

# Cloud Access Security Broker (CASB) Implementation Training Course

Professional Development Training Course Outline

|          |               |               |                            |
|----------|---------------|---------------|----------------------------|
| Category | Data Security | Duration      | 5 Days                     |
| Base Fee | \$1,500 USD   | Delivery Mode | Online / On-site<br>Hybrid |

## Course Introduction

In the era of rapid digital transformation, organizations are heavily adopting SaaS, PaaS, and IaaS models, moving critical workloads and sensitive data to the cloud. This shift introduces significant security challenges, notably the loss of direct visibility and control over data and user activities a gap that traditional security measures can't bridge. The Cloud Access Security Broker has emerged as the essential security policy enforcement point, acting as a gatekeeper between cloud service consumers and providers. A robust CASB implementation is crucial for mitigating risks associated with Shadow IT, preventing data exfiltration, ensuring regulatory compliance with frameworks like GDPR and HIPAA, and delivering a cohesive multi-cloud security posture. This training provides the comprehensive knowledge and practical skills required for the successful design, deployment, and ongoing management of a cutting-edge CASB solution.

Cloud Access Security Broker (CASB) Implementation Training Course is designed to empower security professionals to master the Four Pillars of CASB Visibility, Data Security, Threat Protection, and Compliance. Successful implementation involves strategic architecture selection, integration with existing security ecosystems like SIEM/SOAR and IAM/SSO, and the creation of granular, context-aware policies. Learners will explore advanced topics like User and Entity Behavior Analytics for detecting insider threats, configuring Cloud DLP, and ensuring zero-trust access controls. By focusing on real-world use cases and case studies, this training transforms conceptual understanding into actionable deployment expertise, making participants indispensable assets in securing the modern cloud environment against advanced persistent threats.

## Programme Curriculum

### Cloud Access Security Broker (CASB) Implementation Training Course

#### Introduction

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### **Course Duration**

5 days

### **Course Objectives**

1. Strategize and Architect modern CASB deployments, including multi-mode CASB and integration within a SASE framework.
2. Master the principles of Shadow IT Discovery and implement continuous monitoring to gain comprehensive Cloud App Visibility.
3. Design and deploy advanced Cloud Data Loss Prevention policies for data in motion and data at rest across SaaS applications.
4. Configure and manage granular, context-aware Access Controls utilizing CASB's integration with Identity and Access Management and Single Sign-On (SSO).
5. Implement Real-time Threat Protection mechanisms, including malware detection, and leveraging Threat Intelligence feeds.
6. Utilize User and Entity Behavior Analytics (UEBA) capabilities for proactive detection and mitigation of insider threats and account compromise.
7. Ensure organizational Regulatory Compliance through CASB-driven auditing, reporting, and automated remediation.
8. Understand the nuances of API-based vs. Proxy-based CASB deployment models and select the optimal architecture for various cloud services
9. Integrate CASB with Security Information and Event Management (SIEM) and Security Orchestration, Automation, and Response (SOAR) for centralized logging and automated incident response.
10. Develop and enforce policies for securing data on unmanaged devices (BYOD) through Reverse Proxy controls and session-level protection.
11. Apply Data Encryption and Tokenization techniques via the CASB to protect sensitive data before it is stored in cloud services.
12. Conduct a thorough CASB Risk Assessment and create a prioritized implementation roadmap aligned with business and DevSecOps security goals.

13. Implement Automated Policy Enforcement and continuous security validation to maintain a strong Cloud Security Posture Management (CSPM).

## **Target Audience**

1. Cloud Security Engineers/Architects.
2. Information Security Managers/CISOs.
3. Security Operations Center (SOC) Analysts.
4. Network Engineers.
5. Compliance and Audit Professionals.
6. Enterprise Architects.
7. DevSecOps Engineers.
8. IT Administrators.

## **Course Modules**

### **Module 1: CASB Fundamentals and Architecture**

- Introduction to the Four Pillars of CASB.
- Understanding the rise of Shadow IT and the need for CASB in multi-cloud environments.
- Deep dive into deployment modes.
- Integrating CASB into the broader SASE framework and the concept of Zero Trust Access.
- Case Study: Analyzing a financial institution's transition from on-prem DLP to an API-based CASB for Office 365/Salesforce security.

### **Module 2: Cloud App Discovery and Visibility**

- Techniques for discovering and categorizing all cloud services used
- Configuring log collection from firewalls, proxies, and endpoints for comprehensive cloud service inventory.
- Assessing cloud app risk using CASB-provided scores and customizing risk factors.
- Implementing policies to sanction or block high-risk/non-compliant cloud applications.
- Case Study: A retail company using CASB to uncover and mitigate high-risk data sharing by over 50 "Shadow IT" apps.

### **Module 3: Data Security and Cloud DLP Implementation**

- Developing and tuning Cloud DLP policies to identify sensitive data at rest and in transit.
- Implementing real-time DLP enforcement actions: block, notify, quarantine, or coach the user.
- Applying Data Encryption for data stored in the cloud.
- Configuring policies for secure file sharing, collaboration control, and preventing data exfiltration.
- Case Study: A healthcare provider setting up CASB to enforce HIPAA compliance by automatically encrypting PHI uploaded to a sanctioned cloud storage app.

### **Module 4: Access Control and Identity Integration**

- Integrating CASB with IAM platforms for centralized identity management and SSO.
- Implementing Adaptive/Context-Aware Access Control based on user, device, location, and risk score.
- Utilizing Session Control to restrict in-session actions on unmanaged devices.
- Enforcing Multi-Factor Authentication and managing privileged access to cloud services.
- Case Study: A technology firm leveraging CASB's session controls to allow read-only access to corporate SaaS apps from personal laptops.

## **Module 5: Threat Protection and UEBA**

- Configuring Malware and Ransomware Detection for files uploaded to or downloaded from cloud applications.
- Implementing User and Entity Behavior Analytics to baseline normal user activity.
- Detecting anomalies and suspicious activities indicating a potential Account Takeover or Insider Threat.
- Setting up automated response and remediation playbooks via integration with SIEM/SOAR.
- Case Study: Investigating and remediating a potential insider threat flagged by UEBA for excessive file downloads and unusual login location.

## **Module 6: Compliance and Governance Reporting**

- Mapping CASB controls to major regulatory requirements
- Generating comprehensive Audit Trails and activity reports for compliance officers and auditors.
- Configuring alerts and dashboards to monitor policy violations and compliance risks in real-time.
- Implementing automated governance policies, such as revoking external shares after a set period or for non-compliant data.
- Case Study: A multinational company using CASB reporting to demonstrate GDPR compliance for data movement across various geographic cloud regions.

## **Module 7: Deployment, Testing, and Troubleshooting**

- Developing a detailed CASB Implementation Plan and proof-of-concept strategy.
- Best practices for integrating CASB with existing security tools
- Tuning policies to minimize false positives and ensure smooth user experience.
- Common CASB deployment challenges and effective troubleshooting techniques.
- Case Study: A university's challenge in deploying a reverse proxy CASB for a hybrid environment and the steps taken to optimize performance and reduce friction.

## **Module 8: Advanced CASB Management and Future Trends**

- Advanced techniques for extending CASB to IaaS/PaaS security and Cloud Security Posture Management
- Strategies for continuous Policy Refinement and adapting to new cloud services and features.
- Securing non-traditional cloud uses, such as Generative AI and large language model interfaces.
- The evolution of CASB and its role in the future of Extended Detection and Response
- Case Study: Planning the migration of a CASB to a unified Security Service Edge platform to simplify security stack management.

## **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](mailto: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

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Ready to enroll or request a customized program? Book online or contact us:

**Register Online Now**

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