SITA Wireless Gatelink

USE CASE

Single sign-on connectivity for next-generation aircraft on the ground

Many airlines use (or are planning to use) wireless connectivity for aircraft data transmission on the ground. However, offering this service for next-generation aircraft (NGA) while ensuring end-to-end authentication raises additional obstacles.

BACKGROUND

Next-gen aircraft compatibility
The airlines' local Wi-Fi provider is not able to support new aircraft types to its Gatelink service.

Single solution, multiple connectivity options
There are two Gatelink options: Legacy, and the PKI certificate management capabilities required by newer aircraft types (e.g.B787s, B737max, A350s and A320neos).

Single support contract
Local solutions cannot provide a single contract for setup, migration, operations and support across multiple sites and technologies.

End-to-end responsibility
An enterprise-level solution needs to work the first time, all the time. The service provider must take responsibility for the complete solution.

SOLUTION

SITA Wireless Gatelink provides full end-to-end connectivity for:

- Legacy Wi-Fi Gatelink
- Current certificate-based Gatelink
- Cellular Gatelink access

The solution is modular by design, offering different access types and technologies depending on your needs. This approach provides the functionality for secure, reliable access and connectivity for newer aircraft.

SITA provides guidance and full end-to-end coverage throughout the project lifecycle: from initial design, setup and testing to operations. By its very nature, this requires close cooperation with both the airline and airport to ensure a smooth migration.

BENEFITS

- Real Gatelink experience and expertise across different aircraft types and airports.
- Single connectivity contract for all next-gen aircraft across multiple technologies and locations if needed.
- Complete end-to-end connectivity and support: from the aircraft to their backend systems.
- Secure end-to-end setup, including authentication options, central control and private links.
- Complete project delivery providing design, consultancy and migration activities.
- Experienced subject matter experts to ensure deployment is carried out smoothly and efficiently.

RESULTS

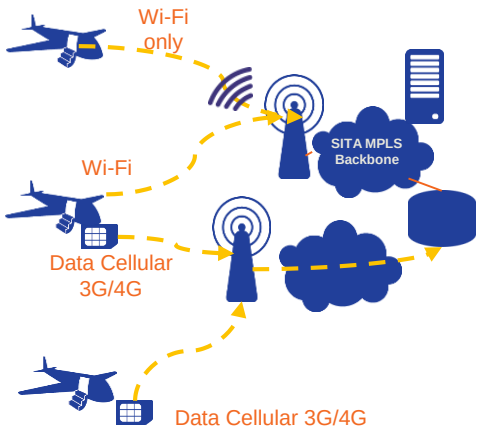
110 airports
ready for service

SITA AT AIRPORTS

SITA Wireless Gatelink

USE CASE

How does it work?



- Wi-Fi or cellular access for next-gen aircraft when on the ground, through a single end to end contract at locations subscribed
- Use of secure private links, adding security and utilizing SITA's widespread WAN coverage via its APH network for Wi-Fi access. This can also take place via its SITA Mobile Data Access (MDA) service for cellular coverage.
- A SITA cloud-based solution provides central control for authentication, connectivity and powerful dynamic policy control, regardless of access type used.

SOLUTION COMPONENTS

SITA Wireless Gatelink connectivity provides aircraft connectivity at airports around the world.

1. Aircraft access – Wi-Fi access is through shared Gatelink SSIDs, operated by the airport. Cellular access is via SITA's MDA service using a dedicated Gatelink associated APN (mobile VLAN).

2. One SITA contract– We procure Wi-Fi connectivity from the relevant airport wireless operator as well as the necessary circuit set up and routing, VLAN,etc. This allows the backhauling of data flows. SITA monitors and resolves all faults associated with the airport wireless network.

3. Standard and enhanced authentication – Standard authentication is via proxy Radius service to customer's AAA servers for Service Access Control and authentication. SITA can also provide a Radius server and PKI certificate management if needed for aircraft authentication on behalf of the customer.

4. Security and control – End-to-end private networks provided via SITA AirportHub and MPLS networks. Furthermore, powerful traffic filtering dynamic policy control is provided as part of the service.

5. SITA supported – The service is fully integrated into SITA's 24/7 support operations.

CASE STUDY

A Tier 1 airline already had a Wi-Fi Gatelink service at their hub airport. This was provided by the airport's Wi-Fi service provider for its legacy aircraft (B777).

The issue they faced was that their newer generation aircraft (B787s) required new certificate-based management mechanisms. The solution needed to both provide access for the delivery of these new aircraft and support the older B777s.

The solution also had to migrate all services from the original wireless service provider to a single contact point within SITA.

SITA's end-to-end solution provides all the airline's next-gen aircraft connectivity at their hub airport to their applications and authentication services. SITA manages authentication of aircraft via its central cloud-based solution including PKI certificate and Radius server management.

The solution included successful close cooperation with the airline and airport authority. This gave the aircraft access from day one and allowed for the smooth migration from the airport to SITA.

For more information please contact us at **info@sita.aero**

SITA AT AIRPORTS