

Security Level:

数据中心网络演进及其对 网络设备影响

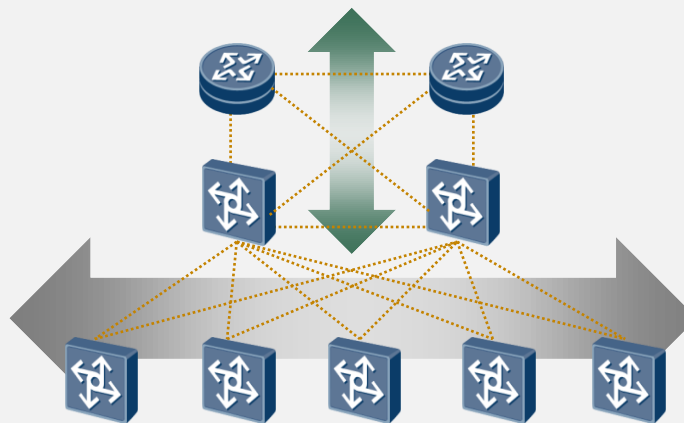
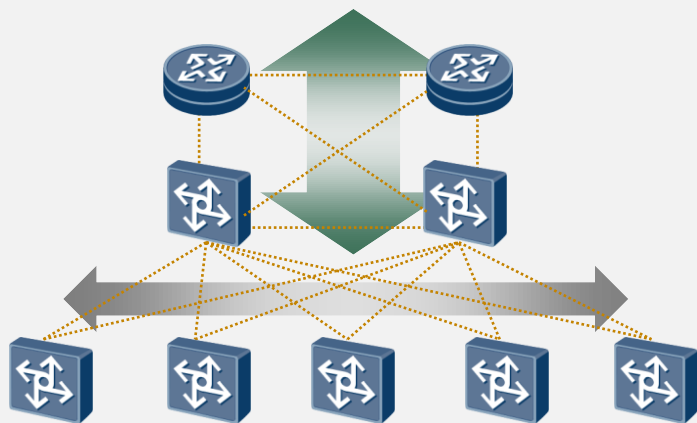
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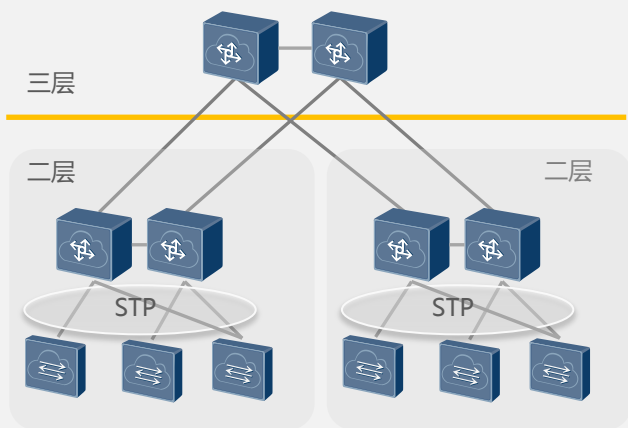


数据中心网络的演进与变化

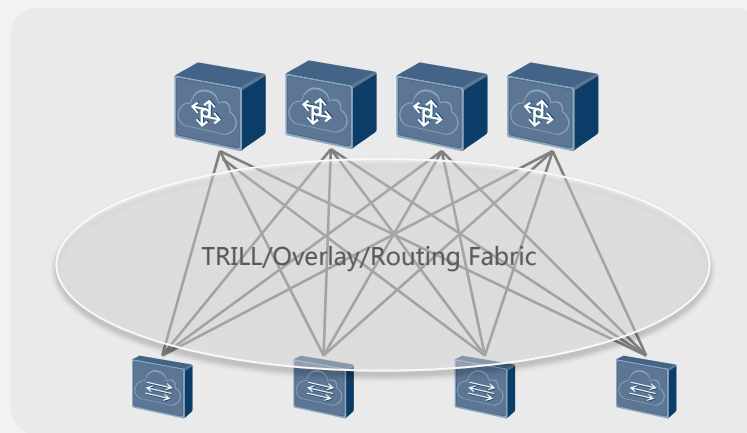
HUAWEI ENTERPRISE ICT SOLUTIONS A BETTER WAY



计算架构驱动流量模型变化



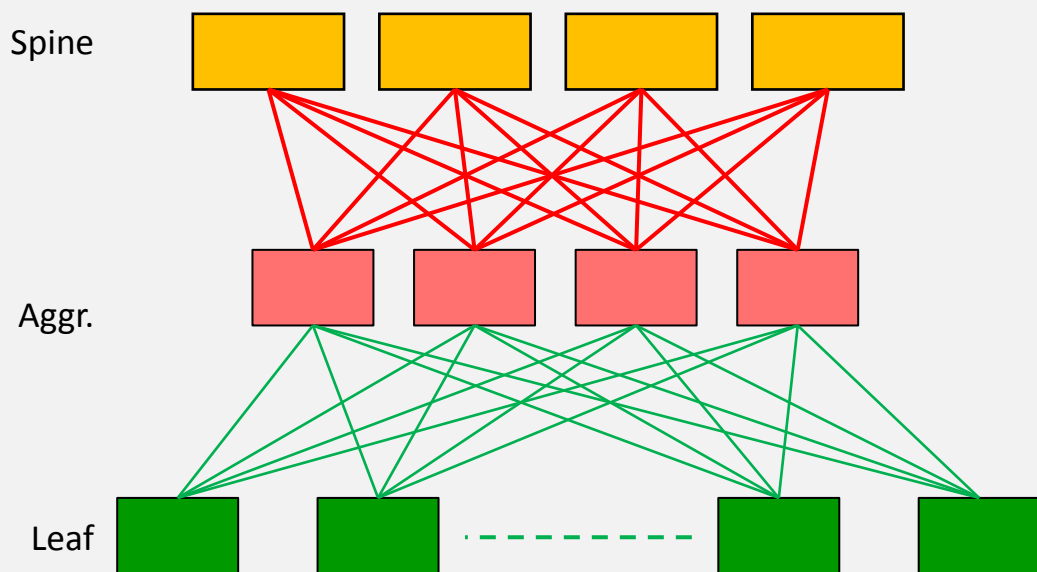
传统数据中心架构



流量模型驱动网络架构演进

新一代数据中心架构

数据中心网络核心需求的变化



Past 5 years:

Scalability
Performance
Cost

Next 5 years:

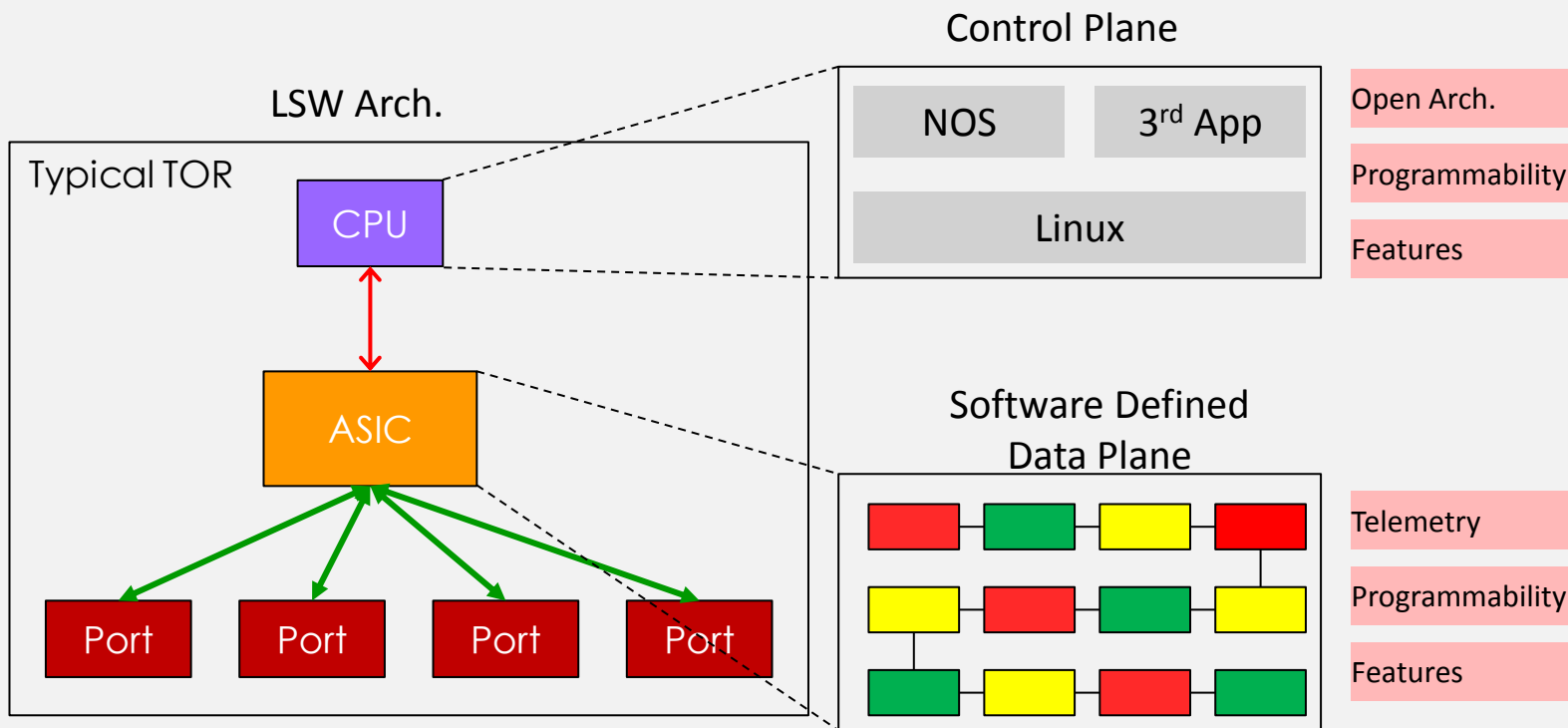
Telemetry
Feature Velocity
Quality
.....

(需求变化)对网络设备的影响

Cambrian Explosion

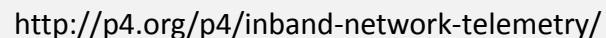


http://www.bio.miami.edu/dana/pix/cambrian_explosion.jpg



如同寒武纪生物大爆发，网络进入SDN时代，需求（环境）发生巨大的变化，对网络设备的架构和技术路线都将产生巨大的影响。

网络设备不只是控制面的演进，转发面将进入软件定义时代 ---- a Software Define Data Plane.



帶内度量:

Ingress/Egress Port ID

Egress Link Utilization

Hop Latency

Egress Queue Occupancy

Egress Queue Congestion Status

<https://tools.ietf.org/html/draft-lapukhov-dataplane-probe-00>

Case 2 : New Features (NSH)

如何实现SFC?

PBR?
NSH?

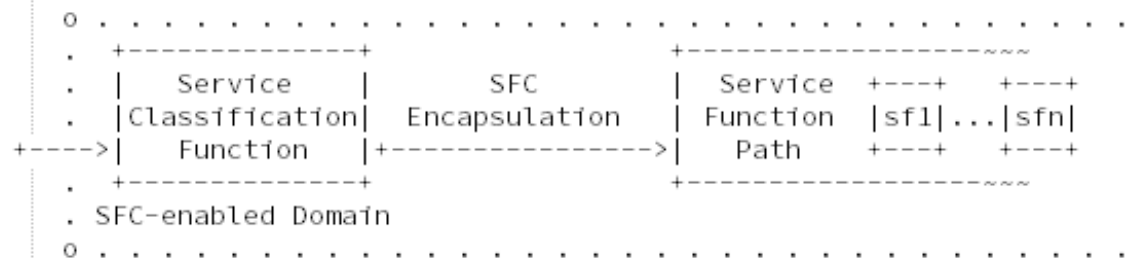


Figure 2: Service Function Chain Architecture

https://datatracker.ietf.org/doc/rfc7665/?include_text=1

通过软件定义转发面，3个月内实现新业务，不用等2~3年。

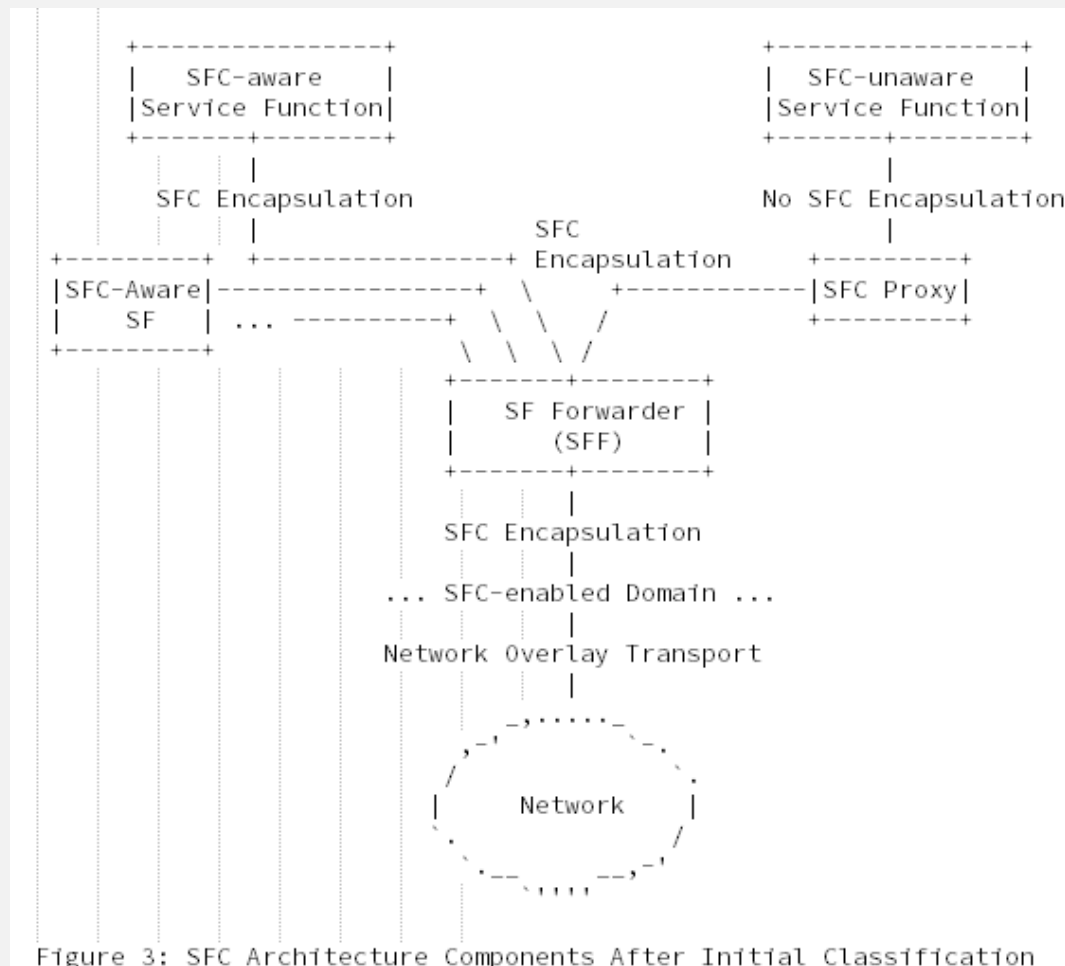


Figure 3: SFC Architecture Components After Initial Classification

Thank you

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