Case Study – InfiniBox SSA
>$5B CSP/MSP/MHP

Eric Herzog
CMO
Infinidat
@zoginstor
eherzog@infinidat.com
Comprehensive Enterprise Applications and Use Cases

- One Architecture
  - many possibilities

- Superior Performance
  - from AIOps inside and outside the box

- Multi-Petabyte Scalability

- Primary Storage
  - 100% Availability
    - by design

- Secondary Storage
  - Set It & Forget It Operations
    - simple to install & manage

- Lowest Cost & TCO

- InfiniSafe
  - cyber resiliency

- Comprehensive Enterprise Applications and Use Cases
  - Cyber Attack Ransomware Defense
  - Business Apps (SAP, Oracle, ...)
  - Office Apps (Exchange, File Servers, ...)
  - Data Warehouses
  - Analytics
  - Backup
  - Archive
  - VDI
  - AI / ML
  - HPC

- High Performance Business Apps (SAP, Oracle, ...)
- Mission Critical Apps
- Virtualization
- Containers
- Cyber Attack Ransomware Defense
- Performance-critical apps
- Long-Term Retention (LTR)
- Disaster / Rapid Recovery
- Simple to install & manage
- 100% Availability by design
“Infinidat’s achieving 35 microseconds of latency is significant not only for the company with the new InfiniBox SSA II solution, but it also sets a new bar for the storage industry. This extremely low latency will enable greater application performance, which allows enterprises to consolidate systems and obtain greater value from data infrastructure. The InfiniBox SSA II has high performance and a 100% availability guarantee – two of the most important considerations for enterprises.”

Randy Kerns
Senior Strategist and Analyst
Evaluator Group
How Does Infinidat Do It?

• How is InfiniBox SSA Faster than other All-flash Arrays?
  - World’s best DRAM cache-hit ratios through Neural Cache Software
  - >95% cache hit for most real-world applications and workloads are

• Why can Infinidat platforms deliver 100% Guaranteed availability?
  - Triple-redundancy of critical components
  - Far fewer “touches” required for management and maintenance

• How is Infinidat simpler/easier?
  - Completely virtualized back-end
  - Full autonomous automation across the entire software stack
  - InfiniOps with Infiniverse
  - Exceptional ecosystem integration – VMware, ServiceNow, Kubernetes, RedHat
  - HTML5 interface

• How is Infinidat less expensive?
  • Single architecture with 100% commodity H/W, the IP is all S/W
  • Our costs are simply lower, and we can pass that on!
InfiniBox SSA II Performance

• “…setting a new performance bar for the storage industry”
  
  Dave Raffo, Evaluator Group, July 2022

• “InfiniBox SSA II is in a unique position in that it delivers the lowest latencies (35 microseconds) of any open SAN product on the market today”
  
  Eric Burgener, IDC, May 2022

• “Infinidat has focused on latency, setting a new bar for competitors at 35 microseconds“
  
  Randy Kerns, Evaluator Group, April 2022

• “Infinidat says its InfiniBox SSA II has 35 microseconds of latency, lower than any other comparable enterprise storage platform in the industry.”
  
  Chris Mellor, Blocks & Files, April 2022
Customer Problem:

• Tier 1 and Tier 2 SLAs:
  - Storage-as-a-Service (STaaS)
  - Platform-as-a-Service (PaaS)
  - Infrastructure-as-a-Service (IaaS)

• Tier 1 Services Contractually Must be All-flash

• Both Tier 1 and Tier 2 Deployments Include VMware vSphere
  - ESXi – Virtualization Layer
  - vCenter - Management Layer

• All Services Configurations Deployed as Pods Combining Storage, Servers, and Network Infrastructure

• Selected non-Infinidat All-Flash Solution for Tier 1 SLAs
• Selected Infinidat’s InfiniBox Hybrid Solution for Tier 2 SLAs
Customer Problem:

• 1 Year Results for Tier 1 Very Disappointing but Stellar for Tier 2
  - Many Customers Reported Tier 1 Performance Results Did NOT Deliver Contracted SLAs
  - Existing All-flash Vendor Attempted Several Times to Adjust Configurations to Deliver Needed Performance
  - Several Storage Outages with Existing All-flash Vendor
  - Several Tier 1 Customers Switched to Other CSPs
  - Revenue Loss Caused Internal Audit
Solving the Problem:

• CSP Decided to Upgrade Tier 1 SLA Configuration
• CSP Invited 6 All-flash Array Vendors to Compete
  - Existing All-flash Array Vendor
  - Infinidat’s InfiniBox SSA
  - Four other All-Flash Array Vendors

• Multiple Evaluation Tests
  - Storage Tests
    ▪ Latency
    ▪ Bandwidth
    ▪ IOPS
  - Real World Application Tests
    ▪ OLTP – Multiple Databases
    ▪ Bulk Workloads
  - All Testing Using VMware Environments
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“It seems that we have sold 200-300TB of storage to our customers tagged all flash (provided from our all-flash tier on ‘the other vendor’). Given that the performance of Infinibox seems to be ten times that of the ‘the other vendor’s’ it would seem stupid to continue selling that as premium to our customers.”

Chief Technology Officer
>$5B CSP
InfiniBox SSA II Solution:

- InfiniBox Hybrid Array Laid the Foundation for Success
  - Never had an outage
  - 90% of Tier 2 SLA InfiniBox Customers Exceeded SLAs
  - Very Strong VMware Integration
  - “Set it and forget” autonomous automation reduced OPEX and Operational Manpower Needs
  - InfiniOps Provides AIOps Capabilities Inside Infinidat Storage Platforms and Tightly Integrated to Cloud/Data Center AIOps Solutions (vCenter, RedHat, Ansible, ServiceNow etc)

- InfiniBox SSA Outperformed Competitors by 3 to 4X in All Testing - PaaS, STaaS and IaaS
- Latency Across All Workloads Between 35-40 microseconds - No Other All-flash Array Tested <100 microseconds
- Deployed 2.3PB of InfiniBox SSA and SSA II
The End Users Have Spoken - July 2022
“If you aren't running Infinidat in your data center, you are wasting money on storage.”

VP of Technology Security Industry
THANK YOU
www.infinidat.com