

# World Digital Preservation Day

@UVA

**#WDPD2019** 



# **3rd annual!**World Digital Preservation Day

@UVA

**#WDPD2019** 



**Bits Decay: Do Something Today** 

30th November 2017



## 2019 Theme:

# "At Risk Digital Materials"

#### **CRITICALLY ENDANGERED**



Digital materials are listed *Critically Endangered* when they face material technical challenges to preservation, there are no agencies responsible for them or those agencies are unwilling or unable to meet preservation needs. This classification includes *Endangered* materials in the presence of aggravating conditions.

#### PRACTICALLY EXTINCT



Digital materials are listed as *Practically Extinct* when the few known examples are inaccessible by most practical means and methods. This classification includes *Critically Endangered* materials in the presence of aggravating conditions.

#### CONCERN



Digital materials are listed as of *Concern* when an active member of the digital preservation community has expressed a legitimate concern but the concern has not yet been assessed by the BitList jury. They will be assessed for inclusion in the subsequent year.



## **Digital Preservation:**

A series of managed activities necessary to ensure continued access to digital materials over time\*.

\*Or for as long as necessary



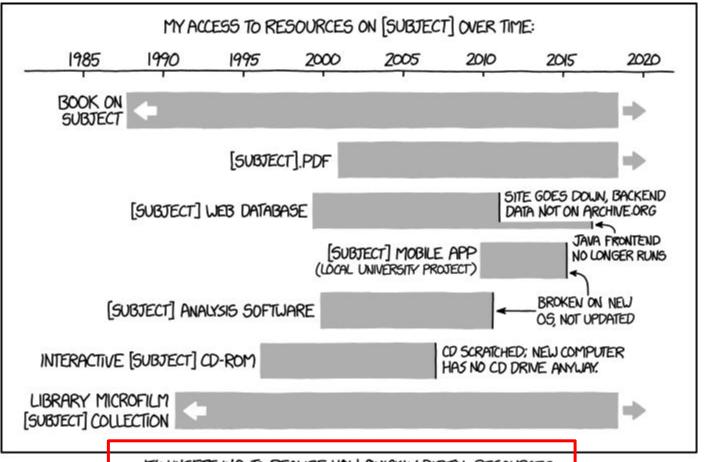
# **Part I.** PDA Tools (2-2:30)

Part II. Guided exploration of software preservation & emulation (2:30-3:30)

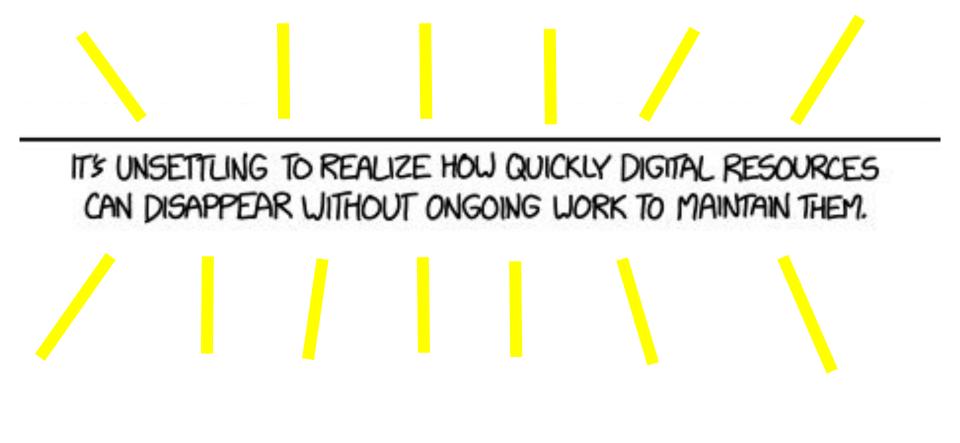


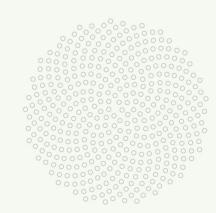
# **Part I.** PDA Tools (2-2:30)

It's WDPD. Do you know where your (second, if not third) copy of data is?

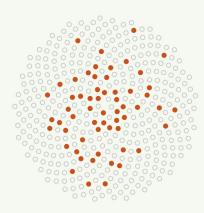


IT'S UNSETTLING TO REALIZE HOW QUICKLY DIGITAL RESOURCES CAN DISAPPEAR WITHOUT ONGOING WORK TO MAINTAIN THEM.

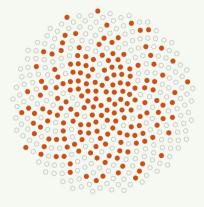




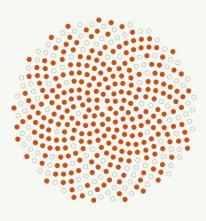
**Links start healthy.** New citations have been vetted and verified.



**After one year.** After a year, over 20% of cited links may be dead or otherwise inaccessible.



**After five years.** After five years, the situation is much worse — over 50% of cited links can be affected.



**As time goes on.** Link rot is inevitable and rarely reversible. The longer the wait, the more likely a link will have rotted.



# Web Archiving Tools

- -Documentation
- -Demo

## "Unite the Right" Rally and Community Response Web Archives

Digital Record Identifier: 9318

Albert and Shirley Small Special Collections Library | "Unite the Right" Rally and Community Response Web Archives

Digital Object (mixed\_materials)

#### Extent

8 Gigabytes

## Collapse All

#### **Parent Resources**

• Tunite the Right Rally and Community Response collection | Digital Materials, 2017-07-08 - 2018 | Archived webpages, 2017-08-11 - 2018

#### Repository Details

## **Repository Details**

Part of the Albert and Shirley Small Special Collections Library Repository

https://small.library.virginia.edu/



# Web Archiving Tools

- -Documentation
- -Demo

### The Wayback Machine's Save Page Now is New and Improved

Posted on October 23, 2019 by Mark Graham



Capture a web page as it appears now for use as a trusted citation in the future.



# Personal Digital Archiving

- -Documentation
- -Demo



# Part II. Guided exploration of software preservation & emulation (2:30-3:30)



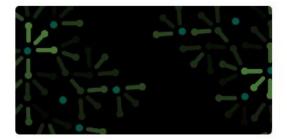
Software Preservation & **Emulation at UVa Library** 

## **Current Affiliated Projects**



#### EaaSI

Scaling Software Preservation and Emulation Infrastructure (EaaSI) is developing software to enable organizations running the bwFLA Emulation as a Service (EaaS) software to network with each other and share resources. This allows participating node-hosts to share software and pre-configured software environments that others in the network can then use to ensure access to their preserved digital data.



#### **FCoP**

Fostering a Community of Practice: Software Preservation in Libraries, Archives, and Museums (FCoP) centers around the experience of a cohort of six organizations as they design and implement their own software preservation projects. Each organization created a Project Team consisting of staff roles that represent critical perspectives in the implementation of programmatic software preservation and emulation.



#### **BPs for Fair Use**

The Code of Best Practices in Fair Use for Software Preservation (BPs for Fair Use) helps ensure that the subjects, products, and tools of scholarship will continue to be accessible despite evolving technology. The code will express a consensus view of how fair use—the legal doctrine allowing the use of copyrighted materials without permission from the copyright holder under certain circumstances—applies to core, recurring situations

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#### Emulation In The Archives Workshop - July 18, 2019 - University of Virginia

#### Workshop Program

The University of Virginia Library is excited to announce a FREE, one-day open workshop on software preservation and emulation of born digital materials to be held in Charlottesville, Virginia.

This workshop is part of our project within the Software Preservation Network's <u>Fostering a Community of Practice</u> grant cohort, and will focus on:

- Sharing and discussing documentation, practice, and lessons learned from our Emulation in the Archives project,
- Discussing developing best practices and and additional use cases from <u>featured speakers</u>

#### When?

Thursday, July 18th, 2019

8:30AM - 4:00PM

#### Where?

The workshop will be held at the Albert and Shirley Small Special Collections Library in the Auditorium (Map).

#### Which topics will be covered?

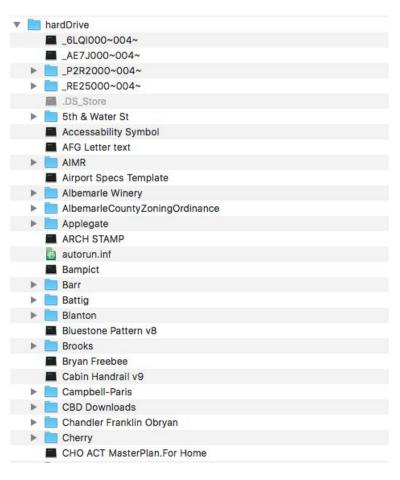
Our full schedule is now live! Visit the Schedule page to see full workshop plan.

#### Who should attend?

# What is software preservation?

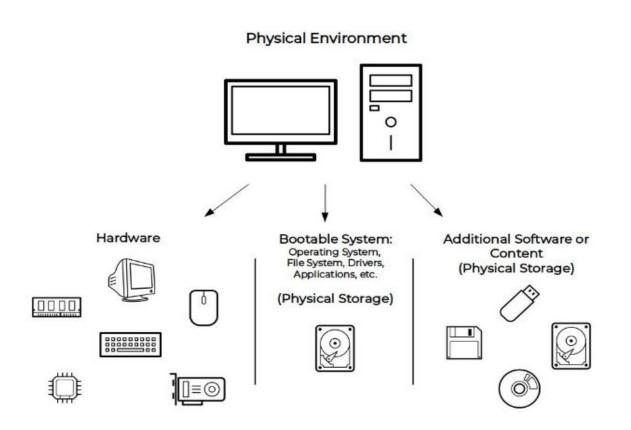
Why is software preservation?

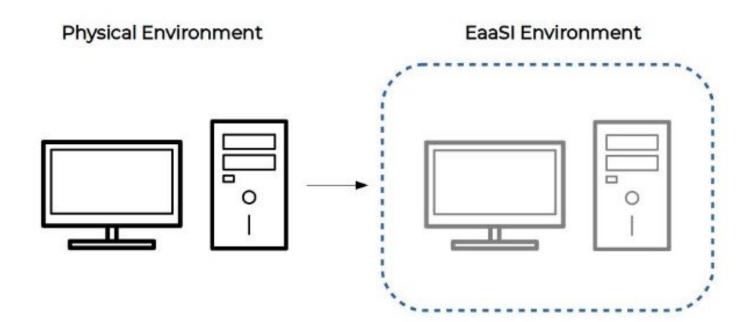




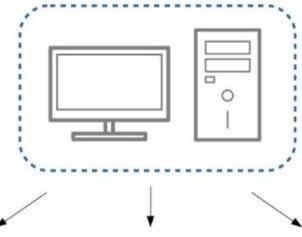


## **Emulation**





#### EaaSI Environment (.xml)



#### **Emulator Template**

 XML configuration file (xml)

#### Bootable System:

Operating System, File System, Drivers, Applications, etc.

## (Disk Image)

- · Raw (.dd, .img, .bin, etc.)
- VirtualBox (.vdi)
- Virtual PC (.vhd)
- VMWare (.vmdk)
- · Expert Witness Format (.E01)
- QEMU (.qcow/.qcow2)

#### Additional Software or Content (Disk Image)

- Raw (.dd, .img, .ima, .bin, etc.)
- ISO (.iso, .cdr, .img, etc.)

# **Emulation**



## Software Library: MS-DOS Games

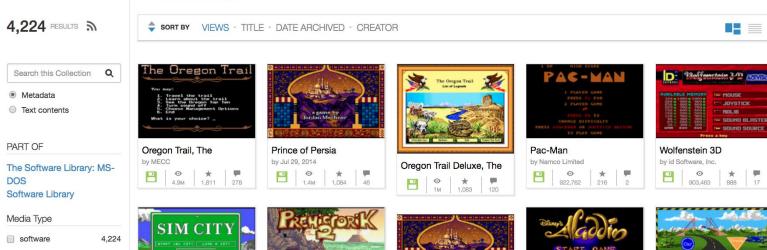
Share

☆ Favorite

Play All

Software for MS-DOS machines that represent entertainment and games. The collection includes action, strategy, adventure and other unique genres of game and entertainment software. Through the use of the EM-DOSBOX in-browser

ABOUT COLLECTION



# Let's try it out!\*

\*Please do not exit out of the program and environment until we are all ready and instructions are given!

We'll go through the stop menu together.



## Known issues with this particular emulated environment

"Tiny windows syndrome" at the start of a session. We'll start by opening Finder windows and troubleshooting until we all have normal sized windows

Mouse movements may be a bit slow, and if you go outside of the emulated window, you will get a message - this is OK! Pres esc to move your mouse in and outside of the window.

virginia.softwarepreservationnetwork.org



# Questions? Comments?



# Thank you!

Happy WDPD.