



Infrastructure



At Katharion, we recognize that email is critical to any business. We have invested significantly in developing a reliable, stable, and scalable solution, consistent with our mission to be a highly effective service that is hands-free and trouble-free for our customers. Our software architecture is designed for high availability, and our network spans multiple, geographically distributed data centers as the foundation for our services.

Overview

Katharion was developed by a team of senior architects and engineers with many years of experience in building and managing high-volume networks and mission-critical applications. Significant attention was paid to the many components affecting the reliability and scalability of Katharion's services, including Katharion's network architecture, systems architecture, and software architecture.

Network Architecture

Katharion's distributed network architecture uses multiple datacenters, located on both coasts of the United States as well as in other locations. Within each datacenter, Katharion uses a Cisco-based, fault-tolerant network with redundant Gigabit Ethernet connectivity to multiple Tier 1 backbone providers.

Hosting Environment

Katharion grew out of I-3, a development firm with ten years of hosting experience for enterprise customers. Each carrier-grade datacenter chosen by Katharion provides power feeds from redundant power sources, continuously online UPS systems, redundant climate control, 24x7 manned guard stations, and institutional banking quality access procedures. All have emergency diesel generators with ample fuel on-site as well as negotiated arrangements for priority refueling in the event of an extended utility power outage.

Redundant Parallel Systems

Katharion's systems architecture is modular and comprised of load balancers, filters, supervisor modules, queues, and quarantine servers. All of these systems - from the front-end load balancers to the back-end quarantine servers - are redundant and running in parallel.

Proven Software

Engineered to scale with the rapid growth of junk mail, the Katharion software is purpose-built and highly optimized. The software design avoids any disk access at all opportunities. This design provides for faster message processing and greater scalability than other approaches that are more disk-intensive.

Message processing is fully atomic; confirmation of message receipt to a sending mail server is only sent after a verifiable delivery or disposition of that message, ensuring that no message can be lost. The software has been proven through the processing of billions of messages for Katharion customers.

Monitoring

Each network component and each system is continuously tested at the network-level and/or service-level by redundant monitoring systems. Furthermore, Katharion conducts 24x7 full-path message monitoring, thus testing real-world system performance across the application.

For more information about Katharion's managed anti-spam solutions,
or to sign up for a free trial, visit us at

www.sbbs.com