- Filename: eccouncil-ceh31250-v11-14-12-1-apis-and-webhooks.md
- Show Name: CEHv11 (312-50)
- Topic Name: Web Application Hacking Hacking Web Applications
- Episode Name: APIs and Webhooks

APIs and Webhooks

Objectives:

- · What is an API?
 - o A single web service that can facilitate multiple online sources
 - Less complexity
 - API Services
 - SOAP
 - REST
 - RESTful
 - XML
 - JSON
- · What is a Webhook?
 - Push notifications
- API Security Risks
 - OWASP Top 10 API Security Risks
 - https://owasp.org/www-project-api-security/
 - SQLi
 - ∘ IDOR
 - o Auth/Access insecurity
 - DDoS
- API Hacking Methodology
 - Identify the Target
 - o Detect security standards
 - o Identify the attack surface
 - Launch Attack
- Security countermeasures for APIs and Webhooks
 - API
 - Sanitize User Input
 - Firewalls
 - Rate-Limiting
 - Parameterized Statements
 - Pagination
 - Rate-limiting and throttling
 - MFA
 - Webhooks
 - Require authentication
 - Blacklist calls from unauthorized sources
 - Webhook signing

- Timestamps
 - X-Cld-Timestamp (timing attacks)
 - X-OP-Timestamp