Scaling Software Preservation & Emulation Services
What is Emulation-as-a-Service?
Challenges
Emulation services do not scale to the needs of a broad spectrum of users
Two

Many potential applications to install, configure, and access via emulation
Three

Descriptive practices for software and computing environments are inconsistent and/or insufficient
Four

End-user access services are limited or non-existent
Distributed Mgmt

- A network of distributed nodes, each contributing to the EaaS1 service and the software development roadmap.
Sharing

○ In-network sharing of software images and configured environments.
○ Yale University Library will contribute at least 3000 pre-configured software applications running in configured software environments.
EaaSI Network – Example
EaaS Network – Example
EaaSI Network – Example
EaaSI Network – Example
Discovery

- Incorporating services developed by Wikidata for Digital Preservation
- Comprehensive, open, machine-readable documentation
- Defining profile for description of software and computer environments
Access

- Emulated CD-ROM environment sharing service
- Virtual Reading Rooms Service
- Scientific Software Portal
- API to automatically render objects in original software via emulation
Participatory Design
Why participatory design?

- Builds ownership of project outcomes
- Boosts confidence and self-reliance
- Sets expectations
- Fosters community engagement
- Reduces the risk of failure and consequently, cost
Who is participating?

Advisors
- UC San Diego
- Stanford
- Notre Dame
- Virginia
- Carnegie Mellon

Advisors
- BCC
- TDL
- CfA
- DPC
- U of Toronto
- OPF
Our Methods

Current

- Structured Interviews
- Collection/Software Inventories
- Scenarios for Use & Access
- Baseline Cost Measuring
- Conference Workshops
Our Methods

Future

- Publishing Deliverables For Review
- User Experience Testing
- Public Sandbox
- Open Software Prioritization
- Expanding Network of Nodes
Learn more

1. Mailing List
   SPN Stack Trace Newsletter

2. SPN Community Forum
   See Stack Trace Newsletter for details

3. Website
   Coming soon?
A Very Special Thanks to our Funders...
Thanks!

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