debuginfod and its interaction with the Yocto Project

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debuginfod

- What is debuginfod? debuginfod is a daemon turns a machine that holds debug artifacts into file server for easier debugging.
- Why use it? Debug info is too big to be stored locally on the target devices. Different versions of binaries exist, storing and searching for debug artifacts manually is too slow.

Installing debuginfod

There are two ways to install on a Ubuntu machine:

- ▶ Upgrade to Ubuntu 22.04
- ▶ append the impish package to /etc/apt/sources.list

Setting up and using debuginfod

Starting the debuginfod server:

- ► To start the file server, simply run debuginfod -F. Different arguments will search for different debug artifacts (-F -R -U)
- Providing a path to a directory will point debuginfod where to scan for the debug artifacts.
- ► To set a rescan time, provide -t [time in seconds]

On the host machine:

▶ set environment variable DEBUGINFOD_URLS to the ip address of the file server, prefixed by http:// and suffixed by the port number defaulted to :8002, which can be changed by -p [port num]

Federating debuginfod servers

debuginfod servers can act as a host machine and query other servers

Demo

debuginfod with the Yocto Project

For versions after 3.4(honister) only 2 changes are needed for debuginfod to work on a build. Append the following the local.conf:

- PACKAGE_CONFIG_pn-elfutils-native="debuginfod libdebuginfod"
- 2. DISTROFEATURES += "debuginfod"