LevelB/ue

LEVELBLUE CONTENT DELIVERY NETWORK
WEB PERFORMANCE SERVICES

Deliver Rich, Engaging Web Experiences and Exceed User Expectations

Our performance and intelligence solution helps make web experiences faster, more reliable, and more secure for end-user interactions.

Customers and prospects expect fast, quality web experiences independent of their browser, location, device or network. Failure to deliver fast, scalable, and engaging web experiences can result in lower revenue and higher cost. Delays in web page response times can lead to a decrease in customer satisfaction, and a loss in engagement and conversions.

The web has changed. The proliferation of connected devices and the rise in application complexity required to deliver fast, secure, quality web experiences demands an intelligent performance optimization solution that will meet the rising expectations of always connected end-users.

It's no longer enough to accelerate dynamic web content in a homogenous way. Intelligence and interoperability are necessary to deliver an effective set of real-time, interrelated and layered optimizations that result in an optimal end-user experience based on the end-user's unique situation and context. We refer to this intelligent, responsive, real-time optimization as "situational performance."

LevelBlue Content Delivery Network Service offers Ion services as our situational performance solution, a tightly integrated suite of scale, performance, and intelligence technologies required for real-time web experience optimization based on end-users' situations across devices, locations, and networks.

Potential Benefits

- Deliver rich, engaging web experiences that can exceed user expectations for speed and availability

- Help increase conversions and engagement while reducing abandonment on web and mobile

- Achieve application scalability and performance under peak traffic conditions

- Reduce development cost and complexity

- Gain key insights into how your audiences engage with your brand

- Gain greater agility with self-service configuration and intelligence

- Deliver quality experiences across virtually all geographies without infrastructure build-out

Scale

Ion services enable organizations to offload expensive web infrastructure, including bandwidth, compute, and storage while providing web and mobile application availability and scalability. Key capabilities include:

Caching: Payment Card Industry DSS (PCIDSS) is a single Data Security Standard that applies to both merchants and service providers. The LevelBlue Content Delivery Network service is certified as a Level 1 PCI service provider.

Site Failover: Helping web and mobile application availability with comprehensive failover capabilities and monitoring of your origin infrastructure to reroute requests when the origin is not available.

Performance

LevelBlue Content Delivery Network web performance Ion services offer a fully-automated solution for situational performance enabling organizations to deliver faster web performance, anticipate requests in fewer round trips and bytes, and improving the users' experience. Optimizations are applied based on analysis of the web application, as well as real-time conditions specific to the user's environment such as browser, device, network, and presence of third-party services. Key capabilities include the following.

Enhanced Protocol: With Enhanced Protocol, customers can take advantage of aggressive mapping and network protocol optimizations, helping in further improving performance.

Route Optimization: Identifies the fastest, most reliable, available path to your origin to retrieve and deliver dynamic/interactive content.

Page Prefetching: Retrieves the next pages most likely to be requested even before the user selects them for viewing.

Adaptive Image Compression: Designed to vary the level of compression for JPEG images based on real-time network conditions so pages load quickly and consistently—even when network conditions are poor.

Adaptive Consolidation: With this feature, Ion services can fetch multiple files with one request, but cache resources in the browser separately, avoiding redundant downloads.

On-Demand Image Loading: Enables a page to only load images that are visible within the current browser view, or "viewport." As a user scrolls, new images load on demand.

Browser-Specific Image Optimizations: Ion services dynamically identify where JPEG images can be replaced by browser-specific image formats for a faster, better web experience.

EdgeStart: A powerful optimization that reduces the time to deliver the first part of the HTML response, which allows the browser to download important resources such as JS, CSS, and images earlier to enhance the user experience.

Asynchronous JavaScript and CSS: Modifies the way scripts and CSS are embedded into the page, so a browser processes these and other resources in parallel.

File Versioning for Browser Cache Extension: Many sites only cache content for a few hours to prevent expired content from being used from the browser cache. Ion gives each file a unique name so that if a resource changes, the old file will be not be referenced, and so all content can be cached in the browser cache indefinitely.

Minification: HTML, JavaScript, and CSS files contain comments and whitespace that, while useful to developers, are not needed for the page's operation. Minification is an Ion services process that removes these components and reduces the total download size automatically, without modifying their functionality.

Inline Small Objects: Inlining is the technique of embedding small external images and scripts directly into the page or resources that references them. Ion services automatically embeds resources into pages and CSS files based on size and other considerations, reducing page load times and HTTP overhead.

On-Demand Image Loading: Enables a page to only load images that are visible within the current browser view, or "viewport." As a user scrolls, new images load on demand.

Intelligence

Our Ion services provide valuable insight into the web experiences of your customers while empowering our global platform or your origin infrastructure to make decisions based on that intelligence. Key services include the following:

Real User Monitoring: Real User Monitoring (RUM) provides key insight into individual end–user experiences by monitoring web pages and collecting performance data from real end-users based on various factors such as browser type, geography, OS, or protocol (including IPv6).

Mobile Detection and Redirect: Using a constantly updated user agent database on our global platform, inbound HTTP requests are evaluated and device characteristics are discerned.

Device Characterization: Using information derived from the browser's user–agent, our global platform is able to decipher many characteristics of the requesting device, such as screen size, GPS for location–based services, Javascript support, and more. These characteristics allow businesses to make intelligent decisions regarding how to respond to a particular request.

The LevelBlue Content Delivery Network Ecosystem

LevelBlue Content Delivery Network services supports to make users' web experience faster and more reliable. Our comprehensive solutions are built on a globally distributed platform™, managed through the unified, customizable Luna Control Center for visibility and control, and supported by Professional Services experts who get you up and running easily and inspire innovation as your strategies evolve.
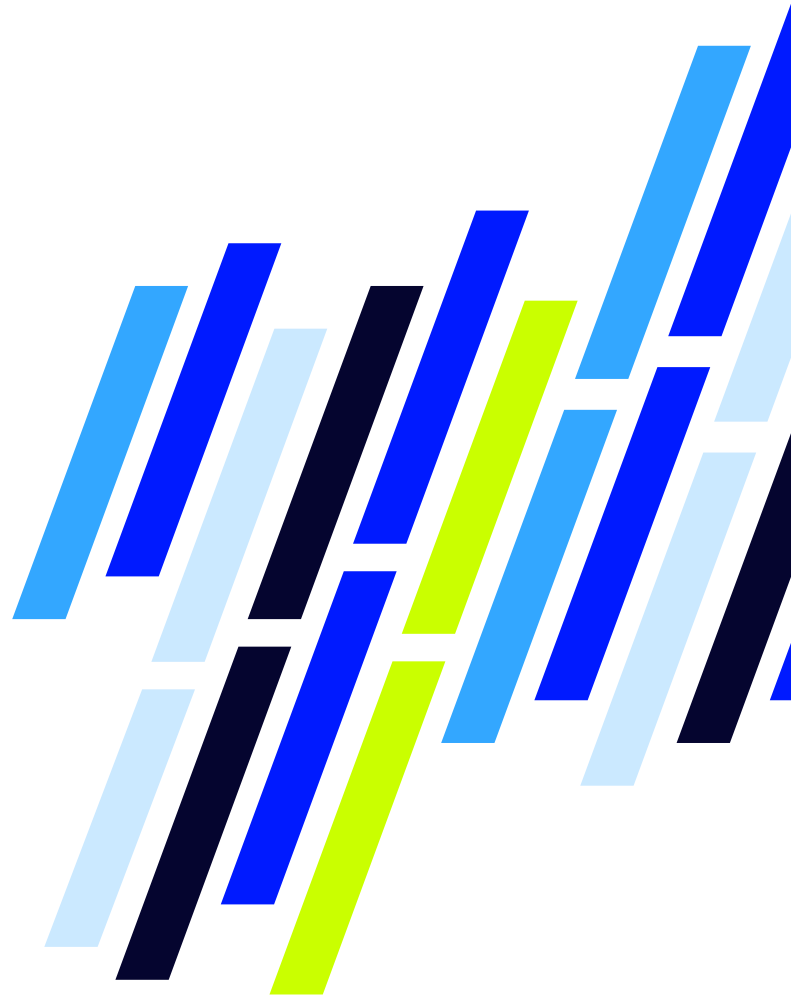
About LevelBlue

We simplify cybersecurity through award-winning managed security services, experienced strategic consulting, threat intelligence and renowned research. Our team is a seamless extension of yours, providing transparency and visibility into security posture and continuously working to strengthen it.

We harness security data from numerous sources and enrich it with artificial intelligence to deliver real-time threat intelligence. This enables more accurate and precise decision making. With a large, always-on global presence, LevelBlue sets the standard for cybersecurity today and tomorrow. We easily and effectively manage risk, so you can focus on your business.

Cybersecurity. Simplified.

To learn more about LevelBlue Web Performance Services visit <u>LevelBlue.com</u>, or contact your LevelBlue sales representative.