

Profile

The client is a provider of online price comparison portal for products and services offered in various European countries. Their portal gives an accurate and latest overview of the offers and pricing of products that the visitor is interested in. Their website connects with various reputed online shops to collect the pricing data. Once collected, the data is structured and shown to the visitor as a response to a specific product search.

The portal itself is free for anyone to use. It saves all the terms visitors use to search products on the portal, thus having a record of which terms are most popularly searched.

Challenges

Very high volume of concurrent users, downtime resulting in huge financial losses, solution stability and scalability.

Solution

eUKhost provisioned a multi-server load balanced cluster with 100% uptime handling a few thousand concurrent connections very efficiently.

Business Challenges

The client is in such a highly competitive business that any issues with its hosting platform translates into huge losses, commercial, reputational and search engine rankings. The key aspects that the client wanted to address were:

- *100% uptime* – The portal has to be up and running all the time.
- *Ability to handle huge traffic volume* – During European day time and during festivals / events / promotions.
- *UK based Server and 24/7 Support* – Required a host that would always respond quickly to requests.
- *Completely Managed Solution* – A host that could look after the server maintenance and software upgrades including the server security.

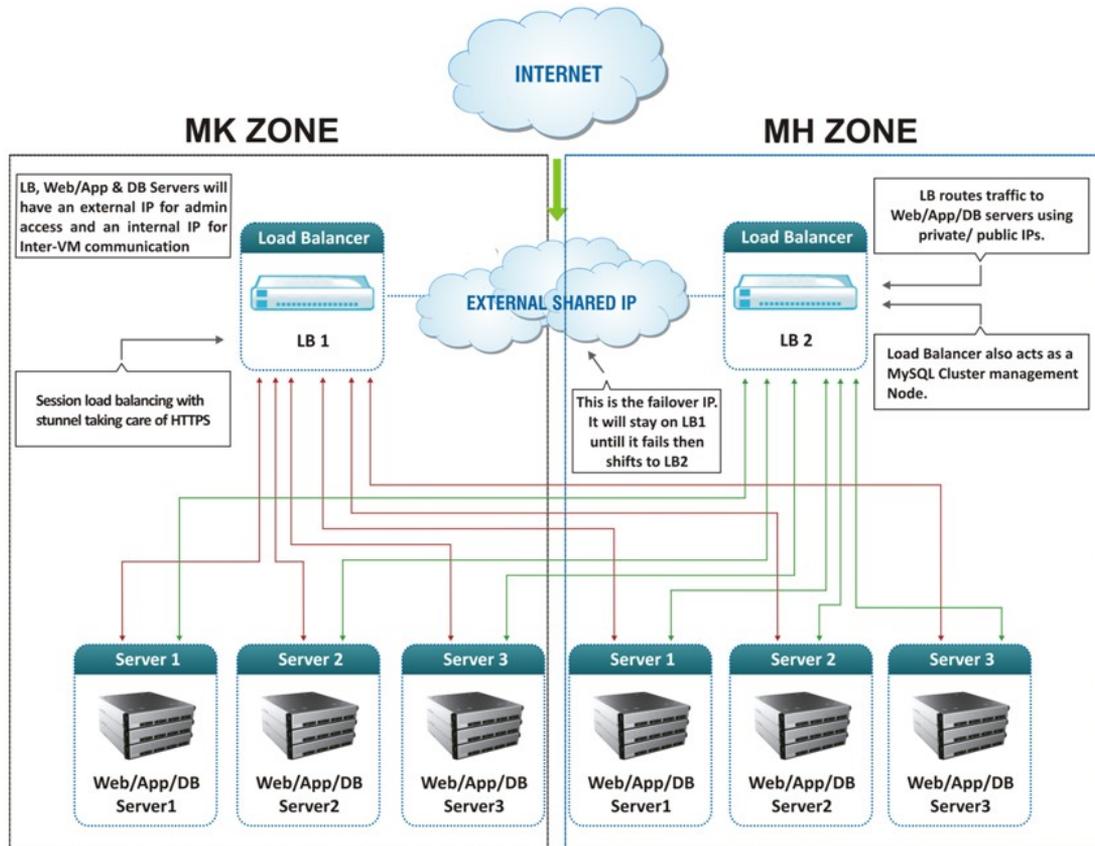
Solution

eUKhost Solutions Team provided a High Availability (HA) Load Balanced (LB) cluster consisting of redundant Web and Database Servers. The solution consists of 2 Load Balancers and 6 nodes distributed between two datacenters of eUKhost. Both these Load Balancers share a common public IP address, which receives the internet traffic and directs to primary Load Balancer. The second Load Balancer also acts as a management node for MySQL cluster.

This solution allows proxying for TCP and HTTP-based applications which distribute the traffic between servers in the cluster supporting tens of thousands of connections. Its mode of operation makes its integration into existing architectures very easy and risk free, while still offering the possibility not to expose fragile web servers to the Net.

This solution also provides Failover, wherein the slave Load balanced server stands in for master Load balanced server in case the master server goes down. With the help of Failover, user and application requests that are directed to the failed master server are routed to the slave server. This is done with the help of a monitoring script running on the Slave server which binds the Secondary IP of master server (IP allocated to websites) and all other Dedicated IPs on the slave server.

The following network diagram shows overall setup of this cluster:



Benefits

The client has been benefitted immensely since they moved to eUKhost from another hosting service provider and have reaped following benefits:

- Amazing response speed and performance while handling around 10000 concurrent visitors.
- Load being spread among several servers assuring server persistence.
- Availability of backup servers in case a main server fails.
- Block requests matching a particular pattern to avoid any unwanted traffic and various cyber attacks.
- Guide clients to the right application server depending on application cookies.
- Ability to add any number of servers, web or DB, as and when needed.
- 24x7 Customer Support
 - Designated staff assigned for problem handling
 - Easy to reach either by email, phone, or online chat
- Secure Data Center with multi-layer security
- Round the clock server monitoring
- Hardware Guarantee