By
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Back in Vogue

Insight: The Open Compute Project is shining a new spotlight on hardware for carriers.

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Over the past decade, the focus on gaining IT efficiencies in the data center has been through virtualization. Starting with server hardware virtualization, virtualization has evolved to desktops, networks and now applications. With its focus on abstracting software from the underlying hardware, virtualization benefits evolved from sharing hardware to hardware consolidation. Returns from these have been significant in terms of both capital and operating savings.

While not specifically related to virtualization, the Open Compute Project promises continued IT data center cost reductions.

In a focused effort by Facebook to further optimize its own data centers, the OCP evolved from the work done at Facebook's Prineville data center, which achieved impressive results, requiring 38% less energy to do the same work as its existing facilities, while costing 24% less.

The Open Compute Project Foundation is a growing community of hardware engineers involved in a crowd-sourcing effort to create the most efficient, lowest cost, scalable data centers of the future. The foundation, which is focused on open source software and hardware, has lofty goals defined in its underlying principles, all in support of its mission statement.

Unlike traditional industry consortia where there may be closed door secrets, the OCP was launched with transparency as a key factor. Not only are what could be viewed as competitive advantages shared at OPC summits, but innovation in improved hardware design is enabled through a "hackathon." At the most recent hackathon, seven new hardware designs were produced, all of which went from concept to prototype during the summit.

Insurers stand to benefit from the OCP in two ways—a lower cost/performance from their cloud providers and better price/performance within their own data centers. An existing OCP data center, according to the Open Compute website, "consumes 52% less energy than a data center built to code requirements, consumes 72% less water for occupant use and meets 100% of irrigation needs through rainwater capture."

Along with operating savings, the insurance data center of the future will help carriers achieve corporate "green initiatives" while decreasing capital costs for new data center hardware. "Many of the cost savings in OCP-standard products come down to two design themes: commonality and disaggregation," said *InformationWeek* Executive Editor Doug Henschen. The more common the interconnections and the less integrated the data center elements, the more mixing and matching of these elements can occur.

Taken to the next level, those same characteristics can result in smarter technology refreshes. Rather than replace an entire server every few years, server components can be more selectively refreshed.

The concept of a "custom hardware solution" is not beyond reach. Several financial services firms are already working within the OCP project to design and source system boards custom-made to handle certain financial processing workloads. What similar solutions can be optimized to enhance insurers' risk assessment and risk management capabilities or to increase actuarial throughput? The OCP may ultimately help provide carriers with innovative approaches for these and other industry-specific workloads. **BR**

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