

English Edition



Integrated Airport Operations Platform

A polished capability overview for DCS, Weight and Balance, GHMS, CUPPS, and FIDS

Samport

Prepared as a redesigned executive brochure based on the attached source catalog.

DCS

Weight & Balance

GHMS

CUPPS

FIDS

A unified operating model for passenger, ramp, terminal, and flight information workflows

This brochure summarizes the source document as a modern product narrative. It focuses on operational value, system scope, shared architecture, and cross-system integrations.

5 core systems

DCS, W&B; GHMS, CUPPS, FIDS

Shared services

APIs, monitoring, security, audit

Deployment choice

On-premise, private cloud, or hybrid



Passenger journey

Check-in, boarding, baggage, seating, and document readiness in one flow.



Aircraft readiness

Load planning, load control, fuel, trim, loadsheet, and safety checks.



Ground orchestration

Turnaround milestones, contracts, service delivery, and workforce control.



Shared infrastructure

Common-use devices, counters, printers, readers, and airline access rules.



Real-time visibility

Flight status, public displays, alerts, dashboards, and audit history.

DCS



Departure Control System

Passenger acceptance and flight execution from check-in to boarding.

DCS centralizes flight control, check-in, seating, baggage, travel documents, boarding, self-service, and operational printing.

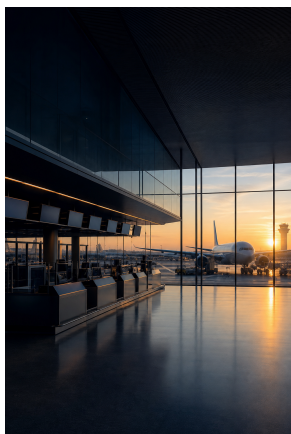
Key Capabilities

- Flight schedule, leg, route, aircraft, and status management
- Passenger search by PNR, ticket number, surname, or passport
- Individual, group, transfer, and re-check-in handling
- Seat map visualization with emergency-exit and family seating rules
- Checked baggage, special baggage, APIS, SSR, OSI, and assistance workflows

Operational Outcomes

- Faster acceptance and gate processing
- Lower manual errors across boarding and baggage
- Live connectivity with kiosks, CUPPS, and downstream systems

W&B



Weight and Balance

Accurate load control and aircraft balance with full operational traceability.

Weight and Balance manages aircraft configuration, passenger and baggage loads, fuel, loadsheet production, safety checks, and operational reporting.

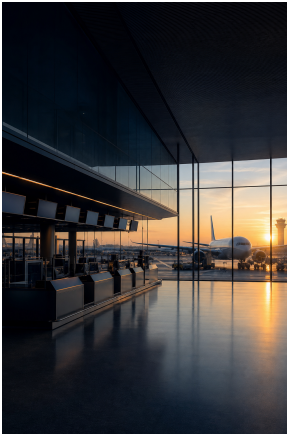
Key Capabilities

- Aircraft master data, registration, DOW, DOI, zones, holds, arms, and moments
- Automatic intake of flight, passenger, seat, cargo, mail, crew, and fuel data
- Standard or actual passenger weight logic, including adult, child, and infant rules
- Bulk load, ULD, compartment, dangerous goods, and special load management
- Fuel planning from trip and taxi fuel to reserve, alternate, and contingency fuel

Operational Outcomes

- Safer release decisions with fewer balance exceptions
- Quicker loadsheet finalization for ramp and flight crews
- Clear audit trail for controllers, ramp agents, and dispatch teams

GHMS



Ground Handling Management System

Turnaround planning, service control, staffing, equipment, and billing in one workspace.

GHMS connects contracts, turnaround milestones, ground services, workforce, GSE, task execution, incident capture, and service invoicing.

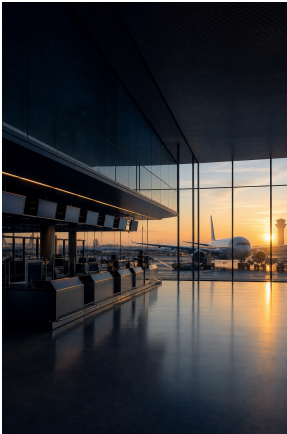
Key Capabilities

- Contract, SLA, tariff, and station-specific service configuration
- Arrival, departure, turnaround, milestone, bay, and gate planning
- Service coordination for ramp, passenger, cleaning, catering, fuel, water, de-icing, and cargo
- Shift planning, attendance, mobile task execution, and equipment assignment
- Ad-hoc service capture, service delivery notes, incident, damage, and near-miss workflows

Operational Outcomes

- More predictable turnarounds and better SLA discipline
- Stronger control of staff, GSE, and service exceptions
- Cleaner billing data with operational proof attached

CUPPS



Common Use Passenger Processing System

Shared airport devices and workstations with secure airline separation.

CUPPS enables airlines to operate on a shared airport platform while keeping sessions, devices, peripherals, and printing secure and manageable.

Key Capabilities

- Thin clients and airport devices assigned to counters, gates, and terminals
- Support for boarding pass printers, baggage tag printers, scanners, and readers
- Secure airline login with workstation access policies by counter, gate, and station
- Counter allocation, opening and closing windows, and gate workstation assignment
- Print routing, queue, retry, paper and ribbon status, and full print logging

Operational Outcomes

- Better asset utilization across terminals
- Faster airline onboarding on shared infrastructure
- Central control over security, availability, and device health

FIDS



Flight Information Display System

Public and operational flight visibility with instant publishing and alert control.

FIDS manages flight data, display templates, operational statuses, content publishing, zone-based distribution, and screen monitoring.

Key Capabilities

- Inbound and outbound flight intake from DCS, AODB, or schedule systems
- Operational statuses such as check-in open, final call, boarding, gate closed, delayed, and cancelled
- Display zoning for departures, arrivals, gates, transfer points, check-in counters, and belts
- Template designer for airline branding, text, media, ticker, clock, and environment content
- Real-time push updates for gate, belt, delay, final call, emergency, and cancellation messages

Operational Outcomes

- A clearer passenger journey with fewer information gaps
- Faster publication of changes and operational alerts
- Reliable screen monitoring across terminals and zones

Shared Architecture and Integration

The source document consistently points to a shared digital backbone: web-based operation, role-based access, auditability, API-driven integration, resilience, and multi-airline readiness.

- Web-based platform usable across airport networks and operational stations
- On-premise, private cloud, or hybrid deployment with multi-airline and multi-station support
- Role-based access control, audit trail, logging, notifications, and operational dashboards
- REST API, OpenAPI, Type B, MQ, and SFTP support for internal and external connectivity
- High availability, backup, failover, disaster recovery, sandbox, and versioned integrations

Deployment

- On-premise
- Private cloud
- Hybrid
- Multi-airline
- Multi-station

Typical Integration Flows

- DCS -> FIDS: schedule and status
- DCS -> W&B;: passengers, seats, bags
- W&B; -> Ops: loadsheet and final load
- GHMS -> Dashboards: milestones and SLA
- CUPPS -> DCS: workstations and devices



Designed for operational control, not isolated tools

Together, these modules form a practical airport operations ecosystem: passenger handling, flight readiness, ground execution, common-use infrastructure, and passenger-facing visibility.

Operational continuity

Shared visibility

Integration-first

Executive-ready

Source basis

The attached PDF was treated as source content for scope and capabilities, while the user request defined the redesign, language, and presentation goals.