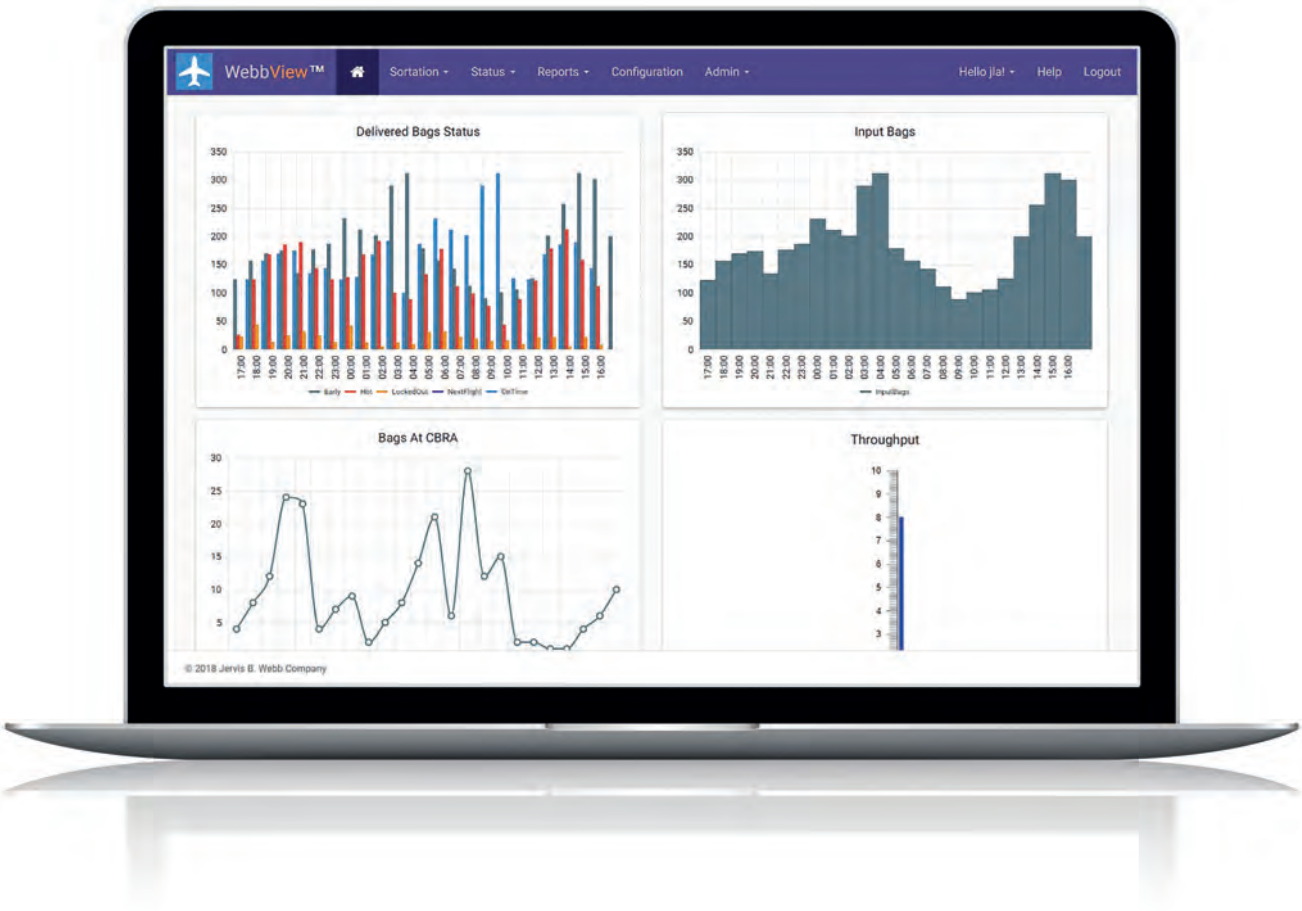
DAIFUKU | Daifuku Airport Technologies

WebbView®
Integrated Baggage Handling Control System



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A leader in digital airport solutions

Daifuku Airport Technologies is the trusted partner of airports and airlines globally, providing unified digital solutions across self-service, security and operational systems.

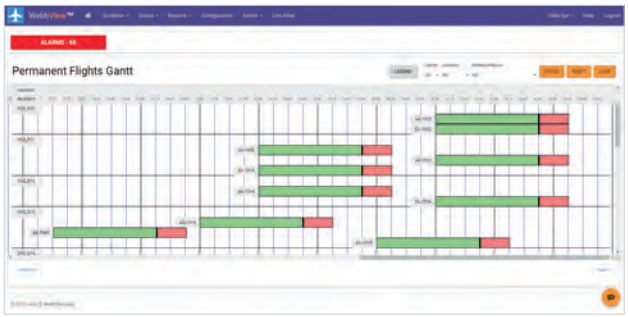
Our leading-edge digital solutions continue to revolutionise airport and airline operations around the world, enhancing the productivity, accuracy and passenger service levels of our partners.

We are defined by our innovative spirit and enduring partner relationships, facilitated by deeply understanding their needs and delivering accurate and valued solutions and support. Working closely with our partners, we set and achieve strategic objectives that help navigate the complexities of airport operations.

Together, we keep the world moving.

A world-leading solution

WebbView® is the most advanced integrated baggage handling control system (BHCS) throughout airports worldwide. This comprehensive solution ensures optimal baggage throughput and tracking accuracy while minimising system downtime, by incorporating the following four key elements of a control system:



1. Supervisory control

- Bag tag translation
- Sortation logic control
- Flight schedule management
- Email reports and alerts
- BSM and flight information interfaces

2. Equipment control

- Motor sequencing for energy savings
- Bag tracking and sorting
- Bag tag scanner interface
- Performance data collection

3. Manual encode

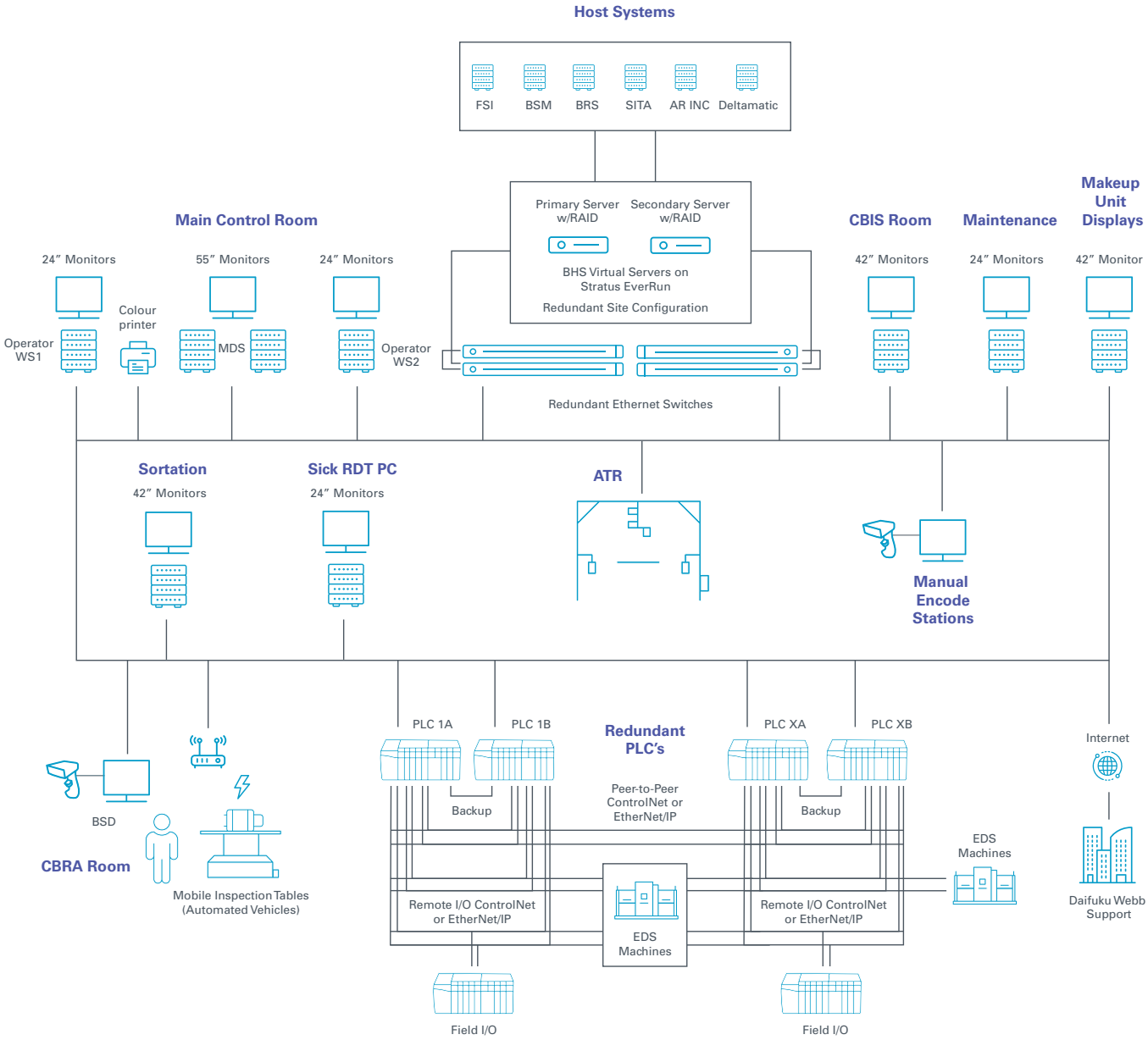
- Local fault annunciation
- Touch-screen terminal
- Stand alone sortation
- Re-tag capable
- Integrated graphics display

4. User interface

- Browser access
- Customizable
- System level status display
- Data analytics
- Alarm and reporting functions

System architecture

The figure below shows a typical system architecture diagram for a baggage handling system with WebbView® incorporated. In a WebbView system, the main goal is operational redundancy across all platforms.



Unparalleled control

Integrated redundancy protocols

WebbView's® control system architecture features integrated redundancy protocols in processing and networking components, in order to avoid single points of failure.

Redundant systems include:

- Virtual server hot backup
- Programmable Logic Controller (PLC) hot backup redundancy
- Cloud-ready virtual environments
- Network switch redundancy

The system is also scalable, allowing it to be adapted for use in baggage handling systems (BHS) of any size, and suitable for use within airports globally.

Host network interfaces

The airport and/or airline host network sends baggage source message (BSM) information that contains critical data to the BHCS, allowing bags to be routed through the sortation system. The interface is also tasked with exchanging BSM information and baggage processed message (BPM) information, allowing users to check on individual bag status in real-time. The flight schedule interface also communicates with WebbView, allowing flight information to be exchanged between the control system and host network, and updated in real-time.

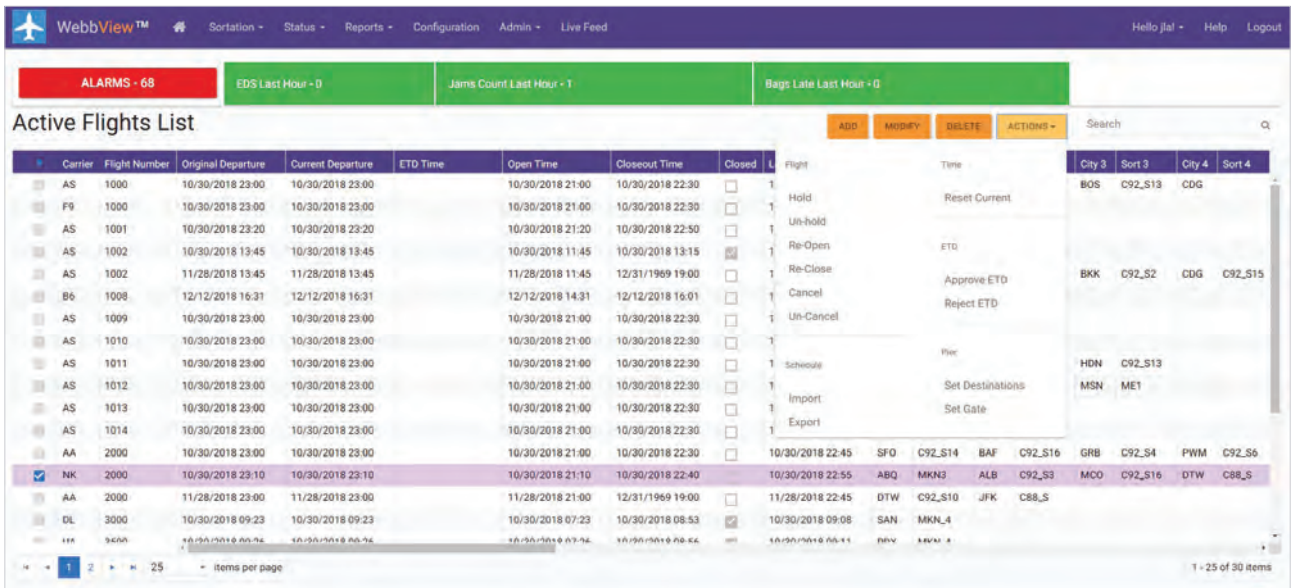
> Scalable system architecture to suit the needs of every airport.

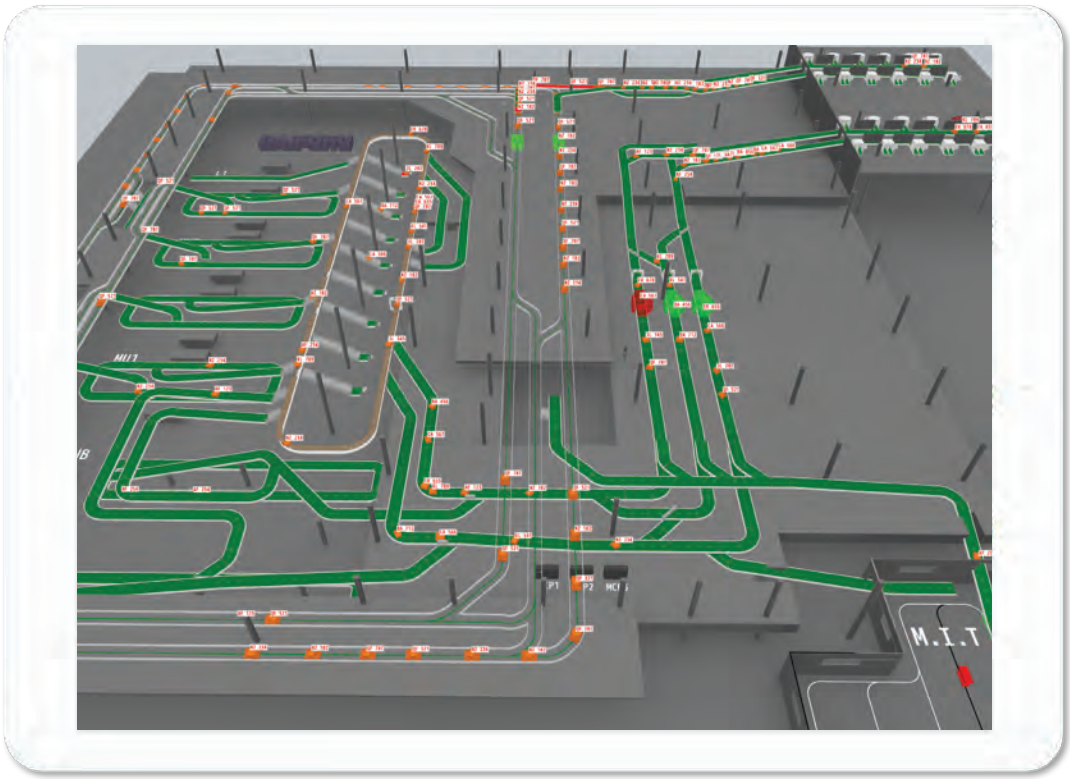
Flexible sortation options

WebbView® facilitates bag sortation based on multiple variations of the standard ten digit IATA bag tag. These include 'flight sorting', which uses a combination of BSM and flight schedule information to sort bags to location assignments, and allows users to select from a wide range of sort assignments based on service class, standby status and early or late arrival. Alternatively, 'carrier sorting' assigns sort location to the carrier, with the system providing a 'next flight' option for late bags, which are automatically routed to the next available flight headed to the target destination.

Sortation capabilities include:

- IATA resolution 753 compliance
- IATA 10 digit flight sort
- Carrier Sorting
- PLC fallback sorting
- 2 digit pier tag sort
- 4 digit pier tag sort
- Sort assignments based on service class, standby status, and early/late arrival
- Automatic re-route of late bags for next flight headed to target destination





Sym3 integration

WebbView® integrates seamlessly with Daifuku's Sym3 3D Graphics Package. This software separates Daifuku from all other BHS providers in that it is capable of showing real-time bag volume on the screen. This allows operators to visibly understand system load for the first time ever.

Key features of Sym3:

- Bag location and size of bag is displayed on the 3D virtual system
- Ability to reduce system backups through informed decision making
- Custom user accounts
- Mobile application integration

Intuitive analytics and planning

Graphical reports

WebbView® features a comprehensive reporting system that allows operators to view data based on a wide range of critical metrics, through an easy-to-use dashboard interface. Custom reports can be generated based on operator preferences to highlight correlations between specific data points, with all reports able to be previewed on screen, printed, archived or automatically scheduled. Key reporting areas include system function, history, security and a range of graphical options.

Flight schedule application

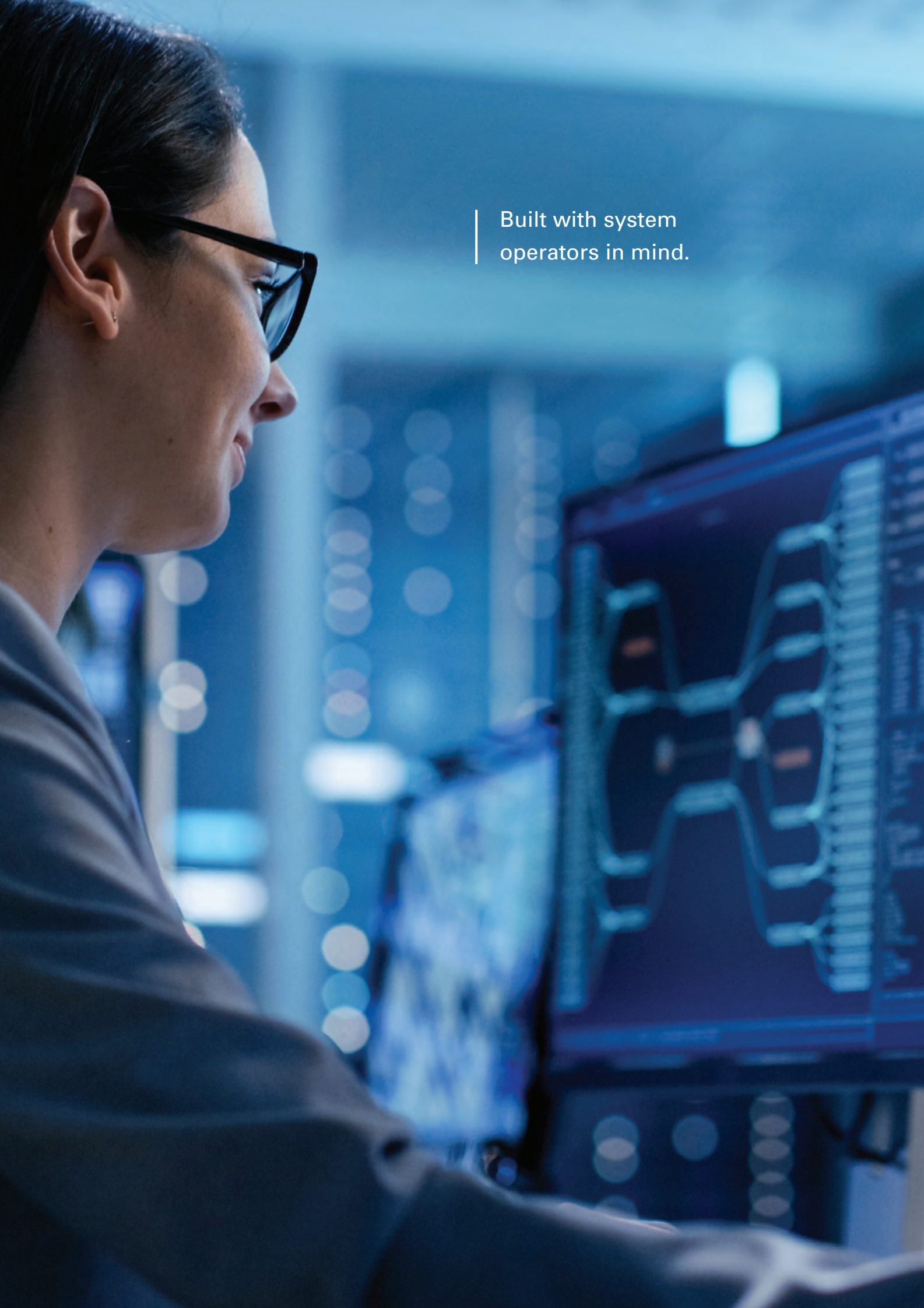
WebbView's integrated flight schedule application facilitates baggage sortation based on the daily passenger flight schedule, which is automatically updated from the long-term schedule. Administrative operator accounts have the ability to modify, prepare and manage both the daily and long-term flight schedule at their discretion to address contingent events, or allow the system to automatically manage day-to-day scheduling.

Reporting features include:

- Fully customizable
- Email capability
- Quick bag tag lookup feature on every screen
- Hyper-linked cross-reporting for quick access to information
- PGDS 6 compliance
- 400 day data retention
- Multiple format generation (pdf, excel, csv)

Key tools include:

- Multiple view options, including list or GANTT formatting
- FTP schedule download
- Import/export using Microsoft Excel
- Multiple name schedules can be activated and supported


Built with system
operators in mind.

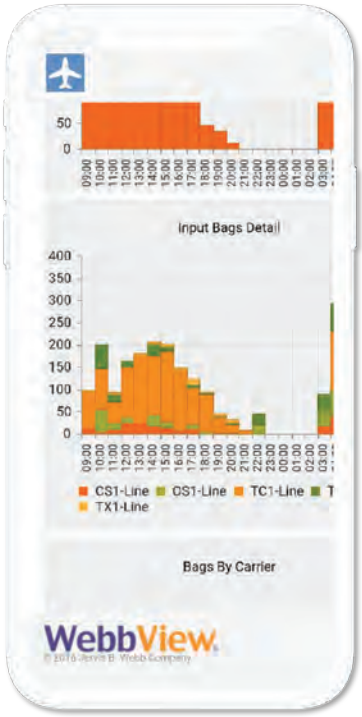
A flexible user-interface

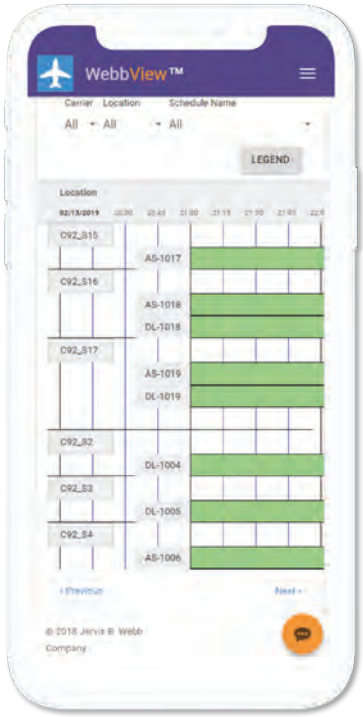
Browser-based applications

WebbView® features a range of applications that allow system operators to monitor and control all components of the baggage handling system, including an intuitive user-interface, graphical SCADA system and text-based alarm viewer. All applications feature a familiar, browser-based interface that presents new system operators with a familiar look and feel, and short learning-curve. Operators have quick access to a range of system key performance indicators (KPIs), and can configure their dashboard to display any number of these according to their preferences.

Convenient mobile access

WebbView's revolutionary browser-based applications can be accessed from any mobile device, allowing system operators to check baggage status, troubleshoot alarms and review overall system status from any location, at any time. This presents an unprecedented level of flexibility and system access for all airport staff, from bagroom operators through to executive management.





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Daifuku Airport Technologies is a world-class solutions provider for airports globally. Discover how we can support you and your customers today.

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