

The logo for EaaS! is a black circle with the text "EaaS!" in white. The "i" is stylized with a blue dot above it and a blue dot to its right.

EaaS!

Preserving Useable Software The EaaS! Program of Work

Archiving and preservation of unusual born-digital objects
NISO Plus
February 17, 2022

Yale



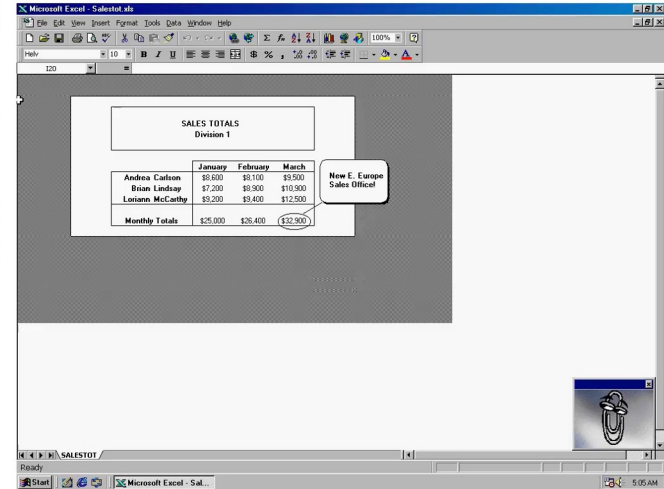
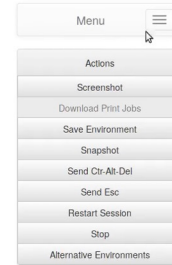
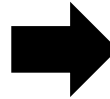
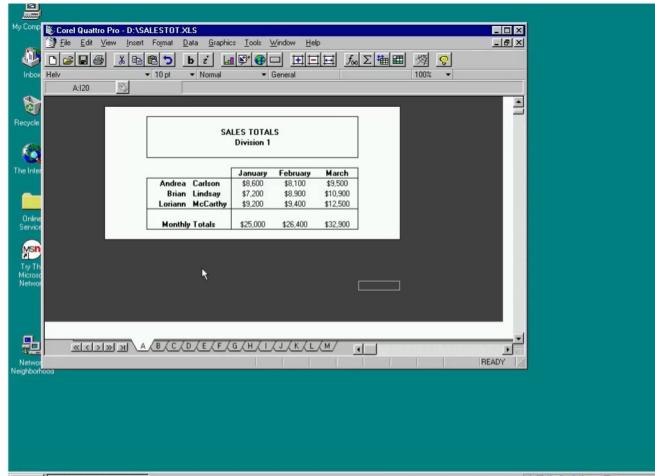
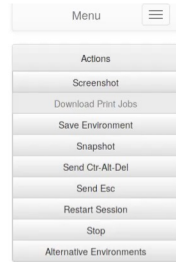
Software
Preservation
Network

The logo for EaaS is located in the top-left corner. It consists of the text "EaaS" in a white sans-serif font, with a blue dot above the 'i' and a blue dot to the right of the 's'. The text is enclosed within a semi-transparent grey circle, which is itself inside a larger, lighter grey circle. The background of the slide is dark blue with a pattern of diagonal lines and dots.

EaaS

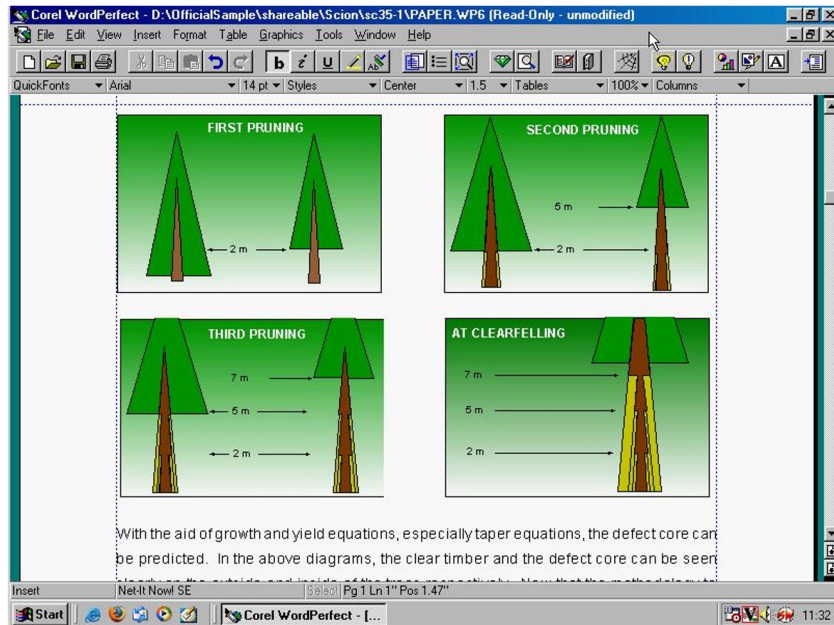
Why preserve software?

A series of five concentric white circles are positioned in the bottom-right area of the slide, partially overlapping the large white circle.

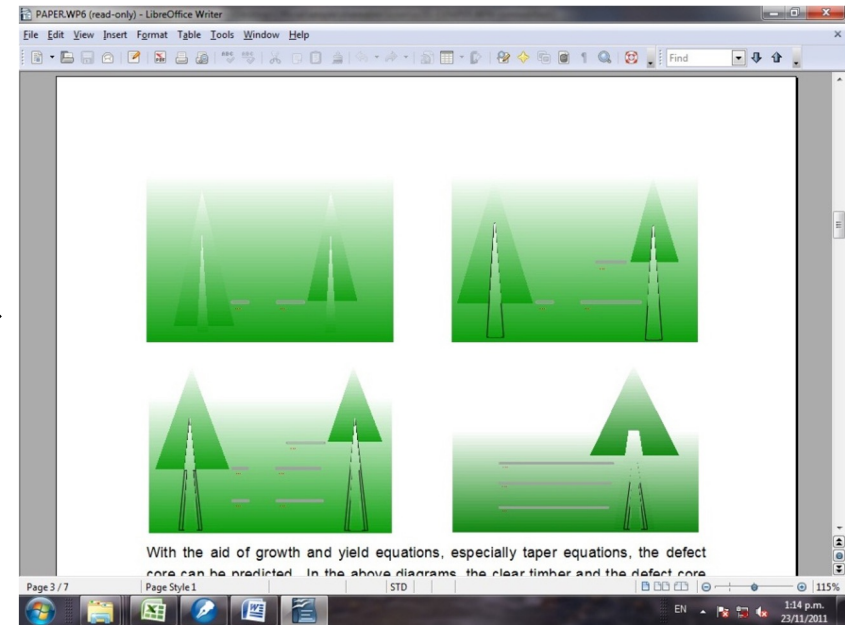
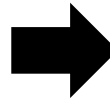


Original content in contemporaneous but incorrect software

Original content in correct original software



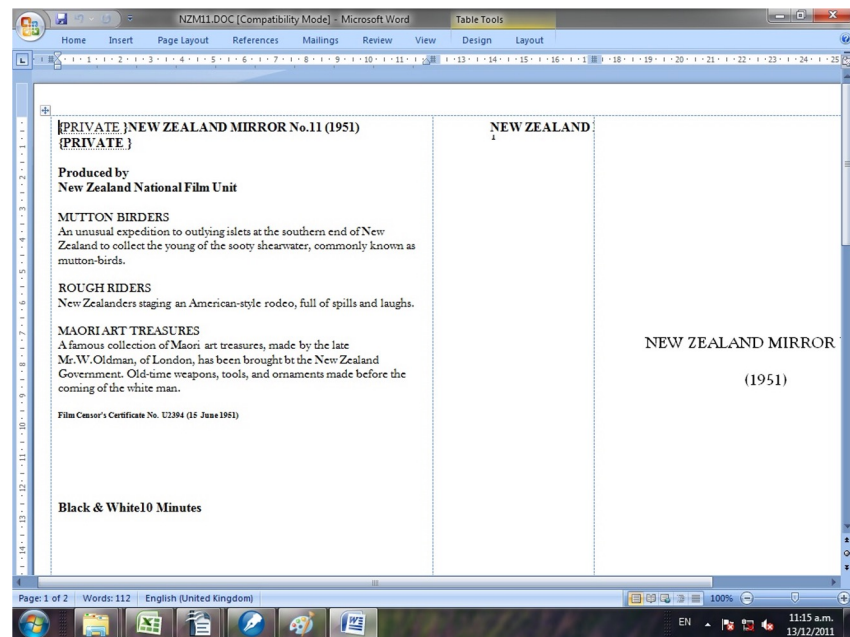
Original content in original software
(WordPerfect in Windows 95)



Original content in newer software
(LibreOffice Writer in Windows Vista)



Original content in original software
(WordPerfect 5.2)



Original content in newer software
(Microsoft Office 2007)

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WordStar D:\...\NSC525-13\MULFUNC.DOC
File Edit View Insert Style Layout Utilities Help
Body Text Default font B I U <*> L C R J #1
TAPER EQUATIONS
-----
PREDICTION OF DIAMETER(d) AT ANY LENGTH(L) FROM TIP OF TREE IS :

d = 100*SqRoot((4V/(Pi*H))*

      2      3      4      5      B7
(B1(L/H) + B2(L/H) + B3(L/H) + B4(L/H) + B5(L/H) + B6(L/H) )

PREDICTION OF VOLUME(v) at A LENGTH(L) FROM TIP OF TREE IS :

      2      3      4      5      6      5
v =(V/H)*(B1(L/2H) + B2(L /3H ) + B3(L /4H ) + B4(L /5H ) + B5(L /6H )

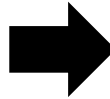
      B7+1      B7
+ B6(L / (B7+1)H ))

EQUATION CODES ARE Tinn FOR INSIDE BARK function no nn.

Insert P1 L40 V7.00" C1 H0.00"

```

Original content in original software
(WordStar Version 7 for MS-DOS)



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LibreOffice Writer
File Format Table Tools Window Help
Text Times New Roman 10
TAPER EQUATIONS
-----
PREDICTION OF DIAMETER(d) AT ANY LENGTH(L) FROM TIP OF TREE IS :

_d = 100*SqRoot((4V/(Pi*H))*

      2      3      4      5      B7
(B1(L/H) + B2(L/H) + B3(L/H) + B4(L/H) + B5(L/H) + B6(L/H) )

PREDICTION OF VOLUME(v) at A LENGTH(L) FROM TIP OF TREE IS :

      2      3      4      5      6      5
_v =(V/H)*(B1(L/2H) + B2(L /3H ) + B3(L /4H ) + B4(L /5H ) + B5(L /6H )

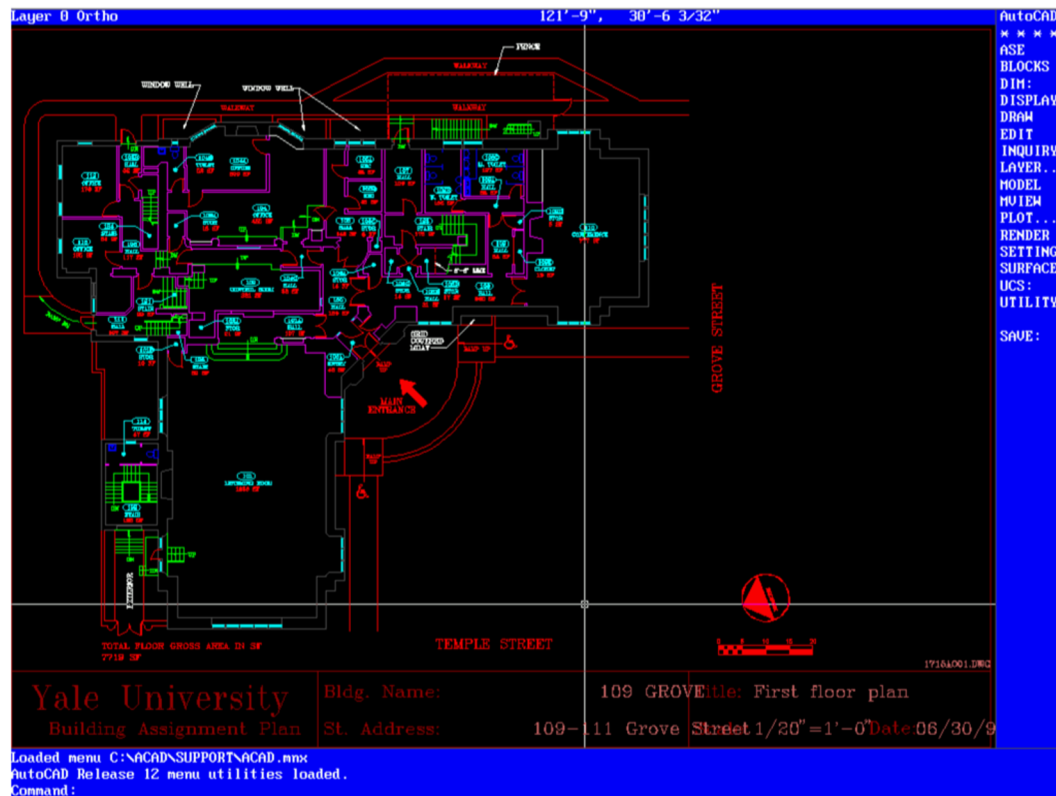
      B7+1      B7
+ B6(L / (B7+1)H ))

_EQUATION CODES ARE Tinn FOR INSIDE BARK function no nn.

COLUMN NUMBER_DESCRIPTION
2- 5 EQUATION CODE
7-31 Description
32-39 B1 * 100,000 Normally the first column of
40-47 B2 * 100,000 each of these will be blank

```

Original content in newer software
(LibreOffice Writer)



Software for format accessibility

Challenges

A decorative graphic consisting of a large, light gray circle on the right side of the slide. On the left side, there are several concentric circles of varying shades of gray, with the number '1' centered in the innermost circle.

1

**Finding legacy
software is hard.
No single organization
can collect all the
software (and
hardware) needed**



2

**Copyright culture and
DRM associated with
software distributed on
installation media**



3

**Lack of comprehensive
metadata describing
software, its
requirements, and
capabilities**



4

**High variability in
computing platforms
and software
requirements**

The image features a dark blue background with a bokeh effect of out-of-focus blue circles. Two concentric white circles are centered on the page. The text 'EaaS' is centered within the inner circle, with the 'i' in 'aaS' being a solid blue color.

EaaS

Usable software, forever

EaaS provides technology and services
for the application of software emulation
across a diverse spectrum of
professional disciplines, organizations,
and individual use cases.

Core Services

- **Search & Discover**

Find software and environments to re-use

- **Import**

Upload your content and software to EaaSI

- **Create**

Configure new computer environments

- **Manage**

Administer access to your node and control use

- **Access**

Provide end-user access to software and content

- **Collaborate**

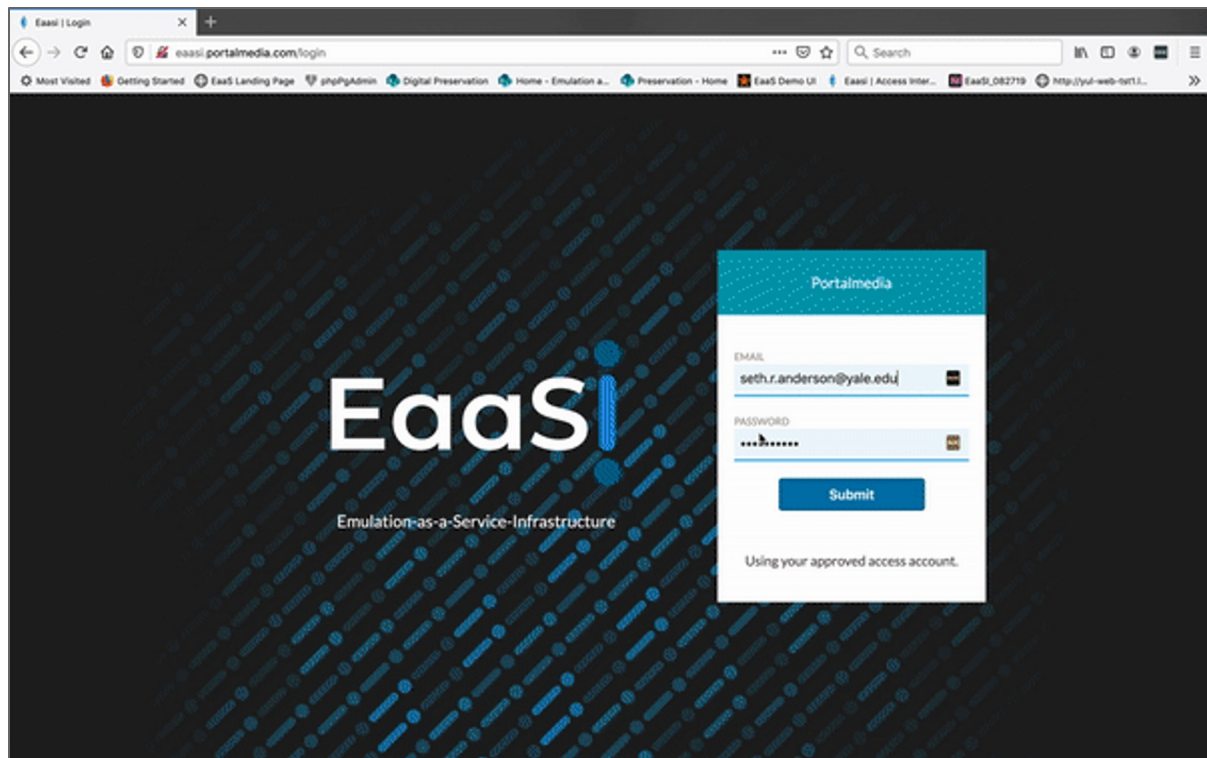
Share software and environments and join the community of EaaSI users



Benefits

- Makes finding necessary software EaaS
- Supplies right emulator version and preconfigures common settings
- Enables access to emulators over the web via browser interface
- Smooths creation of new emulated computing environments
- Smooths configuration of common OS features in legacy systems

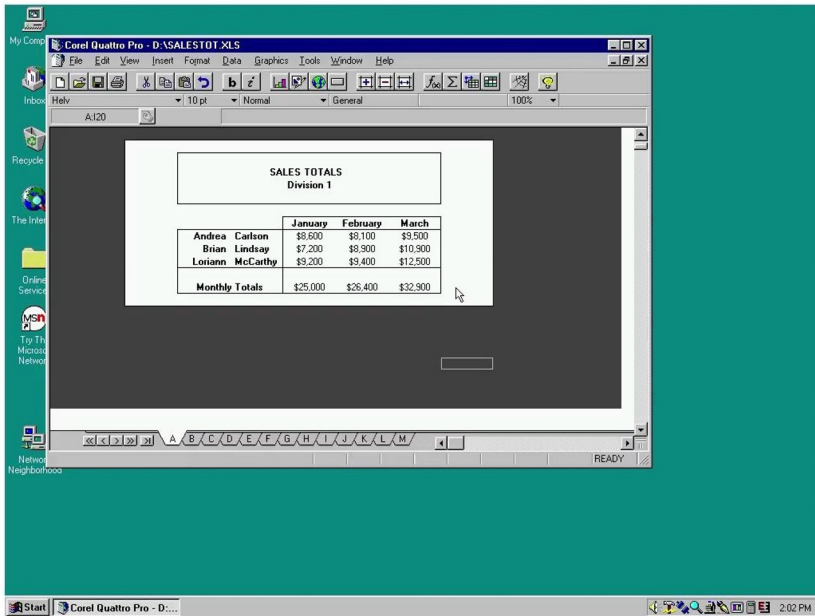
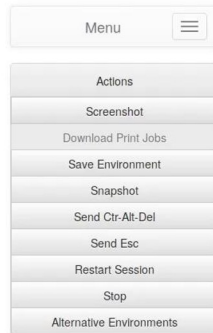




EaaS User Interface

Yale

17



Build: 737A80CAsB
UI-Build: 9140F83942

The Universal Virtual Interactor (UVI)
(one-click open in original software)

- **Seth Anderson (YUL)** Program Manager & Co-PI
- **Euan Cochran (YUL)** Co-PI
- **Ethan Gates (YUL)** User Support Lead
- **Klaus Rechert (OpenSLX)** Development Manager
- **Oleg Stobbe (OpenSLX)** Chief Programmer
- **Jessica Meyerson (Educopia)**
Community Cultivation & Sustainability Lead
- **Katherine Skinner (Educopia)** Sustainability &
Governance Consultant
- **Kat Thornton (Data Current/WikiDP)**
Semantic Architect
- **PortalMedia** UX/UI Design
- **Dual Labs** UX/UI Development
- **Software Emulation Configuration Workers (YUL)**



Our Funders



THE
ANDREW W.
MELLON
FOUNDATION




ALFRED P. SLOAN
FOUNDATION



Thanks!

You can find me at

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- Email: seth.r.anderson@yale.edu

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