Claudia Roeck, Early Stage Researcher, NACCA

Snapshots: Bridging the gap between operation and archiving of software-based artworks

I will explore the role of snapshots in the preservation of software-based art. Snapshots in computer science refer to a storage system, a container, or a virtual machine (VM). A snapshot captures the current state of such a system. For instance, the "Time Machine" of an Apple computer makes snapshots of the Mac storage and archives it so that the user can go back to a certain state later. A container holds a minimal storage system, but not only that: it is an operating system virtualisation. It wraps an application (or artwork) in the software environment the application needs. A virtual machine represents a whole computer system including hardware, which is why it is more independent than a container. A conservator might wrap a legacy software-based artwork in such a container or VM in order to keep it operable. When a container or VM is started, the operatig system within the container starts up just as on any other computer. The user can enter data and experience the artwork. After shutdown, the user data is lost. When restarting the container or VM, it will go through the exact same boot procedure again. With a snapshot of the container, this problem can be mitigated.