

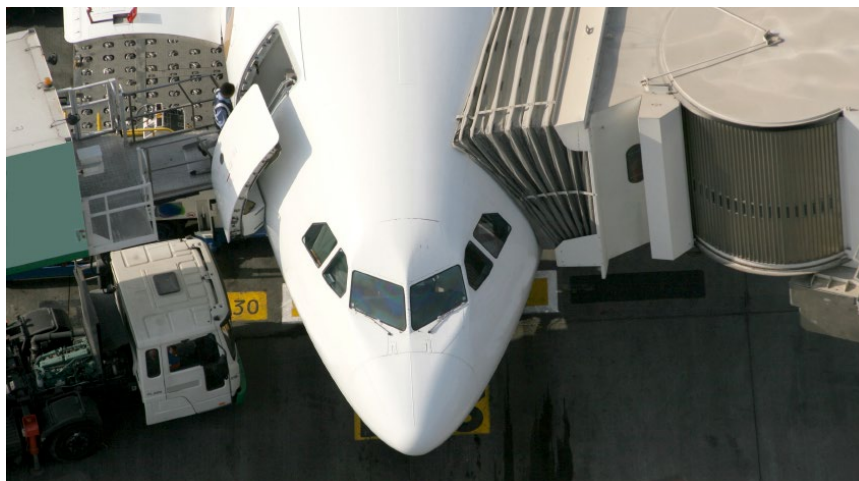
---

Headquarters  
Ascent Technology, Inc.  
101 Federal Street, 19th Floor  
Boston, MA 02110 USA

Mailing address  
Ascent Technology, Inc.  
PO Box 51435  
Boston, MA 02205-1435 USA

Telephone: +1.617.395.4800  
email: sales@ascent.com  
www.ascent.com

---



### **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<sup>®</sup> database, which provides accurate flight-schedule information to coordinated ARIS<sup>®</sup> 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 ARIS/GM gate-management system
- 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<sup>®</sup> flight-leg generator
- Create stand plans
- Unroll items related to schedules, such as routine stand maintenance records

---

## Who we are

Since our founding more than 35 years ago by members of the Massachusetts Institute of Technology Artificial Intelligence Laboratory, Ascent Technology 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.

---

## 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, cancelations, 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 ARIS® 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 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.

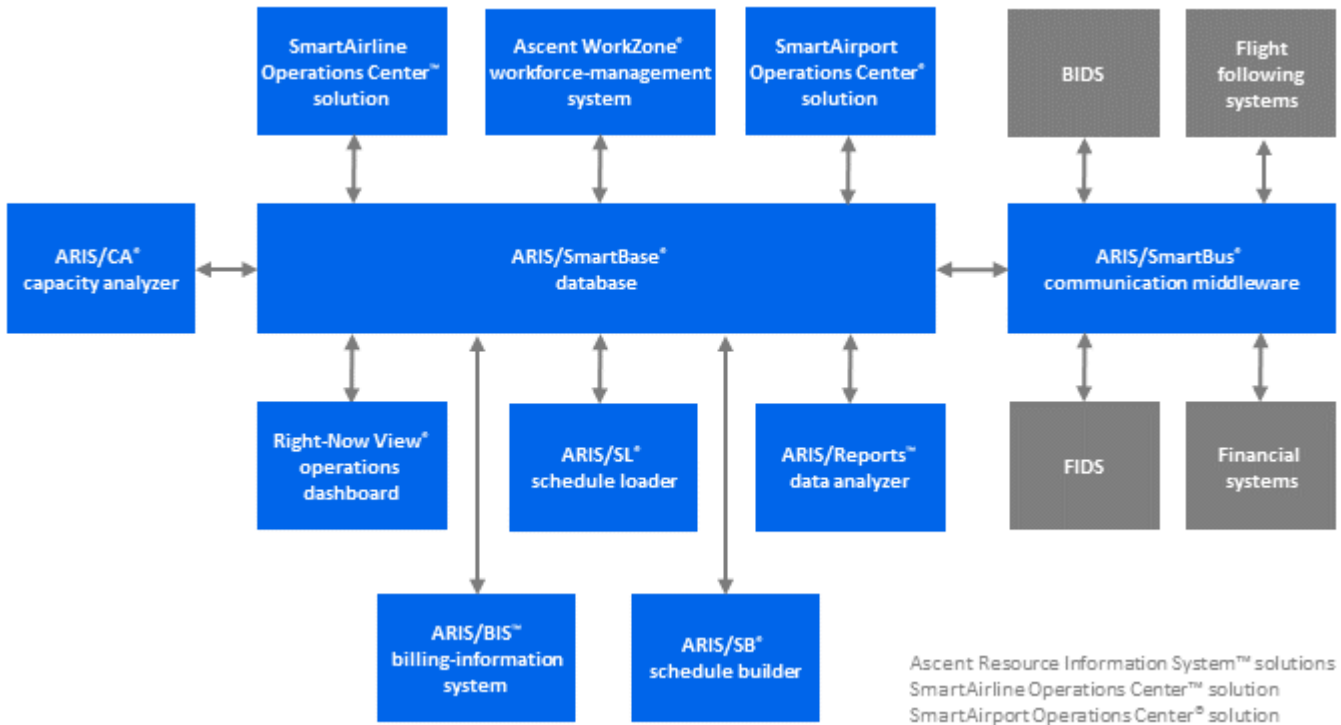
**Multi-user access.** Changes made by one user are seen by all other users in seconds.

**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 directly from your network without any need to install, maintain, and support on-premise hardware and software. We can readily adjust available computing power to meet your organization's changing needs, and you can easily expand your solution to accommodate additional users and to manage additional resources, facilities, and locations.



## Ways we can help you

**Advisory and consulting services.** We provide unbiased advice about resource allocation, optimization, planning, scheduling, management, and deployment methodologies; develop cost-benefit analyses; analyze business processes; manage projects; gather and document technical requirements; develop functional specifications; and specify hardware, software, and devices.

**Project-management services.** Our project-management team works closely with you, following our time-proven delivery methodology, and uses face-to-face meetings, teleconferences, web conferences, and email exchanges to keep you informed every step of the way. We believe careful project management is the key to successful on-time and on-budget deliveries of Ascent Technology's SmartAirline Operations Center solution and SmartAirport Operations Center solution.

**Knowledge-engineering services.** Knowledge engineering is the process of identifying your business knowledge—the business rules, policies, procedures, preferences, and requirements that guide the way your organization operates—and then codifying your business knowledge in the knowledge base at the heart of the SmartAirline Operations Center solution and SmartAirport Operations Center solution. The business knowledge in the knowledge base determines how the solutions behave. Our knowledge engineers work with you to gather and enter the business knowledge that enables the solution to behave exactly the way you want it to.

**Implementation, integration, and installation services.** Our 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. Our implementation team is also responsible for setting up an environment, customized to meet your organization's needs, and monitoring its performance, in our secure hosting center.

**Training services.** We provide a wide range of user, administrator, trainer, and refresher training classes at your location, at our Boston, MA, headquarters, and remotely over the web. We also provide operational training services remotely when you begin to use the SmartAirline Operations Center solution or the SmartAirport Operations Center solution in production.

**Maintenance and support services.** We offer premium support services for the SmartAirline Operations Center solution and the SmartAirport Operations Center solution around the clock. We provide comprehensive remote user support services via telephone, email, web conferences, and Internet, as well as software maintenance, such as product updates, patches, and releases. Our customer support community portal and ticket system enable you to ask questions and receive responses, request service, report problems, and track issues day and night.

---

### More information

To learn more about how Ascent Technology solutions can help you optimize your resources to greatest advantage and to schedule a demonstration of our products, send email to [sales@ascent.com](mailto:sales@ascent.com) or call our Sales and Marketing department at +1.617.395.4800.

---

## Ascent Technology's From Touchdown to Takeoff Cloud-Hosted Service

You gain access to the Ascent Resource Information System solutions in the SmartAirline Operations Center solution and in the SmartAirport Operations Center solution over the Internet, using a standard web browser.

Ascent Resource Information System solutions SmartAirline Operations Center solution SmartAirport Operations Center solution	From Touchdown to Takeoff cloud-hosted service Browser support: Google Chrome, Microsoft Edge, and Mozilla Firefox Minimum Internet connection speed: 5 Mbps Minimum resolution: Full HD (FHD)
ARIS/AV® aerial-view display	✓
ARIS/BB® baggage-belt allocator	✓
ARIS/BIS™ billing-information system	✓
ARIS/CA® capacity analyzer	✓
ARIS/CI® check-in counter allocator (with ARIS/IQ® queue manager)	✓
ARIS/FW® flight watcher	✓
ARIS/GateView® real-time display	✓
ARIS/GM® gate manager	✓
ARIS/Reports™ data analyzer	✓
ARIS/SB® schedule builder (with ARIS/LegGen® flight-leg generator)	✓
ARIS/SL® schedule loader	✓
ARIS/SmartBase® database (with Resource Editor tools)	✓
ARIS/SmartBus® communication middleware	✓
ARIS/SP® stand planner	✓
Ascent WorkZone® workforce manager	✓
ARIS/WorkModel® workload generator	✓
ARIS/WorkNet® bid and trade manager	✓ *
ARIS/WorkOptimize® work-period generator	✓
ARIS/WorkPlan® work-schedule generator	✓
ARIS/WorkRelay® task and attendance monitor	✓
ARIS/WorkTime® workday manager	✓
Right-Now View® operations dashboard	✓
ARIS/CX® crew-connection analyzer	✓
ARIS/FR® flight-readiness display	✓
ARIS/PX® passenger-connection analyzer	✓
ARIS/TE® tug-equipment assigner	✓
Gate Chart Display™ tool	✓
Stand Assignment Optimizer™ tool	✓

\* Minimum requirements: 512 Kbps Internet connection speed and SXGA resolution

ARIS, ARIS/AR, ARIS/AV, ARIS/BB, ARIS/CA, ARIS/CI, ARIS/CK, ARIS/FR, ARIS/FW, ARIS/GateView, ARIS/GM, ARIS/IQ, ARIS/LegGen, ARIS/PA, ARIS/PX, ARIS/SA, ARIS/SB, ARIS/SE, ARIS/SL, ARIS/SmartBase, ARIS/SmartBus, ARIS/SP, ARIS/TE, ARIS/Tow Panel, ARIS/WorkModel, ARIS/WorkNet, ARIS/WorkOptimize, ARIS/WorkPlan, ARIS/WorkRelay, ARIS/WorkTime, Ascent Resource Information System, Ascent Technology, Inc. (stylized), Ascent WorkZone, Ascent WorkZone (stylized), From Touchdown to Takeoff, GateKeeper, Right-Now View, SmartAirline, SmartAirline Capacity Analyzer (stylized), SmartAirline Information Manager (stylized), SmartAirline Operations Manager (stylized), SmartAirline WorkZone, SmartAirline WorkZone (stylized), SmartAirport, Smartairport.com, SmartAirport Capacity Analyzer, SmartAirport Capacity Analyzer(stylized), SmartAirport Information Manager, SmartAirport Information Manager(stylized), SmartAirport Operations, SmartAirport Operations Center, SmartAirport Operations Manager, SmartAirport Operations Manager (stylized), SmartAirport WorkZone, and SmartAirport WorkZone (stylized) are registered trademarks of Ascent Technology, Inc., in the United States.

Active Schedules, Advanced Pay Rule System, ARIS/AR Display Board, ARIS/AR Turn Generator, ARIS/BB Audit, ARIS/BIS, ARIS/BX, ARIS/DS, ARIS/Reports, ARIS/SCR, Ascent WebConnect, Change History, Extended Flight View Dashboard, Flight Data Dashboard, Flight Filter Manager, Gate Chart Display, Location Editor, Planning Control, Planning Schedules, Profile Editor, Query Editor, Reference Editor, Resource Editors, Rule Editor, SmartAirline Capacity Analyzer, SmartAirline Information Manager, SmartAirline Operations, SmartAirline Operations Center, SmartAirline Operations Manager, Stand Assignment Optimizer, Template Worker Editor, Tow-Data Web Service, Update Control, User Editor, Work Schedule Manager, and Worker Editor are trademarks of Ascent Technology, Inc., in the United States.

This is not a complete list of all registered trademarks, trademarks, and service marks owned by Ascent Technology, Inc. See [www.ascent.com/trademarks.html](http://www.ascent.com/trademarks.html) for information. Other company, product, and service names may be registered trademarks, trademarks, or service marks owned by other parties.

Ascent Technology Software is the Confidential Information of Ascent Technology, Inc., and is available only under the terms of a license or grant of rights provided by Ascent Technology, Inc. Ascent Technology Software may be covered by one or more U.S. patents and/or pending patent applications. See [www.ascent.com/patents.html](http://www.ascent.com/patents.html) for information. Ascent Technology, Inc., solutions may use software components developed by open-source projects. For information, send email to [legal@ascent.com](mailto:legal@ascent.com). Revised 12/2023