



Elevating Agility in Airline Operations to New Heights

A cloud-native platform that streamlines airline operations by unifying flight and crew management, enhancing efficiency, productivity, and decision-making.

A close-up, first-person perspective of a pilot's hands on the cockpit controls. The left hand is on the throttle, and the right hand is on the yoke. A clipboard with a checklist is visible in the center, held by the left hand. The background shows the cockpit instrument panel with various lights and displays.

ibsoftware

Managing cost-effective and efficient flight operations and crew management in a fast-paced environment is a delicate and complex challenge that requires seamless collaboration across multiple stakeholders. Balancing increasing demand with constrained manpower and resources makes the challenge harder. In this high-pressure, high-stakes environment the domino effect of slow decisions can accrue quickly. Flexible technology that enables speedy and accurate decision making is critical for greater operational agility, minimizing disruptions, and controlling costs.

Introducing iFlight Core



iFlight Core is a cloud-native platform that streamlines airline operations management by unifying flight and crew operations. Its single-source data model enables airlines to plan, manage, track, optimize, and recover flight and crew operations accurately, efficiently, and cost-effectively. The platform's centralized data powers intelligent tools, providing operational stakeholders with real-time situational awareness and analytics for proactive collaboration and accelerated decision-making. iFlight Core also has a strong human element, driving crew satisfaction by empowering them to participate in the formulation of crew-friendly schedules and rosters.

Core Principles

Single-source flight and crew operations management

- Seamlessly unified data, processes, and functionality
- Instant, accurate, and dynamic situational awareness
- Centralized alerts for proactive disruption management
- Collaborative workflows between stakeholders
- Centrally configurable rules, data and parameters

Designed to reduce costs and improve productivity

- Real-time dashboards for speedy and holistic decisions
- Smart tools for finding best flights or crew candidates
- Cost and productivity-centered planning optimizers and disruption support
- High automation and decision enablement in planning and day-of-ops processes
- Crew and aircraft productivity and utilization monitors

Future-proof, cloud-native technology

- Open architecture for unparalleled performance and scalability
- Extended ecosystem through community platform, data-driven source
- Open & custom APIs for non-intrusive extensions
- Cloud-agnostic for flexible adoption
- Multi-tenant for central deployment between AOCs

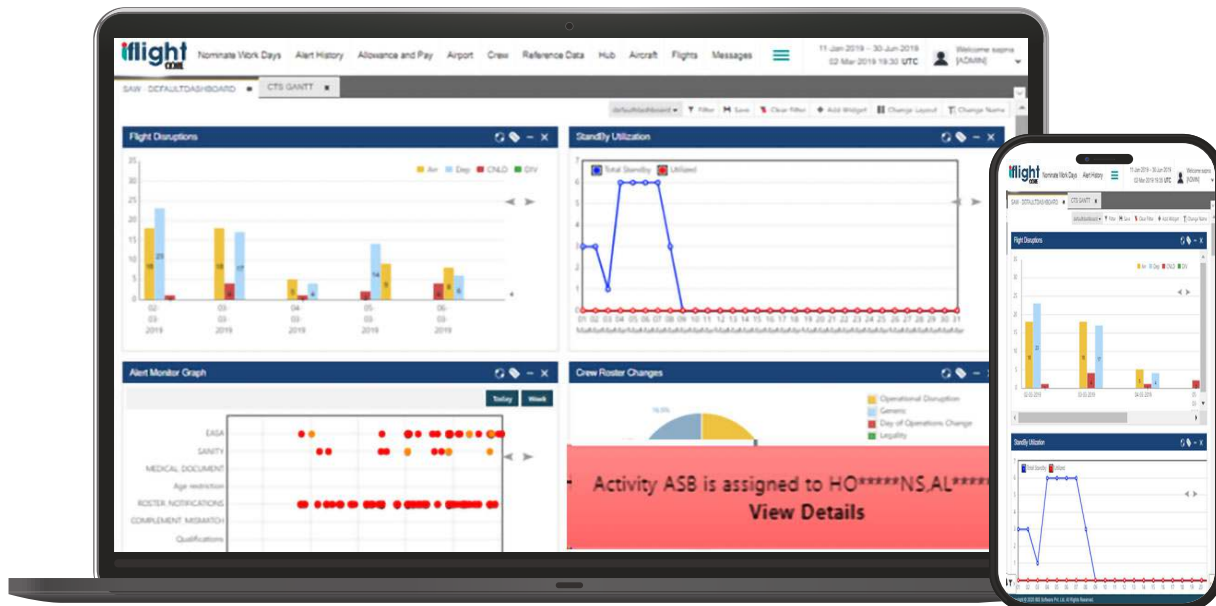
Fast and experienced transformation

- Agile and continuous delivery practices for accruing early benefits
- User Community influenced roadmaps and product enhancement
- Multi-zone and regional disaster recovery and back ups
- Secure deployment with low migration and integration risks

15–30% reduction in planned and unplanned costs

Up to **30%** improvement in staff productivity

5% reduction in IT costs



Key Flight Operations Features

Flight Schedule Management

Enables flexible flight schedule handling in line with IATA standards. It supports various message formats, including ASM, SSM, SSIM, and AIDX. Key functionalities include importing and exporting flight schedules, processing and distributing flight information, bulk creation and modification of schedules, and a graphical view of flight lines defined by SSIM.

Flight Operations

Provides all key functionalities to manage daily flight operations, from advanced scenario planning and what-if analysis to managing flight changes and proactive alerts on the day of operations. Intuitive and highly configurable graphical dashboards for operations and flight monitoring enable the adoption of a management-by-exception approach and faster decision-making thanks to a consolidated view of relevant information from multiple systems, including flight plan, DCS, reservation, crew, ACARS, ground handling, and others.



Maintenance Management

Allows the scheduling and tracking of periodic and ad hoc checks and the establishment of proactive alerts according to highly configurable parameters. Extended capabilities include check inheritance, freezing maintenance checks, defining prohibited airports, and recommendations to maximize aircraft utilization and avoid unnecessary checks.

Tail Assignment

Streamlines the assignment of flights to each aircraft, supported by separate aircraft and schedule windows. Automated tail assignment creates lines of flying and assigns them to specific tails based on

configurable constraints like airport or aircraft restrictions, maintenance plans, and turnaround restrictions. Preferred aircraft utilization and minimum usage can also be specified.

Slot Management

Manages slot clearance requests and responses during the day of operations and tracks slot compliance. SCR messages are automatically generated and dispatched to the pre-configured addresses for ad-hoc flight creations, cancellations, and changes. Controllers can maintain real-time communications with airports, including accepting or rejecting slot offers. Slot rules and 80/20 compliance with assigned slots are continuously tracked and alerted if violated.

Crew / Passenger / Cargo Connection Monitor

Allows airlines to define the minimum inbound and outbound connection requirements between terminals and aircraft subtypes. Based on set definitions and passenger and cargo information received from custom messages for individual flights, connection risks are highlighted for their proactive resolution by controllers.



Cost Management

Improves decision-making by providing insights into the cost impacts of flight schedule changes on the day of operations. Users can define detailed cost variables for delays, cancellations, misconnections, irregular operations, and parking, among other criteria. Factors like sector, aircraft, or airport headers can also be configured. Users can view and compare the costs of actual operating conditions with simulated scenarios.

Aircraft Recovery Support

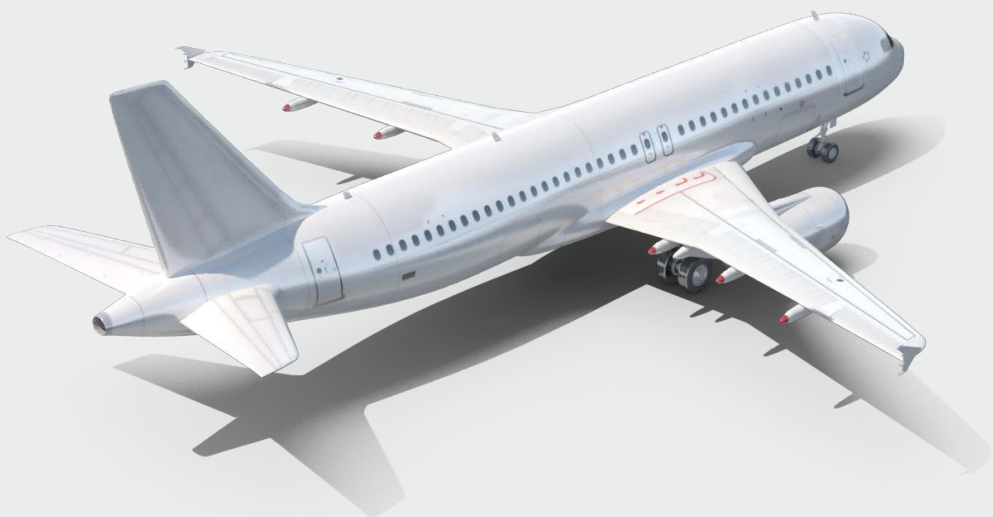
Assists users in identifying the best aircraft recovery scenarios based on different disruption causes. Custom reports are generated depending on the type of disruption during the affected window, including planned flights and maintenance, arrivals and departures, impacted crew, and alternative aircrafts and crew.

Weather and NOTAM Manager

Allows the definition of different weather limits and proactive notifications based on emitted METAR and TAF messages. ICAO NOTAMs are processed and alerted based on operationally relevant information. Rules for filtering NOTAMs of operational relevance can be configured. Closure and curfew information can also be extracted and updated.

Crew Briefing Pack

Generates the crew briefing package by collating centralized data related to flight, aircraft, airport, crew duty and connections, passenger, catering, weather, pre-flight checks and docs, and crew profiles.



Key Crew Management Features

Crew Data Management

Maintains personal and operational crew data including postings, contracts, qualifications, addresses, preferences, and restrictions. Centralized data ensures seamless flight and crew information synchronization is instantly available to authorized system users. Open APIs ensure seamless integration with external HR, data, and warehouse systems. Advanced analytics convert data into insights for FTLs and productivity purposes.

Manpower Planning Reports

The soon-to-be-released functionality will have multiple crew demand vs. supply reports, like training requirements, planned vacations, unplanned absence rates, standby levels, maximum/average flying or duty hours in a period, and crew requirements based on flight schedules. These can be calculated from past roster periods or inputted manually.

Leave Management

Supports end-to-end leave management by defining leave seasons, slots, entitlements, allocation rules, points, and restrictions. Crew can place bids for preferred leave periods that are automatically assigned based on highly configurable rules and restrictions. Unpublished results can be evaluated against KPIs and re-run, if necessary, before publishing to the crew. Any crew or roster changes automatically recalculate the leave situation.

Training and Qualification Management

Allows comprehensive configuration of training course templates, assigning resources like simulators and other venues, and allocating trainers and trainees. Crew qualifications and recency records are maintained and automatically extended based on configured rules. Centralized training information with real-time pre-assignments, planning, and tracking empowers the training department to make faster and better decisions.



Pairing Optimizer

Builds optimal pairings that respect configured legal rules, crew agreements, and business constraints while achieving defined objectives. Unique and unrivaled optimization parameters ensure maximum flight coverage and solution quality. Generated solutions can be evaluated against multiple KPIs like costs, productivity, deadheads, and legality before publication.

Roster Optimizer

Constructs legal rosters from pairings and standby duties considering pre-assigned criteria like leave, training, carry-in, and other special activities. The optimizer supports many different assignment

methodologies, from strict seniority to robust and flexible fair share or complete preference-driven awards. Different KPIs are available to assess the quality of the solution produced. Synchronizes seamlessly with requests in the crew portal.

Logistics Management

Helps plan and modify logistics requirements seamlessly with schedule changes, saving millions in annual hotel, transport, and deadhead ticket costs. Allows expected accommodation and travel requirements for crew members to be calculated at the early planning stages and sends booking requests to the reservations team or logistics intermediaries.

Roster Maintenance & Tracking

Supports a wide range of functions, including manual pairing and roster building with its smart filtering, bulk creation, and assignment tools. Offers multiple provisions to modify rosters and pairings, review legality, and flight schedule adherence before publication. It also allows easy tracking capabilities like managing uncovered pairings, tracking crew non-availability, sickness, and handling crew requests like ad-hoc leave, swaps, or open duty requests. User-configurable dashboards and proactive alerts enable real-time tracking.

Crew Portal & Mobility

Ensures 24/7 connectivity with crew through the mobile app, portal, email, sms or APIs. Proven to improve crew lifestyle and satisfaction at major airlines due to transparency, real-time communication, and crew control over their schedules. Crew can access the latest accurate rosters, trips, flights, and other crew, hotel, and transport details. They can also bid for flights, leave, specify preferences, swap assignments with other crew, volunteer, and pick up open positions without office interruption.

Allowance Management

Tracks crew rosters at all stages and calculates allowance information in real-time. Detailed allowances reports can be accessed by users against planned and actual rosters for comparison. Enables allowance review and finalization before sending to the payroll team. History of allowances changes can also be accessed for easier response to crew queries.

Crew Recovery Support

Analyzes the potential impact of different types of disruption on aircraft and crew proactively. Detailed, pre-configured reports can be generated for accelerated recovery, including departures and arrivals within the affected window, on-service crew and expected legality exceedances or other constraints, and available standby crew at different stations.



The iFlight Core Advantage

iFlight Core's cloud-native architecture and single-source data model enable a unique efficiency framework that amplifies feature benefits and generates platform synergies.



Situational Awareness Window (SAW)

Provides instant operational visibility and highlights potential risks through intuitive dashboards. The highly configurable GUI and widgets can be customized for specific users and roles, focusing attention on KPIs, trends and adopting a management-by-exception approach. By tapping into single-source flight and crew data, the dashboards offer accurate, holistic, and real-time operational awareness, accelerating the identification, prioritization, and resolution of operational irregularities, resulting in significant cost savings.

Rule and Alert Manager

Features a powerful real-time alert manager with a configurable business rule engine for legal, crew agreement, and company-specific policies. Users can customize alert contents, recipients, timing, channels, and display modes. Alerts can be visualized via dashboards, emails, texts, or Gantt charts as colors, symbols, or pop-ups and managed through assignments, overrides, and deferrals by authorized users.

Scenario Planning and What-If Analysis

Improves planning by analyzing limitless flight and crew scenarios. Multiple scenarios can be tested simultaneously in parallel local worlds specific to each user. Users can share local plans with colleagues for collaborative review and input. Any authorized user can then publish the agreed plans. Simulated scenarios provide real-world solutions that boost operational performance and ensure compliance with system rules.

Business Intelligence & Dynamic Reporting

Unlocks the full power of data-driven insights with extensive reporting capabilities on preset or customizable templates. Select from various output formats, including dashboards, reports, charts, and graphs, which can be easily extracted and shared

Integration & Messaging Manager

Facilitates integration and real-time data sharing between systems in the IT landscape by supporting 50+ industry messaging standards, in addition to the platform's open APIs. The configurability of message sources and recipients, notifications, required actions at different stages, and real-time tracking and alerting ensures smooth and stable system performance.

Central Data Manager

Enables unified flight and crew data configuration for single source of truth across stakeholders. The feature minimizes configuration efforts, data inconsistencies, and interface issues. System data can be configured centrally, while external data can be managed through common interfaces, reducing IT overheads, operational risks, and costs.

About IBS Software

IBS Software is a leading SaaS solutions provider to the travel industry globally, managing mission-critical operations for customers in the aviation, tour & cruise, hospitality, and energy resources industries. IBS Software's solutions for the aviation industry cover fleet & crew operations, aircraft maintenance, passenger services, loyalty programs, staff travel and air-cargo management. Across the hospitality sector, IBS Software offers a cloud-native, unified platform for hotels and travel sellers, including central reservation (CRS), property management (PMS), revenue management (RMS), call center, booking engine, loyalty and distribution. For the tour & cruise industry, IBS provides a comprehensive, customer-centric, digital platform that covers onshore, online and on-board solutions. Across the energy & resources industry, we provide logistics management solutions that cover logistics planning, operations & accommodation management. The Consulting and Digital Transformation (CDx) business focuses on driving digital transformation initiatives of its customers, leveraging its domain knowledge, digital technologies and engineering excellence. IBS Software operates from 17 offices across the world.

Further information can be found at www.ibsplc.com



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