

AeroCloud and the Common Use revolution

A Practical Guide for Airport Leaders
and Operators from AeroCloud



Executive Summary

Airports are being challenged like never before. With growing passenger volumes, evolving travel behaviors, and rising expectations, airport operators must rethink how they scale their operations without compromising on experience or efficiency.

Outdated, legacy systems, once considered standard, are now holding airports back from delivering seamless travel experiences and unlocking new revenue opportunities.

This paper explores how Common Use Passenger Processing Systems (CUPPS) can redefine airport operations by reducing infrastructure costs, enabling flexible use of space, and elevating the passenger journey.

You'll learn how AeroCloud's fully cloud-hosted, IATA-compliant CUPPS platform allows airports to do more with less, while improving scalability, operational control, and commercial performance.

Built for the needs of airport leaders focused on delivering both operational excellence and passenger satisfaction, this paper blends strategic insights with practical examples of how CUPPS is being deployed in real-world environments, including at London Luton Airport and Sarasota Bradenton International.



The Airport Challenge

Long queues and slow passenger flow are visible signs of a deeper problem.

Behind the scenes, inefficient passenger processing is quietly draining millions from airport budgets each year. Static infrastructure, siloed systems, and underused equipment are often accepted as the norm, even though they limit capacity, flexibility, and commercial potential.

Airports continue to invest in dedicated check-in counters, boarding gates, and specialized hardware, much of which sits idle for long periods, taking up valuable space without generating revenue. In a world of rising passenger numbers, limited expansion opportunities, and mounting operational costs, airports need a smarter way to operate.

That smarter way is Common Use.

What Is Common Use?

Common Use technology, or Common Use Passenger Processing Solutions (CUPPS), is the flexible and shared use of airport facilities that serves multiple stakeholders simultaneously with the purpose of supporting passenger processing optimization. Rather than each airline relying on dedicated equipment and infrastructure, CUPPS creates a shared environment in which airports, airlines, ground handlers, and FBOs can access the same hardware and software on demand.

CUPPS platforms are built on globally accepted technology standards developed by the International Air Transport Association (IATA), which ensures compatibility across airline Departure Control Systems (DCS) and airport setups. As a result, any check-in desk, gate workstation, or self-service kiosk can be reassigned and utilized by any airline at any time, improving infrastructure efficiency and operational agility.

This shared approach eliminates unnecessary duplication of hardware and enables better space utilization, faster passenger throughput, and greater flexibility, especially during peak hours, seasonal fluctuations, or periods of irregular operations. CUPPS supports real-time switching between applications and airlines, simplifies onboarding of new carriers, and facilitates smooth operational handovers among teams.

At AeroCloud, the CUPPS platform builds on these industry standards with a fully cloud-native architecture and a comprehensive suite of modules including eDesktop, eDCS, eScan, and CUSS. It provides scalable, secure, and future-ready infrastructure that allows airports to streamline check-in, boarding, bag drop, and passenger validation across the terminal.

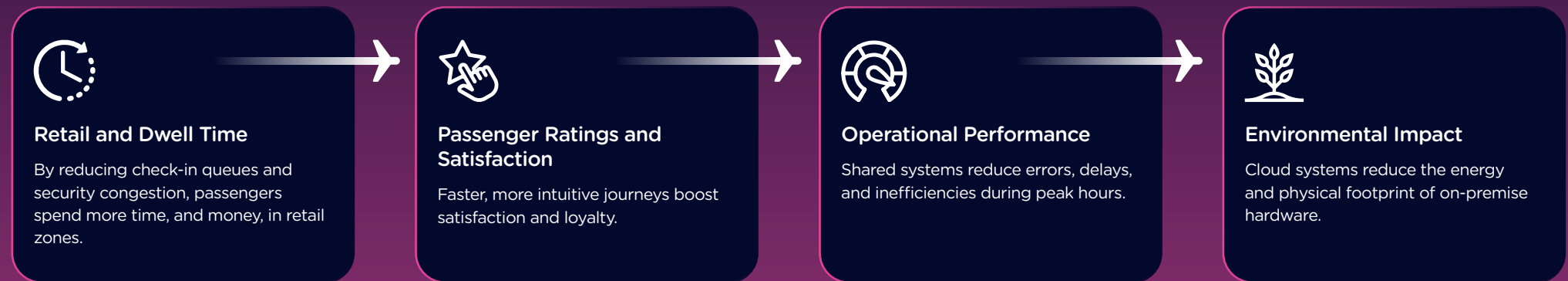
For airports seeking to modernize without disruption, Common Use is the key to increasing capacity, reducing costs, and improving the passenger journey, without building more terminals.



Why It Matters to Airport Leaders

Your role as a decision-maker is to balance commercial growth with operational performance and to make the airport experience as enjoyable and seamless as possible for every passenger. That means solving for both back-of-house efficiency and front-of-house experience.

CUPPS directly impacts:



Most importantly, AeroCloud CUPPS achieves all of this without a massive overhaul. Our solution integrates seamlessly with existing systems, reuses airport hardware where possible, and provides centralized management and support to keep operations running smoothly.

If your airport is facing overcrowding, long queues, inflexible infrastructure, or mounting costs, you're not alone.

This is a global pattern. The difference comes from how you respond.



What Makes AeroCloud CUPPS Unique

When it comes to modernizing airport operations, not all solutions are created equal. Many providers are now trying to retrofit legacy systems with cloud features, adding complexity rather than solving it. AeroCloud takes a different approach. We are cloud-native by design, purpose-built for today's operational realities and tomorrow's passenger expectations.

Our Common Use platform is engineered to remove friction, not add it. Airports shouldn't have to choose between cost, performance, and flexibility - they should expect all three. AeroCloud CUPPS offers a complete infrastructure rethink: it transforms how airport workstations are managed, how airline systems connect, how new services are deployed, and how teams access real-time data to make smart decisions.



Let's take a closer look at the features that make our platform stand apart and why they matter to you...



Seamless Desktop Management

Choose between locally hosted or cloud-based desktops. We manage the full environment, customisation, security, compliance, so you don't have to. This means reliable performance, centralized oversight, and faster onboarding for new users.



Direct Airline Connectivity

Our team works directly with airlines to integrate their DCS with your CUPPS environment. This ensures secure, uninterrupted connectivity and the freedom to onboard new carriers without major lift.



Effortless Application Deployment

Launch or update mission-critical airline apps across the airport with no manual installation. This enables operational agility, especially when adding seasonal routes or expanding services.



Automated Security and Updates

Systems stay secure and operational with proactive patching, system monitoring, and regular updates managed by AeroCloud. No more waiting for overnight IT maintenance windows.



Hardware Compatibility and Flexibility

We integrate with what you already have, printers, scanners, kiosks, while offering modern hardware where needed. Our CUPPS-compliant interfaces and legacy adapters protect your previous investments.



Centralized Support and SLA Packages

From real-time monitoring to flexible service tiers, our support model is designed to match the demands of your airport. Whether you're self-managed or need hands-on help, we've got you covered.



The result? A system that's easier to manage, quicker to scale, and built for continuous improvement, just like the airports we serve.



Product Overview: The AeroCloud CUPPS Suite

AeroCloud eDesktop

AeroCloud eDesktop is the core user interface for airport agents, enabling multiple stakeholders to operate from shared hardware without compromising performance or data security. Fully IATA CUPPS-compliant, eDesktop allows check-in desks, boarding gates, and other workstations to be used interchangeably by different airlines and ground handlers.

Instead of each airline needing dedicated hardware, eDesktop delivers a secure, virtualized desktop experience that supports all major airline Departure Control Systems (DCS), as well as Windows, Android, and iOS applications. The system runs via a secure cloud connection or on local infrastructure where needed, giving airports complete flexibility over deployment.

Peripheral devices such as printers, scanners, and biometric readers are plug-and-play compatible. Staff can log in instantly and access the systems they need, no reconfigurations, no delays. AeroCloud also provides a web-based management portal that offers real-time reporting on workstation usage, system health, and passenger throughput. It's quick to deploy using existing infrastructure and can scale across terminals with minimal support.



AeroCloud eDCS

AeroCloud eDCS is a feature-rich, cloud-native Departure Control System designed for flexibility, ease of use, and rapid deployment. It enables airport operators, airlines, and ground handlers to manage all core passenger processing functions from a single, unified platform.

The platform includes:

- ✓ **Passenger check-in and boarding**
- ✓ **Bag tag printing**
- ✓ **Passport scanning**
- ✓ **Flight and system administration**
- ✓ **Weight and balance management**
- ✓ **Payment processing at service desks**
- ✓ **Flight Watch for real-time operational control**

Fully compliant with UK IAPI standards and supporting all IATA message types, AeroCloud eDCS integrates seamlessly with global messaging systems via MQ and supports free-text, email, and TTY-based communication. It also enables mobile check-in and boarding via Android or iOS—ideal for remote operations, irregular ops, and off-terminal processing.

Designed for airports with growing passenger volumes, eDCS is a smart alternative to expensive and complex airline-owned systems. It reduces operational cost, simplifies training, and offers full visibility across the passenger journey.





Product Overview: The AeroCloud CUPPS Suite

AeroCloud eScan

AeroCloud eScan is a real-time passenger validation and journey tracking system that operates across all key terminal checkpoints. It captures passenger movement through check-in, security, immigration, and boarding by scanning boarding passes and travel documents at each touchpoint.

eScan validates boarding passes against a central database, checking for schedule accuracy, duplication, and eligibility. Optional integration with airline DCS ensures passengers are authorized at each stage of the journey.

Every scan is time-stamped and stored, building a live operational picture of passenger flow throughout the terminal. Dashboards provide airport teams with immediate insights into congestion points, queue lengths, and processing efficiency, enabling data-driven decisions in real time.

When integrated with AeroCloud eDesktop and eDCS, eScan completes the loop for full curb-to-gate visibility.



AeroCloud CUSS

AeroCloud CUSS (Common Use Self-Service) is a modern, flexible self-service solution that enables passengers to independently manage key processing steps such as check-in, boarding pass printing, and bag tag generation.

Unlike traditional airline-specific kiosks, AeroCloud CUSS supports multiple airline environments on a single kiosk, automatically switching between software based on passenger input. Each unit includes:

✓ **Passport readers**

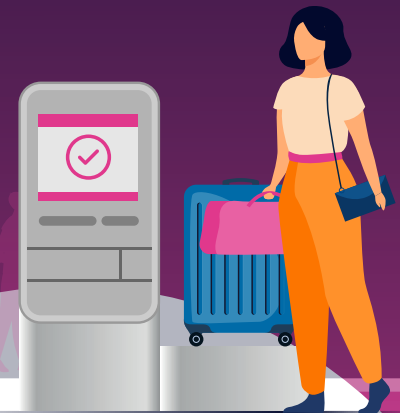
✓ **Receipt and bag tag printers**

✓ **Payment modules**

✓ **Frequent flyer card readers**

The kiosks are manufactured on-demand in the UK, allowing custom branding and hardware configuration to suit the layout and aesthetic of your terminal. They can be deployed standalone or integrated into full-service or self-service bag drop processes.

CUSS empowers passengers, reduces queue pressure, and enables smarter allocation of airport staff. It also ensures a consistent experience regardless of airline, carrier, or terminal.





Real-World Success

London Luton Airport (LTN)

London Luton Airport selected AeroCloud's CUPPS to modernize operations, reduce hardware reliance, and increase passenger handling efficiency. With rising volumes and outdated systems, LTN needed a flexible solution that could be deployed without disrupting operations.

AeroCloud's cloud-based, hardware-agnostic platform was chosen in late 2023 for its cost efficiency, space optimization, and ability to enhance the passenger journey. The rollout took place during the busy half-term holiday period and was completed smoothly thanks to close collaboration and detailed planning.

"London Luton Airport has shown that even an airport of this scale can make a seamless transition to modern technology,"

said George Richardson, CEO of AeroCloud.

Sarasota Bradenton International (SRQ)

SRQ experienced record-breaking growth during and after the pandemic, stretching its manual systems to the limit. By deploying AeroCloud CUPPS, SRQ was able to onboard new airlines quickly, streamline passenger handling, and scale from 1.2 million to 4.3 million passengers without expanding its terminal footprint.

Buyer Considerations and Common Questions

Choosing a Common Use system is a high-impact decision and naturally, airport teams have questions. At AeroCloud, we've worked with airports large and small to understand the real concerns that come up when transitioning away from legacy systems. Below are some of the most common questions we hear and how we answer them:

Q. "It seems complex to deploy."

AeroCloud CUPPS is fully cloud-hosted and managed, meaning most of the heavy lifting happens off-site. Implementation is fast, coordinated closely with your team, and designed to avoid operational disruption. London Luton Airport deployed AeroCloud during a half-term holiday with zero impact to daily operations.

Q. "Will it integrate with our current systems?"

Yes. AeroCloud supports integration with most existing airport hardware and systems. Our open architecture and IATA CUPPS-compliant environment ensure smooth alignment with your current infrastructure.

Q. "What if we grow or change our layout?"

No problem. AeroCloud CUPPS is inherently scalable. Whether you're adding new gates, adjusting desk layouts, or onboarding new airlines, the platform adapts without major rework.

Q. "Is reducing hardware risky?"

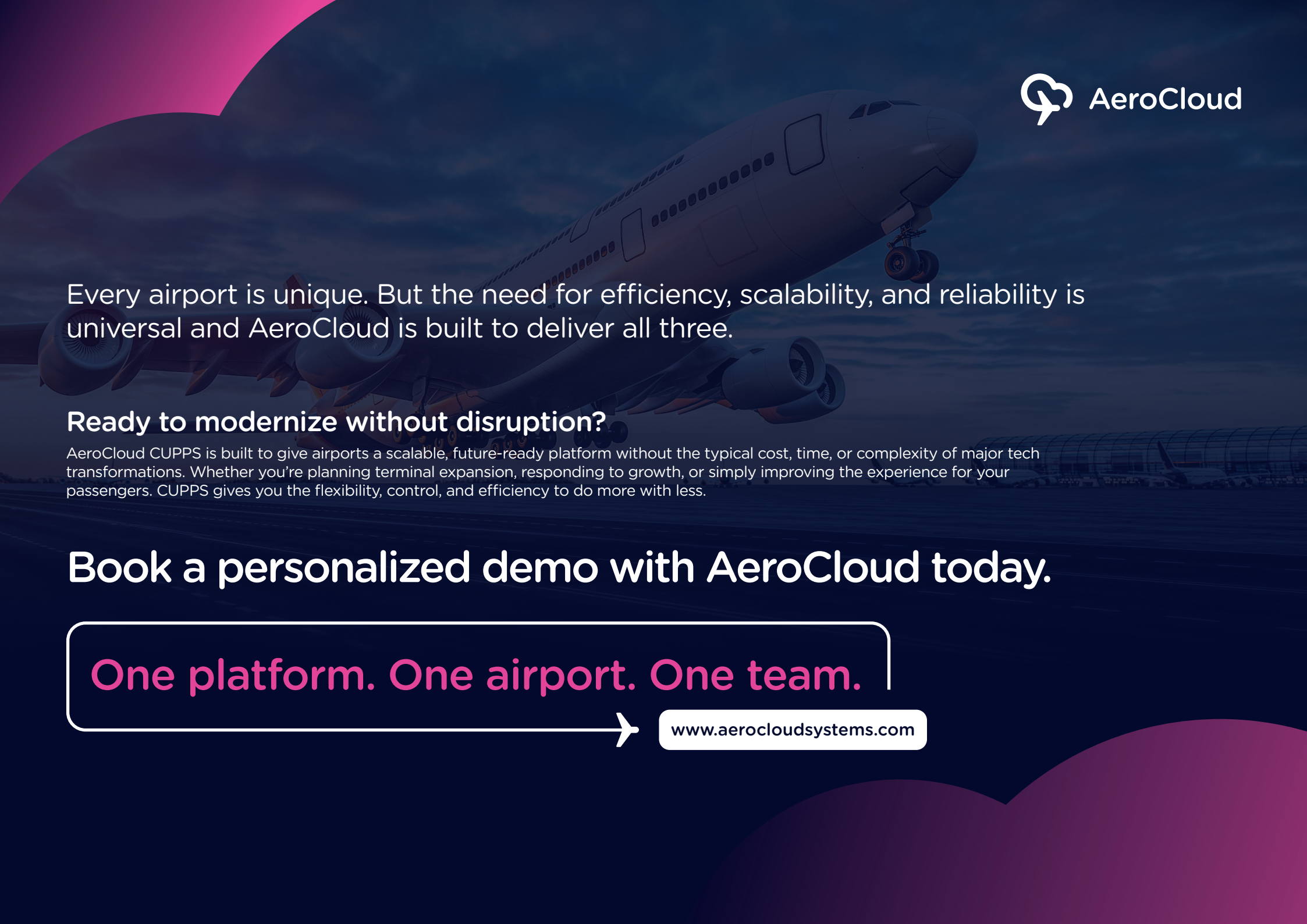
Quite the opposite. Our solution reduces points of failure by minimizing reliance on aging, single-purpose hardware. We reuse what we can and modernize where needed—all while increasing uptime and system stability.

Q. "How does it save us money?"

Savings come from multiple places: less hardware, fewer maintenance contracts, better use of space, and more time for passengers to spend in revenue-generating areas. You'll see both cost avoidance and operational improvement.

Q. "What about support and training?"

We provide multiple SLA tiers and hands-on training for your ops and IT teams. Whether you need initial onboarding or ongoing system management, we'll match the level of support to your internal resources.



Every airport is unique. But the need for efficiency, scalability, and reliability is universal and AeroCloud is built to deliver all three.

Ready to modernize without disruption?

AeroCloud CUPPS is built to give airports a scalable, future-ready platform without the typical cost, time, or complexity of major tech transformations. Whether you're planning terminal expansion, responding to growth, or simply improving the experience for your passengers. CUPPS gives you the flexibility, control, and efficiency to do more with less.

Book a personalized demo with AeroCloud today.

One platform. One airport. One team.



www.aerocloudsystems.com