

Rail Industry wins with Alcatel-Lucent Rainbow

Deliver an always connected passenger experience, enhance operations, and increase security.



Alcatel-Lucent Rainbow[™] Communications Platform as a Service (CPaaS) for Railway connects passengers, operations and security teams, and ecosystem stakeholders as well as business processes. It delivers communication services and collaboration technology across and beyond your organization to improve processes.

Integrating the Rainbow CPaaS solution into existing operations or passenger applications enables you to optimize operations, transform your passengers' and staff's experiences and open up new revenue opportunities.

The connected passenger

According to Forbes, many people can barely go five minutes without connecting to the Internet whether it's through their smartphone, smartwatch, tablet, or laptop.

In today's digital world always-on connectivity is the service passengers expect most from transportation operators before, during, and after their public transportation experience. Passengers need to be connected during their journey to plan trips from A-to-B and have access to multimodal transport options such as bikes, trains, car-sharing and taxis. At the same time, they need to be connected to the passenger community and have access to real-time transportation system information such as service disruptions, trip re-scheduling, emergency incidents, and access to the Internet at the station, on the platform, or on-board the train, tramway or bus.

Transportation operators are embracing digital transformation to move from a 'disconnected' to a 'connected' passenger experience to satisfy new passenger expectations at each step of their trip. Staying connected while they are in transit means that they can be informed at any time; whether it's engaging with their friends and family on their whereabouts, their estimated time of arrival at their meeting place or engaging in real-time interactions with the transportation operator's staff in the event of incidents such as schedule delays or emergency situations. These communication services are possible with a Communications Platform as a Service (CPaaS) solution integrated into the transportation operator's end-user application environment.

Transportation networks are mission-critical as they affect the lives and safety of citizens, passengers, and the economy. People and businesses are always on the move and rail operators, as with other mass transit systems, need to keep them moving in a safe, secure and efficient manner. Rail operators must do their best to anticipate anything that can cause service Welcome to the station Mr Smith, your train is

Would you prefer taking the next available train to your destination?



Mr Smith> Yes please.

Bot> Ok, confirmed your seat is A35 in cab 39. You can upload your ticket. Previous booking has been canceled.





Real-time assistance in-app communication experience

disruptions or imminent threats to the safety of their passengers and if the incidents do occur, they must be able to quickly respond and resolve the issues to resume services and bring passengers back to safety as swiftly as possible.

Efficient operations is at the core of the daily schedule plan for transportation operators. To optimize operations, collaboration between stakeholders is vital to accelerate decision-making, execute the daily schedule as planned, and coordinate actions in a timely manner in the event of service disruptions. To this end, integrating a CPaaS solution with business processes, to allow communication and collaboration services, is a necessity.

Why ALE?

ALE provides the building blocks that enable a secure solution to deliver innovative services and applications for transportation that are based on three main objectives:

- Transforming the passenger experience
- Increasing safety and security
- Improving operations





Transforming the passenger experience

The Rainbow CPaaS embeds collaboration services in business applications. API deployment enables transportation authorities to provide real-time communications capabilities such as messaging, voice, collaboration and video.

- Using the transportation operator's application, the passenger can access a group of services to: plan door-to-door trips, make payments, get real-time travel information using chat bots and re-schedule a trip. Rainbow CPaaS integration into the end user application can enrich the environment by adding personalized communication services, providing contextual information and real-time support from transport staff either at the train station or onboard.
- Passenger assistance is vital during the ticketing process. Rainbow CPaaS integration with the ticketing kiosk can enable real-time passenger assistance via text, voice and video communication, improving the passenger experience and allowing them to catch the train on time.
- With the application, the passenger can also communicate over chat with the passenger community, and access a satisfaction survey using a chat bot.
- Passengers with reduced mobility can get access to a special assistant directly from the application. As well, they can be advised of any special access or routes that would ease their journey.
- The transportation operator can also integrate Rainbow CPaaS into their website to provide passengers a connected portal through chatbot, text messages, voice and video communications to improve the end user support.

Increasing safety and security

Security is a top priority for transportation operators. Solutions that proactively protect, detect, and react are key in keeping the transportation system safe and secure for passengers and staff.

Rainbow CPaaS provides the collaboration platform to allow faster resolution of incidents that can affect the safety and security of passengers and staff.

- Make the passenger an active participant in the security process by using the rail operator application to identify suspicious activities or luggages.
- A Rainbow bubble (a group chat room) for security staff can quickly alert and inform group members of any incidents and allow them to collaborate to resolve the issues.
- An alert can also be sent to passengers and staff, in areas affected by a threat, and provide instructions to bring them to safety.
- Take the alarm notification and emergency events to the next level by integrating IoT devices intended for security purposes such as cameras into security operations to get intrusion alerts or a first-hand view of any emergency situation for faster resolutions.

Improving operations

It's all about improving the decision-making process, optimizing maintenance procedures, sticking to schedules as planned, ensuring coordination and collaboration between stakeholders and fast recovery when operations are interrupted – without breaking the budget.

Rainbow CPaaS lets operators integrate with business processes to improve coordination between stakeholders.

- Improve daily operations for rail operators. The right communications tool lets stakeholders collaborate and share real-time information about the task progress to allow trains to depart on time.
- The operations staff need to communicate with the Operations Control Center (OCC) and with other teams using different communication systems such as radio communications, telephony systems, mobile devices, intercom and so on. Rainbow CPaaS as a relationship machine can work as a federator system to connect all those systems and allow the different stakeholders to communicate seamlessly.
- The increasing use of connected devices (IoT) in the transportation sector for security, operations and passenger services, means solutions must be able to connect objects, systems, business processes and people. A CPaaS solution provides bi-directional communications to receive information from the devices, control them, collect statistics, notify the right team about a specific activity, coordinate actions, and improve collaboration between staff.



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.

Learn more

Go to our dedicated developer website to get more information: http://hub.openrainbow.com





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