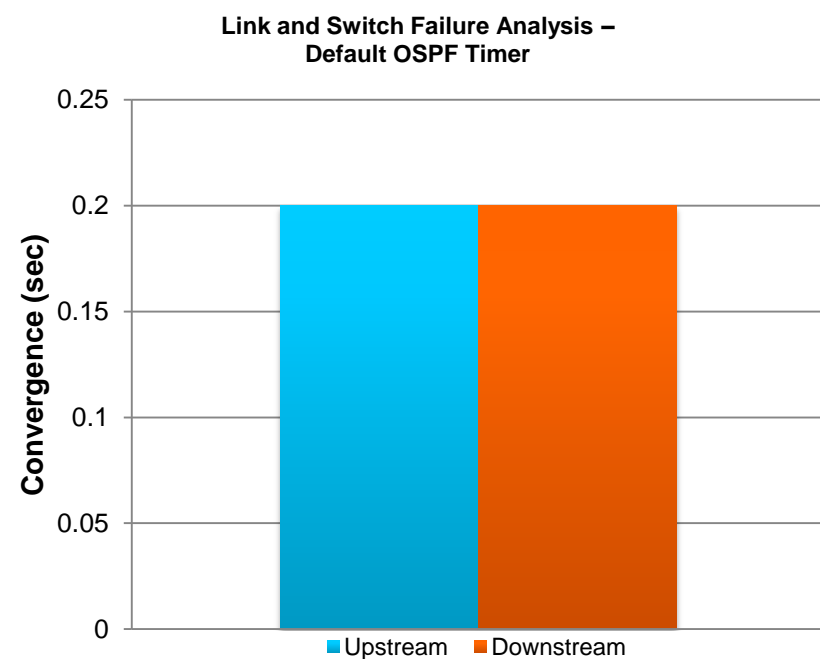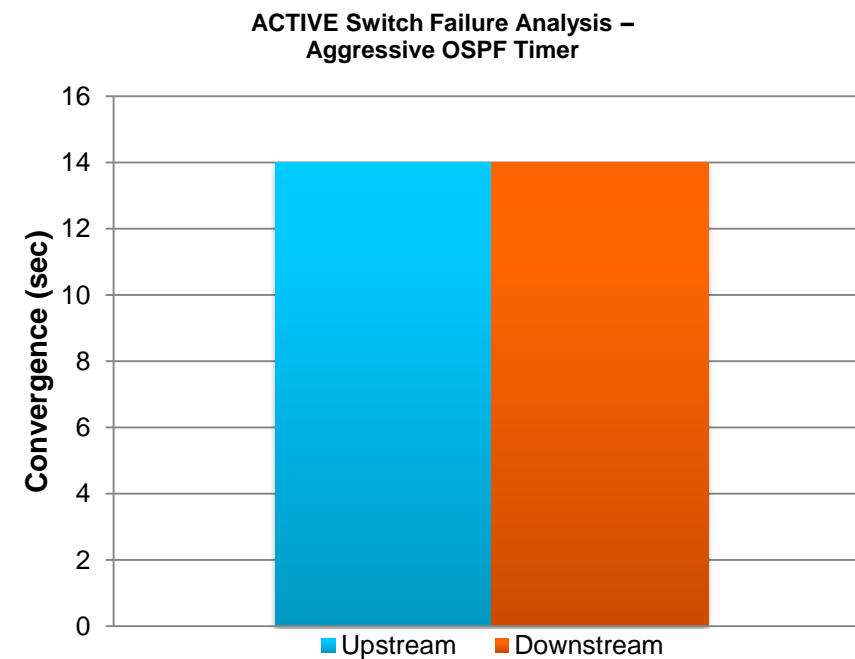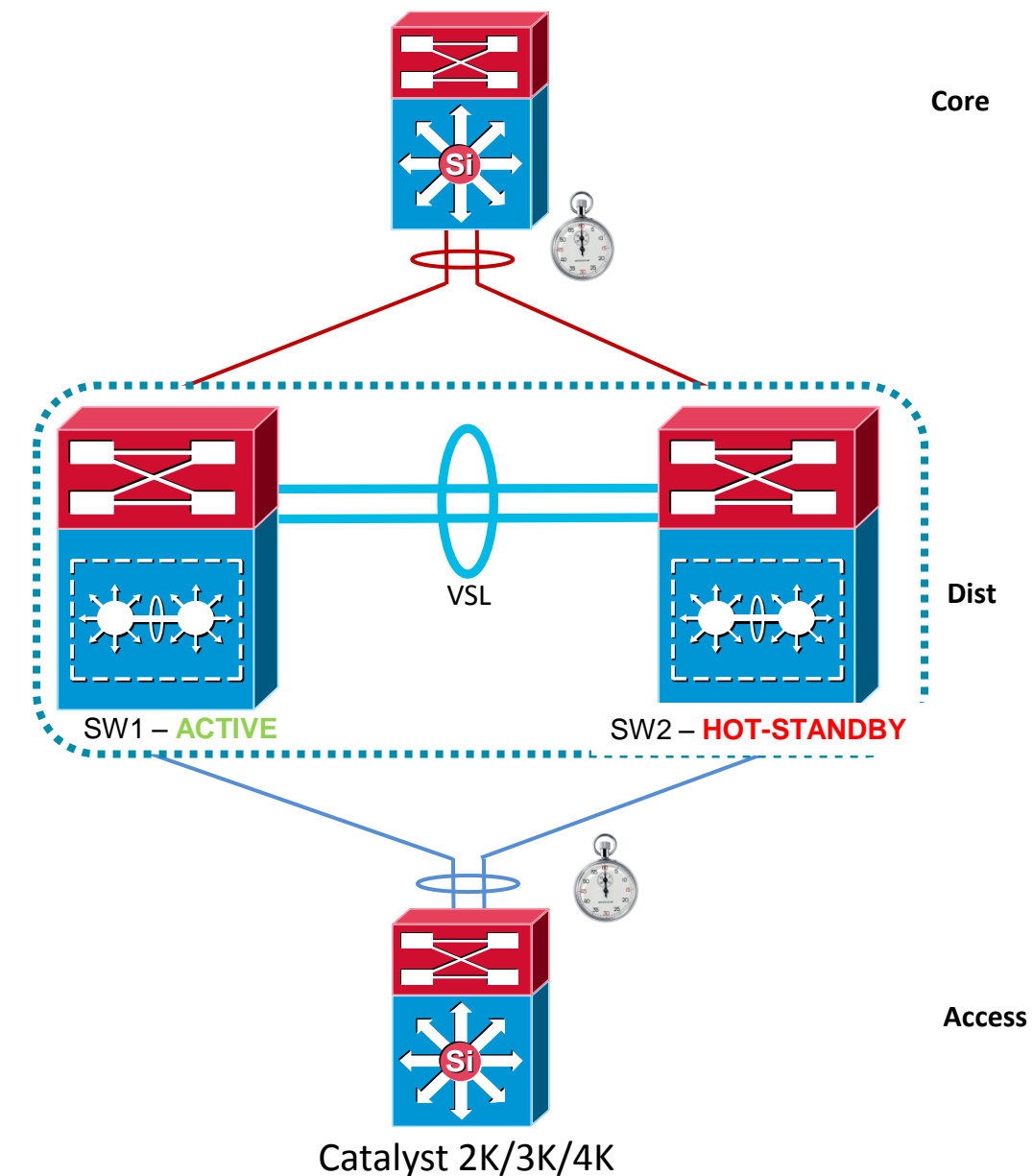# Sub-second Protocol Timers and NSF/SSO

- NSF is intended to provide availability through route convergence avoidance

- Fast IGP timers are intended to provide availability through fast route convergence

- In an NSF environment dead timer must be greater than:

  SSO recovery + Routing Protocol restart + time to send first hello

- Recommendation –

  Do not configure aggressive timer Layer 2 protocols, i.e. Fast UDLD

  Do not configure aggressive timer Layer 3 protocols, i.e. OSPF Fast Hello, BFD etc. Keep all protocol timers at default settings

Link and Switch Failure Analysis –
Default OSPF Timer

ACTIVE Switch Failure Analysis –
Aggressive OSPF Timer

Core

Dist

SW1 – ACTIVE   SW2 – HOT-STANDBY

VSL

Access

Catalyst 2K/3K/4K

Cisco Public