

## What is Emulation in Libraries, Archives, and Museums?

## INTRODUCING EMULATION

The act of **emulation** is the ability for a computer to imitate another computer or software program. When a computer "emulates" another form of software or hardware, it emulates or copies what these earlier systems did but on a newer, faster machine. **Emulators** allow users to run obsolete software, to copy data from old media, even use peripheral devices like game system controllers or older printers that previously would have only worked on an original machine.

Emulation techniques are used a lot amongst die-hard video game fans, computer hobbyists and music producers, even research data managers who want to access software-dependent information. But increasingly, **preservationists** in libraries, archives and museums are using emulation techniques to preserve software and software-dependent information in their collections for future users to access.

The case studies featured in these software preservation Open Educational Resources (OER) handouts introduce learners to some of the goals, obstacles, user needs, and project workflows that different preservation teams incorporate when planning to provide emulation access as a service provision in their information institutions.

The Fostering a Community of Practice (FCOP) project ran for 2 years (2018-2020), following small teams in libraries, archives, and museums as they developed preservation programs using emulation in the United States. These software preservation educational resources are meant for learning communities to learn more about a few case studies of software emulation where teams accomplished a preservation goal together. Each case study follows teams and individual preservationists from selection, to planning, and accomplishing an emulation goal and overcoming challenges unique to their preservation project. Each handout describes an emulation project to help you learn more about the unique challenges, arrangements, and goals that these preservation teams and LAMs face when preserving digital information. These case studies are also meant to give novice preservationists and early-career information professionals insight into preservation workflows in libraries, archives, and museums.

## HOW TO USE THESE RESOURCES

Each case study covers different learning objectives and has discussion questions that encourage groups to consider questions, challenges, and strategies in similar institutional contexts. These case study handouts can be used as stand alone resources or as an iterative unit.

The **Glossary** contains key words that explain concepts and technologies mentioned in detail throughout the handouts.

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For more on the project, or to access any more of these handouts, visit the FCoP website at <a href="https://www.softwarepreservationnetwork.org/projects/fcop/">https://www.softwarepreservationnetwork.org/projects/fcop/</a>. Teaching resources can be found on the "Research" page.