

No. 70

SAP SECURITY ROADMAP

SAP Security Roadmap

Building a security program with the SAP Secure Operations Map and NIST CSF 2.0, explained for beginners

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BEFORE YOU BEGIN

How to use this book

What this book covers, who it is for, and how to use it.

Many SAP security efforts are a series of projects: a role redesign here, a patching push there, a tool purchase after an audit finding. Without a plan, money and effort go to whatever is urgent, and important areas stay neglected for years.

A **security roadmap** turns these efforts into a program. This book explains, for beginners, how to build one for SAP using two frameworks: SAP's own **Secure Operations Map**, which lists what to secure in an SAP landscape, and the **NIST Cybersecurity Framework (CSF) 2.0**, a widely used structure for managing cybersecurity risk. SAP PRESS's Cybersecurity for SAP recommends the same pairing for building a security roadmap.

Which versions this book covers

- The **SAP Secure Operations Map** in its current five-layer form.
- **NIST CSF 2.0**, published February 26, 2024.
- SAP's **Security Optimization Services** resources as described in 2023–2026.

Who this book is for

- **CISOs** who need to include SAP in their security program.
- **SAP security leads** who must plan and justify work.
- **IT and SAP managers** who own budgets.
- **Auditors and risk managers** assessing SAP security maturity.

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How the book is organized

- **Part I — Foundations** (Chapters 1–5): why a roadmap, the Secure Operations Map, NIST CSF 2.0, using them together and other frameworks.
- **Part II — The Secure Operations Map** (Chapters 6–11): each layer and its blocks, plus cloud.
- **Part III — Building the roadmap** (Chapters 12–19): maturity assessment, workshops, the six CSF functions applied to SAP, and prioritization.
- **Part IV — Running the program** (Chapters 20–26): governance, business case, metrics, SAP resources, pitfalls, regulations and a worked example.
- **Reference**: checklists, glossary and further reading.

Callouts

TIP
Practical advice you can use straight away.

IN SAP
Product-specific details and names.

WATCH OUT
Common misunderstandings.

KEY IDEA
The one thing to remember from a section.

A note on screens and examples

Screens are **simplified illustrations**, not copies of real tools. Company names, scores and plans in the examples are invented.

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PART I

Foundations

These chapters explain why SAP needs a security roadmap, introduce the SAP Secure Operations Map and NIST CSF 2.0, show how to use them together and connect other frameworks.

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CHAPTER 1

Why an SAP security roadmap

A roadmap turns reactions into a plan.

Symptoms of no roadmap

- Security work driven only by **audit findings** and incidents.
- **Gaps** that nobody owns, such as monitoring of SAP logs.
- **Tools** bought but not fully used.
- Management cannot see **progress** or compare SAP with other systems.

The blind spot

SAPinsider notes that many security departments see the SAP application layer as a "black box" and leave its security to Basis or application colleagues, which leaves applications at risk. A roadmap brings SAP into the company's security program.

What a roadmap provides

- A **shared picture** of the current state.
- A **target** state agreed with management.
- **Prioritized initiatives** with owners, budgets and dates.
- **Measures** to show progress.

KEY IDEA

A roadmap is not a document for the shelf. It is the plan that decides what the SAP security team does next quarter.

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CHAPTER 2

The SAP Secure Operations Map

SAP's own map of what to secure.

The **Secure Operations Map** is SAP's reference model for structuring the security of SAP landscapes. SAPinsider describes it as a basis for discussing needs and solutions in specific security areas. ISACA describes it as five layers divided into 16 blocks.

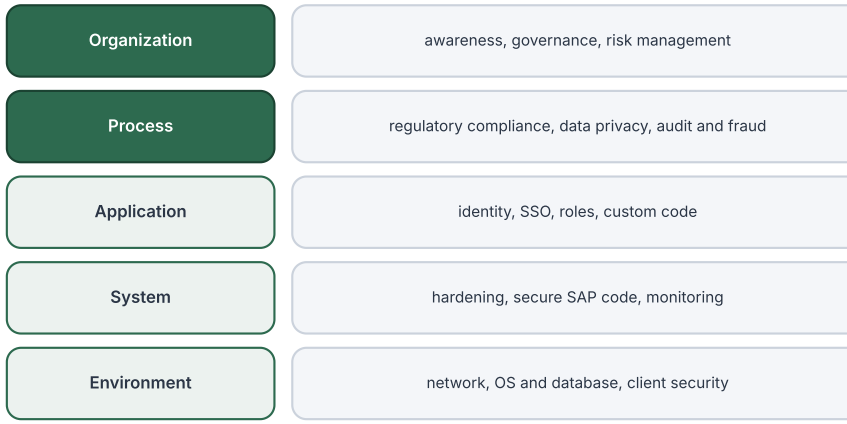


Figure 2.1 The five layers of the SAP Secure Operations Map.

The layers

- **Organization**: awareness, security governance, risk management.
- **Process**: regulatory process compliance, data privacy and protection, audit and fraud management.

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- **Application**: user and identity management, authentication and single sign-on, roles and authorizations, custom code security.
- **System**: security hardening, secure SAP code, security monitoring and forensics.
- **Environment**: network security, operating system and database security, client security.

History

SAPinsider notes that the January 2020 update added the organization and process layers, completing the people, process and technology view. An SAP blog stresses the new focus on organization and awareness.

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CHAPTER 3

NIST Cybersecurity Framework 2.0

NIST CSF 2.0 organizes how to manage cyber risk.

NIST published **CSF 2.0** on February 26, 2024. It provides guidance for managing cybersecurity risk for organizations of any size.

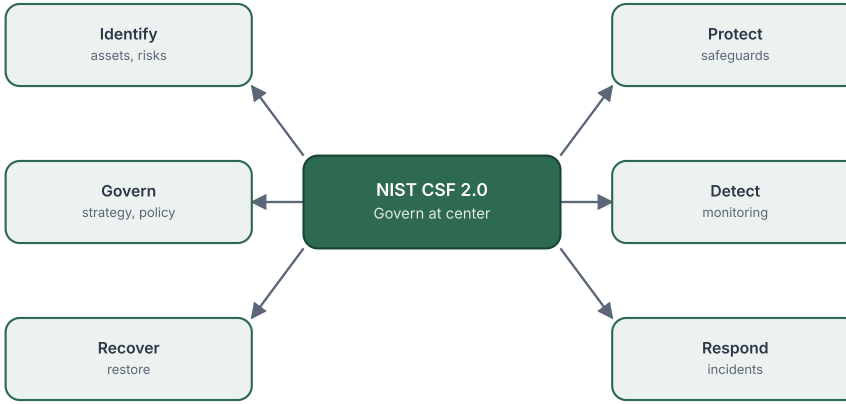


Figure 3.1 The six functions of NIST CSF 2.0.

The six functions

- **Govern**: establish and monitor strategy, expectations and policy.
- **Identify**: understand assets, risks and suppliers.
- **Protect**: use safeguards to prevent or reduce risk.
- **Detect**: find and analyze possible attacks.
- **Respond**: act on detected incidents.

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