



# Network Security Testing

Identify weaknesses in your network before a hacker does

Attack agents may find holes in your network to breach the perimeter. Once inside, they may penetrate your internal networks to do further damage. We find the security vulnerabilities in internal and external networks by mimicking the approach malicious hackers use. As a result, you'll have a clear mitigation strategy to reduce the likelihood of a breach and keep your internal networks and customer data secure.

## 6 reasons you need Network Security Testing

If you're facing one of these six challenges, it's time to turn to Synopsys to develop a network security testing plan.

### 1. You're deploying a new infrastructure

Make sure servers, routers, load balancers, and other network devices that run software are sufficiently hardened to prevent access to critical data.

### 2. You're changing network design or infrastructure

Any major configuration changes or upgrades should require a re-test of all network security.

### 3. You're moving to a hosted environment

Moving your network infrastructure to cloud environments such as Amazon Web Services (AWS) introduces a new attack surface that must be evaluated for proper configuration to ensure sensitive data isn't exposed to unauthorized users.

### 4. You're deploying new or updated applications

In addition to testing the applications themselves, you'll want to consider how they access your network resources.

### 5. You're adding new locations for your business

Use to understand which resources are available and identifying the type of traffic passing between sites.

### 6. You're implementing a regular security plan

Implementing a regular network security assessment can identify changes that may have slipped through the cracks and ensure you are using the most up-to-date security strategies.

## Select the depth that best addresses your network risk profile

We offer three distinct assessment levels based on scope of activity, depth of analysis, breadth of testing, and deliverables.

**Network Security Test-Automated.** A low-cost, tool-based security scan of a network or network range(s).

**Network Security Test-Essential.** This in-depth network test employs automated scanning with manual triage of vulnerabilities identified. Our manual testing checklist includes test cases for encrypted transport protocols, SSL certificate scoping issues, use of administrative services, etc.

**Network Security Test-Standard.** In addition to everything the Essential test offers, this provides manual checks not normally found with automated testing. For example, vulnerabilities related to complex routing paths, access control configurations, business logic, and any functionality that is available through the exposed network services.

## A systematic and comprehensive approach

Our holistic Network Security Testing approach was developed through years of assessment experience. Every test provides all the information you need to resolve network vulnerabilities including:

- A comprehensive security review of your network through a blend of manual and tool-based assessments—from automated scans to in-depth manual penetration testing. Our thorough analysis results in minimal false positives, accurate findings, and actionable guidance
- Detailed reporting through post-assessment reports and expert-led live read-outs with developers and application stakeholders
- Actionable remediation guidance customized to your specific needs, goals, and priorities
- On-demand support through our Remediation Help Desk

## The Synopsys Difference

Synopsys offers the most comprehensive solution for integrating security and quality into your SDLC and supply chain. Whether you're well-versed in software security or just starting out, we provide the tools you need to ensure the integrity of the applications that power your business. Our holistic approach to software security combines best-in-breed products, industry-leading experts, and a broad portfolio of managed and professional services that work together to improve the accuracy of findings, speed up the delivery of results, and provide solutions for addressing unique application security challenges. We don't stop when the test is over. Our experts also provide remediation guidance, program design services, and training that empower you to build and maintain secure software.

For more information go to [www.synopsys.com/software](http://www.synopsys.com/software).

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## Our testers search for vulnerabilities in:

- Access management
- Authentication controls
- Firewall filtering
- Information disclosure that may aid an attacker
- Known configuration errors
- Operating system software flaws
- Router filtering
- Server application software flaws
- Visible network services