



Using Memory as Storage Media

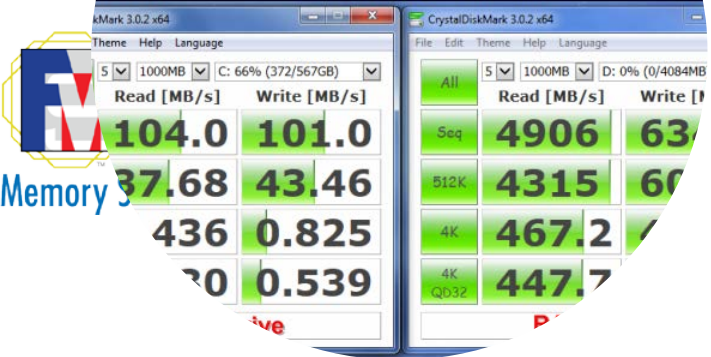
Formulus Black

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Who We Are

- We are a software startup HQ in Jersey City, NJ and team spread around US and India.
- What We Do
 - Our software, Forsa, enables memory to be easily and efficiently used as a high-performance storage media. Forsa can be used to power the most demanding application workloads and for developers seeking to minimize latency, maximize throughput, and scale without performance loss

Flash Memory



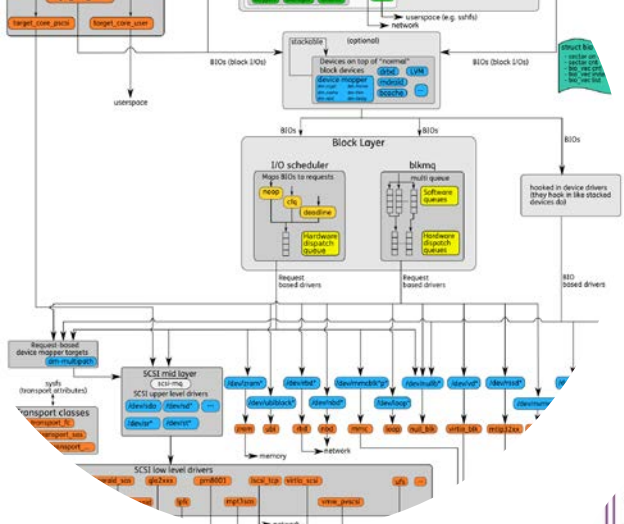
Few Questions

What comes in your mind when we say using memory as storage?

Yes, you need hardware support...

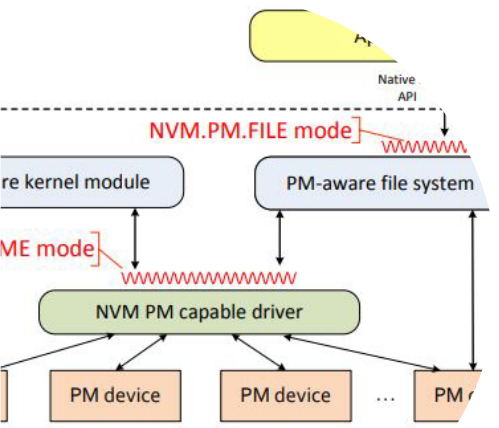
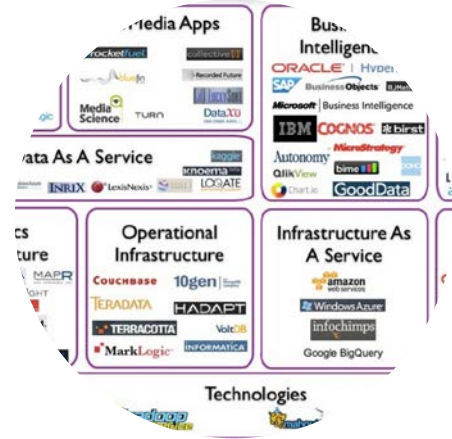
DRAM, NvDIMM, or something else sitting in the memory channel or something with memory interfaces.





More important...

- Software stack should be reconsidered
 - Programming models
 - Application APIs
 - Operating System IO path
 - Virtualization stack
- Using memory as storage media is not as simple as what we used to think about...





Flash Memory Summit

Use it correct and efficient

- Thinking from CPUs instead of peripheral device
- Thinking from memory management more than IO
- Till the end it is the story about *Time* and *Space*

