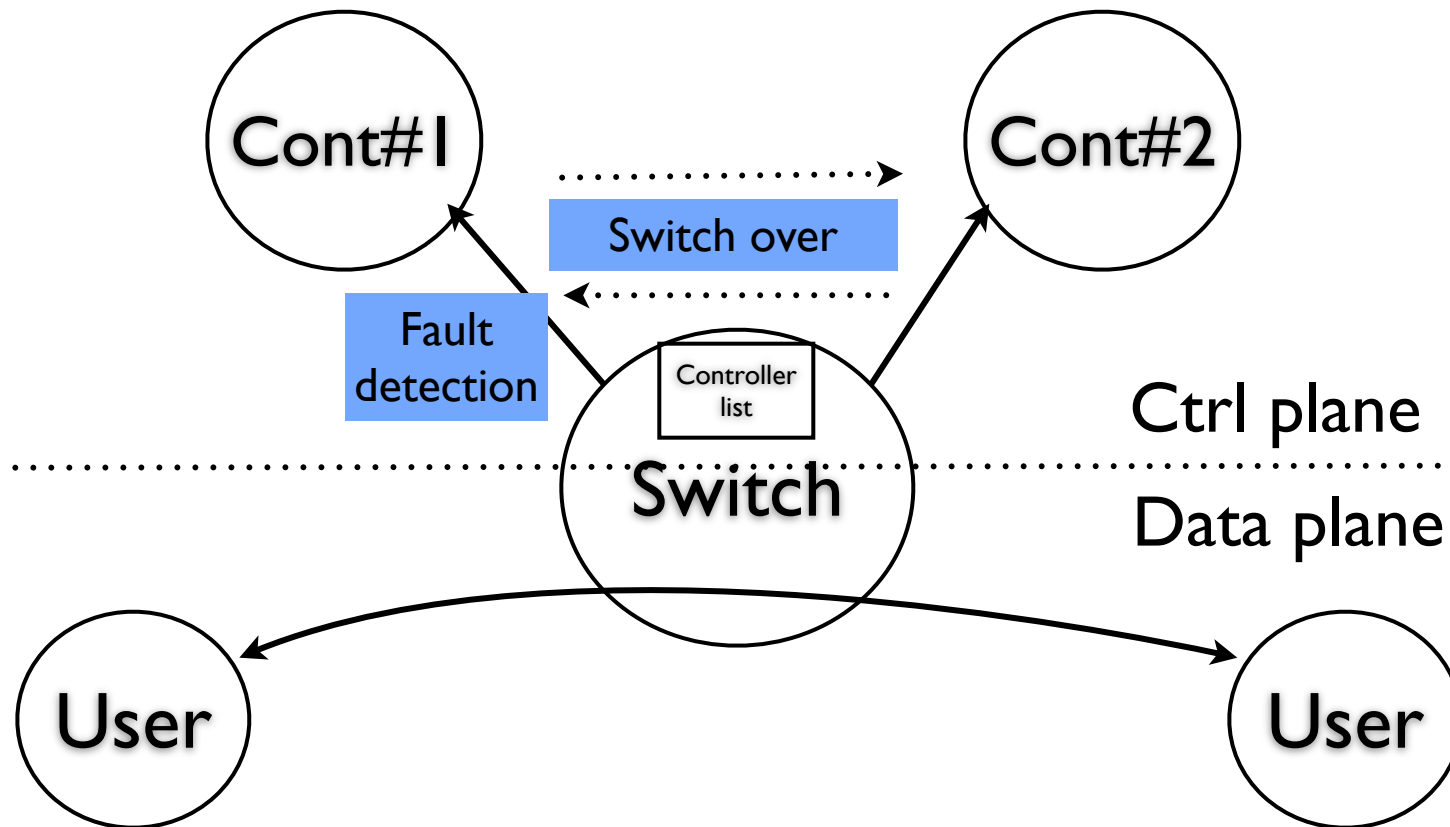
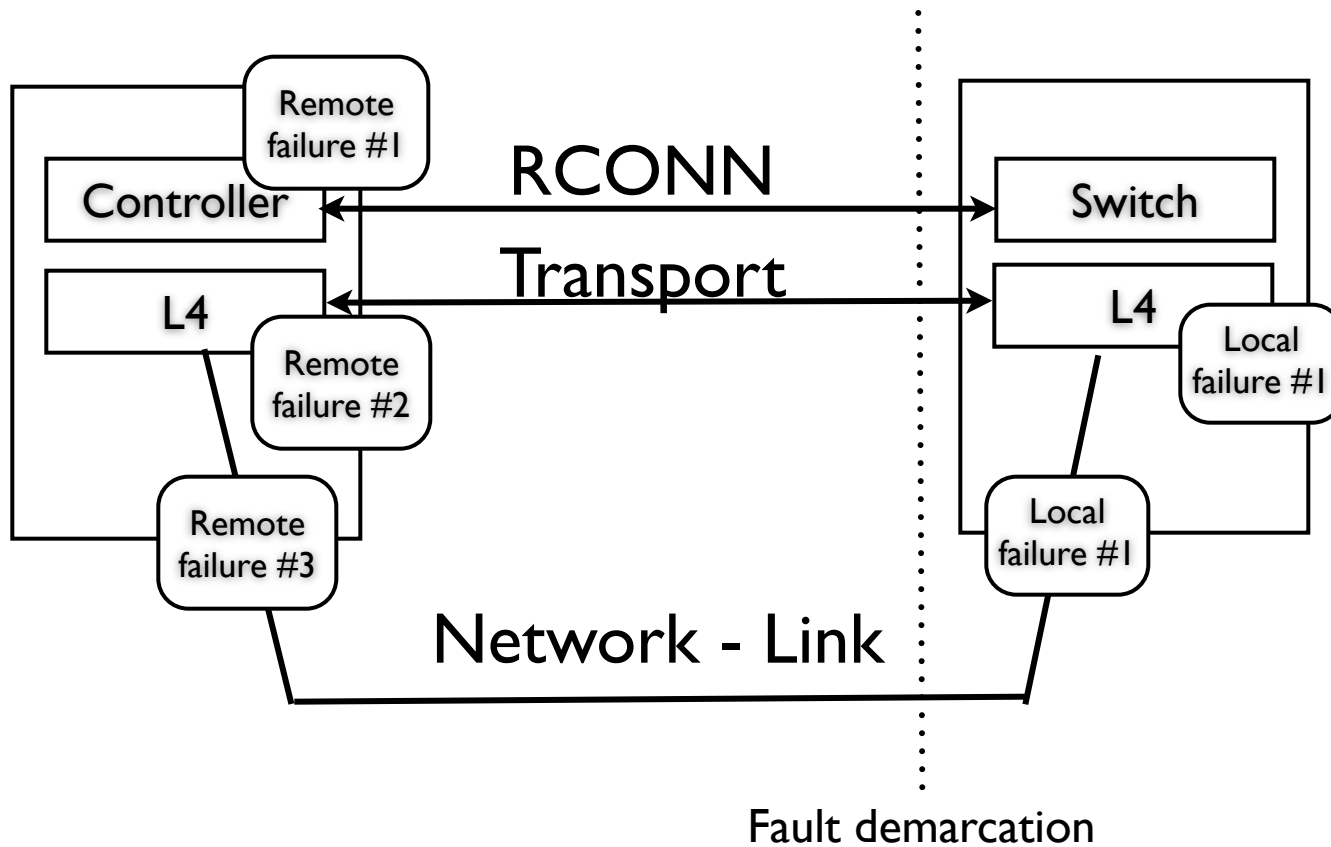


Architecture



Fault detection



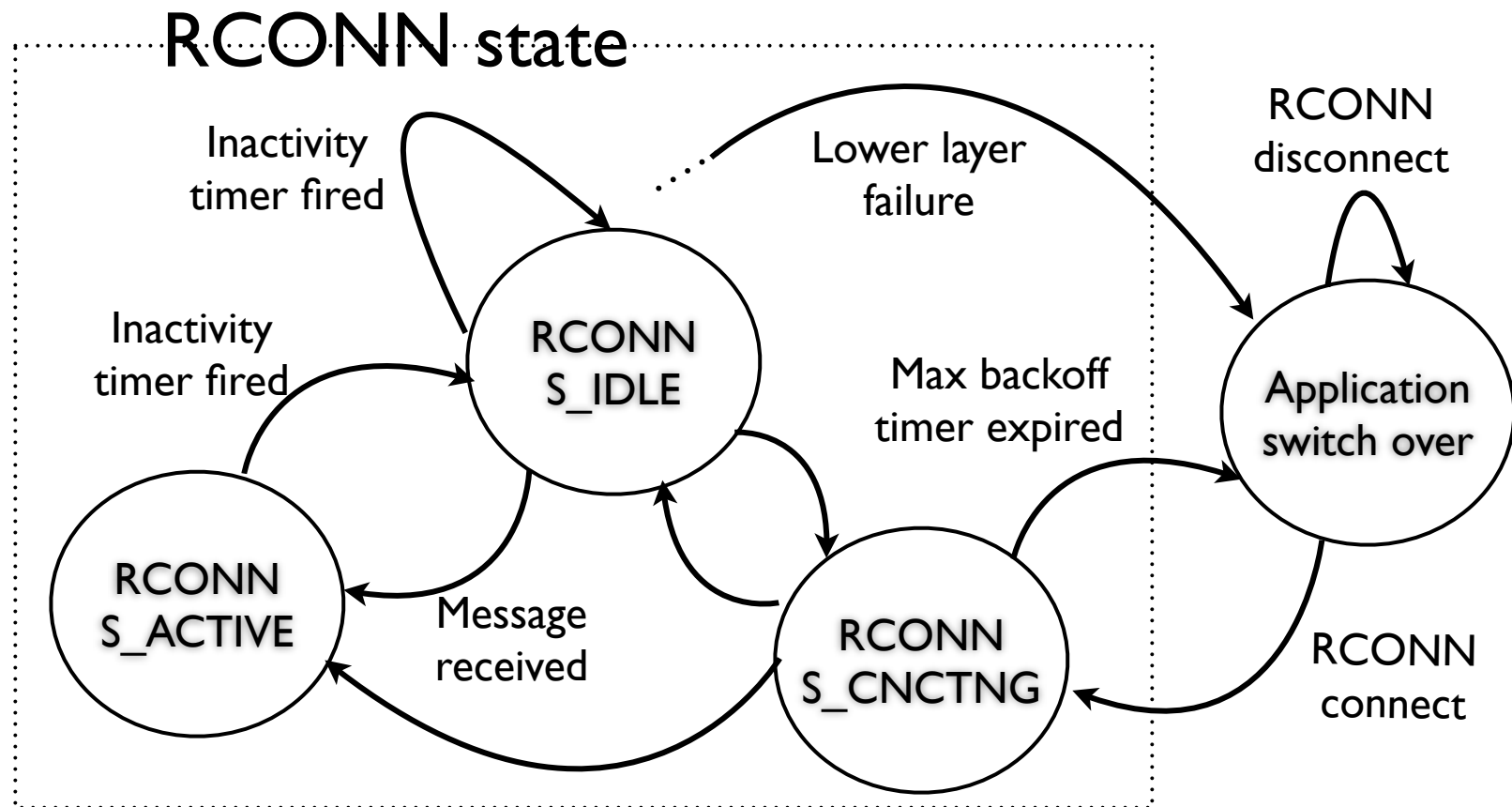
Fault detection (cont)

Demarcation	Point	Detector	Time
Local	#1	Transport and lower layers	Immediately
Remote	#1	RCONN	Inactivity timer x 2
	#2a (w/ shutdown)	Transport	Immediately
	#2b (w/o shutdown)	RCONN	Inactivity timer x 2
	#3	RCONN	Inactivity timer x 2

Inactivity timer: min 5s, default 5s

Max backoff timer: min 1s, default 15s

Fault detection and switch over



Timer adjustment for fault detection

- Inactivity timer
 - Minimum: 5s to 1s (changed)
- Mac backoff timer
 - No change

Failover and other apps

Control plane session type	Applications				
	DHCP discovery	Fail = open (w/ learning-switch)		Fail = closed (w/o learning-switch)	
		w/ STP	w/o STP	w/ STP	w/o STP
Out of band	n/a	Almost okay (need more testing)	Okay	Almost okay (need more testing)	Okay
In band	n/a	Almost okay (need more testing)	Okay	Almost okay (need more testing)	Okay

Usage

- ofprotocol [SWITCH INSTANCE]
[CONTROLLERS (MAX 3)]
e.g. ofprotocol nl:0 tcp:foo:1 23, tcp:bar, tcp:
1.2.3.4:5678

Summary

- Fault detection depends on RCONN
- Failover app hooks MAX_BACKOFF timer
- No controller preference
- No controller selection strategy except equal cost round robin