

Piggybacking Network Functions on SDN with P4 support

- The demo is an augmented implementation of SDN-Defense (SOSR 2017)
- SDN-Defense framework
 - Piggybacks on reactive routing
 - Utilize initial flow packets sent to the controller to perform security checks
 - 90% of malicious flows are detected within the first 4 packets
- Reactive routing is not scalable
- A combination of P4-enabled switches and OpenFlow switches
 - Leverage P4-enabled switches
 - Identify initial flow packets & send a copy of them to the controller
 - Leverage OpenFlow switches for immediate mitigation action