

Smart Shield

Better performance, enhanced security, and lower costs

Overworked origins, network complexity, and cyberattacks can lead to performance and reliability issues that directly impact businesses, costing millions in revenue loss, brand damage, and customer churn.

To ensure business continuity, origins and origin infrastructures must be protected against traffic surges, both legitimate and malicious.

Origin Shield and its limitations

Origin Shield adds a caching layer between the CDN and origins, extending the functionality and benefits of CDNs, to provide a single point of access to protect origins from being overwhelmed.

There are many solution providers that offer Origin Shield solutions. However, these existing products lack a unified platform, with some features resorting to traffic hairpinning across different networks, making the overall solution complex and difficult to manage.

Smart Shield - the future of origin shielding

Cloudflare's Smart Shield is a comprehensive, intermediary layer solution that intelligently manages traffic, optimizes content delivery, and protects origin server infrastructure from unauthorized ingress.

Smart Shield helps lower connection load & cloud egress fees, on average, by up to

30%

With Smart Shield, customers can benefit from:

- Enhanced performance and security for their origins
- A unified, cohesive UI and API, with analytics and actionable insights
- Lower operational and cloud egress costs to maximize savings

Smart Shield consolidates disparate components into a single offering to streamline management and deployment, reducing operational complexity and dependence on professional services

Limitations of existing Origin Shield solutions



Complex

Disparate solutions, complex deployments, and a lack of real-time analytics and actionable insights, delivering poor user experience



Inefficient

Patchwork of multiple products without a unified UI and API, creating loopholes, causing misconfigurations, and adding latency



Expensive

Multiple products and complex deployments creating key-person and professional services dependencies, resulting in higher TCO and delayed ROI

Smart Shield capabilities

Smart Shield provides a suite of capabilities to deliver enhanced performance, security, and savings. These components seamlessly work together to ensure a superior user experience.



Availability and performance

- **Smart Tiered Cache** delivers static content caching and response acceleration.
- **Argo Smart Routing** accelerates dynamic traffic across the fastest, most reliable network paths.
- **Cache Reserve** provides persistent storage to increase cache-hit ratios and minimize egress fees.
- **Health Checks** monitor the health of your origin servers to ensure resilience and uptime.
- **Connection Reuse** reduces the number of connections to your origins by up to 30% on average.



Security and resilience

- **Dedicated CDN Egress IPs** helps to protect against unauthorized origin access.
- **Volumetric DDoS protection** offers unlimited, unmetered attack mitigation.



Ease of use, analytics and insights

- **Dedicated, unified UI and API** ensures easy operationalization and management.
- **Self-guided wizard** simplifies onboarding for new customers, based on best practices.
- **Cloudflare Internet Observatory integration** provides:
 - Detailed, real-time analytics and actionable insights.
 - In-dashboard recommendations for products and performance optimization.

Smart Shield and application modernization

Smart Shield fits into application modernization journeys by addressing key challenges in two common migration projects: rehosting and replatforming.

Smart Shield supports rehosting by providing a unified platform for security, performance, and reliability, extending the life of existing applications and ensuring consistent, global experiences for users.

Smart Shield assists replatforming by simplifying centralizing security, reducing complexity and operational overhead, improving performance, and reducing egress fees across diverse, multi-cloud and hybrid cloud deployments.

By using Cloudflare's Smart Shield, organizations can accelerate their Application Modernization projects, all while providing protecting origins and data, and ensuring business continuity.



How to get started

Smart Shield can be enabled straight [from the dashboard](#).