

Course Agenda

DevSecOps Foundation Certification

Introduction:

SterlingNext's comprehensive training program is designed to provide participants with a deep understanding of DevSecOps principles and practices. The course covers essential topics such as secure coding, continuous security testing, and integrating security into the DevOps pipeline.

Prerequisites:

Participants are expected to have a basic understanding of DevOps practices and principles. Familiarity with software development and IT operations concepts will be beneficial for a more comprehensive learning experience.

Target Audience:

- ✓ DevOps Engineers
- ✓ IT Security Professionals
- ✓ Software Developers
- ✓ System Administrators
- ✓ IT Managers
- ✓ Quality Assurance Teams
- ✓ Project Managers
- ✓ Anyone aspiring to enhance his or her knowledge in DevSecOps practices.

Key Learning Outcomes:

- ✓ Understanding the fundamentals of DevSecOps.
- ✓ Implementing security throughout the software development lifecycle.
- ✓ Integrating Security Into Continuous Integration/continuous
- ✓ Deployment (CI/CD) pipelines.
- ✓ Managing and mitigating security risks in DevOps environments.
- ✓ Implementing secure coding practices.
- ✓ Conducting security testing in automated pipelines.
- ✓ Applying security controls and compliance as code.
- ✓ Collaborating effectively between development, operations, and Security teams.

Skills You Will Acquire:

- ✓ Secure coding practices.
- ✓ Threat modeling and risk management.
- ✓ Security automation and orchestration.
- ✓ Continuous security testing.
- ✓ Integration of security in CI/CD pipelines.
- ✓ Application of security controls as code.
- ✓ Incident response and recovery in DevOps.
- ✓ Collaboration and communication skills in a DevSecOps environment.

Lesson 1: Realizing DevSecOps Outcomes

- Origins of DevOps
- Evolution of DevSecOps
- CALMS
- The Three Ways

Lesson 2: Defining the Cyber threat Landscape

- What is the Cyber Threat Landscape?
- What is the threat?
- What do we protect from?
- What do we protect, and why?
- How do I talk to security?

Lesson 3: Building a Responsive DevSecOps Model

- Demonstrate Model
- Technical, business and human outcomes
- What is being measured?
- Gating and thresholding

Lesson 4: Integrating DevSecOps Stakeholders

- The DevSecOps State of Mind
- The DevSecOps Stakeholders
- What is at stake for who?
- Participating in the DevSecOps model

Lesson 5: Establishing DevSecOps Best Practices

- Start where you are
- Integrating people, process and technology and governance

- DevSecOps operating model
- Communication practices and boundaries
- Focusing on outcomes

Lesson 6: Best Practices to get started

- The Three Ways
- Identifying target states
- Value stream-centric thinking

Lesson 7: DevOps Pipelines and Continuous Compliance

- The goal of a DevOps pipeline
- Why continuous compliance is important
- Archetypes and reference architectures
- Coordinating DevOps Pipeline construction
- DevSecOps tool categories, types and examples

Lesson 8: Learning Using Outcomes

- Security Training Options
- Training as Policy
- Experiential Learning
- Cross-Skilling
- The DevSecOps Collective Body of Knowledge

Exam Preparation Materials:

- Exam Requirements
- Sample Exam Review

About SterlingNext's DevSecOps Foundation Certification Training Program

SterlingNext's DevSecOps Foundation Certification Training Program is a comprehensive and hands-on learning experience. With a focus on practical application, participants will gain the knowledge and skills required to implement security in a DevOps environment effectively. The course is led by experienced instructors, ensuring a valuable and engaging learning journey for every participant.