# Debuginfod on Ubuntu

Sergio Durigan Junior sergiodj@ubuntu.com

# What is debuginfod?

- Relatively young ( $\sim$ 2019) project started by Red Hat.
- It "is a client/server [...] that automatically distributes ELF / DWARF / source-code from servers to clients such as debuggers across HTTP".
- The goal is to replace the need for .ddeb files (but it can do more than that).

There's a debuginfod server (e.g., at https://debuginfod.ubuntu.com) that indexes all available debuginfo from several supported Ubuntu releases.

- There's a debuginfod server (e.g., at https://debuginfod.ubuntu.com) that indexes all available debuginfo from several supported Ubuntu releases.
- Debugger-like tools (e.g., GDB) link against libdebuginfod, which provides the client support.

- There's a debuginfod server (e.g., at https://debuginfod.ubuntu.com) that indexes all available debuginfo from several supported Ubuntu releases.
- Debugger-like tools (e.g., GDB) link against libdebuginfod, which provides the client support.
- When the tool needs a certain debuginfo, it will contact the debuginfod server (specified via the DEBUGINFOD\_URLS shell variable) and put a request for the debuginfo's Build-ID.

- There's a debuginfod server (e.g., at https://debuginfod.ubuntu.com) that indexes all available debuginfo from several supported Ubuntu releases.
- Debugger-like tools (e.g., GDB) link against libdebuginfod, which provides the client support.
- When the tool needs a certain debuginfo, it will contact the debuginfod server (specified via the DEBUGINFOD\_URLS shell variable) and put a request for the debuginfo's Build-ID.
- If found, the server will then transmit the information over HTTP(S) to the client.

## How do I use it?

- GDB on Jammy and Kinetic support using debuginfod to fetch debug information.
- From Kinetic onward, there is no need for manual intervention: the system will automatically use Ubuntu's debuginfod service.
- On Jammy, you can configure your system to use the service by doing:

export DEBUGINFOD\_URLS="https://debuginfod.ubuntu.com"

## Demo

■ Fasten your seat belts, please.

## Future plans

- Work on source code indexing (more demo!).
- Index debug information from other producers (snaps, special PPAs).
- Provide debuginfod-capable GDBs via -backports to previous supported Ubuntu releases.

## More information

- https://ubuntu.com/server/docs/service-debuginfod
- https://sourceware.org/elfutils/Debuginfod.html
- sergiodj @ libera.chat
- sergiodj@ubuntu.com