



SECURITY: EVOLVING THE DATA CENTER

Rasool Kareem Irfan

21 October 2016





AGENDA

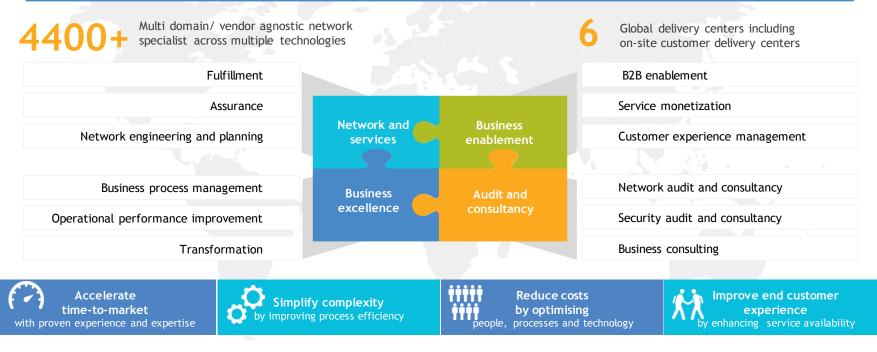
- 1. TCTS Introduction
- 2. Data Center Trends and Security Challenges
- 3. Strategic Priorities to Secure Data Center

www.tatacommunications-ts.com | for tata_tctsl © 2016 Tata Communications Transformation Services. All Rights Reserved. TATA COMMUNICATIONS and TATA are trademarks of Tata Sons Limited in certain countries. TRANSFORMATION SERVICES



TATA COMMUNICATION TRANSFORMATION SERVICES (TCTS)

Managed services for network and business operations across telco lifecycle areas, as well as consultancy and business enablement services, to global enterprises and telecommunications companies, via a global delivery model



www.tatacommunications-ts.com

© 2016 Tata Communications Transformation Services. All Rights Reserved. TATA COMMUNICATIONS and TATA are trademarks of Tata Sons Limited in certain countrie



DATA CENTER TECHNOLOGY TRENDS

- DCIM Will Move Further Up the IT Stack
- Prefabricated Data Centers Will Come of Age
- Hyperscales and the Open Compute Project Will Disrupt Suppliers' Status Quo
- Cloud Will Drive Technical and Business Change
- Data Centers Will Evolve from Consumers to Active Energy Players

Source: 451 Research

The data center has evolved faster than everyone imagined and many are encountering challenges because their approach to **Security** did not evolve



DATA CENTER SECURITY CHALLENGES



Evolving Threats

Security Operations



Compliance

• Detect, understand, and block

- Manual process
- Short on resources
- Long provisioning times

Costly Complex validation process



LISTENER POLL

What challenges does your organization face when planning and implementing data center security?

BIGGER TRUTH

How secure is your data center?



of organizations report that on average security change requests takes days or weeks to complete of organizations experienced a security incident that resulted in the compromise of one or more data center services in the past 2 years

57%

68%

of organizations that have suffered lateral data center server attacks have confidence that additional network segmentation could definitely prevent future compromises of organizations with a method for removing out-of-date firewall rules says this process is difficult and time consuming

68%

TATA

www.tatacommunications-ts.com | tata_tctsl © 2016 Tata Communications Transformation Services. All Rights Reserved. TATA COMMUNICATIONS and TATA are trademarks of Tata Sons Limited in certain countries.





STRATEGIC PRIORITIES TO SECURE DATA CENTER

Segmentation

- Establish boundaries: network, compute, virtual
- Enforce policy by functions, devices, organizations
- Control access to networks, resources, applications

Threat Control

- Stop internal and external attacks
- Patrol zone and edge boundaries
- Control information
 access and usage

Visibility

- Provide transparency to usage
- Apply business context to network activity
- Simplify operations and compliance reporting

www.tatacommunications-ts.com | tata_tctsl © 2016 Tata Communications Transformation Services. All Rights Reserved. TATA COMMUNICATIONS and TATA are trademarks of Tata Sons Limited in certain countries.



SEGMENTATION

Firewall Segmentation

Context Aware Segmentation

Fabric Segmentation Network Segmentation

© 2016 Tata Communications Transformation Services. All Rights Reserved. TATA COMMUNICATIONS and TATA are trademarks of Tata Sons Limited in certain countries.

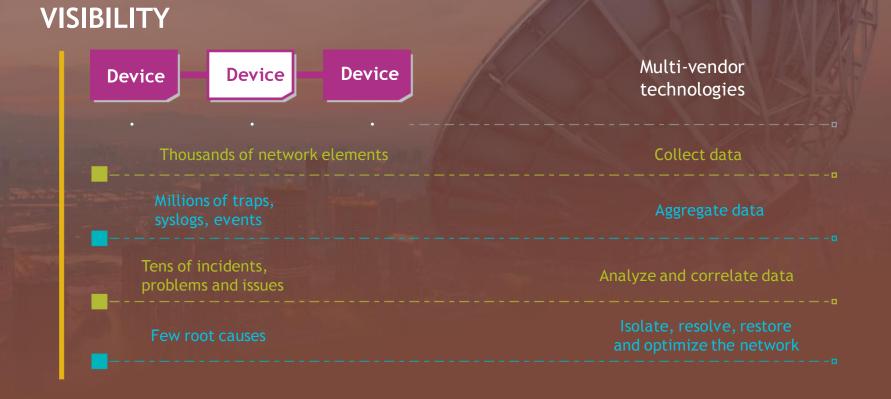


THREAT CONTROL









www.tatacommunications-ts.com | for tata_tctsl © 2016 Tata Communications Transformation Services. All Rights Reserved. TATA COMMUNICATIONS and TATA are trademarks of Tata Sons Limited in certain countries.



LISTENER POLL

TATA COMMUNICATIONS and TATA are trademarks of Tata Sons Limited in certain countries.

Are data centers doing enough to train their employees for new security threats in the age of virtualization? Or is there still a lot of room for improvement?





HOW TATA COMMUNICATIONS TRANSFORMATION SERVICES CAN HELP CUSTOMERS

TATA COMMUNICATIONS

TRANSFORMATION SERVICES

TATA

TCTS SECURITY OFFERINGS

Transformation methodologies to mitigate cybersecurity concerns

Security Consulting

- Security Architecture Review
- Security Migration
 Services
- Solution Optimization Services

Security Assessments

Regulatory Compliance
 Assessment

₿

- Security Governance
 Assessment
- Technical Security
 Assessment

Managed Security

- Security Monitoring & Management Services
- Security Design & Implementation
- Solution & Platform
 Engineering





THANK YOU

Tatacommunications-ts.com

© 2016 Tata Communications. All Rights Reserved. TATA COMMUNICATIONS and TATA are trademarks of Tata Sons Limited in certain countries.