

# Axway API Gateway

The bridge to delivering digital applications across cloud, mobile and partner channels



Axway API Gateway — a foundational component in an API-first architecture for digital business — provides enterprise-grade delivery and governance of web APIs that connect back-end applications and third-party systems, cloud apps, mobile devices and the Internet of Things (IoT). Using a graphical “configure-not-code” approach, this next-generation technology makes it easy to develop, orchestrate and integrate APIs of all types, across a wide range of protocols and formats (including REST, SOAP web services, XML, messaging and WebSockets), protected from attack and authenticated by a wide variety of identity management mechanisms.

Additionally, Axway API Gateway provides real-time operational monitoring and analytical reporting to give IT, business and operational users visibility into API usage. Integration with Axway Sentinel combines API usage data with information from other Axway products to provide end-to-end visibility into B2B data flows.

### Key Features & Benefits

#### End-to-end lifecycle management

Manage the API lifecycle from creation to end-of-life

- API creation and virtualization
- Drag-and-drop policy creation
- Intuitive graphical “flow chart” policy metaphor
- Library of over 200 pre-built policy operations
- Policy property store with graphical schema editor for simplified development of dynamic metadata-driven policies
- Interactive API testing tool
- Integration with Axway API Portal for developer onboarding and management, and API development, registration, publication and lifecycle management
- Self-service API and web service consumption
- Integration with API/SOA repositories and registries



Key Features & Benefits	
<b>Security and authentication</b> Thwart attacks, control access, and secure data and applications	<ul style="list-style-type: none"> <li>▪ NIST FIPS- and NSA Suite B-compliant modes</li> <li>▪ Embedded API Firewalling engine</li> <li>▪ SafeNet Luna HSM (hardware security module) integration</li> <li>▪ Out-of-the-box integrations with all the leading identity management vendors, such as CA, IBM and Oracle</li> <li>▪ Customizable authentication policies for any API or web service registered in the API catalog</li> <li>▪ OAuth token-based authorization</li> </ul>
<b>Control and governance</b> Monitor and manage APIs for quality and access control	<ul style="list-style-type: none"> <li>▪ Rate-limiting and quota-plan configuration for API usage</li> <li>▪ Alerts for API usage and security events</li> <li>▪ Quality-of-service monitoring and adjustment</li> <li>▪ Service Level Agreement (SLA) monitoring and enforcement</li> <li>▪ Traffic throttling, smoothing and load balancing</li> <li>▪ Content-based routing, blocking and processing</li> </ul>
<b>Monitoring and reporting</b> Monitor API operations and analyze API usage	<ul style="list-style-type: none"> <li>▪ Configurable logging of any API transaction data</li> <li>▪ Real-time system monitoring</li> <li>▪ Alerting based on errors, exceptions and thresholds</li> <li>▪ Transaction tracing and root cause analysis</li> <li>▪ API usage analysis</li> <li>▪ Automated generation and delivery of reports</li> <li>▪ Integration with log and system management tools</li> </ul>
<b>Cloud connectivity</b> Use Axway API Gateway as an OAuth 2.0 client to Salesforce, Google and Amazon	<ul style="list-style-type: none"> <li>▪ Cloud connectivity to Salesforce and Google REST APIs, and Amazon Web Services (AWS)</li> <li>▪ Connectivity with Amazon Simple Queuing Service (SQS), Simple Storage Service (S3) and Simple Notification Service (SNS)</li> </ul>
<b>Internet and enterprise messaging</b> Support end-to-end asynchronous messaging	<ul style="list-style-type: none"> <li>▪ WebSockets: Full-duplex asynchronous communication between clients and back-end servers</li> <li>▪ Embedded Apache ActiveMQ: Native JMS provider to support end-to-end asynchronous APIs and integration between external-facing REST APIs and SOAP Web Services and back-end systems and applications</li> <li>▪ Commit/Rollback options including explicit rollback from a policy and re-delivery delay</li> <li>▪ Support for Durable Topic Subscribers to avoid losing messages in crash cases</li> <li>▪ "Read from JMS" filter to pull messages from policies (alternative to listeners)</li> <li>▪ Client &amp; server certificate+key selection (including HSM) from JMS dialogs</li> </ul>
<b>Administration</b> Use the optional Axway API Manager for self-service API and web service consumption, easy administration and rapid registration	<ul style="list-style-type: none"> <li>▪ API and web service catalog and repository (SOAP and REST)</li> <li>▪ Versioning</li> <li>▪ Migration of APIs/web services and policies across environments</li> <li>▪ Client management, including organization, application, device and user</li> <li>▪ Integration with partner management systems and processes</li> <li>▪ Active/active high availability</li> </ul>

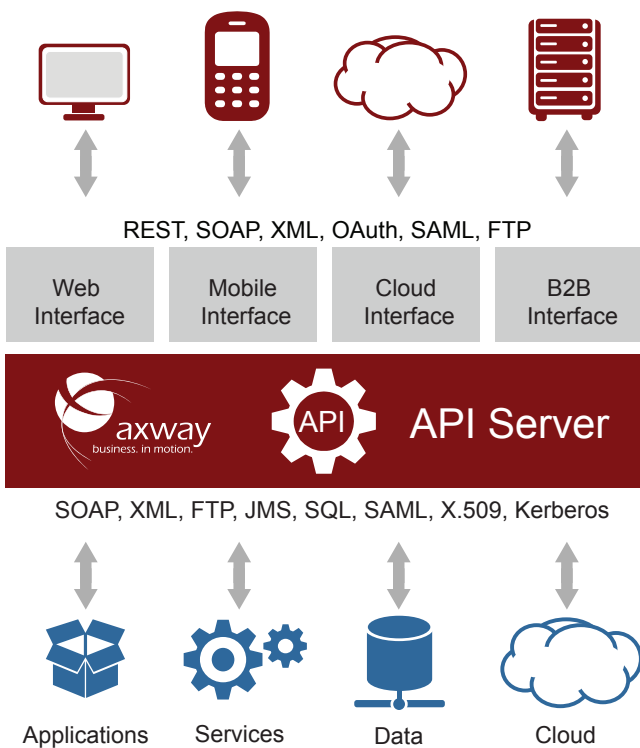
## Fast, Easy and Secure API Development and Delivery

Axway API Gateway enables enterprises to standardize the API development and delivery capabilities required to provide business services via cloud, mobile and partner channels. Encapsulating application gateway, cloud service broker and identity middleware functionality in a unified platform, it provides an agile, graphical configure-not-code API environment that leverages existing back-end applications, services and data to help speed time-to-market for new business services while ensuring high security, performance, and availability.

### Core Functionality

#### Manage end-to-end API lifecycle

APIs have a lifecycle that spans development, testing, deployment, administration and monitoring. Unlike other solutions that cover only parts of the API lifecycle, don't support web services, or are merely building blocks for custom integration, Axway provides a comprehensive API platform that lets you build APIs, define policies, test APIs, migrate APIs between environments, market APIs, serve APIs, enforce policies, manage and debug API traffic, manage API consumption by partners and developers, and monitor and report on API usage.



*API Server Manages, Delivers & Secures APIs*

**Deliver APIs quickly with consistent quality**

An API is useless unless it is delivered with consistent quality. Axway API Gateway helps ensure great performance, high availability and elastic scalability by enabling enterprises to operationalize API delivery with standardized supporting services, including traffic management, transformation and system integration. Consistent performance and fast response times enable millisecond-latency transactions in demanding SLA-driven environments.

**Secure APIs and meet compliance requirements**

API security breaches can cause brand damage, revenue loss, and compliance penalties. Axway API Gateway provides comprehensive API security and pre-built identity management integrations. Axway API Gateway protects APIs from attacks, controls access to APIs, and secures the data transmitted by APIs. Axway also provides extensive auditing, monitoring and reporting capabilities to help enterprises meet the most stringent compliance mandates.

**Configure-not-code approach**

Axway API Gateway provides consistency across development and management of native REST APIs, developed APIs that require back-end integration, and existing web services. No matter how an API is implemented, it can be defined, registered and published to the API catalog in the same way.

The Policy Studio development environment is an Eclipse-based drag-and-drop interface where policy developers can create policies simply by configuring and wiring components together. API owners and IT professionals alike will appreciate the rich analytics module with easy-to-navigate reports. The unified administration console makes managing even the largest and most complex API environments easy through interactive wizards and visualization tools that put all management tasks at the administrator's fingertips: APIs, servers, policies, transactions, reports and logs.

You can also use Policy Studio to build a library of standardized corporate policies (for caching, threat protection, etc.) that developers can choose from when they register a new API or web service.

**Unparalleled flexibility and extensibility**

Companies can add their own components and capabilities using Java and popular scripting languages, including Groovy, JavaScript, Jython and Ant. A full SDK is available to support any other custom in-depth integration needs.



**Enterprise-class deployment flexibility**

Axway API Gateway supports the broadest range of enterprise deployment scenarios, including software, a hardened appliance that is ideal for DMZ deployment, virtual appliances in VMware virtual machine images, and native AMI images. Standard software installation is certified on Windows, Linux and Solaris. All software options can be deployed on premise or in the cloud. The Axway Appliance Platform ensures consistency across Axway appliances and enables support for other virtual and cloud stacks

**Proven performance, scalability and reliability**

Axway API Gateway is built on a patented VXA processing engine that supports many of the largest API deployments in production today. This native-code engine processes API delivery tasks at wire speed and can offload many XML and security tasks from the back-end application infrastructure. This class-leading performance requires no proprietary hardware and scales linearly with physical and virtual resources, delivering the same high performance in any form factor.

**Extensive pre-built adapters**

Axway API Gateway offers an extensive library of out-of-the-box adapters. These include integrations to all the leading identity management vendors, such as CA, Entrust, IBM, Oracle and RSA, as well as application and SOA infrastructure vendors such as HP Systinet, IBM, JBOSS, .NET, Oracle, Progress, Software AG and TIBCO.

**Enhanced Gateway Capabilities****Cloud connectivity**

As enterprises increasingly add cloud applications to their portfolios, they need to integrate them with their on-premise solutions. Axway API Gateway enables “cloud-to-ground” connectivity by exposing on-premise applications to cloud applications as REST APIs and Web Services, simplifying integration with Salesforce, Google, Amazon and other cloud-based services.

**Asynchronous APIs and enterprise messaging**

Axway API Gateway enables companies to support end-to-end asynchronous APIs within, across and beyond the firewall by embedding a native JMS messaging provider, Apache ActiveMQ, as part of its mediation and orchestration runtime. This approach makes it much easier to use API Gateway with or without an ESB to integrate external-facing REST API and Web Services with back-end applications. Companies can also deploy, secure and manage external asynchronous APIs using WebSockets for asynchronous communication between a browser and a server to support interactive applications such as live content updates and chat.



**Support for SOAP and Web Services**

To help organizations leverage existing investments, Axway API Gateway works exactly the same way for native REST APIs as it does for exposing existing back-end SOAP web services as REST APIs. A WSDL and XSD repository provides the ability to manage multiple versions of imported web services as they change throughout their lifecycles, which makes developers much more productive and responsive to change.

**Integration with Axway 5 Suite**

Axway 5 Suite enables organizations to integrate and govern the flows of data that drive business interactions so they can deliver new services securely via APIs, streamline data exchange with partner communities via managed file transfer and B2B integration, and ensure SLA and regulatory compliance with complete visibility and control.

Axway API Gateway integrates with other components of Axway 5 Suite, including:

- Axway Sentinel for end-to-end tracking of messages across Axway 5 Suite, including technical monitoring and high-level metrics for SLAs, usage quotas and billing.
- Axway B2Bi for expanding the reach of B2B deployments with bi-directional integration. Axway Passport customers can leverage existing investments to authenticate and authorize users accessing APIs and services via Axway API Gateway.
- Axway Validation Authority to obtain the revocation status of digital certificates.

For more information, visit [www.axway.com](http://www.axway.com)

Copyright © Axway 2015. All rights reserved.

