SAST/DAST Tool Implementation and Analysis Training Course

Professional Development Training Course Outline

Category	Data Security	**Duration**	5 Days
Base Fee	$1,500 USD	**Delivery Mode**	Online / On-site Hybrid

Course Introduction

The modern Software Development Life Cycle demands a robust, automated approach to security, shifting from post-production audits to a proactive, "Shift-Left" model. SAST/DAST Tool Implementation and Analysis Training Course provides the DevSecOps skills necessary to master the dual pillars of modern Application Security Testing (AST): Static Application Security Testing (SAST) and Dynamic Application Security Testing (DAST). Participants will move beyond theoretical knowledge to gain practical, hands-on expertise in selecting, implementing, configuring, and tuning leading commercial and open-source SAST/DAST tools. The core focus is on minimizing false positives/negatives, integrating seamlessly into CI/CD pipelines, and effectively translating scan results into prioritized, actionable remediation workflows for secure, high-velocity software delivery.

This advanced training emphasizes vulnerability management and reporting excellence in an Agile/DevOps environment. You will learn to perform deep code analysis with SAST to catch flaws early and validate runtime behavior using DAST to uncover environment-specific issues. By mastering the SAST/DAST synergy, professionals will become indispensable security champions, driving measurable risk reduction and ensuring regulatory compliance within their organizations?ÇÖ secure development lifecycle (S-SDLC). The methodology is intensely practical, ensuring participants can immediately apply learned techniques to complex, cloud-native and microservices applications.

Programme Curriculum

SAST/DAST Tool Implementation and Analysis Training Course

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Course Duration

5 days

Course Objectives

Upon completion of this course, participants will be able to:

1. Strategize a Shift-Left application security program using SAST and DAST.
2. Evaluate and select appropriate SAST/DAST tools for diverse technology stacks.
3. Architect and deploy SAST and DAST seamlessly within CI/CD Pipelines
4. Configure advanced SAST rulesets and custom queries to reduce noise and maximize signal quality.
5. Master DAST scanning techniques for complex applications, including single-page applications (SPAs) and APIs
6. Analyze and Triage complex SAST and DAST reports to differentiate between true security flaws and false positives/negatives.
7. Prioritize vulnerabilities based on risk using reachability analysis and threat modeling principles.
8. Automate the feedback loop, pushing actionable findings directly into Developer Workflows (IDE/VCS) for rapid remediation.
9. Implement Security Gates in the pipeline to enforce organizational security policies and S-SDLC standards.
10. Correlate SAST and DAST findings for holistic vulnerability context and improved reporting.
11. Measure and report key AppSec metrics to executive leadership.
12. Address modern threats like Supply Chain Attacks and vulnerabilities in Infrastructure-as-Code
13. Apply secure development practices to mitigate top risks like the OWASP Top 10 and CWE/SANS Top 25.

Target Audience

1. DevSecOps Engineers/Architects
2. Application Security Specialists.
3. Software Development Engineers.
4. Security Analysts/Consultants.
5. Quality Assurance (QA) Engineers/Testers.
6. Security Operations Center Staff.

7. Technology Managers/Leaders.
8. Cloud Security Engineers.

Course Modules

Module 1: Foundations of Application Security Testing (AST)

- The Secure SDLC and the Shift-Left Paradigm.
- SAST and DAST.
- Understanding the AppSec Tool Landscape.
- Key Standards and Frameworks.
- Selecting the right tool for the job.
- Case Study: Tool Selection in an Agile Enterprise.

Module 2: Strategic SAST Implementation and Customization

- Setting up the SAST infrastructure.
- Integrating SAST with Version Control Systems and IDEs for pre-commit/PR scans.
- Advanced Ruleset Management
- Deep dive into Data Flow Analysis and Taint Analysis techniques.
- Reporting formats, integrating with Jira/ServiceNow for ticketing and tracking.
- Case Study: False Positive Reduction in Legacy Code.

Module 3: Dynamic Application Security Testing (DAST) in Practice

- DAST deployment models.
- Configuring DAST for modern web applications: Authentication and Session Handling.
- Effective Crawling and Spidering for Single Page Applications and complex navigation.
- Configuring vulnerability checks for XSS, CSRF, and SSRF.
- Using DAST to discover and test Hidden Functionality and endpoints.
- Case Study: DAST on an E-commerce API.

Module 4: SAST/DAST Automation in the CI/CD Pipeline

- The Automation Imperative.
- Scan Orchestration.
- Handling build failures.
- Automated Credentials and Secrets Management for DAST scans.
- Testing Infrastructure-as-Code templates for security misconfigurations.
- Case Study: Implementing a DevSecOps Security Gate.

Module 5: Vulnerability Analysis and Triage Workflow

- The Triage Process.
- Understanding Source-to-Sink Data Flow.
- Minimizing False Negatives.
- Vulnerability Correlation.
- Creating effective Remediation Guidance tailored for developers.
- Case Study: Correlating Cross-Site Scripting.

Module 6: Advanced Topics: AI, Cloud-Native, and Microservices

- Security for Microservices and Containerized applications.
- Cloud-Native AppSec challenges and solutions for Serverless architectures.
- Leveraging AI and Machine Learning for enhanced vulnerability prioritization and Autofix suggestions.
- Generating and analyzing the Software Bill of Materials using SCA for supply chain risk.
- Transitioning to Application Security Posture Management
- Case Study: Securing a Kubernetes-based Application.

Module 7: Remediation, Governance, and Compliance

- Best practices for effective developer Security Training based on recurring scan findings.
- Designing and measuring AppSec Metrics
- Establishing Vulnerability Disclosure and Exception Handling processes.
- Compliance Mapping.
- Sustaining the AppSec program.
- Case Study: Remediation Success and MTTR Reduction

Module 8: Tool Deep Dive and Optimization Workshop

- In-depth comparison of advanced features in Veracode, Snyk, and Checkmarx/Fortify.
- Writing a custom SAST rule to enforce a unique company coding standard.
- Configuring an advanced DAST scan using an authenticated user, including form submissions and file uploads.
- Building a unified dashboard from aggregated SAST and DAST data for management.
- Review and final Q&A on participant-specific implementation challenges.
- Case Study: Tool Integration for High-Risk Application.

Training Methodology

This course employs a participatory and hands-on approach to ensure practical learning, including:

- Interactive lectures and presentations.
- Group discussions and brainstorming sessions.
- Hands-on exercises using real-world datasets.
- Role-playing and scenario-based simulations.
- Analysis of case studies to bridge theory and practice.
- Peer-to-peer learning and networking.
- Expert-led Q&A sessions.
- Continuous feedback and personalized guidance.

Register as a group from 3 participants for a Discount

Send us an email: info@fineskilltrainingcenter.org or call +254769199797

Certification

Upon successful completion of this training, participants will be issued with a globally- recognized certificate.

Tailor-Made Course

We also offer tailor-made courses based on your needs.

Key Notes

a. The participant must be conversant with English.

b. Upon completion of training the participant will be issued with an Authorized Training Certificate

c. Course duration is flexible and the contents can be modified to fit any number of days.

d. The course fee includes facilitation training materials, 2 coffee breaks, buffet lunch and A Certificate upon successful completion of Training.

e. One-year post-training support Consultation and Coaching provided after the course.

f. Payment should be done at least a week before commence of the training, to Fineskill Training Center account, as indicated in the invoice so as to enable us prepare better for you.

Upcoming Scheduled Sessions

Start Date	End Date	Location	Price
23 Nov 2026	27 Nov 2026	Online	$1,000
23 Nov 2026	27 Nov 2026	Physical	$1,500
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$3,000
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$4,500
23 Nov 2026	27 Nov 2026	Physical	$6,000
23 Nov 2026	27 Nov 2026	Physical	$6,000

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