Cloud Security

The need for security in the cloud has never been clearer.

Cloud security may be a rapidly evolving area, but the principles of building integrity remain the same. No matter where you run an application, its vulnerabilities will follow. With our 20 years of security and compliance expertise, we can help you take advantage of all the cloud has to offer, without sacrificing security.

Take your security to new heights

Synopsys offers proven, deeply researched, and standards-derived cloud security guidance and services built on and evaluated against NIST and ISO 27000 recommendations. No matter where you are in your cloud migration or application development, our services help you make effective, meaningful decisions about the use of public cloud services.

Evaluate your application portfolio for cloud services

Before you migrate your portfolio of applications to the cloud, our Cloud Architectural Risk Assessment (Cloud ARA) experts evaluate your applications for cloud preparedness across several domains.

- Secure, private connectivity to your public or private cloud environment
- Delivery models (public, private, or hybrid)
- Container and virtual machine security
- Encryption, key management, and protecting secrets
- Isolation and multitenancy concerns
- Cloud service models (IaaS, PaaS, SaaS)
- Security for data at rest and in transit
- Authentication, authorization, and data residency
- Governance and risk management

We help you prioritize the security risks affecting your applications’ architecture and advise you about how to design applications to take full advantage of the security controls and capabilities of your cloud services provider.

Migrate your applications to the cloud

We provide implementation and security design assistance to help securely migrate your applications to cloud environments in several modes, including forklift, lift and shift, hybrid (where portions of the application are optimized for the cloud), and full optimization as cloud-native applications.

Develop new cloud-native applications

Unlike other software security companies, our security engineers are also developers who support development, testing, and production environments. We can help you develop solutions native to your cloud environment, without increasing your security risk.
Secure your cloud applications
We review your configuration periodically to ensure that the application and cloud services you rely on still implement security best practices. If they don’t, we’ll tell you. We also provide targeted guidance to harden your custom services against security intrusions.

Teach your staff cloud security
Our cloud training and assessments teach you how to identify and fix missing or weak cloud security controls. You will also learn security best practices for your cloud services provider. Your team will become better equipped to mitigate security flaws, reducing the risk to both you and your applications.

Refine your governance and security policies for cloud services
Adopting the cloud means revisiting your security and governance policies. We help you align your security needs to the shared security responsibilities between you and your cloud provider. We evaluate your security controls and identify gaps in your governance strategy. We also suggest enhancements and recommend products and services to supplement your security controls as needed.

We have the expertise, tools, and services you need
Our experts will help you develop a sustainable initiative to continuously and comprehensively identify and mitigate your cloud and application security risks. We’ve adapted the fundamentals of risk management to the cloud ecosystem’s unique features.

- **Architecture risk analysis and threat modeling**: Identify missing or weak security controls, understand secure design best practices, and reduce your risk of a breach.
- **Security testing**: Get the level of testing you need with static application security testing, software composition analysis, penetration testing, and network security testing.
- **Training**: Learn about cloud security fundamentals and secure coding assurance from our cloud security experts.
- **Cloud security policy development**: Let us help you specify security directives to your stakeholders (executives, IT, development teams, etc.) so they can better understand and adhere to cloud security best practices.

The Synopsys difference
Synopsys provides integrated solutions that transform the way you build and deliver software, accelerating innovation while addressing business risk. With Synopsys, your developers can secure code as fast as they write it. Your development and DevSecOps teams can automate testing within development pipelines without compromising velocity. And your security teams can proactively manage risk and focus remediation efforts on what matters most to your organization. Our unmatched expertise helps you plan and execute any security initiative. Only Synopsys offers everything you need to build trust in your software.

For more information about the Synopsys Software Integrity Group, visit us online at [www.synopsys.com/software](http://www.synopsys.com/software).

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