

Profile

The client entered the Gaming Industry as a solution provider to offer Development & Consulting to customers and allow them to establish their existence in the Gaming World. The client soon became one of the leading Gaming Development and Consulting company and started expanding its business.

With the growing business, the client extended its team by employing highly experienced Gaming enthusiasts with similar interests. Most of the team has an experience related to Gaming including Online & Server Based Gaming, based on which they expanded their portfolio and included outsourcing in their venture.

They provide their customers regular updates about the latest trends in the industry, develop the Games & Applications for them & offer them a platform on which the games can be tested.

Challenge

A solution spanning number of Web & Database Servers to manage the traffic & ensure reliability; all this with Low Latency connection.

Solution

A cluster of dedicated servers and load balancers ensuring all traffic is efficiently handled with High Availability.

Business Challenge

Considering the growth the client had experienced, they had to choose a solution which can provide Space, Bandwidth, Uptime, Reliability and Low Latency Connection. A number of Servers were required to meet these requirements as the servers were to be used for Software Development, Testing & Outsourcing. The Client would provide their users access to the servers at times to check the working of the developed Software & Applications. The solution had to be online 24x7 so as to serve the team members & clients. Bandwidth Connection had to be optimum to ensure that customers were more than impressed with the solution offered by the client. The solution had to serve a number of simultaneous requests at the same time without affecting the performance.

Though, they were pretty sure about their requirements, a solution which was expandable whenever required was needed. Resources when required had to be available for the client to enhance the growth of the organization. Along with all these requirements, Support & Reasonable pricing were another challenges which the client wanted to overcome.

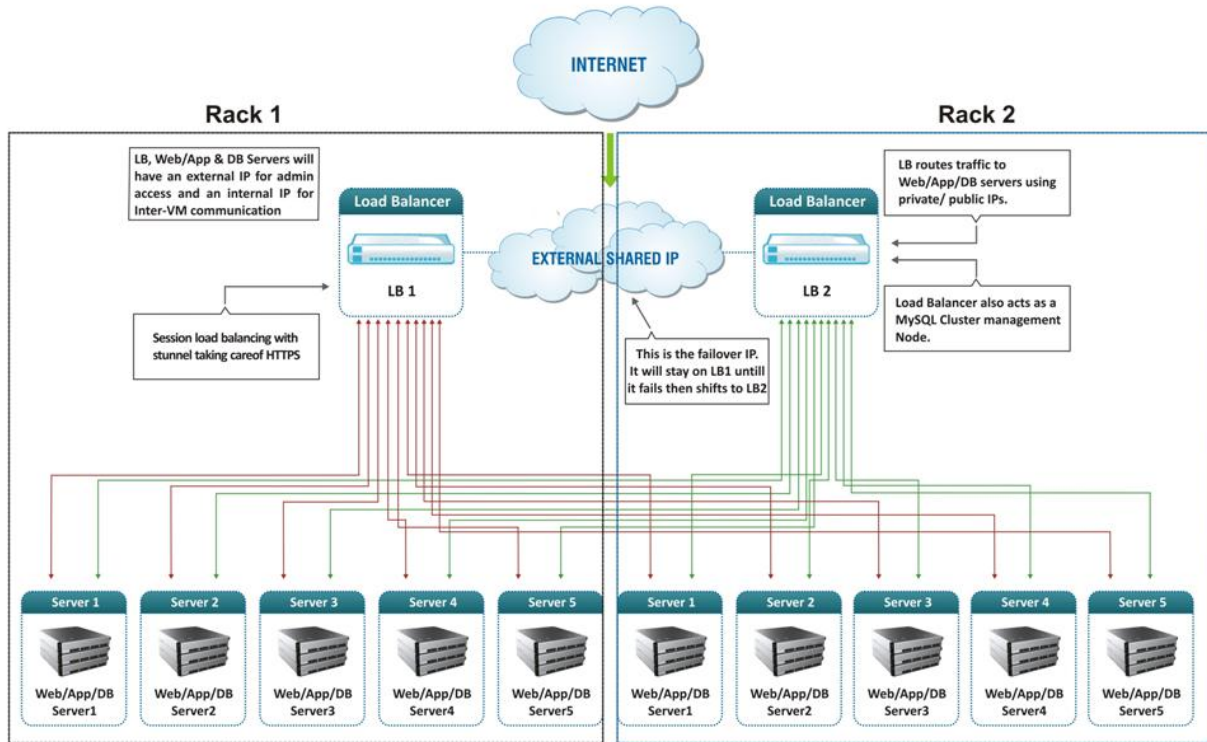
Solution

eUKhost Solution Architects got together to design a solution which offers combined benefits of 3 different setups, viz. High Availability Cluster (HA), Load Balanced Cluster & Failover. The solution included 2 Servers as Load Balancers & 10 Dedicated servers, each of which was utilized as Web & Database server setup in a Cluster to ensure excellent performance. A software solution is used to form the Cluster which is the most widely used application for Clustering ensuring fast & reliable service.

To avoid any delay in DNS propagation in case the primary load balancer goes down, both load balancers were assigned a shared single public IP address. This IP address will receive the internet traffic & will send it to the primary load balancer. The second load balancer will come into play only when the primary load balancer fails. This load balancer also acts as a MySQL Cluster Management Node. The IP address will be shifted to the secondary load balancer when the principal load balancer fails without any manual intervention ensuring failover.

The software used for clustering allows Proxying for TCP and HTTP-based applications responsible for distributing the traffic between the Web & Database servers due to which it's considered to be the most suitable for High Availability environments. The architecture thus formed fulfills the requirements of serving few thousand requests without compromising on the performance & stability of the system.

The diagram given below further explains the setup architecture:



Solution Benefits:

The solution and associated services could convince the client to proceed and thereby receiving optimum benefits. Currently, this architecture is housed in the datacenter offering the most reliable solution. Some of the benefits & features provided are given below:

- Completely Redundant & High Availability Environment.
- Optimum Quality Hardware & 100% Network Uptime.
- High Security Infrastructure & Protection against various types of attacks.
- Solution which ensured Automatic switchover to Secondary Servers whenever needed.
- Scalability – Ability to increase the number of Web & Database Servers to meet future requirements.
- High Configuration servers required for the Architecture.
- Administrator access to the Servers & control over the Setup.
- Datacenter Facility with Top Notch Network, Support & Security Features.
- 24x7 Customer Oriented Support Team available through Chat, Phone & Email.