



Developer Data Bites

October 27, 2022



info@fedramp.gov
fedramp.gov

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

Outcomes:

- Understanding of the OSCAL tools FedRAMP currently uses
- Awareness of NIST's OSCAL CLI tool and other NIST resources



Agenda:

- Welcome
- Pre-Submitted Q&A
- FedRAMP Tools Review
- NIST OSCAL Tools Demo
- Open Forum
- Next Steps & Closing



Keep the discussion respectful



Be curious, seek understanding



Speak from your own experience



Challenge through questions



Focus on ideas



Keep it technical

Pre-Submitted Questions

Question 1: LI-SaaS Control Implementation (Rev 4): Are users supposed to fill out the parent control or all sub statements? As the parent statement does not contain any details, how would they address this?

If the parent statement does not contain any requirement details then users do not need to fill out the parent control. However, any parent control that exists without a requirement has sub-requirements thus requiring sub-statements. Sub statements should be included in this case.

Additionally: A rev 4 Issue exists such that high, moderate, and low have "response-point" prop at control part level, whereas LI-SaaS profile and CIS WB only specifies it at the parent control level.

Question 2: What scenario requires fedramp-li-saas profile to be used?

The FedRAMP LI-SaaS profile is for Low-Impact SaaS applications that do not store personal identifiable information (PII) beyond that generally required for login capability (i.e. username, password, and email address). See <https://www.fedramp.gov/understanding-baselines-and-impact-levels/> for more information

FedRAMP Tools Review

What tools does FedRAMP use for OSCAL Artifact Validation and Conversion?

OSCAL Artifact Validation/Conversion Steps:

- 1. Validate File Format** in JSON, XML or YAML
 - Any valid schema aware editor (VS Code (free), XML Notepad, OxygenXML). Plenty of Open Source tools available.
 - XML musts: root elements, element closing tags, case sensitive tags, properly nested elements, and quoted attributes
- 2. Validate file's NIST OSCAL Schema** against Version 1.0.x of OSCAL.
 - We use the tools available off of the [NIST OSCAL website](#) and [NIST Github](#). You can also use VS Code or OxygenXML to do this!
- 3. Convert file to XML** and **validate** using FedRAMP Schematron validations for FedRAMP specific extensions to NIST Core OSCAL.
 - Conversion: <https://github.com/usnistgov/oscal-cli/>
 - Validation: <https://github.com/GSA/fedramp-automation/src/validations>

NIST OSCAL CLI Tool



*The NIST OSCAL Command Line Tool enables users working with OSCAL in XML, JSON, and YAML to **simplify** basic operations.*

What is NIST's OSCAL Command Line Interface (CLI)?

The OSCAL CLI is a **Java** command line tool that performs common operations on Open Security Controls Assessment Language (OSCAL) and Metaschema content such as:

- Content Validation
- Conversion
- Profile resolution
- Schema generation

CLI Tool Demo



Open Forum

Thank you

Save the Date! Our next Developer Data Bites virtual meeting will be on
Thursday, November 10, 2022 at 12p EDT.

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

Learn more at fedramp.gov



@FEDRAMP

Ensuring your outstanding issues or questions are received:

Issues can be submitted in several ways:

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

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>