Open Security Controls Assessment Language (OSCAL)

Lunch with the OSCAL Developers

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Teleconference Overview

- Ground Rules
- OSCAL Status Summary (5 minutes)
- Issues Needing Help from the Community
- Question and Answer / Discussion
  - Submitted questions will be discussed
  - The floor will be open for new questions and live discussion

OSCAL Lunch with the Developers

Purpose:

- Facilitate an open, ongoing dialog with the OSCAL developer and user communities to promote increased use of the OSCAL models

Goals:

- Provide up-to-date status of the OSCAL project development activities
- Answer questions about implementing and using the OSCAL models, and around development of OSCAL model-based content
- Review development priorities and adjust priorities based on community input
- Help the OSCAL community identify development needs

Ground Rules

- Keep the discussion respectful
  - Using welcoming and inclusive language
  - Being respectful of differing viewpoints and experiences
  - Gracefully accepting constructive criticism
  - Focusing on what is best for the community
  - Wait for one speaker to finish before speaking - one speaker at a time
- Speak from your own experience instead of generalizing ("I" instead of "they," "we," and "you").
- Do not be afraid to respectfully challenge one another by asking questions -- focus on ideas.
- The goal is not to always to agree -- it is to gain a deeper understanding.

OSCAL Version 1 Milestones

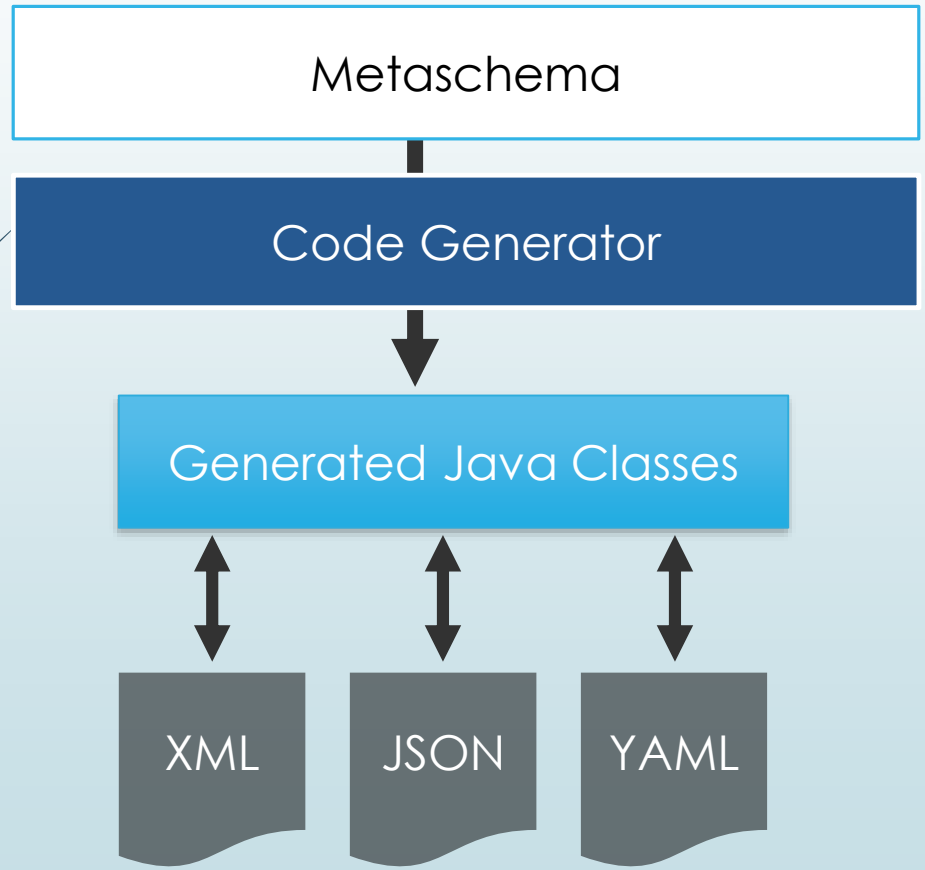
Milestone	Focus	Sprints	Status	Date
Milestone 1	Catalog and Profile Models	**1** to **21**	**Completed**	**6/15/2019**
Milestone 2	System Security Plan (SSP) Model	**6** to **23**	**Completed**	**10/1/2019**
Milestone 3	Component Definition Model	**6** to **~28**	**In Progress**	**May 2020**
Full Release	Development of a web-based specification	**24** to **~33**	**In Progress**	August 2020
Ongoing Maintenance	Minor and bugfix releases as needed	Additional Sprints	Planned	Ongoing

Current Sprint: 28 (https://github.com/usnistgov/OSCAL/projects/27)

Review of Current/Completed Work

On Github: https://github.com/usnistgov/OSCAL

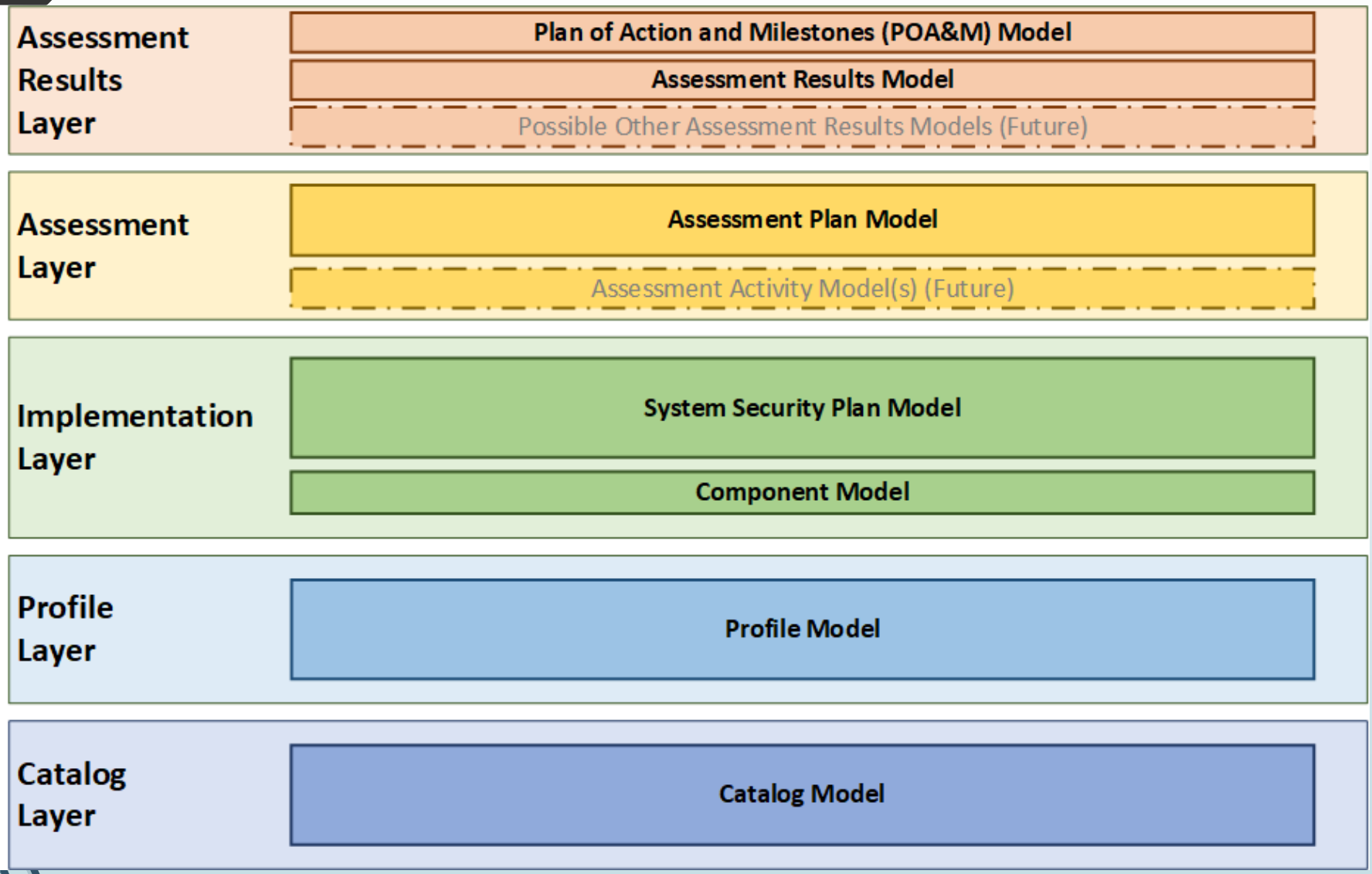
Other Development Efforts: Java Code Generation



- A tool that generates Java classes and serializers/deserializers based on a Metaschema definitions
- Generated code can read/write valid XML, JSON, and YAML content based on Metaschema generated XML and JSON schema
- Reading and writing XML, JSON and YAML now working
- Working on a Maven plugin to auto generate code
- Will be used to create an OSCAL Java library

https://github.com/usnistgov/liboscal-java

Three New OSCAL Models



POA&M

- Based on FedRAMP POA&M

Assessment Results

- Based on FedRAMP Security Assessment Report (SAR)

Assessment Plan

- Based on FedRAMP Security Assessment Plan (SAP)

Important Notes

Preliminary Draft

- Based on FedRAMP's Security Assessment Plan (SAP), Security Assessment Report (SAR), and Plan of Action and Milestones (POA&M)

Subject to Refinement

- NIST agreed to let FedRAMP accelerate these models
- They may evolve as NIST considers them more broadly as part of OSCAL 2.0

Deferred Analysis and Modeling

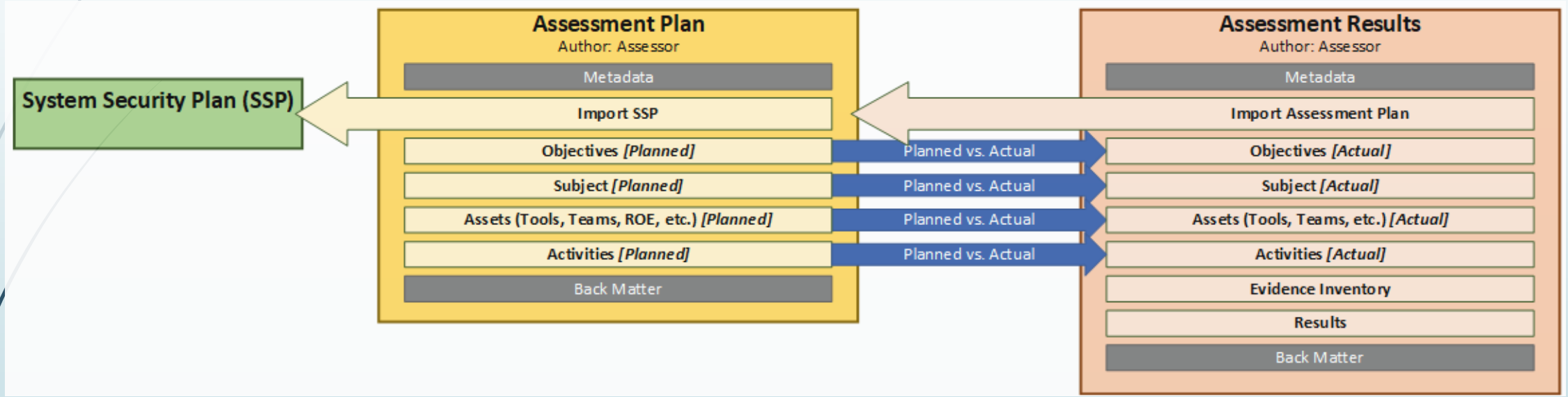
As part of OSCAL 2.0, NIST intends to focus more on the assessment layers, including:

- Assessment execution
- Assessments for other frameworks

Shared Syntax:
Assessment Plan and Assessment Results

Assessment Plan identifies what was planned

Assessment Results identifies what actually happened



Objectives: Applicable assessment objectives in catalog/profile. Can add objectives.

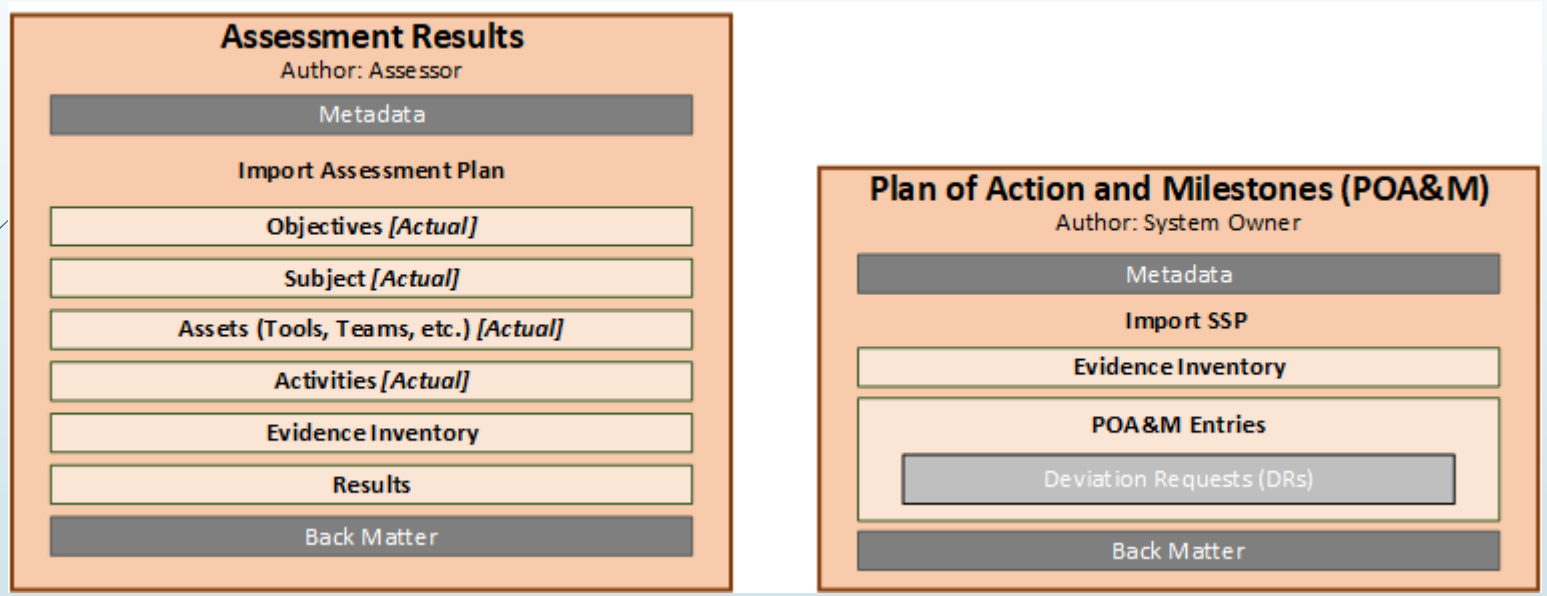
Subject: System controls, people, and components that are part of this assessment.

Assets: Assessment team and tools. Rules of Engagement (ROE).

Activities: Schedule and activities (social engineering, manual tests, etc.)

Shared Syntax:
Assessment Results and POA&M

Designed to easily move assessment results data into POA&M



Evidence Inventory: Actual evidence is either attached or referenced in Back Matter. A more detailed enumeration of provided evidence is organized here for both Assessment Results and POA&M.

Results and POA&M Entries: Same syntax addresses Test Case Workbook (TCW), Risk Exposure Table (RET), and POA&M Entries. Provides for risk deviations (operationally required, false positive, risk adjustment, and others).

Resources and Next Steps

Syntax Published

Assessment Plan: https://pages.nist.gov/OSCAL/documentation/schema/assessment-plan/

Assessment Results: https://pages.nist.gov/OSCAL/documentation/schema/assessment-results/

POA&M: https://pages.nist.gov/OSCAL/documentation/schema/poam/

FedRAMP-Specific Implementation Guidance

- To be published by FedRAMP for public comment early June
- The Guide to OSCAL-Based FedRAMP System Security Plans will be revised about the same time
- All FedRAMP-drafted guidance will be posted for public comment as it becomes available to: https://github.com/gsa/fedramp-automation

Open Floor

What would you like to discuss?

What questions do you have?

Thank you

Next Lunch with Devs:

April 23, 2020

12:00 Noon EST (5:00 PM UTC)

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

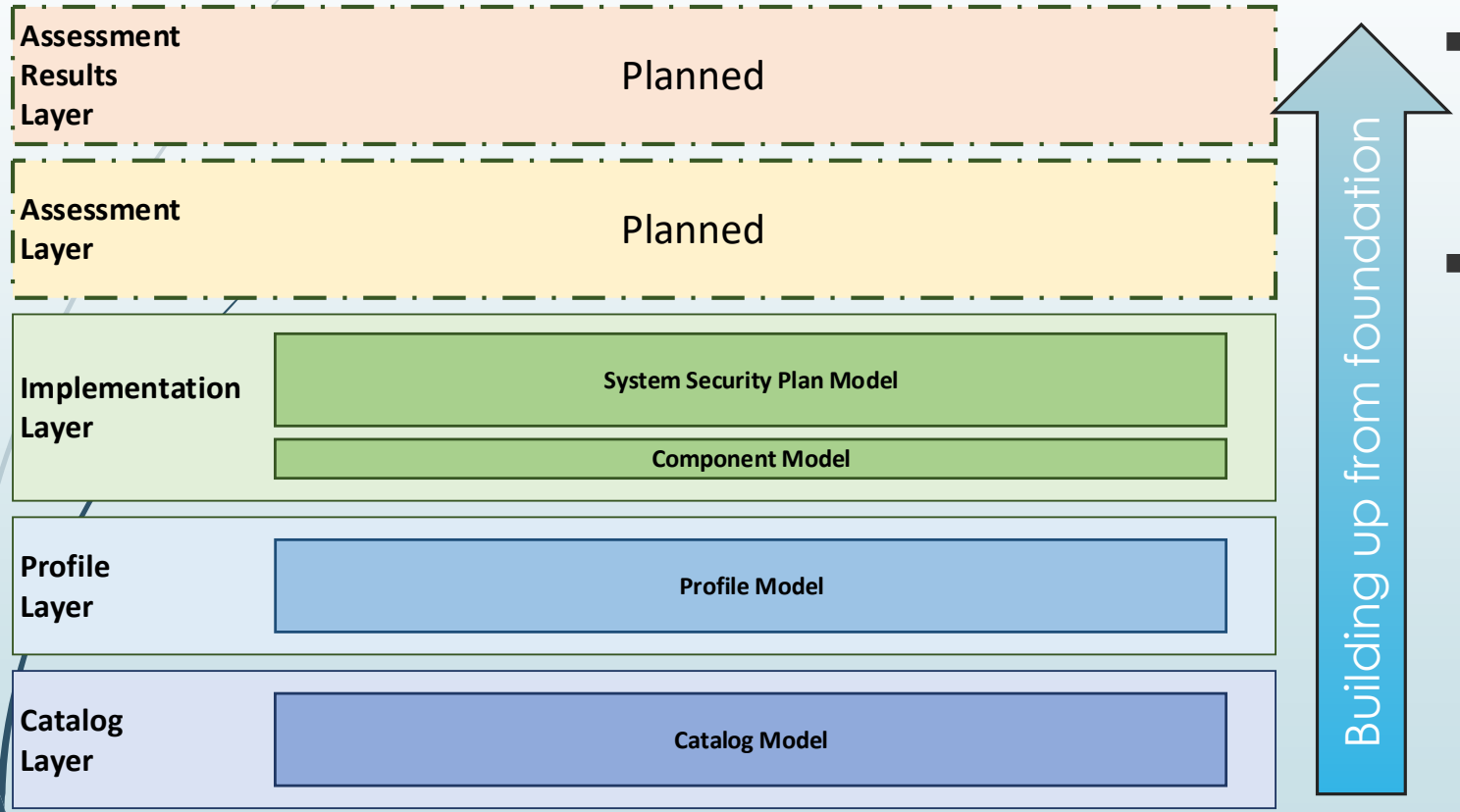
Project Website:
https://www.nist.gov/oscal

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

Contact Us: oscal@nist.gov

Backup Slides

OSCAL Layers & Models



OSCAL is architected in layers

- The lowest layer is foundational
- Each higher layer builds on layer(s) below it
- OSCAL development is following this bottom up approach
  - Allows lower layers to be used, while higher layers are developed
  - Lower layers can be enhanced based on high-layer information needs
  - Ensures that data provided in lower layers can be used to meet the information needs in higher layers