



# Smart City Networks


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**NETWORK SMARTER**

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# Why Smart Cities?

## Few Facts

By 2050, India is projected to add 404 million urban dwellers- according to UN Report

700 million to 900 million square metres of new residential and commercial space would need to be built every year from 2010 to 2020- *McKinsey*

**India** generates 62 million tonnes of **waste** every year, with an average annual growth rate of 4% (PIB 2016)

Smart Building

Smart Waste Management

## Few Facts

Smart Traffic  
Management


Traffic congestion costs \$21 billion a year

Smart Parking

Drivers looking for a parking space  
cause 30 percent of urban congestion

Smart Lighting

Street Lighting - Accounts for 1.5% of total  
electricity consumption in India- *McKinsey*



It Lead to...  
Data Explode



# A Smart City Begins with A Network

# Allied Telesis Role

NETWORKING INFRASTRUCTURE

TOTAL AUTONOMOUS NETWORKING

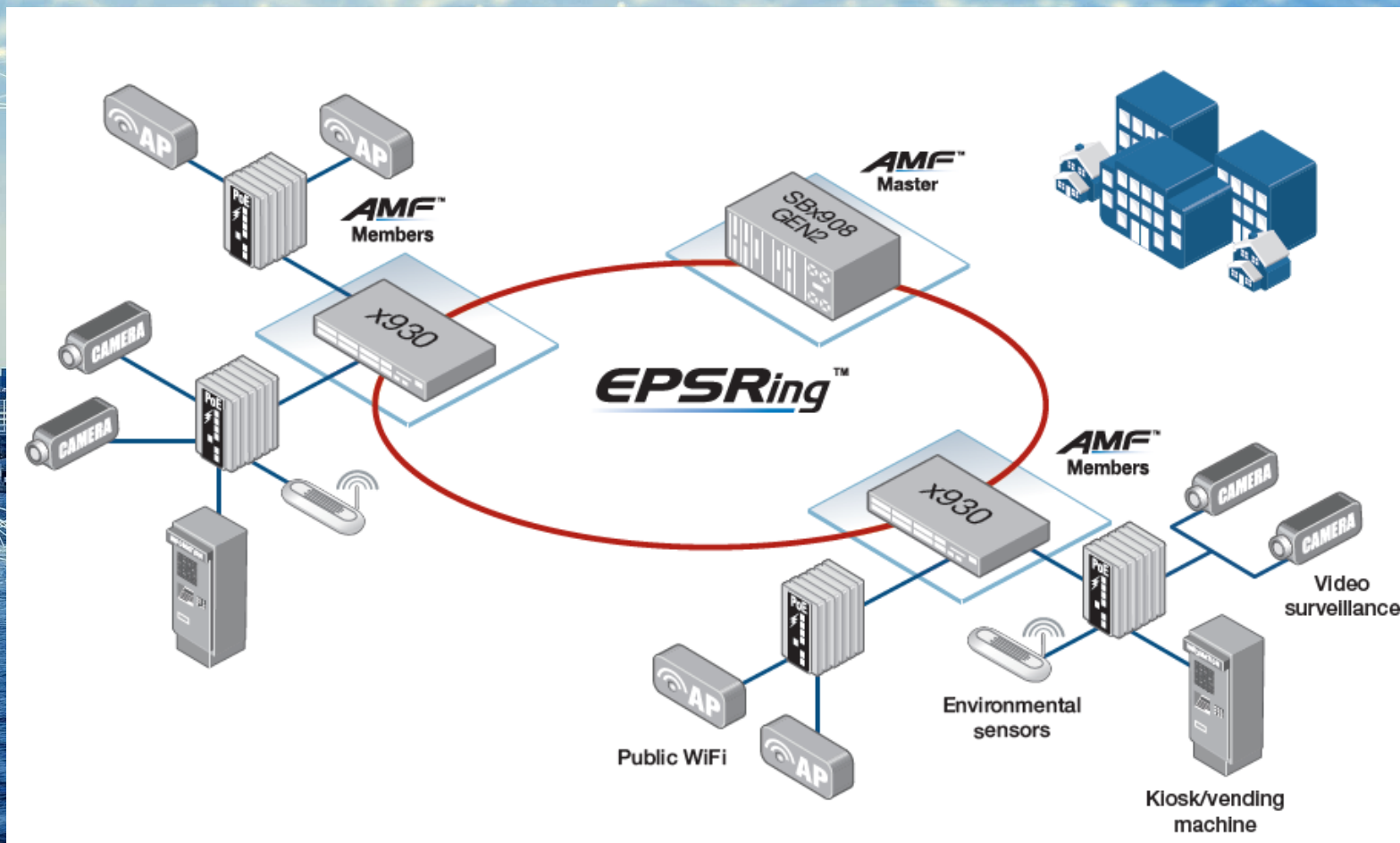
Secure Communication

IP NETWORK



NETWORK INFRASTRUCTURE

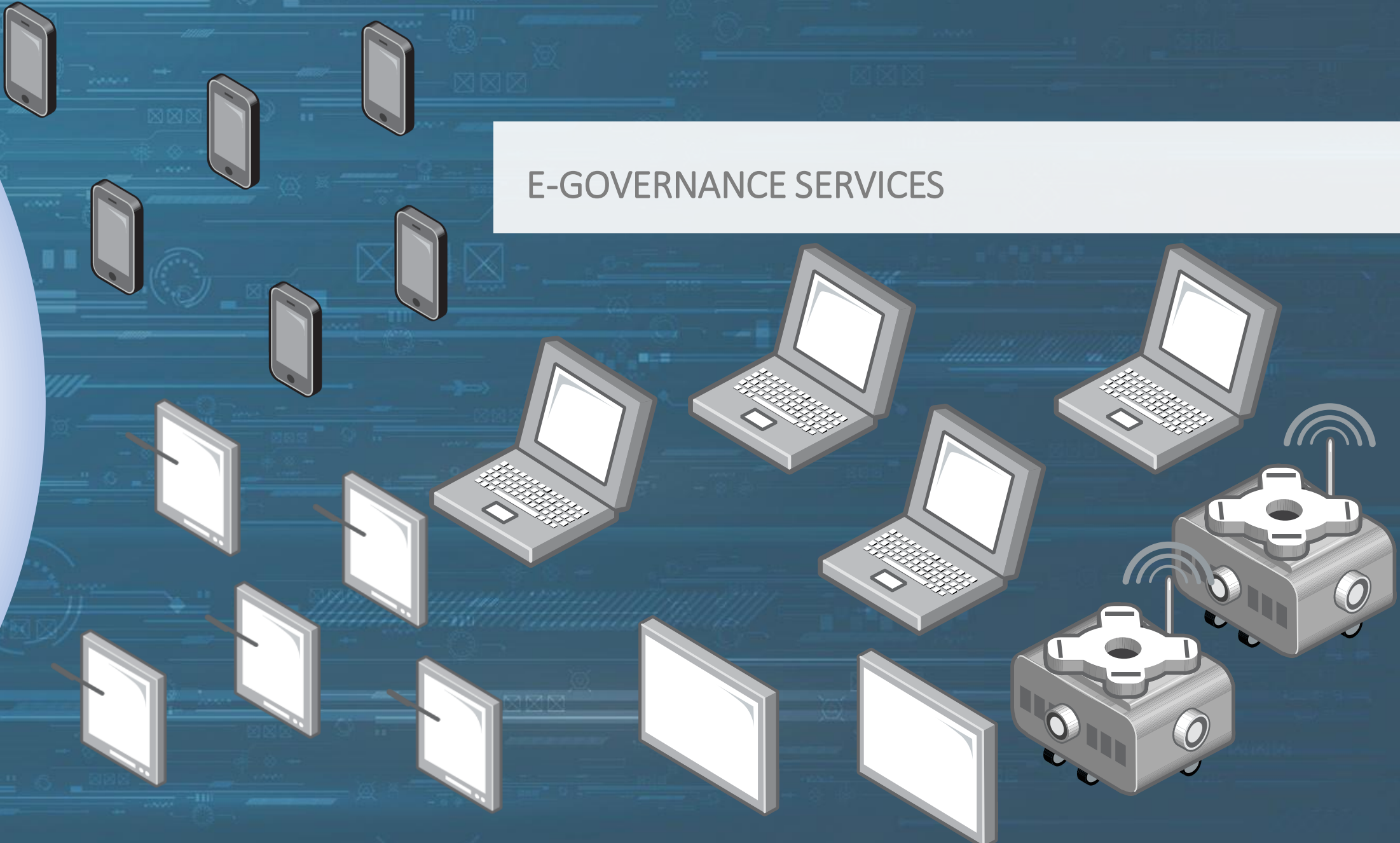
# END TO END SOLUTION





WIRELESS

# E-GOVERNANCE SERVICES



# CHANNEL BLANKET TECHNOLOGY

WIRELESS

WI

WIDE AREA NETWORK

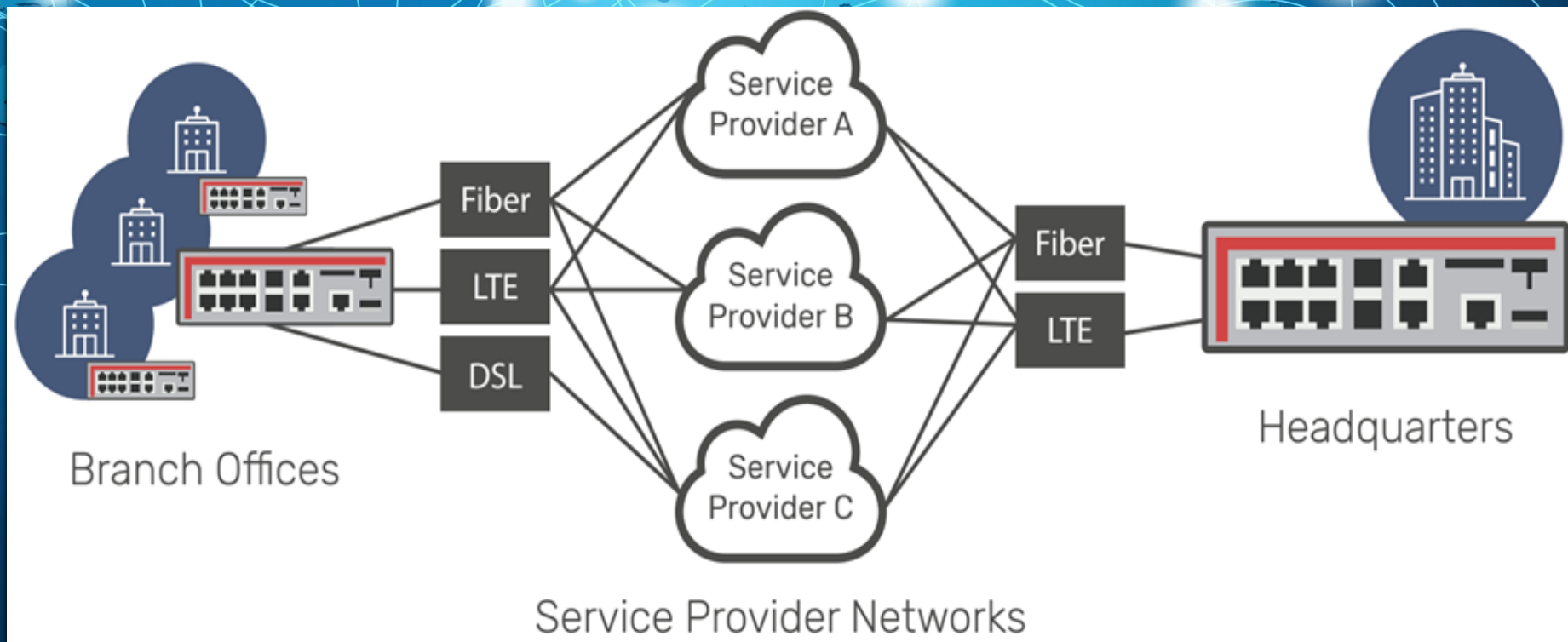


WAN LINK IS A CRITICAL FACTOR

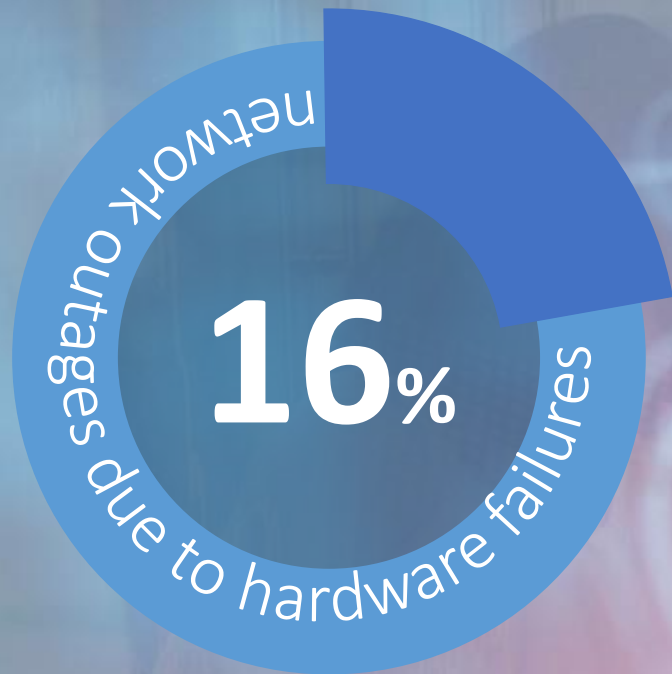
REMOTE OFFICE RELIABLE LINK

APPLICATION PRIORITY

## SECURE SD-WAN



AUTOMATION

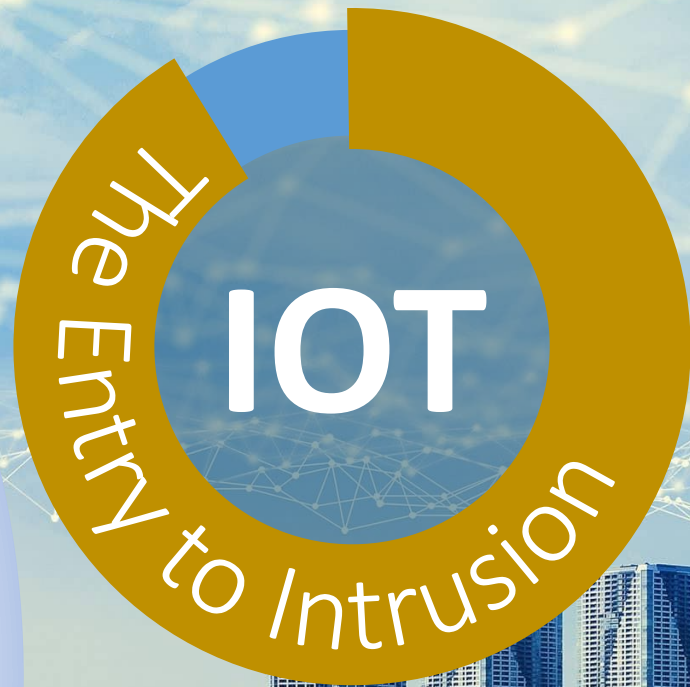


THE PROBLEM

SIMPLIFY EVERYDAY TASKS

VISUAL MONITORING AND MANAGEMENT

EDGE SECURITY PROGRAM



THOUSANDS OF SENSORS ACROSS CITY

THE SENSORS THAT POWER SMART CITIES ARE A HACKER'S DREAM

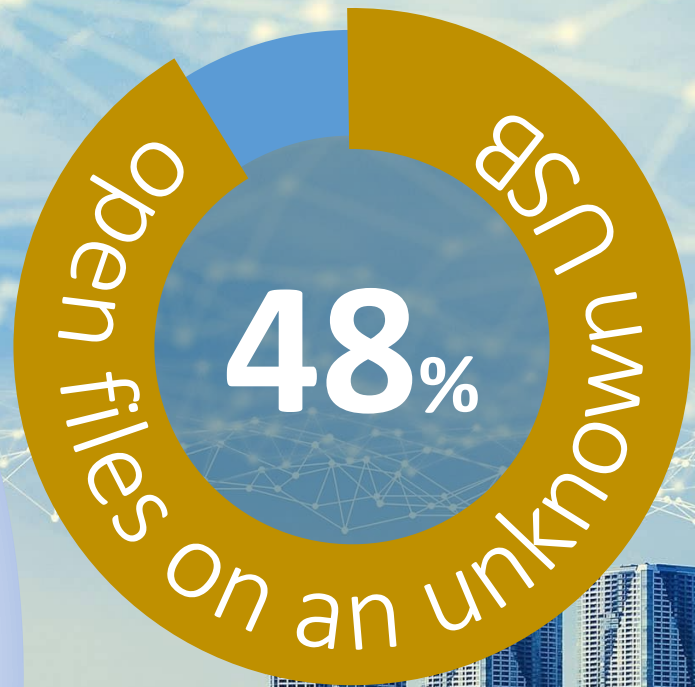
STRONTIUM —

Microsoft catches Russian state hackers using IoT devices to breach networks

Fancy Bear servers are communicating with compromised devices inside corporate networks.

DAN GOODIN - 8/6/2019, 3:45 AM

EDGE SECURITY PROGRAM

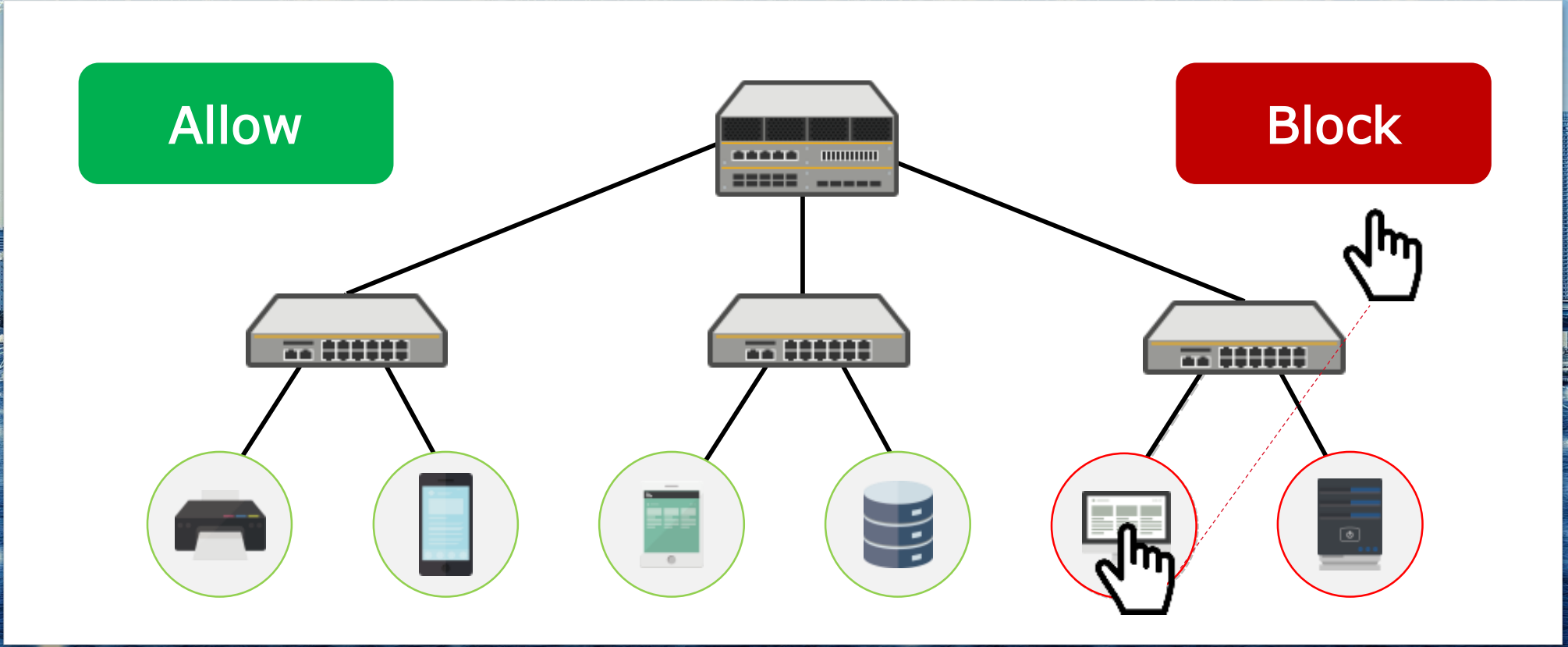


SECURITY IS A HUMAN PROBLEM

PROTECT USER FROM NETWORK

PROTECT NETWORK FROM USER

# SELF DEFENDING NETWORKS





# In Summary

NETWORKING INFRASTRUCTURE

TOTAL AUTONOMOUS NETWORKING

Secure Communication

IP NETWORK



# Transport and Infrastructure

- Metro Rail Projects - FOTS Project
  - Lucknow Metro Rail Corporation Ltd (22 Stations)
  - Navi Mumbai Rail Corporation Ltd (11 Stations)
  - Nagpur Metro Rail Corporation Ltd (37 Stations)



## • Airports

- More than 35 Indian Airports
  - FIDS, CCTV network
- T3 Terminal Delhi
  - Instrumental Landing System
  - IP Public Announcement System



# Smart City and Safe City

- Vadodara Eye- Smart City Project
  - Dedicated 20G Fibre backbone
  - City Surveillance – Phase-1
  - ATCS, Variable Message Signs, Sensors, GPS
- Raipur Smart City
- Agra Smart City



## • Safe City

- Rajasthan State 23 Cities Surveillance (under deployment)
  - More than **10,000** switches for **55,000** Cameras
- Telangana and Cyberabad Safe City Project
  - More than **6500** switches for **15,000** Cameras
- Kolkata City Surveillance Phase-I & II
- Delhi City Surveillance – **1400** switches, **6000** cameras
- Dhanbad, Siliguri, Patna, Bhubneshwar, Orissa,
- 100 Police Stations of Tamil Naidu

**T H A N K**

**Y O U**