

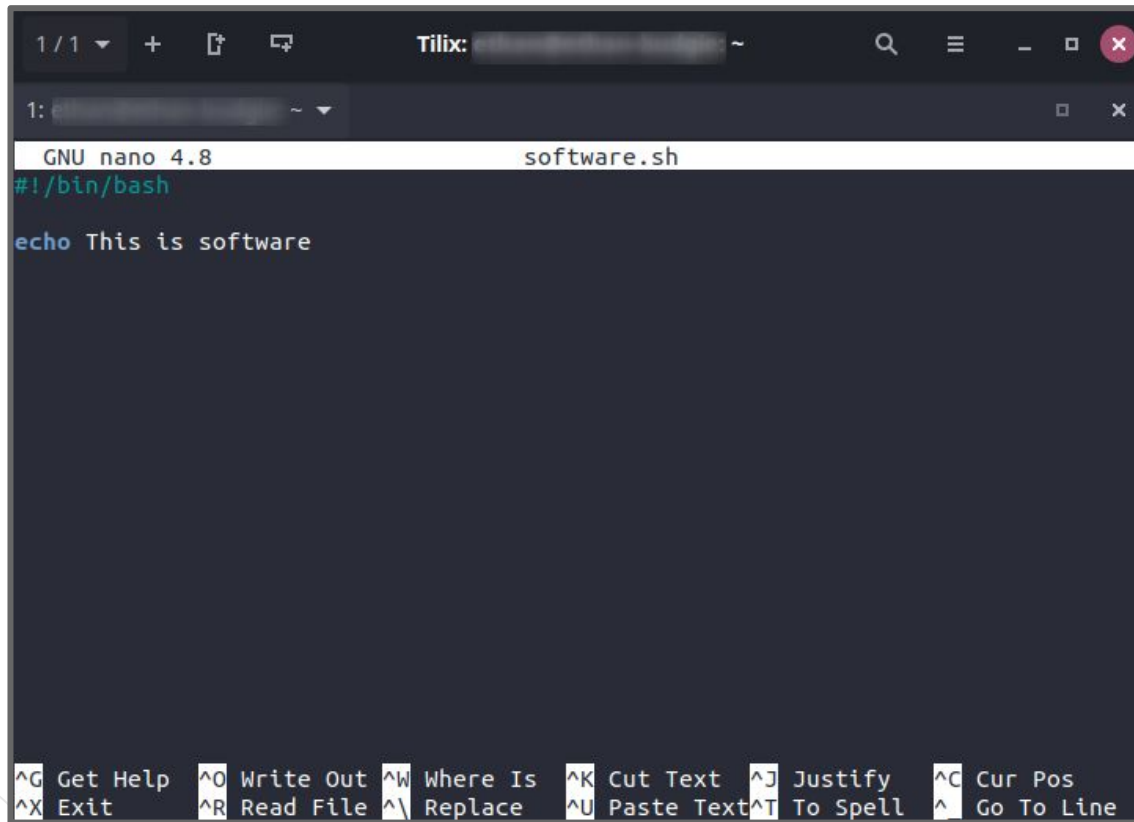
The logo consists of the text 'EaaS' in white, with a blue exclamation mark as the dot for the 'i'. This is enclosed within a dark blue circle, which is itself surrounded by a thin white ring.

EaaS!

Software and Content

EaaS Training Module #2

A series of five concentric white circles are positioned on the right side of the slide, partially overlapping the large white circle.



```
1 / 1 + [ ] [ ] Tilix: [REDACTED] ~ 🔍 ☰ - □ ×  
1: [REDACTED] ~ □ ×  
GNU nano 4.8 software.sh  
#!/bin/bash  
  
echo This is software  
  
^G Get Help ^O Write Out ^W Where Is ^K Cut Text ^J Justify ^C Cur Pos  
^X Exit ^R Read File ^\ Replace ^U Paste Text ^T To Spell ^_ Go To Line
```

But first...what is “software?”

During This Module

- What is the difference between “Software” and “Content” resources?
- How (and why) does the EaaSI platform treat them differently?

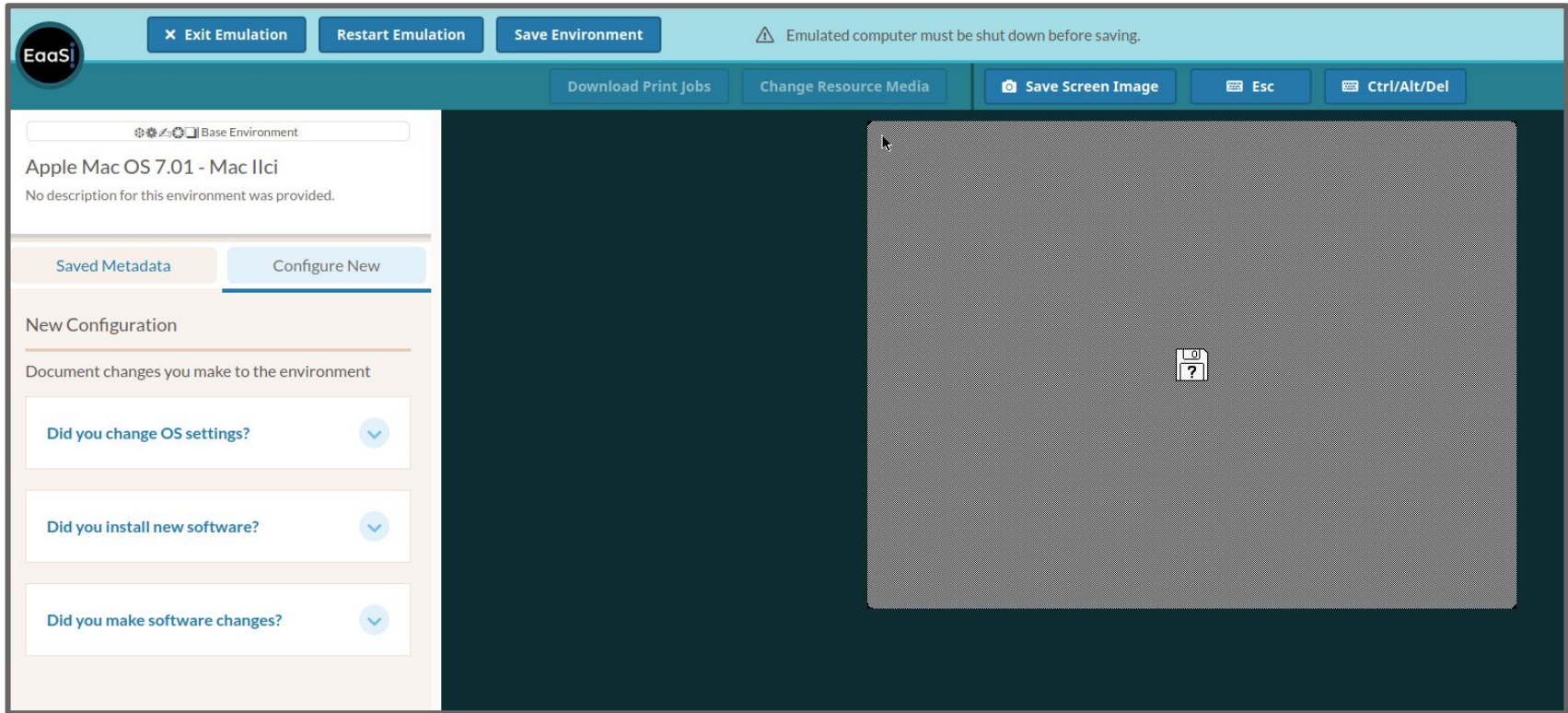


software (noun, soft·ware | 'sɒft- ,wer)

- A collection of data and/or instructions that tell a computer how to work¹
- Something used or associated with and usually contrasted with hardware²
- The difference between a pile of plastic, glass, metal, and silicon, and a computer, okay?³

1. [Wikipedia](#)
2. [Merriam-Webster](#)
3. [Urban Dictionary](#)

0 1 0 1 1 1 0 0 1 0 1 1 1 0
0 1 1 1 0 1 0 0 1 1 1 0 1 0
0 1 0 1 1 1 0 0 1 0 1 1 1 0



Emulators recreate hardware - but an Environment isn't much use without programs and data

0 1 0 1 1 1 0 0 1 0 1 1 1 0
0 1 1 1 0 1 0 0 0 1 1 1 0 1 0
0 1 0 1 1 1 0 0 1 0 1 1 1 0



0 1 0 1 1 1 0
0 1 1 1 0 1 0
0 1 0 1 1 1 0

Software

0 1 0 1 1 1 0
0 1 1 1 0 1 0
0 1 0 1 1 1 0

Content

EaaSI sorts programs and data into multiple
resource types - including Software and Content

- Individual file



- Multiple files



- Complex data set



- Program or application



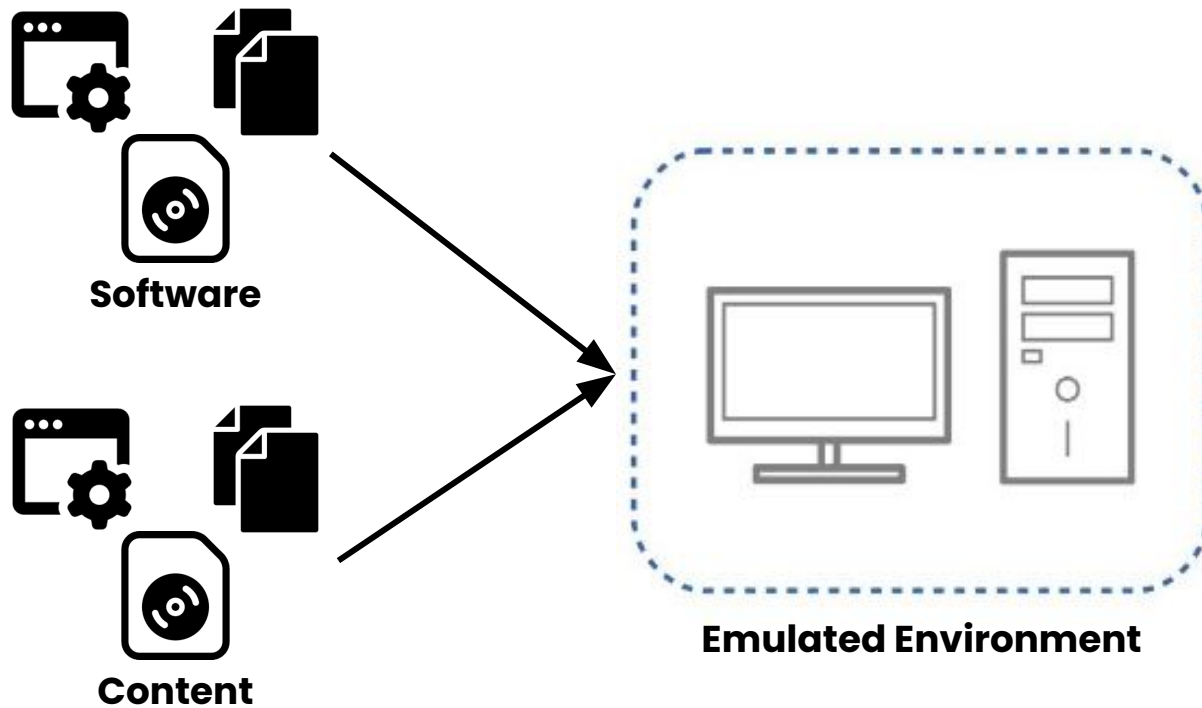
- Script



- Disk Image



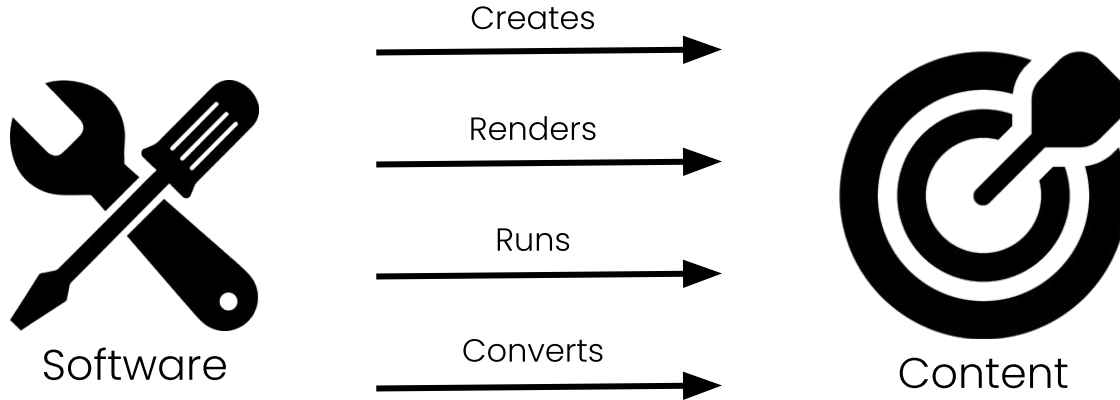
Software and Content resources are both arbitrary,
user-defined digital objects



In EaaSI they are similarly uploaded, mounted,
and saved into Environments

So what's the diff?

Software is a tool - Content is the target



Software



- Installation media and/or executable programs
- Used to create new Environments with different capabilities
- Address dependencies in Content
- Publishable in the EaaSI platform – access and re-use guided by Fair Use principles

[← Back to All Results](#)

Aldus PageMaker 3.0 Macintosh

Review Mode

Edit Mode

Visit this published resource on [Wikidata for Digital Preservation](#) to initiate metadata changes.

Software

Aldus PageMaker 3.0 Macintosh

Aldus PageMaker 3.0 Macintosh

Software details

OBJECT ID

4176bf9c-4b76-4f07-b379-cc34d4d718c8

OBJECT LABEL

Aldus PageMaker 3.0 Macintosh

Rendering Environments

No Environments Selected

+ Add Environment

Detect Environments

Software Properties

LICENSE INFORMATION

ALLOWED NUMBER OF INSTANCES (FOR UNLIMITED CHOOSE -1)

-1

QID

-

This is an Operating System

RENDERING CAPABILITIES: NATIVE FMTS

Native PUID

Add Native PUID

Attached Files

FILE (FLOPPY)

FID-56ff1460-5067-494a-9166-bad8e2b2b30a

FILE (FLOPPY)

FID-bab14885-09bd-40a2-9cf7-4984ac368bfc

FILE (FLOPPY)

FID-66382dcd-cf9a-4674-8b01-40a16fd3a323

FILE (FLOPPY)

FID-d63e9b5a-d975-4fa4-900a-903e1b9d40ba

FILE (FLOPPY)

FID-dbe080bd-704c-4e93-aae0-6035fe77622e

Example EaaSI Software resource: Aldus PageMaker 3.0 for Macintosh

Content



- User data and/or objects in a digital collection
- Require an appropriate Environment (Emulator + Software) to render, run, or display as needed
- **Not** publishable in the EaaSI platform – access and re-use guided by local permissions and systems

[← Back to All Results](#)

6737925 – World telecommunication indicators database

Review Mode

☒

Edit Mode

Content

6737925 – World telecommunication indicators database

Content Details

OBJECT ID

5b0962de-3baa-4d5e-a48c-adac785bb3a5


OBJECT LABEL

6737925 – World telecommunication indicators database

Rendering Environments

No Environments Selected

+ Add Environment

 Detect Environments

Example EaaS Content resource: [World Telecommunication Indicators Database](#) (CD-ROM, International Telecommunication Union, 2004)

Context is Key



A Content resource may also contain Software

Example: a government-issued CD-ROM of economic data that also contains and installs the Borland Database Engine

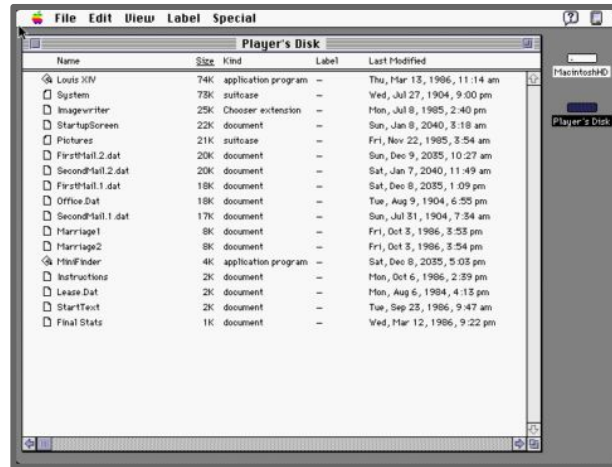


Context is Key



Content may be installable or executable

Example: an educational simulation, game, or other application written by university faculty



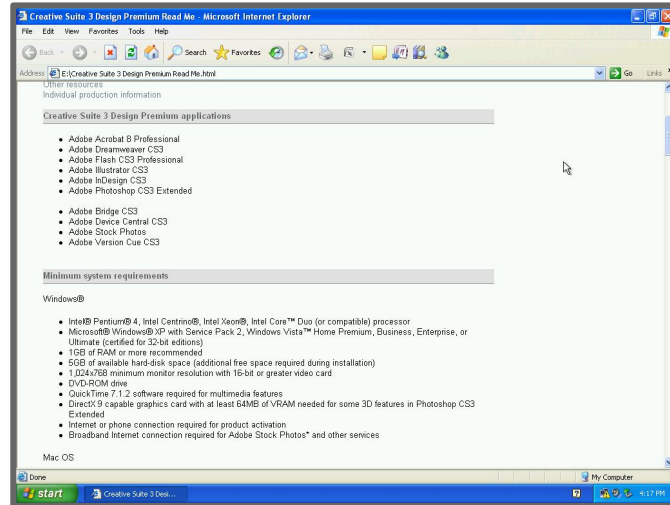
* See [Eaasi Case Study #1](https://bit.ly/eaasi-case-study-1): bit.ly/eaasi-case-study-1

Context is Key



Software objects may contain multiple Software resources

Example: an Adobe Creative Suite installer that contains installation media for Acrobat, Dreamweaver, Photoshop, Illustrator, InDesign, and more

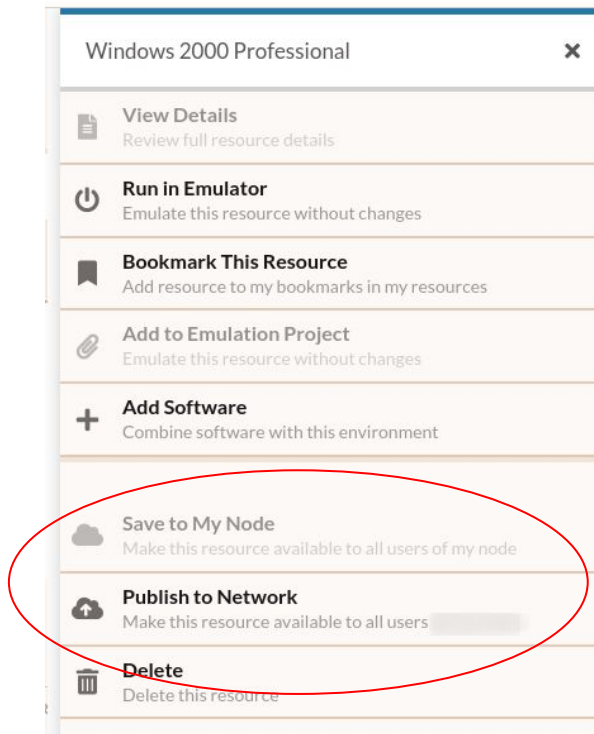


Publishing (Software) is Caring

EaaSI users can share Software collections with other users and organizations by publishing resources to the EaaSI Network

You can also search, save and re-use other users' public resources to address your Content

Content is varied but Software dependencies tend to be redundant





Fair use applies to institutions making software available on a cooperative basis to broaden research opportunities, including off-premises access using technology such as Emulation as a Service...

– ARL Code of Best Practices in Fair Use for
Software Preservation

Context is Still Key

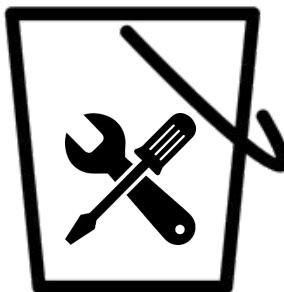


Content can still be *accessed* by patrons or the public even if they can not be *Published*

“Publish” is a specific administrative feature within the EaaSI platform*

Advances in EaaSI user management and advanced permissions will allow EaaSI to behave as an access system and/or send resources to existing ones

* Future Training Modules will address Publishing in more detail



EaaS provides the framework - you decide what goes where

Credits

- Training Module written and designed by Ethan Gates, Software Preservation Analyst, Yale University Library
- All photos, screenshots, and videos recorded by Ethan Gates
- Icons sourced from [The Noun Project](#)
- EaaSI program of work sponsored by the Alfred P. Sloan Foundation and the Andrew W. Mellon Foundation, hosted by Yale University Library



Yale

Principle Partner



Alfred P. Sloan
FOUNDATION

Sponsor

THE
ANDREW W.

MELLON
FOUNDATION

Sponsor