



Mission Critical Computing with SSD

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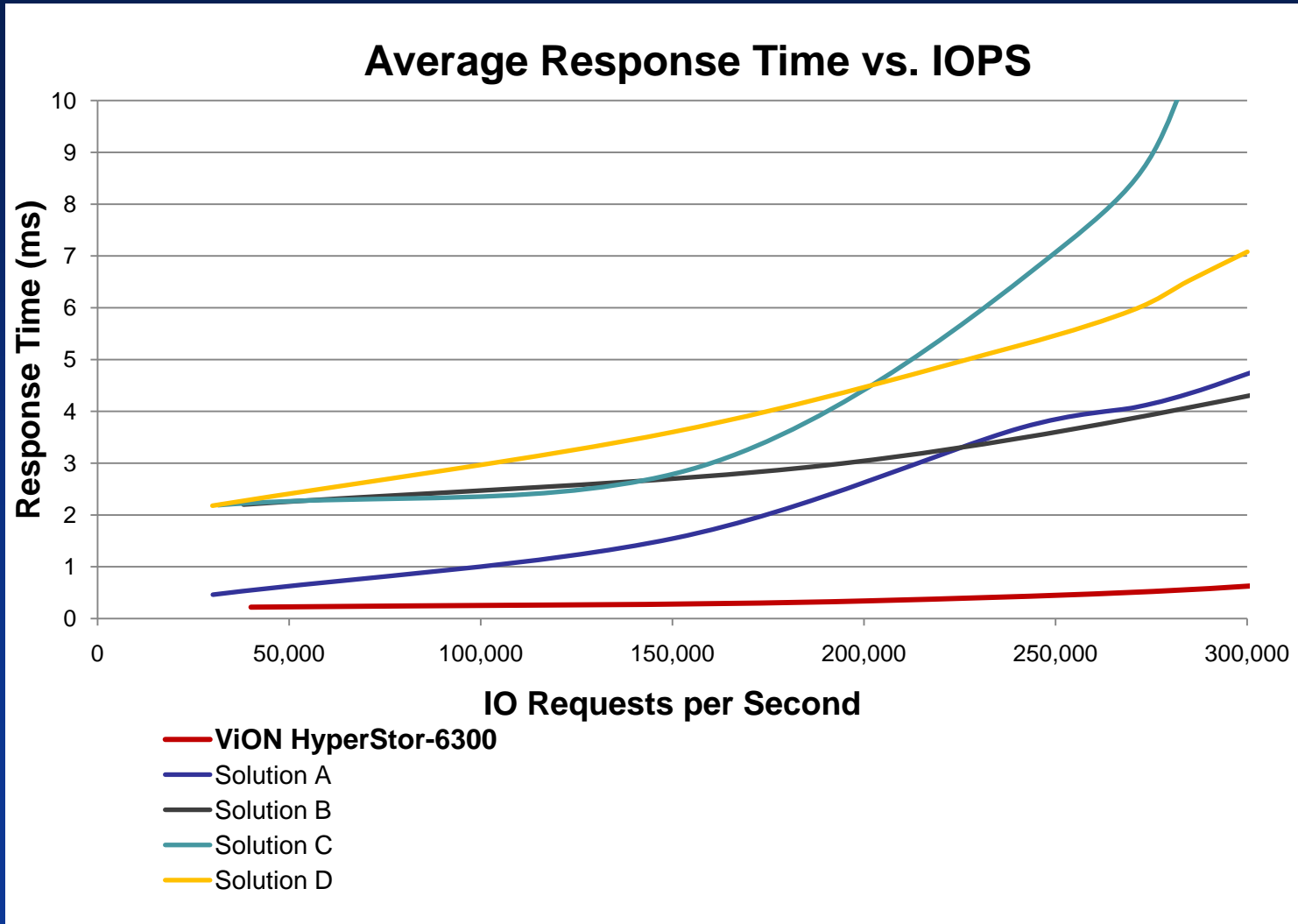


Mission Critical Computing with SSD Agenda

- Extreme Performance
- Data Protection
- Data Availability
- Business Continuity
- Continuous Performance Availability
- ViON Case Study



Mission Critical Computing with SSD Extreme Performance



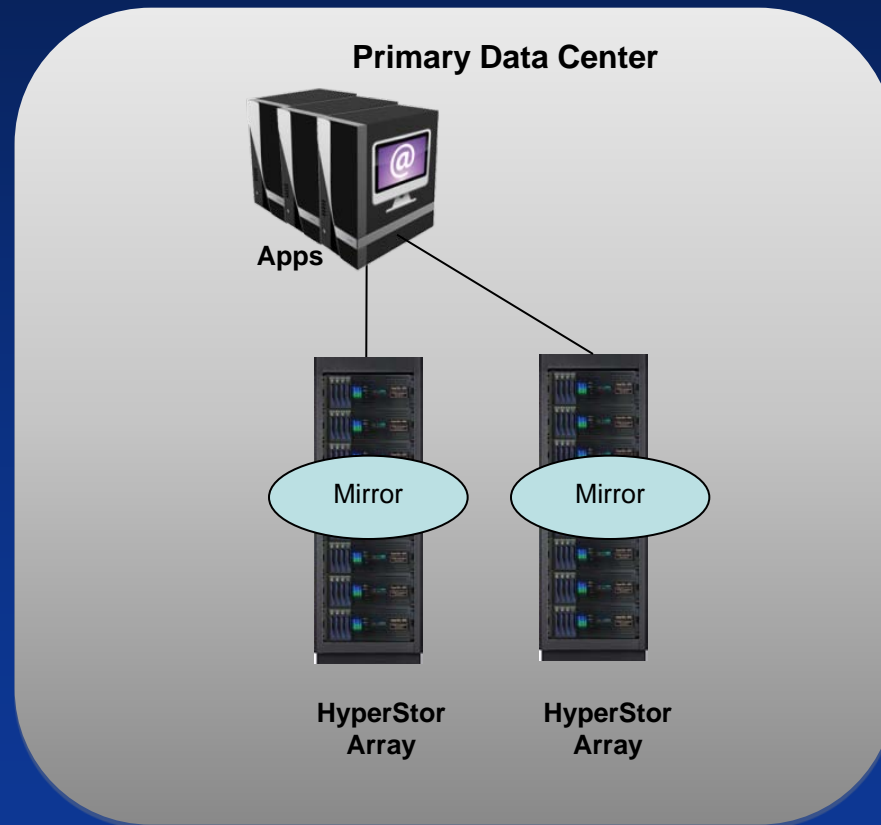


Mission Critical Computing with SSD Data Protection

- Media Protection
 - RAID protected media (could be central RAID or distributed RAID)
 - Wear leveling, Bad block replacement
- Redundant Controller Paths
- Data Path Protection
- Redundant and Hot Swap Components

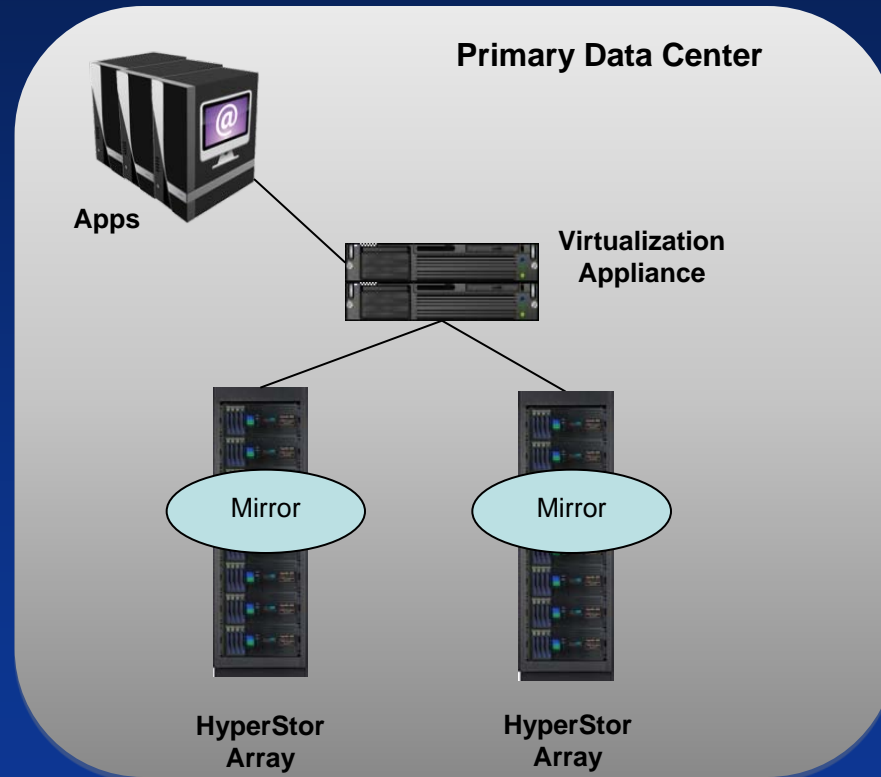
Mission Critical Computing with SSD Data Availability

Host-Based Mirroring



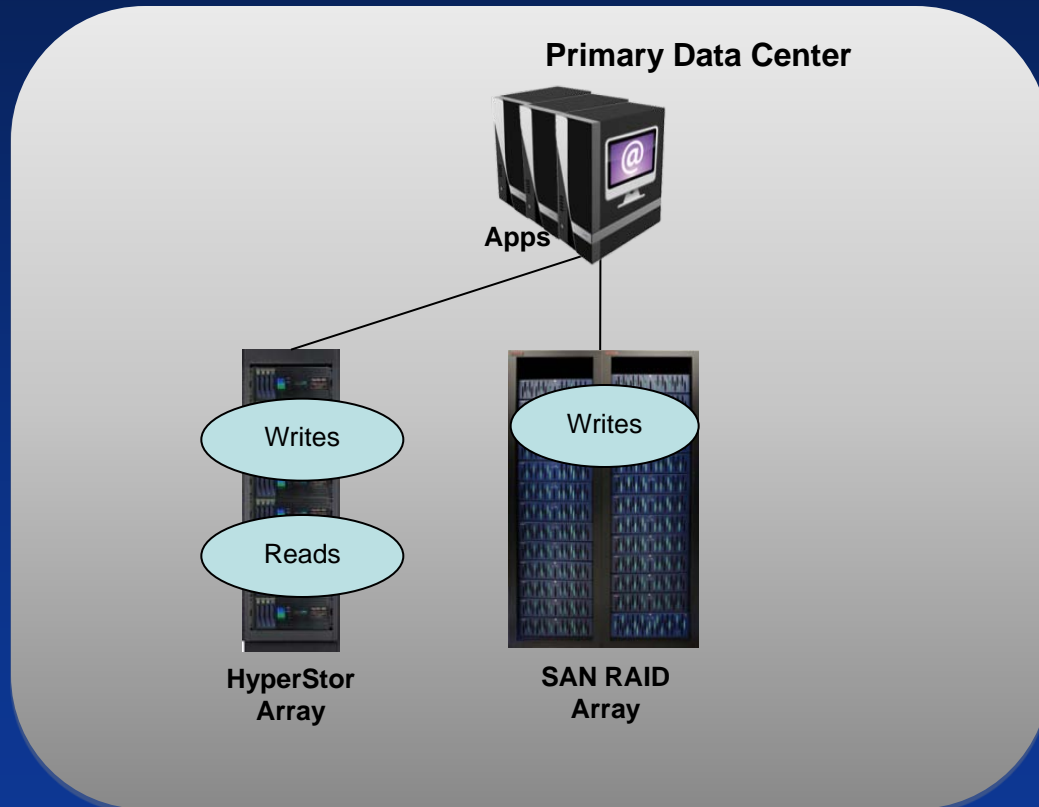
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Virtualization Appliance Mirroring



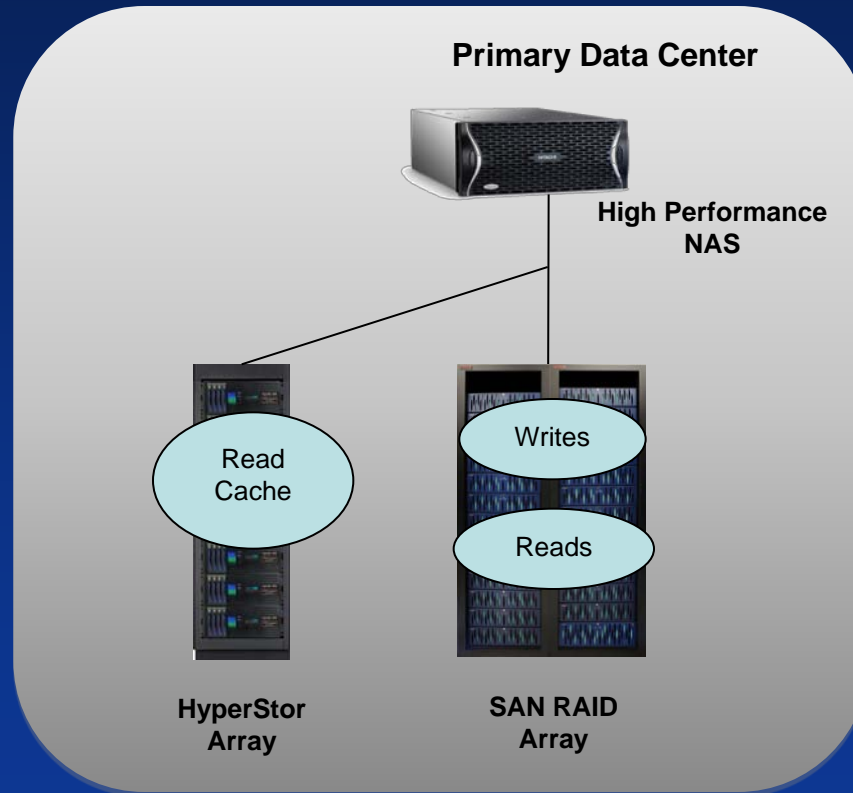
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Preferred-Read Mirroring



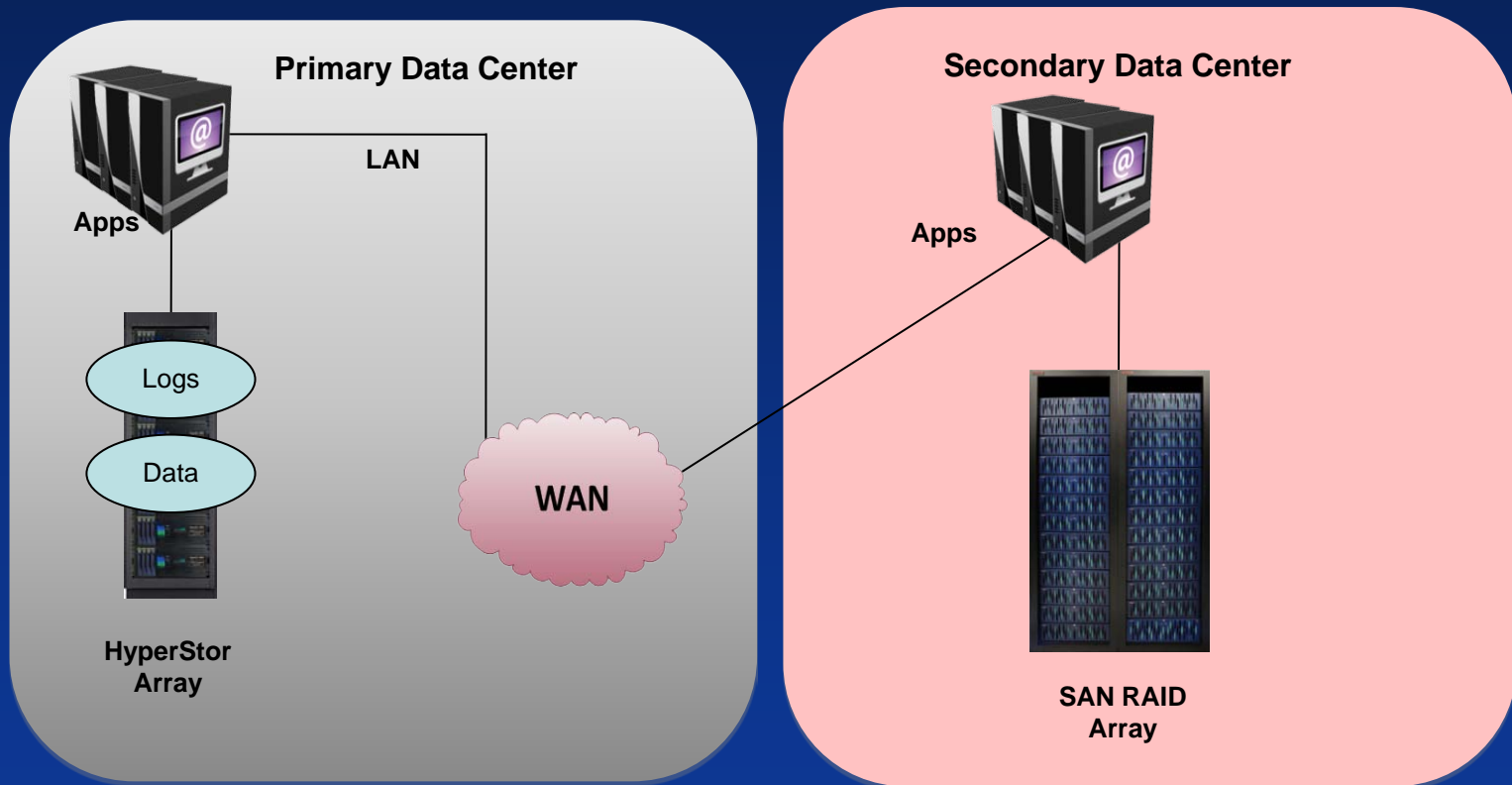
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Read-Caching



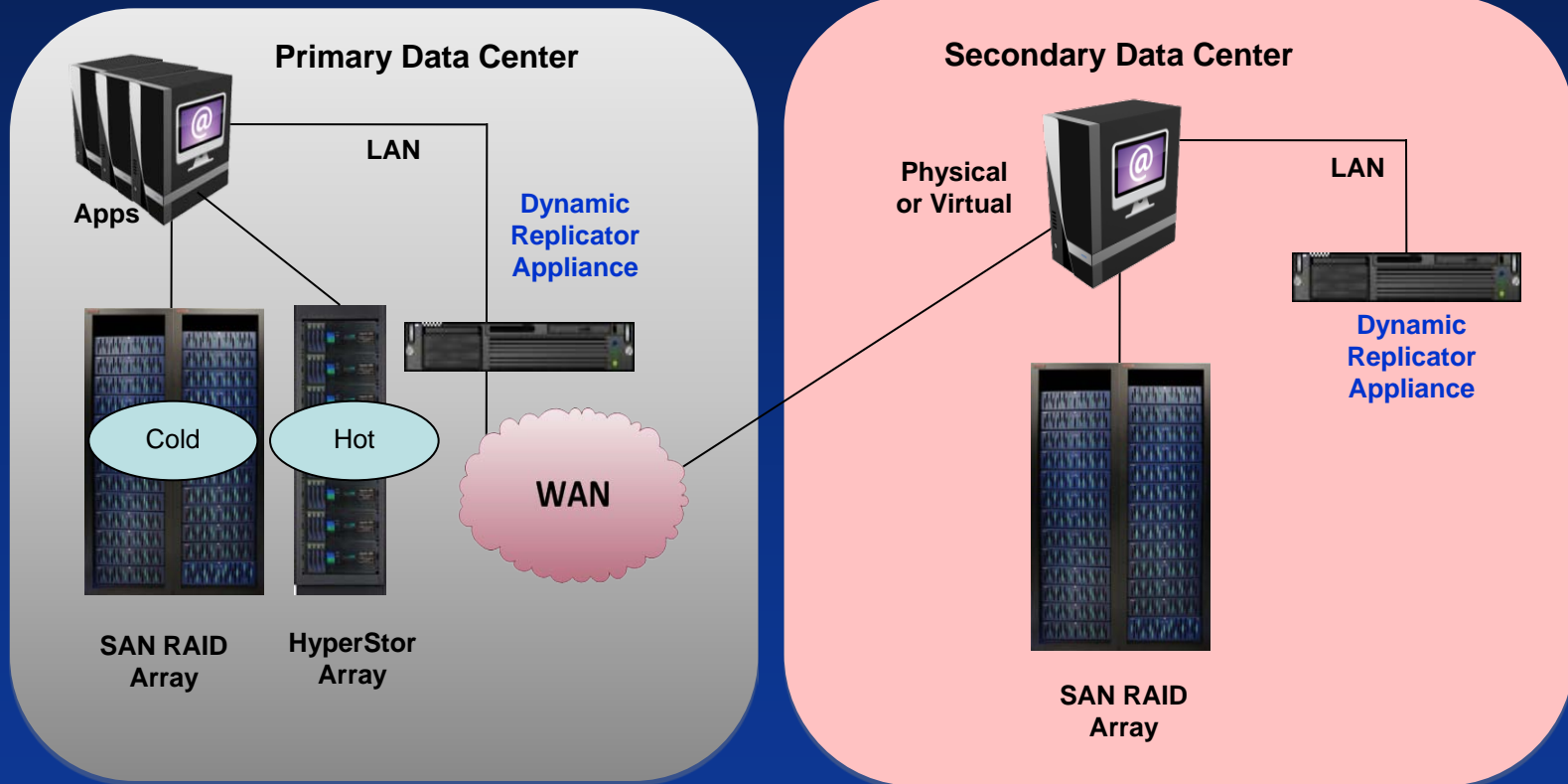
Mission Critical Computing with SSD Business Continuity

Application-Based (such as Oracle Data Guard)



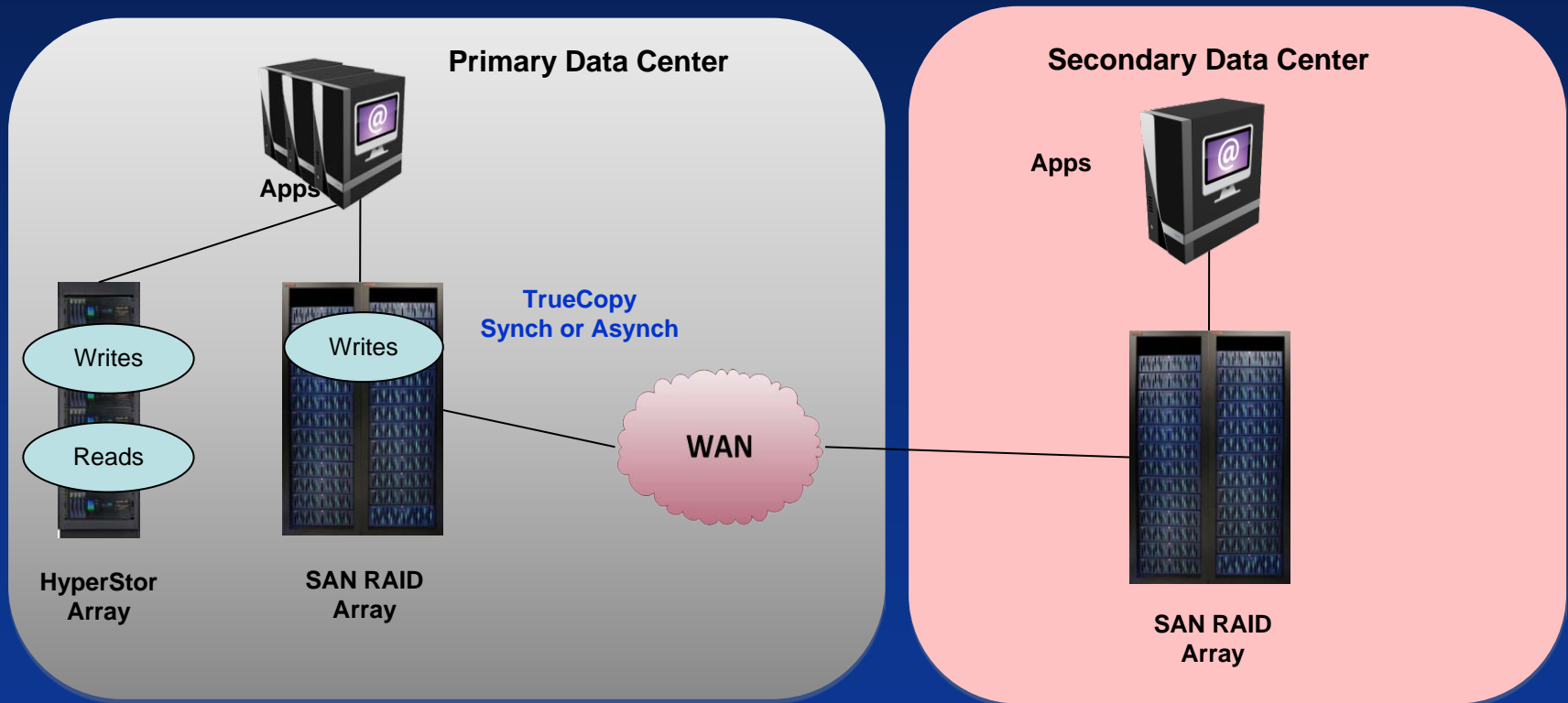
Mission Critical Computing with SSD Business Continuity

Content Data Protection – Appliance Based



Mission Critical Computing with SSD Business Continuity

Replication – Storage Based





Mission Critical Computing with SSD Performance Availability

- Performance Availability – Definition:
“A storage architecture such that data and performance are maintained even in the event equipment or a site is lost.”
- Performance availability is required when your business or your mission simply cannot slow down.



Mission Critical Computing with SSD

Case Study – Continuous Performance Availability

- Very large ViON government customer
- Mission Critical database application
- Preferred read mirror with Ultra-performance availability
- 24 HyperStor SSD units
- No application downtime in seven years

