

Technical Implementation of Assessment and Authorization (A&A) in the NISP

Student Guide

Lesson 1: Course Overview

Course Introduction and Information

Welcome to the Technical Implementation of Assessment and Authorization (A&A) in the NISP course.

The purpose of this course is to provide you with the knowledge needed to assess information systems for authorization under the National Industrial Security Program (NISP).

Scenario

Meet Monique, an Information Systems Security Manager (ISSM) at Lockhardt, Inc. Lockhardt is a new company that has recently won a new government contract. The company is geographically dispersed with several different environments. Monique has been working on preparing Lockhardt's information system for authorization under the NISP.

She has guided Lockhardt through steps 1-3 of the Assessment and Authorization process, which are (1) categorize system, (2) select security controls, and (3) implement security controls.

Now she will be using the Security Content Automation Protocol (SCAP) Compliance Checker and Security Technical Implementation Guide (STIG) Viewer to self-assess Lockhardt's system security controls so that Lockhardt will be prepared for authorization.

Course Objectives

Here are the course objectives.

- Distinguish the steps to install and properly configure the SCAP Compliance Checker and STIG Viewer
- Perform the steps used to conduct a SCAP scan to assess risks to information systems
- Identify mitigation strategies of a known vulnerability
- Identify unmitigated vulnerabilities required to be included in a Plan of Actions & Milestones (POA&M)

Lesson 2: Obtaining the SCAP Compliance Checker and STIG Viewer

Lesson Introduction

To begin a self-assessment for Lockhardt, Inc., Monique must obtain two tools: a SCAP Compliance Checker and a STIG viewer. This lesson will explain the purpose of these tools and how to obtain them.

Here are the lesson objectives:

- Identify the purpose of the SCAP Compliance Checker and how to obtain it
- Identify the purpose of the STIG Viewer and how to obtain it

Introduction to the SCAP Compliance Checker

Monique begins the self-assessment process by obtaining the SCAP Compliance Checker. The SCAP Compliance Checker is an automated vulnerability scanning tool. It leverages the Defense Information Systems Agency (DISA) Security Technical Implementation Guides (STIGS) and Operating System-specific baselines to analyze and report on the security configuration of an information system.

The SCAP Compliance Checker is not the only method of scanning for vulnerabilities. Other DoD-approved tools authorized by your command may be available.

It is important to note that administrative privileges on the machine to be scanned are required.

Installing the SCAP Compliance Checker: Method 1

The SCAP Compliance Checker may be obtained in two ways, depending on the possession of a DoD PKI token.

If you are PKI enabled, go to DISA's Information Assurance Support Environment (IASE).

Method 1

- Open an internet browser.
- Click in the address bar. Navigate to <http://iase.disa.mil/stigs/scap/Pages/index.aspx>
- Scroll to the bottom section titled "SCAP Tools."
 - You will need to know the operating system of the machine you are scanning. In this demonstration, we are using Windows 7.
- Select the appropriate SCAP Compliance Checker for your operating system from the list and provide your PKI credentials to start the download of the ZIP file.
- Enter your PIN
- Select the **OK** button
- Select the **Save** button
- Open the extracted files folder
- Select by double-clicking the setup application file

- Select the **Run** button
- Select the “I accept the agreement” radio button
- Select the **Next** button
- Select the **Next** button
- Select Components (or leave default), then select the **Next** button
- Select the “Create a desktop shortcut” check box
- Select the **Next** button
- Select the **Install** button
- Select the **Finish** button

Installing the SCAP Compliance Checker: Method 1

Method 2

If you are not PKI enabled, go to the DSS Office of the Designated Approving Authority, or ODAA, Business Management System, or OBMS, through the NISP Central Access Information Security System, or NCAISS.

<https://ncaiss.dss.mil>

- After you log in, select **OBMS Application**
- Select **Accept**
- Select **ODAA Bulletin Board**
- Scroll to **Headquarters Section**
- Select “Headquarters Bulletin Board” in the Headquarters section
- select the forum post corresponding to the operating system you are using. In this demonstration, we are using Windows.

You are now ready to download the ZIP file, unarchive, and install the application.

Knowledge Check 2.1

Answer this question.

Which of the following do you need to know before installing the SCAP Compliance Checker?

- a. The date your system was last scanned
- b. Login credentials for accessing DISA tools
- c. The operating system of the machine you’re scanning

Downloading the Baseline

Next, Monique will need to download the appropriate baseline, also known as a benchmark. The baseline is used to generate checklists used for vulnerability assessments. They are version-specific, unclassified, and non-PKI controlled.

Monique returns to the IASE DISA page where she found the SCAP Compliance Checker.

She navigates to the Microsoft Windows 7 STIG Benchmark and downloads the baseline.

- Open an internet browser
- Click in the browser address bar
- Navigate to DISA's Information Assurance Support Environment (IASE) webpage: <http://iase.disa.mil/stigs/scap/Pages/index.aspx>
- Scroll to the applicable **SCAP Content**
- In this example, we will be using the "Microsoft Windows 7 STIG Benchmark, Version 1, Release 32," which is the current baseline.
- Select the **Save as** button
- Save ZIP file to the C drive, Program Files, SCAP Compliance Checker 4.2, Resources
- Select the **Save** button

Introduction to the STIG Viewer

Monique has successfully obtained the SCAP Compliance Checker and baseline, which she will use to analyze and report on the security configuration of her information system. To view the compliance of the system's security settings, she needs another tool: the STIG Viewer.

The STIG Viewer is an unclassified, non-PKI controlled tool. It can be downloaded from DISA's IASE website. It is a Java-based application, requires no installation, and runs as a Java applet.

It is used in conjunction with the SCAP Compliance Checker scan results in order to view the compliance status of the system's security settings.

Other DoD-approved tools are available.

Downloading the STIG Viewer

To download the STIG Viewer, go to DISA's IASE webpage.

- Open an internet browser
- Click in the browser address bar
- Enter the URL as shown: <http://iase.disa.mil/stigs/Pages/stig-viewing-guidance.aspx>
- Scroll to the section titled **STIG Viewer**
- Select the most current version
- Select the **Save** button
- Extract the STIG Viewer from your Downloads folder to the Desktop

Downloading the STIGs

Next, Monique will need to download the appropriate STIGs.

STIGS are Security Technical Implementation Guides – Configuration standards based on DoD policy and security controls that contain technical guidance to “lock down” information systems and software that might otherwise be vulnerable to a malicious computer attack.

- Open an internet browser
- Click in the browser address bar
- Enter <http://iase.disa.mil/stigs/os/Pages/index.aspx>
- Select the link for your applicable operating system to access the STIGs
- In this example, we have chosen “Microsoft Windows 7 STIG – Version 1, Release 26”
- Select the **Save** button
- Extract the files from the Downloads folder to your Desktop

Your desktop is now equipped with the SCAP Compliance Checker, STIG Viewer, and STIGs.

Knowledge Check 2.2

True or False: STIG Viewers are non-PKI controlled.

True

False

Lesson 2 Review

Try this exercise:

Each of the phrases in the Word Bank below describe either the SCAP Compliance Checker, STIG Viewer, or both. Select phrases that match each term and enter them in the organizer. Two boxes will be empty.

SCAP Compliance Checker	Both	STIG Viewer

Word Bank

Java-based

Administrative privileges required

PKI controlled

Shows compliance status of an IS

Available at DISA’s IASE website

Installation not required

Analyzes and reports the security configuration of an IS

Lesson Conclusion

In this lesson, you learned about two tools essential to the self-assessment process: The SCAP Compliance Checker and the STIG Viewer. You are now ready to follow Monique as she conducts a system scan.

Lesson 2 Answer Key

Knowledge Check 2.1

Which of the following do you need to know before installing the SCAP Compliance Checker?

- a. The date your system was last scanned
- b. Login credentials for accessing DISA tools

c. The operating system of the machine you're scanning

Knowledge Check 2.2

True or False: STIG Viewers are non-PKI controlled.

True

False

Lesson 2 Review

SCAP Compliance Checker	Both	STIG Viewer
PKI controlled	Available at DISA's IASE website	Java-based
Administrative privileges required		Installation not required
Analyzes and reports the security configuration of an IS		Shows compliance status of an IS

Lesson 3: Running a SCAP Scan

Lesson Introduction

Monique will now initiate a SCAP scan. Time will vary based on network speed, but it may take about 3 minutes to run the scan. Before doing the scan, let's see how to select and save appropriate configuration settings.

Here are the lesson objectives.

- Select and save appropriate configuration settings for the SCAP Compliance Checker
- Describe the process used to run a SCAP scan and save results

Initiate a Scan

To initiate a scan, Monique opens the SCAP Compliance Checker Application.

During this lesson, you will be performing the same actions as Monique. Follow the audio cues and use your mouse to find messages in blue boxes that will help you complete the process.

She'll need to select the appropriate baseline. In her case, it is the Windows 7 Version 1 Release 32 STIG SCAP 1-1 Benchmark. Generally this file is the last one listed and has the most recent date. She will check the box to select the file, and then left click on the entry to select the Mission Assurance Category, or MAC level. Generally an ISSM should select MAC-3 Classified.

To initiate the scan, Monique selects "Analyze Selected Computer(s)." The "local computer" radio button should be selected.

- Double-click the "SCAP Compliance Checker (SCC) 4.2" shortcut icon
- Select **Edit > Content and Options**
- Select **Install SCAP Content**
- In the window that appears, navigate to the benchmark that you previously downloaded.
- Select the **Open** button
- Select the **OK** button
- Scroll to select the latest benchmark version. You'll need to select the appropriate baseline. For this demonstration, it is the Windows 7 Version 1 Release 32 STIG SCAP 1-1 Benchmark. Generally this file is the last one listed and has the most recent date. Check the box to select the file.
- Right click the Profile column to select the Mission Assurance Category, or MAC level. Generally an ISSM should select MAC-3 Classified. MAC-3_Classified is the default configuration setting for systems under the NISP.
- Select MAC-3_Classified

- Select **OK**
- To initiate the scan, the “local computer” radio button should be selected.
- Select “Analyze Selected Computer(s)” to initiate the scan.

The scan will complete after a few minutes. It will generate results in human-readable form in HTML files.

Knowledge Check 3.1

Answer this question.

Which of the following is the default configuration setting for systems under the NISP?

- MAC-1
- MAC-2
- MAC-3

View All Settings Report and Non-Compliance Report

After Monique completes the SCAP scan, she can access two different reports.

- Select the **Results** tab

To access them, she selects the Open Results Directory from the Results tab and double-clicks the folder with the most recent date.

- Select **Open Results Directory**
- Double-Click the folder with the most recent date

Next she opens the folder named SCAP and selects the largest HTML file, which is titled **All Settings Report**.

- Open the folder named SCAP
- Double-click the largest the largest size HTML file, which will be titled “All Settings Report.”

Monique reads through the report to gain familiarity of it, but the results shown in this report do not impact the scan.

- To exit, close the browser

When Monique selects the smaller HTML file, she has access to a Non-Compliance Report. This report lists open vulnerabilities.

- Double-click the smaller size HTML file, which will be titled “Non-Compliance Report”
- This is a report that shows **only** open vulnerabilities

Copy SCAP Results to Desktop

Next, we will copy SCAP results to the Desktop. In order to do this, we will copy the XCCDF file to the Desktop.

- Open the XML folder
- Right-click to open the context menu
- Select **Copy**
- Right-click the **Desktop** tree view item
- Select **Paste**
- Close browser window
- Close SCAP Compliance Checker window

The file is now copied to the desktop.

View Results in STIG Viewer

Next, Monique is ready to review the SCAP scan results in the STIG Viewer.

- Open the STIG Viewer

She opens the STIG viewer on her desktop and then selects the File tab, and then Import STIG.

- Select the **File** tab
- Select **Import STIG**

She returns to her desktop, opens the STIG folder, and selects the XCCDF file, but this is not the results she previously copied to the Desktop.

- Open the STIG folder on your desktop and select the XCCDF file. Note this is not the results file previously copied to the desktop.
- Open the STIG folder
- Select the XCCDF file
- Select **Open**

After selecting Open, she selects the imported STIG profile from the menu appearing on the left. She selects the Checklist tab and selects Create Checklist.

- Select the imported STIG profile
- Select the Checklist tab
- Select **Create Checklist**

Next she selects Import, and then XCCDF Results File. She returns to her desktop one more time and selects the Results file, and selects Open.

- Select **Import**
- Select **XCCDF Results File**
- Select the Results File you copied to the desktop

- Select the **Open** button

Now we see the results in the STIG Viewer.

Knowledge Check 3.2

Answer this question.

Where are the SCAP scan results stored in human-readable form?

- a. ZIP folder
- b. HTML file
- c. XCCDF file

Lesson 3 Review

Answer this question.

What is the purpose of initiating a SCAP scan?

- a. Assess risks to information systems
- b. Identify vulnerabilities needing remediation
- c. Preparation for assessment by an ISSP/SCA
- d. All of the above

Lesson Conclusion

In this lesson, you learned how to conduct a SCAP scan and import the results into the STIG Viewer.

You are now ready to take a closer look at the results in the STIG Viewer.

Lesson 3 Answer Key

Knowledge Check 3.1

Which of the following is the default configuration setting for systems under the NISP?

- a. MAC-1
- b. MAC-2
- c. MAC-3

Knowledge Check 3.2

Where are the SCAP scan results stored?

- a. ZIP folder
- b. HTML file
- c. XCCDF file

Lesson 3 Review

What is the purpose of initiating a SCAP scan?

- a. Assess risks to information systems
- b. Identify vulnerabilities needing remediation
- c. Preparation for assessment by an ISSP/SCA
- d. All of the above

Lesson 4: Assessing and Remediating Vulnerabilities

Lesson Introduction

Narrator: Franklin, the Facility Security Officer, or FSO, at Lockhardt, Inc., has stopped by to discuss the SCAP scan with Monique.

Franklin: How are you doing, Monique? Are you having success with the SCAP Compliance Checker?

Monique: Yes, I've gotten it to run two reports, and now I'm ready to have a look at the results in the STIG Viewer.

Franklin: The STIG Viewer?

Monique: Yes, as part of the automated approach we now have in the Risk Management Framework, or RMF, I imported the STIGs, or Security Technical Implementation Guides, specific to our system into this STIG Viewer in the form of a checklist. The STIG Viewer will now compare our settings with the checklist and identify any vulnerabilities we may need to address.

Franklin: I'd like to see the results. Could I have a look?

Monique: Sure, please join me. I'll walk you through the results in the STIG Viewer.

Narrator: The STIG Viewer will provide Lockhardt, Inc. not only with a list of vulnerabilities, but also suggestions for fixing them.

Here are the lesson objectives.

- Identify categories of vulnerabilities
- Compare scan results to the System Security Plan (SSP) to identify vulnerabilities

Results Overview

Monique: Here are the results in the STIG Viewer. We can see from looking at the pie graph and caption that there are 94 open findings, 163 findings that were closed, or not vulnerabilities, and 46 that were not reviewed.

Franklin: That looks like a lot of open findings!

Monique: Yes, but some of them may actually not be vulnerabilities. The STIG Viewer assists us in sorting through them and identifying any that need remediation. You'll also see that 46 findings were not reviewed. These are manual checks. They can't be assessed automatically and must be reviewed manually. The STIGS also cover managerial and administrative checks as well.

Franklin: What are the CAT tabs?

Monique: These are different levels of severity. Level 1 is the most severe and Level 3 is the least severe. The NISP does not require corrective actions for each of these levels, but best

industry practices recommend we mitigate CAT 1 findings first. I'll select CAT 1 and have a look at the results.

Interpreting the Results

Monique: Besides seeing the results in the pie chart, we can also see them color coded in the center column. A red O indicates Open, a green NF is Not a Finding, and a black NR is Not Reviewed. I'll select one of the open findings. It is V-3347, Internet Information Services, which means that a workstation has Internet Information Services enabled. In this case, this means that someone from outside the network may be able to access information they shouldn't.

These tabs provide valuable details related to the findings. There is a Discussion tab that helps us understand the potential vulnerability exploit. In this case, it is telling us that having IIS enabled on a system may allow unauthorized services to be hosted on a workstation, instead of authorized services on a properly configured server.

- Select the **Check Content** tab

Next there is a Check Content tab to show us if the system is properly configured. The description here will tell us if we may need to change the registry, add a registry key, or modify the registry hive. In this case, we'll need to review the installed services or registry settings.

- Select the **Fix Text** tab

And here is likely the most valuable tab, the Fix Text tab. It provides guidance in how to resolve the issue. As you can see, we'll need to remove Internet Information Services to close the vulnerability.

- Select the **CCI** tab

In addition, the CCI tab identifies Control Correlation Identifiers in the NIST SP 800-53, and the Misc. tab (not shown in this example) lists Information Assurance controls.

Knowledge Check 4.1

Answer this question.

Which findings are most severe?

- a. CAT 1
- b. CAT 2
- c. CAT 3

Analyzing Open Findings

Franklin: It's great to see there are fixes for our open findings. Looks like you will be working on mitigating these for the next few days.

Monique: Yes, I may have some work to do, but some of the findings that are categorized as open may be false positives. For example, this finding, V-26359, requiring a warning banner when logging in, is categorized as open. However, because the specialized system doesn't have user interface, as cited in our System Security Plan, or SSP, I know this finding does not require a control.

Franklin: I see. The SCAP Compliance Checker is a powerful tool, but your knowledge as an ISSM is needed to truly determine the criticality of these findings.

Knowledge Check 4.2

True or False?

The SCAP Compliance Checker is the best determiner of the criticality of an open finding.

True

False

Lesson 4 Review

Answer this question.

Do all open results from the SCAP scan require controls?

- a. Yes, and these are listed in the "Fix Text" tab of the STIG Viewer
- b. No, and the ISSM can reference the SSP for guidance on findings requiring controls

Lesson 4 Conclusion

In this lesson, you learned how to interpret the results provided in the STIG Viewer by identifying categories of vulnerabilities and comparing the results to the System Security Plan. In the next lesson, we will discuss how to document vulnerabilities that need corrective actions before they can be resolved.

Answer Key**Knowledge Check 4.1**

Which findings are most severe?

- a. CAT 1
- b. CAT 2
- c. CAT 3

Knowledge Check 4.2

The SCAP Compliance Checker is the best determiner of the criticality of an open finding.

- a. True
- b. False

The ISSM is the best determiner of the criticality of an open finding.

Lesson 4 Review

Do all open results from the SCAP scan require controls?

- a. Yes, and these are listed in the “Fix Text” tab of the STIG Viewer
- b. No, and the ISSM can reference the SSP for guidance on findings requiring controls

Not all open results require controls. Some open results may be false positives or require manual checks.

Lesson 5: Documenting Vulnerabilities

Lesson Introduction

During Monique's evaluation of the SCAP Compliance Checker results, she identified some vulnerabilities needing corrective actions. As part a of the self-inspection process, she is required to document these vulnerabilities in a Plan of Action and Milestones, or POA&M. This lesson will further explain the purpose of the POA&M and how to use it.

Here are the lesson objectives.

- Identify the purpose of a POA&M
- Describe details expected to be included in a POA&M
- Explain the procedure for using a POA&M, including who creates the plan, compiles results in a SSP, and who monitors the plan

Pretest your Knowledge

How much do you already know about POA&Ms? Answer this question to test your knowledge.

Which of the following describe the purpose of the POA&M? Select ALL correct choices.

- a. The POA&M is a report prioritizing corrective actions.
- b. POA&Ms are submitted early in the RMF process to inform the Authorizing Official (AO) of vulnerabilities.
- c. The POA&M is used to monitor progress on mitigating vulnerabilities
- d. The POA&M is maintained as part of the Security Authorization Package
- e. POA&Ms are updated approximately once per year.

Pretest Answer

Which of the following describe the purpose of the POA&M? Select ALL correct choices.

- a. The POA&M is a report prioritizing corrective actions.
- b. POA&Ms are submitted early in the RMF process to inform the Authorizing Official (AO) of vulnerabilities.
- c. The POA&M is used to monitor progress on mitigating vulnerabilities
- d. The POA&M is maintained as part of the Security Authorization Package
- e. POA&Ms are updated approximately once per year.

Feedback: POA&Ms are not submitted early in the RMF process to inform the Authorizing Official (AO) of vulnerabilities. Instead they are used by the AO to monitor progress in correcting weaknesses. POA&Ms are living documents that are maintained throughout the system lifecycle.

Purpose of the POA&M

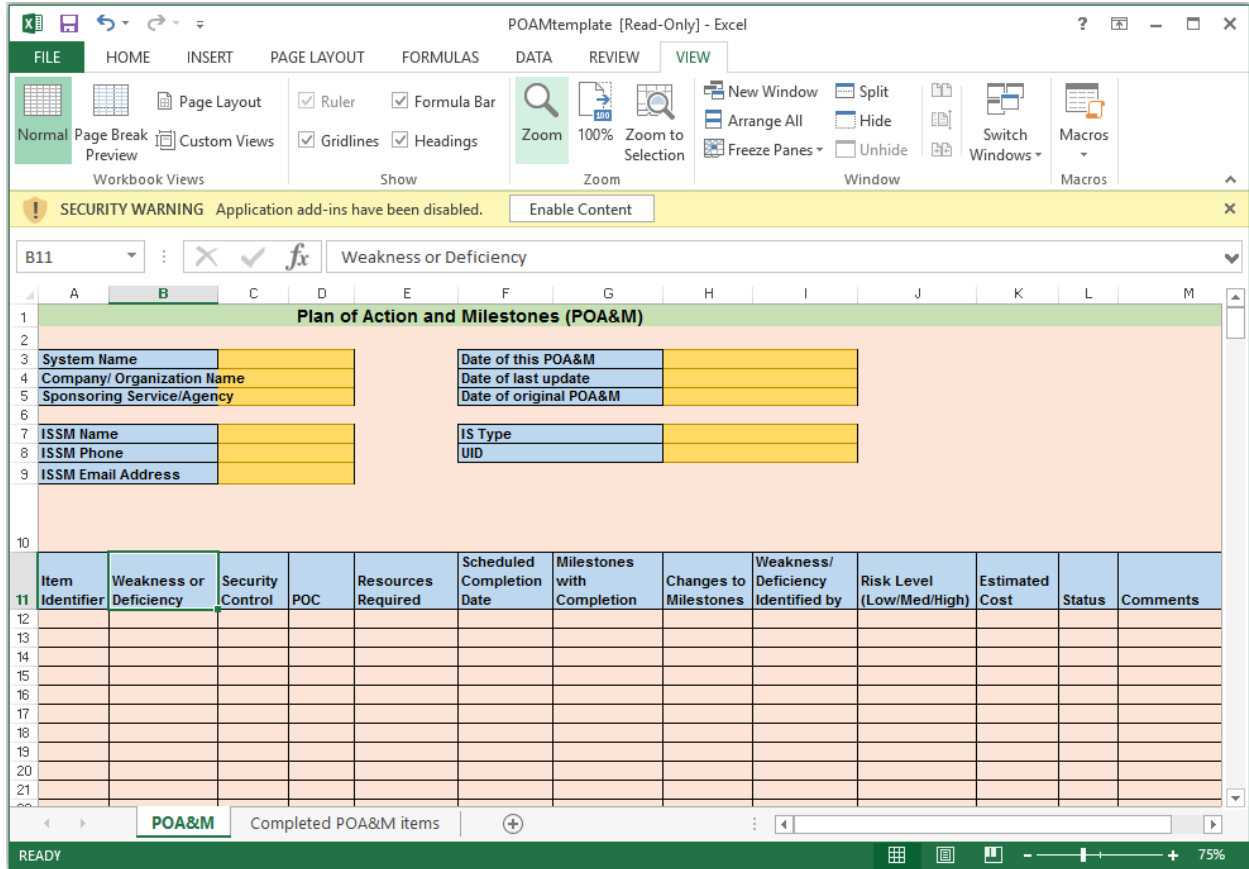
How did you do? As you may have already known or just learned, one of the most important purposes of a POA&M is to monitor the progress of correcting security vulnerabilities. To achieve this purpose, the POA&M is a living document that is maintained throughout the system life cycle. It is used by the ISSM to monitor progress in correcting weaknesses and is maintained as a part of the Security Authorization Package, which is formerly known as the Certification and Accreditation, or C&A, package. POA&Ms are required for a system undergoing recertification, third party inspection, or self-inspection.

Unmitigated Vulnerabilities to be Included in the POA&M

Listings in the POA&M should be unmitigated vulnerabilities. Examples include an outdated patch, an incorrect version of Java, or a misconfigured security setting. Until these listings are mitigated, their status is recorded in the open findings section of the POA&M and continuously monitored.

How to Use a POA&M Template

Monique will be using a template to assist her in creating a POA&M.



Let’s walk through this template. First you’ll see that there are two tabs. One lists the active items and the other lists completed items. When vulnerabilities have been mitigated, they are moved to the “Completed” tab.

In the top block, you’ll find space to list system specific, or organization specific, information. You’ll see in the last block, IS type, you could select enclave type. For UID, unique identifier, this is a number unique to your organization, your organization’s schema, or naming system.

Next, there are several column headers.

Item Identifier: Identification of a unique weakness that is used to track and correlate the weaknesses that are ongoing throughout the quarterly submissions within the organization. The numbering scheme is determined by your organization.

Weakness or Deficiency: This represents any program level or system level deficiency that poses an unacceptable risk of compromise in confidentiality, integrity, or availability to the system.

Security Control: Here you can list the security control from NIST Special Publication 800-53 and directly relate to the weakness identified in the weakness or deficiency column. Enter the security control that correlates with the weakness or deficiency.

POC: Enter the title of a position within the organization that is responsible for mitigating the weakness.

Resources Required: Include the total funding requirements of the security solution. Also note if the resources are current, new, or re-allocated.

Scheduled Completion Date: Enter a date based on a realistic estimate of the amount of time needed to procure and allocate the resources required for corrective action. Enter either the estimated completion date or NA if the risk is going to be accepted. Never change this date. If the security weakness is resolved before or after the scheduled completion date, enter the actual completion date in the status field.

Milestones with Completion Dates: Enter specific high level steps to be executed in mitigating the weaknesses and the estimated completion date for each step.

Changes to Milestones: Enter new estimated completion dates for milestones and the reason for the change. Indicate the new estimated date for the milestone completion if the original date is not met, and indicate the reason for the change.

Weakness/Deficiency Identified by: List the source of the weakness plus the reviewing agency, the organization, and the date that the weakness was identified.

Risk Level (Low/Med/High): List risk level by high, medium, or low. High risk means that there is risk of a catastrophic effect on the system or operations. Medium means there is a severe adverse risk to system or operations, and low means that there is risk of limited adverse effect to the system or operations.

Estimated Cost: Enter the total estimated cost, which may include man hours, by adding up the individual estimated costs of correcting each weakness or deficiency.

Status: Note the state of the weakness: completed, ongoing, delayed, planned, or accepted.

Comments: Enter explanations for a delay or change in a milestone or a scheduled completion date, or identify obstacles or challenges that are non-funding related, such as lack of personnel or expertise related to that personnel.

Using a POA&M Template

As an example, let's look at the [open](#) finding V-3347, Internet Information [System](#), or IIS.

[The Discussion](#) tab states that IIS may allow unauthorized internet services to be hosted, which would be a significant risk.

This has appeared as an open finding because Lockhardt, Inc. is using a workstation to host some web content, but because of the criticality of the web-accessible information, the data must be transferred to a dedicated server prior to removing the service.

This is how Monique can enter her mitigation plan into the POA&M:

Monique will enter FY18_001 as an item identifier, which is consistent with the schema defined by the organization. This will allow the organization to track and correlate weaknesses consistently.

[The weakness or deficiency in this case is that IIS is installed on a workstation as cited in the Discussions](#) tab.

The Relevant security control is CM-7, which is the security control defined in NIST SP 800-53 that is impacted by this vulnerability.

The POC is an IT staff member.

Monique estimates 40 hours are needed for the fix and \$465 in new hardware costs.

Monique estimates the work will be completed in 30 days. Today is March first, so she enters March 30.

Monique estimates three milestones. She expects to procure the hardware by March 15, remove all sensitive information from the system by March 22, and commission data to the server by March 30.

At this stage, there aren't any changes to milestones, so Monique enters N/A for Not Applicable.

The weakness was identified during Monique's SCAP scan on March 1, and it is a high risk.

The estimated cost for the new hardware and new workstation is \$1,015.

The status is planned.

Monique adds in the comments that the impacted workstation will be moved to the Demilitarized Zone (DMZ) and any sensitive information will be removed from the system.

[Recommend downgrading risk level after move is complete.](#)



Item Identifier	Weakness or Deficiency	Security Control	POC	Resources Required	Scheduled Completion Date
FY18_001	IIS is installed on a workstation	CM-7	Helen in the IT department	40 hours, \$465 new hardware, \$550 new workstation for the impacted user	March 30

Milestones with Completion Dates	Changes to Milestones	Weakness/ Deficiency Identified by	Risk Level (Low/Med/High)	Estimated Cost	Status	Comments
Milestone 1: Procure hardware and workstation by March 15. Milestone 2: Remove all sensitive information from the system by March 22. Milestone 3: Commission data to the server by March 30.	N/A	SCAP scan on March 1	High	\$1015	Planned	The impacted workstation will be moved to the DMZ and any sensitive information will be removed from the system. Recommend downgrading risk level after move is complete.

Activity: Using a POA&M Template

Now it's your turn. Given this scenario, what would you enter in your company's POA&M?

Based on the results of the SCAP scan, there is an open vulnerability of V-14236: UAC - User Elevation Prompt. The User Account Control is not currently enabled and does not prompt the user for credentials when requiring elevation. This is due to legacy software that is pending update.

In this activity, three options are provided as POA&M entries. Select the best entry and drag it to the highlighted column, and select Select Show Scenario to review.

Select Continue to complete the POA&M.

In this activity, we will examine each column of the POA&M. Where appropriate, information is provided, as you see here. We can see the item identifier is FY18_002.

Within other columns, three options are provided as POA&M entries. Select the best entry and drag it to the highlighted column. To reference the Scenario, select Show Scenario. Select Submit when finished.

Choose the best selection from the lists below.

Weakness or Deficiency

1. UAC is enabled on a workstation
2. UAC is not enabled on a workstation
3. UAC is out of date and requires update

Security Control

1. IA-11
2. NIST 800-53
3. Uninstall IIS

POC

1. NIST
2. Microsoft
3. IT Department

Resources Required

1. IIS
2. Software license costs
3. Increased Funding

Risk Level (Low/Med/High)

1. Low
2. Med
3. High

Status

1. Completed
2. Delayed
3. Planned

FAQs: Using and Monitoring the POA&M

Franklin: Monique, can you tell me more about the POA&M you're creating?

Monique: Sure, Franklin. As an ISSM, my role is to create the POA&M as part of the SSP. I use the POA&M to communicate issues we cannot resolve to the ISSP/SCA. The ISSP/SCA will evaluate the POA&M and determine next steps. I'll monitor it as we take steps to mitigate our vulnerabilities.

Franklin: Do you create the POA&M on your own, or do you need input from others?

Monique: I work with the ISO, PM, or SM to enter some information into the POA&M such as noncompliant security controls, controls that are not applicable, remediation tasks, required resources, milestones and completion dates, and inherited vulnerabilities. The ISO, PM, or SM will initiate corrective actions.

Franklin: Will the ISSP/SCA approve the POA&M?

Monique: No, as part of the RMF process, ultimately, the Authorizing Official, or AO, approves or rejects elements of the POA&M.

Franklin: Thank you, Monique. This is much clearer to me now.

Knowledge Check 5.1

In the table below, each position is not aligned with the correct POA&M responsibility. Draw a line from each position to the correct POA&M responsibility.

Position	POA&M Responsibility
ISSM	Approves or rejects
ISSP/SCA	Initiates corrective actions
AO	Evaluates vulnerabilities
ISO or PM/SM	Monitors progress

Knowledge Check 5.2

Answer this question.

What is the purpose of a POA&M?

- Document the RMF process
- Monitor progress in mitigating vulnerabilities
- Communicate vulnerabilities to the FSO

Lesson Conclusion

In this lesson, you learned the ISSM’s responsibilities for creating and monitoring a POA&M, the end product of the SCAP scan and STIG comparison. This living document will aid you in mitigating your vulnerabilities and documenting them for the AO.

Lesson 5 Answer Key

Activity: Using a POA&M Template

Now it’s your turn. Given this scenario, what would you enter in your company’s POA&M?

Based on the results of the SCAP scan, there is an open vulnerability of V-14236: UAC - User Elevation Prompt. The User Account Control is not currently enabled and does not prompt the user for credentials when requiring elevation. This is due to legacy software that is pending update.

Weakness or Deficiency

- UAC is enabled on a workstation
- UAC is not enabled on a workstation
- UAC is out of date and requires update

Security Control

1. IA-11

2. NIST 800-53

3. Uninstall IIS

POC

1. NIST

2. Microsoft

3. IT Department

Resources Required

1. IIS

2. Software license costs

3. Increased Funding

Risk Level (Low/Med/High)

1. Low

2. Med

3. High

Any answer is correct

Status

1. Completed

2. Delayed

3. Planned

Knowledge Check 5.1

Position	POA&M Responsibility
ISSM	Approves or rejects
ISSP/SCA	Initiates corrective actions
AO	Evaluates vulnerabilities
ISO or PM/SM	Monitors progress

Knowledge Check 5.2

What is the purpose of a POA&M?

- a. Document the RMF process
- b. Monitor progress in mitigating vulnerabilities
- c. Communicate vulnerabilities to the FSO

Course Review

This course provided you with instruction needed to use the SCAP Compliance Checker and STIG Viewer to identify vulnerabilities and document unmitigated vulnerabilities on a POA&M. If you are an ISSM like Monique, you now have more tools to prepare for authorization.

Here are the course objectives.

- Distinguish the steps to install and properly configure the SCAP Compliance Checker and STIG Viewer
- Perform the steps used to conduct a SCAP scan to assess risks to information systems
- Identify mitigation strategies of a known vulnerability
- Identify unmitigated vulnerabilities required to be included in a Plan of Actions & Milestones (POA&M)

Ready to test your knowledge? Start the exam by selecting the exam link.