



Networks and Communications for the Air Transportation Industry

Secure, high quality solutions connecting
passengers, staff and systems



The connected airport delivers better communications, faster operations, increased safety and security

Airports are the place where every player in the air transportation industry comes together. From passenger processing and security checks to baggage handling, airport operations and air traffic control, every person who works in the ecosystem needs to collaborate and connect – with each other, with systems and with passengers.

The challenge is to deliver the best possible passenger experience and keep operations running efficiently, while ensuring the safety and security of people and systems.

Many of the steps in the passenger journey are not always enjoyable or profitable. They're just necessary steps that bring constraints and stress without revenues. These steps need to become as simple, efficient and stress free as possible so passengers can spend time at airport shops or enjoying a meal and a drink – more pleasant activities that generate revenues.

Behind the scenes, all of the subsystems – security, operations center, building management, passenger announcements and information, communications and business applications – need to work smoothly together with no interruptions or security breaches.

With the right mix of secure networks and communications, airports can address these challenges. All it takes is the right technology.

Choose the right technology partner

A partner that provides both networks and communications solutions is in the best position to deliver a secure, interconnected experience for air industry staff and passengers.

ALE provides the building blocks needed for wired and wireless LAN networks, communications and applications. And they are all designed to help airports enhance the passenger experience, accelerate operations, and increase safety and security.



Technology is key to success in the air transportation industry

The air transportation industry is under constant pressure to evolve. Geopolitical, economic and environmental requirements are increasingly strict. And competition from high-speed rail, buses, and roads, is on-the-rise. Everyone is competing for the same passengers. And everyone sees that delivering the best door-to-door traveler experience is an important differentiator.

To meet new requirements and thrive in a tough business climate, the air transportation industry needs to continuously innovate and adopt new technologies. This is the only way they can follow new rules and regulations and attract more passengers while keeping costs down and expanding safety and security measures for travelers and staff.

Connect with passengers to deliver a better experience

With the right communications and applications, there are endless ways to engage passengers and interact with them to make their door-to-door journey easier and more enjoyable.



Stay in touch with every move

Use voice, web and mobile applications to interact with passengers before, during and after travel. Proactively provide information. Integrate chat, voice and video for richer, real-time communications. Add location-based services to provide helpful tips. Now you can:

- Offer auto-attendant services that make it easy for travelers to get information or assistance
- Provide updates about departure gates, schedules or delays
- Respond quickly to requests for assistance
- Help people find their departure gate, an airline lounge, duty free shops, restaurants or the nearest washroom

Easy Wi-Fi access makes happy customers

No matter where they are, people expect to access entertainment and applications just like they do at home. So let passengers easily and automatically connect to your safe and secure Wi-Fi network from anywhere in the airport. Add support for Bluetooth Low Energy (BLE) to enable a full set of new services. You can increase convenience for passengers and open the door to new business opportunities, such as offering travelers a discount coupon on their smartphone or tablet as they pass by a particular restaurant or store.

Make it happen

To securely connect with passengers and deliver a better experience, ask about our:

- Rainbow cloud-based collaboration platform
- Communications application programming interface (API)
- Way-finding solutions
- Wi-Fi and access solutions

Connect people and systems to accelerate operations

Making it fast and easy for staff to communicate and collaborate with each other and with passengers is key to accelerating operations. Taking it one step further and integrating business systems and processes with real-time communications gives staff new power and flexibility to quickly resolve issues, improve the passenger experience and turn decisions into actions.

Put the network at the center of your operations

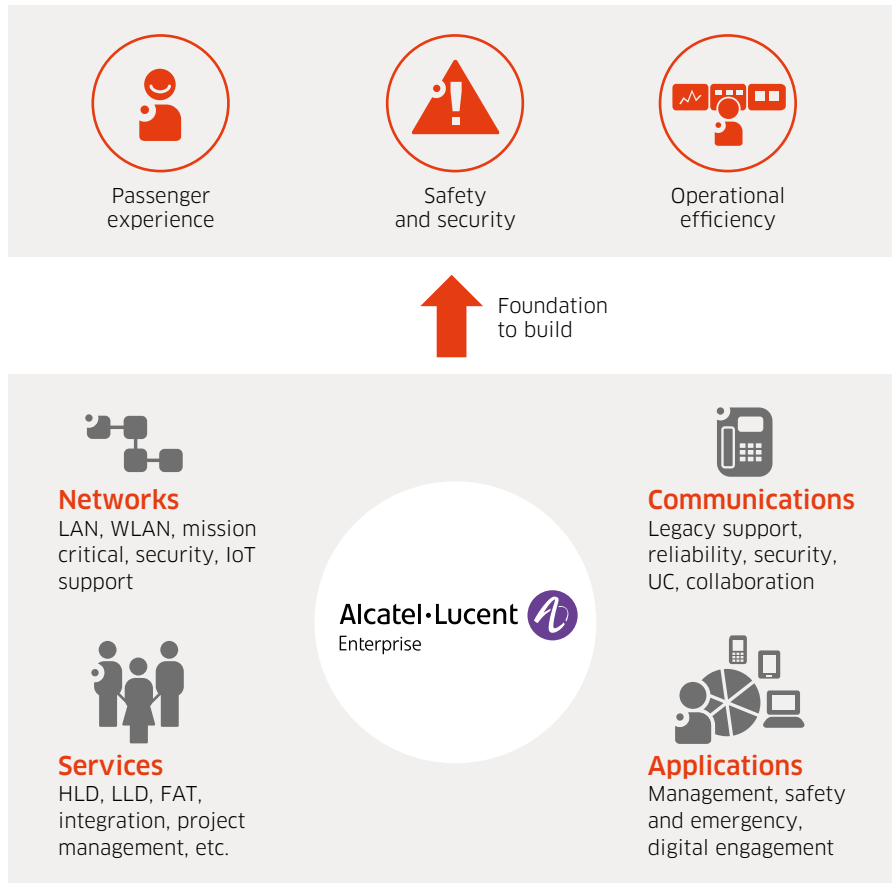
A single, converged network infrastructure is at the heart of more efficient airport operations. With this open and resilient infrastructure, you gain sophisticated capabilities without the management complexity typically associated with advanced networking. You have:

- A self-healing network that provides automated design, deployment and maintenance capabilities
- Business-based network profiles that let you efficiently manage mobility on all devices across the network
- Smart analytics for full visibility into application, device and, user data allows for proactive business and network management decisions
- A secure virtual private network (VPN) that can support all of the different tenants within the airport ecosystem

Automate and collaborate

Solutions that automatically connect people and systems accelerate tasks. They also help ensure that key tasks, events and notifications occur when they should, every time. You can:

- Connect your communications platform with the airport information system to enable unified communications and real-time multimedia collaboration
- Automatically send the right information to the right team at the right time to keep everyone informed and accelerate decision-making
- Instantly connect people and processes, including people at different companies and external emergency services, whenever required



Make it happen

To securely connect staff and systems to accelerate operations, ask about our:

- Single converged network infrastructure for voice, data, fixed and Wi-Fi communications
- Secure VPN for multi-tenant services
- Robust and secure voice communications platform
- Automated notification server
- Rainbow cloud-based collaboration platform
- Strategy to address industry changes resulting from Internet of Things (IoT) devices

Increase safety and security

Like all businesses, airports are vulnerable to cyber security attacks. A cyber attack can cut off access to commercial and business applications, compromise passenger information, and even put airport operations at risk. While Ethernet, IP and converged networks bring many benefits to airport operations, integrating subsystems also increases the risk that an isolated threat could become a much bigger problem. As a result, every airport needs a comprehensive approach to cyber security and a strong containment strategy.

Take a layered approach to network security

A layered security approach starts at the switch level with a hardened operating system. It continues through application analytics, device security that includes finger printing and health checks, and policy-based access for users.

Focus on IoT containment

More and more Internet of Things (IoT) devices are being used in airports. That means the network has to be aware of these devices and be able to support and secure them.

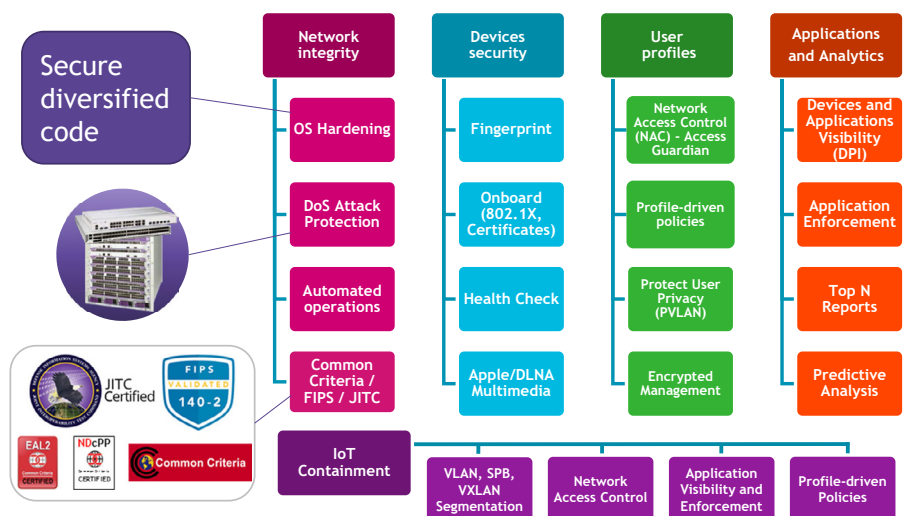
An IoT containment solution that combines virtualization, security and quality of service (QoS) provides excellent support for IoT operations while minimizing security risks. Policy-based access to IoT systems helps to prevent cyber attacks and data breaches from affecting, or reaching, other parts of the network.

Look for built-in security

Built-in security features, such as technology scanning, are crucial to protect voice communications systems. Binary signatures, along with voice and signaling encryption all help to maintain confidentiality. And best practices such as call barring, alarms, monitoring and audit trails help to prevent the system from direct cyber attacks.

Improve safety communications and processes

A real-time notification server that supports geolocation and integrates with a CCTV system accelerates emergency response times and helps keep passengers and staff safe. Integrating the emergency conferencing and notification solution with the airport control center system further increases safety. And adding a recording and call-tracking application provides the details needed for post-incident analysis and investigations.



Make it happen

To increase safety and security, ask about our:

- Hardened operating system and automatic user-network profiles
- IoT containment solutions
- Real-time emergency notification solution
- APIs for control center system integration
- Recording and call tracking systems

| Want to learn more?

To learn more, visit: www.al-enterprise.com/en/industries/transportation/air

Connected Transportation

At Alcatel-Lucent Enterprise we help you connect airport systems with technology that works.

With global reach and local focus, we deliver networking and communications built for airport systems, to deliver mobility, security and safety.

