉ 2 replies >



• Bird-users

↪ 12/11/25, 18:50 :

BIRD 3.1.5 crash: Assertion failure in do_lock / i...

✉ 2 replies >



CRASHES

WE NEED TO GET INFORMATION

COREFILE + CONFIG

COREFILE + CONFIG + BINARY

**COREFILE + CONFIG + BINARY +
SYSTEM INFO**

**COREFILE + CONFIG + BINARY +
SYSTEM INFO + DEPENDENCIES**

**COREFILE + CONFIG + BINARY +
SYSTEM INFO + DEPENDENCIES +
DEBUG SYMBOLS**

WEEK WORTH OF EMAILS...

SOLUTION

WE NEED

Automate the process

"Download this, run that" instructions

Indifference to the user setup

FOSS (ofc)

Are we alone in this?

DEBUGPACK

DEBUGPACK

CLI tool in Python v3.6

Minimal dependencies

GPLv3+ license

USER

```
debugpack -v pack core [binary] -a file.conf
```

Saves provided **files**, **binary**, **dependencies**, **system info**

tar.gz archive structure

```
debugpack_archive
├── config.json
├── binary
│   └── BINARY_FILE
├── core
│   └── CORE_FILE
└── libraries
    ├── lib
    │   └── ...
    └── lib64
        └── ...
└── sysinfo
    └── proc
        └── cpuinfo
        └── meminfo
```

Info: Running packing routine.

(,-.-`_._,`-'(_`-`|`-/-|
`-. -` \) -` (, o o)
`-` \`"-` __/
//| |\\
(oo)

Info: Creating temporary working directory '/tmp/debugpack-176
Info: Copying LIBRARY from '/lib/x86_64-linux-gnu/libssh.so.4'
Info: Copying LIBRARY from '/lib/x86_64-linux-gnu/libpthread.so.6'
Info: Copying LIBRARY from '/lib/x86_64-linux-gnu/libc.so.6' to /tmp/debugpack-176/lib/
Info: Copying LIBRARY from '/lib/x86_64-linux-gnu/libcrypto.so.1.1.1' to /tmp/debugpack-176/lib/
Info: Copying LIBRARY from '/lib/x86_64-linux-gnu/libz.so.1' to /tmp/debugpack-176/lib/

DEVELOPER

```
debugpack debug <archive> gdb
```

Sets up **debuginfod** sources

Downloads debug symbols

Sets up and runs **GDB**

```
debugpack browse <archive> -s meminfo
```

Browses **system info** and **aditional files**

BENEFITS

All the necessary information at all times

Normalization and automation of the process

Better user and dev experience

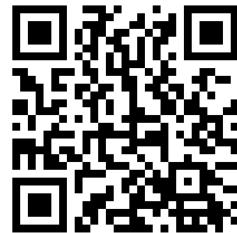
SAVES TIME!

FUTURE WORK

- Plugins for developers?
- Spin up container with user system?
- Daemon bundler?
- Your idea goes here!

WHAT IS YOUR USECASE?

Tell us at  stand!



Email: david.petera@nic.cz