

# Course 2 resources and citations

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## Module 1: Introduction to frameworks within security domains

### Resources

Helpful resources and tips

- [Google Docs Editors Help: Google Docs Help Center](#)
- [Google Docs Editors Help: Google Sheets Help Center](#)
- [Google Docs Editors Help: How to use Google Slides](#)
- [Hands-on labs overview](#)

Learn more about security and compliance with Google whitepapers

- [Google Cloud: Cloud Security Podcast](#)
- [Google Cloud: Google security overview](#)
- [Google Cloud: Security whitepapers](#)
- [Google Security Blog: MiraclePtr: protecting users from use-after-free vulnerabilities on more platforms](#)

Learn more about security controls

- [NIST: Control Catalog spreadsheet](#)
- [NIST: Control Map spreadsheet](#)
- [NIST: SP 800-53 controls and SP 800-53B control baselines: Resources for implementers](#)



Use existing frameworks to demonstrate compliance

- [AICPA: 2017 Trust Services Criteria: See what's changed](#)
- [Department of Health and Human Services: Security Standards: Technical Safeguards](#)
- [Google Cloud: SOC 2 – Compliance](#)
- [HITRUST for HIPAA](#)

Control mapping for risk management

- [NIST: Control Map spreadsheet](#)

Security control implementation

- [Carnegie Mellon University: Threat modeling: 12 available methods](#)
- [Google Cloud: Enforce uniform MFA to company-owned resources](#)

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Introduction to cloud security domains

- Holladay, H.G. (2022, November 21). [How to write a cloud security policy for your business](#). Kirkpatrick Price Blog.
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- Skoutaris, E.(2020, October 16). [What is the cloud controls matrix \(CCM\)?](#) Cloud Security Alliance blog.



Explore compliance and security

- Auditboard. (2022, April 25). [Security vs compliance: Where do they align?](#)
- Coretelligent. (2023, May 19). [Security vs. Compliance: Differences & similarities \(2023\)](#).
- Cyber Risk Management. (2023, November). [Security vs. compliance: What's the difference?](#) Trava Security blog.
- Miller, A. (2021, June 25). [IT security vs IT compliance: What's the difference?](#) Security & Compliance blog.
- National Institute of Standards and Technology. (n.d.). [Cybersecurity framework](#).

Learn more about security and compliance with Google whitepapers

- Google Cloud. (n.d.). [Security & Identity Google Cloud Blog](#).

Security controls and compliance

- Exabeam. (n.d.). [Cloud security controls: Key elements and 4 control frameworks](#).
- National Institute of Standards and Technology. (n.d.). [Security control](#). Computer Security Resource Center.
- Walkowski, D. (2019, August 22). [What are security controls?](#) F5 Labs.

Learn more about security controls

- Joint Task Force. (2020, September). [Security and privacy controls for information systems and organizations](#) (Special Publication 800-53r5). National Institute of Standards and Technology.
- Peacock, J. (n.d.). [NIST SP 800-53 control families explained](#). Cybersaint.



## Risk and compliance

- Cyber Risk Management. (2023, November). [Security vs. compliance: What's the difference?](#) Trava Security blog.
- javaTpoint. (n.d.). [What are the security risks of cloud computing?](#)
- SecurityScorecard. (2021, August 25). [Compliance vs risk management: What you need to know.](#)

## The three areas of compliance: People, process, and technology

- Computer Science Research Education Group. (n.d.). [Computer security 10.3: Technology, people, process and compliance](#). University of Canterbury, NZ.
- Manage Engine Academy. (n.d.). [The three Ps of compliance](#).
- Plutora. (2020, September 8). [People, process, technology: The PPT framework, explained](#).

## Use existing frameworks to demonstrate compliance

- HIPAA Journal. (2023, July 31). [HIPAA compliance guidelines](#).
- PCI DSS “©2006-2023 PCI Security Standards Council, LLC. All Rights Reserved.”
- Yawn, A.J. (2022, January 24). [SOC 2 Trust Services Categories](#). SANS Institute.

## Overview of the Google Cloud Security Command Center

- Google Cloud. (n.d.). [Security command center](#).
- Google Cloud. (2024, January 17). [Configuring security command center](#).

## Cloud security controls

- Swanagan, M. (2020, December 7). [Types of security controls explained](#). PurpleSec.
- Exabeam. (n.d.). [Cloud security controls: Key elements and 4 control frameworks](#).

Explore steps to implement security controls

- Buchanan Technologies. (n.d.). [5 key steps to performing a cloud security assessment.](#)
- Google Cloud. (2020, February 5). [Enforce uniform MFA to company-owned resources.](#)
- XM Cyber. (n.d.). [What is a security control?](#)

Security control implementation

- Shah, J. (2019, December 9). [What to do, and How to do it — 5 Steps to Implementing IT Security Controls.](#) Medium.
- XM Cyber. (n.d.). [What is a Security Control Validation?](#)

## Module 2: Risk management and security frameworks, regulations, and standards

### Resources

Risk management and security frameworks

- [Google Cloud: Security and resilience framework](#)
- [Cloud Security Alliance: What is the Cloud Controls Matrix \(CCM\)?](#)

Compare and contrast risk management frameworks

- [NIST: Control Map spreadsheet](#)
- [AICPA: Mapping of SOC 2 Trust Services to HITRUST](#)

Google's Secure AI Framework

- [Google: Introducing Google's Secure AI Framework](#)
- [Google: Secure AI Framework Approach](#)



Learn more about data protection and privacy regulations

- [PIPEDA Fair Information Principle 1 – Accountability](#)
- [PIPEDA Fair Information Principle 2 – Identifying Purposes](#)
- [PIPEDA Fair Information Principle 3 – Consent](#)
- [PIPEDA Fair Information Principle 4 – Limiting Collection](#)
- [PIPEDA Fair Information Principle 5 – Limiting Use, Disclosure, and Retention](#)
- [PIPEDA Fair Information Principle 6 – Accuracy](#)
- [PIPEDA Fair Information Principle 7 – Safeguards](#)
- [PIPEDA Fair Information Principle 8 – Openness](#)
- [PIPEDA Fair Information Principle 9 – Individual Access](#)
- [PIPEDA Fair Information Principle 10 – Challenging Compliance](#)
- [PIPEDA in brief](#)
- [What is GDPR, the EU's new data protection law?](#)

Security frameworks, regulations, laws, and standards

- [NIST: Control Map spreadsheet](#)
- [General Data Protection Regulation \(GDPR\)](#)
- [Department of Health and Human Services: HIPAA Administrative Simplification](#)
- [HIPAA Journal: HIPAA Compliance Guidelines](#)
- [ISO standards](#)
- [NIST: Cybersecurity framework](#)
- [Official PCI Security Standards Council site](#)



- [PIPEDA legislation and related regulations](#)
- [Department of Health and Human Services: Security Standards: Technical Safeguards](#)
- [Google Cloud: SOC 2 – Compliance](#)
- [The California Privacy Rights Act of 2020](#)
- [Department of Health and Human Services: The HIPAA Privacy Rule](#)

What is Google Cloud Risk Manager?

- [Google Cloud: Access control with IAM](#)
- [Google Cloud: Automatically generating reports](#)
- [Google Cloud: Cloud Asset Inventory](#)
- [Center for Internet Security: New CIS Benchmark for Google Cloud Computing Platform](#)
- [Google Cloud: Remediating findings](#)
- [Google Cloud: Security Command Center](#)
- [Google Cloud: Vulnerability findings](#)

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Risk management and security frameworks

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Google's Secure AI Framework

- Hansen, R. & Venables, P. (2023, June 8). [Introducing Google's secure AI framework](#). *Google blog*.

Data protection and privacy

- Intersoft Consulting. (n.d.). [General data protection regulation \(GDPR\)](#).
- TutorialsPoint. (2022, March 22). [Distinguish between data privacy and data protection](#).

Learn more about data protection and privacy regulations

- Klosowski, T. (2021, September 6). [The State of Consumer Data Privacy Laws in the US \(And Why It Matters\)](#). Wirecutter.

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- National Institute of Standards and Technology. (2019, April 30). [\*NIST Privacy Framework: An enterprise risk management tool \(Discussion Draft\)\*](#).
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## Industry-specific regulations and standards

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- Gorman, J., & Redding, J. (2023, February 21). [\*FedRAMP is law! So what? Infusion Points\*](#).
- Hartwig, B. (2021, May 20). [\*CCPA vs CalOPPA: Which one applies to you and how to ensure data security compliance\*](#). Infosec.
- Nadeau, M. (2020, June 12). [\*General Data Protection Regulation \(GDPR\): What you need to know to stay compliant\*](#). CSO Online.
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## Apply industry-specific requirements

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- VikingCloud. (n.d.). [VikingCloud—Bringing security and compliance together](#).
- Yacono, L. (2023, January 5). [A beginner's guide to PCI compliance](#). CIMCOR.

#### What is Google Cloud Risk Manager?

- Google Cloud. (n.d.). [Quickstarts](#).
- Google Cloud. (n.d.). [Risk Protection Program](#).

## Module 3: The compliance lifecycle

### Resources

Learn more about controls for workloads and services

- [Google Cloud: BigQuery overview](#)
- [Google Cloud: Customer-managed encryption keys \(CMEK\)](#)
- [Google Cloud: Enterprise foundations blueprint](#)
- [Google Cloud: Harden your cluster's security](#)
- [Google Cloud: Hardening MySQL overview](#)
- [Google Cloud: Introduction to data governance in BigQuery](#)
- [Google Cloud: Overview of access control](#)
- [Google Cloud: Three security and scalability improvements for Cloud SQL for SQL Server](#)

Audits and security assessments

- [AICPA & CIMA: System and Organization Controls: SOC Suite of Services](#)
- [HITRUST Alliance: External Assessors](#)
- [InvGate: What is the difference between assessment and audit?](#)

Best practices Google Cloud resource hierarchy

- [Google Cloud: Organize resources using labels](#)
- [Google Cloud security best practices center](#)
- [Google Cloud: Understanding allow policies](#)

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Overview of compliance lifecycle

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- PCI Security Standards Council. (2008) [\*Getting started with PCI data security standard.\*](#)
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Cloud security controls

- Baykara, S. (2021, December 9). [\*Cloud security controls: What you need to know.\*](#) PCI DSS GUIDE.
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Control mapping

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- MITRE Engenuity: Center for Threat Informed Defense. (n.d.). [\*Google Cloud Platform security control mappings to MITRE ATT&CK®.\*](#)

Learn more about controls for workloads and services

- Google Cloud. (2023, December 20). [\*Enterprise foundations blueprint.\*](#)



## Review a compliance report

- Ross, W. L., & Copan, W. (2020, September). [Security and privacy controls for information systems and organizations](#) (NIST Special Publication 800-53, Rev. 5). National Institute of Standards and Technology.

## Cloud security audits

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## Audits and security assessments

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## Prepare for and audit

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- Google Cloud. (n.d.). [What is cloud architecture?](#)
- Lucidscale. (n.d.). [How to prepare for a cloud audit](#).
- RSI Security (2022, September 19). [Best practices for auditing the cloud](#). *RSI Security Blog*.



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- Tracy, R. (2020, May 5). [Control Inheritance – Easing the burden of compliance and reducing audit fatigue](#). *Telos Corporation Blog*.
- Google Cloud. (2023, August 8). [Google Cloud Architecture Framework: Security, privacy, and compliance](#).

## Cloud resource hierarchy and security controls

- Google Cloud. (2024, January 22). [Using resource hierarchy for access control](#).
- Google Cloud. (2024, January 22). [Introduction to the Organization Policy Service](#).

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Policy as code and infrastructure as code

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Key considerations when writing policy as code

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Review and update a risk management policy

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## Module 4: Cloud tools for risk management and compliance

### Resources

Vulnerability management

- [CVE: About the CVE Program](#)
- [NIST: National vulnerability database – Homepage](#)
- [OWASP Top 10 API Security Risks – 2023](#)
- [VulDB: Vulnerability database – Homepage](#)



Cloud security management (CSPM) resources

- [Netskope: Cloud security posture management \(CSPM\)](#)
- [Gartner Peer Insights: Cloud security posture management tools reviews and ratings](#)
- [Check Point: CloudGuard for cloud native security](#)
- [Palo Alto Networks: DevSecTalks](#)
- [Palo Alto Networks: Prisma Cloud](#)
- [UC Berkeley: Prisma Cloud Security](#)
- [CrowdStrike: Cloud Workload Protection](#)
- [CSO: Review: CrowdStrike Falcon breaks the EDR mold](#)
- [Orca Security: Demo](#)

Cloud tools for risk management

- [Google Cloud: IAM overview](#)
- [Google Cloud: Policy Analyzer for IAM policies](#)

Guide to Guide to risk assessment and compliance management with Security Command Center

- [Google Cloud: Manage and monitor for compliance](#)

Use reports to remediate findings

- [Google Cloud: Firewall](#)
- [Google Cloud: Policy Analyzer for IAM policies](#)
- [Google Cloud: Managing reports](#)
- [Google Cloud: Risk Manager conceptual overview](#)

Digital sovereignty and sovereign clouds

- [Google Cloud: T-Systems Sovereign Cloud Powered by Google Cloud](#)

Organizational policy constraints, inheritance and violation

- [Google Cloud: Access control for folders with IAM](#)
- [Google Cloud: Access control for organization resources with IAM](#)
- [Google Cloud: Access control for projects with IAM](#)
- [Google Cloud: Resource hierarchy](#)
- [Google Cloud: Resource hierarchy: IAM Inheritance](#)
- [Google Cloud: Understanding constraints](#)
- [Google Cloud: Understanding hierarchy evaluation](#)

Interview tip: Provide examples

- [Interview Warmup](#)

## Citations

Vulnerability management frameworks

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## Vulnerability management

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## Introduction to multicloud CSPMs

- Check Point. (n.d.). [CloudGuard for Cloud Security Posture Management](#).
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## Security Command Center

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Security Command Center, Risk Manager, Policy Analyzer, Assured Workloads

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## Digital sovereignty and sovereign clouds

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## Organizational policies in the cloud

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## Organization policy service

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- Google Cloud. (2022, October 11). [How Goldman Sachs bolstered their security posture through policy management and controls](#) [Video]. Youtube.

## Organizational policy constraints, inheritance and violation

- Google Cloud. (2024, January 22). [Organization policy constraints](#).