

Solution Brief

THALES
Building a future we can all trust

CYBERSECURITY

CipherTrust Manager Resilience with Loadbalancer.org

High availability and
accelerated key sharing

cpl.thalesgroup.com

Key benefits, delivered by Loadbalancer.org:

- 100% service availability
- Passthrough for increased encryption transaction throughput
- Multi-site resilience

The business challenge

[Thales CipherTrust Manager](#) is a mission-critical application that simplifies key lifecycle management tasks, including secure key generation, backup/restore, clustering, deactivation, and deletion. It does this by enabling organizations to centrally manage encryption keys for the Thales CipherTrust Data Security Platform and third-party products.

Downtime

CipherTrust Manager downtime must be avoided at all costs to meet service delivery requirements. This requires any [single points of failure](#) to be addressed by establishing redundancy.

Latency

The transfer of SSL keys can also become problematic at scale, as a large number of encryption transactions must take place simultaneously.

Site vulnerabilities

For CipherTrust Manager end-users in different locations, an inconsistent and uninterrupted application performance experience is unacceptable.

The Loadbalancer.org solution

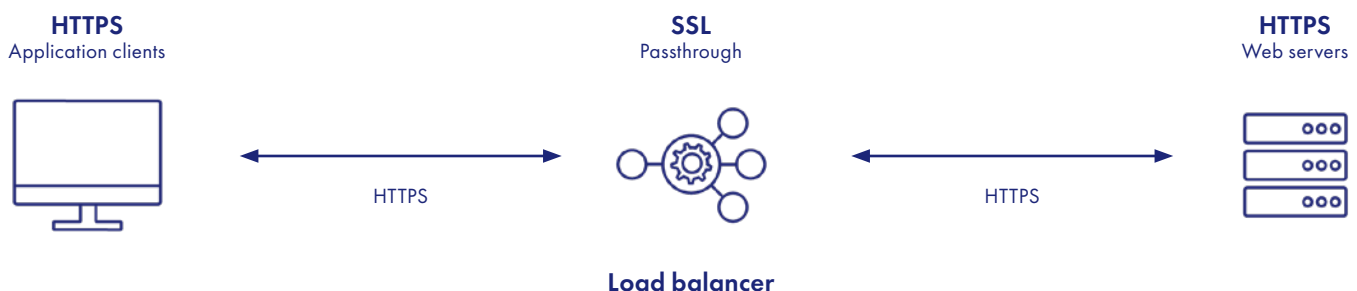
Loadbalancer.org addresses these challenges with high availability, SSL passthrough, and Global Server Load Balancing (GSLB) for Thales CipherTrust Manager. With Loadbalancer.org, Thales CipherTrust Manager can be deployed in a cluster of servers and even across multiple sites for high availability and distribution of large numbers of requests, making CipherTrust Manager a truly scalable, certificate management system for large Enterprises.

High availability

These load balancers continuously monitor the health of the CipherTrust Manager servers using a variety of health checks. Should one of the servers become compromised or overloaded, the load balancer is able to immediately reroute traffic to the remaining healthy servers, ensuring uninterrupted service delivery and avoiding traffic bottlenecks in peak periods.

SSL/TLS passthrough

In this mode, the load balancer does not decipher the traffic. Instead, it opens a TCP tunnel between the client and the CipherTrust Manager server to let them negotiate and handle the TLS traffic.



Global Server Load Balancing

Guarantees a uniform user experience for Thales CipherTrust Manager applications distributed across multiple sites.

Just as a load balancer distributes traffic between connected servers in a single data center, Global Server Load Balancing (GSLB) distributes traffic between connected servers in multiple locations. So if one server, in any location, fails, or if an entire data center becomes unavailable, GSLB reroutes the traffic to another available server at another site. Equally, GSLB can detect users' locations and automatically route traffic to the best available server in their nearest data center.

This provides multi-site resilience and a consistent and uninterrupted connection.

Summary

Load balancing your Thales CipherTrust Manager infrastructure with a Loadbalancer.org solution is crucial for ensuring a highly available, fast, and scalable key management solution. It eliminates a single point of failure, accelerates key sharing, and allows you to adapt to changing demands.

About Loadbalancer.org

Loadbalancer.org is the engineers' choice for smarter load balancing. Network Engineers and System Administrators can work smarter, not harder, with powerful, user-friendly application delivery solutions from the load balancing experts, building more resilient applications and maximizing performance with a company that cares about your results, not just our technology.

About Thales

Thales is a global leader in cybersecurity, helping businesses, governments, and the most trusted organizations in the world protect critical applications, sensitive data, identities, and software anywhere, at scale — with the highest ROI. With more than 30,000 customers, including 58% of the Fortune Global 500, our solutions are deployed in 148 countries around the world. Through our innovative services and integrated platforms, Thales helps customers achieve better visibility of risks, defend against cyber threats, close compliance gaps, and deliver trusted digital experiences for billions of consumers every day.