Learn more about security and compliance with Google whitepapers

In this reading, you'll find links to the different sections of Google's security whitepapers. A whitepaper is an in-depth report on a specific topic that educates users about a particular issue, or explains a particular methodology. Instead of a typical reading, this is a collection of whitepapers you can read at your own pace.

Google security overview whitepaper

This whitepaper outlines these topics:
- Google's security and privacy-focused culture
- Operational security
- Technology with security at its core
- Key security controls
- Data access and restrictions
- Support for compliance requirements
- Google cloud products and services

Infrastructure security whitepaper

This whitepaper includes:
- Google infrastructure security design overview
- BeyondProd
- Binary Authorization for Borg
- How Google enforces boot integrity on production machines
- How Google protects the physical-to-logical space in a data center
- Remote attestation of disaggregated machines
- How Google protects its production services
- Titanium hardware security architecture at Google
- Titan hardware chip

Encryption at rest whitepaper

This whitepaper includes:
- Default encryption at rest
- Granularity of default encryption for Google Cloud services
- Cloud Key Management Service encryption
- Cloud HSM architecture
- Customer-supplied encryption keys

Encryption in transit whitepapers

These whitepapers include:
- Encryption in transit
- Application Layer Transport Security

Customer data management whitepapers

These whitepapers include:
- Confidential space security overview
- Implement the CDMC key controls framework in a BigQuery data warehouse

Google Cloud data management whitepaper

This section describes:
- Data deletion on Google cloud
- Data incident response process

Note: Google Cloud is just one of many options for cloud service providers.

Resources for more information

- Google Security Blog for the latest news and insights from Google on security and safety on the internet
- Cloud Security Podcast to learn more about cloud security from experts in the field
- Security and Identity Blog and other related resources for news on Google cloud and security identity