

Outpacing Digital Disruption

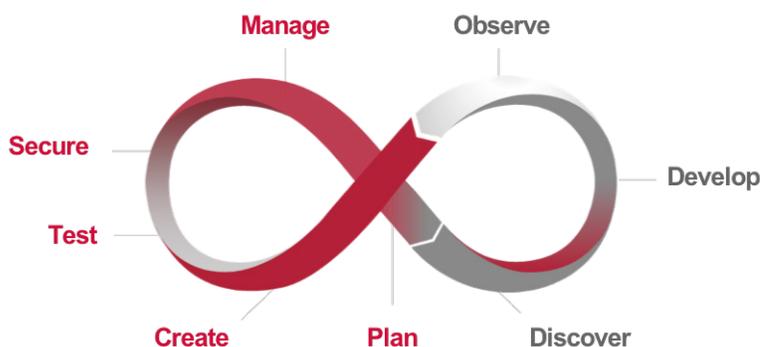
Delivering Intelligence Through Full Lifecycle API Management

Digital disruption is having a massive impact on IT and application delivery in every enterprise. Now, DevSecOps teams need to join together to fundamentally advance their development agility and insight so they can thrive amidst this disruption, and deliver the optimized digital experiences customers and employees require. With Broadcom solutions, customers can leverage comprehensive API lifecycle management capabilities to maximize insights, efficiencies, and value across the entire organization.

Optimize Every Phase of the API Lifecycle

We deliver complete API planning services. Our team of experts can help your organization establish a solid API program strategy and overcome organizational, cultural, and technical hurdles so you can ensure a successful rollout.

With our API creation capabilities, your teams can build and deploy API-enabled microservices in a matter of minutes rather than months. You can use a point-and-click process for integrating required data sources and adding business logic. We deliver API testing capabilities that provide a wide range of testing paradigms, so your teams can ensure your APIs deliver optimal functionality and high performance in real-world scenarios. We provide API security capabilities



that enable your organization to deliver innovative, market-disrupting application features—without compromising security, the user experience, or time to market. Our solutions offer capabilities for managing partner organizations, coordinating developer relationships, publishing and documenting APIs, and defining access controls.

For application developers, we deliver rich API discovery capabilities, including detailed API descriptions, interactive and prose documentation, code samples, and API keys. We deliver SDKs for developing native mobile and hybrid applications. With these SDKs, teams can add sophisticated security features, without writing any security code. At runtime, API interfaces are managed within a secure infrastructure that is deployed in the line of transaction traffic, either on-premises or in the cloud. Our solutions provide a range of enterprise-grade features, including message transformation, protocol

mediation, and sophisticated policy definition. We deliver API monitoring solutions that turn captured data and metrics into actionable insights for improving operations, performance, root cause analysis, and security.

In the following sections, we focus on a few API lifecycle steps, detailing how our solutions accelerate secure development and provide the intelligence necessary to outpace your competition and stay ahead of disruption.

Test

Our solutions offer advanced, integrated testing capabilities that are tailored to the needs of the API developer. Development teams can effectively capture clear requirements and model for optimal API test designs. This approach ensures that both testing and development are tightly aligned with core objectives. Teams can now test APIs at the very moment code is developed, keeping pace with

requirement changes that impact test cases. Teams can further collaborate to share and reuse test assets across the business, helping maximize test coverage while reducing waste throughout the lifecycle.

API developers are able to test code in their own preferred development environments, write automated test scripts, and run functional tests on code snippets—all from their local machines. Developers can push clean code into an enterprise-grade testing tool that can scale API performance testing on-demand to over 10 million virtual users across different geographical regions. By supporting test-as-code approaches, we help teams gain the advantages of real-world test environments, while eliminating the costly delays associated with waiting for legacy test resources to be made available. Teams can orchestrate test services when ready, and run API testing simultaneously across multiple projects, all direct from dedicated workspaces.

Testing does not stop at development. Teams need to continue validating their APIs in production, employing the same scripts that were used to create and scale API tests in development, to scan and monitor API calls in real-world conditions for accessibility and availability. Teams can now conduct a comprehensive set of positive and negative API tests that complement actual test results with findings derived from the use of synthetic test data for completeness of testing. With

these comprehensive capabilities and views, teams can now establish a continuous feedback loop that incorporates intelligence on real user experiences in production and feed those insights back into the development process. Our solutions help ensure that APIs consistently deliver the functionality required.

Secure

Our solutions offer robust, easy-to-implement security controls that have been vetted by some of the most security-conscious organizations in the world. Development teams can focus on creating and delivering rewarding user experiences, while our solutions manage sophisticated end-to-end security flows.

Pre-built policies can be leveraged immediately and adapted efficiently. Developers can use native SDKs and pre-built backend services to create rich, secure experiences, without having to write thousands of lines of complex security code. Our solutions feature capabilities for frictionless biometric login, step-up authentication for users flagged by our risk evaluation engine, single sign-on to multiple applications, and secure session transfer between devices.

Teams get visibility and fine-grained control over who has access to APIs at run time, based on details on the end user, device, application, context, and transaction. Plus, teams can leverage rich threat protection capabilities and advanced threat analytics.

Observe

Our solutions deliver the intelligence and automation that enables DevSecOps teams to be more productive and deliver more value. Teams get key insights into portal and API usage in real-world conditions, so they can consistently transform the customer experience. Rather than simply tracking a gateway or portal, our solutions enable teams to observe activities across the entire API lifecycle. With this comprehensive visibility and traceability, teams can quickly determine the root cause of an issue, proactively deliver code changes where needed, and mitigate quality concerns well before end users are affected.

We help teams learn continuously, so they can keep improving the quality of their APIs. Featuring advanced AIOps capabilities, our solutions can constantly sift through massive volumes of operational and testing metrics and deliver actionable insights. As a result, teams can spot potential problems, including gaps in test plans and security threats. In addition, they can uncover new opportunities and user requirements. By aggregating test metrics from development and production, we can help teams establish effective baselines and more efficient troubleshooting. With these capabilities, teams can streamline their releases while boosting the resiliency of their APIs.

For More Information

To learn more, be sure to visit digitalexperience.ai