DEMARC Configuration via UMT (a.k.a. DEMARC Use Case)

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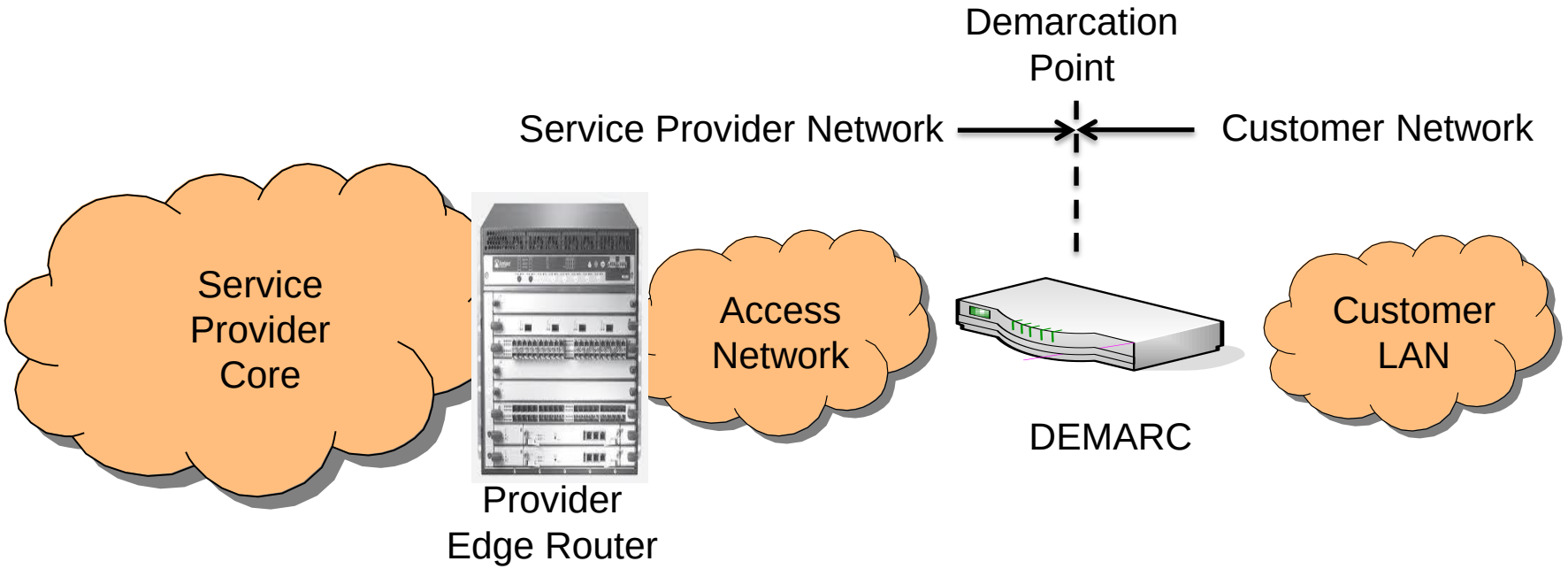
Demarcation Device (DEMARC)

- Located at demarcation point to separate the service provider network from the customer network
- Provides Metro Ethernet Forum (MEF) User Network Interface (UNI)
- Provides trusted testing and monitoring point
- Owned by service provider
- Adds EVC identifiers to service and management frames



Configuring the DEMARC

- Two methods are typical:
  - Pre-configured:
    - DEMARC is configured with operating parameters prior to customer delivery
    - Customer connects DEMARC
  - Technician delivered:
    - Service tech delivers DEMARC to customer
    - Configures DEMARC while onsite with customer
- Pre-configured is problematic when operating parameters are incorrect
- Technician-delivered can be expensive

Problem Statement

1. DPoE DEMARC is an example of the general problem of the insertion of an L2 or L2/L3 device for extending or creating a manageable edge DEMARC (single or multiple UNI) in a service provider's access network
   - OAM is blocked from managing all service provider's devices.
   - ANWG "tunnel" would be a solution to span over intermediate access network devices
2. Distinguishing management traffic out from multiple user channels would be a benefit
   - ANWG encapsulation with forwarding/mapping to BMT or service provider specified L2 VLAN would be useful

Configuration Example

- Customer (provider) receives DEMARC device
- DEMARC contacts BSS/OSS using OAM over Universal Management Tunnel (UMT)
- Minimal operating configuration provided via UMT
  - Minimal configuration may consist of:
    - Management EVC service delimiter (i.e. service tags)
    - IP stack parameters
- BSS/OSS provides remaining configuration and management via Layer 3 (IP)

Thank you!

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