

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



# ARIS/BB baggage-belt allocator

## 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

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 and ticket 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 ticket 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, such as the Google Chrome™ browser, directly from your network without the need to install, maintain, and support onpremise 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.

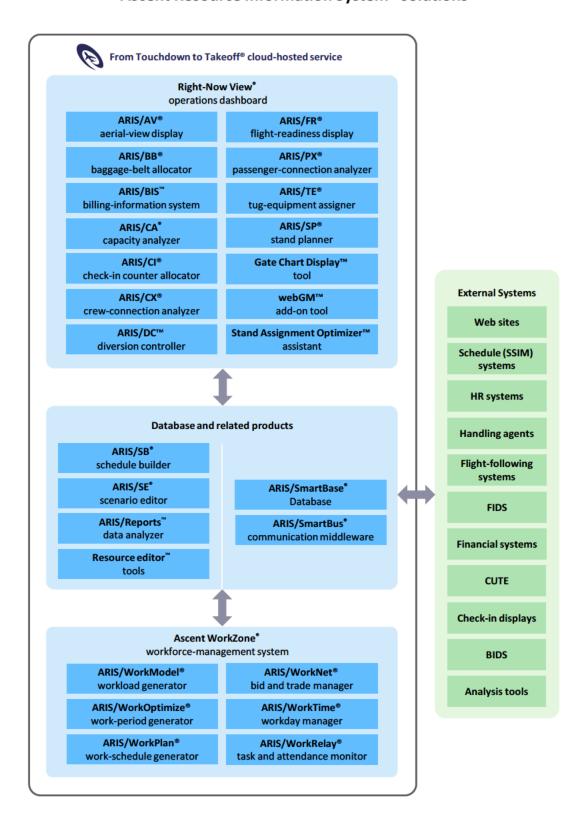
**Training services.** Ascent offers a wide range of user, administrator, trainer, and refresher training classes at your location, at Ascent's Boston, MA, headquarters, and remotely over the web. Ascent also offers operational training services remotely when you begin to use an Ascent solution in production.

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
<ul> <li>Location Editor<sup>™</sup> tool</li> </ul>	Manages the location hierarchy and records used to plan, schedule, and manage workload, workers, and tasks
<ul> <li>Planning Control™ tool</li> </ul>	Manages work-schedule planning
<ul> <li>Profile Editor™ tool</li> </ul>	Manages passenger-arrival profiles for departure flights
<ul> <li>Reference Editor<sup>™</sup> tool</li> </ul>	Manages reference-information records that determine how the Ascent Technology products, applications, and tools behave
<ul> <li>Rule Editor™ tool</li> </ul>	Manages scenarios, rule groups, and rules for workforce management
Template Worker Editor™ tool	Manages template worker records used to plan workload
<ul> <li>Update Control<sup>™</sup> tool</li> </ul>	Manages settings that block external systems from updating information in specified database fields
<ul> <li>User Editor<sup>™</sup> tool</li> </ul>	Manages user access to the products, applications, and tools
<ul> <li>User Group Editor<sup>™</sup> tool</li> </ul>	Manages user-group access to pre-set configurations and automated distribution of email and messages
<ul> <li>Worker Editor™ tool</li> </ul>	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

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

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/SA, ARIS/SB, 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, SmartAirline Information Manager, SmartAirline Operations Manager, SmartAirline WorkZone, SmartAirport, SmartAirport Capacity Analyzer, SmartAirport Information Manager, SmartAirport Operations, SmartAirport Operations Center, SmartAirport Operations Manager, SmartAirport WorkZone 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/DC, 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, Stand Assignment Optimizer, Template Worker Editor, Tow-Data Web Service, Update Control, User Editor, User Group Editor, webGM, webSB, 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 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 for information. Ascent Technology, Inc., solutions may use software components developed by open-source projects. For information, send email to legal@ascent.com. Revised 08/2024