

Annual Review for

/* ACADEMY
SOFTWARE
FOUNDATION



rez - project info

Brief Description:

A lightweight cross-platform package manager written in Python - Build and release packages to a central repository, then consume them in standalone configured environments.

TSC Delegate:

Stephen Mackenzie <maxnbk@gmail.com>

Project Leads / Co-chairs:

Jean-Christophe Morin <jeanchristophemorin13@gmail.com>

Stephen Mackenzie <maxnbk@gmail.com>

TSC Members and Affiliations:

Brendan Abel (Walt Disney Imagineering)

Jean-Christophe Morin (Anaconda)

Stephen Mackenzie (NVIDIA)

Thorsten Kaufmann (Accenture Song Content)

Contributed by:

Allan Johns while at Method Studios

Key Links:

Github:

github.com/AcademySoftwareFoundation/rez

Website: *rez-project.io (redirects to github)*

Docs: *rez.readthedocs.io*

Artwork: *artwork.aswf.io/projects/rez/*

Mailing list: *lists.aswf.io/g/rez-discussion*

OpenSSF Best Practice Badge:

- “Passing 100%”,
- “Silver 85%”,
- “Gold 57%”,
- *<https://www.bestpractices.dev/en/projects/8389>*

rez - project origins

- V1 implementation at Dr.D Studios circa 2011
 - Author previously working at MPC London, where version management was increasingly problematic
 - Both studios' systems tightly coupled show configuration with package versioning, and were problematic
 - Rez (drd-config at the time) sought to address these issues
 - Python solver, everything else bash
 - Primarily used to manage C++ packages
 - Open sourced circa 2013 when Dr.D Studios was closed down
- V2 implementation at Method Studios, LA, circa 2014
 - Much more extensible - pluggable package repos, build systems, shell languages
 - Cross platform, monitoring
 - Bash requirement removed - agnostic package commands language introduced
 - Used to manage both python and C++ packages
 - Animal Logic one of the first studios to adopt outside of Method
 - Submitted to ASWF for incubation on 2021/12/06 - First TSC meeting 2022/08/22 - Allan stepped down

Roadmap

Releases

One release since the last review.

rez-3.3.0 (summarized)

- Features
 - shifted python support from 3.7+<3.12 to 3.8+<3.14
 - wildcard support in rez-test
 - gitbash compatibility improvement
 - logging improvements in payload caching
 - rez-plugin registration using entrypoints
 - new settings for payload caching disk usage
- Fixes
 - platform compatibilities (slashes, case sensitivities, exit codes)
 - race conditions,
 - large-scale updates to vendored-dependencies
- Docs improvements
 - security policy
 - rez-bind deprecation warning
 - improved plugin and .rezconfig.py docs

Graduation Requirements Report Card

- [✓] Technical Charter Approval
- [✓] Legal
- [✓] Governance
- [✓] LICENSE
- [✓] CODEOWNERS
- [✓] README
- [✓] License scan
- [✓] Defined Architecture & Features
- [] Defined Mission & Scope
- [] Roadmap

- [✓*] Contributing
- [✓] Code of Conduct
- [✓*] Release
- [✓] Support
- [✓] Adopters
- [✓] Security Policy
- [] Growth Assessment
- [✓] OpenSSF Badge (pass)
- [85%] OpenSSF Badge (silver)
- [57%] OpenSSF Badge (gold)

LFX Insights

The Good

Health score

● Healthy

The Insights Health Score combines the four key areas to measure an open source project's overall trustworthiness. [Learn more](#)

 Health Score **Healthy**

Share your project Health Score in your GitHub page.

[Generate badge](#)

Contributors

Quarterly Contributor Retention Rate

38% of contributors are contributing quarter over quarter - This project has excellent contributor retention, indicating a highly engaged and stable community.

The Bad



Contributor Dependency

2 contributors account for 51%+ of contributions - This project relies on only two contributors, leading to an increased risk if those individuals become unavailable.



Organization Dependency

2 organizations account for 51%+ of contributions - This project mainly relies on only two organizations, which suggests risk if one withdraws.

LFX Insights

The Good

Popularity ^



GitHub Stars

1,120 GitHub stars - This project has great visibility on GitHub. It's important to assess this in context, as star counts can be artificially inflated.



GitHub Forks

329 forks - This project has exceptional forking activity, suggesting widespread influence and robust engagement. While impressive, fork counts can occasionally be artificially inflated, so consider them in context with additional metrics.



Search Queries

9,900 queries per month - This project exhibits exceptional search interest, demonstrating high visibility and widespread public engagement. Note that search volumes can be influenced by trends or external factors, so it should be considered alongside other metrics.

























The Bad














Contributions Outside Work Hours

67% of contributions occur outside regular working hours - This project highly depends on contributors working outside of working hours.

Contribution Dashboard (Individual)

1		Jean-Christophe Morin	319 - 50%	13		Gabriel Reed	5 - 1%
2		Stephen Mackenzie	62 - 10%	14		Vanessa Valderrama	4 - 1%
3		craig_zerouni	48 - 8%	15		Pavan Madduri	4 - 1%
4		Bryce Gattis	36 - 6%	16		Maxime Cots	4 - 1%
5		Chad Dombrova	30 - 5%	17		michaeltma	3 - 0%
6		Nathan Rusch	24 - 4%	18		Nig3l	3 - 0%
7		Maxime Cots	22 - 3%	19		Paweł Bernaciak	2 - 0%
8		sanikache	17 - 3%	20		George van Ridal	2 - 0%
9		George van Ridal	11 - 2%	21		Robert Minsk	2 - 0%
10		Jonah Newton	8 - 1%	22		Nathan Rusch	2 - 0%
11		Thorsten Kaufmann	6 - 1%	23		Valerio Viperino	2 - 0%
12		George Antonopoulos	6 - 1%	24		george.ridal	2 - 0%

Contribution Dashboard (Org)

1		NVIDIA	62
2		Eyeline Studios - Powered by Netflix	54
3		LAIKA Studios	48
4		Brazen Animation	36
5		Mackevision	7
6		W.W. Grainger, Inc	4
7		The LF	4
8		FX	2
9		Apple Inc.	2
10		DreamWorks Animation LLC	1
11		Crafty Apes	1

Contributions outside work hours

Contributors' activity patterns focused on contributions performed during non-business hours and weekends during the selected period. [Learn more](#) Include collaborations [?](#)

68% ⬆️ 0.2% vs. 68.5% last period

Mon-Fri (after 18:00) **38.5%** Weekends **29.9%**



Only considering contributions from contributors with known timezones

ADOPTERS.md

- Accenture Song Content
- Animal Logic
- AntaresImage
- ANTARUXA
- Apple
- Brazen Animation
- Brunch Studio
- Company3 / Method Studios
- Crafty Apes
- Digital District
- Dreamworks Animation
- Dupe VFX
- Electric Theatre Collective
- Flying Bark Productions
- FuseFX / Folks VFX
- HouseofVFX
- Iloura
- Laika
- Luma Pictures
- Mikros Image
- Milk VFX
- MSG Sphere
- NAD-UQAC
- Netflix (Feature Animation)
- Paramount Animation
- Pixomondo
- Platige Image
- Rodeo FX
- Saddington Baynes
- SHED Inc
- Sony Pictures Imageworks
- Squeeze Studio Animation
- Squint Opera
- Tangent Animation
- Tencent Games
- Time based arts
- Toonbox Entertainment
- WWFX UK

VFX Industry Build Matrix updates

1. rez is pure python so almost nothing in the sheet applies to its own operations
2. Shifted python support from 3.7+<3.12 to 3.8+<3.14 at rez version 3.3.0
3. Found cmake-4 incompatibility to-be-addressed
4. Old-school rez-gui probably needs a Qt lift, many are unaware it even exists
 - a. Personally hoping to replace with a dedicated / separate project

Project Engineering Contributions updates

No changes.

rez asserts that there are zero ASWF member orgs that dedicate 20% of their work time towards the project, which has been the case for its existence.

CI / Security / Marketing Updates

1. Type annotations PR will hopefully enable mypy usage in CI.
2. Signing releases/tags PR probably just needs a few more hours of work.
3. JCM made rez-pip2 into the actual first project on PYPI to create/upload SLSA attestations
4. Small but consistent improvements to docs
5. We have an active security policy now, and the correct github/ASWF-email things wired up to receive vuln notices.
6. Seeking “dynamic analysis tool” for python tools to fulfill SSF badge requirement
7. Had conversations with a group from NYU that found us, offering security analysis assistance that found us through CLOtributor, but it fizzled out
8. TSC meetings have had intermittent cancelations due to TSC availability/burnout at times, but still continue at largely regular intervals, and attendance by non-TSC members has slightly risen, lately, with smaller studios making up a larger group. DWA and Laika very consistent attendees.

AI / ML Code Generation Use / Reporting

1. 1 or 2 docs PRs

Non-Code Aspirational LLM usage scenarios

1. Scrape our public slack for...
 - a. docs improvement opportunities
 - b. common FAQs to add to FAQ docs
 - c. ...or to write more extensive usage scenarios
 - d. finding “We should do...” notes to assemble improvement lists, generate github issues, etc
 - e. develop referenceable “studio strategies” that get circulated repeatedly
 - i. packaging tips
 - ii. OS-specific advice
2. Collating related github issues for combined solution design
3. Generating release notes
4. Remove meeting-notes / summarization / action-item-tracking needs from maintainers
5. Analysis of project inconsistencies (e.g. logging, path handling)
6. Security analysis / Threat modeling

Areas the project could use help on

1. Replacement TSC member
2. Better code reviewer SLA
3. More member company engineering time
4. Test coverage
5. JCM's rez-pip2 is seeming mature enough that it likely makes sense to migrate soon (flagged last year)

Feedback on working with ASWF

TAC Open Discussion

#ASWF

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