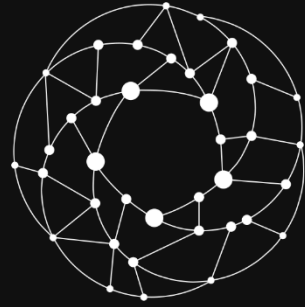


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OSM Hackfest – Session 9 Service Function Chaining

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What is Service Function Chaining?

SFC Status in OSM

- Available since OSM Release 3
- SFC only available using:
Openstack Queens (or higher) with Networking-SFC
- Only supports Asymmetrical Chains
- SFC Encapsulation using Network Service Headers (NSH)
- Traffic classification based in the following fields:

IP Protocol

Source IP Address

Destination

IP Address

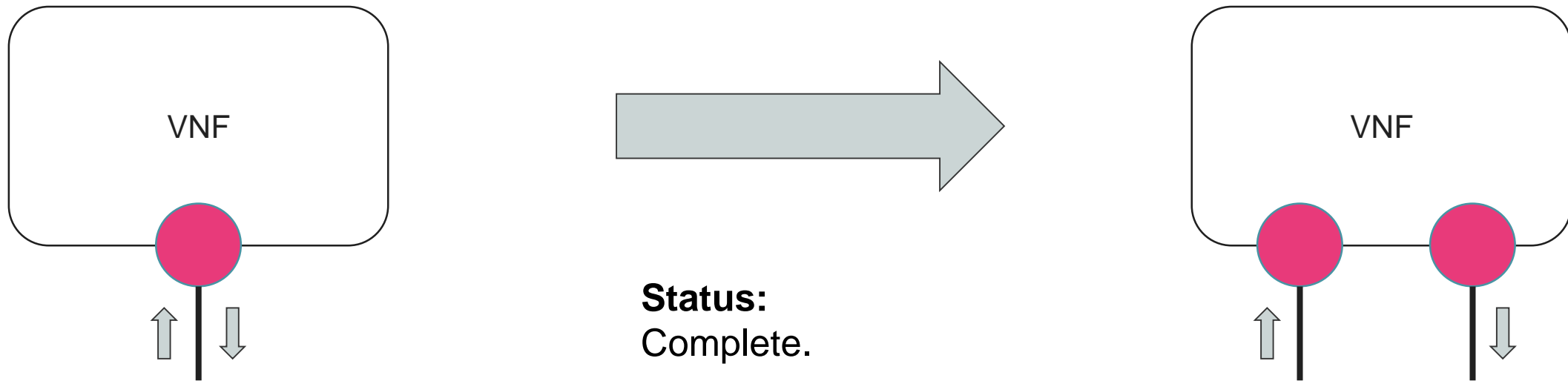
Source Port

Destination

Port

Separate ingress and egress ports

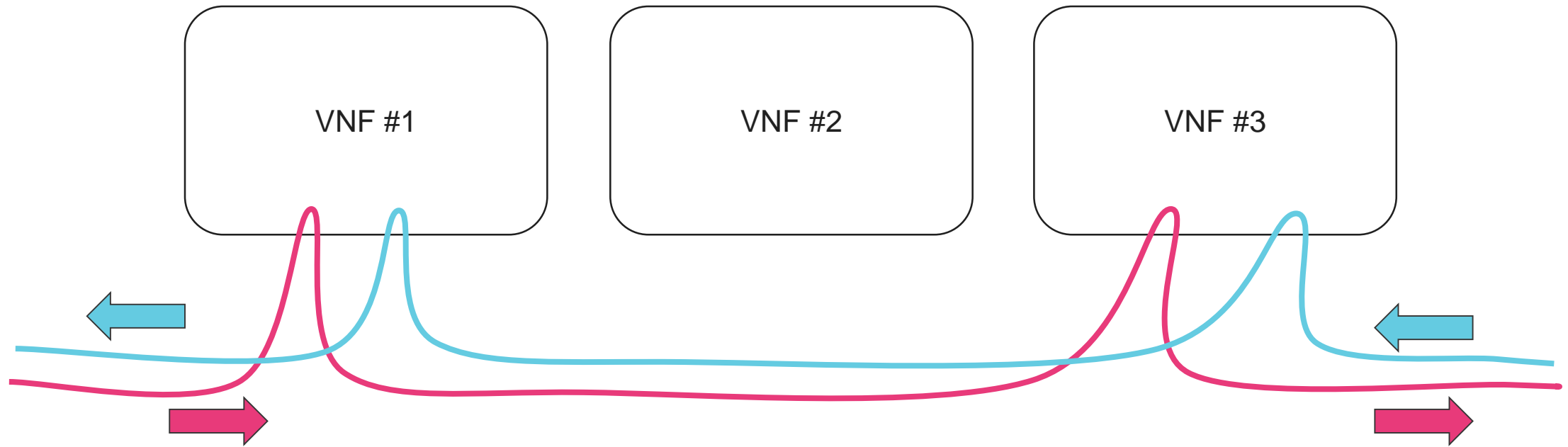
Modifying the Information Model and Resource Orchestrator



Symmetrical/Asymmetrical Chains

Currently only Asymmetrical Chains are supported.

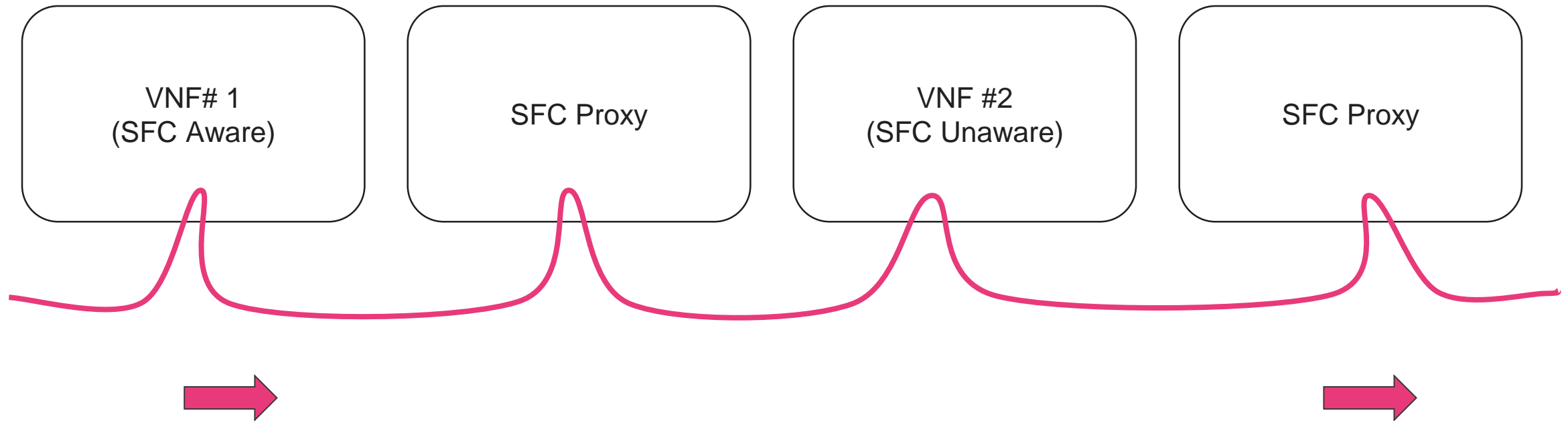
Status: In development.



Non-Transparent Service Functions

Currently not supported.

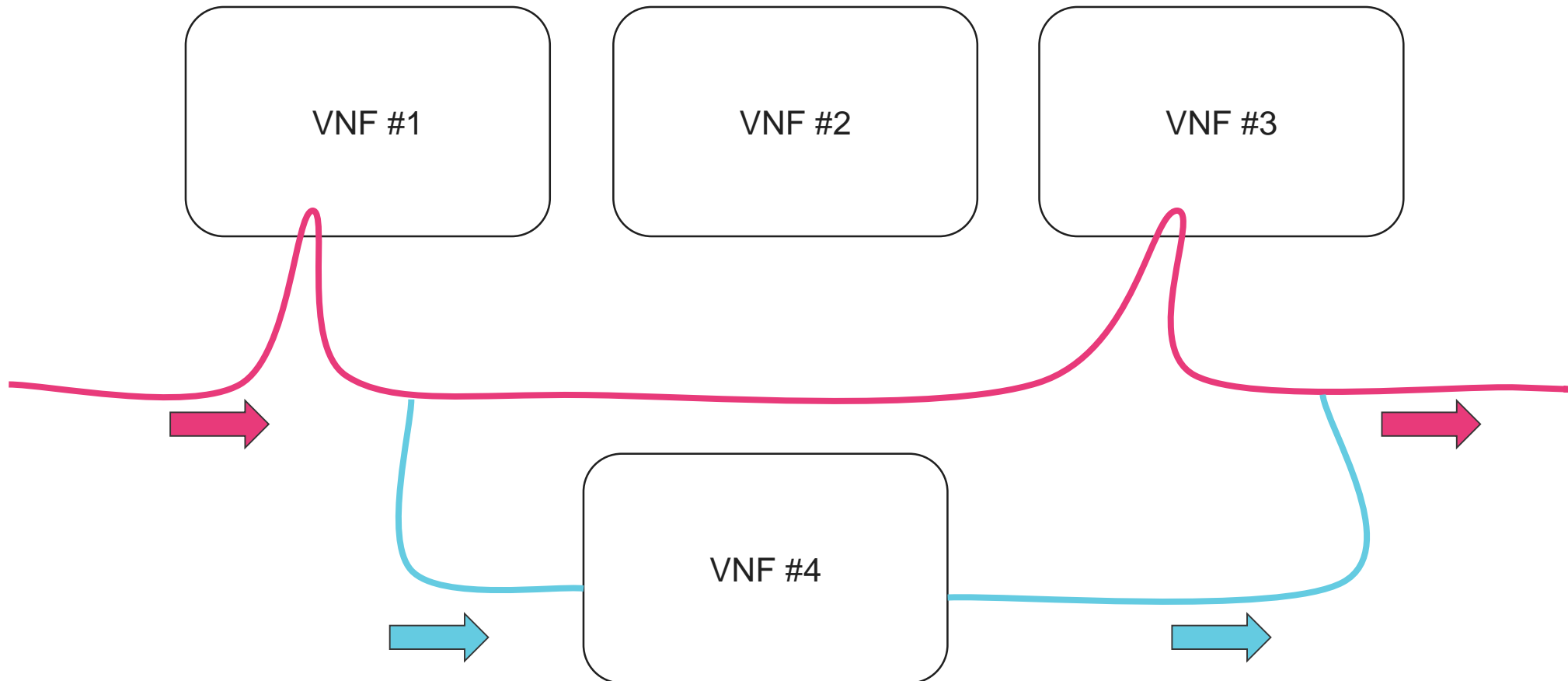
Status: Research ongoing.



Branching and Joining

Currently not supported.

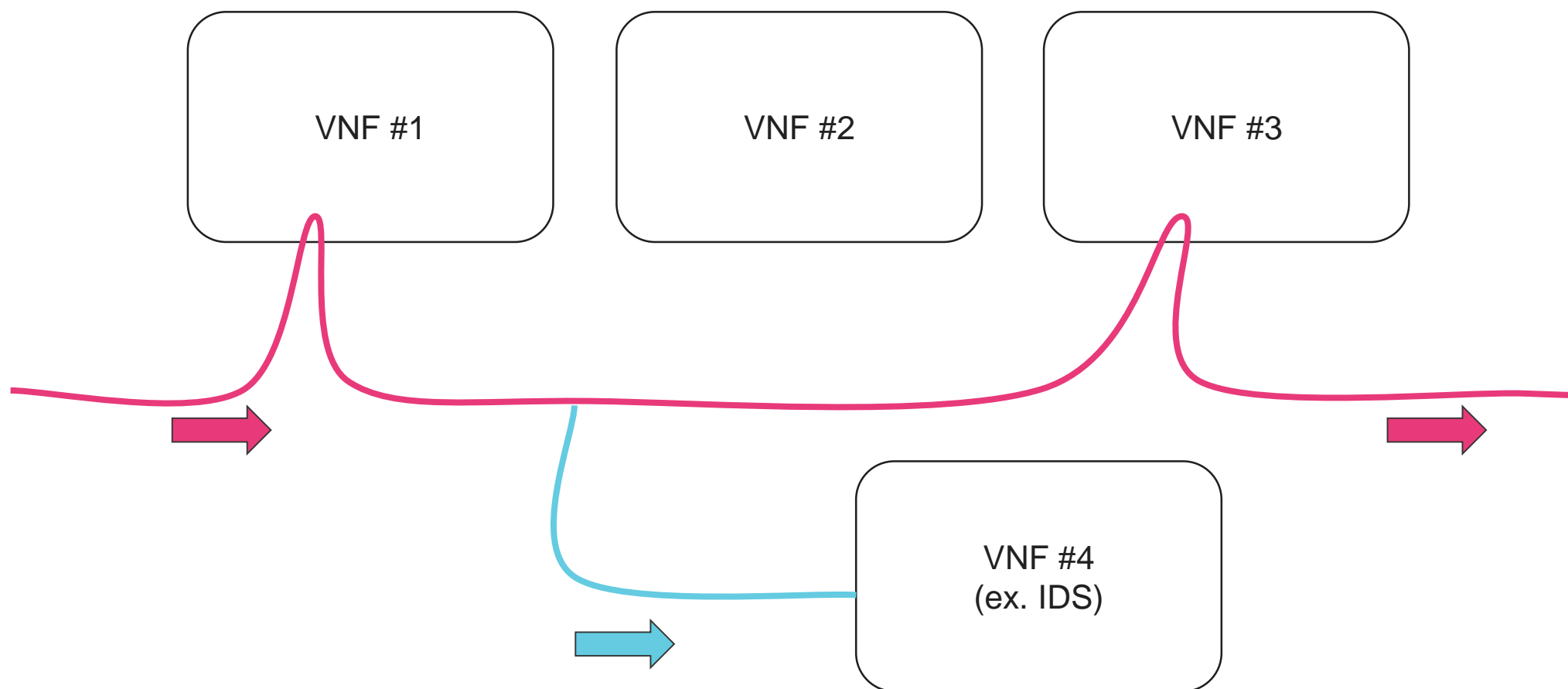
Status: Research ongoing.



Service Function Tap

Currently not supported.

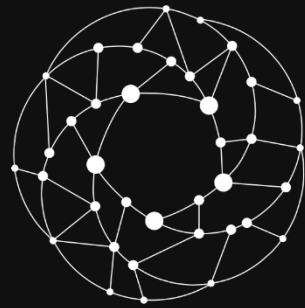
Status: Research ongoing.



SFC descriptors

```
- classifier:  
  - id: class1  
    match-attributes:  
      - destination-ip-address: 10.10.10.12  
        destination-port: 80  
        id: match1  
        ip-protocol: 6  
        source-ip-address: 10.10.10.11  
        source-port: 0  
    member-vnf-index-ref: 1  
    name: class1-name  
    rsp-id-ref: rsp1  
    vnfd-connection-point-ref: vnf-data  
    vnfd-id-ref: endpoint_vnfd
```

```
rsp: #redereed service paths  
  - id: rsp1  
    name: rsp1-name  
    vnfd-connection-point-ref:  
      - member-vnf-index-ref: 3  
        order: 0  
        vnfd-egress-connection-point-ref: vnf-cp0  
        vnfd-id-ref: vnf_nsh_vnfd  
        vnfd-ingress-connection-point-ref: vnf-cp0
```



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Hands-on

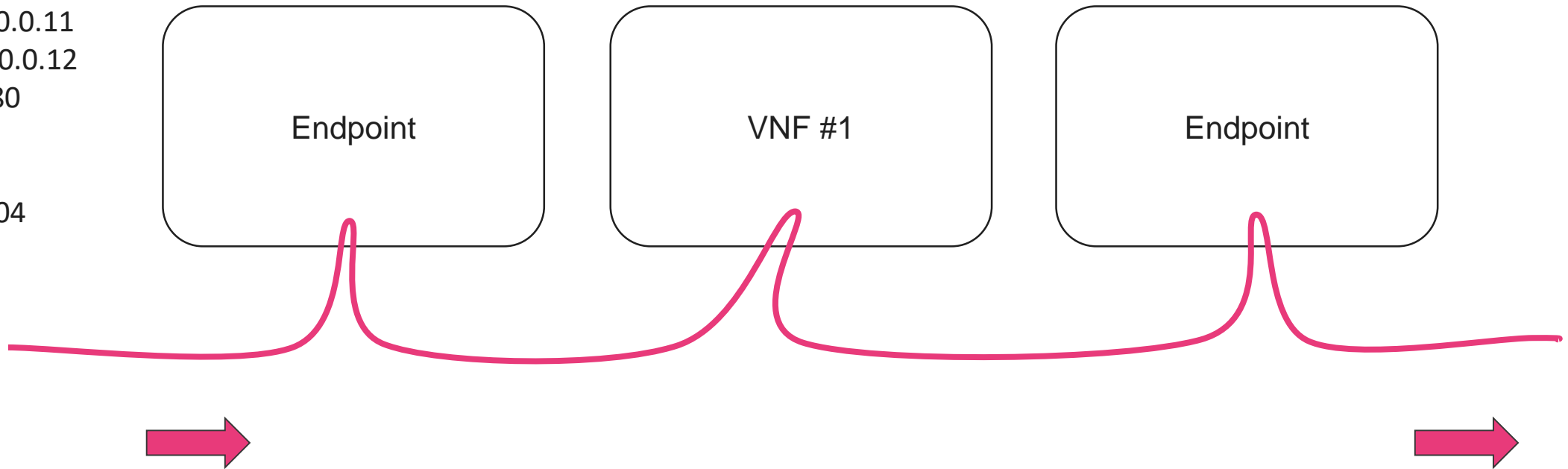
Demo: Original Network Service

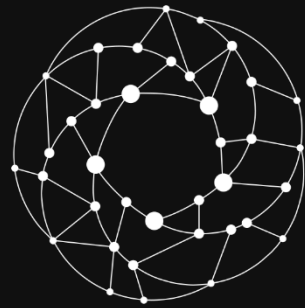
Flow Classifier #1:

- IP Proto: TCP
- Src IP: 10.0.0.11
- Dst IP: 10.0.0.12
- Dst Port: 80

Image:

- ubuntu1604





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The End