Standardizing the Hyperscale Data Center

Intel® Rack Scale Design is a reference architecture for composable, disaggregated infrastructure based on industry standards

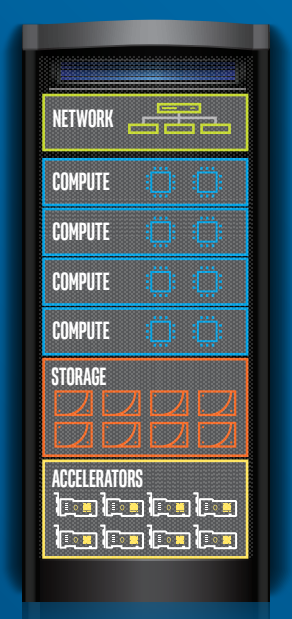
Today's Data Center

- **40%** YEARLY GROWTH CAPACITY DEMAND[1]
- **45%** EQUIPMENT UTILIZATION[2]
- **50%** EFFICIENCY IT OPERATIONS[2]
- **35** PEOPLE HOURS PER RACK UPDATE[1]

Intel® Rack Scale Design

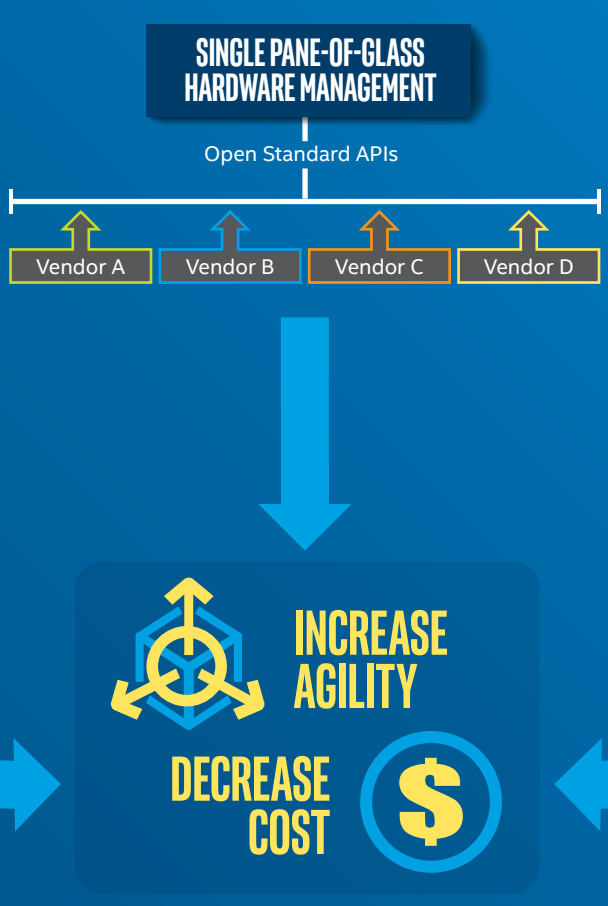
Disaggregated

Buy only what you need, when you need it



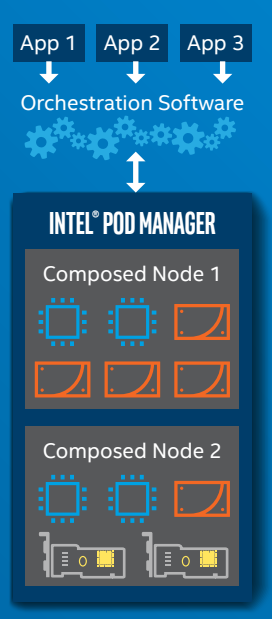
Interoperable

Choose the best hardware without vendor lock-in



Composable

Compose on the fly for specific workloads



Buy Less Up Front

Potential resource savings from disaggregated vs. direct attach flash storage at the same throughput level[3]

NVME

UP TO **40%** SAVINGS ON NVME RESOURCES

Save Money Over Time

Potential refresh savings from better component lifecycle management made possible by disaggregation[4]

CAPEX

44% REFRESH SAVINGS REPLACING CPU/DRAM ONLY

OPEX

77% REDUCTION IN TECHNICIAN TIME

Contact your OEM or Intel representative today to evaluate Intel® Rack Scale Design.

[1] White paper, "Disaggregated Servers Drive Data Center Efficiency and Innovation", Shesha Krishnapura, Intel Fellow and Intel IT CTO, http://intel.ly/2rJew4i
[2] "Quantifying Datacenter Inefficiency: Making the Case for Composable Infrastructure," IDC, http://www.hpe.com/us/en/resources/integrated-systems/composable-case.html
[3] Flash Storage Disaggregation study, Stanford University, Klimovic, Kozyrakis, et al.
[4] Internal Intel IT study of disaggregated rack design based on 3U chassis with 14 blades comparing out-of-cycle refresh of CPU and Memory vs. full hardware acquisition.