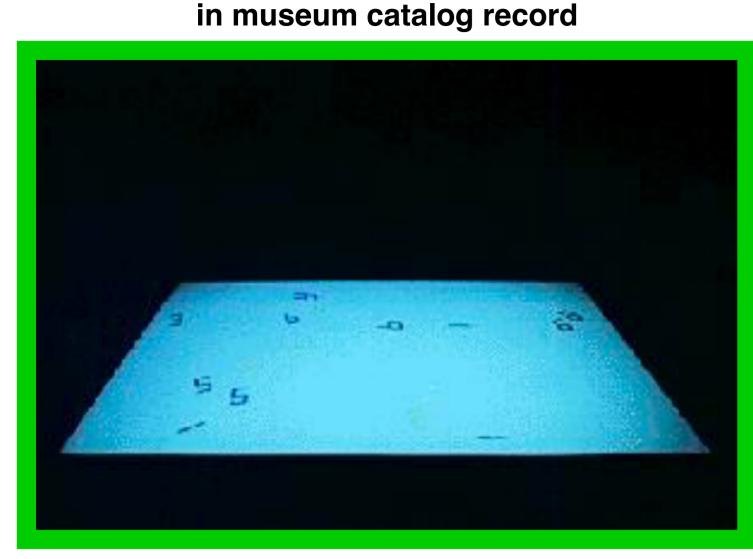
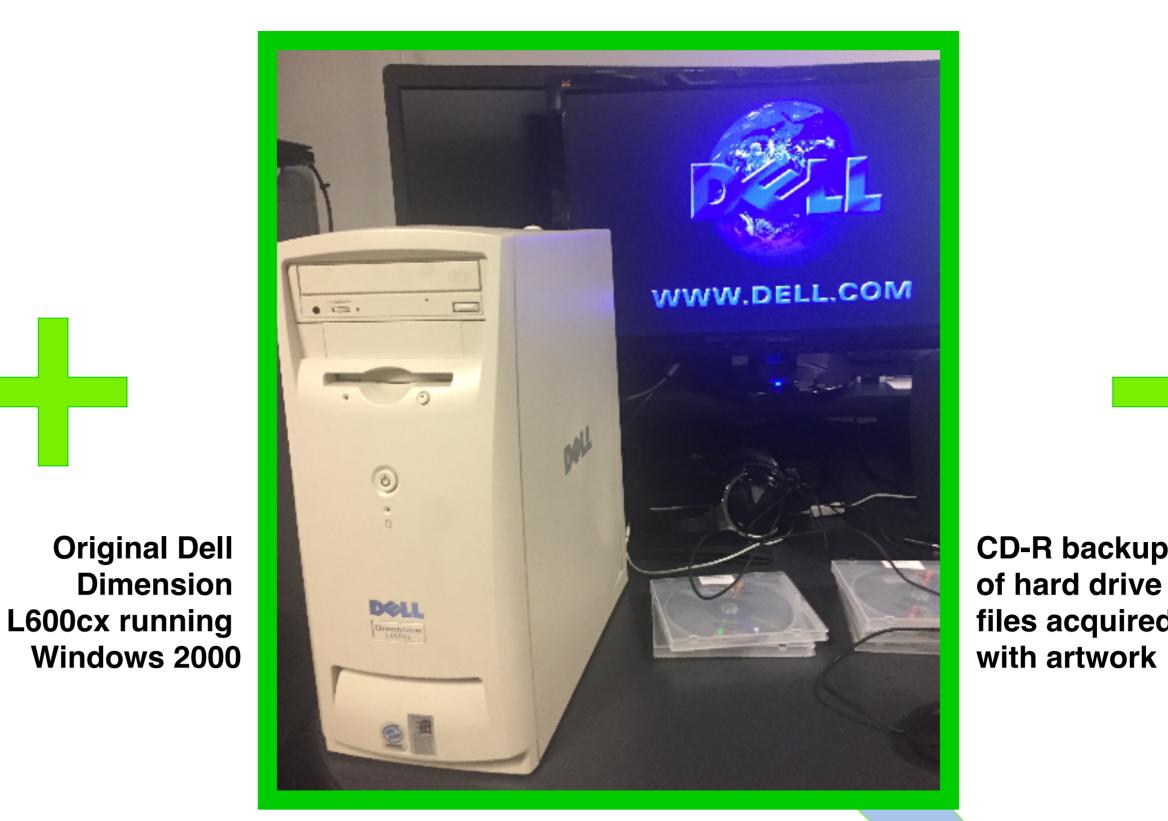
Using Quick Emulation (QEMU) in Software-based Art Conservation

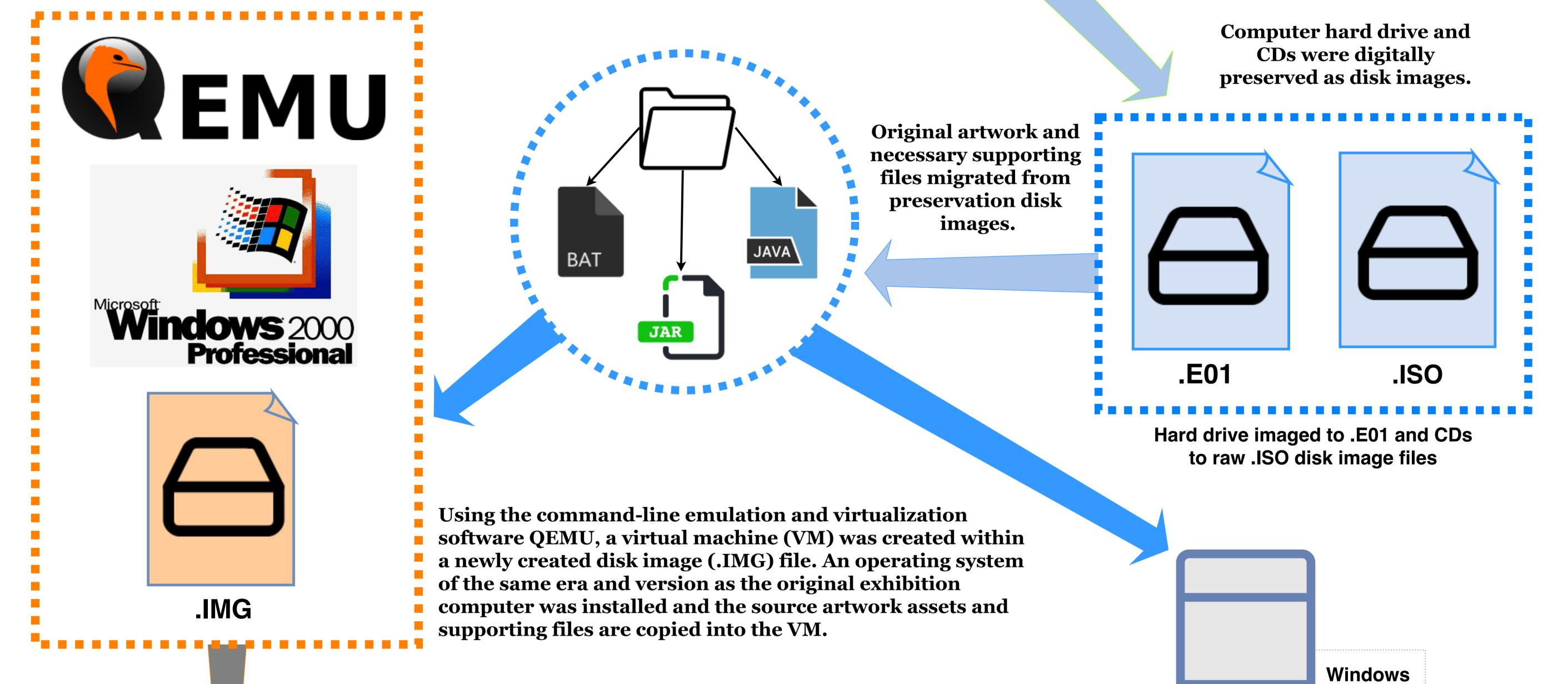
Outlined below are steps taken to realize the 2019 installation of the software-based artwork *Floating Time - Marine Blue* (2000) by Tatsuo Miyajima at the Denver Art Museum. After assessing the original objects acquired by the museum in 2003, and following by the preservation of digital information of an internal hard drive and CD-R discs, emulation of the nearly 20 year-old animation was performed to aid in the re-installation process.



JPEG still documenting 2005 exhibition

Tatsuo Miyajima, *Floating Time: Marine Blue*, 2000, Denver Art Museum, Gift from the collection of Vicki and Kent Logan, Copyright © Tatsuo Miyajima

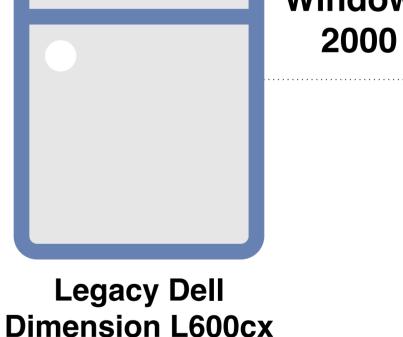






A contemporary Dell tower had a Linux operating system installed in order to test newly created disk image and VM in QEMU as part of the research project for emulating original assets.

QEMU bash script commands for launching disk image of Windows 2000 or booting up the VM with artwork assets contained within it



After a 2019 date for *Floating Time* was moved up in the exhibition calendar, the DAM sourced Dell towers circa 2000 and with specifications similar to original exhibition computer. The process of emulation discovered the key elements of the original artwork needed to create the successful exhibition run through 2020.

(Newly Sourced)

Contemporary Dell OptiPlex from pool of exhibition computers at DAM







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