Smart+Connected Railways
CRIS SYMPOSIUM
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Smart+Connected Railways
Intelligent Trains and Stations with Improved Communication

Safety of Passengers and Assets
Punctuality
Performance
Enhance Customer Service for both Freight and Passenger Segments and Increase Revenue, Save Costs
Connected Rail Solution Categories

- Communications
  - (Telephony, Announcement)
- Passenger Convenience
  - (Internet Access, Entertainment, PIS)
- Vehicle Operation
  - (Monitor, Control)
- Remote Diagnostics
  - Maintenance, Repair, Inventory Management
- Staff Information & Training

Performance

Punctuality

Indian Railways: Challenges

- over 18 million passengers everyday
- over 2 million tonnes of freight everyday
- over 7000 railway stations
- over 63,000 km stretch of route
- over 1.6 million employees

Need for intelligent rail infrastructure that improves performance, punctuality and safety
Case Study: Amtrak
Challenge: Protect Maintenance Facilities

Solution:
- Video surveillance system tied in an IP video management system, thermal imaging cameras, video analytics, and a command-and-control solution.

Result:
- Amtrak will be able to converge its physical security system over an IP network of fiber backbones and wireless access points to remotely monitor and detect a host of suspicious activities.

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Case Study: Netherlands Railways
Challenge: Improve passengers’ experience of their end-to-end journeys, Increase staff productivity, and reduce internal costs

Solution:
- A secure Unified Wireless Network in conjunction with context-aware intelligence, delivering mission-critical information and innovative services in stations and on trains.

Result:
- Saved €8 million in operational costs
- Improved on-time performance and station security
- New revenue-generating service opportunities through on-board delivery of information, news, and advertising content
Smart+Connected Railways

Business Applications and Devices
- Station and Train Connectivity
- Mobility for Staff and Passengers
- Secure Stations and Trains
- In-Station On-Train Media
- Routing Switching
- Wireless APs
- IP Phones
- Content Video
- Physical/Data Security

Cisco Connected Rail
- Punctuality
- Safety
- Performance

Cisco Vision: Network as the Platform

“The network is squarely at the center of innovation and is capable of changing the way people work, live, play, and learn”

John Chambers
President and CEO