



**COMPUTERWORLD**

**SNIA**

**SNW**

**April 12-15, 2010 | Rosen Shingle Creek Resort | Orlando, Florida**

Om Sai Ram





## Welch's Manages Complexity from Grower to Table

Presenter : Mukesh Sharma

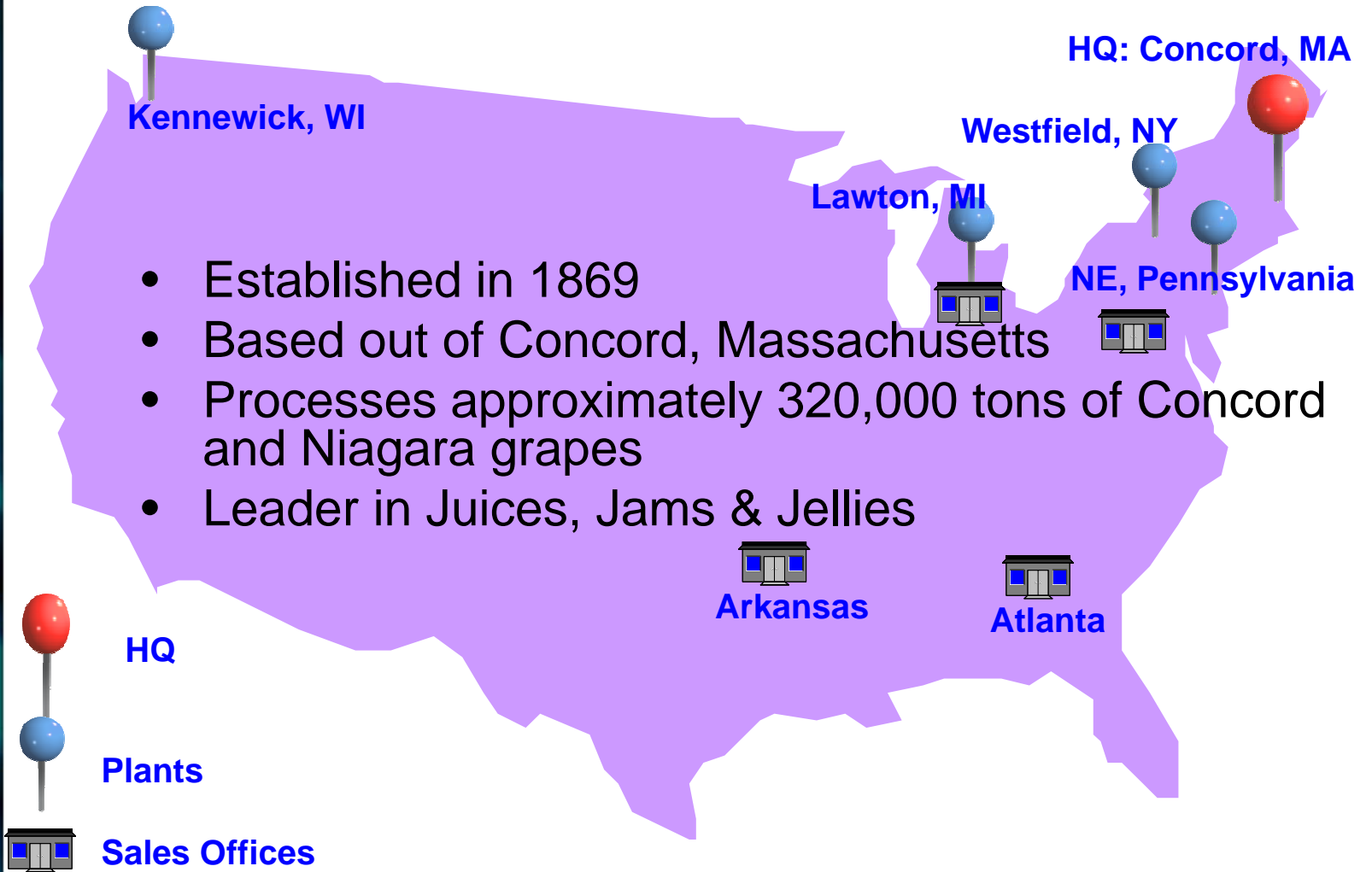
Title : Sr. Manager IT, Welch's

Email : [Msharma@welchs.com](mailto:Msharma@welchs.com)


  

  
 COMPUTERWORLD
   
 April 12-15, 2010
   
 Rosen Shingle
   
 Creek Resort
   
 Orlando, Florida




# - Family Farmers owned Cooperative





SNIA<sup>7</sup>



**SNW**

COMPUTERWORLD

April 12-15, 2010  
Rosen Shingle  
Creek Resort  
Orlando, Florida

# Welch's Worldwide Presence





# Welch's IT Mission

- Empower Business with Information
- Unsaid objective
  - Deliver greater value to hard working family farmers for every dollar spent.



# Journey Starts – 2004

- Welch's embarks on its biggest project to date – ERP Implementation
- Goal
  - Enable business by implementing fully integrated system, 31 modules with manufacturing lines connected to Central Data Center (Concord, MA)
- 7x24 uptime requirements





April 12-15, 2010  
Rosen Shingle  
Creek Resort  
Orlando, Florida

# Consistency is our hallmark





# Challenges

- Be more responsive to Customer needs
- Adopt an efficient, scalable & flexible server & storage platform.
- Enable the organization to meet rapidly growing and changing infrastructure requirements.
- All this with a modest budget and limited manpower – Lean IT



# Opportunity


- Challenge brings Opportunity – Mantra to be successful
- Embrace Technology and take Intelligent Risks
  - Early adopters of Virtualization
    - Would have outgrown DC
- Invest in strategic outsourcing / partnership
  - A process oriented Team work approach
- Deliver State of the Art Data Center with high ROI





Solution - Implement end to  
end virtualized scalable &  
stable architecture

SNIA<sup>7</sup>

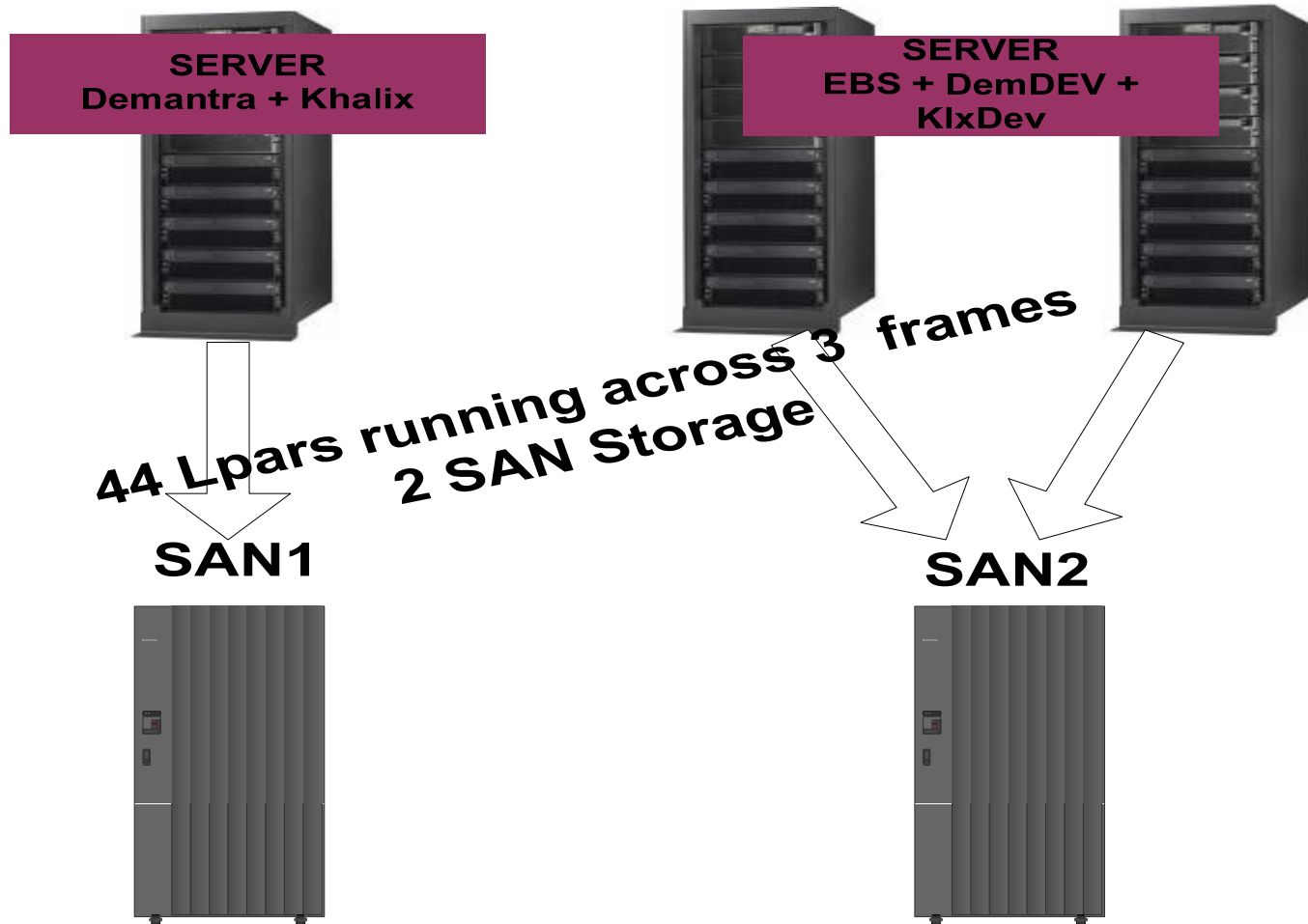


**SNW**

COMPUTERWORLD

April 12-15, 2010  
Rosen Shingle  
Creek Resort  
Orlando, Florida

# 2006 – Migrated over 30 standalone servers







# A successful ERP implementation

- Ability to grow vertically - Virtualization
  - No more under sizing or over sizing
- Reduced Data Center footprint
- State of the Art Highly Available systems
  - ERP implemented on Clustered servers
  - Improved ROI
    - Within reach operating cost
  - Simple but Nimble
  - Ability to focus on value added activities



# 2009 – Economy vs. Business

- Business requirements growing but Budget Shrinking
  - Storage growing 40% per year
  - Rapid implementation of new ERP modules
  - Need to lower RTO & RPO
    - Unsaid requirement
  - Reduce system Maintenance downtime
  - Reduce Complexity
  - Save Money : Do more with Less

SNIA<sup>7</sup>

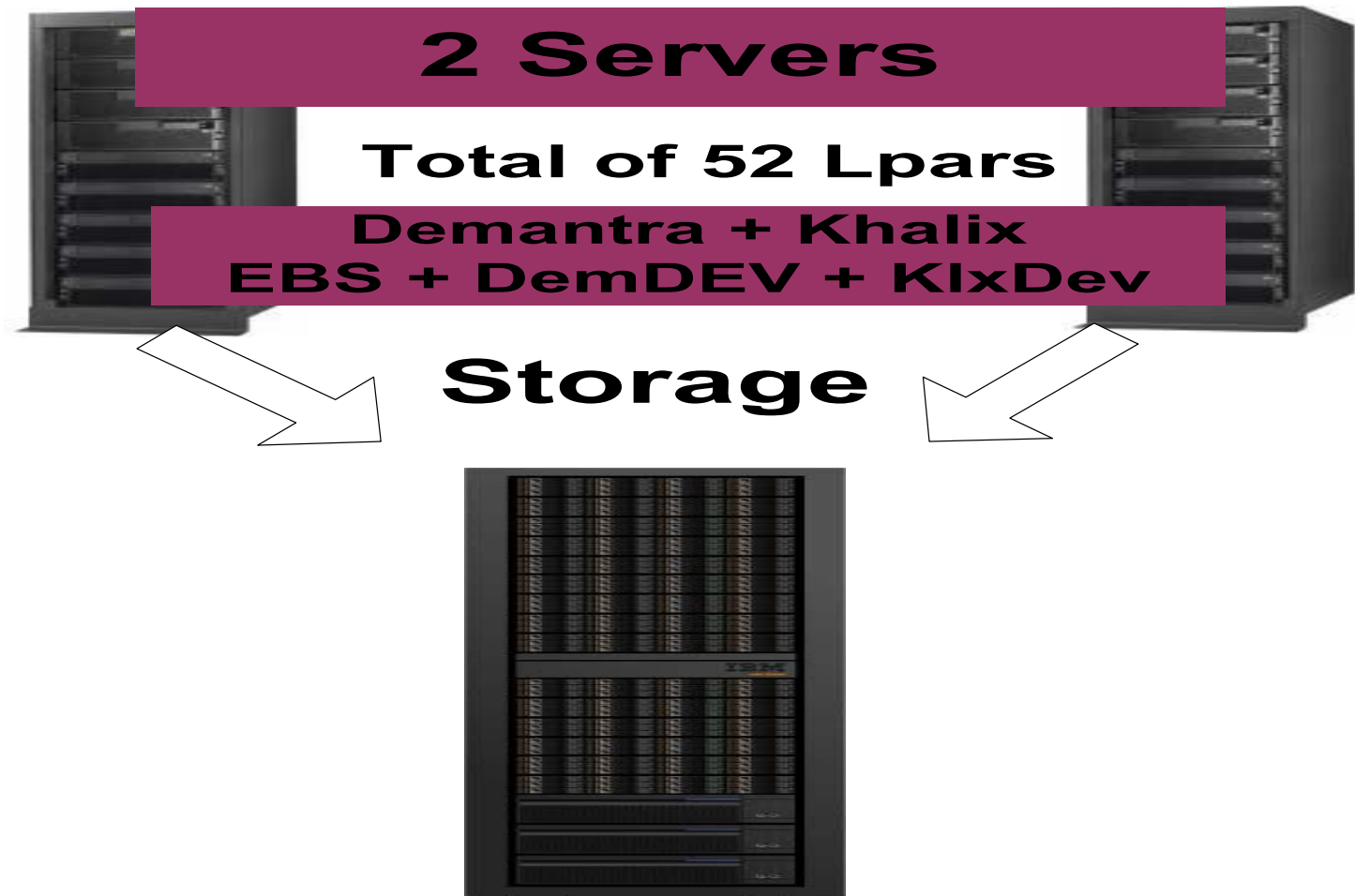


**SNW**

COMPUTERWORLD

April 12-15, 2010  
Rosen Shingle  
Creek Resort  
Orlando, Florida

## 2009 – Further consolidation & Acquire smart storage solution



- Virtualized Lan Connections – IVE
- Virtualized San Connections – NPIV
- Virtualized Hardware – VIO servers





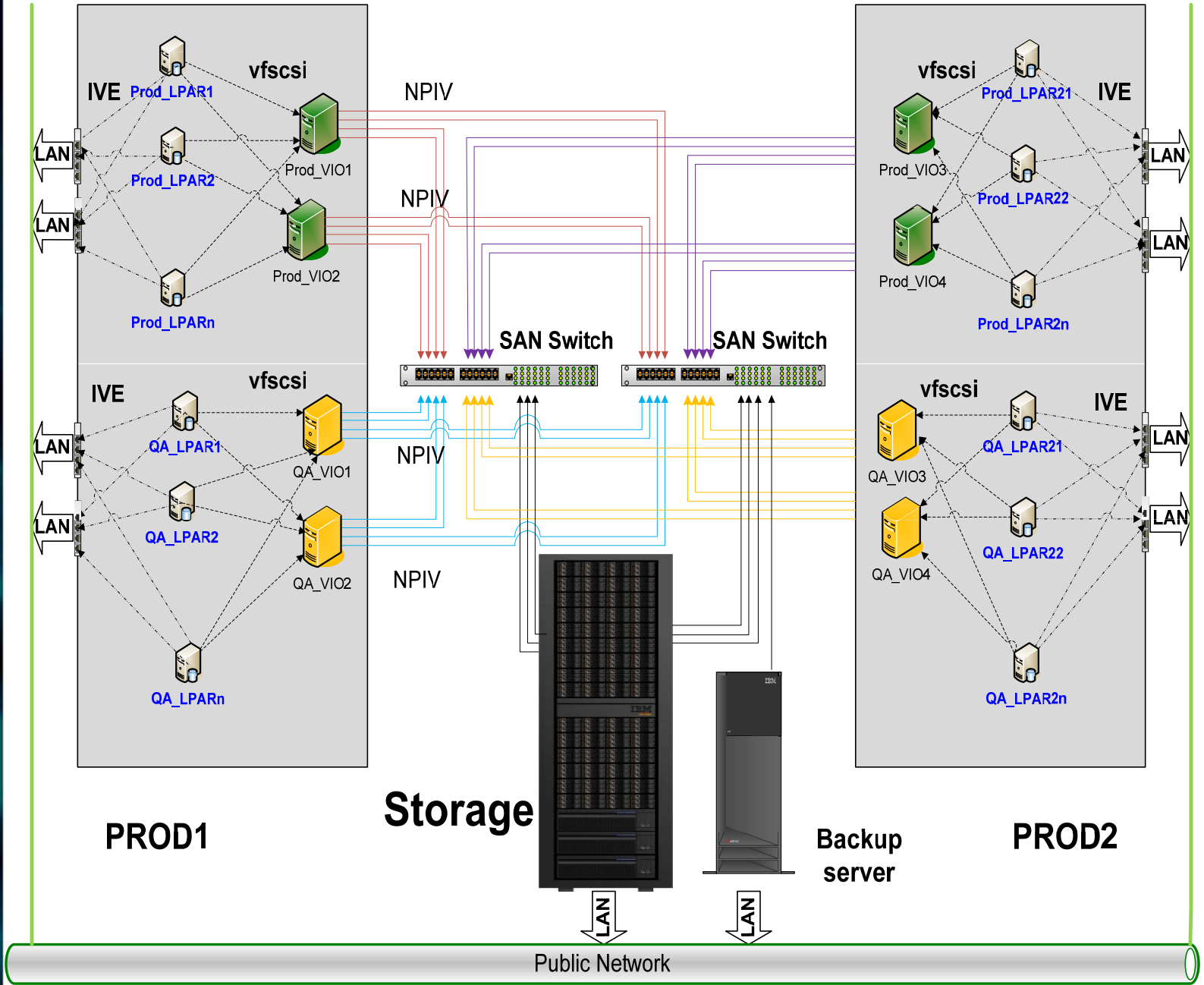
SNIA<sup>7</sup>

**SNW**

COMPUTERWORLD

April 12-15, 2010  
Rosen Shingle Creek Resort  
Orlando, Florida

# Consolidated Environment



SNIA<sup>7</sup>

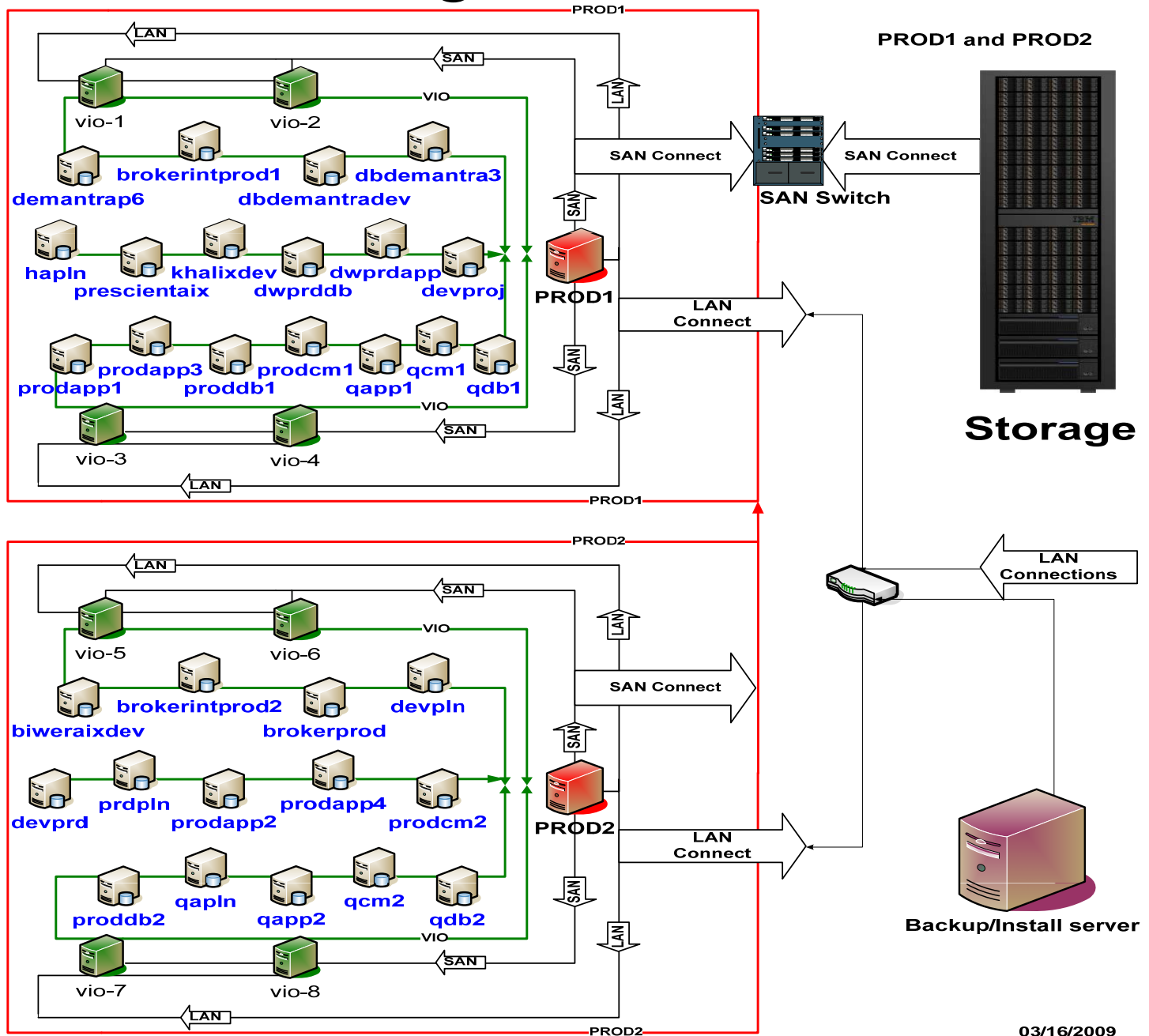


**SNW**

COMPUTERWORLD

April 12-15, 2010  
 Rosen Shingle  
 Creek Resort  
 Orlando, Florida

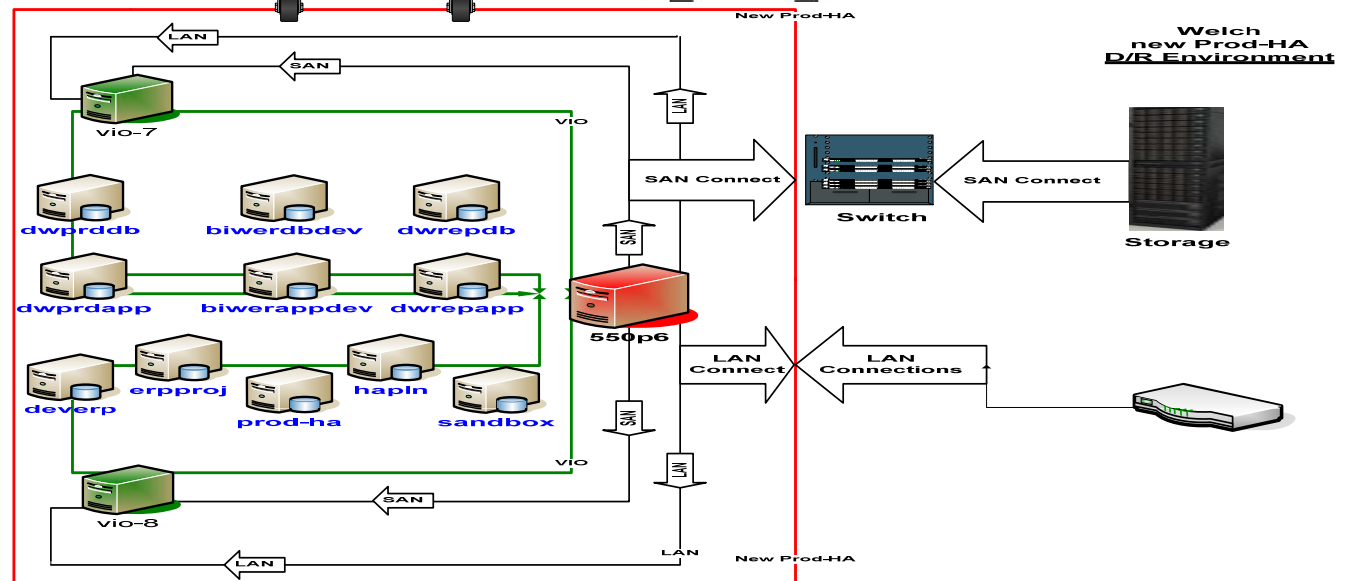
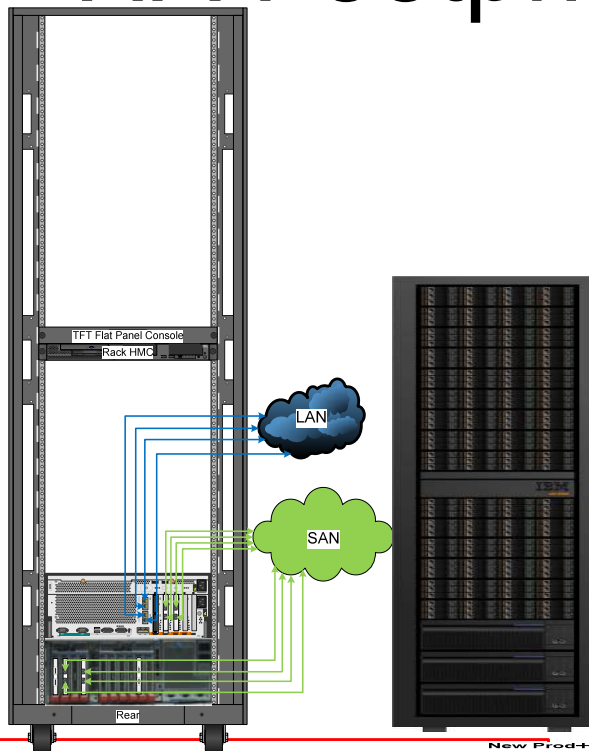
# Logical View



# HA Footprint

Small  
Footprint and  
Investment  
Big Risk  
mitigation

13 Lpars  
running on a  
small 4 Way box  
Non-critical  
(Dev) + Critical  
(PROD)



SNIA<sup>7</sup>

**SNW**

COMPUTERWORLD

April 12-15, 2010  
Rosen Shingle  
Creek Resort  
Orlando, Florida






# Business Benefits

## Quick systems provisioning

- Remove bottleneck of mundane steps
  - No more Layout talks for every system
  - No need to redo physical DC planning work
  - Do it once and reuse it over & over
- Operational excellence – The right approach
  - Plan Plan Plan
  - Document Document Document
  - Walkthrough's
  - Test Test Test
  - Make it a GO
- World class Highly Available systems
  - Averted near Disaster

SNIA<sup>7</sup>

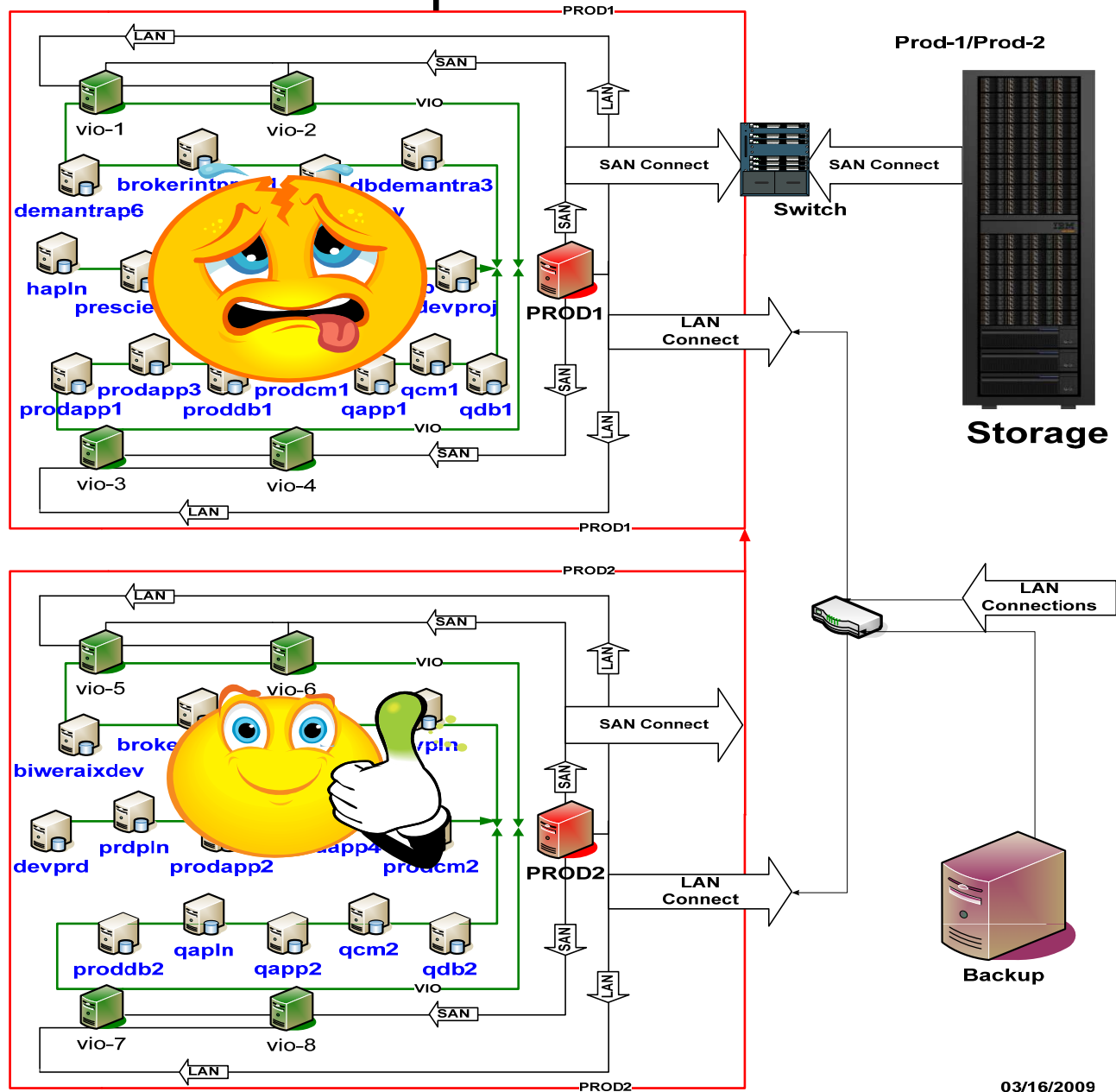


**SNW**

COMPUTERWORLD

April 12-15, 2010  
 Rosen Shingle Creek Resort  
 Orlando, Florida

# One Production Server washed out – No hick up for Business






# Smart Storage Solution

- Virtualized Storage layer - Met/Exceed business needs
  - Single Tier storage : Tiered storage challenges solved
  - Contain Growth
    - Utilize features of Snapshot and Thin provisioning to reduce Storage footprint.
    - Scalable Grid system to grow as needed
  - Rapid Implementation of new Modules
    - Storage provisioning – reduced from days to minutes
    - Utilize Snapshots & Volume copy to create new systems
  - Lower RTO & RPO
    - Utilize Snapshot process to create quick system backups
    - Utilize SAN to SAN Replication to achieve near CDP.
  - Reduce system maintenance downtime
    - Backups in seconds - Snapshots allow quick system backup & recovery
    - Snapshots allow for value added tasks during managed downtime



SNIA<sup>7</sup>

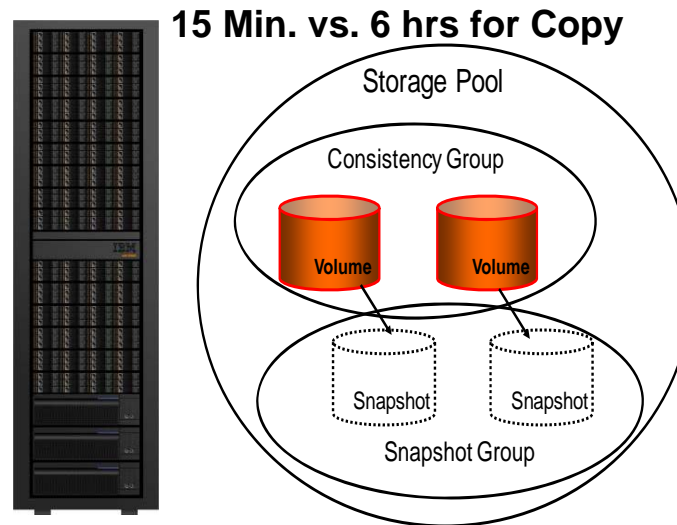


**SNW**

COMPUTERWORLD

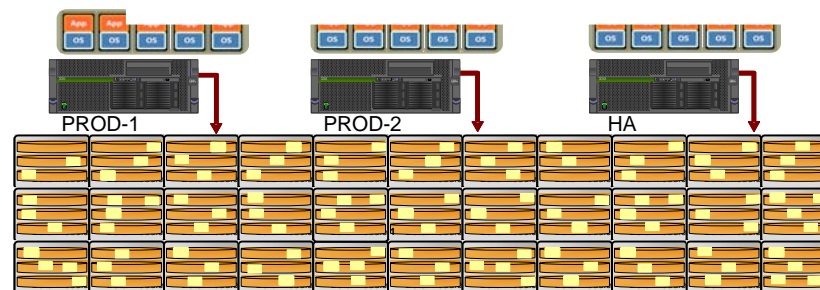
April 12-15, 2010  
Rosen Shingle  
Creek Resort  
Orlando, Florida

# Do More with Less



- Reduced complexity
  - Process oriented approach
  - Scripts interface
  - Simple Management interface
  - Storage performance monitoring – no more back end/guess work.
- Optimized access from any protocol
  - RAW F/S
  - Parallel F/S
  - Standalone F/S
  - SAN bootable Lpars

## Servers & Storage





# Holistic approach – End Result

- Transformed Architecture enables next generation systems
  - End to End virtualization puts Welch's in driving seat
- Smart storage solution enables Innovative architecture
- Grid storage architecture improves I/O performance
- Gain in overall system performance by 60%
  - Deliver Good Morning reports in Morning
- People & Process oriented approach makes it happen
- A solid foundation for new Business environment – With in Reach



# Lessons Learned

- Look at the bigger picture
- Don't shy away from Innovation
- Strategic POC Approach
  - Clear concise success criteria
- Invest in Strategic partnerships
- Process oriented approach
  - Plan, Document, Walkthrough, Execute.
- Learn from missteps – do not repeat them



# A Big Thank you!!

- Welch's IT Team
- Welch's extended team
  - The ATS Group
  - Essex Technology group
  - Oracle DBA Team
- Our Partners
  - IBM
  - Oracle





Thank you!

Q & A