

IBM webMethods API Management

Complete API management – in the cloud and on-prem – powered by IBM webMethods



Highlights

Why IBM webMethods API Management?

What do you get with IBM WebMethods API Management

In an increasingly connected world, APIs are the foundation for new digital business models. They're the connectors between applications, data and services—enabling your business to expose data and services from web apps, mobile apps, Internet of Things (IoT) sensors and other touchpoints in a secure, standard way. IBM webMethods API Management is an all-in-one API management platform that makes it easy for you securely expose your APIs with end-to-end visibility across clouds, runtimes and geographies, attract new customers and add new revenue streams. What's more, developers will like the convenience of a single place to discover, test and sign up for your APIs.

Everything you need to build an API ecosystem

Key Benefits

IBM webMethods API Management is a cloud platform for API management that offers you an API control plane for end-to-end governance, a developer portal for developer collaboration and an API gateway to protect you from malicious users. You can do all of this with IBM webMethods API Management:

- Visualize your hybrid, distributed, multi-vendor runtimes in a single pane of glass
- Design and compose APIs
- Build and grow your developer audience to increase adoption and add new revenue channels
- Secure your APIs from malicious external attacks and unauthorized users
- Monetize your APIs
- Track and measure API usage with analytics and reporting
- Reduce or eliminate the need for unnecessary holes in your firewall
- Protect consumers from underlying changes through API virtualization features

Key features

Runtime monitoring and administration

Attain new levels of control and productivity with a centralized runtime administration and monitoring control plane that delivers comprehensive visibility and governance over your distributed API landscape. With the IBM webMethods API Control Plane, you can catalog, browse, filter, and search through all your APIs from a single pane of glass. Moreover, you can also identify differences and inconsistencies, allowing you to take necessary actions to standardize your API ecosystem.

Some of the key features of IBM webMethods API Control Plane are, but not limited to:

API runtime monitoring

View all on-premises, SaaS, and private cloud gateways and APIs in one dashboard, including 3rd-party tools. Monitor gateway and API performance, analyze operations, and track trends across the landscape, viewing transaction patterns for selected time ranges.

API runtime management

The API Control Plane offers detailed insights into every API Gateway deployment, also known as API runtimes, within your ecosystem. Easily assess the health status of each gateway to ensure continuity and quality of service.

API catalog

Access a comprehensive list of all APIs deployed across any API gateway. Upon API gateway registration, the API Control Plane is automatically populated with the complete API inventory from the API landscape. This tool facilitates tracking API associations with API gateways, including instances where the same API is deployed across different gateways. Additionally, it identifies discrepancies in API fields and offers seamless navigation to the API details page in the API Gateway.

Data Plane Management

A data plane constitutes a logical grouping of API gateway runtimes, organized according to how an organization references or uses them. It can be categorized into data planes using various criteria such as name, tags, location, region, runtime type, and deployment type. This feature enables efficient management of data planes, allowing users to easily view the individual runtimes within each data plane and monitor their status.

Dashboard for analytics

Gain detailed insights into the performance of your API landscape with in-depth analytics. Visualize the geographical distribution of data planes and runtimes across your organization. This visualization provides a comprehensive summary of total transactions, error rates, average response times, and latency for the specified time frame.

API Gateway

API Security

Protect your API ecosystem from malicious attacks with powerful DMZ-level security. With IBM webMethods API Gateway, you can effectively secure the communication between API consumer requests and service execution, defending against Denial of Service (DoS) attacks based on IP addresses, specific mobile devices, and message volume. Use policy-driven layered security to uniformly protect and monitor access to services and data exposed in your APIs. You can support both transport and message-layer security, including authentication, authorization, digital encryption and digital signatures.

Transformation and routing

API policies have extensive support for mapping and transformation, encompassing protocols, message formats, and transports.

Plans and packaging for monetization

Create new revenue channels through enhanced API monetization features, including defining and managing API plans and packages. Define, publish and track usage in support of API subscriptions and charge-back services.

Clustering

When self-hosted, API Gateway offers scalability through clustering multiple instances. By placing a load balancer in front of the clustered API Gateway instances, request messages can be efficiently distributed, ensuring optimal performance.

Developer Portal

Expand your developer network and increase API consumption by leveraging a secure developer portal. With IBM webMethods Developer Portal, you can establish a seamless API ecosystem that fosters collaboration and innovation. Empower developers and partners to explore, consume, and contribute to your APIs, driving growth and enhancing your organization's digital capabilities and revenue channels.

IBM webMethods Developer Portal offers a range of key capabilities, including, but not limited to:

API Support

Tailored for REST APIs, the Developer Portal seamlessly accommodates oData APIs and traditional SOAP-based APIs. This flexibility enables you to utilize existing investments in SOAP-based APIs while transitioning to REST for newer API developments.

Hackathons and Beta Program Support

Foster growth within your developer API ecosystem through initiatives like hackathons and other engagement programs designed to drive participation and increase API utilization.

Automatic synchronization

Eliminate the need for redundant maintenance of API descriptions for both internal and external consumers by automatically generating API documents (descriptions) from the enterprise API catalog metadata.

API Monetization

Optimize your API monetization potential with tailored options for integrating a Stripe payment gateway account. Through seamless integration, effortlessly administer and customize payment processes, offering users secure and convenient payment alternatives.

Built-in usage analytics

Gain insights into visitor origins, popular pages, and API usage patterns to enhance your understanding of user behavior. Utilize this information to refine your portal's customer experience, driving increased API adoption among developers and leveraging valuable API insights for continuous improvement.

Deployment flexibility

Leverage deployment flexibility by deploying the Developer Portal in a public cloud, private cloud, or within the DMZ.

API Development

IBM webMethods API Studio is a comprehensive tool for API development, offering a centralized platform where developers and product managers can create, test, and deploy APIs. It allows users to author APIs and related assets, add policies and tests, and seamlessly deploy projects to API gateways, all while providing support for version control systems.

Microgateway

Managing microservices in the cloud, protecting them and throttling traffic to backend servers is a difficult challenge for IT organizations. But without this visibility and control, your customers, partners, and employees can experience slowdowns and data loss. With IBM webMethods API Management you'll be able to prevent main gateways from overloading and secure and manage your microservices across distributed environments in a small footprint, rapid start format.

- **Multiple form factors:** Provision IBM webMethods Microgateway as a Java® instance or as a Docker® container with a micro-Linux® host. Choose from a standalone or a sidecar deployment.
- **Seamless failover with service registry support:** A service registry will enable you to automatically failover to another running instance if a microservice becomes unavailable.
- **Advanced user security:** Create advanced policies for JSON web tokens, SAML, API keys, OAuth, or Open ID, as well as data masking policies for sensitive PII data. And you'll be able to automatically protect and control microservices as soon as they're deployed
- **Traffic monitoring and control:** Log all traffic requests and responses for analysis and apply limits to service invocations during a specific time interval for identified clients.

API Lifecycle Management

Manage the entire process of designing, developing, deploying, versioning and retiring APIs with CentraSite.

Lifecycle models and versioning

Ensure standards and practices are followed as every API moves through its lifecycle. You can do this by defining permissible transitions between states. With built-in versioning capabilities, you can define and track API versions. Multiple versions can co-exist, and older versions can be retired over time.

Policy management

Design and configure policies to be applied to your APIs at runtime. A given policy can even be applied to multiple APIs at the same time and be dynamically scoped by naming patterns, categorization or organization, which saves time when making changes. You can use pre-loaded policies, including metadata validation, approval workflow and permission provisioning, or define custom policies.

Dependency analysis

Make sense of the complex interdependencies of APIs on various services and applications using an interactive graphical view of APIs and their relationships. Visualize the effects of changes beforehand to avoid undesired issues and complications. You can customize the view to restrict the set of APIs and associations shown to zero-in on the details that interest you the most.

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