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Drivers and Demands
Change drivers impacting Data Center Security Investments?

- Too much money for no real return
- Build vs buy vs lease decisions
- How long will this investment last?
- Upgrade or Re-implement Security?
- Is this risk acceptable?
- Which is safer my Data center or the Cloud?
- Is my IT vendor the right Security partner
- Is Security liability shared?
- Where do I start with security?
The CXO demands on IT

Monetize Investments
(Cloud DC/generate revenue vs cost consumption)

Protect existing customer base and revenue streams
(Secure customers, employees and revenue)

Keep the technology simple
(Clear ROI/No bleeding edge)

Drive new Revenue
(Support innovation/open systems/Partner vs build)

Business driven security technology
(Optimized investments)

Reduce or eliminate downtime of services and data loss.
(zero downtime)
A Data Center Security Transformation Model
Next Generation Security Architecture Overlay

Cloud Data Center Building Blocks
- Unified Compute
- Unified Fabric
- Virtualization

Cloud Data Center Protection
- Harden
- Isolate
- Enforce

Cloud Data Center Visibility
- Identification
- Monitoring
- Correlation

Cloud Data Center Control
- Cloud Data Center Compliance and SLA

Threat Profile
- Service Disruption
- Intrusions and Takeover
- Data Leakage
  - Data Disclosure
  - Data Modification
  - Identify Theft and Fraud

Courtesy Cisco Cloud Data Center Architecture
A Distributed Cloud Data Center Architecture

Internal Cloud
- Application:
  - OA
  - Digital Library
  - Car tracking system
  - Crime Information System
  - Drug Monitoring
  - Education Resource Sharing
  - Police VDC
  - Health VDC
- Resource Pool:
  - General Resource Pool
  - High-Performance Pool
  - X86 Physical Pool
  - Virtualization Pool (Government)
- IT Infrastructure:
  - X86 Server
  - SAN
  - Server SAN
  - Network
  - Security
- L1 Facility:
  - Power
  - UPS
  - Wiring
  - Fire Control
  - Cabinet
  - Cooling

Enterprise & Public Service Cloud
- Application:
  - OA
  - ERP
  - Production VDC
  - WEB
  - TEST VDC
  - BIG DATA VDC
- Resource Pool:
  - General Resource Pool
  - High-Performance Pool
  - X86 Physical Pool
  - Virtualization Pool (Enterprise & Public Service)
- IT Infrastructure:
  - X86 Server
  - SAN
  - Server SAN
  - Network
  - Security

DC United Management
- United Portal
- Service Resource Providing
- OM Management
- SLA
- Multi-DC Monitoring
- Room Monitor

National Distributed Cloud Data Center N

National Distributed Cloud Data Center 1
The path to secure Data Centers
The real Business Drivers of Cloud DC

Protect
- Applications
- Data
- Customers
- Responsiveness
- Service Levels

Optimize
- Cost
- People & Process
- Investments
- Support complexity
- Underutilized resources

Grow
- Technology adoption in the business
- App rollout
- Information availability
- Service enablement
- Enterprise Value
Implementing a Cyber Security Operations Center with the Cloud

Data Layer
- Security Events
- Assets
- Logs
- Policy Management
- Profiles
- Network Events

Data Acquisition Layer
- Internet
- Routers
- Web
- Apps
- Firewalls
- Servers
- Switches
- Gateways

Reporting Layer
- Security Management
- Network Management
- Device Management
- User Management