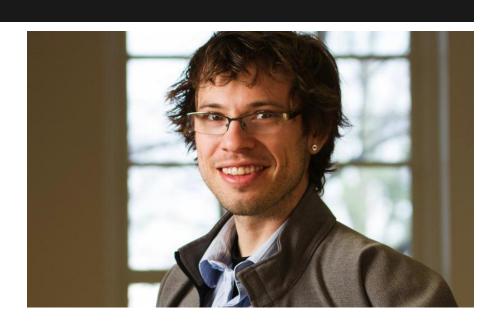
Archiving Dynamic Websites

at ibiblio.org

Me

Cristóbal Palmer

cmp@cmpalmer.org
@coxn



81A2 0F2F 9C11 79B2 03AB 0E1B 48C0 5B6D DD36 6EEB

You

- Shirt?
- Run a website of any kind whatsoever?
- Looked for something on the web and found it broken or missing?
- Library card?

Overview

- Archives
- Digital Archives
- ibiblio
- Archiving the Web
- Archiving Dynamic Sites at ibiblio
- Join us

Archives



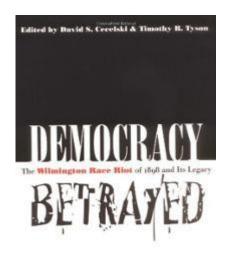
Digital Archives

Digital Archives



while black citizens fled to the swamps or woods to avoid being killed in the streets. Even as late as the following Sunday, the mob was still searching for

missing black leaders, including Kirk, who was eventually forced to leave his



With a Foreword by John Hope Franklin

digital archiving challenges

 compared to archival paper, digital media does not last http://static.googleusercontent.com/media/research.google.com/en/us/archive/disk_failures.pdf

Failure Trends in a Large Disk Drive Population

Eduardo Pinheiro, Wolf-Dietrich Weber and Luiz André Barroso Google Inc. 1600 Amphitheatre Pkwy Mountain View, CA 94043 {edpin,wolf,luiz}@google.com

Abstract

It is estimated that over 90% of all new information produced in the world is being stored on magnetic media, most of it on hard disk drives. Despite their importance, there is relatively little published work on the failure patterns of disk drives, and the key factors that affect their lifetime. Most available data are either based on extrapolation from accelerated aging experiments or from relatively modest sized field studies. Moreover, larger population studies rarely have the infrastructure in place to collect health signals from components in operation, which is critical information for detailed failure analysis.

We present data collected from detailed observations of a

for guiding the design of storage systems as well as devising deployment and maintenance strategies.

Despite the importance of the subject, there are very few published studies on failure characteristics of disk drives. Most of the available information comes from the disk manufacturers themselves [2]. Their data are typically based on extrapolation from accelerated life test data of small populations or from returned unit databases. Accelerated life tests, although useful in providing insight into how some environmental factors can affect disk drive lifetime, have been known to be poor predictors of actual failure rates as seen by customers

digital archiving challenges

- copy-on-write, checksums, etc. (ZFS, btrfs)
- LOCKSS, iRODS, etc.

ibiblio

ibiblio.org

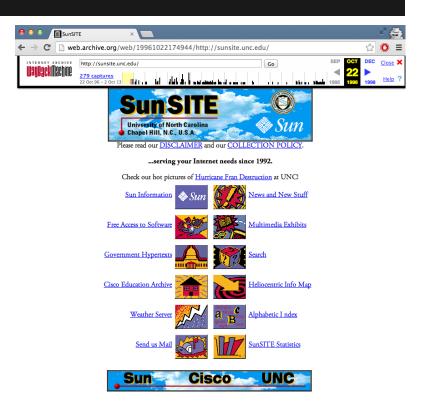
The public's library and digital archive

- 1. sils.unc.edu
- 2. jomc.unc.edu
- 3. its.unc.edu



ibiblio past

sunsite.unc.edu metalab.unc.edu ibiblio.org



IT'S BELIEVED THAT IN 1994 WXYC IN CHAPEL HILL IN THIS STATE BECAME THE FIRST RADIO STATION TO WEBCAST

ibiblio past

- HTML
- dynamic in a different sense









#\$MTIMFH







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#\$-:Image Map file created by Map THIS! #\$-:Map THIS! free image map editor by Todd C. Wilson #\$-:Please do not edit lines starting with "#\$" #\$VERSION:1.30 #\$DATE:Tue Oct 29 20:36:32 1996 #\$PATH:C:\temp\ #\$GIF:secondpage4.gif #\$FORMAT:ncsa #\$EOH # Format: NCSA

rect Halicon.htm 14,309 189,433 rect tradit.htm 1,1 134,144 rect costume.htm 297,0 434,152 rect chapel.htm 159,132 297,257 rect witch.htm 3,232 125,383 rect haunt.htm 318,244 416,384 default Halicon.htm

ibiblio present

- vmware
- even more dynamic
- expensive to support

Pause for some sites



this talk is a redux

When Good Sites Go Bad - And how to save them: Archival challenges and solutions for post-1995 websites

Paul Jones (director of ibiblio): http://bit. ly/Qs4v0d

Archiving the Web

Archiving the Web

Wayback Machine is awesome!



Archiving Dynamic Sites

ibiblio future

- Free and Open Source hypervisor
- Free and Open Source Virtual Machine management layer
- metadata framework for collections and snapshots
- "checkout" mechanism

ibiblio future - hypervisor

Xen or KVM? Other?

ibiblio future - node mgmt

- Managing nodes
- Xen4CentOS
- oVirt
- libvirt

ibib future - magical cloud

- Manage apps/collections, not nodes
- OpenStack?? http://www.openstack.org/software/
- OpenShift?? http://openshift.github.io/ (+ Docker http://www.docker.io/)



This talk:

http://bit.ly/X4ftlL

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