Pothos – January 2015 Update

- Release tags
- Users' group
- New documentation
- New features
- Upcoming videos
- Quick demos



Maint branch and release tags

Releases page

- https://github.com/pothosware/pothos/wiki/Releases
- https://pothosware.github.io/pothos/doxygen/
- Maint branch
 - https://github.com/pothosware/pothos/tree/maint
- Pothos v0.1.0
 - https://github.com/pothosware/pothos/tree/pothos-0.1.0
- SoapySDR v0.1.0
 - https://github.com/pothosware/SoapySDR/tree/soapy-sdr-0.1.0



Pothos Users' Group

- Links to users' group for sign up and email
 - https://github.com/pothosware/pothos/wiki/Support
 - https://groups.google.com/d/forum/pothos-users
 - pothos-users@googlegroups.com





New documentation

- Remote control guide
 - https://github.com/pothosware/pothos-library/wiki/RemoteControlGuide
- Pothos Utility documentation
 - https://github.com/pothosware/pothos-library/wiki/PothosUtilGuide
- Scheduler explained
 - https://github.com/pothosware/pothos-library/wiki/SchedulerExplained
- Coding guide: Advanced scheduling
 - https://github.com/pothosware/pothos-library/wiki/BlocksCodingGuide#advanced-scheduling





New features and API changes

Topology automation and benchmarking

- JSON topology
- JSON stats
- Labels API
 - Width field
 - Convenience function for propagation
- Pothos Zynq toolkit
 - Userspace driver and kernel module
 - Zero copy DMA source and sink blocks
 - https://github.com/pothosware/pothos-zynq/wiki

Data producer



Data consumer

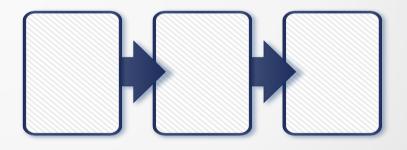
A stream with labels

label

1-0--

New digital and packet blocks

- FIR designer RRC and Gaussian filters
- Symbol mapping/slicing
- Byte to bit to symbols conversions
- Differential encoding/decoding
- Packet framer/correlator
- Scrambler/descrambler
- Simple MAC protocol block
- Chat box GUI widget

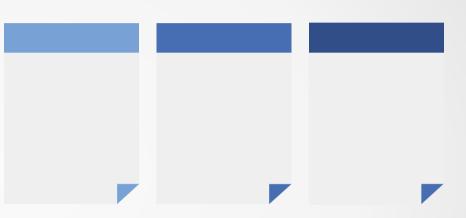




Upcoming videos

Scheduler Explained

- Slide style video
- Actor model implementation
- Threading, queues, resources
- Work handling and stimulus
- Advanced buffer features
- Communication layer demo
 - Screencast style video
 - PHY DMPSK, signal conditioning
 - MAC use of packets and messages
 - 100% within Pothos GUI





And some quick demos

- Transmit QPSK
- Chat box demo



Thanks for watching

 Find a copy of this presentation and all of its links: http://www.joshknows.com/blog

