

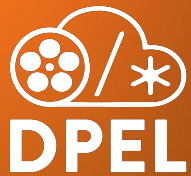


DPEL

Digital Production Example Library

Annual Project Review

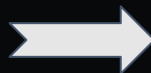
September 2024



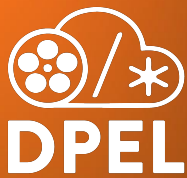
TSC Chair



Eric Enderton
NVIDIA

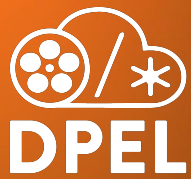


Matthew Low
DreamWorks



A library of **digital assets** -
3D scenes, digital cinema footage, etc. -
that demonstrate the **scale** and **complexity** of
modern feature film production,
including computer graphics, VFX and animation.

Curated by the Academy Software Foundation,
these assets are available free of charge
to **researchers** and **developers**
of both open source and commercial projects,
to **test, demonstrate, and inspire** their ideas.



ASWF Digital Assets License v1.1

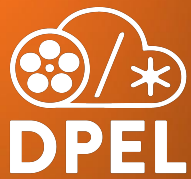
License for <Asset Name> (the “Asset Name”).

<Asset Name> Copyright <Year> <Asset Owner>. All rights reserved.

Redistribution and use of these digital assets, with or without modification, solely for education, training, research, software and hardware development, performance benchmarking (including publication of benchmark results and permitting reproducibility of the benchmark results by third parties), or software and hardware product demonstrations, are permitted provided that the following conditions are met:

...

https://aswf.io/licenses/aswf_digital_assets_license_v1.1.txt



ASWF Digital Assets License v1.1

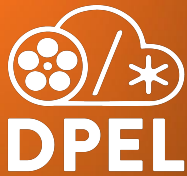
License for <Asset Name> (the “Asset Name”).

<Asset Name> Copyright <Year> <Asset Owner>. All rights reserved.

Redistribution and use of these digital assets, with or without modification, **solely for education, training, research, software and hardware development, performance benchmarking** (including publication of benchmark results and permitting reproducibility of the benchmark results by third parties), **or software and hardware product demonstrations**, are permitted provided that the following conditions are met:

...

https://aswf.io/licenses/aswf_digital_assets_license_v1.1.txt



SPDX License List

The SPDX License List is an integral part of the SPDX Specification. The SPDX License List itself is a list of commonly found licenses and exceptions used in free and open or collaborative software, data, hardware, or documentation. The SPDX License List includes a standardized short identifier, the full name, the license text, and a canonical permanent URL for each license and exception.

The purpose of the SPDX License List is to enable efficient and reliable identification of such licenses and exceptions in an SPDX document, in source files or elsewhere.

- **License Exceptions** are commonly found exceptions to free and open source licenses, used with the **License Expression** operator, "WITH" to create a license with an exception
- The **matching guidelines** define what constitutes a license or exception match. The license text on the HTML pages here will display omissible text in blue and replaceable text in red (see Guideline #2 for more information).
- **Explanation of fields** used on the SPDX License List
- **License inclusion principles** for adding new licenses or exceptions to the SPDX License List
- **Contribute** to the project or request a new license
- Use **short identifiers in your source code**
- **GitHub repo**
- Machine readable **data files** for the SPDX License List

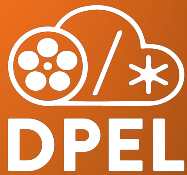
Version: 3.25.0 2024-08-19

Note: You can sort by each column by clicking on the column header. By default, the table sorts by the Identifier column.

Full name	Identifier	FSF Free/Libre?	OSI Approved?
BSD Zero Clause License	0BSD		Y
3D Slicer License v1.0	3D-Slicer-1.0		
Attribution Assurance License	AAL		Y
Abstyles License	Abstyles		
AdaCore Doc License	AdaCore-doc		
Adobe Systems Incorporated Source Code License Agreement	Adobe-2005		

Arphic Public License	Arphic-1999
Artistic License 1.0	Artistic-1.0
Artistic License 1.0 w/clause 8	Artistic-1.0-cl8
Artistic License 1.0 (Perl)	Artistic-1.0-Perl
ASWF Digital Assets License version 1.0	ASWF-Digital-Assets-1.0
ASWF Digital Assets License 1.1	ASWF-Digital-Assets-1.1
Bahyph License	Bahyph
Barr License	Barr
bcrypt Solar Designer License	bcrypt-Solar-Designer
Beerware License	Beerware

<https://spdx.org/licenses/ASWF-Digital-Assets-1.1.html>



<https://dpel.aswf.io/>

#ASWF /* ACADEMY SOFTWARE FOUNDATION

DPEL

Digital Production Example Library

A library of **digital assets** - 3D scenes, digital cinema footage, etc. - that demonstrate the **scale** and **complexity** of modern feature film production, including computer graphics, visual effects and animation. Curated by the **Academy Software Foundation**, these assets are available free of charge to **researchers** and **developers** of both open source and commercial projects, to **test, demonstrate, and inspire** their ideas. See our **license template**. You can find us on **Stack** at **#assets**, or on our **mailing list**.

News

New Assets

New from Intel, an indoor-outdoor 3D scene with challenging ray tracing scenarios. And for you non-linear editing fans, Animal Logic has provided the full edit list and media clips for the Alab promotional trailer. Links below!

Other Assets

Here is a short list of **computer graphics assets available elsewhere**.

Assets



AWS Airship Asset

A complete animatable airship asset, with rig, geometry, textures, and surfacing, represented in Maya. The airship is featured in the short film *Spanner*, created by AWS's in-house production team FuzzyPixel.

[DOWNLOADS PAGE](#)

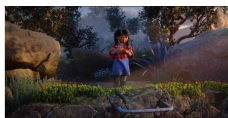


Animal Logic Alab - USD Production Scene

A full production scene with over 300 assets and two characters, with looping animation in the first open-sourced USD scene and shot control from a studio. Supplied as three separate downloads: the full production scene, high-quality textures, and baked procedural fur and fabric for the animated characters. For more information, visit the [Animal Logic Alab website](#).

[DOWNLOADS PAGE](#)

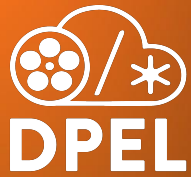
[GITHUB REPOSITORY](#)



AWS Picchu Edit

Picchu is a short film created using Amazon Nimble Studio that follows the journey of an Andean girl named Mayu propelled by the unconditional support of her mother. The original DaVinci Resolve project, source media, and OpenTimelineIO assets are available for download.

[DOWNLOADS PAGE](#)



GitHub Website Migration

- Contributed by **DreamWorks** in October 2023
- Move management to **GitHub**
- Adopt **Astro** framework
- Direct contributions via **PRs**
- Automated **deployment via Actions to Pages**
- Faster turnaround & autonomy
- Local preview
- 27 PRs, 11 contributors

The screenshot shows the GitHub repository page for 'dpel-website'. The repository is public and has 47 commits, 12 watchers, and 11 forks. The repository description is 'Website for the Digital Production Example Library'. The repository is licensed under CC-BY-4.0. The repository is managed by 'matthew-dwa'. The repository contains the following files and folders:

- github/workflows
- .vscode
- public
- src
- .gitignore
- CNAME
- LICENSE
- README.md
- THIRD_PARTY.md
- astro.config.mjs
- package-lock.json
- package.json
- tailwind.config.cjs
- tsconfig.json

The repository is managed by 'matthew-dwa'. The repository contains the following files and folders:

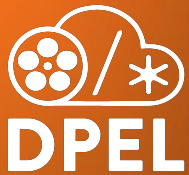
- github/workflows
- .vscode
- public
- src
- .gitignore
- CNAME
- LICENSE
- README.md
- THIRD_PARTY.md
- astro.config.mjs
- package-lock.json
- package.json
- tailwind.config.cjs
- tsconfig.json

The repository is managed by 'matthew-dwa'. The repository contains the following files and folders:

- github/workflows
- .vscode
- public
- src
- .gitignore
- CNAME
- LICENSE
- README.md
- THIRD_PARTY.md
- astro.config.mjs
- package-lock.json
- package.json
- tailwind.config.cjs
- tsconfig.json

The repository is managed by 'matthew-dwa'. The repository contains the following files and folders:

- github/workflows
- .vscode
- public
- src
- .gitignore
- CNAME
- LICENSE
- README.md
- THIRD_PARTY.md
- astro.config.mjs
- package-lock.json
- package.json
- tailwind.config.cjs
- tsconfig.json



Picchu Edit

- Contributed by **AWS & FuzzyPixel** in December 2023
- Award-winning short film follows the journey of an Andean girl named Mayu propelled by the unconditional support of her mother
- Edited with **DaVinci Resolve**
- Resolve project, source media, rendered movie, and exported **OpenTimelineIO** assets

[Watch the short film here!](#)

Home » AWS Picchu Edit

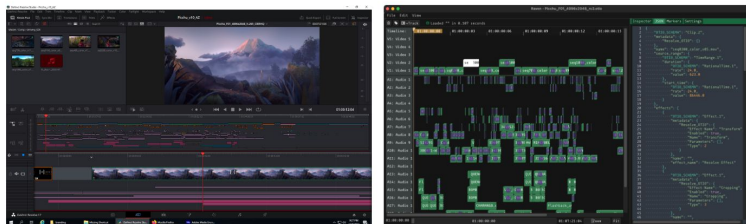
[DPEL HOME PAGE](#)

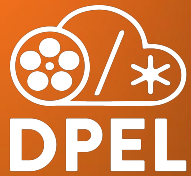
AWS Picchu Edit



Picchu is a story that follows the journey of an Andean girl named Mayu propelled by the unconditional support of her mother. The film reflects the reality of many children around the world. It was created using Amazon Nimble Studio, a service that empowers artists to animate in the cloud.

[Watch the film here!](#) Edited with DaVinci Resolve Studio 17





Airship Asset

- Contributed by **AWS & Fuzzy Pixel** in July 2024
- From the *Spanner* short film, alongside Noa Character Asset
- Fully **rigged blimp**
- High-resolution **textures** and **materials**
- Multiple **Maya** reference files
- Renderable with **Arnold**

[Watch the short film here!](#)

Home » AWS Airship Asset

[DPEL HOME PAGE](#)

AWS Airship Asset

The airship asset was showcased in *Spanner*, a short film produced by FuzzyPixel, an AWS creative team. FuzzyPixel specializes in rigorously testing cloud technologies, ensuring they meet the demanding standards of real-world production environments.



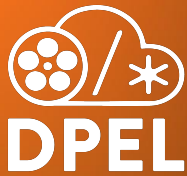
[Watch The film here!](#)

Created With:
Maya 2024
MtoA 5.3.5.1 Arnold Core 7.2.5.1
Asset Size: 44.2 GB

BY DOWNLOADING THESE FILES, YOU AGREE TO THE TERMS OF THE LICENSE LINKED BELOW.

[ASWF Asset License](#)

[DOWNLOAD](#)



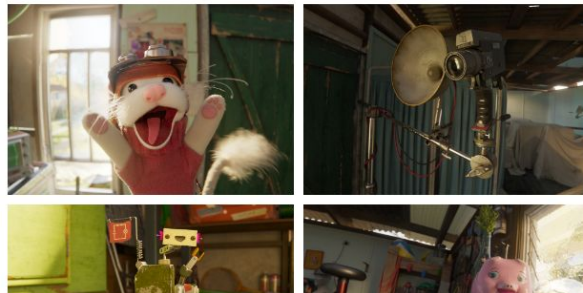
ALab v2.2 Updates

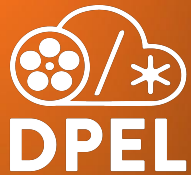
- Initially contributed by **Animal Logic** in 2022
- Updated in July 2024
- Breaks out **TechVar** components
- Defines main **OpenUSD asset structure** separate from geometry, lights, shaders, and rigs
- Migration to **GitHub** for asset hosting

Animal Logic ALab - USD Production Scene



A full production scene created by Animal Logic for exploration by the wider community to be used in demonstrations, training material, and in the testing of USD support across software and pipeline. ALab has over 300 assets, complete with high-quality textures and two characters with looping animation in what context, expanding on the static scenes released to date. Supplied as separate downloads, the asset structure (available in GitHub as well), geometry / rigs / shaders assets, high-quality textures, and baked procedural fur and fabric for the animated characters. For more information, visit the [Animal Logic ALab website](#), read the [technical documentation](#), or join us on [Slack](#).

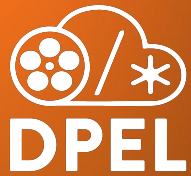




GitHub for Asset Hosting

- Enable greater **discoverability** and **collaboration**
- More **readable**, **explorable**, **linkable**
- Better documentation with **GitHub Pages**
- Facilitate easier **community experimentation**
- Encourage **contributions** via forks & PRs
- Best for assets restructured into **smaller text files**

The screenshot shows the GitHub interface for the 'ALab' repository. At the top, there's a search bar and navigation links for Code, Issues, Pull requests, Actions, Projects, Wiki, Security, Insights, and Settings. The repository name 'ALab' is displayed as 'Public'. Below this, there are statistics for 'Unwatch', 'Fork', and 'Star'. The main content area shows a list of files and folders: .github/workflows, .vscode, ALab, docs, .gitignore, LICENSE.md, and README.md, each with a brief description and a timestamp. Below the file list, there are tabs for 'README' and 'License'. A large image of a character from 'Animal Logic' is featured, with the text 'ALab' overlaid. Below the image is an 'Introduction' section with a welcome message and instructions on how to use the assets. On the right side, there's an 'About' section with a description of the project, a 'Readme' link, and a 'Releases' section showing 'Version 2.2.0' as the latest release.



OpenPBR Shader Playground

- Contributed by **Adobe** in September 2024
- Additional contributions from **NVIDIA**
- Novel aspects of **OpenPBR Surface**
- OpenPBR nodes within **MaterialX** documents referenced into **OpenUSD** scene
- Imageable within **Arnold** and **Omniverse**
- Beta hosting on **GitHub**



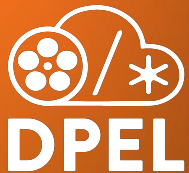
OpenPBR
Adobe
AUTODESK
ASWF

Shader Playground



OpenPBR
Adobe
AUTODESK
ASWF

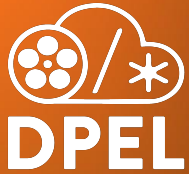
Shader Playground



Future Assets: StEM v3

- Standard Evaluation Material v2 (StEM v2) contributed by **ASC** in 2022
- **Reference material** for color and image processing pipelines, display and projector calibration, etc
- Emphasis on **HDR, high resolution, wide color gamut**

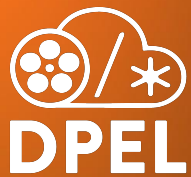




Future Assets: StEM v3

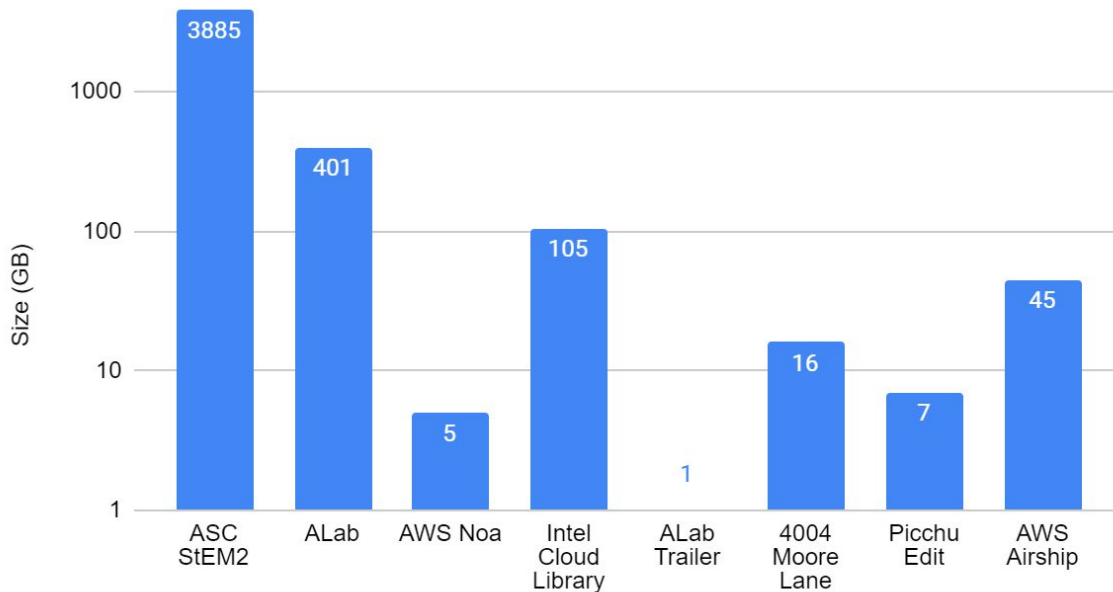
- StEM v3 focuses on **Virtual Production / ICVFX**
- From ASC **Joint Committee on Virtual Production**
- Mix of **2D & 3D assets**
- Contributions from **numerous studios**
- Targeting beta Q4 and v1 @ NAB '25
- Questions around **IP/licensing** and **hosting costs**



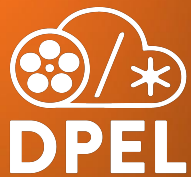


Download Statistics

DPEL Asset Size

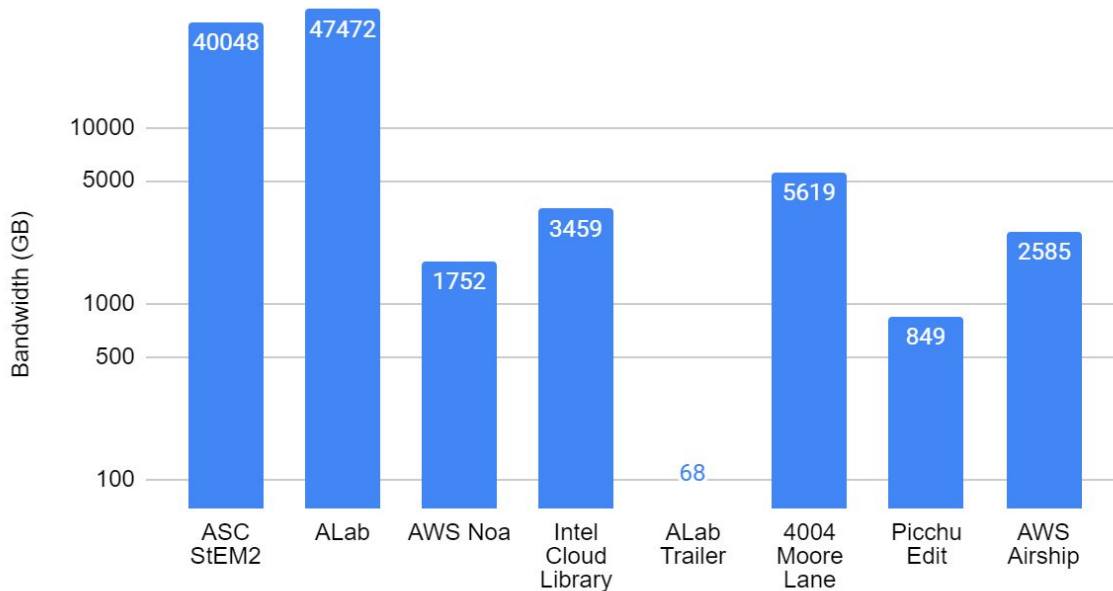


*Since March 2024

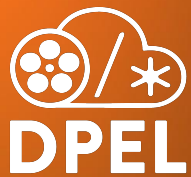


Download Statistics

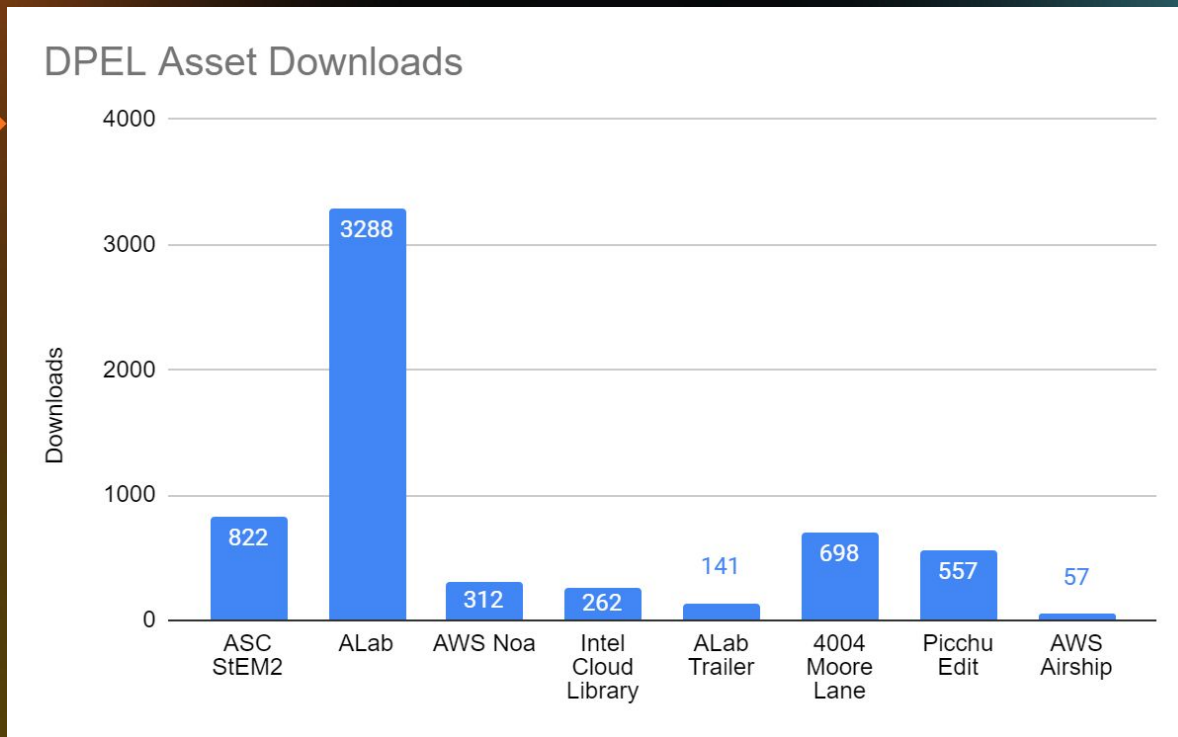
DPEL Asset Bandwidth



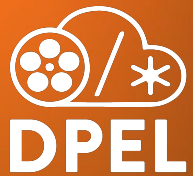
*Since March 2024



Download Statistics



*Since March 2024



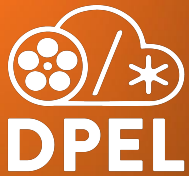
Download Analytics



S3 Storage Lens

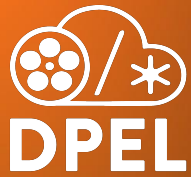


CloudFront Metrics



Technical Steering Committee

- **Matthew Low** | DreamWorks, Chair
- **Ben Fischler** | Autodesk
- **Darin Grant** | Animal Logic
- **Eric Enderton** | NVIDIA
- **Haley Kannall** | Amazon Web Services
- **Joshua Minor** | OpenTimelineIO
- **Michael Johnson** | Apple
- **Nick Porcino** | Pixar
- **Satish Goda** | Netflix
- **Sean McDuffee** | Intel

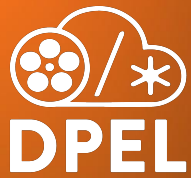


Challenges

Not a source code project

Contributions are substantial and singular

Lower engagement, collaboration, and TSC stability



Opportunities

Lower barriers to contribution

Create source code components

Grow visibility and stabilize TSC

USD ALab

open
Source
days²⁴
/* ACADEMY
SOFTWARE
FOUNDATION
#ASWF

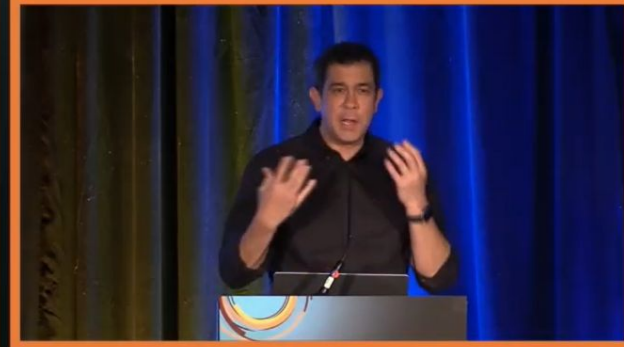


Aidan Sarsfield, Jens Jebens, Christian Lopez Barron, Grant Freckelton

- Born of Frustration – Intellectual Property Restrictions
- “Skin in the game” learnings from AL_USDMaya to USD schemas
- Cross-disciplined development team (Artists, Production, Legal)

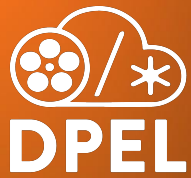
Barrier: No one had ever released a production quality USD asset

Lesson: Doing something outside of your comfort zone can reap great rewards



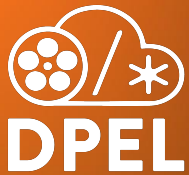
/* ACADEMY SOFTWARE FOUNDATION

open
Source
days²⁴




Future

- Increase engagement and collaboration
- Continue GitHub asset migration
- Website improvements
- Explore 3D web viewers
- Grow ASWF engagement and public visibility
- Enhanced download statistics and analytics
- Solicit new assets



Project Adoption Status

openssf best practices silver



Digital Production Example Library (DPEL)

Projects that follow the best practices below can voluntarily self-certify and show that they've achieved an Open Source Security Foundation (OpenSSF) best practices badge. [Show details](#)

If this is your project, please show your badge status on your project page! The badge status looks like this: [openssf best practices silver](#) Here is how to embed it: [Show details](#)

These are the **gold** level criteria. You can also view the [passing](#) or [silver](#) level criteria.


[Expand panels](#) [Show all details](#) [Show complete and incomplete criteria](#)

Basics	5/5
Change Control	4/4
Quality	7/7
Security	4/5

Use basic good cryptographic practices

Note that some software does not need to use cryptographic mechanisms. If your project produces software that (1) includes, activates, or enables encryption functionality, and (2) might be released from the United States (US) to outside the US or to a non-US-citizen, you may be legally required to take a few extra steps. Typically this just involves sending an email. For more information, see the encryption section of [Understanding Open Source Technology & US Export Controls](#).

Secured delivery against man-in-the-middle (MITM) attacks

<input checked="" type="radio"/> 	<input type="radio"/> Met	The project website, repository (if accessible via the web), and download site (if separate) MUST include key hardening headers with nonpermissive values. (URL required) ^{hardened_site} hide details Note that GitHub and GitLab are known to meet this. Sites such as https://securityheaders.com/ can quickly check this. The key hardening headers are: Content Security Policy (CSP), HTTP Strict Transport Security (HSTS), X-Content-Type-Options (as "nosniff"), and X-Frame-Options. Fully static web sites with no ability to log in via the web pages could omit some hardening headers with less risk, but there's no reliable way to detect such sites, so we require these headers even if they are fully static sites.
<input checked="" type="radio"/> Unmet		
<input type="radio"/> ?		

Found all required security hardening headers. // X-Content-Type-Options was not set to "nosniff".

Other security issues

Analysis	2/2
----------	-----

<https://www.bestpractices.dev/en/projects/8737>



DPEL

Digital Production Example Library