

## Product Brief

### Key Benefits

- **Developer access.** Empower internal and external developers to leverage your APIs.
- **Mobile access.** Securely connect the enterprise with mobile apps and smart devices.
- **Partner access.** Share information and services across organizational boundaries.
- **Data access.** Produce a complete, working system—everything you need for your applications in minutes: data integration, application logic, and a robust API

### Critical Differentiators

- **Ease of use.** Layer7 API Management offers a visual user interface to instantly create APIs or setup complex security policies. It can easily connect SOA, ESB, and legacy applications.
- **Scale.** Achieve high performance and scaling with throttling, prioritization, caching, and routing. Dynamically scale up or down as needed.
- **Security.** Protects against threats, OWASP vulnerabilities and controls access with single sign-on and identity management, providing end-to-end security for apps, mobile, and IoT.
- **Flexibility.** Can be implemented as a SaaS, on-premises, or hybrid solution. It is available in a wide range of form factors ranging across hardware, software, virtual, and containers such as Docker.
- **Event-driven APIs.** Support for iOS, Android, Cordova, and MQTT Websockets for a wide range of use cases

# Layer7 API Management

## The Industry's Leading Platform for Enterprise-Scale API Management

### At A Glance

Increasingly, enterprises are opening their data and applications to partners, developers, mobile apps, and cloud services. APIs provide a standardized way to open up information assets across the web, mobile devices, service-oriented architecture (SOA), and the cloud. However, to make API information sharing safe, reliable and cost-effective, enterprises must deal with critical security, performance management, and data adaptation challenges.

Layer7 API Management (formerly CA API Management) combines advanced functionality for back-end integration, mobile optimization, cloud orchestration, and developer management. It is unique in its ability to address the full breadth of enterprise API management challenges.

### Full API Lifecycle Management

The role of API management has expanded to cover a complete lifecycle that governs the creation, deployment, promotion and optimization of APIs on the provisioning side, as well as their discovery, acquisition and consumption by app developers and other API consumers.

**Provisioning:** Enterprises are responsible for a continuous sequence of API strategy, design, creation, orchestration, protection, testing, deployment, promotion, and monitoring. Full lifecycle API management enables each of these steps with functionality that also addresses security, scalability, and manageability concerns.

**Consumption:** The provisioning cycle meshes with a parallel one for the developers who leverage APIs to design, build, launch, and iterate their apps. Full lifecycle API management provides them with a reliable mobile data infrastructure, improved onboarding, and additional capabilities that accelerate, streamline, and improve mobile and IoT development.

Functional coverage in all of these areas is important when evaluating API management. A good solution will offer effective tools with clear benefits for all API stakeholders—enterprise architects, security specialists, product managers, app developers, and business executives. Named as a leader in multiple analyst reports, Layer7 API Management offers the industry's leading products that accelerate and enable the entire API lifecycle.

## Solution Overview

The following table shows the capabilities of Layer7 Full Lifecycle API Management.

Layer7 Full Lifecycle API Management Capabilities	
API Strategy and Design	<ul style="list-style-type: none"> <li>• API Academy resource center</li> <li>• Agile planning and delivery model</li> </ul>
API & Microservice Creation	<ul style="list-style-type: none"> <li>• Connect to legacy data sources including SQL, noSQL, DB2, and more</li> <li>• Automated solution for developing APIs and microservices</li> <li>• Instantly generate APIs and microservices with business logic</li> <li>• Drag and drop API creation</li> </ul>
Testing & Publishing	<ul style="list-style-type: none"> <li>• Solutions for testing across the plan, create, or run phases</li> <li>• Range of form factors including hardware, VMs, or containers</li> <li>• Integration with service virtualization tools for real-time testing</li> <li>• Cloud-agnostic deployment model</li> </ul>
Security	<ul style="list-style-type: none"> <li>• Protect against threats and new 2017 OWASP vulnerabilities</li> <li>• End-to-end omni-channel and SSO across devices</li> <li>• Mobile and IoT security with OAuth (server and client) and OpenID Connect profile certification</li> <li>• Common Criteria and FIPS 140-2 Certification</li> <li>• Support for WebService (WS-) Security</li> </ul>
Microservice Orchestration	<ul style="list-style-type: none"> <li>• Light, DevOps friendly, containerized, ephemeral gateway</li> <li>• Integration with edge gateway for a complete application backend</li> <li>• Discovery, access control, and routing for microservices built-in</li> <li>• Advanced 360-degree microservices monitoring, real-time</li> </ul>
Management	<ul style="list-style-type: none"> <li>• Integrates SOA, ESB, legacy applications and microservices</li> <li>• Compression, caching, and aggregation to optimize throughput</li> <li>• Protocol orchestration, adaptation, translation, and composition</li> <li>• Enterprise scale with support for over 40,000 TPS</li> </ul>
Discovery	<ul style="list-style-type: none"> <li>• Management features to enroll, engage, and educate developers</li> <li>• Foundation for a digital ecosystem with analytics and optimization</li> <li>• Developer friendly features including code generation and docs</li> <li>• Works on-premises, in the cloud, or as a hybrid deployment</li> </ul>
Mobile & IoT Development	<ul style="list-style-type: none"> <li>• Range of developer friendly tools, SDKs, and app services</li> <li>• Reduces development time of core mobile functions like messaging</li> <li>• Mobile SDK and OAuth Toolkit to ensure consistent security</li> <li>• Support for iOS, Android, Cordova, and MQTT for a wide range of use cases</li> <li>• Support for Websockets</li> </ul>
Monitoring	<ul style="list-style-type: none"> <li>• Provides API performance metrics and reporting</li> <li>• Precision monitoring for proactive identification and triage of issues</li> <li>• Provides app and consumption metrics to optimize development</li> <li>• Detailed transaction tracing from the gateway to backend systems</li> </ul>

## Supported Standards

XML, JSON, SOAP, REST, PCI-OSS, AJAX, XPath, XSLT, WSOL, XML Schema, LDAP, RADIUS, SAML, XACML, OAuth 1.0a/2.0, PKCS, Kerberos, X.509 Certificates, FIPS 140-2, XML Signature, XML Encryption, SSL/TLS, SNMP, SMTP, POP3, IMAP4, HTTP(S), JMS, MQ Series, Tibco EMS, Raw TCP, FTP(S), WS-Security, WSTrust, WS-Federation, WS-SecureExchange, WSIL, WS-I, WS-Addressing, WS-Policy, SSecureConversation, WS-MetadataExchange, WS-SecurityPolicy, WSPolicyAttachment, WS-I BSP, UDOI, WSRR, MTOM, IPv6, WCF, MQTT, RabbitMQ, Kafka, JMS, Websockets

For more information about Layer7 API Management, please visit [ca.com/api](https://ca.com/api).