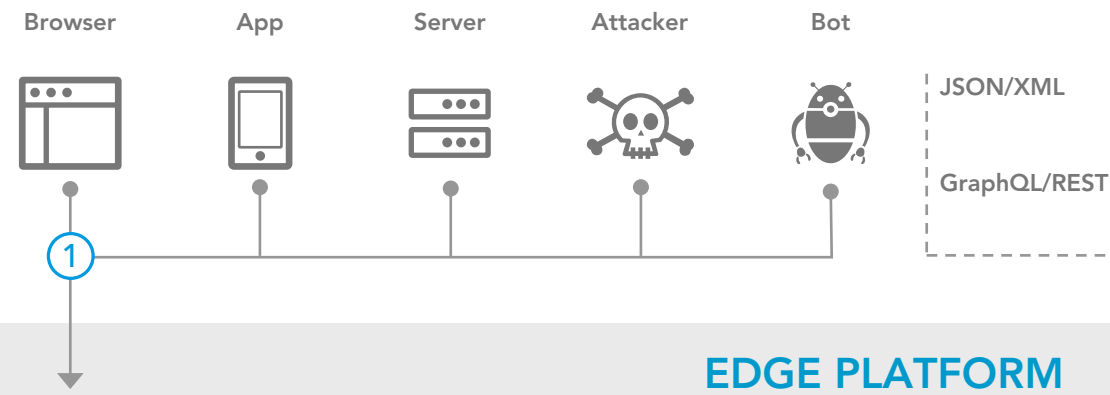
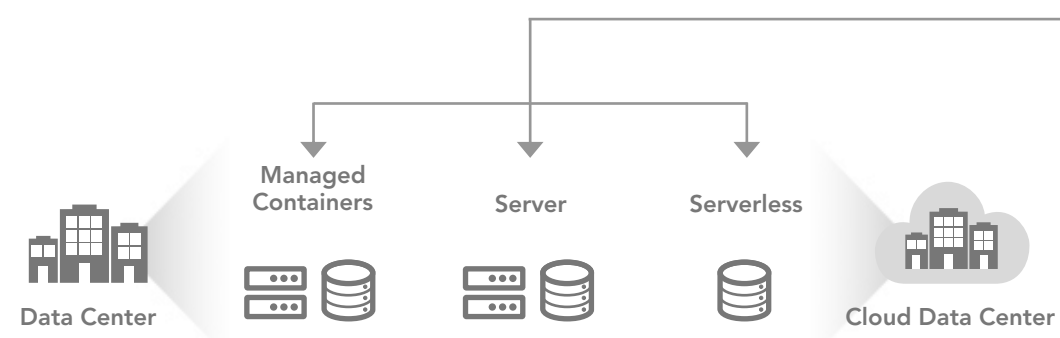
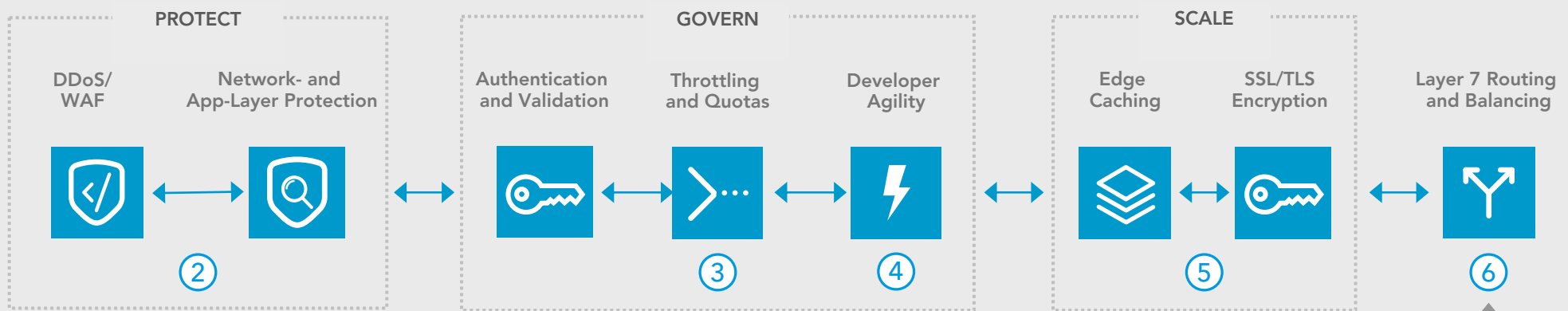


# SCALING MICROSERVICES

## Reference Architecture



### EDGE PLATFORM



## OVERVIEW

Microservices-based architectures offer greater agility and help accelerate innovation in digital experiences. The use of microservices has become more popular, and they serve as business-critical components to omnichannel applications through API integrations. Where each microservice handles the business logic it is responsible for, the business logic for authentication, authorization, quota management, and security should be managed globally to achieve these benefits, remove single points of failure, and seamlessly scale while maintaining high-availability applications.

- 1 Consumers access your API through the Akamai Intelligent Edge Platform.
- 2 Edge servers automatically drop network-layer DDoS attacks and protect the application layer from DDoS and application attacks.
- 3 API Gateway provides governance by authenticating, authorizing, and controlling API requests to help manage access and consumption. Flexible quotas and throttling limits ensure every microservice can be scaled independently while protecting your origin from overconsumption.
- 4 Easily onboard APIs on the Akamai platform with API definition files. Automate gateway operations with a rich set of administrative APIs and CLI.
- 5 Application-specific caching and routing rules enable teams to release independently of each other, facilitating continuous integration and rapid innovation. Responses can be served from cache to improve performance and reduce infrastructure and bandwidth costs.
- 6 Application-layer load balancing provides instant failover and application-layer awareness in load-balancing decisions to provide high-availability services in a flexible cloud architecture.

## KEY PRODUCTS

- Protect ▶ Kona Site Defender or Web Application Protector
- Govern ▶ API Gateway
- Scale ▶ Ion or Dynamic Site Accelerator
- Load balancing ▶ Application Load Balancer