Open Security Controls Assessment Language (OSCAL)

Assessment Plan
Assessment Results
Plan of Action and Milestones

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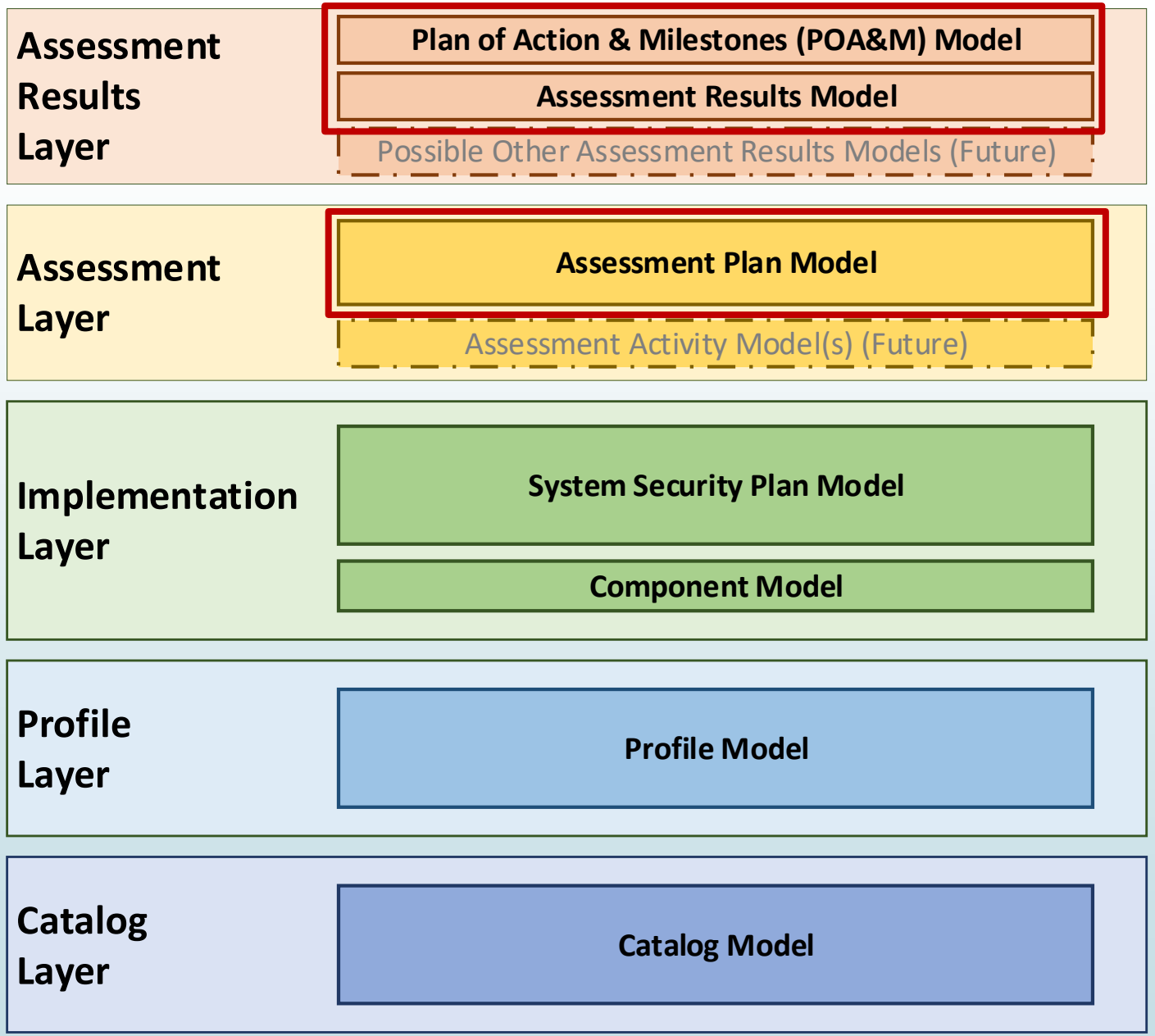
Overview

Three New Models:

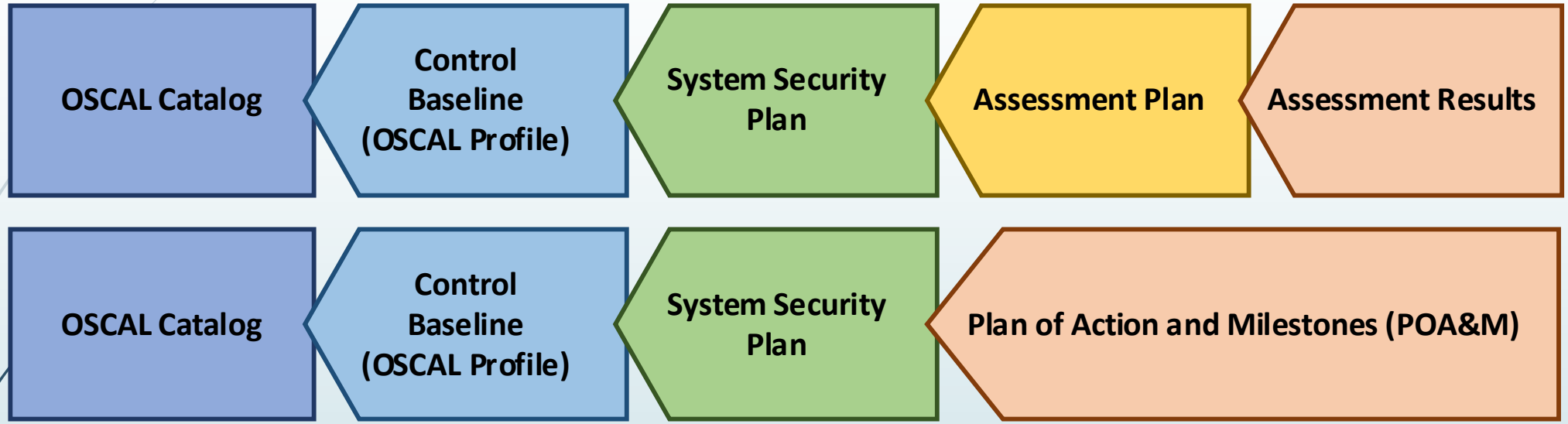
- Assessment Plan
- Assessment Results
- Plan of Action and Milestones



Background

- Assessment Layers were intended to be addressed in OSCAL 2.0
- FedRAMP has an immediate need to receive a complete ATO package in OSCAL
- NIST and FedRAMP agreed to expand OSCAL now to enable OSCAL modeling of FedRAMP SAP, SAR, and POA&Ms
- Developed these with FedRAMP as the focus, but also in anticipation of other uses, such as continuous assessment
- Additional assessment layer features will still be addressed in OSCAL 2.0, such as additional mechanism to automate assessment inspections and testing.

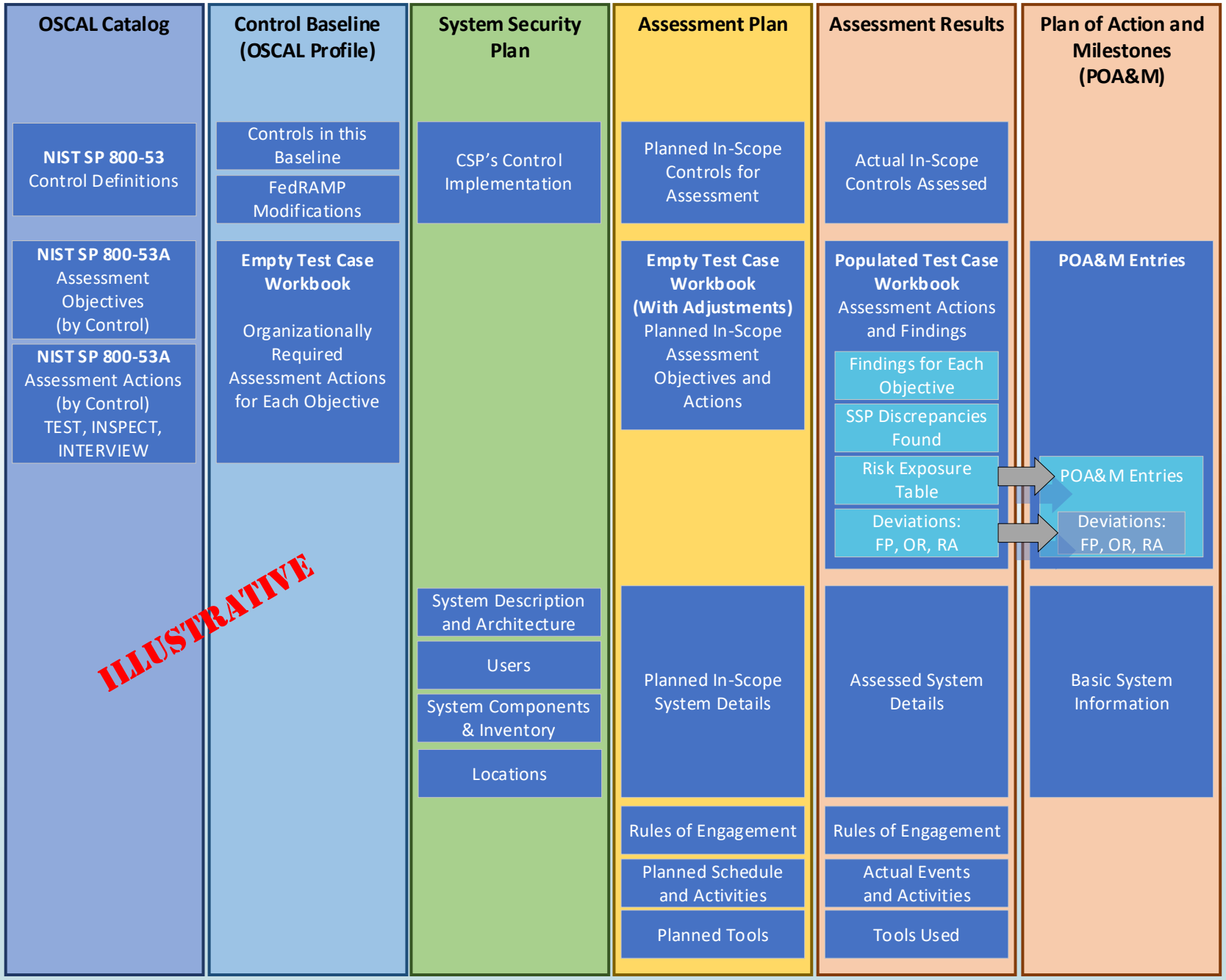
Importance of Import



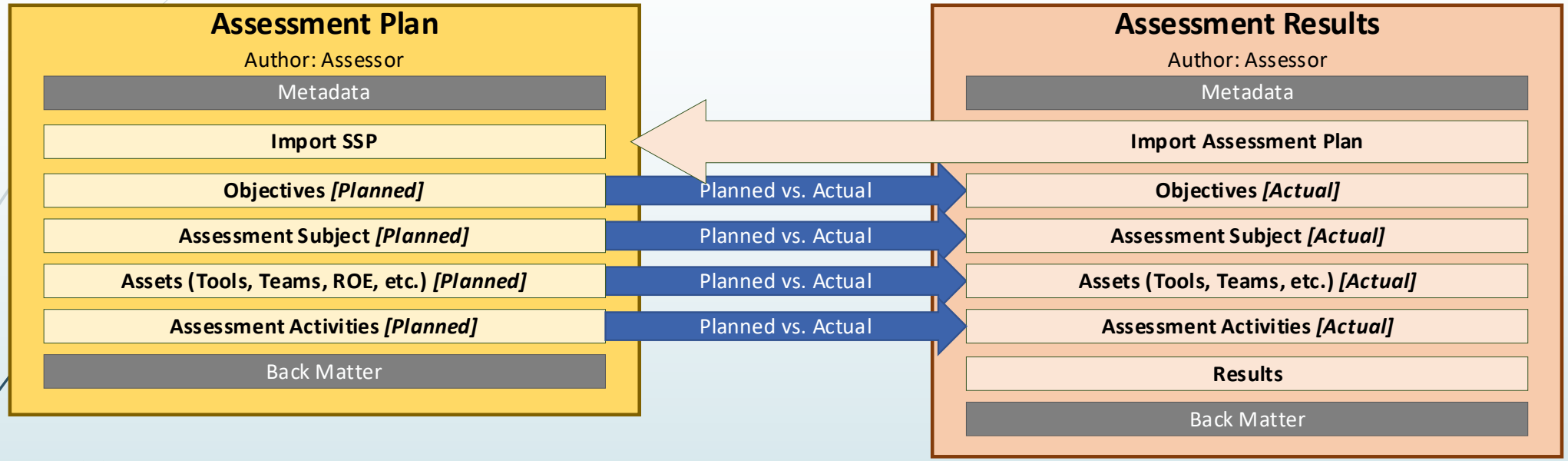
- OSCAL is designed for traceability
- In most cases:
  - Models to the right refer to content in models on the left, instead of duplicating content
  - There are a few exceptions

Importance of Import

- FedRAMP Example
  - The SSP refers to the profile and catalog for control definitions
  - The Assessment Plan and Results refer to the SSP for system description and architecture



Overlapping Syntax (AP and AR)



Traditional Snapshot Approach

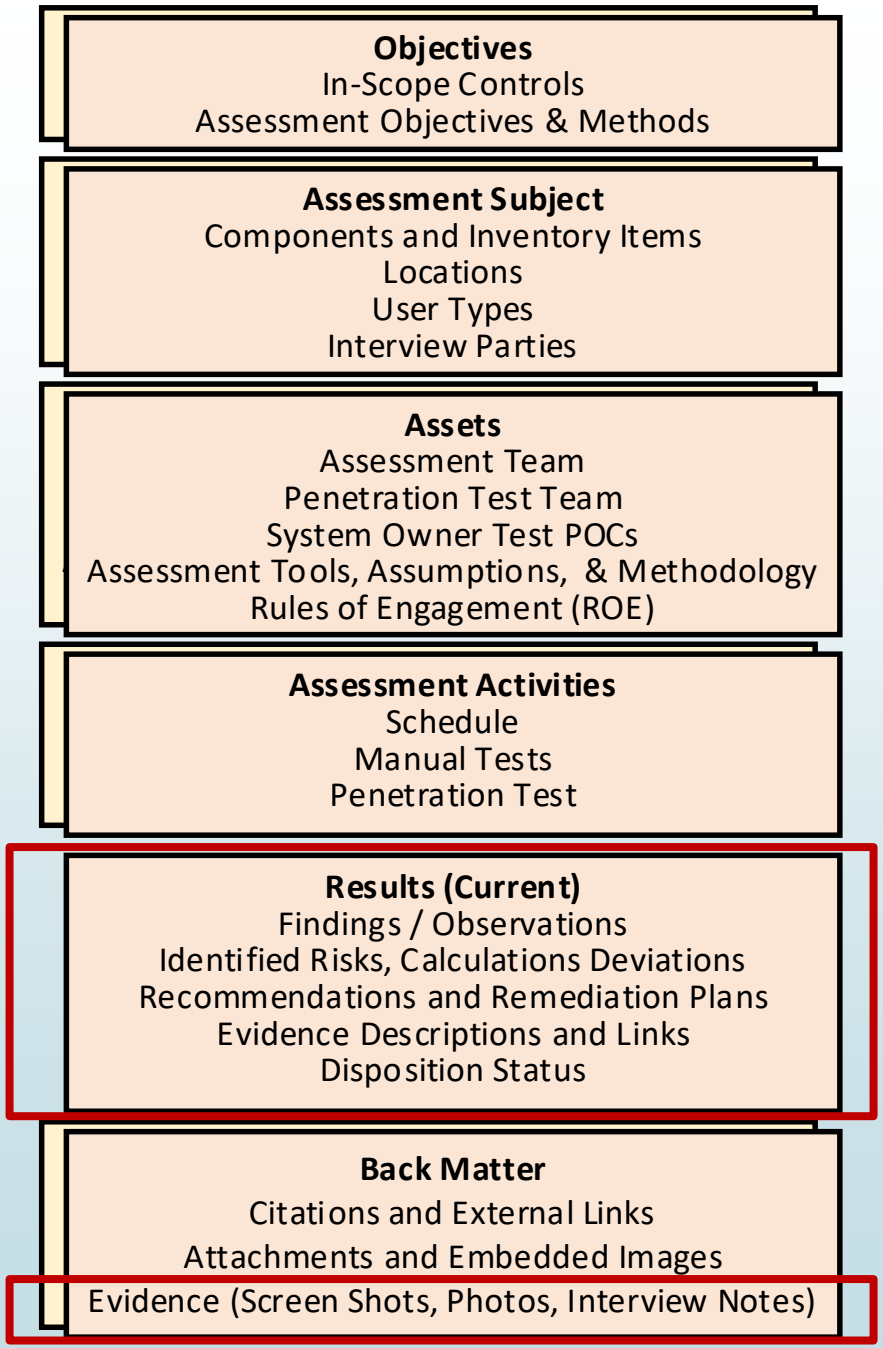
- **Assessment Plan**: What the assessor plans to do
- **Assessment Results**: What the assessor actually did

Continuous Assessment Approach

- **Assessment Plan**: What should be tested/inspected, how, and in what frequency
- **Assessment Results**: Time-slice of results

Assessment Plan and Assessment Results

- **Common to AP and AR:**
  - **Objectives**
  - **Assessment Subject**
  - **Assets**
  - **Assessment Activities**
  - **Back Matter (general)**
- **Unique to AR:**
  - **Results**
  - **Evidence in Back matter**



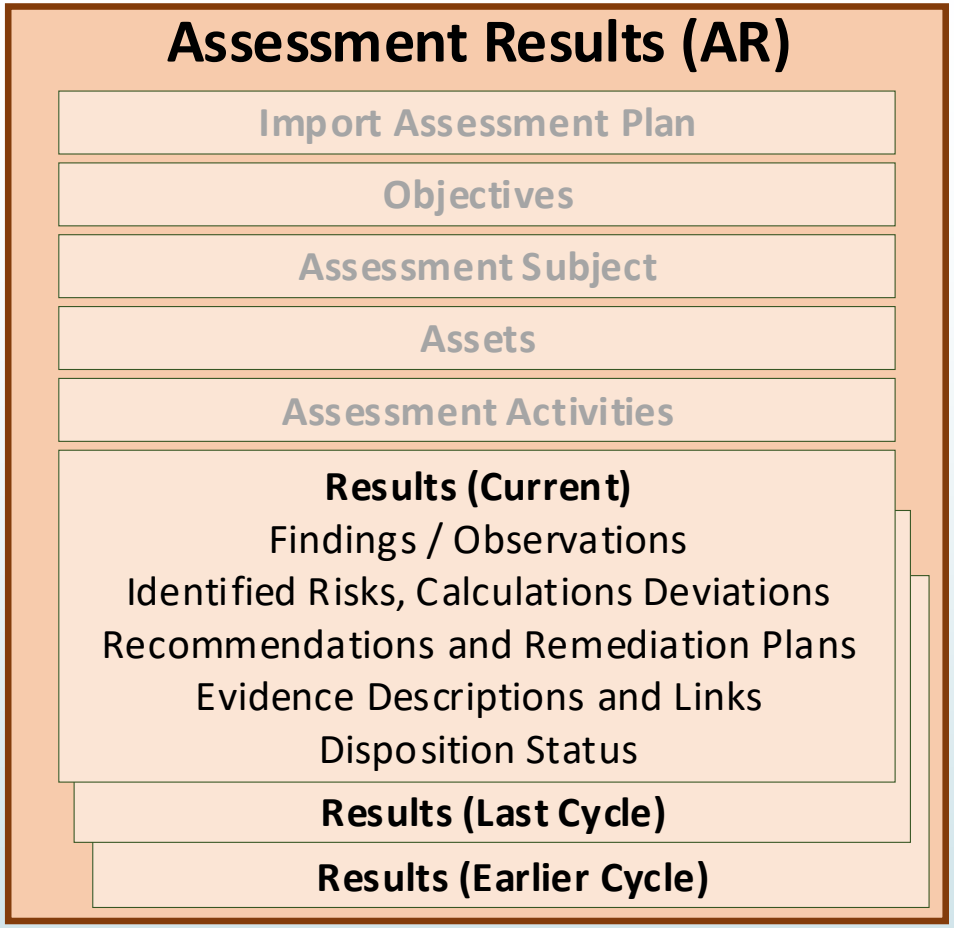
Assessment Results: Time Slices

Traditional Snapshot Approach

- Entire current assessment in one Results assembly
- Each past assessment cycle in its own results assembly

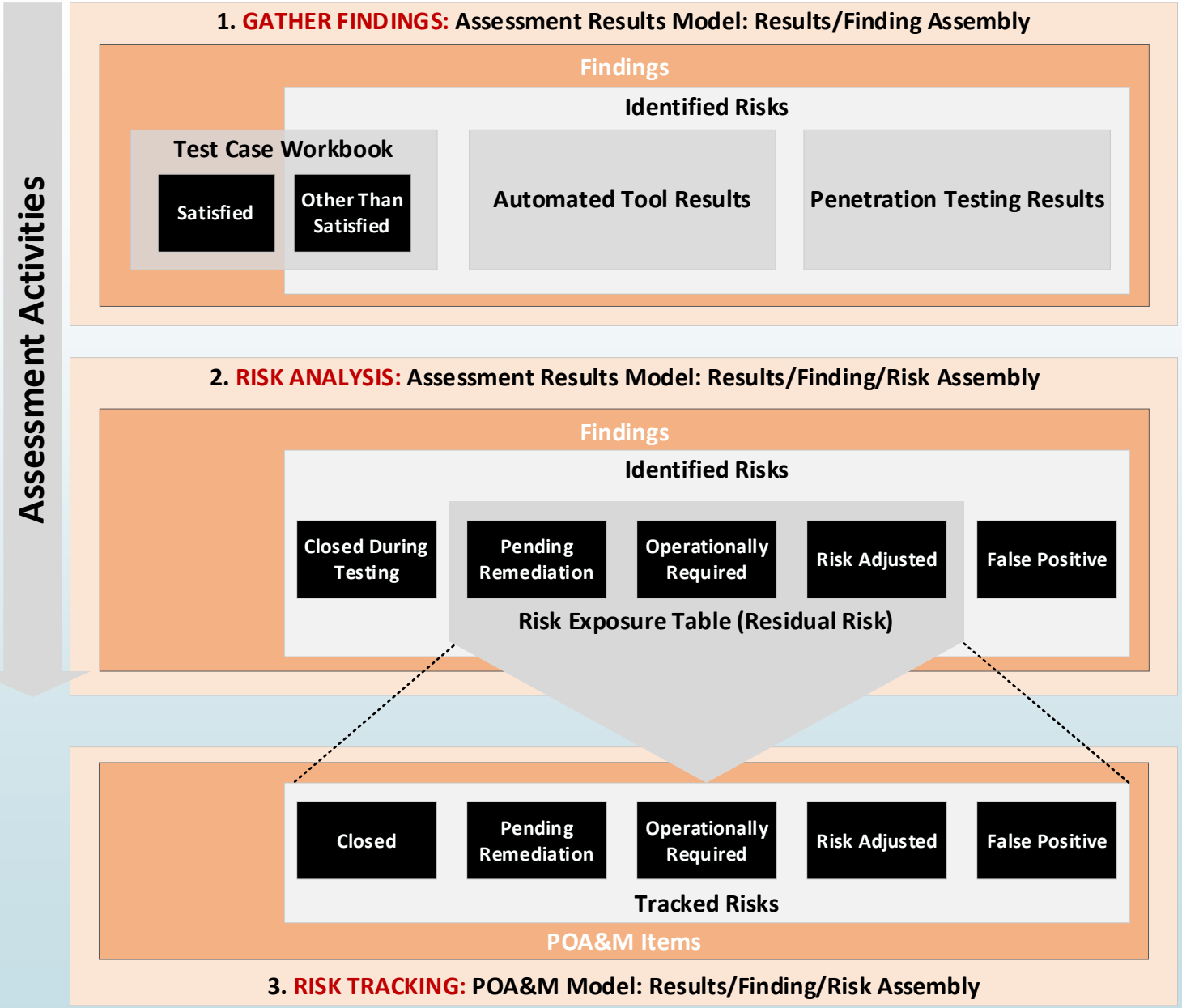
Continuous Assessment Approach

- Each Results assembly is a snapshot in time
- Example: If testing once per hour, each results assembly represents the testing for that hour

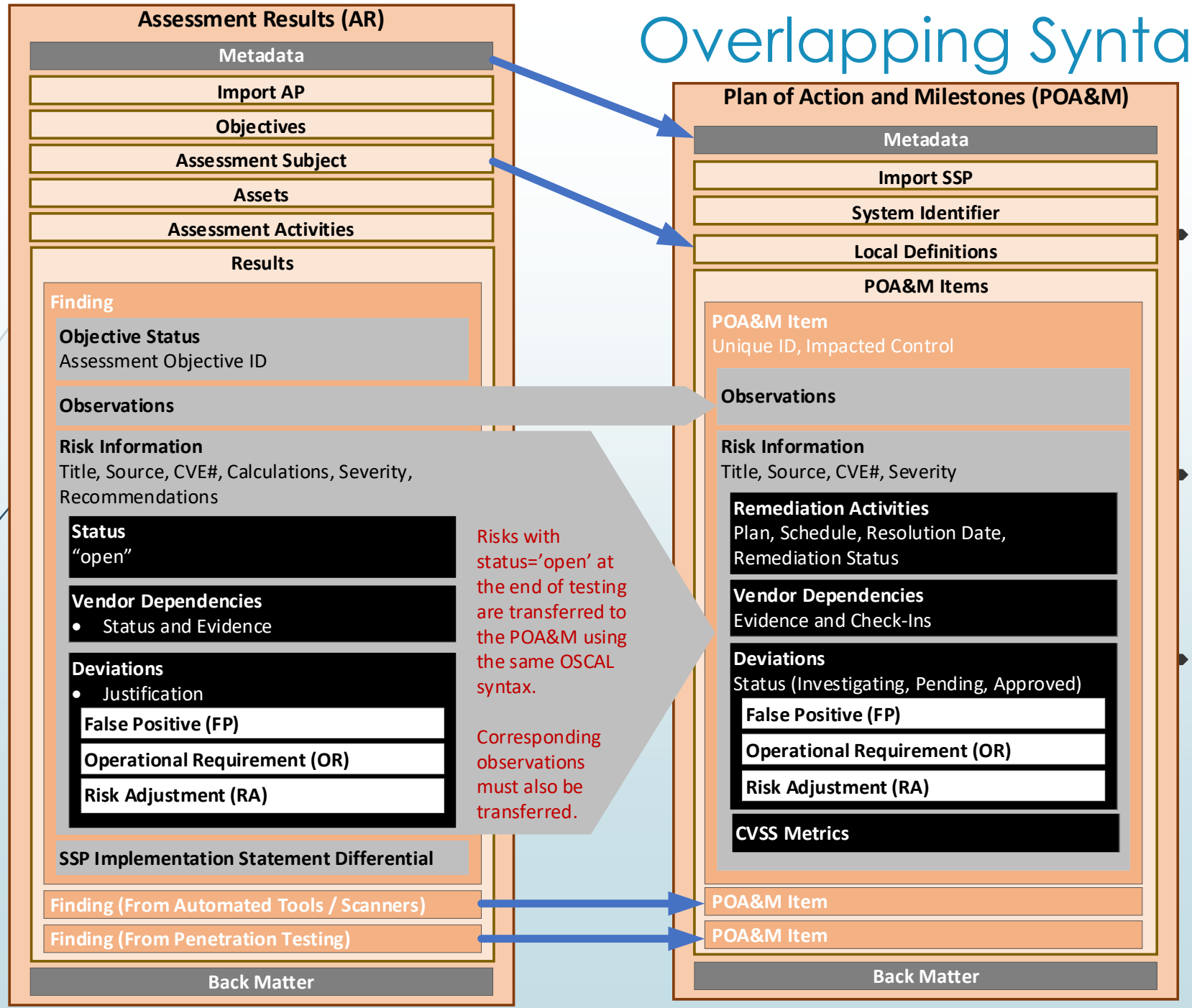


Findings, Risks, Analysis, and Flow

1. Gather findings. Some findings demonstrate compliance. Other findings demonstrate a lack of compliance and represent a risk.
2. While performing risk analysis, some risks are closed during the assessment period. Others are identified as a false positive. Some open risks have mitigating factors, resulting in a risk adjustment. The remaining open and adjusted risks are typically populated in a risk exposure table.
3. All residual risks are typically entered into the POA&M by the system owner, where they are tracked until closure.



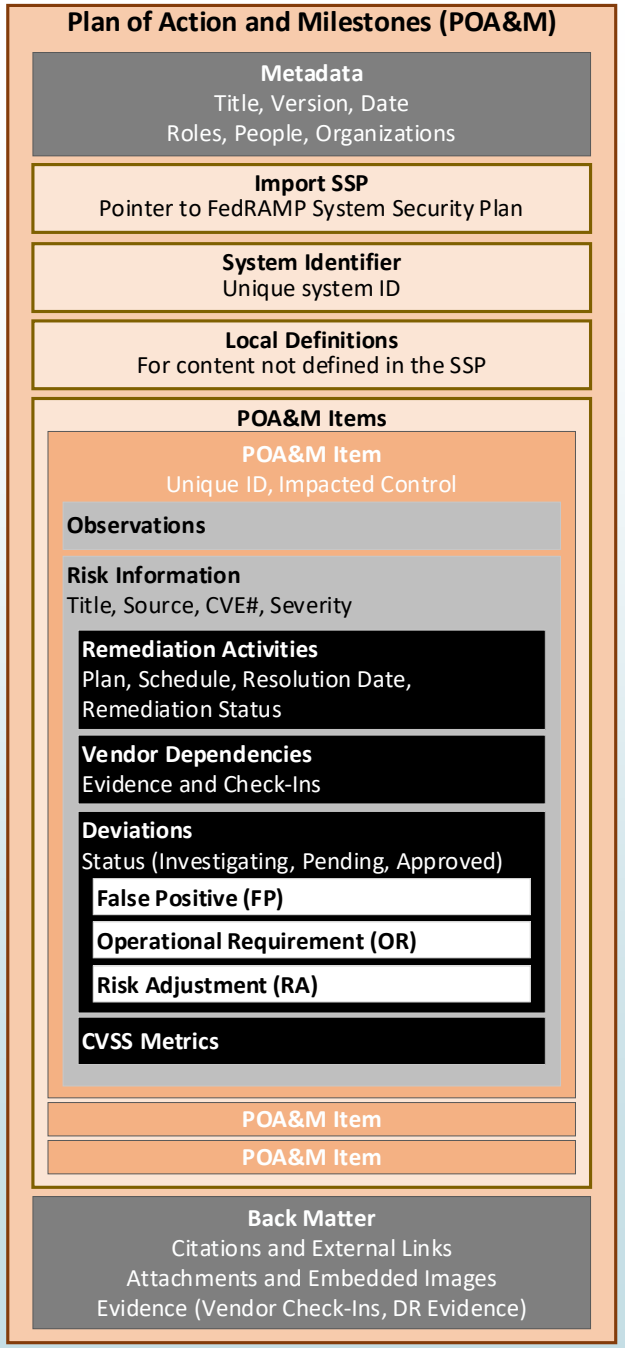
Overlapping Syntax (AR and POA&M)



- Typically all remaining assessment risks are entered into the POA&M. (not closed during testing, and not a verified FP)
- To facilitate this, the syntax the same for an individual AR finding and an individual POA&M item.
- While some detail, such as objective status, may be filtered, it can also travel to the POA&M along with the risk information if appropriate.

POA&M Model

- Ideally the POA&M imports an SSP.
- The System Identifier is used when a POA&M is delivered without its corresponding SSP
  - Example: Monthly Continuous Monitoring (ConMon) delivery of a POA&M where an SSP is only delivered annually.
  - This enables another tool to re-link the POA&M and a previously delivered SSP.
- Scanning tools and missing SSP content are defined in the Local Definitions assembly.
- The structure provides robust remediation planning and tracking activities.
- The structure also provides risk metrics and deviation management for multiple different compliance frameworks. OSCAL enables these to co-exist in a single POA&M item entry.



Questions?
Thank you!

We want your feedback!

OSCAL Repository:
https://github.com/usnistgov/OSCAL

Project Website:
https://www.nist.gov/oscal

How to Contribute:
https://pages.nist.gov/OSCAL/contribute/

FedRAMP Implementation Guides
https://github.com/gsa/fedramp-automation **(Available in July)**

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