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Case Study & Client Information

By:

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Case Study: March of Dimes

Executive Summary

The mission of the March of Dimes is to improve the health of babies by preventing birth defects, premature birth and infant mortality.

Since 2003, the fight to save babies has been strongly characterized by March of Dimes' Prematurity Campaign. The rising incidence of premature birth has demanded action, and the March of Dimes has responded by initiating an intensive, multi-year campaign to raise awareness and find the causes of prematurity.

March of Dimes online fundraising is responsible for more than 40% of overall fundraising and is running on Digital Edge's supported environment.

Client Profile

President Franklin Roosevelt's personal struggle with polio led him to create the National Foundation for Infantile Paralysis at a time when polio was on the rise. Better known as the March of Dimes, the foundation established a polio patient aid program and funded research for vaccines developed by Jonas Salk, MD and Albert Sabin, MD. These vaccines effectively ended epidemic polio in the United States.

Its original mission accomplished, the foundation turned its focus to preventing birth defects and infant mortality. The March of Dimes has led the way to discover the genetic causes of birth defects, to promote newborn screening, and to educate medical professionals and the public about best practices for healthy pregnancy. They have supported research for surfactant therapy to treat respiratory distress and helped initiate the system of regional neonatal intensive care for premature and sick babies. Their recent Folic Acid Campaign achieved a dramatic reduction in the incidence of neural tube defects, birth defects of the brain and spine.

Solution

Provide co-location and managed services for all E-business applications of March of Dimes. Digital Edge fully responsible for uptime, performance as **PCI** compliance of the environment. The system is stress tested to support 22,000 concurrent users.

Architectural Concepts

1. Security:

- a. PCI compliance
- b. Managing HTTP incoming traffic as well as remote access over VPN tunnels
- c. Physical security
- d. Intrusion detection
- d. Managing infrastructure for multiple development team including remote access, access retirement policies and duty separation

2. Stability
 - a. 24/7 support team availability for all underlined technology
 - b. Locked down user environment.
 - d. High Availability. A short down time may result in large amount of loses during fundraising season.
3. Processing capacity and reliability
 - a. Sustain targeted amount of concurrent users
 - b. Be able to scale applications to support more users
 - c. the system is stress tested for 22000 concurrent users
5. Regulatory compliance
 - a. Fully PCI certified.
 - b. Yearly third party audit. Digital Edge is responsible for PCI compliance
 - c. Incoming and outgoing data

Responsibility Model

Type of Service	Responsible party
Desktops	March of Dimes
Employee Emails	March of Dimes
Exchange Server	March of Dimes
Domain Controllers and Security	Digital Edge / March of Dimes
Change control including code moves between environments	Digital Edge
Custom Coding	March of Dimes
Defining Future implementation	March of Dimes IT Committee
MS SQL Server DBA services	Digital Edge
VDI / Remote access / Terminal Services	Digital Edge
Network Administration	Digital Edge
Firewalls/WAN/High Availability/Private lines	Digital Edge
Backups and archiving	Digital Edge
Compliance and Documentation	Digital Edge
Performance stress testing	Digital Edge
Failover testing	Digital Edge

SLA terms:

1. **20 min** on site response time for any problems.
3. SQL Server clusters recoverability to any local failures within **10 min**
4. Recovery of any single server within **10 min**
5. Recovery of business application functionality within **10 min**
6. Recovery of deleted or overwritten files to up to **3 months** in past.
7. Responsibility as per Responsibility Model table

Infrastructure and Technologies:

- 120 servers
- Primary and DR location
- SQL Server cluster
- Load balancing
- EMC SAN storage
- VMWare vSphere 4 Cluster
- Data Archival to DR site

Price

Total Monthly price: \$ NOT DISCLOSED

Migration:

The environment was architected, built and stress tested for the first online campaign. The environment was built specifically to run the application developed by March of Dimes team and to be able to sustain projected load and provide high availability.

Current Status:

The infrastructure has **100% uptime** since it went into production.

Other Notes:

Every year Digital Edge works with third party PCI auditors to maintain PCI compliance.