imperva

CAPABILITY BRIEF

Application Delivery

Faster websites, better performance

Content Delivery Networks (CDNs) have become required functionality over the past decades, not just for website acceleration but also for quick access to applications and enhanced protection against exploits and denial of service attacks. But lots of things can slow down application performance and data delivery: huge files, massive numbers of IoT devices and the expectation of almost-instantaneous access. CDNs become the cloud platforms for all application delivery and security needs, and CDN vendors are required to expand their service suite beyond caching of static resources. In order to reduce server load, cut website latency and ensure content is served quickly and efficiently, CDNs should be aware of the applications they are supporting, and smart enough to apply performance and security intelligence for optimal overall performance, availability and security.

Imperva CDN

Imperva solutions run on a globally-distributed network of data centers that deliver full site acceleration through intelligent caching and content optimization.

KEY CAPABILITIES

- Intelligent caching
- Global coverage with minimal latency
- Speed and performance for e-commerce applications
- Multiple optimization features designed for app developers
- Easy to define rules
- Developer friendly / API support
- Real-time dashboard
- L3/4 visibility
- SSL termination
- Integrated security intelligence



Imperva Global Network Distribution

Multiple ways to accelerate content

The Imperva global CDN, the backbone of Imperva Cloud Application Security, dynamically profiles website resources, and identifies all cacheable content (dynamic and static) including content that other CDNs cannot. Dynamic profiling and frequency analysis ensure that the most frequently accessed resources are identified, and fetched directly from memory without resorting to slower access mechanisms like buffer cache.

All Imperva PoPs are full-stack, and are located in more than 45 locations to ensure the lowest latency possible. Dynamic Content Acceleration leverages the high-quality connectivity between Imperva network PoPs to improve response time, with client requests for dynamic resources (not cached on the Imperva proxy) routing traffic across our network, between PoPs, instead of sending it on to your origin server.

This global Imperva network lets organizations not only prevent unforeseen disruptions to their business, but also mitigate risk. Critical applications are secured against all OWASP Top 10 threats and the malicious effects of bad bots are mitigated through Cloud WAF. DDoS traffic is diverted to the global CDN with guaranteed 3second mitigation, and load balancing ensures an optimal user experience.

Static and dynamic content caching

Static caching serves unchanging content (e.g. HTML files and images) directly from globally distributed data centers on demand. Dynamic caching uses patent-pending advanced learning algorithms to continuously profile website resources, caching those that change rarely and serving the most frequently accessed resources from memory. This improves load time for e-commerce applications, increasing customer retention and brand loyalty.

Additional options to minimize latency

Imperva allows the most frequently accessed resources to be served from memory. Client-side caching, asynchronous validation and flexible caching policies and acceleration settings give you full control over pre-defined caching modes. New capabilities such as Cache Shield (which reduces 75% of origin server load) and Cache Tags (which greatly increases control over the application cache) help app developers improve performance and the user experience. Minification, image compression, session reuse and TCP optimization round out the list of features designed to improve speed and ensure mobile compatibility.

Monitoring dashboard demonstrates website performance

Monitor the effect of caching on your website's performance via the website dashboard. On average, websites using the Imperva CDN are 50% faster and consume up to 70% less bandwidth thanks to dynamic caching and our reliable, self-healing mesh network topology.

IMPERVA APPLICATION SECURITY

CDN is a key component of Imperva Application Security, which reduces risk while providing an optimal user experience. The solution safeguards apps on-premises and in the cloud by:

- Providing WAF protection
- Protecting against DDoS attacks
- Mitigating botnet attacks
- Enabling RASP protection
- Providing actionable security insights
- Ensuring optimal content delivery

Learn more about Imperva Application Security at www.imperva.com.

Imperva is an analyst-recognized, cybersecurity leader championing the fight to secure data and applications wherever they reside.

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