Scale Email Protection with FortiADC and FortiMail

Load Balancing Multiple FortiMail Devices with FortiADC Application Delivery Controllers for Increased Email Security Capacity

Fortinet’s FortiMail secure email gateways are a time-tested email security platform that can handle the needs of most organizations on a single appliance or VM instance. There are times however that an organization’s needs extend beyond what a single device can offer. This is especially true for Managed Service Providers, Carriers and large enterprises that use FortiMail to provide robust email security for their users.

FortiMail itself offers the ability to configure a cluster of devices into a high-availability pool that put multiple devices to work to handle high-volume email traffic environments. However, using the built-in functionality can be cumbersome, requiring a significant amount of effort to manage policies within the network to get users to the correct device.

Load Balancing FortiMail with FortiADC

FortiADC’s high-performance server load balancing and advanced health checks offer an easy way to manage a multiple FortiMail devices to provide a seamless user experience and redundancy to ensure uninterrupted access to email services.

In order to utilize multiple FortiMail devices, the units must be placed into a high-availability configuration and set up as a cluster. FortiMail supports Active-passive HA and Config-only HA. Active-passive is used a backup where if the primary unit fails, the second one comes into service and takes over for the primary. This is great for redundancy where only a single unit can handle the traffic workload. FortiMail’s second HA method, Config-only allows multiple units to be used where they all share the same master configuration.

The Config-only HA method opens the door for the use of multiple FortiMail devices within a data center to handle traffic demand that would exceed a single FortiMail unit. The master unit within the Config-only HA mode shares its configuration with the others, however the FortiMail administrator must manually configure email traffic and users to specific FortiMail devices in the cluster.

CHALLENGE
- Scale email security for large organization
- Extend FortiMail capacity
- Minimize deployment complexity

SOLUTION
- FortiADC to load balance multiple FortiMail devices
- Real-time Health Checking
- Improve user QoE
- Traffic load balancing with persistence

BENEFITS
- Simplified setup with no router or switch configurations
- High-performance email security throughput up to 50 Gbps
- Support for HTTP and HTTPS
- Single vendor, tested solution
FortiADC can be deployed in 2 ways with FortiMail:

- **Layer 3 One-Arm Mode:** Traffic is load-balanced through a cluster of FortiMail units configured in Transparent Proxy (Layer 3) mode with one interface (one-armed).
- **Layer 3 Two-Arm Mode:** Traffic is load-balanced through a cluster of FortiMail units configured in Transparent Proxy (Layer 3) mode with two interface (two-armed).

FortiADC also supports FortiMail’s Loopback Interface where it can route traffic to multiple FortiMail devices using layer 2 load balancing instead of layer 3 load balancing.

**Benefits of Load Balancing FortiMail with FortiADC**

Highly redundant solution that avoids complicated policy based routing configuration on routers Delivers 99.999% FortiMail uptime with intelligent server load balancing
- Advanced traffic management (TCP, UDP, and more)
- Increase overall performance of FortiMail
- Improve FortiMail user QoE (quality of experience)
- Unparalleled deployment flexibility

Using FortiADC with FortiMail leverages the benefits of FortiADC’s high-performance server load balancing, policy-based routing, QoS and SSL offloading to extend FortiMail’s abilities outside of its hardware or VM limitations. In addition, you get a single vendor solution that’s easy to manage and tested to ensure seamless interoperability when deployed together.

To read more about this solution, please download our Load Balancing FortiMail with FortiADC Deployment Guide.

For more information on FortiMail and FortiADC, please visit our detailed product pages on Fortinet.com:

**FortiMail Secure Email Gateways**

FortiMail is a complete Secure Email Gateway platform suitable for any size organization. It provides a single solution to protect against inbound attacks, including advanced malware, as well as outbound threats and data loss with a wide range of top-rated security capabilities. These capabilities cover: antispam, antiphishing, anti-malware, sandboxing, data leakage prevention (DLP), identity based encryption (IBE), and message archiving.

FortiMail’s inbound filtering engines block spam and malware before they can clog your network or compromise your systems. Its outbound inspection technology (including 3G mobile traffic) reduces the loss of sensitive information, maintains compliance and prevents your organization and users from being blacklisted. When integrated with Fortinet’s NSS Labs Recommended FortiSandbox, FortiMail helps stop the most advanced threats before they reach end users.

**FortiADC Application Delivery Controllers**

FortiADC hardware and virtual Application Delivery Controllers provide unmatched Server Load Balancing performance whether to scale an application across a few servers in a single data center or serve multiple applications to millions of users around the globe. With included SSL Offloading, HTTP Compression, Global Server Load Balancing, Firewall and Link Load Balancing, they offer the performance, features and security needed at a single all-inclusive price.