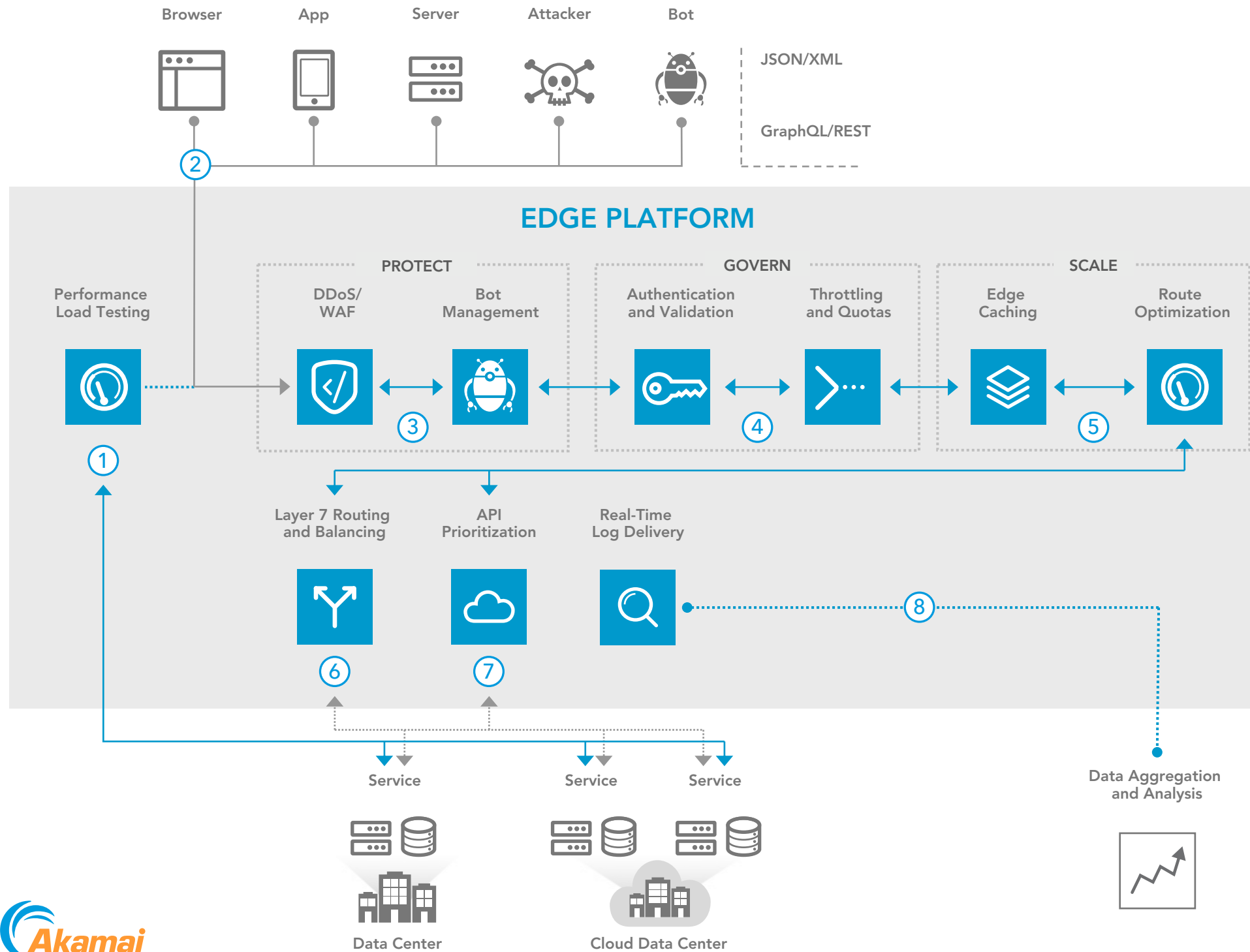


SCALING FOR PEAK API CONSUMPTION

Reference Architecture



OVERVIEW

Poorly performing APIs lead to downtime, as well as loss of revenue and brand value. Akamai can help you prepare by testing API performance under load, and providing protection, governance, and scale to achieve high availability during peak demand.

- 1 Performance load testing generates traffic from a cloud platform to provide actionable insights in preparation for peak events.
- 2 End consumer devices access your API through the Akamai Intelligent Edge Platform.
- 3 Edge servers automatically drop network-layer DDoS attacks and protect the application layer from DDoS and application attacks. Bot management identifies and manages bot traffic with a variety of advanced and conditional actions.
- 4 API Gateway governs API traffic by authenticating, authorizing, and controlling requests from API consumers to help manage access and consumption to maintain availability and fairness in data exchange.
- 5 APIs are accelerated through protocol and route optimization, and 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.
- 7 API Prioritization Cloudlet can serve an alternate file response from the Edge in the event your API or service is at risk of becoming overloaded.
- 8 DataStream delivers middle-mile visibility through aggregated metrics on CDN health, latency, offload, errors, and events via Push and Pull APIs to your data aggregation and analysis tool.

KEY PRODUCTS

- Performance load testing ▶ CloudTest
- Protect ▶ Kona Site Defender, Web Application Protector, or Bot Manager
- Govern ▶ API Gateway
- Scale ▶ Ion or Dynamic Site Accelerator
- Load balancing ▶ Application Load Balancer
- API prioritization ▶ API Prioritization Cloudlet
- Real-time log delivery ▶ DataStream