Project Growth & Next Steps
Agenda

- Status & Growth
- Releases & Packaging
- Community Tools
Recent History

- 2012: zip file on intel.com
- 2013: git + mailing list on independent dpdk.org
- 2014: patchwork, Fedora package
- 2015: doc, ABI care, various hardware support
- 2016:
More Platforms

All platform vendors are welcome

1.8: POWER 8 by IBM
2.1: TILE-Gx by Tilera (EzChip (Mellanox))
2.2: ARM
OSv as virtual platform?
Recently Submitted Device Drivers

- Broadcom/QLLogic NetXtremel11
- Chelsio T5
- Cisco VIC
- COMBO-100G
- Intel FM10000
- Mellanox ConnectX-4
More Devices

All device vendors are welcome, choose your model:

- Open Source contribution in dpdk.org
- Binary extension as shared library - no guarantee on binary interface stability
More Visitors

5000 website users per week
More Popular

1200 members
New registrations on dev@ each month
More Voices

140 senders on dev@
More Discussions

Emails and threads on dev@
Large Email Flow

300 threads (1400 emails) per month

Take care of your readers:
http://dpdk.org/ml

Good and short title attract more readers
More Contributions
Reviews Make Release

Mailing list is not write-only, please read what others do and comment

Reviewers are very important for project scaling

More reviewers + Faster = More enjoyable contributors

Patchwork since 2014
Maintainers

Responsibilities on dedicated areas (since this year)

- 72 sections, 55 have a maintainer
- 30 maintainers
- dpdk-next tree?
- sub-trees: drivers/net?
Release Lifecycle

- Merge window is open when a major release x.y.0 is out
- 1 month before a major release, features should be integrated
- Deadline for 2.2 features: end of October
- Every 4 months, a major release
- 2.2.0 should be released at end of November
Packaging

FreeBSD, Fedora, RHEL, Ubuntu... need more!

- fix namespace
- no -Werror for tarballs
- simplify config
- simplify build
Packaging / Config

needed evolutions

less options

avoid duplicated/limited templates

make config ARCH= OS= CC=

internal/external dependencies
Packaging / Build
needed evolutions

- standard binary install
- app link with pkgconfig

- API/ABI care (since 2.0)
- update to next release without rebuilding apps (NEXT_ABI=n)
- deprecation notices give time to adapt apps
Documentation

- Doc in code and updated simultaneously
- HTML/PDF outputs
- Book about devices
  - Clearer contribution process
  - Guidelines for coding style, doc, versioning
  - Design decision become a guideline
Community Marketing

- Open website administration
- Structure for branding and marketing

Linux Foundation? ONF? lightweight other?
Avoid issues!
Bug Management
why/how a bug tracker

- avoid forgetting bugs
- help to dispatch maintenance work
- risk: break discussions flows

should notice important changes by email
email discussions should be integrated in comments
Test Coverage

- various code/comment/spell checkers
- various C compilers
- various C++ compilers for C++ application
- various OS
- various CPU
- various devices
Test Goals
more than basic checks, unit tests or DTS

Benchmark
- check regression or improvement
- support for patch discussions

Frequency
- daily
- per patch
- on demand - private patch
Distributed Tests

big tasks need big community

test-report@dpdk.org

new test instances are welcome
Distributed CI
per patch test

Counters in a patchwork column

Links to details in test-report@dpdk.org archives

Report header must comply with the (not yet) adopted format

work in progress: patchwork@lists.ozlabs.org

Subject: |ERROR| pw 2905: [PATCH v3 01/42] pci: allow unlimited throughput

Test-Label: Intel Niantic on Fedora

Test-Status: ERROR

Patchwork: http://dpdk.org/dev/patchwork/patch/2905