


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/QLogic NetXtremeII



Chelsio T5



Cisco VIC



COMBO-100G



Intel FM10000



Mellanox ConnectX-4

More Devices

All device vendors are welcome, choose your model:

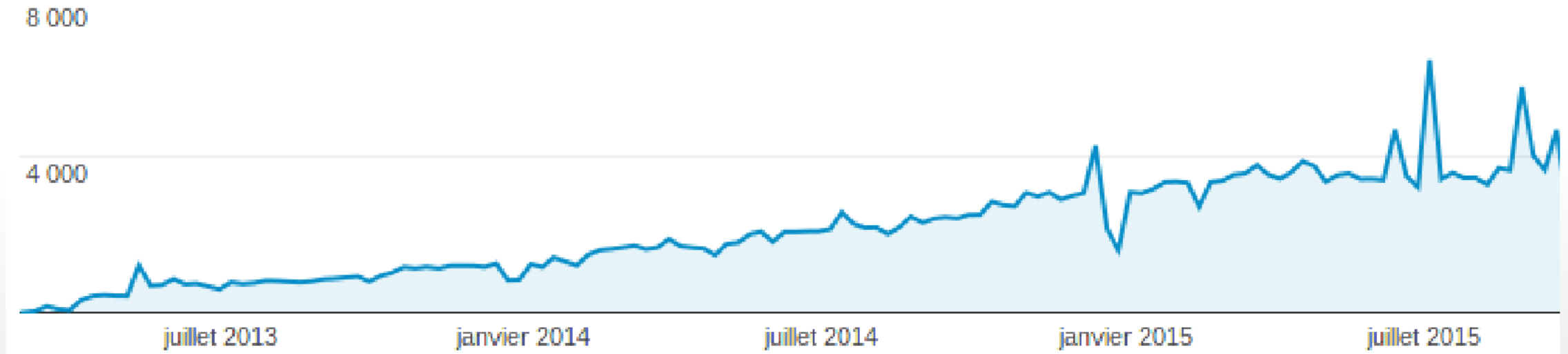


Open Source
contribution in dpdk.org

Binary extension as
shared library - no
guarantee on binary
interface stability

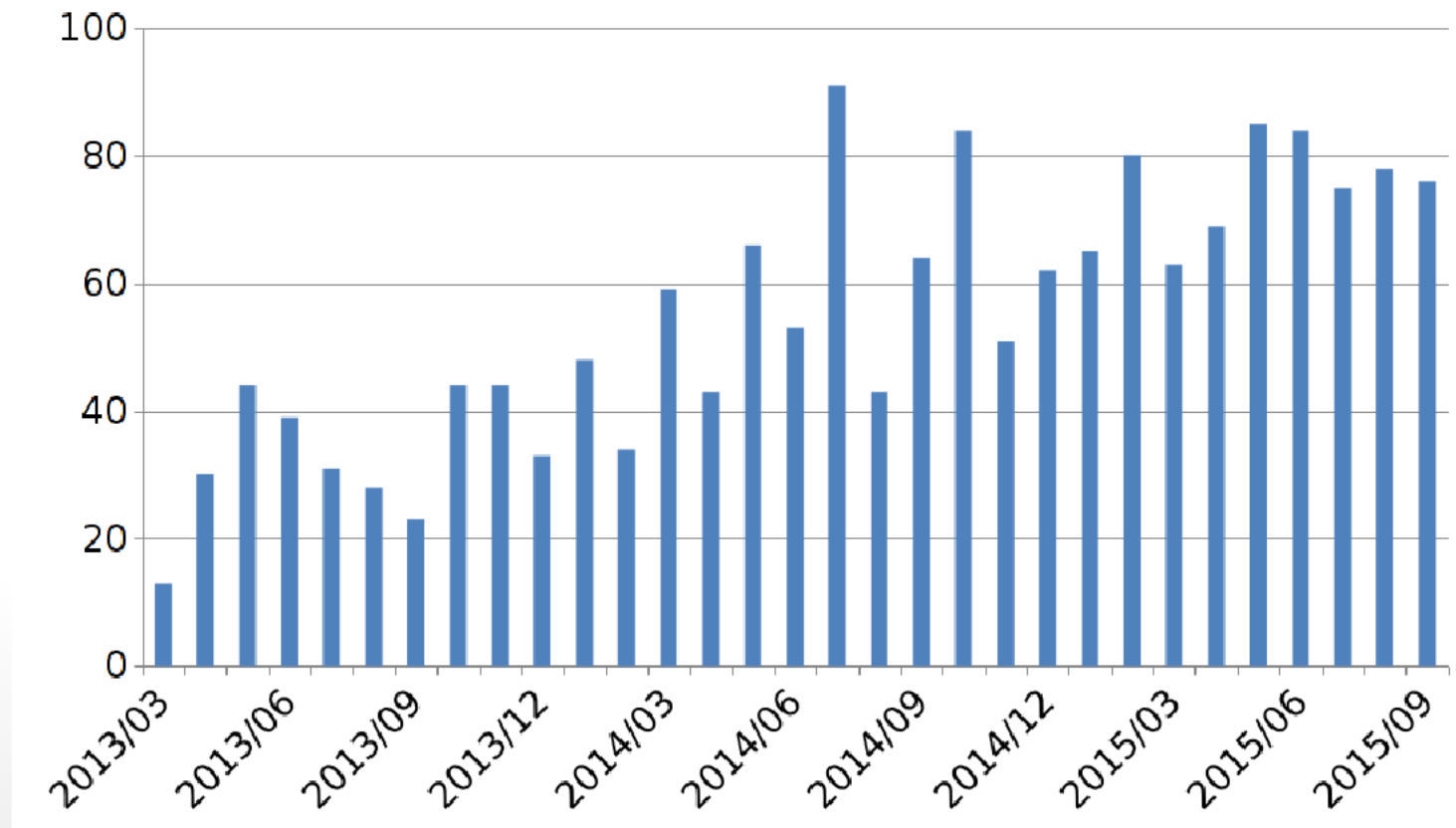
More Visitors

5000 website users per week



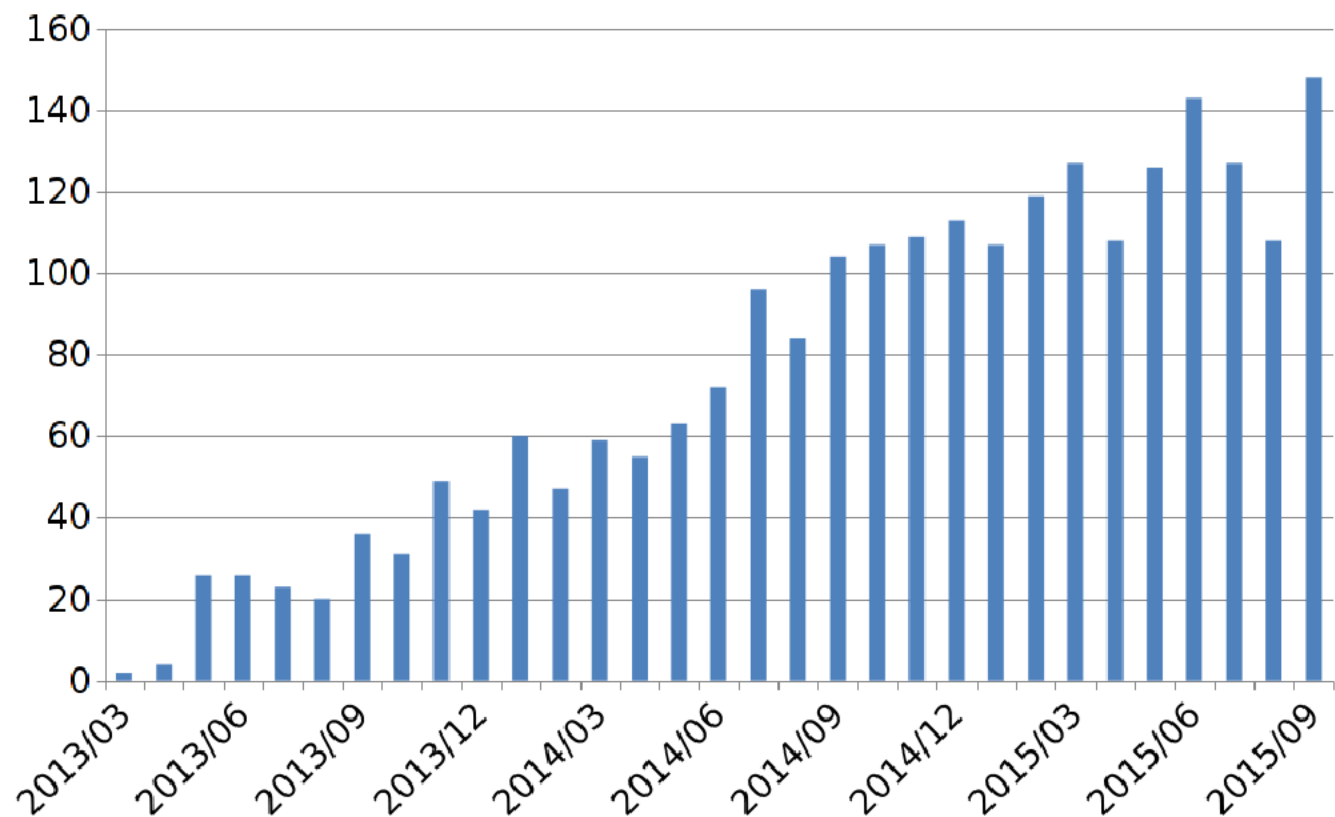
More Popular

1200 members
New registrations on dev@ each month



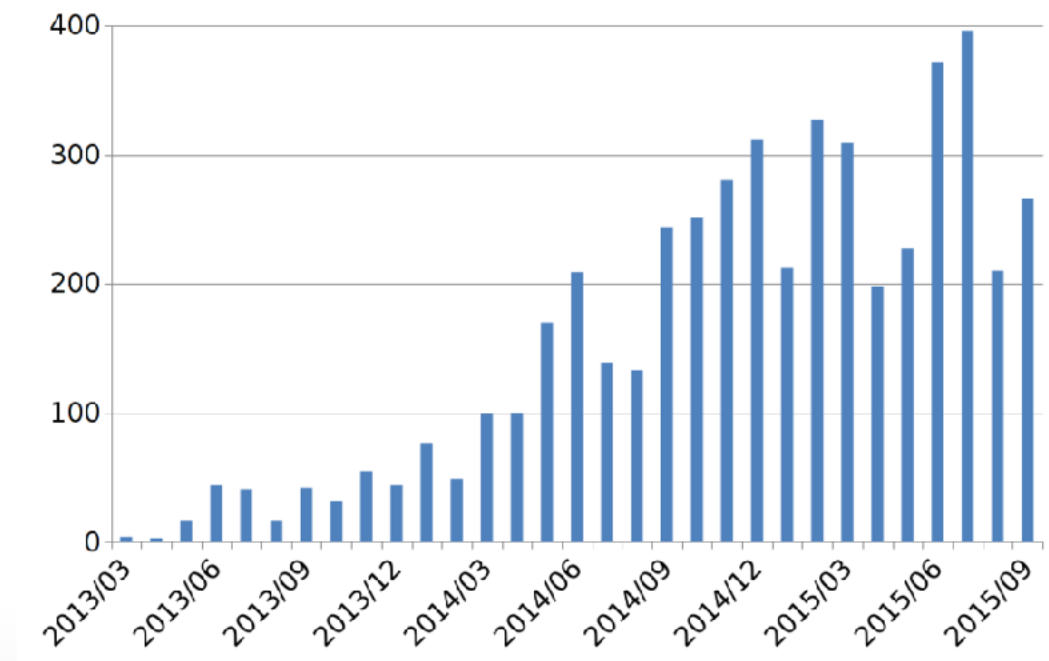
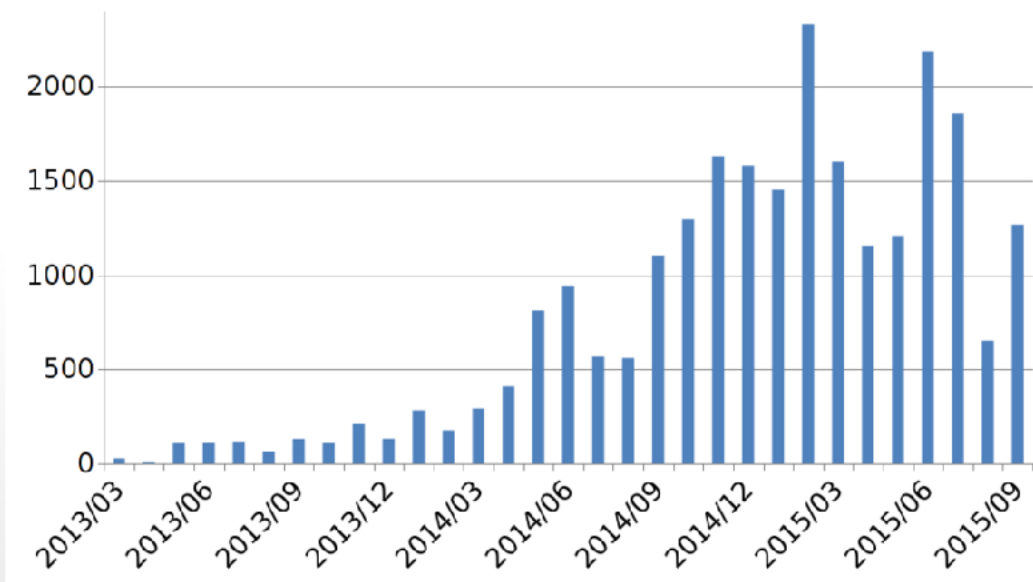
More Voices

140 senders on dev@



More Discussions

Emails and threads on dev@



Large Email Flow

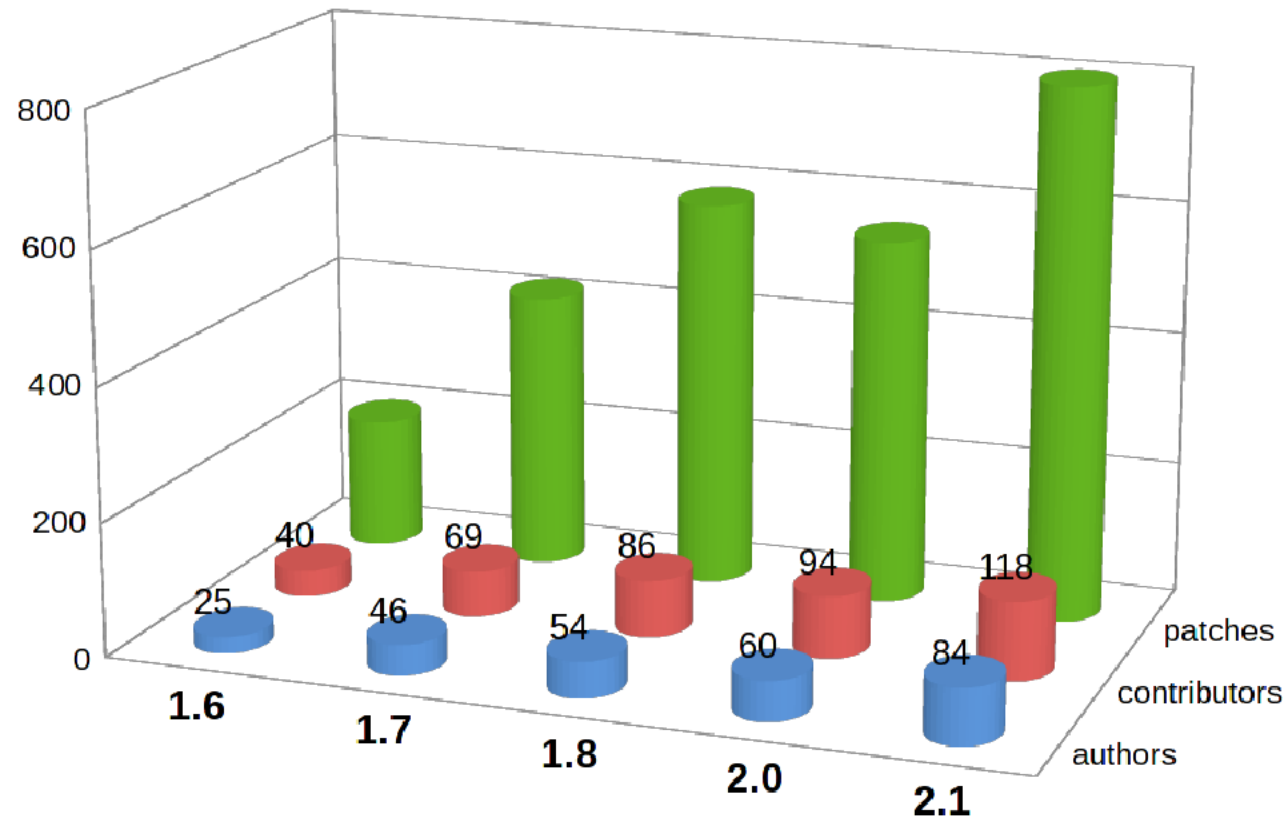


300 threads (1400 emails) per month

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 enjoying contributors



Patchwork since 2014

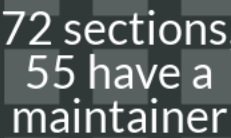


**DPDK
NEEDS YOU**

www.says-it.com/unclesam/

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

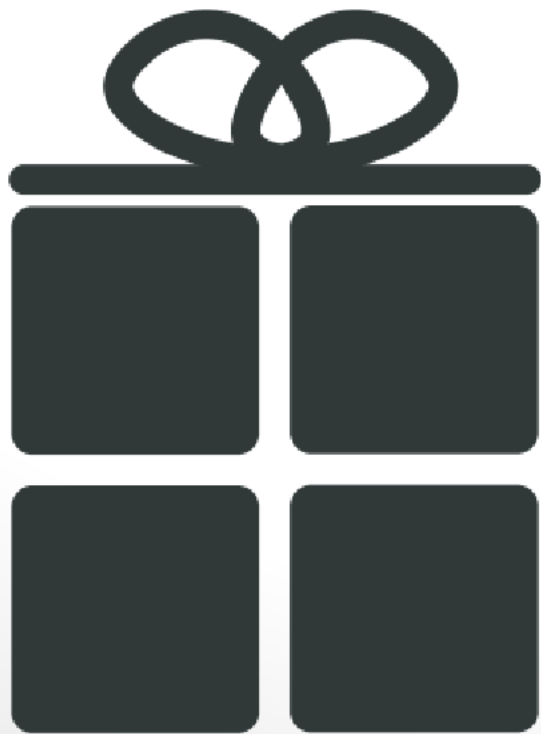
Deadline for 2.2 features: end of October

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



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>



DPDK

