



# Storage Management

Industry segment – Telecommunication



The customer is one of India's largest  
Mobile Service Provider



# solution objectives

- **High Availability of Applications**
  - Ensure 99.99% uptime
  - Automated Fail over
  - Clustering for multiple nodes
  - Custom Agents to monitor in-house application
- **Performance Optimization**
  - Optimize DB Server performance
  - Framework for Block level incremental Backup
  - Simplify Management
- **Data Protection**
  - Centralized Backup Management
  - LAN/Server Free Backup
  - Support Block level incremental Backup



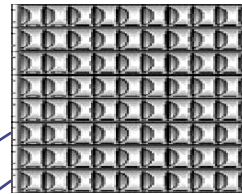
# solution highlights

- **High Availability of Applications**
  - Multi node cluster using VCS (4 nodes)
  - Automated any-to-any fail over
  - Critical applications – both in-house and commercial – being monitored
- **Performance Optimization**
  - First Veritas Database Edition implementation in India
  - Performance of raw device with manageability of file system
  - Point-in-time copies for instant recovery
  - Block level incremental Backup
- **Data Protection**
  - Centralized LAN Free Backup
  - Split mirror backup integration for off host backup (EMC Time Finder)

Tape Library



Enterprise Storage



Cluster  
Interconnect

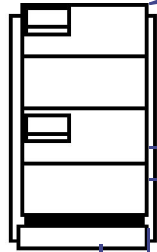
Fiber switch



Fiber switch

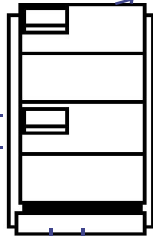


Cluster  
Interconnect



Unix Server

Cluster  
Interconnect



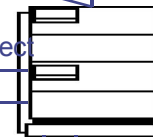
Unix Backup Server

Cluster  
Interconnect



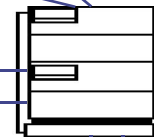
Unix Server

Cluster  
Interconnect



Unix Server

Cluster  
Interconnect



Unix Server

Public Network

# Storage Architecture



## solution benefits

- **High uptime (NSPOF)**
- **Enhanced OLTP performance by 50%**
- **Impact on Network & Computing resources minimized during Backup (Off host backup)**
- **Enabled instant data restoration**
- **Lowered TCO due to simplified Storage Management**