



DPDK

DATA PLANE DEVELOPMENT KIT

DPDK Community Updates

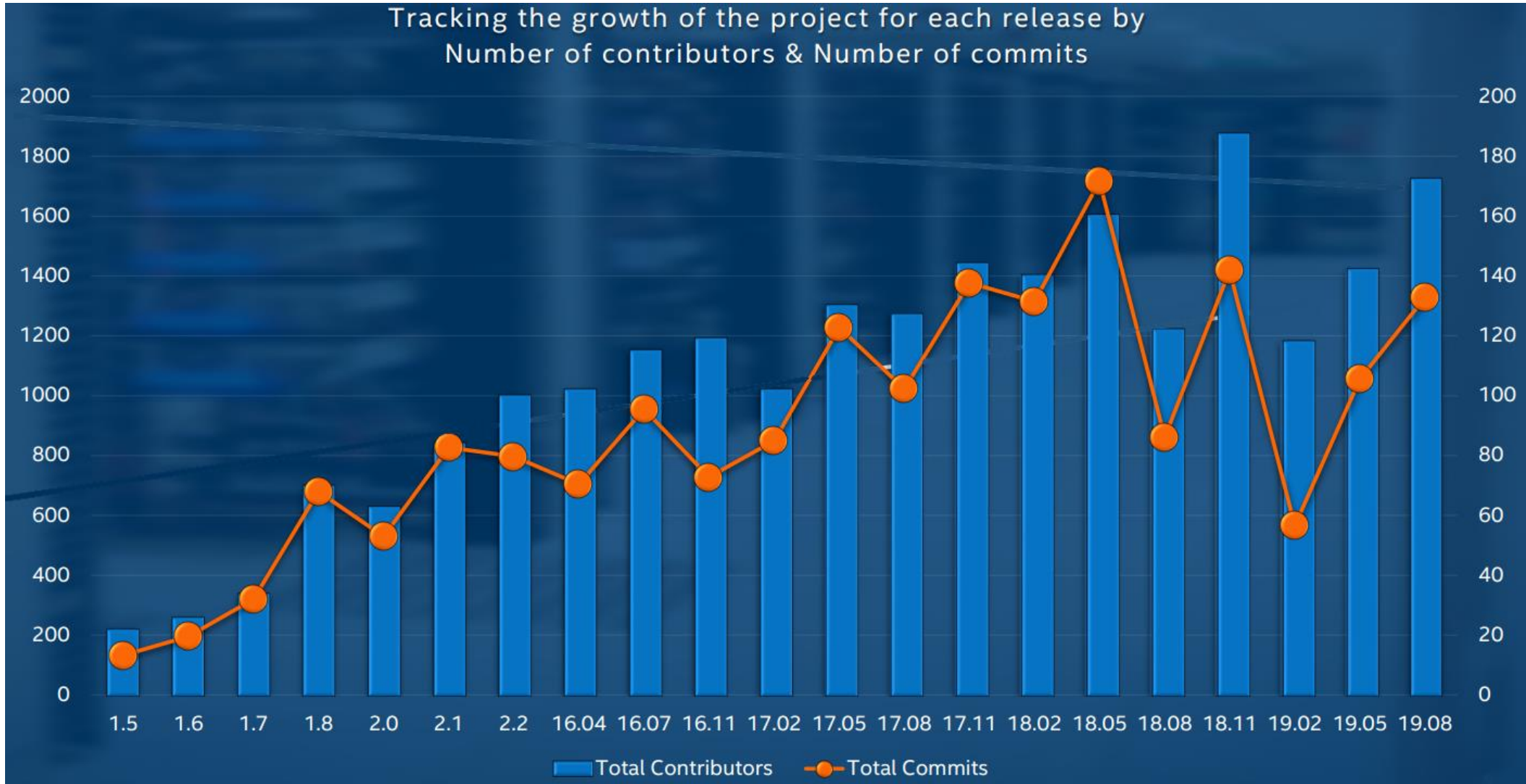
DPDK SUMMIT USERSPACE - BORDEAUX - 2019

JOHN MCNAMARA, FERRUH YIGIT

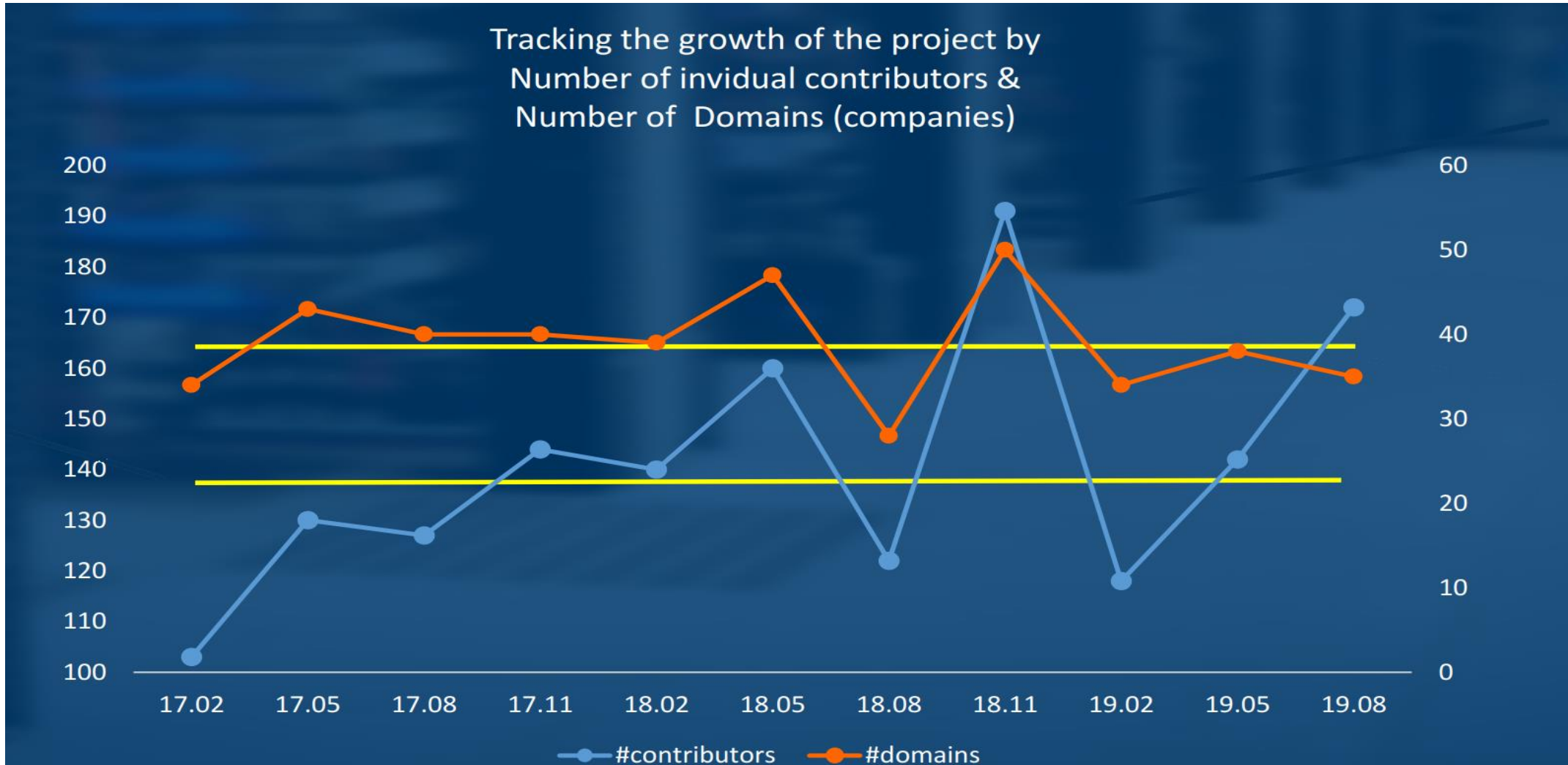
Introduction to existing process

- Mailing list with patch based development
 - Work split into sub-trees
 - Each component has a maintainer
 - 134 unique maintainers, 9 sub-trees, 2 draft sub-trees in v19.08
 - 4 application project hosted in dpdk.org
 - Repos hosted at git.dpdk.org, mirrored on GitHub
- A release every 3 months, xx.02, xx.05, xx.08, xx.11 (LTS)
 - **Proposal** 1st month: Submit new patches/RFC/v1
 - **Integration** 2nd month: Code reviewed and new revisions. Ends with RC1
 - **Test** 3rd month: Testing and fixes applied. Ends with release

Stats



Stats



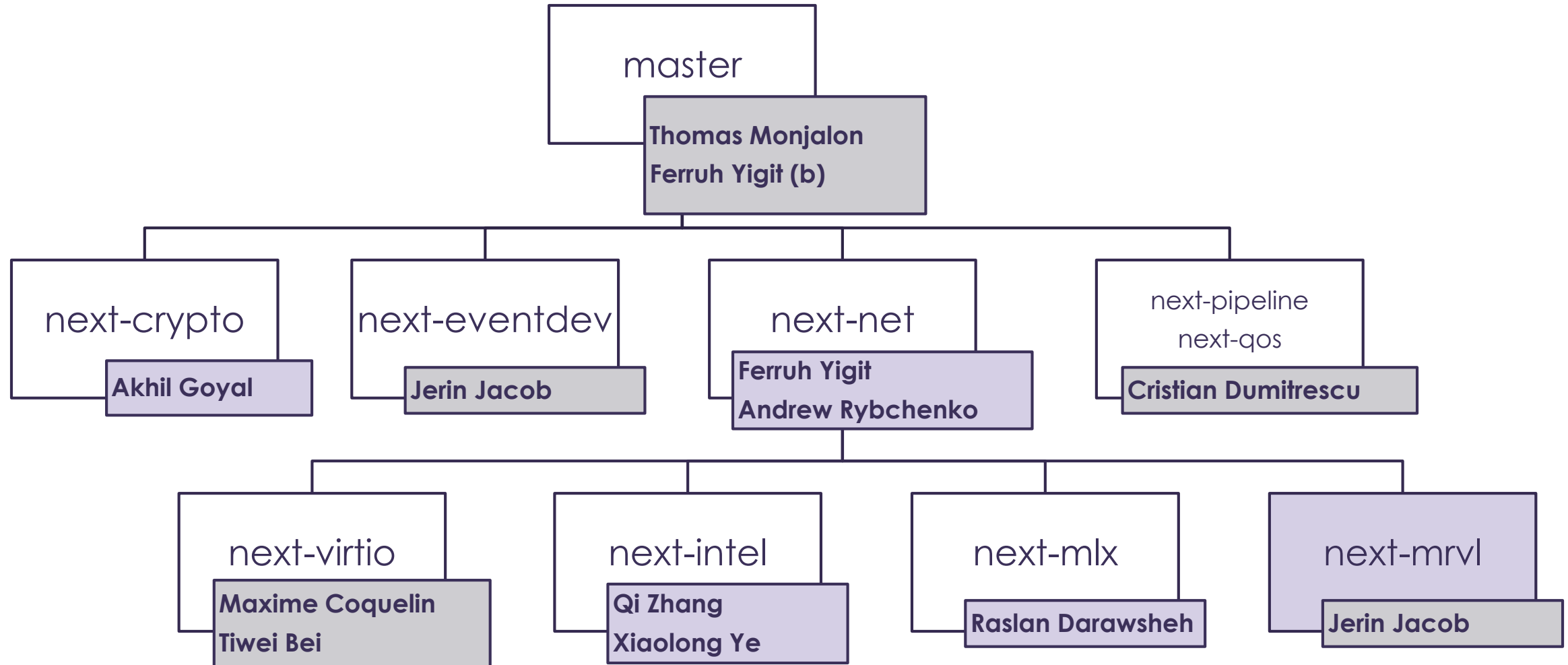
Number of patches (based on patchwork ids)

```
59342 - Sep. 18, 2019 (240 days)
50000 - Jan. 22, 2019 (253 days)
40000 - May 14, 2018 (217 days)
30000 - Oct. 9, 2017 (258 days)
20000 - Jan. 25, 2017 (372 days)
10000 - Jan. 20, 2016 (645 days)
00001 - April 16, 2014
```

```
git diff --shortstat v18.11..v19.08
```

2728 files changed, 401401 insertions(+), 230725 deletions(-)

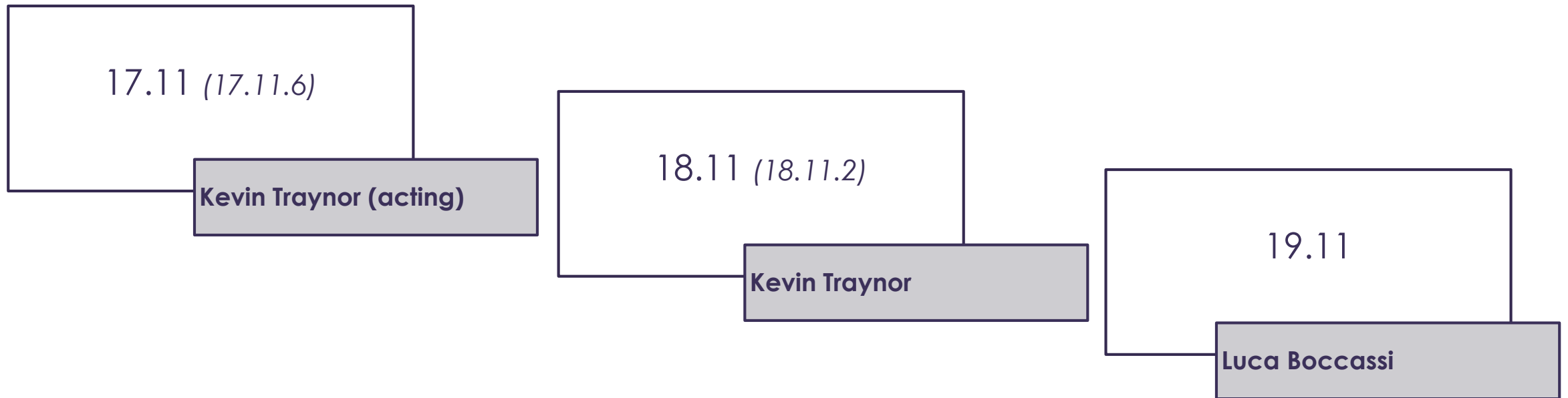
Subtrees and Maintainers



Changes to process since last Userspace

- Travis CI support
- DPDK Open Lab OvS testing, build tests
- Intel public CI improved [1]
- New Security process
- More mature meson support
- New email archive and news server, inbox.dpdk.org
- Online cross reference, lxr.dpdk.org
- Weekly project status meetings going on

LTS trees and Maintainers



New PMDs (since 18.11)

- **next-net**
 - af_xdp
 - hinic
 - ice
 - ipn3ke
 - memif
 - nfb
 - octeontx2
 - ppfe (19.11)
 - hns3 (19.11)
- **crypto**
 - nitrox (19.11)
- **eventdev**
 - octeontx2
- **mempool**
 - octeontx2
- **raw**
 - ioat
 - ntb
- **baseband**
 - fpga_lte_fec

Other

- libraries
 - librte_ipsec
 - librte_rcu
 - librte_stack
 - librte_rib (19.11)
- platform
 - windows
- apps
 - test-compress-perf

Discussion (From last year) Are we better?

- Predictability of status of a feature
- Complex feature requirement gathering and design review
- Multi-vendor features
- Timely releases and milestones
- Release cycle
- Roadmaps
- DPDK Open Lab
- Patch lifecycle metrics
- Consumption metrics
- More Unit Test / Documentation
- More reviews
- Git Merge

“ Thank you

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Backup [1]

os	Makefile					Meson	Document
	gcc	clang	icc	gcc+shared	gcc+debug	gcc/clang	pdf/html
RHEL76-64	pass						
CENTOS76-64	pass	pass	pass	pass	pass		
UB1804-64	pass	pass	pass			pass	pass
UB1604-32	pass					pass	
UB1904-64	pass						
UB1604-64	pass	pass					
FC30-64	pass	pass				pass	
WIN10-64						pass	
FreeBSD12-64	pass	pass		pass	pass	pass	
RHEL80-64	pass						
SUSE15-64	pass	pass				pass	