

Preserving Dynamic Collaborative Environments in the Arts and Humanities

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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

* K. Fitzpatrick, *Planned Obsolescence: Publishing, Technology, and the Future of the Academy*. New York: NYU Press, 2011.

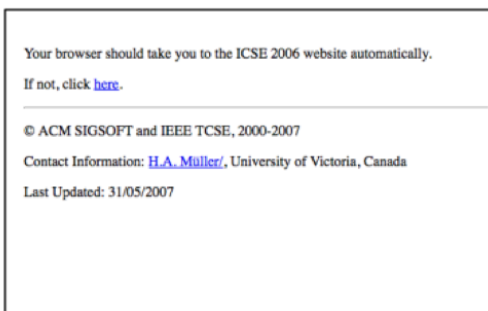
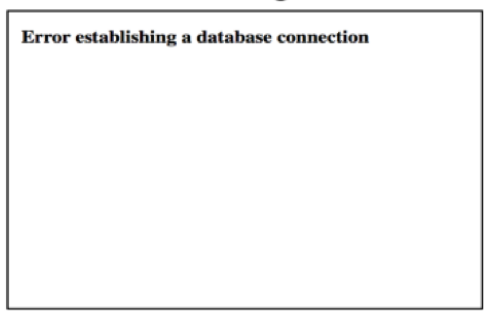
If updates are not applied to the infrastructure of a project over time web requests will eventually start generating errors on the server or the client . This can affect the overall user experience.



Stable Documents



Error Pages



Timeouts and Redirects

Wrong Content

Degree of Divergence

Less Severe More Severe

Problem

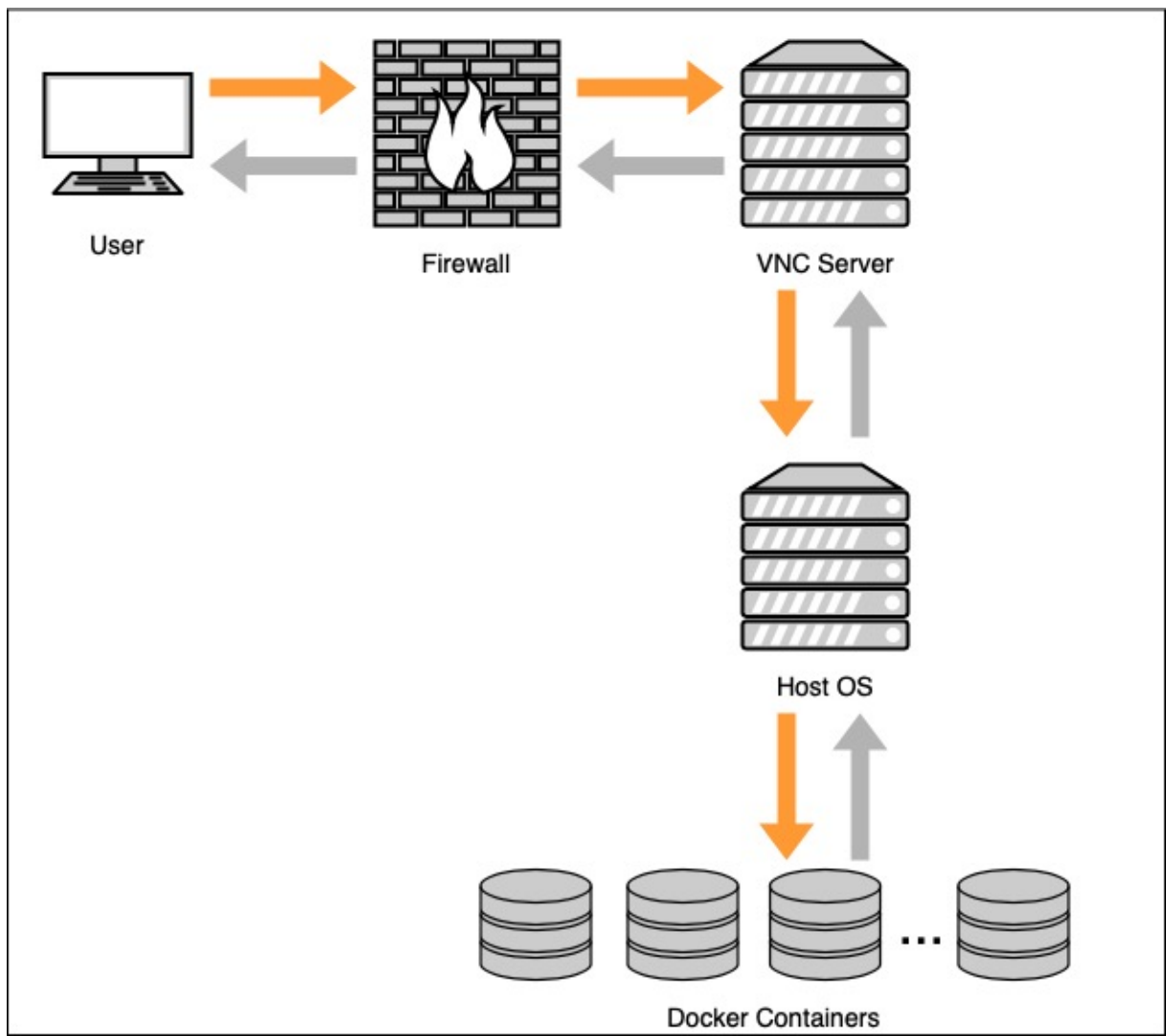
- The path to adopting open, collaborative, digital scholarship has been challenging
 - Not least of all due to questions of economic stability, infrastructure, access, understanding, implementation, and engagement
- This planned obsolescence threatens the completeness and the sustainability of our research 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 **

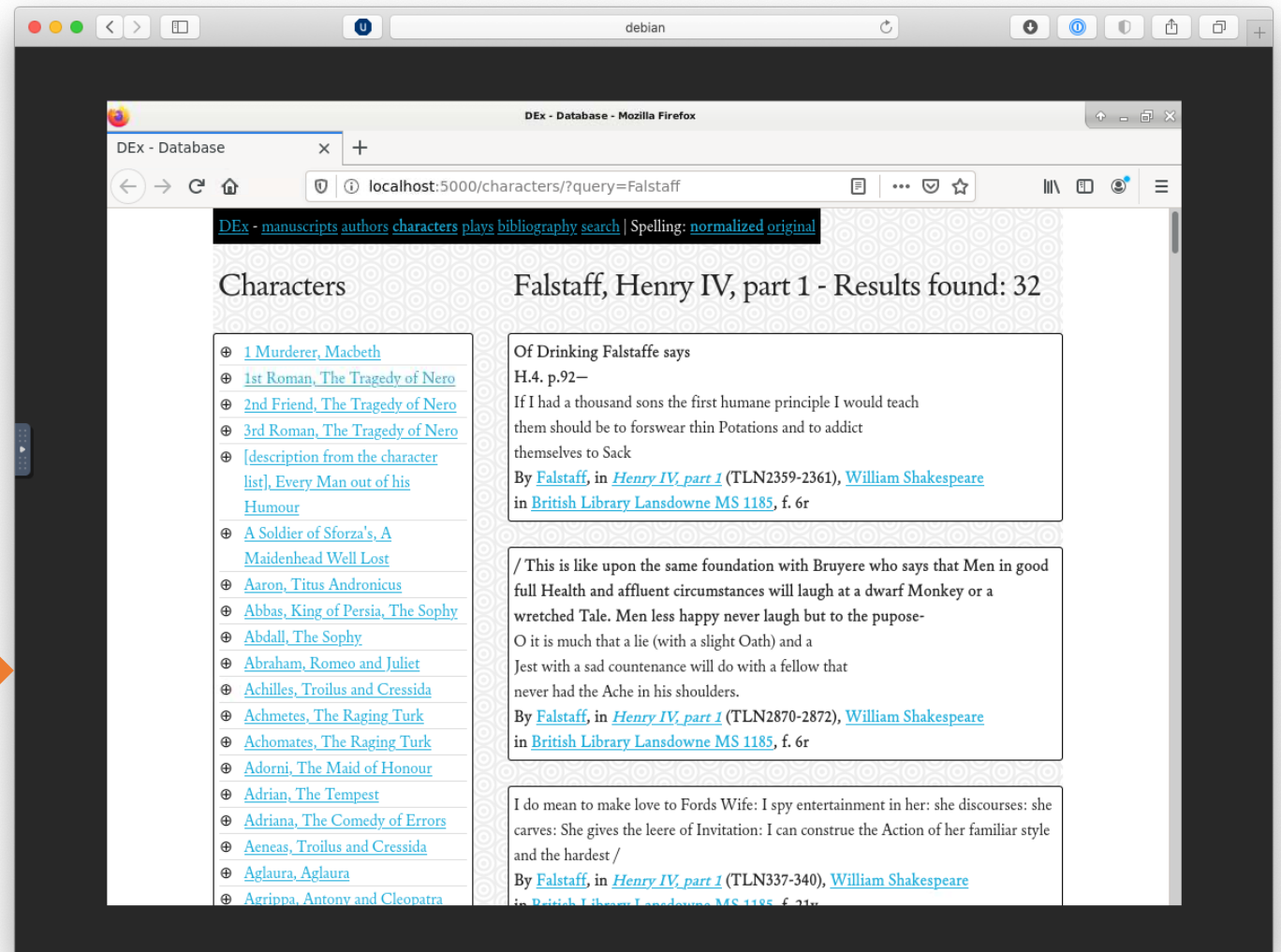
** M. Burton, M. J. Lavin, J. Otis, and S. B. Weingart, "Digits: Two Reports on New Units of Scholarly Publication," *The Journal of Electronic Publishing*, vol. 22, no. 1, Feb. 2020, doi: 10.3998/3336451.0022.105.

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).



DEx - Database - Mozilla Firefox

localhost:5000/characters/?query=Falstaff

DEx - manuscripts authors characters plays bibliography search | Spelling: [normalized](#) [original](#)

Characters

- [1 Murderer, Macbeth](#)
- [1st Roman, The Tragedy of Nero](#)
- [2nd Friend, The Tragedy of Nero](#)
- [3rd Roman, The Tragedy of Nero](#)
- [\[description from the character list\], Every Man out of his Humour](#)
- [A Soldier of Sforza's, A Maidenhead Well Lost](#)
- [Aaron, Titus Andronicus](#)
- [Abbas, King of Persia, The Sophy](#)
- [Abdall, The Sophy](#)
- [Abraham, Romeo and Juliet](#)
- [Achilles, Troilus and Cressida](#)
- [Achmetes, The Raging Turk](#)
- [Achomates, The Raging Turk](#)
- [Adorni, The Maid of Honour](#)
- [Adrian, The Tempest](#)
- [Adriana, The Comedy of Errors](#)
- [Aeneas, Troilus and Cressida](#)
- [Aglaura, Aglaura](#)
- [Agrippa, Antony and Cleopatra](#)

Falstaff, Henry IV, part 1 - Results found: 32

Of Drinking Falstaffe says
H.4. p.92—
If I had a thousand sons the first humane principle I would teach them should be to forswear thin Potations and to addict themselves to Sack
By [Falstaff](#), in [Henry IV, part 1](#) (TLN2359-2361), [William Shakespeare](#) in [British Library Lansdowne MS 1185](#), f. 6r

/ This is like upon the same foundation with Bruyere who says that Men in good full Health and affluent circumstances will laugh at a dwarf Monkey or a wretched Tale. Men less happy never laugh but to the pupose—
O it is much that a lie (with a slight Oath) and a Jest with a sad countenance will do with a fellow that never had the Ache in his shoulders.
By [Falstaff](#), in [Henry IV, part 1](#) (TLN2870-2872), [William Shakespeare](#) in [British Library Lansdowne MS 1185](#), f. 6r

I do mean to make love to Fords Wife: I spy entertainment in her: she discourses: she carves: She gives the leere of Invitation: I can construe the Action of her familiar style and the hardest /
By [Falstaff](#), in [Henry IV, part 1](#) (TLN337-340), [William Shakespeare](#) in [British Library Lansdowne MS 1185](#), f. 21r

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!

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