FCoP In-Person Meeting
DAY 2: 8/3/2018
"EaaS Demo"

Documentation:

http://eaas.uni-freiburg.de/docs/

Definitions:

Emulation as a Service

An emulation framework that simplifies the use of emulators and virtualization tools in a wide range of contexts by abstracting all of the emulator configuration (and its associated issues) away from the end-user. As well as simplifying use of emulators it also simplifies access to emulated environments by providing the ability to access and interact with emulated environments from within your web browser.

Object Archive

The filestore that contains all of the items that you upload for use and access in an emulated environment.

Object

An object can be an:
- iso/ This folder should contain CDROM disk images.
- disk/ This folder should contain hard disk images.

- floppy/ This folder should contain floppy disk images.
- file/ This folder may contain arbitrary files (including subfolder). These files will be wrapped as ISO/CDROM image by default. Note: the folder will not be checked for updated files, i.e. the contents of this folder will not be "repackaged" automatically. To force, repackaging, delete the __imported.iso file in the iso/ folder of the current object.

Base Environment

A base environment is a clean operating system environment.

Derivative Environment

A derivative environment can be created anytime you add software or change configuration settings within a base environment or configured environments. Derivative environments are never stored redundantly - in the EaaS framework, a new layer is created that contains the results of the diff between the original and the derivative.

Demo Instructions

Step 1) Upload objects.

Everything starts with objects. Upload the file that contains your OS image as an object. Note the following settings.
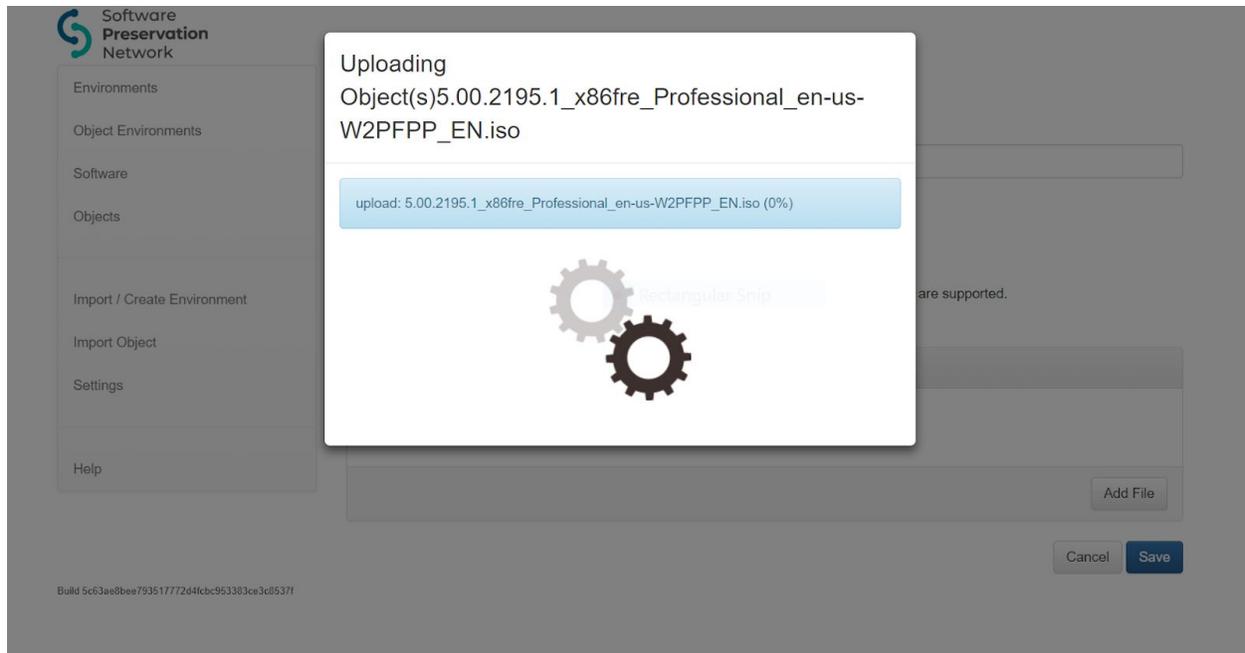
Once you upload an object, check to make sure it is listed on the main Object page.
METADATA ALERT:

- Files that you upload as objects cannot have spaces or special characters in the names - consider what your naming convention will be for different types of objects.
- Assigning object IDs should be considered in relation to ways in which the object is described in your existing systems.

Step 2) Register Objects as Software.

Objects that are software images need to be described as software for the system to use them as software.

METADATA ALERT:
- QIDs refer to Wikidata IDs - you can look up Wikidata IDs and begin to add them in anticipation that a future release will automagically pull any existing metadata from the wikidata record into the EaaS system.
- Currently licensing information is just a free text box. You could have a license key, you could describe the license - however, ultimately, one way to mediate scalable more automated access would be to enforce structure data on the license field.
- If it is an operating system, you need to inform the system by checking the box - this is only way that the item will be made available via dropdown when you switch over to the"Create Environment tab

Once you apply the appropriate metadata and Save, check to make sure your software object is listed on the main Software page.

Step 3) Create a base environment by installing an OS (a software object).

NOTE that you can install an operating using using an existing software object - but only if you have uploaded the object, and it has been characterized as software.

Once an environment is created, you can begin installing additional software/drivers and configuring settings like date, time, background, etc.

Step 4) Install software into an existing environment
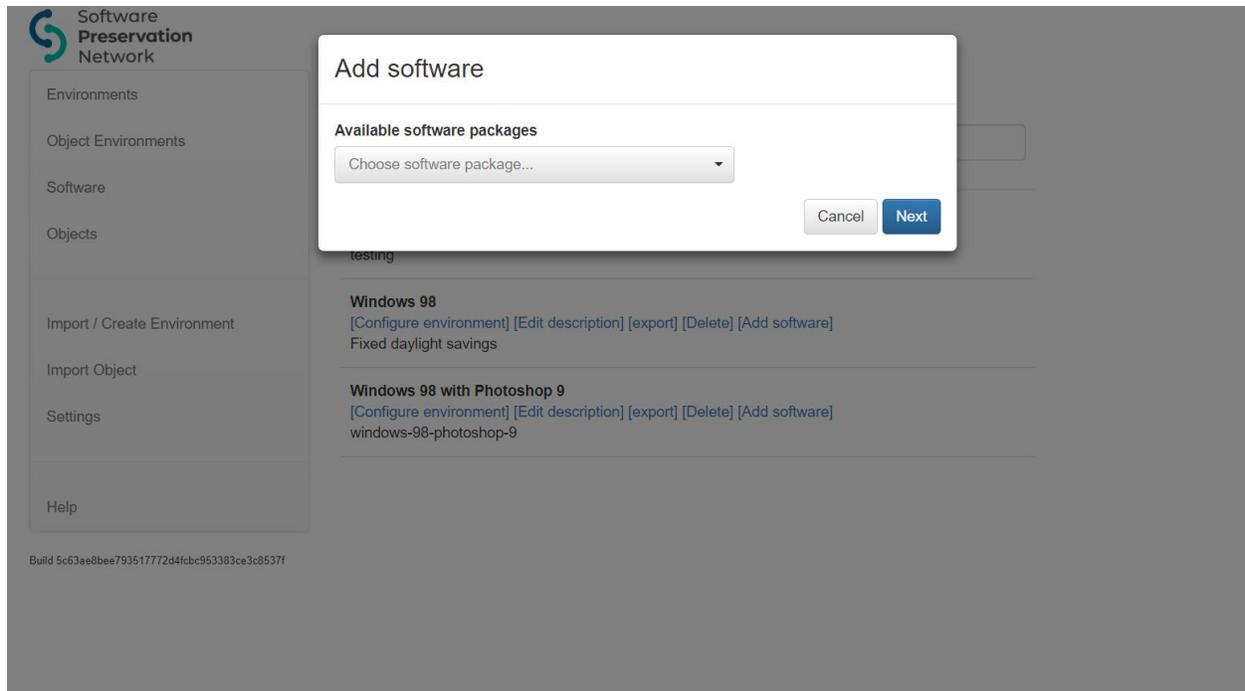
For the demo, let's install Photoshop 9 into a pre-existing Windows 98 environment - both of which have already been uploaded as Objects and characterized as Software Objects.
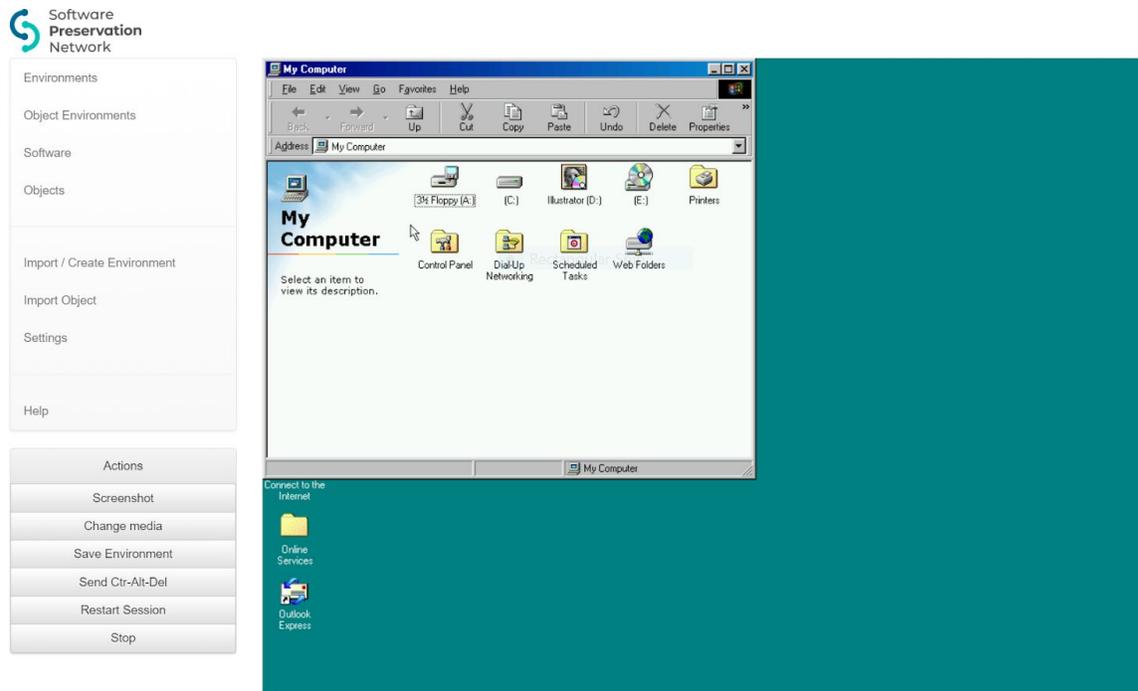
Once your environment boots up, if your software characterization was successful, you should see your software in the :D drive. You can see Photoshop above.

Double-click and walk through the guided installation and configuration steps.

RESOURCES AND NOTES:

- Each of you need to identify some test software:
  - https://www.macintoshrepository.org/
    https://winworldpc.com/library/operating-systems
  - http://home.earthlink.net/~doncox/software/software.html#dtp
  - http://www.oldapps.com/os/Windows_98
  - http://www.oldversion.com/
  -
- Software may ask for a serial or a license key in order to install.
  - http://georgia.forumrama.com/t47-windows-2000-professional-cd-key
- You will have to make some decisions upfront or iteratively about your naming conventions for files and object ids.
- If you image a computer, this can also be uploaded and accessed as a base environment.