

Axway API Manager

Enable API developers and administrators to govern APIs



Axway API Manager empowers API developers and administrators to govern APIs, API developers and API consumer communities. It provides API developers and administrators a Web-based console to manage the development lifecycle of any APIs — including Web services, REST/JSON, or message-based APIs — to register, onboard and manage communities of API developers and consumers, and to define and enforce a broad range of runtime policies ranging from authentication and authorization to quotas and SLAs.

API Manager also provides REST Portal APIs that are the foundation for Axway API Portal. These APIs are also used by companies to build their own API portals or embed API management and self service capabilities into their Web site of choice and create their own personalized experience for API consumers. Combined with API Gateway, API Manager equips API developers and administrators with the tools they need to unleash the full power of the API economy, to create new sales channels, better engage with customers and prospects, integrate with customers and partners to improve efficiency, and enable new business models that help drive revenue growth.

Key Features & Benefits

Role-based and customizable console

Facilitate the user experience via customization and credential management

- Provide application developer self-registration and profile management, application registration, credential management, browse API documentation, and monitor and report API use and consumption
- Stylize the console with unique branding or messaging
- Define user experience based on role or function

API registration

Policy developers and API development teams can quickly and easily register REST APIs

- Enable API administrators and API developers to register REST APIs directly or import WADL or Swagger metadata files
- Automatically apply policies defined in the Client Registry
- Define virtualized APIs that mirror back-end APIs through an easy to use wizard
- Compose new APIs that mash-up multiple back-end APIs
- Map between different styles of REST APIS (e.g., exposing a query string-style API as a URL parameter-style API)
- Define authentication, authorization and quota policies in the Client Registry
- Develop custom, reusable policies to enforce enterprise-specific requirements across all APIs



Key Features & Benefits	
Developer administration and management Secure access and foster collaboration with fine-grained control over API consumption	<ul style="list-style-type: none"> ▪ On-board users by issuing certificates for a specific or unlimited number of developers per organization ▪ Set usage quotas for API clients (including organization, application, device and user) by defining policies that govern who may consume, what they can consume, and how much they can consume ▪ Integrate API Manager with third-party partner management systems and processes through a published set of APIs ▪ Support third-party content management/wiki platforms to enable partners to incorporate API Manager capabilities into their own portals
Easy API administration Manage APIs throughout the entire lifecycle	<ul style="list-style-type: none"> ▪ Maintain an API Catalog and associated documentation, enabling API consumers to easily discover APIs ▪ Control API modifications and rollout through versioning ▪ Enable business and operational users to monitor API usage and manage client consumption of APIs from registration to publication to retirement.
Self-service API consumption Enable API consumers to find, understand, test and consume APIs through the Axway API Portal or using the Axway API Manager APIs	<ul style="list-style-type: none"> ▪ Browse APIs and their associated documentation in the API Catalog ▪ Register applications and developer credentials ▪ Facilitate easy consumption and create partner and developer communities built around APIs
Event Alerts Generate a variety of notifications to trigger governance processes	<ul style="list-style-type: none"> ▪ Provides a set of sample policies that will handle each alert by sending an email to the API administrator or client application developer ▪ Customize policies to invoke workflows from external systems or from Axway Application Studio ▪ Activate processes from a host of events including registrations, quotas, consumption metrics, and more

Fast, Easy and Secure API Management

Operating on Axway API Gateway, Axway API Manager makes managing even the largest and most complex API environments straightforward and easy by providing:

- API administrator interface for complete visibility and management of APIs, developers and policies
- API usage analytics detailing which APIs are being accessed, when, by whom, and how frequently
- Easy and fast registration of REST APIs and documentation using intuitive wizards

Core Functionality

API Governance Console

Axway API Manager includes a Web-based, role-based API governance console for registering, governing and administering APIs. API developers can use the console to browse, register and monitor the consumption and usage of APIs by partner developers and their associated applications.

API Manager is implemented as a Web application on top of Axway API Gateway, and can be customized for any partner or extended developer community.



API Registration Wizard

API Manager supports an administrative-centric approach to registering and managing the consumption of APIs in an operational environment. When a new back-end API is developed, the API can be registered in API Manager, and partner organizations and client applications can be authorized to use it.

Using API Manager, API developers and administrators can:

- Register back-end APIs by importing API definitions (Swagger or WADL) or by manually registering the API, making it available in the API catalog.
- Create front-end APIs by virtualizing a back-end API using an easy-to-use wizard. The front-end API is the public-facing API and, by default, the front-end API will be the same as the back-end API, thus commissioning the API “as-is.”
- Generate a front-end API by “mashing up” multiple back-end APIs, producing API bundles that are domain-, use case- or partner-specific.

Client Registry

The Client Registry is the repository of organizations and partners, API developers and consumers, and client applications that consume the REST APIs. The Client Registry also contains the authentication credentials of the client applications, and authorization and quota policies defined at both the organization and application level. In addition, the product includes filters that provide read-only access to the client registry. These filters allow developers to create policies in Policy Studio that leverage the information in the Client Registry.

Policy Studio API Registration Wizard

The API registration wizard is a plugin to Policy Studio that enables API developers to register REST APIs with API Manager as they develop without having to leave their development environment. Registration routes the API to a policy developed in Policy Studio. Developers will often use Policy Studio to build REST APIs from non-REST back-end applications and services.

Delegated API Registration

API Manager enables a multi-stage, develop-deploy-and-manage approach to API management across teams by allowing groups of API developers and administrators to develop, organize, deploy, and register their own APIs.

API Manager supports this delegated model by providing administrators with the fine-grained control needed to create developer groups, and to delegate the authority to developers to create their own applications that produce and consume APIs, and to register and test back-end APIs and front-end APIs in isolation of other teams.

System Specifications

Axway API Manager runs on Axway API Gateway, which provides the underlying API gateway capabilities

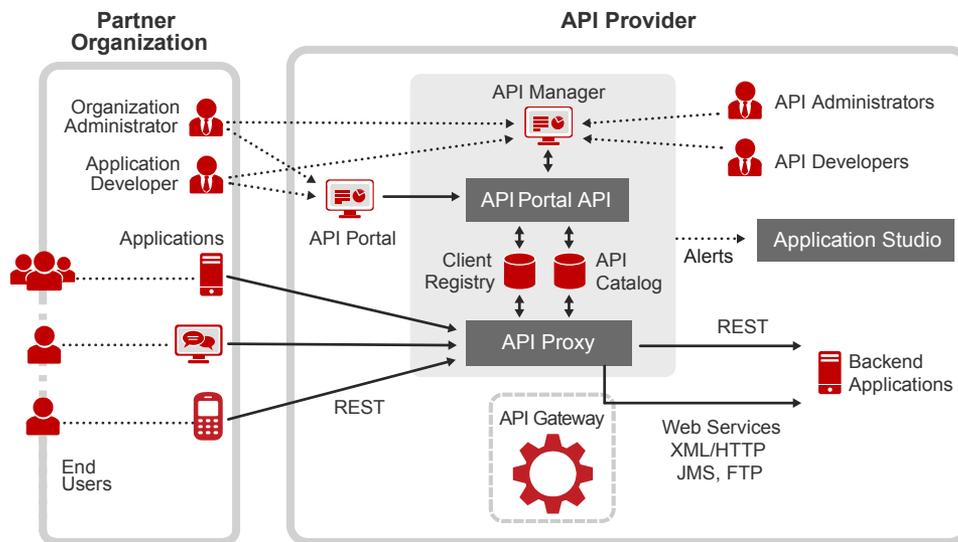
Delivery Options

VMware virtual appliance
Amazon Machine Image appliance
Hardened physical appliance
Licensed software deployed on premise or in the cloud

Platforms

Linux Centos 5.2, Debian GNU/Linux 5.0 (Lenny), Oracle Linux 5.5, Red Hat Enterprise Linux 5 and 6.2, Suse Linux Enterprise Server 11, Ubuntu 11.04 and 12.04
Solaris 10
Windows 7, XP Professional, Server 2008





The role of Axway API Manager in the greater API ecosystem.

API Lifecycle Management

API Manager supports full lifecycle management for APIs by providing a lifecycle model for each API:

- **Unpublished** — The API is registered and tested in isolation in a developer organization, and only available to administrators and developers who are members of the developer organization.
- **Published** — The API is ready to be consumed and is published into the API Catalog. The API Administrator then authorizes organizations to access the API, making it visible to client application developers.
- **Deprecated** — The published API is flagged with a retirement date at which time it will be retired from the API Catalog and no longer available to client applications.
- **Retired** — The API is unpublished from the API Catalog and no longer available to client applications, and is only available within the developer organization where it was created.

Policy Callouts

API Manager supports the use of request, routing and response policy callouts when creating front-end APIs. This allows policy developers using Policy Studio — as a one-time activity — to implement enterprise-specific standard policies that can be applied easily to multiple APIs during registration.

Cross-Origin Resource Sharing (CORS) and Virtual Hosting

API Manager leverages CORS and virtual hosting support from Axway API Gateway; which means front-end APIs can be configured to support CORS to selectively allow access by web applications running in other domains. With virtual hosting, each developer organization can be configured to appear as operating on any selected host.

API Import & Export

Registered APIs can be exported from one API Manager and imported to another API Manager allowing APIs to be promoted from a Sandbox API group (where client applications are developed and tested) to a production API group. An “API Promotion” policy can be invoked that automates this process.

API Proxy

API Proxy is the run-time engine that executes invocations of the registered APIs, applying the policies defined in the Client Registry.

REST Portal API

The REST Portal API provides the underlying capabilities for the API Portal, including management of the data in the Client Registry and browsing of APIs registered using the REST API registration wizard, with API documentation returned in Swagger format. REST Portal API enables the development of custom developer portals and integration with external partner management systems.

