Preserving Dynamic Collaborative Environments in the Arts and Humanities

Luis Meneses, Ray Siemens, Electronic Textual Cultures Lab, University of Victoria
William R. Bowen, Iter Canada

CSDH 2021 - Edmonton, AB - May 31, 2021
Introduction

• The advent of online technologies has provided arts and humanities researchers with greater opportunities to collaborate and create different projects

• These projects are computationally robust and require a significant amount of collaboration
  • Brings together different types of expertise to collaborate on equal terms
  • This model of collaboration has become increasingly important during the current global pandemic
  • It has allowed researchers to share and continue their work remotely
Obsolescence

• Many of the online projects in the digital humanities have an implied planned obsolescence *
  • Degrade over time once they cease to receive updates in their content and software libraries

• Many successful projects are shifting their focus from active development to data management
  • Not received updates for some time but their online tools are stable and continue to be accessed by its users

If updates are not applied to the infrastructure of a project over time web requests will eventually start generating errors on the server or the client. This can affect the overall user experience.
Problem

• The path to adopting open, collaborative, digital scholarship has been challenging
  • Not least of all due to questions of economic stability, infrastructure, access, understanding, implementation, and engagement

• This planned obsolescence threatens the completeness and the sustainability of our research outputs in the arts and humanities over time
  • Presenting a complex problem made more complex when environments are not static objects but rather dynamic collaborative spaces
Software containers

• Technology components for Linux-based operating systems that enable the isolation of computational processes.

• Operating-system-level virtualization

• Why? Performance, Encapsulation, Portability

• Containers open a new horizon of possible practices in scholarly publishing

• Containers could be an enabling format for a new breed of computational publications **

Architecture
Proof of concept

DEx: A Database of Dramatic Extracts viewed through a Debian 10 host. This architecture affords the possibility of long-term availability and for accessing projects in an a "period correct" environment (very close to what they were originally designed and tested).
Work in progress

• Pros
  • Long term availability, access in a period correct environment

• Cons:
  • Security, complexity, and cost

• We welcome your comments, suggestions and help!

• DHSI 2021 Aligned Event: Open Digital Collaborative Project Preservation in the Humanities
Thanks!

Luis Meneses
Mitacs Elevate Postdoctoral Fellow and Assistant Director (Technical Development)
Electronic Textual Cultures Lab | University of Victoria
https://etcl.uvic.ca
@ldmm
Iter Canada