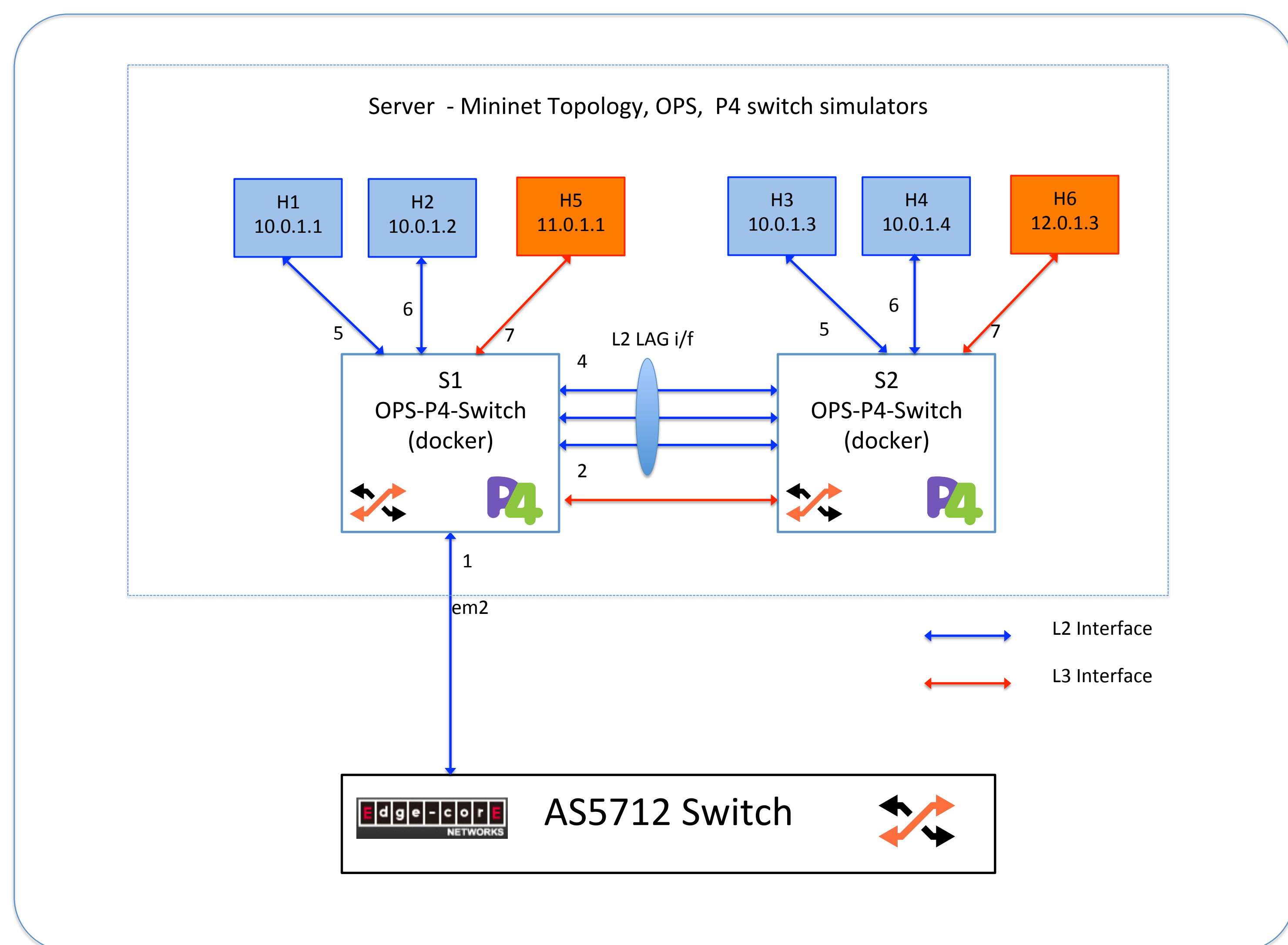


# OpenSwitch with P4 Switch

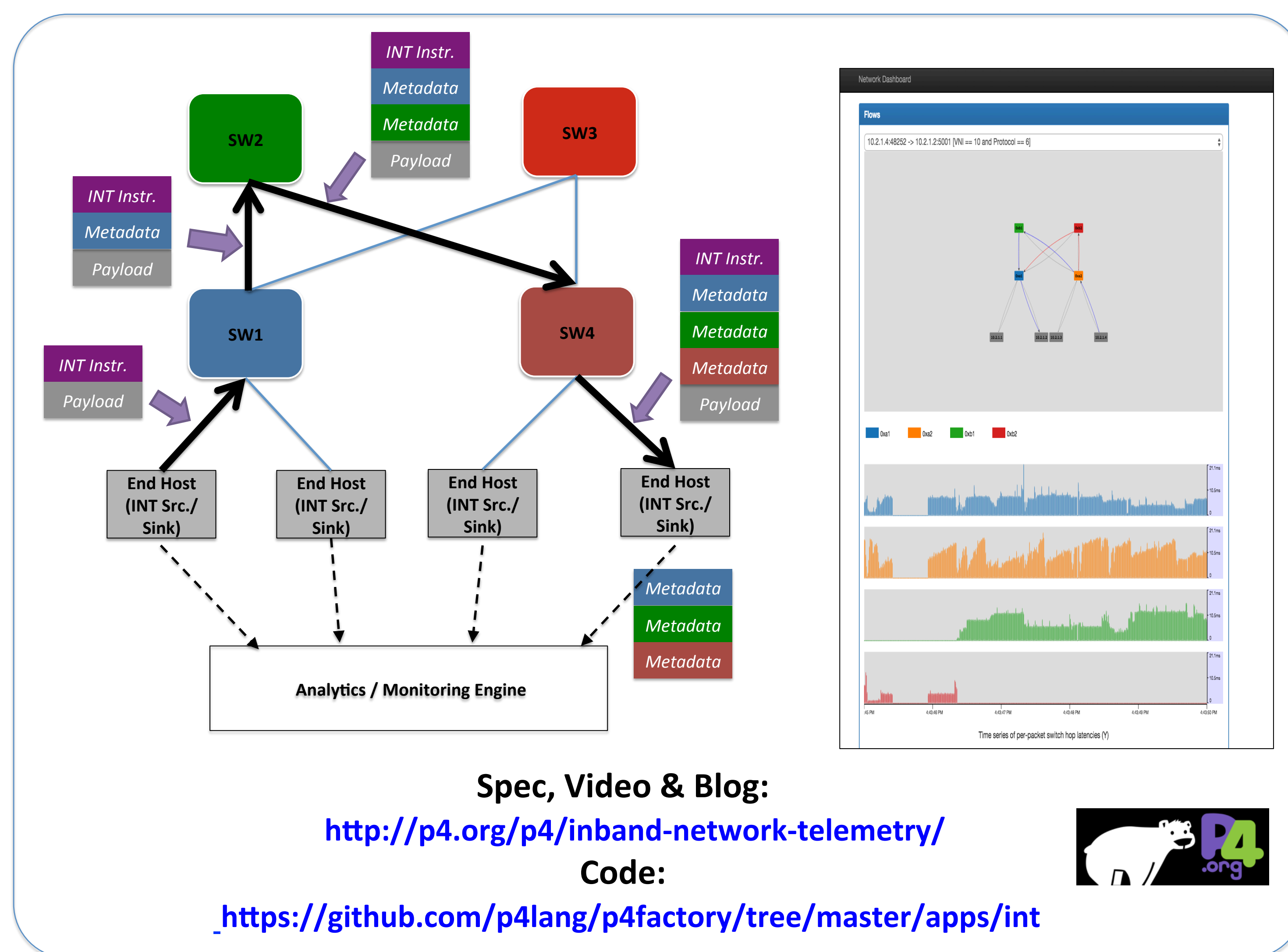
## Open Source Data Plane, Control Plane & Telemetry



### Demo Setup



### In-band Network Telemetry (INT)



Spec, Video & Blog:

<http://p4.org/p4/inband-network-telemetry/>

Code:

<https://github.com/p4lang/p4factory/tree/master/apps/int>



### Benefits of P4 Switch in OPS

#### Programmable Pipeline

Add new feature, tweak / improve / fix existing features

#### Rapid Prototyping and Testing

Pipeline changes can be compiled and tested in just a few hours !!

#### Feature-rich P4 defined pipeline

switch.p4 provides fully functional advanced L2/L3 switch pipeline

#### Zero Effort Silicon Migration

The pipeline can run on simulator and P4 devices

### Benefits of INT

#### Complete network visibility

No black boxes, ghost drops and guessing.

#### Real-time monitoring

No need to depend on polling

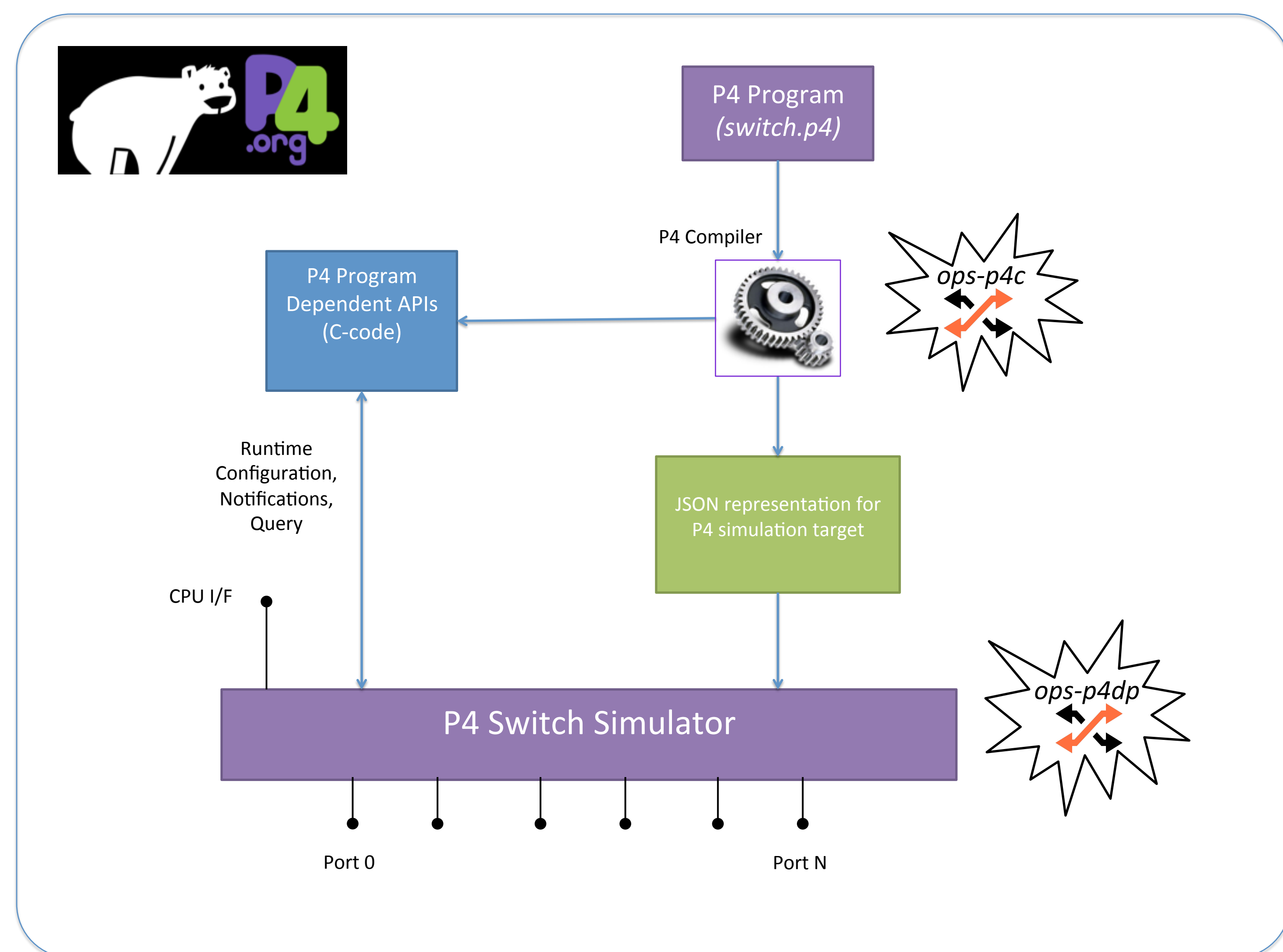
#### Per-packet metadata

No sifting through aggregated counters and information

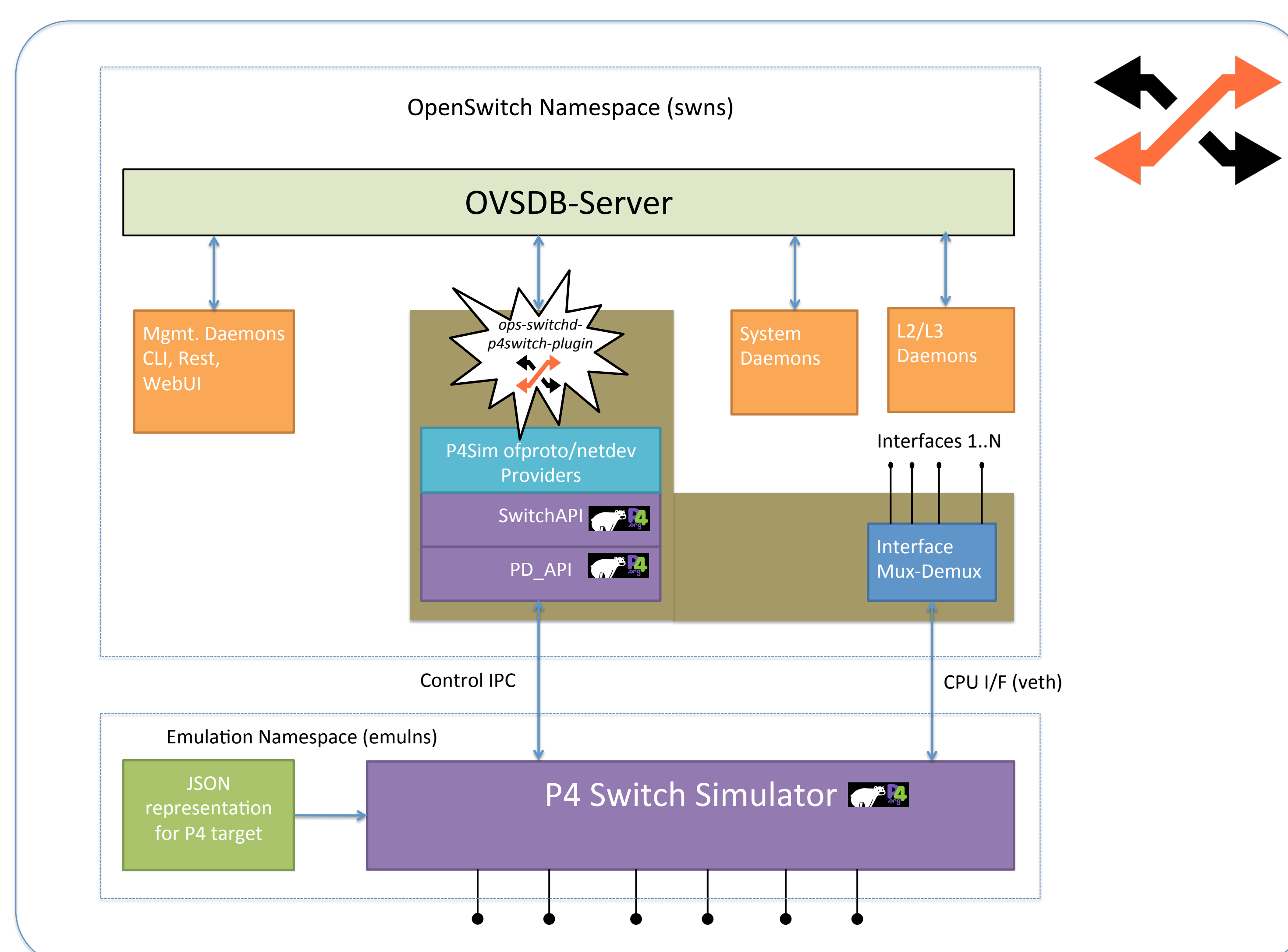
#### Full line rate, zero switch CPU involvement

Not limited by Control Plane bandwidth

### P4 Program Workflow



### P4 Switch in OPS



Parag Bhide Srikrishna Gopu In collaboration with  
(Barefoot Networks) (Barefoot Networks) OpenSwitch