

## ARIS/BB<sup>®</sup> baggage-belt allocator

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### Allocate your baggage make-up and reclaim belts efficiently and effectively

The ARIS/BB baggage-belt allocator assigns make-up and reclaim belts and carousels to arriving and departing flights so you can use your baggage belts and carousels to maximum advantage.

With the ARIS/BB baggage-belt allocator, you can:

- Plan and allocate baggage make-up and reclaim belts and carousels for arriving and departing flights automatically, based on flight schedule, aircraft size, passenger load, passenger count, type of flight, and class of service
- Handle code shares and alliances
- Create allocation plans that ensure the most efficient use of your baggage belts and carousels
- Override automated allocations when needed
- Handle arrival and departure delays automatically
- Vary baggage reclaim belt and carousel assignment start times to reflect the time it takes to transport baggage from different gates, stands, and remote parking positions
- Keep baggage belt and carousel capacity balanced throughout the day based on knowledge about expected and actual number of passengers on a given flight
- Adjust allocations in response to flight schedule changes and other unanticipated events on the day of operation
- Update baggage information displays automatically
- Improve passenger satisfaction by minimizing baggage delays
- Use baggage belts and carousels efficiently during facility remodeling or when changing airport resources

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## 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.

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The ARIS/BB baggage-belt allocator knows how many bags each belt and carousel can handle and understands the physical layout of the airport. It tracks flight schedules, parking-position assignments, passenger loads, and passenger counts. It associates specific check-in counters with specific make-up belts and specific aircraft-parking positions to specific reclaim belts, and then assigns baggage belts dynamically based on flight schedules and changes in belt loads.

Information from the ARIS/BB baggage-belt allocator can be distributed to baggage-information display systems automatically through the ARIS/SmartBus® communication middleware.

The ARIS/BB baggage-belt allocator can be deployed over the Internet and internal networks to workstations throughout the airport.

## Representative features

**Allocation status is available at a glance.** The ARIS/BB baggage-belt allocator provides an easy-to-use, pointer-driven, colorful graphical user interface that displays detailed flight and baggage information to users and alerts users to potential problems.

**Automatic allocation with manual override.** The ARIS/BB baggage-belt allocator assigns make-up units and reclaim belts automatically and allows you to override automated allocations as needed.

**Multi-user access.** If you have multiple users, changes made by one user are seen by all other users within a few seconds.

**Customizable business rules govern the allocations.** Customizable business rules contain knowledge about the number of bags each belt can handle as well as the physical relationship between check-in counters and make-up belts and between aircraft gates and reclaim belts. They also govern the way in which each assignment is performed, for example, adjusting reclaim-belt allocations to start at different times to reflect the time it takes to transport baggage from remote parking positions, recognizing domestic and international baggage-handling requirements, and distinguishing among early bags, normal bags, and first-class bags.

**Dynamic reallocation.** The ARIS/BB baggage-belt allocator re-assigns make-up belts and reclaim belts dynamically when a previously-working belt breaks.

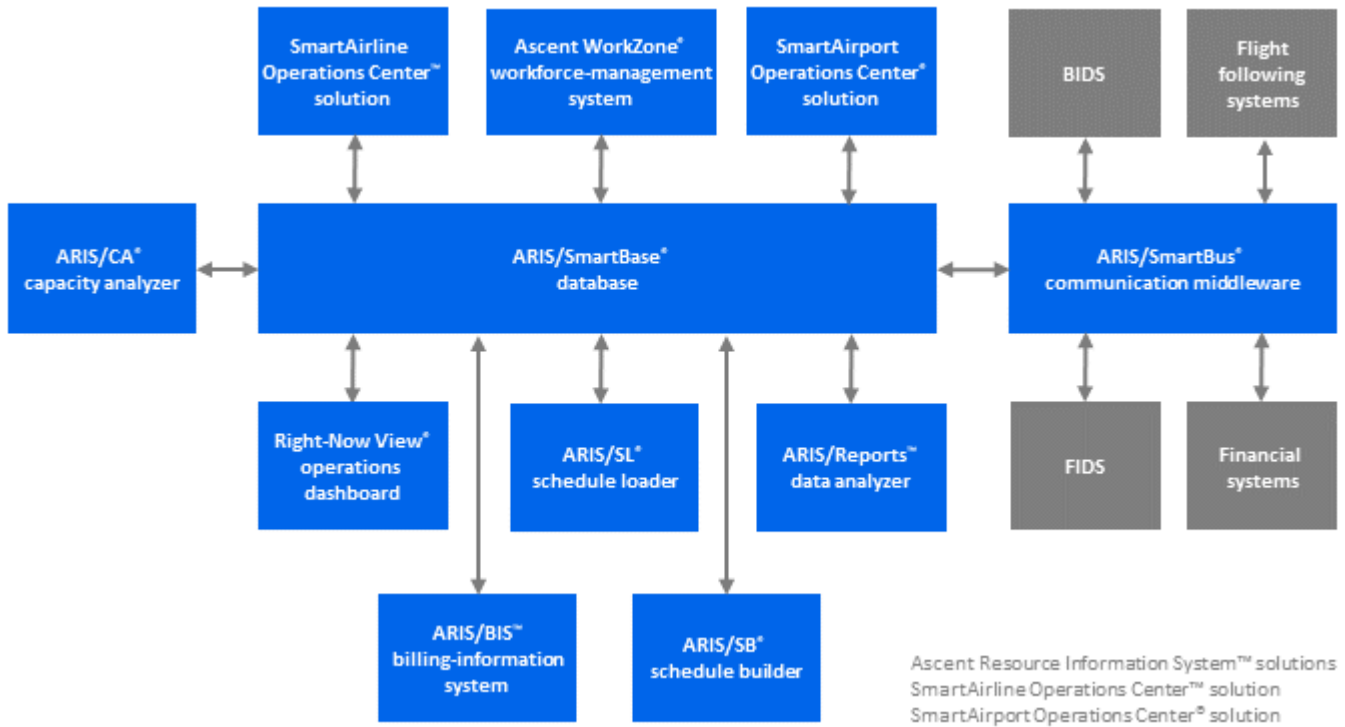
**Information distribution.** The ARIS/BB baggage-belt allocator releases information to baggage-information display systems manually and automatically.

**Capacity balancing.** The ARIS/BB baggage-belt allocator keeps belt capacity balanced throughout the day based on knowledge about the maximum passenger load for an aircraft and the passenger count for a given flight.

**Collaborative decision-making.** The ARIS/BB baggage-belt allocator supports team decision-making, ensuring all users share a consistent current view of operations. You can discuss possible solutions with other users before you commit to changes.

**Web-enabled for cost-effective rapid and wide deployment.** You gain access to the ARIS/BB baggage-belt allocator 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/BB baggage-belt allocator, 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.

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### 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.

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**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 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.



## 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/CX, 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.

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