

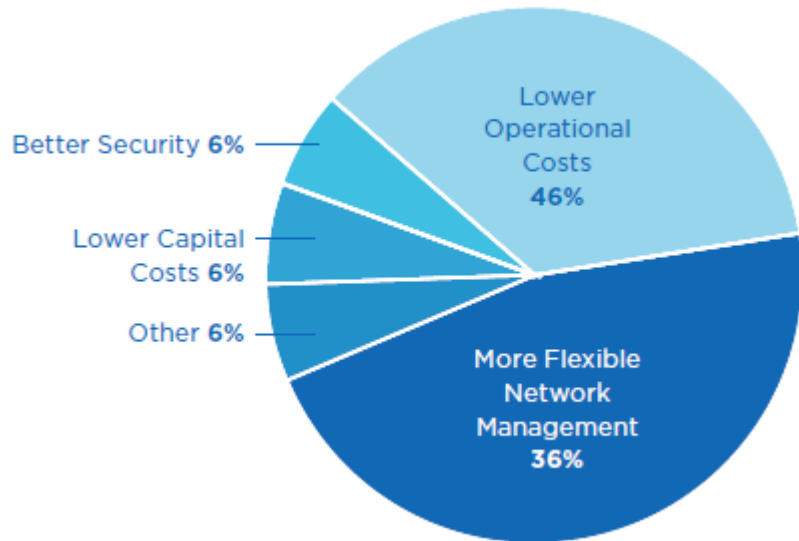
# Layer 7 Visibility for vCPE Services

**Erik Larsson, VP Marketing**

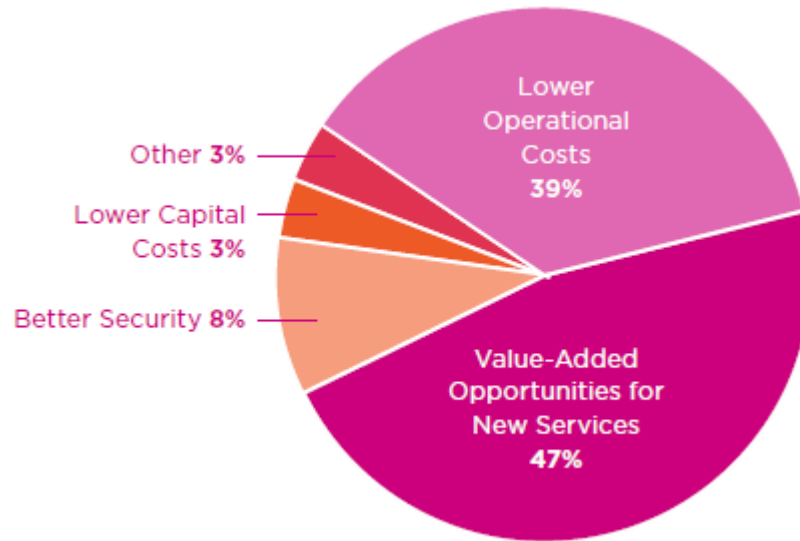
**April 2016**

# Business Drivers for Enterprise vCPE Services

## Enterprise Drivers



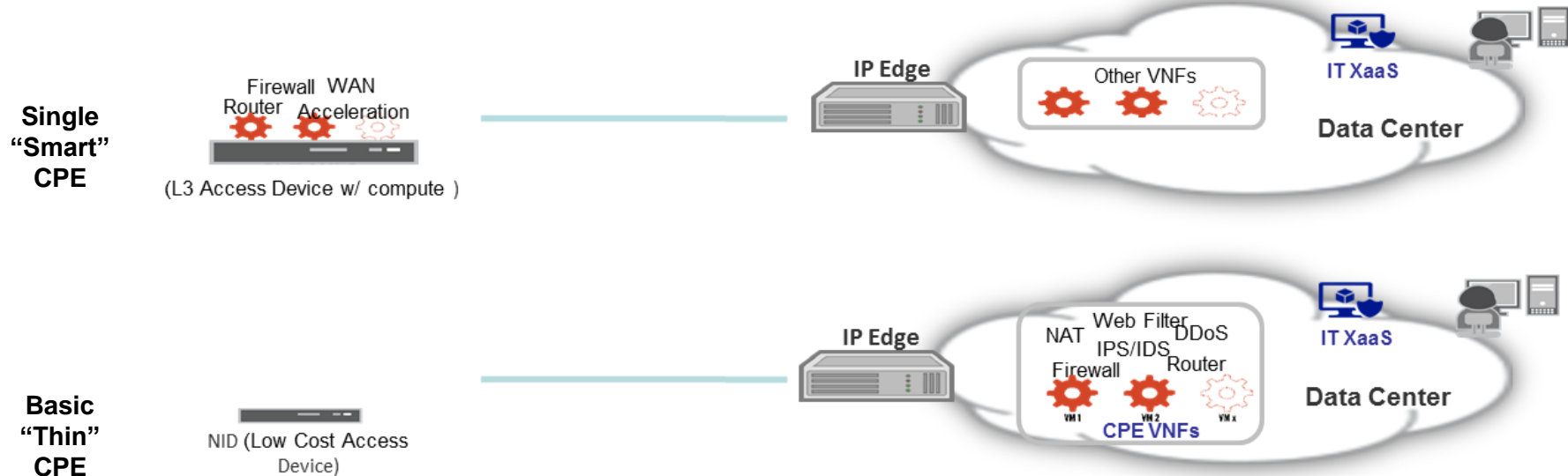
## Service Provider Drivers



Source: 2015 Virtual Edge Report, SDxCentral

***An opportunity for service providers  
to offer network management functions as a value-added service***

# Deployment Scenarios – A Full Spectrum



*Deployment scenarios will have a variable impact on the operator's IT systems and services offered*

# vCPE Benefits: Webification and Cloudification of the Telco Model

## Residential

- Self-service via web-based interfaces
- Service improvements deployed on a continuous basis
- Security and parental control for entire household at once

## Enterprise

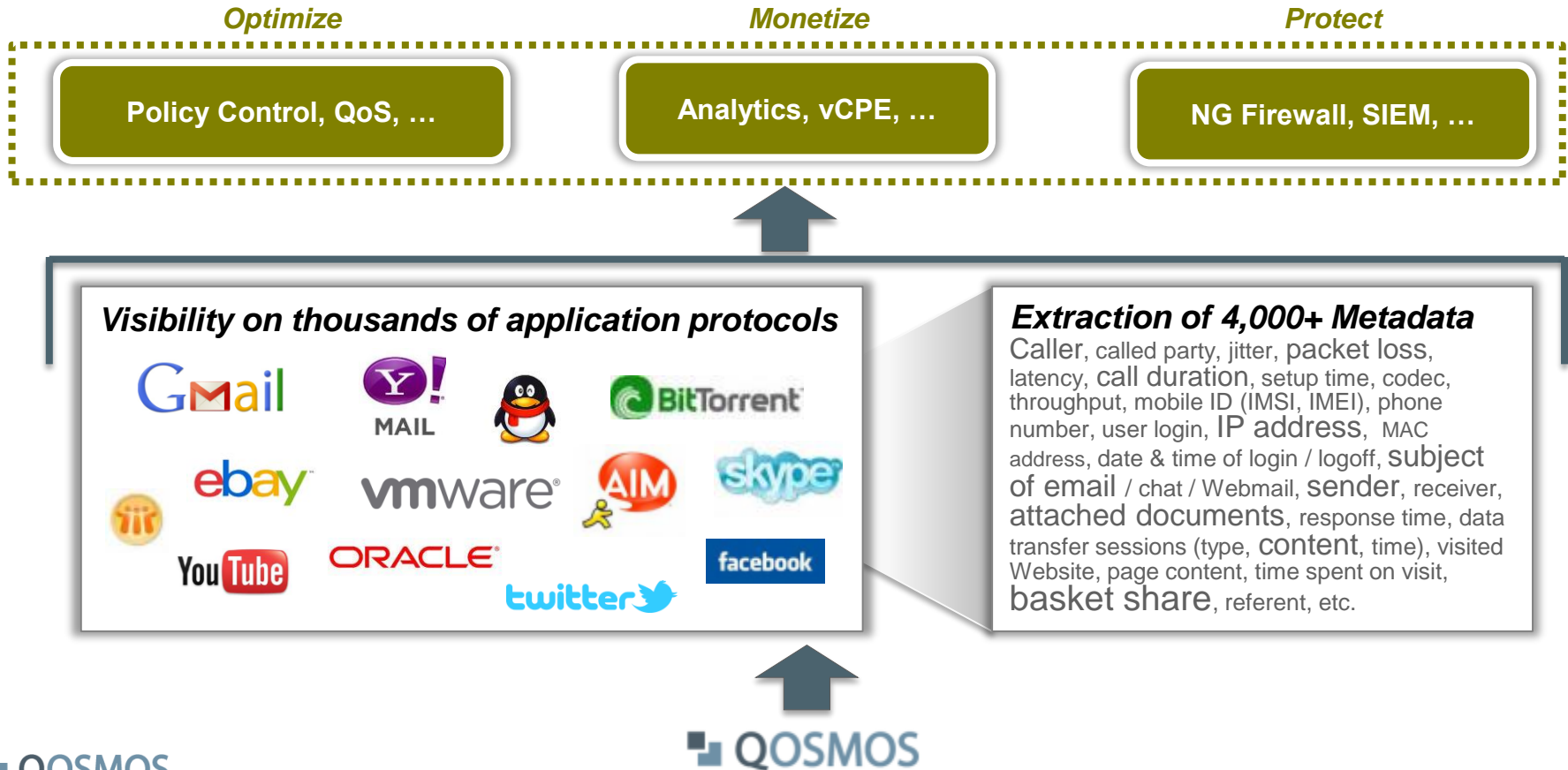
- Lower costs (OPEX & CAPEX)
  - Fewer technicians to manage infrastructure
  - Reduced number and cost of physical hardware
- WAN optimization
- More flexible network management
  - Self-service via web-based interfaces
  - Service improvements deployed on a continuous basis
- Improved security

## Service Provider

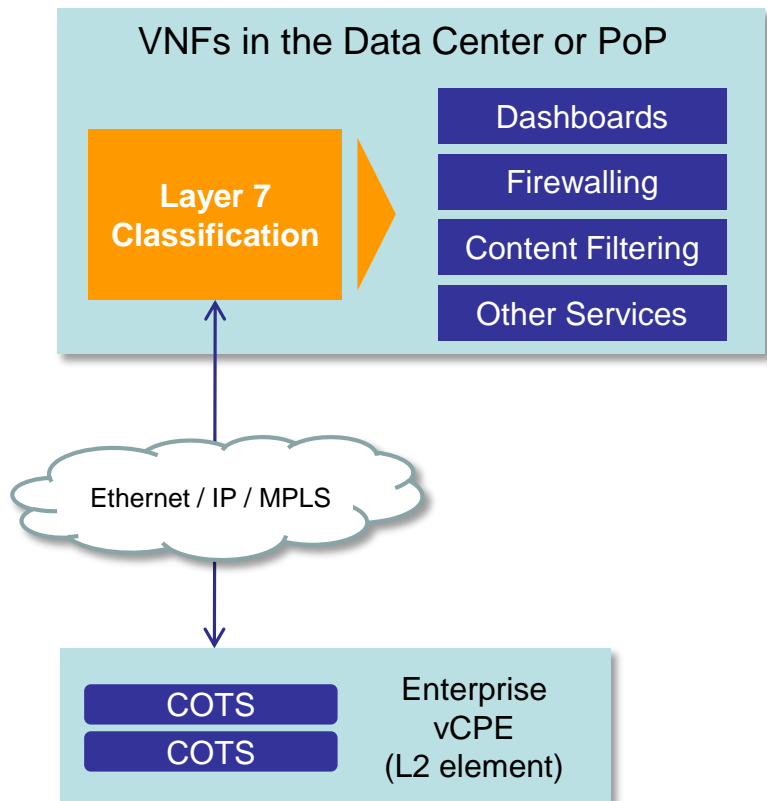
- Lower OPEX
  - Fewer truck and fewer field technicians
  - Service provisioning and maintenance from a central point
  - Customer self-service; webstore
  - Service improvements deployed on a continuous basis
- Opportunities for new VAS
  - Reporting, web-content filtering, self-provisioning, etc.
- Lower CAPEX
  - Reduced number and cost of physical hardware

***vCPE enables operators to adopt a web-like operational model***

# What is Layer 7 Application Visibility?



# Why L7 Visibility?



- Enables optimization of services delivered to premises based on subscriber and application
- Enables simpler introduction of VAS
- All the associated benefits of vCPE (reduced cost, improved security, service agility, easier & faster deployment, etc.)

# Where is L7 Application Awareness Needed?

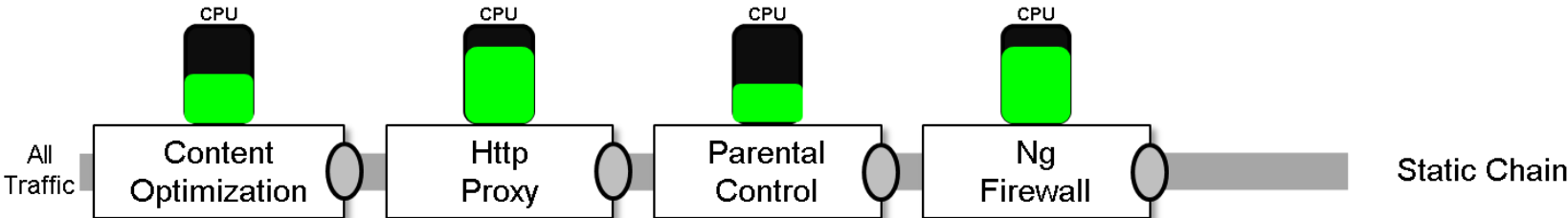
- Optimizing Service Function Chaining (SFC)
- Offering new Value-Added Services through a Web interface
  - Firewalling
  - Dashboards
  - Content filtering
  - Other



**Need  
L7**

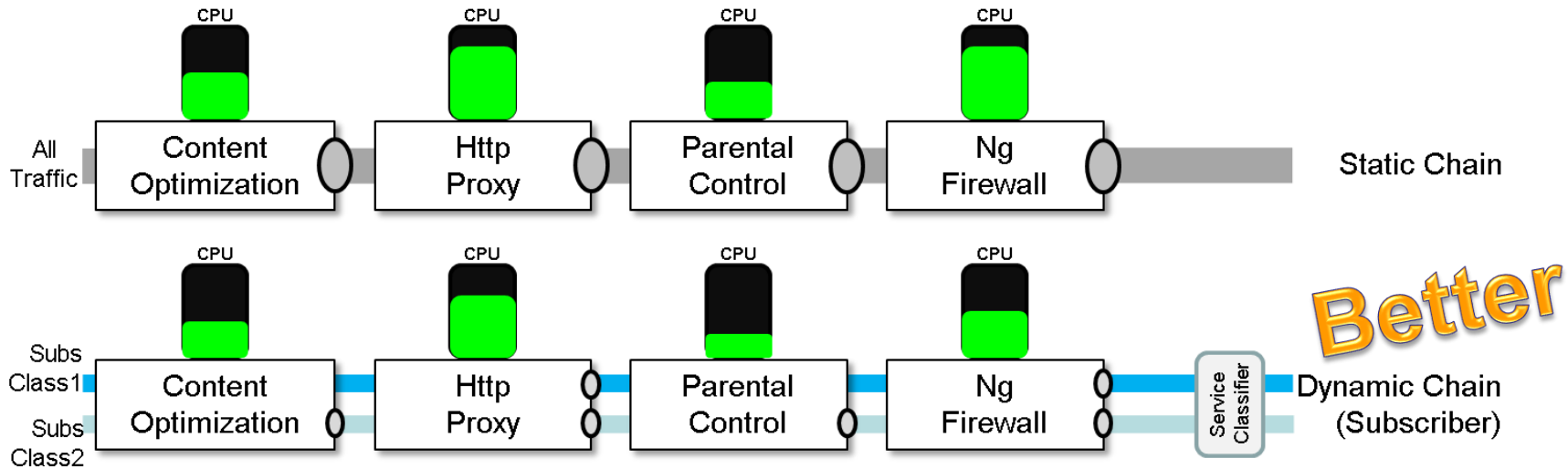
***Granular and continuous Layer 7 application visibility  
helps operators overcome challenges associated with vCPE services***

# Why Add L7 Application Awareness to Service Chaining?

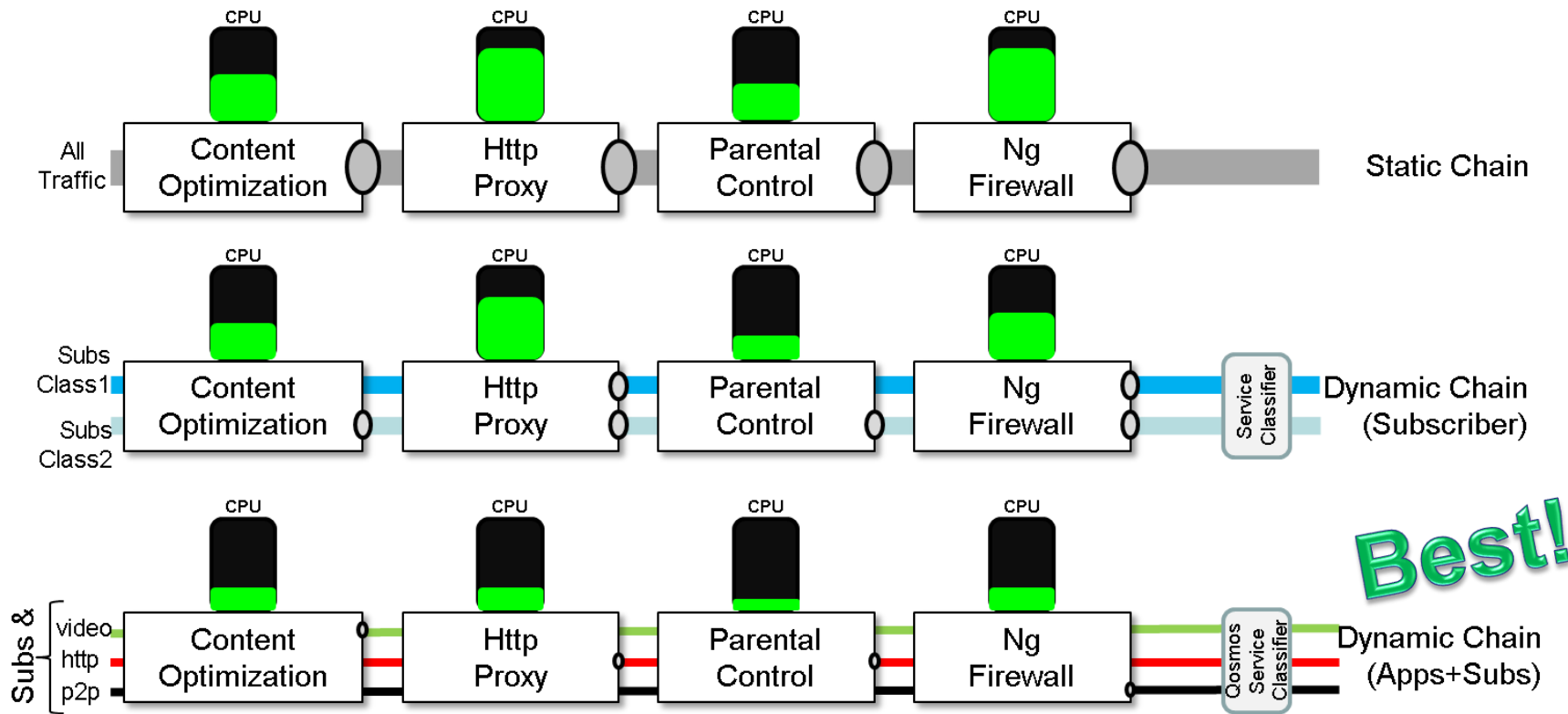




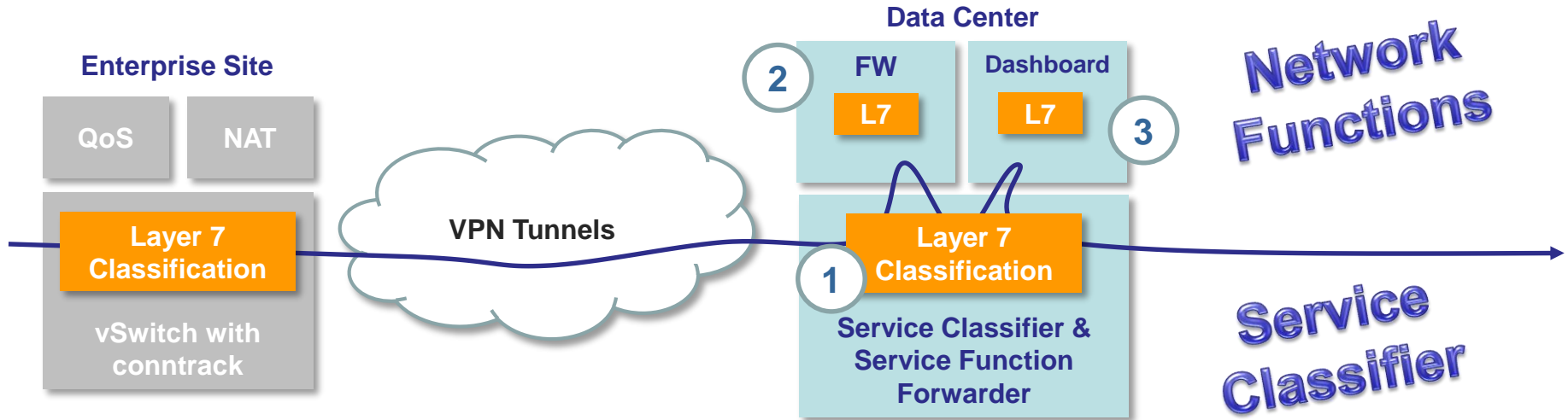
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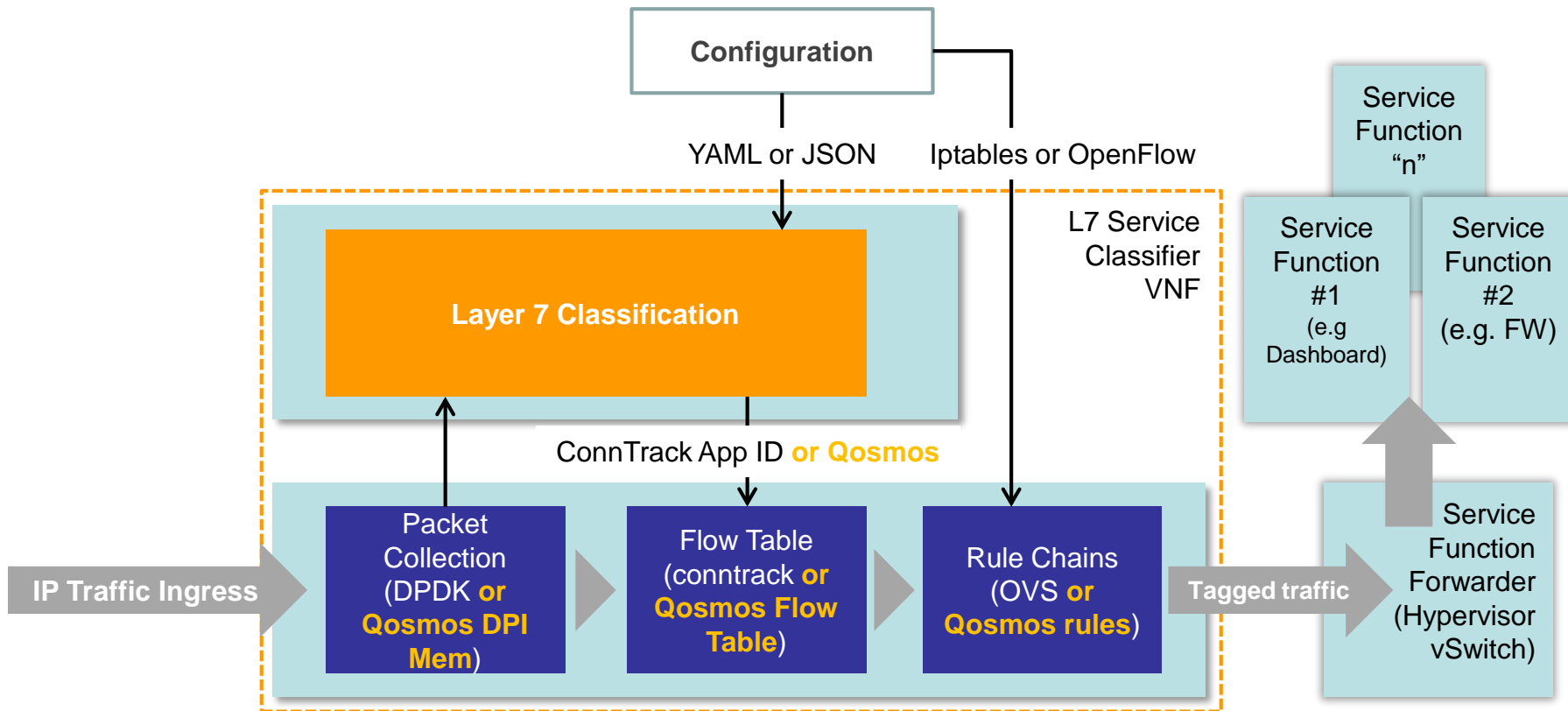
# Where is the L7 Application Awareness in Service Chaining?



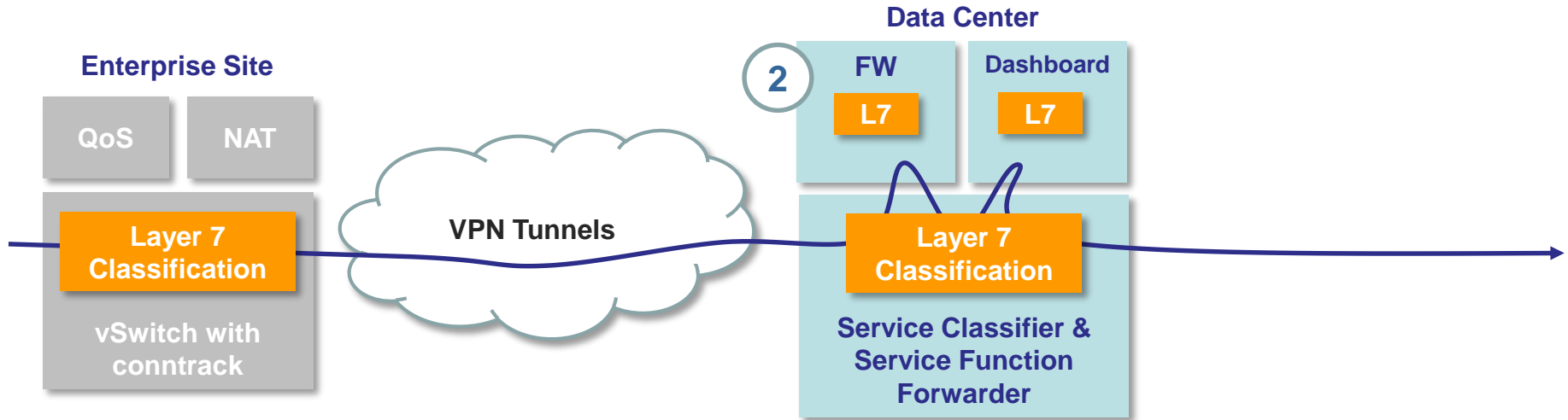
## BENEFITS

- Service chaining: Optimization of services delivered to premises based on subscriber and application
- Service functions: firewalling, dashboards, etc.

# Use Case #1: Layer 7 Inside the Service Classifier



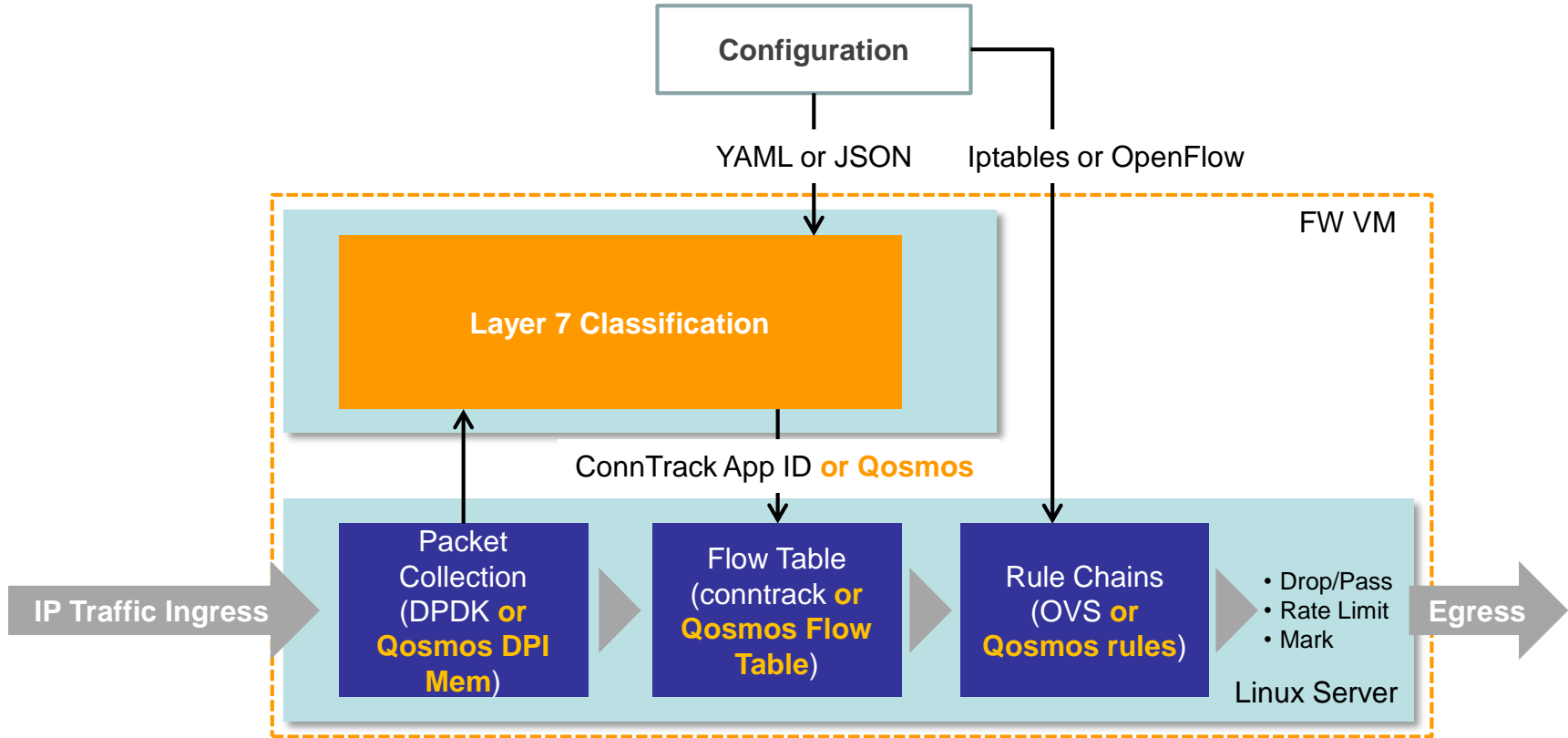
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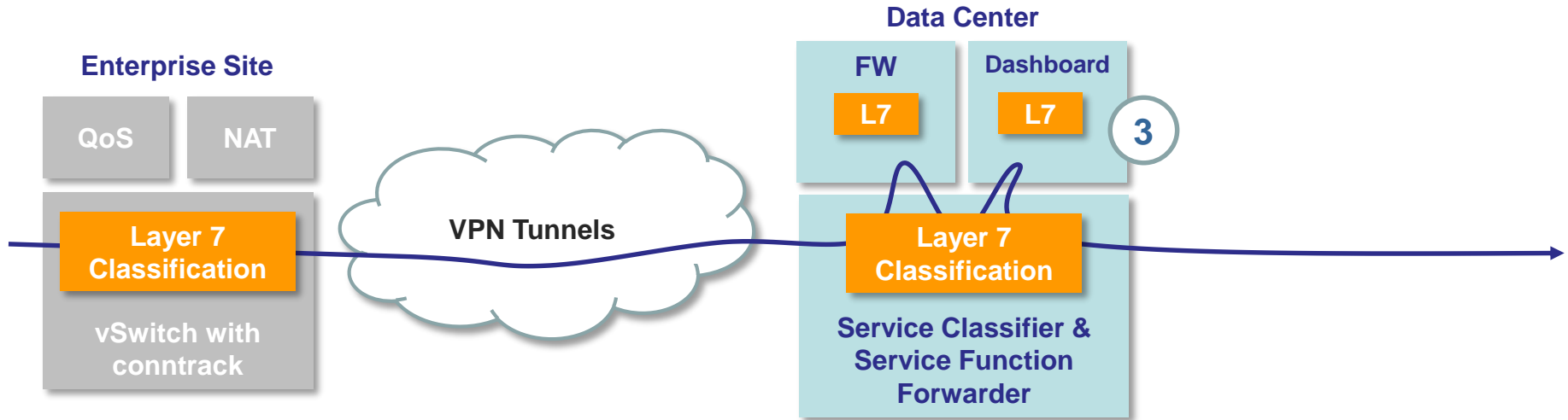
## BENEFITS

- Service chaining: Optimization of services delivered to premises based on subscriber and application
- Service functions: firewalling, dashboards, etc.

# Use Case #2: Layer 7 Inside a Firewall



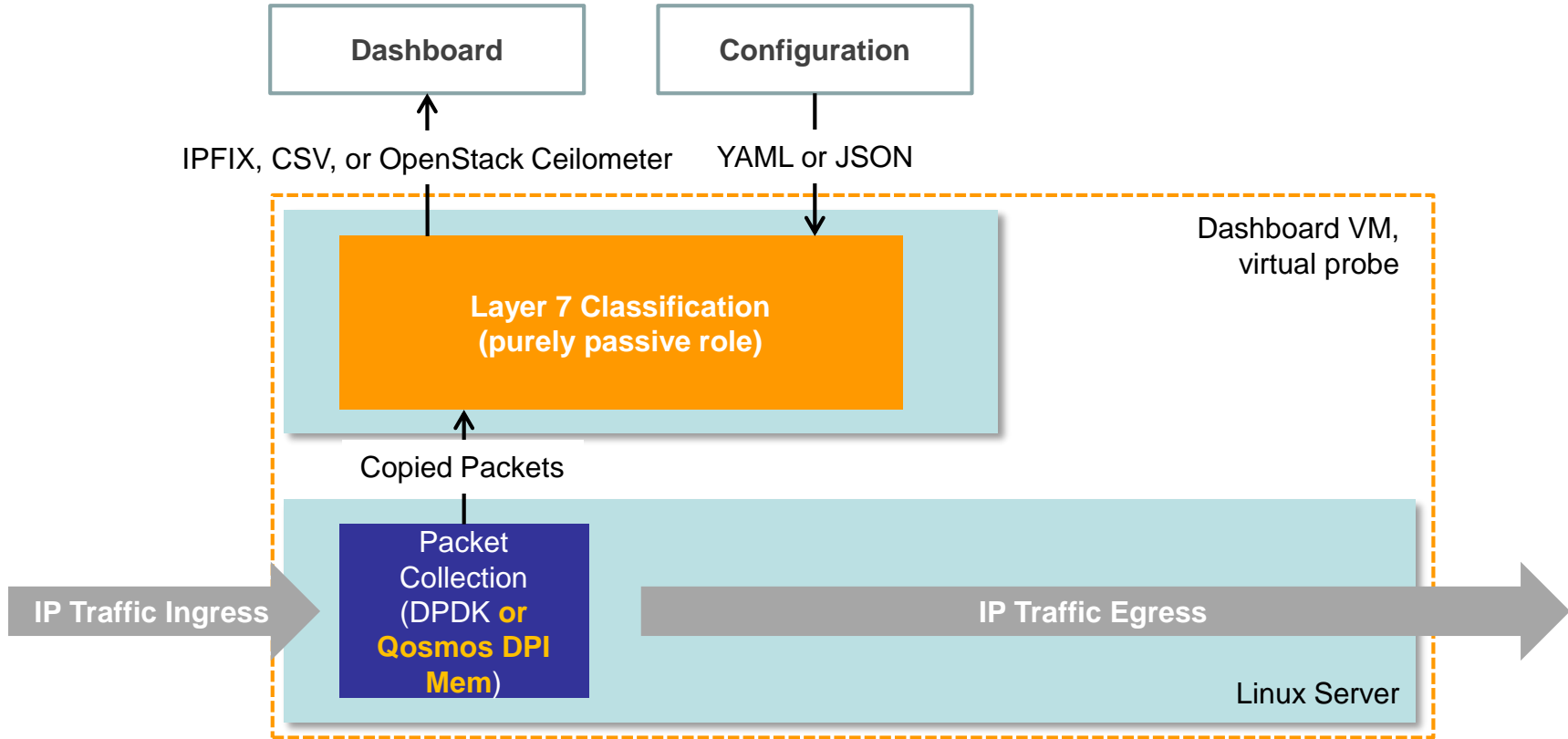
# Where is the L7 Application Awareness in Service Chaining?



## BENEFITS

- Service chaining: Optimization of services delivered to premises based on subscriber and application
- Service functions: firewalling, dashboards, etc.

# Use Case #3: Layer 7 Inside an Enterprise Customer Dashboard





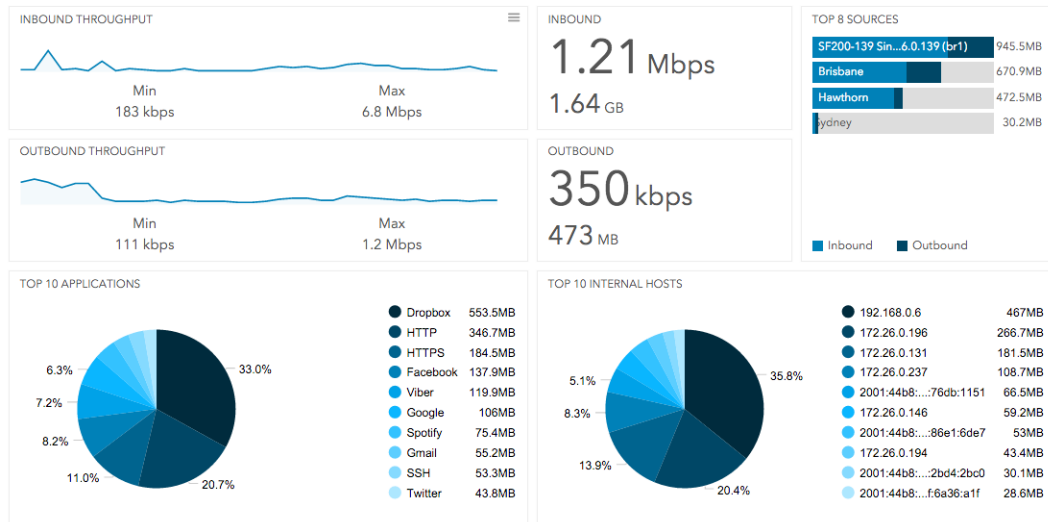
# Example: Layer 7 Classification Function for vCPE - Sinefa

- vCPE ready traffic visibility and control function
- Powered by Qosmos ixEngine
- Available for download now
- Support for service chaining
- Cloud-based analytics and dashboards

[sinefa.com](http://sinefa.com)



## Utilization



## Summary: Why Layer 7 Visibility for vCPE Services

1. Benefits beyond capex-opex savings
2. Perfectly in line with Webification and cloudification of telco business model
3. Optimized Service Function Chaining (SFC) delivered to premises based on subscriber and application
4. New services delivered through a Web interface (e.g. Firewalling, Dashboards)

***Layer 7 visibility is an essential ingredient of any vCPE strategy for both equipment vendors and operators***



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