Imagine …

… a video conference where everyone can be seen and heard like sitting next to you

… an online game fast and responsive as if it was a LAN party

… a factory floor distributed across the country with tight coupling of digital twins

At MLE, we have developed FACs[1] and system / software stacks to enhance efficiency and throughput of existing and new telco equipment. Our FACs offload your server CPUs thereby reducing your capital expenditures and operating costs.

This opens up new and additional revenue streams in telecommunications via application-oriented services. By managing and provisioning bandwidth and latency for individual applications premium video conferences become more lively, online gaming more fun and IIoT connectivity with the cloud becomes feasible.
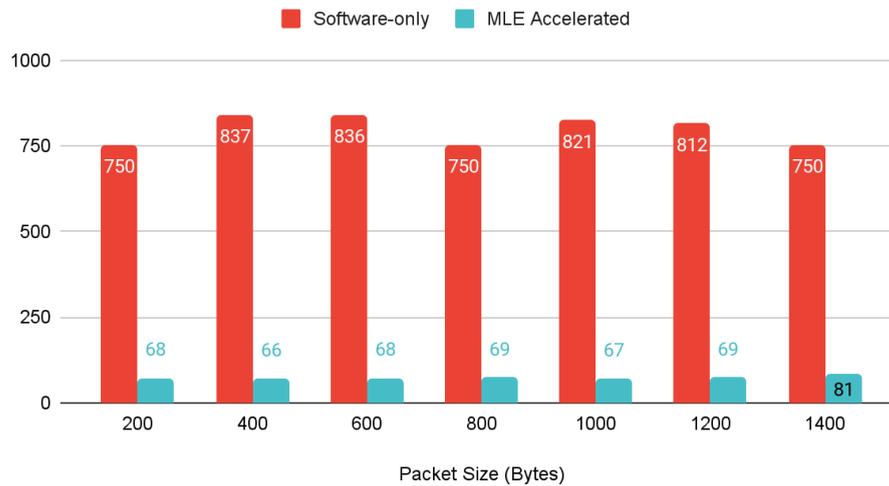

Evolution of FACs From NICs
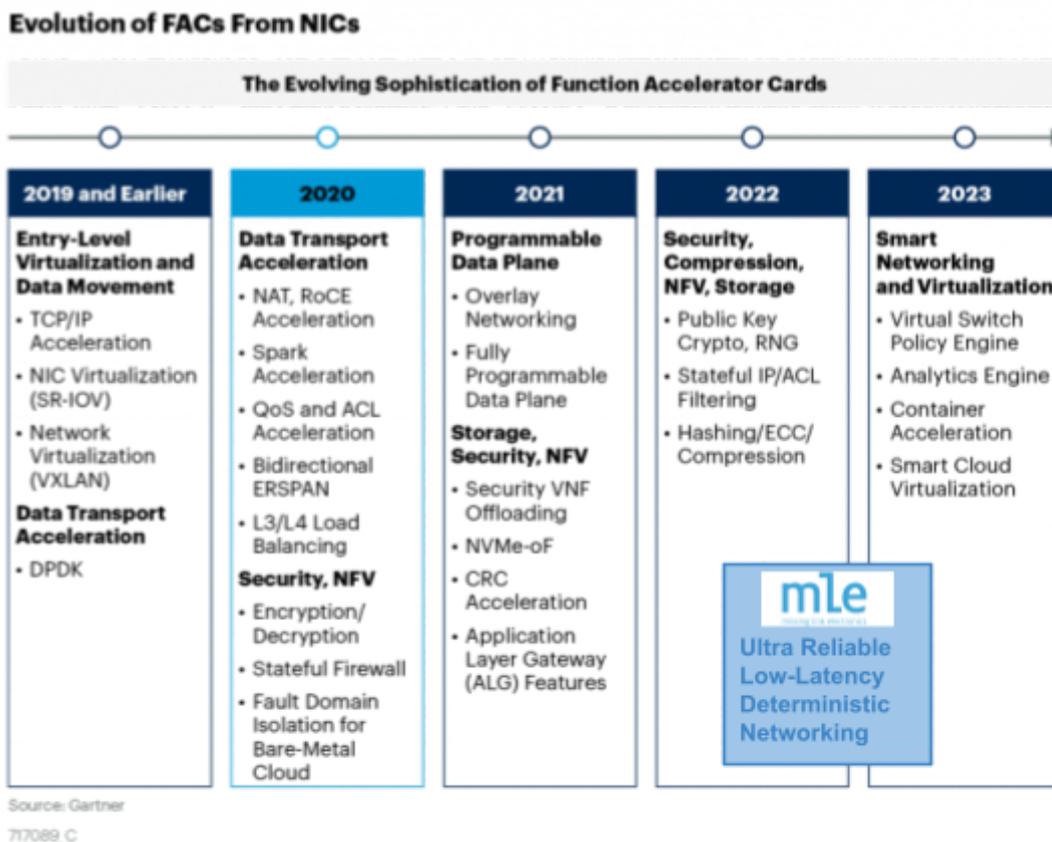
Built on top of existing open-source software, our implementation of Ultra Reliable Low-Latency Deterministic Networking meets de-facto standards and is backwards compatible with existing software-defined infrastructure and off-the-shelf server equipment. Hardware integrates cost-optimized FPGAs from AMD/Xilinx and/or Intel.

---

[1] Andrew Lerner (Gartner) "Just the FACs",
https://blogs.gartner.com/andrew-lerner/2020/08/04/just-the-facs/

You don't have to over-provision your backbone because we apply modern principles of traffic shaping and borrow heavily from Time-Sensitive Networking (TSN[2]). The outcome is lower transport latencies and Round-Trip Times which improve the end-to-end user experience.

Latency Analysis for Single Hop L3 Switch Instance (micro-seconds)

■ Software-only ■ MLE Accelerated

Packet Size (Bytes)	Software-only	MLE Accelerated
200	750	68
400	837	66
600	836	68
800	750	69
1000	821	67
1200	812	69
1400	750	81

Announcing Early Access

After a successful trial phase with a first carrier customer, we herewith announce early access to this technology to a broader customer base. Please contact us, if you (like us) imagine

… a video conference where everyone can be seen and heard like sitting next to you

… an online game fast and responsive as if it was a LAN party

… a factory floor distributed across the country with tight coupling of digital twins

MLE Backgrounder & Contact Information

MLE's Mission is: If It Is Packets, We Make It Go Faster!

MLE is experts in accelerating software-rich system stacks via offloading CPUs using so-called Domain-Specific Architectures by making heavy use of heterogeneous processing devices such as FPGAs. MLE is privately owned with headquarters in Silicon Valley and engineering offices in Germany.

For more information visit us at: http://MLEcorp.com/FAC

---

[2] B. Varga et al., "The Quick and the Dead: The Rise of Deterministic Networks"
https://www.comsoc.org/publications/ctn/quick-and-dead-rise-deterministic-networks