Automatically testing distribution kernel packages

Motivation:

- Provide tested and safe to use kernel packages
- Improve quality of the kernel packages on Gentoo

- Currently we are testing gentoo-sources and other derived packages
- gentoo-sources
    - Genpatches (package containing pactches for each kernel)
        - One specific gentoo patch
    - Kernel sources

What we are doing for Gentoo kernel package testing:

- Testing multiple kernel configurations
    - make allyesconfig (succeeds?)
    - Make defconfig or any other reasonable configuration (succeeds?)
    - stabilize package
- Toolchains can introduce major changes and widespread breakage
    - Build with different toolchains

What we currently have for Gentoo kernel package testing
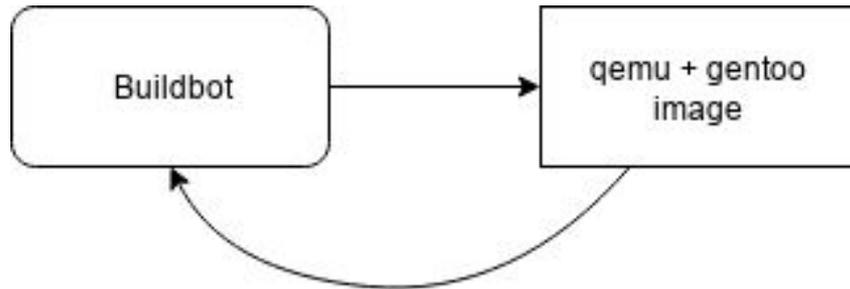
What we are thinking to doing for Gentoo kernel package testing

```
┌─────────────┐         ┌─────────────┐         ┌─────────────┐
│             │         │             │         │             │
│   Buildbot  │────────▶│  Fileserver │────────▶│    Lava     │
│             │         │             │         │             │
└─────────────┘         └─────────────┘         └─────────────┘
```

Generalizing:

- Jenkins vs buildbot or any other testing system
- We need more kernel testing not just boot test
  - LPT, kselftest
- Lava or not ?
  - Bbci (specific to boot, helping us testing gentoo kernels packages) http://kernel.montjoie.ovh/lava/

https://github.com/gentoo/Gentoo_kernelCI

Recently working with docker

https://github.com/aliceinwire/GkernelCI_docker