Open Security Controls Assessment Language (OSCAL)

Lunch with the OSCAL Developers

David Waltermire

National Institute of Standards and Technology

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

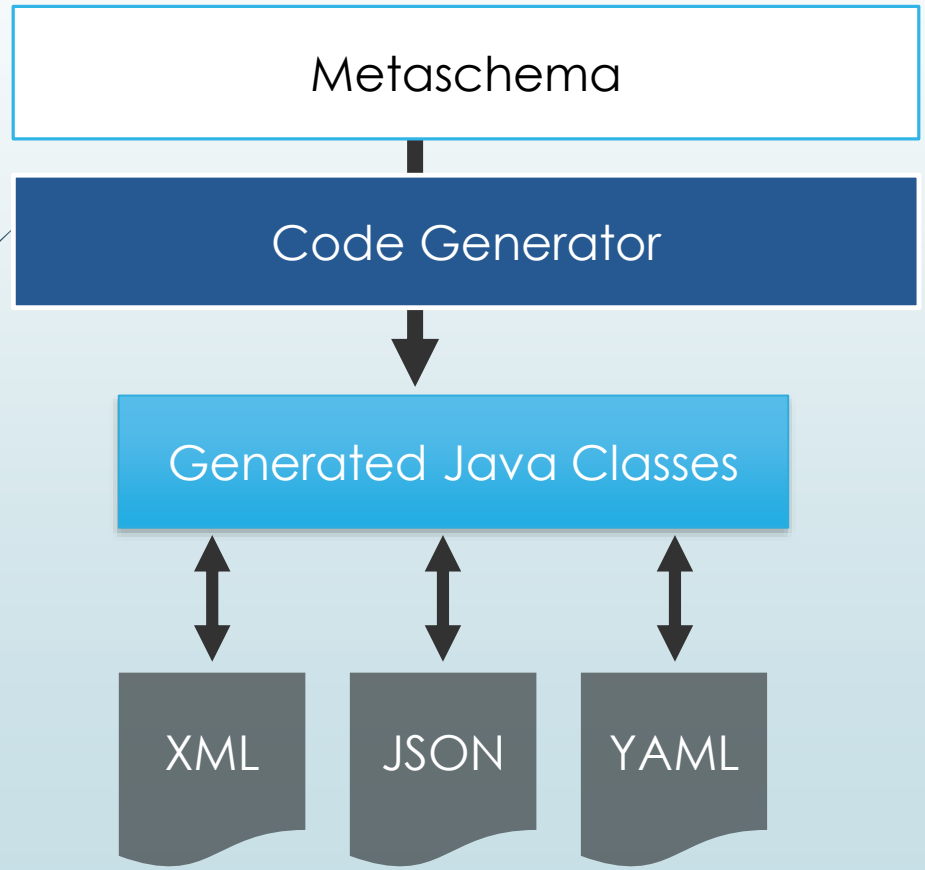
Milestone	Focus	Sprints	Status	Date
Milestone 1	Catalog and Profile Models	**1** to **21**	**Completed**	**6/15/2019**
Milestone 2	System Security Plan (SSP) Model	**6** to **23**	**Completed**	**10/1/2019**
Milestone 3	Component Definition Model	**6** to **~28**	**In Progress**	**May 2020**
Full Release	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

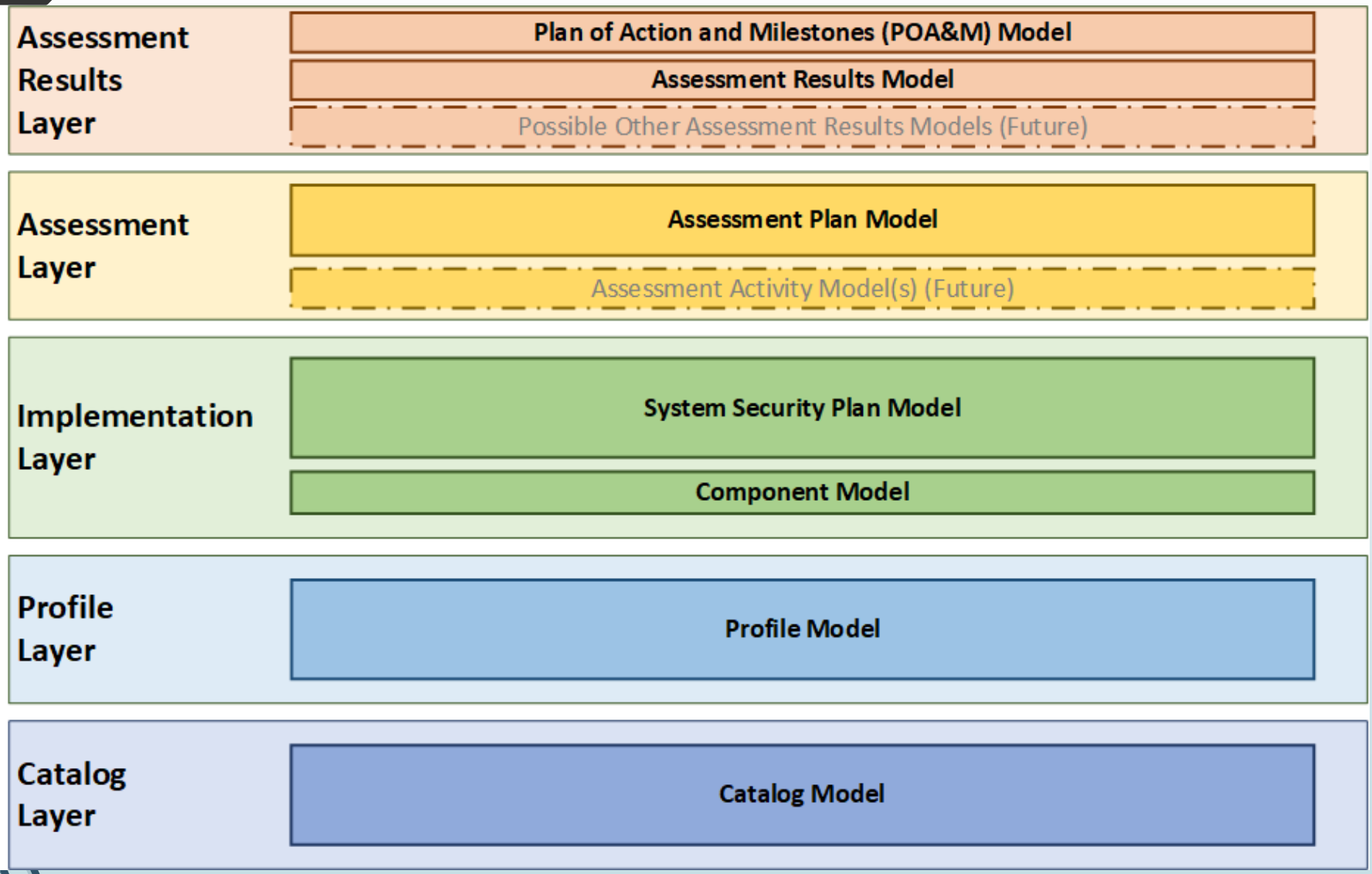
Other Development Efforts: Java Code Generation



- 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)

Help Needed

Please review pull requests and comment on issues you are interested in.

Establishing a reoccurring meeting to discuss model updates/enhancements

- Sent a Doodle poll to oscal-dev@nist.gov
- Responses indicate that Fridays @ 10AM EDT – 11AM EDT is best
- Will host this meeting every other Friday.

We will send a meeting invite out to oscal-dev@nist.gov for this meeting.

Renaming *system-security-plan*

- The root element/property/key in the System Security Plan (SSP) model is named "system-security-plan"
- Controls are not strictly limited to security topics (e.g., privacy)
- A SSP sometimes documents current system state and is not a ***plan***

Is there a better name for this element/property/key?

Possible names:

- Keep the name, since it is a well-used term
- system-implementation
- system-control(s)-implementation
- ssp?
- system-descriptor
- system

Plan of Action and Milestones (POA&M)

- Is this term used outside government?
- Should poa&m be a standard "keyword" in the OSCAL language?
- Would OSCAL use be increased using a different term?

Suggestions:

- open action?
- Milestone? (since it highlights a deadline)
- Weakness? (too general?)

Open Floor

What would you like to discuss?

What questions do you have?

Thank you

Next Lunch with Devs:

May 7, 2020

12:00 Noon EDT (4:00 PM UTC)

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

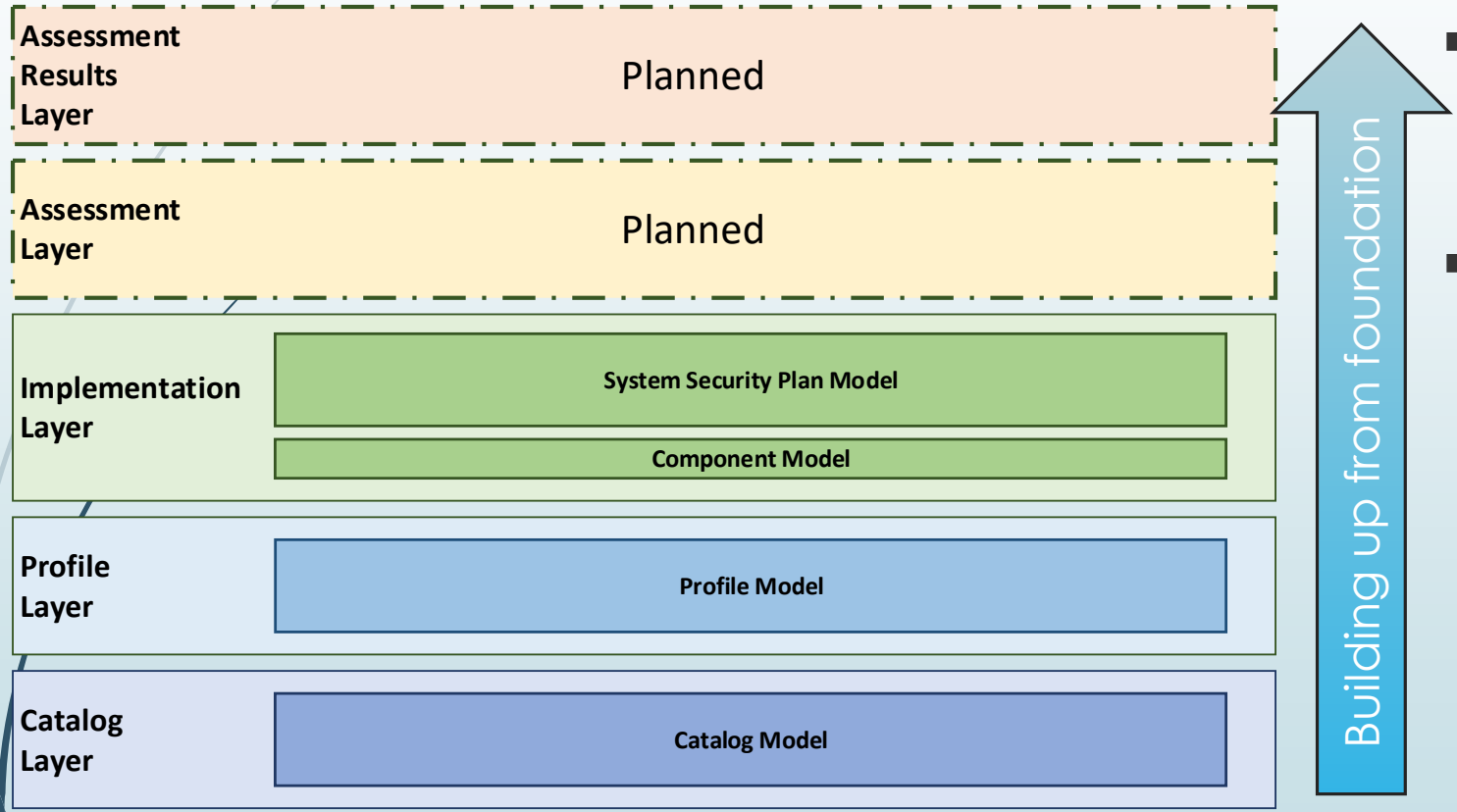
Project Website:
https://www.nist.gov/oscal

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