FedRAMP

OSCAL Developer Data Bites

January 11, 2024

GSA

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Introduction

Purpose: To create space for dialogue between developers who use OSCAL and the FedRAMP® automation team.

Outcomes:

- Shared understanding of impacts to FedRAMP's use of NIST OSCAL content due to NIST's 1.2.1 release.
- Shared understanding of updates to HTML-based OSCAL guides.
- Productive discussion around OSCAL.

Agenda:

- Welcome
- General Updates
- FedRAMP Automation Community Updates
- Pre-Submitted Q&A
- Update on Guides
- NIST 1.2.1 Release
- Open Forum
- Next Steps & Closing

Data Bites Guiding Principles

Keep the discussion respectful

Be curious, seek understanding

Speak from your own experience

Challenge through questions

Focus on ideas

Keep it technical

General Updates

FedRAMP Automation Community Updates

January 11, 2024

NIST OSCAL version 1.1.x release

FedRAMP automation team is continuing to work to update all guidance and validations to align with OSCAL 1.1.1 release.

Revising OSCAL Guides

FedRAMP automation team is continuing to work towards publishing HTML versions of the OSCAL guides to replace the current PDF versions.

GitHub Issues

- Prioritizing issues related to FedRAMP Guide and SP 800-53 rev 5

Review Needed
github.com/GSA/fedramp-automation/pulls

- #502 Adjusted response points
  - Resolves #443, #511, #512, #535
  - Plan to merge on 1/16/2024.
- #540 Local version of SP 800-53 with zero padded labels
- #541 OSCAL Guides in markdown

Pre-Submitted Questions

Pre-Submitted Questions

None received!

Reminder to submit questions/topic ideas via **https://forms.gle/M4pT7P2xyE6hRC7DA**

Update on Guides

HTML-based OSCAL Guides

Status Update

Completed “MVP” Markdown versions of:

- Guide to OSCAL-Based FedRAMP Content (rev 5)
- Guide to OSCAL-Based SSP (rev 5)
- Guide to OSCAL-Based SAP (rev 5)
- Guide to OSCAL-Based SAR (rev 5)
- Guide to OSCAL-Based POA&M (rev 5)

Created feature branch for ongoing guides updates

- See README.md for instructions on generating the guides locally
- Please provide feedback on PR#541

In Progress

- Iterative style guide conformance updates
- Address backlog of backlog of documentation / guide related issues
- Identifying a web hosting solution

Collaborating with FedRAMP

Collaborating with FedRAMP

What you should expect from FedRAMP

Visibility:

- Work performed through GitHub issues and pull requests
- Discussion of options in GitHub issues and pull requests

Review:

- Changes will be posted as pull requests for review before merging
- Significant changes will be available for review for multiple weeks

What FedRAMP expects from you

Collaboration:

- Identify needed changes as issues
- Comment on important issues
  - Support the proposed solution
  - Identify alternate solutions
- Submit changes through pull requests
- Provide code review of pull requests

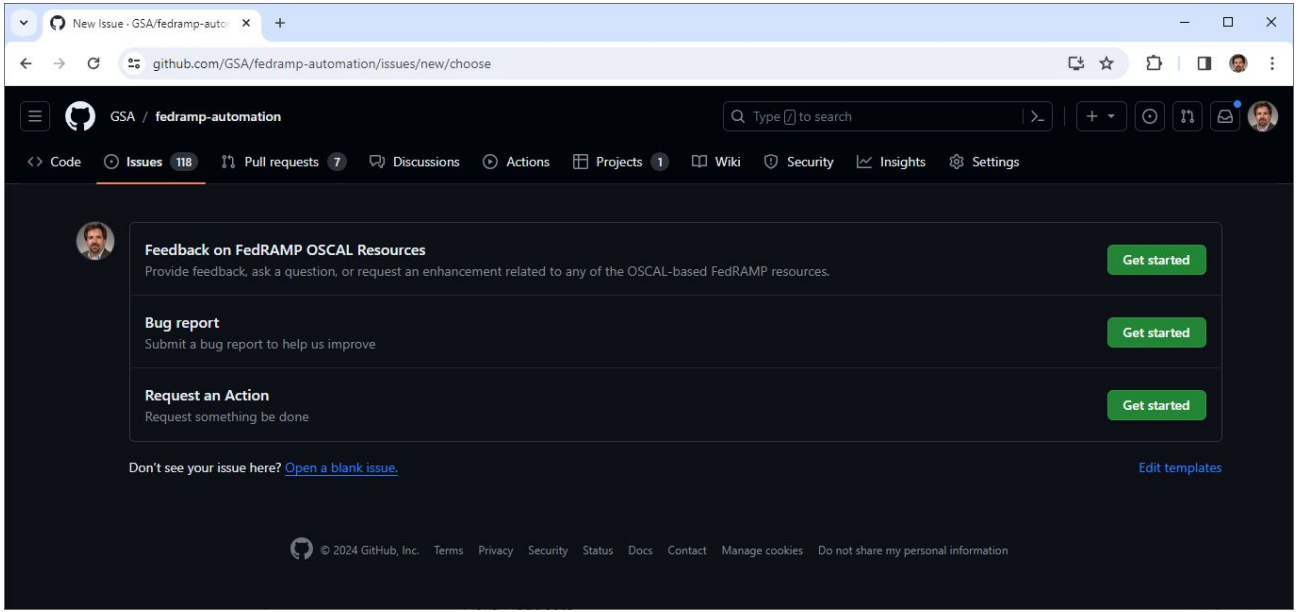
Use of GitHub as a collaboration platform will allow for more progress on resolving issues between meetings.

Submitting an Issue

https://github.com/GSA/fedramp-automation/issues/new/choose

Select an appropriate issue template

- Feedback
- Bug
- Change request

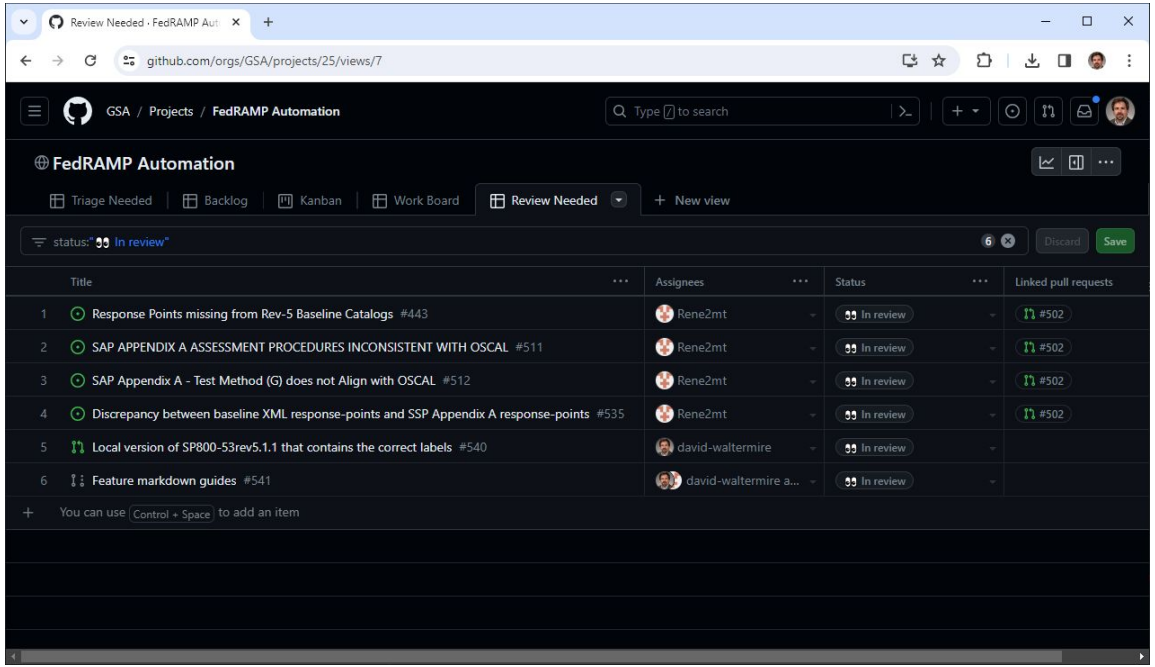


Identifying issues ready for review

https://github.com/orgs/GSA/projects/25/views/7

FedRAMP maintains a work board providing transparency around active areas of work.

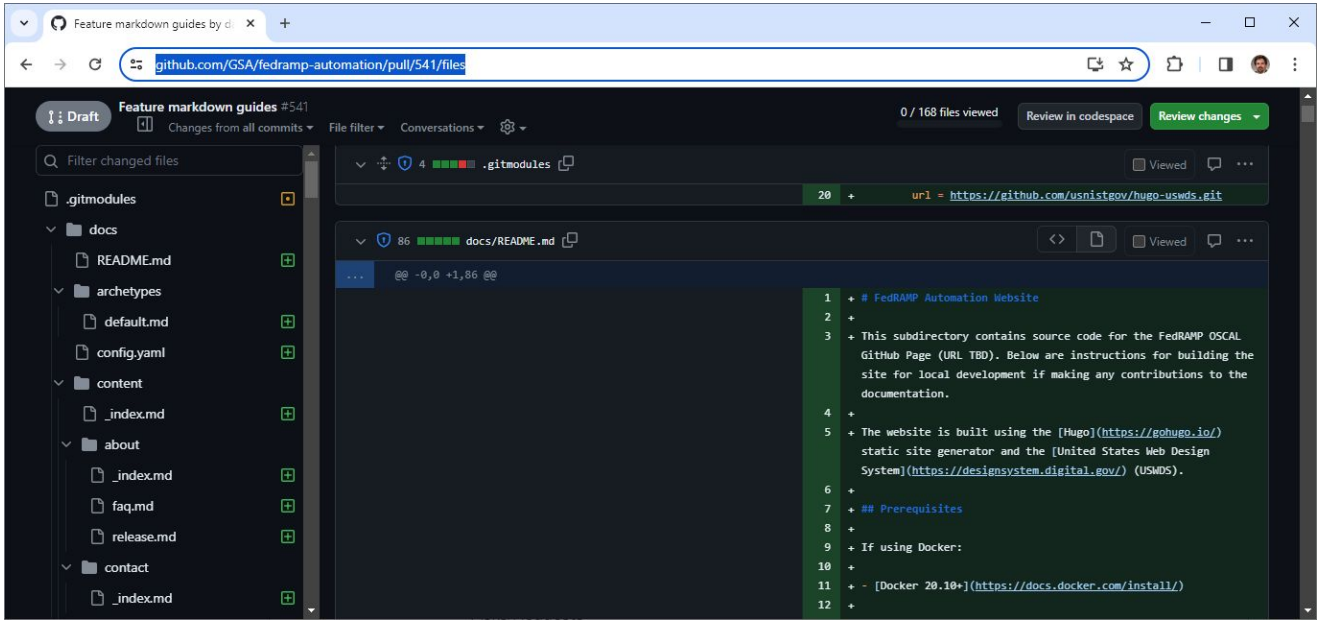
- New Issues/Triage
- Current Work
- Review Needed
- Backlog



Reviewing a pull request

https://github.com/GSA/fedramp-automation/pulls

- Provide an overall review
- Comment on individual changes
- Propose adjustments



Collaboration Resources

FedRAMP Automation GitHub: https://github.com/GSA/fedramp-automation

- Open Issues: https://github.com/GSA/fedramp-automation/issues
- Open Pull Requests: https://github.com/GSA/fedramp-automation/pulls
- Active Work: https://github.com/orgs/GSA/projects/25/views/3
- Community Review Needed: https://github.com/orgs/GSA/projects/25/views/7

GitHub Resources:

- Issues: https://docs.github.com/en/issues
- Pull Requests: https://docs.github.com/en/pull-requests

NIST 1.2.1 Release

NIST OSCAL Content v1.2.1 Release

Background

The NIST OSCAL content v1.2.1 release included backwards-compatibility breaking changes to the SP 800-53 rev5 catalog.

- Replacement of “labels” with “alt-identifiers”
- Removed non-padded labels

FedRAMP adjustments

FedRAMP adjustments to address the compatibility-breaking changes:

- PR #542 reverted catalog to the previous NIST v1.2.0 release
- PR #540 makes similar changes using new “labels”
- Provides zero-padded and non-padded labels

```
</param>
<prop name="alt-identifier" class="sp800-53" value="AC-01"/>
<prop name="alt-identifier" class="sp800-53a" value="AC-01"/>
<prop name="sort-id" value="ac-01"/>
<prop ns="http://csrc.nist.gov/ns/rmf" name="implementation-leve
```

```
<prop name="label" value="AC-1"/>
<prop name="label" class="sp800-53-zero-padded" value="AC-01"/>
<prop name="label" class="sp800-53a" value="AC-01"/>
<prop name="sort-id" value="ac-01"/>
<prop ns="http://csrc.nist.gov/ns/rmf" name="implementation-leve
```

Lessons Learned

Challenge

1. Review was insufficient.
2. Rationale for changes was not clear.
3. PR 228 changed way too many things, making it impossible to diff using GitHub's web UI.
4. Changes occurred in related PRs 2 days before merging, while many were on leave for the holidays.
5. Due to the rate of changes to PRs, it was not clear if/when the work was ready for review.
6. Changes were backwards-compatibility breaking and inconsistent with expectations.

Lesson Learned

1. Use a project board to provide summary issue/PR status. Widely advertise the need for reviews.
2. Explain the “what”, “why”, and “how” in issues/PRs.
3. Break up multiple changes into multiple PRs. To maximize review, diffs should be viewable in the GitHub UI, if possible.
4. Provide more time for review after a significant change is made. Allow more time during holiday periods.
5. Mark PRs in development as “draft”. Remove “draft” status when ready for review.
6. Develop SP 800-53 catalog style guide to ensure consistency. Enforce with external constraints.

Open Forum

Thank you

Our next Developer Data Bites virtual meeting will be on

Thursday, February 8, 2024 at 12p ET.

Submit questions and future discussion topics to OSCAL@fedramp.gov

Learn more at fedramp.gov

@FEDRAMP

How to Submit Issues with FedRAMP

Ensuring your outstanding issues or questions are received:

Issues can be submitted in several ways:

Preferred	Alternate
Open an issue on fedramp-automation github so that it will benefit the NIST/FedRAMP community. https://github.com/GSA/fedramp-automation/issues	Email us at oscal@fedramp.gov

OSCAL Resources

NIST:

https://pages.nist.gov/OSCAL/

Learning Resources: https://pages.nist.gov/OSCAL/learn/

Current release: https://github.com/usnistgov/OSCAL/releases

Development version: https://github.com/usnistgov/OSCAL/tree/develop

Content repo: https://github.com/usnistgov/oscal-content

FedRAMP:

Current repo: https://github.com/GSA/fedramp-automation

Current issues: https://github.com/GSA/fedramp-automation/issues

Validations work: https://github.com/18F/fedramp-automation/tree/master/src/validations

Web based validation tool:

https://federalist-2372d2fd-fc94-42fe-bcc7-a8af4f664a51.app.cloud.gov/site/18f/fedramp-automation/#/documents/system-security-plan