



Open standards: Are They Really?

David Cerf – EVP

Crossroads Corporate Overview

- Founded in 1996
- More than 17 years of storage/network expertise
- More than 125,000 installed systems
- More than 100 patents and numerous award
- IBM, Fuji, HP, EMC, and many others license Crossroads technology



Mission critical solutions

The Fortune 2000 Rely on Crossroads

Banking, Securities & Financial Services



Healthcare



Telecom



Education



Manufacturing & Retail



Transportation & Logistics



Data Today

Volume:

- ~ 90 percent of the stored data in the world has been created in the past two years - *Financial Times*
- ~ 2.5 exabytes of data are created every day
Approximates all the data that was created in 1986

Velocity:

- When scientists turn “on” the Large Hadron Collider, 3-6 GB of data spews out every second” and when a collision occurs, it captures 40 million snapshots in a second

Variety - movies, images, text strings with location

- Internet of things
 - In 2008 the number of devices connected to the Internet exceeded the number of people on earth
 - By 2020 -- 50 billion devices connected

Data – No longer simply data...

- Global broadband and mobile technology now expose timely, worldwide information
- The right information to the right people - in real time - producing better business and social outcomes
- Keep it all, keep it forever



One GB per mobile user per day by 2020

Applications are driving the network evolution



From: Yrjö Neuvo, Aalto University (Former CTO Nokia)
"Unfogging the Future" Speech at Microwave Week Amsterdam 2012

Your data is no longer available



Historical example



SOLUTION
SPOTLIGHT

EMC
CENTERA MIGRATION

Remember these...

FASTER FACT-POWER FOR MANAGEMENT

UNIVAC MAGNETIC TAPE

***saves 90% in storage
and handling
over punched cards***



And these...



No more hardware lock in

LTO – Linear Tape Open



The key word is:

OPEN

Data – Open, available, accessible

LTFS

Linear Tape File System



- Self describing file system
- Faster access to data
- Simple drag and drop
- Compatibility across environment
- Increased data mobility
- A single storage media standard
- Non-proprietary



The major (and I would almost classify it as a breakthrough) advance that LTFS provides is that LTFS changes tape **from application dependent to application independent.**

Jerome Wendt DCIG

Non-Proprietary

No Dependency On

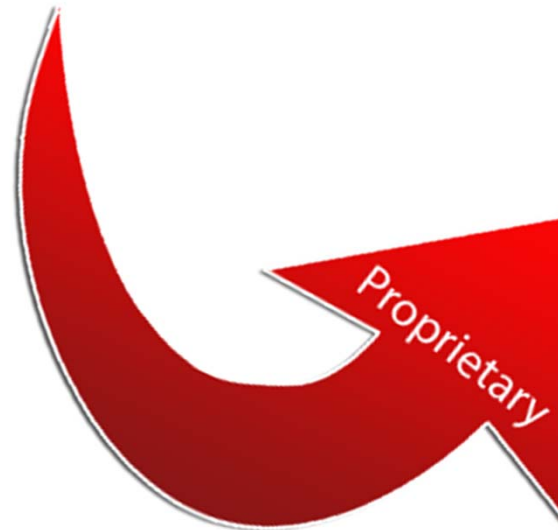
- Operating system
- Applications
- Specialized agents
- Proprietary software layer

Vendor Neutral Archive



No Change To

- File formats, attributes
- Applications



Is your data proprietary?

