Address selection in multihomed environments
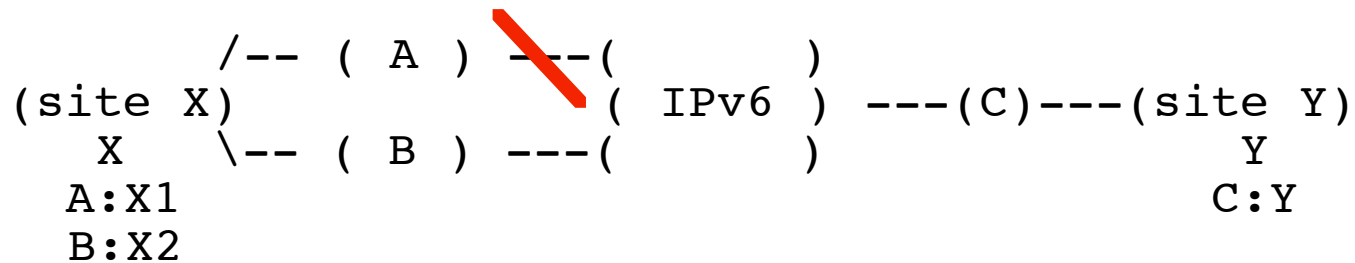
multi6 wg meeting - IETF 61

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Scenario

```
         /-- ( A ) ---(          )
(site X)                ( IPv6 ) ---(C)---(site Y)
   X     \-- ( B ) ---(          )           Y
  A:X1                                       C:Y
  B:X2
```

Problem

```
           /-- ( A ) ---(        )
(site X)                 ( IPv6 ) ---(C)---(site Y)
   X     \-- ( B ) ---(        )               Y
 A:X1                                         C:Y
 B:X2
```

When Y initiates, dest addr sel
some degree of support (app)
When X intiates, source add sel
not currently supported

Goals

- mechanisms for the MH host to allow it to initiate new communications after an outage
- No changes to external hosts

Possible approaches

- Proactive mechanisms: selecting the proper address
  - Direct link failure: deprecate through RADV
  - Other failure modes: server learns information through BGP
- Reactive mechanisms: trial and error by the host
  - Retyry with different source address
  - Who does the retrial? app, IP, try all at once?