Network of Choice

ProCurve Networking by HP

# Information Driven Organizations

**Amol Mitra**
Director of Marketing
Asia Pacific & Japan
ProCurve Networking Business



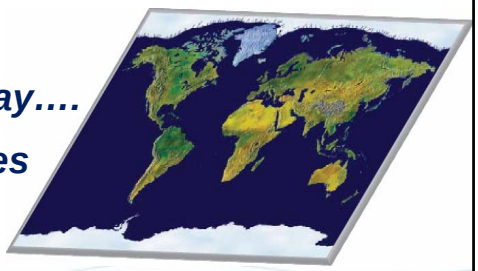

## Pace of change….

ProCurve Networking by HP

- Two tectonic processes affecting modern business
  - **Pace of change**
  - **Business information transformation**
- Multi-decade information management transition
  - **Hardcopy to electronic media**
  - **Information acquisition**

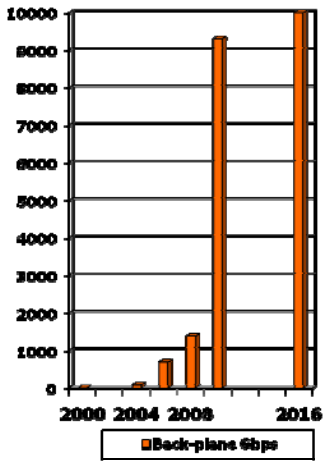
***We have come a long way….***

***but the journey continues***



## Why the Interconnected World Matters!

- Data volume escalates in the always on, always connected world
- Yottabyte tracks Moore's Law providing infinite computing capability
- Network access and physical access will be tied
- The network follows you wherever you go






## The Challenges….

- Information assimilation
- Virtualization
- Security
- The Edge

***Adaptive Information Management…..***

## Big Shifts and Business Impact
## – *Information* –

ProCurve Networking by HP

| Yesterday | The Future |
| --- | --- |
|  |  |
| Ensuring information availability | Pervasive information access |



## Big Shifts and Business Impact
## – *Virtualization* –

ProCurve Networking by HP

| Yesterday | The Future |
| --- | --- |
|  |  |
| Virtualization supports resource isolation | Network resources anytime, anywhere |

## Big Shifts and Business Impact
### – *Security* –

ProCurve Networking by HP

**Yesterday**

Individual access rights map to applications

**The Future**

Protects privacy as the network follows you



## Big Shifts and Business Impact
### – *The Edge Interface* –

ProCurve Networking by HP

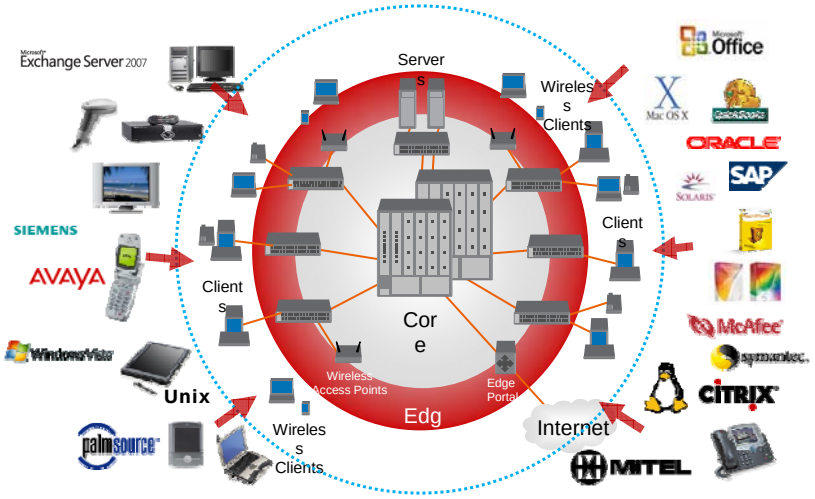
**Yesterday**

Personal computers, laptops and PDAs are conventional interfaces

**The Future**

You will interact with computers in natural, human terms

# Today's Network






# How do we keep pace?

Business requirements

Security challenges

Next-gen IT architecture and services

Exponential traffic and device growth

Forrester Research 09.2007

**The companies that will dominate will be *Information Driven Organizations.***



## The Power….

- Information is ubiquitous (automated and efficient)
- Precise and rapid decision making
- Significant competitive advantage

## Building Blocks of the
# Information Driven Organization

- Invest in a flexible network foundation to support the data explosion and maximize green power distribution.
- Develop a security balance: the most accessible systems are not secure, the most secure systems are not accessible.
- Build intelligent networks to maximize internal and external data feeds for pushing and pulling relevant information.
- Ensure processes occur without human intervention or onerous management.
- Move away from a single vendor environment.

THE VENETIAN Macao ~ Resort ~ Hotel

- 1,000's of nodes and 100's of applications supporting data, VoIP, Video Surveillance, AV, Slot Machines, Private wireless, Public wireless, Wireless gaming
- 24x7 reliability, fail over and ultimate performance challenges
- An adaptive and reliable network infrastructure

## The Venetian Casinos and Resorts

# The Venetian Casinos and Resorts

## 10G Ethernet powers glitzy Vegas resort

VoIP, wireless still need to prove themselves to CTO
By Jim Duffy , Network World , 05/21/2008

LAS VEGAS – The $1.5 billion Venetian resort in Las Vegas is a city within a city. It boasts 7,000 guest rooms in three towers, a 120,000-square-foot casino, waterways, gondolas, frescoes, a convention center, retail shops, a bank, 18 world-class restaurants, its own police force -- even a TV station. (See slideshow of the network behind the Venetian resort).
Throw in 4,000 cameras -- 1,200 for security and surveillance -- wireless hot spots, and back-office operations such as inventory control and purchasing, and it's a tall order for any network to handle. But a 700-switch, 10G Ethernet infrastructure split into 98 virtual LANs is keeping up just fine, according to the resort's IT staff.
The network is running Venetian's entire business -- casino, convention center, retail, multiple restaurants, VoIP and guest services operations, including registration and checkout, cable TV, and wired and wireless Internet access. Despite this heavy lifting, the network is not overly sophisticated – it's been in place since the resort was constructed 10 years ago and was selected based on its simplified operation and management.

**"Our [network] is straightforward, easy to manage and requires minimal support," said Steve Vollmer, vice president of information technology and CTO of Las Vegas Sands Corp. "We estimate [it] helps us save 10 to 15 seconds during guest check-in and checkout, which translates to a savings of nearly 30 hours a day just in one department."**

**Security considerations**
The switches are integrated with virus protection but they can also detect suspicious guest activity. The Venetian recently hosted a Defcon hacker conference and the network thwarted attempts by conference attendees to infiltrate the Venetian network. The resort also hosted a conference of companies in the adult entertainment industry and had to deflect attempts by some attendees to send out spam from their guest rooms.

"They're more of a pain in the [backside] than Defcon," Vollmer says of the adult entertainment attendees.
In both cases, the Venetian network alerted Vollmer and other IT officials to unusually high bandwidth usage. Then the Venetian's ISP noted a slew of hits against its DNS servers coming from the resort. The ISP then handed over the IP addresses of the perpetrators to the Venetian and the room-to-room roundup began.

The next steps for the Venetian are to install a fifth HP ProCurve 5400 switch to strengthen its DMZ zones, and provide redundancy and load balancing. The resort plans to install two more ProCurve 3500s to replace a Cisco 7206 router for part of the DMZ.

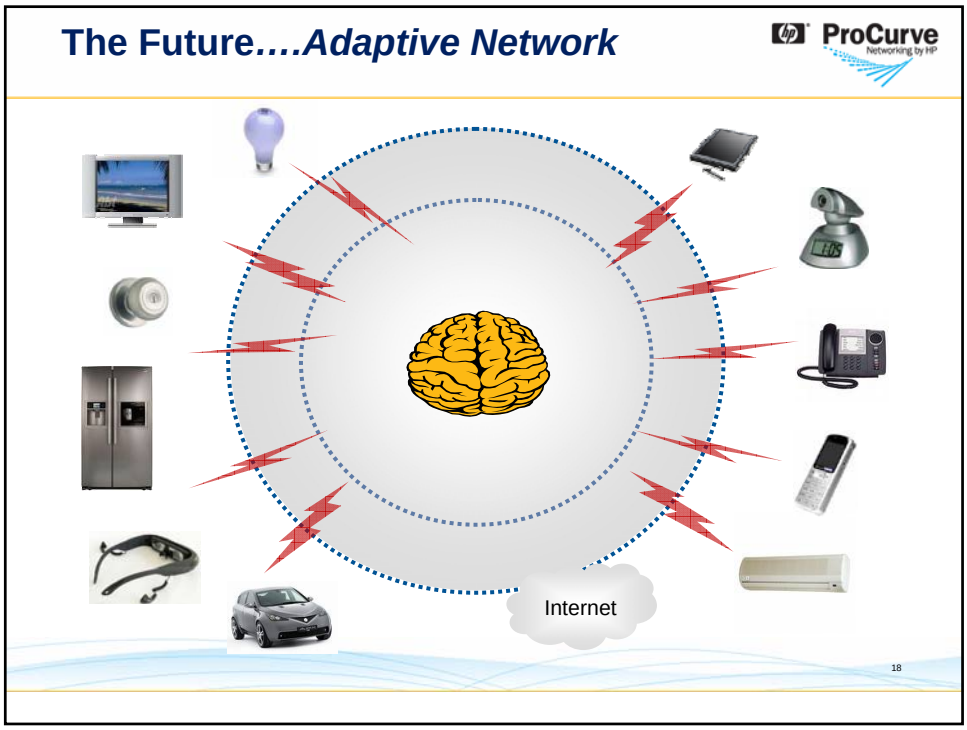
The router was a single point of breakdown, Vollmer says.

The Venetian may also replace the ProCurve 4000 series switches that have been in place for 10 years with 5400s. The replacement has more to do with keeping the network up to date than it does with the older switch wearing out.

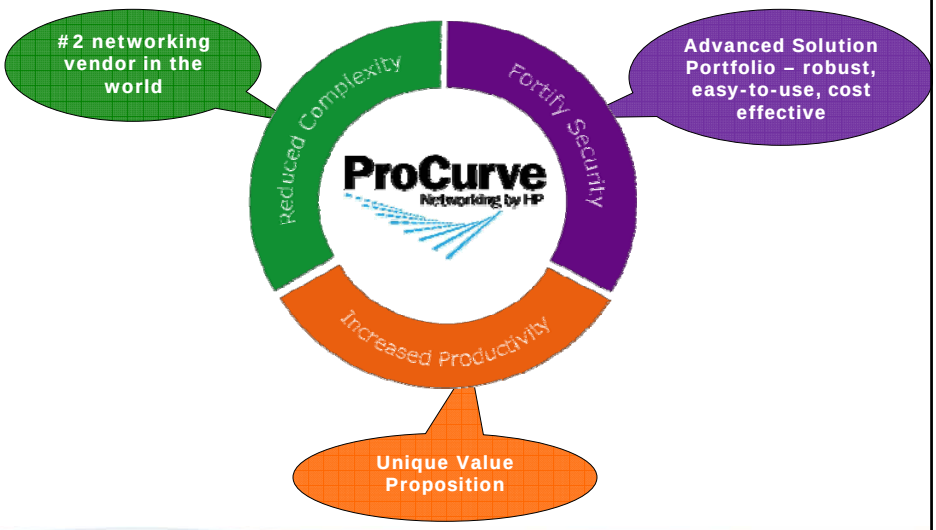
"They don't break," Vollmer says, jokingly adding, "it's flawed because we can't get nothing new."

But rather than disclose how much Sands invested in the two networks, Vollmer prefers to discuss payback. He expects the Macao network to save him $5 million in five years.


Adaptive Networks
Adaptive to users
Adaptive to applications
Adaptive to organization needs
All on a cohesive, flexible network infrastructure that is highly secure and available


The Future….Adaptive Network
ProCurve
Networking by HP
Internet
18

## ProCurve Networking




ProCurve Networking by HP