Framework for Abstraction and Control of Transport Networks

draft-ceccarelli-teas-actn-framework-00

IETF 94 – Yokohama

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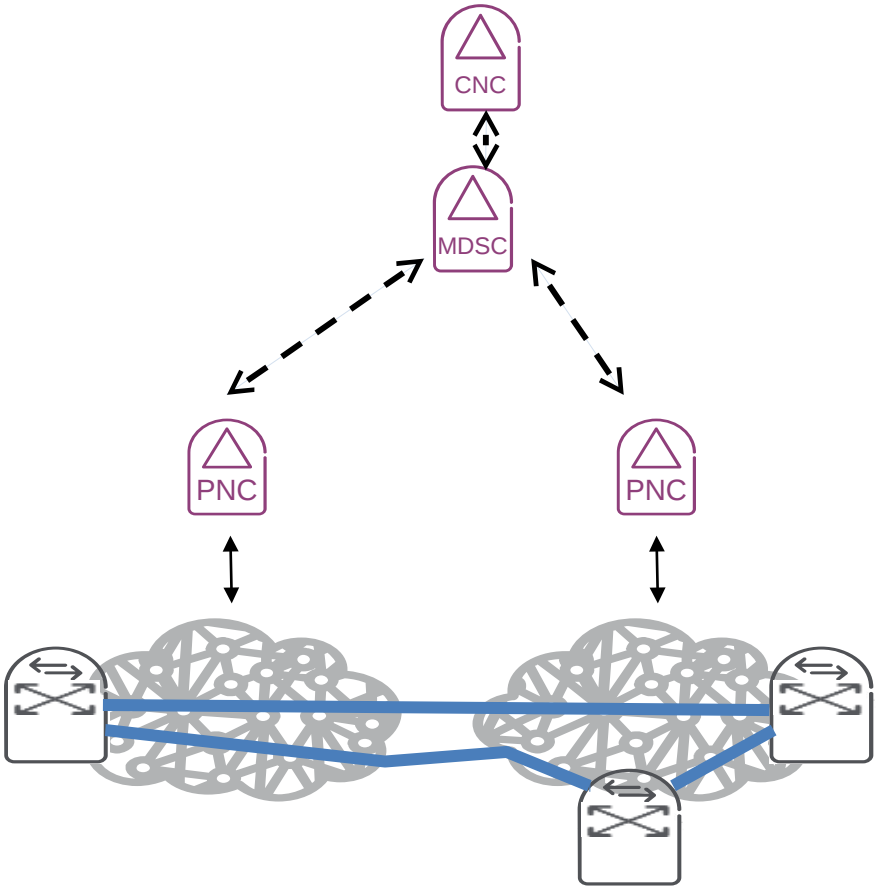
Draft-status

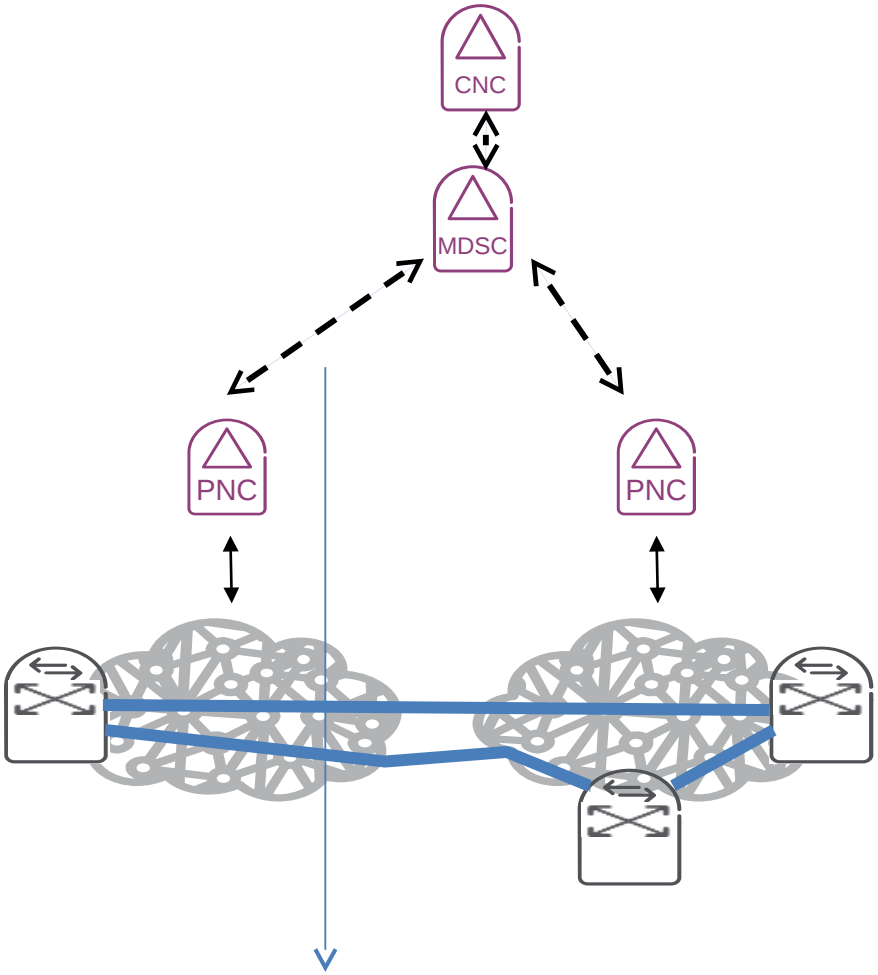
- Respin of draft-ceccarelli-actn-framework-07
  - v00 published on Jan 2014
- Requirements moved
  - To: draft-ietf-teas-actn-requirements-01
- Use cases moved
  - To: draft-ietf-teas-actn-requirements-01

What should ACTN be about?



- Infrastructure:
  - LSPs, Tunnels and Virtual Networks
  - Includes TE constraints

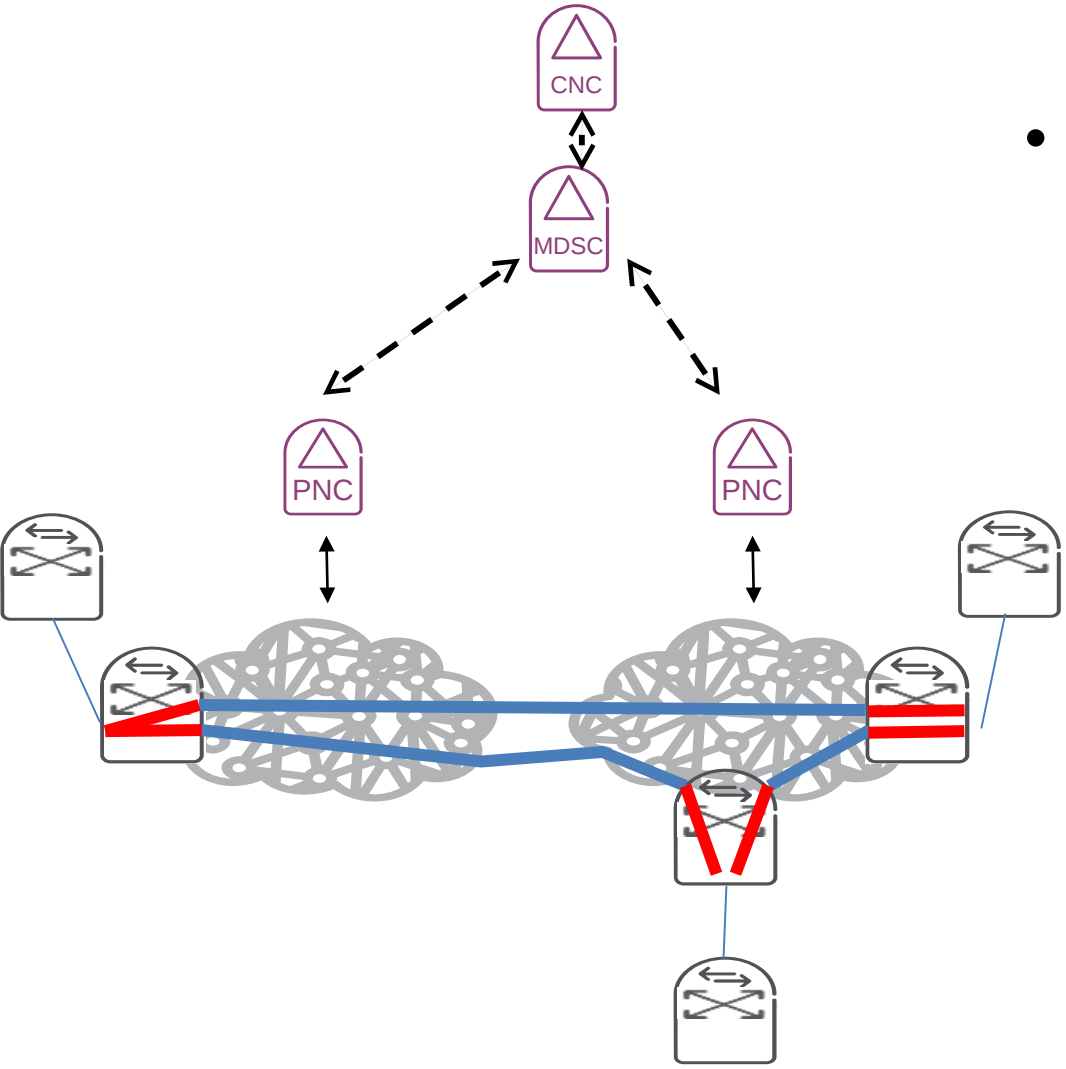
What should ACTN be about?



- Infrastructure:
  - LSPs, Tunnels and Virtual Networks
  - Includes TE constraints
  - Includes policies
    - Policies encoded as identifiers

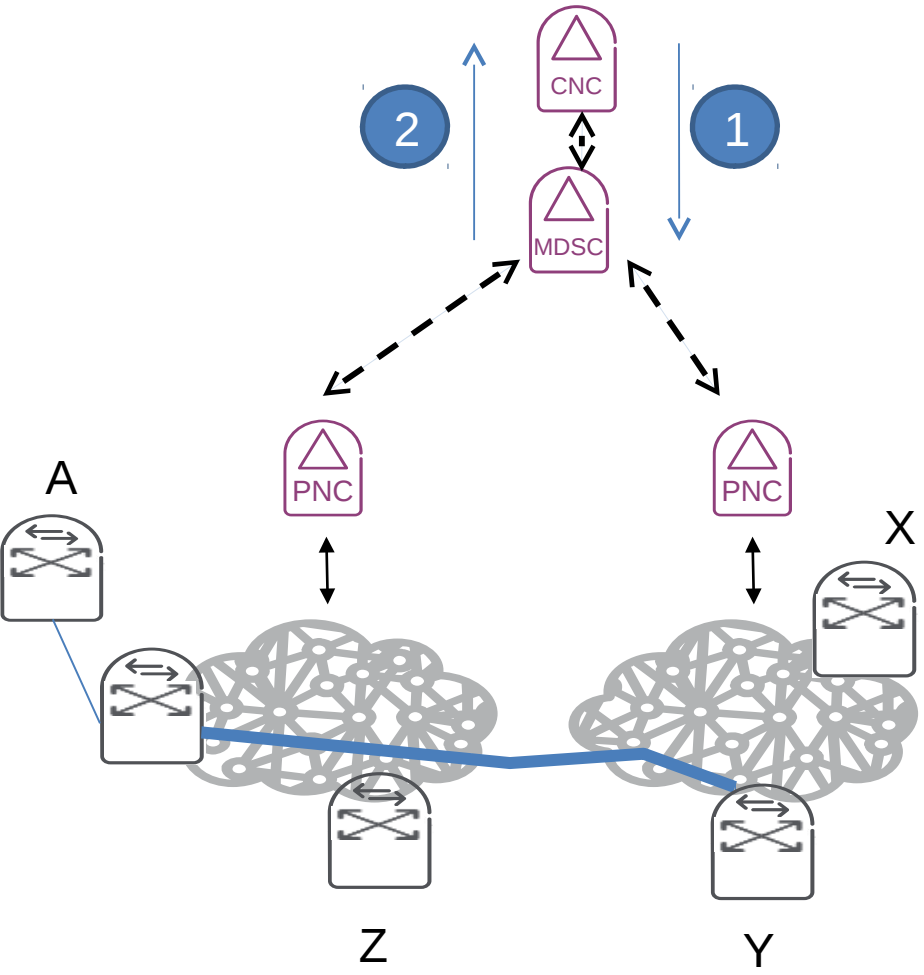
If A happens on VN1, do B on your own and report result. E.g. modify FEC mapping if buffer goes more than 95% for 5 minutes

What should ACTN be about?



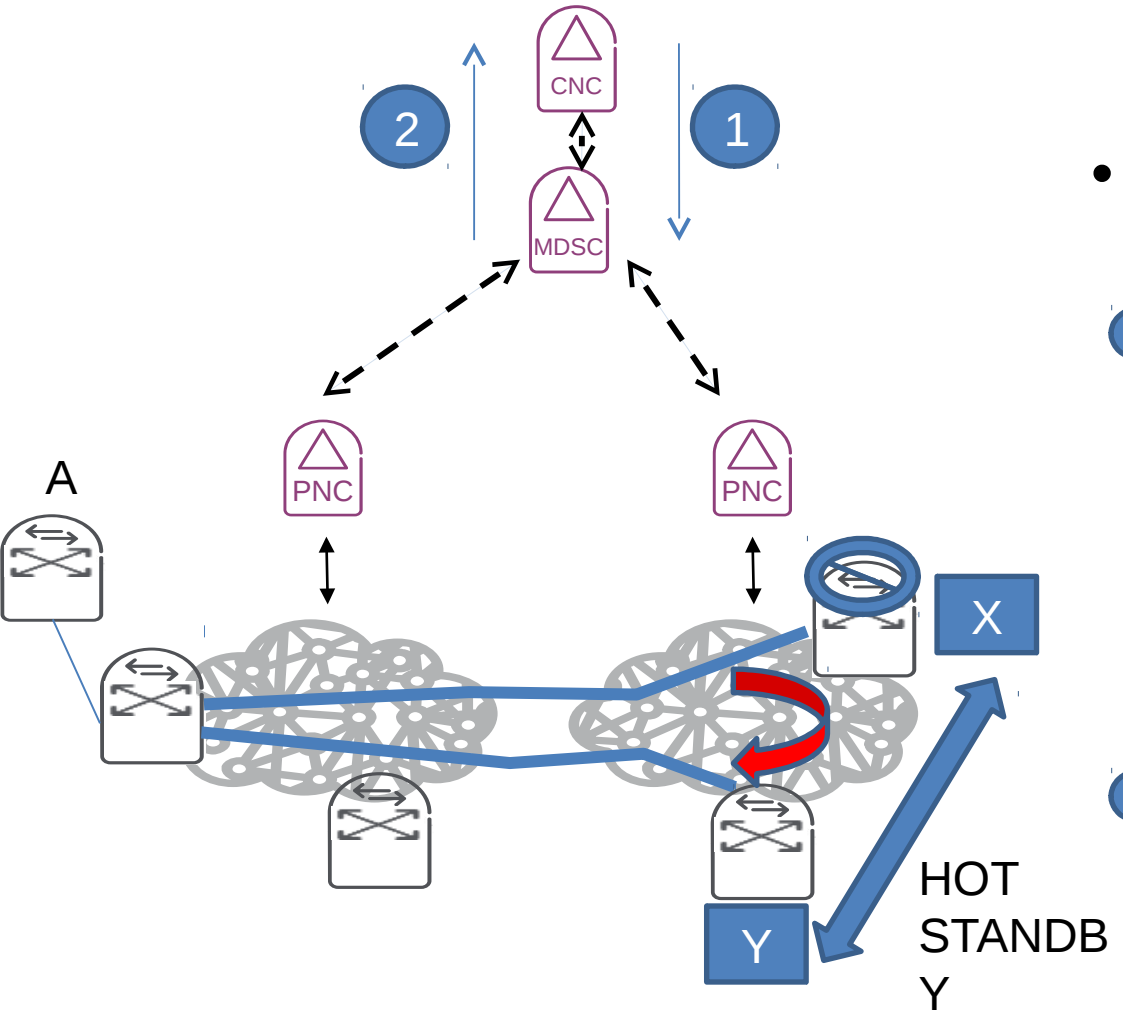
- Connectivity Services:
  - How traffic is mapped to VNs. E.g. VPNs, FEC mapping, how to map client traffic to VN/LSP.
  - End-point awareness

What should ACTN be about?



- End point mobility
  1. I need connectivity between site A and a function that can be deployed in X, Y, Z. Please tell me which to use accordingly to my constraints, polices and network status.
  2. The best is A-Y (setup and notification to CNC)

What should ACTN be about?

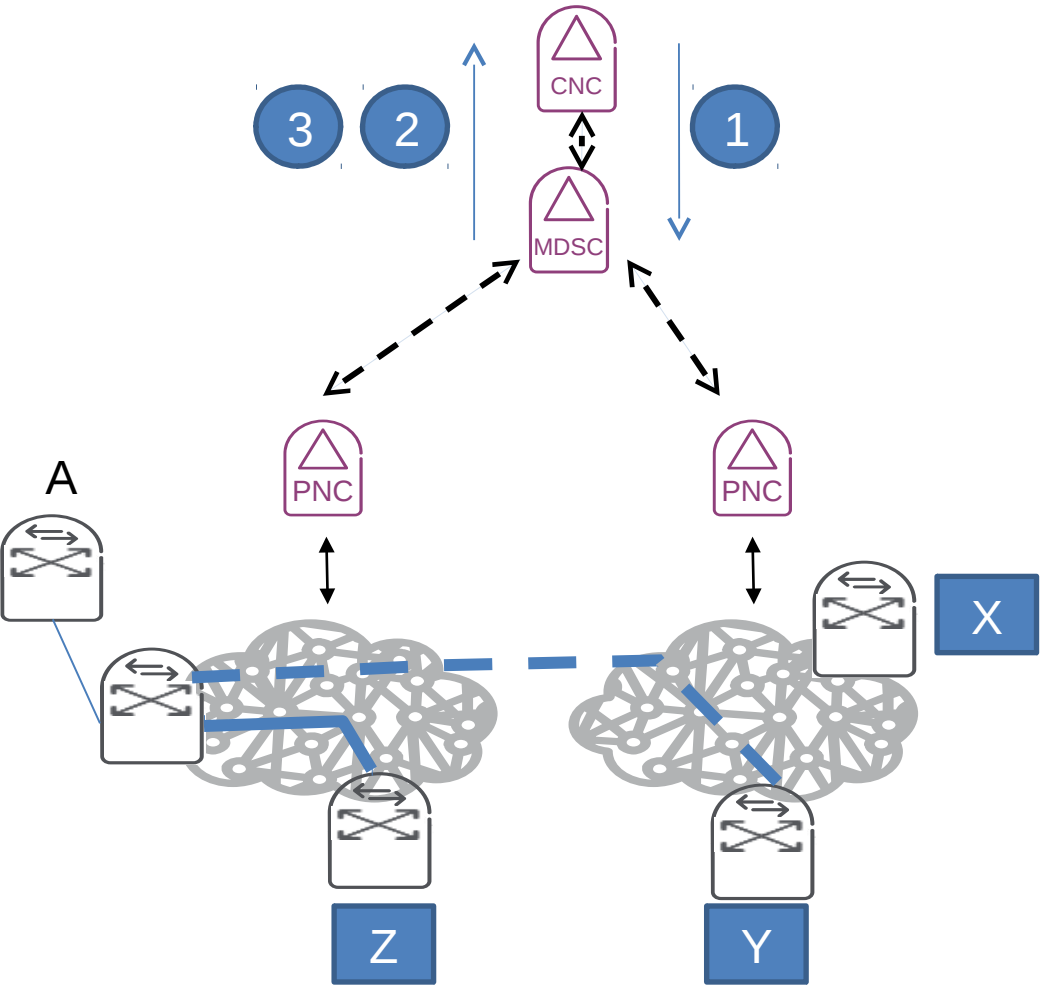


- End point mobility preplanned

1 I need connectivity between site A and X (primary) and A and Y (backup). If the network realizes that X fails (heartbeta), move connectivity to A-X to A-Y. Functioality moved from X to Y (out of scope).

2 Notification to CNC when failure occurs

What should ACTN be about?



- End point mobility on the fly

1. I need connectivity between site A and a function that can be deployed in X, Y, Z. Please tell me which to use accordingly to my constraints, polices and
2. network status.

   The best is A-Y (setup and
3. notification to CNC)

   A-Y failed, i move connectivity to A-Z, please consider moving ”your stuff” to Z

Other open issues

- Need for communication between peers?
  - Inter-administrative domain MDSC-MDSC (East-West) ? Maybe
  - PNC-PNC ? Mostly NO
- MDSC to PNC relationship
  - 1:N (Default)
  - M:1
  - M:N (Work Load Partitioning)
- …

Next Steps

- Still a lot of work to be done
- Starting point for WG discussion
- Need to move on to info model
- Decide what to address among previous topics
  - No need for charter update
  - All of them are Traffic engineering (+ policies)