



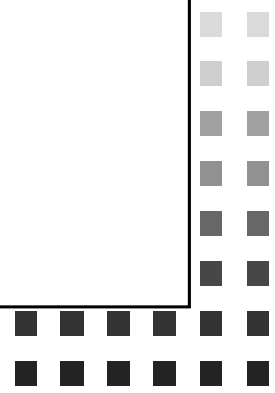
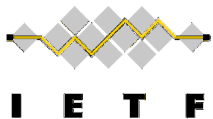
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IETF bcause presentation CUPS BNG

Prefer open, converged infrastructure disaggregation

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DMTS**

Presented by Dirk v. Hugo, DTAG





Summary



Several carriers are interested in jointly pursuing CUPS, disaggregated BNG

We want a common infrastructure layer that can support wireline, fixed and mobile wireless using the same hardware...

It should support native Ethernet access and use of all three access types for Metro Ethernet services

Activities at BBF and 3GPP towards such infrastructure (e.g. 5GWWC) are heading there

Deployed as a rack-n-roll POD that include compute, storage, and networking. Plus potential common acceleration components...

We are working on PoCs and prototypes now, and see a bottom-up slow-roll to convergence, not a flash-cut...

Implementations need classic user plane functions – many times existing wholesale relationship, tariffs and regulations prevent major UP rework.

We are working on this now, with urgency, to be deployed in the next year or two.



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Detail

One deployment of infrastructure to support wireless, wireline, and edge cloud.

Everything Open using a NFVI with SDN, CUPS, Orchestration model.

Merchant Silicon enriched with compute and storage + (maybe) accelerator

Si APIs used to support both Wired and Wireless control plane functions.

OSS/BSS/DBs don't change at outset, and only when there is business value to consolidation.

Focus on converging the low levels first.

Imagine that one slice in a 5G Core is today's wireline core.

Existing OSS/BSS Stacks
RADIUS, UDM may stay separate

BNG CP

Other

5G CPF

BNG UP

Other

5G UPF

L2/Tunnel

SubMgt

RtAgg

NFVI – Merch Si - sliced

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