# 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

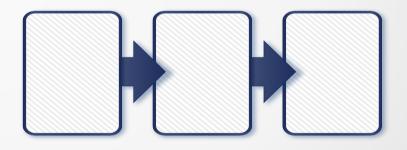
A stream with labels

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

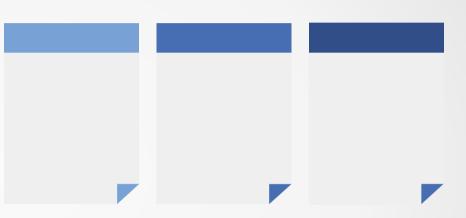




# Upcoming videos

### 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

