

# Efficient use of DMS based on traffic bandwidth: DOTS Telemetry use case

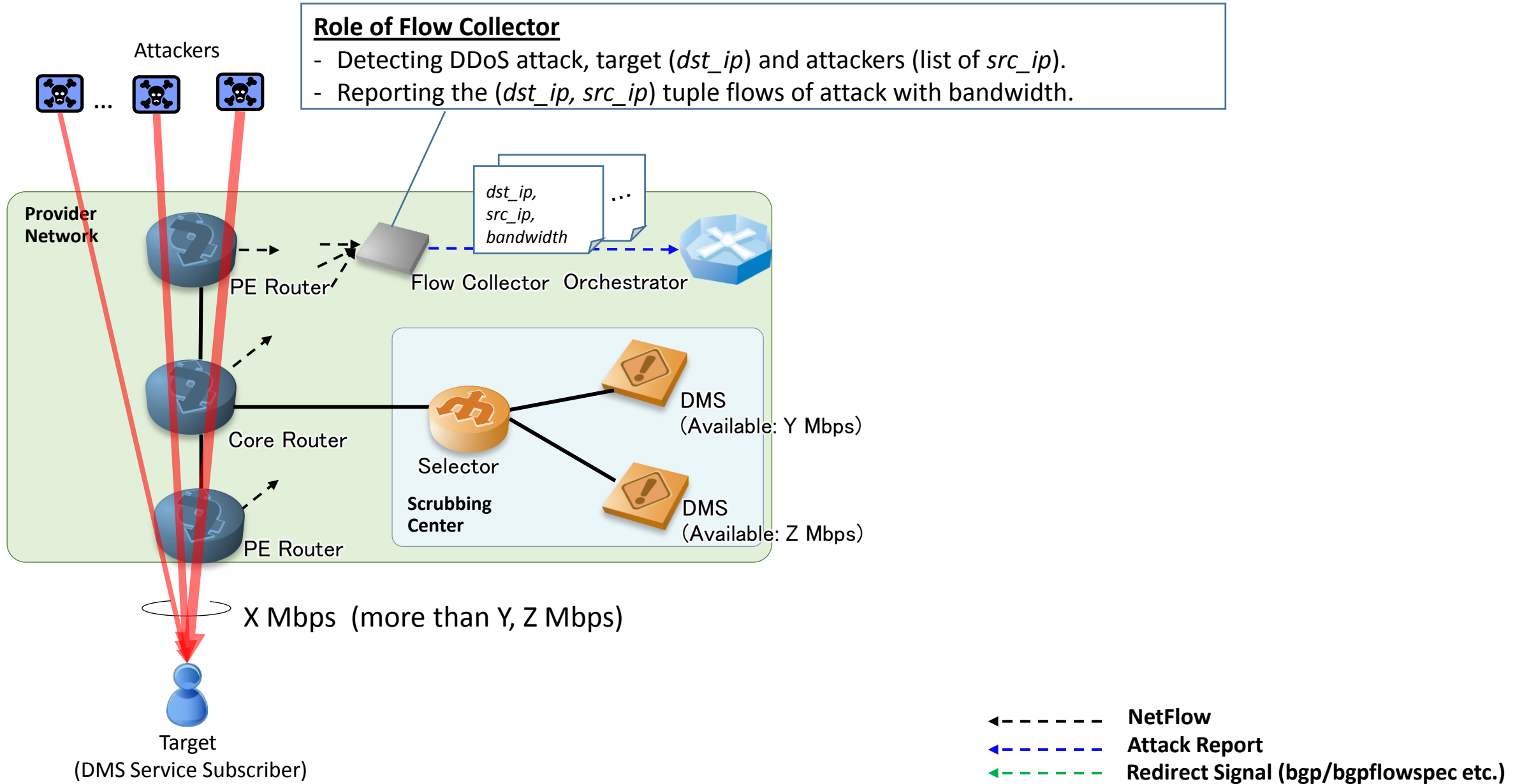
IETF#106, Singapore, November 2019

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## Summary of Presentation

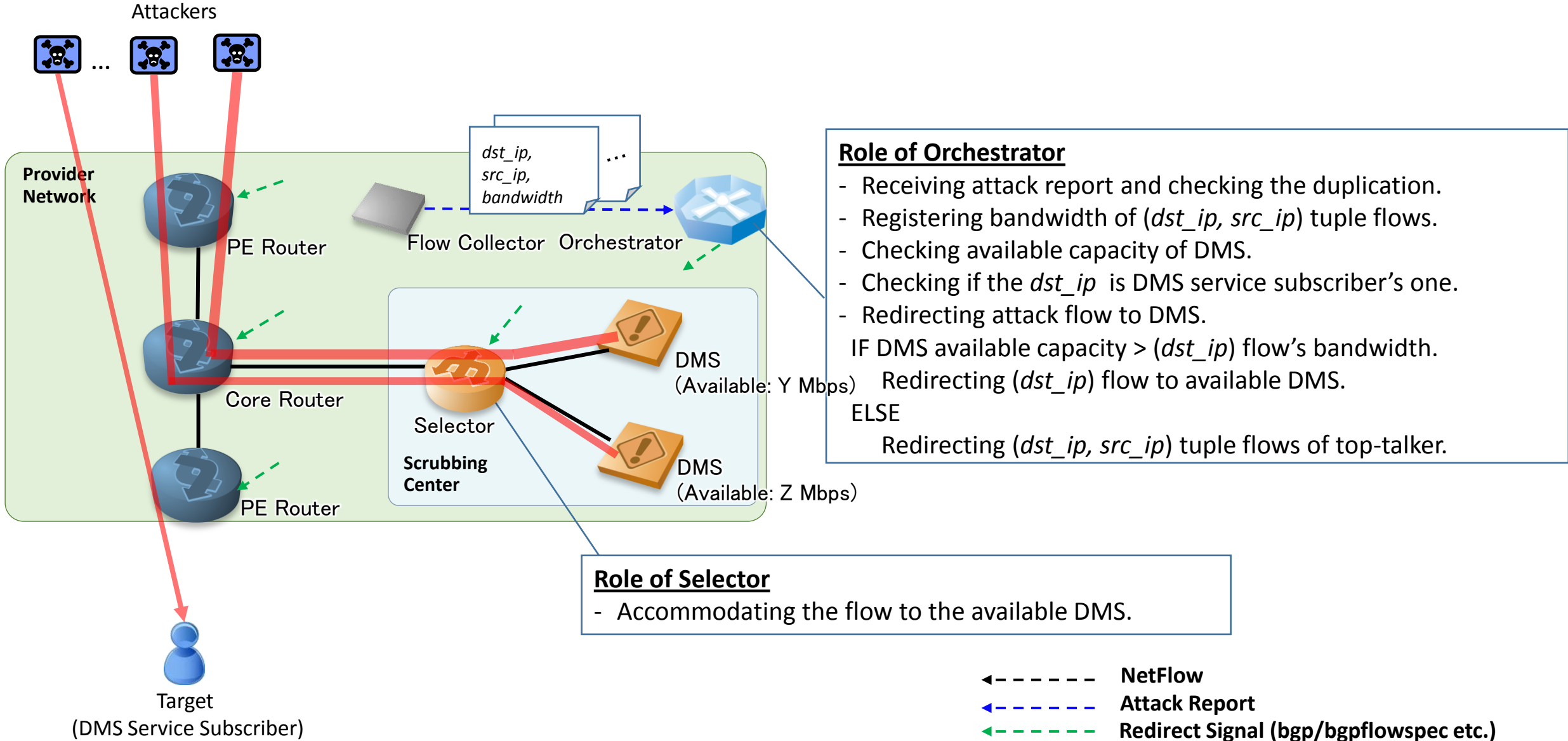
- We carried out a PoC about efficient use of DMS based on traffic bandwidth.
- We assessed that DOTS telemetry spec, especially YANG module related top-talker & bandwidth, can be applied in the use case.

# Assumption



# Use case Scenario

\*PoC of this scenario was already done in our labs.



# Assessment of DOTS Telemetry

Theoretically , the YANG module related top-talker & bandwidth can be applied to the use case.



```
augment /ietf-signal:dots-signal/ietf-signal:message-type:
+--:(telemetry) {dots-telemetry}?
...
+--rw pre-mitigation* [telemetry-id]
  +--rw telemetry-id
  +--rw target
    | +--rw target-prefix*
    | ...
    | +--ro total-attack-traffic*
  +--ro attack-detail
  ...
  +--ro top-talker
    +--ro source-prefix*
    | ...
    | +--ro source-prefix
    | +--ro total-attack-traffic*
    | ...
```

## Role of Orchestrator

- Receiving attack report and checking the duplication.
- Registering bandwidth of  $(dst\_ip, src\_ip)$  tuple flows.
- Checking available capacity of DMS.
- Checking if the  $dst\_ip$  is DMS service subscriber's one.
- Redirecting attack flow to DMS.
- IF DMS available capacity  $>$   $(dst\_ip)$  flow's bandwidth.  
Redirecting  $(dst\_ip)$  flow to available DMS.
- ELSE  
Redirecting  $(dst\_ip, src\_ip)$  tuple flows of top-talker.