



## Web Farm

March 2007

### Overview

**Industry:** Entertainment

**Business challenge:** To improve reliability for web sales environment

**Network Solution:**

- Tweak web servers
- Improve database server
- Clean up networking
- Provide on demand bandwidth

**Business results:**

- Client complaints down
- System crashes, lower
- Sales up

### Business challenge

The client is a provider of live entertainment. The client has both a call centre and online sales for retailing tickets for their productions. The company felt that the investment in the online sales was not being fully realized with their current configuration.

The general manager for ticket sales works hard to provide an environment where clients can easily and quickly purchase tickets. The general manager feels that the online sales capability must meet the ever growing demand of the shop at home clients.

The specific nature of the business (with popular shows causing periodic drastic surges in sales activity) means that the solution must be robust and scalable, while still retaining a low economic foot print over the course of the year.

In the past, the web sales component was neither robust nor scalable and in the end the shop-at-home client experience was disappointing.

The general manager for the client tasked eSubnet to provide an environment for the shop-at-home client which could handle the daily and seasonal ticket sales as well as being capable of the periodic "first day" sales of popular shows - all at a reasonable price.

## Network Solution

The general manager and staff of the client had worked successfully with eSubnet on past projects regarding network design and security. The general manager trusted that eSubnet could provide the solution he needed.

The solution was not delivered over night. The online environment had to remain available to the shop at home clients while improvements were being made. The first step in the process was to document and understand the environment. This provided a starting point for knowing what changes had to be made.

The changes fell into the following categories, front-end implementation, back-end infrastructure, and network design.

### Front-end implementation

The front-end implementation is the web server and firewall configuration. The ticket sales application vendor was consulted on their optimal configuration for a web server running their product. This configuration was pushed to all web servers. Additionally the logging environment was changed to minimize the network impact of logging. The front end firewall was tasked for performing SSL encryption where applicable, thus allowing the web server to only have to serve up web sites.

### Back-end infrastructure

The back-end infrastructure essentially is the data base server. The staff of eSubnet felt the configuration of the server was not optimal. While the server was configured with RAID the partitioning was too broad and not task specific. A new server was brought in and installed with a RAID configuration supporting striping and mirroring for both redundancy and speed. The old server was reconfigured and deployed to provide redundancy.

### Network design

The network design or packet path for communications was optimized for web access in the front-end zone and data-base access in the back-end zone. By deploying VLANs and reducing unnecessary Layer 2 broadcast traffic, the front-end and back-end zones were left with only essential traffic.

The wide area network access rate was increased through the use of additional bandwidth during a peak access time and changes to DNS. This enabled more shop at home clients to simultaneously access the servers.

## Business Results

The general manager is pleased to report the following.

- Criticizing comments from shop at home clients have dropped to an almost nonexistent level
- The stability and speed of the online shopping environment is improved
- For first day ticket sales of a major release the web sales out performed call centre sales - a first for the client

### For more information

The staff of eSubnet assists companies to provide secure, resilient and available network services to their clients. For more information on how eSubnet services can help you see [www.esubnet.com](http://www.esubnet.com).

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