

The KEEP Virtual Machine: long-term accessibility to complex digital objects

November 2011 Workshop



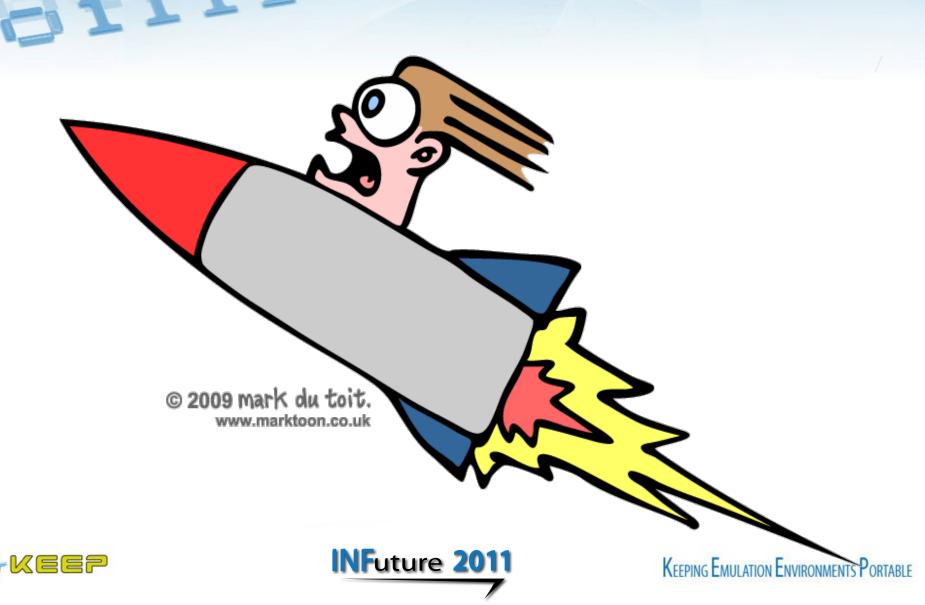
Hans B PUFAL







IT industry moves fast



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Performance doubles every 18 months

Better, faster, more capable products

New markets, new products





Brings rapid obsolescence







Brings rapid obsolescence

Media become unreadable

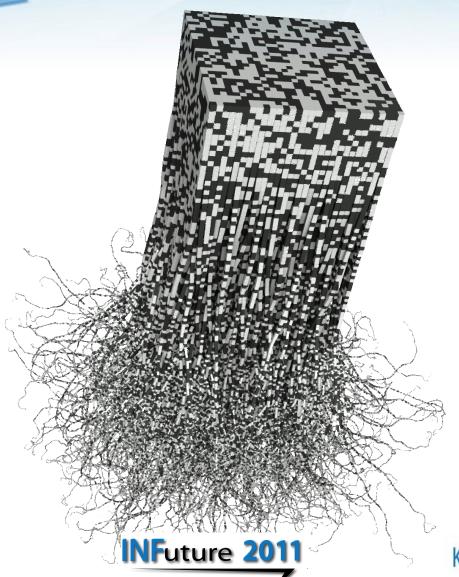
OS and languages become unusable

Programs become un-runnable





Digital Object Preservation





KEEPING EMULATION ENVIRONMENTS PORTABLE

Preserving Digital Objects

- Gather ALL components
- Build hardware emulator
 - Install software components

Test and confirm authenticity





Systems built on quicksand







Systems built on quicksand

- PC OS releases: about 3 years
- Game consoles: every 5-7 years

Languages specs: every 5-10 years

Java: every 2 years





The KEEP Virtual Machine, a bedrock foundation







The KEEP Virtual Machine, a bedrock foundation

- Upper levels
 - Stable emulation system
 - Evolve only when technology changes
- Lower levels
 - Ease of portability
 - Designed not to change
- Guarantees perennity of archives

























Thank you for your attention!

Questions?

INFuture 2011



