

# Not Your Father's Storage

### E.O.F.? End of FAT

Santa Clara, CA USA August 2007

#### **Flash Storage Options** Memory **Drive Densities Increasing Page Sizes** SUMMIT **Hybrid Hard** Drive **NAND** with Performance MMC Flash media cards DENSITY, FLEXIBILITY Faster time Hybrid flash to market Storage extensibility Performance, Density, Low DATA cost **MCPs** NAND **Solid State** Save board real Hybrid **Drive (SSD)** estate High storage NOR NAND & and durability NOR Foundation **TECHNOLOGY EVOLUTION**

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## **Challenging Legacy Thinking**

	Legacy	Modern
	Must sacrifice performance for reliability	We can produce a reliable file system with high performance
	File system mount times increase with drive density	File systems must mount consistently regardless of disk density
Santa	Reliability is a function of hardware	File systems must be inherently reliable



### **Moving File Systems Forward**

	Vendor	Solution	Advantage
	Datalight	Reliance	Reliability and performance
	Microsoft	ExFAT	Exchangeable, large page support
	Wind River	HRFS	Reliability for hard drives
	Mentor Graphics	File 3.1	Exchangeable, VFS
S	Linux anta Clara, CA. USA	EXT-3	Reliability, Security, & performance

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