Axway API Gateway and the Connected Retailer

Create a seamless consumer experience with an omni-channel strategy

Increase consumer confidence in mobile devices as shopping and payment platforms open up new opportunities to reach consumers and fuel business growth.

Using an omni-channel strategy to target and track "connected consumers" across web, mobile and social media platforms, retailers can garner valuable insights, and personalize interactions based on each shopper's persona, purchase patterns, social network connections, website visits, searches and other available information.

But the mobile and connected world is built on a new set of standards and integration approaches that may not be supported by the application-integration and service-oriented architectures many companies have in place today.

The challenge in establishing a successful omni-channel strategy is to present a "unified front" to consumers in spite of technology disconnects between the in-store experience, social networking efforts (or lack thereof), and existing applications, web services and APIs that are not mobile-ready due to gaps in compatibility, security, control and monitoring.

APIs — the "great uniters"

The same lightweight web API technology that is powering the cloud, social and mobile application revolution is also key to delivering a seamless and consistent omni-channel shopping experience for connected consumers. Acting as the messengers between back-end applications and web, mobile and social media channels, APIs can create a unified front for your brand while also doing the heavy lifting when it comes to integrating consumer data with front and back-end systems throughout the supply chain.

Axway API Gateway

Axway API Gateway is an industry-leading API delivery and governance solution that quickly transforms existing applications and web services into secure APIs for mobile applications and browsers, as well as cloud and partner channels.

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business. in motion.

Axway API Gateway enables retailers to connect existing business systems with mobile applications and browsers to create a seamless and secure omni-channel shopping experience.

Key capabilities:

- API monitoring for quality and governance
- Service Level Agreement (SLA) monitoring and enforcement
- Traffic throttling, smoothing and load balancing
- Content-based routing, blocking and processing
- Automated API testing and auditing for quality
- API operations monitoring
- Alerting based on errors, exceptions and thresholds
- Transaction tracing and debugging
- API usage analysis
- API catalog and repository
- API versioning and rollback
- Migration of APIs and policies across environments

Axway API Gateway:

- Provides the must-have security, management and access-control capabilities required to protect APIs that handle sensitive data, and prevent the kind of attacks and breaches that can result in damaged brand reputations, legal challenges and compliance penalties.
- Makes it easy to integrate and aggregate APIs, no matter what interface protocols or authentication schemes they use.
- Delivers the reporting and monitoring tools required to ensure API reliability and performance, and gain insight into how, when and by whom APIs are being used.
- Helps you gather the information you need in order to understand your customers better, and gives you the agility to react quickly to emerging trends and opportunities.

Expose existing assets via mobile-friendly APIs

Mobile applications, whether native or web, rely on lightweight APIs using the REST and JSON patterns. In contrast, enterprise web services and application APIs use the more structured, heavyweight SOAP and XML standards.

Axway API Gateway dynamically transforms SOAP/XML to REST/JSON on the wire, enabling connected retailers to add mobile-ready APIs to enterprise applications instantly and non-invasively.

Axway API Gateway also transforms other standard and proprietary protocols such as Java API, JMS, FTP, TCP and ParlayX.
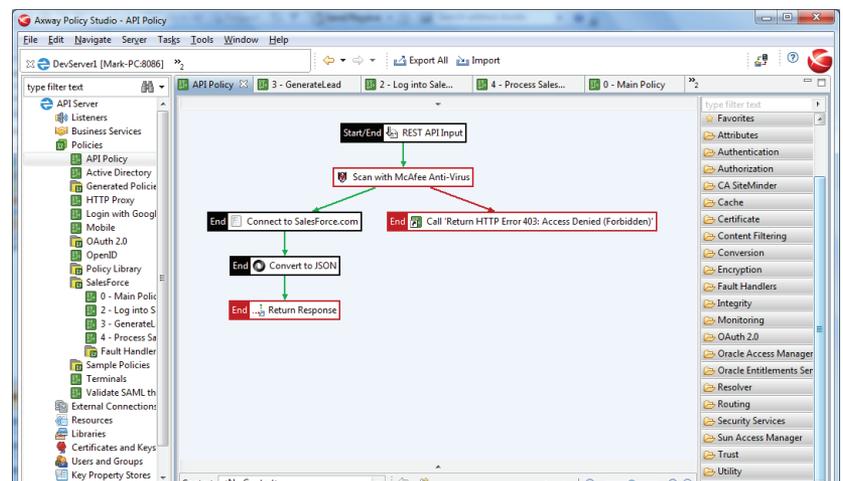
Drag-and-drop mobile API transformation – *Axway provides a graphical development environment with native support for REST, Web Services and OAuth, so you can easily grant access to existing back-end systems without making intrusive changes.*

Secure mobile access

With approximately 1 billion smartphones, 7 billion mobile devices and nearly 1 trillion interconnected devices in use worldwide, mobile access on a grand scale understandably complicates enforcement of security policies. Consequently, authentication, authorization and audit schemes must become more sophisticated to account for the additional device and location context.

Axway API Gateway minimizes risk with out-of-the-box API security capabilities that enable you to control access to, and secure data transmitted by, APIs.

Extend identity and access management platforms

Many organizations have implemented enterprise identity and access management (IAM) platforms to control user access to enterprise applications and enable single sign-on. These enterprise IAM platforms — which date back over a decade to the "Internet era" and are highly user- and browser-centric — are coming up short when it comes to the more complex task of controlling omni-channel mobile access spanning multiple devices and domains that are inherently less secure than non-mobile devices and domains.

Featuring out-of-the-box integration with all leading identity management platforms — such as CA, Entrust, IBM, Oracle and RSA — Axway API Gateway extends existing identity management platforms to handle new mobile requirements such as device authentication, identity federation and contextual authorization.

Integrate with consumer identity provider services

Connected consumers often prefer to use their existing credentials from Google, Facebook, Twitter or other mobile accounts to log in to an application. Integration with third-party identity provider services (IPS), however, is not trivial for most identity management products.

Axway API Gateway provides out-of-the-box support for OAuth- and SAML-based federation, making it easy to incorporate third-party IPS to authenticate mobile API users.

Protect APIs against both malicious and unintentional threats

Because mobile APIs are exposed to larger and more diverse populations of developers and applications, they are also exposed to higher levels of operational and security risk.

Unlike network and web application firewalls, Axway API Gateway detects and prevents message-level threats across all API traffic, including cloud, web, mobile and B2B channels. Serving as the policy enforcement point (PEP) that authenticates, authorizes and audits API access, Axway API Gateway protects APIs from malicious attacks, as well as potential "friendly fire," by monitoring API call volume and client behaviors. Clients that exhibit disruptive behaviors, such as XPATH and SQL injections, viruses and executables, large payloads or cross-site scripting, can be blocked or throttled to prevent denial-of-service and other types of attacks.

## Scale to handle increasing mobile application traffic

Omni-channel mobile marketing can significantly increase application traffic; and scalability is crucial to the smooth delivery of rich content and interactions driven by technologies such as 4G network and voice response.

Axway API Gateway supports high data volumes generated and consumed by mobile devices by bringing wire-speed API delivery to any enterprise mobile platform — with no upgrades to back-end application resources required.

Common CPU-intensive tasks such as parsing, schema validation, encryption and signing can all be offloaded to the API Gateway to increase overall API throughput, while overcoming intermittent connections through asynchronous communications. And responses to high-frequency API calls can be cached to reduce traffic going to the application server and databases.

Ensure high availability and a positive user experience
Axway API Gateway enables your technical staff to monitor, analyze, route, throttle, shape and audit all API traffic at coarse or granular levels.
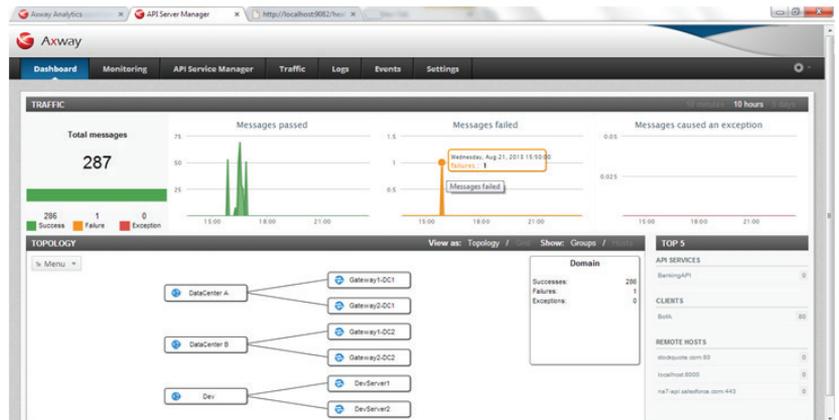
API analytics – Leverage comprehensive reporting, monitoring and auditing capabilities to gain insight into the performance and quality of your API gateway operations, APIs and transactions.

Using any available attributes about the application, device, user, company and network to enforce quotas and service levels, you can take control and operationalize delivery of mobile APIs.

Complete auditing, monitoring, logging and reporting capabilities also help you meet stringent compliance mandates.

For more information visit www.axway.com

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