Software Preservation & You

What It Is, How It Is Done, & How You Can Help
What this presentation covers

1) Software preservation terminology and concepts

2) What other institutions are doing and how

3) What you can do and how

"U.S. Army Photo" from the archives of the ARL Technical Library, featuring Marlyn Wescoff and Ruth Lichterman wiring ENIAC.
Terminology and concepts

- Migration: preserve the functionality of the software
- Emulation: preserve the look & feel of the software
- Virtual Machines: emulation of a specific computing environment
- Disk images: digital forensics tool; copy of the content and structure of a digital storage device
What do we preserve when we preserve software?

Screenshot of a Second Life classroom, taken the [blog of Anne Roberts](https://blog.anne-roberts.com)
Implementation Comparison

**Image** taken from The Strong National Museum of Play’s website

**Image** taken from ICERM’s “Reproducibility in Computational and Experimental Mathematics workshop

**Screenshot** of “Chop-Suey” taken from Rhizome’s emulation of the Theresa Duncan CD-ROMS

**Image** taken from The Strong National Museum of Play’s website

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**Caption:**

Aunt Vera was in the backyard, dancing in big circles around the picnic table. She had her arms around a tall man with sideburns. It was the man who ran the gas station next to the Ping Pong Palace downtown.
How you can help

Consider your collection strategy!

- Think about how software and computing relate to your institution’s needs and mandates
- Consider adding software, manuals, and other software-adjacent materials as it relates to your mandate
You’ve collected it, but now what?

1) Remember that by collecting you’ve already done something good.

2) Disk image to circumvent future hardware obsolescence and media degradation

3) Consider future options for long-term storage and access

Image of some of the software and software-related materials that were located this year at NLM
Other issues to consider

• APIs and external dependencies
• Description and metadata
• Copyright

Image of an NLM-developed software-based tutorial
Questions?

Image of woman operating teletype machine in 1966. Taken from the Providence Public Library’s flickr stream.