

Right-Sizing NIST IT Assessments: Better Scoping, Focused Effort **2025 Cybersecurity Virtual Symposium**



Meet Your Presenters



Ben SadyPrincipal



Mareena Bowen

Manager



Purpose & Learning Objectives

Discover how to make NIST IT assessments smarter, faster, and more focused. This session will show you how to use a risk-based approach to streamline NIST assessment scope, reduce audit fatigue, and zero in on what really matters, without sacrificing compliance

Learning Objectives



Understand how to apply a risk-based methodology to scope NIST-based IT assessments, beginning with data and system inventories and CIA impact assessments.



Learn how to identify and justify the exclusion of non-risk-aligned controls or non-system-specific controls from audit scope without compromising compliance or security.



Learn practical strategies for aligning assessment scope with system risk profiles and improving collaboration between auditors and internal technology teams.



Overview of Common NIST Assessments



NIST 800-53

Purpose

Baseline framework for security controls for federal information systems and organizations.

Scope

20 control families

Total Requirements / Controls

1,000+ controls (including enhancements)



NIST CSF

Purpose

Risk-based framework for managing cybersecurity risk.

Scope

6 core functions (Govern, Identify, Protect, Detect, Respond, Recover), 23 categories

Total Requirements / Controls

100+ controls



NIST 800-171

Purpose

Safeguards for CUI in non-federal systems (e.g., defense contractors).

Scope

17 control families

Total Requirements / Controls

100+ controls



NIST 800-161

Purpose

Guidance for managing cybersecurity risks in the supply chain.

Scope

20 control families

Total Requirements / Controls

150+ controls

NIST 800-37 Risk Management Framework: overarching risk management process and framework



Adoption of NIST 800-53 Frameworks



NIST 800-53

The primary standard for federal information system security controls, but its influence extends far beyond federal agencies.



Many U.S. States

Adopted NIST 800-53 as the foundation for their own cybersecurity standards for agencies, service providers, and critical infrastructure.



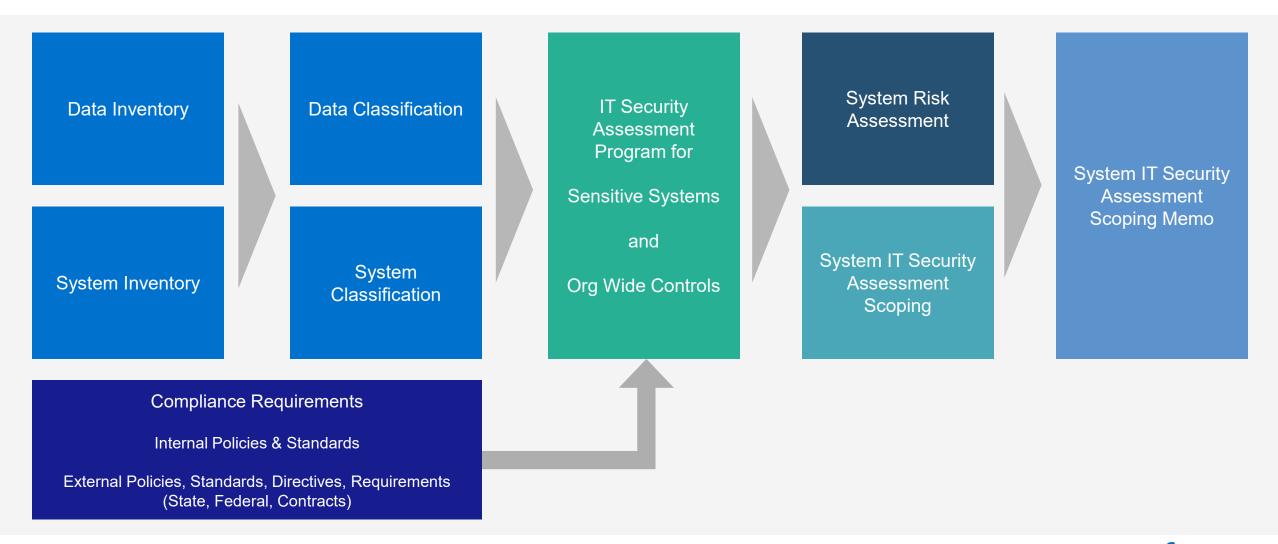
Customization

States often tailor the baseline controls to fit state-specific laws, risk profiles, and operational needs.



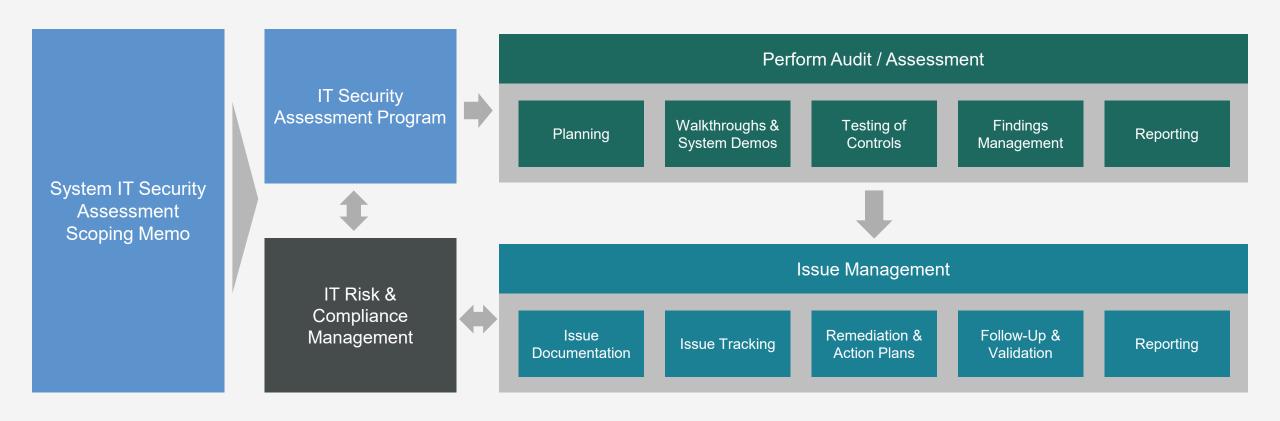


The Big Picture – How This Fits





The Big Picture – How This Fits (continued)



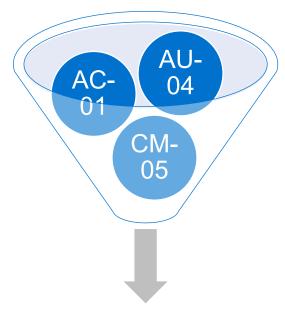


Challenges With NIST Assessments

Challenges

- 1. Too many controls
- 2. Takes too long
- 3. Workforce constraints
- 4. Funding constraints
- 5. Spend same amount of time on low-risk controls as the high-risk controls
- 6. Not tailored to each individual system's business function and risk
- 7. Not producing enough value or focusing on the right risks
- 8. Reduces time available to spend on other IT risk and compliance needs

Total Controls



Test a control set that is System Specific and Risk-Based

Use automation and GRC tools when possible

Desired Outcomes

- 1. Right-sized control set
- 2. Improved audit and time management
- 3. Less strain on workforce
- 4. Funding is better utilized
- 5. Focus energy on high-risk controls
- 6. Tailored to each individual system's business function and risk
- 7. Produce better value and risk management
- 8. Free up time to spend on other IT risk and compliance needs



Right-Sizing

What Does "Right-Sizing" Mean?



Tailoring the scope and depth of NIST assessments to match the actual risk and business function of each system.



Focuses effort where it matters most: on high-risk areas and critical controls.



Avoids "one-size-fits-all" audits that waste time and resources on out of scope and low-risk controls.

What Does Success Look Like?



Improved Value

Assessments deliver actionable insights and meaningful risk reduction.



Greater Focus

Audit teams concentrate on the most important controls and threats.



Efficiency

Less audit fatigue, better use of resources, and faster completion.

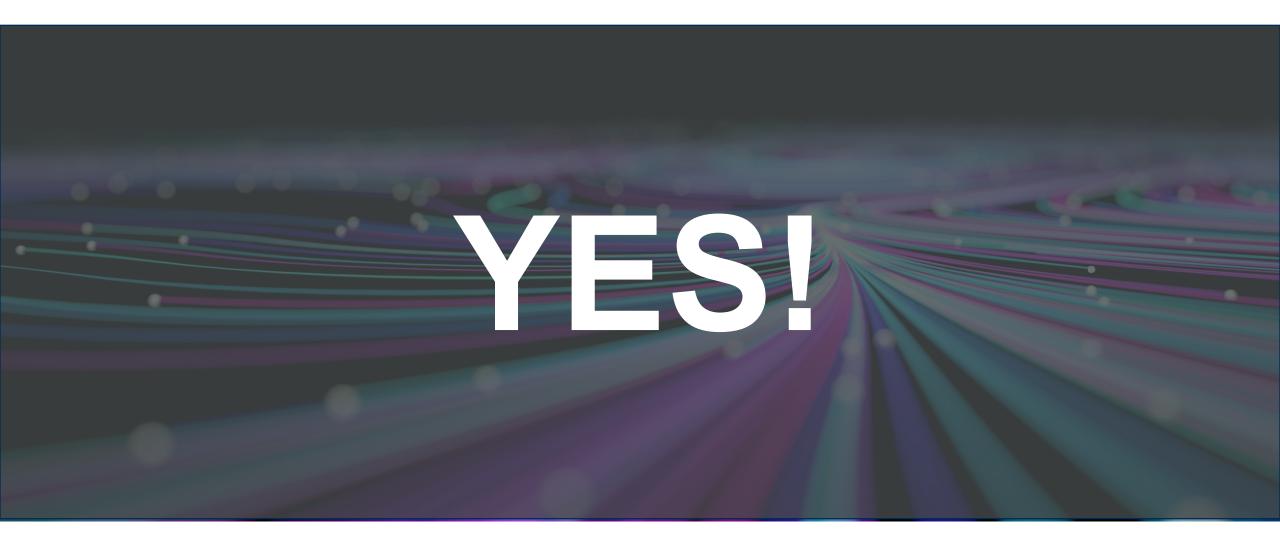


Compliance Maintained

No sacrifice in meeting regulatory or contractual requirements.



Is a Risk-Based Approach Allowed?





NIST Citations

NIST 800-37 (citations)

Section 2.2 (Risk Management Framework Steps and Structure):

"Flexibility of implementation can also be applied to control selection, control tailoring to meet organizational security and privacy needs."

"The implementation of control tailoring helps to ensure that security and privacy solutions are customized for the specific missions, business functions, risks, and operating environments of the organization."

NIST CSF (citations)

Preface:

"The CSF describes desired outcomes that are intended to be understood by a broad audience, including executives, managers, and practitioners, regardless of their cybersecurity expertise. Because these outcomes are sector-, country-, and technology-neutral, they provide an organization with the flexibility needed to address their unique risks, technologies, and mission considerations."

NIST 800-53 (citations)

Section 1.1 (Purpose and Applicability):

"The control selection criteria can be guided and informed by many factors, including mission and business needs, stakeholder protection needs, threats, vulnerabilities, and requirements to comply with federal laws, executive orders, directives, regulations, policies, standards, and guidelines."

Section 2.4 (Security and Privacy Controls):

"The selection and implementation of security and privacy controls reflect the objectives of information security and privacy programs and how those programs manage their respective risks."





NIST Citations (Continued)

NIST 800-171 (citations)

Section 2.2 (Security Requirement Development Methodology):

"Organization-defined parameters (ODPs) are included in certain security requirements. ODPs provide flexibility through the use of assignment and selection operations to allow federal agencies and nonfederal organizations to specify values for the designated parameters in the requirements. Assignment and selection operations provide the capability to customize the security requirements based on specific protection needs. The determination of ODP values can be guided and informed by laws, Executive Orders, directives, regulations, policies, standards, guidance, or mission and business needs."

Section 3 (The Security Requirements):

"Some systems, including specialized systems (*e.g.*, industrial/process control systems, medical devices, computer numerical control machines), may have limitations on the application of certain security requirements."

NIST 800-161 (citations)

Section 1.1 (Purpose and Applicability):

"The control selection criteria can be guided and informed by many factors, including mission and business needs, stakeholder protection needs, threats, vulnerabilities, and requirements to comply with federal laws, executive orders, directives, regulations, policies, standards, and guidelines."

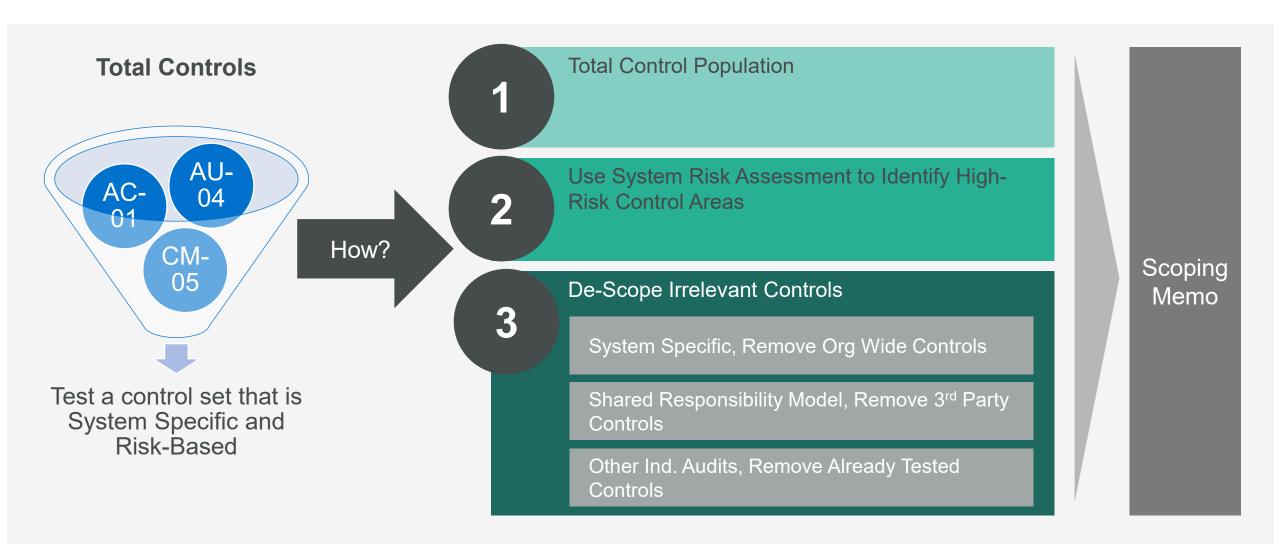
Section 2.4 (Security and Privacy Controls):

"The selection and implementation of security and privacy controls reflect the objectives of information security and privacy programs and how those programs manage their respective risks."





How to Right-Size Control Scoping





How to Right-Size Control Scoping (continued)

Use System Risk Assessment for Scoping

Use the system risk assessment to identify the highest risk and most valuable areas for IT assessment test steps to assess best practices and compliance. De-scope the other areas and controls.

System Specific Details & Controls

Identify only those controls that are relevant to the system. Descope the controls that are Organization-wide and not system specific.

Understand 3rd Parties & Shared Responsibility Model

Identify where the Organizations is responsible for security vs. 3rd parties' contractual obligations, *e.g.*, Shared IT, Colocation, Cloud, SaaS, etc. De-scope the 3rd party responsible controls.

Understand Other Independent Audit Reports

Identify where we can potentially rely on the work of External Auditor, Internal Controls, Internal Audit, OIG, Federal Audits, SOC Reports, etc. De-scope any controls that have already been tested.

Scoping Memo



Example Scoping Memo

System Name: XYZ System

SCOPING DETAILS

System Purpose: Managed inventory of XYZ cases. Users (internal and external) can log in and make updates.

Implementation Date: XXXX Planned Retirement Date: XXXX

System Technical Details: Web-based system. Custom developed by 3rd party. Hosted by XX. Microsoft SQL Server DB.

System Risk Assessment Summary: Confidential data should be secured from tampering at DB and by application access rights. Concerns with user access management. Concerns with audit logging. System availability has not been 100% due to aging custom developed code. No external Federal regulations were found to be applicable. Would like to make sure system security plan has been updated recently. Concerned with failover and recoverability controls if custom code issues arise.

Third Party Responsibilities: XX is responsible for hosting servers, patching servers, and physical security of servers. 3rd party development company is responsible for making custom code updates when needed.

Independent Audit Reports Available: External Financial Auditor audited the password controls and internal user access approval/removal process in past 12 months.

SCOPING DECISIONS

High Risk Focus Areas: Web-based application security testing. Secure coding techniques. IAM periodic reviews and architecture.

Customer IAM – access management. DB security and performance management. Audit logging. Change management.

Moderate Risk Focus Areas: Incident management & recovery. Vendor management. System security plan.



Example Scoping Memo (continued)

FINAL SCOPING

Based on the scoping details and decisions documented above and in workpaper XX, we have identified ## controls that are in-scope for this System IT Security Audit. The detailed scoping spreadsheet at workpaper XX includes full analysis of in-scope and de-scoped controls.

In-Scope Controls:

- XXXXX

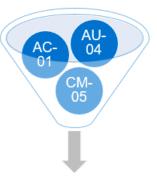


Scoping – Results

Challenges

- 1. Too many controls
- 2. Takes too long
- 3 Workforce constraints
- 4. Funding constraints
- 5. Spend same amount of time on low-risk controls as the high-risk controls
- Not tailored to each individual system's business function and risk
- 7. Not producing enough value or focusing on the right risks
- 8. Reduces time available to spend on other IT risk and compliance needs

Total Controls



Test a control set that is System Specific and Risk Based

Use automation and GRC tools when possible

Desired Outcomes

- 1. Right sized control set
- 2. Improved audit and time management
- 3. Less strain on workforce
- 4. Funding is better utilized
- 5. Focus energy on high-risk controls
- Tailored to each individual system's business function and risk
- 7. Produce better value and risk management
- 8. Free up time to spend on other IT risk and compliance needs

Total Control Population

Use System Risk Assessment to Identify High Risk Control Areas

De-scope Irrelevant Controls

 $System\ Specific,\ Remove\ Org\ Wide\ Controls$

Shared Responsibility Model, Remove 3rd Party Controls

Other Ind. Audits, Remove Already Tested Controls

Scoping Memo System Name: XYZ System

SCOPING DETAILS

System Purpose: Managed inventory of XYZ cases. Users (internal and external)

can log in and make updates.

Implementation Date: XXXX

Planned Retirement Date: XXXX

System Technical Details: Web-based system. Custom developed by 3rd party.

Hosted by XX. Microsoft SQL Server DB.

System Risk Assessment Summary: Confidential data should be secured from tampering at DB and by application access rights. Concerns with user access management. Concerns with audit logging. System availability has not been 100% due to aging custom developed code. No external Federal regulations were found to be applicable. Would like to make sure system security plan has been updated recently. Concerned with failover and recoverability controls if custom code issues arise.

Third Party Responsibilities: XX is responsible for hosting servers, patching servers, and physical security of servers. 3rd party development company is responsible for making custom code updates when needed.

Independent Audit Reports Available: External Financial Auditor audited the password controls and internal user access approval/removal process in past 12 months.

SCOPING DECISIONS

High Risk Focus Areas: Web based application security testing. Secure coding techniques. IAM periodic reviews and architecture. Customer IAM – access management. DB security and performance management. Audit logging. Change management.

Moderate Risk Focus Areas: Incident management & recovery. Vendor management. System security plan.

FINAL SCOPING

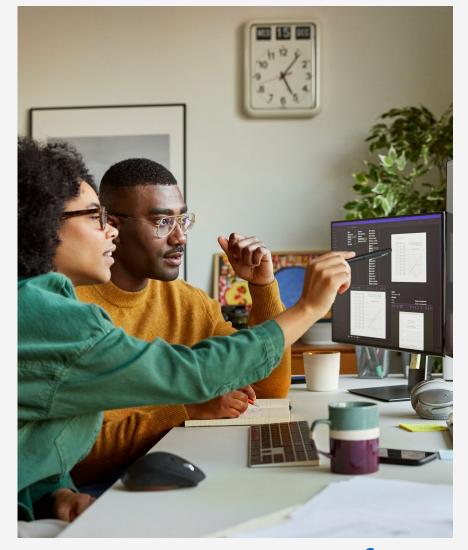
Based on the scoping details and decisions documented above and in workpaper XX, we have identified ## controls that are in-scope for this System IT Security Audit. The detailed scoping spreadsheet at workpaper XX includes full analysis of in-scope and de-scoped controls.

In-Scope Controls:

- XXXXX
- XXXXX

Example Impact of Right-Sizing Assessments

	Traditional Approach	Right-Sized Approach
Controls Tested	500	90
Audit Duration	4 months	2 months
Audit Fatigue	High	Low
Risk Coverage	Broad, unfocused	Targeted, high- value





Documenting Scoping Decisions

How to Justify Exclusions & Focus Areas

Criteria for Exclusion:

- Control is not system-specific (applies only at organization level)
- Control is managed by a third party (e.g., cloud provider, shared IT)
- Control already tested in recent independent audit (e.g., SOC 2, financial audit)
- Control is not applicable to the system's function or risk profile

Documentation Best Practices:

- Use a scoping memo or spreadsheet to record all inclusions and exclusions
- Reference supporting evidence (contracts, audit reports, risk assessments)
- Clearly state rationale for each exclusion or focus area

Sample Documentation Language:

- "Excluded: Managed by AWS under shared responsibility model (see contract XYZ)."
- "Excluded: Previously tested in SOC 2 audit, report dated MM/YYYY."
- "Excluded: Not applicable system does not process sensitive data."



Collaboration Tips

How to Work With Auditors, IT, & Business Teams for Buy-In



Engage Stakeholders Early

- Involve IT, business owners, and auditors in scoping discussions
- Share draft scope and rationale for feedback



Joint Activities

- Conduct walkthroughs and system demos together
- Review documentation and evidence collaboratively



Build Trust

- Be transparent about exclusions and focus areas
- Document decisions and share with all stakeholders



Leverage Tools

Use shared tracking tools (GRC platforms, spreadsheets)

Schedule regular check-ins and updates





Key Benefits

Why Right-Sizing Matters





More efficient use of time and resources



Less audit fatigue for IT and business teams



Improved compliance and risk management (and more time for it)



Better coverage of high-risk areas



Stronger stakeholder buy-in and collaboration



Contact

Forvis Mazars

Ben SadyPrincipal, Consulting Services

Tel: 804.474.1267

Mobile: 571.334.7431

ben.sady@us.forvismazars.com

Mareena Bowen

Manager, Consulting Services

Tel: 804.474.1314

Mobile: 804.938.3628

mareena.bowen@us.forvismazars.com

The information set forth in this presentation contains the analysis and conclusions of the author(s) based upon his/her/their research and analysis of industry information and legal authorities. Such analysis and conclusions should not be deemed opinions or conclusions by Forvis Mazars or the author(s) as to any individual situation as situations are fact-specific. The reader should perform their own analysis and form their own conclusions regarding any specific situation. Further, the author(s)' conclusions may be revised without notice with or without changes in industry information and legal authorities.

© 2025 Forvis Mazars, LLP. All rights reserved.

