



**NEW**

# Cisco Nexus 5000



*Therdtoon Theerasasana*

*ttheera@cisco.com*

# The Case for 10GbE to the Server

**Multi-Core CPU architectures allowing bigger and multiple workloads on the same machine**

**Server virtualization driving the need for more I/O bandwidth per server**

**Growing need for network storage driving the demand for higher network bandwidth to the server**

**10GE LAN on server Motherboards (LoM) beginning mid-2008** *(source: Broadcom)*

# Cisco Nexus 5000 Series

## Unified Fabric, Delivered



**TCO Reduction Through Data Center Simplification**

**Data center consolidation with investment protection for existing infrastructure**

**Increased business agility through VM aware network services**

**Enhanced business resilience through higher levels of operational continuity**

**Ease of deployment and alignment to existing operations models and best practices**

# Extending the Cisco Nexus Family Data Center Class Switches



- Simpler More Stable Layer 2 Network
- Highly Available Platform
- Preserves operational best practices

- FCoE based Unified Fabric
- Virtualization Optimized Networking
- Support for CE, FCoE, DCE, and FC

- Reduces power, cooling, cabling
- Up to 56 ports non-blocking 10GbE
- Up to 1.2 Tbps capacity

Operational  
Continuity

Transport  
Flexibility

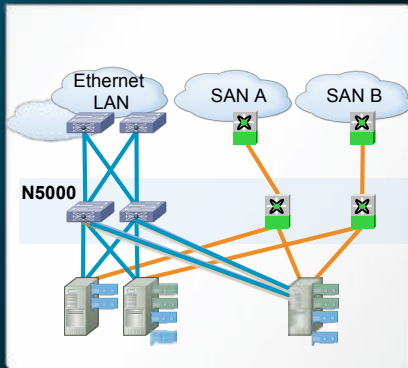
Infrastructure  
Scalability

# An Innovative Platform To Simplify Data Center Transformation

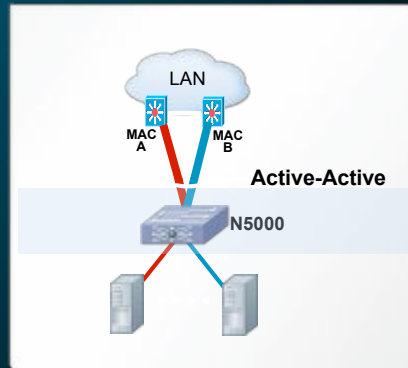
## Standards



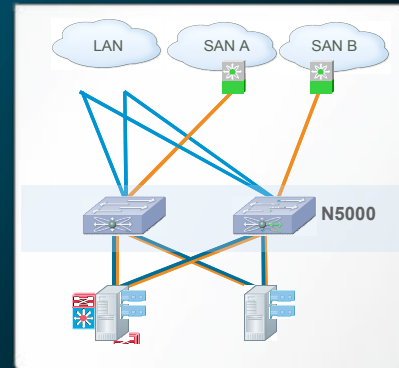
### Wire Speed 10GbE Switching Capacity



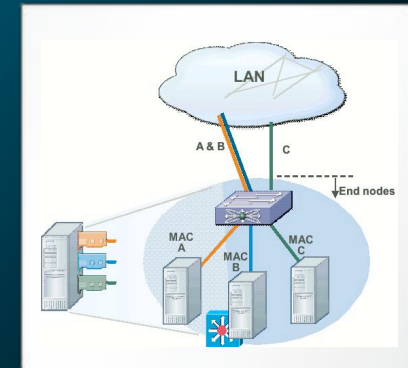
### Data Center Ethernet Scalability



### Fibre Channel over Ethernet Consolidation



### VM Optimized Networking Virtualization



## Eco-System

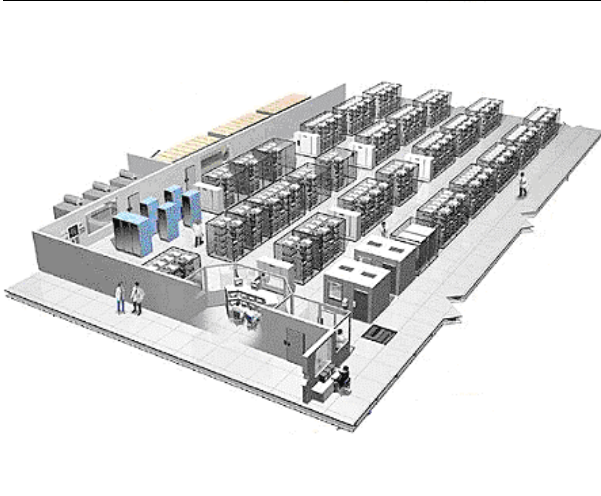


# Cisco Nexus 5000 Benefits to You! Server/System Administrator/Architect



- ♣ Simplifies Server infrastructure by eliminated interfaces and cables
- ♣ Eliminates costs by eliminating interfaces, DAS and allows smaller form factors
- ♣ Delivers 10GbE line speed and granular services to support dense-VM implementation models
- ♣ Allows VM mobility without dependence on network or storage teams

# Cisco Nexus 5000 Benefits to You! Virtualization Administrator/Architect



- ♣ Unified fabric delivers ubiquitous and consistent network and storage services to all servers

- ♣ VM-level granularity of services support security policy and regulatory compliance

- ♣ Enable cross-rack and cross-data center VM portability

- ♣ Open, multi-vendor, and standards compliant—no vendor lock-in, no proprietary technology, no excluded server platforms

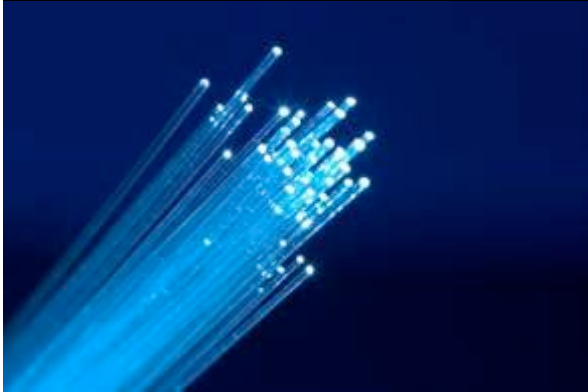


# Cisco Nexus 5000 Benefits to You! Storage Administrator/Architect



- ♣ Give every server SAN access
  - eliminate DAS and consolidate storage
  - eliminate the cost of HBAs
- ♣ Non-disruptive to the SAN – investment protection for FC infrastructure
- ♣ Increase the value and importance of the SAN through increased usage
- ♣ Simplify DR/BC plans
- ♣ Support VMs without compromising design or operational best practices
- ♣ Open, standards compliant approach

# Cisco Nexus 5000 Benefits to You! Network Administrator/Architect



- ♣ DCE increases the resiliency and scalability of network transport in the data center
- ♣ DCE is a standards-based extension of what you already know
- ♣ Cisco Nexus has operations and management consistency with the rest of your Cisco infrastructure
- ♣ Cisco Nexus does not disrupt your design or operations best practices

# Portfolio-Wide Innovation

## Cross-Platform Investment Protection

Cisco® MDS

Fibre Channel and FCoE



Cisco® Nexus

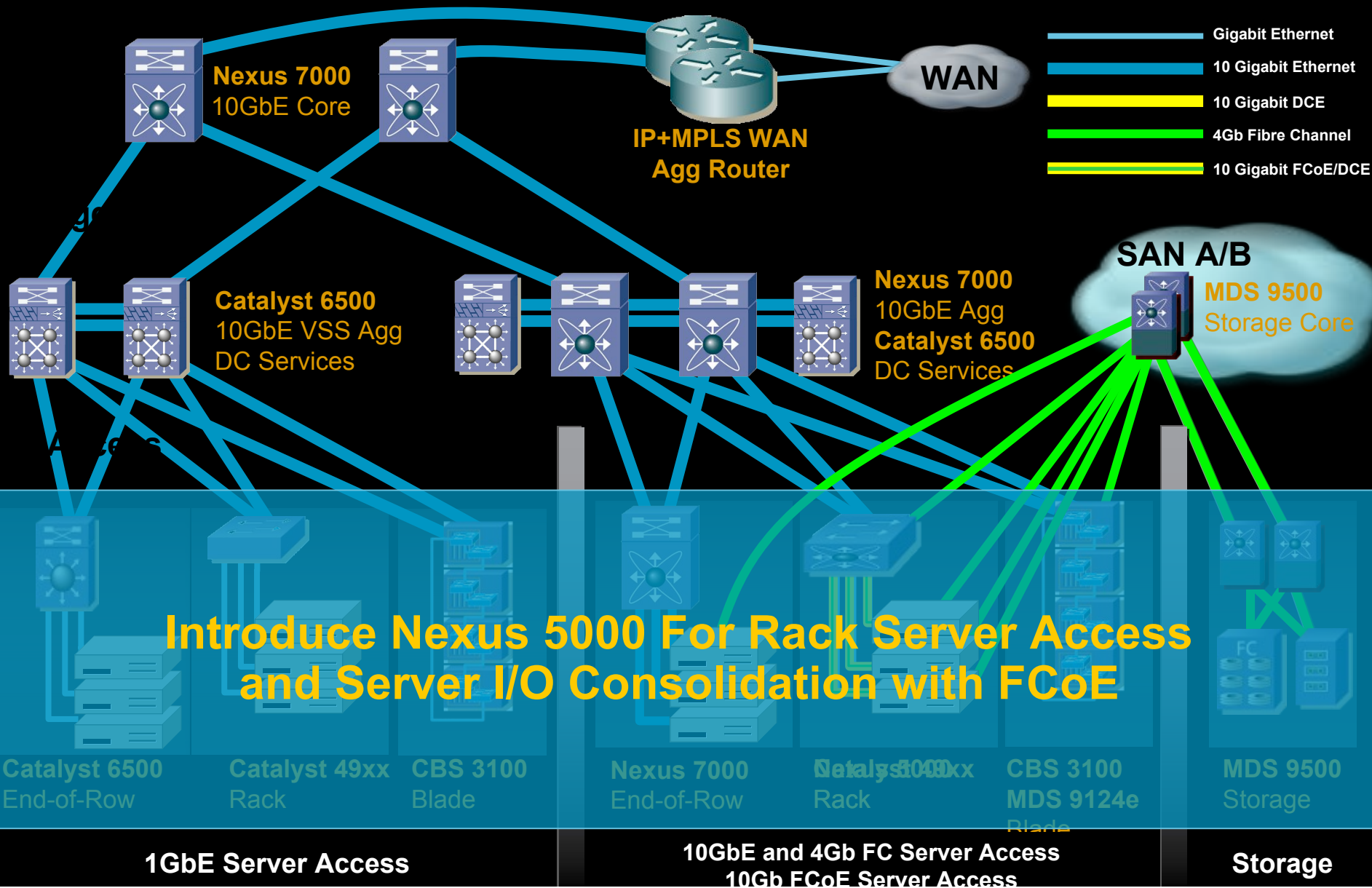
Data Center Ethernet  
and FCoE



Cisco Catalyst®  
Ethernet and DCE



# Unified Fabric Evolution



# Cisco Nexus 5000 Series



## 56-Port L2 Switch

- 40 Ports 10GE/FCoE/DCE, fixed
- 2 Expansion module slots



## Fibre Channel

- 8 Ports 1/2/4G FC



## FC + Ethernet

- 4 Ports 10GE/FCoE/DCE
- 4 Ports 1/2/4G FC



## Ethernet

- 6 Ports 10GE/FCoE/DCE

NX-OS

DC-NM and Fabric Manager

**URL for download presentation :**

**[www.ciscothailand.com/go/techupdate](http://www.ciscothailand.com/go/techupdate)**

