CTI Constraint Technologies

Network Aware

A cutting edge interactive
environment for visualizing real-time
situational data

Available on the App Store   Download the Demo

A Collaborative Awareness Solution

Network Aware is a valuable addition to the AirPAC suite. It leverages off our existing secure, scalable, hosted airline-tracking server. This enables consolidated real-time fleet tracking data to be provided to a range of devices using rich 3D visualization. Network Aware can also utilize in-house servers to consolidate additional required data. Network Aware empowers staff to be in touch at all times and locations when carrying out their duties, and transforms the workplace from being desk & PC bound to full mobility. Our consultants can work with you to integrate AirPAC into your systems using Network Aware's open standard interface.

Real-time Positions and Now Casting

Real-time positional data is becoming increasingly important to airline operations. Technologies such as ADS-B provide huge amounts of positional data that can be used to accurately plot the whereabouts of every tail within a fleet both en route and at the terminal. Now Casting allows operators to input watch zones for weather fronts or no fly zones as well as merge points & TRACONs. Based on aircraft position, alerts can be issued whenever an aircraft deviates from its flight plan or enters a watch zone.
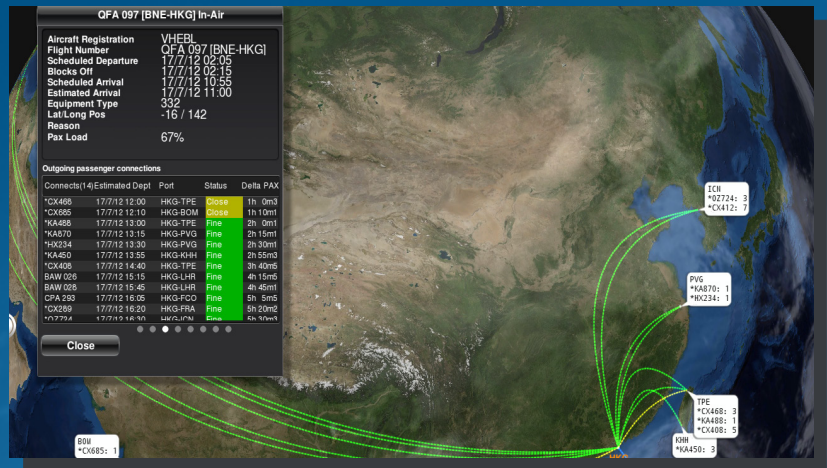

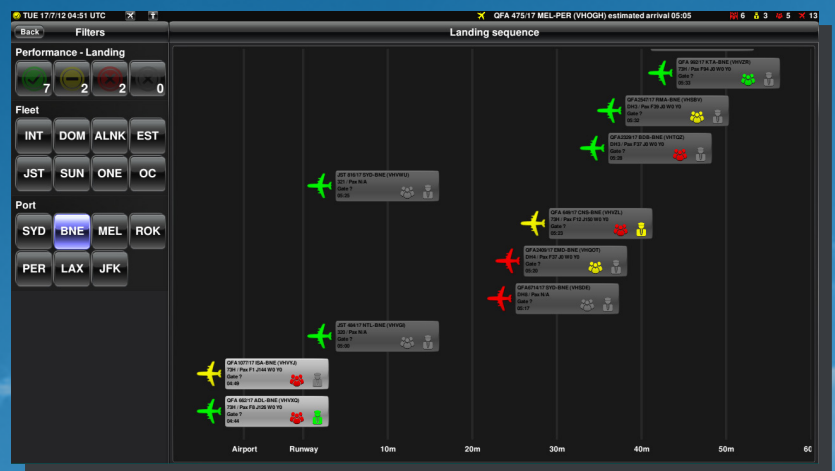Fig.1 Global visualization of flight tracks and connections

Fig 2. Landing sequence display

Fig 3. Globe with aircraft positional data and off course alerting

Devices

- Smart Phones
- Tablets
- Large-screen TV Displays
- Desktop PC
- Video Wall
- Hybrid Laptops

Communication Protocols

- 3G / 4G
- Wi-fi
- Company Intranet

Platforms
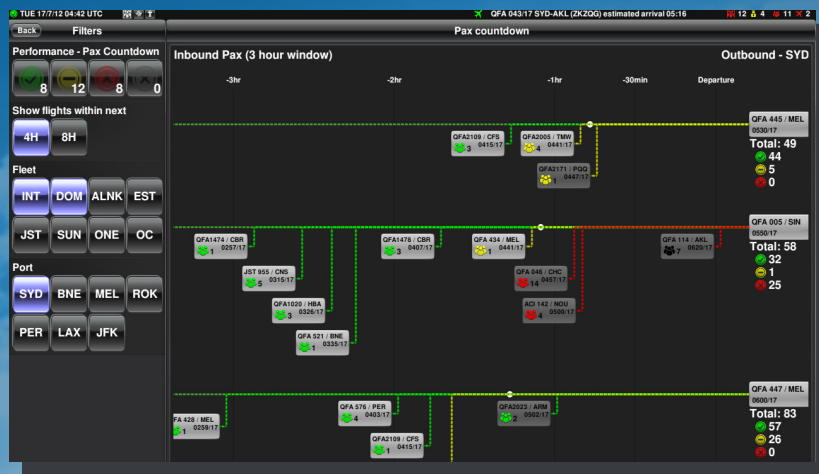
- Windows
- Apple iOS
- Android

Fig.4 Countdown view for inbound feeder flights

Fig.5 Line Management View - Real-time gantt rendering

Fig.6 Disruption Management View

Multiple Modes

Network Aware enables truly mobile access to real-time data throughout the organization, whether that be normal desktops, or areas traditionally not suited to a desktop environment. This includes full access to real-time data while travelling, allowing the dissemination of information to the airline and premium customers. Network Aware supports the full range of mobile and static devices (Mobile Phones, Tablets, plus Large Screen TVs and Projectors) to make it easy to share information in meetings. Large screen mode can also be used non-interactively in public spaces, displaying alerts to highlight problems.

Consolidation

Network Aware consolidates data from multiple systems into a single unified graphical environment allowing staff to use one device rather than multiple disparate systems.

Disruption Managment

Multiple problems can be dispatched to optimisers in parallel. Each solution is visually costed against the customers KPI's to aid decision-making. Solutions can be loaded into local world and animated to clearly show model changes.

Open GL 3D Graphical Environment

Network Aware uses a state of the art interactive touch based interface. The user is fully immersed in a 3D global view. There is full support for gesture based devices, such as tablets and large high resolution table top computers.

News Cast

News Cast is a big screen broadcasting technology designed for operations centres. Adding on to Network Aware, News Cast processes real-time situational awareness data to create a number of TV channels that can be displayed on large screens and video walls within an operations centre. Engineering, Crew Control, and Dispatch are each targeted with their own TV channel that presents them with metrics and charts, as well as alerts and ad-hoc announcements relevant to their needs.

Fig.7 Broadcast a new bulletin on News Cast

Fig.8 News Cast video wall display

Features

- Operational View: Real-time presentation of airport assets and associated operational data.

- Executive Management View: Real-time KPI Rendering e.g. Resource Utilization.

- **Traditional Gantt Based Resource Allocation Views: Stand, Gate, Baggage, Check-In, Vehicle.**

- Detailed filtering and advanced search capabilities.

- Passenger Connection View

- Landing Sequence View

- General Information View: Display and rotate globe to show arrival flight location and status in a passive non-interactive mode.

- Graphical Airport Layout Views showing operational situation with time scrolling and status reporting.

Download the iPad app:
Search for AirPAC Mobile

Constraint Technologies