

# BEACON

David Erickson

## Overview

- OpenFlow 1.0 Controller
- Java
- Cross-platform

## Key points

- Easy to use
- Modular
- High Performance
- Small code base

## Easy to develop on

- <5000 lines of code
- Eclipse Dev Environment
- Develop/compile on any platform
- Compile in ~10s
- Tutorials, docs, discussion forum

## Modular and Dynamic

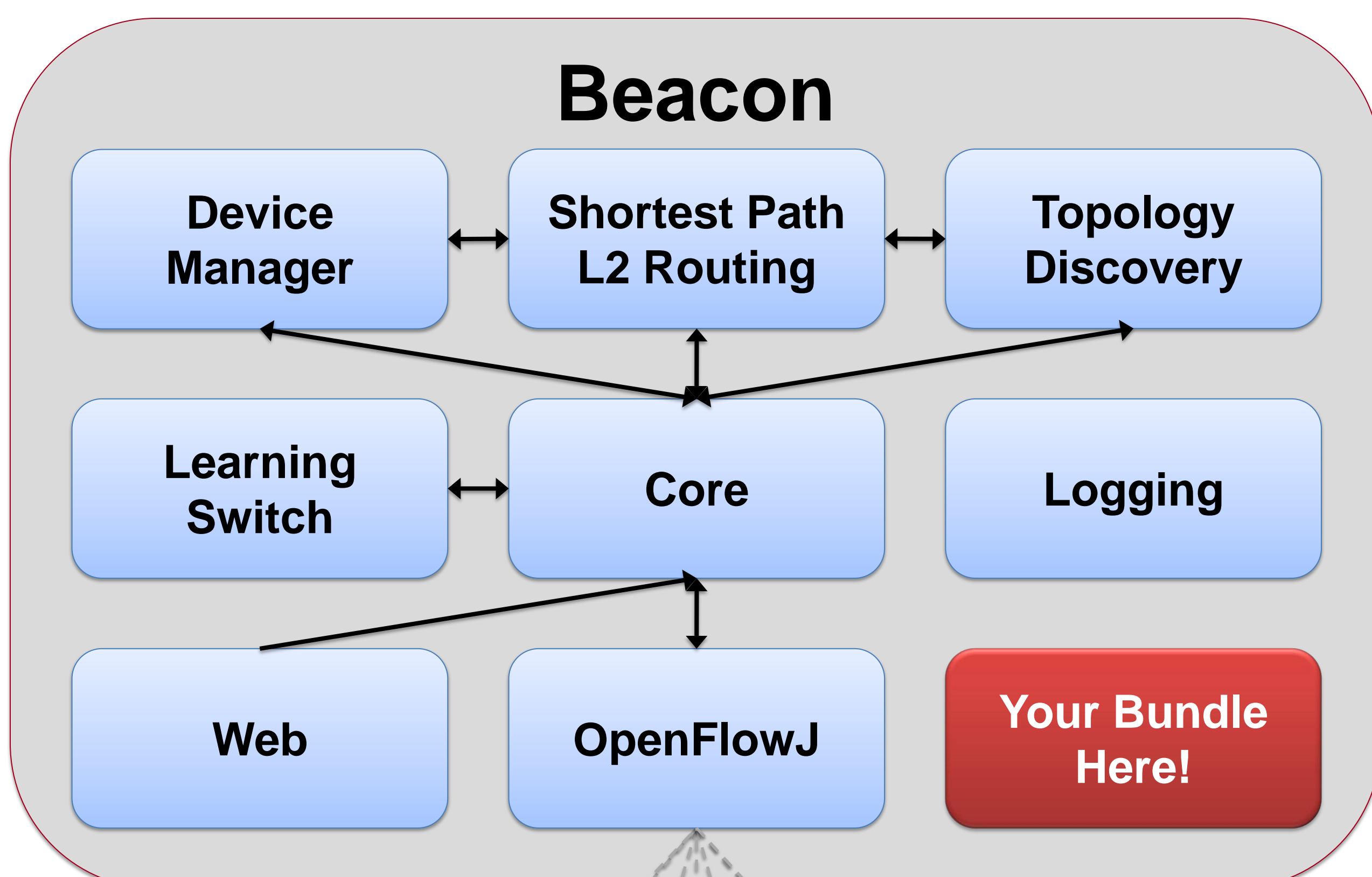
- *Bundles* contain code and resources
- Start, stop, install, and uninstall bundles **at runtime**
- OSGi platform

## Easy to deploy

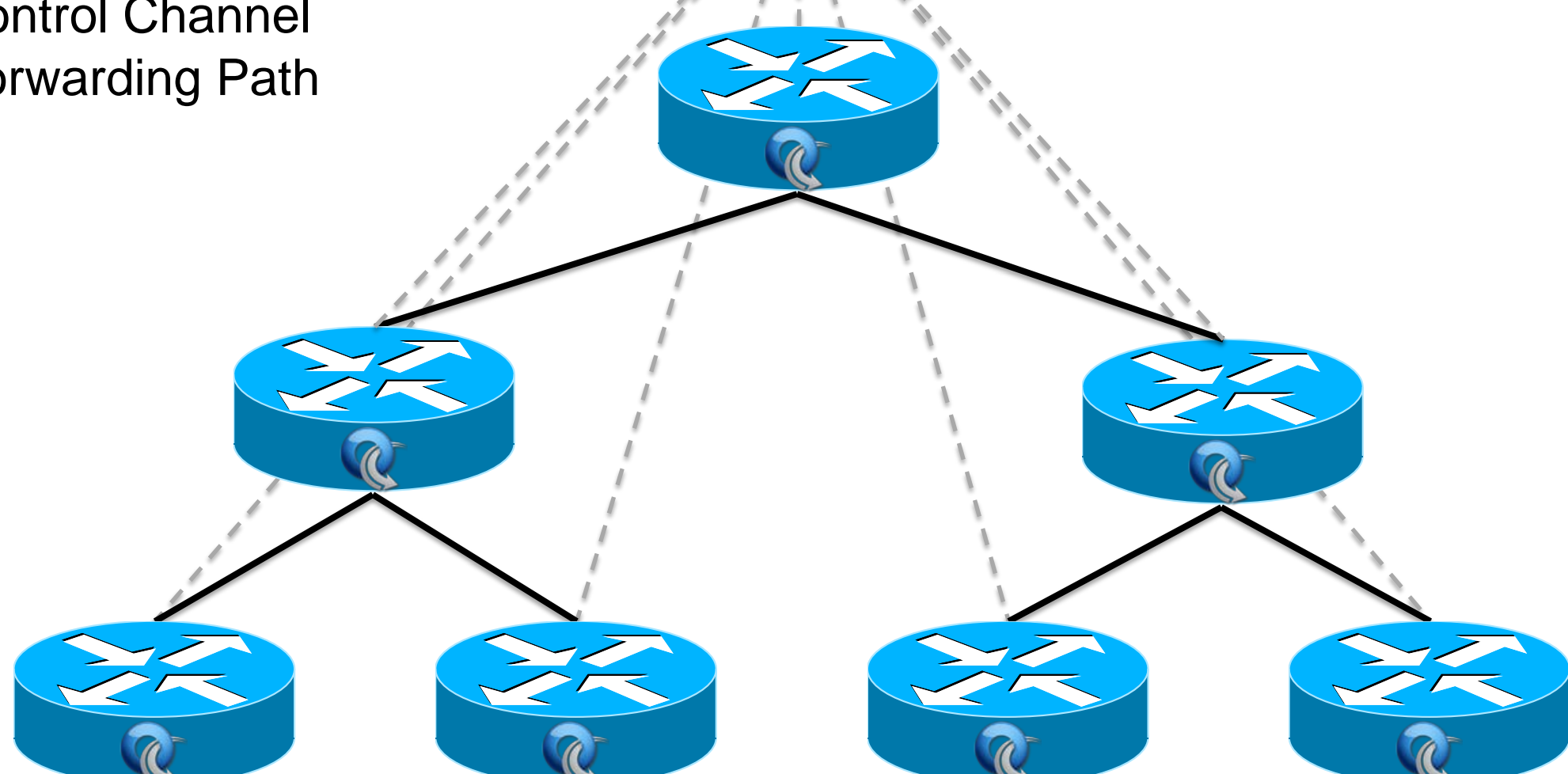
- Binaries for Linux, Mac OSX, Windows
- Only prerequisite is a JVM
- Web UI for management/development

## High Performance

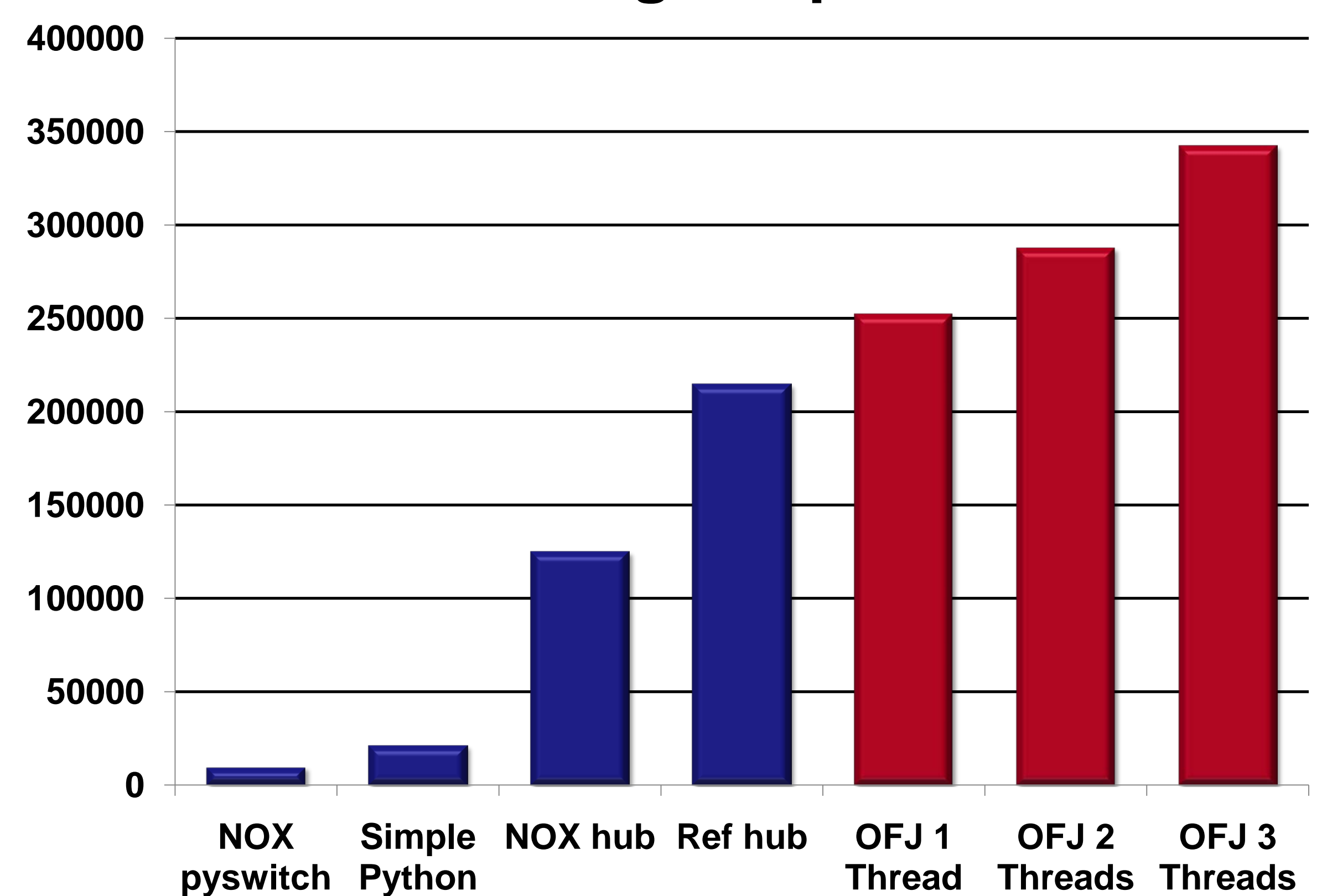
- Multi-threaded
- Java Adaptive Optimization



--- Control Channel  
 — Forwarding Path



Average Replies/s



## Cbench Test

- NOX Hub (Python/C)
- Reference Hub (C)
- Simple Controller (Python)
- OpenFlowJ Hub (Java)

## Flexible

- Interfaces abstract impl. details
- Extend or replace default functionality
- Publish/subscribe and observer design
- Plug in your own web UI component

