Digital-first organizations engage with customers and other users through their digital customer experience. Maintaining availability of that experience is critical to their business, even as it stretches around the world over the public Internet and comprises many moving parts deployed across heterogeneous environments.

1. Authoritative DNS resolves user DNS lookups while global traffic management protects against data center outages.
2. CDN-based DDoS protection maintains application availability through the largest DDoS attacks.
3. Web and API caching helps maintain the digital experience even through outages at the application origin.
4. Intelligent routing connects users with applications using optimal routes around global Internet disruptions.
5. User prioritization provides a branded waiting room experience for visitors and API traffic when the origin is overloaded.
6. Application load balancing offers Layer 7 routing capabilities based on multiple factors, as well as instant failover when an outage occurs.
7. Akamai helps maintain availability for traditional websites as well as API-based applications and microservices.
8. Cloud-agnostic edge capabilities help maintain availability of applications and APIs deployed across any combination of data centers, cloud providers, and colocation facilities.

**OVERVIEW**

**APPLICATION AVAILABILITY**

Reference Architecture

EDGE PLATFORM

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**KEY PRODUCTS**

- DNS ➤ Edge DNS, Global Traffic Management
- DDoS/WAF ➤ Kona Site Defender or Web Application Protector
- Caching and routing ➤ Ion
- User prioritization ➤ Visitor Prioritization or API Prioritization Cloudlet
- Application load balancing ➤ Application Load Balancer Cloudlet