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ARIS/SB® schedule builder

Create, view, modify, and distribute flight-schedule and day-of-operation information

The ARIS/SB schedule builder enables you to create, view, modify, and distribute the flight-schedule and day-of-operation flight-leg information that drives your operations.

Manage flight schedules

- Create flight schedules using information entered manually
- Load flight schedules automatically using IATA SSIM Chapter 6 SMA files and Chapter 7-compliant schedule files imported from external systems
- View, analyze, and modify flight-schedule information, keeping the schedule in the original IATA SSIM Chapter 7-compliant format with start and end days, days of operation, and frequency
- Search and sort flight-schedule information by schedule and properties such as airline, aircraft type, and flight number, and then print your results
- Store updated flight-schedule information in the ARIS/SmartBase® database, which provides accurate flight-schedule information to coordinated Ascent Technology products and external systems

Unroll flight schedules into day-of-operation flight legs

- Unroll flight-schedule information into individual flight-leg records for each day of the schedule
- Link flight arrivals and departures manually or with the intelligent arrival and departure flight matcher embedded in the Right-Now View® operations dashboard Gate Chart Display™ tool
- Identify and correct errors, such as identical flights, in flight schedules
- Revise information for recently created flights to reflect schedule changes with the ARIS/LegGen® flight-leg generator
- Create stand plans
- Unroll items related to schedules, such as routine stand maintenance records

Modify day-of-operation flight information

- Search and sort day-of-operation flight-leg information by property, such as airline, aircraft type, origin, and destination
- View day-of-operation flight information
- Update information about events, such as delays, diversions, cancellations, and new service
- Store updated day-of-operation flight information in the ARIS/SmartBase database, where it is readily available to all ARIS products, flight-information display systems (FIDS), baggage-information display systems (BIDS), and other external systems

Ensure accurate and consistent flight-schedule and day-of-operation flight information

The ARIS/SB schedule builder provides an easy-to-use graphical interface for flight-schedule and day-of-operation flight information entry, display, analysis, and distribution. In essence, the ARIS/SB schedule builder is your window into the ARIS/SmartBase database, the secure central database where flight-schedule and day-of-operation flight-leg records are stored. Because the ARIS/SB schedule builder enables you to locate specific records quickly and efficiently, the information you need is never more than a few clicks away, even when your schedules are enormous and your database contains years of flight records.

You can upload information automatically from different sources and industry-standard formats; the flight schedule is then available for retrieval as consistent records in the IATA Chapter 7 SSIM format. You can browse and query flight schedule, flight leg, and flight information stored in the ARIS/SmartBase database. Preference tabs make it easy to change the way information is presented.

The ARIS/SB schedule builder greatly reduces manual data entry and the accompanying errors. When you do need to enter data manually, the system provides intuitive screens and helpful guidance messages to instruct you. The system alerts you when you make an error, such as when you enter a departure time that is earlier than the arrival time.

The ARIS/LegGen flight-leg generator embedded in the ARIS/SB schedule builder bridges the gap between long-term flight schedules and day-of-operation flight information, automatically converting rolled-up

schedule records into rolled-out flight legs. The system links arrivals and departures automatically, archives old flights, and converts local schedule times to GMT accurately even through daylight savings time changes. Although the ARIS/LegGen flight-leg generator runs silently every night, you can also start the tool manually for planning purposes.

The ARIS/SB schedule builder enables you to manage day-of-operation flight information. For example, to update the record for a flight that has been delayed, you simply select the flight, modify the arrival time, and then click the Save button. In seconds, the updated information is available to all Ascent Technology products and to FIDS, BIDS, and other airport and airline systems.

Schedule planners and operations managers rely on the ARIS/SB schedule builder

Typically, schedule planners use the schedule functionality in the ARIS/SB schedule builder to plan and manage flight schedules that affect operations weeks or months in the future. When you use the Schedules tool, you create flight schedules manually or load flight schedules automatically, often relying on imported data in the IATA SSIM schedule-file format; view, analyze, and modify flight-schedule information; and then distribute flight-schedule information throughout the organization by means of the ARIS/SmartBase database and the ARIS/SmartBus communication middleware.

On the day of operation, operations controllers view, enter, and modify flight information, tracking delays, diversions, and cancellations. Airline and airport staff view and update information about flights for which they are responsible. In addition, airline data feeds continuously update flight information displayed in the screen. Because operational information is dynamic, the ARIS/SB schedule builder acts much like a sophisticated flight-information display.

The ARIS/SB schedule builder contains safeguards to prevent data-entry errors that lead to costly resource-planning and allocation mistakes. By providing accurate, consistent, and timely flight-schedule and day-of-operation flight-leg information to people throughout your organization, the ARIS/SB schedule builder improves collaborative decision-making and overall organizational effectiveness.

Representative features

Detailed flight-schedule and day-of-operation flight information is available at the click of a button. The ARIS/SB schedule builder provides an intuitive, easy-to-use graphical interface. An innovative display scheme enables you to organize information by expanding or contracting the amount of detail shown. Contextual menus, help wizards, and fill-in-the-blanks panels simplify manual data entry.

A single interface manages flight-schedule information. The ARIS/SB schedule builder enables you to create arrivals, departures, and turns; search flight schedules by airline code, origin, destination, aircraft type, and flight; handle code shares and preferred stand assignments; and print schedules and portions of schedules. It also enables you to enter code-share information and create and modify code-share schedules.

Automatic conversion of flight-schedule information into day-of-operation flight information. The ARIS/SB schedule builder analyzes rolled-up flight schedules, unrolls flight schedules into day-of-operation flight legs, and identifies and creates turns. It can unroll flight schedules far into the future and correct unrolled flight schedules when the schedule records change.

A single interface creates, cancels, diverts, returns, and links flights. The ARIS/SB schedule builder provides tools to manipulate day-of-operation flight information from a single user interface.

Up-to-the-minute view of flight schedule and day-of-operation flight information. The ARIS/SB schedule builder automatically updates information periodically, combining information entered manually with information received from automated feeds, providing timely access to consistent, accurate information throughout your organization.

Graphical display of current operations statistics in real time. The ARIS/SB schedule builder displays graphs of key information, so you can see the status of your operations at a glance.

Multi-user access. Changes made by one user are seen by all other users in seconds.

User-access control. You can control which users have access to specific functionality, so each user sees only what is permitted. You can provide filtered views of the ARIS/SB schedule builder to others, while safeguarding your internal business information.

Customizable user interface. You can create custom views of information; the ARIS/SB schedule builder displays the information the way you want to see it.

Ability to view standard reports and to create custom reports that display information stored in the ARIS/SmartBase database. We can create custom reports for you, and you can create your own custom reports using the ARIS/Reports™ data analyzer.

Web-enabled for cost-effective rapid and wide deployment. You gain access to the ARIS/SB schedule builder through Ascent's From Touchdown to Takeoff® cloud-hosted service, a secure, highly-available, and readily-expandable platform. When you subscribe to the service, you can gain access Ascent's entire suite of products, including the ARIS/SB schedule builder, using a standard browser, such as Google Chrome, directly from your network without the need to install, maintain, and support on-premise hardware and software. Available computing power can be readily adjusted to meet your organization's changing needs, and your solution can be easily expanded to accommodate additional users and to manage additional resources, facilities, and locations.

Services to help you maximize the benefits of Ascent solutions

Advisory and consulting services. Ascent provides advice about resource allocation, optimization, planning, scheduling, management, and deployment methodologies; develops cost-benefit analyses; analyzes business processes; and gathers and develops technical requirements and functional specifications.

Project-management services. Ascent's project-management team works closely with you, following time-proven delivery methodologies, and uses face-to-face meetings, teleconferences, web conferences, and email exchanges to keep you informed every step of the way. Ascent believes careful collaborative project management is the key to successful on-time and on-budget deliveries of Ascent's solutions.

Knowledge-engineering services. Knowledge engineering is the process of identifying your business knowledge—the business rules, policies, procedures, preferences, reference information, and requirements that guide the way your organization operates—and then codifying your business knowledge into rules stored in the knowledge base at the heart of the Ascent solutions. Your business knowledge, stored in the knowledge base, determines how the solutions behave. Ascent's knowledge engineers work with you to ensure the solution behaves just as you want it to.

Implementation, integration, and installation services. Ascent's implementation team provides system integration and testing services; develops product extensions, enhancements, and connectivity software for importing data to and exporting data from external systems; and creates reports. Ascent's implementation team is also responsible for setting up environments, customized to meet your organization's needs, and monitoring its performance, in secure AWS hosting centers.

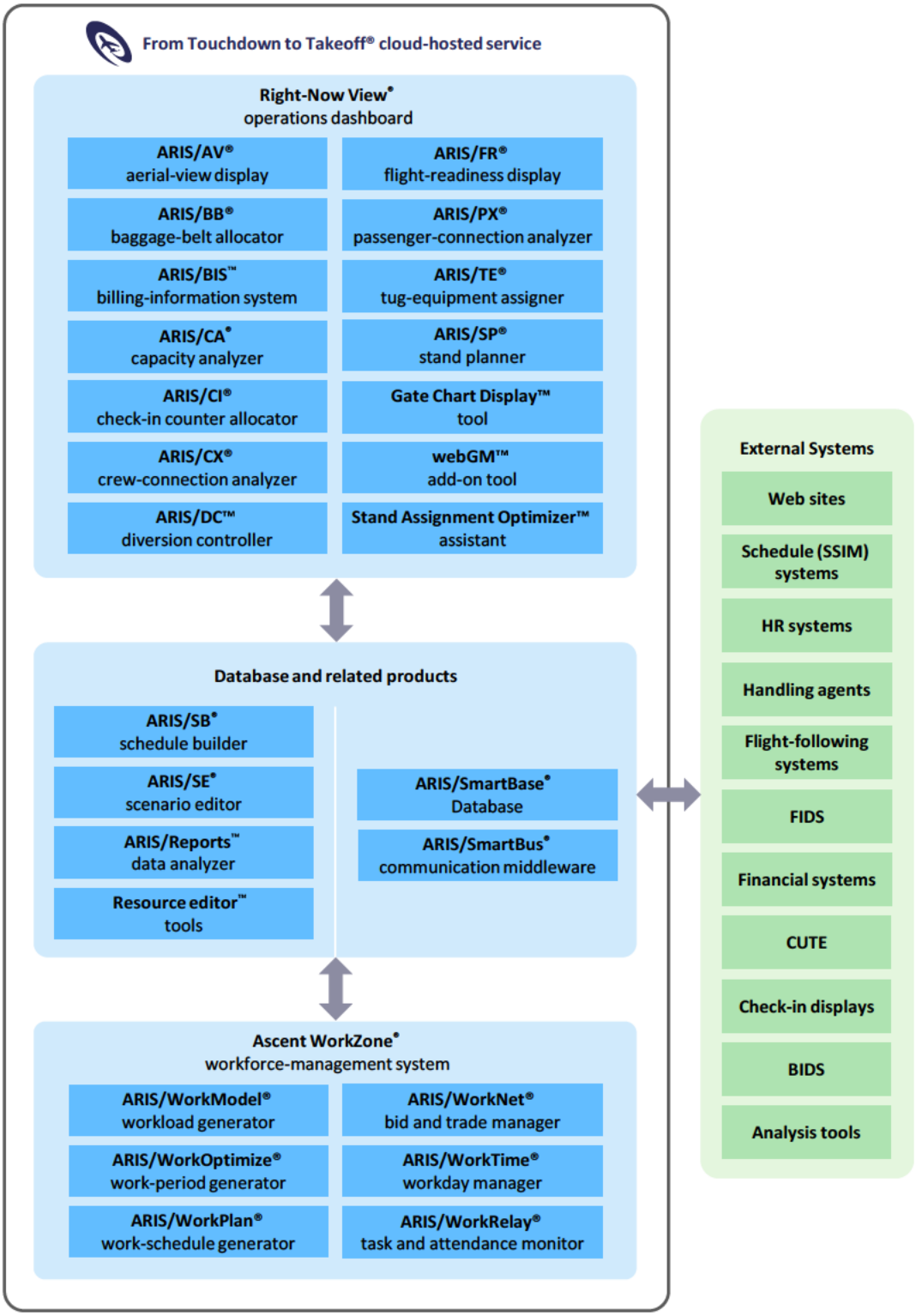
Training services. Ascent offers a wide range of user, administrator, trainer, and refresher training classes at your location, at Ascent's Boston, MA, headquarters, and remotely over the web. Ascent also offers operational training services remotely when you begin to use an Ascent solution in production.

Maintenance and support services. Ascent offers maintenance and support services for Ascent's solutions around the clock. Ascent provides comprehensive remote user support services via telephone, email, web conference, and Internet; software maintenance, such as product updates, patches, and releases; and cloud-hosted environment monitoring, tuning, and switchover. Ascent's ticket system enables you to request service, report problems, and track issues day and night.

Who we are

Since our founding nearly 40 years ago by members of the Massachusetts Institute of Technology Artificial Intelligence Laboratory, Ascent has helped organizations deploy costly resources as efficiently, effectively, and economically as possible. Our highly trained and capable team of technologists, problem solvers, and solution designers has broad domain expertise and substantial experience in artificial intelligence, computer science and engineering, system design, mathematical optimization, operations research, and resource optimization, planning, scheduling, and management. To learn more about how Ascent can help you optimize your resources to greatest advantage, send an email to sales@ascent.com or call our Sales and Marketing team at +1.617.395.4800.

Ascent Resource Information System® solutions



From Touchdown to Takeoff® cloud-hosted service

Solutions for airline and airport resource optimization, planning, scheduling, and management

A standard web browser, such as the Google Chrome™ browser or the Microsoft Edge™ browser, enables access to Ascent Technology's cloud-hosted solutions. The From Touchdown to Takeoff service requires a minimum resolution of full HD (FHD).

Airport Operational Database (AODB)	Central database
ARIS/SmartBase® database Includes one or more of the following tools:	Integrates, coordinates, disseminates, and maintains planning, operations, and historical information for resource and workforce management
• Location Editor™ tool	Manages the location hierarchy and records used to plan, schedule, and manage workload, workers, and tasks
• Planning Control™ tool	Manages work-schedule planning
• Profile Editor™ tool	Manages passenger-arrival profiles for departure flights
• Reference Editor™ tool	Manages reference-information records that determine how the Ascent Technology products, applications, and tools behave
• Rule Editor™ tool	Manages scenarios, rule groups, and rules for workforce management
• Template Worker Editor™ tool	Manages template worker records used to plan workload
• Update Control™ tool	Manages settings that block external systems from updating information in specified database fields
• User Editor™ tool	Manages user access to the products, applications, and tools
• User Group Editor™ tool	Manages user-group access to pre-set configurations and automated distribution of email and messages
• Worker Editor™ tool	Manages worker-related information and records
ARIS/Reports™ data analyzer	Produces reports based on plan, actual, and historic information
ARIS/SB® schedule builder (with ARIS/LegGen® flight-leg generator and ARIS/SL® schedule loader)	Creates, manages, and distributes flight-schedule and day-of-operation flight information; creates flight legs; and loads and stores SSIM flight data
ARIS/SE® scenario editor	Specifies and manages airport-resource rules and scenarios
ARIS/SmartBus® communication middleware	Enables information exchange between the ARIS/SmartBase database and external systems

Ascent WorkZone® workforce manager	Workforce optimization and management for mission-critical environments
ARIS/WorkModel® workload generator	Forecasts workload based on expected demand
ARIS/WorkNet® bid and trade manager	Worker self-service tool for managing work schedules
ARIS/WorkOptimize® work-period generator	Determines how many workers are needed and when they are needed
ARIS/WorkPlan® work-schedule generator	Creates work lines for full-time and part-time workers
ARIS/WorkRelay® task and attendance monitor	Provides task-assignment information to workers in real time
ARIS/WorkTime® workday manager	Assigns work, breaks, and locations to workers dynamically in real time

Right-Now View® operations dashboard	Dashboard to plan, schedule, and manage airline and airport resources and operations
ARIS/AV® aerial-view display	Displays real-time aircraft parking-assignment information on an airport aerial view
ARIS/BB® baggage-belt allocator	Plans and allocates baggage make-up and reclaim belts
ARIS/BIS™ billing-information system	Tracks usage-based ground fees
ARIS/CA® capacity analyzer	Plans, analyzes, and manages airport capacity and resources
ARIS/CI® check-in counter allocator (with ARIS/IQ® queue manager)	Plans, assigns, and manages ticket counters and kiosks
ARIS/CX® crew-connection analyzer	Shows how flight delays and cancellations affect connecting flight crews
ARIS/DC™ diversion controller	Tracks system-wide flight diversions, providing real-time status of diverted flights to diversion stations
ARIS/FR® flight-readiness display	Provides status of tasks and activities related to arrivals and departures
ARIS/PX® passenger-connection analyzer	Shows how flight delays and cancellations affect connecting passengers
ARIS/TE® tug-equipment assigner	Manages aircraft tows, assigns tugs to tows, and displays tow status
ARIS/SP® stand planner	Plans parking-position assignments for schedule periods
Gate Chart Display™ tool	Manages day-of-operation parking assignments with manual entry using basic scenarios and rules
Gate Chart Display with webGM™ add-on tool	Plans and manages day-of-operation parking assignments with automated assistance using business rules and intelligent scenarios
Gate Chart Display with webGM tool and Stand Assignment Optimizer™ assistant	Plans and manages day-of-operation parking assignments with automated assistance using business rules and intelligent scenarios, and resolves future parking-assignment problems caused by delays, swaps, and cancellations in compliance with business rules