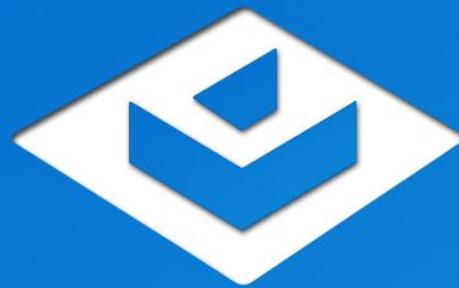# Why ClearCube Technology for Flight Information Display Systems (FIDS) customers?

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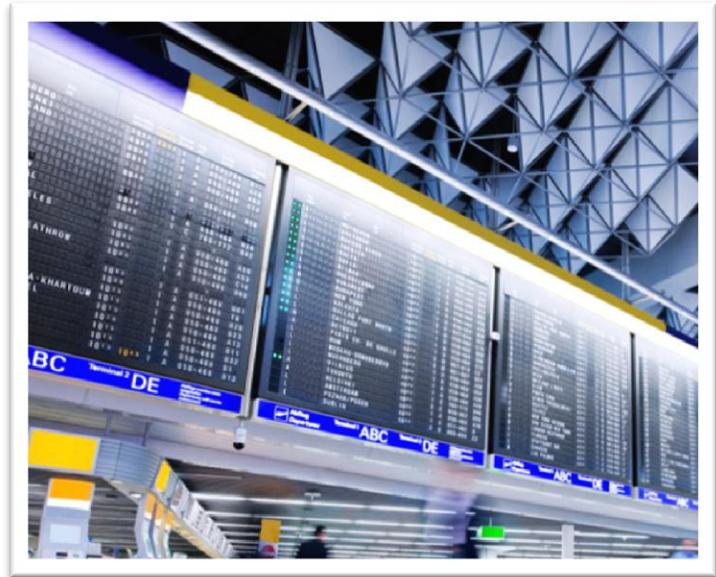
CLEARCUBE®

moving desktops to the datacenter

Why ClearCube for Flight Information Display Systems (FIDS) customers?

ClearCube addresses key issues for airport CIOs that want full graphics capabilities on their flight information displays from low maintenance zero clients connected to processing resources located in their remote datacenters.

ClearCube addresses FIDS requirement wish lists for:

1. Remote processing with fast local multi-display performance
2. Multi-purpose use for revenue-generating digital signage
3. Low maintenance, high reliability end points
4. High availability host platforms with cost benefits

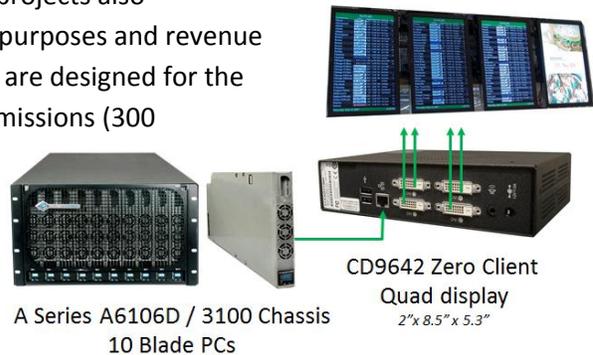## Remote Processing With Fast Local Multi-Display Performance

Travelers rely on Flight Information Display Systems (FIDS) to navigate their arrival and departure journeys through airports. ClearCube Blade PC host platforms are the hidden remote computing resources that deliver the information to the displays in many of the world's most traveled airport locations.

Airport CIOs choose ClearCube because centralized Blade PCs with embedded host compression adapters deliver flight information over distance with no processing delays to multiple displays without compromising performance. Only pixel changes and re-directed USB signals are sent from the host-rendered source. Blade PCs have all the same feeds and performance speeds as standard PCs because they are standard PCs, but with form factor changes that provide high rack density, better manageability and integrated PCoIP host adapters that do host-rendered processing for high speed connection to zero client devices.

ClearCube Blade PCs support multiple displays each. Compared to a PC located near the FIDS display, ClearCube's blade performance will be the same, but the noise, heat, cable clutter, and maintenance is moved back to your data or communications center where it belongs.

Multi-purpose use for revenue-generating digital signage

An added benefit for airport CIOs in deploying ClearCube's architecture is the support for high definition video transmissions to the end point displays. IF FIDS projects also encompass digital signage deliverables for advertising purposes and revenue generation, ClearCube's centralized Blade PC products are designed for the most robust graphics with 60 frames per second transmissions (300 megapixels per second) to the zero client devices located near the large screen displays. Even multiple 2560x1600 resolutions are supported. Network connections to the end points are over standard Cat 5/6 Ethernet cabling and/or fiber optic cabling for long distances.

A Series A6106D / 3100 Chassis
10 Blade PCs

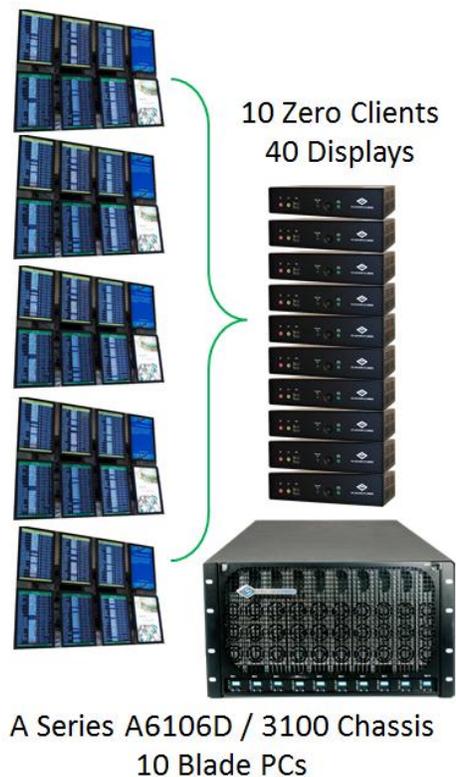CD9642 Zero Client
Quad display
2"x 8.5" x 5.3"

In addition to the endpoint delivery system, ClearCube's hardware platform can support all signage and data storage functionality, all managed by the same administrator's management console

Low maintenance, high reliability end points

ClearCube's zero client end points use persistent link digital signage mode configurations. With FIDS, zero clients are set & forget devices that have no reason to authenticate with the host resources once they are set up. If power is cycled on either end (blade or endpoint) the connection is restored automatically without human intervention.

By removing the PCs from the display areas and replacing them with zero clients, you remove space-consuming, noisy, heat-producing, failure-prone electronics. With Zero Clients, all that resides at the flight information display is a tiny footprint, silent, diskless, low power device that has no moving parts with minimal electronics (6W) to support peripheral connections. Unlike a small form factor PC or thin client, there is no operating system to patch and update at the endpoints, and no local drivers to manage on a ClearCube Zero Client. Since no data resides on zero clients, they are completely secure.

10 Zero Clients
40 Displays

ClearCube's Zero Client benefits for FIDS implementations include resiliency for power fluctuations, dust resistance, and higher stateless device MTBF, which eliminates the pain of having to send a technician with tools through security with a man lift to service a failed PC in the ceiling or in the display bank. Disruptions of service hurt customer satisfaction ratings, so the more reliable the solution, the better the result. ClearCube zero clients are ultra-reliable.

A Series A6106D / 3100 Chassis
10 Blade PCs

High reliability host platforms with cost benefits

The disruption of flight information is painful to airport travelers. If a standard PC fails, restoration of service is time and labor consuming, with negative ramifications on customer relations because customers do not want to go on a search for the next available bank of displays.

Centrally located and managed Blade PCs have higher uptimes than standard PCs, and restoration of service is much quicker. If a Blade PC experiences downtime, the administrator can move the connection over to a spare Blade PC dynamically to immediately restore service and business continuity.

ClearCube's Sentral Console provides a summary snapshot of how the environment is performing and sends alerts to the network administrator if there is a problem. Management of centralized resources is easier than trying to manage distributed PCs on a network. It's easier to access equipment in racks, easier to troubleshoot issues, and easier to add software and services. These result in cost savings through better uptimes and quicker restoration of services.

Another option for airport CIOs to consider in some locations is to use virtual machines instead of physical machines as host platforms. ClearCube's SmartVDI converged host/storage appliances can host 100s of virtual machines with no single point of failure. Zero client end points connect to SmartVDI in the same manner as to Blade PCs.

Summary

For the ultimate in interoperability, ClearCube has forged many OEM partnerships with the leaders in FIDS software and delivery systems like SITA/Aero, ARINC, and others. These relationships allow customers to procure a factory integrated hardware and software solution bundle, greatly expediting rollouts and maintaining full manufacturer's support.

To delve deeper into ClearCube's benefits for you, please contact a ClearCube sales representative today.

ClearCube Technology, Inc.   Fax: 512.652.3501
3700 W Parmer Lane, Austin, TX 78727   Toll Free: 866.652.3500
Voice: 512.652.3500   www.clearcube.com
                        sales@clearcube.com

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