

Inferring Causes of Route Flap

Why We Can't!

2003.02.26

APNIC / Taipei

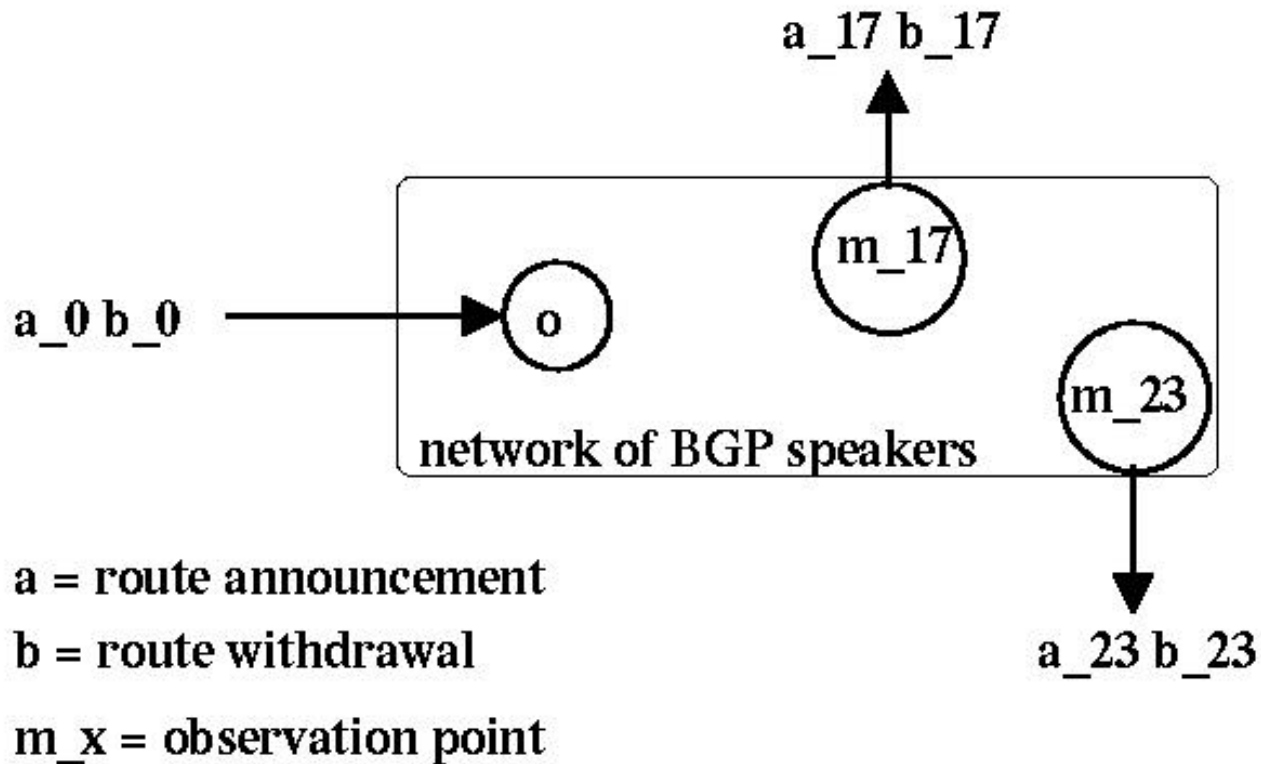
Tim Griffin <griffin@research.att.com>

Randy Bush <randy@iij.com>

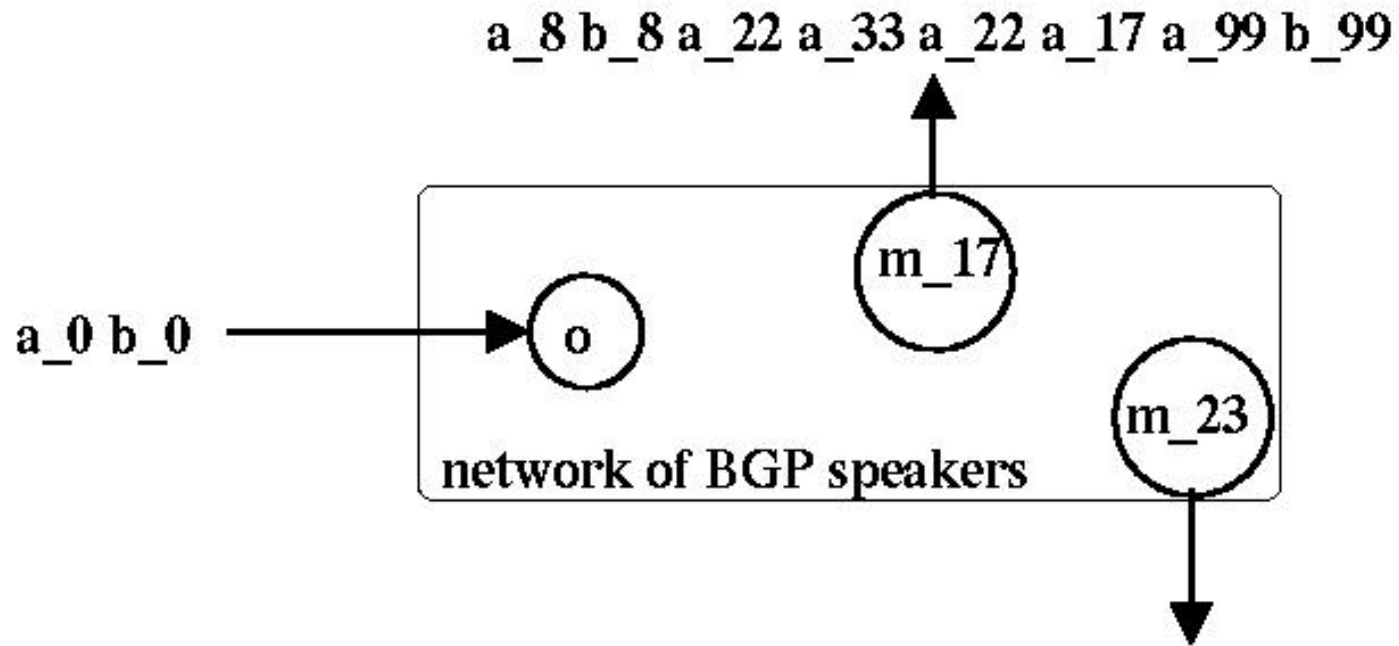
Z. Morley Mao <zmao@research.att.com>

<<http://psg.com/~randy/030226.apnic-flap.pdf>>

The Naive View

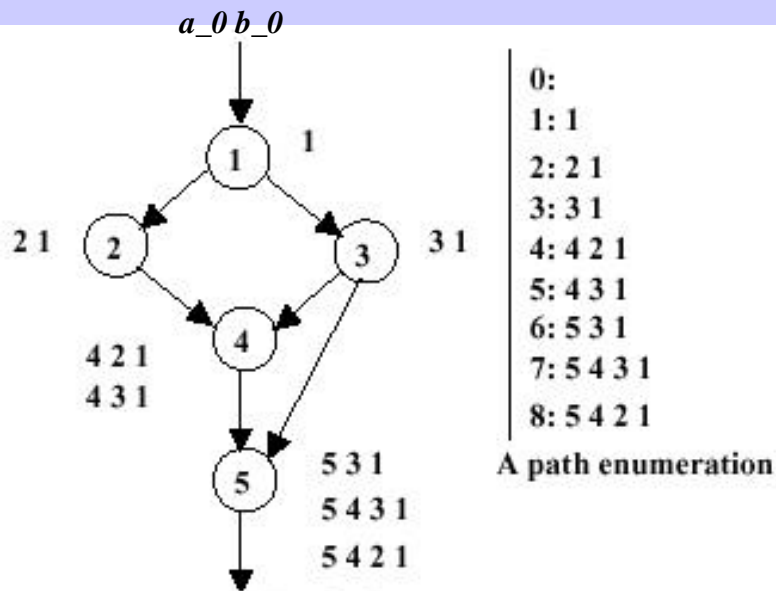


... reality is a wonderful thing



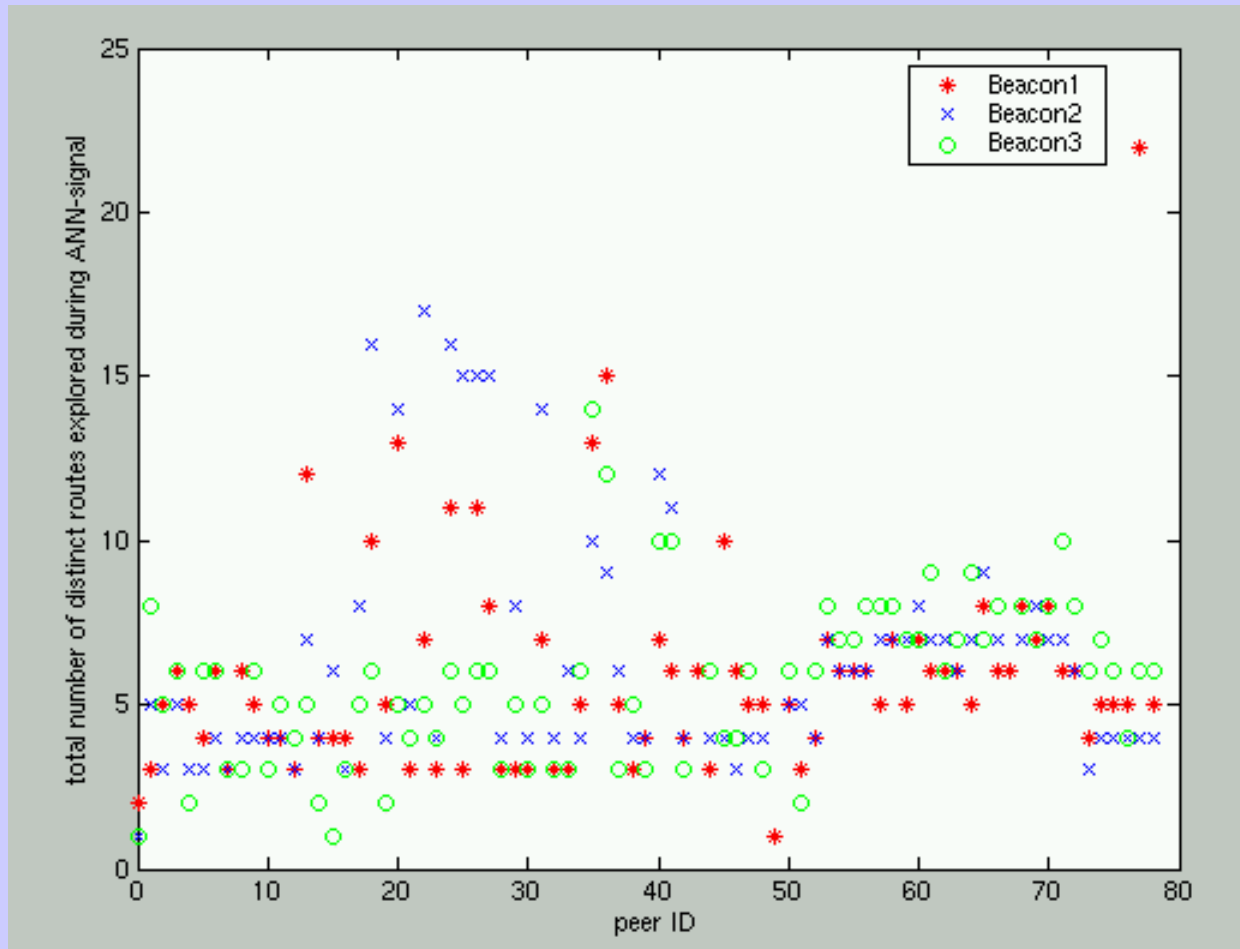
No wonder I'm going crazy trying to interpret those BGP updates

It is easy to construct a 5 node BGP system where a simple Announce/Withdraw signal (a_0 b_0) at one node can produce any of these 52 output signals at another...



a ₆ b ₆	a ₇ a ₆ b ₆	a ₈ a ₆ b ₆	a ₈ a ₆ a ₈ b ₈ a ₇ b ₇
a ₆ a ₇ b ₇	a ₇ a ₆ a ₇ b ₇	a ₈ a ₆ a ₇ b ₇	a ₈ a ₇ a ₆ a ₇ a ₈ b ₈
a ₆ a ₈ b ₈	a ₇ a ₆ a ₈ b ₈	a ₈ a ₆ a ₈ b ₈	a ₈ a ₇ a ₈ a ₆ a ₈ b ₈
a ₆ a ₇ a ₈ b ₈	a ₇ a ₈ a ₆ b ₆	a ₈ a ₇ a ₆ b ₆	a ₈ a ₇ a ₈ b ₈ a ₆ b ₆
a ₆ a ₈ a ₇ b ₇	a ₇ b ₇ a ₆ b ₆	a ₈ b ₈ a ₆ b ₆	a ₈ b ₈ a ₆ b ₆ a ₇ b ₇
a ₆ b ₆ a ₇ b ₇	a ₇ a ₆ a ₇ a ₈ b ₈	a ₈ a ₆ a ₇ a ₈ b ₈	a ₈ b ₈ a ₇ a ₆ a ₇ b ₇
a ₆ b ₆ a ₈ b ₈	a ₇ a ₆ b ₆ a ₈ b ₈	a ₈ a ₆ a ₈ a ₇ b ₇	a ₈ b ₈ a ₇ b ₇ a ₆ b ₆
a ₆ a ₇ b ₇ a ₈ b ₈	a ₇ a ₈ a ₆ a ₈ b ₈	a ₈ a ₆ b ₆ a ₇ b ₇	
a ₆ a ₈ a ₇ a ₈ b ₈	a ₇ a ₈ b ₈ a ₆ b ₆	a ₈ a ₇ a ₆ a ₇ b ₇	
a ₆ a ₈ b ₈ a ₇ b ₇	a ₇ b ₇ a ₆ a ₈ b ₈	a ₈ a ₇ a ₆ a ₈ b ₈	
a ₆ b ₆ a ₇ a ₈ b ₈	a ₇ b ₇ a ₈ a ₆ b ₆	a ₈ a ₇ a ₈ a ₆ b ₆	
a ₆ b ₆ a ₈ a ₇ b ₇	a ₇ a ₆ a ₇ b ₇ a ₈ b ₈	a ₈ a ₇ b ₇ a ₆ b ₆	
a ₆ b ₆ a ₇ b ₇ a ₈ b ₈	a ₇ b ₇ a ₆ b ₆ a ₈ b ₈	a ₈ b ₈ a ₆ a ₇ b ₇	
a ₆ b ₆ a ₈ a ₇ a ₈ b ₈	a ₇ b ₇ a ₈ a ₆ a ₈ b ₈	a ₈ b ₈ a ₇ a ₆ b ₆	
a ₆ b ₆ a ₈ b ₈ a ₇ b ₇	a ₇ b ₇ a ₈ b ₈ a ₆ b ₆	a ₈ a ₆ a ₈ a ₇ a ₈ b ₈	

Max no. updates for Announce



Max no. updates for Withdraw

