

# CIS Policy

Center for Internet Security (CIS) is a non-profit organization. They aim to develop a plan to continuously assess and track vulnerabilities on all enterprise assets within the enterprise's infrastructure, in order to remediate, and minimize, the window of opportunity for attackers.

## CIS Critical Security Controls Version 8

The CIS Critical Security Controls (CIS Controls) are a prioritized set of Safeguards to mitigate the most prevalent cyber-attacks against systems and networks. They are mapped to and referenced by multiple legal, regulatory, and policy frameworks. CIS Controls v8 has been enhanced to keep up with modern systems and software. Movement to cloud-based computing, virtualization, mobility, outsourcing, Work-from-Home, and changing attacker tactics prompted the update and supports an enterprise's security as they move to both fully cloud and hybrid environments.

### CIS Controls

#### Welcome to Version 8 of the CIS Critical Security Controls

Thanks to our volunteer community, the CIS Critical Security Controls (CIS Controls) continue to grow in influence and impact across a world-wide community of adopters, vendors, and supporters. What started over ten years ago as a simple grassroots activity to help enterprises focus on the most important steps to defend themselves against real-world cyber-attacks has become a world-wide movement.

Version 8 is the most effective, best-researched version of the Controls. We addressed emerging technologies, new business and operational challenges (such as work from home), and done more work than ever to study attacks and translate that into prioritized actions. At the same time, we simplified the document by combining like activities and using consistent language.

We've also matured our ability to bring data, rigor and transparency to our recommendations to give you confidence in our work, created cross-mappings to numerous other security frameworks and recommendations, and worked closely with the marketplace to ensure that you are supported with high-quality tools and other resources to help you measure your CIS Controls implementation.

Thanks to everyone for making v8 great!  
Phyllis Lee

The number of Safeguards an enterprise is expected to implement increases based on which group the enterprise falls into.

Implementation Group (IG)	Safeguards
IG1	56 SAFEGUARDS
IG2	74 SAFEGUARDS
IG3	23 SAFEGUARDS

**Implementation Groups (IGs)**

**Essential Cyber Hygiene**

**The Process**

8 calendar months of discussion  
Many hundreds of meeting-hours  
20 high-level contributors  
Hundreds of comments and suggestions

**Guides** Cloud • Mobile • Microsoft Windows 10 • Telework & Small Medium Businesses (SMB) • Community Defense Model (CDM)  
**Tools** CIS Controls Assessment Specification • CIS Controls Self Assessment Tool (CSAT) • CIS Controls Navigator • CIS Risk Assessment Method (RAM)  
**Mappings** NIST • CMMC • PCI • MITRE ATT&CK v8.2

**CIS** Center for Internet Security®  
Creating Confidence in the Connected World.™

### Critical Security Controls v8

- 01 Inventory and Control of Enterprise Assets
- 02 Inventory and Control of Software Assets
- 03 Data Protection
- 04 Secure Configuration of Enterprise Assets and Software
- 05 Account Management
- 06 Access Control Management
- 07 Continuous Vulnerability Management
- 08 Audit Log Management
- 09 Email and Web Browser Protection
- 10 Malware Defenses
- 11 Data Recovery
- 12 Network Infrastructure Management
- 13 Network Monitoring and Defense
- 14 Security Awareness and Skills Training
- 15 Service Provider Management
- 16 Applications Software Security
- 17 Incident Response Management
- 18 Penetration Testing

## SANS Security Frameworks and CIS Controls Training Courses

### SEC566: Implementing and Auditing Security Frameworks & Controls



5 Day Program | 30 CPEs | Lecture Required

SEC566: Implementing and Auditing Security Frameworks & Controls

- Apply a security framework based on actual needs that your organization faces, including mitigating known attacks and preventing organizations important information from being compromised.
- Understand the importance of threat control and how it is complementary to growth, and explain the defensive gap between threats and risks and increased visibility of networks and systems.
- Identify and utilize tools that implement controls through automation.
- Learn how to create a scoring tool for measuring the effectiveness of security controls.
- Display specific metrics to establish a baseline and measure the performance of security controls.
- Understand how the CIS Controls map to standards such as NIST 800-53, ISO 2002, the Australian Top 35, and others.
- Audit each of the Critical Security Controls, with specific, proven templates, checklists, and scripts provided to facilitate the audit process.

**NOTE TO STUDENTS**  
The CIS Controls Version 8 of the Controls is May 2021. This course content is updated to reflect the changes in the CIS Controls Version 8. The most recent version is the NIST SP 800-53 and its predecessor, the NIST SP 800-53A.

#### Building and Auditing Critical Security Controls

Cybersecurity attacks are increasing and evolving so rapidly that it is more difficult than ever to prevent and defend against them. Does your organization have the right processes in place to detect threats, and monitor external and internal threats to prevent security breaches?

In addition to defending their critical systems, many organizations have to regularly update their processes to detect threats, and monitor external and internal threats to prevent security breaches?

The Center for Internet Security (CIS) Critical Controls are specific security controls that CISOs, CIOs, CSOs, systems administrators, and auditors can use to manage and measure the effectiveness of their defenses. They are designed to complement existing standards, frameworks, and compliance requirements by prioritizing the most critical threat vectors and attack paths. These controls are a common baseline for action against risks that we all face.

As threat and attack surface change and evolve, an organization's security should as well. To enable your organization to stay on top of this ever-changing threat scenario, SANS has designed a comprehensive course on how to implement and audit the CIS Controls. Using a risk-based approach to security, designed by private and public sector experts from around the world, the technical details are the best way to block known attacks and mitigate damage from successful attacks. They have been adopted by international governments, organizations, and individuals around the world, and maintain personal information should meet the following requirements:

The following requirements are the minimum level of information that all organizations that collect or maintain personal information should meet. The following requirements are the minimum level of information that apply to an organization's environment.

That applies to the following requirements that constitute a lack of reasonable security:

"The course overall was excellent! I do feel like I can put together a plan to begin implementing these controls at our organization right away! I have a feeling I will be referencing these books often. We most definitely will be having at least one person from my team attending this class next year!"  
—Susan Kropfman, Acuity

## It's not just about the list...

We listened to your questions and responded with guidance for implementing the CIS Controls, showing compliance against other frameworks and tools to measure your Controls implementation. It's not just about a list of best cybersecurity practices—it's about the ecosystem around the Controls to help all enterprises, regardless of size, successfully implement a cybersecurity program.

#### C CIS Controls Tools

**CIS CSAT Pro** CONTROLS SELF ASSESSMENT TOOL  
Helps teams track and document their progress in implementing the CIS Controls. Progress can be compared to industry averages.

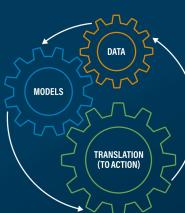
**CIS RAM** RISK ASSESSMENT METHOD  
A method and tool to let enterprises of varying security capabilities navigate the balance between implementing security controls, risks, and organizational needs.

**CIS Controls Assessment Specification**  
Identifies specific tests for Safeguards that can be automated, and provides a specification for vendors to implement them.

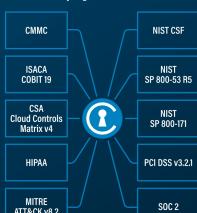
**CIS Controls Navigator**  
Online tool to compare CIS Safeguards with recommendations found in other security frameworks.

**CIS WorkBench**  
CIS collaboration platform for volunteers and CIS staff to share ideas, develop content, and learn from each other.

**CIS Community Defense Model**  
Identifies the security value of CIS Safeguards against specific attacks identified by open data sources, and describes using the MITRE ATT&CK Framework.



**Navigating an Ocean of Cyber Frameworks**  
Authoritative and vetted cross-mappings from our security best practices applied to well-known target frameworks or standards. For current versions and information on mappings, go to [www.cloudsecurity.org/controllers/](http://www.cloudsecurity.org/controllers/)



#### B CIS Benchmarks™

CIS Controls Version 8 (and all prior versions) calls out secure configuration of enterprise assets and software as an essential part of any cyber defense program. We believe in the value of this activity so strongly that we founded the company on this idea over 20 years ago! We are the world's largest independent producer of consensus-based configuration guides, bringing together experts from all across the industry and the world to create, share, and support this essential security content—the CIS Benchmarks.

The CIS Benchmarks include more than 100 configuration guidelines across 25+ vendor product families. Benchmarks for top technologies are updated within 90 days of the vendor release date. CIS Benchmarks are consumable in different forms. For example, CIS Hardened Images, virtual machine images configured to the CIS Benchmarks, are available in the major cloud solution marketplaces. We provide mappings to the CIS Controls and MITRE ATT&CK Framework. We also provide CIS STIG Benchmarks.

We are proud to have collaborated on CIS Controls v8 with these fellow nonprofits, who serve the common good by developing and sharing essential cybersecurity best practices.

**For all of us, "collaborate" is a verb, not a bumper sticker.**



The Cloud Security Alliance participated on the CIS Controls v8 team, making sure it reflected the best available information on cloud security. We also mapped CIS Controls v8 Safeguards with CSA Cloud Controls Matrix.

SAFECode brought their expertise to lead the drafting of CIS Control #16, Application Software Security. They issued a companion SAFECode document, "Application Software Security for CIS Controls," to provide amplifying guidance on this foundational topic.

<https://safecode.org/>

Special thanks to our industry partners:



## Version 8 of the CIS Critical Security Controls

AND

### SANS Security Frameworks and CIS Controls Training Courses

For Cyber Leaders of Today and Tomorrow

[sans.org/cybersecurity-leadership](https://sans.org/cybersecurity-leadership)

@secleadership

SANS Security Leadership

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In February of 2016, then California Attorney General, Vice President Kamala Harris, stated that "The 20 controls in the CIS Controls are the most effective way to protect our nation's critical infrastructure." The minimum level of information required for all organizations that collect or maintain personal information should meet the following requirements:

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