

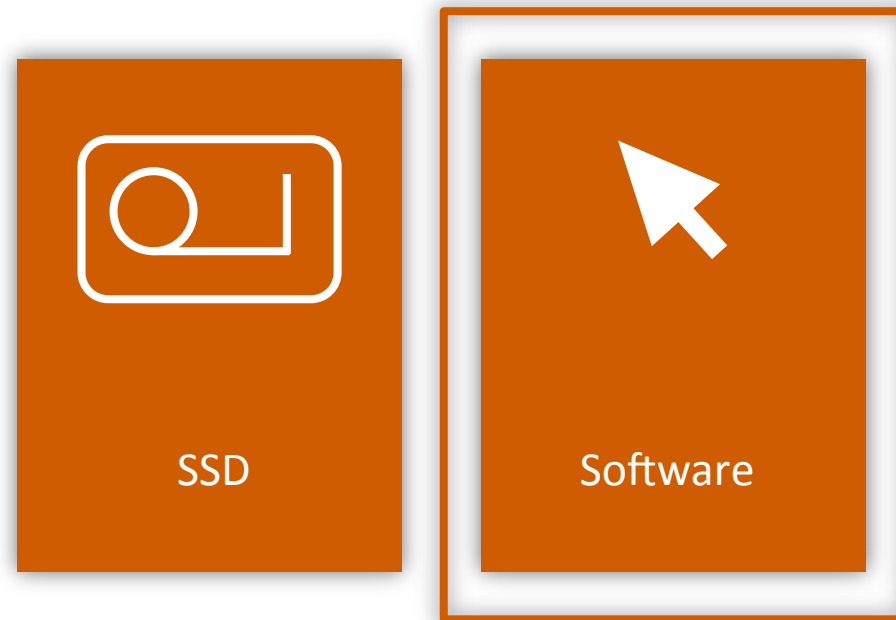


Business in a Flash

Achim Gebhardt
Director Sales DACH



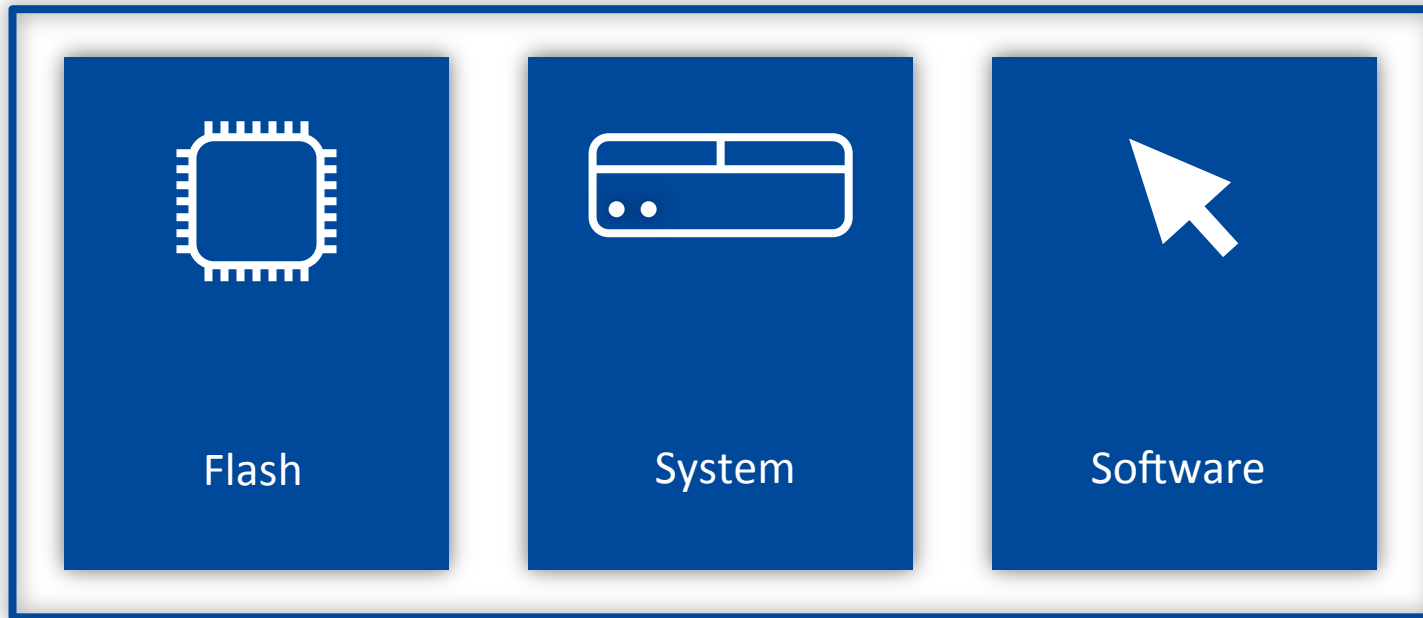
What it takes to build a mediocre all-flash array



Optimization
Capability



What it takes to build the best all-flash array



Significant Optimization Opportunity



The Violin Innovation Advantage



Technological innovation at every layer from Hardware to Software. Deep software and hardware integration

Highlights

- Tier-1 storage for business critical applications
- Best value for your performance demanding environments
- Full redundancy for mission critical deployments

Highlights

- Up to 1 Million IOPS
- Latency in hundreds of microseconds
- Up to 70TB of raw flash capacity
- Only 3 Rack Units (3U)



**Violin
3000/6000**

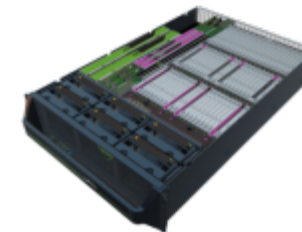
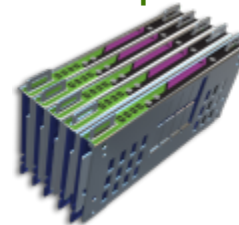
**Toshiba
Flash**



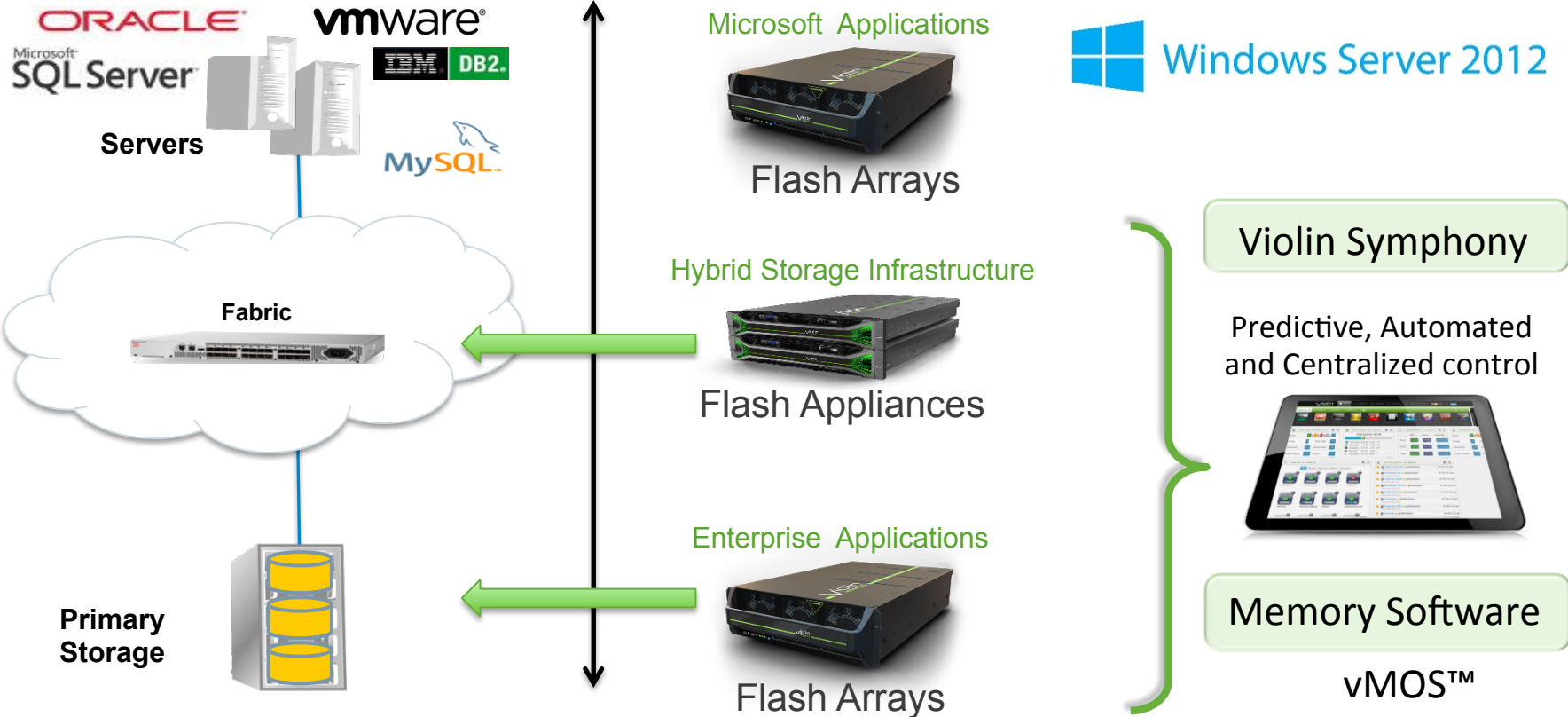
**Violin Intelligent
Memory Module
(VIMM)**



**vRAID
Group**



Violin enables multiple Flash insertion points



Application & Business Impact – Per Application Type



Use Case	Category	Measurement	Impact
VDI (VMware View, Intel Sandy Bridge)	Desktop Support	10 → 25 users per core (38,400 per POD difference).	2.5x more users/core (2,560 Cores!)
OLTP Reporting (SAP BW)	Complex Query/Calculate	24 hours → 3 hours	8x improvement
CRM System (Remedy) Incident Tickets	User Query Performance issues	8-10mins to 30 seconds. 99% less tickets	20x improvement Improved user experience
Billing (Keenan)	Monthly billing run	72 hrs → 22 hrs	330% improvement
VDI (XenServer, Intel Westmere)	Desktop Support	6 → 15 users per core	Less SAN ports (112) and servers (56) for 3000 users





The Future Is Now!

“The ultimate software optimization is hardware”

Larry Ellison CEO Oracle T5 product launch 2013

If we had invented flash 50 years ago would we now package it up to look like disk drives? The short answer is "NO".

Robin Harris, StorageMojo