Parallel Track 3 - Day 2

Hosted By: **Jasson Walker**, President & CEO, *cFocus Software*

James Younger, CEO*, Blackwire Technologies*

(OSCAL Webpage)

Bring your coffee or lunch

and join us at **1:45 PM**

NIST | FedRAMP

NIST: oscal2021@nist.gov
FedRamp: info@fedramp.gov

cFocus Software Incorporated
Custom-solutions Focused. Customer Focused.

Automating an ATO for a Blockchain System Using OSCAL

2nd OSCAL Workshop
February 2, 2021

AUTOMATION

cFocus Software Incorporated
Custom-solutions Focused. Customer Focused.

Automating an ATO for a Blockchain System Using OSCAL

Welcome! Here's the Agenda:

- Introduction

- Primer on Blockchain-based Secure Software @sset Management (BLOSS@M) System

- Automating BLOSS@M ATO Process Using OSCAL

  ➢ Leveraging Blockchain Technology for RMF/FedRAMP Continuous Monitoring

- Q&A

cFocus Software Incorporated
Custom-solutions Focused. Customer Focused.

Automating an ATO for a Blockchain System Using OSCAL

Introduction

cFocus Software Incorporated
Custom-solutions Focused. Customer Focused.

Allow me to re-introduce myself, my name is...

- **Jasson Walker, Jr. CISSP, CPT, CEH, PMP, MCSE**
  - ➢ President & CEO of cFocus Software Incorporated
  - ➢ 20+ years of experience with DITSCAP/DIACAP/RMF/FedRAMP
- **cFocus Software Incorporated**
  - ➢ Established 2006 with 15+ years of federal IA & cybersecurity experience
  - ➢ Providing A&A services for multiple federal agencies (US Army, EPA, etc.)
  - ➢ https://cfocussoftware.com

2nd OSCAL Workshop
February 2, 2021

AUTOMATION

Automating an ATO for a Blockchain System Using OSCAL

cFocus Software Incorporated
Custom-solutions Focused. Customer Focused.

Allow me to re-introduce myself, my name is...

- ## James Younger, CISSP

  ➢ CEO of Blackwire Technologies

  ➢ 15+ years in support of security accreditations, compliance and system development for emerging technologies

Introducing ATO as a Service™

- ## ATO as a Service™ is a SaaS that automates RMF/FedRAMP Authorizations using OSCAL

  - ➢ Incorporates OSCAL Catalog, Profile & Implementation layers

  - ➢ Automates RMF/FedRAMP authorization activities

**2ⁿᵈ OSCAL Workshop
February 2, 2021**

cFocus Software Incorporated
Custom-solutions Focused. Customer Focused.

Automating an ATO for a Blockchain System Using OSCAL

Blockchain-based Secure Software @sset Management (BLOSS@M) Primer

2nd OSCAL Workshop
February 2, 2021

cFocus Software Incorporated
Custom-solutions Focused. Customer Focused.

BLOSS@M Primer

- BLOSS@M is a proof-of-concept application, demonstrating a federal asset management system through a permissioned Blockchain system

- It is a multi-agency system where member nodes serve as agency participants

- Allows for principles of ZeroTrust, multi-cloud deployments.

- Shared immutable ledger is ideal for multi-agency trust and transparency

cFocus Software Incorporated
Custom-solutions Focused. Customer Focused.

Automating an ATO for a Blockchain System Using OSCAL

BLOSS@M Primer - ATO

- ATO - Assess and Authorize BLOSS@M against FISMA requirements

- OSCAL - Implement OSCAL to support the ATO process and continuous monitoring requirements

- Architecture – Develop blockchain reference designs and governance models

cFocus Software Incorporated
Custom-solutions Focused. Customer Focused.

Automating an ATO for a Blockchain System Using OSCAL

Automating BLOSS@M ATO Process Using OSCAL

2nd OSCAL Workshop
February 2, 2021

cFocus Software Incorporated
Custom-solutions Focused. Customer Focused.

How do we obtain FISMA Compliance for BLOSS@M?

- Since BLOSS@M is a permissioned, interagency blockchain, participant agencies must agree on a shared trust model

- We document the trust model using reference architecture and open-source artifacts (e.g. Sovrin Governance Framework)

- Trust model reference architectures & artifacts must also be FISMA compliant

cFocus Software Incorporated
Custom-solutions Focused. Customer Focused.

How do we obtain FISMA Compliance for BLOSS@M?

- Since blockchain is shared among participant agencies, FISMA compliance data & metadata must also be shared

- OSCAL is uniquely capable of sharing FISMA compliance data & metadata

cFocus Software Incorporated
Custom-solutions Focused. Customer Focused.

Automating an ATO for a Blockchain System Using OSCAL

Leveraging Blockchain for Continuous Monitoring

2nd OSCAL Workshop
February 2, 2021

cFocus Software Incorporated
Custom-solutions Focused. Customer Focused.

Automating an ATO for a Blockchain System Using OSCAL
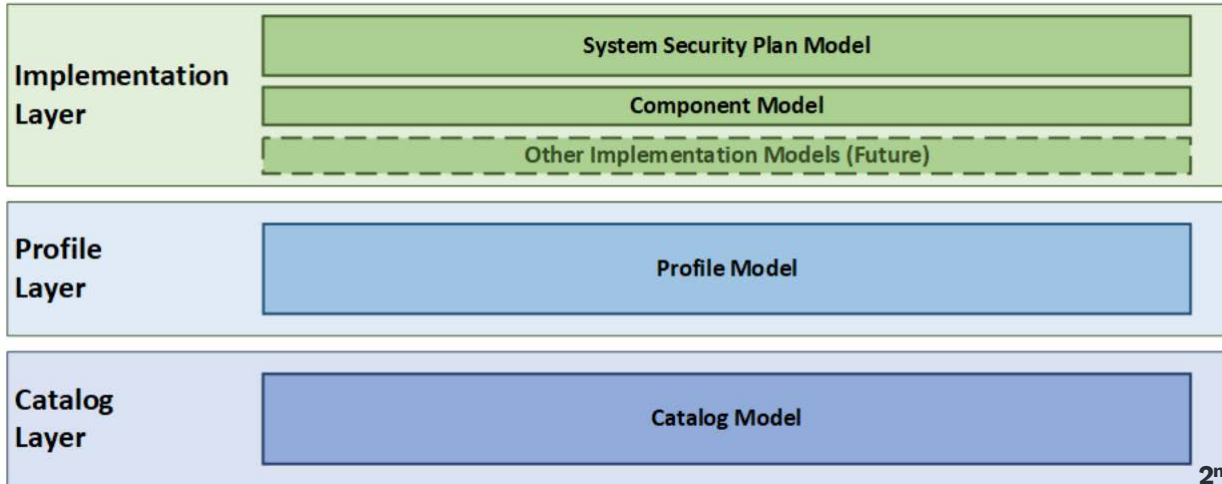
Leveraging Blockchain for RMF/FedRAMP ConMon

- A separate blockchain can be used to store the security state of a system using OSCAL data

- Through OSCAL changes to a system would automatically be updated and evaluated

- A system could then assess the security state of any member participants and allow/deny membership based on the system's status

cFocus Software Incorporated
Custom-solutions Focused. Customer Focused.

Automating an ATO for a Blockchain System Using OSCAL

How do we obtain FISMA Compliance for BLOSS@M?

- OSCAL organizes security information into a stack of layers and models that build on each other

cFocus Software Incorporated
Custom-solutions Focused. Customer Focused.

Automating an ATO for a Blockchain System Using OSCAL

How do we obtain FISMA Compliance for BLOSS@M?

- ## Each OSCAL model is represented in machine readable formats for representing & exchanging data

2nd OSCAL Workshop
February 2, 2021

cFocus Software Incorporated
Custom-solutions Focused. Customer Focused.

Automating an ATO for a Blockchain System Using OSCAL
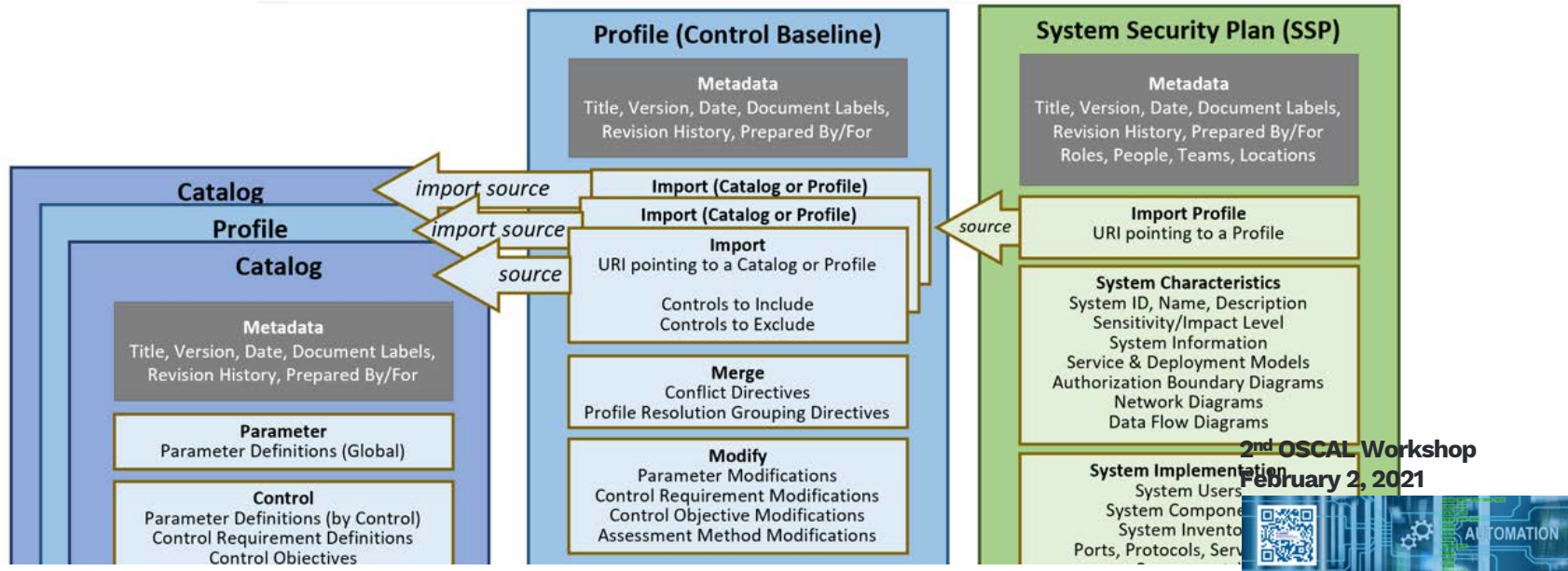
How do we obtain FISMA Compliance for BLOSS@M?

- ## RMF/FedRAMP SSPs are represented by OSCAL SSP models

```
ssp-example.json                    ✕
1   {
2     "system-security-plan": {
3       "uuid": "66c2a1c8-5830-48bd-8fdd-55a1c3a52888",
4       "metadata": {
5         "title": "Enterprise Logging and Auditing System Security Plan",
6         "last-modified": "2019-09-23T18:14:50.591Z",
7         "version": "1.0",
8         "oscal-version": "1.0.0-milestone3",
9         "roles": [
10          {
11            "id": "legal-officer",
12            "title": "Legal Officer"
13          }
14        ]
```

2nd OSCAL Workshop
February 2, 2021

AUTOMATION

How do we obtain FISMA Compliance for BLOSS@M?

- **BLOSS@M components are represented by OSCAL component definition models**

```json
{
  "component-definition":
  {
    "metadata":
    {
      "title": "Component Title",
      "last-modified": "2020-07-22T00:00:00.000-04:00",
      "version": "1.0",
      "oscal-version": "1.0.0-milestone3"
    },
  },

  "components":
  {
```

component-sample.json

cFocus Software Incorporated
Custom-solutions Focused. Customer Focused.

2ⁿᵈ OSCAL Workshop
February 2, 2021

cFocus Software Incorporated
Custom-solutions Focused. Customer Focused.

Automating an ATO for a Blockchain System Using OSCAL

How do we obtain FISMA Compliance for BLOSS@M?

- We can create OSCAL component definitions for BLOSS@M components that contain NIST SP 800-53 control responses

- Each participant agency can import shared BLOSS@M component definitions that auto-populate their SSPs, saving time and cost

cFocus Software Incorporated
Custom-solutions Focused. Customer Focused.

Automating an ATO for a Blockchain System Using OSCAL

How do we obtain FISMA Compliance for BLOSS@M?

- ATO as a Service™ automates SSP development using OSCAL SSP Implementation layer & models

- ATO as a Service enables importing OSCAL component definition data/metadata into an SSP

cFocus Software Incorporated
Custom-solutions Focused. Customer Focused.

Automating an ATO for a Blockchain System Using OSCAL

Let's see how this all works, shall we?

2nd OSCAL Workshop
February 2, 2021

cFocus Software Incorporated
Custom-solutions Focused. Customer Focused.

ATO as a Service™ Demonstration

- Let's get after it!

- For more information about ATO as a Service, go to: https://cfocussoftware.com/offer-atoaas-trial/

cFocus Software Incorporated
Custom-solutions Focused. Customer Focused.

Automating an ATO for a Blockchain System Using OSCAL

Q&A

cFocus Software Incorporated
Custom-solutions Focused. Customer Focused.

Automating an ATO for a Blockchain System Using OSCAL

Thank you! Any Questions?

- ## Let's keep in touch! Here's our contact Info:

  ➤ Jasson Walker, Jr.

  ➤ jasson.walker@cfocussoftware.com

  ➤ (301) 499-2650 office

  ➤ James Younger

  ➤ james.younger@blackwiretech.com

  ➤ (202) 629-3052

2nd OSCAL Workshop
February 2, 2021

Parallel Track 3 - Day 2

Hosted By: **Jasson Walker**, President & CEO, *cFocus Software*
James Younger, CEO*, Blackwire Technologies*

(OSCAL Webpage)

Please return to the main BlueJeans Event Platform. The next event begins at **2:30 PM**.

NIST | FedRAMP

NIST: oscal2021@nist.gov
FedRamp: info@fedramp.gov