Network Transformation - Impact on cert teams

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Presentation outline

› Network transformation
› Emerging threats
› Impact on CERT teams way of working
› Key conclusions
NETWORK TRANSFORMATION
Network transformation

FROM

› Building new networks

› Traditional, proprietary networks

› Hardware

TO

› Network transformation and convergence

› All-IP mobile broadband

› Agility in software and services
Connected home

- Interoperable devices
- Appliances
- Sensors

- New services
  - Remote monitoring & control
  - Surveillance
50 billion connections 2020
EMERGING THREATS
Paradigm shifts

Services Consumption
- Fixed first

Device Momentum
- Shared

Access Bandwidth
- Unlimited

Mobile First

Personal

Limited
Emerging Threats

INFORMATION
- Weaknesses in Data Protection

CONNECTIVITY
- Weaknesses in Aggregation Layers
- Indefinite Amount of Services
- Poor Privacy, Trust, Transparency

SERVICES
- Weaknesses in Trust and Privacy Handling
- Polarized, used as decision base
- Disinformation
- Weaknesses in aggregation layers
- Disorganized, but used as decision base
- Inadequate for connected devices
- Self-configured networks
- Agile services
- Unknown trust
- Poor privacy, transparency

Few but trusted services

Not based for decisions

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CONCLUSIONS

- Attacks shift towards service and DATA layer
- Wide attack surface, NO GEOGRAPHICAL BOUNDARIES
- TRUST AND PRIVACY ISSUES INCREASING
Impact on certainty of teams way of working
CERT TRANSFORMATION

CERT

DERT

Data Emergency Response Team

PERT

PRIVACY Emergency Response Team
Be prepared for

Global Collaboration & CERT ecosystem

› Incident propagation
› Incidents across the borders
› Incidents in the cloud
› Interoperability of CERT teams, 24/7
› Different type of CERT teams required
Be prepared for

VMaaS
- Incident response not core competence for all new players
- Increase in vulnerability information and coordination
- Service levels for incident response and vulnerability management

IRaaS

Skill development
- Access to information, disinformation and corrupted data challenge forensics
- New threat scenarios require special expertise and new tools
- Social skills
KEY CONCLUSIONS

- Increased exposure to attacks due to Network transformation
- Privacy and trust challenges
- VMaaS and IRaaS will emerge
- CERT collaboration and ecosystem becomes a necessity