

OSCAL Developer Data Bytes

December 19, 2024

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Introduction

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

Outcomes:

- Clarity around responsibilities and benefits of the Digital Authorization Package Pilot
- Productive discussion around OSCAL

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Agenda:

- Welcome
- FedRAMP Automation PMO General Updates
- Digital Authorization Package Pilot Discussion
- Open Forum
- Next Steps & Closing

Data Bytes Guiding Principles





Keep the discussion respectful



Be curious, seek understanding



Speak from your own experience



Challenge through questions





General Updates

FedRAMP Automation Community Updates



December 19, 2024

- FedRAMP Platform
 - See <u>changelog</u> for completed and upcoming milestones
- Developer Hub
 - New <u>section with centralized archive</u> of past meeting presentations
 - Ongoing corrections and improvements to SSP guidance sections
- Other Documentation and Resources
 - Improving and refining FedRAMP recommended or required approaches for representing data in OSCAL in a variety of SSP areas
 - Updating example FedRAMP SSP

- Automated Validations
 - Focus is on <u>completeness checks</u>, first part of the strategy
 - Over 170 added since August 2024
 - Current focus on developing constraints for various areas in SSP front-matter and appendices (e.g., sections 3 - 9, and appendices B-L, N-P)
 - Next SSP areas of focus include:
 - Appendix A Security Control Implementations
 - Appendix M Integrated Inventory Workbook
 - User Table

FedRAMP Automation Community Updates



Current Development Priorities & Status

- View the <u>project workboard</u> for more details on ongoing work and upcoming priorities (<u>https://github.com/orgs/GSA/projects/25/views/2</u>)
 - "Ready to Ship" column includes all issues (e.g., constraints) developed to date and slated for future release
 - Digital Authorization Package Pilot participants are evaluating these constraints against their OSCAL SSPs
 - Collaborating with pilot participants, soliciting feedback and resolving identified issues

Important Changes for FedRAMP OSCAL

ADR #11 Approved

- Aligning extension property and misc identifier requirements for the official FedRAMP namespace
 - One common URI for FedRAMP *identifier-type*, *system* facet attribute and FedRAMP extension property *namespaces*
 - We reviewed pull requests #102 and #828, they are ready for merge.
 - We will **deploy updated docs and constraints this week**, but first we will:
 - Update these pull requests (you can subscribe to notifications).
 - Send an email to our mailing list <u>oscal-implementer@fedramp.gov</u>.



Reminder to submit questions/topic ideas via <u>https://forms.gle/M4pT7P2xyE6hRC7DA</u>

Digital Authorization Packages Pilot

Storytime



- Let's zoom in on Simon and Deena today.
 - Simon Security Manager at AwesomeCloud, submitting a digital authorization package for the AwesomeCloud App
 - Deena Developer working on GoodGRC, Simon's GRC tool
- What does it look like for Simon to prepare a Digital Authorization Package?
- How can Deena help?



Simon's Options



- By July of 2026, Simon will need to submit his digital authorization package using OSCAL
 - > His package will need to pass the initial checks of our tooling before submission
- He has some choices:

Option 1: Simon can learn all about OSCAL, use his brain/ a code editor to produce it, and run our tooling himself to make the necessary corrections

In situation A, Simon is sad because he has to do a lot of work, and Deena won't make her performance objectives to increase velocity for AwesomeCloud's GRC program.

<prop name="asset-id" value="DB-001" ns="http://csrc.nist.gov/ns/oscal"/>
 <prop name="asset-type" value="database"/>
 <prop name="allows-authenticated-scan" value="yes"/>
 <prop name="public" value="no"/>



Option 2: Deena adds to the GoodGRC application that is incorporated with FedRAMP tooling, giving Simon a user-friendly interface that produces the OSCAL-based package for him.

- In situation 2, everyone is happy Simon has a clean user interface that guides him on how to fill things out correctly
- Deena has a happy customer and meets her performance objectives.
- Either way, Riley is happy because automation is handling the more tedious parts of her job.



The Digital Authorization Package





Zooming in on SSPs and our constraint work!





Constraint Categories

System information and overview

Who, where, what (roles, parties, locations, users)

Architecture, diagrams, and narratives

Leveraged services (FedRAMP-authorized)

External services (not FedRAMP-authorized)

Digital identity information

FIPS-199 categorization

Related laws and regulations

Inventory and PPSM information

Policy, procedure, and guide attachments

Control requirement documentation

Zooming in on System Information Constraints





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Let's look at the "Word-based Template"



CSP Name:	<insert csp="" name=""> <insert abbreviation,="" appropriate="" as="" csp=""></insert></insert>
CSO Name:	<insert cso="" name=""> <insert abbreviation,="" appropriate="" as="" cso=""></insert></insert>
FedRAMP Package ID:	<insert fedramp="" id="" package=""></insert>
Service Model:	<choose iaas="" iaas,="" one:="" paas,="" paas,<br="" saas,="">IaaS/PaaS/SaaS, IaaS/SaaS, PaaS/SaaS, LI-SaaS></choose>
Digital Identity Level (DIL) Determination (SSP Appendix E):	<choose aal2,<br="" aal3,="" fal2="" fal3="" ial2="" ial3="" one:="">IAL1/FAL1/AAL1></choose>

FIPS PUB 199 Level (SSP Appendix K):	<choose high,="" li-saas="" low,="" moderate,="" one:=""></choose>
Fully Operational as of:	<insert dd="" mm="" yyyy=""></insert>
Deployment Model:	<choose cloud,="" cloud,<br="" government-only="" one:="" public="">Hybrid Cloud></choose>
Authorization Path:	<choose authorization="" board="" joint="" one:="" provisional<br="">Authorization, Agency Authorization></choose>
General System Description:	<insert cso="" name=""> is delivered as [a/an] [insert based on the Service Model above] offering using a multi-tenant [insert based on the Deployment Model above] cloud computing environment. It is available to [Insert scope of customers in accordance with instructions above (for example, the public, federal, state, local, and tribal governments, as well as research institutions, federal contractors, government contractors etc.)].</insert>

How do GoodGRC fields relate to FedRAMP OSCAL

CSP Name:	OSCAL required field	-	FIPS PUB 199 Level (SSP Appendix K):	FedRAMP constraint has-security-sensitivity-level
CSO Name:	OSCAL required field		Fully Operational as of:	FedRAMP constraint
FedRAMP	TedRAMP Package ID: Under Construction			
Package ID:			Deployment Model:	FedRAMP constraint
Service Model:	Model: FedRAMP constraint has-cloud-service-model		model.	has-cloud-deployment-model
			Authorization	FedRAMP constraint
Digital Identity Level (DIL) Determination (SSP Appendix E):	FedRAMP constraint has-identity-assurance-level		raui.	authorization-type
			General System Description:	OSCAL required field

Open Forum

Thank you

Please be on the lookout for new calendar invites in 2025

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



Collaborating with FedRAMP

Collaboration Resources

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

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

GitHub Resources:

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



Ensuring your outstanding issues or questions are received:

Issues can be submitted in several ways:



Open an issue on fedramp-automation github so that it will benefit the NIST/FedRAMP community.

https://github.com/GSA/fedramp-automa tion/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-automa tion/#/documents/system-security-plan